



## PLANNING & ZONING COMMISSION

June 14, 2023 at 6:00 PM  
0110 Whispering Pines Circle, Blue River, CO

---

### AGENDA

---

The public is welcome to attend the meeting either in person or via Zoom.

The Zoom link is available on the Town website:

<https://townofblueriver.colorado.gov/planning-zoning>

Please note that seating at Town Hall is limited.

**I. CALL TO ORDER, ROLL CALL**

**II. APPROVAL OF MINUTES**

[A.](#) Minutes from May 2, 2023

**III. PUBLIC HEARING**

[B.](#) Town of Blue River Land Use Code

**IV. PROJECT APPROVAL**

**C.** Recommendation Vote to Board of Trustees-Land Use Code

[D.](#) 0311 Wagon Road New Construction

**V. ADJOURN**

**NEXT MEETING - July 2023**



## PLANNING & ZONING COMMISSION MAY 2023

May 02, 2023 at 6:00 PM  
0110 Whispering Pines Circle, Blue River, CO

---

### MINUTES

---

The public is welcome to attend the meeting either in person or via Zoom.

The Zoom link is available on the Town website:

<https://townofblueriver.colorado.gov/planning-zoning>

Please note that seating at Town Hall is limited.

#### I. CALL TO ORDER, ROLL CALL

Chair Johnson called the meeting to order at 6:00 p.m.

PRESENT

Travis Beck-Vice Chair

Bevan Hardy

Doug O'Brien

Tim Johnson-Chair

Gordon Manin

Ben Stuckey

Troy Watts

Noah Hopkins-Board Liaison

Also present: Town Manager Michelle Eddy

#### II. APPROVAL OF MINUTES

Motion made by Hardy, Seconded by Watts to approve the minutes of April 2023. Motion passed unanimously.

A. Minutes from April 4, 2023

**III. PROJECT APPROVAL**

B. New Construction Approval 0710 Whispering Pines

Manager Eddy noted the project was reviewed by the Building Official and recommended for approval.

Discussion to clarify the height on the project. The homeowner, Rich Davis, explained his conversation with the Building Official and the home will be within the requirements.

Beck asked for clarification on grading on the USFS land. It was noted that this would be changed on the final plan set. It was discussed that approval of the project, is not approval of any impact on the USFS lands. It was discussed to pay attention to distance and potential impact to the wetlands.

Discussion of the "studio" area should be conditioned on the certificate of occupancy to ensure the space is not used for a separate dwelling unit.

Motion made by Beck, Seconded by Watts to approve the new construction at 0710 Whispering Pines conditioned on avoiding impacts on the National Forest land unless permitted; avoidance of wetlands or with Corps of Engineers approval; recording of the certificate of occupancy not allowing an accessory dwelling unit as well as obtaining the correct height measurement before construction. Motion passed unanimously.

Voting Yea: Beck, Hardy, O'Brien, Johnson, Manin, Stuckey, Watts

**IV. OTHER BUSINESS**

Public Comment

Dan Cleary-Rustic Terrace: asked about the appeal process for a variance process and asked to have clarification. Town Manager Eddy provided information as provided from the Town Attorney.

C. Introduction of the Land Use Code

Attorney Widner provided a background and review of what to expect when the Commission receives the Land Use Code. He noted that this is a comprehensive document that governs all land use and has been developed over the last year by the Board of Trustees.

There will be a public hearing on June 14th with the Planning & Zoning Commission and with the Board of Trustees on June 20th for adoption by ordinance.

Discussion by the Commission on various processes. Attorney Widner provided a hypothetical scenario of how an application moves through the process highlighting a process for a variance. It was clarified that the new Land Use Code will replace Chapters 16, 17 and the architectural guidelines in their entirety.

**V. ADJOURN**

Motion made by Beck, Seconded by Stuckey to adjourn the meeting 7:01 p.m.

Voting Yea: Beck, Hardy, O'Brien, Johnson, Manin, Stuckey, Watts

**NEXT MEETING - June 14, 2023**

June 14, 2023



# TOWN OF BLUE RIVER, COLORADO

# LAND USE CODE

## PART OF THE BLUE RIVER MUNICIPAL CODE

<b>Chapter 16</b>	<b>General Provisions</b>
<b>Chapter 16A</b>	<b>Zoning</b>
<b>Chapter 16B</b>	<b>Design, Development &amp; Operational Standards</b>
<b>Chapter 16C</b>	<b>Development and Improvement Processes</b>
<b>Chapter 17</b>	<b>Subdivision Regulations</b>

**Adopted July 2023**



## **TOWN OF BLUE RIVER, COLORADO**

### **LAND USE CODE**

*Copyright © 2023 Robert C. Widner*

*All rights reserved. Except for brief quotations in critical articles or reviews, no part of this publication may be modified, copied, distributed, transmitted, displayed, reproduced, create derivative works from, transfer, or sell any information contained in this book in any form without the express written consent and permission of the publisher.*

**Publisher:** *Peak Nine Press LLC. 13133 East Arapahoe Road, Suite 100, Centennial, Colorado 80122. [connect@peakninepress.com](mailto:connect@peakninepress.com)*

*Printed and bound in the United States of America*

*The **Town of Blue River Land Use Code** does not provide legal advice. This publication is a source of information for the reader and is not meant as a substitute for legal counsel. Please contact your attorney for assistance.*

#### **Publisher's Permission for Use**

*The **Town of Blue River Land Use Code** ("Land Use Code") is a resource for local government in the preparation of land use codes for their communities. As a copyrighted publication, local governments and others seeking to use chapters, sections, and provisions of the Land Use Code must first contact the publisher for permission at: **Peak Nine Press LLC. 13133 East Arapahoe Road, Suite 100, Centennial, Colorado 80122. [connect@peakninepress.com](mailto:connect@peakninepress.com).***

# TOWN OF BLUE RIVER, COLORADO

## LAND USE CODE

### Board of Trustees – January 2022 – December 2022

Mayor Toby Babich  
Dan Cleary  
Joel Dixon  
Kelly Finley  
Mark Fossett  
Ted Pilling  
Ken Robertson

### Board of Trustees – December 2022 – July 2023

Mayor Toby Babich  
Joel Dixon  
Kelly Finley  
Mark Fossett  
Noah Hopkins  
Ted Pilling  
Ted Slaughter

### Planning & Zoning Commission 2023

Travis Beck  
Tim Johnson  
Bevan Hardy  
Gordon Manin  
Doug O'Brien  
Ben Stuckey  
Troy Watts

### Town Staff

Michelle Eddy, Town Manager  
Robert Widner, Town Attorney  
Molly Schultz, Deputy Town Attorney

# CONTENTS

<b>CHAPTER 16</b>	<b>Land Use Code General Provisions</b> .....	<b>17</b>
<b>Article 1</b>	<b>General Provisions</b> .....	<b>17</b>
<b>Sec. 16-1-10.</b>	<b>Titles.</b> .....	<b>17</b>
<b>Sec. 16-1-20.</b>	<b>Authority.</b> .....	<b>17</b>
<b>Sec. 16-1-30.</b>	<b>Purpose of Chapter 16.</b> .....	<b>17</b>
<b>Sec. 16-1-40.</b>	<b>Background, Purpose, and Intent of the Land Use Code.</b> .....	<b>17</b>
<b>Sec. 16-1-50.</b>	<b>Applicability, Exemptions, and Limitations.</b> .....	<b>19</b>
<b>Sec. 16-1-60.</b>	<b>Conformance with Other Laws.</b> .....	<b>20</b>
<b>Sec. 16-1-70.</b>	<b>Private Covenants.</b> .....	<b>20</b>
<b>Sec. 16-1-80.</b>	<b>General Interpretation.</b> .....	<b>20</b>
<b>Sec. 16-1-90.</b>	<b>Promulgation of Forms.</b> .....	<b>22</b>
<b>Sec. 16-1-100.</b>	<b>Administrative Interpretation.</b> .....	<b>22</b>
<b>Sec. 16-1-110.</b>	<b>Application and Review Fees.</b> .....	<b>22</b>
<b>Sec. 16-1-120.</b>	<b>Violations and Enforcement.</b> .....	<b>24</b>
<b>Sec. 16-1-130.</b>	<b>Severability and Savings Clause.</b> .....	<b>26</b>
<b>Sec. 16-1-140.</b>	<b>Major Activity Notice.</b> .....	<b>26</b>
<b>Article 2</b>	<b>Appeals</b> .....	<b>26</b>
<b>Sec. 16-2-10.</b>	<b>Generally.</b> .....	<b>26</b>
<b>Sec. 16-2-20.</b>	<b>Effective Date of Decisions.</b> .....	<b>27</b>
<b>Sec. 16-2-30.</b>	<b>Appeal of Board of Trustees Final Decisions.</b> .....	<b>27</b>
<b>Sec. 16-2-40.</b>	<b>Appeal of Planning Commission Final Decision.</b> .....	<b>28</b>
<b>Sec. 16-2-50.</b>	<b>Appeal of Final Administrative Decisions.</b> .....	<b>30</b>
<b>Sec. 16-2-50.</b>	<b>Appeal of Board of Adjustment Final Decisions.</b> .....	<b>31</b>
<b>Article 3</b>	<b>Definitions</b> .....	<b>32</b>
<b>Sec. 16-3-10.</b>	<b>Applicability.</b> .....	<b>32</b>
<b>Sec. 16-3-20.</b>	<b>Definitions.</b> .....	<b>32</b>
<b>Article 4</b>	<b>Non-Conforming Uses</b> .....	<b>50</b>
<b>Sec. 16-4-10.</b>	<b>Purpose.</b> .....	<b>50</b>
<b>Sec. 16-4-20.</b>	<b>Illegal Use, Building, Structure, or Lot Not Nonconforming.</b> .....	<b>50</b>



Sec. 16-4-30. Nonconforming Use of Building or Structure..... 51

Sec. 16-4-40. Nonconforming Building or Structure..... 51

Sec. 16-4-50. Nonconforming Lot..... 53

Sec. 16-4-60. Unlawful and Nonconforming Signs..... 53

Article 5 Marijuana Growing in Residential Dwelling ..... 54

Sec. 16-5-10. Purpose..... 54

Sec. 16-5-20. Prohibition of Marijuana Establishments..... 54

Sec. 16-5-30. Marijuana in Residential Dwellings..... 54

Article 6 Vested Property Rights ..... 56

Sec. 16-6-10. Purpose..... 56

Sec. 16-6-20. Reserved..... 56

Sec. 16-6-30. Scope and Eligibility for Vested Property Rights..... 56

Sec. 16-6-40. Submittal Requirements..... 57

Sec. 16-6-50. Notice of Hearing..... 58

Sec. 16-6-60. Review Criteria and Approval..... 58

Sec. 16-6-70. Duration of Approval..... 59

Sec. 16-6-80. Notice of Approval..... 59

Sec. 16-6-90. Payment of Costs..... 59

Sec. 16-6-100. Other Provisions Unaffected..... 60

Sec. 16-6-110. Combined Submittal..... 60

Sec. 16-6-120. Unconstitutionality..... 60

Article 7 Variances..... 60

Sec. 16-7-10. Variances Authorized..... 60

Sec. 16-7-20. Variance Application..... 61

Sec. 16-7-30. Process for Variance Application..... 61

Sec. 16-7-40. Notice of Hearing..... 63

Sec. 16-7-50. Criteria for Approval..... 65

Sec. 16-7-60. Zoning Variance Effectiveness; Termination..... 65

Sec. 16-7-70. Development or Design Variance Effectiveness; Termination. ... 66

**CHAPTER 16A Zoning ..... 67**

Article 1 General..... 67

Sec. 16A-1-10. Title..... 67

Sec. 16A-1-20. Intent and Purpose..... 67

Sec. 16A-1-30. Reference to Chapter 16 General Provisions. .... 67

Sec. 16A-1-40. Definitions. .... 67

Article 2 Zoning Districts and Zoning Maps ..... 68

Sec. 16A-2-10. Zoning Districts Established..... 68

Sec. 16A-2-20. Official Zoning District Map..... 68

Sec. 16A-2-30. Changes in Official Zoning District Map. .... 68

Sec. 16A-2-40. Interpretation of Zone District Boundaries..... 69

Sec. 16A-2-50. Overlay Districts ..... 69

Article 3 Transition District (TD) ..... 70

Sec. 16A-3-10. Purpose..... 70

Sec. 16A-3-20. Principal Permitted Uses..... 70

Sec. 16A-3-30. Accessory Uses..... 70

Sec. 16A-3-40. Prohibited Uses. .... 70

Sec. 16A-3-50. Accessory Improvements..... 71

Sec. 16A-3-60. District Standards. .... 72

Sec. 16A-3-70. Reserved..... 72

Sec. 16A-3-80. Zoning Variance..... 72

Article 4 Single Family Residential District (R-1) ..... 72

Sec. 16A-4-10. Purpose..... 72

Sec. 16A-4-20. Principal Permitted Uses..... 72

Sec. 16A-4-30. Accessory Uses..... 73

Sec. 16A-4-40. Prohibited Uses. .... 73

Sec. 16A-4-50. Accessory Improvements..... 73

Sec. 16A-4-60. Zone District Standards..... 75

Sec. 16A-4-70. Reserved..... 75

Sec. 16A-4-80. Zoning Variance..... 75

Article 5 Single Family Residential Preservation District (RP-1)..... 75

Sec. 16A-5-10. Purpose and Applicability..... 75

Sec. 16A-5-20. R-1 Uses, Improvements, and Standards to Apply. .... 76

Sec. 16A-5-30. Zone District Standards..... 76

Sec. 16A-5-40. Zoning Variance..... 77

Article 6 Planned Residential District (PRD)..... 77

Sec. 16A-6-10. Purpose..... 77

Sec. 16A-6-20. Principal Permitted Uses..... 77

Sec. 16A-6-30. Accessory Uses..... 78

Sec. 16A-6-40. Prohibited Uses. .... 78

Sec. 16A-6-50. Accessory Improvements..... 78

Sec. 16A-6-60. Zone District Standards..... 80

Sec. 16A-6-70. Other zoning criteria for Planned Residential District. .... 80

Sec. 16A-6-80. Planned Residential District Procedures..... 81

Sec. 16A-6-90. Zoning Variance Not Authorized..... 81

Article 7 Mixed Use District (MUD) ..... 81

Sec. 16A-7-10. Purpose..... 81

Sec. 16A-7-20. Minimum Application Requirements..... 81

Sec. 16A-7-30. Permitted Uses..... 82

Sec. 16A-7-40. Accessory Uses..... 83

Sec. 16A-7-50. Accessory Improvements..... 83

Sec. 16A-7-60. Zone District Standards..... 84

Sec. 16A-7-70. Other Zoning Criteria for Mixed-Use District. .... 84

Sec. 16A-7-80. MUD Zoning Application. .... 85

Sec. 16A-7-90. Findings and Approval. .... 85

Sec. 16A-7-100. Form of MUD Ordinance..... 86

Sec. 16A-7-110. Amendment of MUD..... 87

Sec. 16A-7-120. Zoning Variance Not Authorized..... 87

Article 8 Undisturbed Open Space District (UOP)..... 87

Sec. 16A-8-10. Purpose..... 87

Sec. 16A-8-20. Principal Permitted Uses..... 87

Sec. 16A-8-30. Accessory Uses..... 87

Sec. 16A-8-40. Improvements. .... 87

Sec. 16A-8-50. Zone District Standards..... 88

Sec. 16A-8-60. Zoning Variance Not Authorized..... 88

Article 9 Recreation and Floodplain District (RF)..... 89

Sec. 16A-9-10. Purpose..... 89

Sec. 16A-9-20. Principal Permitted Uses..... 89

Sec. 16A-9-30. Prohibited Uses. .... 89

Sec. 16A-9-40. Accessory Uses..... 89

Sec. 16A-9-50. Improvements ..... 89

Sec. 16A-9-60. Zone District Standards..... 91

Sec. 16A-9-70. Zoning Variance Not Authorized..... 91

Article 10 Public Right-of-Way District (PROW)..... 91

Sec. 16A-10-10. Background and Purpose..... 91

Sec. 16A-10-20. Principal Permitted Uses..... 92

Sec. 16A-10-30. Prohibited Uses..... 92

Sec. 16A-10-40. Accessory Uses..... 92

Sec. 16A-10-50. Improvements..... 92

Sec. 16A-10-60. Zone District Standards..... 93

Articles 11-16 Reserved..... 93

Article 17 Residential Dwelling Units..... 93

Sec. 16A-17-10. Use Restrictions..... 93

Sec. 16A-17-20. Notice of Use Restriction as Condition of Building Permit..... 93

Article 18 Group Homes ..... 94

Sec. 16A-18-10. Authorization..... 94

Sec. 16A-18-20. Compliance with Applicable Town Laws ..... 94

Sec. 16A-18-30. Reasonable Accommodation Requests..... 95

Article 19 Home Occupations ..... 95

Sec. 16A-19-10. Purpose..... 95

Sec. 16A-19-20. Home Occupation Standards..... 95

Sec. 16A-19-30. Prohibited Home Occupations..... 97

Article 20 Accessory Apartments ..... 98

Sec. 16A-20-10. Purpose and Applicability..... 98

Sec. 16A-20-20. Reserved..... 98

Sec. 16A-20-30. Location and Design..... 98

Sec. 16A-20-40. Number of Units Allowed..... 98

Sec. 16A-20-50. Size of Units Allowed..... 98

Sec. 16A-20-60. Water and Sewer..... 99

Sec. 16A-20-70. Parking..... 99

Sec. 16A-20-80. Compliance with Building and Fire Codes..... 99

Article 21 Family Child Care Homes ..... 99

Sec. 16A-21-10. Generally..... 99

Sec. 16A-21-20. Town Laws Applicable..... 99

Sec. 16A-21-30. Large Family Child Care Home. .... 100

Article 22-26 Reserved.....100

Article 27 General – Zoning Processes ..... 100

Sec. 16A-27-10. Types of Zoning Processes..... 100

Article 28 Rezoning and Map Revision..... 101

Sec. 16A-28-10. Rezoning and Map Revision Explained; Applicability..... 101

Sec. 16A-28-20. Authority to Apply for Rezoning. .... 102

Sec. 16A-28-30. Authority to Approve Rezoning..... 102

Sec. 16A-28-40. Application..... 103

Sec. 16A-28-50. Sufficiency of Applications..... 104

Sec. 16A-28-60. Public Hearing..... 104

Sec. 16A-28-70. Notice of Hearing..... 105

Sec. 16A-28-80. Surface Development Notification..... 107

Sec. 16A-28-90. Criteria for Review of Rezoning..... 107

Sec. 16A-28-100. Decision on Zoning Application; Ordinance..... 108

Article 29 Text Amendment ..... 108

Sec. 16A-29-10. Text Amendment Explained; Applicability. .... 108

Sec. 16A-29-20. Authority to Propose a Text Amendment. .... 108

Sec. 16A-29-30. Process for a Text Amendment..... 108

Sec. 16A-29-40. Public Hearing and Notice. .... 109

**CHAPTER 16B Development & Design Standards ..... 110**

Article 1 General..... 110

Sec. 16B-1-10. Title. .... 110

Sec. 16B-1-20. Intent and Purpose..... 110

Sec. 16B-1-30. Reference to Chapter 16 General Provisions. .... 110

Sec. 16B-1-40. Applicability..... 111

Sec. 16B-1-50. Definitions..... 111

Article 2 Subdivision, Site, and Lot Design ..... 111

Sec. 16B-2-10. Generally..... 111

Sec. 16B-2-20. Lot Design Standards. .... 112

Sec. 16B-2-30. Dedications Required for Utility and Other Services..... 113

Sec. 16B-2-40. Access to Adequate Public Thoroughfare Required. .... 113

Sec. 16B-2-50. Secondary Access..... 113

Sec. 16B-2-60. Street Design..... 114

Article 3 Utilities and Easements..... 114

Sec. 16B-3-10. General Public Utility Easements..... 114

Sec. 16B-3-20. Sanitary Sewer Easements..... 115

Sec. 16B-3-30. Drainage Easements..... 115

Sec. 16B-3-40. Off-Site Easements..... 115

Sec. 16B-3-50. Emergency Access Easements..... 115

Sec. 16B-3-60. Pedestrian Easements..... 116

Sec. 16B-3-70. Snow Storage Easements..... 116

Article 4 Buildable Area..... 116

Sec. 16B-4-10. Generally..... 116

Sec. 16B-4-20. Setbacks..... 117

Sec. 16B-4-30. Easements..... 117

Sec. 16B-4-40. Other Encumbrances and Limitations..... 119

Sec. 16B-4-40. Buildable Area..... 119

Sec. 16B-4-60. General Restriction Regarding Buildable Area..... 120

Article 5 Building Design Standards..... 120

Sec. 16B-5-10. Generally..... 120

Sec. 16B-5-20. Building Height..... 120

Sec. 16B-5-30. *Reserved*..... 122

Sec. 16B-5-40. *Reserved*..... 122

Sec. 16B-5-50. *Reserved*..... 122

Sec. 16B-5-60. Foundation..... 122

Sec. 16B-5-70. Roofs..... 123

Sec. 16B-5-80. Garages..... 124

Sec. 16B-5-90. Window and Door Design..... 124

Sec. 16B-5-100. Balconies and Railings..... 125

Sec. 16B-5-110. Chimney and Roof Penetrations..... 126

Article 6 Building Materials and Colors..... 126

Sec. 16B-6-10. Generally..... 126

Sec. 16B-6-20. Materials..... 126

Sec. 16B-6-30. Colors..... 127

<b>Article 7</b>	<b>Accessory Improvements</b> .....	127
Sec. 16B-7-10.	<b>Generally</b> .....	127
Sec. 16B-7-20.	<b>Berms</b> .....	128
Sec. 16B-7-30.	<b>Garages</b> .....	134
Sec. 16B-7-40.	<b>Sheds</b> .....	135
Sec. 16B-7-50.	<b>Driveways</b> .....	136
Sec. 16B-7-60.	<b>Parking Areas</b> .....	139
Sec. 16B-7-70.	<b>Walkways</b> .....	141
Sec. 16B-7-80.	<b>Reserved</b> .....	142
Sec. 16B-7-90.	<b>Reserved</b> .....	142
Sec. 16B-7-100.	<b>Decks</b> .....	142
Sec. 16B-7-110.	<b>Gazebos, Pergolas, and Similar Structures</b> .....	142
Sec. 16B-7-120.	<b>Hot Tubs and Saunas</b> .....	143
Sec. 16B-7-130.	<b>Recreational Accessory Improvements</b> .....	144
Sec. 16B-7-140.	<b>Fences</b> .....	145
Sec. 16B-7-150	<b>Retaining, Screening, and Landscape Walls</b> .....	147
Sec. 16B-7-160.	<b>Flagpoles</b> .....	149
<b>Article 8</b>	<b>Signs</b> .....	149
Sec. 16B-8-10.	<b>Signs Generally</b> .....	149
Sec. 16B-8-20.	<b>General Compliance and Permitting</b> .....	150
Sec. 16B-8-30.	<b>Illegal Signs</b> .....	151
Sec. 16B-8-40.	<b>Permanent Signs</b> .....	151
Sec. 16B-8-50.	<b>Temporary Signs</b> .....	153
Sec. 16B-8-60.	<b>Flags</b> .....	154
Sec. 16B-8-70.	<b>Exempt Signs</b> .....	155
<b>Article 9</b>	<b>Lighting</b> .....	156
Sec. 16B-9-10.	<b>Purpose</b> .....	156
Sec. 16B-9-20.	<b>Definitions</b> .....	156
Sec. 16B-9-30.	<b>Applicability, Nonconformities, and Exemptions</b> .....	157
Sec. 16B-9-40.	<b>General Requirements</b> .....	158
<b>Article 10</b>	<b>Landscaping</b> .....	158
<b>Article 11</b>	<b>Public Improvements</b> .....	159
Sec. 16B-11-10.	<b>Street Design Standards</b> .....	159

Sec. 16B-11-20. Street Naming Procedure..... 160

Article 12 Grading and Excavation ..... 160

Sec. 16B-13-10. Generally..... 160

Sec. 16B-13-20. Permit Required..... 160

Sec. 16B-13-30. Financial Guarantee..... 161

Sec. 16B-13-40. Applicability, Nonconformities, and Exemptions. .... 161

Sec. 16B-13-50. Nonconforming Property..... 161

Article 13 Environmental Regulations ..... 161

Sec. 16B-13-10. Generally..... 161

Sec. 16B-13-20. Wetland Protection. .... 162

Sec. 16B-13-30. Floodway and Floodplain Protection. .... 162

Sec. 16B-13-40. Wildfire Protection. .... 163

Article 14 Reserved..... 164

Article 15 Construction Management Requirements..... 164

Sec. 16B-15-10. Purpose..... 164

Sec. 16B-15-20. Responsibility for Compliance. .... 164

Sec. 16B-15-30. Compliance Plans Required..... 164

Sec. 16B-15-40. Access and Parking..... 164

Sec. 16B-15-50. Blasting..... 165

Sec. 16B-15-60. Erosion Control and Vegetation Protection. .... 165

Sec. 16B-15-70. Construction Equipment and Material Storage..... 165

Sec. 16B-15-80. Debris and Trash Removal. .... 165

Sec. 16B-15-90. Construction Hours and Noise. .... 166

Sec. 16B-15-100. Reserved..... 166

Sec. 16B-15-110. Field Staking..... 166

Sec. 16B-15-120. Fire Protection..... 166

Sec. 16B-15-130. Prohibited General Practices. .... 167

**CHAPTER 16C Development & Improvement Processes ..... 168**

Article 1 General Provisions ..... 168

Sec. 16C-1-10. Title. .... 168

Sec. 16C-1-20. Authority..... 168

Sec. 16C-1-30. Background and Purpose. .... 168

Sec. 16C-1-40. Applicability of Processes to Type of Application. .... 169



Sec. 16C-1-50. Administrative Exemption..... 173

Article 2 Development and Improvement Application Processes ..... 173

Sec. 16C-2-10. Applicability..... 173

Sec. 16C-2-20. General Provisions..... 174

Sec. 16C-2-30. Optional Pre-Application Review..... 174

Sec. 16C-2-40. Optional Pre-Application Meeting..... 175

Sec. 16C-2-50. Type A Application Requirements..... 176

Sec. 16C-2-60. Application Completeness Required..... 179

Sec. 16C-2-70. Type A Application Review..... 180

Sec. 16C-2-80. Type B and Type C Application Explanation..... 181

Sec. 16C-2-90. Type B and Type C Application Requirements..... 181

Sec. 16C-2-100. Application Completeness Required..... 181

Sec. 16C-2-110. Type B and Type C Application Review..... 181

Sec. 16C-2-120. Reserved..... 182

Sec. 16C-2-130. Agency Referrals Authorized..... 182

Sec. 16C-2-140. Development Agreements Authorized..... 182

Sec. 16C-2-150. Standards for Approval and Final Decisions..... 182

Article 3 Appeals ..... 183

Sec. 16C-3-10. Appeal for Type A Application Decisions..... 183

Sec. 16C-3-20. Appeal for Type B and Type C Decisions..... 183

Error! Bookmark not defined.

**CHAPTER 17 Subdivision Regulations..... 184**

Article 1 General Provisions ..... 184

Sec. 17-1-10. Title..... 184

Sec. 17-1-20. Authority..... 184

Sec. 17-1-30. Purpose..... 184

Sec. 17-1-30.1 Temporary suspension of subdivisions that create new lots. ... 185

Sec. 17-1-40. Applicability, exemptions, limitations, and repeal..... 186

Sec. 17-1-50. Approval required for recordation..... 187

Article 2 Subdivision Processes ..... 187

Sec. 17-2-10. Forms of subdivision approvals..... 187

Article 3 Minor Subdivision ..... 187

Sec. 17-3-10. Definition of minor subdivision..... 188

Sec. 17-3-20. Minor subdivision review procedures. .... 188

Sec. 17-3-30. Sufficiency of application. .... 188

Sec. 17-3-40. Contents of minor plat application. .... 188

Sec. 17-3-50. Number of copies of plat application materials. .... 189

Sec. 17-3-60. Standard for approval. .... 189

Sec. 17-3-70. Conditions for approval..... 190

Sec. 17-3-80. Effect of approval of minor plat..... 190

Article 4 Major Subdivision ..... 190

Sec. 17-4-10. Definition of major subdivision. .... 190

Sec. 17-4-20. Major subdivision process generally..... 190

Sec. 17-4-30. Major subdivision review procedures. .... 191

Sec. 17-4-40. Sufficiency of applications. .... 191

Sec. 17-4-50. Reserved..... 191

Sec. 17-4-60. Preliminary plan– Contents of application. .... 191

Sec. 17-4-70. Final plat– Contents of application..... 195

Sec. 17-4-80. Standards for approval of a major subdivision..... 197

Sec. 17-4-90. Conditions for approval..... 198

Sec. 17-4-100. Reserved..... 198

Sec. 17-4-110. Effect of approval of preliminary plan. .... 198

Sec. 17-4-120. Effect of approval of final plat..... 199

Article 5 Plat Amendment ..... 199

Sec. 17-5-10. Definition of plat amendment..... 199

Sec. 17-5-20. Plat amendment review procedures..... 200

Sec. 17-5-30. Contents of plat amendment application..... 200

Sec. 17-5-40. Number of copies of plat application materials. .... 202

Sec. 17-5-50. Standards for approval of plat amendment. .... 202

Sec. 17-5-60. Conditions for approval..... 203

Sec. 17-5-70. Effect of approval of plat amendment. .... 203

Article 6 Plat Vacation..... 203

Sec. 17-6-10. Definition of plat vacation..... 203

Sec. 17-6-20. Authority to seek vacation of plat..... 203

Sec. 17-6-30. Plat vacation review procedures..... 204

Sec. 17-6-40. Contents of plat vacation application..... 204

Sec. 17-6-50. Number of copies of plat application materials. .... 205

Sec. 17-6-60. Standards for approval of plat vacation..... 205

Sec. 17-6-70. Conditions for approval..... 205

Sec. 17-6-80. Effect of approval of plat vacation..... 205

Article 7 Reserved..... 206

Article 8 Reserved..... 206

Article 9 Plat Correction ..... 206

Sec. 17-9-10. Purpose..... 206

Sec. 17-9-20. Definition of plat correction..... 206

Sec. 17-9-30. Contents of plat correction application..... 207

Sec. 17-9-40. Number of copies of application materials. .... 208

Sec. 17-9-50. Sufficiency of application. .... 208

Sec. 17-9-60. Plat correction review procedures. .... 208

Sec. 17-9-70. Standards for approval..... 208

Sec. 17-9-80. Town Manager Decision..... 209

Sec. 17-9-90. Appeal to Town Board. .... 209

Sec. 17-9-100. Conditions for approval..... 209

Sec. 17-9-110. Effect of Approval of Plat Correction..... 209

Article 10 Application Review Procedures ..... 210

Sec. 17-10-10. Applicability and purpose..... 210

Sec. 17-10-20. Table of subdivision processes. .... 210

Sec. 17-10-30. Reserved..... 212

Sec. 17-10-40. Pre-application meeting..... 212

Sec. 17-10-50. Completeness determination..... 213

Sec. 17-10-60. Reserved..... 213

Sec. 17-10-70. Agency referrals. .... 213

Sec. 17-10-80. Notice requirements. .... 215

Sec. 17-10-90. Public hearings..... 216

Sec. 17-10-100. Recording of plat and supporting documentation. .... 217

Article 11 Subdivision Improvements and Subdivision Agreements..... 218

Sec. 17-11-10. Assurance of Completion and Maintenance of Improvements.. 218

Sec. 17-11-20. As built plans..... 220

Sec. 17-11-30. Failure to install improvements; rights relinquished. .... 221

**Sec. 17-11-40. Plans and specifications. .... 221**

**Sec. 17-11-50. Open space, trails, and other requirements..... 221**

**Sec. 17-11-60. Reserved..... 221**

**Article 12 Reserved..... 222**

**Article 13 Plat Certificates ..... 222**

**Sec. 17-13-10. Plat certificates. .... 222**

# CHAPTER 16 Land Use Code General Provisions

## Article 1 General Provisions

### Sec. 16-1-10. Titles.

Chapters 16, 16A, 16B, 16C, and 17 of the Blue River Municipal Code shall be collectively referred to as the "*Town of Blue River Land Use Code*," or "*Land Use Code*," or "LUC." These Chapters may be referenced individually as:

Chapter 16 -	Land Use Code General Provisions
Chapter 16A	Zoning
Chapter 16B	Development & Design Standards
Chapter 16C	Development and Improvement Applications
Chapter 17	Subdivision Regulations

### Sec. 16-1-20. Authority.

The Town of Blue River Land Use Code is enacted in accordance with the authority conferred by state law, including Articles 16 and 23 of Title 31, Article 20 of Title 29, and Article 67 of Title 24 of the Colorado Revised Statutes, as amended.

### Sec. 16-1-30. Purpose of Chapter 16.

The purpose of the General Provisions of the Land Use Code is to apply to all activities and actions undertaken pursuant to Chapters 16A, 16B, 16C, and 17.

### Sec. 16-1-40. Background, Purpose, and Intent of the Land Use Code.

- (a) Background. The Town of Blue River values and places great importance on the natural character of the area as defined by the existing forest and vegetation, natural water features, wildlife, geology, geography, view corridors, and ridgelines. The Town seeks to recognize and protect these unique characteristics of the Town.

The natural character of the Town of Blue River can be significantly affected by the zoning, subdivision, use, development, and design of property. Lots should be designed to provide desirable settings for the buildings that are to be constructed, make use of natural contours, minimize the need to reshape and excavate the land, and afford privacy for the residents and protection from noise and vehicular traffic. Natural features and vegetation

of the area must be preserved, if possible. Building styles, colors, and materials should be selected with consideration of how the building and its form will be consistent with mountain character and to not stand out in a manner that denigrates or conflicts with the natural environment and setting. Environmental conditions and quality shall be protected. Improvements commonly associated with land uses should be appropriately located and designed to blend into the lot and the setting. Every resident must have basic services reasonably available to their property, including supply of water, a means of wastewater discharge that is safe to the public and the environment, electricity, and other common public services.

The Land Use Code was prepared with reasonable consideration, among other things, of the largely residential and environmentally sensitive characteristics of the Town and with a regard for the preservation of these characteristics when authorizing and permitting the development and use of property. The Land Use Code establishes zoning, specific development regulations and standards, and processes designed to preserve and the Town's valued character, trees, vegetation, views, waterways, wildlife, and to minimize to the extent lawfully permitted and reasonable the visual impact of development.

- (b) Purpose. The purpose of the Land Use Code is to provide a set of comprehensive regulations to best enable the use and development of property to be undertaken in a manner that will preserve the health, safety, and welfare of the Town and its residents. The Land Use Code establishes the minimum requirements that must be followed. These provisions address the physical relationships between uses, between lots and properties, between development and adjacent properties, and the interrelationship and connection with public streets, neighborhoods, and the natural environment in order to implement the Blue River Comprehensive Plan's vision and goals for a more attractive, efficient and livable community.

All property within the Town of Blue River is assigned a zone district and prior to development must be subdivided into lawfully recognized lots or parcels. Zoning (Chapter 16A) identifies the various zone districts and the allowed uses for property and imposes certain required and general design standards such as minimum lot size, setbacks, and maximum building height. Development Standards (Chapter 16B) provides for land use regulations to apply to uses and development of property. Improvement and Site Planning Application processes (Chapter 16C) provides procedures to apply for and process applications for improvements to lots and for site plan and development plan approval. Subdivision (Chapter 17) establishes a means to physically describe the property by setting lawfully recognized boundaries in order that the property may be later sold, transferred, and developed.

- (c) Intent. The Land Use Code is intended to serve the following goals:
- (1) To inform each property owner of the standards and criteria by which uses are permitted, development will be evaluated, and to provide information as to the type and extent of improvements permitted by the Town.
  - (2) To reduce conflict and increase compatibility with development on adjacent land.

- (3) To protect and conserve the value of land throughout the municipality and the value of buildings and improvements on the land.
- (4) To ensure that the development of property is in compliance with the Town's zoning ordinances and to achieve a harmonious, convenient, workable relationship among land uses, consistent with Town development objectives.
- (5) Preserve the beauty of the community, quiet enjoyment of property, and the value of the land.

**Sec. 16-1-50. Applicability, Exemptions, and Limitations.**

(a) Applicability. The Land Use Code is applicable to the following described property:

- (1) Property located within the legal boundaries of the Town of Blue River;
- (2) Property proposed for annexation to the Town of Blue River except to the extent specifically provided by any annexation agreement enacted by ordinance; and
- (3) Property located outside of the legal boundaries of the Town of Blue River and described in a Town-adopted intergovernmental agreement that requires application of this Zoning Code to the subdivision of property.

(b) Exemption for Town Property Authorized. The Land Use Code or a particular provision of the Land Use Code shall not apply to a specific use or specific proposal for use of Town-owned or Town-leased property if a majority of the entire Board of Trustees<sup>1</sup> grants an exemption *by resolution* based upon a finding that the public interest is best served, the efficient expenditure of taxpayer funds is advanced, or an emergency condition exists for which the application of this Chapter will impede the Town's ability to serve the Town's residents. The Board's consideration and approval of an exemption shall be an administrative decision and shall not require notice or public hearing prior to approval of the resolution granting an exemption.

(c) Limitations. The Land Use Code is not intended to modify, abrogate, amend or annul a vested property right lawfully established in accordance with federal or state law prior to the effective date of this Zoning Code subject to the terms and conditions of any agreement or approval pertaining to such vested right and subject to obligations to compensate owners as may be required by federal or state law.

---

<sup>1</sup> Required vote is a majority of all Board members in office at the time of the vote. For example, for a seven (7) member Board of Trustees, the required vote shall be four (4) votes. The required vote is not a majority of a quorum present as commonly applied to most actions of the Town Board.

**Sec. 16-1-60. Conformance with Other Laws.**

Applicants for Town approvals pursuant to this Land Use Code shall demonstrate complete conformance with all applicable standards and procedures required by federal and state law, including but not limited to issuance of final or conditional permits or approvals from federal and state agencies such as the Environmental Protection Agency (EPA), state air quality control and state water quality control agencies, the United States Army Corps of Engineers, Federal Emergency Management Agency (FEMA), the Colorado Department of Transportation (CDOT), and the Colorado Public Utilities Commission. Applicants are strongly encouraged to obtain any necessary approvals or permits, or to secure written findings establishing exemptions from state and federal regulation, prior to submission of applications. Failure to secure necessary approvals or permits will delay processing of an application or result in denial of an application or a permit.

**Sec. 16-1-70. Private Covenants.**

The applicability and application of the Land Use Code shall not be affected or altered in any way by privately imposed covenants or private contracts to which the Town is not a party that seek to govern or control the use of property. Rights afforded to private parties by such private covenants and contracts shall remain private rights subject to enforcement by the parties to the covenants or contracts according to their terms. No private covenant or contract to which the Town is not a party may alter, amend, reduce, waive, or negate the application, applicability, and requirement of the Land Use Code and approvals of the Town except to the extent permitted by law.

Nevertheless, the Town may legislatively determine that a purpose, element, or an aspect of a private covenant will, if recognized by the Land Use Code, advance the interests of the Town. For example, private river easements were created by covenant within Blue River to protect the floodplain and floodway, and this protection also advances the Town's goals of preserving the natural environment and the desired character of the Town. For that reason, the Town may, through provisions of the Land Use Code, recognize or incorporate the extent of the river easement when establishing or limiting the buildable area of a lot where development may lawfully occur.

**Sec. 16-1-80. General Interpretation.**

In the interpretation and application of the provisions of the Land Use Code, the following rules shall govern in addition to any common rules of statutory construction recognized by Colorado courts:

- (a) The interpretation and application of the provisions of this Land Use Code shall be regarded as minimum requirements for the protection of the health, safety and welfare of the public.
- (b) Whenever the requirements of the Land Use Code are at variance with the requirements of any other lawfully adopted rules, regulations, ordinances, or other legislative actions by



- the Board of Trustees, the more restrictive or that imposing the higher standard shall govern.
- (c) Whenever restrictions imposed by the Land Use Code are either more or less restrictive than regulations adopted by any state or federal agency, the rules or regulations which are more restrictive, or which impose higher standards or requirements, shall govern.
  - (d) When a provision includes a list of specific items, that list is intended to be exclusive; the provision applies only to the listed items and not to others. But if the list starts with a phrase like "at a minimum," "including," or "such as," the list illustrates the types of things the provision applies to and is not intended to be an exclusive list.
  - (e) The use of "may" or "should" means permissive, recommended, or advised but is not mandatory; the use of "shall," "must," or "will" means compliance is mandatory and not voluntary or permissive.
  - (f) If a term or phrase is subject to more than one reasonable interpretation, the more stringent or restrictive interpretation is intended.
  - (g) If two or more provisions of this Zoning Code or other applicable law conflict, the more stringent or restrictive provision shall govern or control.
  - (h) Words in the present tense include the future unless the context clearly indicates the future tense.
  - (i) Words used in the singular number include the plural and words using the plural number include the singular unless the context clearly indicates the contrary.
  - (j) Whenever the requirements of this Chapter are at variance with the requirements of any other lawfully adopted rules regulations or ordinances, the more restrictive, or that imposing the higher standard, shall govern.
  - (k) The use of italics within the text of the Land Use Code is intended as a courtesy to the reader to assist in identifying words and phrases that have a meaning defined by the Land Use Code. The absence of italics for a word or phrase that is defined by the Land Use Code shall not be interpreted as the word or phrase having a meaning apart from the definition and the absence of italics is an oversight.
  - (l) If any section, subsection, paragraph, clause, phrase, or provision of this Chapter shall be adjudged invalid or held to be unconstitutional by a court of competent jurisdiction, the

validity of the remainder shall not be affected in whole or in part, other than the provision adjudged to be invalid or unconstitutional.

**Sec. 16-1-90. Promulgation of Forms.**

The Town Manager is authorized to promulgate and adopt such additional forms, requirements, guidelines, summaries, and directions as may be reasonable or necessary to administer and implement the purposes and intent of the Land Use Code.

**Sec. 16-1-100. Administrative Interpretation.**

- (a) In consultation with the Planning Commission and Town Attorney, the Town Manager is authorized to issue written administrative interpretations applicable to all properties similarly situated concerning the requirements and application of the Land Use Code. An administrative interpretation shall not grant any form of approval or amendment to zoning, use, land development, site plan, or subdivision to a specific property and shall not modify, waive, or amend a non-ambiguous provision of the Land Use Code. An interpretation shall be limited to clarifying, restating, or assisting in identifying the proper application of the Land Use Code to enable applicants to conform to the requirements of the Land Use Code. All general administrative interpretations shall be collected and retained by the Town Manager and made available for public inspection. Following issuance of an administrative interpretation, the Town Manager shall provide a copy of the interpretation to both the Planning Commission and the Town Board of Trustees.
- (b) An appeal of an administrative interpretation is authorized if made in accordance with Section 16-2-50. Persons seeking an appeal are encouraged to discuss the administrative interpretation with the Town Manager before submitting an appeal.

**Sec. 16-1-110. Application and Review Fees.**

- (a) Application Fees. The Town Manager shall prepare, and update from time to time, a proposed schedule of application fees and charges for the processes described in the Land Use Code. The Manager's proposed fee schedule shall be presented to the Board of Trustees for consideration and approval by resolution. Prior to approval of such resolution, the Board of Trustees may refer the fee schedule for review and recommendation to the Planning & Zoning Commission. Fees and charges shall be reasonably related to the total costs generally incurred in application review, application processing, and ensuring compliance with the Land Use Code following application approval including, but not limited to, administrative staff salaries and expenses, cost and expenses in preparing and publishing notices, document copying, recording of documents, meeting and hearing costs and expenses, property and project inspection, and both general enforcement of the Land Use Code as well as enforcement of the Code requirements during the development described in the application.

- (b) Consultant Review Fees. In addition to an application fee, an Applicant shall pay one hundred (100) percent of the costs of review incurred by the Town's consultants that are directly related to the review, inspection, drafting of documents, and consideration of the application. Consultants retained by the Town may include planning, engineering, legal, water, environmental, and other land use professionals.
- (c) Procedure for Payment of Consultant Review Fees. At the time an application is first submitted to the Town, and prior to any review by the Town staff, the Applicant shall pay to the Town both the application fee required by subsection (a) of this section and an initial deposit ("Initial Deposit") to be applied to the Town's consultant review fees in an amount set by the Town Manager based on the Manager's estimate of the consultant resources likely required for review of the application. As consultant review fees are incurred and billed to the Town, the Town shall draw upon the Initial Deposit for payments to the appropriate consultants. At such time that the fees charged against the Initial Deposit exceed seventy-five (75) percent or more of the Initial Deposit, and within ten (10) days of the Applicant's receipt of notice by the Town, the Applicant shall supplement the Initial Deposit by making an additional deposit with the Town of an amount equal to at least fifty (50) percent of the amount of the Initial Deposit.
- (d) Authority to Modify Payment of Fees. The Town Manager may alter the method or timing of fee payment or the deposit of fees, reduce the amount of fees or deposit, or may waive fees and the Applicant's deposit(s) when either: (i) instructed by the Mayor or Town Board in order to advance policies and objective of the Town; or (ii) upon a determination by the Town Manager that the estimated or anticipated additional costs of review can be reasonably paid prior to final consideration of the application or that the fees will not likely exceed the remaining balance held in the Initial Deposit as such deposit may have been previously supplemented.
- (e) Full Payment a Condition for Approval. Notwithstanding the absence of any express condition of approval of an application for approval, the payment in full of all fees and charges associated with an application shall be a standard condition for the effectiveness of any application. The Town is authorized to withhold actions necessary to finalize or implement approval of an application (such as recording, notices, and permitting) until such time that outstanding fees and charges are paid in full.
- (f) Application Termination. The Town shall terminate review and processing of an application when any required fees are unpaid or when the Initial Deposit falls below the required minimum deposit amount determined by the Town Manager. The Town will recommence processing and review only upon receipt of the required additional fee amounts.
- (g) Final Accounting and Refund. Upon the Town's final determination of the application or upon termination of application processing, the Town shall refund any unused amounts on deposit with the Town following the Town's final accounting. Final account shall ensure all fees and charges associated with an application have been paid in full.
- (h) Unpaid Fees and Charges. In the event an Applicant fails to pay in full all outstanding fees and charges, the Town may reject acceptance of future applications from the

Applicant, or businesses or persons affiliated with the Applicant, that seek land use or building permit approval from the Town. In addition, the Town may pursue collection of delinquent fees and charges through any available means including use of a collection agency.

**Sec. 16-1-120. Violations and Enforcement.**

- (a) General Violation. It is unlawful for any person to use land in violation of the Land Use Code.
- (b) False Information. It is unlawful for any person to intentionally or knowingly submit a false statement as part of any application authorized by the Land Use Code.
- (d) Prohibited Construction. No structure shall be constructed, and no building permit issued for a structure, on any parcel of land except where such structure is to be constructed upon a parcel which meets the requirements of the Land Use Code.
- (e) Violation of Express Condition of Approval. It shall be unlawful and a violation of the Land Use Code for any person to fail to substantially satisfy or to breach a condition or requirement expressly imposed upon any approval of any application pursuant to the Land Use Code.
- (f) Violation of Agreement. It shall be unlawful and a violation of the Land Use Code for any person to fail to substantially satisfy or to breach a condition or requirement expressly imposed upon any approval by any written contract or agreement between the Town and the person associated with an application approved pursuant to the Land Use Code.
- (g) Continuing Offense. A violation of the Land Use Code shall be deemed a violation for each and every day or portion thereof during which any violation of the provisions of the Land Use Code is committed, continued, or permitted.
- (h) Enforcement. The provisions of the Land Use Code may be enforced at the direction of the Town Manager or Board of Trustees by use of any of the following methods either individually or in combination:
  - (1) Judicial proceeding including but not limited to actions for declaratory judgment, abatement, damages;
  - (2) Withholding of construction or building permit(s) for all or any improvement upon property that is the subject of the violation;
  - (3) Refuse to accept, continue to process, or to approve, any application pertaining to the property subject to an enforcement action;
  - (4) Withholding or revoking certificate(s) of occupancy for any structure upon property that is the subject of the violation;

- (5) To the greatest extent permitted by law, revocation or suspension of any license, permit, or certificate issued to any property or applicant;
  - (6) Inspection and ordering the removal or abatement of violations;
  - (7) Issuance of a stop work order mandating the temporary suspension of any development activity within or associated with property that is the subject of the violation;
  - (8) Assessment of costs and expenses (including but not limited to costs and expenses for administrative actions, publication, attorneys' fees, and court costs) incurred by the Town in the enforcement of the Land Use Code and the imposition of a lien for such costs and expenses against all or any portion of the property that is the subject of the violation; and
  - (9) Demand for payment and the receipt and use of funds held by any person or financial institution which were deposited to secure the performance of the obligation or duty imposed by the Land Use Code or a written contract or an agreement between the Town and the person owning or controlling the property that is the subject of the violation.
- (i) Entry Upon Property for Enforcement Authorized. Whenever necessary to perform an inspection to enforce any provision contained within the Land Use Code or any condition or requirement of a permit or other land use approval issued pursuant to the Land Use Code, or whenever there is reasonable cause to believe that a violation of the Land Use Code or any permit or any other land use approval issued pursuant to the Land Use Code exists in any building or upon any real property within the jurisdiction of the Town, the Town Manager or designee, or a police officer may, upon presentation of proper credentials, enter such building or real property at all reasonable times to inspect the same or to perform any duty imposed upon him or her by the Blue River Municipal Code; provided, that if such building or real property is unoccupied, the authorized official shall first make a reasonable effort to locate the owner or other persons who have charge or control of the building or of the real property and request entry. If the entry is refused, or the owner cannot be located, the Town Manager, the Manager's designee, or any police officer, is authorized to obtain a search warrant pursuant to the Colorado Municipal Court Rules of Procedure in order to conduct and complete the inspection.
- (j) Costs and Fees. The Town is authorized to collect its costs or fees and enforcement of the Land Use Code against any person violating any provision of the Land Use Code. In addition to any other means permitted by law, assessment of costs or fees shall be made by notice and demand letter signed by the Town Manager which letter shall identify the reasons for the assessment, the amount of such costs and fees, and a demand to pay the costs and fees by a date certain not less than ten (10) days following the person's receipt of the letter. In the event the costs or fees are not timely paid, the Town may certify such costs and fees to the County Treasurer for collection against the property subject to the Land Use Code in the same manner as taxes under C.R.S. §§ 31-20-105 and 31-2-106.

- (k) Remedies Not Exclusive. The remedies provided by the Land Use Code shall be cumulative and not exclusive and shall be in addition to any other remedies provided by law.

**Sec. 16-1-130. Severability and Savings Clause.**

- (a) Severability. If any language, provision, section, or Article of the Land Use Code is found to be unconstitutional, illegal or invalid by a court of competent jurisdiction, only such unconstitutional, illegal or invalid language, provision, section, or Article will cease to be effective, and any such finding shall have no bearing on the effectiveness of the remaining portions of the Land Use Code.
- (b) Savings Clause. The amendment or repeal of any ordinance or part of an ordinance by the Land Use Code shall not release, extinguish, or modify in whole or in part, any penalty or liability or any right of the Town, incurred or obtained under the amended or repealed ordinance or part of the ordinance. The Land Use Code, so amended or repealed, shall be treated and held as remaining in force or effect for the purpose of sustaining any and all proper actions, suits, proceedings and prosecutions, for the enforcement of any penalty, liability or any right of the Town, for the purpose of sustaining any judgment, decree or order which may be rendered in such proceedings, actions, acts, decisions, hearings and appeals pending before the Town, its Town Board, Planning Commission, any other decision-making body or officer, and any court.

**Sec. 16-1-140. Major Activity Notice.**

Pursuant to C.R.S. § 31-23-225, as amended, when a subdivision or commercial or industrial activity is proposed which will cover five (5) or more acres of land, the Town shall send notice to the Colorado Land Use Commission, the state geologist and the Summit County Board of County Commissioners of the proposal prior to approval of any zoning change, subdivision, or building permit application associated with such proposed activity.

**Article 2 Appeals**

**Sec. 16-2-10. Generally.**

Many final land use decisions of the Town, whether the decisions are made by the Board of Trustees, the Planning Commission, the Board of Adjustment, or the Town Manager, are subject to subsequent appeal. Importantly, only decisions that are final – generally meaning that there is no required further review and decision to be made – may be appealed. Filing and processing an appeal requires compliance with this Article and the request for appeal must be made in a timely manner.

**Sec. 16-2-20. Effective Date of Decisions.**

- (a) Board of Trustees.
  - (1) Regular Ordinance. A decision of the Board of Trustees made by adoption of a non-emergency regular ordinance is final upon the expiration of 30 days following the date of publication of the ordinance unless a later date of effectiveness is expressly provided by the ordinance.
  - (2) Emergency Ordinance. A decision of the Board of Trustees made by adoption of an emergency ordinance shall be final upon the date of adoption.
  - (3) Resolution. A decision of the Board of Trustees made by resolution shall be final upon the later of the date of approval of the resolution or the effective date stated in the resolution.
  - (4) Motion. A decision of the Board of Trustees made by adoption of an oral or written motion is final upon the date or approval of the motion.
- (b) Planning Commission.
  - (1) Recommendations and Advisory Decisions. Recommendations or advisory decisions of the Planning Commission that are subject to later consideration or review and a final decision by the Board of Trustees or Board of Adjustment in accordance with the Land Use Code shall be effective at the time of the recommendation or decision.
  - (2) Final Decisions. Final decisions of the Planning Commission concerning an application for development or improvement of property, and which are subject to appeal to the Board of Trustees or Board of Adjustment pursuant to section 16-2-30 or 16-2-50 shall be deemed effective ten (10) calendar days, excluding Town recognized holidays, following the date of the decision. During such 10-day period, no building or other permit or authorization concerning the development or improvements that are the subject of the Commission's decision shall be issued by the Town and, if issued in error, shall not be effective and may be revoked.
- (c) Town Manager Administrative Decision. Administrative decisions of the Town Manager authorized by the Land Use Code shall be final upon the date of the Manager's decision or the date identified in any written decision.

**Sec. 16-2-30. Appeal of Board of Trustees Final Decisions.**

- (a) Final decisions of the Board of Trustees may be appealed in accordance with law to state or federal courts of competent jurisdiction. Appeals are not available in the Blue River Municipal Court.

- (b) Unless otherwise expressly provided, a request or application for reconsideration shall not be available for final decisions of the Board. Where authorized and timely submitted, the submission of a request or application shall stay the date of final decision until the conclusion of such reconsideration.

**Sec. 16-2-40. Appeal of Planning Commission Final Decision.**

- (a) This section shall apply only to final decisions of the Planning Commission. This section shall not apply to recommendations or advisory decisions or opinions.
- (b) An appeal of a final decision issued by the Planning and Zoning Commission must be brought to the Board of Adjustment in accordance with this section by any person that sufficiently alleges in accordance with Colorado law: (1) a legally recognized injury-in-fact from the decision to be reviewed; and (2) such alleged injury is to a legally protected interest.
- (c) A complete and timely filing of a notice of appeal and the processing to conclusion of such appeal evidenced by the issuance of a decision by the Board of Adjustment pursuant to this Section is a jurisdictional prerequisite to the further right of appeal under Rule 106(a)(4) of the Colorado Rules of Civil Procedure or any other applicable law or rule.
- (d) An appeal requires strict conformance with the following process:
  - (1) Within five (5) business days of the date of the Planning Commission's final decision, the party seeking appeal (the "appellant") shall submit to the Town a timely and complete notice of appeal. Submission of the notice of appeal shall be made by physical delivery to the Town Manager or, as an alternative to physical delivery, the notice of appeal may be transmitted by electronic mail if addressed to both the Town Manager and the Mayor at electronic mail addresses available on the Town's official website. To be deemed timely and complete, a notice of appeal shall include:
    - a. The name, telephone number, and electronic mail contact information for the appellant, an explicit demand for appeal, the name or title associated with the application, the date of the Planning and Zoning Commission's decision, and a description of the general errors, grounds, or reasons supporting the appeal;
    - b. A statement setting forth the specific basis for an injury-in-fact and a legally protected interest which basis would confer upon the appellant the standing or legal right of appeal as required by section 16-2-40(b) and the law of the State of Colorado; and
    - c. Full payment of any Town required appeal fee established by the Town Manager as reasonably related to the cost of providing notice and conducting a hearing. Such fee is non-refundable.



- (2) The Town Manager, in consultation with the Town Attorney, shall determine whether a submitted notice of appeal is timely and complete. The appellant shall be promptly notified by the Town Manager of such determination.
- (3) Failure to timely submit a complete notice of appeal shall be deemed a failure to submit an appeal and a failure to meet the jurisdictional prerequisite for further right of appeal under Rule 106(a)(4) of the Colorado Rules of Civil Procedure.
- (4) Upon receipt of a timely and complete notice of appeal:
  - a. No building permits or other Town authorizations or approvals shall be issued for the development or the improvements that are the subject of the appeal of the Planning and Zoning Commission decision until the conclusion of the appeal.
  - b. The Town Manager shall schedule the appeal to be considered by the Board of Adjustment at the Board's earliest available opportunity and with sufficient time to meet applicable notice requirements. Such date of appeal shall not exceed sixty (60) days following the Planning and Zoning Commission's final decision.
  - c. The Town Manager shall cause to be prepared a public notice of the appeal and the scheduled appeal hearing. The content of the notice and the manner of the issuance of the notice (e.g., publication), shall comply with the same notice requirements applicable to the original hearing of the matter before the Planning Commission, if any.
  - d. The Town Manager shall cause the record of the Planning Commission proceeding to be prepared and distributed to the Board of Adjustment together with the notice of appeal and any materials or documents submitted by the applicant, the appellant, or other interested parties.
- (5) At the scheduled date and time of the Board of Adjustment's consideration of the appeal:
  - a. The Town Manager and/or the Town Attorney shall present general information concerning the original application, the appeal, and the development or the improvements that comprise the subject of the appeal.
  - b. The Board of Adjustment shall conduct a quasi-judicial, *de novo*,<sup>2</sup> hearing on the appeal. The applicant, appellant (if not the applicant), and all interested parties shall be provided a reasonable opportunity to address the Board of Adjustment in accordance with any adopted rules of procedure or practices of the Town.

---

<sup>2</sup> *De novo* means that the proceeding will be treated as a completely new matter as if it had not been previously heard or decided.

- c. The Board of Adjustment shall render a final decision on the application subject to appeal. Such decision may, at the Board's option, be evidenced by a resolution or other form of written decision. The Board of Adjustment's decision shall not be subject to further appeal pursuant to this section and further appeal shall be available pursuant to Rule 106(a)(4) of the Colorado Rules of Civil Procedure or other available judicial process or procedure.
- (6) During the pendency of an appeal, the Town shall suspend the effective date of the Planning Commission's decision pending the final decision of the Board of Adjustment.
- (7) The date of the final decision for purposes of judicial review pursuant to Rule 106(a)(4) of the Colorado Rules of Civil Procedure or other available judicial process or procedure shall be the date of the Board of Adjustment's final decision on appeal.
- (8) In the event of a withdrawal of the appeal by the appellant prior to the issuance of a final decision on appeal by the Board of Adjustment, the Planning Commission's original decision shall be deemed the final decision on the matter effective as of the date of the Planning Commission's original decision.

**Sec. 16-2-50. Appeal of Final Administrative Decisions.**

- (a) When Authorized. A final administrative decision of the Town Manager or administrative staff made pursuant to this Land Use Code is only appealable in accordance with this section if:
  - (1) The final administrative decision approves or denies a use, building, structure, or *accessory improvement* for a specific property is an administrative interpretation of a provision of the Land Use Code made pursuant to Section 16-1-100; and
  - (2) The person appealing the final administrative decision (the "appellant") is an owner of property within the Town of Blue River and the owner's property is either (i) directly affected by the decision; or (ii) *measured*<sup>3</sup> to be within three hundred (300) feet of the property subject to the final administrative decision; and
  - (3) The Town has not issued a license or permit which authorizes the use, building, structure, or *accessory improvement* for a specific property that is the subject of the appeal; and
  - (4) The appellant timely submits a notice of appeal pursuant to this Section.
- (b) Notice of Appeal. Within five (5) business days of the date of the final administrative decision, the appellant shall submit to the Town a timely and complete notice of appeal.

<sup>3</sup> See Section 16-3-20 for definition of *measured* for determining distance between properties for purpose of this Land Use Code.

Submission of the notice of appeal shall be made by physical delivery to the Town Manager or, as an alternative to physical delivery, the notice of appeal may be transmitted by electronic mail if addressed to both the Town Manager and the Mayor at electronic mail addresses available on the Town's official website. To be deemed timely and complete, a notice of appeal shall include: (1) the name, telephone number, and electronic mail contact information for the appellant; (2) an explicit demand for appeal; (3) the address of the subject property and the approval provided to the property; (4) a description of the general errors, grounds, or reasons supporting the appeal; and (5) full payment of any Town required appeal fee established by the Town Manager as reasonably related to the cost of providing notice and conducting a hearing. Such fee is non-refundable.

- (c) Notice Review. The Town Attorney shall administratively determine whether a submitted notice of appeal is timely and complete. The appellant shall be promptly notified by the Town Manager of such determination. If deemed untimely or incomplete, the appeal shall be rejected without a right of further appeal.
- (d) Processing. Upon receipt of a timely and complete notice of appeal: (1) no building permits or other Town authorizations or approvals shall be issued for the use, building, structure, or accessory improvement which is the subject of the appeal until the Town determined that the appeal is concluded; and (2) the Town Manager shall schedule the appeal to be considered by the Board of Adjustment at the Board's earliest available opportunity.
- (e) No Notice Required. Other than informally advising the appellant of the date and time of the scheduled appeal, no notice is required.
- (f) Review and Decision. At the scheduled date and time of the appeal, the Board of Adjustment shall conduct an administrative review of the appeal. The appellant and the Town Manager shall be provided a reasonable opportunity to address the Board. The Board shall render a final decision on the appeal and either support or reverse the Town Manager's decision. In the event of a withdrawal of the appeal by the appellant prior to the issuance of a final decision on appeal by the Board of Adjustment, the Town Manager's original decision shall be deemed the final decision on the matter effective as of the date of the Town Manager's original decision.

**Sec. 16-2-50. Appeal of Board of Adjustment Final Decisions.**

- (a) Final decisions of the Board of Adjustment may be appealed in accordance with law to state or federal courts of competent jurisdiction. Appeals are not available in the Blue River Municipal Court.
- (b) Unless otherwise expressly provided, a request or application for reconsideration shall not be available for final decisions of the Board. Where authorized and timely submitted, the submission of a request or application shall stay the date of final decision until the conclusion of such reconsideration.

## Article 3 Definitions

### Sec. 16-3-10. Applicability.

The definitions of this Article shall apply to the administration and interpretation of the Land Use Code unless: (a) a different definition is provided by a specific section or provision found in Chapter 16A, 16B, 16C, or 17; or (b) the context of a provision clearly indicates a different meaning or intent.

### Sec. 16-3-20. Definitions.

*Accepted* means, when used in regard to roads and streets, written acceptance of the road or street by the Town or other form of acceptance permitted or authorized by law.

*Accessory apartment* means a *dwelling unit* approved by the Town pursuant to the Land Use Code which unit is subordinate to and included as an integral part of another principally permitted *dwelling unit* in the R-1 Zone District used for rental housing. An accessory apartment requires express approval of the Board of Trustees as set forth in the Land Use Code.

*Accessory improvement* means a building, structure, or other permanent physical improvement or amenity to real property that is:

- (a) Located on the same lot with a building or structure with an existing lawful principal permitted use;
- (b) Customarily associated with residential use of property;
- (c) Located outside of the exterior walls of a building or structure housing a lawful principal permitted use;
- (d) Incidental, subordinate, and secondary to the building or structure housing the principal permitted use;
- (e) Expressly referenced and authorized by the Land Use Code for lots within a zone district.

*Accessory use* means a use authorized by the applicable zone district which is determined by the Town to be customarily associated with but subordinate to the *principal permitted use* on the same lot. An *accessory use* shall not exist without an established, existing, and operational *principal permitted use*.

*Address sign* means a permanent placard made of wood, metal, or plastic (or combination of such materials) that is limited to announcing only the street address of a lot by number and/or words and which is located on the lot identified by the address.

*Adjacent* means, when used with respect to a lot or a property under single ownership, (a) all properties sharing a common point or a common property line with the subject property; and (b) any property which would share a common point or common property line with the subject property if a public or private vehicular right-of-way separating the properties did not exist.

*Alley* means a private passageway between buildings or behind buildings.

*Apartment* means a room or set of rooms which includes facilities allowing for some level of food preparation and bathing intended to serve as, or leased or rented as, a *dwelling unit*.

*Applicant* means a person or legally recognized entity (a partnership, joint venture, association, corporation, person in a representative or agent capacity) lawfully authorized in writing by an *Owner* to apply for, process, and seek approval of an application or request submitted to the Town in accordance with the Land Use Code. In the context of subdivision (Chapter 17), an "Applicant" is synonymous with "subdivider." The Town may require any person or entity purporting to act or represent an *Owner* to provide a power of attorney or other documentation deemed acceptable to the Town Attorney to lawfully act and bind the owner during the site planning process.

*Area variance* means a waiver, change, reduction, or increase of a dimensional or area standard or requirement imposed by a zone district for a *lot*. An *area variance* would include, for example, the elimination or the modification of a required setback for a *lot* or a reduction in the maximum height of structures imposed by the provisions of a zone district for a *lot*. See also, *use variance*.

*As built plan* means a revised set of drawings submitted to the Town upon completion of a project, subdivision, building, structure or improvement illustrating or describing in detail the exact dimensions, geometry and location of all elements of the work completed.

*Bedroom* means a room within a residential dwelling unit that was lawfully created and is currently lawfully recognized by the Town as a bedroom within the meaning of applicable building and safety codes and intended for overnight sleeping accommodations. Rooms deemed permitted for overnight sleeping accommodation are limited to rooms designed and intended for the primary purpose of overnight sleeping and which include an interior door, one or more closets, and one or more windows which provide egress in the event of emergency and which room and windows meet standards established by the applicable building and safety codes for a bedroom. Garages, kitchens, bathrooms, living rooms, dining rooms, lofts, hallways, family or media rooms, storage rooms, and rooms not heated by the structure's central heating system are deemed not to be bedrooms for purposes of this definition.

*Below grade* means, when referring to any improvement, that the entire improvement or a substantial part of the improvement is located below the surface of the immediately adjacent earth. Related: *finished grade*.

*Berm* means a non-naturally occurring mound of earth greater than two (2) feet in height (as measured from original ground level), or larger than four hundred (400) square feet of surface area.

*Bike path* means a corridor for use by bicycles and pedestrians, prohibited for use by motorized vehicles other than vehicles required by state or federal law concerning accessibility or disability.

*Block* means an area of land within a subdivision which is entirely bounded by streets, highways, natural boundaries or the exterior boundary or boundaries of the subdivision.

*Board* means the Board of Trustees of the Town of Blue River, Colorado.

*Board of Adjustment* (or BOA) means the board required by C.R.S. § 31-23-307 and established by the Blue River Municipal Code to hear and decide appeals from and review of formal orders, requirements, decisions, or determinations made by an administrative official in the administration of the Land Use Code.

*Buffer* (or *buffer area*) means vacant and undeveloped property established as landscaped open space for the purposes of: (a) screening and separating properties with incompatible or potentially incompatible land uses; (b) preserving wildlife areas or corridors; (c) protecting ponds, wetlands, floodway or floodplain, steep slope areas, or scenic or desirable views. A buffer may consist of trees, shrubs, and other natural vegetation and may, where necessary, include below grade utilities.

*Building* means a structure having a roof supported by columns or walls, typically fully enclosed, and for which the purpose is to provide shelter or to contain a use such as a residential dwelling unit, garage, shed, or commercial business.

*Building, multi-family* (or *Multi-family Building*) means a building containing three or more townhouses, row houses, condominiums, or *apartments* designed for or used by three (3) or more *families*, each family living in a separate *dwelling unit* as an independent housekeeping unit, the total number of families in residence not exceeding the total number of dwelling units.

*Building, single-family* (or *Single-family Building*) means a building detached from other buildings that is designed for use as a *dwelling unit* exclusively by one (1) *family* as an independent housekeeping unit and located on an individual lot.

*Building, two-family* (or *Two-family Building*) means a building containing two townhouses, row houses, condominiums, or *apartments* designed for or used by two (2) *families*, each family living in a separate *dwelling unit* within the building as an independent housekeeping unit with each unit having a separate entrance. Such building is oftentimes referred to as a “duplex.”

*Buildable Area* means the area of a *lot* within which lawful development and an accessory improvement may be constructed and maintained following the applications of setbacks,

easements, and other *encumbrances and limitations* in accordance with the Land Use Code.

*Building height* means the vertical distance at any point of a building, structure, or improvement measured in accordance with the Land Use Code.

*Bylaws* means the bylaws or other governing document(s) of a unit owners' association or corporation.

*Carport* means an open-sided structure principally intended for the parking and protection of automotive vehicle(s), usually formed by a roof projecting from the side of a building or structure but shall also include a freestanding building or structure without walls on three or more sides.

*Compatible* means capable of existing together in harmony and without substantial or significant conflict; compatible does not mean the same or similar.

*Construction activity* means any site disturbance, construction, addition or alteration of any building, landscaping, or any other improvement on any lot.

*Construction site* means a site upon which *construction activity* takes place.

*Construction vehicle* means any car, truck, tractor, trailer, or other vehicle used to perform any part of a *construction Activity* or to transport equipment, supplies or workers to a Construction Site.

*Community Center* means a use that is conducted in a permanent building or structure providing a meeting and activity space for congregations of groups of Town residents and others for social, recreational, or neighborhood activities. A *Community Center* is not a commercial business establishment providing services or opportunities to the general public.

*Contractor* means an individual, partnership, corporation, joint venture, or other legal entity performing the work. In the case of work being performed under permit issued by the Town, the permittee shall be construed to be the contractor.

*Culvert* means a ditch, drain or conduit, not incorporated in a closed system that carries drainage water under a driveway, roadway, railroad, pedestrian walk or public way, or other type of overhead structure.

*Days* means consecutive calendar days, unless otherwise specified.

*Deck* means an exterior floored structure that is typically elevated from the ground; often but not always adjoining a house, not enclosed by walls, may be with or without a railing or stairs, and with or without a full or partial covering.

*Dedication* means a grant, donation, or conveyance of land by the owner of a fee interest, easement, right-of-way, or other right to the ownership or use of the land, involving a

legally recorded or acknowledged transfer of property rights, and acceptance of the dedicated property if required by law.

*Development (or to develop)* means any and all processes undertaken in the grading, excavating, filling, constructing, demolishing, reconstructing, renovating, remodeling, or other physical alteration or change to real property such as, but not limited to the creation or removal of buildings of any kind or type, structures, streets, roads, driveways, walkways, parking areas, drainage structures, retaining walls, fences, stairs, patios, decks, courtyards, signs, the installation, removal, or relocation of utilities; the de-vegetation or revegetation of the land; or change of use, regardless of whether such alteration or change is intended to add value to the real property. *Development* is generally synonymous with *improvement* although the term *improvement* oftentimes denotes a lesser degree or lesser extent of property modification.

*Documentation of ownership, liens, and encumbrances* means documentary evidence acceptable to the Town reasonably establishing: (1) that the applicant(s) is/are either the fee owner(s) of the entire property proposed for subdivision or that the applicant possesses the legal authority to subdivide the property on behalf of the fee owner(s); and (2) the full names and mailing addresses of all other interest holders in the property. Documentation of ownership, liens and encumbrances shall include all of the following:

- (a) A written ownership and encumbrances report or title commitment prepared by a title company and dated not more than sixty (60) days from the date of the application submission to the Town;
- (b) Written authorization by the owner, acceptable to the Town Attorney, that establishes the applicant's full authority to perform all actions required by these subdivision regulations and to subdivide the property on behalf of an owner;
- (c) A listing of the owners of any surface, subsurface, or above surface rights, easements or other interests in the land including the names and addresses of such owners, together with the book or film, page and reception number of each owner as recorded in the office of the county clerk and recorder; and
- (d) A listing of all liens and encumbrances against the subject property with the book or film, page and reception number of each lien or encumbrance as recorded in the office of the Summit County clerk and recorder including the names and addresses of all such lienholders.

*Drainage* means surface water runoff or the removal of surface water or ground water from land by drains, grading or other means, which include runoff controls to minimize erosion and sedimentation during and after construction or development.

*Driveway* means a privately owned and maintained surface designed, intended, or used to connect a residence, garage, or other building with a public or private street.



*Dwelling (or dwelling unit)* means a residential structure or part of a residential structure with one or more rooms, including kitchen and bathing facilities, designed for the purpose of living, sleeping, and cooking.

*Easement* means a reservation, grant, dedication, or conveyance by the owner of real property of a non-possessory right or interest in the owner's real property for a specified use or purpose which reservation, grant, dedication, or conveyance is both lawfully existing and recorded in the real estate records of the Summit County Clerk and Recorder's Office.

*Encumbrances (also encumbrances and limitations)* means and includes forms of easements, deed restrictions, contracts, covenants, federal, state and local laws, and other legally recognized restrictions or impediments affecting a lot that effectively reduce or restrict the area of a lot that may be developed or improved.

*Elevation drawing* means a drawing is drawn on a vertical plane showing a vertical depiction.

*Event Center* means a commercial business establishment that provides space rental for congregations of larger groups of people for social activities, conferences, festivals, or functions, including but not limited to, weddings, birthdays, anniversaries, parties, retirements, and funerals.

*Excavation* means any disturbance of the surface of the land (except to the extent reasonably necessary for planting of approved vegetation or soil and septic testing), including any trenching which results in the removal of earth, rock, or other substance or any grading of the surface.

*Existing* means having an actual and present physical existence which includes having previously existed but was removed prior to proposed re-installation or re-construction.

*Exterior view* means the extent or range of vision directed toward the development from any location beyond the boundaries of the development.

*Family* means:

- (a) One or more persons living together as a single household unit who are related by blood, marriage, lawfully recognized domestic partnership or civil union, legal adoption, or foster care; or
- (b) A group of not more than five (5) persons not related by blood, marriage, or adoption, living together as a single household unit, provided that the total occupancy does not exceed either: (i) one person for each four hundred (400) square feet of habitable floor area as defined by the Municipal Code excluding any garage; or (ii) two persons for each bedroom. For purposes of this subsection (b), a dwelling not having a separate room designated for sleeping shall be considered as having one bedroom; or
- (c) A family foster home, licensed by the State of Colorado having no more than four (4) foster children; or

- (d) A group of persons which qualify in both character and number as a “group home” pursuant to federal or state law.

*Family Child Care Home* means a state-licensed facility which is:

- (a) A “family childcare home” as defined by C.R.S. §26-6-102(13) which is not also defined or classified as a “large family childcare home” by rule or regulation of the state of Colorado; or
- (b) A “large family childcare home” which is not *adjacent* to another large family childcare home; or
- (c) A “large family childcare home” which is *adjacent* to another existing state-licensed large family childcare home and for which the Town has expressly granted approval for the large family childcare home to be located adjacent to the existing large family childcare home.<sup>4</sup>

*Fence* means a permanent or temporary structure serving as an enclosure, a barrier, or a boundary, usually made of posts or stakes joined together by boards, wire, or rails.

*Fill* means any addition of earth, rock, or other materials to the surface of the land, which increases the natural elevation of such surface.

*Finished grade* means the final elevation of the ground surface after man-made alterations, such as grading, grubbing, filling, or excavating, have been completed.

*Fire Protection District* means the Red, White, and Blue Fire Protection District.

*First floor* shall mean the floor of the building that is at or nearest to the level of the ground around the building. First floor is synonymous with ground floor or ground level (noun).

*Flagpole* means a metal or wood pole attached or affixed to either the ground (freestanding) or to a structure (mounted) which is designed for the sole purpose of attaching one or more flags.

*Garage* means any enclosed or partially enclosed non-habitable space designed, suitable, or intended for the storage, whether permanent or temporary, of one or more motorized vehicles or personal recreational motorized vehicles together with materials, goods, or equipment any other sort or type. A garage may also be used by the owner or tenant of the principal permitted structure for any lawful ancillary activity commonly associated with residential use, such as but not limited to hobbies, art studio, or greenhouse.

*Gazebo* means a freestanding, roofed structure that is not enclosed except for screening, glass, or plexiglass and utilized for the purpose of relaxation, shade, or protection from the elements.

---

<sup>4</sup> See C.R.S. §16-6-104.5(b).

*Grade* means the topmost elevation of the ground surface. Related: *below grade* and *finished grade*.

*Greenbelt* means a buffer area of high-quality vegetation left substantially intact or supplemented by additional plant materials.

*Greenhouse*, see *Shed*.

*Gross density* means the average number of dwelling units per acre.

*Gross floor area* means the sum of all of the roofed-over floor area of a building, measured from its exterior walls and including all accessory buildings on the same lot.

*Group Home* means a residential facility offering housing (living, sleeping, and eating accommodations) and on-site personal care to residents and which facility is either:

- (a) A state-licensed group home of not greater than eight (8) residents and appropriate staff providing for persons meeting one of the following state statutory definitions as recognized by C.R.S. § 31-23-303:
  - (i) intellectual and developmental disabilities; or
  - (ii) behavior or mental health disorders; or
  - (iii) aged (greater than 60 years of age).
- (b) A group home providing residential housing exclusively for persons protected from discrimination in housing by the federal Fair Housing Amendments Act and appropriate support staff necessary to serve the needs of the residents.

*Habitable space* or *habitable size* means the portion of a residential structure measured in square feet that is lawfully authorized by Town-adopted building and safety codes for human occupancy and habitation (*i.e.*, living and sleeping).

*Home occupation* means any business, profession, occupation, trade, or activity conducted for financial gain from within a residential structure or dwelling where such use is incidental and accessory to the use of the structure or dwelling as a residence by the person engaged in the home occupation.

*Homeowners' association* (or *HOA*) means organization of owners of property within a particular subdivision or condominium formed for the purpose of providing, preserving, maintaining, and enhancing their property, property value, property amenities and/or services, most often through covenants, programs, regulations, and enforcement. A homeowner's association may be titled by various names including but not limited to "civic association," "property owners association," or "subdivision association."

*Hotel* means a commercial business establishment that provides overnight lodging and may include meals, entertainment, or various personal services for the general public.

*Hot tub* means a large container full of water, often heated, in which one or more persons can sit for the purpose of relaxation, hydrotherapy, and/or socializing. A hot tub may be above, at, or below *grade*.

*Illegal use* means any use commenced or undertaken without compliance with applicable law, or which was not an authorized or permitted use within the zone district in which the use is located.

*Illegal building or Illegal structure* means any building or structure which was initially constructed, created, or established, or was later modified, changed, renovated, or remodeled, without compliance with applicable law, including but not limited to this Land Use Code and the Town-adopted building and safety codes. An *illegal building or illegal structure* shall also include an otherwise lawfully established building or structure which was altered or modified to accommodate an illegal additional dwelling unit, accessory apartment, *lock-off unit*, or unlicensed short-term rental.

*Illegal land division* means any division of land whether by map, plat, agreement, deed, or other form of documentation undertaken without the approval of a county or municipality with jurisdiction and authority over the *subdivision* of the land.

*Improvement is generally* synonymous with *Development* when used to describe the general modification of a building site. See *Development*. In the context of describing, referencing, or regulating a specific building, structure, or physical amenity on a site, *improvement* means the building, structure, or amenity. E.g., see “*Building height*.”

*Independent housekeeping unit* means one (1) family having available to them their own cooking (whether stove, oven or microwave oven) and sanitary facilities.

*Inspector* means an authorized representative of the Town, appointed or assigned by the Town Manager, to make any or all necessary inspections of materials and work performed by a person.

*Intensity of use* means the qualitative and quantitative levels of activity anticipated for any use.

*Interior view* means the extent or range of vision originating from within the development and directed to another portion of the development or any surrounding area.

*Landscaping* means the modification or enhancement of real property for the principal purpose of enhancing its visual quality, adding value, or screen or mitigating objectionable views or aspects through the use of any or all of the following elements: trees, shrubs, flowers, grass or other horticultural elements, retaining walls, berm, decorative rock or stonework, pond or water features, flood or drainage management, paving or trail creation, lighting, permanent fixtures or furniture, or other architectural elements.

*Landscape wall* means a wall exterior to a building or structure which is intended to hold the vertical weight of architectural elements such as pillars, gazebos, pergolas, or other similar structures or intended to aesthetically divide areas of a lot such as garden beds, transitions between natural and landscape areas, or to designate walkways or other purposes of the

lot. A landscape *wall* is not a *wall*, a *screening wall*, or a *retaining wall* (as defined by this Section).

*Lean to* means a structure with a single roof pitch either: (a) attached to a building or another structure along one wall; or (b) freestanding, and which is exposed or open and without walls on three or more sides.

*Local agency* shall include, in the context of the subject matter, topic, application, or property at issue:

- (a) Fire District;
- (b) Town Police Department;
- (c) Town Engineer;
- (d) Town Attorney;
- (e) Any water and sanitation district deemed by the Town Manager as specially affected or interested; and
- (f) Electricity provider;
- (g) School district;
- (h) Telephone service provider; and
- (i) When deemed by the Town Manager as specially affected or interested, the following:
  - (j) Any county, regional, state or federal agencies that may be deemed by the Town Manager as specially affected or interested; and
  - (k) Summit County land use department;
  - (l) Colorado State Department of Transportation; and
  - (m) Any other county, regional, state or federal agency including but not limited to the Colorado State Engineer, Soil Conservation Service, Colorado Geological Service, Denver Regional Council of Governments, Colorado State Forest Service, and the Colorado Water Conservation Board.

*Lock-off unit* (sometimes called a “lock-off” or a “lock-out unit”) means a portion or part of a *dwelling unit* which is physically separated or divided, or is capable of being physically separated or divided, into an additional space suitable as an independent or additional dwelling unit by the addition of one or more doors capable of being locked, by wall(s), or by other similar dividing elements. The presence of one or more facilities, conveniences, equipment, or amenities customarily associated with a residential kitchen (e.g., stove, range, cook-top, refrigerator, sink, 220v electrical circuitry, or utilities separately metered from the principal permitted residential use) and bathroom/bathing facilities within the space capable of being locked off shall create a presumption that the space is intended for use as a separate and independent dwelling unit.

*Lot* means land held in *single ownership* or by *undivided interest* which is lawfully created and is depicted on a recorded subdivision plat which was approved by a governmental authority having jurisdiction over the subdivision of the land. For purposes of Chapters 16, 16A, and 16B, the term *lot* includes a *parcel*, unless the provision or the context clearly indicates otherwise. See *Parcel*. A *lot* does not include an *outlot* or *tract*.

*Lot line* means the exterior boundaries which defines a *lot*.

*Lot area (net square feet)* means the number of square feet included within a lot as measured within the boundaries of the lot, measured on a horizontal plane.

*Marijuana* means all parts of the plant of the genus *cannabis*, whether growing or not, the seeds thereof, the resin extracted from any part of the plant and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or its resin, including marijuana concentrate. *Marijuana* does not include industrial hemp, nor does it include fiber produced from the stalks, oil or cake made from the seeds of the plant, sterilized seed of the plant which is incapable of germination, or the weight of any other ingredient combined with marijuana to prepare topical or oral administrations, food, drink or other product.

*Marijuana enterprise* means any commercial operation, facility, machine, or business which does not require for lawful operation any Town application, Town approval, or Town permit or license and which sells or dispenses marijuana and/or marijuana products, including but not limited to vending machines selling marijuana or marijuana products.

*Marijuana establishment* means a marijuana store, marijuana club, a marijuana cultivation facility, marijuana enterprise, a marijuana products manufacturer, a marijuana hospitality establishment, a marijuana hospitality and sales establishment, a marijuana testing facility, and marijuana delivery of any form.

*Measure (or measured or measurement):*

- (a) When determining the distance between two *lots* (i.e., for purposes of deciding the appropriate recipients of notices), means to compute the linear distance between two *lots* from the lots' nearest lot lines using a straight line on a two-dimensional map without concern for topography.
- (b) When determining area (i.e., for purpose of determining the size of a small fence enclosure or size of a deck), means to compute the area based on a two-dimensional map illustrating two perpendicular axes such length and width or latitude and longitude.
- (c) When determining height, means the perpendicular distance from grade level to the highest point of a building, structure, or improvement, unless a different means of measurement is provided by a specific provision.

*Motor vehicle* shall have the same meaning as defined by the Colorado Model Traffic Code (2020 edition and as may be amended) adopted by Section 8-1-10 of the Town Code.

*Neighborhood* means the area surrounding a *property* which area shares distinctive characteristics in terms that may include housing type and size, property size, access by common street network, and zone district.

*Nonconforming*, with regard to a use, building, structure, lot, or accessory improvement, means lawfully existed at the time of the Land Use Code's adoption, or a later amendment, but which now do not conform with one or more of the regulations contained in this Code.

*Non-habitable*, in reference to a building, structure, or accessory improvement, means not lawfully authorized by Town-adopted building and safety codes for human occupancy and habitation (i.e., living and sleeping) and that such occupancy and habitation is unlawful or illegal.

*Open space* means an area with few or no structures, relatively light tree cover and capable of sustaining circulation systems and suitable recreational activities.

*Outlot* means a lawfully described and identifiable unit of land illustrated or depicted on a subdivision plat approved by a governmental authority having jurisdiction over such subdivision plat and land not intended for development by use of terms such as, but not limited to, "outlot," "buffer," "buffer area," or "reserved." Except to the extent expressly and specifically stated on the subdivision plat, an outlot (by whatever identifying name) shall not be deemed a lot or a building site and shall not be approved for any use. Any future use and development of an outlot requires Town approval of a minor subdivision plat, final plat, plat amendment, and/or site plan.

*Overlay district* means a subarea super-imposed over one or more existing zone district for the purpose of allowing specialized regulations to apply within such subarea to address a specific concern for the protection of the public health, safety, or welfare.

*Owner* means a *person* or persons holding or vested with single ownership in real property and, by virtue of such ownership, possesses the legal right to convey, grant or dedicate such property, or to otherwise bind future owners of such property through execution of a subdivision plat or other instrument affecting the property. Such term shall include an *Applicant*, as defined by this Section.

*Ownership*. See *single ownership*.

*Parcel* means a unit of land that was lawfully created, is lawfully described by deed or recorded plat, is unsubdivided, and is an *undivided ownership*.

*Parking, off-street* means any parking area located wholly within the limits of one (1) or more lots.

*Parking space* means that part of a parking area, exclusive of drives, turning areas or loading spaces, devoted to parking for one (1) *motor vehicle*.

*Park (or parkland)* means property reserved for active or passive recreational purposes.

*Pergola* means an arbor or a passageway of columns supporting a roof of supports or trelliswork on which climbing plants can be trained to grow or which defines an entry, exit, or a division of space within a lot.

*Person* means any individual, partnership, corporation, joint stock association, trustee, receiver, assignee, any other legally recognized entity, or personal representative thereof. Person also includes any municipality, or state, special district, or any political subdivision thereof

to the extent that the Town of Blue River has jurisdiction over their activities that are within the scope of the Land Use Code.

*Personal recreational motorized vehicle* means a motorized vehicle designed and intended for, and primarily limited to use in, the personal pursuit and enjoyment of outdoor recreational activities, including motorcycles, trailbikes, snowmobiles, all-terrain vehicles, low power scooters, golf carts, motorized bicycles, and boats, but not including a common passenger vehicle or a recreational vehicle as defined by the Colorado Model Traffic Code (2020 edition).

*Plan drawing* means a drawing on a horizontal plane showing a view from above.

*Plans* means the drawings, profiles, cross sections, working drawings, and supplemental drawings, or reproductions thereof, approved by the Town or building official, which show the location, character, dimensions, or details of the work.

*Planning Commission* means the officially appointed Planning and Zoning Commission for the Town of Blue River as a body and when acting in the body's official capacity at the request of the Board of Trustees or attending a properly noticed public meeting. *Planning Commission* does not include or refer to any individual of the Commission or group of individuals when not engaged in a properly noticed public meeting.

*Professional engineer* means a person or firm currently licensed and in good standing as an engineer in the State of Colorado.

*Plat, final (or final plat)* means a map, drawing or chart upon which the subdivider presents proposals for the physical development of a subdivision, and which a person submits for Town approval and intends to record in final form following Town approval.

*Playground equipment* means items commonly associated with outdoor recreational activities for children, such as seesaw, merry-go-round, swing set, slide, jungle gym, chin-up bars, sandbox, trapeze rings, playhouses, or mazes.

*Pole barn* means a structure for which 70 percent or more of the perimeter is permanently open.

*Preliminary plan* means the preliminary drawings described in these regulations indicating the proposed manner or layout of the subdivision to be submitted to the Board for approval.

*Principal permitted* - in reference to a *use, building, structure, or dwelling unit* on a - means the *use, building, structure, or dwelling unit* is lawfully authorized for a lot by the applicable zone district and which does not require specific approval of the Town.

*Project application* means a document or set of documents, prepared in the form promulgated by the Town Manager, which provide(s) at a minimum the information necessary to identify and contact the *Owner* and, if applicable, the *Applicant*, describes at a general level a proposed development or improvement(s), and which is submitted to the Town for the purpose of seeking Town consideration and approval on the development or improvement pursuant to the Land Use Code.



*Property* is synonymous with *Lot* or *Parcel*.

*Public building or public use* means any building open to the general use, participation or enjoyment of the public and owned or leased by the Town, county, state or federal government or by a public utility corporation.

*Public utility* means, for the purpose of this Chapter only, an electric substation, a gas regulator station, a telephone exchange, a water or sewer pumping station or a water reservoir.

*Redevelopment* means the process of demolishing, dismantling, replacing, converting, rebuilding, replacing, or reconstructing improvements located on real estate.

*Reconstruction* means to assemble or build again or recreate.

*Recreation court* means a concrete or other form of permanent firm surface greater than 200 square feet in size designed and intended for use for recreational purposes such as tennis, pickleball, badminton, basketball, or other activities of a recreational nature.

*Religious Institution* means any church, synagogue, mosque, temple or building which is used primarily for worship and related activities for a legally recognized and established religion.

*Restaurant* means a commercial business establishment where meals are prepared and served for purchase by the general public or, if associated with an onsite *Event Center*, for consumption by persons hosted at the *Event Center*.

*Retaining wall* means a structure of any kind or type intended for the purpose of restraining or preventing the advance of a vertical faced mass of soil or earth. A *retaining wall* is not a *wall*, a *screening wall*, or a *landscape wall* (as defined by this Section).

*Right-of-way* means the: (a) width or area between property lines; or (b) an area preserved or dedicated; for the purpose of providing for the right of passage over the land and which may include a right of passage for above grade and below grade utilities, conduit, culverts or other water conveyance structures, together with a right of lateral support.

*Road* is synonymous with *Street*. See *street*.

*Road easement* means property lawfully reserved for the principal purpose of vehicular traffic. Such reservation customarily results from a recorded easement or government approved subdivision plat.

*Section drawing* mean a drawing illustrating a vertical (elevation) depiction that shows a view of a structure as though it had been sliced in half or cut along another imaginary plane.

*Service connection* means all or any portion of the conduit, cable, or duct, including meter, between a utility distribution line and an individual consumer.

*Setback* means the distance required by the lot's zone district (see Chapter 16A) between the drip edge of a building or proposed building and the closer of the lot line or the edge of any right-of-way or road, access and pedestrian easements, except for the Timber Creek Estates Development, where the setback will be measured from the property line.

*Interpretive Note:* The phrase "*within a setback,*" "*within the setback*" or "*within the setbacks*" shall be interpreted to refer to the area defined as a setback and shall not mean within the area enclosed by or that results from the application of two or more setbacks. The area enclosed by or results from the application of setbacks to a lot, which area is outside of the setbacks, is known as the *buildable area* (see definition above).

*Sewer system* means a central or individual system providing a treatment of raw sewage in a manner approved by public authority.

*Screening wall* is intended to prevent or mitigate the view of items located on a lot such as service yards, utility tanks, trash containers, storage of patio furniture, and maintenance and recreational equipment. A *screening wall* is not a *wall*, a *retaining wall*, or a *landscape wall* (as defined by this Section).

*Shed* means any enclosed or partially enclosed non-habitable space designed, suitable, or intended for (i) the storage, whether permanent or temporary, of materials, goods, or equipment of any sort or type; (ii) the storage, whether permanent or temporary, of personal recreational motorized vehicles; and/or (iii) the use by the owner or tenant of the principal permitted structure for any lawful ancillary activity commonly associated with residential use, such as but not limited to hobbies, art studio, or greenhouse.

*Shrub* means a woody plant of relatively low height, customarily having several stems arising from the base and lacking a single trunk; a bush.

*Sign* means any structure, statue, figure, poster, banner, painting, mural, insignia, billboard, trademark or other object or device used as a means of communication, situated outdoors or indoors, of which the effect produced is to advertise, announce, communicate, identify, declare, demonstrate, direct, display, amuse, capture attention, and/or instruct.

*Sign face* means the total surface of sign measured in a two-dimensional plane (length and width) from the most exterior or outside edge of the sign.

*Single ownership* means land owned in its entirety as a single *lot or parcel* and the owner or owners of the land possess equal right to the use and occupancy of the land regardless of owning unequal or dissimilar shares or percentages in such land. Common undivided ownership types are sole ownership, tenancy in common, joint tenancy, and tenancy by the entirety. Owners may include an individual, partnership, corporation, political subdivision, limited liability company, trust, holding company or other business entity, or in any combination of such owners.

*Site Plan* means a document or set of documents required by this Land Use Code that describes in detail the proposed development in terms of building locations, building architectural design, street and driveway layout, parking area, easement and utility locations, garage

size, exterior lighting, and other requirements and standards imposed ensure that the development of the lot will not adversely impact or impair the health, safety, and welfare of the community.

*Site specific development plan* means a plan meeting the requirements of Article 6 of Chapter 16 of the Land Use Code that describes with reasonable certainty the type and intensity of use for a specific parcel or parcels of property and which has been approved at a separate hearing conducted by the Board of Trustees pursuant to Article 6 of Chapter 16 of the Code.

*Street* means an open, public or private way designed, intended, or used for the passage of vehicles. *Street* is synonymous with *road*. A *street* is not a *driveway*.

*Street, arterial (or arterial street)* means, for the Town of Blue River, Colorado State Highway 9.

*Street, collector (or collector street)* means a street designed, intended, or used to collect traffic from one or more local streets and to direct or divert such traffic onto Colorado State Highway 9 in Blue River.

*Street, local (or local street)* means a street designed, intended or used for the purpose of connecting a lot to an arterial street or a collector street. Customarily, a local street experiences relatively few vehicular trips when compared to arterial and collector streets.

*Street, public (or public street)* means any street, regardless of its initial or original creation as a private street, road, or road easement, that is maintained by the Town for purposes of vehicular or pedestrian use.

*Street, public* means the entire width between the boundary lines of every right-of-way publicly maintained when any part is open to the use of the public for purposes of vehicular travel.

*Street identification sign* means a sign, whether publicly or privately owned, customarily erected at an intersection, within or adjacent to a right-of-way or road easement, at a point of change of direction of a road, or at the commencement of a road, for the evident intent and purpose of identifying the name of the road for purposes of wayfinding.

*Storm sewer* means any conduit and appurtenances intended for the reception and transfer of stormwater.

*Structural alteration* means any addition to or subtraction of parts of a building, including walls, columns, beams, girders, foundations, doors and windows.

*Structure* means anything constructed or erected upon the ground, except utility poles. *Structure* includes any solar device or solar panel.

*Subdivide (or Subdivision)* means the act of dividing land into one or more discrete *lots*, *tracts*, or *outlots*, by obtaining formal approval of a *subdivision plat* by a governmental agency with jurisdiction over the division of land, for the purpose of holding the *lot*, *tract*, or *outlot* in

*undivided ownership* for immediate or future sale, development, investment, or other lawful purpose.

*Subdivider* means an *Applicant* seeking any form of *subdivision* approval in accordance with Chapter 17 of the Land Use Code. See *Applicant*.

*Subdivision entry sign* means a form of *sign* that is located at the entry of a lawfully recognized subdivision with the evident intent of announcing or establishing the identity of the subdivision.

*Subdivision plat* means:

- (a) An illustrative document approved by a governmental agency with jurisdiction over the division of land into one or more *lots*, *tracts*, or *outlots*, which document is recorded with the Summit County Clerk and Recorder's Office as a public record; or
- (b) An illustrative document used to create condominiums in accordance with the Colorado Common Interest Ownership Act (or a predecessor condominium authorizing statute) and which is recorded with the Summit County Clerk and Recorder's Office as a public record.

*Surety* means any individual, firm, or corporation, that guarantees the performance of work or obligations of another party another and who is legally bound to performance or payment for the estimated value of such work or obligation, plus other administrative costs and expenses when authorized, in the event of default. The Town reserves the right to determine whether a proffered surety is sufficiently qualified to guarantee the performance of work or the obligations at issue and the form of the acceptable surety (i.e., performance or other bond, letter of credit, cash deposit, or other means).

*Swimming pool* means a structure greater than 200 feet in area (measured by width and length) designed to hold water to enable swimming, paddling, or other water leisure activities whether built above or below ground and regardless of material of construction. A swimming pool does not include a *hot tub*.

*Temporary sign* means a *sign* that is either: (a) constructed of materials which are not intended to be permanent in nature; or (b) is readily movable and not affixed in a permanent manner to the ground although the sign may be attached or otherwise tethered to the ground for the duration of display. Common forms of temporary signs include a real estate sale or rental sign, yard sale sign, or political issue or candidate sign.

*Town* means the municipality of the Town of Blue River, Colorado.

*Manager* (or *Town Manager*) means the Town Manager of the Town of Blue River or the Manager's designee as identified in writing.

*Tree* means a perennial woody plant having a main trunk and usually a distinct crown.

*Undivided interest* means land that is owned in its entirety as a single *lot* or *parcel* and the owner or owners of the land possess equal right to the use and occupancy of the land regardless of owning unequal or dissimilar shares or percentages in such land. Common undivided ownership types are sole ownership, tenancy in common, joint tenancy, and tenancy by the entirety.

*Use* means the purpose for which any land, structure or building is designed, maintained, or occupied. Use of property allowed under these regulations in a particular district includes construction, establishment, maintenance, alteration, moving onto, enlargement and occupation.

*Use by right* means any use listed as a principal permitted use in this Chapter in any given zoning district.

*Use variance* means an addition, elimination, or modification of a *principal permitted use* or *accessory use* permitted or prohibited within a zone district. For example, a *use variance* would include the addition of a kennel (a prohibited commercial use within the R-1 zone district) to the listed *principal permitted uses* for a *lot* or a modification of the definition of a *hotel* to increase the maximum number of rooms permitted for a *lot* by the definition of *hotel*. See also, *area variance*.

*Utility* (or *utilities*) means such improvements, equipment, and systems most commonly under the ownership, control, or management of a business, whether public or private, for the purpose of providing necessities or services to property such as water, electricity, natural gas, telephone, wastewater, stormwater, or cable or internet. Utilities may be above or below grade.

*Vegetation zones* means areas to which certain genera or associations are restricted due to the effects of either altitude or latitude.

*Vested property right* means the right to undertake and complete the development and use of property under the terms and conditions of a Town-approved *site-specific development plan* or a site-specific development plan approved by another government having land use jurisdiction for such plan prior to annexation of the property by the Town.

*Wall* means an upright structure serving to enclose, divide, or protect an area, especially a vertical construction forming an inner partition or exterior siding of a building. A *wall* is not a *retaining wall*, a *screening wall*, or a *landscape wall* as defined by this Section.

*Written* (or *in writing*) means the use of letter or other hardcopy correspondence or electronic mail (email). Text messaging, instant messaging, telephonic message, voicemail, visual forms of communication, or other forms of communication that do not produce easily and permanently retainable, storable, archivable, and retrievable messages equivalent to letter or electronic mail shall not be deemed writing or in writing.

*Yard* means the area between a lot or parcel line and a building.

*Yard, Front (Front yard)* means the area extending from the front lot line into a lot over the full width of the lot to the foundation or the nearest point of projection of the primary structure

*Yard, Rear (Rear yard)* means the area extending from the rear lot line into a lot over the full width of the lot, to the foundation or the nearest point of projection of the primary structure.

*Yard, Side (Side yard)* means the area extending from the side lot line into a lot over the full lot depth to the foundation or the nearest point of projection of the primary structure and excluding front yard and back yard areas.

*Yard statue* means a form of sign created in a three-dimensional form or likeness sculpted, modeled, carved, or cast from a solid material such as stone, clay, wood, plastic, or metal (or combination of solid materials) and which is visible from adjacent properties or from public rights of way. By way of examples, yard statues commonly found in Summit County include forms or likenesses of wildlife or geometric shapes.

## Article 4 Non-Conforming Uses

### Sec. 16-4-10. Purpose.

- (a) The purpose of this Article is to recognize the existence of uses, buildings, structures, and lots that lawfully existed at the time of the Land Use Code's adoption, or a later amendment, but which now do not conform with one or more of the regulations contained in this Code. A nonconform lot, building, structure, or use is deemed incompatible with the purposes and principal permitted uses in the zoning district in which the nonconformance exists. Therefore, nonconforming uses, buildings, structures, and lots are subject to regulations limiting their use, restoration, reconstruction, extension, and substitution in order to reduce or mitigate the nonconformity. Such nonconforming status shall be continued only in conformance with this Article.
- (b) A use, building, structure, or lot that is expressly authorized pursuant to a legally granted variance is not a nonconforming use, building, structure, or lot.

### Sec. 16-4-20. Illegal Use, Building, Structure, or Lot Not Nonconforming.

- (a) Illegal Use. An *illegal use* shall not be recognized as a nonconforming use. Without limiting the foregoing, an illegally created additional *dwelling unit*, accessory apartment, *lock-off unit*, or unlicensed short-term rental use shall not be deemed a nonconforming use.
- (b) Illegal Building or Structure. Any *illegal building* or any *illegal structure* shall not be recognized as a nonconforming building or structure. Such illegal status shall include, specifically, an otherwise lawfully established building or structure which was altered or

modified to accommodate an illegal additional dwelling unit, accessory apartment, *lock-off unit*, or unlicensed short-term rental).

- (c) Illegal Land Division. Any *illegal land division* shall not create or be considered a nonconforming *lot, parcel, or outlot*. Later Town-approval of a *subdivision plat* including such illegally divided land shall either establish the divided property as lawful (if conforming to minimum lot size and other applicable standards) or a nonconforming property (if failing to meet minimum lot size).

**Sec. 16-4-30. Nonconforming Use of Building or Structure.**

The use of a building, structure, or land undertaken and existing lawfully on the effective date of the Land Use Code, or any later amendment of the Code, but which use does not conform to the use regulations of the district in which the use is located, shall be a nonconforming use. A nonconforming use may continue so long as it remains otherwise lawful and does not constitute a public nuisance, subject to the following provisions:

- (a) Alteration or Reconstruction, of a Building or Structure Occupied by a Nonconforming Use. No building or structure occupied by a nonconforming use shall be reconstructed or structurally altered in any manner unless the use of the building or structure is changed to a use permitted in the zone district in which the building or structure is located. Customary repair and maintenance is permitted.
- (b) Change, Enlargement, or Expansion of Nonconforming Use. A nonconforming use of a building, structure, or land shall not be changed to another nonconforming use, or physically enlarged, expanded, or relocated to a part of the land that was not occupied by the use at the time it became nonconforming.
- (c) Damage or Destruction. In the event a building or structure that is occupied by a nonconforming use is destroyed by any means or event to the extent of sixty percent (60%) or more of the total market value of the building or structure, as recognized by the Summit County Assessor or as determined by the Town based on evaluation of market values, the building or structure shall not be rebuilt, restored or re-occupied for any use unless such use conforms to the use regulations of the zone district in which the building or structure.

**Sec. 16-4-40. Nonconforming Building or Structure.**

A building or structure existing lawfully on the effective date of this Land Use Code, or any later amendment of the Code, but which building or structure does not conform to the required minimum *setback*, maximum building height, encroaches on land outside of the applicable *buildable area*, architectural requirements, or other dimensional, size, or character regulations of the zone district in which the building or structure it is located, shall be a nonconforming building or nonconforming structure. A nonconforming building or structure may continue to be used or occupied by a use permitted in the zone district in which it is located so long as it remains otherwise lawful and does not constitute a public nuisance, subject to the following provisions:

- (a) Maintenance and Repair. Ordinary repairs, or repair or replacement of non-bearing walls, fixtures, wiring, residential driveways or plumbing may be performed on a nonconforming structure or building or on any portion provided, however, no structural parts shall be replaced except when required by law to restore such building or structure to a safe condition or to make the building or structure conform to the regulations of the district in which it is located.
- (b) Enlargements or Extensions. A nonconforming building or structure shall not be enlarged or extended unless:
  - (1) The original building or structure is made to conform to the regulations of the zone district in which it is located; or
  - (2) The proposed enlargement or extension is in compliance with the regulations of the zone district in which it is located, and will not increase any existing nonconformity in any other portion of the building or structure; or
  - (3) The building extension will result in a significant reduction of a nonconforming condition as determined administratively by the Planning Commission.
- (c) Relocation. A nonconforming building or structure shall not be relocated in whole or in part to any other location on the lot or to another lot unless the building is made to conform to the regulations of the zone district in which it is to be located.
- (d) Reducing a Nonconforming Site Condition on a R-1 Zoned Lot. If an enlargement, extension or relocation of an existing residential nonconforming building or structure on an R-1 zoned lot is proposed, the Planning Commission may administratively review the proposal and approve the enlargement, extension or relocation upon an administrative finding by the Commission that: (1) the enlargement, extension or relocation will result in a substantial or significant reduction of the existing nonconformity; and (2) the enlargement, extension or relocation is reasonably expected to be completed within one calendar year from the date of the Commission's approval. The Commission may administratively revoke its approval for an enlargement, extension or relocation which has not received building permits or other needed authorization to commence above grade construction or that is not likely to be substantially completed within one calendar year of the approval. Prior to any revocation, the Commission shall provide mailed notice to the owner of record of the property affected by the approved enlargement, extension, or relocation.
- (e) Damage or Destruction. In the event a nonconforming building or structure is destroyed by any means or event to the extent of sixty percent (60%) or more of the total market value of the building or structure, as recognized by the Summit County Assessor or as determined by the Town based on evaluation of market values, the building or structure shall not be rebuilt, restored or re-occupied unless such building or structure will conform to the regulations of the zone district in which the building or structure is located.



**Sec. 16-4-50. Nonconforming Lot.**

A *lot*<sup>5</sup> that is not in compliance on the effective date of this Land Use Code, or any amendment of the Code, with the minimum lot size or lot width regulations of the zone district in which the *lot* is located shall be a nonconforming *lot*. A nonconforming lot may be used as follows:

- (a) Existing Dwelling on a Residential Lot. If the nonconforming lot is occupied by a lawful residential dwelling, such dwelling may be maintained and may be repaired, modernized or altered, provided that the building shall not be enlarged in floor area unless the enlarged section(s) complies with all regulations of the Land Use Code, except the lot area and lot width regulations of the zone district in which the lot is located. The number of dwelling units shall not be increased in excess of the number permitted by the zone district for the lot.
- (b) Vacant Nonconforming Lot. A vacant non-conforming lot that is owned as an *undivided interest* with other adjacent lots shall be permitted to be developed or redeveloped as a site for a single-family dwelling provided that the dwelling complies with all regulations of the Land Use Code for the zone district in which the lot is located, except the lot size and lot width regulations. Notwithstanding the foregoing, existing landlocked lots or parcels without direct frontage on a public right-of-way or permanent access meeting the requirements of the Land Use Code may not be developed or redeveloped without obtaining frontage or permanent access required for a lot.
- (c) Nonconforming Lot to be Combined When Possible. If a vacant nonconforming lot adjoins one or more lots all of which lots are controlled or pending control by the same owner intending to redevelop the properties, such nonconforming lot shall be re-platted to combine the nonconforming lots or parcels into one or more conforming lot as a prerequisite to the issuance of any land use or development approval or any building permit.

**Sec. 16-4-60. Unlawful and Nonconforming Signs.**

- (a) Unlawful Signs. Many signs located throughout the Town of Blue River were unlawfully installed without a permit and in contravention of the regulations in place at the time of sign installation. Such signs were unlawful when installed and which continue to be unlawful are hereby declared a nuisance and may be removed in accordance with the Municipal Code.
- (b) Certification of Conformance. Owners seeking to establish that a sign was lawfully established may apply to the Town Manager for a determination of conformance. Owners must provide evidence of the issuance of a permit authorizing the sign and that the sign remains in conformance with the permit. The Town Manager is authorized to issue an administrative determination that the sign was installed lawfully and is not subject to subsection (a) of this section.

<sup>5</sup> For purposes of Chapters 16, 16A, and 16B of the Land Use Code, the term *lot* includes a *parcel*, unless the provision or the context clearly indicates otherwise. See Section 16-3-20 definitions for *lot* and *parcel*.

- (b) Nonconforming Signs. A sign lawfully established prior to the effective date of this Land Use Code and lawfully existing immediately prior to the effective date of this Land Use Code, which sign does not conform to the requirements of the Land Use Code shall be a nonconforming sign. A nonconforming sign may continue to exist subject to the following provisions:
  - (1) Maintenance and Repair. Ordinary maintenance and repairs may be performed provided that such maintenance and repair does not alter the sign's size or height or add new elements such as illumination decoration.
  - (2) Relocation. A nonconforming sign shall not be relocated in whole or in part to any other location on the lot or to another lot.
- (c) Reducing a Nonconforming Sign. With the prior administrative approval of the Town Manager, a nonconforming sign may be modified to reduce the sign's size or height. To approve the modification of the sign, the Manager must find that the reduction in size or height will result in a substantial or significant reduction of the existing nonconformity.
- (d) Damage or Destruction. In the event a nonconforming sign is damaged or destroyed by any cause, the sign shall not be rebuilt or restored.

## Article 5 Marijuana Growing in Residential Dwelling

### Sec. 16-5-10. Purpose.

This Article is intended to apply to the growing of marijuana in residential structures for personal use to the extent authorized by Article XVIII, Section 16(3)(b) of the Colorado Constitution. Words and phrases used in this Article shall have the meaning provided by the Constitution.

### Sec. 16-5-20. Prohibition of Marijuana Establishments.

Marijuana Establishments (all non-residential, retail, and commercial marijuana business uses), as defined by Section 16-3-20 of the Municipal Code, are prohibited within the Town of Blue River.

### Sec. 16-5-30. Marijuana in Residential Dwellings.

Any person, for purposes of this subsection and consistent with Article XVIII, Section 16(3)(b) of the Colorado Constitution, who is twenty-one (21) years of age or older who is cultivating marijuana plants for his or her own use may possess, grow, process or transport no more than

six (6) marijuana plants with three (3) or fewer being mature, flowering plants, subject to the following requirements:

- (a) Such processing, growing, possessing, or transporting of marijuana plants for personal use must be in full compliance with all applicable provisions of Article XVIII, Section 16 of the Colorado Constitution.
- (b) Except as provided herein, such marijuana plants are possessed, grown, or processed within the primary residence of the person possessing, growing, or processing the marijuana plants for personal use, as defined by subsection (8) below. No more than a total of twelve (12) marijuana plants may be cultivated in a primary residence. If persons living in a primary residence desire to cultivate more than a total of twelve (12) marijuana plants, each person may cultivate no more than six (6) marijuana plants for personal use.
- (c) The possession, growing and processing of such marijuana plants must not be observable from the exterior of the primary residence, including but not limited to:
  - 1. Common visual observation, including any form of signage;
  - 2. Unusual odors, smells, fragrances, or other olfactory stimulus;
  - 3. Light pollution, glare, or brightness that disturbs others.
- (d) Marijuana plants shall not be grown or processed in the common areas of a planned community or of a multi-family or attached residential development.
- (e) Such cultivation, production, growing and processing of marijuana plants shall be limited to the following space limitations within a primary residence:
  - 1. Within a single-family dwelling (Group R-3 as defined by the International Building Code): A secured, defined contiguous area not exceeding one hundred fifty (150) square feet within the primary residence of the person possessing, growing, or processing the marijuana plants for personal use.
  - 2. Within a multi-family dwelling unit (Group R-2 as defined by the International Building Code): a secured, defined, contiguous area not exceeding one hundred (100) square feet within the primary residence of the person possessing, growing, or processing the marijuana plants for personal use.
  - 3. Such possession, growing and processing of marijuana plants shall not occur in any accessory structure.
- (f) Such possession, growing and processing of marijuana plants shall meet the requirements of all adopted Town building and life/safety codes, and applicable fire codes, including requirements concerning electrical systems and ventilation systems, as the same may be amended from time to time. Any person cultivating marijuana for personal use shall have an initial building and safety inspection conducted by the Town and shall comply with any conditions of such inspections, and shall submit to periodic building, safety and fire code inspections thereafter.
- (g) Pursuant to Section 9-7-113, C.R.S., the use of a compressed flammable gas as a solvent in the extraction of THC or other cannabinoids is prohibited.

- (h) The possession, growing and processing of marijuana plants shall meet the requirements of all adopted water and wastewater regulations promulgated by the Town.
- (i) Cultivation of marijuana in a residential unit that is not a primary residence is not permitted.
- (j) For the purposes of this subsection "primary residence" means the place that a person, by custom and practice, makes his or her principal domicile and address to which the person intends to return, following any temporary absence, such as a vacation. Residence is evidenced by actual daily physical presence, use and occupancy of the primary residence and the use of the residential address for domestic purposes, such as, but not limited to, sleep, preparation of meals, regular mail delivery, vehicle and voter registration, or credit and utility billings. A person shall have only one (1) primary residence. A primary residence shall not include accessory buildings.
- (k) For the purposes of this subsection, a "secure area" means an area within the primary residence accessible only to the person possessing, growing, or processing marijuana plants for personal use. Secure premises shall be locked or partitioned off to prevent access by children, visitors, or anyone not authorized to possess marijuana.

## **Article 6 Vested Property Rights**

### **Sec. 16-6-10. Purpose.**

The purpose of this Article is to provide procedures necessary to implement the provisions of Title 24, Article 68, C.R.S., which purports to establish a vested property right to undertake and complete development and use of real property under the terms and conditions of a site-specific development plan. By the passage of this Article, the Board of Trustees intends only to provide the procedures necessary to implement the provisions of that legislation.

### **Sec. 16-6-20. Reserved.**

### **Sec. 16-6-30. Scope and Eligibility for Vested Property Rights.**

Compliance with this Article shall be the only available method to obtain vested property rights as defined by this Article. The procedures set forth in this Article shall be available with respect to any land use development project that has reached the stage of final approval of a minor or major subdivision plan. Vested property rights shall not be available with respect to any other type of land use approval process within the Town, including without limitation initial zoning, rezoning, annexation, or variances.

**Sec. 16-6-40. Submittal Requirements.**

An application for approval of a site-specific development plan including all of the following information shall be submitted not less than thirty-five (35) days prior to a public meeting of the Board of Trustees at which the applicant wishes to be considered:

- (1) All of the common submittal requirements set forth in Section 8303 of the Summit County Land Use and Development Code, Chapter 8, incorporated by Chapter 17 of this Code. The application fee shall be the same as for a final plat for a major subdivision.
- (2) Three (3) copies of the approved preliminary subdivision plan and/or planned unit development preliminary development plan, together with copies of the entire final submittal packet for such plans.
- (3) Fifteen (15) paper copies of a proposed final plat for the property and, if applicable, a condominium plat, meeting all of the requirements set forth in this Code.
- (4) Three (3) copies of the following supplemental information:
  - a. A site specific development plan agreement in a form acceptable to the Town Attorney, including a legal description of the property, providing provided that no grading or construction will occur on any portion of the property until such time as a final subdivision plan has been approved for the property and a subdivision improvements agreement has been entered into between the property owner and the Town pursuant to this Code, this chapter, and a performance guarantee has been provided to the Town. Upon approval by the Board of Trustees, the site-specific development plan agreement shall be recorded in the office of the County Clerk and Recorder and shall operate as a covenant and equitable servitude upon the land. The agreement shall provide that in the event of a breach, the Town will be entitled to an injunction and damages, and the developer will forfeit its vested property rights. Said covenant and servitude shall expire upon the expiration of any vested property rights granted pursuant to this Article section or upon the recordation of an approved final plat and approved subdivision improvements agreement for the property pursuant to this Code, this chapter, whichever first occurs.
  - b. Certification by the County Treasurer that all applicable ad valorem taxes have been paid and are not in arrears.
  - c. The proposed subdivision protective covenants, if any.
  - d. Evidence, which need not include evidence of actual filings with any public utilities, that all services, including water, sewage, disposal and street access, will conform to state and local laws and shall be available to each subdivision lot and condominium unit in a manner permitted by law and the covenants of the subdivision. On double frontage or corner lots, street access shall be designated by the Town Engineer.

- e. A copy of the Colorado State Land Survey Monument Record forms for any survey corners as required to be filed by state law.
- f. Condominium declarations (applicable if the subdivision includes condominium units) and/or common interest community documents as required by Title 38, Article 33.3, C.R.S., and including the following:
  - 1. A statement defining the character, duration, rights, obligations and limitations of condominium common interest community ownership, including any restrictive covenants affecting individual units;
  - 2. A statement of the method by which the proportionate valuation of common elements shall be assessed to individual units; and
  - 3. Provisions for creating conditions, restrictions, and limitations on time-sharing ownership, if applicable.

**Sec. 16-6-50. Notice of Hearing.**

No site-specific development plan shall be approved until after a public hearing is held before the Board of Trustees, at a regular or special meeting. This hearing may be combined with other hearings before the Board of Trustees relating to the project. Public notice shall be given by the applicant of the public hearing either separately or combined with other notices which are required by this Code. Any interested persons shall have an opportunity to be heard at the public hearing.

Prior to the public hearing, the Board of Trustees may refer the site-specific development plan to the Planning & Zoning Commission for a recommendation.

**Sec. 16-6-60. Review Criteria and Approval.**

Review and approval by the Board of Trustees shall be a legislative and discretionary action of the Board and any decision may incorporate the following considerations:

- (1) Conformance of the proposal with this Article and the Land Use Code;
- (2) The compatibility of the proposal with the character of the surrounding area, including but not limited to the architectural character of the neighborhood, the average lot and building sizes in the neighborhood and the relative value of the proposed structure to the value of other structures in the neighborhood;
- (3) The desirability for the proposed use in the specific area of the Town;
- (4) The potential for adverse environmental effects that might result from the proposed use; and

- (5) The potential impact of the proposed use upon the value of property and buildings within the surrounding area.

In addition to the matters set forth therein, the Board of Trustees may consider whether the proposed site-specific development plan conforms with all conditions of approval of any preliminary subdivision plan. No site-specific development plan shall be approved by the Planning Commission. No site-specific development plan shall be approved except by ordinance. Denial of a site-specific development plan and the decision not to grant vested property rights to a proposed development or property may be made by motion, resolution, or ordinance of the Board of Trustees.

**Sec. 16-6-70. Duration of Approval.**

Approval by the Board of Trustees of a site-specific development plan pursuant to this Article shall operate to grant vested property rights for a period of three (3) years from the date of the Board of Trustees' final approval action, unless a longer or shorter period is requested by the Applicant and is expressly approved by the Board of Trustees. The approval of a site-specific development plan and the granting of vested property rights pursuant to this Article and the Colorado Vested Property Rights Act is a legislative decision which reserves to the Board absolute discretion for approval. In the event amendments to the site-specific development plan are proposed and approved, the effective date of such amendments, for the purpose of the duration of the vested property right, shall be the date of the approval of the original site-specific development plan, unless the Board of Trustees specifically finds to the contrary and incorporates such findings in its approval of the amendment.

**Sec. 16-6-80. Notice of Approval.**

Each site-specific development plan shall contain the following language:

APPROVAL OF THIS PLAN MAY CREATE A VESTED PROPERTY RIGHT  
PURSUANT TO ARTICLE 68 OF TITLE 24, C.R.S., AS AMENDED.

The failure to include this statement in the plan shall preclude the creation of the vested property right. In addition, a notice describing generally the type and intensity of use approved, the specific parcel or parcels of property affected, and stating that a vested property right has been created shall be published once, not more than fourteen (14) days after approval of the site-specific development plan, in a newspaper of general circulation within the Town. The applicant shall have the sole responsibility to publish said notice. Failure to publish the notice within the prescribed time period shall preclude the creation of the vested property right unless a new hearing is conducted by the Board of Trustees at the expense of the applicant.

**Sec. 16-6-90. Payment of Costs.**

Fees and costs shall be imposed on an application for approval of a site-specific development plan and the grant of vested rights in accordance with Section 16-1-110 of this Land Use Code.

**Sec. 16-6-100. Other Provisions Unaffected.**

Except as expressly set forth in this Section, approval of a site-specific development plan does not constitute an exemption from, or waiver of, any other provision of the Land Use Code pertaining to the development and use of property.

**Sec. 16-6-110. Combined Submittal.**

The applicant may elect to combine an application for approval of a site-specific development plan with an application for approval of a final subdivision plan and/or planned unit development final development plan. In such event, the submittal requirements set forth in this Section may be satisfied as part of the application for approval of the final subdivision plan and/or planned unit development final development plan, and neither the separate application nor the separate fee described in Section 16-6-40 above shall be required. All other provisions of this Article shall still apply.

**Sec. 16-6-120. Unconstitutionality.**

Nothing contained in this Article is intended to create a vested property right, but merely to implement the provisions of Title 24, Article 68, C.R.S. (the Colorado Vested property rights Statute). In the event that the Colorado Vested Property Rights Statute is repealed, or judicially determined to be invalid or unconstitutional to the Town, this Article shall be deemed to be repealed and its provisions no longer effective.

## **Article 7 Variances**

**Sec. 16-7-10. Variances Authorized.**

(a) Chapter 16A – Zoning Variance.

(1) **Area Variance Authorized.** An *owner of property* may request an *area variance* for any standard or requirement imposed upon the *property* by Chapter 16A (e.g., to modify a setback or the maximum allowable height of a structure). This Article applies to any application for an area variance.

(2) **Use Variance Prohibited.** The application for and granting of a *use variance* is prohibited (i.e., to add, waive, modify, or remove a principal permitted use or an accessory



use for a lot). Changes to uses within a zone district shall only be authorized by a text amendment. See Article 28 of this Chapter 16A.

(b) Chapter 16B – Development or Design Variance.

Variance Authorized. An *owner of property* may request a *variance* for any development or design standard or requirement imposed upon the *property* by Chapter 16B (e.g., to allow a berm to exceed the maximum berm height or to allow an otherwise prohibited structure to be located outside of the *buildable area*). This Article applies to any application for an area variance.

**Sec. 16-7-20. Variance Application.**

(a) Application. Owners seeking a variance from a provision of either Chapter 16A or Chapter 16B shall submit a completed variance application to the Town Manager together with the following:

- (1) Payment of all fees and charges for a variance application.
- (2) Specific identification of the provision, standard, or requirement for which the variance is requested;
- (3) A description of the reasons supporting the variance application. Owners are encouraged to address all of the criteria for approval set forth in Section 16-7-50;
- (4) A description of the extent, degree, size, or length of the requested variation to the standard or requirement. For example, that the Owner “seeks to reduce the side setback on the northern property line from the required 25-foot standard to 16 feet.”; and
- (5) Any other information requested by the Town Manager or the Board of Adjustment deemed necessary to ensure a complete review of the variance request.

(b) Number of Copies. Except where the Town Manager approves the submission of electronic copies, the Owner shall submit to the Town ( ) copies of the application and supporting materials. The Town Manager may request additional copies of documents larger than eight and one-half by eleven (8 1/2 x 11) inches.

**Sec. 16-7-30. Process for Variance Application.**

- (a) Completeness Review. The Town Manager shall review the submitted application and supporting materials. If determined to be complete, the Manager shall schedule the application for processing and notify the owner. The Manager shall notify the owner of any elements of an incomplete application.

- (b) Manager Initial Review. The Town Manager shall review the completed variance application and supporting materials and provide a written opinion to the *owner* that the request will, or will not, be supported by the Town Manager and the reasons for the Manager's opinion. The owner may amend or supplement the application and supporting materials within ten (10) days of the Town Manager's opinion. Following completion of the Manager's initial review and opinion, the Manager shall forward the variance application to the Planning Commission for administrative review.
- (c) Planning Commission Administrative Review. The Planning Commission shall administratively review the variance application and consider the criteria for approval provided by Section 16-7-50. The Commission shall promptly render a written recommendation to the Town Board to approve, approve with conditions, or reject the application. The Commission's recommendation shall be forwarded to the Board of Trustees for the Board's review and final determination. Failure to forward a recommendation to the Board within forty-five (45) days of the date of the completion of administrative review shall be deemed by the Board of Adjustment as a recommendation that the Board deny the application.
- (d) Board of Adjustment Public Hearing. All applications for a variance shall require a public hearing before the Board of Adjustment. The following process shall apply:
- (1) The Town Manager shall set the date and time of a public hearing to be held by the Board of Adjustment.
  - (2) Public notices of the public hearing required by this Article shall be made in conformance with Section 16-7-50.
  - (3) At the public hearing, the Board of Adjustment shall review the application for conformance with this Article, the Municipal Code, state law, and the applicable review standards for the application.
  - (4) Any public hearing or other action of the Board of Adjustment may be continued or postponed at any time indefinitely or to a specified date and time in order to permit preparation of additional information for further review by the Board.
  - (5) The Board of Adjustment shall conduct a public hearing and shall, at the conclusion of the hearing, approve, approve with conditions, deny the application, or continue the matter to a date certain.
  - (6) Notwithstanding the imposition by the Board of Adjustment of other express of specific condition of approval, all approvals shall be conditioned upon the payment in full of all fees and charges for the review and processing of the application. Execution and recordation of any final approved resolution or ordinance shall not be completed by the Town unless and until all fees and charges are paid in full.
  - (7) The Owner for any zoning variance shall bear the burden of presenting sufficient competent evidence at the public hearing to support the standards for approval set forth by this Article. Any decision by the Board to approve, conditionally approve, or

deny an application shall be based upon consideration of all evidence presented during the public hearing. Where evidence presented is contradictory, the Board shall weigh such evidence and judge the credibility and sufficiency of the evidence prior to rendering a decision. A finding by the Board of Adjustment that the application or evidence fails to meet one or more of the criteria for review shall require denial of the application.

- (8) The Board of Adjustment may impose reasonable conditions upon any approval of a variance necessary to ensure continued conformance with the Land Use Code, the Municipal Code, or that may be necessary to protect the health, safety and welfare of the Town and its residents.
- (9) Variances shall be approved by resolution of the Board of Adjustment in a form approved by the Town attorney.

**Sec. 16-7-40. Notice of Hearing.**

(a) Notice Publication Requirement.

The Town shall cause a notice to public hearing to be published once in the Summit County Daily Newspaper (or other official newspaper designated for publication of the Town of Blue River) **at least fifteen (15) days** before the date of the hearing. The content of published notice shall include:

- A description of the variance proposal;
- The street address of the property subject to the variance proposal;
- The location of the land which is the subject of the hearing or meeting (e.g., lot number or parcel designation within a subdivision of record with the Summit County Clerk and Recorder's Office or location in relation to known streets and intersections);
- The date, time and location of the hearing or meeting;
- A recital that public comment will be accepted at the public hearing; and
- A recital that written comment will be accepted if sent to a Town-designated electronic mail address.

(b) Notice by Mailing Requirement.

1. The Town Manager shall direct by written letter or electronic mail to the owner or the owner's representative that notice be provided by mailing. Notice by mailing shall be deemed a requirement for a variance proposal.
2. The mailed notice shall comply with the content requirements for notice by publication in subsection (a) above.

2. Notice by mailing shall be sent by the *owner* or the *applicant* addressed to owners of property *measured*<sup>6</sup> to be within 300 feet of the property described in the application as their names appear in the real property records of the Summit County Assessor. For purposes of determining addressees for mailed notice, the *owner* may rely upon the ownership information provided by the Summit County clerk and recorder's office.
3. A mailed notice shall be deposited in the United States Mail first class postage prepaid or shall be delivered by another comparable service, including hand-delivery to the address. The deposit in the U.S. Mail or delivery by another comparable service shall be made at least seven (7) days before the date of the hearing. Failure of the addressee to receive a properly mailed notice shall not be deemed sufficient cause to require a postponement, re-mailing of notice, or invalidation of the hearing.

(c) Courtesy Notices.

1. The Town Manager may, but shall not be required to, direct by written letter or electronic mail to the owner or the owner's representative that the notice be provided by posting of a notice on the property subject to the variance proposal. The posting of notice shall be a courtesy to the public and a supplementary means of advising the public of the pendency of an application but shall not be deemed a legal requirement for the processing of an application or the conduct of a hearing if notice by publication was properly completed.
2. Where notice by posting is directed, the Town may post such notice or may require the *owner* to post a Town prepared sign withing public view on or within the vicinity of the affected property that states that a rezoning is under review and providing for contact information for the Town Manager not less than ten (10) calendar days prior to the date set for the public hearing.
3. The Town may provide other forms of courtesy notice of a variance application or hearing (such as additional publications, mailings, or postings). Such notices shall be offered as a courtesy to the public and a supplementary means of advising the public of the pendency of an application but shall not be deemed a legal requirement for the processing of an application or the conduct of a hearing if notice by publication was properly completed.

(d) Notice Certification by Owner.

Where mailed and/or posted notice is directed by the Town Manager, not less than five (5) calendar days prior to the public hearing, the owner shall cause to be delivered to the Town Manager a written certification that the owner has complied with the mailing

---

<sup>6</sup> See Section 16-3-20 for definition of *measured* for determining distance between properties for purpose of this Land Use Code.

and/or requirements of this Article. Failure to submit such certification may, at the Town's option, require the continuation of the public hearing.

**Sec. 16-7-50. Criteria for Approval.**

- (a) The Town Board may grant a variance where the *owner* establishes all of the following:
- (1) The existence of extraordinary physical conditions or circumstances, such as the *property's* size, shape, location, topography, floodplain, or steep slope imposes an unreasonable hardship in the development of the property; and
  - (2) The hardship deprives the owner of privileges associated with development enjoyed by most other *properties* within the *neighborhood*; and
  - (3) Compliance with the standard or requirement would impose an extraordinary and wholly unreasonable cost or expense upon the owner which cost or expense essentially makes the property undevelopable and unmarketable given economic conditions; and
  - (4) The need for a variance is not the result of the owner's or the owner's predecessor's decisions, actions, or inactions<sup>7</sup>; and
  - (5) The granting of the variance will not be materially detrimental to the public welfare or injurious to other *properties* in the *neighborhood* which are located within the Town; and
  - (6) The variance granted will be the least modification possible to permit the owner's reasonable use of the owner's *property*.

**Sec. 16-7-60. Zoning Variance Effectiveness; Termination.**

A zoning variance approved by the Board of Adjustment shall remain effective indefinitely until repealed by the Board. The Board may, in accordance with the same general procedures for the approval of a zoning variance and after five (5) or more years following the effective date of the approving ordinance, repeal the ordinance and terminate the variance upon a finding that: (1) the property no longer meets one or more of the criteria for approval of the zoning variance; and (2) no development or improvements were constructed in reliance on the zoning variance.

---

<sup>7</sup> For example, a setback or height variance to allow for a larger residence is not authorized where the owner installed other improvements within the building envelope which improvements limited the footprint and ultimate square footage of a principal residence.

**Sec. 16-7-70. Development or Design Variance Effectiveness; Termination.**

A Development or Design Variance approved by the Board of Adjustment shall remain effective indefinitely until repealed by the Board. The Board may, in accordance with the same general procedures for the approval of a Development or Design Variance and after five (5) or more years following the effective date of the approving resolution, repeal the variance and terminate the development or design variance upon a finding that: (1) the property no longer meets one or more of the criteria for approval of a development or design variance; and (2) no development or improvements were constructed in reliance on the development or design variance.

DRAFT

## CHAPTER 16A Zoning

### Article 1 General

#### Sec. 16A-1-10. Title.

Chapter 16A of the Blue River Municipal Code shall be referred to as the "Town of Blue River Zoning Ordinance" or "Zoning Ordinance."

#### Sec. 16A-1-20. Intent and Purpose.

- (a) **Intent.** The Zoning Ordinance is generally intended to divide the Town of Blue River into different districts or zones, that are intended, for the most part, to be separate from one another. Uses permitted within each district or zone are intended to be restricted or limited by characteristics or elements such as setback, height, size, and operation.
- (b) **Purpose.** The purpose of this Zoning Ordinance is to: (1) encourage and provide for uses that are deemed appropriate, necessary, and desirable for the Town of Blue River; (2) provide a degree of uniformity of uses within zone districts; (3) coordinate uses between zone districts to advance land use compatibility; (4) reasonably protect property values; (5) create a community that best preserves the natural environment and character that defines the Town of Blue River; (6) secure safety from fire, panic and other dangers; (7) provide adequate light and air and prevent the overcrowding of land and undue concentration of population; and (8) facilitate the adequate provision of transportation, water, sanitary sewer and storm water systems, parks and other public requirements.

#### Sec. 16A-1-30. Reference to Chapter 16 General Provisions.

The provisions of Chapter 16 (General Provisions) shall be applicable to this Chapter 16A.

#### Sec. 16A-1-40. Definitions.

The definitions of words and phrases used in Chapter 16A (Zoning) are found at Article 3 of Chapter 16 of the Land Use Code.

**Article 2 Zoning Districts and Zoning Maps**

**Sec. 16A-2-10. Zoning Districts Established.**

In order to carry out the purposes and provisions of this Chapter, the Town of Blue River is divided into the following zoning districts:

CATEGORY	DISTRICT
Residential Districts	Transitional (TD) Single-Family Residential (R-1) Single-Family Residential Preservation (RP-1) Planned Residential (PRD)
Mixed Residential/ Commercial District	Mixed Use (MUD)
Resource Protection Districts	Undisturbed Open Space (UOP) Recreation and Floodplain (RFD) Public Right-of-Way (PROW)

**Sec. 16A-2-20. Official Zoning District Map.**

- (a) The Town of Blue River Zoning District Map shall be properly attested and kept on file in the Town Hall for any party interested in examining the Map.
- (b) The boundaries of the zoning districts hereby established are shown on a map entitled “Blue River Zoning District Map.” The Zoning District Map and all notations, references and other information shown thereon shall have the same force and effect as if fully set forth or described in this Chapter, and such map is hereby made part of this Chapter.

**Sec. 16A-2-30. Changes in Official Zoning District Map.**

- (a) Changes made to a zone district in accordance with procedures authorized by this Chapter shall be made promptly by the amendment of the Official Zoning District Map noting the date of the change and a brief description of the nature of the change. Such entry may be signed by the Mayor and attested by the Town Clerk. The amending ordinance shall provide that such changes or amendments shall not become effective until they have been duly entered upon the Official Zoning District Map. No amendment



to this Chapter which involves matter shown on the Official Zoning District map shall become effective until after such change and entry have been made on said map.

- (b) No changes of any nature shall be made on the Official Zoning District Map or matters shown thereon except in conformity with the procedures set forth in this Chapter.

**Sec. 16A-2-40. Interpretation of Zone District Boundaries**

Where uncertainty exists as to the boundary of a zone district as shown on the Official Zoning District Map, the following interpretive rules shall apply:

- (a) Boundaries approximately following the center lines of streets or highways shall be construed as following such center lines.
- (b) Boundaries approximately following platted lot lines shall be construed as following such lot lines.
- (c) Boundaries approximately following Town limits shall be construed as following Town limits.
- (d) Boundaries approximately following shorelines or water bodies shall be construed to follow such shorelines or water bodies, and in the event of change in the shoreline or water body, shall be construed as moving with the actual shoreline or actual water body.
- (e) Boundaries approximately following the center line of streams, rivers or canals shall be construed to follow such center lines.
- (f) Distances not specifically indicated on the Official Zoning District Map shall be determined by the general scale of the map, where possible.

**Sec. 16A-2-50. Overlay Districts**

*Overlay Districts* may be created by the Board by ordinance and super-imposed upon property within any zone district or a portion of a zone district for the purpose of applying specialized regulations to protect the health, safety, and welfare of the Town's inhabitants. For example, an Overlay District together with specific regulations and requirements may be appropriate for lands which include, or which are adjacent to, the following:

- Major thoroughfares and intersections.
- Places of relatively steep slope or grade.
- Wildlife corridors or sensitive wildlife areas.
- Floodplains, drainage corridors, and aquifer recharge areas.
- Ridgelines and locations of aesthetic concern.
- Areas of potential conflicts created by adjacent and dissimilar land uses.

## Article 3 Transition District (TD)

### Sec. 16A-3-10. Purpose.

The Transition District (TD) is intended to provide for reasonable use of land that is typically larger in size, potentially suitable for later subdivision, and held in single ownership or as an undivided interest. Property within the Transition District may present opportunities for later subdivision and development if compatible with surrounding uses.

### Sec. 16A-3-20. Principal Permitted Uses.

The following uses are permitted in the Transition District:

- One (1) *Single-Family Dwelling Unit* for each legally recognized *lot*.
- *Religious Institution*
- *Public Building*
- *Community Center*
- *Group Home*
- Any use of property expressly required by federal or state law to be recognized as a residential use.

The addition of any use not expressly permitted by this section will require a text amendment of this Section. See Section 16A-\_\_\_\_.

### Sec. 16A-3-30. Accessory Uses.

- *Home occupation*
- *Family Child Care Home*

### Sec. 16A-3-40. Prohibited Uses.

The following uses are prohibited in the Transition District:

- Any use not otherwise authorized by Section 16A-3-20.
- Any *Accessory Use* not otherwise authorized by Section 16A-3-30.

**Sec. 16A-3-50. Accessory Improvements.**

(a) Permitted Accessory Improvements. The following *accessory improvements* are lawful and permitted provided that such accessory improvements meet all requirements imposed for such improvement. See referenced Sections:

Accessory Improvement	Reference Section
Berm	See Section 16B-7-20
Garage	See Section 16B-7-30__
Shed (including greenhouse)	See Section 16B-7-40__
Driveway	See Section 16B-7-50
Parking Areas	See Section 16B-7-60
Walkway	See Section 16B-7-70
Deck	See Section 16B-7-100__
Gazebo, Pergola, and Similar Structures	See Section 16B-7-110
Hot Tub or Sauna (Exterior)	See Section 16B-7-120__
Recreational Improvement: Fire Pit, Outdoor Fireplace, Chimenea, <i>Playground Equipment</i>	See Section 16B-7-130
Fences	See Section 16B-7-140__
Walls	See Section 16B-7-150
Flagpoles	See Section 16B-7-160
Signs	See Section 16B-8-10
Lighting	See Section 16B-9-10
Utilities	See Section 16B-3-10
Any building, structure, or improvement not listed in this Section 16A-3-50 and which is administratively determined by the Town Manager as: (a) meeting the definition of Accessory Improvement; and (b) presenting no greater impact upon the neighborhood than other approved Accessory Improvements.	See Section 16-1-100

(b) Prohibited Accessory Improvements. The following Accessory Improvements are prohibited in the Transitional District:

Any accessory amenity not listed in Section 16-3-50(a) and specifically including without limitation:

- Tennis, Pickleball, and other outdoor recreational courts.
- Swimming pools (above ground, in ground, and whether or not enclosed within a building or structure).
- Permanent skate or rollerblade park or rink.
- Firearm or archery range.

**Sec. 16A-3-60. District Standards.**

Minimum Lot Size	None
Minimum Lot Width	None
Front Yard Setback	Minimum 25 Feet
Rear Yard Setback	Minimum 25 Feet
Side Yard Setback	Minimum 15 Feet
Building Height	Maximum 35 Feet

**Sec. 16A-3-70. Reserved.**

**Sec. 16A-3-80. Zoning Variance.**

An application for a zoning variance is authorized pursuant to Article 7 of Chapter 16.

**Article 4 Single Family Residential District (R-1)**

**Sec. 16A-4-10. Purpose.**

The purpose of the Single-Family Residential District (R-1) is to encourage low density in the development of land, to preserve the natural and scenic features of open and wooded areas and thereby to preserve the essential character and value of the Town, to facilitate harmonious growth and to understand and respect the physiographic limitations of the environment.

**Sec. 16A-4-20. Principal Permitted Uses.**

The following uses are permitted in the Single-Family Residential District:

- One (1) *Single-Family Building* for each legally recognized *lot*.
- Local government owned or leased buildings, such as Town or fire department buildings.
- *Group Home*
- Any use of property expressly required to be recognized by federal or state law as a residential use.

Any use not expressly permitted will require a text amendment of this Section. See Article 29 of Chapter 16A.

**Sec. 16A-4-30. Accessory Uses.**

The following accessory uses are permitted:

- *Home occupation*
- *Accessory Apartment*. See Article 20 of Chapter 16A.
- *Family Child Care Home*.

**Sec. 16A-4-40. Prohibited Uses.**

The following uses are prohibited in the Transition District:

- Any use not otherwise authorized by Section 16A-4-20.
- Any accessory use not otherwise authorized by Section 16A-4-30.

**Sec. 16A-4-50. Accessory Improvements.**

(a) Permitted Accessory Improvements. The following *accessory improvements* are lawful and permitted and, where indicated, regulates such *accessory improvements*:

Accessory Improvement	Reference Section
Berm	See Section 16B-7-20
Garage	See Section 16B-7-30__
Shed (including greenhouse)	See Section 16B-7-40__
Driveway	See Section 16B-7-50
Parking Areas	See Section 16B-7-60
Walkway	See Section 16B-7-70
Deck	See Section 16B-7-100__
Gazebo, Pergola, and Similar Structures	See Section 16B-7-110

Hot Tub or Sauna (Exterior)	See Section 16B-7-120__
Recreational Improvement: Fire Pit, Outdoor Fireplace, Chimenea, Playground Equipment	See Section 16B-7-130
Fences	See Section 16B-7-140__
Walls	See Section 16B-7-150
Flagpoles	See Section 16B-7-160
Signs	See Section 16B-8-10
Lighting	See Section 16B-9-10
Utilities	See Section 16B-3-10
Any building, structure, or improvement not listed in this Section 16A-3-50 and which is administratively determined by the Town Manager as: (a) meeting the definition of Accessory Improvement; and (b) presenting no greater impact upon the neighborhood than other approved Accessory Improvements.	See Section 16-1-100

(b) Prohibited Accessory Improvements. The following Accessory Improvements are prohibited in the R-1 zone district:

Any accessory improvement not listed in Section 16-4-50(a) and specifically including without limitation:

- Tennis, Pickleball, and other outdoor recreational courts.
- Swimming pools (above ground, in ground, and whether or not enclosed within a building or structure).
- Permanent skate or rollerblade park or rink.
- Shooting or archery range.

**Sec. 16A-4-60. Zone District Standards.**

Minimum Lot Size	80,000 square feet. For lots not meeting the minimum lot size, see <i>Non-Conforming Uses</i> , Section 16-4-10.
Minimum Lot Width	100 feet
Front Yard Setback	Minimum 25 Feet Rivershore Subdivision: Minimum 15 Feet
Rear Yard Setback	Minimum 25 Feet Rivershore Subdivision: Minimum 15 Feet
Side Yard Setback	Minimum 15 Feet
Building Height	Maximum 35 feet.

**Sec. 16A-4-70. Reserved.**

**Sec. 16A-4-80. Zoning Variance.**

An application for a zoning variance is authorized pursuant to Article 7 of Chapter 16.

**Article 5 Single Family Residential Preservation District (RP-1)**

**Sec. 16A-5-10. Purpose and Applicability.**

- (a) Purpose. The purpose of the Residential Preservation District (RP-1) is to recognize as lawful and confirming certain residential lots or dwelling units within property previously zoned within the R-1 District where the lot or dwelling unit fails to conform to certain R-1 District standards. It is not the purpose of this Article to authorize a rezoning to the RP-1 District any unlawfully subdivided property or any unlawfully constricted dwelling unit or improvement.

- (b) Applicability. Property within the R-1 District is eligible for zoning within the RP-1 District where:
- (1) The lot was lawfully platted prior to January 1, 2020, and is nonconforming due to noncompliance with minimum lot size and/or minimum lot width.
  - (2) The lot is used for one existing single family dwelling unit for which a certificate of occupancy was issued prior to January 1, 2020, and the dwelling unit is nonconforming due to noncompliance with setback(s) and/or building height.:

**Sec. 16A-5-20. R-1 Uses, Improvements, and Standards to Apply.**

All uses, accessory uses, prohibited uses accessory improvements within the R-1 District (Article 4) shall apply within the RP-1 District except as provided by Section 16A-5-30.

**Sec. 16A-5-30. Zone District Standards.**

<p>Minimum Lot Size</p>	<p>The smaller of:</p> <ul style="list-style-type: none"> <li>• 80,000 square feet; or</li> <li>• The lot size existing as of the date of the initial rezoning of a lot to the R-1P District,</li> </ul>
<p>Minimum Lot Width</p>	<p>The smaller of:</p> <ul style="list-style-type: none"> <li>• Minimum 100 feet; or</li> <li>• The lot width existing as of the date of the initial rezoning of a lot to the R-1P District,</li> </ul>
<p>Front Yard Setback</p>	<p>The smaller of:</p> <ul style="list-style-type: none"> <li>• Minimum 25 feet; or</li> <li>• The front yard setback existing as of the date of the initial rezoning of a lot to the R-1P District,</li> </ul>
<p>Rear Yard Setback</p>	<p>The smaller of:</p> <ul style="list-style-type: none"> <li>• Minimum 25 feet; or</li> <li>• The rear yard setback existing as of the date of the initial rezoning of a lot to the R-1P District,</li> </ul>



Side Yard Setback	The smaller of: <ul style="list-style-type: none"><li>• Minimum 15 feet; or</li><li>• The side yard setback existing as of the date of the initial rezoning of a lot to the R-1P District,</li></ul>
Building Height	The lesser of: <ul style="list-style-type: none"><li>• Maximum 35 feet; or</li><li>• The building height existing as of the date of the initial rezoning of a lot to the R-1P District,</li></ul>

**Sec. 16A-5-40. Zoning Variance.**

An application for a zoning variance is authorized pursuant to Article 7 of Chapter 16.

**Article 6 Planned Residential District (PRD)**

**Sec. 16A-6-10. Purpose.**

The purposes of the Planned Residential District are to:

- (1) Encourage flexibility and creativity in the residential development of land;
- (2) Enhance the design, character and quality of new development;
- (3) Maximize the efficient use of land;
- (4) Facilitate the harmonious growth of the Town;
- (5) Preserve the natural and scenic features of open and wooded areas; and
- (6) Understand and respect the physiographic limitations of the environment.

**Sec. 16A-6-20. Principal Permitted Uses.**

The following uses are permitted in the Planned Residential District:

- *Single-Family Building*
- *Two-Family Building*
- *Multi-Family Building*
- *Religious Institution*

- *Public Building*
- *Community Center*
- *Group Home*
- Any use of property expressly required to be recognized by federal or state law as a residential use.

Any use not expressly permitted will require a text amendment of this Section. See Article 29 of Chapter 16.

**Sec. 16A-6-30. Accessory Uses.**

The following accessory uses are permitted:

- *Home Occupation.*
- *Family Child Care Home.*

**Sec. 16A-6-40. Prohibited Uses.**

The following uses are prohibited in the Planned Residential District:

- Any use not otherwise authorized by Section 16A-5-20.
- Any accessory use not otherwise authorized by Section 16A-5-30.

**Sec. 16A-6-50. Accessory Improvements.**

(a) Permitted Accessory Improvements. The following accessory improvements are lawful and permitted and, where indicated, regulates such accessory improvements:

Accessory Improvement	Reference Section
Berm	See Section 16B-7-20
Garage	See Section 16B-7-30__
Shed (including greenhouse)	See Section 16B-7-40__
Driveway	See Section 16B-7-50
Parking Areas	See Section 16B-7-60
Walkway	See Section 16B-7-70
Deck	See Section 16B-7-100__
Gazebo, Pergola, and Similar Structures	See Section 16B-7-110
Hot Tub or Sauna (Exterior)	See Section 16B-7-120__
Recreational Improvement: Fire Pit, Outdoor Fireplace, Chimenea, Playground Equipment	See Section 16B-7-130

Fences	See Section 16B-7-140
Walls	See Section 16B-7-150
Flagpoles	See Section 16B-7-160
Signs	See Section 16B-8-10
Lighting	See Section 16B-9-10
Utilities	See Section 16B-3-10
Any building, structure, or improvement not listed in this Section 16A-3-50 and which is administratively determined by the Town Manager as: (a) meeting the definition of Accessory Improvement; and (b) presenting no greater impact upon the neighborhood than other approved Accessory Improvements.	See Section 16-1-100

(c) Prohibited Accessory Improvements. The following *Accessory Improvements* are prohibited in the R-1 zone district:

Any *accessory improvement* not listed in Section 16A-5-50 and specifically including without limitation:

- Tennis, Pickleball, and other outdoor recreational courts.
- Swimming pools (above ground, in ground, and whether or not enclosed within a building or structure).
- Permanent skate or rollerblade park or rink.
- Shooting or archery range.
- Fences or other similar forms of enclosures.
- Walls (see Definition at Section 16-3-20)
- Private *streets* not located within a lawfully existing easement and which do not terminate within the PRD unless approved by the Town with the approval of the PRD.
- Private *driveways* which do not terminate on the lot that is served by the driveway unless approved by the Town with the approval of the PRD.

**Sec. 16A-6-60. Zone District Standards.**

Minimum Lot Size	To be determined by approval of submitted PRD Plan.
Minimum Lot Width	To be determined by approval of submitted PRD Plan
Front Yard Setback	To be determined by approval of submitted PRD Plan
Rear Yard Setback	To be determined by approval of submitted PRD Plan
Side Yard Setback	To be determined by approval of submitted PRD Plan
Building Height	Maximum 35 feet unless otherwise authorized by approval of submitted PRD Plan.*

\* The maximum height of buildings and structures within a PRD must be approved by the Town upon review of each planned residential development in relation to the following factors: (1) Geographical position; (2) The probable impact on surrounding slopes and hills; (3) Adverse visual impacts upon adjoining property owners, other areas of the development, public lands or public rights-of-way; (4) Potential impacts upon adjacent sites, both within and outside of the Planned Residential District, caused by shade, shadows, or loss of air circulation; (5) Surrounding traffic conditions and lines of sight; (6) Uses within each building; and (7) Fire prevention measures.

**Sec. 16A-6-70. Other zoning criteria for Planned Residential District.**

Together with compliance with any applicable requirements of Chapter 16B, the following shall be specifically addressed by the Planned Residential District:

- (a) Density. The Applicant shall be responsible for justifying the proposed density in terms of land planning and physiographic data, but in no case shall the gross density exceed six (6) dwelling units per acre of land.
- (b) Off-street parking shall be provided according to the off-street parking provisions of this Chapter and any approved PRD Plan.
- (c) Snow storage and snow management shall be provided and depicted on the plan.
- (d) Circulation shall be determined by review of each planned residential development in order to ensure an adequate internal street system, connectivity, and adequate access for

emergency services. Public streets must serve all developments; however, some private streets may be incorporated if: (1) they meet minimum standards established for public streets by the Town; (2) the Planned Development Plan guarantees by written agreement or other mechanism deemed acceptable to the Town that permanent, irrevocable, and ongoing maintenance and snow removal will be provided, and emergency vehicles will have continuous access to all development served by private roads.

**Sec. 16A-6-80. Planned Residential District Procedures.**

The process to establish a Planned Residential District shall require the submission of a Major or Minor Subdivision, as applicable, pursuant to Chapter 17 of the Municipal Code which application and subdivision plat shall evidence compliance with the standards and requirement of this Article. Final subdivision plats shall include the title of “[*Name of Development*] Planned Residential District.”

**Sec. 16A-6-90. Zoning Variance Not Authorized.**

Because the Planned Residential District is comprehensively planned to accommodate the limitations and unique features of the property within the District, zoning variances shall not be authorized within the Planned Residential District. Modifications of an established Planned Residential District shall require a text amendment of the Planned Residential District pursuant to Article 29 of Chapter 16.

**Article 7 Mixed Use District (MUD)**

**Sec. 16A-7-10. Purpose.**

The purpose of the Mixed-Use Zone District (MUD) is to allow for the comprehensively planned and coordinated development of land greater than thirty-five (35) acres in total size which is annexed into the Town after January 1, 2021. All details of development, uses, and improvements in a Mixed-Use District must be described and set forth on a MUD Plan which may incorporate provisions of the Land Use Code. Every MUD Plan shall reserve not less than one-third (1/3) of the parcel size as public or private open space, active or passive parks, riparian or resource protection area, floodplain and floodway, and/or undeveloped buffer areas.

**Sec. 16A-7-20. Minimum Application Requirements.**

A parcel of land may be proposed for zoning as a Mixed-Use District only where the land and proposed development will meet or exceed the following minimum requirements:

- (1) The property is annexed into the Town of Blue River on or after January 1, 2021, and is authorized by an annexation agreement to seek application for a Mixed-Use Zone District;
- (2) A minimum parcel size of thirty-five (35) acres; and
- (3) The planned development of the property will reserve not less than one-third (1/3) of the parcel size as public or private open space, active or passive parks, riparian or resource protection area, floodplain and floodway, and/or undeveloped buffer areas.

**Sec. 16A-7-30. Permitted Uses.**

An application for a Mixed-Use District may include any two or more of the following uses subject to the designation of the areas associated with each use within the MUD Plan and the consideration and discretionary approval of the Board of Trustees as best serving the health, safety, and welfare of the community:

- *Dwelling, Single-family.*
- *Dwelling, Two-family* provided that ownership, lease, or rental of all units is deed or covenant restricted to: (i) business owners and/or employees of the commercial businesses within the Mixed-Use District; or (ii) employees of a public law enforcement agency, fire or fire/rescue agency or district, or public emergency medical services, providing services within Summit County.
- *Dwelling, Multi-family* provided that ownership, lease, or rental of all units is deed or covenant restricted to: (i) business owners and/or employees of the commercial businesses within the Mixed-Use District; or (ii) employees of a public law enforcement agency, fire or fire/rescue agency or district, or public emergency medical services, providing services within Summit County.
- *Hotel* as defined by Section 16-3-20 not exceeding [redacted] total square feet or a total of [redacted] rentable rooms for overnight accommodations.
- *Restaurant* as defined by Section 16-3-20 not exceeding [redacted] square feet in total size for each Restaurant.
- *Event Center* as defined by Section 16-3-20.
- *Public Building.*
- *Community Center.*
- *Group Home.*
- Any use permitted as a permitted use in the Undisturbed Open Space District (UOP) (see Section 16A-8-20)

- Any use authorized as a permitted use in the Recreation and Floodplain District (see Section 16A-9-20).

**Sec. 16A-7-40. Accessory Uses.**

- *Family Child Care Home* within a residential *dwelling unit*.

No other accessory uses shall be permitted in a Mixed-Use District including, specifically, a Home Occupation, unless otherwise expressly approved by the Board of Trustees and evidenced in the ordinance approving the Mixed-Use District.

**Sec. 16A-7-50. Accessory Improvements.**

- (a) Permitted Accessory Improvements. Each Mixed-Use District shall identify the *accessory improvements* permitted within the District and the scope, extent, and other regulations to govern the *accessory improvements*. See, e.g., Accessory Uses and regulations of Section 16A-4-30.
- (b) Prohibited Accessory Improvements. The following Accessory Improvements are prohibited in the Mixed-Use Zone District:
- Tennis, Pickleball, and other outdoor recreational courts.
  - Swimming pools (above ground, in ground, and whether or not enclosed within a building or structure).
  - Permanent skate or rollerblade park or rink.
  - Shooting or archery range.
  - Fences or other similar forms of enclosures.
  - Private streets not located within a lawfully existing easement and which do not terminate within the MUD unless approved by the Town with the approval of the MUD.

Private driveways which do not terminate on the lot that is served by the driveway unless approved by the Town with the approval of the MUD.

**Sec. 16A-7-60. Zone District Standards.**

Minimum Lot Size	To be determined by approval of submitted MUD Plan.
Minimum Lot Width	To be determined by approval of submitted MUD Plan
Front Yard Setback	To be determined by approval of submitted MUD Plan
Rear Yard Setback	To be determined by approval of submitted MUD Plan
Side Yard Setback	To be determined by approval of submitted MUD Plan
Building Height	Maximum 35 feet unless otherwise authorized by approval of submitted MUD Plan.*

- \* The maximum height of buildings and structures within a MUD must be approved by the Town upon review of each MUD in relation to the following factors:
- (1) Geographical position; (2) The probable impact on surrounding slopes and hills; (3) Adverse visual impact upon adjoining property owners, other areas of the development, public lands or public rights-of-way; (4) Potential impacts upon adjacent sites, both within and outside of the MUD, caused by shade, shadows, or loss of air circulation; (5) Surrounding traffic conditions and lines of sight; (6) Uses within each building; and (7) Fire prevention measures.

**Sec. 16A-7-70. Other Zoning Criteria for Mixed-Use District.**

- (a) Density. The applicant shall be responsible for justifying the proposed density level in terms of land planning and physiographic data, but in no case shall the gross density exceed six (6) dwelling units per acre of land.
- (b) Off-street parking shall be provided according to the parking provisions of Chapter 16B.
- (c) All signs shall conform to the sign provisions of Chapter 16B.
- (d) Vehicular circulation shall be determined by review of each planned residential development in order to ensure an adequate internal street system, connectivity, and adequate access for emergency services. Public streets must serve all developments; however, some private streets may be incorporated if: (1) they meet minimum standards established for public streets by the Town; (2) the Mixed-Use Plan guarantees by written



agreement or other mechanism deemed acceptable to the Town that permanent, irrevocable, and ongoing maintenance and snow removal will be provided and emergency vehicles will have continuous access to all development served by private roads.

**Sec. 16A-7-80. MUD Zoning Application.**

An owner seeking approval of a Mixed-Use Zone District shall submit an application in a form promulgated by the Town Manager containing ownership and contact information. All Mixed-Use Zone District applications shall include a MUD Zoning Plan that shall provide, at a minimum, the following detail:

- (1) A description of all allowed uses for the property including designation of the areas or zones within the property where such uses may be located. All uses must be described with specificity including, where appropriate, residential densities, and total number and type of residential units. The specific amount of square feet for areas or zones set aside for the proposed uses may be identified generally and shall customarily be defined by the topography and/or natural features of the property.
- (2) A description of lot sizes, minimum lot frontages, setbacks, and maximum building heights for all uses. If the property is intended for future subdivision, the plan shall identify the potential lot arrangement together with setbacks from anticipated subdivided lot boundaries. For areas generally designated for types of residential use, minimum lot areas, lot widths, and front, side, and rear yard setbacks shall be identified. The Mixed-Use District shall not constitute subdivision; later subdivision of the property will be required in accordance with Chapter 17.
- (3) Accesses, streets, drive aisles, and parking areas sufficient to accommodate all uses of the property.
- (4) Designation of areas to be preserved as public or private open space, active or passive park or recreation, public or private trails, riparian or resource protection, and/or undeveloped buffers that will best integrate the mixed uses into the residential character of the Town and preserve and protect existing residential uses from impacts reasonably associated with the proposed uses. Such areas are assumed to remain undeveloped unless a description of the types and forms of development (e.g., gazebos, warming huts), together with maximum structure sizes, setbacks, and heights are included in the MUD Zoning Plan.
- (5) Sample illustrations of the intended design aesthetic for all structures, materials, and colors to be incorporated into future development.

**Sec. 16A-7-90. Findings and Approval.**

All new MUD applications require an administrative review and recommendation by the Planning Commission and review and consideration of approval by the Town Board of Trustees following

a public hearing. Final approval of a MUD application shall require findings by the Board of Trustees that the application and Zoning Plan meets or exceeds the following criteria:

- The property meets the minimum requirements for a Mixed-Use District provided by Section 16A-6-20.
- The planned development of the property demonstrates that adjacent uses located within the Town will be adequately protected from adverse impacts of the mixed use due to logically located undeveloped buffer areas;
- The planned development of the property provides efficiency in the layout of uses, parking areas, and the provision of roads, utilities and other infrastructure necessary to serve the proposed mixed uses;
- The planned development will reasonably implement applicable provisions of the Blue River Comprehensive Plan.
- The development of the property in accordance with the Mixed-Use Zone District will preserve the residential and open character of the Town;
- For any commercial development proposals, the proposed development of the property in accordance with the Mixed-Use Zone District will directly serve the commercial needs of the Town; and
- The development of the property in accordance with the Mixed-Use Zone District will be adequately served with utilities, sufficient parking, and access.

**Sec. 16A-7-100. Form of MUD Ordinance.**

Approval of a Mixed-Use Zone District shall require the approval of an ordinance which includes an illustration of the property with the designation of areas to be devoted to varying uses together with a narrative of the uses, structures, setbacks, building heights, and limitations and conditions authorized within each designated area. The illustration and narrative shall be subject to review and recommendation of the Town Attorney as to the sufficiency of the plan to meet the need for specificity for the zoning of property. Applicants are encouraged to work closely with the Town Manager and Town Attorney in preparing the MUD Zoning Plan and supporting documents to ensure adequacy of the Plan to meet the Town's requirements.

**Sec. 16A-7-110. Amendment of MUD.**

Any change to an approved Mixed-Use Zone District shall be subject to the same process of review and approval as the initial approval of the District.

**Sec. 16A-7-120. Zoning Variance Not Authorized.**

Because the Mixed-Use District is comprehensively planned to accommodate the limitations and unique features of the property within the District, zoning variances shall not be authorized within the Mixed-Use District. Modifications of an established Mixed-Use District shall require amendment of the Mixed-Use District pursuant to Section 16A-6-110.

**Article 8 Undisturbed Open Space District (UOP)**

**Sec. 16A-8-10. Purpose.**

The Undisturbed Open Space District (UOP) is intended to designate property that was restricted from development and is to be preserved in an undisturbed, natural, and undeveloped state pursuant to a reservation or grant included in an instrument of conveyance, covenant, or other agreement. Occasional pruning or planting of vegetation to preserve and enhance the existing flora, fauna and wildlife may be allowed by approval of the Board of Trustees if consistent with the reservation or grant.

**Sec. 16A-8-20. Principal Permitted Uses.**

The following uses are permitted in the Undisturbed Open Space District:

- Uses expressly permitted by the document or instrument preserving the property in an undisturbed, natural, and undeveloped state.

**Sec. 16A-8-30. Accessory Uses.**

- No accessory uses are permitted.

**Sec. 16A-8-40. Improvements.**

Although no use or improvement of the property within an UOP District is generally permitted, the following *improvements* are permitted in the Undisturbed Open Space District unless inconsistent with a reservation or grant associated with the property within the UOP District:

- Underground utilities provided that: (i) any land disturbed by installation of utilities be restored to its natural state that existed prior to installation of utilities; and (ii) prior to installation of utilities, the owner enters into an agreement with the Town to guarantee the restoration of the property which agreement may, at the Town’s discretion, require the posting of bond or other surety to ensure the completion of restoration.
- Fire hydrants shall be allowed only along or within twenty (20) feet of the outer property boundary of any area zoned UOP.
- Roadways in existence and located on any parcel of land which is zoned UOP may continue in existence and may be maintained, repaired, and paved. Such roadways may not be widened or relocated.

Any other *accessory improvements* of the property within an UOP District are prohibited unless approved by the Board of Trustees.

**Sec. 16A-8-50. Zone District Standards.**

Minimum Lot Size	None
Minimum Lot Width	None
All Setbacks	Minimum 40 Feet.
Building Height	Maximum 25 feet.

**Sec. 16A-8-60. Zoning Variance Not Authorized.**

Zoning variances shall not be authorized within the Undisturbed Open Space District.

## Article 9 Recreation and Floodplain District (RF)

### Sec. 16A-9-10. Purpose.

The Recreation and Floodplain District (RFD) is intended to zone property that will be preserved from intensive development to either: (i) protect property from impacts due to natural water flows and floods; or (2) provide for passive or lower-intensive recreational uses such as trails, fishing, boating, kayaking, ice skating, or other common recreational activities.

The Recreation and Floodplain District may be applied to a lot in a manner that would result in a portion of the lot being within one zone district (e.g., the R-1 District) and a portion within the RFD. Such division of the lot by two zone districts is intended to allow for a building site while also recognizing that the lot is limited in development potential due to the existence of floodplain or other restriction.

### Sec. 16A-9-20. Principal Permitted Uses.

The following principal permitted uses are authorized in the Recreation and Floodplain District:

- Uses expressly authorized by Army Corp of Engineers, or any other federal or state agency with jurisdiction over waterways and floodplains.
- Uses deemed by the Board of Trustees after review and consideration to be not inconsistent with lower-intensive recreation or floodplain management.

### Sec. 16A-9-30. Prohibited Uses.

The following uses are specifically prohibited in the Recreation and Floodplain District:

- Any use not otherwise expressly authorized by Section 16A-9-20.

### Sec. 16A-9-40. Accessory Uses.

- No accessory uses are permitted.

### Sec. 16A-9-50. Improvements.

Although some minimal use and improvement of the property within a Recreation and Floodplain District is permitted, the following improvements are permitted in the Recreation and Floodplain

District unless inconsistent with a reservation or grant associated with the property within the District:

- Underground utilities provided that: (i) any land disturbed by installation of utilities be restored to its natural state that existed prior to installation of utilities; and (ii) prior to installation of utilities, the owner enters into an agreement with the Town to guarantee the restoration of the property which agreement may, at the Town's discretion, require the posting of bond or other surety to ensure the completion of restoration.
- Fire hydrants shall be allowed only along or within twenty (20) feet of the outer property boundary of any area zoned RFD.
- Roadways in existence and located on any parcel of land which is zoned RFD may continue in existence and may be maintained, repaired and paved. Such roadways may not be widened or relocated.
- Permanent or temporary improvements commonly associated with flood water management such as, but not limited to, drop structures, swales, embankments, retaining walls, conduits, and channels.
- Permanent or temporary improvements commonly associated with lower-intensity recreational uses such as, but not limited to, gazebo, picnic table, benches, warming hut, boardwalks, retaining wall not greater than five (5) feet in height for trail or area protection; and restrooms which do not exceed 200 square feet without approval of the Town. No structure may exceed 15 feet in height measured from the immediate average grade level of the structure.

Any other improvements of the property within a Recreation and Floodplain District are prohibited unless approved by the Board of Trustees. Without limiting the foregoing, the following improvements are specifically prohibited as wholly inconsistent with the purposes of the Recreation and Floodplain District:

- Garages, sheds, or other similar structures used for storage of vehicles or equipment.
- Fences and enclosures except to protect from entry of persons into protected or environmentally sensitive areas as approved by the Town.
- Any use or structure prohibited by the Army Corp of Engineers, or any other federal or state agency with jurisdiction over waterways and floodplains.
- Any private use or structure that requires a conditional or final letter of map revision the Army Corp of Engineers or other federal or state agency for the use or structure.

**Sec. 16A-9-60. Zone District Standards.**

Minimum Lot Size	None
Minimum Lot Width	None
All Setbacks	Minimum 20 Feet.
Building Height	Maximum 12 feet.

**Sec. 16A-9-70. Zoning Variance Not Authorized.**

Variations shall not be authorized within the Recreation and Floodplain District.

**Article 10 Public Right-of-Way District (PROW)**

**Sec. 16A-10-10. Background and Purpose.**

The Town of Blue River was incorporated to include numerous residential subdivisions, many of which were platted immediately prior to incorporation. Each subdivision included streets necessary to provide access to and from the residential lots to State Highway 9. For many subdivisions, the local streets were dedicated by the original subdivider to the owners of the lots within the subdivision. Upon incorporation, the Town assumed ownership, maintenance, and control of all the streets and has, since 1965, openly, continuously, and consistently maintained the streets and street network for the benefit and safety of the general public. Ownership, control, and maintenance included, but was not limited to, the grading, patching, surface restoration, drainage management, snow removal and snow storage along the sides of the traveled portion of the streets and authorizing and permitting above and below grade improvements customarily associated with streets such as public and private utilities. The Town has managed and maintained the streets through the use of public tax funding, including funds allocated by the State Highway User Tax Fund (HUTF) based on a report of the Town's ownership of line miles for the Town streets. Other streets within the Town were specifically dedicated to the County or to the Town as public streets.

The Public Right of Way District (PROW) is intended to designate property under the ownership, control, management, or maintenance of the Town of Blue River either through public *dedication* or as the result of the Town's continuous and uninterrupted management and maintenance of the property for use by the public for transportation, vehicular access, and other uses customarily

recognized as associated with public rights-of-way, thoroughfares, streets, and roads such as pedestrian access and utility use.

**Sec. 16A-10-20. Principal Permitted Uses.**

The following principal permitted uses are authorized in the Public Right-of-Way District:

- Transportation of persons, goods, and equipment by vehicles lawfully authorized for operation on public streets.
- Pedestrian access and use.
- A corridor for the occupation and extension of public utilities recognized by the Town or by federal or state law as lawfully authorized and entitled to be located within public rights-of-way.
- Subject to Town approval, a corridor for other forms of utilities and improvements necessary or desirable for service to residential or commercial properties.
- Improvements for surface water management and drainage approved by the Town.
- Storage of snow removed from the right-of-way by the Town or by Town authorized service providers.
- Any other use by the Town which is customarily undertaken by local government in the operation and maintenance of a street for the benefit of the public,
- Any other use expressly authorized by the Town pursuant to a permit, contract, or other written form of approval.

**Sec. 16A-10-30. Prohibited Uses.**

The following uses are specifically prohibited in the Public Right of Way District (PROW):

- Private use of property without Town approval.
- Any use not otherwise expressly authorized by Section 16A-10-20.

**Sec. 16A-10-40. Accessory Uses.**

No accessory uses are permitted unless expressly authorized by the Town. Examples of authorized accessory uses may include special events or public property uses for which a permit is issued by the Town in accordance with the Municipal Code.

**Sec. 16A-10-50. Improvements.**

Improvements within the PROW are limited to those deemed necessary or desired by the Town to advance the District's permitted or authorized uses.



**Sec. 16A-10-60. Zone District Standards.**

Minimum Lot Size	None
Minimum Lot Width	None
All Setbacks	None
Building Height	None

**Articles 11-16 Reserved**

**Article 17 Residential Dwelling Units**

**Sec. 16A-17-10. Use Restrictions.**

- (a) Authorized Use. Each *dwelling unit*, whether a single or separate unit, or a unit within a two-family or multi-family structure, shall be used principally and primarily as a place for residential accommodations by one (1) *family* living, sleeping, and cooking as an independent housekeeping unit.
  
- (b) Legal Occupancy. Each dwelling unit may be lawfully occupied by ownership or by lease or rental. A lawful occupancy by lease or rental shall be for a period greater than thirty (30) consecutive days. Lease or rental for thirty (30) consecutive days or less (a “*short-term rental*”) shall be unlawful unless such short-term rental is undertaken pursuant to the Town’s issuance of a short-term rental license in accordance with Article 1 of Chapter 6 of the Municipal Code. Because the short-term rental of property is not a right of use and is a privilege subject to annual licensing, the short-term rental of property may not constitute or create a nonconforming use of a dwelling unit.
  
- (c) Unlawful Division. It shall be unlawful and a violation of the Municipal Code to convert, separate, add to, or otherwise divide a dwelling unit to accommodate or serve more than one (1) *family* unless otherwise approved by the Town pursuant to the Land Use Code. An unlawful conversion, separation, addition to, or division includes, but is not limited to, the creation of an unapproved *apartment* or a *lock-off unit*.

**Sec. 16A-17-20. Notice of Use Restriction as Condition of Building Permit.**

- (a) Application. This section applies to the application for issuance of a building permit for the following:
- (1) The creation, construction, or expansion of any accessory building or structure, including a garage, that is greater than 144 square feet in *gross floor area* and which building, structure, or garage is served by, or can reasonably be served by, water, sanitary sewer, and electrical services; or
  - (2) Any expansion, remodeling, reconfiguration, or modification of any part of portion of an *existing dwelling unit* that could, in the Town's opinion, reasonably permit, accommodate, create, or be used for an apartment, *lock-off unit*, or an additional dwelling unit; or
  - (3) Any new construction of a dwelling unit that the design of which, in the Town's opinion, could reasonably permit, accommodate, create, or be used for an apartment, *lock-off unit*, or an additional dwelling unit.
- (b) Condition for Building Permit. Prior to issuance of a building permit for the improvement of any *lot* as provided in (a) above, the owner of such *lot* shall execute a notice to be recorded by the Town in the real property records for the lot, which gives notice that the issuance of the building permit does not authorize or permit the occupancy of the building or structure as an accessory apartment, *lock-off unit*, or additional dwelling unit and such occupancy is specifically prohibited by the Town of Blue River Municipal Code. The form of such required notice shall be promulgated by the Town.

## Article 18 Group Homes

### Sec. 16A-18-10. Authorization.

A *group home* as defined by Section 16-3-20 is a *principally permitted use* of a residential *dwelling unit* in accordance with state and federal law. No permit or Town approval is required, although the owner of a *group home* is strongly encouraged to contact the Town Manager to ensure understanding and compliance with the Town rules and regulations applicable to the operation of a group home.

### Sec. 16A-18-20. Compliance with Applicable Town Laws

A *group home* shall comply with all Town laws applicable to the residential use of property including, but not limited to, requirements imposed by Chapter 16B.

**Sec. 16A-18-30. Reasonable Accommodation Requests.**

An *owner of a group home* seeking a reasonable accommodation from compliance with Town laws as may be permitted by federal law for group homes subject to the Fair Housing Amendments Act (“FHAA”) is encouraged to consult with the Town Manager regarding such request. The Town Manager is authorized to administratively grant written requests detailing the scope and purpose for the accommodation following consultation with the Town Attorney and confirmation that the request is both reasonable and supported by the FHAA. A denial of a request for accommodation is a final administrative decision appealable to the Board of Adjustment in accordance with Section 16-2-50.

**Article 19 Home Occupations**

**Sec. 16A-19-10. Purpose.**

- (a) The purpose of this Article is to provide regulations for home occupations within the Town to ensure that a home occupation is secondary or incidental in relation to the residential use of the main structure or dwelling and to ensure compatibility with the residential character of the neighborhood. The standards set forth herein for the physical features, building character, and operations of home occupations ensure that the uses are compatible with the surrounding neighborhood and do not negatively affect the character or quality of life in the Town.
- (b) A home occupation is an activity conducted on property or within a dwelling unit as a privilege subject to issuance of a business license. A home occupation shall not be deemed a use of property and shall not constitute **a nonconforming use.**

**Sec. 16A-19-20. Home Occupation Standards.**

A home occupation shall be unlawful unless the home occupation complies with all of the following standards:

- (a) The home occupation shall obtain and maintain at all times a valid business license with the Town.
- (b) The home occupation shall be secondary and subordinate to the main use of the dwelling as a residence and shall occupy no more than twenty-five percent (25%) of the floor area of the main floor of a dwelling.

- (c) If located within a lawfully permitted accessory structure, attached or detached garage, or shed, the home occupation shall not occupy more than two hundred (200) square feet of total floor area.
- (d) The existence of a home occupation at the residence shall not be recognizable from the exterior of the residential structure. All aspects of the home occupation shall be contained and conducted within a completely enclosed building. No exterior advertising, signs or outdoor displays associated with the home occupation shall be permitted. There shall be no outside storage on the premises of materials, goods, or equipment used in connection with the home occupation.
- (e) The home occupation shall not create any noise, vibration, smoke, dust, heat, or glare inconsistent with or in excess of the impacts associated with common residential use of property or that is detrimental to the residential use of nearby properties.
- (f) The home occupation shall not create any odors that are perceptible from the outside of the building in which the home occupation is conducted.
- (g) No structural alteration of the exterior of the principal residence, including the construction of an additional entrance, shall be permitted to accommodate the home occupation.
- (h) The home occupation shall be conducted only by the residents of the property exclusively and there shall be no non-resident employees permitted on or at the property in association with the home occupation at any time.
- (i) All parking needs created by the residential property and the home occupation shall be accommodated by off-street parking. Parking associated with the residential property and the home occupation shall comply with all applicable parking standards imposed by the Town for residential property within the applicable zone district.
- (j) No more than two (2) visitor, customer, or vendor vehicles associated with the home occupation shall be present at the residential property at any one time.
- (k) If the home occupation is subject to any local, state, or federal regulation, the home occupation shall comply with all applicable regulations at all times.
- (l) No storage of motor fuels in amounts that are greater than typically stored for residential home use shall be permitted for a home occupation. Storage of more than five (5) gallons of gasoline or diesel fuel on site, or storage of more than fifteen (15) gallons of biodiesel on site, shall be presumed to be in violation of this standard. No storage of hazardous materials in amounts that are greater than typically stored for residential home use shall be permitted by a home occupation.
- (m) No pick-up or delivery by commercial vehicles or heavy trucks other than mail and parcel pick-up and delivery services commonly engaged in providing service to

residential properties shall be permitted for a home occupation. Pick-up and delivery shall be limited to no more than two (2) visits each day.

**Sec. 16A-19-30. Prohibited Home Occupations.**

The following home occupations are prohibited in the Town. Exclusion of an occupation from the following list shall not be interpreted as expressly permitting an unlisted use.

- (a) Motor vehicle service, repair, maintenance, salvage, reconstruction, restoration, cleaning, wash, detailing, sale, or storage.
- (b) Butcher, meat processing, or taxidermy.
- (c) Funeral home or mortuary.
- (d) Veterinary clinic or kennel that provides commercial or for-profit care or boarding for animals. This limitation shall not preclude volunteer fostering of animals for domestic animal rescues or other similar organizations provided that the maximum number of animals permitted by the Municipal Code for the property is not exceeded.
- (e) Large appliance repair.
- (f) Medical or dental office (except psychiatric, mental health, or other counseling services).
- (g) Overnight accommodations including commercial bed and breakfast (not to include lawfully permitted short term rentals authorized by the Municipal Code).
- (h) Personal services providing non-medical service on a recurring basis including, but not limited to, barbershop, hair salon, nail salon, beauty parlor, massage therapy or tailoring if such occupation is designed to serve more than one (1) customer at a time or serves more than one (1) customer at a time.
- (i) Any occupation using spray painting equipment.
- (j) Any occupation using flammable liquids or gases in quantities not customarily found associated with single family residential dwelling units.

## Article 20      Accessory Apartments

### Sec. 16A-20-10.      Purpose and Applicability.

- (a)      The purpose of this Article is to permit the construction of accessory apartments in single-family dwellings within R-1 zone districts in the Town subject to the criteria and conditions set forth below.
- (b)      The provisions of this Article shall apply only to R-1 building sites which exist on lots created by the elimination of a lot line formerly existing between two (2) lots, thus combining two (2) former lots into one (1).

### Sec. 16A-20-20.      Reserved.

### Sec. 16A-20-30.      Location and Design.

An accessory apartment shall be incorporated into the primary residence on the property or a garage serving the primary residence. Residences which contain accessory apartments shall be designed so as to retain a single-family character. An accessory apartment may have a separate kitchen and may have a separate entrance from that of the residence with which it is associated.

### Sec. 16A-20-40.      Number of Units Allowed.

- (a)      Where accessory apartments are permitted, no more than one (1) accessory apartment shall be permitted on each parcel. In order to maintain the single-family character of neighborhoods where accessory apartments are permitted, a maximum of ten percent (10%) of the single-family dwellings in each subdivision filing at build-out shall be approved for accessory apartments.
- (b)      No accessory apartments may be constructed without the express approval of the Board of Trustees indicated on the plat by the signature of the Mayor and Town Clerk, nor may any accessory apartment be constructed within five hundred (500) feet of an existing or approved unit. The Board of Trustees may decrease this requirement or the ten-percent limitation set forth above when it is determined that sufficient buffering exists to limit the impact of units in close proximity. Buffering may consist of topographic, landscape or other physical features such as roads or vacant properties.

### Sec. 16A-20-50.      Size of Units Allowed.

Where accessory apartments are allowed, the square footage in the accessory apartment shall not exceed forty-five percent (45%) of the square footage contained in the primary residence,

excluding garage space, or not more than six hundred (600) square feet, whichever is less. In calculating the number of square feet in an accessory apartment to determine compliance with this Chapter, any garage or storage space associated with the accessory apartment shall be excluded.

**Sec. 16A-20-60. Water and Sewer.**

Prior to approval of an accessory apartment, the property owner shall provide proof of adequate water and sewer service to both the primary residence and the accessory apartment. If the unit is served by well and septic, approval of the County Environmental Health Department must be obtained.

**Sec. 16A-20-70. Parking.**

Each accessory apartment shall be provided with parking only in a designated paved or graveled area with no more than two (2) spaces. Parking may be in tandem or in a garage.

**Sec. 16A-20-80. Compliance with Building and Fire Codes.**

Where approval of an accessory apartment is sought by an owner for a unit existing before adoption of this Article, the unit shall be inspected and shall comply with applicable requirements of the Building and Fire Codes.

**Article 21 Family Child Care Homes**

**Sec. 16A-21-10. Generally.**

A *Family Child Care Home* is authorized by state law as an accessory use to an existing residential dwelling unit subject to state licensing. A local license is not required.

**Sec. 16A-21-20. Town Laws Applicable.**

A *Family Child Care Home* shall comply with all rules and regulations of the Town applicable to other residential uses including, but not limited to, regulations governing parking, lighting, signs, trash management, and noise.

**Sec. 16A-21-30. Large Family Child Care Home.**<sup>8</sup>

A *Family Child Care Home* classified or defined as a large *Family Child Care Home* by the State of Colorado shall not be located *adjacent* to another existing large family childcare home unless the proposed large family child care home first seeks administrative authorization from the Town Manager as meeting the following standards or requirements:

- (a) The operation of the proposed large *Family Child Care Home*, considered in combination with the existing large *Family Child Care Home*, will not result in a significant increase in traffic volume above that commonly experienced in neighborhoods of comparable residential density in the Town; and
- (b) The operation of the proposed large *Family Child Care Home*, considered in combination with the existing large family childcare home, will not result in the parking of vehicles in excess of the parking permitted for a residential dwelling unit in the Town.

**Article 22-26 Reserved**

**Article 27 General – Zoning Processes**

**Sec. 16A-27-10. Types of Zoning Processes.**

Once established, a zone district may be modified through three different processes:

- Rezoning (Map Revision)

A rezoning (also known as a map revision) is a change from one existing zone district to another zone district. The process will result in oftentimes significant differences in available land uses and create potential impacts upon the surrounding properties. For these reasons, a proposal to rezone property requires public notice and hearing and must be approved by the Board of Trustees in accordance with this Part 3.

- Text Amendment

A text amendment is a modification of the language of a zone district which will modify the zone district for all properties within the zone district. For example, a text amendment can add or delete uses available in the zone district and, as a result, all the properties within that zone district will be afforded the added use or be denied to deleted use. A text amendment is a legislative decision of the Town Board of Trustees and property owners

<sup>8</sup> See C.R.S. §26-6-104.5(b).



have no legal right to a text amendment. Text amendments are subject to the discretion of the Board of Trustees.

- Zoning Variance

In extraordinary or unusual circumstances, the minimum or maximum requirements of a zone district may impose significant hardship upon a property or unreasonably restricts the potential development when compared to other properties within the immediate neighborhood in the same zone district. A zoning variance can modify the restrictions of the zone district to mitigate the hardship or unreasonable limitation on development. A zoning variance is limited to modification to the area or dimensional standards of the zone district (e.g., setback or height) and cannot modify or change the uses which are available in the zone district. Zoning variances are authorized by Article 7 of Chapter 16.

## **Article 28            Rezoning and Map Revision**

### **Sec. 16A-28-10.        Rezoning and Map Revision Explained; Applicability.**

- (a) Zoning is the method for classifying property for the purpose of assigning permitted land uses and protecting the health, safety, and welfare by ensuring compatibility between various uses. Zoning classifications are illustrated on the Official Zoning Map for the Town of Blue River or, for unincorporated property located outside of the Town, on the official zoning map for Summit County. As a result, amending the official zoning map to illustrate a change in the zoning classification for property is known as a “rezoning” or a “map revision.”
- (b) There are two types of rezoning or map revision:
  - Initial Zoning. Upon incorporation of property following annexation, a municipality must assign a zoning classification to the annexed property within ninety (90) days. This zoning is a change from the zoning designation of Summit County to the first assignment of a zoning classification of the Town of Blue River which is often referred to as the “initial zoning.” Upon approval of the initial zoning, the official map of the Town is revised to show the property and its zoning classification.
  - Rezoning of Town-zoned Property. After property is initially zoned, any future change in the zone district boundaries or the zoning classification is commonly referred to as a “rezoning.” Upon approval of the zoning change, the official map of the Town is revised to illustrate the change.
- (c) This Article shall apply to all requests for a zoning change that would result in a map revision. For purposes of Chapter 16A, a “rezoning” shall mean a change in zone district boundaries or zone district designation whether such change is an initial zoning or a rezoning of Town-zoned property.

**Sec. 16A-28-20. Authority to Apply for Rezoning.**

Applications seeking to rezone property shall only be submitted to the Town by: (a) the owner of the property subject to the change in zoning; or (b) the Board of Trustees. Applications for rezoning submitted by any other party shall not be accepted.

- (a) Owner Application. An *owner* seeking a rezoning shall submit an application in accordance with section 16A-27-40.
- (b) Town Initiated Rezoning Application. The Board of Trustees may seek the rezoning of any property by the submission to the Town Manager of a request and documentation deemed relevant to the Board. At a minimum, such application and documentation shall include a general description of the property subject to rezoning together with the proposed zoning designation and any proposed conditions upon such rezoning.

**Sec. 16A-28-30. Authority to Approve Rezoning.**

- (a) Board of Trustee Authority for Final Decision. The Board of Trustees may change the zone district boundaries or zone district classification of any property after public notice and public hearing as provided in Sections 16A-27-60 and 16A-27-70 of this Chapter.<sup>9</sup>
- (b) Planning Commission Administrative Review<sup>10</sup> and Recommendation. Prior to holding a public hearing, the Board shall submit the rezoning proposal and application to the Planning Commission. The Commission shall conduct an administrative review of such proposal and application and render promptly a recommendation regarding the proposed zoning designation or boundaries for the subject property. The Planning Commission shall submit its recommendation to the Town Board within forty-five (45) days after receipt of such submittal. Upon failure of the Planning Commission to submit a recommendation within forty-five (45) days, the Town Board shall consider such failure as a neutral recommendation by the Commission and the Board may proceed to change the zoning designation or boundaries as set forth in this Chapter, after public notice and public hearing as provided in Sections 16A-27-60 and 16A-27-70.

<sup>9</sup> See C.R.S. §31-23-304 and 31-23-306. The authority for changes in zone district boundaries or designation is vested in the governing body.

<sup>10</sup> The Planning Commission review shall not require a public hearing. The public hearing requirements of C.R.S. § 31-23-306 reference the need for a public hearing for the setting of the *original* zoning districts of the community and the preparation of a report. State law does not require a public hearing for applications for rezoning of individual properties following the establishment of original zoning districts and the obligation for public hearing is a hearing before the governing body. See C.R.S. § 31-23-304.

**Sec. 16A-28-40. Application.**

(a) Contents of Application. Except where the Town Manager approves the submission of electronic copies, the applicant shall submit to the Town [REDACTED] ( ) copies of all application materials. The Town Manager may request additional copies of documents where necessary to provide sufficient documentation for unanticipated referrals. The following submittals, materials and information shall comprise a complete application for initial zoning or rezoning:

1. A completed application in the form approved by the Town;
2. Payment of all required application fees and any review fee deposit;
3. Current title commitment or other documentation showing current ownership of the property vested in the owner listed on the application. At the Town's discretion, such documentation may include a current ownership and encumbrance report or informational title commitment;
5. An illustration showing the vicinity of the property subject to proposed zoning sufficient for the Town to evaluate the appropriateness of the proposed zoning with surrounding zoning and land uses;
4. A legal description of the property proposed to be zoned (submission of a copy of the currently valid subdivision map showing lot or parcel is acceptable);
5. The names of all adjoining subdivisions with lines of abutting lots and departing property lines of adjoining properties;
6. The total acreage or square footage contained within the property proposed for zoning;
7. Zoning and existing land uses on all lands adjacent to the area proposed for zoning;
8. The location and dimensions for all existing public rights-of-way, including streets, and watercourses within and adjacent to the area proposed for rezoning; and
10. A list of the names and mailing addresses, as this information appears of record with the Summit County assessor's office, of all owners of property *measured*<sup>11</sup> to be within three hundred (300) feet of the property proposed for rezoning.

(b) Written Statement. A written statement shall accompany the application for zoning addressing the following:

---

<sup>11</sup> See Section 16-3-20 for definition of *measured* for determining distance between properties for purpose of this Land Use Code.

1. The owner's reason or purpose for the proposed change to the current zone district;
2. If the owner anticipates the eventual development or improvement of the property, a description of the overall development or improvement concept. If the property is or will be residentially zoned, the description shall include representations concerning the proposed quality and styles of residential structures and amenities;
3. Environmental considerations, including but not limited to, unstable slopes/rockfall zones, related geologic factors, wildlife corridors, floodways, flood plains, wetlands, and high groundwater areas;
4. Structures and improvements on the property proposed for rezoning;
5. Statements explaining the nature and location of all easements and reservations, if any;
6. A general description of the purpose and nature of covenants, homeowners' association, or other contemplated private or contractual restrictions on the use, character and maintenance of the property;
7. If the property will permit non-residential commercial or business use, a description of the nature of the use, the trade area, and anticipated employment base in sufficient detail to demonstrate the economic viability of the anticipated uses authorized by the proposed zoning; and
8. The applicant shall provide other information requested by the Planning Commission or Town Board that may be necessary to adequately review the proposal for conformance with the applicable requirements.

**Sec. 16A-28-50. Sufficiency of Applications**

All plans, reports, maps, and other information required for any application for zoning must be complete, legible, and submitted by the deadlines established by this Chapter or deadlines established during the review process. A failure of the application to meet the requirements of this Chapter or any applicable deadline shall delay the processing of the application until the application is deemed sufficient and complete by the Town. The Town shall not process or schedule the processing of any application which is found to be incomplete.

**Sec. 16A-28-60. Public Hearing.**

All applications for rezoning shall require a public hearing before the Board of Trustees. The following process shall apply:

- (a) The Town Manager shall set the date and time of a public hearing to be held by the Board. Notice of the public hearing shall be issued in accordance with Section 16A-27-70.
- (b) At the public hearing, the Board shall review the application for conformance with this Chapter, the Municipal Code, state law, and the applicable review standards for the application.
- (c) Any public hearing or other action of the Board may be continued or postponed at any time indefinitely or to a specified date and time in order to permit preparation of additional information for further review by the Board.
- (d) The applicant for any rezoning approval shall bear the burden of presenting sufficient competent evidence at the public hearing to support the standards for approval set forth by this Chapter. Any decision by the Board to approve or conditionally approve an application shall be based upon consideration of all evidence presented during the public hearing. Where evidence presented is contradictory, the Board shall weigh such evidence and judge the credibility and sufficiency of the evidence prior to rendering a decision.

**Sec. 16A-28-70. Notice of Hearing.**

All public notices of hearings shall include the date, time, place, and purpose of the hearing, a general description of the property affected, and any other information deemed appropriate by the Town to apprise the public of the general nature of the action proposed. Errors or inaccuracies in the notice shall not be deemed sufficient cause to postpone or invalidate a hearing except where such errors are substantive and material and are found to have reasonably mislead or misinformed the public as to only the date, time, place, or general purpose of the hearing. Noting in this section shall prevent or preclude the Town from providing any other form of notice deemed desirable by the Town including the posting of notice on the Town's website.

(a) Notice Publication Requirement.

The Town shall cause a notice to public hearing to be published once in the Summit County Daily Newspaper (or other official newspaper designated for publication of the Town of Blue River) **at least fifteen (15) days** before the date of the hearing. Published notice shall include:

- A description of the land use proposal in question;
- The location of the land which is the subject of the hearing or meeting (e.g., lot number or parcel designation within a subdivision of record with the Summit County Clerk and Recorder's Office or location in relation to known streets and intersections);
- The date, time and location of the hearing or meeting; and
- A recital that public comment will be accepted at the public hearing and written comment will be accepted if sent to a designated electronic mail address.

(b) Courtesy Notice by Mailing.

1. The Town Manager may direct by written letter or electronic mail to the *applicant* or the applicant's representative that the applicant provide notice by mailing for initial zoning or rezoning. Notice by mailing shall be deemed a courtesy to owners and a supplementary means of advising the public of the pendency of an application but shall not be deemed a legal requirement for the processing of an application or the conduct of a hearing if notice by publication was properly completed.
2. Where courtesy notice by mailing is planned, notice shall be sent by the *owner* addressed to owners of property *measured*<sup>12</sup> to be within 300 feet of the property described in the application as their names appear in the real property records of the Summit County Assessor. For purposes of determining addressees for mailed notice, the *owner* may rely upon the ownership information provided by the Summit County clerk and recorder's office.
3. A mailed notice shall be deposited in the United States Mail first class postage prepaid or shall be delivered by another comparable service, including hand-delivery to the address. The deposit in the U.S. Mail or delivery by another comparable service shall be made at least seven (7) days before the date of the hearing. Failure of the addressee to receive notice shall not be deemed sufficient cause to require a postponement, re-mailing of notice, or invalidation of the hearing.

(c) Courtesy Posting of Notice.

- 1.. The Town Manager may direct by written letter or electronic mail to the owner or the owner's representative that the notice be provided by posting of the property. The posting of notice shall be a courtesy to the public and a supplementary means of advising the public of the pendency of an application but shall not be deemed a legal requirement for the processing of an application or the conduct of a hearing if notice by publication was properly completed.
2. Where notice by posting is directed, the Town may post such notice or may require the *owner* to post a Town prepared sign on or within the vicinity of the affected property that states that a rezoning is under review and providing for contact information for the Town Manager not less than ten (10) calendar days prior to the date set for the public hearing.

(d) Notice Certification by Applicant.

Where mailed and/or posted notice is directed by the Town Manager, not less than five (5) calendar days prior to the public hearing, the applicant shall cause to be delivered to the Town Manager a written certification that the applicant has complied with the mailing

---

<sup>12</sup> See Section 16-3-20 for definition of *measured* for determining distance between properties for purpose of this Land Use Code.

and/or requirements of Section 16A-28-70. Failure to submit such certification may, at the Town's option, require the continuation of the public hearing.

**Sec. 16A-28-80. Surface Development Notification.**

Nothing in this Section shall affect the owner's statutory obligation and notification requirements set forth in Section 24-65.5-101, et seq., C.R.S. The Town may request, and the applicant shall provide prior to or at the public hearing, certification that notice was provided in accordance with Section 24-65.5-101, et seq., C.R.S. Failure to submit such certification may, at the Town's option, require the continuation of the public hearing.

**Sec. 16A-28-90. Criteria for Review of Rezoning.**

- (a) In the administrative review by the Planning Commission and in the review of an application and evidence provided during the public hearing for a rezoning by the Board, the Commission and Board shall consider all of the following in rendering a recommendation or final decision:
1. Whether the proposed rezoning is justified by changed or changing conditions in the character of the area proposed to be rezoned.
  2. Whether the proposed rezoning is consistent with any applicable comprehensive plan adopted by the Board of Trustees.
  3. Whether the uses authorized by the proposed zone district will be *compatible* with the surrounding area or uses.
  4. Whether adequate facilities are available to serve the uses authorized by the proposed<sup>13</sup> zone district.

A finding by the Commission or Board that the application fails to meet one or more of the criteria for review shall justify the recommendation or the decision to deny the application.

- (b) The Commission and Board shall consider that the approval of the application will authorize any and all uses permitted by the proposed zone district notwithstanding that the applicant proposes a particular land use or land use design. If one or more uses within the proposed zone district is found to not meet the criteria for review provided by this section, the Commission or Board shall either recommend denial or deny the application or, subject to the applicant's voluntary consent to conditions on a proposed zoning and the documentation of such consent as an express condition of approval, may conditionally approve the proposed zone district.

<sup>13</sup> See definition of "compatible" found at Section 16-3-20.

**Sec. 16A-28-100. Decision on Zoning Application; Ordinance.**

- (a) A decision of the Board of Trustees to deny an application for rezoning may be made by motion, resolution, or ordinance at the Board’s discretion.
- (b) A decision of the Board of Trustees to approve an application for rezoning shall be made by ordinance. Following the effective date of such ordinance and upon satisfaction of all conditions of approval including payment of application and review fees, the ordinance shall be recorded with the Summit County Clerk and Recorder’s Office.

**Article 29 Text Amendment**

**Sec. 16A-29-10. Text Amendment Explained; Applicability.**

All zone districts set forth in Chapter 16A include regulations and restrictions applicable to the uses allowed in each zone district. An amendment, supplement, change or repeal of the regulations or restrictions is known as a “Text Amendment.” A Text Amendment would change the regulations or restrictions applied to all property within the zone district and not to any individual property. This Article shall apply to all requests for a Text Amendment to Chapter 16A.

**Sec. 16A-29-20. Authority to Propose a Text Amendment.**

The authority to propose a Text Amendment is reserved to the legislative discretion of the Board of Trustees. Persons seeking a Text Amendment should contact Board of Trustee members to enlist Board support to advance a proposed amendment.

**Sec. 16A-29-30. Process for a Text Amendment.**

- (a) Ordinance Required. The Board of Trustees may consider a Text Amendment by the same process used to adopt a legislative ordinance of the Town. In addition, state law requires notice and a public hearing before the Board prior to any ordinance amending, supplementing, changing, or repealing provisions of Chapter 16A.



- (b) Planning Commission Referral and Administrative Review.<sup>14</sup> Prior to holding a public hearing, the Board shall submit the proposed Text Amendment to the Planning Commission. The Commission shall conduct an administrative review of such proposal and render promptly a recommendation regarding the proposed amendment. The Planning Commission shall submit its recommendation to the Town Board within forty-five (45) days after receipt of such submittal. Upon failure of the Planning Commission to submit a recommendation within forty-five (45) days, the Town Board shall consider such failure as a neutral recommendation by the Commission and the Board may proceed to consider, further modify or amend, and adopt the proposed text amendment after public notice and public hearing as provided in Section 16A-29-40.

**Sec. 16A-29-40. Public Hearing and Notice.**

- (a) All Text Amendment proposals shall require a public hearing before the Board of Trustees. All public notices of hearings shall include the date, time, place, and purpose of the hearing in accordance with this section. Errors or inaccuracies in the notice shall not be deemed sufficient cause to postpone or invalidate a hearing except where such errors are substantive and material and are found to have reasonably mislead or misinformed the public as to only the date, time, place, or general purpose of the hearing. Nothing in this section shall prevent or preclude the Town from providing any other form of notice deemed desirable by the Town including the posting of notice on the Town's website.
- (b) Notice Publication Requirement. The Town shall cause a notice to public hearing to be published once in the Summit County Daily Newspaper (or other official newspaper designated for publication of the Town of Blue River) **at least fifteen (15) days**<sup>15</sup> before the date of the hearing. Published notice shall include:
- A general description of the proposed Text Amendment deemed sufficient by the Town to describe the amendment's purpose, scope, and effect. As an alternative, the Town may publish all or a portion of the form of ordinance to be considered that will effectuate the text amendment.
  - The date, time and location of the hearing or meeting; and
  - A recital that public comment will be accepted at the public hearing and written comment will be accepted if sent to a designated electronic mail address.

---

<sup>14</sup> The Planning Commission review shall not require a public hearing. State law does not require a public hearing for text amendments except before the governing body. The governing body is authorized to provide for the manner in which the zoning regulations and restrictions are determined and later amended or changed. See C.R.S. § 31-23-304.

<sup>15</sup> Required by C.R.S. 31-23-304.

## CHAPTER 16B Development & Design Standards

### Article 1 General

#### Sec. 16B-1-10. Title.

Chapter 16B of the Blue River Municipal Code shall be referred to as the "Town of Blue River Development & Design Standards" or more generally "Design Standards."

#### Sec. 16B-1-20. Intent and Purpose.

- (a) Intent. The Development and Design Standards are generally intended to implement and build upon Chapter 16A – Zoning. The Development Standards seek to recognize a reasonable balance between owners' private property rights and the protection of the natural mountain character and attractiveness of the Town. It is the natural mountain character of the Town and its surroundings that creates Blue River as a desirable place for development.
- (b) Purpose. Protection of the natural mountain character of the area includes creating appropriate settings for the buildings that are to be constructed within the Town, to make use of natural contours, to minimize the need to reshape and excavate the land, and to afford privacy for the residents and protection from noise and vehicular traffic. Buildings should be integrated into the landscape and building materials should be limited in color and type to best ensure that the built environment does not overwhelm or dominate the natural character. Moreover, every resident must have basic services reasonably available to their property, including supply of water, a means of wastewater discharge that is safe to the public and the environment, electricity, and other common public services.

The purpose of the Development and Design Standards is to address the physical relationships between uses, between lots and properties, between development and adjacent properties, and the interrelationship and connection with public streets, neighborhoods, and the natural environment in order to implement the Blue River Comprehensive Plan's vision and goals for a more attractive, efficient, and livable community.

#### Sec. 16B-1-30. Reference to Chapter 16 General Provisions.

The provisions of Chapter 16 (General Provisions) shall be applicable to this Chapter 16B.

**Sec. 16B-1-40. Applicability.**

- (a) General Applicability. This Chapter 16B shall apply to all property within the Town of Blue River. Provisions of this Chapter may apply at different stages of land use or land development such as:
1. Subdivision (e.g., lot layout, street design).
  2. Design of Improvements.
  3. Development or Redevelopment of Property.
  4. Use of Property.

**Sec. 16B-1-50. Definitions.**

The definitions of words and phrases used in Chapter 16B (Development Standards) are found at Article 3 of Chapter 16 of the Land Use Code.

**Article 2 Subdivision, Site, and Lot Design**

**Sec. 16B-2-10. Generally.**

The creation of *lots* and, in turn, the creation of potential building sites, through the process of subdivision, re-subdivision, lot consolidation greatly impacts the character of the Town. Lot creation should remain sensitive to the environment and topography while also ensuring that the lot meets the requirements and limitations of the zone district in which the lot is located and the lot can be adequately served with access and utilities.

To this end, the lengths, widths, and shapes of lots shall be designed to:

1. Comply with the minimum lot size and minimum lot frontage required by the property's zone district;
2. Comply with this Article and any other applicable provisions of the Land Use Code;
3. Provide for adequate building sites that can accommodate the uses permitted within the zone district;
4. Accommodate necessary public utilities, easements, and parking;
5. Provide for safe and efficient access, including emergency access vehicles, based on the types of use(s) permitted within the zone district; and
6. Integrate with the limitations and opportunities presented by the topography of the site.

**Sec. 16B-2-20. Lot Design Standards.**

- (a) Design for Minimum Alterations to Lot. Subdivision design shall minimize the need for alteration of topographic and natural features of the site except where alteration is necessary to control surface drainage (e.g., creation of detention areas) and to ensure avoidance of hazardous traffic conditions (e.g., to align intersections at right angles).
- (b) Double Frontage Lots. Double frontage lots (lots bounded on two opposite sides by *streets*) are prohibited except where the lot has a depth of not less than one hundred and thirty (130) feet and one of the following circumstances exist:
1. Where a double frontage lot design is necessary to separate residential development from an adjacent highway or *arterial street* and no direct access is permitted from a lot to the adjacent highway or *arterial street*;
  2. Where access to an adjacent highway or *arterial street* which created the need for the double frontage lot is legally prohibited from the lot(s); or
  3. Where the subdivision design incorporates a landscaping or other improvement plan that is determined by the Town as reasonably ensuring a uniform and consistent design along the highway, arterial street, or collector street.
- (c) Design of Useable Building Site. All lots shall be designed to provide for an adequate and usable *building site* (see Article 4 of this Chapter 16B) following the application of the requirements of these Land Use Regulations and consideration of *setbacks* and *encumbrances and limitations* that reduce the potentially buildable area of the lot. Where *setbacks* and *encumbrances and limitations* effectively reduce the buildable lot area and undermine reasonable development opportunities, owners are encouraged to create lots larger than the applicable minimum lot area of the zone district to permit adequate space for a building site. The creation of a lot with a limited buildable area due to setbacks and known limitations or impediments shall be deemed a self-imposed or self-created hardship which may restrict the potential developable size of any building on the lot and which may potentially preclude the granting of a variance pursuant to Article 7 of Chapter 16.
- (d) Outlots. The creation of an *outlot* shall be prohibited except where such outlot will be owned by the Town, a *homeowners' association*, or a special district and the *outlot* will be permanently and perpetually managed and maintained through an agreement approved by the Town at the time of subdivision review and approval and the outlot is expressly limited by the subdivision plat or other land use documentation to use as a location for:
1. A *subdivision entry sign*; or
  2. Facilities for drainage detention or retention, or for surface water flow easement; or
  3. *Open space, greenbelt*, or park; or
  4. *Buffer area*; or
  4. Undeveloped property (no development, improvement, buildings or structures) for the purpose of advancing traffic safety and/or road maintenance such as, but not

limited to, land devoted to intersection visibility triangles, noise mitigation space, and snow storage areas.

- (e) Required Road Radii. Property lines of lots located at the corners of two intersecting local or collector roads shall be rounded by an arc having a radius of not less than fifteen (15) feet. Property lines of lots located at a corner of Colorado Highway 9 or a local arterial road shall be rounded by a radius of at least twenty-five (25) feet.

**Sec. 16B-2-30. Dedications Required for Utility and Other Services.**

- (a) All Major Subdivisions and Minor Subdivisions, and the creation of a new lot by subdivision, approved after **August 1, 2021**, shall dedicate public use easements within each lot in accordance with Article 3 of this Chapter 16B. Unless otherwise authorized or accepted by the Town, easements shall be depicted on and dedicated by the subdivision plat.
- (b) For the *redevelopment* of any *lot*, no building permit shall be issued unless the lot is determined by the Town to be in compliance with the requirements of Article 3 of this Chapter 16B in order that such lot is afforded necessary utility services. The dedication of new easements shall be required for existing utilities which are located outside of an easement and which provide services to the lot or to adjoining lots.

**Sec. 16B-2-40. Access to Adequate Public Thoroughfare Required.**

Public Access Required. All lots shall be laid out and designed in order to be served by lawfully recognized, direct, uninterrupted, and permanent access to an existing public thoroughfare capable of safely and efficiently handling both the existing demand upon such thoroughfare and the estimated vehicular traffic volume generated by the proposed lot development or subdivision.

**Sec. 16B-2-50. Secondary Access.**

- (a) Secondary Access Required. The road layout within a Major Subdivision<sup>16</sup> shall be designed to provide at least two (2) permanently available means of public access to lots within the subdivision. This secondary access requirement shall not apply to lots within a subdivision that obtain access from a cul-de-sac street that is less than five hundred (500) feet in length measured from the cul-de-sac entrance to the furthest point of the cul-de-sac. Both primary and secondary access shall be provided by roads meeting all design and construction standards applicable to such roads; provided, however, that the Town may permit secondary access not meeting such standards where it is demonstrated that:

<sup>16</sup> See Article 4 of Chapter 17, *Major Subdivision*.

- (1) Due to the size of the subdivision, location of the lots, and sufficiency of the primary access and street layout, there is no reasonable necessity for providing two means of permanent public access to the lots within the subdivision; and
  - (2) The secondary access is sufficient to permit access by emergency vehicles; and
  - (3) The secondary access will be regularly maintained, and will remain permanently available for emergency vehicle use; and
  - (4) The secondary access will not be detrimental to the public health, safety, and welfare.
- (b) Waiver Authorized. The Town Board may waive the requirement or postpone the completion of the requirement for secondary access to any Major Subdivision only upon a finding by the Board that one or more physical conditions associated with the subdivision, such as topography, property ownership patterns, or existing development on adjacent property, will prevent or preclude an opportunity for constructing secondary access and the absence of secondary access will not be detrimental to the public health, safety, and welfare.

**Sec. 16B-2-60. Street Design.**

Streets to Meet Standards. All lots shall be accessible by a street system that meets all standards provided by the Land Use Code and Town adopted street construction standards. Where the existing street system providing access to the lot fails to meet the applicable standards, subdivision approval shall be denied until such time that the Town legislatively allocates adequate funding to bring the street system into conformance with the Land Use Code and Town adopted street construction standards. Alternatively, the *Applicant* for approval shall upgrade the street system at the *Applicant's* expense as part of the public improvements necessary to serve the lot or subdivision, as applicable.

## Article 3 Utilities and Easements

**Sec. 16B-3-10. General Public Utility Easements.**

Public easements sufficient to provide reasonable service facilities for public utilities (water, sewer, electricity, gas, telephone, communication, fiber optic, cable, etc.) shall be designated and dedicated to the Town for public use on each subdivision plat and shall meet the following minimum standards:

1. At least fifteen (15) feet in width when located on one side of a rear lot line; or
2. At least a total of twenty (20) feet (10 feet on each side) when centered on a rear lot line; and

3. At least and fifteen (15) feet (7.5 feet on each side) alongside lot lines.

The use or uses for each public easement shall be identified on the plat or development plan. Where not identified, the easement shall be available for all public uses. Whenever possible, easements should permit co-location of uses to minimize the need for multiple easements. The *Applicant* is encouraged, in lieu of providing easements on each and every lot line, to propose a public easement layout plan for providing the necessary utilities in order to reduce the number and complexity of easements. The layout plan is subject to approval by the utility providers and by the Town.

**Sec. 16B-3-20. Sanitary Sewer Easements.**

Sanitary sewer lines shall not be located along side lot lines or extend between lots except where such location is determined by the Town as the only reasonable alternative due to topographic or physical features of the property and a twenty (20) foot wide easement for both the line location and future maintenance is provided on the plat.

**Sec. 16B-3-30. Drainage Easements.**

Drainage easements shall be established for all drainage ways, channels, streams, or irrigation ditches traversing multiple lots of a subdivision. The location of such easements shall conform substantially to the natural and historic lines of surface drainage and shall include additional reasonable width for maintenance purposes. Where a third party holds an ownership interest in a drainage way, channel, stream, or irrigation ditch, the applicant shall obtain the owner's written consent to any modification or re-location of the drainage system.

**Sec. 16B-3-40. Off-Site Easements.**

If a proposed utility or drainage system or plan will require use of private land located outside of the development or subdivision, the applicant shall secure the legal and permanent right in a form acceptable to the Town Attorney for such use of land outside of the development or subdivision.

**Sec. 16B-3-50. Emergency Access Easements.**

Emergency access easements (publicly dedicated easements reserved for use by fire protection equipment access and other emergency service access such as ambulances and law enforcement) shall be required where determined by the Town as reasonably necessary to gain access to and protect the development and immediate area. *Subdivisions* and *developments* of greater than four (4) lots served by a single access road may be required by the Town to establish secondary emergency access. When required, all emergency access easements shall be at least

sixteen (16) feet in width, have an all-weather surface<sup>17</sup> acceptable to the Town and shall permanently remain free of obstructions and available for access at all times.

**Sec. 16B-3-60. Pedestrian Easements.**

Within the Town of Blue River, pedestrian easements were created and shown on many of the recorded subdivision plats and were created by deeds and other documents recorded with the Summit County Clerk and Recorder. The Town recognizes that these easements confer a legal right upon the easement holder to reserve the easement area for pedestrian access and pedestrian passage. The Town further recognizes that the construction of structures, buildings, fences, or other above grade improvements and the parking of vehicles substantially interferes or precludes with the right of pedestrian access and passage. Therefore, pedestrian easements shown on subdivision plats or recorded with the Summit County Clerk and Recorders Office shall be recognized as unavailable for most development and no above grade improvements shall be permitted within pedestrian easements absent the express consent of all easement holder(s) and the termination of the easement.

**Sec. 16B-3-70. Snow Storage Easements**

All Major Subdivisions and Minor Subdivisions, and the creation of a new lot by subdivision, approved after August 1, 2021, shall dedicate public use easements along all public streets for the storage of snow removed from adjacent rights-of-way. Snow storage may be required for other forms of subdivision or land use approvals where determined by the Town that public access will likely be impaired to the property due to an inability to effectively clear the public right-of-way of snow and ice.

**Article 4 Buildable Area**

**Sec. 16B-4-10. Generally.**

The extent of potential development or the improvement of a lot shall be governed, in significant part, by the lot's setbacks together with the limitations imposed by easements, encumbrances and limitations that may restrict development. This Article defines the permitted extent of development of a lot and the means of determining the permitted buildable area for the lot and the location of any building, structure, or accessory improvement.

---

<sup>17</sup> All Weather Surface means a surface capable of allowing motor vehicle access during any weather condition, which surface may include packed gravel, seal-coated asphalt, asphalt, concrete or another material approved by the Town.



**Sec. 16B-4-20. Setbacks.**

*Setbacks* (front, rear, and sides) are established by the Zone District that is assigned to a *lot*. See Chapter 16A - Zoning. Setbacks are a specified distance measured from the front, rear, and sides of the property line that defines the boundaries of the lot. *Setbacks* effectively define the initial location within the lot in which the principal permitted building or structure may be lawfully constructed, erected, or maintained *except* as expressly permitted by the Land Use Code. Such initial location is subject to limitations imposed by easements and other encumbrances.

**Sec. 16B-4-30. Easements.**

(a) Easements Generally. Along with *setbacks*, most lots include or contain easements and other forms of legal encumbrances that can restrict the ability to locate and construct some types of development or improvements. For example, many lots include utility easements that allow for the service lines necessary to serve the building. Buildings and other types of improvements cannot be lawfully constructed within a utility easement because the building will impair the ability to use the easement for the purpose of installation, maintenance, relocation, and removal of utilities. Likewise, a pedestrian easement is reserved for the use of pedestrians to traverse the easement area, therefore, a building or other structure constructed within a pedestrian easement will defeat the purpose of the easement and building within the easement is not permitted.

(b) Recognized Easements and Limitations on Development or Improvement of a Lot. The following easements and encumbrances will be found throughout the Town of Blue River which may restrict or limit the development potential for a lot.

(1) Utility easements and existing utilities;

Generally, no *permanent* improvements may be constructed within a utility easement or upon property where utilities exist. Some limited use of the easement area that is not adverse to the purpose of the easement may be permitted. For example, the surface of the easement area may be used for recreational activities or gardens and other forms of landscape planting that do not create conflicts with underground utilities due to deep invasive roots or conflicts with above-grade utilities due to growth of trees reaching utility lines. The language of the easement and the easement holder (the party that holds the easement and has the right to the use of the easement) should be consulted for the permitted use of easement areas.

(2) Drainage Easements for Retention, Detention, and Surface Flows.

Easements are often created for the purpose of reserving land to manage surface waters and stormwaters. Such easements prohibit the use of the surface for nearly all permanent buildings and structures due to the conflict with the purpose of the easement.

(3) Road Easements (Public and Private) and Access Easements.

Easements are often created to reserve property for vehicular traffic and to provide for permanent access to property. Such easements are not available for any development or improvement other than overhead and subsurface utilities that will not interfere with the existing or future use of the road within the road easement or the access secured by the easement.

(4) River Easements (shown on subdivision plats).

River easements were privately established within the Town of Blue River and today encumber all or a portion of some *lots* within the Town. The particular document creating each river easement requires review in order to determine the specific restrictions imposed on use of the easement area. Such document will oftentimes prohibit surface uses in order to reserve the property for river and surface water flows unless otherwise approved by the easement holder(s). As a general matter, the Town will deem the areas within river easements as unavailable for development or improvement without the express approval of the easement holder(s).

(5) Pedestrian and Trail Easements (shown on subdivision plats).

Some *lots* are encumbered with pedestrian or trail easements which are illustrated on subdivision plats recorded with the Summit County Clerk & Recorder's Office. The purpose of the easement is recognized by the Town as reserving the easement area for use by pedestrians or trail users. As a result, such easements are considered by the Town as unavailable for use for improvement absent approval of the easement holder(s).

(6) Conservation Easements (or other similar forms of easements intended to limit or prevent development).

Conservation easements or other forms of easements are created by deed, contract, subdivision plat, or other legally recognized document for the purpose of preventing or limiting development or improvement of all or any portion of the easement area. The particular document creating each easement requires review in order to determine the specific restrictions imposed on use of the easement area. The Town will not typically permit development or improvement within legally established conservation easements without the express consent of the easement holder(s).

(7) Other Legally Recognized Easements (public or private).

A variety of different forms of easements may be created by private contract or dedicated or created to serve a public purpose. Where such easements exist, they are typically recorded against the lot and are on file with the Summit County Clerk and Recorders Office. The terms and conditions of the easement contract or the document creating the easement will dictate the permitted scope and use of an

easement. The Town may, in some situations, prohibit development that will conflict with the easement or, on most situations, require the applicant to notify the easement holder of the proposed development to enable the easement holder the opportunity to decide whether to enforce the terms and conditions of the easement.

**Sec. 16B-4-40. Other Encumbrances and Limitations.**

- (a) Together with setbacks and easements, the ability to develop or improve a lot may also be limited by requirements or federal, state, or local laws. Locally, such laws recognized by the Town of Blue River include:
  - (1) Federally Designated Floodways or Floodplains (see Article 16B-16-30).
  - (2) Federally Designated Wetlands (see Article 16B-13-20).
  - (3) Policies established by the Town of Blue River (including the Land Use Code) designed to reduce the impact of development in order to advance goals and objectives to preserve the natural environment that defines the character of Blue River.
  - (4) *Reserved.* (Subsection reserved for later reference to any local regulations *such as* ridgeline development regulations, wildfire mitigation zones, wildlife corridors, or steep slope restrictions).

**Sec. 16B-4-40. Buildable Area.**

- (a) Determining Building, Structure, and Accessory Improvement Location. When seeking Town approval of the location within a lot of any building, structure, accessory improvement, or other improvement regulated by the Land Use Code, the owner or applicant shall demonstrate a consideration of the following when deciding the appropriate location of the building, structure, accessory improvement, or other improvement:
  - 1. The lot's applicable setbacks imposed by the zone district (see Chapter 16A – Zoning);
  - 2. Easements that may prohibit, restrict, or limit the location of development or improvements;
  - 3. Other *encumbrances or limitations* that lawfully prohibit, restrict, or limit development or improvements within the lot;
  - 4. Integration of the building, structure, and site improvements into the natural topography and natural features of the lot to reduce the impact of the mass of the building, structure, or improvement;
  - 5. Minimizing the need for grading or surface disruption and revegetation;

6. Avoiding areas of natural or historic drainage and minimizing the need for extensive redirection or natural drainage courses;
7. Minimizing the need for lengthy or steeply sloped driveways or access roads;
8. Reasonable buffering of views of the proposed building, structure, or site improvement from existing adjacent residences and a recognition of the advantages of sun exposure for vegetation and snow management; and
9. To the extent practicable, minimizing or buffering impacts on adjacent property caused by vehicle headlights, parking, and the use of areas intended for social or recreational activities such as decks, outdoor dining areas, and hot tubs.

**Sec. 16B-4-60. General Restriction Regarding Buildable Area.**

The Town shall not authorize or permit a building, structure, accessory improvement, or other improvement which will unlawfully encroach into any setback or Town-recognized easement, or conflict with any encumbrance or limitation recognized in accordance with this Article.

## **Article 5 Building Design Standards**

**Sec. 16B-5-10. Generally.**

Buildings can positively or negatively impact the mountain character that the Town of Blue River seeks to preserve and encourage. The thoughtful incorporation of certain forms of building architecture, design elements, height, materials, and colors can enable a building to naturally blend into the environment and to enhance the visual qualities of a mountain community. Conversely, other forms of building design and construction may cause the building to appear wholly inconsistent and out of place when located with a mountain community. This Article is intended to reasonably regulate architecture, design, mass, scale, height, material, and colors to best enable buildings within the Town to enhance, and not detract, from the mountain character and qualities this Land Use Code seeks to advance and preserve.

**Sec. 16B-5-20. Building Height.**

- (a) Building Height Limit Generally. Maximum building height for each lot is established by the applicable zoning district. See Chapter 16A.
- (b) Building Height Measurement. Heights of buildings and structures are calculated as follows:

- (1) Building height shall be measured using a certified topographic map that also illustrates the entire proposed building footprint. The building height shall be the distance measured vertically from any point at the lower in elevation of the natural or finished grade of the building to the highest point of the building at such point (not including any exceptions for physical improvements to the height limitation provided by this Section).
  - (2) The methodology for measuring height can best be visualized as an irregular surface located above the building site at the height limit permitted by the underlying zoning district, having the same shape as the natural or finished grade of the building site (whichever is more restrictive).
  - (3) Where minor or nominal irregularities in the grade exist (as determined by the Town), such irregularities shall not be used in determining compliance with the height limitation and the surrounding typical slope of natural grade shall be used.
  - (4) Window wells, walk out doorways, cellar or basement entry points, and similar building appurtenances installed below the general grade of the site shall not be included as an element of the finished grade for the purposes of calculating building height.
- (c) Improper Modifications of Existing Grade. A modification of the natural grade of a lot performed without Town approval and prior to a determination of the allowable building height, when determined by the Town to be an effort to increase the building height contrary to this Section or the applicable limitation of building height, shall be disregarded in calculating allowable building height for a lot. In such instance of unauthorized or improper modification, the Town shall approximate the natural grade of the lot based on information available to the Town and the Town shall determine the allowable building height for the lot.
- (d) Exceptions to Height Limits: The following exceptions to height limits are allowed:
- (1) Chimneys, vents, and other forms of common roof appendages for utilities, heating, cooling, or ventilation of common household equipment may exceed the maximum height allowance by a maximum of ten percent (10%). Where a greater extension is mandated by a Town-adopted and applicable building or safety code, the greater extension shall be permitted as an exception to the height limitation.
  - (2) The Planning Commission is authorized to approve a limited exception to building height in the following circumstances:
    - (i) *Varying Roof Height Exception.* The Commission may approve an exception where the Commission finds that:
      - a. The building or structure incorporates varying roof forms and varying roof heights and such variations result in the building or structure being lower than the maximum allowed building height for approximately 25% of the total building or structure; and

- b. The building or structure meets all other applicable provisions concerning height, mass, scale, and setback for the applicable zone district; and
- c. The exception is deemed nominal or minor by the Commission and in no event exceeds three (3) feet.

(ii) *Nominal and Inconsequential Exception.* The Commission may approve an exception where the Commission finds that:

- a. The building or structure is found to exceed the maximum building height at a given point but such deviation is determined by the Commission to be nominal or inconsequential when considering the building's or structure's overall conformance with the maximum height limitation in all other instances; and
- b. the deviation is less than three (3) feet; and
- c. the deviation will not be readily noticeable to the general public given the surrounding topography, vegetation, and location of the structure; and
- d. The deviation is not the evident result of the Owner's or Applicant's intentional effort to violate the applicable maximum building height requirement.

**Sec. 16B-5-30. Reserved.**  
**Sec. 16B-5-40. Reserved.**  
**Sec. 16B-5-50. Reserved.**  
**Sec. 16B-5-60. Foundation.**

- (a) Generally. The foundation comprises the lowest part of a building or structure that is in direct contact with the soil and which transfers loads from the structure to the soil safely. Although the construction standards for a given foundation are governed by the Town-adopted building and safety codes, exposed portions of a foundation visible from the exterior of the building or structure can diminish or enhance the character of a building or structure depending on the treatment of the exposed foundation.
- (b) Design Requirements. The surface the portion of a foundation visible from the exterior of a building or structure shall be physically treated to integrate the foundation's appearance with the building or structure and with the surrounding environment. Stone, rock, stone veneer, and metal are acceptable treatment materials provided that the materials match or are consistent with similar materials used in the construction of the predominant portions of the building or structure. Exposed concrete or cinderblock foundation walls are prohibited unless such exposed walls are both approved by the Town (See Chapter 16C and Type C Application) and painted to match the predominant Town-approved color of the principal building or structure. For foundations with nominal visual exposure (i.e., no greater than 18 inches in height at any point above finished grade), the use of

landscaping materials which will significantly reduce or mask the visibility of the foundation are acceptable if such treatment is included within a landscape plan approved by the Town.

**Sec. 16B-5-70. Roofs.**

- (a) Generally. The design of roofs and roof slope on all buildings or structures can enhance the compatibility of the building or structure with the surrounding environment. For this reason, the design of roofs for all buildings and structures shall comply with this Section.
- (b) Roof Form Requirements.
- (1) *Prohibited.* The use of a flat, shed, butterfly, or mansard roof forms<sup>18</sup> as the predominant or primary roof for a building or structure is prohibited. The use of a roof with a pitch of 2:12 or lesser slope shall be limited to roof sections that serve as secondary elements of architectural interest, such as integrating small segments of flat or shed roof over entryways or where necessary to accommodate a second-floor deck. Where secondary flat or shed roof segments are proposed, the Town may require engineering certification of the roof's capacity to accommodate anticipated snow loads and/or the integration of mechanisms or methods to ensure the mitigation of snow and ice from roof sections.
  - (2) *Acceptable.* Gable, hip, hip and valley, and shed roof forms with roof pitches between 4:12 and 12:12 are acceptable.
  - (3) *Subject to Discretionary Review.* The use of other forms of roof (i.e., saltbox, gambrel, or combination of different roof forms) shall be subject to Town review and discretionary approval based on factors such as: (i) consistency with other roof forms found within the immediate neighborhood on existing buildings or structures; (ii) the roof's integration into the immediate surrounding environment in a manner that reduces the appearance of the building or structure, (iii) the integration of architectural elements such as dormers, cutouts, and roof variations to lessen the appearance of the roof and the mass of the building or structure; and (iv) the degree to which the proposed roof form will allow the building or structure to significantly reduce the need to build to the maximum allowed building height for the lot.
- (c) Design Requirements.
- (1) Roof design shall accommodate snow loading reasonably anticipated for Blue River.
  - (2) Roof overhangs shall be used to add visual interest, enable the safe shedding of snow and ice, and protect the building or structure from weather.

<sup>18</sup> See <https://www.britannica.com/technology/roof> for illustrations of basic roof forms.

- (3) The use of metal fascia is prohibited.
  - (4) Roofing material shall be metal (allowable muted, non-reflective earth tones or dark natural colors) or asphalt shingles (earth tones or dark natural colors). All other roofing material shall be subject to Town review and approval based on the ability of the proposed material to be equal or better than metal or asphalt shingles in the protection of the building or structure and in the aesthetic appearance and impact on the natural environment.
- (d) Design Guidelines.
- (1) Roof design should avoid long uninterrupted expanses of roof surface without the addition of architectural treatment to add visual interest.
  - (2) Roof design should follow existing contours of the surrounding topography to enable the roof to integrate into the natural environment and reduce visual impact on the community.
  - (4) The use of flashing, gutters and downspouts are to be minimized and used only where needed to protect walkways, sidewalks, entrances, and other areas with anticipated pedestrian use. Where proposed for use, they are to be constructed of durable metals and in colors that blend with the roof and exterior walls.

**Sec. 16B-5-80. Garages.**

- (a) Garages as Subordinate Feature. Garages shall not dominate the structure and shall be subordinate to the residence. Garage walls shall be set back behind the front primary walls of the home. Where possible, garages shall be side loaded.
- (b) Materials and Color. Garage doors shall be wooden or of a material and color to match adjacent surfaces. Simple designs are encouraged. Clad materials such as anodized metal, baked enamel or plastics are subject to the review and approval of the Town. White garage doors are prohibited.

**Sec. 16B-5-90. Window and Door Design.**

- (a) Window Design Standards.
  - (1) Window openings shall be designed in proportion to the structure and form of the residence. Openings of unusual shapes, sizes, and colors that distract from the overall design of a building or structure are not permitted. Window openings in mass walls should be relatively small in scale and be used in an informal pattern on the wall with deep-set reveals and varied proportions.



- (2) Large panes of windows should be detailed with window mullions. Large banks of windows should be designed with intermediate framing or deep recesses to reduce the scale of the glass area.
- (3) Clad wood windows are recommended. Clad materials such as anodized metal, baked enamel or plastics are subject to the review and approval of the Town. White windows are not permitted.
- (4) Insulated glass windows are required by state and local energy codes. Clear, solar gray and solar bronze glass may be used. Other colored, reflective, or mirrored glass is not permitted.

(b) Doors.

- (1) Front or entry doors shall be a prominent feature of each building or structure.
- (2) Door openings shall be designed in proportion to the structure and form of the residence. Openings of unusual shapes, sizes, and colors that distract from the overall design of a building or structure are not permitted.
- (3) Clad materials such as anodized metal, baked enamel or plastics are subject to the review and approval of the Town. White doors are prohibited.
- (4) Simple decorative doors such as carved wood, plank, and glazed are encouraged for exterior doors. Ornate, gaudy or period designs are not permitted.

**Sec. 16B-5-100. Balconies and Railings.**

(a) Balconies.

- (1) Balconies should be sized to individual rooms or functions within the building and should be proportional to the overall exterior elevation of the building.
- (2) Long horizontal expanses of continuous or repetitive balconies shall be avoided.
- (3) Balconies enclosed with wood or solid walls on more than two sides are prohibited.

(b) Railings.

- (1) Railings on balconies, decks, stairs and porches, are to be made up of structures and materials that appear as natural extensions of the buildings that adjoin them.
- (2) Balcony railings should be light in appearance with a significant portion of the area left open by using narrow pickets or railing patterns.
- (3) The use of framing material for balcony railings is not permitted. Wood or wrought iron railings may be used.

**Sec. 16B-5-110. Chimney and Roof Penetrations.**

- (a) Chimneys. A chimney shall be designed with form, shape, mass consistent with and in proportion to the structure to which the chimney is attached or related. The principal materials used for the exterior chimney surround shall be identical to or consistent with other materials used for exterior surfaces of the structure.
- (b) Roof Penetrations. Items that penetrate the roof surface (including, but not limited to attic vents, sewer and utility system vents, HVAC vents, dryer vents, flues, and pipes) should be consolidated to the extent practicable and enclosed within common channels. All exposed penetrations, pipes and flues shall be painted to match the roof color.

**Article 6 Building Materials and Colors**

**Sec. 16B-6-10 Generally.**

Materials and colors of buildings and site improvements can enable the building or improvement to blend into the surrounding environment and enhance the mountain character of the Town. Conversely, some materials and colors can result in a building or structure that detracts from and conflicts with the natural environment. This Article seeks to reasonably limit the types of materials and colors used for all buildings, structures, and improvements within the Town to achieve the purposes and goals of the Land Use Code.

**Sec. 16B-6-20. Materials.**

- (a) Exterior Walls.
  - (1) Acceptable Materials:
    - (i) Log;
    - (ii) Timbers;
    - (iii) Plank siding;
    - (iv) Board and Batten;
    - (v) Bevel Siding;
    - (vi) Wood Shake; and
    - (vii) Cementitious (fiber cement) only siding when resembling wood siding.
  - (2) Conditional Materials (only with Town approval upon finding that the proposed material and its application will resemble acceptable materials in texture, color, and ease of maintenance):
    - (i) Metal siding; and

- (ii) Vinyl or plastic siding.
- (3) Prohibited Materials.
  - (i) Plywood siding;
  - (ii) Synthetic siding;
  - (iii) Ferro cement siding;
  - (iv) Stucco;
  - (v) Adobe;
  - (vi) Concrete block and concrete masonry units (CMU);
  - (vii) Brick; and
  - (viii) Contrasting light or dark grout or mortar.
- (b) Exterior Trim Materials. All wood trim boards shall be a minimum of two-inch by two-inch (2x2) material. Cementitious and other non-wood trim materials shall mimic wood materials with a minimum proportion of two-inch by two-inch (2x2) and shall be subject to review and approval of the Town upon a finding that the proposed material and its application will resemble acceptable materials in texture, color, and ease of maintenance as wood trim materials.

**Sec. 16B-6-30. Colors.**

- (a) Intent. The overriding principle for the exterior color of buildings within the Town is to blend buildings into the terrain and vegetation of the natural landscape. Therefore, naturally weathering materials such as cedar shakes and shingles; redwood and western red cedar boards, rusting metal, and native stone are central to the design theme.
- (b) General Prohibition on Colors: The following colors are prohibited for all surfaces of all *buildings, structures, and accessory improvements*:
  - (1) White (including colors muted or tinted that approximate white);
  - (2) Yellow; and
  - (3) Fluorescent colors of any kind or type.
- (c) Exterior Stain. Where exterior stain is used on wood siding and exterior walls the color shall resemble natural wood tones. Paint is not to be used on exterior siding.

## Article 7 Accessory Improvements

**Sec. 16B-7-10. Generally.**

- (a) Accessory Improvements Generally. Together with lawful permitted buildings on a lot, other improvements accessory to the buildings will significantly impact the character of a subdivision as well as the character of the Town. For this reason, certain types of

improvements must be constructed or installed, and then managed and maintained, in accordance with standards designed to balance the impact of the improvement upon the community with the reasonable needs of the property owner to enjoy the property.

- (b) Improvement Requirements Not Inclusive of all Applicable Regulations. The requirements of this Article are imposed in addition to any design and construction standards imposed by applicable building and safety codes of the Town of Blue River.
- (c) Other Improvements Governed by Building Codes. Improvements within a lot not specifically addressed by this Article shall not imply that the improvements are unregulated. Most improvements of a lot shall require conformance with applicable Town-adopted building and safety codes and owners should always contact the Town for information on processes to obtain approval of all forms of improvements.
- (d) Lawful Dwelling Unit Required. All *accessory improvements* are authorized only with the presence of a lawfully existing *dwelling unit* on the same *lot*. *Accessory improvements* that must be installed contemporaneously with but prior to the completion of the *dwelling unit*, such as a *retaining wall* or *driveway* necessary to create or access a building site, shall be authorized only where a building permit is issued for the *dwelling unit* and the owner commences construction of the *dwelling unit*.

**Sec. 16B-7-20. Berms.**

- (a) Policy Statement and Applicability.

It is the purpose and intent of the Town to ensure that all berms are designed and constructed to appear natural using plants, trees and other landscaping materials that match the existing natural areas within the Town. For the purposes of this Chapter, a "berm" shall mean a non-naturally occurring mound of earth greater than two (2) feet in height (as measured from original ground level), or larger than four hundred (400) square feet of surface area. All berms within the Town shall comply with the provisions in this Article.

- (b) Declaration of Nuisance.

Any *berm* constructed, installed, or otherwise placed on any lot within the Town of Blue River without required permit(s) or which berm fails to meet the minimum requirements of this Section is hereby declared illegal and a nuisance. In addition to enforcement of the Land Use Code for an illegal accessory improvement, the Town is authorized to seek abatement of the nuisance in accordance with the Municipal Code.

- (c) Location Requirement.

- (1) Berms may be located within a setback.
- (2) The slope of a berm may terminate on a lot line.
- (3) Berms may not be located within a plated road easement.

- (4) Berms may not be located within the sight distance triangle. See subsection (h) below.
- (5) Berms may not be located within any area of an existing street used by the public.
- (6) Berms may not be located in an area where snow storage is necessary to enable the Town to maintain the street for the adjacent property.
- (7) Berms shall not be located where the berm will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot.

(d) Design and Construction Standards.

- (1) Every berm within the Town shall be designed and constructed in accordance with the following:
  - (i) Maximum height shall not exceed eight (8) feet, as measured from existing grade to the top of the crown of the berm.
  - (ii) Maximum slope shall not be greater than two to one (2:1) as a horizontal run to vertical rise.
  - (iii) The entire length of the perimeter shall be tied into the existing grade.
  - (iv) The area of the berm shall be contained within a single lot.
  - (v) Berms may not enter into any pedestrian, trail, utility or other easements or road, public right-of-way or public property.
  - (vi) The entire berm shall be landscaped as follows:
    - a. Grass, shrubs, perennials, groundcovers, annuals or trees shall cover eighty percent (80%) of the surface area. All grass seed mixes, perennials, groundcovers, annuals, and trees are limited to those identified in the Summit County Required Plant Materials List in Appendix 16-A of this Chapter.
    - b. Natural landscaping materials, including logs, stumps, decorative dead trees and boulders of varying sizes, must be incorporated into the site.
  - (vii) Landscaping of all berms shall take into account and be designed to be protected from snow storage areas and from snow sliding off of roofs. Hardy landscaping plants that will not be damaged by snow storage shall be located in those areas so affected by snow piled upon or against the berm.
  - (viii) Located within a site distance triangle described in this Article.

- (ix) The applicant shall take into consideration if there are proper water rights for use on the landscaped areas in case additional water is necessary for supplementing natural precipitation. Appendix 16-A lists the types of vegetation to use for three (3) different ranges of precipitation.
- (2) The following additional construction standards apply to all berms:
  - (i) A berm shall be compacted prior to planting, landscaping or revegetation.
  - (ii) Berms shall contain soil in sufficient quantity to ensure the survival of the grass, shrubs, perennials, groundcovers, annuals or trees. At a minimum, a berm must have at least two (2) inches of topsoil. If topsoil is not used, the applicant may use two (2) inches of mulch (straw, hay, wood cellulose, etc.) prior to seeding. The topsoil or mulch must be tilled at least four (4) inches deep into the soil prior to seeding. Straw and hay shall be certified as free of noxious weeds and shall not be in a state of decomposition so as to smother or retard the growth of natural grasses or groundcovers used by the applicant.
  - (iii) Any groundcovers shall be free from weeds identified as invasive, noxious or otherwise nuisance weed species in the Summit County Weed Management Guide in effect on the date construction of an approved berm commences.
  - (iv) Plantings of grass, groundcovers or flower seeds shall occur within ten (10) days following the surface soil preparation.
  - (v) Construction materials, concrete, bricks and garbage cannot be used as fill material to construct a berm.
  - (vi) Existing trees shall not be buried or incorporated into the berm.
- (e) Construction Permit Required; Financial Guarantee.
  - (1) A permit for the construction of a berm is required. Such permit may be issued upon approval of the Building Official as described in this Article. Such permit will expire eighteen (18) months after issuance.
  - (2) A financial guarantee in the form of a cash bond, in an amount of 150% of the cost estimates, shall be paid to the Town, prior to the issuance of a permit to construct a berm. Such bond will be refunded upon approval by the Town of the full completion of the construction of the berm, including required landscaping. The Town shall hold these funds in a non-interest-bearing account. The funds may be commingled with other Town funds. If the construction of the berm, including landscaping, is not completed within eighteen (18) months from the date of issuance of the permit, the Town may contract for the completion, including landscaping, and deduct any incurred expenses from the bond. Any unused funds

shall be returned to the applicant upon final completion of the berm, including landscaping.

(f) Contents, Timing and Review of Application.

- (1) The applicant shall submit an application to the Town that includes the following items:
  - (i) Town berm permit application form with the property address and name and address of the owner of the property, a narrative describing the project and an estimated time of completion;
  - (ii) A depiction of the property showing the property lines, easements, structures, driveways, snow storage areas, utilities, septic system, site distance triangle described in this Article, location of the proposed berm(s) and location and identification of type of existing trees that will be affected by the proposed berm;
  - (iii) A list of the revegetation and other landscape materials to be used on the proposed berm;
  - (iv) A sketch of the proposed berm meeting the design standards of this Article, with items shown as close to scale as possible (including the placement of the listed materials, along with any natural materials used, such as trees, stumps, large rocks, etc.);
  - (v) Other permits that may be required by the Town to complete the work; and
  - (vi) A fee for the review of the application in an amount set by motion or other form of the Town Board of Trustees.
- (2) The Building Official shall review the application to determine that it is complete and meets the requirements of this Article. The Building Official may:
  - (i) Find that the application is complete and review the proposed berm project. If the proposed berm meets the design standards and other requirements of this Article, the Building Official shall approve the construction of the proposed berm. If the proposed berm does not meet the design standards or other requirements of this Article, the Building Official may ask the applicant to revise the application or deny the application.
  - (ii) Ask the applicant to complete the application.
  - (iii) Ask the applicant to supplement the application by submitting additional plans and details, including, for example, an Improvement Location Certificate (ILC) or other survey documentation. The applicant shall comply with requests of the Building Official to complete or supplement the application.

- (3) The Building Official is authorized to deny an application for a berm construction permit if:
  - (i) The application is incomplete.
  - (ii) The applicant fails to supplement the application as requested by the Building Official.
  - (iii) The application fails to meet the design standards or other requirements of this Article.
- (4) The denial of an application shall be in writing, identifying the reasons for the denial, and sent to the applicant at the mailing address shown in the application by first class mail, postage prepaid.
- (5) The applicant may seek review of that decision by submitting an appeal to the Board of Adjustment. Any appeal of the denial of an application must be submitted in writing within fourteen (14) days of the date of mailing of the denial letter. If the applicant fails to meet that deadline, the Board of Adjustment shall not hear the appeal. An appeal must identify in detail the reasons for the appeal.

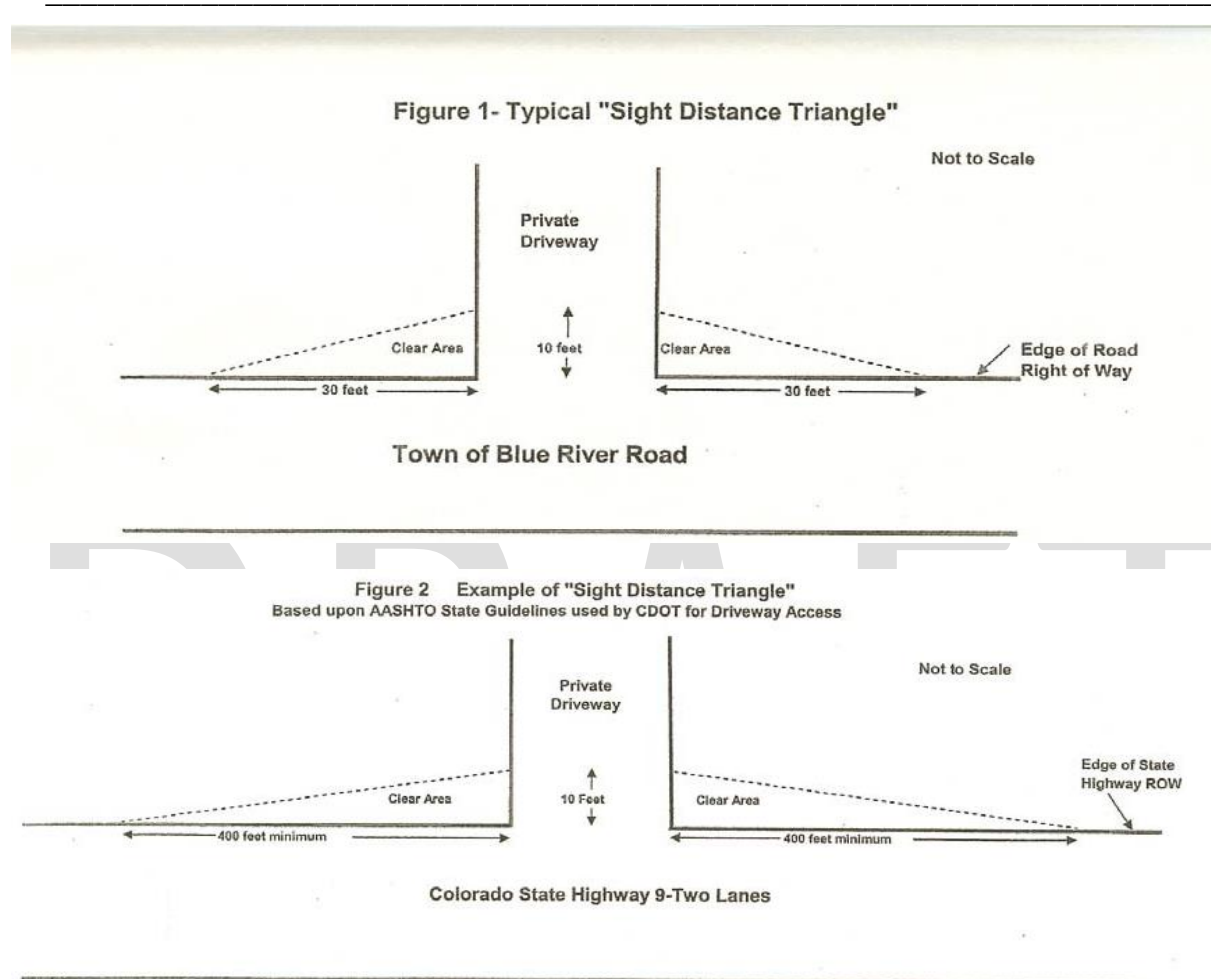
(g) Inspection of Berm, Approval of Construction.

Upon completion of construction of the berm, the applicant shall provide notice to the Town. The berm shall be inspected by the Building Official to determine compliance with the approved berm permit application and this Article. If the Building Official determines that construction of the berm is not in accordance with the requirements of this Article, the applicant shall make the changes necessary to bring it into compliance. Any determination of the Building Official concerning the inspection of the berm may be appealed to the Board of Adjustment, provided that notice of such appeal is presented in writing to the Town Manager within fourteen (14) days of the action to be appealed.

(h) Sight Distance Triangle.

For safety and visibility purposes, a sight distance triangle shall be maintained at all street intersections and where driveways intersect Town streets (See Figure 1) or Colorado State Highway 9 (See Figure 2). No landscape materials, berm or other visual obstructions between three (3) feet and eight (8) feet shall be allowed within this sight distance triangle. The Town may request the Colorado Department of Transportation determine whether proposed or existing berms near driveways or road intersections with Colorado State Highway 9 conform to its requirements. Property owners may be required to reconstruct a berm if it fails to meet those standards. This regulation is a highway safety measure and is not intended to prohibit the planting of trees or retention of existing trees in the sight distance triangle, if they are pruned so that all branches are higher than seven (7) feet as measured from the ground surface.





(i) Completed Berms.

- (1) Property owners are responsible for the establishment and maintenance of vegetation and landscaping on any berm in Town.
- (2) Berms constructed prior to the adoption of the ordinance codified herein must be brought into compliance with the provisions in this Article upon any change to the berm, replat of the property causing property lines to run through the berm, or other changes to the property requiring physical modifications to berm.
- (3) Berms located within any Town or CDOT right-of-way, site triangle or public easements may be removed by the Town.

(h) Variances.

Variances from the provisions in this Article may be granted by the Board of Adjustment for any existing or new berm in accordance with Article 7 of Chapter 16.

**Sec. 16B-7-30. Garages.**

(a) Generally.

- (1) A *garage* is limited to an enclosed or partially enclosed *non-habitable* space designed, suitable, or intended for the storage, whether permanent or temporary, of one or more motorized vehicles or personal recreational motorized vehicles together with materials, goods, or equipment any other sort or type. A garage may also be used by the owner or tenant of the principal permitted structure for any lawful ancillary activity commonly associated with residential use, such as but not limited to hobbies, art studio, or greenhouse.
- (2) A *garage* is an *accessory improvement* to a principally permitted residential dwelling unit. A garage shall not be located on a lot absent an existing residential *dwelling unit*.

(b) Location Requirement.

- (1) Garages shall not be located within a setback.
- (2) Garages shall not be located where the garage will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot.

(c) Maximum Garage Size.

The maximum total size in square feet of the first floor of any garage or garages on a lot whether detached from or incorporated into a principal permitted structure shall be:

- (1) for principal permitted residential structures of 5,000 square feet or less in habitable size, the greater of: (i) 800 square feet; or (ii) forty five percent (45%) of the total habitable size of the existing principal permitted structure on the same lot; provided that in no event shall the maximum size of garage(s) on a lot exceed 1,200 square feet; or
- (2) for principal permitted residential structures of greater than 5,000 square feet in habitable size, twenty-five percent (25%) of the total principal permitted structure's habitable size.

(d) Maximum Garage Height.

The maximum height of any garage shall not exceed the lesser of: (1) the height of the existing principal permitted structure on the lot; or (2) the maximum building height for the lot established by Chapter 16 of the Town Code. It is the intent of this subsection that garages shall be subordinate in size and height to both the principal permitted structure and use of a property.

(e) Design Standard.

A garage, whether attached or detached, shall be consistent with the principal permitted building on the same lot in terms of architectural style, building materials, and color.

(f) Prohibitions.

- (1) *Carports* are permitted if attached to a lawfully existing dwelling unit.
- (2) Mobile, portable, or temporary non-permanent shells (e.g., tents, fabric or plastic canopies, fabric and hybrid fabric/metal buildings or structures, hoop barns, pony wall buildings, and fabric covered steel tubing supports) are prohibited.<sup>19</sup>

**Sec. 16B-7-40. Sheds.**

(a) Generally.

- (1) A shed is an enclosed or substantially enclosed *building* or *structure* limited to *non-habitable* space designed, suitable, or intended for (i) the storage, whether permanent or temporary, of materials, goods, or equipment of any sort or type; (ii) the storage, whether permanent or temporary, of personal recreational motorized vehicles; and/or (iii) the use by the owner or tenant of the principal permitted structure for any lawful ancillary activity commonly associated with residential use, such as but not limited to hobbies, art studio, or greenhouse.
- (2) A *shed* is an *accessory improvement* to a lawfully existing *dwelling unit*. A *shed* shall not be located on a lot absent an existing lawful *dwelling unit*.

(b) Location Requirement.

- (1) Sheds shall not be located within a setback.
- (2) Sheds shall not be located where the shed will conflict with the purpose and intent of a lawful easement or other *encumbrance* or *limitation* affecting the lot.

(c) Number of Sheds Allowed.

No more than two (2) *sheds* are permitted on any one *lot*.

(d) Maximum Shed Size.

The maximum total size of the first floor any shed on a *lot* whether detached from or incorporated into a principal permitted structure shall not exceed a total of 200 square feet. Where more than one shed is present on a lot, the maximum total size of the first floor of all sheds shall not exceed a total of 200 square feet.

---

<sup>19</sup> E.g.: garage, greenhouse and other structures at <https://www.farmtek.com>; and <https://www.clearspan.com>.

(e) Maximum Shed Height.

The maximum height of any shed shall be fifteen (15) feet. It is the intent of this subsection that sheds shall be subordinate in size and height to both the principal permitted structure and use of a property.

(f) Design Standards.

A shed, whether attached or detached to a building or structure, is encouraged to be consistent with the principal permitted building on the same lot in terms of architectural style, building materials, and color.

(g) Prohibitions. The following structures or designs are prohibited:

- (1) Structures greater than 100 square feet in total surface area without walls on three or more sides (e.g., a *pole barn* or a *lean to*).
- (2) Mobile, portable, or temporary non-permanent shelters or improvements designed or intended to provide protection from the elements, storage, workspace, or other similar purpose (e.g., tents, fabric or plastic canopies, fabric and hybrid fabric/metal buildings or structures, hoop barns, pony wall buildings, and fabric covered steel tubing structure or frame).<sup>20</sup>
- (3) ClearSpan™ buildings, structures, garages, mini garage, sheds, mini sheds, mini barns.<sup>21</sup>

**Sec. 16B-7-50. Driveways.**

(a) Generally.

- (1) Where required parking areas for a lot are not immediately adjacent and accessible to a public access road without the need for a *driveway*, a *driveway* shall be required.
- (2) *Driveways* are mandatory where any portion of an exterior wall of the first story of a residential *dwelling unit* is located more than one hundred fifty (150) feet from a public road from which emergency vehicles will access the lot.
- (3) *Driveways* in excess of three hundred (300) feet in length shall be provided with turnarounds and driveways in excess of five hundred (500) feet in length and less than twenty (20) feet in width shall be provided with turnouts and turnarounds. The specific requirements for a turnout or turnaround as required in this subsection shall be established in consultation with the emergency service providers and

<sup>20</sup> See, as an illustrative example only: <https://www.farmtek.com/farm/supplies/home>

<sup>21</sup> See, e.g., <https://www.farmtek.com/farm/supplies/home>.

districts in order to address differences in lot topography, vegetative and geologic conditions, and drainage.

(b) Location Requirement.

- (1) A *driveway* may be located within a *setback* to the extent necessary to connect a public or private road to the buildings and structures within the *lot*.
- (2) A driveway shall not be located where the driveway will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot.
- (3) No part or portion of any driveway shall be located within a designated or recognized wetland, floodway, or floodplain without Town approval and any required approvals of state and federal regulatory jurisdictions.
- (4) No part or portion of any driveway, culvert, or other private improvement shall extend into public right of way without Town approval and a license agreement or other legally established right of use of the right-of-way for driveway access.

(c) Driveways Servicing Multiple Lots.

- (1) A *driveway* shall serve no more than four (4) *lots* unless otherwise approved by the Town upon a finding that a driveway presents a Town-preferred alternative to the construction of a public street in terms of: (i) unwarranted public expense for installation and maintenance; or (ii) avoidance of adverse impacts to environmentally sensitive areas such as wetland, steep slope, or wildlife corridors; or (iii) the need or lack of need for the extension of access to other lots for future development.
- (2) Driveways serving or located on more than one lot shall be permitted only where the owners of the lots enter into an enforceable and recorded easement, covenant, plat, deed, or other legally accepted documentation agreement approved by the Town Attorney that will ensure permanent and perpetual maintenance and access of the driveway for the lots.

(d) Design Standards.

- (1) Driveways shall be designed to follow naturally existing site contours as much as possible and to minimize impacts upon trees and other significant plants and planted areas, rock outcroppings, and drainage patterns.
- (2) Grading and modifications to existing site contours should be minimized to the greatest extent possible.
- (3) For driveways constructed after the effective date of the Land Use Code (\_\_\_\_\_, 2023), acceptable driveway surfaces shall be concrete, asphalt, gravel, recycled

or milled asphalt on aggregate base, stamped concrete or asphalt, cobbles, brick pavers, exposed concrete and colored concrete.

(4) Driveways shall meet the following requirements:

Maximum Driveway Width <u>Within</u> First 10 Feet from Public Access Road	12 feet
Maximum Driveway Width <u>Beginning</u> 10 feet from Public Street	24 feet
Minimum Centerline Curve Radius	30 feet
Cross Slope Required for Drainage	2%
Maximum % of Grade <u>Within</u> First 20 Feet from Public Road	6%
Maximum % of Grade <u>After</u> the First 20 Feet From Public Road	10%

(e) Driveway Drainage Standards.

- (1) Driveways in conflict with natural or manmade surface flow drainage courses shall be designed and engineered at the owner's cost and expense to prevent retention or detention of surface flow and overtopping of driveway or public roads.
- (2) Whenever a driveway crosses a barrow pit or side street swells which manage surface flows adjacent to driveways, culverts shall be installed under the driveway. When culverts are required, culvert ends shall be cut to match the adjacent slope. The culvert must extend a minimum of 2 feet on both sides of the drive. If end walls are used, end walls shall be constructed of stone or colored concrete to match building materials. Flared metal or high-density polyethylene (HDPE) ends are acceptable.

(f) Existing Nonconforming Driveways.

Driveways failing to conform with the requirements of this Article as of the effective date of the Land Use Code (\_\_\_\_\_, 2023), shall be brought into conformance upon relocation, reconstruction, or replacement (excluding routine overlay or routine surface repair). Conformance shall include, but not be limited to surfacing, grades, culverts or drainage management measures, and design standards.

(g) Driveway Snow Removal.

- (1) Property owners and residents are responsible for maintaining their driveways in an open and accessible condition. Failure to maintain driveways may impair access to the property by emergency vehicles.
- (2) Directing Snow Removal to Public Right of Way. Consistent with Colorado Revised Statutes § 43-5-301, it is unlawful and a violation of both state law and this Section for any person to direct, pile, dump, load, or push snow from private driveways or private property onto public streets or rights-of-way.
- (3) Snow Storage Easements Required. All Major Subdivisions and Minor Subdivisions, and the creation of a new lot by subdivision, approved after the effective date of the Land Use Code ( [REDACTED], 2023), shall dedicate public use easements along all public streets for the storage of snow removed from adjacent rights-of-way. Snow storage may be required for other forms of subdivision or land use approvals where determined by the Town that public access will likely be impaired to the lot or property due to an inability to efficiently and effectively clear the public right-of-way of snow and ice.

**Sec. 16B-7-60. Parking Areas.**

- (a) Purpose. The purpose of this Section is to ensure that adequate on-site and off-street parking is provided to meet the parking needs of the uses located in the Town of Blue River, to promote efficient design of parking areas, and to protect the Town's character. Given the limited availability of public rights-of-way to accommodate parking and to enable parking of vehicles within the limited rights-of-way, it shall be the responsibility of the owner to provide and to continuously maintain the on-site and off-street parking required by this Section.
- (b) Parking Required. All lots shall provide for a designated area available for the minimum number of parking spaces as required by this Section.
- (c) Parking Space Location.

All parking spaces designated to serve a lot shall be located within the same lot. Designated parking may not include on-street parking spaces, parking spaces located on another lot, outlot, or other area.
- (d) Parking Space to be Delineated. Each lot shall provide and maintain a recognizable and readily identifiable area to serve as the required parking of motor vehicles. Such standard shall be met by the formal creation of an area that is visually distinguishable from other areas of the lot by leveling, grading, and surface improvement (paving, gravel, or other non-native surface condition). Areas designated for required parking shall not be unimproved natural areas indistinguishable from the general character of the lot.
  - (1) Parking areas and spaces shall not be located within a setback.

- (2) Parking areas shall not be located where the parking area will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot.
- (3) All designated parking spaces must be designed to ensure that parked vehicles do not, when parked, occupy areas within setbacks and occupy areas outside of the *Buildable Area*, (see Article 4 of Chapter 16) or extend into or onto adjacent properties, or extend into streets and the public rights-of-way.
- (4) No parking space may be located on property reserved for, designated as, or recognized as wetland, floodway, floodplain, riparian area, open space, greenbelt, wildlife habitat or corridor, forage area, or aquifer recharge area. Where, due to variance, court order, or other legal authority, a parking space or parking area is permitted to be located within property owned or controlled by a state or federal agency, express written approval of such state or federal agency shall be mandatory.
- (5) No part or portion of any parking space shall extend into public right of way without Town approval and a license agreement or other legally established right of use of the right-of-way for such parking and use.

(e) Parking Requirements.

- (1) Minimum Parking Space Requirement. Each lot shall provide for a *minimum* of three (3) parking spaces reserved the parking of motor vehicles.
- (2) Maximum Outdoor Parking. No more than five (5) motor vehicles may be parked outside of a closed garage on any lot.
- (3) Garage and Parking Spaces to be Reserved. Garages are strongly encouraged to be used for parking spaces. In the event that parking spaces necessary to meet this standard are designated as located within a garage, such garage shall remain available at all times to accommodate the required parking. In the event that parking spaces necessary to meet this standard are designated as outside of a garage, such area shall remain available at all times to accommodate the required parking. Garages spaces or outdoor spaces designated to meet the required parking for a lot shall not be used for storage, parking of trailers or recreational vehicles, or otherwise rendered unavailable for the parking of motor vehicles. Garages or spaces designated or necessary for use to meet the required number of parking spaces for a lot shall not be converted or approved for use for any other purpose (e.g., converted from a garage to living space or spaces used for expansion of structure).



- (f) Parking Space Size. A space designated as a parking space available to meet the Town's required parking space allocations shall meet a minimum size of:
- (1) for indoor parking spaces (within a garage) – Ten (10) feet by twenty (20) feet; and
  - (2) for outdoor parking spaces – Nine (9) feet by eighteen (18) feet.

**Sec. 16B-7-70. Walkways.**

- (a) Specific Definitions for Section.

In addition to definitions provided by Article 3 of Chapter 16 of the Land Use Code, the following definitions shall apply to the application and administration of this Article:

*Primary internal walkway* means the intended path for pedestrians of direct connection between the driveway and any main access point(s) to the principal structure(s) within the lot. A lot which maintains more than one principal structure, or a detached garage may have more than one primary internal walkway extending from the driveway.

- (b) Primary Internal Walkways.

Primary internal walkways shall be provided within a lot in accordance with the following standards:

- (1) Primary internal walkways may be located within a setback if the lot configuration and topography prevent the reasonable location of the walkway within the applicable *buildable area* or the construction of the walkway outside of the *buildable area* will ensure a more secure, safe, level, or reasonable means of primary pedestrian access within the lot.
- (2) Primary walkways connecting driveways and any public access point to the principal structure within the lot shall be designed and maintained for a minimum width of six (6) feet.
- (3) For walkways constructed after the effective date of the Land Use Code (\_\_\_\_\_, 2023), primary walkways shall be covered in flagstone, sandstone, gravel, concrete pavers, wood or wood substitute decking, asphalt, or exposed or colored concrete.
- (4) It is the owner's obligation that primary internal walkways meet the requirements of any applicable federal or state accessibility standards.
- (5) Primary walkways shall be maintained reasonably clear of snow and ice during all periods the primary structure is occupied.
- (6) Lighting of primary internal walkways shall conform to Article 9 of this Chapter 16B.

**Sec. 16B-7-80. Reserved.**  
**Sec. 16B-7-90. Reserved.**

**Sec. 16B-7-100. Decks.**

- (a) Purpose. Decks are recognized as a common and desired *accessory improvement* for a residential *lot*. This Section applies to decks within all zone districts except the Mixed-Use District and the Planned Residential District if the approved plan for such district provides for comprehensive regulation of deck size and location.
- (b) Location.
  - (1) Decks exceeding 18 inches in height above *finished grade* at any point shall not be located within a setback.
  - (2) Decks not exceeding 18 inches in height above *finished grade* any point may be located within a setback but not within an easement that prohibits or conflicts with the deck and in no event closer than five (5) feet from any *property line*.
  - (3) Decks regardless of height shall not be located where the deck will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot.
- (c) Design. Decks exceeding 18 inches in height above finished grade shall be designed to:
  - (1) Be supported from the ground by support columns which appear structurally substantial for the deck height and size. The use of stone bases at the point of connection with the grade and use of larger log, posts, or dimensional lumber as vertical supporting elements are strongly encouraged.
  - (2) Meet all requirement of the applicable building and safety codes. When required by the Town, the certification of a structural engineer shall be provided demonstrating that the deck meets minimum design and safety standards prior to construction.
  - (3) When elevated greater than 15 feet from the finished grade and visible from rights-of-way or adjacent property, design elements shall be incorporated where feasible to mitigate the view of the underside of the deck.

**Sec. 16B-7-110. Gazebos, Pergolas, and Similar Structures.**

- (a) Generally. A *gazebo, pergola*, or any similar structure (including archways or other above grade structures permanently affixed to the ground and intended for use or enjoyment of

occupants of a principal permitted building) shall be an *accessory improvement* when located on a lot with an existing lawful *dwelling unit* and when meeting the requirements of this Section. A *gazebo, pergola, or any similar structure* shall not be located on a lot absent an *existing lawful dwelling unit*.

- (b) Size. A *gazebo, pergola, or similar structure* shall not exceed 225 square feet in total size or exceed 15 feet in height measured from the grade level.
- (c) Location Requirements.
  - (1) A *gazebo, pergola, or similar structure* shall not be located within a setback.
  - (2) A *gazebo, pergola, or similar structure* shall not be located where the gazebo or similar structure will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot.
- (d) Design. A *gazebo, pergola, or similar structure* is encouraged to incorporate design, color, and material that is similar to or aesthetically compliments the principal permitted residential dwelling unit on the same lot.

**Sec. 16B-7-120. Hot Tubs and Saunas.**

- (a) Purpose. Hot tubs and saunas exterior to the *principal permitted* building are recognized as a common *accessory improvement* for a residential *lot*. This Section applies to hot tubs and saunas exterior to the principal permitted building within all zone districts except the Mixed-Use District (MUD) and the Planned Residential District (PRD) if the approved plan for the MUD or PRD provides for comprehensive regulation of hot tub and/or sauna size and location. Hot tubs and saunas located within a *principal permitted* building, while not subject to this Section, shall meet all applicable provisions of building and safety codes.
- (b) Location Requirements.
  - (1) Hot tubs and saunas shall not be located within a setback notwithstanding the location of the hot tub or sauna on a lawfully existing or lawfully located deck. The intent being that a hot tub or sauna is restricted by location to the *buildable area*.
  - (2) Hot tubs and saunas shall not be located where the hot tub or sauna will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot.
- (c) Design. Hot tubs and saunas may be covered by a trellis, pergola, or other structure if such structure is otherwise lawfully permitted and meets all applicable provisions of building and safety codes. Walls, fences or landscaping may be required by the Town to screen or reduce visual impact and noise resulting from use when the hot tub or sauna is located within 15 feet from a principal permitted building on an adjacent lot.

**Sec. 16B-7-130. Recreational Accessory Improvements.**

(a) Generally. Permanent and immobile physical improvements affixed to the ground that support or are necessary for the conduct of *recreational activities* is an *accessory improvement* of any lot. It is necessary to reasonably regulate some recreational improvements in order to protect the mountain character of the Town of Blue River and to protect all lot owners from unreasonable noise from certain recreational uses.

(b) Permitted Recreational Accessory Improvements.

(1) Permanent. Where permanent, immobile, and attached or affixed to a foundation or to a concrete or other permanent surface, the following recreational improvements are permitted within the lot's *buildable area*:

- (i) Fire pit.
- (ii) Outdoor fireplace.
- (iii) Outdoor cooking facilities.
- (iv) Chimenea.
- (v) *Playground equipment.*

Such accessory improvements shall not be located if in conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot. The presence of flame or fire shall be subject to regulatory restrictions imposed by Red White and Blue Fire Protection District, the Town of Blue River, Summit County, and/or the State of Colorado.

(2) Mobile, Temporary, or Impermanent. Where mobile, impermanent, or temporary and not affixed to a foundation or to a concrete or other permanent surface, the following recreational improvements are permitted within the lot including within setbacks:

- (i) Fire pit.
- (ii) Outdoor fireplace.
- (iii) Outdoor cooking facilities.
- (iv) Chimenea.
- (v) *Playground equipment.*

Such accessory improvements shall not be located if in conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot. The presence of flame or fire shall be subject to regulatory restrictions imposed by Red White and Blue Fire Protection District, the Town of Blue River, Summit County, and/or the State of Colorado.

**Sec. 16B-7-140. Fences.**

- (a) Generally. Fences are generally considered as conflicting with the open mountain character of the Town and can conflict with the movement of wildlife and surface water flows. Fences are, however, recognized as serving certain common residential needs such as containment of pet animals and demarcation of areas for recreational or other activities. For these purposes, fences are generally prohibited within the Town unless the fence meets the requirements of this Section and is installed in accordance with this Section and, in such case, a fence is an *accessory improvement* to an existing lawful *dwelling unit*. A fence shall not be authorized absent an existing lawful *dwelling unit* on the same lot.
  
- (b) Permit Required. All fences require issuance of a permit issued by the Town pursuant to Chapter 16C of the Land Use Code. Moreover, fences have historically required the issuance of a permit prior to the adoption of the Land Use Code. Fences constructed without issuance of a permit are declared a nuisance and shall be subject to penalty and/or removal in accordance with the Municipal Code.
  
- (c) Permitted Fences.
  - (1) **Small Enclosure Fence.** Where fences are used as an enclosure (such as a dog run or enclosure for animal control), the fence shall:
    - (i) Be located wholly within the lot's *buildable area*;
    - (ii) Enclose no greater than 400 square feet of total area;
    - (ii) Not exceed six (6) feet in height as measured perpendicularly from the grade at any point along the fence;
    - (iv) Comply with the fencing material requirements of subsection (e) below; and
    - (v) Not be located where the fence will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot. For example, a fence located within a pedestrian or trail easement which blocks pedestrian access and movement will necessarily conflict with the purpose of the pedestrian or trail easement.
  
  - (2) **Limited Perimeter Fence.** The Planning Commission is authorized upon review of a Type A Application to administratively approve a limited perimeter fence upon a finding that the fence will:
    - (i) Be constructed of split rail, buck and rail, or other similar form of open character wood fencing the appearance of which will enhance or be consistent with the desired mountain character of the Town of Blue River;
    - (ii) Not exceed four (4) feet in height as measured from the grade at any point along the fence;

- (iii) Be located along a lot line and entirely on the owner's property;
  - (iv) Not be located within the front setback or within 20 feet of the edge of a public right of way;
  - (vi) Not be located where the fence will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot. For example, a fence located within a pedestrian or trail easement which blocks pedestrian access and movement will necessarily conflict with the purpose of the pedestrian or trail easement.
  - (vii) Will be reasonably maintained in perpetuity by the owner or until removal by the owner of the lot on which the fence is located. The Town may require a written agreement approved by the Town Attorney to ensure ongoing maintenance and repair of the fence.
- (d) Prohibited Fences. Any fence not permitted by this Section shall be prohibited and, specifically, perimeter fences (installed along or near the boundaries of a lot) are prohibited.
- (e) Materials. Where a small enclosure fence is permitted or authorized, the fence shall conform to the following standards for materials:
- (1) Prohibited.
    - (i) Galvanized or other uncoated metal
    - (ii) Solid vinyl, PCV, plastic, rubber (e.g., tires)
    - (iii) Barbed wire
    - (iv) Corrugated metal
    - (v) Brick
  - (2) Permitted.
    - (i) Wood
    - (ii) Natural stone and rock
    - (iii) Commercially available recycled fencing resembling wood containing more than 90% recycled material (such as Trex)
    - (iv) Coated metals such as vinyl coated wire, powder coated, or paint provided that the fencing is accompanied by wood, natural stone, or rock accents
    - (v) Ornamental iron or ornamental metal
- (f) Design Standard.

Fencing, whether attached or detached to a building or structure, is encouraged to be consistent with the principal permitted building on the same lot in terms of architectural style and color and should blend into the surrounding environment and enhance the mountain character of the Town consistent with Section 16B-6-10.

**Sec. 16B-7-150 Retaining, Screening, and Landscape Walls.**

(a) Generally.

A retaining wall, screening wall, or a landscape wall in conformance with this Section shall be an accessory improvement to a lot where an existing lawful dwelling unit exists on the same lot.

(b) Purposes. A retaining wall or a landscape wall may serve different purposes and are regulated differently in this Section:

- (1) A retaining wall is intended to hold back a mass of soil, to restrain a vertical faced mass of earth, or to resist lateral pressure and prevent the advance of a mass of earth.
- (2) A screening wall is intended to prevent or mitigate the view of items located on a lot such as service yards, utility tanks, trash containers, storage of patio furniture, and maintenance and recreational equipment.
- (3) A landscape wall is intended to hold the vertical weight of architectural elements such as pillars, gazebos, pergolas, or other similar structures or intended to aesthetically divide areas of a lot such as garden beds, transitions between natural and landscape areas, or to designate walkways or other purposes of the lot.

(c) Location. The location and alignment of a retaining wall, screening wall, or a landscape wall should be determined based on site contours and changes in topography, natural features or man-made improvements. In no case shall a retaining wall or a landscape wall follow lot lines.

(1) *Retaining wall:*

- (i) shall not be located within a setback except where the wall is deemed necessary by the Town to provide a reasonable buildable area for a lot.
- (ii) shall not be located where the retaining wall will conflict with the purpose and intent of a lawful easement or other encumbrance or limitation affecting the lot.

(2) *Screening wall:*

- (i) shall not be located within a setback.
- (ii) shall not be located where the screening wall will conflict with the purpose and intent of a lawful easement or other encumbrance or limitation affecting the lot.

(3) *Landscape wall:*

- (i) shall not be located within a setback.
- (ii) shall not be located where the *landscape wall* will conflict with the purpose and intent of a lawful easement or other *encumbrance or limitation* affecting the lot.

(d) Design and Materials.

- (1) Retaining walls and landscape walls are encouraged to be designed to protect a lot, structure, or building against soil or earth movement, facilitate changes in grade, to define exterior living spaces and to transition from the native to manicured landscape areas. Randomly placed boulders, consistent with the dwelling unit's stone wall veneer which will provide a feel of informality is encouraged. Stone should be of an indigenous Colorado source and shall be laid in a pattern matching the building construction.
- (2) Materials used to construct a retaining wall or a landscape wall shall be consistent with the architectural materials, textures, and colors used on the dwelling unit. Generally, such walls should be constructed of stone or concrete with a stone veneer. The use of stucco, brick or wood as a retaining wall or a landscape wall material is prohibited
- (3) Materials used to construct a screening wall shall be consistent with the architectural materials, textures, and colors used on the dwelling unit.
- (4) Where a retaining wall, screening wall, or a landscape wall is used adjacent to another hard surface such as a driveway, patio, or building, a generally horizontal area of two (2) feet or greater shall be provided sufficient for planting of landscape materials.

(e) Height and Size.

- (1) A *retaining wall* shall not exceed four (4) feet in height measured perpendicularly from any point of the wall at grade level. Where extreme grades necessitate a *retaining wall* in excess of four (4) feet, the use of multiple terraced walls is required. Where terracing is determined by the Town to not be a feasible means for retention of soil or earth due to insufficient space, a retaining wall with a vertical face of not greater than eight (8) feet may be permitted.
- (2) A *Screening wall* shall not exceed six (6) feet.
- (3) A *landscape wall* used as a transition area of a lot or to define outdoor spaces shall not exceed seventy-two (72) inches above finished grade and should not extend for more than thirty-two (32) linear feet in length.
- (4) Any *retaining wall* or a *landscape wall* in excess of four (4) feet in height is to be designed by a professional engineer.



**Sec. 16B-7-160. Flagpoles.**

- (a) Generally. A *flagpole* meeting the requirements of this Section is an *accessory improvement* to an existing principally permitted residential dwelling unit. A flagpole shall not be authorized absent an existing lawful dwelling unit on any lot.
- (b) Types: Flagpole types include: (1) mounted (affixed to a lawful building or structure); or freestanding (affixed only to the ground).
- (c) Permitted and Prohibited Flagpoles.
  - (1) Mounted flagpoles are permitted.
  - (2) Freestanding flagpoles are prohibited.
- (d) Number. No more than three (3) mounted *flagpoles* are permitted for any one lot.
- (e) Location.
  - (1) A mounted *flagpole* may be affixed to any lawfully permitted building or structure.
  - (2) A mounted *flagpole* shall not be affixed to a tree.  
  
Maximum Height. No mounted *flagpole* shall exceed the lesser of: (i) the height of the building or structure to which the *flagpole* is mounted; or (ii) the maximum building height for the zone district in which the *flagpole* is located.
- (f) Other. See Section 16B-8-60 for regulations of flags.

**Article 8 Signs**

**Sec. 16B-8-10. Signs Generally.**

- (a) Sign Defined. A sign is broadly defined by Section 16-3-20 as:

*Sign* means any structure, statue, figure, poster, banner, painting, mural, insignia, billboard, trademark or other object or device used as a means of communication, situated outdoors or indoors, of which the effect produced is to advertise, announce, communicate, identify, declare, demonstrate, direct, display, amuse, capture attention, and/or instruct.

- (b) Objectives of Section. The objective of this Article is to provide a balanced and fair legal framework for the placement of signs that:
- (1) Promotes the safety of persons and property by ensuring that signs do not create a hazard by: (i) collapsing or otherwise decaying; (ii) confusing or distracting motorists; (iii) impairing drivers' ability to see pedestrians, wildlife, obstacles or other vehicles, or to read traffic signs;
  - (2) Promotes the efficient communication of messages consistent with the Town's land uses and residential character and ensures that persons exposed to signs are not overwhelmed by the number of messages presented;
  - (3) Protects the goals of the Town to preserve its rural mountain residential character and scenic views by avoiding sign clutter;
  - (4) Ensures that signs are compatible with their surroundings, and prevents the construction of signs that are a nuisance to occupants of adjacent and contiguous property due to brightness, reflectivity, bulk, or height;
  - (5) Promotes the use of signs that are aesthetically pleasing, of appropriate scale, and integrated with the built environment,
  - (6) Assists in wayfinding;
  - (7) Provides fair and consistent permitting and enforcement.

**Sec. 16B-8-20. General Compliance and Permitting.**

In all zone districts except the Mixed-Use District (MUD) and the Planned Residential District (PRD), all installation, construction, relocation, enlargement, alteration, or modification of signs within the City shall conform to the requirements of this Article, all State and Federal regulations concerning signs and advertising, and applicable building and safety codes. Generally, signs are approved by issuance of a sign permit. However, some signs do not require a permit as specified by this Article.

Withing the Mixed-Use District and the Planned Residential District, the authorization for signs shall be specifically described in the Town-approved MUD or PRD Plan. Failure to address, authorize, or provide for signs within a MUD or PRD Plan shall constitute a prohibition of all signs within such District. A MUD or PRD Plan may provide for individualized sign requirements and regulations or may incorporate all or any portion of this Article.

**Sec. 16B-8-30. Illegal Signs.**

- (a) Any sign installed, constructed, relocated, enlarged, altered, or modified without compliance and/or permit required by this Article are declared illegal.
- (b) Any sign installed, constructed, relocated, enlarged, altered, or modified *prior to* the effective date of this Article without compliance and/or permit required by such ordinances or regulations of the Town existing at the time of installation, construction, relocation, enlargement, alteration, or modification, are declared illegal. Owners may seek to qualify signs as lawfully established in accordance with Section 16-4-60 of the Land Use Code (Unlawful and Nonconforming Signs).

**Sec. 16B-8-40. Permanent Signs.**

- (a) Permanent Signs. All forms of permanent signs are prohibited *except*

- Address Sign
- Subdivision Entry Sign
- Yard Statue
- Exempt Sign (see Section 16B-8-60)

- (1) Address Sign.

It is declared by the Town of Blue River that a compelling governmental interest exists to authorize each *lot* within the Town upon which a *principal permitted use* is located to erect and maintain up to two (2) *address signs* on the *lot*. More specifically, the efficient and timely delivery of law enforcement, emergency medical, and fire protection services is contingent upon ready property address identification and, therefore, the regulation of the content of address signs serve a compelling governmental interest. An address sign *conforming to the requirements of this section* shall not require a permit or approval of the Town.

An *address sign* is defined by Section 16-3-20 to mean a permanent placard made of wood, metal, or plastic (or combination of such materials) that is limited to announcing only the street address of a lot by number and/or words and which is located on the lot identified by the address.

An address sign shall be limited to the following standards:

- (i) A one-sided sign face if attached to a building or structure on the lot;
- (ii) A one-sided or two-sided sign face if established as a stand-alone sign not affixed or attached to a building;
- (iii) A sign face shall not be larger than six (6) square feet in size.
- (iv) A sign face shall only include numbers or letters that identify the street address with or without street name of the lot on which the sign is located. No other words, numbers, or information is permitted including but not

limited to a name of a business, name of short-term rental property, owner name, or property name. Images which are clearly secondary and subordinate to the display of property address such as images of wildlife, trees, or mountains are permitted although not desired or recommended.

- (v) An address sign may be located outside of the *buildable area of the lot* but not closer than five (5) feet from the edge of any street, road, or platted right of way.
- (vi) An address sign may not be located on any part of portion of a berm contracted without a permit or at any point higher than three (3) feet from the berm base for berms constructed with a permit. (See Section 16B-7-20)

An address sign meeting the address sign requirements of the Red, White, and Blue Fire Protection District (“District”) and receiving approval of the District shall be exempt from the size, content, and location standards of this subsection provided that no more than two (2) such permanent address signs are affixed to the lot.

(2) Subdivision Entry Sign.

A subdivision entry sign shall be limited to the following standards or requirements:

- (i) One permanent subdivision entry sign is permitted for each entrance to a platted subdivision consisting of five (5) or more lots upon approval of a permit by the Town. Chapter 16C for permitting process.
  - (ii) Each entry sign shall be located within an *outlot*.
  - (iii) Each entry sign shall be subject to a permanent and enforceable covenant, agreement, or other means deemed acceptable to the Town Attorney that will ensure the sign’s ongoing upkeep, maintenance, and repair.
  - (iv) An entry sign shall be erected on the ground (monument sign) or supported by one (1) or more columns or poles extended from the ground or from an object on the ground.
  - (v) An entry sign shall not exceed a total of twenty-four (24) square feet of visible sign area regardless of the number of sign faces or exceed nineteen (19) feet in height.
  - (vi) The content or message of a subdivision entry sign is not regulated by it is intended that such signs announce the name of the subdivision to which the sign relates.
  - (vii) An entry sign shall not be illuminated by any source of artificial light.
- (3) Yard Statue. A yard statue is a form of sign created in a three-dimensional form or likeness sculpted, modeled, carved, or cast from a solid material such as stone,

clay, wood, plastic, or metal (or combination of solid materials) and which is visible from adjacent properties or from public rights of way. By way of examples, yard statues commonly found in Summit County include forms or likenesses of wildlife or geometric shapes. A yard statue shall be limited to the following standards:

- (i) One (1) yard statue is permitted for each lot only upon issuance of a permit. See Chapter 16C.
- (ii) A yard statue may be no greater in height than fifteen (15) feet measured by a straight line extending from the highest point of the yard statue to the point of contact of the ground to the statue. A yard statue may be no wider than ten (10) feet at any point of the statue measured by a straight line extending through the center of the statue to the edges of the statue. A yard statue less than 3 feet in height and less than two (2) in width shall be exempt from this subsection and is authorized without a permit provided that such statue is wholly within the *buildable area* of the lot.
- (iii) The entirety of a yard statue shall consist of a solid bronze, dark brown, or dark green color. No letters, numbers, or illustrations shall be affixed to a yard statue other than a commemorative plaque attached or integrated into the base of the yard statue.
- (iv) A yard statue must be located within the *buildable area* of the lot; provided, however, that a yard statue may be located within an *outlot* where such yard statue is intended to serve as a *subdivision entry sign* and meets all requirements of Section 16B-7-40 of this Section.
- (v) A yard statue shall not be illuminated by any source of artificial light.

**Sec. 16B-8-50. Temporary Signs.**

- (a) Temporary Signs. A *temporary sign* is either: (a) constructed of materials which are not intended to be permanent in nature; or (b) is readily movable and not affixed in a permanent manner to the ground although the sign may be attached or otherwise tethered to the ground for the duration of display.

Common forms of temporary signs include a real estate sale or rental sign, yard sale sign, or political issue or candidate sign. All forms of *temporary signs* are prohibited *except temporary sign that meets all of the following requirements:*

- (1) A temporary sign shall not require a Town-issued permit provided that the lot is in full compliance with this Section.
- (2) No more than three (3) temporary signs may be erected and maintained on any lot at any time.

- (3) A temporary sign is limited to four (4) square feet maximum per sign side and limited to two (2) sides per sign.
- (4) A temporary sign may be located outside of the *buildable area* of the lot on which the sign is displayed by no closer than seven (7) feet from any *lot line* or *right-of-way*.
- (5) Temporary signs shall not be affixed to trees.
- (6) Temporary signs shall not be illuminated by any source of artificial light.
- (7) The content or message of a temporary sign is not regulated.
- (8) Any temporary sign that fails to serve the purpose of conveying the message displayed due to being torn, faded, or otherwise worn or damaged, is declared a nuisance and may be summarily and immediately removed and disposed of by the Town. The Town may, at its discretion, attempt to contact the occupant of the lot in which the sign is located regarding the nuisance and need for immediate removal.

**Sec. 16B-8-60. Flags.**

A *flag* is a form of *temporary sign*. Flags are permitted on any lot provided that the following standards are met:

- (a) The total size of any individual *flag* is limited to no greater than four (4) feet by six (6) feet (or twenty-four (24) square feet in total size).
- (b) Permitted flags:
  - (1) A flag must be attached to a mounted flagpole within the *buildable area* of the lot. See Section 16B-7-160.
  - (2) No more than three (3) flags may be located on a lot.
  - (3) A flag shall not be illuminated. For lighting, see Article 9 of Chapter 16B.
  - (4) The content or message of a flag is not regulated.
- (c) Prohibited flags:
  - (1) Any flag not meeting the requirements of subsection (b) is prohibited.
  - (2) A flag may not be attached to any building, structure, or *accessory improvement* that is located outside of the *buildable area* of the lot.
  - (3) A flag, or any bracket, rope, or other means of attachment for a flag, may not be attached to a tree or suspended between trees.

**Sec. 16B-8-70. Exempt Signs.**

Exempt Signs. The following signs are not regulated by this Article and do not require a Town-issued sign permit, but the sign may require a building permit or other related permit (if subject to building or safety codes):

- (1) Signs erected by the Town of Blue River including but not limited to permanent and temporary traffic control signs and devices.
- (2) Temporary traffic and safety management signs erected by the Colorado Department of Transportation, the Red White and Blue Fire Protection District, or other governmental agency.
- (3) Permanent signs approved pursuant to Chapter 22 of the Municipal Code (Areas and Activities of State Interest).
- (4) Temporary official and legal notice signs required to be posted by any court, public body, person, or officer in performance of a public duty or in giving any legal notice. The duration of authorized posting shall not exceed 60 days.
- (5) Signs required to be posted to provide notice of pending actions pursuant to the Land Use Code.
- (6) Signs that are affixed to a lawfully existing *building, structure, or accessory improvement* which sign does not exceed one (1) square foot in total sign area, provided that such sign is not directly visible from public rights-of-way or neighboring property.
- (7) Signs that are less than three-fourths of a square foot in area that are affixed to machines, equipment, fences, gates, walls, gasoline pumps, public telephones, or utility cabinets.
- (8) Decorative displays, objects, and lighting clearly incidental, customary, and commonly associated with a legally recognized holiday, provided that such signs shall be displayed on a lot for a period of not more than 60 consecutive days or more than 60 total days in any one year.
- (9) Bumper stickers affixed to vehicles.
- (10) Signs interior to a *building, structure, or accessory improvement* that are not visible from an *adjacent lot or right of way*.
- (11) Signs permanently affixed to a motor vehicle engaged in active travel on a street or construction equipment performing work on a lot, outlot, open space, park, or street.

- (12) Signs permanently affixed to a parked motor vehicle when the location of such vehicle is upon or adjacent to a lot at which services are actively being provided by the operator of such vehicle or the vehicle is parked on residential property that is owned, leased, or permanently or temporarily occupied for residential purposes by the vehicle operator.

## Article 9 Lighting

### Sec. 16B-9-10. Purpose.

The purpose of this Article is to provide regulations for outdoor lighting that will: (i) minimize adverse impacts of human-made light sources that cause light trespass and obtrusive light onto neighboring development and vacant land; (ii) curtail light pollution, reduce skyglow and improve the nighttime environment; and (iii) help protect the well-being of humans, wildlife, vegetation, the overall ecosystem and natural environment from the adverse effects of human-made artificial night lighting.

### Sec. 16B-9-20. Definitions.

This Section supplements for this Article the definitions of words and phrases found in Article 3 of Chapter 16 of the Land Use Code.

*Bistro lights* means a string of lamps (bulbs) that are placed outside of a structure on decks, patios, porches, gazebos, pergolas, and within backyards.

*Fully shielded* means that the lighting fixture is constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane of the fixture.

*Lamp* means a bulb, element, or device used to convert electricity into light, consisting of a source of illumination (e.g., an electric filament or one or more LEDs) enclosed within a transparent or translucent shell, typically but not always having a rounded shape and designed to be fitted into a luminaire.

*Light pollution* means the adverse effect of man-made light, including but not limited to glare, or light trespass due to excessive or unnecessary lighting, or artificial light that unnecessarily diminishes the ability to view the night sky or its disruptive to flora and fauna.

*Light trespass* means light projected across property lines or into the public right-of-way when it is not required or permitted to do so.



*Luminaire* means a fixture designed to direct, control, distribute or emit light whether powered by an external electric energy source, photovoltaic source, or battery.

*Outdoor* means at any location outside of the interior walls of a structure or away from any structure.

*Unshielded fixture* means a lighting fixture which, as designed or installed, emits all or part of the light above the lowest part of the light source.

*Up-lighting or up-light* means the placement and use of a luminaire to direct light in an upward fashion.

**Sec. 16B-9-30. Applicability, Nonconformities, and Exemptions.**

- (a) Applicability and Nonconformities. Except as described below, all luminaires and lamps installed or replaced after August 1, 2020, shall comply with these requirements. This includes, but is not limited to, new luminaires, replacement luminaires, or lamps whether attached to structures, poles, the earth, or any other location. Luminaires and lamps installed prior to August 1, 2020, shall be deemed nonconforming and lawfully permitted until such time that the luminaire or lamp is repaired or replaced. It shall be a presumption in any enforcement of this section that the luminaire or lamp was installed after August 1, 2020, which presumption shall be the obligation of the owner of property to provide sufficient evidence that a luminaire or lamp is exempt from the requirements of this Section VII(D).
- (b) Exemptions. The following are not regulated by this section:
- (1) Lighting installed by local or state government within the public right-of-way or easement for the principal purpose of illuminating roads and highways or providing for traffic safety and direction.
  - (2) One luminaire for each residential property using light of less than sixty (60) watts designed to illuminate a property address sign.
  - (3) Temporary lighting for construction sites for the purpose of safety.
  - (4) Temporary seasonal or holiday lighting provided that individual lamps are less than 25 lumens (by way of example, a C7 medium sized colored (not clear) holiday light produces less than 25 lumens).
  - (5) Lighting that is only used under emergency conditions.
  - (6) Lighting expressly required by law or regulation or authorized by special permit or site plan approval issued by the Town.

**Sec. 16B-9-40. General Requirements.**

- (a) Shielding Required. All outdoor luminaires shall be fully shielded so that the light produced by the luminaire does not trespass beyond the property lines of the light source. A practical way to determine if a luminaire will conform to this provision is to not allow light to escape above a horizontal plane running through the lowest point of the luminaire and that the lamp element of the luminaire is not visible when viewed from above or from the side of the luminaire.
- (b) Filtering Required. All metal halide and fluorescent fixtures shall be fully filtered and enclosed with glass, acrylic, or translucent enclosures so that the lamp of the luminaire is not directly visible from any location.
- (c) Prohibitions.
  - (1) Luminaires using mercury vapor lamps or lighting source are prohibited.
  - (2) Uplighting of building facades, landscaping features, trees, vegetation or to draw visual attention is prohibited.
  - (3) Blinking, flashing, rotating or moving lights are prohibited.
  - (4) Luminaires or lamps attached to trees or strung between trees are prohibited.
  - (5) Unshielded *bistro lights* shall not be illuminated (on) between the hours of 9:00 p.m. and 7:00 a.m. See subsection (a) above for shielding requirement and standard. The shielding of a bistro light fails to comply with this section where a lamp can be viewed at any point along the property line.
- (d) Spotlights and Security Lighting. Spotlights and other types of security lighting (floodlights) shall be designed and located to prevent view of the floodlight's lamp or lighting source except where the view is made directly from the area intended to be illuminated. Floodlights shall not cast light outside of the property boundaries of the floodlight source. All floodlights shall be controlled through a motion detection mechanism calibrated to not illuminate due to the motion of branches caused by wind or weather and not to illuminate longer than five (5) minutes when activated.

**Article 10 Landscaping**

**[To be added and to include Plat List Currently in Municipal Code]**

## Article 11 Public Improvements

### Sec. 16B-11-10. Street Design Standards.

- (a) Design Standards. All streets, roads, and alleys shall meet the following design requirements:
- (1) Except for roads subject to ownership and control of the Colorado Department of Transportation, the layout and design of all public and private roads, alleys, and public access drives shall conform to the requirements of the Town of Blue River Standard Specifications for Road and Bridge Construction. [Under production for adoption in September 2023]
  - (2) Alleys shall be open at both ends or shall provide adequate means and space for vehicles to turn-around and exit the alley without backing out.
  - (3) Road layout shall be designed to connect and relate in a logical and efficient manner to existing and planned roads. Road layout and design shall address and be designed to accommodate topographic conditions, soil conditions (particularly considering drainage and erosion factors), and public convenience, safety, and aesthetics.
  - (4) Intersections of roads shall be made at approximately right angles unless the topography prevents such an alignment.
  - (5) Intersection visibility shall be unobstructed for a minimum of one hundred (100) feet (measured center line to center line).
  - (6) The centerline of a new intersection along one side of an existing road shall reasonably align with the centerline of any existing intersection on the opposite side of such road.
  - (7) The center of two roads forming a three-way intersection shall be spaced not less than one hundred fifty (150) feet from the centerline of any other three-way or four-way intersection.
  - (8) Access to a state highway shall occur only at intersections approved by the Colorado Department of Transportation in consultation with the Town.
  - (9) A public road terminating at a private property shall be designed to provide adequate dedicated space for vehicles (including emergency vehicles and equipment) to safely turn around. Such design may include cul-de-sac, hammerhead, or other means meeting Town-adopted design standards or building and safety codes.
  - (10) Dead-end roads, with the exception of cul-de-sacs, shall be prohibited unless approved by the Town and are designed to connect with a future road in an

adjacent unplatted parcel. If a dead-end road is approved, a temporary turnaround may be required by the Town where it is determined that the temporary turnaround is desirable to facilitate the movement of emergency services and to promote the safe and efficient management of vehicular traffic. A temporary turn-around shall be established by the dedication of a public easement which shall burden the lots upon which the turnaround is located and which shall be conditioned to terminate upon the Town's acceptance of the through street as a public improvement.

- (11) The dedication of less than the full width of a road within a subdivision plat shall not be accepted.

**Sec. 16B-11-20. Street Naming Procedure.**

Street names may be proposed by the *applicant* at the time of subdivision application or upon creation or construction of a street. Final approval of road names and changes to road names shall be subject to the discretion of the Board of Trustees.

**Article 12 Grading and Excavation**

**Sec. 16B-13-10. Generally.**

The grading and excavation of land within the Town of Blue River is, by its nature, contrary to the goals and objective of the Town in preserving the natural environment. The Town recognizes that there is a reasonable need for grading and excavation associated with the development of land. However, the Town desires to balance and limit to the greatest degree practicable the extent of such grading and excavation to best preserve and protect the Town's environmental quality and character.

**Sec. 16B-13-20. Permit Required.**

A grading and excavation permit must be obtained prior to any person undertaking any earth-disturbing activity, including but not limited to grading, excavating, clearing of timber, vegetation, revegetation, or landscaping activity, if the area of the activity is:

- (a) More than four hundred (400) square feet of surface area;
- (b) An excavation or placement of earth greater than three (3) feet in height or depth from original ground levels, including test holes for percolation tests for the design of septic systems or soils tests for foundation/ structure designs; or
- (c) Final vegetation or revegetation of the entire surface of a septic or leach field system approved by the Summit County Department of Environmental Health, whether or not four hundred (400) square feet in area.

No permit shall be required for emergency work, as shall be defined by the regulations, or for activity covered by a valid building permit. Work not requiring a permit shall nevertheless conform to the requirements of the regulations.

**Sec. 16B-13-30. Financial Guarantee.**

- (a) No permit application shall be approved unless the applicant shall have provided a financial guarantee of completion of grading and revegetation acceptable to the Building Official. The amount of the guarantee shall be calculated on the basis of one dollar and fifty cents (\$1.50) per square foot of disturbed area. *Disturbed area* means all adjacent and/or other associated areas of disturbance or uprooting of trees or vegetation resulting from the construction activity, including but not limited to new roads or parking areas; graded or run-over areas disturbed to provide materials, equipment or other storage needs; or any other, similar area determined by the Building Official to be disturbed.
- (b) In calculating the disturbed area, the Building Official shall exclude areas of completed construction, including but not limited to residences, garages, paved roads, sheds, patios, gazebos and decks. In the case of septic or leach field systems, the entire area of disturbance, including areas containing the installed system, shall be included.

**Sec. 16B-13-40. Applicability, Nonconformities, and Exemptions.**

Any permit issued under this Article shall expire twelve (12) months from the date of issue.

**Sec. 16B-13-50. Nonconforming Property.**

Any property having exposed, unvegetated slope areas from side hill cuts, filled pad slopes or other cuts and fills that are exposed and not vegetated shall be stabilized and revegetated within nine (9) months of the approval of any regulations requiring such stabilization and revegetation.

**Article 13 Environmental Regulations**

**Sec. 16B-13-10. Generally.**

Because a primary purpose of the Land Use Code is to preserve the natural environment of the Town of Blue River, regulation of the extent of development and improvement of lots in relation to the natural features of the lot is necessary. This Article places reasonable and limited restrictions upon the development of a lot to advance the purposes of the Land Development Code.

**Sec. 16B-13-20. Wetland Protection.**

- (a) The Town of Blue River incorporates into the Land Use Code the delineation of wetlands recognized and established by state and federal law. Although the mapping which delineates state or federal protected wetlands is readily available to the public, the Town shall make available to the public information to assist in identification of protected wetlands.
- (b) The area of any lot which is located within a delineated wetland shall be prohibited from development or improvement unless the proposed development or improvement is expressly authorized and permitted by the state or federal regulatory agency with jurisdiction over such wetland area. The Town shall only accept as evidence of state or federal authorization or permission a written declaration issued by the appropriate federal or state agency which identifies both the specific development or improvement proposed by the Owner or Applicant and which demonstrates a clear understanding of the extent and nature of such development or improvement.
- (c) *Owners and Applicants* seeking development approval from the Town of Blue River are encouraged to consult with the Town prior to the planning of any development or improvement in order to identify the extent of protected wetlands.

**Sec. 16B-13-30. Floodway and Floodplain Protection.**

- (a) The Town of Blue River incorporates into the Land Use Code the delineation of floodway and floodplain recognized and established by state and federal law. Although the mapping which delineates state or federal protected floodway and floodplain is readily available to the public, the Town shall make available to the public information to assist in identification of protected floodway and floodplain.
- (b) The area of any lot which is located within a delineated floodway or floodplain shall be prohibited from development or improvement unless the proposed development or improvement is expressly authorized and permitted by the state or federal regulatory agency with jurisdiction over such area. The Town shall only accept as evidence of state or federal authorization or permission a written declaration issued by the appropriate federal or state agency which identifies both the specific development or improvement proposed by the Owner or Applicant and which demonstrates a clear understanding of the extent and nature of such development or improvement.
- (c) *Owners and Applicants* seeking development approval from the Town of Blue River are encouraged to consult with the Town prior to the planning of any development or improvement in order to identify the extent of protected floodway or floodplain.

**Sec. 16B-13-40. Wildfire Protection.**

- (a) All development and improvement shall conform to the requirements of Article V, Chapter 7 of the Blue River Municipal Code.
- (b) The following requirements are imposed upon development and improvement of any lot:
  - (1) Cedar Shake roofing may only be used if treated with a commercially recognized and pressure impregnated fire retardant intended for such purpose. No surface only application of fire retardants on wood shake roofing is permitted.
  - (2) Only Noncombustible Underwriter Laboratories Class “A” approved roof finish materials are authorized for use in Blue River.
  - (3) Chimneys shall include approved spark arrestors.
  - (4) Strict conformance is required for all building and safety code provisions pertaining to fire safety. No variance shall be authorized or permitted which would reduce conformance of the development or improvement with this Section or any applicable fire safety provision.
- (c) The following maintenance requirements are imposed upon the use of any lot:
  - (1) Tree branches shall be maintained to prevent encroachment within fifteen (15) feet of chimneys;
  - (2) Roofs shall be kept reasonably free of leaves, needles, and other flammable debris;
  - (3) Firewood shall be stacked at least 15 feet from any building or structure;
- (d) The following guidelines and recommendations are encouraged for the use of any lot:
  - (1) Owners and occupants should develop emergency wildfire hazard evacuation plans;
  - (2) All horizontal at-grade surfaces such as decks and patios are encouraged to be constructed with fire impervious materials such as stone or pavers. Decks and porches connected to the structures may be constructed of wood.
  - (3) One or more 10 pound ABC-Class fire extinguisher should be readily available within each residence and garage.

## Article 14 Reserved

## Article 15 Construction Management Requirements

### Sec. 16B-15-10. Purpose.

Construction within the Town of Blue River can significantly impact other owners, occupants, and visitors and create noise, traffic, smoke, and trash that degrade the environment and the natural character the Town seeks to preserve. This Article balances the reasonable need to engage in construction activities while protecting the environment and the natural character the Town. Construction sites and construction operations undertaken under the authority of any Town-issued permit (including building permits) shall conform to the standard and requirement of this Article.

### Sec. 16B-15-20. Responsibility for Compliance.

Owners engaged in the development or improvement of a lot, or who commission or cause others to perform the development or improvement of a lot, for which a permit is issued by the town shall be responsible for compliance with this Article. In addition, contractors and others performing services on behalf of the owner may be held responsible for compliance for specific actions and activities that failed to comply with this Article. The Town reserves the right to enforce the requirements of this Article pursuant to the Municipal Code and this Land Use Code against either the owner, those engaging in construction activity on behalf of an owner or both.

### Sec. 16B-15-30. Compliance Plans Required.

Whenever the Town requires and approves a Construction Management Plan and/or an Erosion Control and Vegetation Protection Plan (see Chapter 16C), the terms, conditions, and requirements of such plans shall be an obligation of the owner and deviation, neglect, or nonperformance of the terms, conditions, or requirements of such plans shall constitute a violation of this Article.

### Sec. 16B-15-40. Access and Parking.

- (a) Vehicles used in construction upon any lot shall gain access to the lot only from existing roads adjacent to the construction site.
- (b) Prior to commencement of construction, the Owner of a Construction Site shall submit as an element of the Construction Management Plan, a parking plan that indicates how



contractor and employee parking needs will be handled. Parking will not be allowed, at any time, on Town roads without prior approval from the Building Official. Special safety precautions are necessary for the road including, but not limited to, safety cones, barriers and flaggers. Each parking plan shall describe:

- (1) How and where Construction and Delivery Vehicles will be parked at the Construction Site during the Construction Activity; and
- (2) The maximum number of Construction and Delivery Vehicles that will be parked at or adjacent to the Construction Site at any one time.

**Sec. 16B-15-50. Blasting.**

No blasting shall be performed on any property without the Town Manager’s prior consent. Notification shall be provided a minimum of 24 hours in advance of any blasting operations, and in all cases blasting shall occur only between the hours of 9:00 a.m. and 5:00 p.m.. Blasting may be subject to certain restrictions, which shall be determined by the Town Manager or Town Building Official in their sole and absolute discretion, and restrictions may vary from property to property.

**Sec. 16B-15-60. Erosion Control and Vegetation Protection.**

The Building Official shall not approve any proposed Construction Activity unless and until the activity has first approved an erosion control and soil stabilization plan as a part of the Construction Management Plan. The Owner of the Construction Site is responsible for preparing and submitting such plans.

**Sec. 16B-15-70. Construction Equipment and Material Storage.**

Each Owner or Owner’s Representatives and their contractors shall ensure that all construction material is stored in a designated materials storage area. Such storage area shall be indicated on the Construction Management Plan described above and shall be located to minimize the visual impact from adjacent properties and roadways.

**Sec. 16B-15-80. Debris and Trash Removal.**

Owners, Owner’s Representatives, and their contractors shall be responsible for assuring that:

- (1) At the end of each day, all trash and debris on the Construction Site is cleaned up and stored in proper covered containers or organized piles and not permitted to be blown about the Site or adjacent property.

- (2) At least once a week, all trash and debris are removed from the Construction Site to a proper dumpsite located off the Property.
- (3) Due to the abundant wildlife within the Town, all food trash must either be removed from the site at the end of each workday or the General Contractor must arrange for bear-proof trash containers to be available on-site.
- (4) All trash and debris shall be kept off the road right of way and adjacent property at all times.

**Sec. 16B-15-90. Construction Hours and Noise.**

Construction Activities shall be limited to the following hours of operation:

Monday through Friday: 7:30 AM – 6:00 PM  
Saturday/Sunday: 9:00 AM – 5:00 PM

Entrance to work site for the purpose of set-up only, is permitted one half hour prior to hours of operation. (Monday through Friday 7:00 AM and SAT 8:30 AM). During the half-hour set-up, the operation of heavy equipment, compressors, impact tools, or any activity that creates noise that is audible to the occupants of an adjacent lot shall be prohibited.

At all times each Owner shall use reasonable efforts to minimize external noise resulting from Construction Activity.

**Sec. 16B-15-100. Reserved.**

**Sec. 16B-15-110. Field Staking.**

All building footprints, setback lines, and driveways, storage and lay-down areas shall be staked in the field. A licensed Colorado land surveyor shall stake the building footprint and setback lines.

**Sec. 16B-15-120. Fire Protection.**

At least one 10-pound ABC-rated dry chemical fire extinguisher shall be present and available in a conspicuous place on the Construction Site at all times. Fire protection is the Owner's responsibility, but the Town recommends that the Owner or Owner's Representative establish additional fire protection, the handling of combustible materials and suppression measures as part of an overall Site safety program.

**Sec. 16B-15-130. Prohibited General Practices.**

All Owners will be responsible for the conduct and behavior of their Owner's Representatives in the Town. The following practices are prohibited within the Town and will result in an automatic fine:

- (1) Changing oil on any vehicle or equipment on the Construction Site;
- (2) Allowing concrete suppliers and contractors to clean their equipment on any Town property, roadway, right-of-way, ditch, easement, or other property;
- (3) Removing any rocks, plant material, topsoil, or similar items from any property of others within Town;
- (4) Using disposal methods or units other than those approved by the Town;
- (5) Careless disposition of cigarettes and other flammable materials;
- (6) Careless treatment or removal of any native plant materials;
- (7) Disruptive activity including, but not limited to, public drinking, public nuisances, and disturbing the peace;
- (8) Working before or after the scheduled construction hours without prior permission;

DRAFT

## CHAPTER 16C      Development & Improvement Processes

### Article 1    General Provisions

#### Sec. 16C-1-10.      Title.

Chapter 16C of the Blue River Municipal Code shall be referred to as the "Town of Blue River Development and Improvement Processes."

#### Sec. 16C-1-20.      Authority.

The Town of Blue River Development and Improvement Processes are enacted in accordance with the authority conferred by Articles 15 and 23 of Title 31, Article 20 of Title 29, and Article 67 of Title 24 of the Colorado Revised Statutes, as amended.

#### Sec. 16C-1-30.      Background and Purpose.

- (a)    Background. Once a lot is both zoned and subdivided, the development or improvement of the lot requires Town approval of an *Improvement Application* and/or a *Site Plan* in accordance with this Chapter.
- (1)    An *Improvement Application* will provide information necessary to identify the owner or developer and to describe at a general level the proposed development or improvement.
  - (2)    A *Site Plan* describes in detail the proposed development in terms of building locations, building architectural design, street and driveway layout, easement and utility locations, garage size, exterior lighting, and other requirements and standards imposed ensure that the development of the lot will not adversely impact or impair the health, safety, and welfare of the community.
- (b)    Purpose. The purpose of this Chapter is to establish a process for review and approval of development or improvement of residential property within the Town. The development and design standards of Chapters 16, 16A, and 16B shall apply to the physical layout and design of all development or improvement, unless exempted by this Chapter. This Chapter is further intended to serve the following specific purposes:
- (1)    To inform a property owner of the information needed to allow the Town to review and consider a proposed development or improvement.
  - (2)    To implement the provisions of Chapters 16, 16A, and 16B and the Municipal Code generally.

- (3) To ensure that the development or improvement of property is in conformance with the Town's zoning ordinances, land development regulations, and to achieve a harmonious, convenient, workable relationship among land uses, consistent with Town development objectives.

**Sec. 16C-1-40. Applicability of Processes to Type of Application.**

This Chapter, and the obligation to obtain approval of an Improvement Application and/or a Site Plan from the Town, shall apply to the following proposed development or improvement unless exempt as provided by section 16C-1-50. The “application type” (or “type”) for a proposed development or improvement will determine the applicable process for approval pursuant to this Chapter.

Proposed Improvement or Development	Application Type
(1) <b>Residential Dwelling Unit:</b> (a) New construction; (b) Any expansion, enlargement, or addition in height, footprint, or square footage of an existing structure. (c) Replacement or reconstruction of all or any portion of an existing structure	A
(2) <b>Garage structure:</b> (a) New construction; (b) Any expansion, enlargement, or addition in height, footprint, or square footage of an existing structure. (c) Replacement or reconstruction of all or any portion of an existing structure	A

<p>(3) <b>Major Landscaping:</b></p> <p>(a) Disruption, excavation, or de-vegetation/re-vegetation of approximately 50 percent or more of the existing surface area of the lot as calculated by the Town. Division of a project into two or more phases for the purpose of avoiding approval needed for Major Landscaping shall not be permitted.</p> <p>(b) The conversion of existing naturally vegetated or unimproved area 300 square feet or greater in surface area to lawn, gravel, rock, pavers, brick, flagstone, asphalt, concrete, mulch, irrigated areas, or other similar materials not naturally existing within a natural treed mountain environment.</p> <p>(c) Landscaping proposal that, in the Town's opinion, will result in a significant difference between the character of existing adjacent properties or the neighborhood, e.g., the applicant proposes creation of an extensive formal garden or irrigated lawn that will be inconsistent with surrounding properties or the neighborhood's natural treed mountain environment.</p>	<p><b>A</b></p>
<p>(4) <b>Residential Building or Structure Improvement or Modifications:</b></p> <p>(a) Window(s) new, replacement of existing</p> <p>(b) Door, new or replacement of existing</p> <p>(c) Balcony or railing, new or replacement of existing</p> <p>(d) Chimney and Roof Penetrations, new only</p>	<p><b>C</b></p>
<p>(5) <b>Roof</b></p> <p>(a) Installation of new</p> <p>(b) Replacement or repair of existing greater than 200 square feet in surface area.</p>	<p><b>C</b></p>
<p>(6) <i>Reserved.</i></p>	
<p>(7) <b>Berm.</b></p> <p>New installation or any modification or replacement of existing.</p>	<p><b>B</b></p>
<p>(8) <b><u>Shed or greenhouse</u></b> <u>whether or not on a foundation</u></p> <p>(a) New construction;</p> <p>(b) Expansion, enlargement, or addition in height, footprint, or square footage of an existing structure.</p> <p>(c) Replacement or reconstruction of all or any portion of an existing structure</p>	<p><b>B</b></p>

<p>(9) <b>Driveway.</b>          New installation or any modification or replacement of existing.</p>	<p><b>B</b></p>
<p>(10) <b>Parking area.</b>          New installation or any modification or replacement of existing.</p>	<p><b>B</b></p>
<p>(11) <b>Walkway.</b>          New installation or any modification or replacement of existing</p>	<p><b>B</b></p>
<p>(12) <b>Deck.</b>          New installation or any modification or replacement of existing.</p>	<p><b>B</b></p>
<p>(13) <b>Retaining Wall, Screening Wall, Landscape Wall.</b>          New installation or any modification or replacement of existing.</p>	<p><b>B</b></p>
<p>(14) <b>Fence (other than Limited Perimeter)</b>          New installation or any modification or replacement of existing.</p>	<p><b>B</b></p>
<p>(14A) <b>Fence (Limited Perimeter)</b> See Section 16B-7-140.          New installation or any modification or replacement of existing.</p>	<p><b>A</b></p>
<p>(15) <b>Gazebo, Pergola, or other similar accessory improvement whether or not on a foundation</b>          (a) New construction;          (b) Expansion, enlargement, or addition in height, footprint, or square footage of an existing structure.          (c) Replacement or reconstruction of all or any portion of an existing structure</p>	<p><b>B</b></p>
<p>(16) <b>Hot Tub or Sauna Exterior to Dwelling Unit.</b>          Installation of new or replacement of existing.</p>	<p><b>B</b></p>
<p>(17) <b>Recreational Accessory Improvement</b> that is permanent or affixed to ground, see Section 16B-7-<span style="background-color: yellow;">    </span>; includes fire pit, outdoor fireplace, outdoor cooking facilities; chimenea, <i>playground equipment</i>.</p>	<p><b>B</b></p>
<p>(18) <b>Sign</b> (see Article <span style="background-color: yellow;">    </span> of Chapter 16B)</p>	<p><b>B</b></p>

<p>(17) <b>Minor Landscaping:</b></p> <p>(a) New installation of one or more trees regardless of height.</p> <p>(b) Removal of one (1) or more trees measuring seven (7) feet in height measured from the ground level at the base of the tree in any one calendar year.</p> <p>(c) The conversion of existing naturally vegetated or unimproved area less than 300 square feet in surface area to asphalt, concrete, pavers, brick, flagstone, rock, or any other form of surface treatment not commonly existing within a natural treed mountain environment.</p>	<p><b>C</b></p>
<p>(14) <b>Excavation and/or Grading and Movement of Soil or Rock for any purpose.</b>          Greater than 20 cubic feet of material or greater than 400 square feet of surface area.</p>	<p><b>B</b></p>
<p>(18) <i>Reserved.</i></p>	
<p>(18) <b>Exterior lighting fixture.</b> See Article 9 of Chapter 16B.          Installation of new or replacement of existing.</p>	<p><b>C</b></p>
<p>(17) <b>Utilities</b>          Installation of new or repair or extension of existing.</p>	<p><b>B</b></p>
<p>(19) <b>Hot Water Heater</b>          Installation of new or replacement of existing.</p>	<p><b>C</b></p>
<p>(21) <b>Electrical, Mechanical, Plumbing Improvements</b></p> <p>(a) Installation of new</p> <p>(b) Replacement or repair of existing.</p>	<p><b>C</b></p>
<p>(22) <b>Siding/Staining</b></p> <p>(a) Installation of new</p> <p>(b) Replacement, repair, or refinishing of existing.</p>	<p><b>C</b></p>



**Sec. 16C-1-50. Administrative Exemption.**

- (a) Type A Exemption. For a Type A Application, the Town Manager is authorized to administratively exempt the Applicant from submission of one or more of the application submittal requirements set forth in Section 16C-2-50. The Town Manager is not authorized to provide any other administrative exemption for a proposed Type A improvement or development, or an element of a Type A proposed improvement or development. In exempting an Application from a submittal requirement, the Town Manager shall find that the submittal requirement is unnecessary for the proposed improvement or development because it would not be reasonably necessary to enable the Planning Commission to determine compliance with Chapter 16A or 16B. For example, a Landscape Plan is not necessary where no new landscaping is proposed and no removal of landscaping is proposed.
- (b) Type B and C Exemptions. The Town Manager is authorized to administratively exempt in writing any proposed improvement or development, or an element of a proposed improvement or development, that would otherwise require a Type B or Type C Application, upon a finding that the proposal is both:
- *De minimis*<sup>22</sup> in its scope and impact on adjacent property and/or the neighborhood as to not warrant the submission of an application and processing pursuant to this Chapter 16C; and
  - Fully complies with all requirements of Chapter 16A and 16B of the Land Use Code.

In approving an administrative exemption, the Town Manager is authorized to impose reasonable conditions on the exemption necessary or desirable to ensure that the improvement or development meets Chapter 16A and 16B of the Code. The Manager's imposition of conditions is subject to appeal to the Board of Adjustment pursuant to Section 16-2-50.

**Article 2 Development and Improvement Application Processes**

**Sec. 16C-2-10. Applicability.**

This Article applies to any Type A, B, or C application as described in Section 16C-1-40 of this Chapter.

---

<sup>22</sup> De minimis means *lacking significance or importance; so minor as to merit disregard.*

**Sec. 16C-2-20. General Provisions.**

- (a) It is the responsibility of the *Applicant* to become familiar with all regulations and requirements applicable to improvement or development within the Town, and to secure copies of the most up-to-date versions of all applicable regulations.
- (b) All improvement or development within Town shall conform to the Land Use Code and all other applicable local, special district, county, state, and federal laws, codes, ordinances, regulations, and restrictions.
- (c) Incomplete submittals will not be scheduled for processing or processed until deemed complete in accordance with this Chapter.
- (d) The processing of a Type A, B, or C Application shall be administrative in nature and no notice or hearing shall be required during the review process.

**Sec. 16C-2-30. Optional Pre-Application Review.**

- (a) Pre-Application Review Option by Applicant. An *Applicant* for a Type A, B, or C application may request a Pre-Application Review.
- (b) Review Strongly Suggested for Type A Applications. In order to allow the Town to properly address the necessary submittal requirements for a Type A Application, a pre-Application Review (and Pre-Application Meeting) is strongly encouraged.
- (c) Purpose. The purpose of the Pre-Application Review is intended to provide an opportunity for any Applicant who may be uncertain about the application's type or who are unfamiliar with the Town's processes to become acquainted with the process and to avoid delays in processing applications. The review will enable the Town to assess whether or not the proposal should be granted an administrative exemption (see Section 16C-1-50), and if an exemption is not available, to decide what application submission requirements and plans will be required to enable the Town to process the application. In addition, a Pre-Application Review will enable the Town to potentially reduce the required plans to be submitted for a proposed improvement or development.
- (b) Setting of Pre-Application Review. Prior to submission of an application pursuant to this Chapter, any person seeking a Pre-Application Review in accordance with this Chapter shall:
  - (1) Send an inquiry concerning the Improvement or development to the Town Manager at [info@townofblueriver.org](mailto:info@townofblueriver.org), or by regular U.S. Mail sent to, or hand delivery during normal business hours, to:

Town Manager  
Town of Blue River  
Attention: Pre-Application Inquiry

0110 Whispering Pines Circle  
P.O. Box 1784  
Breckenridge, CO 80424

- (2) The inquiry shall include the following information:
- (a) Name of the *Applicant* and a telephone number and email address to enable the Town to contact the Applicant.
  - (b) Address of the property proposed for improvement or development.
  - (c) A description, in as much detail as may be available, of the improvement or development proposed. Such description could include a sketch or general site drawing illustrating the approximate location of existing buildings, illustration of the location of the proposed improvement or development, and a narrative description of the proposed improvement or development.

**Sec. 16C-2-40. Optional Pre-Application Meeting.**

- (a) Pre-Application Meeting. The Town Manager may, at the Manager's discretion and based in the contents of the materials submitted for Pre-Application Review, suggest to an Applicant that an in-person<sup>23</sup> Pre-Application meeting be held. An Applicant may also request a Pre-Application meeting.
- (b) Notice of Meeting. Should a Pre-Application meeting be mutually agreed upon by the Town and the Applicant, the Town Manager shall informally contact the Applicant regarding a date and time for the meeting. The Manager may include instructions for the applicant to provide additional documentation or information at the meeting.
- (c) Meeting Expectation. At the Pre-Application Meeting, the *applicant* should be prepared to discuss the proposed application and the proposed development with the Town Manager. The applicant shall be encouraged to present such plans, diagrams, illustrations or photographs, color and material samples, or other preliminary information, and is encouraged to have supporting consultants available, to permit the review of the proposed application in as much detail as can be provided.
- (d) Meeting Outcome. Following the Pre-Application Meeting held pursuant to this Section, the Town shall without undue delay:
  - (1) Issue a written determination to the applicant confirming the application type as a Type A, Type B, or Type C Application;

---

<sup>23</sup> During periods of declared emergency, such meeting may be held at the Town Manager's discretion through telephone or internet-based communication platforms or applications such as GoToMeeting, Zoom, or Microsoft Teams.

- (2) Issue a written determination to the applicant of the required contents for a formal application pursuant to this Chapter 16C; and
- (3) Issue a written determination that all, a part, or a portion of the proposed improvement or development qualifies for an administrative exemption pursuant to Section 16C-1-50.

**Sec. 16C-2-50. Type A Application Requirements.**

This Section provides general application content and requirements for a Type A Application. Unless otherwise granted an administrative exemption for a submittal requirement (see Section 16C-1-50), all of the following submittal requirements shall be mandatory for all Type A Applications:

- (a) Application Form. Each Type A Application shall include a completed application in the form approved by the Town;
- (b) Payment. All Town-required fees, charges, and review deposit shall accompany each Application;
- (c) Record of Ownership. *Documentation of ownership, liens and encumbrances; (See Section 16-3-20 definition); and*
- (d) Site Information:

- (1) Topographic Survey

A plan drawing which locates the coordinates and height data, depth, and size for the surface features of the entire lot upon which improvements or development is proposed. Shall be prepared and stamped by a Colorado licensed surveyor indicating site contours at 2-foot intervals and significant natural features such as rock outcroppings, drainages, and mature stands of trees (Scale minimum of 1-inch equals 10 feet).

- (2) *Buildable Area Plan*

A plan drawing illustrating the property's *buildable area* as defined and described by Section 16B-4-40 of the Land Use Code.

- (3) Wetlands Delineation Map

A map and narrative report or map illustrating the location and extent of wetland within the property proposed for improvement or development.

(4) Site Plan

A plan drawing indicating property boundaries, *buildable area*, proposed and existing buildings and structures, driveway and grades, stream crossing structures, transformer and vault locations, well location, above and below grade utilities, parking areas, snow storage areas, major site improvements.-(Scale: minimum of 1"=10')

(5) Grading Plan

A plan drawing indicating proposed shaping of the surface of the lot and any adjacent areas to direct surface runoff away from structures. Grading plan should permit a full understanding of the proposed modification of the lot during improvement or development when compared to the existing conditions illustrated by the Topographic Survey. (Scale: minimum of 1"=10').

(6) Floor Plan

A plan drawing indicating the general layout of all rooms, approximate size, and total square footage of enclosed space for each floor level of all structures accessible to human entry (residence, garages, sheds). (Scale: minimum of 1/8"=1'- 0")

(7) Exterior Elevations Drawings

An elevation drawing indicating in detail the architectural character of all structures on the lot, including fenestration, siding, fascia, stairs, entries, doorways, and exterior beams, posts, and other building elements that are visible from the exterior of the structures. (Scale: same as floor plan). The Exterior Elevations Drawings shall show elevations as viewed from all four compass points (North, East, South, and West) or from four vantage points each separated by approximately ninety degrees. When Exterior Finish Samples and Boards (see 6 below) are also required or provided, the Exterior Elevation Drawings shall reference and shall correspond with the samples to enable the Town to understand where on the Elevation Plan each sample color or material is applied.

(8) Exterior Finish Samples Boards

Samples indicating type, color, and texture of all exterior materials (including roofing, siding, paints, masonry, brick, rock, trim, and other visible surfaces). Although planned exterior finish is most often illustrated by sample materials and colors affixed to display boards, applicants shall provide with the application photographic documentation illustrating the proposed materials and colors and shall bring samples and boards to any hearing. The Exterior Finish Samples and Boards requirement shall include specific references to Pantone or other universal color palate and material descriptions or cut sheets by manufacturer, product name, type, or color which will enable the Town to inspect and confirm compliance with any improvement or development approval.

(9) Specifications Details & Cut Sheets

Written specifications and/or cut sheets for the following items: exterior wall materials, windows and exterior doors, exterior trim materials, wall and roof flashing, fireplace and flue caps, and exterior lighting fixtures.

(10) Roof Plan

Indicating proposed roof pitch, overhang lengths, flue locations, roofing materials and elevations of major ridge lines and all eave lines. (Scale: same as floor plans). Roof color and materials shall also be required as part of Exterior Finish Samples and Boards.

(11) Site/Building Sections

A section drawing indicating building walls, floors and roof relative to the site, including existing and proposed grades, retaining walls and proposed site improvements such as patios, decks, driveways and other landscape features (Scale: minimum of 1/8"=1'-0")

(12) Specific Site Details – Plan and Elevation

For any specific element of the proposed improvement or development not otherwise described in another required plan, elevation, or section drawing, provide descriptions and drawings in sufficient detail to demonstrate the architectural character, design, construction technique(s), mass, and view of the improvement or development. For example, where a retaining wall is proposed, a Specific Site Detail – Plan and Elevation submission would illustrate and describe the purpose, location, height, mass, length, footings, construction method (dry stack, mortared, veneered, slipform, tilt-up, etc.), materials, and colors of the proposed wall.

(13) Landscape Plan

A plan drawing and narrative description identifying all existing landscaping to remain and all existing landscaping to be removed, specifically identifying all trees greater than 3" in diameter to be removed; a planting plan with proposed plant materials identified by common and botanical names and size and with plant installation specifications and instructions; type and location of irrigation system; the location and size of all other proposed landscape materials such as retaining walls, patios and decks, walkways, walls and fences, and specifications for seeded areas including seed mix, mulch and fertilizer type, and application method and schedule. The area of land covered by spray irrigation shall be calculated and listed, by square foot, on the landscape plan. (Scale: 1"= 20' minimum). An application proposing landscape improvements designated as a Type A application shall be prepared by a professional landscape architect licensed in the state of Colorado.

(14) Erosion Control and Revegetation Plan

A plan drawing and narrative description indicating the means and time schedule by which the prevention of soil erosion will be addressed during and after construction, revegetation of cut and fill slopes, methods of controlling surface water, siltation control devices, vehicular access points, and location of soil storage areas and stabilization measures (Scale: minimum of 1"=20')

(15) Proposed Construction Schedule and Construction Management Plan

A narrative description, illustration(s), and plan drawing(s) identifying the approximate time schedule of start-up and completion dates for construction, utility connection, proposed periods of road closures or right-of-way encroachments, and completion of landscaping, and anticipated occupancy date. The construction management plan shall identify the limits of the area that will be subject to surface disruption, construction, and construction related activities and any areas where all construction activities will be prohibited. In addition, the plan shall indicate the location of access drives and parking, temporary structures/trailers, chemical toilet, dumpsters, material lay-down and staging areas, and construction signage. The Construction Management Plan shall indicate all mitigating measures for protecting natural features of the lot during construction. This plan shall be separate from the Landscape Plan and Site Plan(s).

(16) Additional Information Required:

- (i) A copy of any agreements, conveyances, restrictions, or private covenants that will govern the use and maintenance of the property.
- (ii) *Reserved.*

**Sec. 16C-2-60. Application Completeness Required.**

- (a) All plans, reports, maps and other information required for any application must be complete and legible. A failure of the application to meet the requirements of this Chapter or any applicable deadline shall delay the processing of the application until the application is sufficient and complete. The Town shall not process or schedule the processing of any application which is found to be incomplete.
- (b) In the event that the Town Manager determines that the application complies with the applicable requirements, the Town Manager shall schedule the application for review.
- (c) In the event the Town Manager determines that the application is incomplete, the Town Manager shall inform the applicant in writing of the deficiencies in the application. No further processing of an incomplete application shall be undertaken until the Town Manager determines that the applicant has remedied the application's deficiencies.

**Sec. 16C-2-70. Type A Application Review.**

- (a) Administrative Review. Type A Applications shall be administratively reviewed by the Planning Commission during public meeting held in conformance with the Colorado Open Meetings Law, C.R.S. § 24-6-401 *et seq.*
- (b) Notice and Hearing Not Required. No notice of the administrative review and no formal hearing shall be required. However, the Town may at its discretion provide a courtesy notice of the administrative review meeting to the general public or to property owners within the vicinity of the proposed improvement or development. Errors in a courtesy notice shall not result in invalidation of the administrative action taken.
- (c) Process for Administrative Review. Although no specific process for administrative review is required by this Chapter, the Planning Commission may generally follow a process that includes in order:
  - (1) Introduction of the Application by the Town staff;
  - (2) Opportunity for comments regarding the application by the *Applicant*;
  - (3) With permission of the meeting chairperson of the Planning Commission, other persons in attendance may provide comments to the Commission;
  - (4) Questions of the Town staff or Applicant by the Commissioners; and
  - (5) Deliberation by the Commission regarding the conformance of the proposed improvement or development with the applicable provisions of the Land Use Code.
  - (6) Decision by the Commission to:
    - (i) Approve the Application upon a finding that the proposed improvement or development will be in conformance with Section 16C-\_\_-\_\_; or
    - (ii) Approval of the Application with the imposition of conditions to ensure conformance of the proposed improvement or development with Section 16C-\_\_-\_\_; or
    - (ii) Deny the Application due to the non-conformance the proposed improvement or development with Section 16C-\_\_-\_\_; or
    - (iv) Continue the Application to a future meeting of the Planning Commission for the purpose of obtaining additional information from the Town staff and/or Applicant that is necessary to fully evaluate the conformance of the proposed improvement or development with Section 16C-\_\_-\_\_.



**Sec. 16C-2-80. Type B and Type C Application Explanation.**

- (a) Type B Applications. Type B Applications involve the installation, modification, repair, or replacement to a lot, building, structure, or improvement for which a review of the location of the work is relevant to the Town's determination that the work complies with the Land Use Code. For this reason, Type B Applications will oftentimes require the submission of a plat, plan, or other illustration showing the specific location of the work. Type B Applications may also oftentimes require a surveyor or other land professional to certify as to the precise or specific location of the work.
- (b) Type C Applications. Type C Applications involve the installation, modification, repair, or replacement of an element or improvement associated with a building or structure for which the location on the lot is not relevant or does not require review.

**Sec. 16C-2-90. Type B and Type C Application Requirements.**

This Section provides general application content and requirements for Type B and Type C Applications. Unless otherwise granted an administrative exemption for a submittal requirement (see Section 16C-1-50), all of the following submittal requirements shall be mandatory for all Type B and Type C Applications:

- (a) Application Form. Each Type B or Type C Application shall include a completed application in the form approved by the Town.
- (b) Payment. All Town-required fees, charges, and review deposit shall accompany each Application.
- (c) Submittal Plans. The Town Manager shall promulgate requirements for the submittal of plans necessary to evaluate and decide whether improvements or development complies with Chapter 16A and Chapter 16B. For example, the Manager may set forth different submittal requirement for applications based on the type of improvements or development proposed; a landscape plan may not be reasonable or necessary for an application for a hot tub.

**Sec. 16C-2-100. Application Completeness Required.**

Consistent with the requirements of Section 16C-2-\_\_\_, no Type B or Type C Application shall be processed unless the application is deemed complete by the Town.

**Sec. 16C-2-110. Type B and Type C Application Review.**

Type B and Type C Applications shall be administratively reviewed as time permits by the Town's administrative staff. As administrative staff, the Colorado Open Meetings Law, C.R.S. § 24-6-401

*et seq.*, shall not apply to such review. No notice of the administrative review and no hearing or meeting shall be required or undertaken.

**Sec. 16C-2-120. Reserved.**

**Sec. 16C-2-130. Agency Referrals Authorized.**

- (a) The Town Manager is authorized to refer any application to any *local agency* prior to final decision on the application. The purpose of all referrals is to define any conflict that the agencies or individuals may have with the proposal, and to allow for the possible resolution of conflicts through the processing of the application. The requirement of agency referral shall be considered as an optional and discretionary action by the Town.
- (b) Referral agencies shall be expected to make recommendations and comments within twenty-one (21) days from the date of receipt of notification that the preliminary plan is available for review unless a shorter time for response is set by the Town. The lack of response from a referral agency to a request for referral comment shall be interpreted as "no comment" concerning the proposal and shall not be deemed a finding of acceptance or "no conflict." The absence of a agency comment shall not preclude the Planning Commission or Town Board from later seeking agency comment on a specific issue raised during the review process or any hearing or appeal. Recommendations or comments made after the twenty-one-day period may, at the reviewing body's discretion, be considered in the review of the application.

**Sec. 16C-2-140. Development Agreements Authorized.**

Where determined by the Town Manager after consultation with the Town Attorney, development agreements shall be authorized as a condition of final approval of a Type A, Type B, or Type C application. The terms and conditions of a development agreements shall ensure satisfaction and ongoing compliance with the obligations, requirements, and standards of the Land Use Code and the Town's Municipal Code.

**Sec. 16C-2-150. Standards for Approval and Final Decisions.**

Following review by the Planning Commission or the Town Manager, as applicable, an application shall be approved only upon an administrative determination that the application meets the following standards for approval:

- (a) The application is complete.
- (b) The application and submittal documents establish that the improvement or development described in the application is found to fully meet or satisfy all applicable requirements for the improvement or development set by:

- (1) Chapter 16B and 16A; and
- (2) Applicable building and safety codes, to the extent that the improvement of development will not be later subject to additional Town review for compliance with such building or safety codes.

### **Article 3 Appeals**

#### **Sec. 16C-3-10. Appeal for Type A Application Decisions.**

Final decisions of the Planning Commission shall be subject to appeal pursuant to Section 16-2-40.

#### **Sec. 16C-3-20. Appeal for Type B and Type C Decisions.**

Final decisions of the Town Manager shall be subject to appeal pursuant to Section 16-2-50.

## CHAPTER 17 Subdivision Regulations

### Article 1 General Provisions

#### Sec. 17-1-10. Title.

Title 17 of the Blue River Municipal Code shall be referred to as the "Town of Blue River Subdivision Regulations" or "Subdivision Regulations."

#### Sec. 17-1-20. Authority.

The Town of Blue River Subdivision Regulations are enacted in accordance with the authority conferred by Articles 16 and 23 of Title 31, Article 20 of Title 29, and Article 67 of Title 24 of the Colorado Revised Statutes, as amended.

#### Sec. 17-1-30. Purpose.

- (a) **Intent and Goals.** These regulations are generally intended to: (1) protect the environment; (2) to ensure efficient traffic circulation, adequate improvements, sufficient open space and to assist the orderly, efficient and integrated development of the Town; (3) provide for the proper arrangement of streets and ensure proper distribution of population; (4) coordinate the need for public services with governmental improvements and programs (5) ensure adequate and convenient utilities, emergency access, drainage, recreation and light and air; (6) safeguard the interests of the public and subdivider and provide consumer protection for the purchaser; and to (7) regulate other matters as the Town may deem necessary in order to protect the best interests of the public.
- (b) **Special Character Considered.** These Subdivision Regulations were prepared with reasonable consideration, among other things, of the largely residential and environmentally sensitive characteristics of the Town and with a regard for the preservation of these characteristics when authorizing and permitting the subdivision and use of property.
- (c) **Specific Purposes.** These regulations are further intended to serve the following specific purposes:
- (1) To inform each subdivider of the standards and criteria by which development proposals will be evaluated, and to provide information as to the type and extent of improvements required.
  - (2) To provide for the subdivision of property in the future without conflict with development on adjacent land.

- (3) To protect and conserve the value of land throughout the municipality and the value of buildings and improvements on the land.
- (4) To ensure that subdivision of property is in compliance with the Town's zoning ordinances, to achieve a harmonious, convenient, workable relationship among land uses, consistent with town development objectives.
- (5) To guide public and private policy and action in order to provide adequate and efficient transportation, water, sewage, schools, parks, playgrounds, recreation, and other public requirements and facilities and generally to provide that public facilities will have sufficient capacity to serve the proposed subdivision.
- (6) To provide for accurate legal descriptions of newly subdivided land and to establish reasonable and desirable construction design standards and procedures.
- (7) To prevent the pollution of air, streams and ponds, to assure adequacy of drainage facilities, to safeguard the water table and to encourage the wise use and management of natural resources throughout the Town in order to preserve the integrity, stability and beauty of the community and the value of the land.

**Sec. 17-1-30.1 Temporary suspension of subdivisions that create new lots.**

- (a) Temporary Suspension of Subdivision that Create New Lot(s). Upon the effective date of these Subdivision Regulations and until the date of any future repeal of this Section 17-1-30-1, no previously subdivided tract, parcel, or lot (see definition of *Subdivision* at Section 17-1-50) that is described in any form of plat or map recorded and effective with the Summit County clerk and recorder's office may be further subdivided to create a new lot or new lots notwithstanding any provision of this Chapter 17 or any declared minimum lot size for any zone district recognized by Chapter 16. The Town Manager shall decline to accept applications for subdivision that propose to create a new lot or lots.
- (b) Limited Exemption. Applications for new subdivision deemed complete and submitted to the Town on or prior to April 15, 2020, shall be exempt from the temporary suspension of subdivisions provided by subsection (a) above. It is the intent of this limited exemption to recognize that one or more applicants who prepared subdivision plans and applications were informed prior to April 15, 2020, that their applications would be accepted and processed under both the then-existing and any new subdivision regulations and such applicants relied on such information in the preparation of their applications. Those applicants entitled to an exemption may choose to process their completed application in accordance with the subdivision regulations approved by Ordinance 15-04 or in accordance with these Subdivision Regulations. The limited exemption provided by this subsection (b) is intended to be a personal exemption and is not an exemption that is transferrable or that runs with property ownership.
- (c) Other Subdivision Applications Accepted. Lawfully recognized tracts, parcels, and lots described in a plat or map recorded and effective with the Summit County clerk and

recorder's office may be amended or consolidated (see Article V), and the subdivision vacated or corrected (see Articles VI and IX) provided that such amendment, consolidation, vacation, or correction does not increase the number of tracts, parcels, or lots within the subdivision.

**Sec. 17-1-40. Applicability, exemptions, limitations, and repeal.**

(a) Applicability. These regulations are applicable to the following described property:

- (1) Property located within the legal boundaries of the Town of Blue River;
- (2) Property proposed for annexation to the Town of Blue River except to the extent specifically provided by any annexation agreement enacted by ordinance; and
- (3) Property located outside of the legal boundaries of the Town of Blue River and described in a Town-adopted intergovernmental agreement that requires application of these Subdivision Regulations to the subdivision of property.

(b) Exemptions. These Subdivision Regulations shall not apply to the following:

- (1) A division of land to heirs through an estate proceeding conducted in accordance with law provided that any resulting division of the property shall be subject to minimum lot size and other limitations imposed by Chapter 16 which may render all or a portion of the divided property undevelopable;
- (2) A division of land by virtue of the foreclosure of a deed of trust in accordance with law provided that any resulting division of the property shall be subject to minimum lot size and other limitations imposed by Chapter 16 which may render all or a portion of the divided property undevelopable;
- (3) The division of land which creates an interest or interests in oil, gas or minerals which are presently or hereafter severed from the surface ownership of real property.
- (4) Any property owned by or leased to the Town of Blue River where the Town is an applicant for subdivision approval, unless the Board of Trustees voluntarily elects to subdivide the property in accordance with all or any portion of this Chapter; and
- (5) A division of land solely for purposes of enabling right-of-way dedication or the creation of a public trail to be owned or controlled by the Town.

(c) Limitations. This Chapter is not intended to modify, abrogate, amend or annul the following:

- (1) Any currently valid subdivision approvals or permits related to the use of land issued by the Town of Blue River prior to the effective date of these Subdivision Regulations;

- (2) Any currently valid subdivision approvals or permits related to the use of land issued by Summit County while the property was subject to the County's subdivision jurisdiction;
  - (3) Any lawfully created easement;
  - (4) Any rights granted to an owner or person by a privately imposed covenant, condition, or restriction on the use of property; or
  - (5) Any vested property right lawfully established in accordance with federal or state law prior to the effective date of these Subdivision Regulations subject to the terms and conditions of any agreement or approval pertaining to such vested right.
- (d) Repeal. The subdivision regulations enacted by Town of Blue River Ordinance No. 15-04 shall remain effective for the limited and sole purpose of processing pending subdivision applications submitted in accordance with Section 17-1-30.1(b). Upon the completion of processing of all exempted applications, Ordinance No. 15-04 shall be deemed repealed in its entirety.

**Sec. 17-1-50. Approval required for recordation.**

All plats of a subdivision of land within the Town shall be filed and recorded only after having been approved and signed by the authorized official or representative of the Town. Any plat purporting to subdivide property, including any plat lot line adjustment, lot consolidation, subdivision vacation, which is recorded without approval of the Board shall be unlawful and deemed void.

## **Article 2 Subdivision Processes**

**Sec. 17-2-10. Forms of subdivision approvals.**

The Town of Blue River authorizes the following forms of subdivision approvals:

- Minor Subdivision (Article III)
- Major Subdivision (Article IV)
- Plat Amendment (Article V)
- Plat Vacation (Article VI)
- Plat Correction (Article IX)

## **Article 3 Minor Subdivision**

**Sec. 17-3-10. Definition of minor subdivision.**

"Minor subdivision" means the division of land including replat, that:

- (a) Results in no more than five lots or outlots;
- (b) Does not create or result in the creation of a lot or parcel of land that would violate or fail to conform to any applicable zoning or other standard including, but not limited to, lot area, minimum frontage, building height, setback(s), street or private drive width, parking or access; and
- (c) Does not propose a major subdivision, plat amendment, or plat vacation as defined by these Subdivision Regulations.

**Sec. 17-3-20. Minor subdivision review procedures.**

The procedures applicable to the processing of an application of a minor subdivision are provided in the Table of Subdivision Processes set forth in Section 17-10-20 of these Subdivision Regulations.

**Sec. 17-3-30. Sufficiency of application.**

All plans, reports, maps, and other information required for any plan or plat must be complete, legible, and must be submitted by the deadlines established by these Subdivision Regulations or deadlines established during the review process. A failure of the application to meet the requirements of these Subdivision Regulations or any applicable deadline shall delay the processing of the application until the application is sufficient and complete. The Town shall not process or schedule the processing of any application which is found to be incomplete.

**Sec. 17-3-40. Contents of minor plat application.**

All minor plat applications shall meet all submittals, materials, and information requirements of a final plat contained in Section 17-4-70(b), except that the applicant shall provide or satisfy the following:

- (a) The title of the subdivision plat shall prominently identify the proposed name of the subdivision together with the phrase "Minor Plat."
- (b) Documentation of ownership, liens, and encumbrances or, in the alternative where no dedication of property to the public is proposed by the plat, all of the following:
  - 1. A copy of a recorded deed for all of the property described in the application evidencing that the applicant is the fee owner of the property;



2. A written, executed, and notarized statement of the applicant representing to the Town that he or she is the fee owner of the property; and
  3. A certified copy of documentation from the Summit County assessor or clerk and recorder evidencing that the applicant is the owner of record of the property.
- (c) List of all mineral owners and lessees of mineral owners for all the property described in the application; and evidence of notice to such mineral owners and lessees of the public hearing to consider such plat.

**Sec. 17-3-50. Number of copies of plat application materials.**

Except where the Town Manager approves the submission of electronic copies, the applicant shall submit to the Town twenty (20) copies of all application materials. The Town Manager may request additional copies of documents larger than eight and one-half by eleven (8 1/2 x 11) inches where necessary to provide sufficient documentation for unanticipated referrals.

**Sec. 17-3-60. Standard for approval.**

Recommendation of approval or conditional approval of any minor plat by the Planning Commission, and any approval or conditional approval by the Town Board shall require a finding that the applicant and the evidence presented to the commission or the Town established the following by competent and sufficient evidence:

- (a) The proposed subdivision meets or satisfies all applicable requirements of these Subdivision Regulations;
- (b) The proposed subdivision conforms to all applicable requirements for the zone district(s) in which the property is located, including, but not limited to, requirements for setbacks, height, floor and lot areas, and minimum lot sizes;
- (c) The proposed subdivision substantially conforms to all other applicable requirements of this code, ordinances, and resolutions of the Town of Blue River;
- (d) The proposed subdivision substantially conforms to the goals and policies of the Blue River Comprehensive Plan to the extent that such goals and policies do not conflict with provisions or requirements of the Municipal Code and to the extent that such goals and policies set forth requirements which are sufficiently specific to permit the Planning Commission or Town Board to decide that such application or subdivision meets or fails to meet such goal or policy; and
- (e) The proposed subdivision (both during and following construction and development) will not result in an unreasonable increase in the peak rate of discharge, or result in a decrease in the quality of discharge, or result in any significant change in the direction or location of

the point of discharge, of storm water or surface water flows upon any adjacent or neighboring property.

**Sec. 17-3-70. Conditions for approval.**

The Town Board may impose reasonable conditions upon any approval which are necessary to ensure continued conformance with these standards of approval, this code, or which are necessary to protect the health, safety, and welfare of the Town and its residents. Any proposed condition for approval shall be reviewed and approved by the Town Attorney.

**Sec. 17-3-80. Effect of approval of minor plat.**

- (a) Recording of Final Plat. As soon as practicable following approval by the Town, the applicant shall submit to the Town a fully executed original minor plat in material and form suitable for recordation with the Summit County clerk and recorder and any applicable subdivision improvements agreement. Upon confirmation that the applicant has received final approval of the minor plat and all supporting documents and paid all outstanding fees and charges, the Town shall cause to be filed and recorded such plat and documents in the office of the Summit County clerk and recorder at the applicant's expense.
- (b) No approval or conditional approval of a minor plat and any applicable subdivision improvements agreement shall be deemed effective or finally approved until the minor plat is recorded with the county clerk and recorder.

**Article 4 Major Subdivision**

**Sec. 17-4-10. Definition of major subdivision.**

A "major subdivision" is any division of land that is not defined as a "minor subdivision," a "plat amendment," a "plat vacation," or a "plat correction" as these phrases are defined by these Subdivision Regulations.

**Sec. 17-4-20. Major subdivision process generally.**

A major subdivision requires the processing and approval of two separate plans or plats: preliminary plan and final plat. Full processing and approval by the Town Board of all three phases in accordance with this title constitutes approval of a "major subdivision."

- (a) Preliminary Plan. The preliminary plan is the first step of the two-step major subdivision approval process. Preliminary plan approval requires public hearings held before the Planning Commission and the Town Board. The preliminary plan process will review the feasibility and design characteristics of the proposal based on the standards set forth in

these Subdivision Regulations, the Zoning Ordinance, and this Municipal Code. The preliminary plan process will also evaluate preliminary engineering design. The applicant must receive preliminary plan approval or conditional approval in order to proceed with the final plat application.

- (b) Final Plat. The final plat is the last step in the two-step subdivision approval process. An applicant must have received preliminary plan approval or conditional approval and the approval must be valid at the time of submission of the final plat application in order to proceed with the final plat process. Final plat review requires public hearings before both the Planning Commission and the Town Board. No major subdivision shall be deemed finally approved until the Town Board approves or conditionally approves the final plat and the final plat is properly recorded in the office of the Summit County clerk and recorder. The final plat process will review the final engineering plans, the development agreement, homeowners' association covenants, the final plat itself, and any other documents, reports or studies as may be necessary to ensure conformance with these Subdivision Regulations, the Zoning Ordinance, and the Municipal Code.

**Sec. 17-4-30. Major subdivision review procedures.**

The procedures applicable to the processing of an application of a major subdivision are provided in Article 10 of these Subdivision Regulations.

**Sec. 17-4-40. Sufficiency of applications.**

All plans, reports, maps, and other information required for any plan or plat must be complete, legible, and submitted by the deadlines established by these Subdivision Regulations or deadlines established during the review process. A failure of the application to meet the requirements of these Subdivision Regulations or any applicable deadline shall delay the processing of the application until the application is sufficient and complete. The Town shall not process or schedule the processing of any application which is found to be incomplete.

**Sec. 17-4-50. Reserved.**

**Sec. 17-4-60. Preliminary plan– Contents of application.**

Except where the Town Manager approves the submission of electronic copies, the applicant shall submit to the Town twenty-five (25) copies of all preliminary plan application materials. The Town Manager may request additional copies of documents larger than eight and one-half by eleven (8 1/2 x 11) inches where necessary to provide sufficient documentation for unanticipated referrals. The following submittals, materials, and information shall comprise a complete application for preliminary plan review:

- (a) A completed application in the form approved by the Town;

- (b) Payment of all required application fees and any review fee deposit;
- (c) Documentation of ownership, liens and encumbrances;
- (d) A legal description of the property proposed to be subdivided prepared by a licensed registered Colorado land surveyor;
- (e) A list of the names and mailing addresses, as this information appears of record with the Summit County assessor's office, of all owners of adjacent property to the property proposed for subdivision; and
- (g) Preliminary Plan. The preliminary plan shall be prepared at a scale of one-inch equals one twenty (20) feet and shall be prepared, drawn, signed and stamped by a currently registered Colorado land surveyor. The size of the map sheet shall be twenty-four by thirty-six (24 x 36) inches. Other scales may be authorized in writing by the Town Manager for larger, lower-density developments provided that the necessary data can be clearly and accurately shown. Where the required data cannot be clearly shown on one plan sheet, additional plan sheets of the same size may be used with easily identifiable match lines. The preliminary plan shall include or illustrate:
  - 1. A general vicinity map of the subdivision illustrating the subdivision's location within the Town and showing major streets;
  - 2. A title that prominently identifies the proposed name of the subdivision together with the phrase "preliminary plan;"
  - 3. Topography at vertical intervals of five feet where the average cross-slope of the subdivision is more than ten (10) percent and at vertical intervals of two feet where the average cross-slope of the subdivision is less than ten (10) percent. Elevation data shall be based on current United States Geological Survey datum and, the benchmarks used shall be identified on the plan;
  - 4. Date of preparation, map scale, north arrow and revision box;
  - 5. Name, address and telephone number of the applicant, land owner(s), planner, engineer and surveyor;
  - 6. Subdivision names and lot owners' names for property within any adjacent subdivision(s), unsubdivided tracts with owner's names, and all public lands with the agency name. The approximate location of lot lines within adjacent subdivision for lots adjacent to the proposed subdivision;
  - 7. Zoning classifications of property adjacent to the property proposed for subdivision;
  - 8. Proposed names of any new streets;

9. Location and principal dimensions of all existing streets, pedestrian ways, alleys, easements, irrigation ditches and laterals, both of record and apparent from inspection of the property within or adjacent to the proposed subdivision;
  10. Location and size of existing utilities within or adjacent to the tract to be subdivided, including water, sewer, electric, gas and phone lines (utilities may be illustrated on a separate map at a matching scale as used for the preliminary plan);
  11. Locations of streams, ditches, ponds, and other water features, including direction of flow, high water elevations, and the location and extent of those areas subject to inundation by the one hundred (100)-year frequency storm;
  12. Location and description of significant existing and proposed vegetation and landscaping;
  13. Location and dimensions of all proposed lots, blocks, and outlots. Lots and blocks shall be numbered. All outlots shall be lettered in alphabetical order;
  14. Location, dimensions, and areas expressed in acres and as a percent of the total project area of all proposed streets, off-street parking areas, pedestrian ways, bike paths and equestrian ways, alleys, easements and other public ways, and building setback lines;
  15. Location and dimensions in acreage and as a percent of the total of all property proposed to be set aside for park and/or open space purposes, or other private reservations;
  16. Location and types of any existing structures;
  17. Location, alignment, profiles, and cut and fill slope intercepts for streets and driveways for subdivisions with any slope area(s) of ten (10) percent or greater; and
  18. Location of proposed or required exterior lighting (streetlights, parking lots) and signs, including subdivision monument or entry signs.
- (h) Written Statement. A written statement addressing the following:
1. Any additional or supplemental information necessary to meet the content requirements of the preliminary plan in subsection (g) of this section that is not thoroughly shown on the preliminary plan;
  2. A description of the overall development concept, purpose and function of the proposed subdivision. If the property is or will be residentially zoned, the description shall include representations concerning the proposed quality and styles of residential structures, anticipated sales price ranges, and amenities;

3. Environmental considerations, including but not limited to, unstable slopes/rockfall zones, related geologic factors, flood plains and wetlands, and alignment of structures and improvements to take into consideration climatic conditions and high groundwater areas;
  4. Unique site characteristics not common to other properties, including any natural and man-made features and/or hazards that may affect the development;
  5. A phasing plan and development schedule for the construction and/or installation of streets, utilities, buildings and landscaping;
  6. A supplement to the drainage plan describing how the applicant proposes to mitigate potential drainage, erosion and water retention or storage problems that may result from development;
  7. Statements explaining the nature of all easements and reservations, if any;
  8. A parks and open space plan documenting types of space (public, private, common areas), proposed uses, development in sequence with the phasing plan, and administrative and maintenance responsibilities;
  9. A general description of the purpose and nature of covenants, homeowners' association, or other contemplated private or contractual restrictions on the use, character and maintenance of the subdivision;
  10. If the subdivision will permit commercial, business, or industrial use, a description of the nature of the use, the trade area, and anticipated employment base shall be submitted in sufficient detail to demonstrate the economic viability of the proposed use.
- (i) Reports and Studies. The following preliminary reports and studies shall be prepared by a qualified professional at the applicant's cost and submitted with the application:
1. Preliminary Drainage Report and Grading Plan. The drainage plan shall include a contour map marked to show existing drainage basins, flow patterns, concentration points, approximate runoff quantities and velocities and all existing natural and man-made features affecting site drainage and location of on-site and off-site surface water detention facilities and any easements for conveyance of surface water;
  2. Preliminary soils report;
  3. Preliminary utility plan for delivery of water, sewer and electric services to and throughout the property;
  4. Preliminary traffic impact analysis including an evaluation of the vehicular and pedestrian traffic patterns, together with estimated trips per day, for roads within

the subdivision and for all routes leading from the subdivision and connecting to highway and arterial roads.

5. Additional Information. The applicant shall provide other information requested by the Planning Commission or Town Board that may be necessary to adequately review the proposal for conformance with the applicable requirements.

**Sec. 17-4-70. Final plat– Contents of application.**

(a) Contents of Application. Except where the Town Manager approves the submission of electronic copies, the applicant shall submit to the Town twenty-five (25) copies of all final plat application materials. The Town Manager may request additional copies of documents larger than eight and one-half by eleven (8 1/2 x 11) inches where necessary to provide sufficient documentation for unanticipated referrals. A final plat application may be submitted for all or any logical portion of property described in an approved and valid preliminary plan. The following submittals, materials and information shall comprise a complete application for final plat review:

1. A completed application in the form approved by the Town;
2. Payment of all required application fees and any review fee deposit;
3. Documentation of ownership, liens and encumbrances;
4. A legal description of the property proposed to be subdivided prepared by a licensed registered Colorado land surveyor;
5. A list of the names and mailing addresses, as this information appears of record with the Summit County assessor's office, of all owners of adjacent property to the property proposed for subdivision;
6. A list of the names and mailing addresses of all mineral owners and lessees of mineral owners as this information appears of record with the Summit County clerk and recorder and assessor's office.

(b) Final Plat. The final plat shall be drafted at a scale of one inch to one twenty (20) feet by the use of permanent ink on a stable reproducible drafting medium with outer dimensions of twenty-four by thirty-six (24 x 36) inches. Maps of two or more sheets shall be referenced to an index map placed on the first sheet. Other scales may be authorized in writing by the Town Manager for larger, lower-density developments provided that the necessary data can be clearly and accurately shown. Where the required data cannot be clearly shown on one plan sheet, additional plan sheets of the same size with easily identifiable match lines may be used.

1. A title that prominently identifies the proposed name of the subdivision together with the phrase "Final Plat";

2. Date of preparation, map scale and north arrow;
  3. Name, address and telephone number of the applicant, land owner(s), planner, engineer and surveyor;
  4. Total acreage and surveyed description of the area;
  5. Primary boundary survey control points with monument descriptions; all parcel lines dimensioned with lengths; curve data including chord lengths and bearings; basis of bearings and relation to true meridian;
  6. Tract boundary lines, road right-of-way lines, easements and other sites with accurate bearings and dimensions including chord lengths and bearings, central angles, arc lengths and radii of all curves;
  7. Name and right-of-way width of each street. Right-of-way widths are to be shown at each leg of an intersection, at point of curvature and point of tangent, at dead-ends, and at angle points;
  8. Locations, dimensions and purposes of all easements;
  9. Number or letter to identify each lot, outlot and block. Lots and blocks shall be numbered. All outlots shall be lettered in alphabetical order;
  10. An identification of the streets, alleys, easements, parks, open space, and any other public facilities shown on the plat to be dedicated to public use. No areas within the plat may be designated as areas of conditional, planned or future public acquisition. Dedications of public property not made on the final plat shall be made only by general warranty deed unless otherwise approved by the Town Board;
  11. Names of all adjoining subdivisions with dotted lines of abutting lots. If the adjoining land is unplatted, it should be shown as such;
  12. Signature and seal of the registered land surveyor;
  13. A delineation of the extent of the one hundred (100)-year flood plain; and
  14. All final plat approval certifications, plat language, and recording information in forms approved by the Town. See Article XIII.
- (c) The following final studies and reports, as may be required by the Town, shall be prepared by a qualified professional at the applicant's cost and submitted with the application:
1. Final drainage report and grading plan;
  2. Final soils and geology report;



3. Final utility plan for delivery of water, sewer and electric services to and throughout the property;
4. Final traffic impact analysis including an evaluation of the vehicular and pedestrian traffic patterns, together with estimated trips per day, for roads within the subdivision and for all routes leading from the subdivision and connecting to highway and arterial roads.

(d) Additional Information Required:

1. One copy of any agreements, conveyances, restrictions, or private covenants that will govern the use and maintenance of the subdivision and any common private open space or private subdivision amenity; and
2. Complete engineering plans and specifications sufficient to commence construction for all public facilities and improvements to be installed, including but not limited to:
  - a. Water and sewer improvements, including all sewer lift stations;
  - b. Streets and related improvements;
  - c. Bridges; and
  - d. Storm drainage, detention and erosion control improvements;
3. One copy of any agreement affecting the subdivision and public or private improvements made with ditch companies, railroad companies, utility providers, and state, county, or local governmental or quasi-governmental agencies;
4. Written description of arrangements and financial institution commitments for providing financial guarantees and sureties for the timely completion of all public improvements;
5. A preliminary or draft subdivision improvements agreement in the form required by these Subdivision Regulations and generally acceptable to both the subdivider and the Town attorney and which is capable of finalizing upon the conclusion of the public hearing and approval or conditional approval of the final plat by the Town Board.

**Sec. 17-4-80. Standards for approval of a major subdivision.**

Recommendation of approval or conditional approval of any stage of a major plat by the Planning Commission, and any approval or conditional approval by the Town Board, shall require a finding that the applicant and the evidence presented to the Planning Commission or the Town Board established the following by competent and sufficient evidence:

- (a) For a final plat, a finding must be made that a preliminary plan for the subdivision was approved or conditionally approved by the Town Board not more than twelve (12) months prior to the date of submission of an application for final plat approval or that the preliminary plan is currently valid and effective as the result of the approval of an extension of the effective date of the preliminary plan.
- (b) The proposed subdivision and development conforms to all applicable requirements for the zone district(s) in which the property is located, including but not limited to, requirements for use, setbacks, height, floor and lot areas, and minimum lot sizes.
- (c) The proposed subdivision and development substantially conforms to all other applicable requirements of the Town's Municipal Code, ordinances, and resolutions.
- (d) The proposed subdivision and development substantially conforms to the goals and policies of the Blue River comprehensive plan to the extent that such goals and policies do not conflict with provisions or requirements of this code and to the extent that such goals and policies set forth requirements which are sufficiently specific to permit the Planning Commission or Town Board to decide that such application or subdivision meets or fails to meet such goal or policy.
- (e) The application:
  - 1. For preliminary plan approval, meets or satisfies all applicable requirements of the Subdivision Regulations; or
  - 2. For final plat approval, is in substantial conformance with the approved preliminary plan and the final plat meets or satisfies all applicable requirements of the Subdivision Regulations;
- (f) Adequate capacity of water and wastewater utilities are currently available for the entire subdivision and development.

**Sec. 17-4-90. Conditions for approval.**

The Town Board may impose reasonable conditions upon any approval which are necessary to ensure continued conformance with these standards of approval, this code, or which are necessary to protect the health, safety and welfare of the Town and its residents.

**Sec. 17-4-100. Reserved.**

**Sec. 17-4-110. Effect of approval of preliminary plan.**

Approval or conditional approval of a preliminary plan shall be valid for twelve (12) months following the date of approval or conditional approval by the Town Board. Such period may be

extended by the Town Board for not more than six (6) additional months upon written request of an applicant only where the applicant establishes to the satisfaction of the Board that the applicant is reasonably pursuing completion of a final plat.

**Sec. 17-4-120. Effect of approval of final plat.**

- (a) Recording of Final Plat. As soon as practicable following approval by the Town, the applicant shall submit to the Town a fully executed original final plat in material and form suitable for recordation with the Summit County clerk and recorder and any applicable subdivision improvements agreement. Upon confirmation that the applicant has received final approval of the final plat and all supporting documents and paid all outstanding fees and charges, the Town shall cause to be filed and recorded such plat and documents in the office of the Summit County clerk and recorder at the applicant's expense.
- (b) No approval or conditional approval of a final plat and any applicable subdivision improvements agreement shall be deemed effective or finally approved until the final plat is recorded with the county clerk and recorder.

**Article 5 Plat Amendment**

**Sec. 17-5-10. Definition of plat amendment.**

A "plat amendment" is any form of amendment or modification of an approved and recorded minor plat or a final plat (other than a plat vacation) that:

- (a) Does not create any additional lot(s) or outlot(s);
- (b) Does not create or result in the creation of a lot or outlot that would violate or fail to conform to any applicable zoning or other standard, including but not limited to, lot area, minimum frontage, building height, setback(s), street or private drive width, parking, or access;
- (c) Does not reduce the amount of any dedicated or publicly owned land, and in the opinion of the Town Manager does not significantly alter or affect the subdivision's access, parking, or traffic circulation system;
  - 1. Eliminates one or more lot lines within the subdivision (a lot consolidation);
  - 2. Relocates or reconfigures one or more lot lines within the subdivision; and/or
  - 3. Modifies, amends, adds, or deletes a restriction, limitation, condition, or other obligation, right, or duty stated on the minor plat or final plat; and

- (d) Is initiated by the owners of record of all lots and outlots within the area directly affected by the proposed amendment. The "area directly affected by the proposed amendment" means:
- (1) The properties that would be physically affected by an amendment to eliminate or relocate of one or more lot lines within the subdivision. Where a single lot line is eliminated or relocated, the "area directly affected by the proposed amendment" would customarily include the lots on each side of the lot line subject to elimination or relocation; and
  - (2) All properties which are directly benefited by the restriction, limitation, condition, or other obligation, right, or duty stated on the minor plat or final plat. In many instances, all properties within the subdivision are affected by a restriction, limitation, condition, or other obligation, right, or duty stated on the minor plat or final plat.

**Sec. 17-5-20. Plat amendment review procedures.**

The procedures applicable to the processing of an application of a plat amendment are provided in the Table of Subdivision Processes set forth in Section 17-10-20 of this Chapter.

**Sec. 17-5-30. Contents of plat amendment application.**

The following submittal, materials, and information shall comprise a complete application for a plat amendment:

- (a) A completed application in the form approved by the Town;
- (b) Payment of all required application fees and any review fee deposit;
- (c) Documentation of ownership, liens and encumbrances;
- (d) A legal description of the property proposed for plat amendment prepared by a licensed registered Colorado land surveyor;
- (e) A list of the names and mailing addresses, as this information appears of record with the Summit County assessor's office, of all owners of adjacent property to the area directly affected by the proposed amendment.
- (f) For a plat amendment that relocates one or more lot lines within a previously approved subdivision or consolidates lots by the elimination of lot line(s), an amended plat shall be submitted with the application.
  - (1) The amended plat shall be drafted at a scale of one inch to twenty (20) feet by the use of permanent ink on a stable reproducible drafting medium with outer

dimensions of twenty-four by thirty-six (24 × 36) inches. Other scales may be authorized in writing by the Town Manager for larger, lower-density developments provided that the necessary data can be clearly and accurately shown. Where the required data cannot be clearly shown on one plan sheet, additional plan sheets of the same size may be used with easily identifiable match lines.

- (2) A title that prominently identifies the name of the recorded subdivision together with the phrase "plat amendment" or "lot consolidation" as appropriate for the particular application;
  - (3) Date of preparation, map scale and north arrow;
  - (4) Name, address and telephone number of the applicant, land owner(s), planner, engineer and surveyor;
  - (5) Total acreage and surveyed description of the lots and area subject to the proposed amendment; and
  - (6) A clear illustration or description of the amendment proposed, using shading, crosshatching, highlighting, or other techniques to accurately illustrate the proposed amendment.
- (g) For a plat amendment that modifies, amends, adds or deletes a restriction, limitation, condition, or other obligation, right, or duty stated on the recorded plat, a written description clearly stating the proposed amendment in a form suitable for recordation with the office of the Summit County clerk and recorder. The written description shall be subject to approval of the Town attorney and, at a minimum, the written amendment shall include:
- (1) A title that prominently identifies the name of the recorded subdivision together with the phrase "Plat Amendment;"
  - (2) The county recording information (book and page or recordation number, as applicable) of the original subdivision plat, and the recording information and titles of any other prior amendments of the original plat; and
  - (3) Date of preparation, name, address, and telephone number of the applicant, land owner(s), and any professionals (planners, engineers, surveyors) assisting in the plat amendment.
- (h) For a consolidation of one or more lots, a written agreement in a form approved by the Town Attorney that includes the owner's contractual commitment to not apply for or otherwise seek further subdivision of the consolidated lot(s). Such contractual commitment shall at a minimum: (1) run with the land and bind future owners of the consolidated lot(s); (2) include a provision granting the Town the authority to unilaterally release or void the contractual commitment upon a finding by the Town Board that both: (i) section 17-1-40(a) of these Subdivision Regulations is repealed thereby authorizing subdivisions within the Town; and (ii) the subdivision of the consolidated lot(s) in accordance with the then-effective Subdivision Regulations will be in the best interests of

the Town and advance the Town's policies concerning new lot creation and increase in density.

**Sec. 17-5-40. Number of copies of plat application materials.**

Except where the Town Manager approves the submission of electronic copies, the applicant shall submit to the Town twenty (20) copies of all application materials. The Town Manager may request additional copies of documents larger than eight and one-half by eleven (8 1/2 x 11) inches where necessary to provide sufficient documentation for unanticipated referrals.

**Sec. 17-5-50. Standards for approval of plat amendment.**

Recommendation of approval or conditional approval of any stage of a plat amendment by the Planning Commission, and any approval or conditional approval by the Town Board, shall require a finding that the applicant and the evidence presented to the commission or the council established the following by competent and sufficient evidence:

- (a) The proposed amendment meets or satisfies all applicable requirements of this title.
- (b) The proposed amendment conforms to all applicable requirements for the zone district(s) in which the property is located, including but not limited to, requirements for setbacks, height, floor and lot areas, and minimum lot sizes.
- (c) The proposed amendment substantially conforms to all other applicable requirements of the code and all regulations promulgated by the Town.
- (d) The proposed subdivision substantially conforms to the goals and policies of the Blue River comprehensive plan, to the extent that such goals and policies do not conflict with provisions or requirements of the code and to the extent that such goals and policies set forth requirements which are sufficiently specific to permit the Planning Commission or Town Board to decide that such subdivision meets or fails to meet such goal or policy.
- (e) The proposed amendment would not cause significant hardship or inconvenience for adjacent or neighboring landowners or tenants.
- (f) The proposed amendment would not be likely to prove detrimental to the public health, safety or welfare of Town residents.

**Sec. 17-5-60. Conditions for approval.**

The Town Board may impose reasonable conditions upon any approval which are necessary to ensure continued conformance with these standards of approval, this code, or which are necessary to protect the health, safety and welfare of the Town and its residents.

**Sec. 17-5-70. Effect of approval of plat amendment.**

- (a) Recording of Plat Amendment. As soon as practicable following approval by the Town, the applicant shall submit to the Town a fully executed original plat in material and form suitable for recordation with the Summit County clerk and recorder and any applicable subdivision improvements agreement. Upon confirmation that the applicant has received final approval of the plat amendment and all supporting documents and paid all outstanding fees and charges, the Town shall cause to be filed and recorded such plat and documents necessary for recording in the office of the Summit County clerk and recorder at the applicant's expense.
- (b) No approval or conditional approval of a plat amendment and any applicable subdivision improvements agreement shall be deemed effective or finally approved until the final plat is recorded with the county clerk and recorder.

**Article 6 Plat Vacation**

**Sec. 17-6-10. Definition of plat vacation.**

A "plat vacation" is any termination, elimination and vacation of a previously approved and recorded minor plat or final plat so as to return all of the previously platted property to an unplatted and unsubdivided condition. A plat vacation is not a vacation of a public street or right-of-way (For vacation of streets and rights-of-way, see C.R.S. § 43-2-301, et seq.)

**Sec. 17-6-20. Authority to seek vacation of plat.**

An application for plat vacation may be initiated by:

- (a) The Town Board, with or without a recommendation by the Planning Commission; or

- (b) All owners of record or duly authorized agent of any owner of record of all lots and outlots within the approved and recorded subdivision plat.

**Sec. 17-6-30. Plat vacation review procedures.**

The procedures applicable to the processing of an application of a plat vacation are provided in 17-10-20 of these Subdivision Regulations.

**Sec. 17-6-40. Contents of plat vacation application.**

All plat vacation applications shall meet the following submittal, materials, and information requirements:

- (a) Application in the form approved by the Town;
- (b) Payment of all required application fees and any review fee deposit;
- (c) Documentation of ownership, liens and encumbrances;
- (d) A legal description of the property proposed for plat vacation prepared by a licensed registered Colorado land surveyor;
- (e) A list of the names and mailing addresses, as this information appears on record with the Summit County assessor's office, of all owners of property within the original subdivision plat that is subject to the proposed vacation, including all owners or beneficiaries of easements;
- (f) Notice of Plat Vacation. A written description unconditionally stating that the recorded subdivision plat is vacated and voided. The written description shall be in a form suitable for recordation with the office of the Summit County clerk and recorder if the vacation is approved by the Town. The written description shall be subject to approval of the Town attorney and, at a minimum, the written description shall include:
  - (1) A title that prominently identifies the name of the recorded subdivision together with the phrase "Plat Vacation and Termination;"
  - (2) The county recording information (book and page or recordation number as applicable) of the original subdivision plat, and the recording information and titles of any other prior amendments of the original plat;
  - (3) Date of preparation, name, address, and telephone number of the applicant, land owner(s), and any professionals (planners, engineers, surveyors) assisting in the plat vacation application.



**Sec. 17-6-50. Number of copies of plat application materials.**

Except where the Town Manager approves the submission of electronic copies, the applicant shall submit to the Town twenty (20) copies of all application materials. The Town Manager may request additional copies of documents larger than eight and one-half by eleven (8 1/2 x 11) inches where necessary to provide sufficient documentation for unanticipated referrals.

**Sec. 17-6-60. Standards for approval of plat vacation.**

Approval or conditional approval of any plat vacation by either the Planning Commission or the Town Board shall require a finding that the applicant and the evidence presented to the commission or the Town Board established the following:

- (a) Development of the property in accordance with the recorded subdivision plat will not permit efficient use of the platted property.
- (b) Development of the property in accordance with the recorded subdivision plat will not advance the goals and objectives of this code or the Blue River comprehensive plan.
- (c) The proposed plat vacation would neither interfere with nor deny access via a public thoroughfare to existing structures within the recorded plat, adjoining properties, utility services or other improvements.
- (d) The proposed plat vacation would not cause undue hardship or inconvenience for any utility company, special district, neighboring landowner or tenant and that it would not be detrimental to the public health, safety or welfare of Town residents.
- (e) The proposed vacation substantially conforms to the goals and policies of the Blue River comprehensive plan to the extent that such goals and policies do not conflict with provisions or requirements of this code and to the extent that such goals and policies set forth requirements which are sufficiently specific to permit the Planning Commission or Town Board to decide that such subdivision meets or fails to meet such goal or policy.

**Sec. 17-6-70. Conditions for approval.**

The Town Board may impose reasonable conditions upon any approval which are necessary to ensure continued conformance with these standards of approval, this code, or which are necessary to protect the health, safety and welfare of the Town and its residents.

**Sec. 17-6-80. Effect of approval of plat vacation.**

- (a) Recording of Plat Vacation. As soon as practicable following approval by the Town, the applicant shall submit to the Town a fully executed original plat vacation in material and

form suitable for recordation with the Summit County clerk and recorder and any applicable subdivision improvements agreement. Upon confirmation that the applicant has received final approval of the final plat and all supporting documents and paid all outstanding fees and charges, the Town shall cause to be filed and recorded such plat and documents in the office of the Summit County clerk and recorder at the applicant's expense.

- (b) No approval or conditional approval of a final plat and any applicable subdivision improvements agreement shall be deemed effective or finally approved until the final plat is recorded with the county clerk and recorder.

**Article 7      Reserved**  
**Article 8      Reserved**

**Article 9      Plat Correction**

**Sec. 17-9-10.      Purpose.**

The purpose of this Article is to establish an administrative subdivision process applicable to proposals to correct an error in a previously approved subdivision plat. This Article is intended to provide for the efficient processing of corrections without the need to undertake a formal public hearing process provided that all requirements of this Article are satisfied.

**Sec. 17-9-20.      Definition of plat correction.**

A "plat correction" is any proposal and application that is determined by the Town Manager to meet all of the following criteria:

- (a) The proposal seeks to correct an evident or obvious error in an approved and recorded plat (a plat associated with a minor subdivision, major subdivision, plat amendment, or plat vacation) and, by way of examples only, the correction would revise a typographical or grammatical error in plat language, correct an error in a property legal description, delete or add language in a note or other text of a plat to bring the plat into conformance with these Subdivision Regulations or into conformance with a condition of subdivision approval;
- (b) The proposed correction does not relocate or move an existing lot line;
- (c) The proposed correction does not create one or more additional lots, outlots, parcels, or tracts; or
- (d) The proposed correction does not alter, amend, or change any public or private easement or any right, obligation, intent, or requirement associated with the plat.

**Sec. 17-9-30. Contents of plat correction application.**

A plat correction application shall be in a form of one of the following:

- (a) An eight and one-half by eleven (8 1/2 × 11) inch document suitable for recordation which clearly and concisely explains or details the correction, references the recordation information of the approved and recorded plat to be corrected together with a title of “Plat Correction to [name of plat to be recorded]” and bearing the signature (and stamp, if appropriate) of the individual or business entity that prepared and signed the original plat; or
- (b) A reprint of the previously approved and recorded plat which reprinted plat contains the correction together with a new title “Plat Correction to [name of plat to be recorded].” The reprint shall be created by the same individual or business entity that prepared the original plat and all original plat certificates shall be re-signed and re-dated by the appropriate parties. Where parties are unavailable due to passage of time or sale of property within the subdivision, a Plat Amendment shall be the appropriate form of application to evidence a correction to a recorded subdivision plat.
- (c) Documentation of ownership, liens and encumbrances or, in the alternative, all of the following:
  - 1. A copy of a recorded deed for all of the property described in the application evidencing that the applicant is the fee owner of the property;
  - 2. A written, executed, and notarized statement of the applicant representing to the Town of Blue River that he or she is, or they are, the fee owner of all property within the plat to be corrected; and
  - 3. A certified copy of documentation from the Summit County assessor or clerk and recorder evidencing that the applicant(s) is the owner of record of the property.
- (d) The following certificate of approval shall be substituted for and replace the certificate of approval of the Town Board on any plat or upon any plat correction document submitted with the application:

APPROVED by the Town of Blue River Planning and Zoning Commission and approved for recordation with the Summit County Clerk and Recorder's Office pursuant to the Blue River Municipal Code this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

**Sec. 17-9-40. Number of copies of application materials.**

Except where the Town Manager approves the submission of electronic copies, the applicant shall submit to the Town Manager fifteen (15) copies of all application materials. The Town Manager may request additional copies of documents larger than eight and one-half by eleven (8 1/2 x 11) inches where necessary to provide sufficient documentation for unanticipated referrals.

**Sec. 17-9-50. Sufficiency of application.**

All plans, reports, maps, and other information required for any plan or plat must be complete, legible, and must be submitted by the deadlines established by these Subdivision Regulations or deadlines established during the review process. A failure of the application to meet the requirements of these Subdivision Regulations or any applicable deadline shall delay the processing of the application until the application is sufficient and complete. The Town shall not process or schedule the processing of any application which is found to be incomplete.

**Sec. 17-9-60. Plat correction review procedures.**

All applications for plat correction shall be administratively reviewed by the Town Manager and the Planning Commission without notice or a public hearing and may be finally approved by the Planning Commission in accordance with this Article. Following submission of a plat correction application and supporting documents, the Town Manager shall determine whether the application and plat are complete as required by these Subdivision Regulations. Following a determination that the application and supporting documents are complete, the Town Manager shall endeavor to reach a decision concerning the application's and plat's compliance with the Subdivision Regulations within thirty (30) days of the date of submission of the completed application and plat correction unless such deadline is waived by the applicant. Following review and decision by the Town Manager, the Manager shall present the Manager's decision to the Planning Commission for administrative review and final approval in accordance with this Article.

**Sec. 17-9-70. Standards for approval.**

An application and plat correction shall be administratively reviewed by both the Town Manager and by the Planning Commission for compliance with the following standards:

- (a) The proposed subdivision meets the definition of a "plat correction" contained in this Article;
- (b) The proposed plat correction meets all content requirements of these Subdivision Regulations, the Zoning Ordinance, and the Municipal Code; and

- (c) The plat correction does not, in the opinion of the Planning Commission, substantially and adversely affect adjacent lots or raise significant issues of policy which are not addressed by the Blue River comprehensive plan or the Blue River Municipal Code.

**Sec. 17-9-80. Town Manager Decision.**

The Town Manager shall approve a plat correction application upon a finding that the application meets the requirements of Section 17-8-70 of this Article. The Town Manager shall deny a plat correction application for failure to meet the requirements of Section 17-8-70 of this Article. Any decision to deny an application shall be made in writing stating the specific reasons for denial and the decision shall be promptly mailed or hand delivered to the applicant.

**Sec. 17-9-90. Appeal to Town Board.**

The applicant may appeal a denial by the Planning Commission to the Town Board by requesting an appeal in writing delivered to the Town Manager not more than twenty (20) days following the date of the applicant's receipt of the written notice of denial. The Town Board shall administratively consider an applicant's timely request for an appeal at a regular or special meeting. Following consideration of the application and plat, the Town Board Commission may affirm the Planning Commission's decision or, upon a finding that the application meets all the applicable standards set forth in Section 17-8-70 of this Article, the Town Board may reverse the Planning Commission's decision and order the Planning Commission to approve the plat correction and execute the documents or plat, as applicable, in a manner suitable for recordation. In the event that the Town Board orders the Planning Commission to approve the application and plat, the Town Manager shall process and record the plat correction documents in accordance with Section 17-9-110.

**Sec. 17-9-100. Conditions for approval.**

The Planning Commission or Town Board, as applicable, may impose reasonable conditions upon any approval of a plat correction that are necessary to ensure continued conformance with the standards of approval or the Blue River Municipal Code or these Subdivision Regulations. Any proposed condition for approval shall be reviewed and approved by the Town Attorney.

**Sec. 17-9-110. Effect of Approval of Plat Correction.**

- (a) Recording of Plat Correction. As soon as practicable following approval by the Town, the applicant shall submit to the Town a fully executed original plat correction in material and form suitable for recordation with the Summit County clerk and recorder and any applicable subdivision improvements agreement. Upon confirmation that the applicant has received final approval of the plat correction and all supporting documents and paid all outstanding fees and charges, the Town shall cause to be filed and recorded such plat

and documents in the office of the Summit County clerk and recorder at the applicant's expense.

- (b) No approval or conditional approval of a plat correction and any applicable subdivision improvements agreement shall be deemed effective or finally approved until the plat correction is recorded with the county clerk and recorder.

## Article 10 Application Review Procedures

### Sec. 17-10-10. Applicability and purpose.

This Article applies to each of the following subdivision processes described in this title and is entitled "Table of Subdivision Processes."

- Minor Subdivision (Article III)
- Major Subdivision (Article IV)
- Plat Amendment (Article V)
- Plat Vacation (Article VI)
- Plat Correction (Article IX)

### Sec. 17-10-20. Table of subdivision processes.

R = Required	O = Optional at Subdivider's Request	N/A = Not Applicable
--------------	--------------------------------------	----------------------

	Pre-App Meeting	Application Contents	Application Completeness Determination	Referral Agencies	Notice of Hearing	Planning Commission/ Town Board
						Public Hearing
	See Section 17-10-40		See Section 17-10-50	See Section 17-10-70	See Section 17-10-80	

<b>Minor Subdivision</b>	R	See Section 17-3-40	R	Local Agencies	R Publication Mailing	R
<b>Major Subdivision</b>						
Preliminary Plan	R	See Section 17-4-60	R	Local Agencies	R Publication Mailing	R
Final Plat	O	See Section 17-4-70	R	All Agencies	R Publication Mailing	R
<b>Plat Amendment</b>	R	See Section 17-5-30	R	Local Agencies	R Publication Mailing	R
	<b>Pre-App Meeting</b>	<b>Application Contents</b>	<b>Application Completeness Determination</b>	<b>Referral Agencies</b>	<b>Notice of Hearing</b>	<b>Planning Commission/ Town Board</b>
						Public Hearing
	See Section 17-10-40		See Section 17-10-50	See Section 17-10-70	See Section 17-10-80	

<b>Plat Vacation</b>	R	See Section 17-6-40	R	Local Agencies	R Publication Mailing	R
<b>Plat Correction</b>	R	See Section 17-9-30	R	N/A	N/A	N/A  Administrative review Applicant may appeal to Town Board
<b>Waiver</b>	O	See Section 17-10-110	N/A	N/A	N/A	N/A  Administrative review Applicant may appeal to Town Board

**Sec. 17-10-30.**

**Reserved.**

**Sec. 17-10-40.**

**Pre-application meeting.**

Where an application requires a pre-application meeting in accordance with Section 17-10-20, the following process shall apply:

- (a) Prior to the formal submission of the application, the subdivider shall contact the Town Manager in writing to schedule and request an informal meeting. Following receipt of a request, the pre-application meeting shall be set for a date within fifteen (15) days of the date of the applicant's written request. The Town Manager shall advise the applicant of the date and time of the pre-application meeting.
- (b) The applicant shall attend the meeting at the designated date and time. The applicant shall be prepared to discuss the proposed application and the proposed development with the Town Manager. The applicant shall be encouraged to present such plats, plans, diagrams, or other preliminary information sufficient to permit the conceptual review of the proposed application.
- (c) The purpose of the pre-application meeting shall be to assist the subdivider in understanding the Town's subdivision processes and to permit the Town Manager to determine the applicable process and regulations for the proposed application. Upon request of the subdivider, the Town Manager shall provide to the subdivider a written



determination concerning the appropriate procedure for the processing of the applicant's proposed application.

- (d) Where a pre-application meeting is required, no application shall be accepted or processed by the Town unless and until the pre-application meeting is held.

**Sec. 17-10-50. Completeness determination.**

Where an application requires a completeness determination in accordance with Section 17-10-20, the following process shall apply:

- (a) Within twenty (20) days following receipt of an application, the Town Manager shall administratively review the application and determine whether the application complies with the applicable application content requirements and that all required application fees, consultant review fees, and other applicable charges are paid or deposited in accordance with these Subdivision Regulations.
- (b) All plans, reports, maps, and other information required for any plan or plat must be complete and legible. A failure of the application to meet the requirements of these Subdivision Regulations or any applicable deadline shall delay the processing of the application until the application is sufficient and complete. The Town shall not process or schedule the processing of any application which is found to be incomplete.
- (c) In the event that the Town Manager determines that the application complies with the applicable requirements, the Town Manager shall schedule the application for review in accordance with Section 17-10-20 of this Article.
- (d) In the event the Town Manager determines that the application is incomplete, the Town Manager shall inform the applicant in writing of the deficiencies in the application. No further processing of an incomplete application shall be undertaken until the Town Manager determines that the applicant has remedied the application's deficiencies.

**Sec. 17-10-60. Reserved.**

**Sec. 17-10-70. Agency referrals.**

Where an application requires agency referral in accordance with Section 17-10-20, the following process shall apply:

- (a) For purposes of any required agency referral to "local agencies" as required by Section 17-10-20, the phrase "local agencies" shall include:
  - 1. Fire District;
  - 2. Town Police Department;

3. Town Engineer;
  4. Town Attorney;
  5. Any applicable water and sanitation district;
  6. Electricity provider to the area;
  7. School district;
  8. Telephone service provider;
  10. Any other county, regional, state or federal agencies that may be deemed by the Town Manager as specially affected or interested; and
  11. For any subdivision action affecting five or more acres of land, notice will also be provided to the Colorado Land Use Commission as required by C.R.S. § 31-23-225.
- (b) For purposes of any required agency referral to "all agencies" as required by Section 17-10-20, the phrase "all agencies" shall include:
- (1) All agencies identified as a "local agency" in subsection (a) of this section;
  - (2) Summit County land use department;
  - (3) Colorado State Department of Transportation; and
  - (4) Any other county, regional, state or federal agency that may be deemed by the Town Manager as specially affected or interested including but not limited to the Colorado State Engineer, Soil Conservation Service, Colorado Geological Service, Denver Regional Council of Governments, Colorado State Forest Service, and the Colorado Water Conservation Board.
- (c) A copy of each application shall be referred by Town staff to the appropriate agencies following a determination of application completeness by the Town Manager. The purpose of all referrals is to define any conflict that the agencies or individuals may have with the proposal, and to allow for the possible resolution of conflicts through the processing of the application. Such agencies shall be expected to make recommendations and comments within twenty-one (21) days from the date of receipt of notification that the preliminary plan is available for review.
- (d) The lack of response from a referral agency to a request for referral comment shall be interpreted as "no comment" concerning the proposal and shall not be deemed a finding of acceptance or "no conflict." The absence of a timely agency comment shall not preclude the Planning Commission or Town Board from later seeking agency comment on a specific issue raised during the review process or any hearing. Recommendations or comments made after the twenty-one-day period may, at the reviewing body's discretion, be considered in the review of the application.
- (e) Failure to forward a referral of an application to an agency as required by Section 17-10-20 shall not constitute a material deviation from the subdivision application review process and shall not void or invalidate any action taken by the Planning Commission or Town Board. The requirement of agency referral shall be considered as a preferred, but discretionary, action by the Town.

**Sec. 17-10-80. Notice requirements.**

All public notices of hearings required by these Subdivision Regulations shall include the date, time, place, and purpose of the hearing, a general description of the property affected, and any other information deemed appropriate by the Town clerk to apprise the public of the general nature of the action proposed. Notice shall be made when required in accordance with the requirements of Section 17-10-20 and may include notice by publication or mailing, or a combination of these methods. Errors or inaccuracies in the notice shall not be deemed sufficient cause to postpone or invalidate a hearing except where such errors are substantive and material and are found to have reasonably misled or misinformed the public as to the date, time, place or purpose of the hearing. Notice by mailing shall be deemed a courtesy to owners and a supplementary means of advising the public of the pendency of an application but shall not be deemed a legal requirement for the processing of an application or the conduct of a hearing if notice by publication was properly completed.

- (a) Notice by Publication. Where notice by publication is required for any public hearing by Section 17-10-20, notice of the hearing shall be published in the Summit County Daily Newspaper (or other official newspaper designated for publication of the Town of Blue River) at least fifteen (15) days before the date of the hearing. A single notice may combine the notice of the hearing dates of the Planning Commission and the Town Board.
- (b) Notice by Mailing.
  - (1) Where notice by mailing is required for any public hearing by Section 17-10-20, notice shall be deposited in the United States Mail first class postage prepaid or shall be delivered by another comparable service, including hand-delivery to the address. The deposit in the U.S. Mail or delivery by another comparable service shall be made at least seven (7) days before the date of the hearing. Failure of the addressee to receive notice shall not be deemed sufficient cause to require a postponement, re-mailing of notice, or invalidation of the hearing.
  - (2) Where notice by mailing is required for any public hearing, mailed notice shall be sent by the applicant addressed to owners of property within 300 feet of the property described in the application as their names appear in the real property records of the Summit County assessor. For purposes of determining addressees for mailed notice, the applicant may rely upon the ownership information provided by the Summit County clerk and recorder's office.
  - (3) The applicant shall deliver to the Town prior to each public hearing a signed, written certification addressed to the Town stating that the applicant or the applicant's representative has provided notice by mailing in accordance with this section. Failure to provide such mailing or such certification may result in a denial of the application or a continuation of the public hearing in order to ensure that proper mailed notice was completed.

**Sec. 17-10-90. Public hearings.**

Where an application requires a public hearing before the Planning Commission or the Town Board (the "reviewing body") in accordance with Section 17-10-20, the following process shall apply:

- (a) The Town clerk shall set the date and time of a public hearing to be held by the Planning Commission and the Town Board. Notice of the public hearing shall be issued in accordance with Sections 17-10-20 and 17-10-80.
- (b) At the public hearing, the reviewing body shall review the application for conformance with the Subdivision Regulations and the applicable review standards for the application.
- (c) Any public hearing or other action of the reviewing body may be continued or postponed at any time to a specified date and time in order to permit preparation of additional information for further review by the reviewing body.
- (d) Following the conclusion of the public hearing, the Planning Commission shall decide that the application be recommended for approval, conditionally approved or denied. For any preliminary plan or final plat, the date upon which the plat shall be deemed submitted to the Planning Commission for purposes of C.R.S. § 31-23-215(1) shall be the date at which the public hearing is concluded.
- (e) Within ten (10) days of taking its action, the Planning Commission shall forward its recommendation to Town Board. Town Board shall conduct a public hearing and shall, at the conclusion of the hearing, approve, approve with conditions, deny the application, or continue the matter to a date certain.
- (f) Notwithstanding the imposition by the reviewing body of an express of specific condition of approval, all approvals shall be conditioned upon the applicant's execution of the plat and any applicable agreement accompanying the plat, and payment in full of all fees and charges for the processing and recordation of the plat and agreement(s).
- (g) The applicant for any subdivision approval shall bear the burden of presenting sufficient competent evidence at the public hearing to support the standards for approval set forth by these Subdivision Regulations. Any decision by the reviewing body to recommend approval, approve or conditionally approve a subdivision plan, plat or other application shall be based upon a consideration of all evidence presented during the public hearing. Where evidence presented is contradictory, the reviewing body shall weigh such evidence and judge the credibility and sufficiency of the evidence prior to rendering a decision.

**Sec. 17-10-100. Recording of plat and supporting documentation.**

Where the final decision by the Town Board to approve or conditionally approve any subdivision application must be evidenced by the recordation of a plat or other documentation in accordance with these regulations, the following process shall apply:

- (a) Following approval or conditional approval of the application by the Town Board, the applicant shall cause the fully executed plat or other documentation intended for recordation as part of the application approval to be delivered to the Town clerk in a form acceptable for recordation by the Summit County clerk and recorder.
- (b) The Town clerk shall review the form of the plat or documentation for completeness of all required signatures and notarizations. Where the plat or other documentation is determined by the Town clerk to be complete and in the proper form for recordation, the Town clerk shall cause the plat or other documentation to be recorded in the office of the Summit County clerk and recorder.
- (c) All costs of recordation shall be paid in advance by the applicant.

**Sec. 17-10-110. Subdivision Requirement Waiver**

- (a) An applicant or owner of property may request a waiver of any standard or requirement imposed by these Subdivision Regulations for the owner's lot or property. The Town Board may grant a waiver where the owner establishes each of the following:
  - (1) Literal enforcement of the standard or requirement would place an unnecessary and unreasonable hardship upon the owner for the lot or property;
  - (2) The granting of the waiver will not be materially detrimental to the public welfare or injurious to other property in the neighborhood and surrounding area; and
  - (3) The proposed waiver will not be adverse to the goals and policies of the Blue River Comprehensive Plan, to the extent that such goals and policies do not conflict with provisions or requirements of the Municipal Code and to the extent that such goals and policies set forth requirements which are sufficiently specific to permit the Planning Commission or Town Board to decide that the application meets or fails to meet such goal or policy.
- (b) Owners seeking a waiver for any standard or requirement shall submit a written request to the Town Manager together with an explanation of justification to support the request. The Town Manager shall review the request and supporting materials and provide a written opinion to the owner that the request will, or will not, be supported by the Town Manager and the reasons for the Manager's opinion. The owner may amend or revise the request and supporting materials within ten (10) days of the Town Manager's opinion. The Town Manager shall forward the request to the Planning Commission for administrative

review and the Commission shall render a written recommendation to the Town Board to approve, approve with conditions, or reject the request. The Commission's recommendation shall be forwarded to the Town Board for the Board's administrative review and final administrative determination.

- (c) The Town Board may impose reasonable conditions upon any approval of a waiver necessary to ensure continued conformance with these Subdivision Regulations, the Municipal Code, or necessary to protect the health, safety and welfare of the Town and its residents.
- (d) Waivers shall be approved only by written resolution of the Town Board in a form approved by the Town attorney.
- (e) Waivers approved by resolution of the Board shall remain effective for three (3) years from the date of resolution approval or such other time as the Board may specify in the approving resolution. Extensions of the expiration of a waiver may be requested by an owner and administratively approved by the Board (without Town Manager or Planning Commission review) upon a finding by the Board of just cause.

## **Article 11 Subdivision Improvements and Subdivision Agreements**

### **Sec. 17-11-10. Assurance of Completion and Maintenance of Improvements.**

- (a) Improvements and performance guarantees:
  - (1) Completion of Improvements. All subdividers shall be required to complete all the street and other improvements as specified in the subdivision plan or as required by this Chapter, Town adopted ordinance, resolution, policy, or standard and to dedicate all public improvements to the Town or other applicable public agencies, free and clear of all liens and encumbrances. The subdivider shall submit a certificate of title prior to conveying any land to the Town indicating all title restrictions.
  - (2) Subdivision Improvements Agreement. Subsequent to preliminary plan approval, but prior to recording a final plat, the subdivider shall either install all required improvements or enter into an agreement with the Town which shall obligate the subdivider to install and construct all public (hereafter also includes quasi-public) improvements within and adjacent to the proposed subdivision as may be required under the provisions of this Chapter. If the subdivider chooses to enter into an agreement, it shall specify the following at a minimum:
    - a. A description of all public improvements required.
    - b. An estimate of the cost of installing all public improvements.

- c. The timing of public improvements in relation to the development of individual sites.
  - d. A description of all private improvements required by this Chapter, conditions of approval, or other pertinent Town regulations.
  - e. A performance guarantee that the improvements will be installed in accordance with the approved plans.
- (b) Performance guarantees.
- (1) If the street and other improvements as specified in the subdivision plan or as required in this Chapter are not installed prior to filing of the plat, the subdivider shall post a performance guarantee consisting of either a surety bond, cash bond or an acceptable irrevocable letter of credit drawn upon a Colorado bank. The performance guarantee shall be posted with the Town prior to the time of recording the plat and shall be in an amount equal to one hundred and twenty (120) percent of the estimated costs of all remaining public improvements not already installed or paid for.
  - (2) The performance guarantee described in this Section, shall be subject to review by and found satisfactory to the Town Attorney. The period within which required improvements must be completed shall be incorporated in the guarantee. Said guarantee shall remain in full force and effect until released by the Town.
  - (3) The performance guarantee shall remain in effect and shall be renewed by the subdivider from time to time as necessary to assure continuous coverage until the performance guarantee is released by the Town.
  - (4). Failure to complete subdivision. Where a performance guarantee has been posted and a subdivision improvements agreement signed, and all improvements required by the Town have not been installed as required by such agreement, the Town may thereupon declare the agreement to be in default and may utilize the funds available from the performance guarantee to complete the improvements required for the subdivision.
- (c) Release or reduction of performance guarantees.
- (1) The Town will not accept the required improvements and will not release a performance guarantee until the Town has indicated that all required improvements have been satisfactorily completed and until the subdivider's engineer has certified to the Town, through submission of detailed as built plans of the subdivision, that all improvements are in accordance with the approved construction plans for the subdivision and are ready for dedication to the Town.
  - (2) A performance guarantee may be reduced by the Town upon actual completion of public improvements and then only in the ratio that the public improvements completed bears to the total public improvements of the plan. In no event shall a

performance guarantee be reduced below twenty (20) percent of the principal amount until all improvements have been completed and accepted by the Town.

(d) Maintenance of improvements and maintenance bonds.

- (1) The subdivider shall be required to maintain public improvements in the subdivision and to provide for snow removal, street cleaning, drainage, and general maintenance on streets and sidewalks prior to acceptance by the Town. In the event the subdivider fails to comply, the Town is authorized to perform the necessary work, without incurring any liability, and charge such work to the subdivider. Any such charges shall become a first and prior lien on the subdivision.
- (2) The subdivider shall be required to file a maintenance bond with the Town in a form acceptable to the Town Attorney, prior to acceptance of any public improvements, in an amount equal to twenty (20) percent of the original cost of the public improvements, in order to assure the satisfactory maintenance of the required improvements for a period of two (2) years after the date of their acceptance by the Town. Such bond shall guarantee all public improvements constructed by the subdivider shall remain free from defect for the required two-year period.

(e) Issuance of permits.

- (1) Prior to the issuance of a building permit for any lot within the subdivision, the extent of street improvements shall be adequate for vehicular access by the prospective occupant and by Police and Fire and any other emergency equipment. At a minimum, the street shall be improved with a base course up to that portion of the street that provides direct access onto the lot for which a building permit is requested.
- (2) Prior to the issuance of a certificate of occupancy for any structure all public improvements required by the subdivision plan shall be completed. The Town may waive the requirements of this Section if in the opinion of the Town Manager the issuance of a certificate of occupancy will not create significant adverse impacts to the community, and the improvements remaining are satisfactorily guaranteed to be completed in a timely manner.

**Sec. 17-11-20. As built plans.**

Finished plans of all public improvements as installed will be required before the Town will accept the improvements.



**Sec. 17-11-30. Failure to install improvements; rights relinquished.**

If one or more improvements required by this Chapter as a condition of subdivision approval are not installed within three (3) years of the date of Town subdivision approval, the plat shall be deemed void without further or additional action by the Town. All right to improve or develop the property on the part of the owner or subdivider shall thereby be relinquished. The Town Manager may, at the Manager's discretion, file with the Summit County Clerk and Recorder such document(s) as may be necessary to alert the public of the invalidity of the plat.

**Sec. 17-11-40. Plans and specifications.**

- (a) Plans and specifications are to be prepared based on appropriate traffic studies, soils reports, planning criteria, applicable standards, and requirements. All design work is to be prepared and signed by a professional engineer registered in the State. Plans are to be completed in sufficient detail to facilitate review.
- (b) All preliminary plans and final plats, where applicable, shall be designed in accordance with Chapter 11, Streets, Sidewalks and Public Property of the Municipal Code.
- (c) Where no standard exists, the Town may require adherence to professionally accepted standards such as standards and guidance provided by the American Association of State Highway and Transportation Officials (AASHTO).

**Sec. 17-11-50. Open space, trails, and other requirements.**

New subdivisions may be required to provide open space areas, parks, trails, sidewalks, roadway improvements, and other improvements which are reasonably related and proportionate to the impacts of the proposed subdivision and necessary to mitigate those impacts. It is anticipated that such requirements will be included or previously negotiated during the zoning or rezoning process for the property. The Town may require and rely upon studies and reports to determine the extent of the mitigation necessary to address the impacts.

**Sec. 17-11-60. Reserved.**

**Article 12     Reserved**

**Article 13 Plat Certificates**

**Sec. 17-13-10.     Plat certificates.**

The following certificates and notices, properly executed and in substantially the following form, shall be shown on the face of each final subdivision plat before it is recorded with the Summit County clerk and recorder. Any substantive variation from the text of the certificates as shown must be approved by the Town Attorney. Any other certificates or notices that are deemed necessary for the purposes of the particular plat shall also be included at the time of its submission.

Note: The following plat notes must be customized to fit the facts of the particular plat (i.e., if the owner is not an entity, but are two (2) individuals, the reference to the type of the business entity must be deleted; "has laid out" must be changed to "have laid out"; and so forth).

- (a) The title format as required on all plats is as follows:

**[Name of Type of Plat]**  
**SUBDIVISION NAME, FILING OR PHASE NUMBER LOT, BLOCK, TRACT**  
Town of Blue River, County of Summit, State of Colorado

- (b) Certificates shall be as follows:

**CERTIFICATION OF DEDICATION AND OWNERSHIP**

KNOW ALL MEN BY THESE PRESENTS that being sole owner(s) in fee simple of all that real property situated at (*insert property location*) in the Town of Blue River, Summit County, Colorado, described as follows: containing (*insert number here*) acres, more or less: have by these presents laid out, platted and subdivided the same into (*insert number here*) lots and (*insert number here*) blocks as shown on this final plat under the name and style of a subdivision in the Town of Blue River, Summit County, Colorado; and does hereby accept the responsibility for the completion of required improvements; and does hereby dedicate and set apart all of the public roads and other public improvements and places as shown on the accompanying plat to the use of the public forever; and does hereby dedicate those portions of said real property which are indicated as easement on the accompanying plat as easements for the purpose shown hereon; and does hereby grant the right to install and maintain necessary structures to the entity responsible for providing the services for which the easements are established.

Executed this day of (insert date), 20\_\_\_\_.

Owner (if individual owner to sign): \_\_\_\_\_

Corporation name (if corporation to sign): \_\_\_\_\_

Address: \_\_\_\_\_

By (signature): \_\_\_\_\_  
(type individual's name)

Title (if applicable): \_\_\_\_\_

*[Insert Notary Certificate Here as Approved by Town]*

**CERTIFICATION OF DEDICATION FOR MORTGAGE HOLDER OR DEED OF TRUST HOLDER**

KNOW ALL MEN BY THESE PRESENTS that being the holder of a mortgage or deed of trust on the real property situated at (insert property location) in the Town of Blue River, Summit County, Colorado, described as follows: containing (insert number here) acres, more or less; as shown on this final plat under the name and style of a subdivision in the Town of Blue River, Summit County, Colorado; agrees to the dedication and setting apart all of the public roads and other public improvements and places to the Town of Blue River as shown on the accompanying plat to the use of the public forever; and does hereby agree to the dedication of these portions of said real property which are indicated as easement on the accompanying plat as easements for the purpose shown hereon; and does hereby agree to the granting of the right to install and maintain necessary structures to the entity responsible for providing the services for which the easements are established.

Holder: (if individual owner to sign): \_\_\_\_\_

Corporation name (if corporation to sign): \_\_\_\_\_

Address: \_\_\_\_\_

By (signature): \_\_\_\_\_  
(type individual's name)

Title (if applicable): \_\_\_\_\_

*[Insert Notary Certificate Here as Approved by Town]*

**SURVEYOR'S CERTIFICATE**

(For all plats except condominium maps)

I do hereby certify that I am a registered Land Surveyor licensed under the laws of the State of Colorado, that this plat is true, correct and complete as laid out, platted, dedicated and shown hereon, that such plat was made from an accurate survey of said property by me and under my supervision and correctly shows the location and dimensions of the lots, easements and streets of said subdivision as the same are staked upon the ground in compliance with applicable regulations governing the subdivision of land.

In witness thereof I have set my hand and seal this day of (insert date here), 20\_\_.

Name: \_\_\_\_\_  
COLORADO LAND SURVEYOR NO. \_\_\_\_\_

Corporation name (If corporation): \_\_\_\_\_

Address: \_\_\_\_\_

By (signature): \_\_\_\_\_  
(type individual's name)

Title (if applicable): \_\_\_\_\_

**TITLE CERTIFICATE**

(Name of title company) does hereby certify that the title to all lands shown upon this plat have been examined and is vested in and that title to such lands is free and clear of all liens and encumbrances, except as follows: (Insert text here)

Dated this day of (insert date here), 20\_\_.

Title Company or Attorney's Name Address: \_\_\_\_\_

By: (Signature) \_\_\_\_\_  
(printed name and title of officer or attorney)

**CLERK AND RECORDER CERTIFICATE**

This plat was filed for record in the office of the Clerk and Recorder on this day of (insert date), 20\_\_, at (insert number) o'clock (insert A.M or P.M). Recorded under Reception No. (insert number) in Book (insert text) at Page (insert number).

Clerk and Recorder

Summit County, Colorado

By: (Signature) \_\_\_\_\_  
(printed name)

Title (if applicable): \_\_\_\_\_

**BOARD OF TRUSTEES CERTIFICATE**

This plat approved by the Board of Trustees of the Town of Blue River, Colorado this day of (insert date here), 20\_\_\_\_, for filing with the Clerk and Recorder of Summit County, Colorado and for the conveyance to and acceptance by the Town of Blue River of the public dedications shown hereon; subject to the provision that approval in no way obligates the Town of Blue River for maintenance of roads dedicated to the public until construction of improvements thereon shall have been completed in accordance with Town of Blue River specifications, and the Board of Trustees of the Town of Blue River has by a subsequent resolution agreed to undertake maintenance of the same. This approval does not guarantee that soil conditions, subsurface geology, ground water conditions, or flooding conditions of any lot shown hereon are such that a building permit or any other required permit will be issued. This approval is with the understanding that all expenses involving all improvements required shall be the responsibility of the subdivider and not the Town of Blue River.

Mayor, Town of Blue River

\_\_\_\_\_  
[Print name here]

ATTEST:

\_\_\_\_\_  
Town Clerk

**PLANNING AND ZONING COMMISSION CERTIFICATE**

This plat was recommended for approval by the Town of Blue River Planning and Zoning Commission this day of (insert date here), 20\_\_\_\_.

Chairperson

\_\_\_\_\_  
[Print name here]  
Blue River Planning & Zoning Commission

ATTEST:

\_\_\_\_\_  
Town Clerk

**CERTIFICATION OF OWNERSHIP**

KNOW ALL MEN BY THESE PRESENTS that being sole owner(s) in fee simple of all that real property situated in the Town of Blue River, Summit County, Colorado, described as follows: containing (insert number) acres, more or less: have by these presents laid out,

platted and subdivided the same into lots and blocks as shown on this final plat under the name and style of a subdivision in the Town of Blue River, Summit County, Colorado; and does hereby accept the responsibility for the completion of required improvements.

Executed this day of (insert date), 20\_\_\_\_.

Owner (if individual owner to sign): \_\_\_\_\_

Corporation name (if corporation to sign): \_\_\_\_\_

Address: \_\_\_\_\_

By (signature): \_\_\_\_\_  
(type individual's name)

Title (if applicable): \_\_\_\_\_

*[Insert Notary Certificate Here as Approved by Town]*

DRAFT



## Building Permit Application

Email to: [info@townofblueriver.org](mailto:info@townofblueriver.org)

Questions? Call (970) 547-0545 ext. 1

**Lot Number:** 14 **Subdivision:** Spillway Sub #1  
**Blue River Physical Address:** 0311 Wagon Road, Blue River, CO 80424

### Homeowner Information:

Name: Landyn Hackebeil  
Mailing Address: 405 Front St Comfort, TX 78013  
Phone: Office: 830-741-3400, Cell: 210-275-2824  
Email: landyn@ttcustomhomes.com

### Contractor Information

Company Name: Texas Traditions Design & Renovations Contact  
Name: Landyn Hackebeil Mailing  
Address: 405 Front St Comfort, TX 78013 Phone:  
Office: 830-741-3400, Cell: 210-275-2824 Email:  
landyn@ttcustomhomes.com Contractor

Registration #: \_\_\_\_\_

*\*\*Please note a Town of Blue River Business License is required for all businesses to conduct business in the Town of Blue River including contractors, sub-contractors and architects. \*\**

### Description of Project:

New ground-up construction of residential home

Distance to Property Line	Type of Heat: Gas	Construction Type: Type VB
North: <b>19.49'</b>	Roof: Standing Seam Metal roof	Building Height: 35
South: <b>18.11'</b>	Exterior Walls: Wood Siding	No. Stories: 2 Stories
East: <b>37.35'</b>	Interior Walls: Gypsum Board	Total # Bedrooms: 4
West: <b>56.90'</b>	Basement Fin. Sq.Ft.: 0 Sq. Ft.	Total # Bathrooms: <b>5.5</b>
New Addition/Res. Sq.Ft.: N/A	Main Level Sq.Ft.: 1967 Sq. Ft.	Septic or Sewer: Septic
Garage Sq.Ft.: <b>782'</b>	2 <sup>nd</sup> Level Sq.Ft.: 1744 Sq. Ft.	
Total Square footage: 3711 Sq. Ft.	3 <sup>rd</sup> Level Sq.Ft.: 0 Sq. Ft.	

SEPARATE PERMITS ARE REQUIRED FOR ELECTRICAL, PLUMBING, HEATING, VENTILATION WORK, & FIREPLACES. THIS PERMIT BECOMES NULL AND VOID IF CONSTRUCTION AUTHORIZED IS NOT COMMENCED WITHIN \_\_\_\_ OR IF CONSTRUCTION IS SUSPENDED OR ABANDONED FOR A PERIOD OF \_\_\_\_ AT ANY TIME AFTER WORK IS COMMENCED.

I HEREBY CERTIFY THAT I HAVE READ AND EXAMINED THIS APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. I AGREE TO COMPLY WITH ALL TOWN ORDINANCES AND STATE LAWS REGARDING BUILDING CONSTRUCTION AND TO BUILD ACCORDING TO THE APPROVED PLANS. THE GRANT OF A PERMIT DOES NOT PRESUMED TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY OTHER STATE OR LOCAL LAW REGULATING CONSTRUCTION OR THE PERFORMANCE OF CONSTRUCTION.

Signature of Owner or Contractor: \_\_\_\_\_ Date: \_\_\_\_\_

# Submittal Requirements

**\*\*ALL Submittals Must be Electronic\*\***  
**Emailed to: info@townofblueriver.org**

## Planning & Zoning Review Submittal Requirements

**\*\*Please indicate via check box item included as well as page number in submitted packet.**

Completed <input checked="" type="checkbox"/>	Item	Description	Page #
	<b>Site Plan</b>	Scale: 1" = 10'; May appear on a single sight plan. IF on a separate page, please indicate the page.	#3
		Property Boundaries	#3
		Building Envelope with setbacks	#3
		Proposed Buildings	#20-34
		Structures (existing & proposed)	#20-34
		Driveway & Grades	#35-40
		A wetlands delineation & Stream crossing structures where applicable.	#4
		Topographic survey, prepared and stamped by a licensed surveyor, indicating site contours at 2' intervals, easements, and significant natural features such as rock outcroppings, drainages and mature tree stands.	#42
		Transformer & vault location (if installed by owner or existing)	
		Well location; septic if applicable	#4
		Snow storage areas and calculations	
		Major site improvements	#12
		Existing & proposed grading & drainage	#4
	<b>Landscaping Plan</b>	<b>*May be included in the site plan**</b>	
		Landscaping must indicate tree removal for defensible space requirement; any trees 6" or more primarily noting the removal of any ponderosa pines or large trees. Clear cutting of a site is not allowed.	N/A, owner
		Indicate the percentage of trees removed and revegetation to be conducted.	N/A, owner
		Upon completion of the construction project, all land must be raked and	



		reseeded with native seed prior to issuance of CO. in cases of completion during snow coverage and/or winter, CO may be issued with conditions for completions within 60 days of the last snow and a deposit.	Understood.
		Any major structures (retaining walls; fences; landscaping rocks) must be indicated in detail on plans in conformance with the design regulations.	N/A, owner
		Indicating building walls, floors and roof relative to the site, including existing and proposed grades, retaining wall and proposed site improvements.	N/A, owner
	<b>Floor Plans</b>	Scale 1/8" = 1'	
		Indicate the general layout of all rooms, approximate size, and total square footage of enclosed space for each floor level.	#20-21
	<b>Exterior Elevations</b>	Scale same as floor plans	
		Detail to indicate the architectural character of the residence, fenestration and existing and proposed grades. Elevations must include a description of exterior materials and colors.	#27-30
	<b>Roof Plan</b>	Scale same as floor plans	
		Indicate the proposed roof pitch, overhang lengths, flue locations, roofing materials and elevations of major ridge lines and all eave lines.	#26
	<b>Materials Sheet</b>	Display materials to be used. Color renderings are suggested as well. In cases of additions, if matching the existing structure, photos of current home.	#43

**After Approval and BEFORE Permit is Issued:**

- **ELECTRONIC COPY Stamped set.**
  - **All of the above mentioned.**
  - Soils report if applicable.
  - Electrical, plumbing and mechanical plans.
  - Construction Management Plan. Please refer to the Town Code and Architectural Guidelines for all requirements.
  - Stamped structural plans.
  - Current Summit County Septic System Permit (including system plot plan), or evidence of full payment of tap fees to Upper Blue Sanitary District.
  - Current Colorado Well Permit or evidence of full payment of tap fees to Timber Creek Water District.
  - Current Colorado Department of Transportation Highway Access Permit, if access to Highway 9 is required.
  - Designation of General Contractor, except for bona fide homeowner contractor.
  - For Manufactured Homes the following additional information is required:
    - State of Colorado Division of Housing Approved Plans.
    - State of Colorado Division of Housing Registered Installer Certificate.

## Blue River Building Code Items

- ❖ When designing the structure, refer to the Blue River Municipal Town Code, Chapter 16 for zoning information and allowable uses/construction. The Building Code information is available under Chapter 18. <https://townofblueriver.colorado.gov>.
- ❖ Building Codes Adopted:
  - International Residential Code 2018
  - International Energy Conservation Code 2012
  - National Electric Code 2020
  - International Fire Code 2018
- ❖ Snow loads:
  - Roofs shall be designed in accordance with accepted engineering practice based upon a ground snow load of 100 psf.
  - Balconies/decks-125 psf.
  - No reductions for duration.
- ❖ Frost line depth:
  - Foundation footing minimum depth below grade-40 inches.
  - Uncovered deck piers may be set at 24 inches.
- ❖ Roof underlayment 100% Ice & Water shield.
- ❖ Roof may be metal; 30-year minimum architectural grade, composition fiberglass (dark brown, dark gray, dark green, weathered wood or black only); or class-A #1 cedar shakes.
- ❖ Wind speed: 90 mph, exposure “B”. Seismic design category: “B”.
- ❖ Propane gas alarm/shutoff system required.
- ❖ Wood burning stoves: Required to meet Colorado Dept. of Health, Regulation No. 4.
- ❖ The building height limit in the Town is 35 feet. Refer to the Architectural Guidelines for additional information.
- ❖ Locally re-settable GFCI breakers are required in bathrooms.
- ❖ Compliance with the International Energy Conservation Code is required.
- ❖ Any application that would create an accessory apartment must meet zoning regulations and will not be processed without prior approval of the Town Board of Trustees.
- ❖ Note that Hwy 9 access permits may require 3-4 months and well permits 5-6 weeks.
- ❖ Planning & Zoning Commission approvals become void if the building permit is not issued within eighteen (18) months.
- ❖ Building permits become void if construction is discontinued for more than 180 days.



## Building Permit Application

Email to: [info@townofblueriver.org](mailto:info@townofblueriver.org)  
 Questions? Call (970) 547-0545 ext. 1

**Lot Number:** 14 **Subdivision:** Spillway Sub #1  
**Blue River Physical Address:** 0311 Wagon Road, Blue River, CO 80424

**Homeowner Information:**

Name: Landyn Hackeheil  
 Mailing Address: 405 Front St Comfort, TX 78013  
 Phone: Office: 830-741-3400, Cell: 210-275-2824  
 Email: landyn@ttcustomhomes.com

**Contractor Information**

Company Name: Texas Traditions Design & Renovations Contact  
 Name: Landyn Hackeheil Mailing  
 Address: 405 Front St Comfort, TX 78013 Phone:  
Office: 830-741-3400, Cell: 210-275-2824 Email:  
landyn@ttcustomhomes.com Contractor

Registration #: \_\_\_\_\_

*\*\*Please note a Town of Blue River Business License is required for all businesses to conduct business in the Town of Blue River including contractors, sub-contractors and architects. \*\**

**Description of Project:**

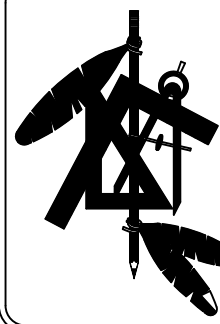
New ground-up construction of residential home

Distance to Property Line	Type of Heat: Gas	Construction Type: Type VB
North: 19.49'	Roof: Standing Seam Metal roof	Building Height: 35
South: 18.11'	Exterior Walls: Wood Siding	No. Stories: 2 Stories
East: 37.35'	Interior Walls: Gypsum Board	Total # Bedrooms: 4
West: 56.90'	Basement Fin. Sq.Ft.: 0 Sq. Ft.	Total # Bathrooms: 5.5
New Addition/Res. Sq.Ft.: N/A	Main Level Sq.Ft.: 1967 Sq. Ft.	Septic or Sewer: Septic
Garage Sq.Ft.: 782'	2nd Level Sq.Ft.: 1744 Sq. Ft.	
Total Square footage: 3711 Sq. Ft.	3rd Level Sq.Ft.: 0 Sq. Ft.	

SEPARATE PERMITS ARE REQUIRED FOR ELECTRICAL, PLUMBING, HEATING, VENTILATION WORK, & FIREPLACES. THIS PERMIT BECOMES NULL AND VOID IF CONSTRUCTION AUTHORIZED IS NOT COMMENCED WITHIN \_\_\_\_ OR IF CONSTRUCTION IS SUSPENDED OR ABANDONED FOR A PERIOR OF \_\_\_\_ AT ANY TIME AFTER WORK IS COMMENCED.

I HEREBY CERTIFY THAT I HAVE READ AND EXAMINDED THIS APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. I AGREE TO COMPLY WITH ALL TOWN ORDINANCES AND STATE LAWS REGARDING BUILDING CONSTRUCTION AND TO BUILD ACCORDING TO THE APPROVED PLANS. THE GRANT OF A PERMIT DOES NOT PRESUMED TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY OTHER STATE OR LOCAL LAW REGULATING CONSTRUCTION OR THE PERFORMANCE OF CONSTRUCTION.

Signature of Owner or Contractor: [Signature] Date: 5/15/23



LITTLEHORN ENGINEERING & SURVEYING

# CIVIL SITE AND GRADING PLANS FOR A SINGLE-FAMILY RESIDENCE

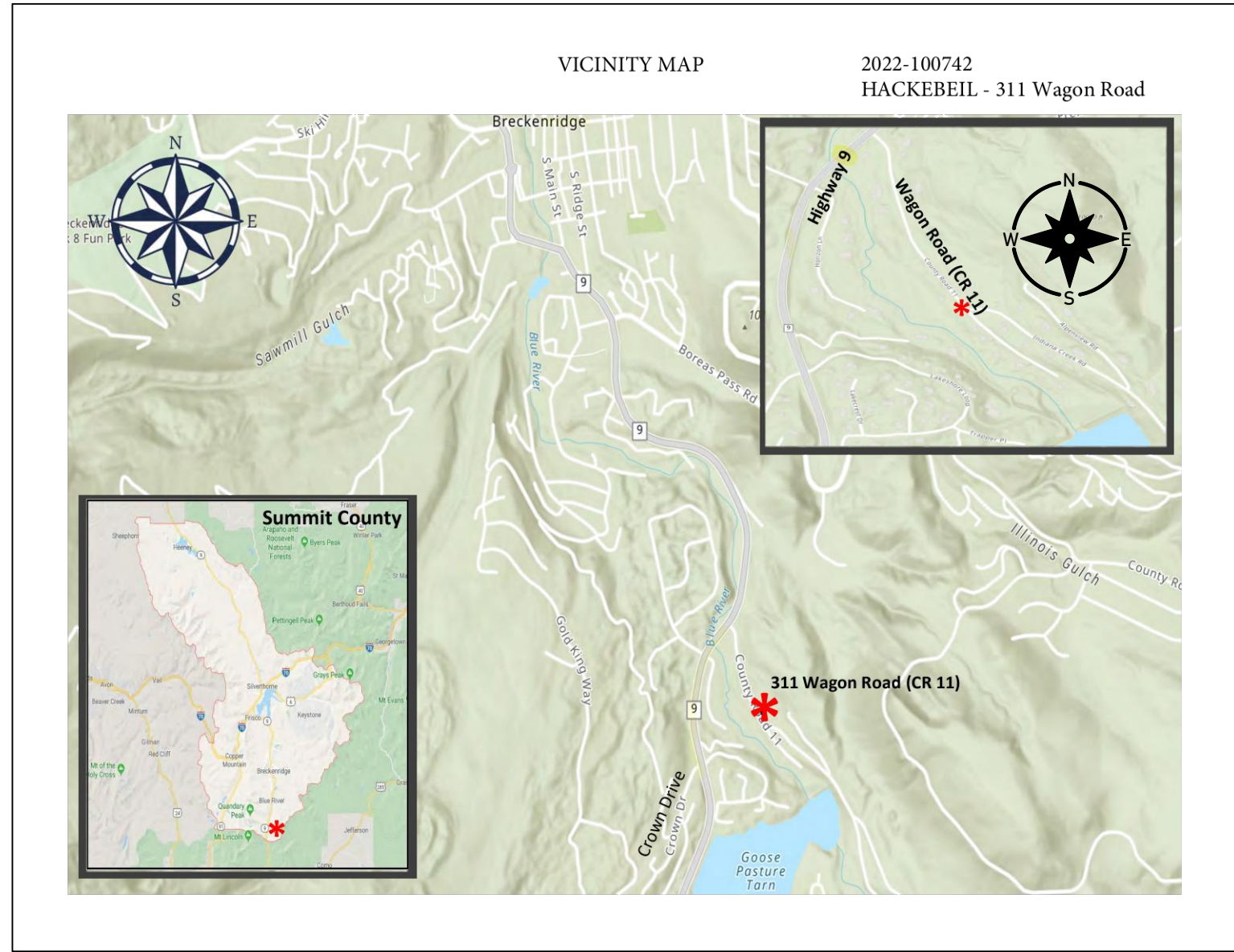
## 311 WAGON ROAD, TOWN OF BLUE RIVER, CO

A PERMIT IS REQUIRED FROM THE TOWN OF BLUE RIVER TO EXCAVATE & INSTALL A DRIVEWAY AND EXCAVATE ON THIS SITE AND FROM SUMMIT COUNTY FOR THE OWTS RELATED WORK

### CONSTRUCTION NOTES - Construction notes shall govern ALL civil drawings

#### GENERAL CONSTRUCTION AND PROJECT NOTES

- PERMITS. IT IS THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL RETAINING WALLS ARE INSTALLED APPROPRIATELY AND WITH THE PERMISSION OF THE COUNTY AND HOA AND SOMETIMES THE FIRE DEPARTMENT (VERIFY). THE CONTRACTOR IS RESPONSIBLE FOR PROCUREMENT OF ALL NECESSARY PERMITS. COUNTY AND FIRE ACCESS REQUIREMENTS FOR DRIVEWAY STANDARDS MUST BE MET. IF SITE DISTURBANCE RESULTS IN MORE THAN 10 ACRES OF DISTURBANCE, A PERMIT FROM THE STATE OF COLORADO IS REQUIRED.
- GREAT CARE AND PROFICIENCY HAVE GONE INTO THE PREPARATION OF THESE PLANS AND BLUE PRINTS. HOWEVER, DUE TO THE IMPOSSIBILITY OF PROVIDING "ON-SITE" SUPERVISORY CONTROL OVER ACTUAL CONSTRUCTION AND BECAUSE OF GREAT VARIATIONS IN LOCAL BUILDING CODES, SOILS, GROUNDWATER, BUILDING CONDITIONS, AND WEATHER CONDITIONS, THE ENGINEER ASSUMES NO LIABILITY EXCEPT AS DESCRIBED IN THE CONTRACT FOR PROFESSIONAL SERVICES. THE ENGINEER HAS DESIGNED THE PROJECT FROM GENERALLY ACCEPTED ENGINEERING PRACTICES AS IS TYPICAL IN THE LOCAL AREA TO ASSURE THAT THE DESIGNED ITEMS ARE SOUND.
- DISCREPANCIES IN BUILDING PLANS OFTEN EXIST, THEREFORE THE HOME OWNER AND THE CONTRACTOR MUST INTERPRET THE BLUE PRINTS AND VERIFY PRIOR TO CONSTRUCTION COMMENCEMENT: SITE CONDITIONS, CONSTRUCTION SETBACKS, BUILDING LOCATION, DIMENSIONS, MATERIALS, COLORS, QUANTITIES, ELEVATIONS, AND FINISHES. ALL WORK SHALL COMPLY WITH APPLICABLE GOVERNING CODES, BUILDING DEPARTMENT ORDINANCES, LAWS, AND MANUFACTURER'S SPECIFICATIONS. ANY CHANGES OR ITEMS REQUIRED FOR CONSTRUCTION WHICH ARE NOT CLEAR SHALL BE REPORTED TO THE ENGINEER (OR OTHER DESIGNERS/SURVEYORS) FOR APPROVAL.
- THESE PLANS ARE NOT AN INSTALLATION MANUAL AND DO NOT SHOW ALL DETAILS AND HAVE NOT AND CAN NOT CONSIDER EVERY CONCEIVABLE EVENT WHICH MAY OCCUR, AS THAT WOULD RENDER THE DESIGN AND FABRICATION OF THE PROJECT EXCESSIVELY EXPENSIVE. APPLICABLE INSTALLATION MANUALS AND CODES, AS LISTED IN THE SECTION LABELED "CODES", MUST BE REFERENCED AND USED FOR CONSTRUCTION. USE OF THESE DRAWINGS CONSTITUTES ACCEPTANCE OF RESPONSIBILITY FOR HAVING READ AND FULLY UNDERSTOOD THE CONSTRUCTION DRAWINGS AND THE ENGINEER'S LIABILITY. IF THE CLIENT OR CONTRACTOR HAS ANY QUESTIONS, PLEASE CONTACT THE ENGINEER PRIOR TO FABRICATION.
- LOCATE ALL BURIED UTILITIES PRIOR TO ANY CONSTRUCTION.
- A SOILS ENGINEER SHALL VERIFY ALL SOILS BEFORE & DURING PLACEMENT OF ANY APPURTENANCES, RETAINING WALLS, ASPHALT, OR CONCRETE.
- ALL MATERIALS SHALL BE PROTECTED WITH SUITABLE TEMPORARY WEATHER FACILITIES AS MAY BE REQUIRED TO PROTECT MATERIALS FROM DAMAGE DURING CONSTRUCTION.
- JOB-SITE SAFETY IS BEYOND THE SCOPE OF THESE DRAWINGS AND THE ABILITY OF THE ENGINEER TO MANAGE. THE OWNER AND CONTRACTORS BEAR ALL RESPONSIBILITY FOR THEIR OWN SAFETY AND THE SAFETY OF EMPLOYEES, WORKERS, AND PASSENGERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL METHODS OF CONSTRUCTION, INCLUDING TEMPORARY BRACING OR SHORING AS REQUIRED AND CONSTRUCTION SEQUENCING. CONTRACTOR SHALL PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE LINES AND DIMENSIONS OF THE CONTRACT DOCUMENTS AND SHALL PROVIDE FOR THE SAFETY OF THE WORKERS. SITE VISITS BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE.
- WEATHER PROTECTION AND SNOW REMOVAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND OWNER.
- DO NOT SCALE DRAWINGS. VERIFY LINES & DIMENSIONS ON STRUCTURAL DRAWINGS W/ ARCHITECTURAL DRAWINGS PRIOR TO ANY WORK. CALL ENGINEER FOR ANY DIMENSIONING QUESTIONS. DIMENSIONS ON DRAWINGS DO NOT ACCOUNT FOR FINISHES.
- SUBMIT ALL SHOP DRAWINGS TO THE ENGINEER. ENGINEER'S REVIEW OF SHOP DRAWINGS IS PROVIDED AS AN AID TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEW AND CORRECTNESS OF SHOP DRAWINGS. SHOP DRAWINGS DO NOT REPLACE CONTRACT DOCUMENTS. SHOP DRAWINGS (ONLY REVIEWED UPON CLIENT'S REQUEST) ARE SOMETIMES PROVIDED ON CULTIVATORS, FLARED END SECTIONS, GEOGRID FABRICS, FILTER FABRICS, SLOPE NETTING, EROSION MATS, AND OTHER SITE RELATED WORK.
- OTHERS SUBMITTING ENGINEERED DESIGN AND LAYOUT SHALL BEAR RESPONSIBILITY FOR SUCH WORK, AS AN ENGINEER FOR THE DRIVEWAY ONLY, WE SHALL BE LISTED OR RECOGNIZED AS THE ENGINEER OF RECORD FOR THE ENTIRE PROJECT.
- THE CONTRACTOR SHALL NOTIFY ENGINEER OF DETAILS NOT SHOWN ON PLANS THAT ARE NECESSARY FOR THE WORK TO PROCEED.
- ALTERNATES PROVIDED FOR THE CONTRACTOR'S CONVENIENCE SHALL REQUIRE THE CONTRACTOR TO PROVIDE ALL CHANGES AND COORDINATE ALL DETAILS NECESSARY SHOULD THE CONTRACTOR CHOOSE AN ALTERNATE.
- DRIVEWAYS: DRIVEWAYS SHALL CONFORM TO THE REQUIREMENTS OF THE COUNTY OR MUNICIPALITY WHICH INCLUDE THE DIMENSIONS DRIVEWAY WIDTHS, OPENINGS, AND THE CENTERLINE CURVE RADIUS. FOR THE TOWN OF BLUE RIVER THIS IS MAX. 6.0% FOR THE FIRST 20 FEET, THEN UP TO 12% WITH TOWN APPROVAL THEREAFTER. PARKING AREAS SHALL HAVE A MAXIMUM GRADE OF 4%, AND A MINIMUM GRADE OF 1.0% TO FACILITATE DRAINAGE. ALL GRADES MUST SLOPE AWAY FROM STRUCTURE REGARDLESS OF WHAT IS SHOWN ON ANY GRADING PLAN. DRAINAGE FROM DRIVEWAYS SHALL BE DIVERTED TO ROADSIDE DITCHES OR OTHER APPROPRIATE DRAINAGE WAY.
- PLEASE NOTE THAT ANY TIME A DRIVEWAY IS CUT INTO THE HILL SIDE FROM THE DIRECTION OF THE PREVAILING WINDS, DRIFTING WILL OCCUR. THIS DRIFTING AND SNOW BUILD-UP MAY MAKE THE DRIVE IMPASSABLE IN THE WINTER.
- PARKING AND DRIVEWAY SURFACES: RECYCLED ASPHALT, PAVING, OR CONCRETE IS USUALLY RECOMMENDED TO FACILITATE SNOW REMOVAL. PAVING IS NOT REQUIRED FOR PARKING AREA AND DRIVES SERVING SINGLE-FAMILY UNITS, OR FOR DUPLEXES WHERE THE ROAD PROVIDING ACCESS IS NOT PAVED. WHERE ROADS ARE PAVED, PARKING AREAS AND DRIVES FOR DUPLEXES MUST BE PAVED. PARKING AREAS NOT PAVED SHALL BE COVERED WITH 1-2 INCHES OF DRIVEWAY GRAVEL OR 2 INCHES OF RECYCLED ASPHALT (OWNER TO SPECIFY). WHEN PAVING IS USED, VERIFY ALL UNDERLYING SOILS WITH GEOTECH.
- PARKING STANDARDS: PARKING SHALL CONFORM TO COUNTY AND ANY APPLICABLE HOA REQUIREMENTS. FIELD VERIFY THE NUMBER OF PARKING SPACES REQUIRED.
- WHENEVER ROADWAYS, DRIVEWAYS, PARKING AREA, BRIDGES, REC. PATHS OR OTHER TYPES OF CONSTRUCTION RESULT IN EARTH DISTURBANCE, REVEGETATION AND/OR LANDSCAPING IS REQUIRED. REVEGETATION AND/OR LANDSCAPING WORK SHALL BE IN ACCORDANCE WITH THE COUNTY LAND USE AND DEVELOPMENT CODE AND IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AS PART OF PERMIT ISSUANCE.
- HISTORICAL FLOW QUANTITIES AND PATTERNS SHALL BE VERIFIED AND MAINTAINED. CHANGES TO SITE DRAINAGE CAN CAUSE ADVERSE EFFECTS TO NEIGHBORING PROPERTIES.
- SNOW STACK SPACE: SNOW STORAGE FOR DRIVEWAYS SHALL BE PROVIDED ON THE OWNER'S PROPERTY. USE OF THE RIGHT-OF-WAY FOR SNOW STORAGE BY PRIVATE INDIVIDUALS OR COMPANIES IS PROHIBITED (C.R.S. 43-5-303). SNOW STORAGE AREA IS SHOWN ON SITE PLAN.
- IF EARTH DISTURBANCE RESULTS IN CUT OR FILL SLOPES THAT CAN NOT BE TAPERED BACK INTO EXISTING GRADES AT THE GRADES SHOWN HEREIN, A RETAINAGE SYSTEM SHALL BE REQUIRED. IF THE PROPOSED RETAINING SYSTEM IS LESS THAN 4.0 FT IN HEIGHT, A DETAIL OF THE PROPOSED RETAINING SYSTEM MUST BE PROVIDED TO THE COUNTY FOR THEIR APPROVAL, PRIOR TO INSTALLATION.
- LOCATE BUILDINGS PER COUNTY REGULATIONS AND WHEN APPLICABLE, SUBDIVISION REGULATIONS. BOTH HAVE BUILDING SETBACKS AND STANDARDS AND BOTH SHALL BE CONSULTED PRIOR TO CONSTRUCTION.
- TREE CLEARING SHALL BE COMPLETED IN ACCORDANCE WITH FIRE REGULATIONS, SUBDIVISION REGULATIONS (WHEN APPLICABLE), AND COUNTY REGULATIONS.
- MINOR GRADE CHANGES MAY BE MADE ON-SITE TO MEET SITE CONDITIONS, HOWEVER, COUNTY AND HOA STANDARDS MUST BE MAINTAINED.
- EROSION CONTROL SYSTEMS ARE ILLUSTRATIVE AND SHALL BE VERIFIED BY OTHERS TO MEET ACTUAL CONSTRUCTION NEEDS.



#### VEHICLE CONSTRUCTION ENTRANCE

- WHEN CONSTRUCTION VEHICLES LEAVE ACTIVE CONSTRUCTION AREAS, SEDIMENT CONTROLS SHALL BE INSTALLED TO CONTROL SEDIMENT FROM LEAVING THE SITE. A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND SHALL CONSIST OF A STONE PAD OR EQUIVALENT CONTROL MATS LOCATED WHERE VEHICLES WILL LEAVE THE CONSTRUCTION SITE. THE PAD SHALL CONSIST OF AT LEAST 6 INCHES OF LARGE GRAVEL OR RIP RAP. THE PAD/ROCK ENTRANCE SHOULD BE AT LEAST 25 FT LONG, HOWEVER, LONGER ENTRANCES MAY BE REQUIRED TO ADEQUATELY CLEAN TIRES. GEOTEXTILE FABRIC MAY BE NEEDED UNDER THE ROCK TO PREVENT MIGRATION OF MUD FROM THE UNDERLYING SOIL INTO THE STONE. IF TIRES ARE CLEANED WITH WATER, THE WASH WATER SHOULD BE DIRECTED TO A SUITABLE SETTLING AREA. WHEN REQUIRED, A PIPE OR CULVERT AND/OR SMALL BERM SHALL BE CONSTRUCTED AT THE ENTRANCE.
- MONITORING AND MAINTENANCE: VEHICLE CONSTRUCTION PADS SHALL BE INSPECTED BY THE CONTRACTOR AS NEEDED AND AFTER RAIN ACTIVITIES. ANY EVIDENCE OF EROSION PROBLEMS SHALL BE REPAIRED AS QUICKLY AS POSSIBLE. SEDIMENT SHALL BE REMOVED AS APPROVED AND DISPOSED OF OUTSIDE THE FLOODPLAIN, WETLANDS AND BUFFER AREAS IN AN APPROVED DISPOSAL SITE OR FILL AREA AND THEN STABILIZED. WHENEVER THE EXISTING ROCK (OR MATS) BECOME BURIED OR FILLED WITH MUD, THE PAD WILL REQUIRE TOP-DRESSING WITH ADDITIONAL ROCK, OR REMOVAL AND RE-INSTALLATION. AREAS USED FOR SEDIMENT TRAPPING ALSO NEED TO BE CLEANED ROUTINELY. IF CONDITIONS ON THE SITE ARE SUCH THAT THE MAJORITY OF THE MUD IS NOT REMOVED BY THE VEHICLES TRAVELING OVER THE GRAVEL, ADDITIONAL SEDIMENT TRACKING CONTROL MEASURES SHOULD BE ADDED TO PREVENT THE TRACKING OF MUD OR DIRT ONTO THE PUBLIC ROADWAY.

#### ELECTRICAL/PLUMBING/MECHANICAL SYSTEMS

- THESE SYSTEMS ARE NOT BE WITHIN THE SCOPE OF THESE PLANS THROUGH THESE SYSTEMS SHOULD BE ENGINEERED. THE ENGINEER CAN NOT ACCEPT ANY RESPONSIBILITY WITH REGARD TO THESE SYSTEMS. ALL DESIGN AND INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE OWNER, BUILDER AND THEIR CONTRACTORS. IF THE CLIENT CHOOSES, THESE SYSTEMS CAN BE PROFESSIONALLY ENGINEERED. FOLLOW MANUFACTURER'S AND BUILDING MUNICIPALITY MECHANICAL, PLUMBING, AND ELECTRICAL CODES WHEN INSTALLING THESE SYSTEMS.

#### HIGH DENSITY POLYETHYLENE PIPE (HDPE) - CULVERT PIPE

- CULVERTS SPECIFIED SHALL BE APPROVED HIGH DENSITY POLYETHYLENE PIPE (HDPE) OR CORRUGATED METAL TYPE PIPE (CMP), WHEN CULVERTS ARE INSTALLED IN THE COUNTY RIGHT OF WAY THE CONTRACTOR SHALL VERIFY THE CULVERT TYPE WITH THE COUNTY BEFORE INSTALLATION.
- ALL HDPE PIPE SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS: A) THICKNESS ASTM D751 & D1593, B) DENSITY ASTM D1505, C) TENSILE ASTM D438, D) PUNCTURE RESISTANCE ASTM F7510IC METHOD 2065, E) LOW TEMPERATURE BRITTLENESS ASTM D744, F) ENVIRONMENTAL STRESS CRACK RESISTANCE ASTM D5397.
- PIPE SHOULD BE STOCKPILED ON LEVEL GROUND AND IF STACKED, BLOCKING SHOULD BE PROVIDED TO PREVENT ROLLING. STACKED PIPE SHOULD BE PLACED TO PREVENT DEFORMING AND DAMAGE. ALL MATERIALS SHALL BE PROPERLY STORED.
- TRENCHING SHOULD BE COMPLETED IN EXISTING SOILS WITH SIDEWALLS REASONABLY VERTICAL TO THE TOP OF THE PIPE. FOR POSITIVE PROJECTION EMBANKMENT INSTALLATIONS, WHEN EXCAVATION DEPTHS OR SOIL CONDITIONS REQUIRE SHORING OR USE OF A TRENCH BOX, THE BOTTOM OF THE SHORING OR TRENCH BOX SHOULD BE PLACED NO LOWER THAN THE TOP OF THE PIPE. THE FOLLOWING TRENCH WIDTHS ARE RECOMMENDED TRENCH WIDTHS FOR MOST INSTALLATIONS TO PERMIT PROPER PLACEMENT AND COMPACTION OF BACKFILL MATERIAL IN THE HAUNCHES AND AROUND THE PIPE.

PIPE DIAMETER	TRENCH WIDTH
12"	31"
15"	34"
18"	39"
24"	48"
30"	66"

- EMBEDMENT MATERIALS ARE THOSE USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL. ALL EMBEDMENT MATERIALS SHOULD BE FREE FROM LUMPS OF FROZEN SOIL, DEBRIS, STICKS, WOOD, AND ICE WHEN PLACED. ADDITIONALLY, EMBEDMENT MATERIALS SHOULD BE PLACED AND COMPACTED AT OPTIMUM MOISTURE CONTENT. FOR THIS PROJECT WE RECOMMEND CLASS I, CLASS II, OR CLASS III FOR EMBEDMENT MATERIALS (CLASS I - ANGULAR CRUSHED STONE OR ROCK, DENSE OR OPEN GRADED WITH LITTLE OR NO FINES (1/4 INCH TO 1 1/2 INCHES IN SIZE); CLASS II - CLEAN, COARSE GRAINED MATERIALS, SUCH AS GRAVEL, COARSE SANDS AND GRAVEL/SAND MIXTURES (1 1/2 INCHES MAXIMUM IN SIZE); CLASS III - COARSE GRAINED MATERIALS WITH FINES INCLUDING SILTY OR CLAYEY GRAVELS OR SANDS. GRAVEL OR SAND MUST COMPRISE MORE THAN 50 PERCENT OF CLASS III MATERIALS (1 1/2 INCHES MAXIMUM SIZE).
- PIPE FOUNDATION: THE TRENCH BOTTOM SHALL BE FREE OF ICE, SNOW, AND DEBRIS AND BE CAPABLE OF SUPPORTING 2500 PSF.
- THOROUGHLY CLEAN THE BELL AND SPIGOT ENDS PER MANUFACTURER'S RECOMMENDATIONS.
- REMOVE SHIPPING COLLARS (WHERE PROVIDED) PRIOR TO LOWERING THE PIPE IN THE TRENCH. PROPERLY DISPOSE OF SHIPPING COLLARS OUTSIDE THE PIPE TRENCH. DO NOT INSTALL PIPE WITH SHIPPING COLLARS ON THE PIPE AND DO NOT DISPOSE OF SHIPPING COLLARS IN THE TRENCH.
- LUBRICANT SHOULD BE LIBERALLY APPLIED TO BOTH THE BELL AND SPIGOT ENDS OF THE PIPE. CARE SHOULD BE TAKEN TO ENSURE LUBRICANT IS APPLIED TO THE CHAMFERED LEADING EDGE OF THE BELL.
- ALIGN THE PIPE AND PUSH THE SPIGOT HOME ON GRADE. JOINTS SHOULD BE INSTALLED WITH BELLS FACING UPSTREAM FOR PROPER INSTALLATION. GENERALLY, PIPES SHOULD BE LAID STARTING AT THE DOWNSTREAM END AND WORKING UPSTREAM. SMALL DIAMETER PIPE (BELOW 24") CAN USUALLY BE INSTALLED BY PUSHING THE JOINT HOME BY HAND. LARGER DIAMETERS MAY NECESSITATE USING A BAR OR EQUIPMENT TO PUSH HOME. IF A BAR OR EQUIPMENT IS UTILIZED, A WOOD BLOCK SHOULD BE USED TO PREVENT DAMAGE TO THE BELL. WHEN PUSHING THE JOINT HOME, MAKE SURE BEDDING MATERIAL IS NOT PULLED INTO THE BELL BY THE SPIGOT. MATERIAL SUCH AS SMALL STONES AND SAND PULLED INTO THE BELL AS THE PIPE IS JOINED CAN CAUSE LEAKS.
- MINIMUM COVER: CULVERTS ARE TYPICALLY PROVIDED WITH AT LEAST 12 INCHES (MEASURED FROM THE TOP OF THE PIPE TO THE GROUND SURFACE) OF SUITABLE IMPACTED SOIL COVER FOLLOWED BY DRIVEWAY GRAVEL OR ASPHALT (REF. PLAN). IF 12 INCHES CAN NOT BE MAINTAINED, CULVERT DISPLACEMENT MAY OCCUR.

#### SURVEY NOTES

- ANY BOUNDARY PINS OR CORNERS & TOPOGRAPHY IN QUESTION SHALL BE VERIFIED. IF CHANGES TO THE CIVIL DRAWINGS ARE REQUIRED, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY AND PRIOR TO CONSTRUCTION IF POSSIBLE. FOR THIS PROJECT THE BOUNDARY AND TOPOGRAPHIC SURVEY WERE COMPLETED BY OTHERS.
- EXISTING CONTOURS: EXISTING CONTOURS ARE SHOWN. LITTLEHORN IS NOT RESPONSIBLE FOR DEFECTS IN THE TOPOGRAPHIC SURVEY WHEN THE SURVEY IS PERFORMED BY OTHERS.

#### GRADING AND MATERIAL SPECIFICATIONS

- A PRE-GRADING MEETING WITH THE SITE OWNER, PROJECT ENGINEER AND CONTRACTOR IS HIGHLY RECOMMENDED AND SHOULD BE PERFORMED TO FACILITATE PROJECT INSTALLATION.
- WHEN THE GRADING OPERATIONS ENCOUNTER REMAINS OF PREHISTORIC PEOPLE'S DWELLING SITES, REMAINS, OR ARTIFACTS OF HISTORICAL, PALEONTOLOGICAL OR ARCHAEOLOGICAL SIGNIFICANCE, THE OPERATIONS SHALL BE TEMPORARILY DISCONTINUED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PROMPTLY CONTACT THE PROPER AUTHORITIES TO DETERMINE THE DISPOSITION THEREOF. IF REQUIRED BY STATE OR FEDERAL AUTHORITIES, THE CONTRACTOR SHALL PRESERVE THE AREA OF SIGNIFICANCE TO ALLOW AUTHORITIES TO EXCAVATE AND RECOVER THE ITEMS OF SIGNIFICANCE.
- AT ALL TIMES, PRECAUTIONS SHALL BE TAKEN FOR THE PROTECTION OF CULVERTS, EROSION CONTROL STRUCTURES, IRRIGATION CROSSINGS, MAIL BOXES, DRIVEWAY APPROACHES, VALVE BOXES, MANHOLES, SURVEY MONUMENTS, UNDERGROUND OR OVERHEAD UTILITY LINES AND ALL OTHER PUBLIC OR PRIVATE INSTALLATIONS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. ANY DAMAGE TO SUCH STRUCTURES SHALL BE REPAIRED, DOCUMENTED AND SUBMITTED TO THE APPROPRIATE AUTHORITY PRIOR TO ISSUANCE OF ANY CERTIFICATE OF COMPLETION FOR THE SITE.
- CLEARING AND GRUBBING: CLEARING AND GRUBBING CONSISTS OF REMOVING AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF THE APPROVED GRADING PLANS WHERE THE DRIVEWAY, SOIL TREATMENT AREA, HOUSE, WELL/WELL LINES, AND WASTEWATER LINES ARE TO BE LOCATED. CLEARING AND GRUBBING SHALL BE PERFORMED ONLY WHERE NECESSARY. THE PRESERVATION OF ALL VEGETATION AND ANY OTHER TREES AND OBJECTS SHOULD REMAIN WHERE FEASIBLE AND AS OUTLINED AND WITHIN LOCAL FIRE DEPARTMENT RECOMMENDATIONS. STUMP HOLES AND OTHER HOLES FROM WHICH OBSTRUCTIONS ARE REMOVED, SHALL BE BACKFILLED WITH SUITABLE MATERIALS AND COMPACTED AS REQUIRED. MATERIALS AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH STATE AND COUNTY REGULATIONS, WITH OWNER'S AND COUNTIES PERMISSION, ROOTS MAY BE BURIED ON-SITE.
- TOPSOIL: ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED. TOPSOIL SHALL CONSIST OF LOOSE FRIABLE LOAM REASONABLY FREE OF ADMIXTURES OF SUBSOIL, REFUSE, STUMPS, ROOTS, ROCKS, BRUSH, WEEDS, OR OTHER MATERIAL WHICH WOULD BE DETRIMENTAL TO THE PROPER DEVELOPMENT OF VEGETATIVE GROWTH. MATERIALS SELECTED FOR TOPSOIL, AND LYING WITHIN THE LIMITS OF THE PROJECT SHALL BE EXCAVATED AND STOCKPILED AS REQUIRED AND WHERE PERMISSIBLE. TOPSOIL SHALL BE PLACED AND SPREAD AT LOCATIONS AND TO THE THICKNESS SHOWN ON THE PLANS AND SHALL BE KEPT TO THE UNDERLYING MATERIALS BY THE USE OF HARROWS, ROLLERS, OR OTHER EQUIPMENT SUITABLE FOR THE PURPOSE. FOR SITES THAT DON'T CONTAIN ENOUGH REUSABLE TOP SOIL, APPROVED TOP SOIL WILL HAVE TO BE IMPORTED TO THE SITE.

- GENERAL EXCAVATION AND EMBANKMENT: EXCAVATION AND EMBANKMENT GRADING CONSISTS OF EXCAVATION, DISPOSAL, SHAPING, OR COMPACTION OF ALL MATERIAL ENCOUNTERED WITHIN THE LIMITS OF THE GRADING PLANS INCLUDING EXCAVATION FOR DITCHES AND CHANNELS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT IN ACCORDANCE WITH THE GRADING PLANS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, AND TYPICAL CROSS-SECTIONS SHOWN ON THE PLANS. THE EXCAVATION AND EMBANKMENTS SHALL BE FINISHED TO REASONABLY SMOOTH AND UNIFORM SURFACES. GRADING OPERATIONS SHALL BE CONDUCTED SO THAT MATERIAL OUTSIDE OF THE LIMITS OF SLOPES WILL NOT BE DISTURBED. PRIOR TO BEGINNING GRADING OPERATIONS IN ANY AREAS, ALL NECESSARY CLEARING AND GRUBBING AND TOPSOIL, IN THAT AREA SHALL HAVE BEEN PERFORMED IN ACCORDANCE WITH THE CLEARING AND GRUBBING AND TOPSOIL PROVISIONS. WHERE MATERIAL ENCOUNTERED WITHIN THE LIMITS OF GRADING ARE CONSIDERED UNSUITABLE FOR EMBANKMENT FOUNDATIONS, STREETS/ROADS, OR STRUCTURAL AREAS BY THE SOILS ENGINEER, SUCH MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SUITABLE MATERIAL. SOME EXAMPLES OF UNSUITABLE MATERIAL INCLUDE SOILS WHICH CONTAIN SIGNIFICANT AMOUNTS OF ORGANIC MATERIAL AND/OR LARGE DIAMETER ROCKS, CONCRETE, OR ASPHALT. EXCESS UNSUITABLE EXCAVATED MATERIAL, INCLUDING ROCK AND Boulders, THAT CANNOT BE USED IN EMBANKMENTS MAY BE PLACED IN NON-STRUCTURAL AREAS AS APPROVED BY THE SOILS ENGINEER.

- UTILITIES: WHEN UTILITY DEVICES ARE TO BE INSTALLED WITHIN THE COUNTY OR TOWN'S ROAD RIGHT-OF-WAY, THE COUNTY OR TOWN POLICY ON UTILITY USE OF COUNTY RIGHTS-OF-WAY SHALL APPLY. BEFORE BEGINNING ANY EXCAVATION, CALL FOR A UTILITY LOCATE.
- TRAFFIC CONTROL: APPROVED BARRICADES, WARNING SIGNS, AND FLAGMEN SHALL BE USED AS NECESSARY.

- DRIVEWAY SUBBASE: ALL MATERIAL SHALL BE OF SOUND PARTICLES AND SHALL BE FREE OF ORGANIC MATTER. COMPACTION OF MATERIAL SHALL BE VERIFIED BY THE ENGINEER BEFORE PLACEMENT OF CONCRETE, ASPHALT, TANKS, PIPES, OR OTHER STRUCTURES. SUBBASE AND BASECOURSE SHALL BE COMPACTED AS REQUIRED FOR STRUCTURAL FILL (SEE COMPACTION REQUIREMENTS). THE SUBBASE IS CONSIDERED THE NATIVE SOIL OR IMPORTED, APPROVED, STRUCTURAL FILL. IF SUBBASE DEPTHS EXCEED 12 INCHES, CONTACT THE ENGINEER FOR INSPECTION AND COMPACTION TESTING. THE SUBBASE SHALL BE FREE OF STICKS, ROCKS LARGER THAN 8 INCHES IN DIAMETER, SNOW, ICE, AND OTHER DEBRIS.

- SURFACE COURSE: INSTALL A TIN CRUSHED AGGREGATE SURFACE COURSE UNDER ALL PAVED AREAS. THE SURFACE COURSE IS USUALLY 1/2-INCH TO 2 INCHES IN DEPTH. SURFACE COURSE SHALL BE 1" MINUS MATERIAL AND MUST BE A HARD ROCK CRUSHED AGGREGATE WITH:

SIEVE SIZE	% PASSING
1"	100
#4	5-15
#10	0-8
#200	0-4

- WATERING: WATER SHALL BE APPLIED TO THE TOPSOIL AT THE LOCATIONS AND IN THE AMOUNTS WHERE REQUIRED. WATER SHALL BE APPLIED IN A FINE SPRAY BY NOZZLES OR SPRAY BARS IN SUCH A MANNER THAT IT WILL NOT WASH OR ERODE THE TOPSOIL. AREA ALL WATER USED SHALL BE FREE OF ANY MINERAL SALTS OR CONTAMINATING MATERIAL WHICH MIGHT RESULT IN EXPANSION OF MATERIALS AFTER PLACEMENT. SPRINKLING EQUIPMENT SHALL BE OF A TYPE WHICH ENSURES UNIFORM AND CONTROLLED DISTRIBUTION OF WATER WITHOUT PONDING OR WASHING. DUST PALLIATIVES SHALL BE APPLIED ON PORTIONS OF THE PROJECT AND ON Haul Roads AT THE LOCATIONS AND IN THE AMOUNTS AS MAY BE NECESSARY AND AS APPROVED. DUST PALLIATIVES MAY CONSIST OF WATER OR OTHER SUBSTANCES APPROVED BY THE COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT. WATER USED IN LANDSCAPING SHALL BE PROVIDED FOR SEEDING, MULCHING, PLANTING, TRANSLANTING, SODDING, AND SOIL STERILIZATION, AND ANY OTHER LANDSCAPING WORK AS REQUIRED.

- COMPACTION: FIELD DENSITY TESTS SHALL BE MADE BY THE SOILS ENGINEER AS SPECIFIED IN THE SOILS REPORT. WHEN A SOILS REPORT DOES NOT EXIST, CONTACT LITTLEHORN FOR TESTING REQUIREMENTS. WHEN TESTING IS NOT PERFORMED IN ROADWAYS, IN EXCAVATED TRENCH AREAS, AND AROUND TANKS AND THE HOUSE, SETTLEMENT IS LIKELY.

- SLOPE STANDARDS: CUT SLOPES (I.E., EXCAVATED SLOPES) SHALL BE NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL UNLESS SPECIFICALLY IDENTIFIED OTHERWISE IN THESE PLANS. FILL SLOPES SHOULD NOT EXCEED TWO (2) HORIZONTAL TO ONE (1) VERTICAL OR AS SPECIFIED IN THE PLANS. ALL PERMANENT CUT AND FILL SLOPES SHALL BE CONSTRUCTED AT SLOPES WHICH ENSURE LONG TERM SLOPE STABILITY AND THAT WILL NOT CAUSE ACCELERATED EROSION. THE TOPS AND TOES OF CUT AND FILL SLOPES SHALL BE SET BACK FROM PROPERTY BOUNDARIES AS FAR AS NECESSARY FOR SAFETY OF THE ADJOINING PROPERTIES AND TO PREVENT DAMAGE RESULTING FROM WATER RUN-OFF OR EROSION OF THE SLOPE. THE TOPS AND TOES OF CUT AND FILL SLOPES SHALL BE SET BACK FROM STRUCTURES AS FAR AS IT IS NECESSARY FOR ADEQUACY OF FOUNDATION SUPPORT AND TO PREVENT DAMAGE AS A RESULT OF WATER RUN-OFF OR EROSION OF THE SLOPES. FOR SLOPES WHICH EXCEED 30% TERRACES AT LEAST EIGHT (8) FEET IN WIDTH SHALL BE ESTABLISHED. AT LEAST A TWO (2) PERCENT GRADIENT SHALL BE MAINTAINED FROM BUILDING PADS TO DRAINAGE FACILITIES UNLESS OTHERWISE APPROVED.

- GUARANTEES: ALL CONSTRUCTION SHALL BE GUARANTEED BY THE CONSTRUCTION FIRM OR CONSTRUCTING INDIVIDUAL FOR A MINIMUM OF ONE YEAR TO MEET THE CONTINUAL STANDARDS TO WHICH IT WAS CONSTRUCTED. SUCH GUARANTEE MAY BE BY BOND, CASH DEPOSIT, PLEDGED SECURITIES, OR OTHER VALUABLE CONSIDERATIONS ACCEPTABLE BY THE OWNER.

**PROPERTY INFORMATION**  
 311 WAGON ROAD  
 BLUE RIVER, CO 80424  
 SPILLWAY SUB. #1, LOT 14

**DRAWING PREPARED FOR:**  
 LANDYN AND MICHELLE HACKEBEIL  
 405 FRONT STREET  
 COMFORT, TX 78013

#### CONTRACTOR:

TBD

**BUILDING ARCHITECT:**  
 ROSE-VILLACORTE ARCHITECTURE, LLC  
 480 NORTH SAM HOUSTON PARKWAY EAST, SUITE 110  
 HOUSTON, TX 77060  
 OFFICE # (346) 498-3808

#### DESIGN CRITERIA AND OTHER NOTES

- WIND LOADING ON RETAINING WALLS: V<sub>ult</sub> = 110 MPH, EXPOSURE C (90 MPH V<sub>asd</sub> OR NOMINAL WIND - 2018 IRC) PROVISIONS FOR DETENTION POND NOT REVIEWED OR REQUIRED PER THE TOWN OF BLUE RIVER STANDARD ACCEPTED EROSION CONTROL METHODS ARE USED LANDSCAPING DESIGN REQUIREMENTS AND SPECIFICATIONS NOT REVIEWED
- SOIL CONDITIONS FOR GRADING DESIGN AND THESE CIVIL DRAWINGS ARE BASED UPON THE SOILS REPORT BY LITTLEHORN ENGINEERING, DATED JANUARY 5, 2022. POORLY GRADED SAND WITH SILT, GRAVEL, COBBLES AND BOULDERS PASSIVE EQUIV. FLUID PRESSURE - 275 P.C.F. (DRAINED) EQUIV. FLUID UNIT SOIL WEIGHT - 46 P.C.F. (DRAINED) COEFFICIENT OF FRICTION - 0.35 ALLOWABLE BEARING PRESSURE - 2750 P.S.F. ON UNDISTURBED SOIL

SOIL CONDITIONS SHALL BE VERIFIED BY GEOTECH DURING CONSTRUCTION CONTACT ENGINEER FOR INSPECTION OF ALL RETAINING WALLS, STRUCTURAL FILLS, AND ROCK LINED SWALES.

CIVIL SHEET INDEX	
SHEET#	SHEET DESCRIPTION
C0	COVER SHEET & SITE CONSTRUCTION GENERAL NOTES
C1	PROPOSED OVERALL SITE PLAN WITH OVERALL DRIVEWAY AND PARKING AND SNOW REMOVAL
C1.1	PROPOSED SITE PLAN DETAIL WITH DRIVEWAY AND PARKING
C2	EROSION CONTROL PLAN
C3	SITE CONSTRUCTION DETAILS
C4	EROSION CONTROL SPECIFICATIONS & DETAILS
-	BUILDING HEIGHT ANALYSES IS BY OTHERS
-	
-	
-	
-	
-	
-	
6	SHEETS TOTAL WITH COVER PAGE (24X36 SHEETS)

DIG SAFELY - CALL 811 GAS/ELECTRIC/TELEPHONE/CABLE WWW.UCC2.ORG

#### CODES GOVERNING MATERIALS AND WORKMANSHIP\*

IRC 2018	INTERNATIONAL RESIDENTIAL BUILDING CODE
ACI 308	REINFORCED CONCRETE DETAILING MANUAL
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
AWWA	AMERICAN WATER WORKS ASSOCIATION
BRBD	BLUE RIVER BUILDING DEPARTMENT (BUILDINGS & SITE RELATED WORK EXCEPT FOR OWTS)
SECHD	SUMMIT COUNTY COUNTY ENVIRONMENTAL HEALTH DEPARTMENT (WASTEWATER SYSTEM & DRIVEWAY)
A.F.D.	BLUE RIVER COUNTY PLANNING DEPARTMENT (SETBACKS, ZONING, ETC.)
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASSE	AMERICAN SOCIETY OF SANITARY ENGINEERS
MSDS	MATERIAL SAFETY DATA SHEETS

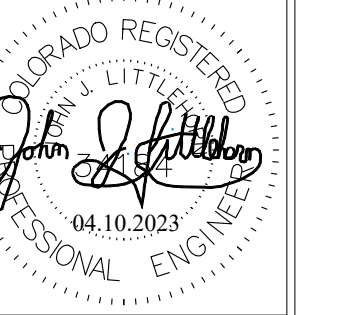
\*ALL OF THE ABOVE CODES MAY NOT BE USED FOR CONSTRUCTION IN THE SPECIFIC PROJECT. WHEN APPLICABLE, THE CODE SHALL APPLY.

#### SOME ABBREVIATIONS USED IN THESE DRAWINGS

NOT ALL ABBREVIATIONS ARE USED IN THESE DRAWINGS. ABBREVIATIONS MAY OR MAY NOT CONTAIN PERIODS. THIS CHART IS FOR INFORMATION PURPOSES ONLY. CONTACT ENGINEER FOR ANY MISSING ABBREVIATIONS USED.

A.B.	ANCHOR BOLT	FG	FINISH GRADE	PLY.	PLYWOOD
ABV.	ABOVE	FIN.	FINISH(ED)	P.S.F.	POUNDS PER SQUARE FOOT
ADD'L.	ADDITIONAL	FLR.	FLOOR	P.S.I.	POUNDS PER SQUARE INCH
A.F.F.	ABOVE FINISHED FLOOR	FDN.	FOUNDATION	P.T.	PRESSURE TREATED
AL.F.G.	ARCHITECTURAL FINISH GRADE	FDN.M.	FOUNDATION	PWR.	POWER (CABINET)
ALUM.	ALUMINUM	F.O.C.	FACE OF CONCRETE	QTY.	QUANTITY
ALT.	ALTERNATE	F.O.M.	FACE OF MASONRY	QUA.	QUARRY
APPRX.	APPROXIMATE(LY)	F.O.S.	FACE OF STUD	RAD.(R)	RADIUS
ARCH.	ARCHITECTURAL	F.O.W.	FACE OF WINDOW	REF.	REFERENCE OR REFER TO
AWG.	AMERICAN WIRE GAUGE	F.S.	FINISH SURFACE	REIN.F.	REINFORCEMENT(S)
AWN.	AWNING	FT.(F)	FOOT (FEET)	REQ'D.	REQUIRED
BLDG.	BUILDING	FTG.	FOOTING	RES.	RIGID GALVANIZED STEEL
BLK.	BLOCK	GA.	GAUGE	R.S.	ROUGH SAWN
BM.	BEAM	GAL.	GALVANIZE(D)	SCH(D).	SCHEDULE
B.O.F.	BOTTOM OF FOOTING	GEN.	GENERAL	SF	SQUARE FEET
BOT.	BOTTOM OF TANK	G.F.I.	GROUND FAULT CIRCUIT INTER.	SHT.	SHEET
BRS.	BEARING	GPS.	GLOBAL POSITIONING SYSTEM	SIM.	SIMILAR
CAB.	CABINET	GPD.	GALLONS PER DAY	SPEC.	SPECIFICATION(S)
CANT.	CANTILEVER(ED)	GRND.	GROUND	SQ.	SQUARE
C.I.P.	CAST IN PLACE	HRZ.	HORIZONTAL	S.S.	STAINLESS STEEL
CL.	CENTERLINE	H OR HT.	HEIGHT	STA.	SOIL TREAT. AREA (LEACH FIELD)
CLG.	CEILING	IN.(T)	(N) INCHES	STD.	STANDARD
CLR.	CLEAR	INSUL.	INSULATION	STL.	STEEL
COL.	COLUMN	INT.	INTERIOR	STRUC.	STRUCTURAL
COMP.	COMPOSITE	INT.	INTERIOR	T&B	TOP AND BOTTOM
CONC.	CONCRETE	LB.(#)	LAG BOLTS	TEG.	TONGUE AND GROOVE
CONN.	CONNECTION(OR)	L.F.	LINEAR FEET (FOOT)	T.B.D.	TO BE DETERMINED
CONST.	CONSTRUCTION	L.	LONG(TUDINAL) OR LENGTH	TEMP.	TEMPORARY OR TEMPERED
CONT.	CONTINUOUS	MAS.	MASONRY	THK.	THICKNESS
CSMT.	CASEMENT	M.	MAXIMUM	THRU	THROUGH
DBL.	DOUBLE	M.B.	MACHINE BOLT	T.N.	TOE NAIL
DEPT.	DEPTH	MECH.	MECHANICAL	T.O.C.	TOP OF CURB
DIAG.	DIAGONAL	MFG.	MANUFACTURER	T.O.F.	TOP OF FOOTING
DIM.	DIMENSION	MFR.	MANUFACTURER	T.O.M.	TOP OF MOUND
DTL.	DETAIL	MIL.	MILLIMETER	T.O.P.	TOP OF PLATE (PARAPET)
DWG.	DRAWING(S)	MIN.	MINIMUM	T.O.S.	TOP OF SLAB
DWL.	DOWEL(S)	MISC.	MISCELLANEOUS	T.O.	TOP OF SAND (LEACH FIELD)
EA.	EACH	MTL.	METAL	T.O.B.	TOP OF BERM
ELEV.	ELEVATION	N.I.C.	NOT IN CONTRACT	T.O.T.	TOP OF TANK

THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.



OVERALL SITE PLAN  
311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB#1, LOT 14

LITTLEHORN ENGINEERING & SURVEYING  
"PEACE OF MIND THROUGH HOLISTIC DESIGN"  
351 HIGHWAY 285, SUITE #201  
FAIRPLAY, COLORADO 80440  
MAIN OFFICE 719.836.7120  
SILVER CLIFF PHONE 719.783.3757



PROJECT NO.  
2022-100742

CLIENT  
LANDYN AND MICHELLE HACKEBEIL

DATE  
04.10.2023

REVISION:  
△ -  
△ -

C1

LEGEND	
3	RETAINING WALL HEIGHT (ABOVE GRADE HEIGHT WITHOUT KEY)
—SS—	PROPOSED SEWER LINE
—W—	PROPOSED WATER LINE
—○—	PROPOSED SILT FENCE
+++++	PROPOSED STRAW WATTLE
---	EXISTING CONTOUR
100	EXISTING CONTOUR LABEL
100	PROPOSED CONTOUR
100	PROPOSED CONTOUR LABEL
●	PROPERTY PIN
●	ELEVATION POINT (0.1 FEET ±)
□	UTILITY
←	DRAINAGE ROUTE
14p	TREE TYPE & SIZE (PINE/ASPEN, Ø)
▨	PROPOSED SNOW STORAGE
▨	WETLANDS (IF DELINEATED)
▨	BLOCK RETAINING WALL
▨	BOULDER RETAINING WALL
▨	EXISTING ASPHALT ROADWAY
▨	PROPOSED GRAVEL ROADWAY

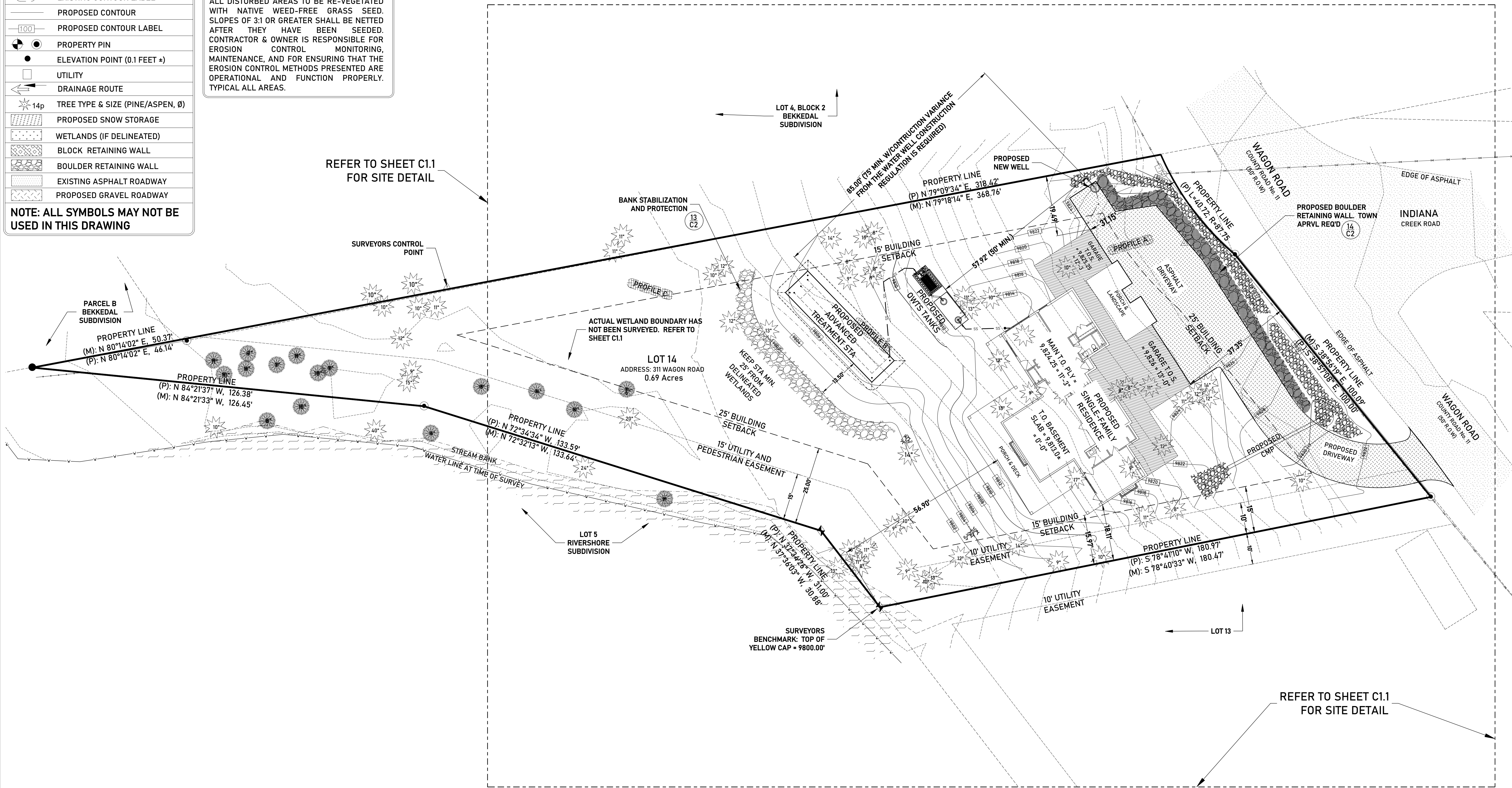
NOTE: ALL SYMBOLS MAY NOT BE USED IN THIS DRAWING

IN AREAS WHERE IT IS NOT POSSIBLE TO MAINTAIN A 1:1 CUT SLOPE, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL NECESSARY SHORING, BRACING, SLOPE STABILIZATION AND DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORKERS AS WELL AS MATERIALS AND WORKMANSHIP ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AND KEEPING THE SITE DE WATERED.

DRIVEWAY DESIGNED SLIGHTLY STEEPER THAN 10% (AND WITH RETAINING WALLS). ALL EFFORTS WERE MADE TO KEEP THE DRIVEWAY AT 10% MAX AND REDUCE THE FRONT RETAINING WALL HEIGHT; HOWEVER, THE NATURAL SITE GRADES, BEING OVER 30% IN MANY AREAS, AND THE HOUSE DESIGN DICTATED A STEEPER DRIVEWAY. A STEEPER DRIVEWAY DID REDUCE THE HOUSE HEIGHT. TOWN AND FIRE DEPARTMENT APPROVAL IS REQUIRED.

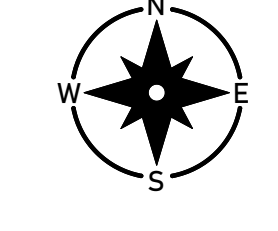
NOTE: ENTRANCE INTO THE RESIDENTIAL GARAGES MAY REQUIRE A 3-POINT TURN.

ALL DISTURBED AREAS TO BE RE-VEGETATED WITH NATIVE WEED-FREE GRASS SEED. SLOPES OF 3:1 OR GREATER SHALL BE NETTED AFTER THEY HAVE BEEN SEEDED. CONTRACTOR & OWNER IS RESPONSIBLE FOR EROSION CONTROL MONITORING, MAINTENANCE, AND FOR ENSURING THAT THE EROSION CONTROL METHODS PRESENTED ARE OPERATIONAL AND FUNCTION PROPERLY. TYPICAL ALL AREAS.



REFER TO SHEET C1.1 FOR SITE DETAIL

REFER TO SHEET C1.1 FOR SITE DETAIL



### Site and Grading Plan

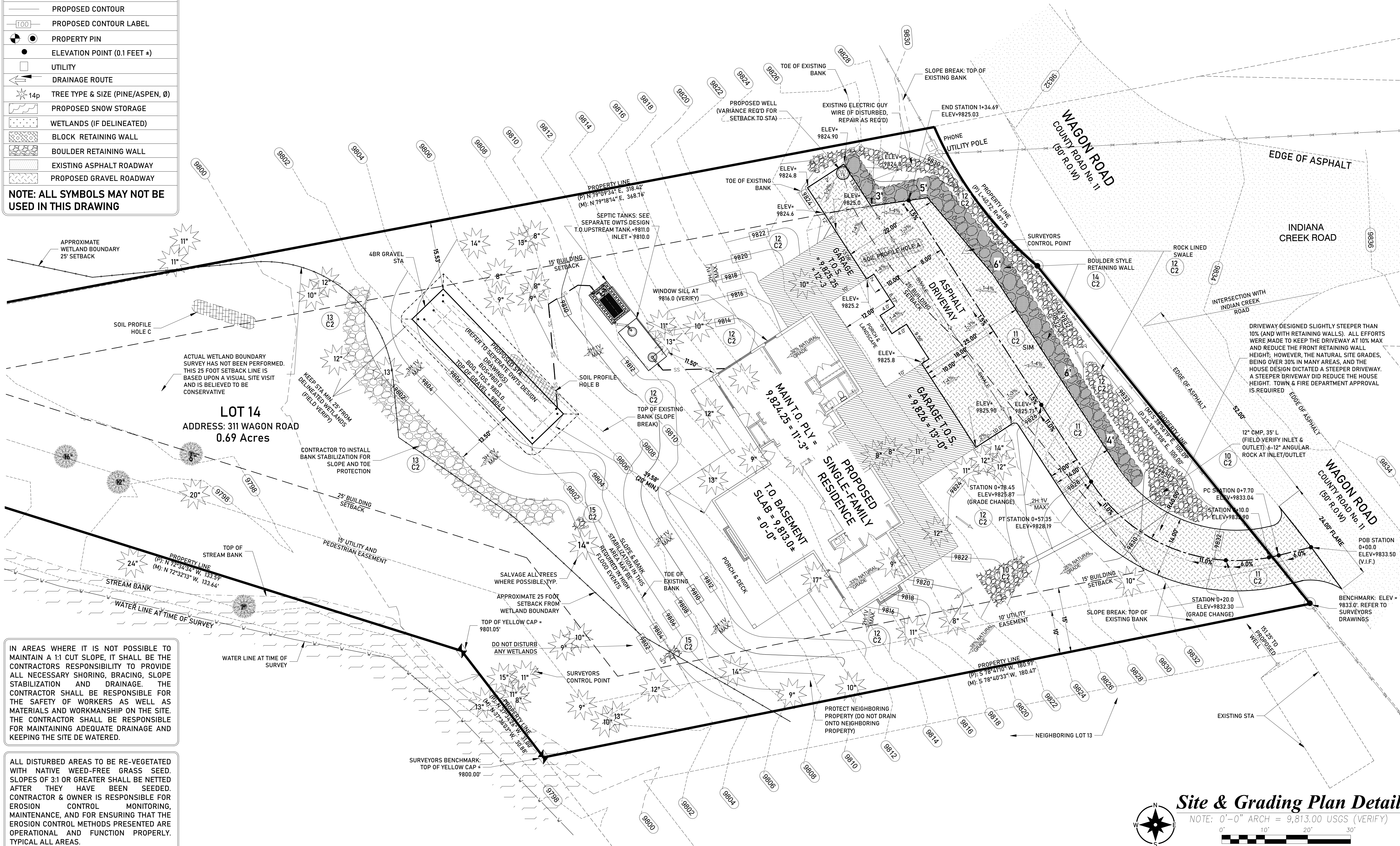
NOTE: 0'-0" ARCH = 9,813.00 USGS (VERIFY)



PLOTTED SCALE 1" = 15'

LEGEND	
3	RETAINING WALL HEIGHT (ABOVE GRADE HEIGHT WITHOUT KEY)
—SS—	PROPOSED SEWER LINE
—W—	PROPOSED WATER LINE
—○—	PROPOSED SILT FENCE
	PROPOSED STRAW WATTLE
---	EXISTING CONTOUR
100	EXISTING CONTOUR LABEL
---	PROPOSED CONTOUR
100	PROPOSED CONTOUR LABEL
●	PROPERTY PIN
●	ELEVATION POINT (0.1 FEET ±)
□	UTILITY
→	DRAINAGE ROUTE
14p	TREE TYPE & SIZE (PINE/ASPEN, Ø)
☄	PROPOSED SNOW STORAGE
▨	WETLANDS (IF DELINEATED)
▨	BLOCK RETAINING WALL
▨	BOULDER RETAINING WALL
▨	EXISTING ASPHALT ROADWAY
▨	PROPOSED GRAVEL ROADWAY

**NOTE: ALL SYMBOLS MAY NOT BE USED IN THIS DRAWING**



IN AREAS WHERE IT IS NOT POSSIBLE TO MAINTAIN A 1:1 CUT SLOPE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY SHORING, BRACING, SLOPE STABILIZATION AND DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORKERS AS WELL AS MATERIALS AND WORKMANSHIP ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AND KEEPING THE SITE DE WATERED.

ALL DISTURBED AREAS TO BE RE-VEGETATED WITH NATIVE WEED-FREE GRASS SEED. SLOPES OF 3:1 OR GREATER SHALL BE NETTED AFTER THEY HAVE BEEN SEEDED. CONTRACTOR & OWNER IS RESPONSIBLE FOR EROSION CONTROL MONITORING, MAINTENANCE, AND FOR ENSURING THAT THE EROSION CONTROL METHODS PRESENTED ARE OPERATIONAL AND FUNCTION PROPERLY. TYPICAL ALL AREAS.

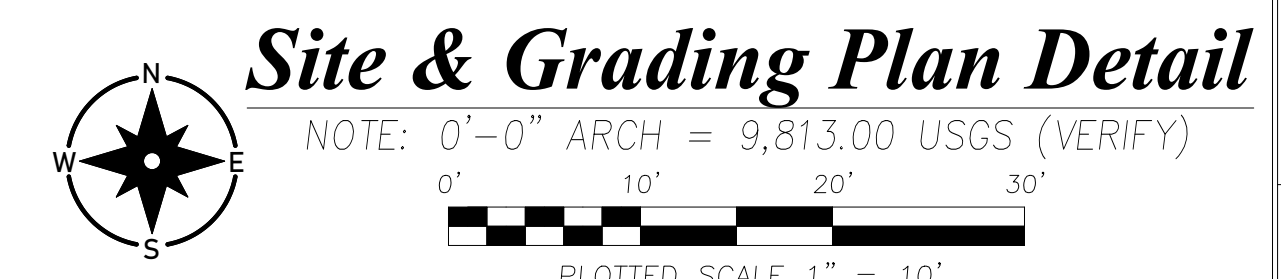
THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

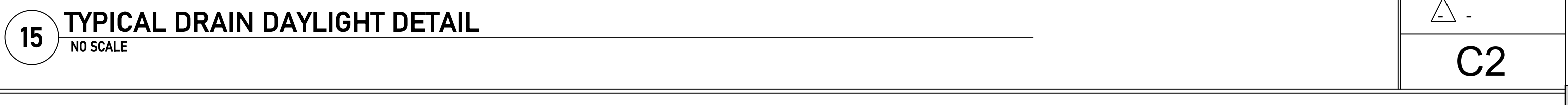
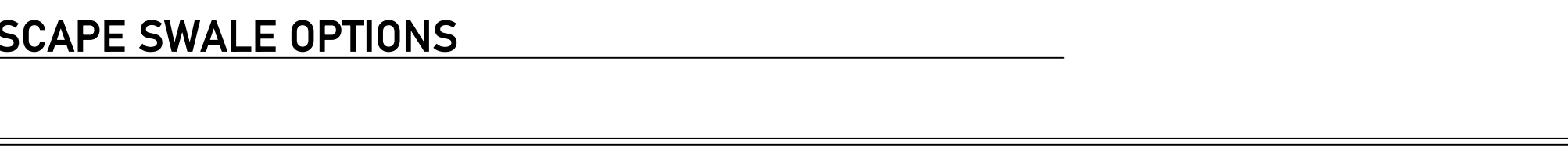
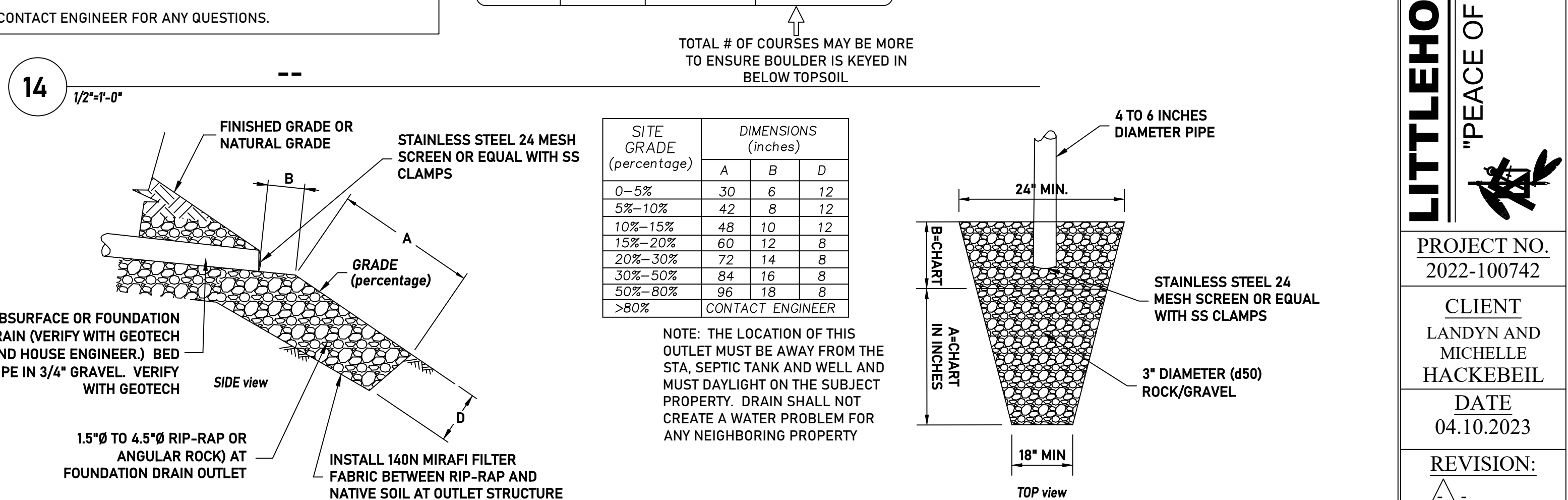
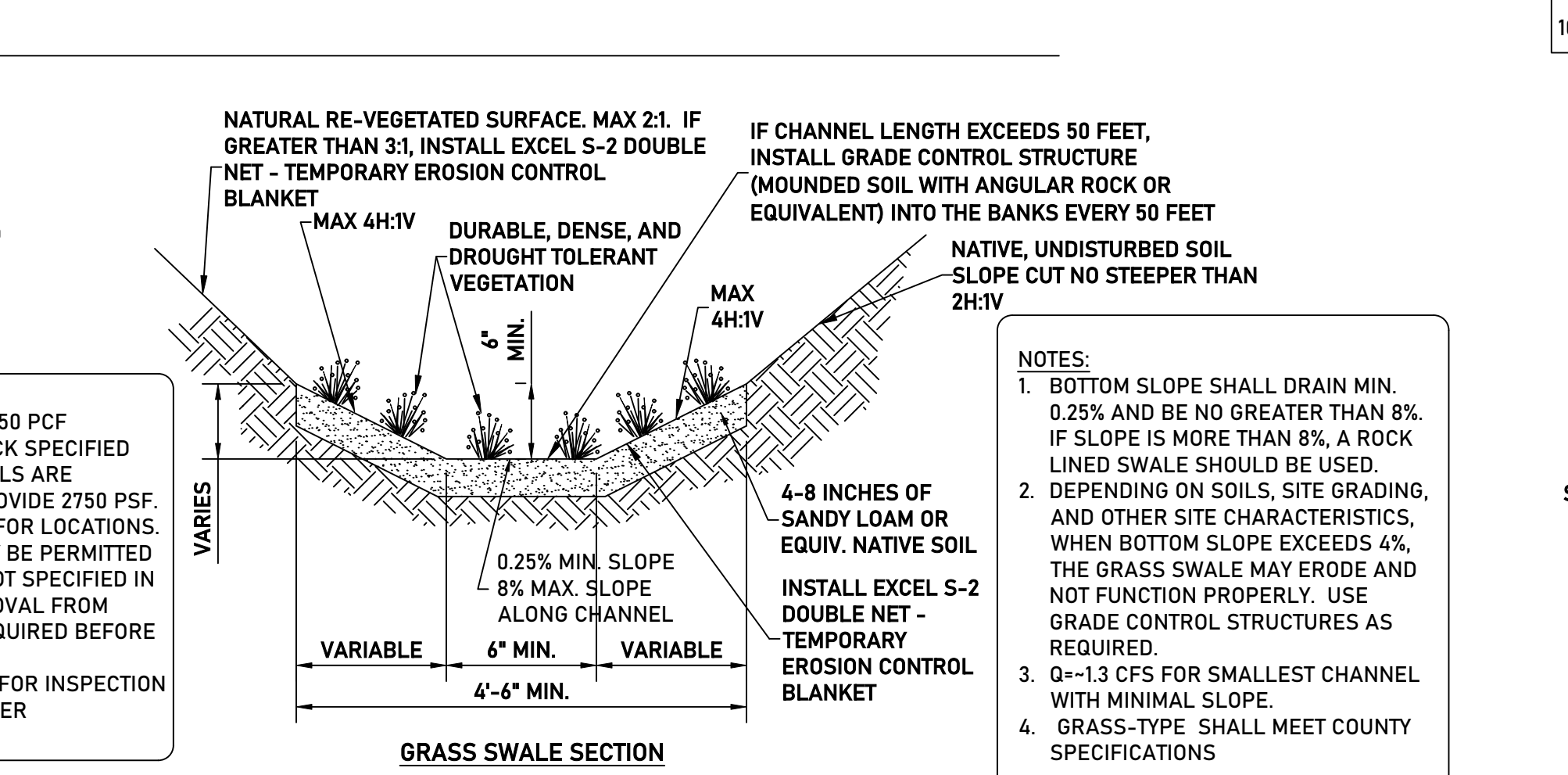
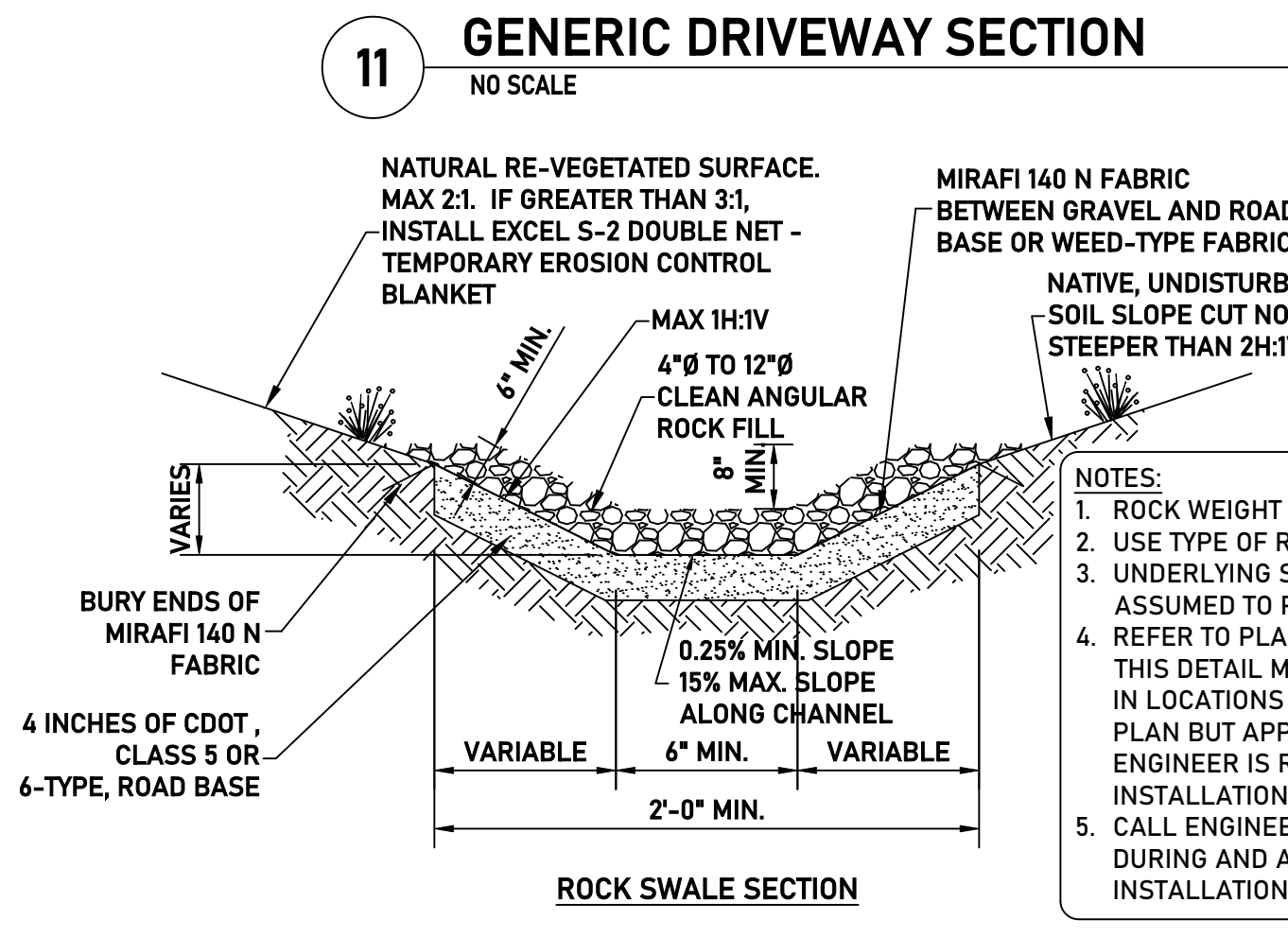
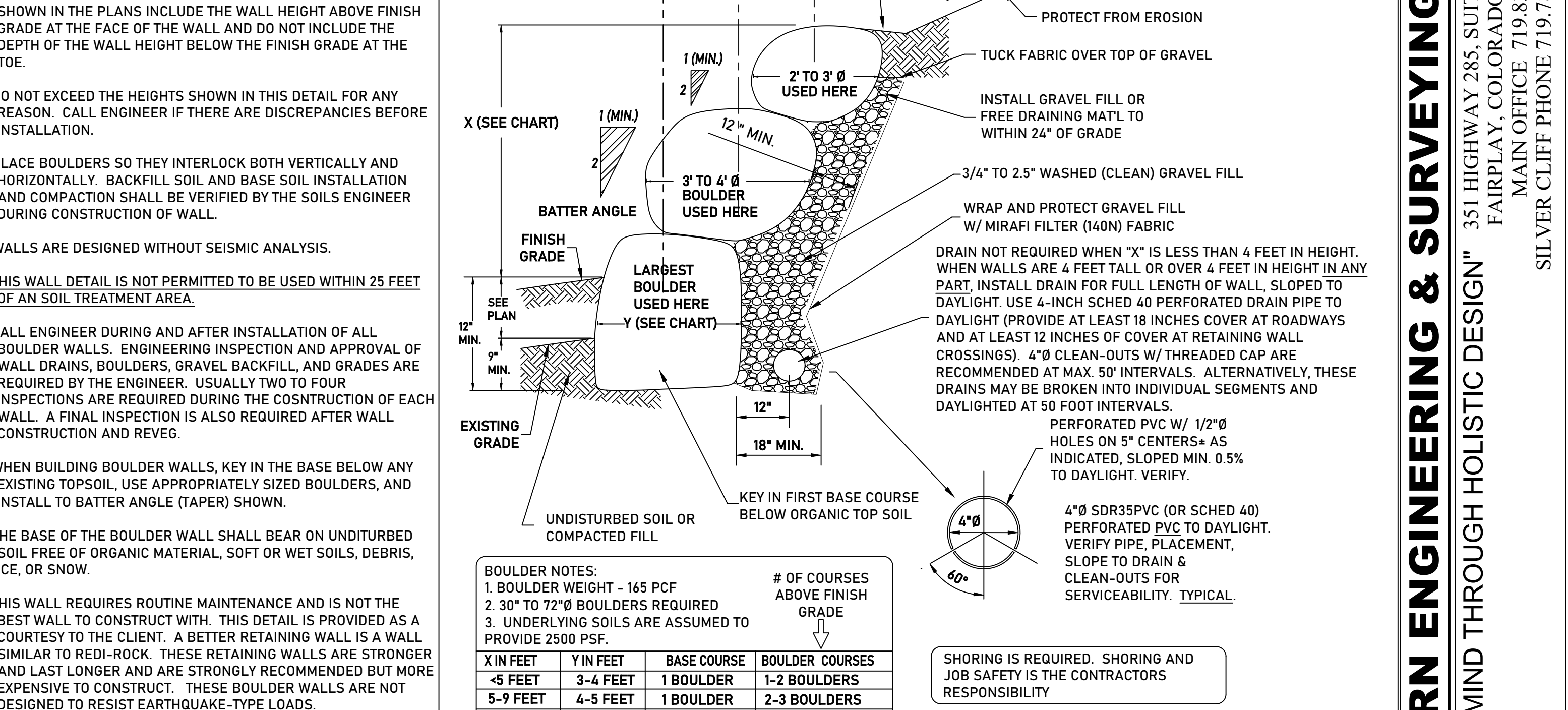
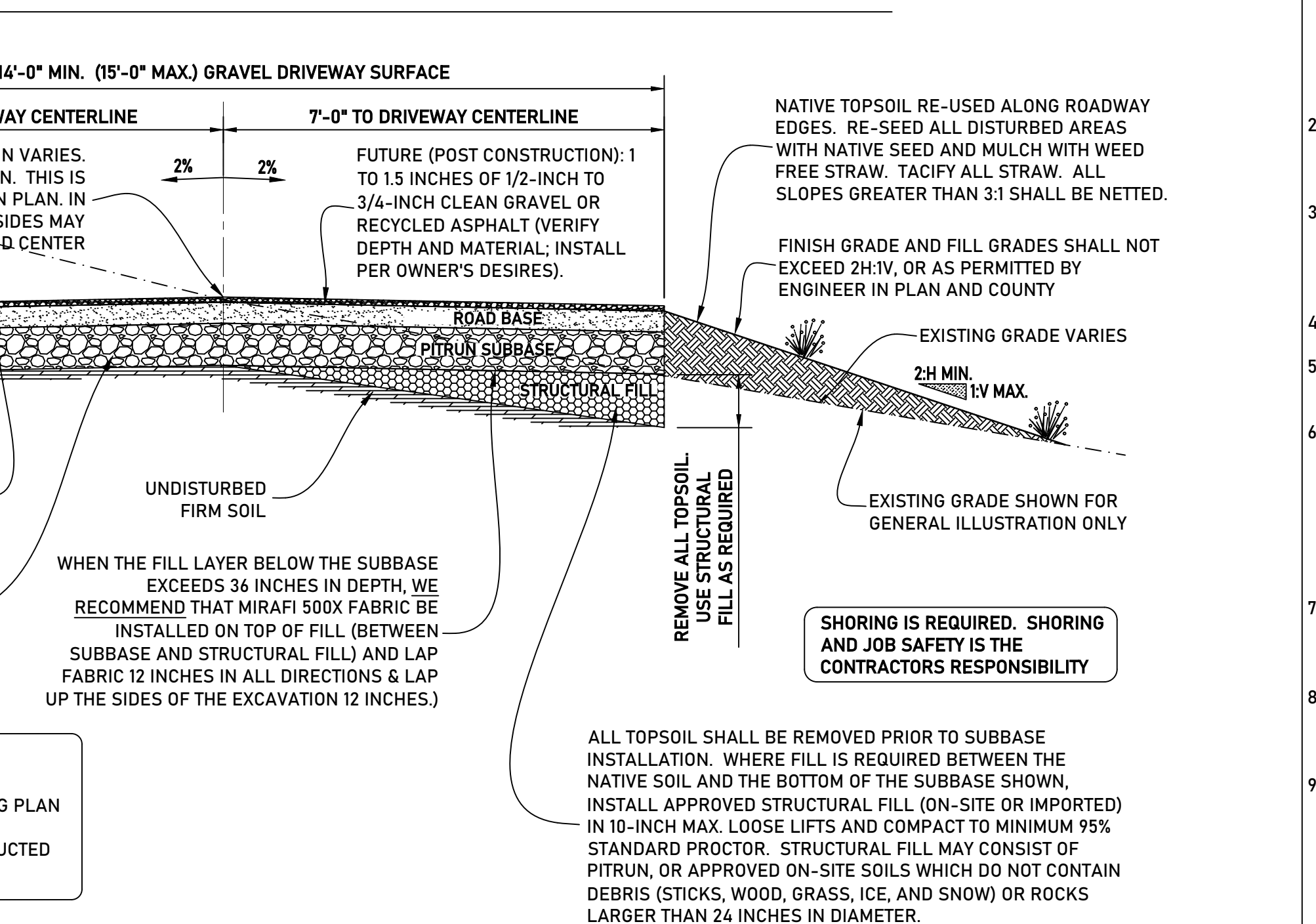
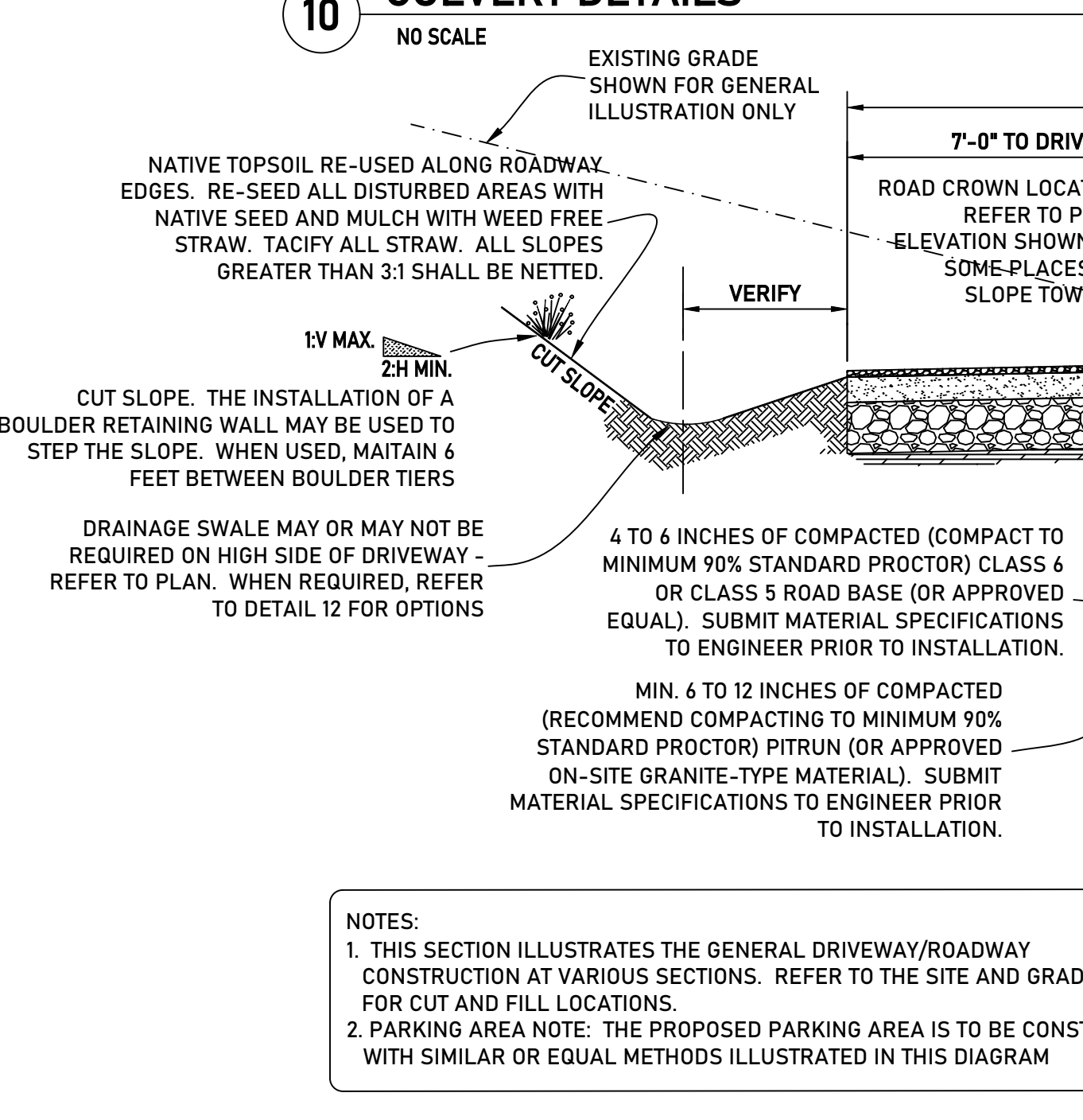
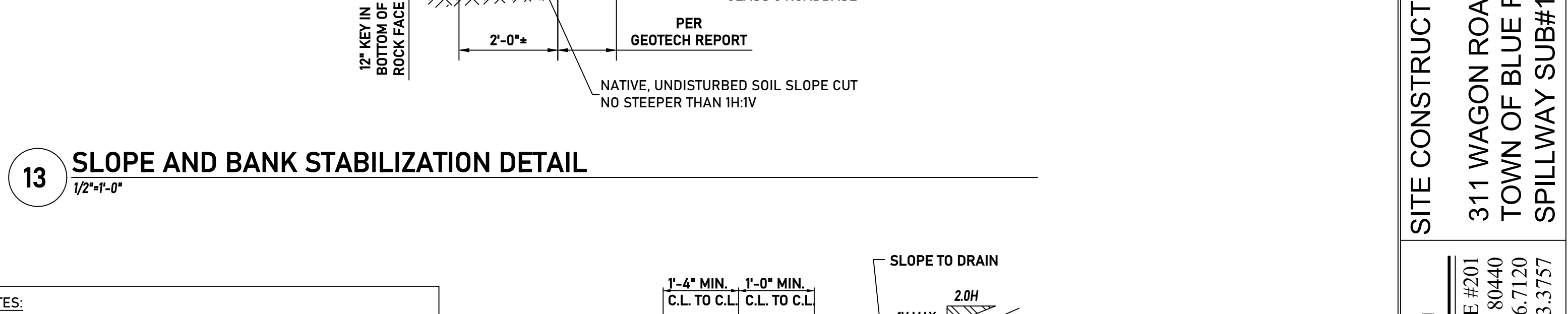
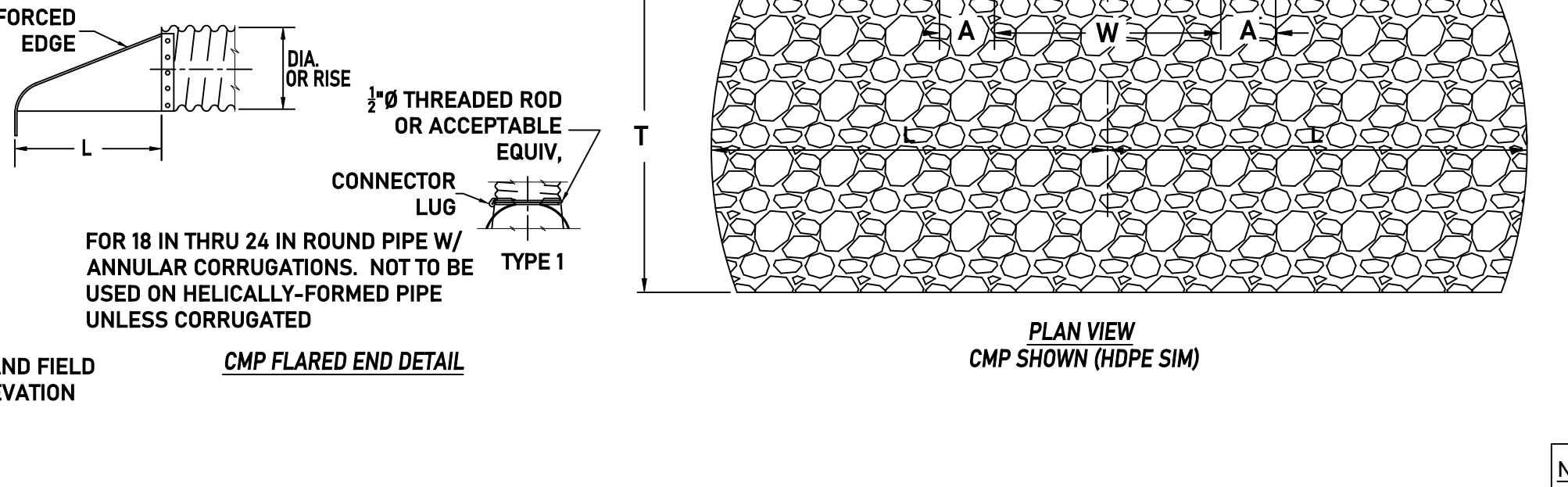
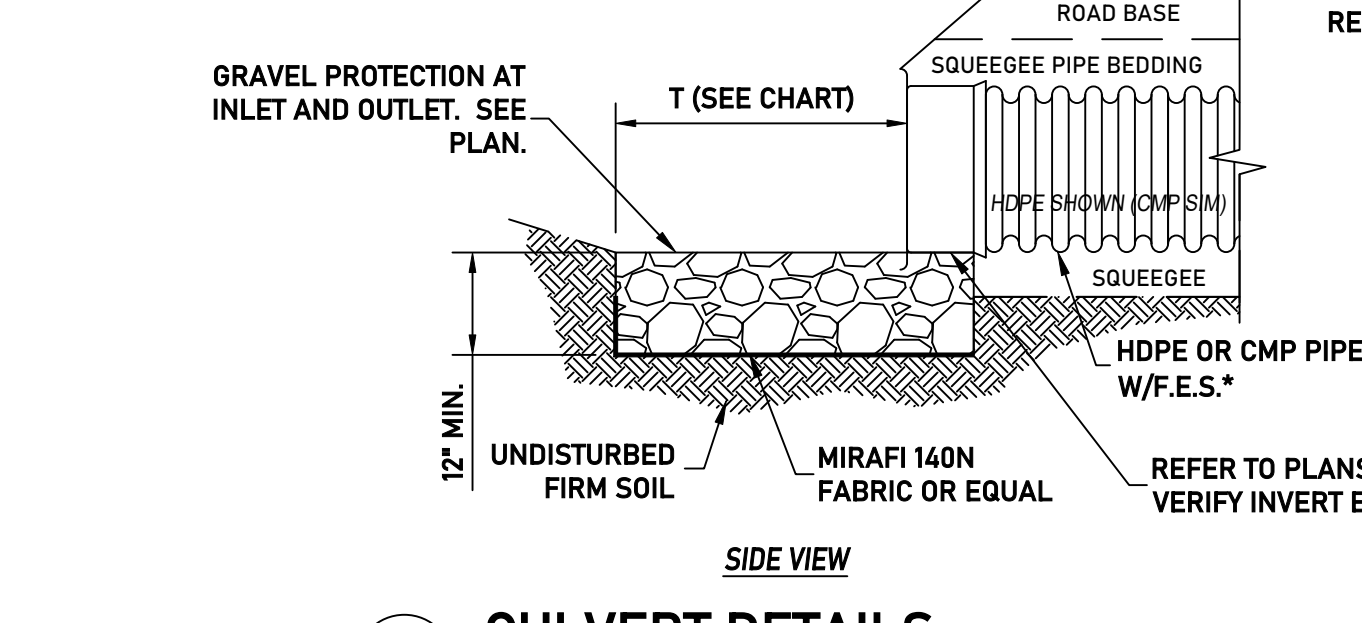
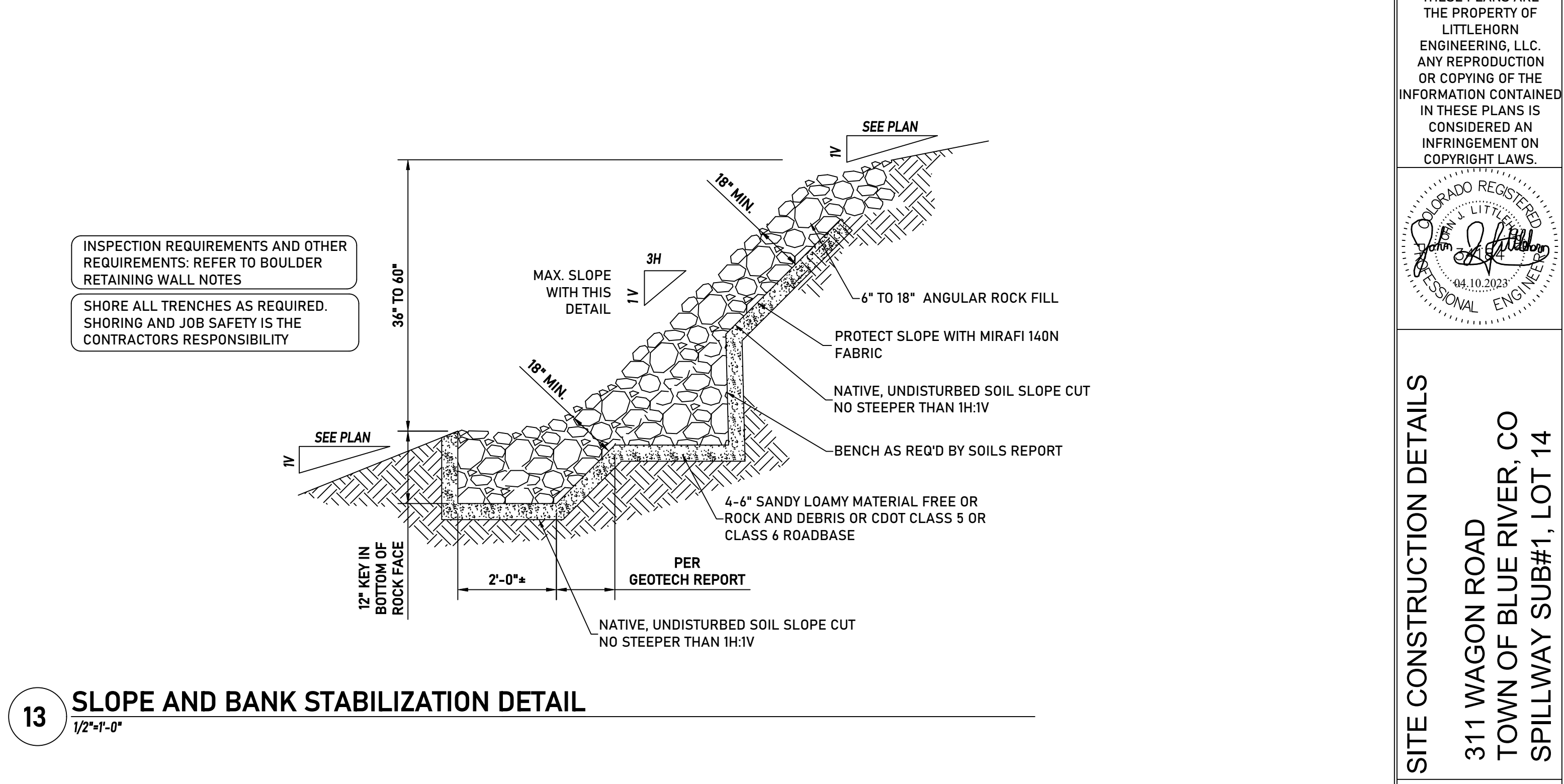
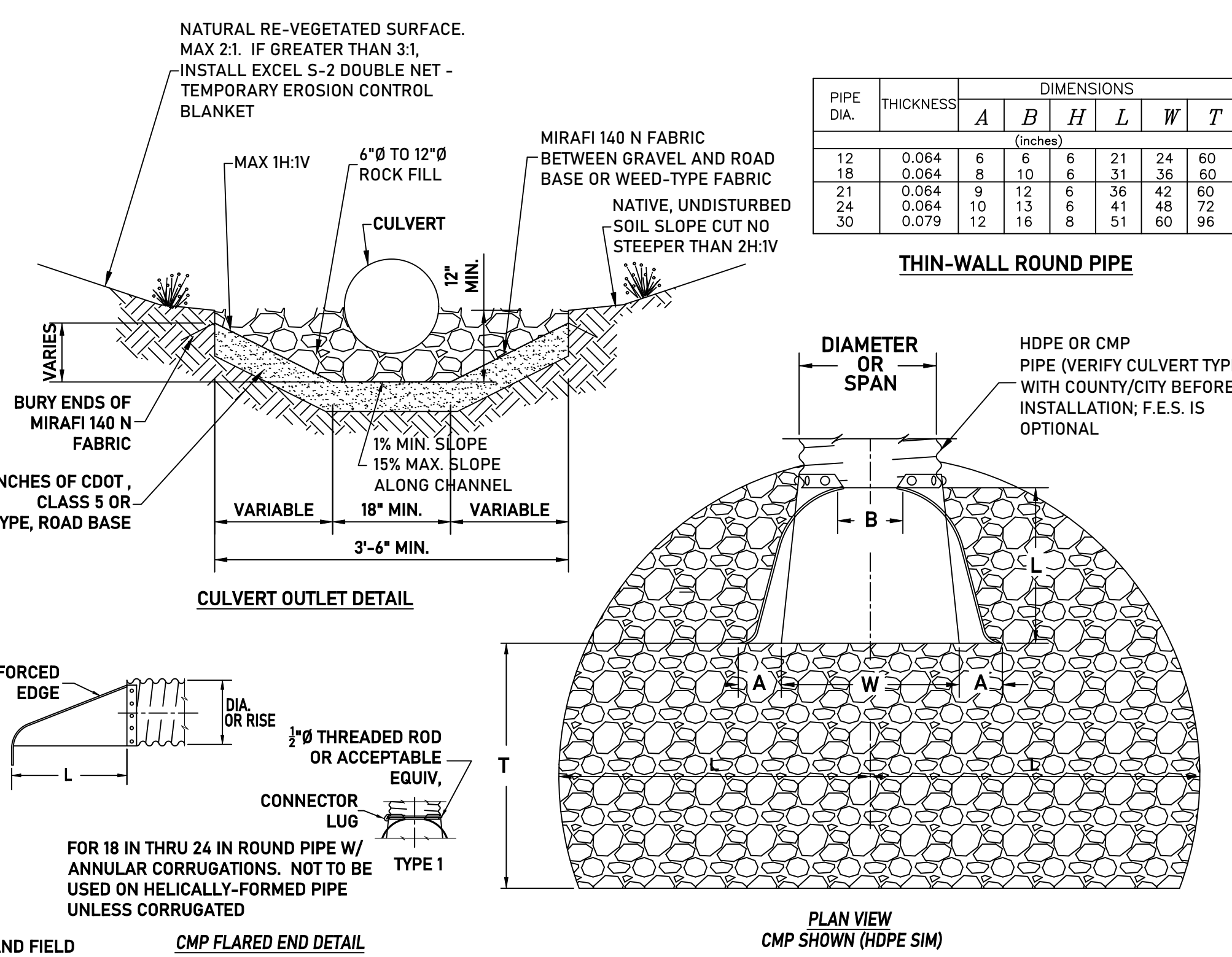
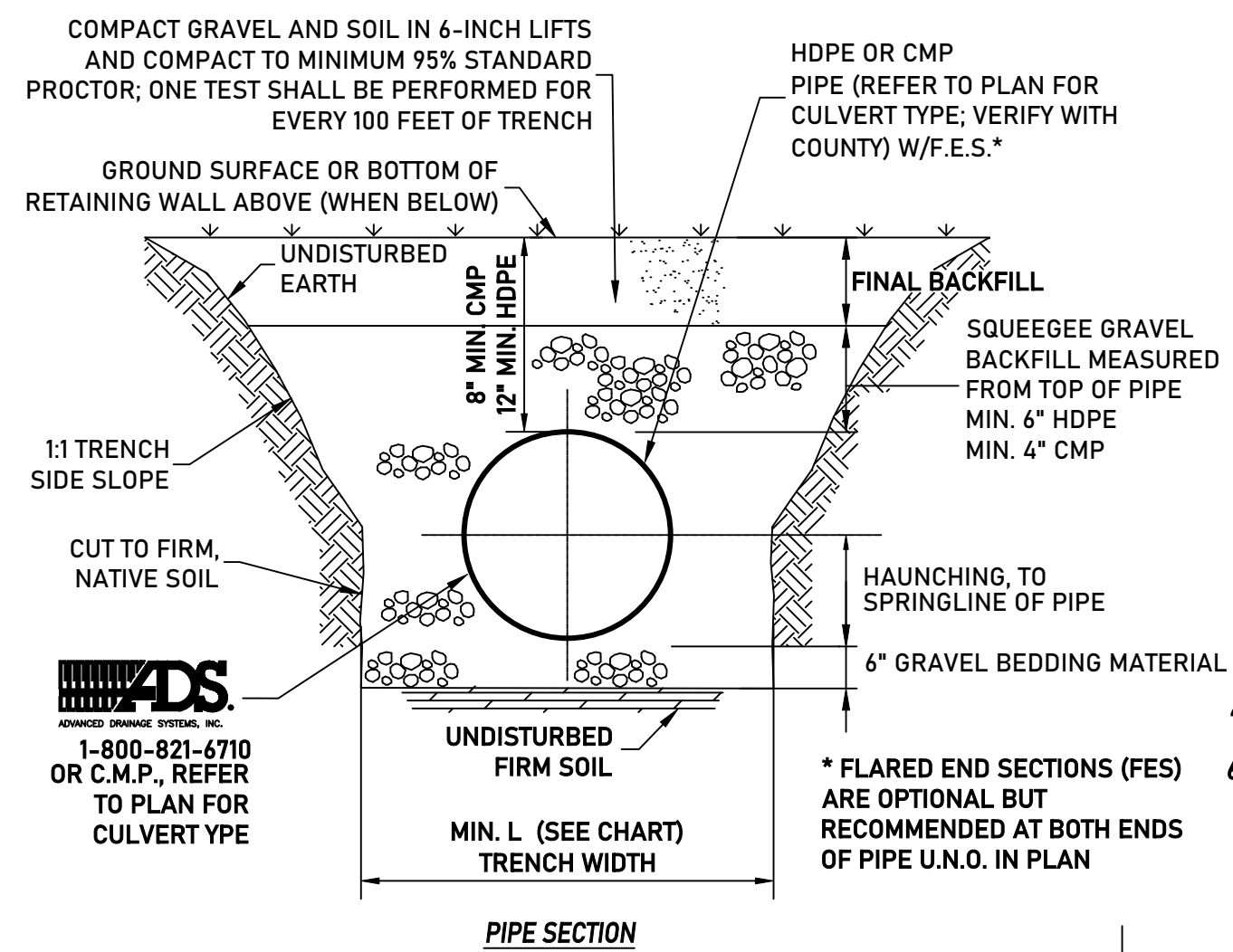


**LITTLEHORN ENGINEERING & SURVEYING**  
 "PEACE OF MIND THROUGH HOLISTIC DESIGN"  
 3511 HIGHWAY 285, SUITE #201  
 FAIRPLAY, COLORADO 80440  
 MAIN OFFICE 719.836.7120  
 SILVER CLIFF PHONE 719.783.3757

PROJECT NO. 2022-100742  
 CLIENT LANDYN AND MICHELLE HACKEBEIL  
 DATE 04.10.2023  
 REVISION:  
 △ -  
 △ -

**LITTLEHORN ENGINEERING & SURVEYING**  
 SITE & GRADING PLAN DETAIL  
 311 WAGON ROAD  
 TOWN OF BLUE RIVER, CO  
 SPILLWAY SUB#1, LOT 14





THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

PROFESSIONAL ENGINEER  
 JAMES L. HERRING  
 04.10.2023

SITE CONSTRUCTION DETAILS

311 WAGON ROAD  
 TOWN OF BLUE RIVER, CO  
 SPILLWAY SUB#1, LOT 14

"PEACE OF MIND THROUGH HOLISTIC DESIGN"  
 351 HIGHWAY 285, SUITE #201  
 FAIRPLAY, COLORADO 80440  
 MAIN OFFICE 719.836.7120  
 SILVER CLIFF PHONE 719.783.3757

LITTLEHORN ENGINEERING & SURVEYING

PROJECT NO. 2022-100742

CLIENT LANDYN AND MICHELLE HACKEBEIL

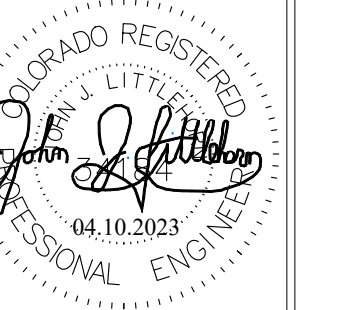
DATE 04.10.2023

REVISION:  
 △ -  
 △ -

C2



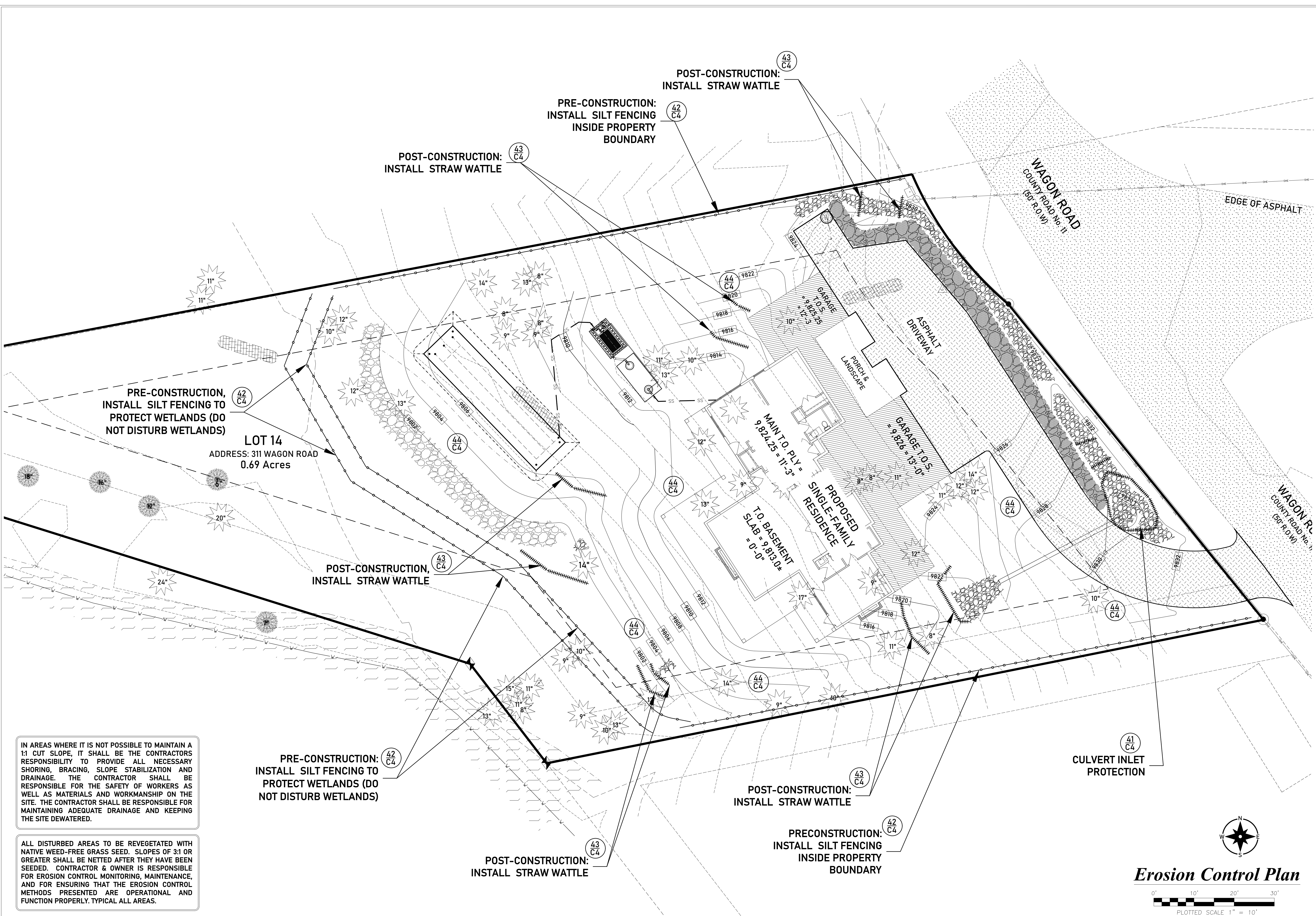
THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.



EROSION CONTROL PLAN  
311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB#1, LOT 14

**LITTLEHORN ENGINEERING & SURVEYING**  
"PEACE OF MIND THROUGH HOLISTIC DESIGN"  
351 HIGHWAY 285, SUITE #201  
FAIRPLAY, COLORADO 80440  
MAIN OFFICE 719.836.7120  
SILVER CLIFF PHONE 719.783.3757

PROJECT NO. 2022-100742  
CLIENT LANDYN AND MICHELLE HACKEBEIL  
DATE 04.10.2023  
REVISION:  
△ -  
△ -  
**C3**



POST-CONSTRUCTION:  
INSTALL STRAW WATTLE

PRE-CONSTRUCTION:  
INSTALL SILT FENCING  
INSIDE PROPERTY  
BOUNDARY

POST-CONSTRUCTION:  
INSTALL STRAW WATTLE

PRE-CONSTRUCTION,  
INSTALL SILT FENCING TO  
PROTECT WETLANDS (DO  
NOT DISTURB WETLANDS)

**LOT 14**  
ADDRESS: 311 WAGON ROAD  
0.69 Acres

POST-CONSTRUCTION,  
INSTALL STRAW WATTLE

PRE-CONSTRUCTION:  
INSTALL SILT FENCING TO  
PROTECT WETLANDS (DO  
NOT DISTURB WETLANDS)

POST-CONSTRUCTION:  
INSTALL STRAW WATTLE

PRECONSTRUCTION:  
INSTALL SILT FENCING  
INSIDE PROPERTY  
BOUNDARY

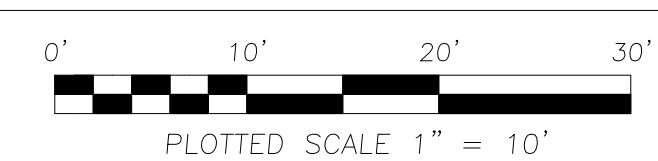
POST-CONSTRUCTION:  
INSTALL STRAW WATTLE

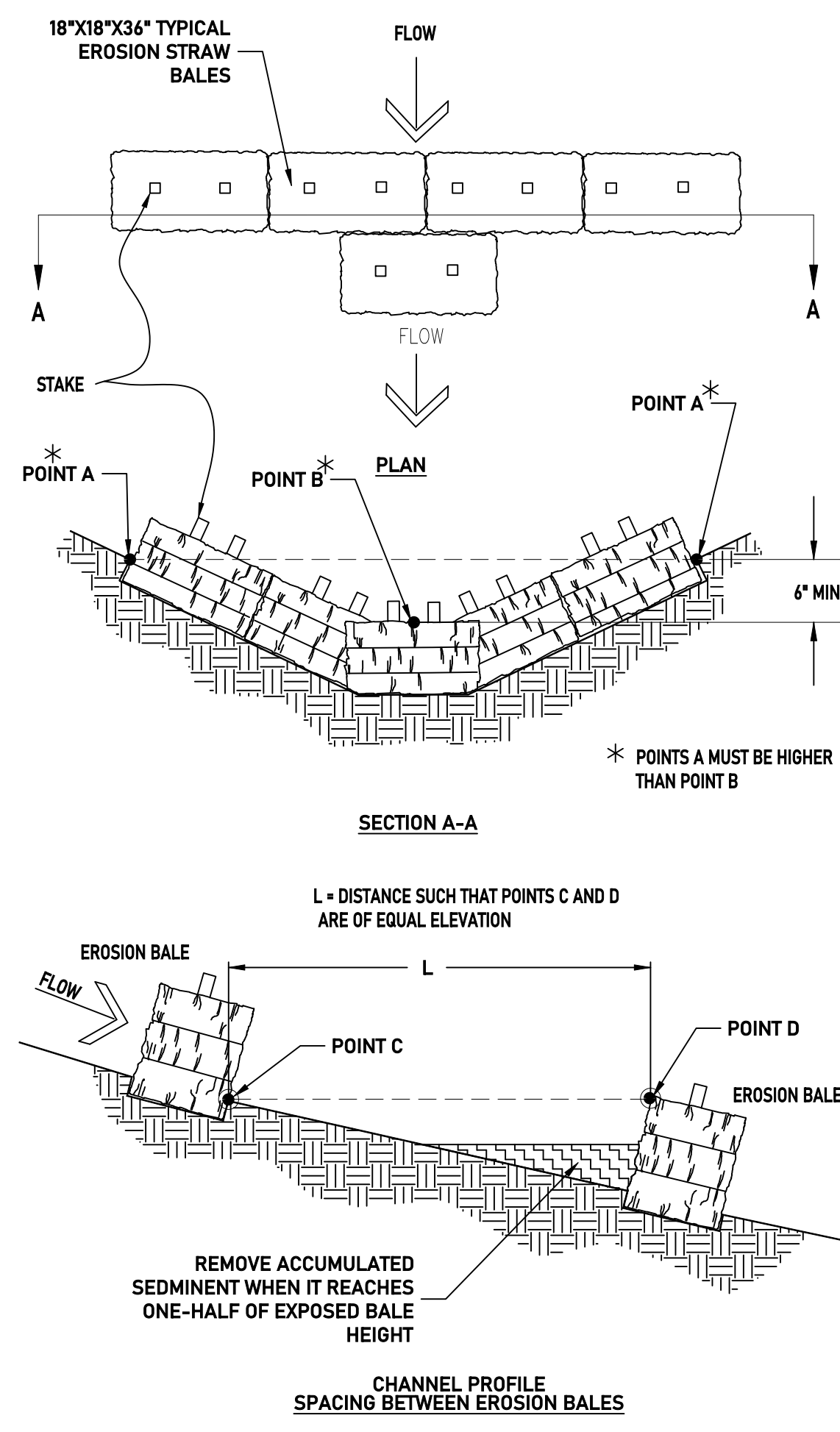
CULVERT INLET  
PROTECTION

IN AREAS WHERE IT IS NOT POSSIBLE TO MAINTAIN A 1:1 CUT SLOPE, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL NECESSARY SHORING, BRACING, SLOPE STABILIZATION AND DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORKERS AS WELL AS MATERIALS AND WORKMANSHIP ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AND KEEPING THE SITE DEWATERED.

ALL DISTURBED AREAS TO BE REVEGETATED WITH NATIVE WEED-FREE GRASS SEED. SLOPES OF 3:1 OR GREATER SHALL BE NETTED AFTER THEY HAVE BEEN SEEDED. CONTRACTOR & OWNER IS RESPONSIBLE FOR EROSION CONTROL MONITORING, MAINTENANCE, AND FOR ENSURING THAT THE EROSION CONTROL METHODS PRESENTED ARE OPERATIONAL AND FUNCTION PROPERLY. TYPICAL ALL AREAS.

**Erosion Control Plan**

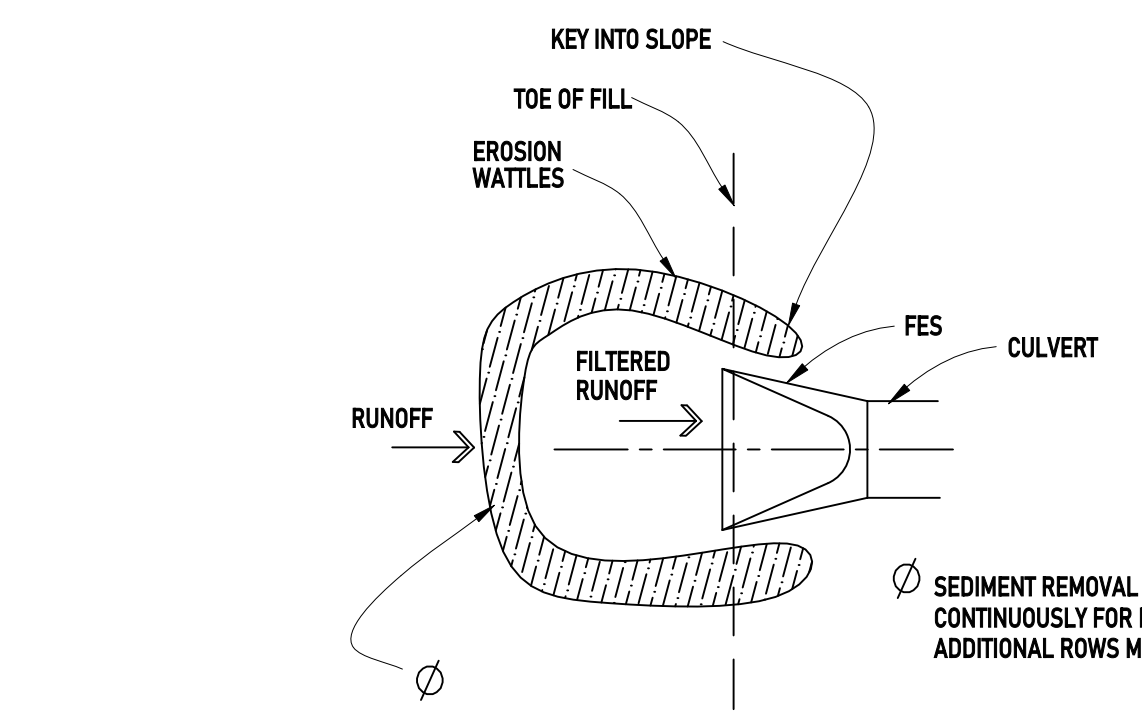




NOTE: A STRAW BALE BARRIER CONSISTS OF STRAW BALES PLACED END TO END ALONG A LEVEL CONTOUR IN A SHALLOW TRENCH AND THEN STAKED TO HOLD THEM IN PLACE. THE STRAW BALE BARRIER DETAINS AND FILTERS STORMWATER RUNOFF, CREATING A SMALL POND BEHIND THE BARRIER WHERE SEDIMENTATION OCCURS. STRAW BALE BARRIERS CAN BE INSTALLED BELOW SLOPES, ALONG PAVED AREAS, ALONG STREAM BANKS AND MANY OTHER LOCATIONS WITHOUT REQUIRING VEHICLE ACCESS OR HEAVY EQUIPMENT. STRAW BALE BARRIERS CAN BE INSTALLED BY HAND OR BY USING A SMALL PIECE OF TRENCHING EQUIPMENT (PROVIDED THE AREA IS OUTSIDE A WETLAND AREA). PROPER INSTALLATION IS NECESSARY TO ENSURE GOOD EROSION CONTROL. IMPROPERLY INSTALLED STRAW BALE BARRIERS CAN ACTUALLY WORSEN EROSION BY CONCENTRATING STORMWATER RUNOFF INSTEAD OF SLOWING AND DETAINING. STRAW BALE BARRIERS ARE OFTEN USED INTERCHANGEABLY WITH SILT FENCE. HOWEVER, SILT FENCE HAS A MUCH HIGHER EFFICIENCY IN REDUCING SEDIMENT, WILL LAST LONGER, AND MAY BE MORE COST-EFFECTIVE. A STRAW BALE BARRIER TYPICALLY HAS A MAXIMUM LIFE OF 3 MONTHS PRIOR TO EXCESSIVE DETERIORATION AND ROT. STRAW BALE BARRIERS ARE OFTEN USED IN TWO ROWS OF BALES, OR WITH A LAYER OF GEOTEXTILE FABRIC ACROSS THE FRONT, OR IN CONJUNCTION WITH OTHER EROSION CONTROL DEVICES, IN ORDER TO IMPROVE THE SEDIMENT REMOVAL CAPABILITIES OF STRAW BALES. A SINGLE ROW OF STRAW BALE BARRIER MAY REMOVE APPROXIMATELY 60% OF THE SEDIMENT IF CAREFULLY INSTALLED AND MAINTAINED. EFFICIENCY IS MAINTAINED PRIMARILY BY REPLACING STRAW BALES WHICH HAVE DETERIORATED IN A TIMELY MANNER. SUITABLE APPLICATIONS INCLUDE THE FOLLOWING:

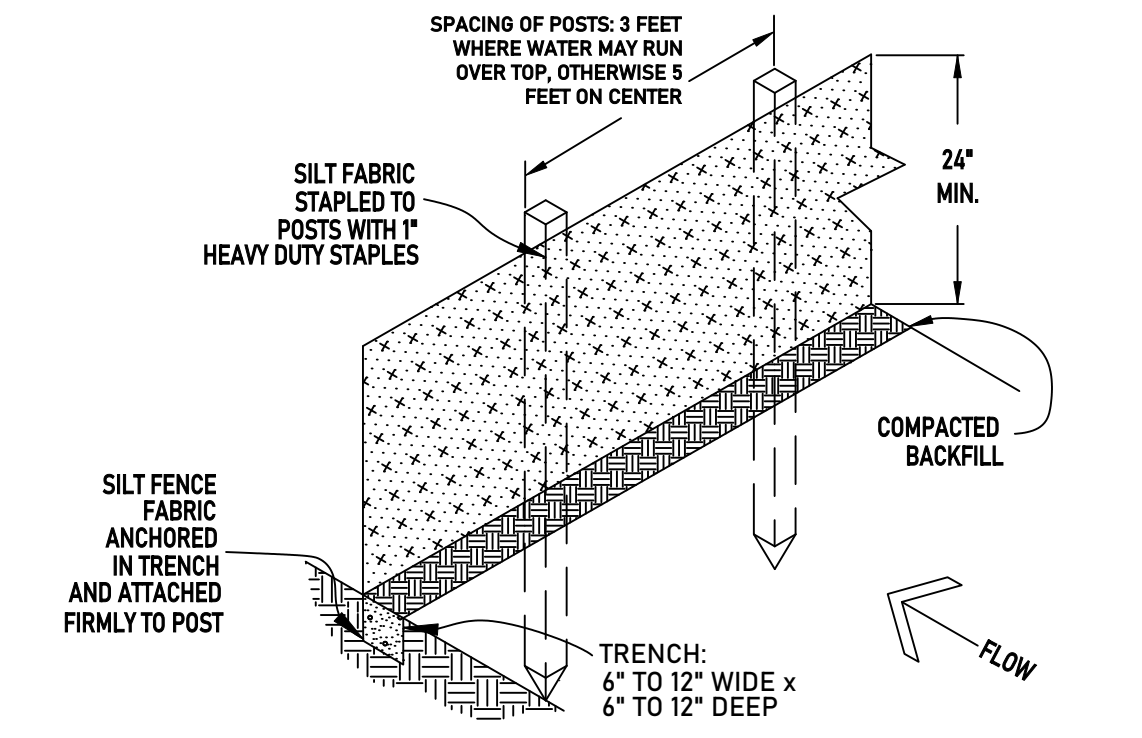
1. ALONG THE PERIMETER OF THE SITE EXCEPT DO NOT USE WITHIN A ROADWAY R.O.W.
2. ALONG STREAMS AND CHANNELS, OR TO PROTECT SENSITIVE AREAS.
3. AROUND TEMPORARY SPOIL AREAS AND OTHER SMALL CLEARED AREAS.
4. AT THE BOTTOM OF EXPOSED AND SIGNIFICANT ERODIBLE SLOPES.
5. WITHIN A SWALE OR DITCH THAT HAS GENTLE SLOPES AND DRAINAGE AREA LESS THAN 1 ACRE.

**40 STRAW BALE DETAILS**



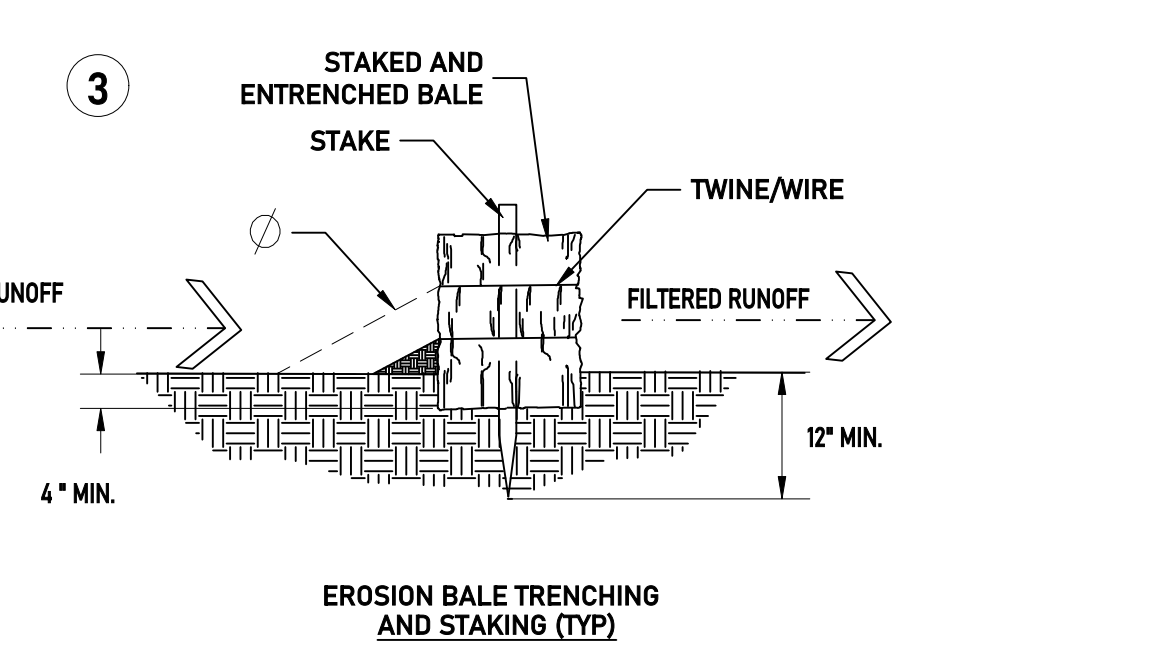
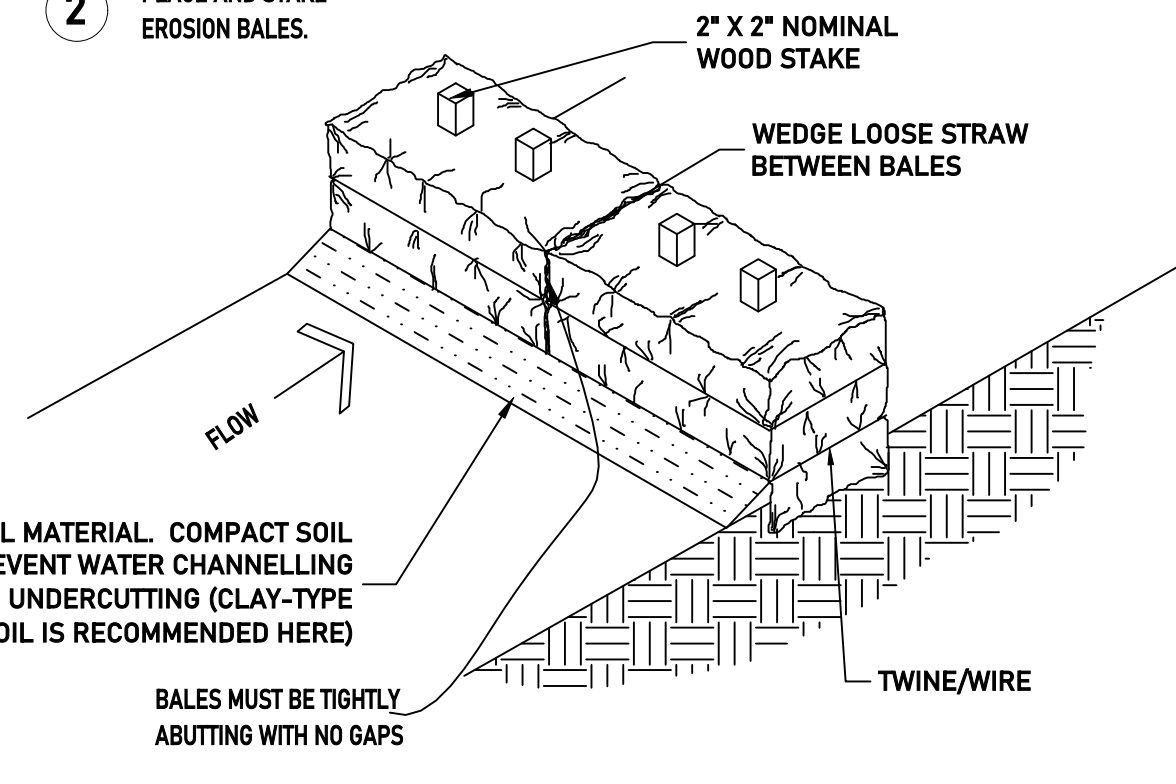
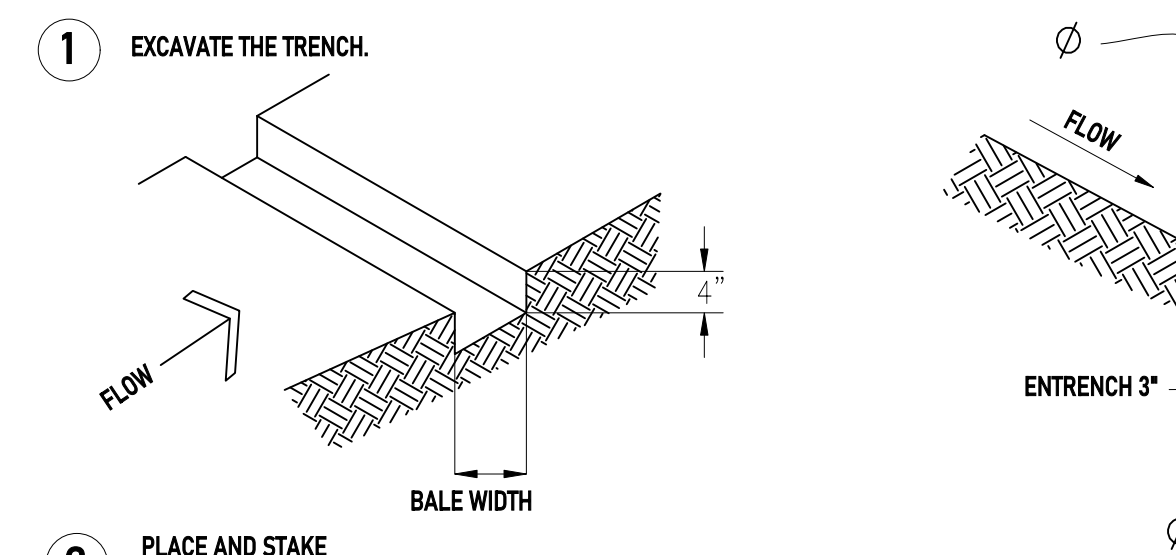
**41 CULVERT INLET PROTECTION**

OUTLET PROTECTION IS SIMILAR EXCEPT USE TWO ROWS - APPROX. 3-5 FEET APART. THIS STRAW WATTLE IS TO BE INSTALLED AFTER THE CULVERT IS INSTALLED



1. SILT FENCE MAY BE SUBSTITUTED IN LIEU OF STRAW WATTLES.
2. WHERE SILT FENCING IS SPECIFIED IN THE PLAN, STRAW WATTLES MAY NOT BE SUBSTITUTED.
3. WHERE JOINTS IN SILT FENCE ARE REQUIRED, POSTS SHALL BE JOINED TOGETHER, THEN ROTATED 180 DEGREES AND DRIVEN INTO THE GROUND. POSTS SHALL OVERLAP AT JOINTS SUCH THAT NO GAPS IN FENCING EXIST.
4. CREATE J-HOOKS AT ENDS OF SILT FENCE.

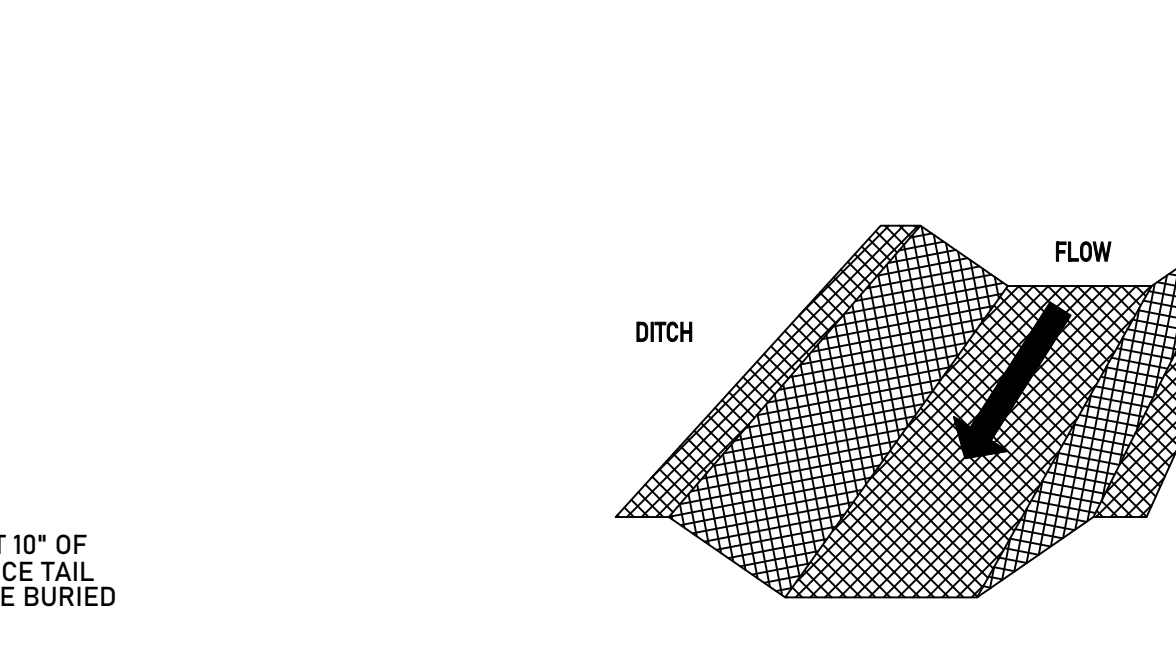
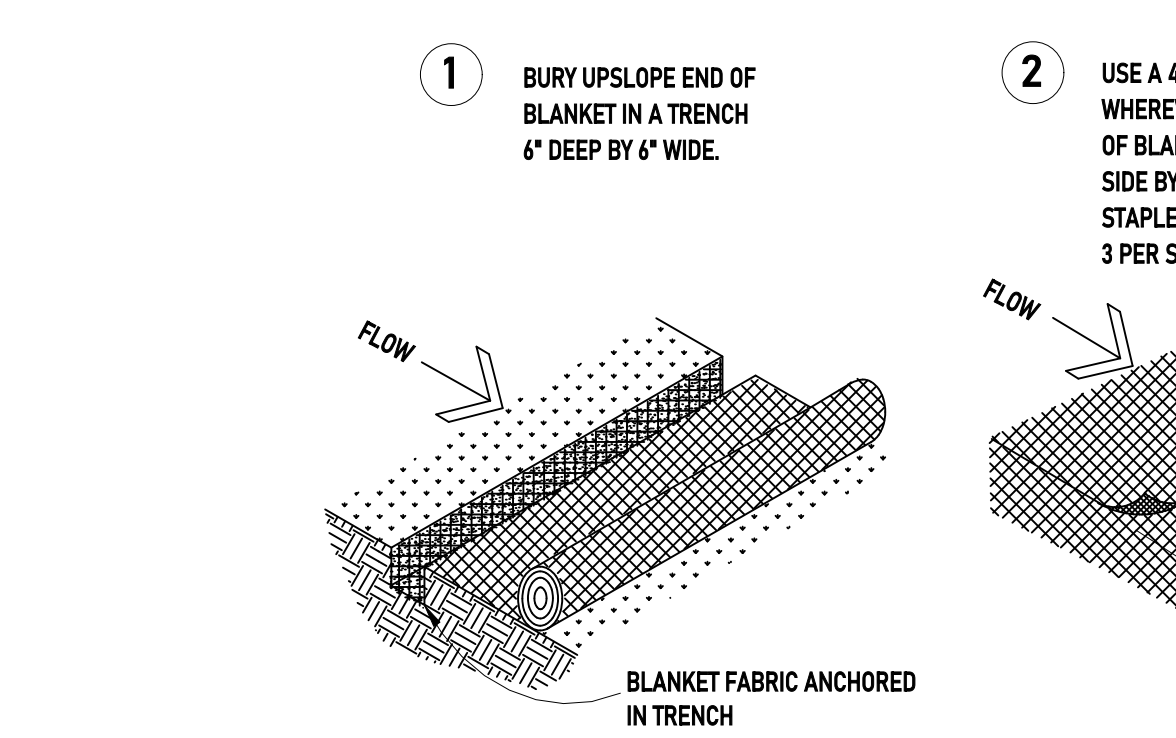
**42 SILT FENCE DETAIL**



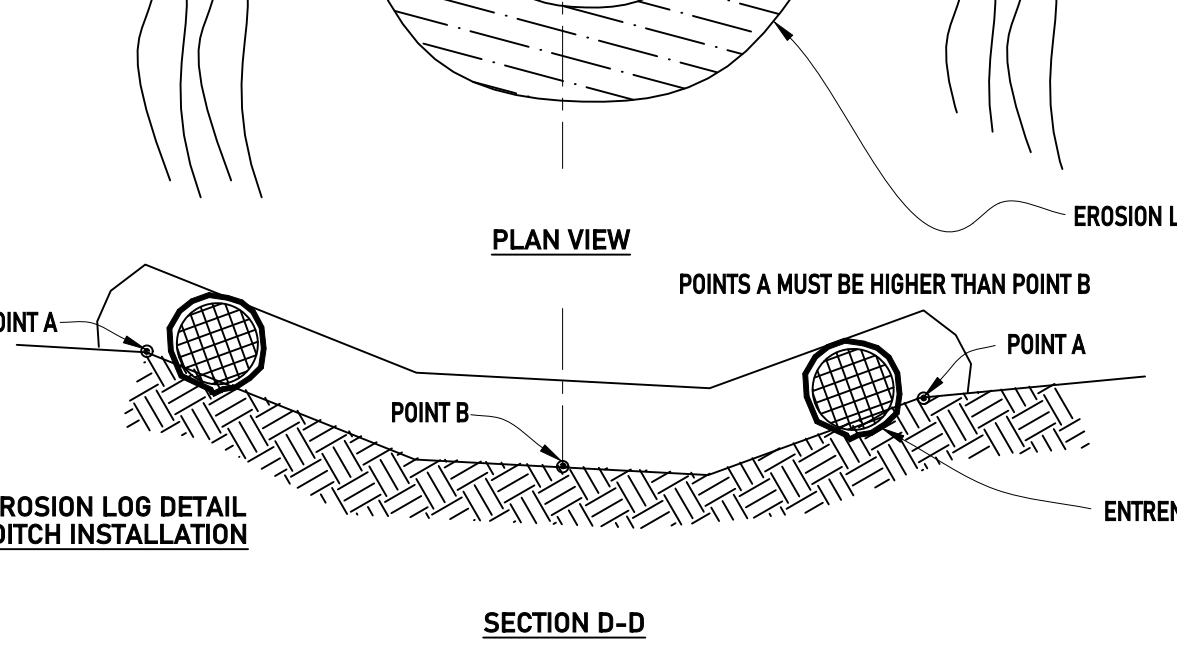
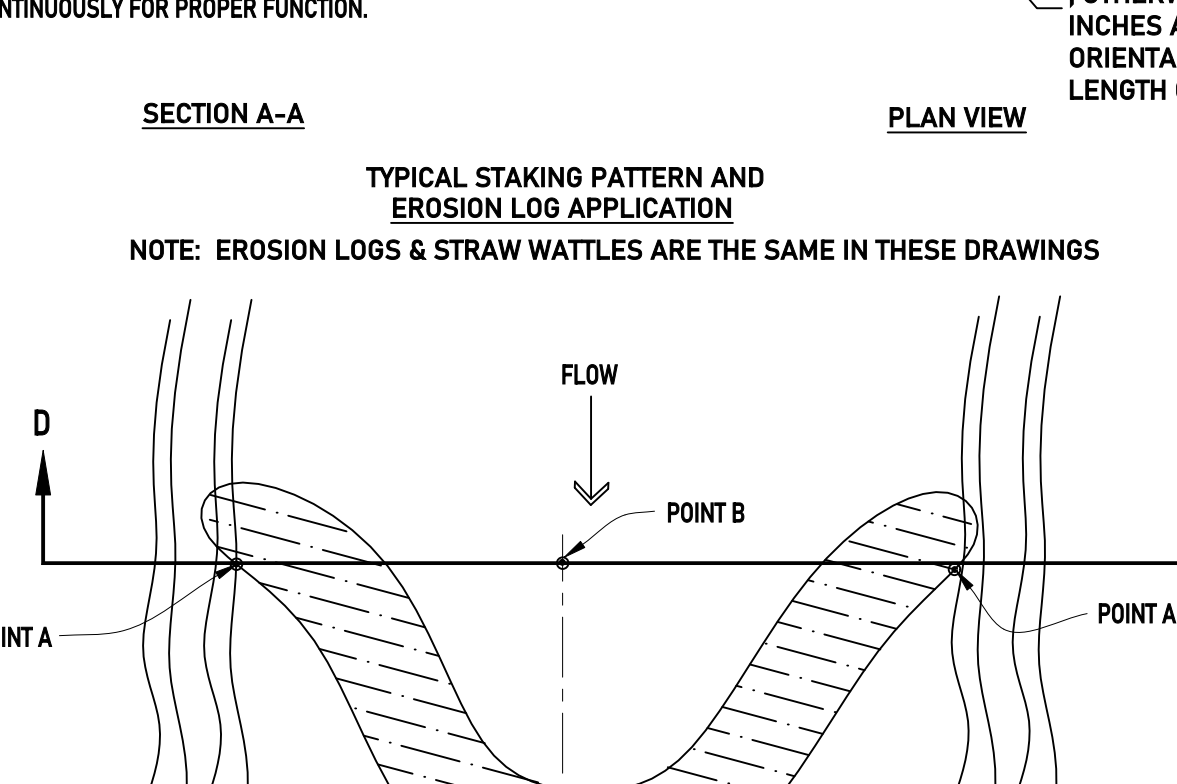
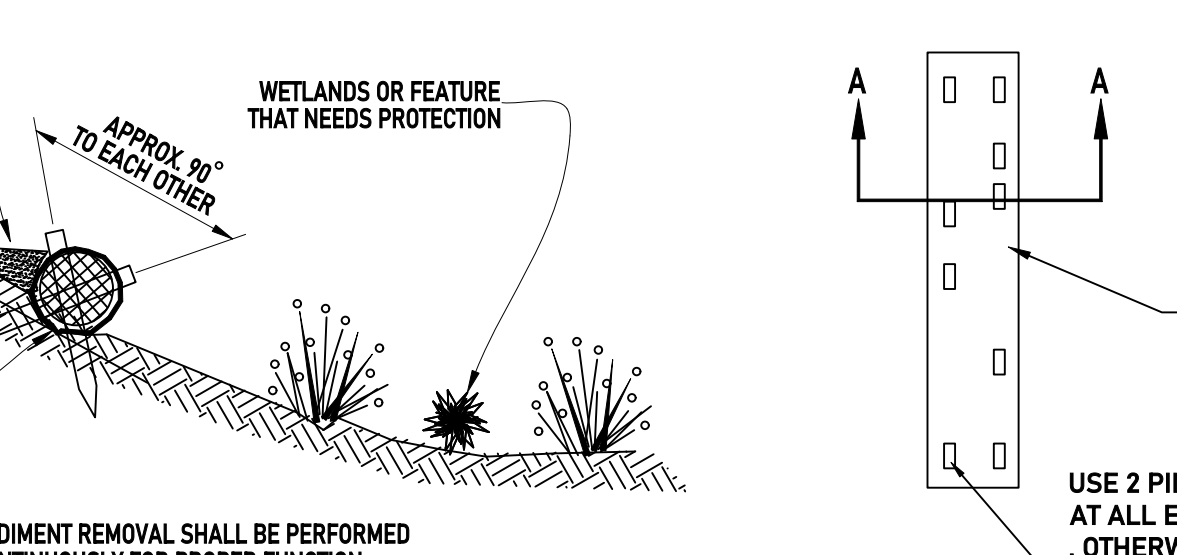
**43 EROSION LOG DETAILS**

ALL DISTURBED AREAS TO BE REVEGETATED WITH NATIVE WEED-FREE GRASS SEED. SLOPES OF 3:1 OR GREATER SHALL BE NETTED AFTER THEY HAVE BEEN SEEDED. CONTRACTOR & OWNER IS RESPONSIBLE FOR EROSION CONTROL MONITORING, MAINTENANCE, AND FOR ENSURING THAT THE EROSION CONTROL METHODS PRESENTED ARE OPERATIONAL AND FUNCTION PROPERLY. TYPICAL ALL AREAS.

ONE (1) YEAR AFTER PROJECT COMPLETION (WHEN THE CERTIFICATE OF OCCUPANCY IS OBTAINED AND DELIVERED TO THE HOME OWNER), THE CONTRACTOR SHALL VISIT THE SITE AND PERFORM ROUTINE MAINTENANCE REQUIREMENTS AND ASSUMING THE RE-VEGETATION PROCESS IS COMPLETE, ALL TEMPORARY EROSION PRODUCTS (SEE ITEM 4 ON THIS SHEET) CAN BE REMOVED



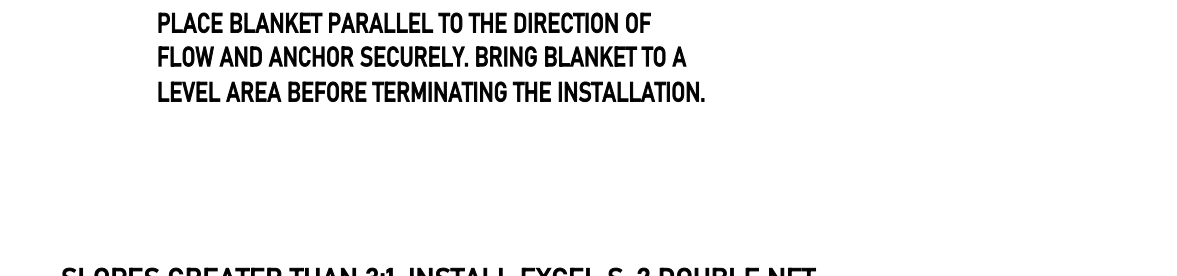
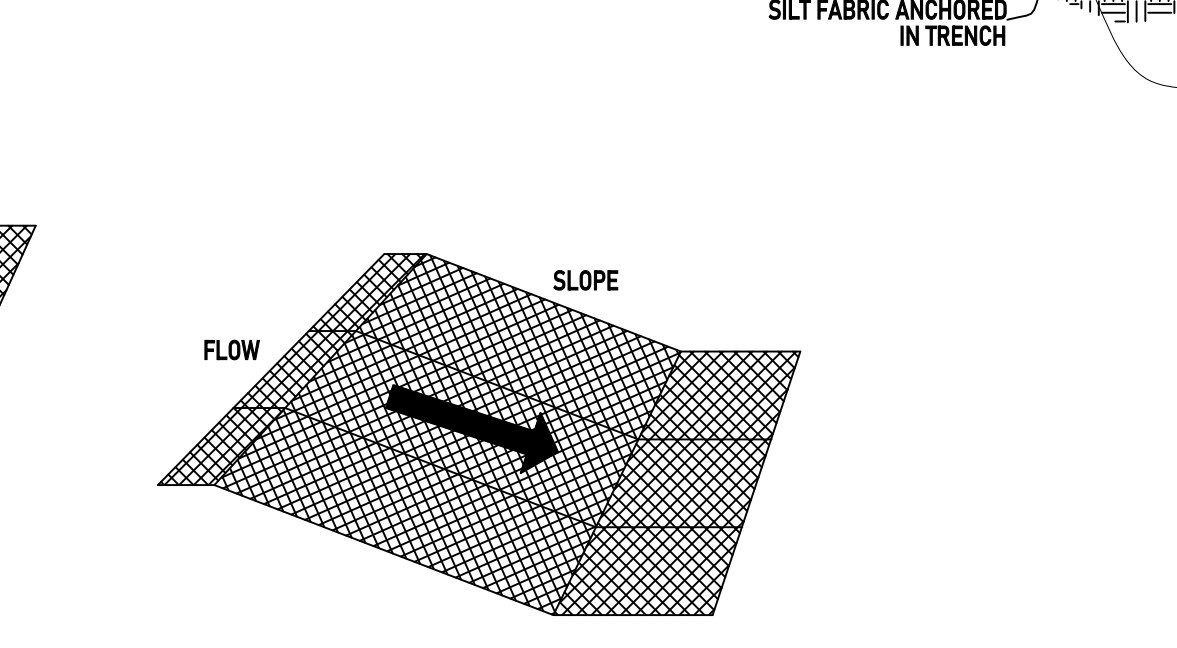
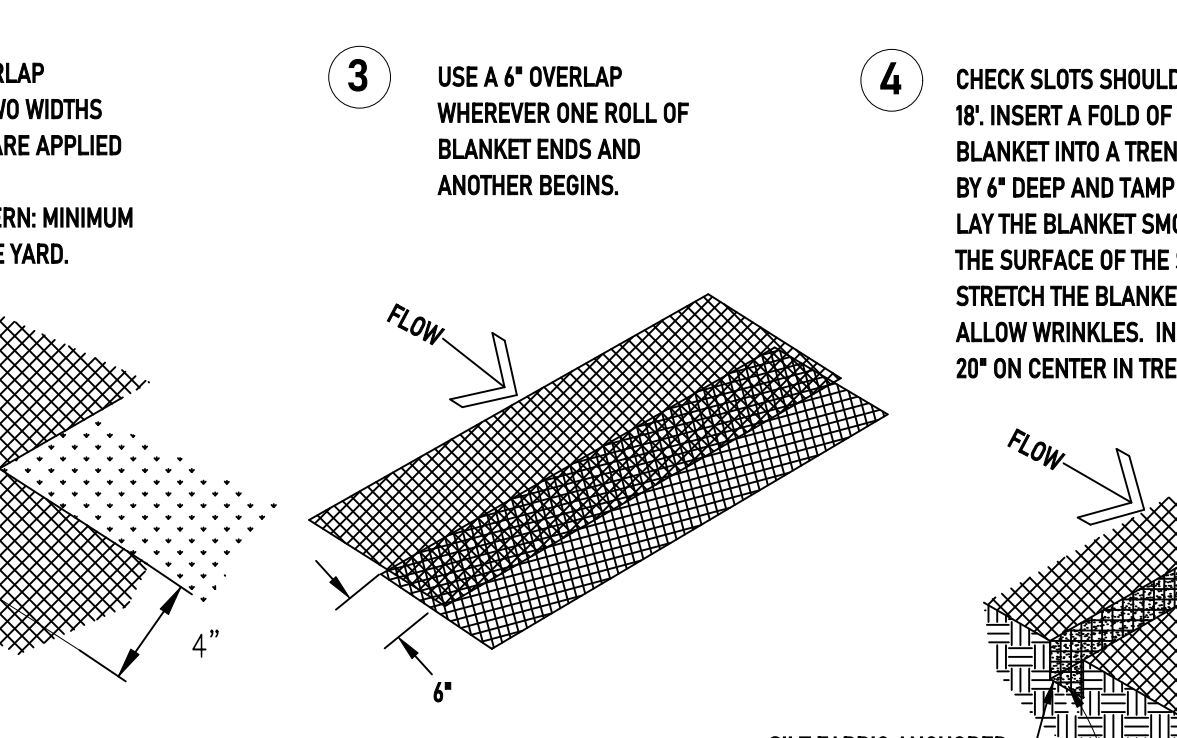
**44 SOIL RETENTION BLANKETS**



**43 EROSION LOG DETAILS**

ONE (1) YEAR AFTER PROJECT COMPLETION (WHEN THE CERTIFICATE OF OCCUPANCY IS OBTAINED AND DELIVERED TO THE HOME OWNER), THE CONTRACTOR SHALL VISIT THE SITE AND PERFORM ROUTINE MAINTENANCE REQUIREMENTS AND ASSUMING THE RE-VEGETATION PROCESS IS COMPLETE, ALL TEMPORARY EROSION PRODUCTS (SEE ITEM 4 ON THIS SHEET) CAN BE REMOVED

ONE (1) YEAR AFTER PROJECT COMPLETION (WHEN THE CERTIFICATE OF OCCUPANCY IS OBTAINED AND DELIVERED TO THE HOME OWNER), THE CONTRACTOR SHALL VISIT THE SITE AND PERFORM ROUTINE MAINTENANCE REQUIREMENTS AND ASSUMING THE RE-VEGETATION PROCESS IS COMPLETE, ALL TEMPORARY EROSION PRODUCTS (SEE ITEM 4 ON THIS SHEET) CAN BE REMOVED



**44 SOIL RETENTION BLANKETS**

- EROSION CONTROL:**
1. THE CONTRACTOR AND OWNER SHALL PROVIDE ALL SUPERVISION, LABOR, MATERIALS, TOOLS, EQUIPMENT AND RELATED ITEMS REQUIRED FOR PREPARING GROUND, PROVIDING FOR SOWING OF SEEDS AND FERTILIZING, MULCHING WITH STRAW, WATERING WEED CONTROL, AND OTHER MANAGEMENT PRACTICES REQUIRED FOR EROSION CONTROL AND TO OBTAIN A GRASS COVER. AREAS REQUIRING SEEDING FOR EROSION CONTROL WILL INCLUDE THE LEVEE AND ROADWAY SUBGRADE, DRAINAGE DITCHES, CUTTALL CHANNEL, ALL BORROW AREAS, AND ALL AREAS DISTURBED BY CONSTRUCTION, INCLUDING THE WORKING EASEMENT.
  2. SEEDING. SEED SHALL COMPLY WITH U.S. DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT. BAGS OF FERTILIZER SHALL BE LABELED COMPLYING WITH APPLICABLE STATE FERTILIZER LAWS AND SHALL BEAR THE NAME, TRADE NAME, TRADEMARK, AND WARRANTY OF PRODUCER. CONTRACTOR SHALL INSPECT AND MAKE SURE THAT ALL WORK IS IN COMPLIANCE AS REQUIRED WITH REGARD TO THE SEED BED PREPARATION, FERTILIZER APPLICATION RATE, PLANTING SEED RATE, PLANTING SEED UNIFORMITY, AND APPLICATION OF MULCH.
  3. HYDRO SEEDING MULCH FIBER (IF USED) SHALL BE PRODUCED FROM A NATURAL OR RECYCLED STRAW FIBER; THESE MATERIALS SHOULD BE FREE FROM PLASTIC MATERIALS OR OTHER NON BIODEGRADABLE SUBSTANCES. FIBER SHALL BE OF SUCH CHARACTER THAT THE FIBER WILL DISPERSE INTO UNIFORM SLURRY WHEN MIXED WITH WATER. IT IS IMPERATIVE THAT THE MULCH BE APPLIED AT THE SPECIFIED RATE; TOO WET OF A MIXTURE WILL CAUSE THE FIBERS TO BE BURIED. WATER CONTENT OF THE FIBER MUST EXCEED 14 PERCENT OF THE DRY MASS FIBER. THE PERCENTAGE OF MOISTURE CONTENT OF THE FIBER SHALL BE CLEARLY MARKED ON THE PACKAGE. FIBER SHALL BE COLORED GREEN TO CONTRAST THE AREA ON WHICH THE FIBER IS BEING APPLIED, AND SHALL NOT STAIN CONCRETE OR OTHER SURFACES IN WHICH IT COMES INTO CONTACT WITH. FIBER AND OTHER MULCH INGREDIENTS SHALL BE FREE FROM GROWTH OR GERMINATION INHIBITING INGREDIENTS.
  4. MAINTENANCE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AREAS DURING PLANTING PERIOD AND UNTIL OTHER WORK UNDER CONTRACT HAS BEEN COMPLETED. MAINTENANCE SHALL CONSIST OF PROTECTION, REPLANTING, MAINTAINING EXISTING GRADES, AND REPAIR OF EROSION DAMAGE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING GRADES OF SLOPES AFTER COMMENCEMENT OF PLANTING OPERATIONS AND DURING MAINTENANCE PERIOD. PROMPTLY REPAIR ANY DAMAGE TO FINISHED SURFACE GRADES. PROMPTLY REPAIR DAMAGE IN THE EVENT EROSION OCCURS FROM RAINFALL OR OTHER CAUSES. CORRECT RUTS, RIDGES, TRACTS AND OTHER SURFACE IRREGULARITIES AND RECLAIM AREAS WHERE REQUIRED PRIOR TO ACCEPTANCE. ALWAYS INSPECT EROSION CONTROL METHODS ON THE SITE WEEKLY, IF NOT DAILY. IF THE PROPOSED SYSTEM IS NOT FUNCTIONING WELL, CONTACT THE ENGINEER IMMEDIATELY. SILT FENCES SHOULD ALWAYS BE INSPECTED BEFORE AND AFTER STORMS. SILT FENCE IS TYPICALLY DESIGNED ONLY TO PERFORM FOR A PERIOD OF WEEKS. REMOVE EXCESS SEDIMENT PERIODICALLY, AT A MINIMUM WHEN THE SEDIMENT REACHES ONE-FOURTH OF THE SILT FENCE HEIGHT. EROSION CONTROL FENCES CAN BE REMOVED ONCE THE AREA HAS BEEN SUCCESSFULLY REVEGETATED SUCCESSFULLY AND THE CONSTRUCTION IS COMPLETE.
  5. WATERING. APPLY WATER AFTER COMPACTION AND SEEDING. APPLY WATER USING PORTABLE PIPE OR HOSE LINES WITH ROTATING SPRINKLERS WITHIN 24 HOURS AFTER SEEDING. SPRINKLING MAY BE DONE WITH WATER TRUCKS AND HOSES IN CERTAIN LOCATIONS WHERE IT IS IMPRACTICAL TO USE PORTABLE LINES OR HOSES. SUPERVISE SPRINKLING TO PREVENT RUNOFF OF WATER. THE CONTRACTOR SHALL FURNISH ALL PUMPS, HOSES, PIPE LINES, WATER TRUCKS AND SPRINKLING EQUIPMENT REQUIRED. WATER AS REQUIRED TO ACHIEVE ACCEPTABLE GRASS COVERAGE. DO NOT WATER AT RATES EXCEEDING 2,000 GAL/AC/HR. TO PREVENT RUNOFF.
  6. WEEDING. KEEP ALL SEEDED AREAS RELATIVELY FREE FROM WEEDS AND UNDESIRABLE GRASSES, USING APPROVED METHODS, MATERIALS AND TIMING.
  7. SILT FENCE. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG DRIVEN 1/4\"/>

THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

EROSION DETAILS & SPECIFICATIONS

351 HIGHWAY 285, SUITE #201  
FAIRPLAY, COLORADO 80440  
MAIN OFFICE 719.836.7120  
SILVER CLIFF PHONE 719.783.3757

311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB#1, LOT 14

"PEACE OF MIND THROUGH HOLISTIC DESIGN"

**LITTLEHORN ENGINEERING & SURVEYING**

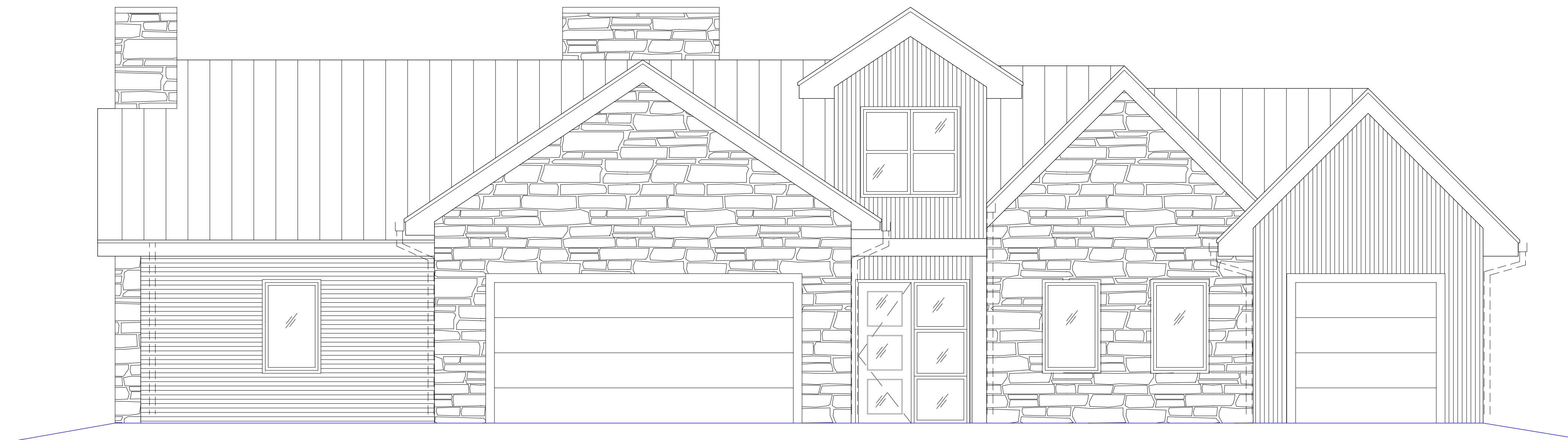
PROJECT NO. 2022-100742

CLIENT LANDY AND MICHELLE HACKEBEIL

DATE 04.10.2023

REVISION:

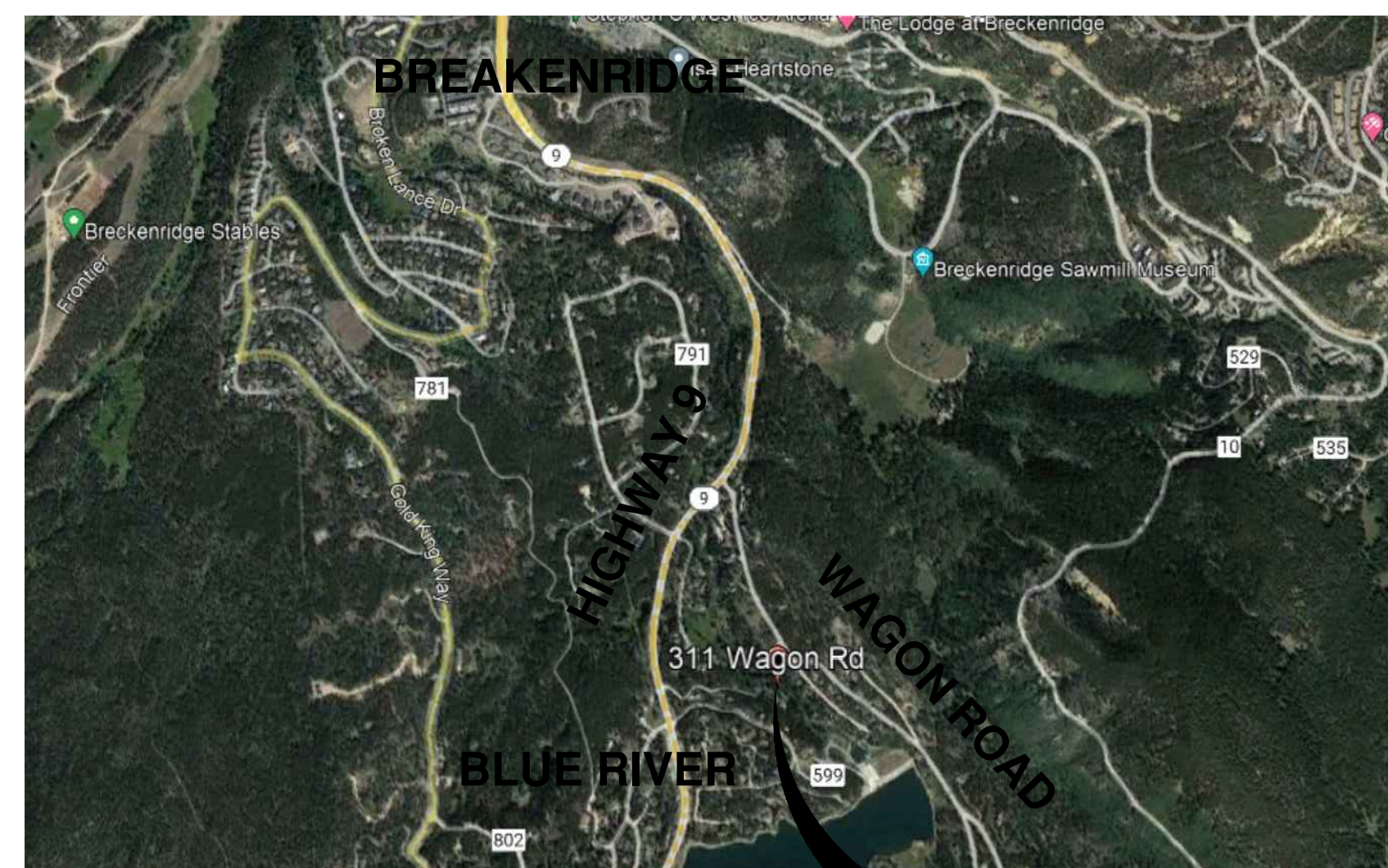
C4



# Blue River Mountain Home

## 311 Wagon Road, Blue River, CO 80424

### LOCATION MAP



**PROJECT SITE**

### SETS ISSUED:

04.14.23 FOR PERMIT

### CONTACTS

#### PRESENTED BY

**405 Front Street  
Comfort, TX 78013  
830-741-3400  
Landyn Hacketbeil  
llandyn@ttcustomhomes.com**

#### ARCHITECT

**ROSE-VILLACORTE ARCHITECTURE LLC  
480 N Sam Houston Parkway E, Suite 110  
Houston TX 77060  
346-498-3808  
Timothy Paul Rose, Architect #26947  
timothy@rvaarch.com**

#### STRUCTURAL ENGINEER

**Sarab Structural & Civil LLC  
13831 Northwest Freeway, Suite 245  
Houston, TX 77040  
832-922-1145  
Karim S. Dadelahi P.E.  
sscllc@sarabstructural.com**

#### CIVIL ENGINEER

**Littlehorn Engineering LLC  
351 U.C. Highway 285  
Fiarplay, CO 80440  
719-836-7120  
John J Littlehorn P.E.**

#### ELECTRICAL ENGINEER

n/a

### DRAWING INDEX

COVER TITLE, INDEX  
A0.00 CODE SHEET

#### CIVIL

- C0 COVER SHEET & CONSTRUCTION DETAILS
- C1 OVERALL SITE PLAN
- C1.1 SITE AND GRADING PLAN DETAIL
- C2 SITE CONSTRUCTION DETAILS
- C3 EROSION CONTROL PLAN
- C4 EROSION DETAILS AND SPECIFICATIONS
- COVER OWTS
- D0 GENERAL CONSTRUCTION & SITE NOTES
- D1 DESIGN & INSTALLATION NOTES
- D2 OVERALL SITE PLAN FOR OWTS
- D2.1 SITE PLAN DETAIL FOR OWTS
- D3 STA DETAILS AND NOTES
- D4 SEPTIC TANK DETAILS & SPECIFICATIONS
- D4.1 ORENCO ADVANTEX AX-RT MFG. DRAWINGS 1 OF 2
- D4.2 ORENCO ADVANTEX AX-RT MFG. DRAWINGS 2 OF 2
- D5 OWTS DETAILS & EXCAVATION NOTES
- D6 OWTS MAINTENANCE REQUIREMENTS
- D7 SOILS TESTING & PUMP CALCULATIONS

#### LANDSCAPE

N/A - BY OWNER

#### ARCHITECTURAL

- A2.00 UPPER LEVEL FLOOR PLAN
- A2.01 LOWER LEVEL FLOOR PLAN
- A2.02 UPPER LEVEL REFLECTED CEILING PLAN
- A2.03 LOWER LEVEL REFLECTED CEILING PLAN
- A2.04 UPPER LEVEL POWER PLAN
- A2.05 LOWER LEVEL POWER PLAN
- A2.08 ROOF PLAN
- A3.00 EXTERIOR ELEVATIONS
- A3.01 EXTERIOR ELEVATIONS
- A3.02 EXTERIOR ELEVATIONS
- A3.03 EXTERIOR ELEVATIONS
- A5.00 BUILDING SECTIONS
- A5.01 BUILDING SECTIONS
- A5.02 BUILDING SECTIONS
- A5.03 BUILDING SECTIONS
- A6.00 DOOR & WINDOW SCHED. & DETAILS

#### STRUCTURAL

#### MECHANICAL

N/A - BY OWNER

#### ELECTRICAL

N/A - BY OWNER

#### PLUMBING

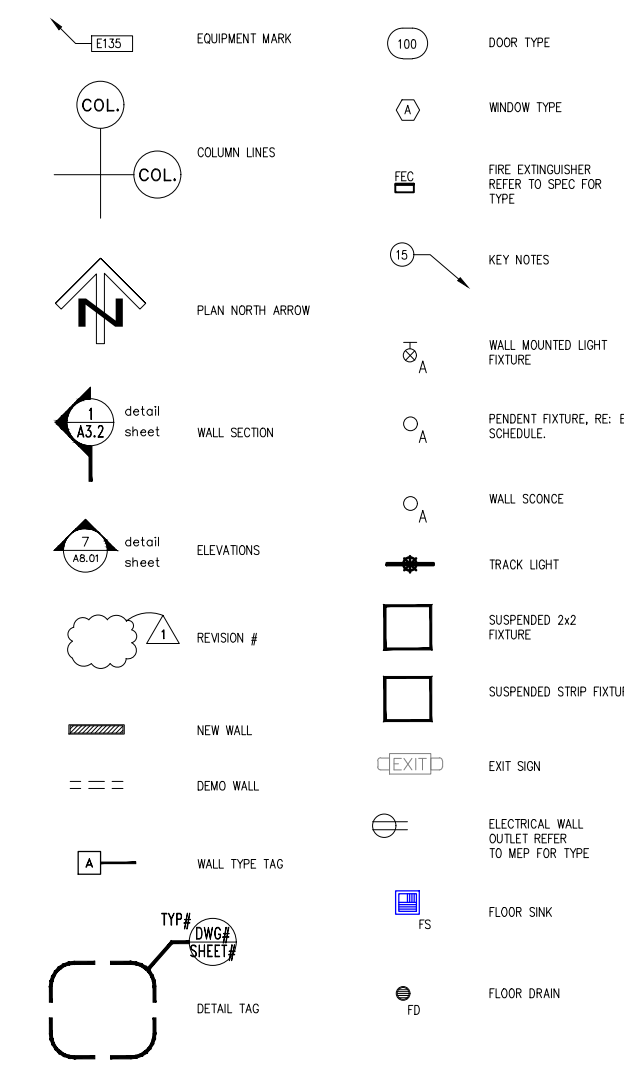
N/A - BY OWNER

# GENERAL NOTES

- INSPECTION OF SITE BIDDERS ARE INSTRUCTED TO VISIT AND INSPECT THE PREMISES PRIOR TO SUBMITTING THEIR PROPOSALS AND TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS UNDER WHICH THE WORK WILL BE PERFORMED. NO SUBSEQUENT EXTRAS OR ADDITIONS WILL BE ALLOWED ON ANY CLAIM OF LACK OF KNOWLEDGE OF CONDITIONS OR CIRCUMSTANCES ABOUT WHICH THE BIDDER COULD HAVE INFORMED THEMSELVES.
- MODIFICATIONS BIDDERS SHALL MAKE KNOWN ANY LIMITATIONS, EXCLUSIONS, OR MODIFICATIONS TO THE PROJECT DURING THE PRICING PHASE OF THE PROJECT. UNLESS NOTED ALL WORK SHOWN ON THE DRAWINGS WILL BE PRESUMED TO BE INCLUDED.
- INSURANCE ALL CONTRACTORS INVOLVED IN THIS WORK SHALL CARRY PROPERTY DAMAGE AND PUBLIC LIABILITY INSURANCE AS REQUIRED BY OWNER & GOVERNMENTAL AGENCIES HAVING JURISDICTION AND COMPLY WITH STATUTORY REQUIREMENTS FOR DISABILITY AND WORKMEN'S COMPENSATION. THEY WILL COMPLY WITH ALL RULES AND REGULATIONS DICTATED BY THE OWNER AND THE CONDITIONS OF THE JOB. INSURANCE SHALL PROTECT THE OWNER, THE TENANT, ARCHITECT AND OTHER GROUP(S) TO BE NAMED FROM LIABILITY TO THE CONTRACTOR'S NEGLIGENCE.
- DIMENSIONING DO NOT SCALE DRAWINGS: DIMENSIONS SHALL GOVERN. DETAILS SHALL GOVERN OVER PLANS AND ELEVATIONS; LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS. IF THERE IS A DISCREPANCY, YOU ARE REQUIRED TO NOTIFY THE ARCHITECT IMMEDIATELY. G.C. SHALL VERIFY ALL DIMENSIONS. DIMENSIONS ARE FINISH DIMENSIONS UNLESS OTHERWISE NOTED.
- SUBSTITUTION OF MATERIALS SHALL BE APPROVED BY ARCHITECT/OWNER PRIOR TO CONSTRUCTION OF MATERIAL. SUBSTITUTION MADE THAT ARE NOT APPROVED ARE AT G.C. RISK AND SUBJECT TO CORRECTION AT G.C. EXPENSE.
- REVIEW OF PLANS THE GENERAL CONTRACTOR SHALL, BEFORE COMMENCING WORK, REVIEW ALL PLANS AND SPECIFICATIONS AND VERIFY ALL GOVERNING DIMENSIONS AT THE BUILDING. THE GENERAL CONTRACTOR SHALL EXAMINE ALL ADJOINING WORK OR AREAS UPON WHICH THE PERFORMANCE OF THEIR WORK IS IN ANY WAY DEPENDENT ON ANY VARIATIONS OR DISCREPANCIES SHALL BE REPORTED, WITH ALL DUE EXPEDIENCY, TO ARCHITECT PRIOR TO THE FABRICATION OR ERECTION OF THE WORK IN QUESTION OR SUBMITTAL OF BID PROPOSALS.
- DISTRIBUTION OF DRAWINGS THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISTRIBUTION OF DRAWINGS TO ALL TRADES UNDER THEIR EMPLOY.
- ADDITIONAL INFORMATION ANY INFORMATION REQUIRED BY CONTRACTORS THAT IS NOT SHOWN ON THE DRAWINGS OR CONTAINED IN OTHER CONTRACT DOCUMENTS SHALL BE REQUESTED BY THE GENERAL CONTRACTOR FROM ARCHITECT.
- SUBCONTRACTORS LIST THE GENERAL CONTRACTOR SHALL SUPPLY, PRIOR TO THE COMMENCEMENT OF WORK, A LIST OF ALL SUBCONTRACTORS TO ARCHITECT. THE NAME OF THE PRINCIPAL CONTACT, THE ADDRESS AND PHONE NUMBER OF EACH SUBCONTRACTOR SHALL BE INCLUDED ON THE LIST.
- MATERIAL SAMPLES THE GENERAL CONTRACTOR SHALL FURNISH SAMPLES TO ARCHITECT OF VARIOUS MATERIALS, TOGETHER WITH FINISHES, IF NOT ALREADY SPECIFIED IN THE CONTRACT DOCUMENTS, AND INTENDED FOR USE IN THE WORK BEFORE THE COMMENCEMENT OF THE SPECIFIED WORK.
- G.C. REPRESENTATIVE A REPRESENTATIVE OF THE GENERAL CONTRACTOR AUTHORIZED TO DISCUSS THE WORK AND RECEIVE INFORMATION FROM ARCHITECT SHALL BE AVAILABLE AT ALL TIMES THAT WORK IS IN PROGRESS.
- DAMAGES TO SITE GREAT CARE SHALL BE EXERCISED TO ASSURE THAT THE BUILDING SHALL BE PROTECTED FROM DAMAGE THAT COULD OCCUR BECAUSE OF THIS WORK. CONTRACTORS SHALL PROVIDE PROTECTION FOR EXISTING AREAS AND NEW WORK AREAS. ANY DAMAGES CAUSED BY THIS WORK OR ACCIDENTS SHALL BE REPAIRED, REPLACED OR PATCHED TO THE SATISFACTION OF ARCHITECT AND THE OWNER. CONTRACTORS SHALL BEAR FINANCIAL RESPONSIBILITY FOR SUCH DAMAGE AND ANY WORK UNDERTAKEN TO CORRECT IT.
- DAMAGES TO MATERIALS THE CONTRACTORS SHALL EXERCISE GREAT CARE IN PROTECTION FROM DAMAGE ALL MATERIALS EXISTING ON THE JOB AND SHALL MAINTAIN PROTECTION FOR ALL TRAFFIC AREAS OF THE BUILDING TO BE USED DURING THE EXECUTION OF WORK RELATING TO THIS CONTRACT WITH THE UNDERSTANDING THAT THE CONTRACTOR'S WILL RECTIFY ANY DAMAGE ATTRIBUTABLE TO THEIR OPERATION.
- SHOP DRAWINGS THE CONTRACTORS SHALL SUBMIT SHOP DRAWINGS FOR SUCH WORK FOR ALL MATERIAL OR AS MAY BE SPECIFICALLY REQUESTED IN THE DRAWINGS, OR ELSEWHERE IN THE CONTRACT DOCUMENTS, TO ARCHITECT FOR REVIEW. SHOP DRAWINGS SHALL SHOW ALL DIMENSIONS AND CONDITIONS AND SHALL BE SUBMITTED IN THE FORM OF ELECTRONIC FORMAT AS "PDF". ANY SUBMITTAL THAT HAS NOT BEEN REVIEWED BY AND STAMPED BY THE GENERAL CONTRACTOR AND E-FILES THAT ARE NOT LEGIBLE SHALL BE REJECTED FOR RESUBMITAL AND THE REVIEW CLOCK SHALL RESET. WHEN ARCHITECT REQUIRES THE REVISION AND RESUBMISSION OF SHOP DRAWINGS, SUCH RESUBMISSION SHALL OCCUR WITHIN ONE (1) WEEK OF NOTIFICATION OF SUCH REQUIREMENT. INITIAL SHOP DRAWINGS SHALL BE SUBMITTED (2) WEEKS PRIOR TO THEIR CRITICAL PATH RETURN DATE. FOR INITIAL AND READMISSIONS, THE GENERAL CONTRACTOR IS TO PREVIEW AND MARK UP THE SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE ARCHITECT. ALL WORK COMPLETED BY THE GENERAL CONTRACTOR OR ITS SUB-CONTRACTORS THAT HAS NOT BEEN REVIEWED THRU THE SUBMITTAL PROCESS THAT IS DEEMED UNACCEPTABLE BY THE ARCHITECT/OWNER SHALL BE RECONSTRUCTED, RE-FABRICATED, CORRECTED ETC. AT THE EXPENSE OF THE GENERAL CONTRACTOR AND ITS SUB-CONTRACTORS.
- QUALIFICATIONS ALL WORK SHALL BE PERFORMED BY SKILLED AND QUALIFIED WORKMEN AND IN ACCORDANCE WITH THE BEST PRACTICES OF THE TRADES INVOLVED. CARE SHALL BE TAKEN TO ENSURE COMPLIANCE WITH BUILDING REGULATIONS AND/OR GOVERNMENTAL LAWS, STATUTES, OR ORDINANCES CONCERNING THE USE OF UNION LABOR.
- QUALITY OF MATERIALS ALL MATERIALS SHALL BE NEW, UNUSED, AND OF THE HIGHEST QUALITY IN EVERY RESPECT UNLESS OTHERWISE NOTED. MANUFACTURED MATERIALS AND EQUIPMENT SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS UNLESS OTHERWISE NOTED.
- QUALITY OF WORK ALL WORK SHALL BE ERECTED AND INSTALLED PLUMB, LEVEL, SQUARE AND TRUE, AND IN PROPER ALIGNMENT.
- CODE COMPLIANCE SEE COVER SHEET GENERAL NOTES FOR CODE COMPLIANCE. CONTRACTORS SHALL BE REQUIRED TO BUILD PER CODE REGARDLESS OF SPECIFIC NOTATIONS ON THE DRAWINGS. ANY DISCREPANCIES FOUND SHALL BE REPORTED TO THE ARCHITECT IN WRITING PRIOR TO CONTINUANCE OF WORK FOR THE SPECIFIC CODE ISSUE FOUND.
- WORKFORCE THE GENERAL CONTRACTOR SHALL KEEP SUFFICIENT WORKMEN ON THE JOB SITE AT ALL TIMES TO PERFORM THE WORK IN THE MOST EXPEDITIOUS MANNER CONSISTENT WITH GOOD WORKMANSHIP, GOOD BUSINESS PRACTICE AND THE BEST INTERESTS OF THE OWNER.
- SCHEDULING OF TRADES EACH TRADE WILL BE EXPECTED TO PROCEED IN A FASHION THAT WILL NOT DELAY OR DETAIN THE TRADES FOLLOWING THEM.
- EXTRA WORK THE CONTRACTORS SHALL NOT PROCEED WITH ANY ADDITIONAL WORK OR CHANGES FOR WHICH THEY EXPECT ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT WRITTEN AUTHORIZATION FROM OWNER. FAILURE TO OBTAIN SUCH AUTHORIZATION SHALL INVALIDATE ANY CLAIM FOR EXTRA COMPENSATION.
- WARRANTEE ALL WORK AND MATERIALS SHALL BE GUARANTEED AGAINST DEFECTS IN DESIGN, WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR.
- WASTE THE CONTRACTORS SHALL AT ALL TIMES KEEP THE PREMISES FREE OF THE ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR OPERATIONS. THE CONTRACTORS SHALL CONFINE THEIR OPERATIONS FOR REMOVAL TO SUCH METHODS AS MAY BE AGREABLE WITH THE OWNER. THE PROJECT SHALL BE LEFT CLEAN AND CLEAR TO THE SATISFACTION OF THE OWNER, AND THE DISPOSITION OF ALL SALVAGED MATERIALS IS TO BE CLEARED WITH THE OWNER PRIOR TO REMOVAL. THE PREMISES SHALL BE SWEEP CLEAN DAILY OF RELATED CONSTRUCTION DEBRIS.
- PUNCH-LIST UPON SUBSTANTIAL COMPLETION OF THE WORK, THE GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT TO SCHEDULE A "PUNCH LIST" WALK THROUGH.
- RESPONSIBILITIES OF SCOPE IT IS INTENDED THAT THE GENERAL CONTRACTOR PROVIDE A COMPLETE JOB AND ANY OMISSIONS IN THESE NOTES OR IN THE OUTLINE OF WORK SHALL NOT BE CONSIDERED AS RELIEVING THE GENERAL CONTRACTOR OF SUCH RESPONSIBILITIES IMPLIED BY THE SCOPE OF WORK EXCEPT FOR ITEMS SPECIFICALLY NOTED.
- UNENFORCEABLE DOCUMENTS SHOULD ANY PORTION OF THE CONTRACT DOCUMENTS PROVE TO BE, FOR WHATEVER REASON, UNENFORCEABLE, SUCH UNENFORCEABLE SHALL NOT EXTEND TO THE REMAINDER OF THE CONTRACT NOR SHALL IT VOID ANY OTHER PROVISIONS OF THE CONTRACT.
- CURRENT DOCUMENTS THE GENERAL CONTRACTOR SHALL HAVE A COPY OF THE LATEST SET OF CONTRACT DOCUMENTS, CHANGE ORDERS, MINOR CHANGES, CLARIFICATIONS, ETC. ON THE JOB SITE AT ALL TIMES FOR REVIEW BY ARCHITECT/OWNER.
- COMPLIMENTARY DOCUMENTS ALL DRAWINGS AND CONSTRUCTION NOTES ARE COMPLIMENTARY AND WHAT IS CALLED FOR BY ONE SHALL BE BINDING AS IF CALLED FOR BY ALL.
- AS-BUILT AND RECORD DOCUMENTS COMPLETE RECORD DOCUMENTS TO BE MAINTAINED SEPARATELY FROM THE FIELD SET. THE RECORD SET SHALL HAVE ALL FIELD CHANGES DOCUMENTED AND WILL BE HELD BY ARCHITECT AT THE COMPLETION OF PROJECT. PROVIDE A COPY OF THE RECORD DOCUMENTS TO THE OWNER. GENERAL CONTRACTOR IS RESPONSIBLE FOR DOCUMENTATION OF AS-BUILT DRAWINGS TO BE TURNED OVER TO THE ARCHITECT AND OWNER AT PROJECT CLOSEOUT.
- MATERIAL STORAGE THE GENERAL CONTRACTOR SHALL RECEIVE MATERIALS TO JOB SITE ONLY WHEN READY FOR INSTALLATION. THE GENERAL CONTRACTOR IS TO PROVIDE A CLEAN, SECURE & LOCKED STORAGE AREA FOR SUCH MATERIALS AS REQUIRED. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL DELIVERED & SIGNED FOR AT JOB SITE.
- SCOPE OF WORK THE WORK INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR, AND REASONABLY INCIDENTAL TO, THE COMPLETION IN PLACE OF ALL WORK ILLUSTRATED AND DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS. ALL SUCH WORK IS TO BE DONE BY THE CONTRACTORS UNLESS OTHERWISE NOTED.
- LEAD-TIMES THE GENERAL CONTRACTOR SHALL SUBMIT CONFIRMATIONS WITH DELIVERY DATES OF ORDERS FOR MATERIALS AND EQUIPMENT ON ANY LONG LEAD-TIME ITEMS.
- O&M THE GENERAL CONTRACTOR SHALL SUBMIT AN "O&M" OPERATIONS AND MAINTENANCE MANUAL FOR ALL ITEMS THAT ARE REQUIRED AS SPECIFIED OR CALLED OUT IN THE DOCUMENTS. THE O&M MANUAL SHALL BE HANDLED OVER AT PROJECT CLOSE OUT. INCLUDES BUT NOT LIMITED TO: WARRANTIES, REVIEWED SHOP DRAWINGS, CALCULATIONS, EQUIPMENT CUT-SHEETS INSTALLATION AND OPERATION FOR ALL MATERIALS PROVIDED OR INSTALLED BY THE CONTRACTOR.
- MILLWORK DIMENSIONS ARE OVERALL DIMENSIONS – G.C. TO PROVIDE SHOP DRAWINGS FOR REVIEW PRIOR TO CONSTRUCTION.
- VERIFY ROUGHED-IN OPENINGS PRIOR TO FABRICATING MILLWORK, DOOR AND WINDOW FRAMES.
- NOT USED.

- GENERAL CONTRACTOR TO COORDINATE LOCATION OF REFRIGERATION LINES WITH APPROPRIATE SUBCONTRACTOR(S) PRIOR TO FINISHING SURFACES.
- ALL SERVICE STATION, BREWERY, AND TOILET ROOM WALLS SHALL BE SHEATHED WITH MOISTURE RESISTANT GYPSUM BOARD.
- NOT USED.
- VERTICAL PIPING LOCATED WITHIN THE STUD SPACE OF THE PARTITION SHALL BE COMPLETELY ENCLOSED WITH FULL THICKNESS OF DRYWALL ON EACH SIDE.
- GENERAL CONTRACTOR TO COORDINATE LOCATION OF ALL BLOCKING REQUIRED FOR EQUIPMENT MANUFACTURE. ALL BLOCKING SHALL BE INSTALLED DIRECTLY TO ROUGH WOOD STUDS. GENERAL CONTRACTOR TO FURNISH ALL BLOCKING REQUIRED AND VERIFY INSTALLATION IN FIELD.
- JOINTS OCCURRING IN RATED DRYWALL PARTITIONS SHALL BE STAGGERED BOTH HORIZONTALLY AND VERTICALLY.
- RECESSES FOR ELECTRICAL PANELS, FIRE EXTINGUISHER CABINETS, FIRE HOSE CABINETS, ANNUNCIATOR BOXES, ETC. LOCATED IN RATED PARTITIONS SHALL BE FACED WITH DRYWALL TO CREATE A FIVE SIDED ENCLOSURE AS REQUIRED TO RETAIN THE RATING OF THE WALL.
- NOT USED.
- ALL MATERIAL USED FOR INTERIOR WALL AND CEILING FINISH SHALL BE NOT GREATER THAN A FLAME SPREAD RATING OF 76–200 CLASS C, EXCEPT TEXTILE WALL COVERINGS AND AT REQUIRED VERTICAL EXIT WAYS / PASSAGEWAYS / CORRIDORS PROVIDING EXIT WAY ACCESS, WHEREBY SUCH MATERIAL SHALL HAVE A FLAME SPREAD RATING OF 26 TO 75, CLASS B (REFER TO SECTION 803, TABLE 803.3).
- UNLESS INDICATED OTHERWISE, ALL DIMENSIONS ARE TO FACE OF STUD TO FACE OF STUD.
- DIMENSIONS TO CENTERLINES OF PLUMBING FIXTURES ON FLOOR PLANS ARE TO FINISHED FACE OF WALL.
- PROJECT CONVENTION IS TO DIMENSION INTERIOR STUD WALLS TO ONE SIDE FOR CLARITY.
- NOMINAL STUD SIDES ARE AS DEFINED IN PARTITION SCHEDULE, AND WALL SECTIONS. ROUGH FRAMING OPENINGS MAY VARY DEPENDING ON REQUIREMENTS OF INSTALLED ITEMS.
- OPENINGS FOR DOORS, WINDOWS, AND STOREFRONT ARE NOMINAL DIMENSIONS. ROUGH FRAMING OPENINGS MAY VARY DEPENDING ON REQUIREMENTS OF INSTALLED ITEMS.
- PROVIDE FIRE RETARDANT BLOCKING BEHIND ALL WALL-MOUNTED FIXTURES AND EQUIPMENT AS MAY BE REQUIRED. REFER TO EQUIPMENT PLANS AND ELEVATIONS FOR LOCATIONS.
- CONTRACTOR SHALL FURNISH THE STORE OWNER (OR OWNERS REPRESENTATIVE) WITH THE CERTIFICATE OF OCCUPANCY.
- CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL REQUIRED INSPECTIONS WITH APPROPRIATE AUTHORITIES HAVING JURISDICTION AND SHALL NOTIFY ARCHITECT/OWNER OF DATE AND TIME OF INSPECTIONS.
- THE CONTRACTOR SHALL PROVIDE A LIST OF THE NAMES, ADDRESSES AND TELEPHONE NUMBERS OF ALL SUBCONTRACTORS TO THE ARCHITECT/OWNER BEFORE THE START OF CONSTRUCTION.
- UPON COMPLETION OF THE WORK, THE GENERAL CONTRACTOR SHALL PROVIDE FOR FINAL CLEANING TO BE PERFORMED BY A PROFESSIONAL CLEANING SERVICE. THE ENTIRE STORE SHALL BE THOROUGHLY CLEANED BEFORE TURNING THE STORE OVER TO THE CLIENT. CLEANING TO INCLUDE ALL SURFACES SUCH AS FLOORS, WALLS, CEILING, COUNTERS EQUIPMENT, DUCTS, LIGHTS AND FIXTURES, ETC.
- SUPERINTENDENT MUST REMAIN ON JOB SITE THROUGH FF&E AND COMPLETION OF THE PUNCH LIST UNLESS ALTERNATE ARRANGEMENTS FOR FINAL PUNCH LIST HAVE BEEN MADE PRIOR TO STORE TURN OVER.
- UPON COMPLETION OF THE WORK CONTRACTOR SHALL DEMONSTRATE THE OPERATION OF ALL SYSTEMS UNDER THEIR SCOPE TO THE CLIENT. THIS INCLUDES: ELECTRICAL, MECHANICAL, PLUMBING, LIGHTING, AUDIO-VISUAL, AND OPERATION OF DOORS, GRILLS AND WINDOWS ETC.
- GENERAL CONTRACTOR SHALL COMPLETE THE TURNOVER CHECKLIST WITH OWNER/ARCHITECT PRIOR TO FINAL ACCEPTANCE OF SPACE BY THE OWNER.
- TURN OVER CHECK LIST AND ITS ACCEPTANCE DOES NOT RELIEVE THE GENERAL CONTRACTOR THEIR SUBS FROM COMPLETING ANY CURRENT OR FOLLOW UP PUNCH LIST ITEMS REQUIRED BY THE ARCHITECT/OWNER/LANDLORD OR AUTHORITIES HAVING JURISDICTION.
- ALL CONSTRUCTION AND INSTALLATION OF ITEMS INCLUDED OR IMPLIED IN THIS CONSTRUCTION DOCUMENTS, AND ACCOMPANYING SPECIFICATIONS AS MAY BE SUPPLIED ARE THE RESPONSIBILITY AND REQUIREMENT OF THE GENERAL CONTRACTOR TO PROVIDE AND INSTALL UNLESS SPECIFICALLY NOTED OTHERWISE.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR DAMAGE, LOSS THEFT OR DESTRUCTION OF ALL OWNER FURNISHED MATERIALS. THE CONTRACTOR WILL BE BACH-CHARGED THE FULL COST OF REPLACEMENT MATERIALS INCLUDING FREIGHT CHARGES AND INSTALLATION, INCLUDING RE-CONNECTION OF ANY UTILITIES AND OR DAMAGE TO CONNECTIONS.
- GENERAL CONTRACTOR ASSUMES FULL RESPONSIBILITIES FOR ALL WORK AND MATERIALS INSTALLED.
- THE GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL TAKE GREAT CARE IN THE SELECTIVE DEMOLITION OF MATERIALS AND/OR EQUIPMENT. ANY DAMAGE CAUSED TO ITEMS NOT CALLED OUT TO BE DEMOLISHED SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR, IN THE EVENT THAT A DEMOLITION IS ANTICIPATED TO CAUSE DAMAGE TO A NON-DEMOLITION ITEM THEN THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/OWNER IN WRITING PRIOR TO WORK THE SCOPE OF DAMAGE TO BE EXPECTED AND RECEIVE APPROVAL TO PROCEED FROM OWNER PRIOR TO WORK. CONTRACTOR IS REQUIRED TO OBTAIN MANUFACTURERS RECOMMENDATIONS ON DEMO REMOVAL OR INSTALLATION OF ALL MATERIALS PRIOR TO WORK, WHERE G.C. IS NOT FAMILIAR WITH INDUSTRY STANDARD PROCESS OR PRACTICES.
- THE CONTRACTOR IS TO PERFORM ALL OTHER WORK AS DESIGNATED BY THE LANDLORD.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL FEES REQUIRED TO PERFORM THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS, INCLUDING TEMPORARY UTILITIES AS MAY BE NEEDED.
- GENERAL CONTRACTOR OR SUB-CONTRACTOR SHALL MAKE THEM SELVES FAMILIAR WITH THE ENTIRE CONSTRUCTION DOCUMENTS IN ORDER TO PROPERLY COORDINATE THEIR OWN SCOPE OF WORK AND TO INSURE THAT THE COORDINATION OF TRANSITION OF TRADE TO TRADE IS COVERED AND NO GAPS ARE CREATED.
- GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL REPORT DISCREPANCIES, DAMAGES OR MISSING ITEMS TO ARCHITECT/OWNER WITH-IN 24 HOURS OF RECEIPT. MATERIAL OF QUESTIONABLE QUALITY IS NOT TO BE RECEIVED, OR INSTALLED, OTHERWISE IT WILL BE REPLACED AT CONTRACTORS EXPENSE. GENERAL CONTRACTOR IS TO RECEIVE AND INSTALL ALL OWNER SUPPLIED MATERIALS AS MAY BE NOTED IN THE DRAWINGS, AND/OR DESCRIBED IN SPECIFICATIONS AND/OR AS DIRECTED BY THE OWNER.
- CONTRACTOR IS REQUIRED TO VERIFY PROJECT ADDRESS PRIOR TO BEGINNING CONSTRUCTION AND FOR ALL DELIVERIES.
- CONTRACTOR SHALL NOT DUMP WASTE, SOIL ETC. ON SITE. CONTRACTOR SHALL DISPOSE OF CONSTRUCTION WASTE AS REQUIRED BY AHI.
- CONTRACTOR SHALL NOT CAUSE DESTRUCTION TO EXISTING SITE FEATURES OR AMENITIES INCLUDING DUMPSTER, LANDSCAPE, ANY DAMAGED CAUSED SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE GENERAL CONTRACTOR.
- ALL NEW ELECTRICAL OUTLETS SHALL BE PLACED AT 42" A.F.F. TO BOTTOM OF OUTLET PLATE.
- SECURITY CAMERAS AND SYSTEM BY OWNER. G.C. SHALL COORDINATE AS NEEDED WITH TENANT AND OR SECURITY INSTALLATION SUB CONTRACTOR.
- G.C. IS RESPONSIBLE FOR COORDINATION BETWEEN CONSTRUCTION DRAWINGS AND ALL EQUIPMENT AND FIXTURES PRIOR TO CONSTRUCTION OR INSTALLATION.
- NO SUBSTITUTIONS ARE ALLOWED UNLESS APPROVED IN WRITING BY ARCHITECT/OWNER.
- ALL PROPOSED CHANGE ORDERS ARE TO BE PRESENTED WITH ESTIMATED COST BACK UP TO ARCHITECT & OWNER PRIOR TO IMPLANTATION OF ANY AND ALL SCOPE OF WORK BEGINS, FAILURE BY THE G.C. TO DO SO WILL AT RISK FOR THE G.C. AND THE G.C. SHALL BE HELD RESPONSIBLE FOR CORRECTION AND COST OF WORK (INCLUDING MATERIALS AND LABOR).
- G.C. SHALL COORDINATE DRAWINGS AS REQUIRED WITH EXISTING BUILDING CONSTRUCTION DOCUMENTS. DRAWINGS WILL BE MADE AVAILABLE AT TIME CONSTRUCTION DOCUMENTS ARE ISSUED FOR BID AND PERMIT.
- G.C. SHALL COORDINATE WITH A&E TEAM & OWNER FOR ALL SLAB AND FOUNDATION PENETRATIONS, CUTTING ETC. FOR DEMO OR NEW UNDERGROUND SCOPE OF WORK PRIOR TO START OF WORK.
- G.C. SHALL SIGN A CERTIFICATE OF COMPLIANCE TO ALL BUILDING CODES AND CONSTRUCTION DOCUMENTATION.
- G.C. SHALL COORDINATE ALL MODIFICATIONS TO BUILDING WITH EXISTING CONSTRUCTION DOCUMENTS. ALL REPAIRS, PATCHES, INFILL'S, ETC SHALL MATCH EXITING MANUFACTURE AND PRODUCT. INCASES WHERE EXACT MANUFACTURE AND MODEL CANNOT BE VERIFIED, G.C. SHALL NOTIFY ARCHITECT/ENGINEER/TENANT IN WRITING AND SHALL PROVIDE AN EQUIVALENT MANUFACTURE AND MODEL FOR ARCHITECT/ENGINEER/TENANT FOR REVIEW AND COMMENT. FAILURE TO CONFORM TO THIS REQUIREMENT IS AT G.C. RISK AND SUBJECT TO CORRECTION AT G.C. EXPENSE.
- G.C. SHALL BUILD TO ALL APPLICABLE BUILDING CODES AS REQUIRED REGARDLESS OF NOTATIONS OR LACK OF NOTATIONS IN THE CONSTRUCTION DRAWINGS.
- ALL EXPOSED PIPING SHALL BE INSULATED PER TAS/ADA GUIDELINES.
- PROVIDE ICE AND WATER SHIELD FOR ROOF.
- PROPANE GAS ALARM/SHUTOFF SYSTEM REQUIRED BY LOCAL ORDINANCE.

# DRAWING SYMBOLS



# CODE NOTES

- CODE COMPLIANCE:** ALL WORK TO COMPLY WITH APPLICABLE NATIONAL AND LOCAL CODES AND ORDINANCES AND UNDERWRITERS REGULATIONS HAVING JURISDICTION. IF ANY WORK INDICATED ON THE CONTRACT DOCUMENTS IS BELIEVED TO BE AT VARIANCE WITH THE ABOVE CRITERIA, THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY FOR A DETERMINATION BEFORE PROCEEDING.
- PERMITTING AND LICENSING:** THE GENERAL CONTRACTOR SHALL OBTAIN ALL PERMITS AND CERTIFICATES OF OCCUPANCY OR LOCAL EQUIVALENT, INCLUDING SIGNAGE PERMITS. THE GC WILL BE REIMBURSED FOR PERMIT FEES. THE OWNER SHALL OBTAIN ALL LIQUOR AND HEALTH PERMITS.
- INSPECTIONS:** THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ARRANGING AND MANAGING ALL BUILDING, FOOD AND LIQUOR LICENSE INSPECTIONS IN A TIMELY MANNER AS REQUIRED BY THE JURISDICTION FOR FINAL APPROVAL AND CERTIFICATE OF OCCUPANCY PER JURISDICTION REQUIREMENTS FOR BUILDING, ZONING AND SIGNAGE PERMITS.
- REMAINING GENERAL NOTES:** REFER TO SHEET A0.01 FOR ADDITIONAL GENERAL NOTES.

# SITE & BUILDING DATA

PROJECT SCOPE:  
TWO STORE RESIDENCE TO BE LOCATED AT 311 WAGON ROAD  
BLUE RIVER COLORADO.

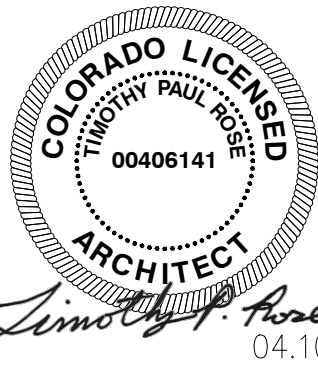
**APPLICABLE CODES**  
**NATIONAL CODE, LOCAL CODE AND /OR AMENDMENTS USED:**  
**Building Code:** 2018 International Residential Code (IRC)  
**Electrical Code:** 2020 National Electrical Code (NFPA 70)  
**Energy Code:** 2018 International Energy Code (ICC)

ZONING:	Residential
TYPE OF CONSTRUCTION CLASSIFICATION:	New structure is Type VA unprotected, un-sprinkled.
OCCUPANCY CLASSIFICATION:	Use Group Designed as: SINGLE FAMILY RESIDENTIAL
BUILDING HEIGHT:	as allowed as designed
Number of Stories:	2, 35'-0" A.F.F. Number of Stories: 2, 34'-11" A.F.F. Square foot area: 3,711 s.f. gross
GLAZING:	U-FACTOR 0.35 OR LOWER, SHGC 0.25 OR LOWER
WALL:	CONTINUOUS INSULATION R 20 PLUS R3.8 CONTINUOUS INSULATION
WALLS BELOW GRADE:	CONTINUOUS INSULATION R 10
SLAB INSULATION – UNHEATED:	CONTINUOUS INSULATION R 15
ROOF:	R 49

**OTHER NOTES:**  
1) PROPANE GAS ALARM/SHUTOFF SYSTEM REQUIRED



**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**



PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT

# A0.02 GENERAL NOTES & CODE



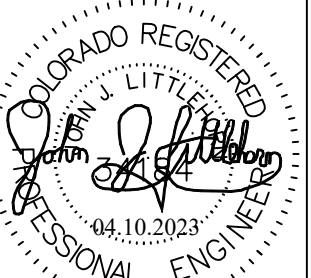
# CIVIL SITE AND GRADING PLANS FOR A SINGLE-FAMILY RESIDENCE

## 311 WAGON ROAD, TOWN OF BLUE RIVER, CO

A PERMIT IS REQUIRED FROM THE TOWN OF BLUE RIVER TO EXCAVATE & INSTALL A DRIVEWAY AND EXCAVATE ON THIS SITE AND FROM SUMMIT COUNTY FOR THE OWTS RELATED WORK

<b>PROPERTY INFORMATION</b> 311 WAGON ROAD BLUE RIVER, CO 80424 SPILLWAY SUB. #1, LOT 14	<b>DRAWING PREPARED FOR:</b> LANDYN AND MICHELLE HACKEBEIL 405 FRONT STREET COMFORT, TX 78013
<b>BUILDING ARCHITECT:</b> ROSE-VILLACORTE ARCHITECTURE, LLC 480 NORTH SAM HOUSTON PARKWAY EAST, SUITE 110 HOUSTON, TX 77060 OFFICE # (346) 498-3808	<b>CONTRACTOR:</b> TBD

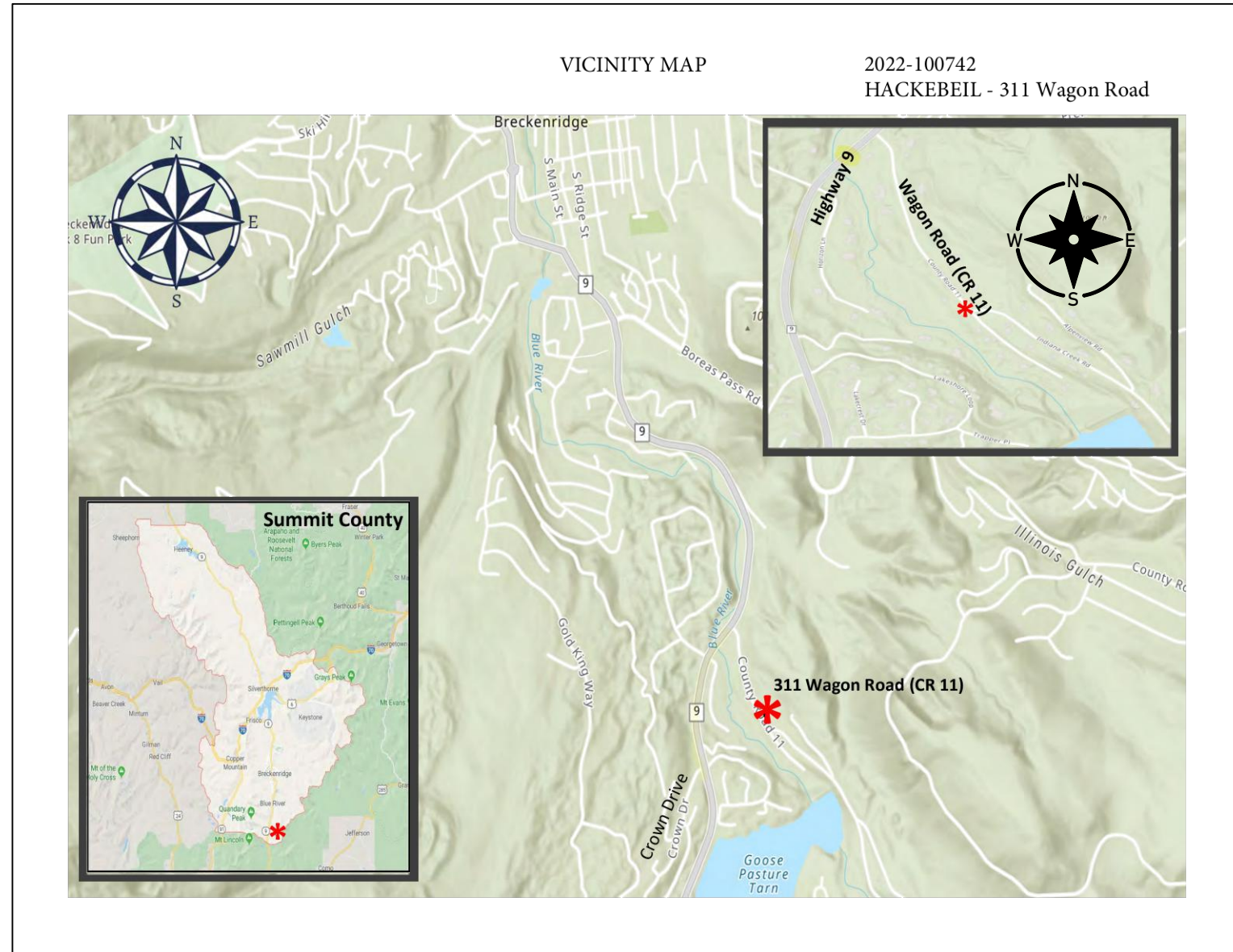
THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.



**CONSTRUCTION NOTES - Construction notes shall govern ALL civil drawings**

**GENERAL CONSTRUCTION AND PROJECT NOTES**

- PERMITS. IT IS THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL RETAINING WALLS ARE INSTALLED APPROPRIATELY AND WITH THE PERMISSION OF THE COUNTY AND H.O.A. AND SOMETIMES THE FIRE DEPARTMENT (VERIFY). THE CONTRACTOR IS RESPONSIBLE FOR PROCUREMENT OF ALL NECESSARY PERMITS. COUNTY AND FIRE ACCESS REQUIREMENTS FOR DRIVEWAY STANDARDS MUST BE MET. IF SITE DISTURBANCE RESULTS IN MORE THAN 10 ACRES OF DISTURBANCE, A PERMIT FROM THE STATE OF COLORADO IS REQUIRED.
- GREAT CARE AND PROFICIENCY HAVE GONE INTO THE PREPARATION OF THESE PLANS AND BLUE PRINTS. HOWEVER, DUE TO THE IMPOSSIBILITY OF PROVIDING "ON-SITE" SUPERVISORY CONTROL OVER ACTUAL CONSTRUCTION AND BECAUSE OF GREAT VARIATIONS IN LOCAL BUILDING CODES, SOILS, GROUNDWATER, BUILDING CONDITIONS, AND WEATHER CONDITIONS, THE ENGINEER ASSUMES NO LIABILITY EXCEPT AS DESCRIBED IN THE CONTRACT FOR PROFESSIONAL SERVICES. THE ENGINEER HAS DESIGNED THE PROJECT FROM GENERALLY ACCEPTED ENGINEERING PRACTICES AS IS TYPICAL IN THE LOCAL AREA TO ASSURE THAT THE DESIGNED ITEMS ARE SOUND.
- DISCREPANCIES IN BUILDING PLANS OFTEN EXIST, THEREFORE THE HOME OWNER AND THE CONTRACTOR MUST INTERPRET THE BLUE PRINTS AND VERIFY PRIOR TO CONSTRUCTION COMMENCEMENT: SITE CONDITIONS, CONSTRUCTION SETBACKS, BUILDING LOCATION, DIMENSIONS, MATERIALS, COLORS, QUANTITIES, ELEVATIONS, AND FINISHES. ALL WORK SHALL COMPLY WITH APPLICABLE GOVERNING CODES, BUILDING DEPARTMENT ORDINANCES, LAWS, AND MANUFACTURERS' SPECIFICATIONS. ANY CHANGES OR ITEMS REQUIRED FOR CONSTRUCTION WHICH ARE NOT CLEAR SHALL BE REPORTED TO THE ENGINEER (OR OTHER DESIGNERS/SURVEYORS) FOR APPROVAL.
- THESE PLANS ARE NOT AN INSTALLATION MANUAL AND DO NOT SHOW ALL DETAILS AND HAVE NOT AND CAN NOT CONSIDER EVERY CONCEIVABLE EVENT WHICH MAY OCCUR, AS THAT WOULD RENDER THE DESIGN AND FABRICATION OF THE PROJECT EXCESSIVELY EXPENSIVE. APPLICABLE INSTALLATION MANUALS AND CODES, AS LISTED IN THE SECTION LABELED "CODES", MUST BE REFERENCED AND USED FOR CONSTRUCTION. USE OF THESE DRAWINGS CONSTITUTES ACCEPTANCE OF RESPONSIBILITY FOR HAVING READ AND FULLY UNDERSTOOD THE CONSTRUCTION DRAWINGS AND THE ENGINEER'S LIABILITY. IF THE CLIENT OR CONTRACTOR HAS ANY QUESTIONS, PLEASE CONTACT THE ENGINEER PRIOR TO FABRICATION.
- LOCATE ALL BURIED UTILITIES PRIOR TO ANY CONSTRUCTION.
- A SOILS ENGINEER SHALL VERIFY ALL SOILS BEFORE & DURING PLACEMENT OF ANY APPURTENANCES, RETAINING WALLS, ASPHALT, OR CONCRETE.
- ALL MATERIALS SHALL BE PROTECTED WITH SUITABLE TEMPORARY WEATHER FACILITIES AS MAY BE REQUIRED TO PROTECT MATERIALS FROM DAMAGE DURING CONSTRUCTION.
- JOB-SITE SAFETY IS BEYOND THE SCOPE OF THESE DRAWINGS AND THE ABILITY OF THE ENGINEER TO MANAGE. THE OWNER AND CONTRACTORS BEAR ALL RESPONSIBILITY FOR THEIR OWN SAFETY AND THE SAFETY OF EMPLOYEES, WORKERS, AND PASSERSBY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL METHODS OF CONSTRUCTION, INCLUDING TEMPORARY BRACING OR SHORING AS REQUIRED AND CONSTRUCTION SEQUENCING. CONTRACTOR SHALL PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE LINES AND DIMENSIONS OF THE CONTRACT DOCUMENTS AND SHALL PROVIDE FOR THE SAFETY OF THE WORKERS. SITE VISITS BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE.
- WEATHER PROTECTION AND SNOW REMOVAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND OWNER.
- DO NOT SCALE DRAWINGS. VERIFY LINES & DIMENSIONS ON STRUCTURAL DRAWINGS W/ ARCHITECTURAL DRAWINGS PRIOR TO ANY WORK. CALL ENGINEER FOR ANY DIMENSIONING QUESTIONS. DIMENSIONS ON DRAWINGS DO NOT ACCOUNT FOR FINISHES.
- SUBMIT ALL SHOP DRAWINGS TO THE ENGINEER. ENGINEER'S REVIEW OF SHOP DRAWINGS IS PROVIDED AS AN AID TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEW AND CORRECTNESS OF SHOP DRAWINGS. SHOP DRAWINGS DO NOT REPLACE CONTRACT DOCUMENTS. SHOP DRAWINGS (ONLY REVIEWED UPON CLIENT'S REQUEST) ARE SOMETIMES PROVIDED ON CULTURTS, FLARED END SECTIONS, GEODIR FABRICS, FILTER FABRICS, SLOPE NETTING, EROSION MATS, AND OTHER SITE RELATED WORK.
- OTHERS SUBMITTING ENGINEERED DESIGN AND LAYOUT SHALL BEAR RESPONSIBILITY FOR SUCH WORK, AS AN ENGINEER FOR THE DRIVEWAY ONLY, WE SHALL BE LISTED OR RECOGNIZED AS THE ENGINEER OF RECORD FOR THE ENTIRE PROJECT.
- THE CONTRACTOR SHALL NOTIFY ENGINEER OF DETAILS NOT SHOWN ON PLANS THAT ARE NECESSARY FOR THE WORK TO PROCEED.
- ALTERNATES PROVIDED FOR THE CONTRACTOR'S CONVENIENCE SHALL REQUIRE THE CONTRACTOR TO PROVIDE ALL CHANGES AND COORDINATE ALL DETAILS NECESSARY SHOULD THE CONTRACTOR CHOOSE AN ALTERNATE.
- DRIVEWAYS: DRIVEWAYS SHALL CONFORM TO THE REQUIREMENTS OF THE COUNTY OR MUNICIPALITY WHICH INCLUDE THE DIMENSIONS, DRIVEWAY WIDTHS, OPENINGS, AND THE CENTERLINE CURVE RADII. FOR THE TOWN OF BLUE RIVER THIS IS MAX. 6.0% FOR THE FIRST 20 FEET, THEN UP TO 12% WITH TOWN APPROVAL THEREAFTER. PARKING AREAS SHALL HAVE A MAXIMUM GRADE OF 4%, AND A MINIMUM GRADE OF 1.0% TO FACILITATE DRAINAGE. ALL GRADES MUST SLOPE AWAY FROM STRUCTURE REGARDLESS OF WHAT IS SHOWN ON ANY GRADING PLAN. DRAINAGE FROM DRIVEWAYS SHALL BE DIVERTED TO ROADSIDE DITCHES OR OTHER APPROPRIATE DRAINAGE WAY.
- PLEASE NOTE THAT ANY TIME A DRIVEWAY IS CUT INTO THE HILL SIDE FROM THE DIRECTION OF THE PREVAILING WINDS, DRIFTING WILL OCCUR. THIS DRIFTING AND SNOW BUILD-UP MAY MAKE THE DRIVE IMPASSABLE IN THE WINTER.
- PARKING AND DRIVEWAY SURFACES: RECYCLED ASPHALT, PAVING, OR CONCRETE IS USUALLY RECOMMENDED TO FACILITATE SNOW REMOVAL. PAVING IS NOT REQUIRED FOR PARKING AREA AND DRIVES SERVING SINGLE-FAMILY UNITS, OR FOR DUPLEXES WHERE THE ROAD PROVIDING ACCESS IS NOT PAVED. WHERE ROADS ARE PAVED, PARKING AREAS AND DRIVES FOR DUPLEXES MUST BE PAVED. PARKING AREAS NOT PAVED SHALL BE COVERED WITH 1-2 INCHES OF DRIVEWAY GRAVEL OR 2 INCHES OF RECYCLED ASPHALT (OWNER TO SPECIFY). WHEN PAVING IS USED, VERIFY ALL UNDERLYING SOILS WITH GEOTECH.
- PARKING STANDARDS: PARKING SHALL CONFORM TO COUNTY AND ANY APPLICABLE HOA REQUIREMENTS. FIELD VERIFY THE NUMBER OF PARKING SPACES REQUIRED.
- WHENEVER ROADWAYS, DRIVEWAYS, PARKING AREA, BRIDGES, REC. PATHS OR OTHER TYPES OF CONSTRUCTION RESULT IN EARTH DISTURBANCE, REVEGETATION AND/OR LANDSCAPING IS REQUIRED. REVEGETATION AND/OR LANDSCAPING WORK SHALL BE IN ACCORDANCE WITH THE COUNTY LAND USE AND DEVELOPMENT CODE AND IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AS PART OF PERMIT ISSUANCE.
- HISTORICAL FLOW QUANTITIES AND PATTERNS SHALL BE VERIFIED AND MAINTAINED. CHANGES TO SITE DRAINAGE CAN CAUSE ADVERSE EFFECTS TO NEIGHBORING PROPERTIES.
- SNOW STACK SPACE: SNOW STORAGE FOR DRIVEWAYS SHALL BE PROVIDED ON THE OWNER'S PROPERTY. USE OF THE RIGHT-OF-WAY FOR SNOW STORAGE BY PRIVATE INDIVIDUALS OR COMPANIES IS PROHIBITED (C.R.S. 43-5-303). SNOW STORAGE AREA IS SHOWN ON SITE PLAN.
- IF EARTH DISTURBANCE RESULTS IN CUT OR FILL SLOPES THAT CAN NOT BE TAPERED BACK INTO EXISTING GRADES AT THE GRADES SHOWN HEREIN, A RETAINAGE SYSTEM SHALL BE REQUIRED. IF THE PROPOSED RETAINING SYSTEM IS LESS THAN 4.0 FT IN HEIGHT, A DETAIL OF THE PROPOSED RETAINING SYSTEM MUST BE PROVIDED TO THE COUNTY FOR THEIR APPROVAL, PRIOR TO INSTALLATION.
- LOCATE BUILDINGS PER COUNTY REGULATIONS AND WHEN APPLICABLE, SUBDIVISION REGULATIONS. BOTH HAVE BUILDING SETBACKS AND STANDARDS AND BOTH SHALL BE CONSULTED PRIOR TO CONSTRUCTION.
- TREE CLEARING SHALL BE COMPLETED IN ACCORDANCE WITH FIRE REGULATIONS, SUBDIVISION REGULATIONS (WHEN APPLICABLE), AND COUNTY REGULATIONS.
- MINOR GRADE CHANGES MAY BE MADE ON-SITE TO MEET SITE CONDITIONS, HOWEVER, COUNTY AND HOA STANDARDS MUST BE MAINTAINED.
- EROSION CONTROL SYSTEMS ARE ILLUSTRATIVE AND SHALL BE VERIFIED BY OTHERS TO MEET ACTUAL CONSTRUCTION NEEDS.



**VEHICLE CONSTRUCTION ENTRANCE**

- WHEN CONSTRUCTION VEHICLES LEAVE ACTIVE CONSTRUCTION AREAS, SEDIMENT CONTROLS SHALL BE INSTALLED TO CONTROL SEDIMENT FROM LEAVING THE SITE. A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND SHALL CONSIST OF A STONE PAD OR EQUIVALENT CONTROL MATS LOCATED WHERE VEHICLES WILL LEAVE THE CONSTRUCTION SITE. THE PAD SHALL CONSIST OF AT LEAST 6 INCHES OF LARGE GRAVEL OR RIP RAP. THE PAD/OR ROCK ENTRANCE SHOULD BE AT LEAST 25 FT LONG, HOWEVER, LONGER ENTRANCES MAY BE REQUIRED TO ADEQUATELY CLEAN TIRES. GEOTEXTILE FABRIC MAY BE NEEDED UNDER THE ROCK TO PREVENT MIGRATION OF MUD FROM THE UNDERLYING SOIL INTO THE STONE. IF TIRES ARE CLEANED WITH WATER, THE WASH WATER SHOULD BE DIRECTED TO A SUITABLE SETTLING AREA. WHEN REQUIRED, A PIPE OR CULVERT AND/OR SMALL BERM SHALL BE CONSTRUCTED AT THE ENTRANCE.
- MONITORING AND MAINTENANCE: VEHICLE CONSTRUCTION PADS SHALL BE INSPECTED BY THE CONTRACTOR AS NEEDED AND AFTER RAIN ACTIVITIES. ANY EVIDENCE OF EROSION PROBLEMS SHALL BE REPAIRED AS QUICKLY AS POSSIBLE. SEDIMENT SHALL BE REMOVED AS APPROVED AND DISPOSED OF OUTSIDE THE FLOODPLAIN, WETLANDS AND BUFFER AREAS IN AN APPROVED DISPOSAL SITE OR FILL AREA AND THEN STABILIZED. WHENEVER THE EXISTING ROCK (OR MATS) BECOME BURIED OR FILLED WITH MUD, THE PAD WILL REQUIRE TOP-DRESSING WITH ADDITIONAL ROCK, OR REMOVAL AND RE-INSTALLATION. AREAS USED FOR SEDIMENT TRAPPING ALSO NEED TO BE CLEANED ROUTINELY. IF CONDITIONS ON THE SITE ARE SUCH THAT THE MAJORITY OF THE MUD IS NOT REMOVED BY THE VEHICLES TRAVELING OVER THE GRAVEL, ADDITIONAL SEDIMENT TRACKING CONTROL MEASURES SHOULD BE ADDED TO PREVENT THE TRACKING OF MUD OR DIRT ONTO THE PUBLIC ROADWAY.

**ELECTRICAL/PLUMBING/MECHANICAL SYSTEMS**

- THESE SYSTEMS ARE NOT BE WITHIN THE SCOPE OF THESE PLANS THROUGH THESE SYSTEMS SHOULD BE ENGINEERED. THE ENGINEER CAN NOT ACCEPT ANY RESPONSIBILITY WITH REGARD TO THESE SYSTEMS. ALL DESIGN AND INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE OWNER, BUILDER AND THEIR CONTRACTORS. IF THE CLIENT CHOOSES, THESE SYSTEMS CAN BE PROFESSIONALLY ENGINEERED. FOLLOW MANUFACTURER'S AND BUILDING MUNICIPALITY MECHANICAL, PLUMBING, AND ELECTRICAL CODES WHEN INSTALLING THESE SYSTEMS.

**HIGH DENSITY POLYETHYLENE PIPE (HDPE) - CULVERT PIPE**

- CULVERTS SPECIFIED SHALL BE APPROVED HIGH DENSITY POLYETHYLENE PIPE (HDPE) OR CORRUGATED METAL TYPE PIPE (CMP), WHEN CULVERTS ARE INSTALLED IN THE COUNTY RIGHT OF WAY THE CONTRACTOR SHALL VERIFY THE CULVERT TYPE WITH THE COUNTY BEFORE INSTALLATION.

- ALL HDPE PIPE SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS: A) THICKNESS ASTM D751 & D1593, B) DENSITY ASTM D1505, C) TENSILE ASTM D438, D) PUNCTURE RESISTANCE ASTM F7510IC METHOD 2065, E) LOW TEMPERATURE BRITTLINESS ASTM D744, F) ENVIRONMENTAL STRESS CRACK RESISTANCE ASTM D5397.
- PIPE SHOULD BE STOCKPILED ON LEVEL GROUND AND IF STACKED, BLOCKING SHOULD BE PROVIDED TO PREVENT ROLLING. STACKED PIPE SHOULD BE PLACED TO PREVENT DEFORMING AND DAMAGE. ALL MATERIALS SHALL BE PROPERLY STORED.

- TRENCHING SHOULD BE COMPLETED IN EXISTING SOILS WITH SIDEWALLS REASONABLY VERTICAL TO THE TOP OF THE PIPE. FOR POSITIVE PROJECTION EMBANKMENT INSTALLATIONS, WHEN EXCAVATION DEPTHS OR SOIL CONDITIONS REQUIRE SHORING OR USE OF A TRENCH BOX, THE BOTTOM OF THE SHORING OR TRENCH BOX SHOULD BE PLACED NO LOWER THAN THE TOP OF THE PIPE. THE FOLLOWING TRENCH WIDTHS ARE RECOMMENDED TRENCH WIDTHS FOR MOST INSTALLATIONS TO PERMIT PROPER PLACEMENT AND COMPACTION OF BACKFILL MATERIAL IN THE HAUNCHES AND AROUND THE PIPE.

PIPE DIAMETER	TRENCH WIDTH
12"	31"
15"	34"
18"	39"
24"	48"
30"	66"

- EMBEDMENT MATERIALS ARE THOSE USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL. ALL EMBEDMENT MATERIALS SHOULD BE FREE FROM LUMPS OF FROZEN SOIL, DEBRIS, STICKS, WOOD, AND ICE WHEN PLACED. ADDITIONALLY, EMBEDMENT MATERIALS SHOULD BE PLACED AND COMPACTED AT OPTIMUM MOISTURE CONTENT. FOR THIS PROJECT WE RECOMMEND CLASS I, CLASS II, OR CLASS III FOR EMBEDMENT MATERIALS (CLASS I - ANGULAR CRUSHED STONE OR ROCK, DENSE OR OPEN GRADED WITH LITTLE OR NO FINES (1/4 INCH TO 1 1/2 INCHES IN SIZE); CLASS II - CLEAN, COARSE GRAINED MATERIALS, SUCH AS GRAVEL, COARSE SANDS AND GRAVEL/SAND MIXTURES (1 1/2 INCHES MAXIMUM IN SIZE); CLASS III - COARSE GRAINED MATERIALS WITH FINES INCLUDING SILTY OR CLAYEY GRAVELS OR SANDS. GRAVEL OR SAND MUST COMPRISE MORE THAN 50 PERCENT OF CLASS III MATERIALS (1/2 INCHES MAXIMUM SIZE).
- PIPE FOUNDATION: THE TRENCH BOTTOM SHALL BE FREE OF ICE, SNOW, AND DEBRIS AND BE CAPABLE OF SUPPORTING 2500 PSF.
- THOROUGHLY CLEAN THE BELL AND SPIGOT ENDS PER MANUFACTURER'S RECOMMENDATIONS.
- REMOVE SHIPPING COLLARS (WHERE PROVIDED) PRIOR TO LOWERING THE PIPE IN THE TRENCH. PROPERLY DISPOSE OF SHIPPING COLLARS OUTSIDE THE PIPE TRENCH. DO NOT INSTALL PIPE WITH SHIPPING COLLARS ON THE PIPE AND DO NOT DISPOSE OF SHIPPING COLLARS IN THE TRENCH.
- LUBRICANT SHOULD BE LIBERALLY APPLIED TO BOTH THE BELL AND SPIGOT ENDS OF THE PIPE. CARE SHOULD BE TAKEN TO ENSURE LUBRICANT IS APPLIED TO THE CHAMFERED LEADING EDGE OF THE BELL.
- ALIGN THE PIPE AND PUSH THE SPIGOT HOME ON GRADE. JOINTS SHOULD BE INSTALLED WITH BELLS FACING UPSTREAM FOR PROPER INSTALLATION. GENERALLY, PIPES SHOULD BE LAID STARTING AT THE DOWNSTREAM END AND WORKING UPSTREAM. SMALL DIAMETER PIPE (BELOW 24") CAN USUALLY BE INSTALLED BY PUSHING THE JOINT HOME BY HAND. LARGER DIAMETERS MAY NECESSITATE USING A BAR OR EQUIPMENT TO PUSH HOME. IF A BAR OR EQUIPMENT IS UTILIZED, A WOOD BLOCK SHOULD BE USED TO PREVENT DAMAGE TO THE BELL. WHEN PUSHING THE JOINT HOME, MAKE SURE BEDDING MATERIAL IS NOT PULLED INTO THE BELL BY THE SPIGOT. MATERIAL SUCH AS SMALL STONES AND SAND PULLED INTO THE BELL AS THE PIPE IS JOINED CAN CAUSE LEAKS.
- MINIMUM COVER: CULVERTS ARE TYPICALLY PROVIDED WITH AT LEAST 12 INCHES (MEASURED FROM THE TOP OF THE PIPE TO THE GROUND SURFACE) OF SUITABLE IMPACTED SOIL COVER FOLLOWED BY DRIVEWAY GRAVEL OR ASPHALT (REF. PLAN). IF 12 INCHES CAN NOT BE MAINTAINED, CULVERT DISPLACEMENT MAY OCCUR.

**SURVEY NOTES**

- ANY BOUNDARY PINS OR CORNERS & TOPOGRAPHY IN QUESTION SHALL BE VERIFIED. IF CHANGES TO THE CIVIL DRAWINGS ARE REQUIRED, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY AND PRIOR TO CONSTRUCTION IF POSSIBLE. FOR THIS PROJECT THE BOUNDARY AND TOPOGRAPHIC SURVEY WERE COMPLETED BY OTHERS.
- EXISTING CONTOURS: EXISTING CONTOURS ARE SHOWN. LITTLEHORN IS NOT RESPONSIBLE FOR DEFECTS IN THE TOPOGRAPHIC SURVEY WHEN THE SURVEY IS PERFORMED BY OTHERS.

**GRADING AND MATERIAL SPECIFICATIONS**

- A PRE-GRADING MEETING WITH THE SITE OWNER, PROJECT ENGINEER AND CONTRACTOR IS HIGHLY RECOMMENDED AND SHOULD BE PERFORMED TO FACILITATE PROJECT INSTALLATION.
- WHEN THE GRADING OPERATIONS ENCOUNTER REMAINS OF PREHISTORIC PEOPLE'S DWELLING SITES, REMAINS, OR ARTIFACTS OF HISTORICAL, PALEONTOLOGICAL OR ARCHAEOLOGICAL SIGNIFICANCE, THE OPERATIONS SHALL BE TEMPORARILY DISCONTINUED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PROMPTLY CONTACT THE PROPER AUTHORITIES TO DETERMINE THE DISPOSITION THEREOF. IF REQUIRED BY STATE OR FEDERAL AUTHORITIES, THE CONTRACTOR SHALL PRESERVE THE AREA OF SIGNIFICANCE TO ALLOW AUTHORITIES TO EXCAVATE AND RECOVER THE ITEMS OF SIGNIFICANCE.
- AT ALL TIMES, PRECAUTIONS SHALL BE TAKEN FOR THE PROTECTION OF CULVERTS, EROSION CONTROL STRUCTURES, IRRIGATION CROSSINGS, MAIL BOXES, DRIVEWAY APPROACHES, VALVE BOXES, MANHOLES, SURVEY MONUMENTS, UNDERGROUND OR OVERHEAD UTILITY LINES AND ALL OTHER PUBLIC OR PRIVATE INSTALLATIONS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. ANY DAMAGE TO SUCH STRUCTURES SHALL BE REPAIRED, DOCUMENTED AND SUBMITTED TO THE APPROPRIATE AUTHORITY PRIOR TO ISSUANCE OF ANY CERTIFICATE OF COMPLETION FOR THE SITE.
- CLEARING AND GRUBBING: CLEARING AND GRUBBING CONSISTS OF REMOVING AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF THE APPROVED GRADING PLANS WHERE THE DRIVEWAY, SOIL TREATMENT AREA, HOUSE, WELL/WELL LINES, AND WASTEWATER LINES ARE TO BE LOCATED. CLEARING AND GRUBBING SHALL BE PERFORMED ONLY WHERE NECESSARY. THE PRESERVATION OF ALL VEGETATION AND ANY OTHER TREES AND OBJECTS SHOULD REMAIN WHERE FEASIBLE AND AS OUTLINED AND WITHIN LOCAL FIRE DEPARTMENT RECOMMENDATIONS. STUMP HOLES AND OTHER HOLES FROM WHICH OBSTRUCTIONS ARE REMOVED, SHALL BE BACKFILLED WITH SUITABLE MATERIALS AND COMPACTED AS REQUIRED. MATERIALS AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH STATE AND COUNTY REGULATIONS, WITH OWNER'S AND COUNTIES PERMISSION, ROOTS MAY BE BURIED ON-SITE.
- TOPSOIL: ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED. TOPSOIL SHALL CONSIST OF LOOSE FRIABLE LOAM REASONABLY FREE OF ADMIXTURES OF SUBSOIL, REFUSE, STUMPS, ROOTS, ROCKS, BRUSH, WEEDS, OR OTHER MATERIAL WHICH WOULD BE DETRIMENTAL TO THE PROPER DEVELOPMENT OF VEGETATIVE GROWTH. MATERIALS SELECTED FOR TOPSOIL, AND LYING WITHIN THE LIMITS OF THE PROJECT SHALL BE EXCAVATED AND STOCKPILED AS REQUIRED AND WHERE PERMISSIBLE. TOPSOIL SHALL BE PLACED AND SPREAD AT LOCATIONS AND TO THE THICKNESS SHOWN ON THE PLANS AND SHALL BE KEYS TO THE UNDERLYING MATERIALS BY THE USE OF HARROWS, ROLLERS, OR OTHER EQUIPMENT SUITABLE FOR THE PURPOSE. FOR SITES THAT DON'T CONTAIN ENOUGH REUSABLE TOP SOIL, APPROVED TOP SOIL WILL HAVE TO BE IMPORTED TO THE SITE.

- GENERAL EXCAVATION AND EMBANKMENT: EXCAVATION AND EMBANKMENT GRADING CONSISTS OF EXCAVATION, DISPOSAL, SHAPING, OR COMPACTION OF ALL MATERIAL ENCOUNTERED WITHIN THE LIMITS OF THE GRADING PLANS INCLUDING EXCAVATION FOR DITCHES AND CHANNELS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT IN ACCORDANCE WITH THE GRADING PLANS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, AND TYPICAL CROSS-SECTIONS SHOWN ON THE PLANS. THE EXCAVATION AND EMBANKMENTS SHALL BE FINISHED TO REASONABLY SMOOTH AND UNIFORM SURFACES. GRADING OPERATIONS SHALL BE CONDUCTED SO THAT MATERIAL OUTSIDE OF THE LIMITS OF SLOPES WILL NOT BE DISTURBED. PRIOR TO BEGINNING GRADING OPERATIONS IN ANY AREAS, ALL NECESSARY CLEARING AND GRUBBING AND TOPSOIL, IN THAT AREA SHALL HAVE BEEN PERFORMED IN ACCORDANCE WITH THE CLEARING AND GRUBBING AND TOPSOIL PROVISIONS. WHERE MATERIAL ENCOUNTERED WITHIN THE LIMITS OF GRADING ARE CONSIDERED UNSUITABLE FOR EMBANKMENT FOUNDATIONS, STREETS/ROADS, OR STRUCTURAL AREAS BY THE SOILS ENGINEER, SUCH MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SUITABLE MATERIAL. SOME EXAMPLES OF UNSUITABLE MATERIAL INCLUDE SOILS WHICH CONTAIN SIGNIFICANT AMOUNTS OF ORGANIC MATERIAL AND/OR LARGE DIAMETER ROCKS, CONCRETE, OR ASPHALT. EXCESS UNSUITABLE EXCAVATED MATERIAL, INCLUDING ROCK AND Boulders, THAT CANNOT BE USED IN EMBANKMENTS MAY BE PLACED IN NON-STRUCTURAL AREAS AS APPROVED BY THE SOILS ENGINEER.

- UTILITIES: WHEN UTILITY DEVICES ARE TO BE INSTALLED WITHIN THE COUNTY OR TOWN'S ROAD RIGHT-OF-WAY, THE COUNTY OR TOWN POLICY ON UTILITY USE OF COUNTY RIGHTS-OF-WAY SHALL APPLY. BEFORE BEGINNING ANY EXCAVATION, CALL FOR A UTILITY LOCATE.
- TRAFFIC CONTROL: APPROVED BARRICADES, WARNING SIGNS, AND FLAGMEN SHALL BE USED AS NECESSARY.

- DRIVEWAY SUBBASE: ALL MATERIAL SHALL BE OF SOUND PARTICLES AND SHALL BE FREE OF ORGANIC MATTER. COMPACTION OF MATERIAL SHALL BE VERIFIED BY THE ENGINEER BEFORE PLACEMENT OF CONCRETE, ASPHALT, TANKS, PIPES, OR OTHER STRUCTURES. SUBBASE AND BASECOURSE SHALL BE COMPACTED AS REQUIRED FOR STRUCTURAL FILL (SEE COMPACTION REQUIREMENTS). THE SUBBASE IS CONSIDERED THE NATIVE SOIL OR IMPORTED, APPROVED, STRUCTURAL FILL. IF SUBBASE DEPTHS EXCEED 12 INCHES, CONTACT THE ENGINEER FOR INSPECTION AND COMPACTION TESTING. THE SUBBASE SHALL BE FREE OF STICKS, ROCKS LARGER THAN 8 INCHES IN DIAMETER, SNOW, ICE, AND OTHER DEBRIS.

- SURFACE COURSE: INSTALL A TYPICAL CRUSHED AGGREGATE SURFACE COURSE UNDER ALL PAVED AREAS. THE SURFACE COURSE IS USUALLY 1/2-INCH TO 2 INCHES IN DEPTH. SURFACE COURSE SHALL BE 1" MINUS MATERIAL AND MUST BE A HARD ROCK CRUSHED AGGREGATE WITH:

SIEVE SIZE	% PASSING
1"	100
#4	5-15
#10	0-8
#200	0-4

- WATERING: WATER SHALL BE APPLIED TO THE TOPSOIL AT THE LOCATIONS AND IN THE AMOUNTS WHERE REQUIRED. WATER SHALL BE APPLIED IN A FINE SPRAY BY NOZZLES OR SPRAY BARS IN SUCH A MANNER THAT IT WILL NOT WASH OR ERODE THE TOPSOIL. AREA ALL WATER USED SHALL BE FREE OF ANY MINERAL SALTS OR CONTAMINATING MATERIAL WHICH MIGHT RESULT IN EXPANSION OF MATERIALS AFTER PLACEMENT. SPRINKLING EQUIPMENT SHALL BE OF A TYPE WHICH ENSURES UNIFORM AND CONTROLLED DISTRIBUTION OF WATER WITHOUT PONDING OR WASHING. DUST PALLIATIVES SHALL BE APPLIED ON PORTIONS OF THE PROJECT AND ON Haul ROADS AT THE LOCATIONS AND IN THE AMOUNTS AS MAY BE NECESSARY AND AS APPROVED. DUST PALLIATIVES MAY CONSIST OF WATER OR OTHER SUBSTANCES APPROVED BY THE COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT. WATER USED IN LANDSCAPING SHALL BE PROVIDED FOR SEEDING, MULCHING, PLANTING, TRANSPLANTING, SODDING, AND SOIL STERILIZATION, AND ANY OTHER LANDSCAPING WORK AS REQUIRED.
- COMPACTION: FIELD DENSITY TESTS SHALL BE MADE BY THE SOILS ENGINEER AS SPECIFIED IN THE SOILS REPORT. WHEN A SOILS REPORT DOES NOT EXIST, CONTACT LITTLEHORN FOR TESTING REQUIREMENTS. WHEN TESTING IS NOT PERFORMED IN ROADWAYS, IN EXCAVATED TRENCH AREAS, AND AROUND TANKS AND THE HOUSE, SETTLEMENT IS LIKELY.
- SLOPE STANDARDS: CUT SLOPES (I.E., EXCAVATED SLOPES) SHALL BE NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL UNLESS SPECIFICALLY IDENTIFIED OTHERWISE IN THESE PLANS. FILL SLOPES SHOULD NOT EXCEED TWO (2) HORIZONTAL TO ONE (1) VERTICAL OR AS SPECIFIED IN THE PLANS. ALL PERMANENT CUT AND FILL SLOPES SHALL BE CONSTRUCTED AT SLOPES WHICH ENSURE LONG TERM SLOPE STABILITY AND THAT WILL NOT CAUSE ACCELERATED EROSION. THE TOPS AND TOES OF CUT AND FILL SLOPES SHALL BE SET BACK FROM PROPERTY BOUNDARIES AS FAR AS NECESSARY FOR SAFETY OF THE ADJOINING PROPERTIES AND TO PREVENT DAMAGE RESULTING FROM WATER RUN-OFF OR EROSION OF THE SLOPE. THE TOPS AND TOES OF CUT AND FILL SLOPES SHALL BE SET BACK FROM STRUCTURES AS FAR AS IT IS NECESSARY FOR ADEQUACY OF FOUNDATION SUPPORT AND TO PREVENT DAMAGE AS A RESULT OF WATER RUN-OFF OR EROSION OF THE SLOPES. FOR SLOPES WHICH EXCEED 30%, TERRACES AT LEAST EIGHT (8) FEET IN WIDTH SHALL BE ESTABLISHED. AT LEAST A TWO (2) PERCENT GRADIENT SHALL BE MAINTAINED FROM BUILDING PADS TO DRAINAGE FACILITIES UNLESS OTHERWISE APPROVED.
- GUARANTEES: ALL CONSTRUCTION SHALL BE GUARANTEED BY THE CONSTRUCTION FIRM OR CONSTRUCTING INDIVIDUAL FOR A MINIMUM OF ONE YEAR TO MEET THE CONTINUAL STANDARDS TO WHICH IT WAS CONSTRUCTED. SUCH GUARANTEE MAY BE BY BOND, CASH DEPOSIT, PLEDGED SECURITIES, OR OTHER VALUABLE CONSIDERATIONS ACCEPTABLE BY THE OWNER.

**DESIGN CRITERIA AND OTHER NOTES**

- WIND LOADING ON RETAINING WALLS: V<sub>ult</sub> = 110 MPH, EXPOSURE C (90 MPH V<sub>asd</sub> OR NOMINAL WIND - 2018 IRC) PROVISIONS FOR DETENTION POND NOT REVIEWED OR REQUIRED PER THE TOWN OF BLUE RIVER STANDARD ACCEPTED EROSION CONTROL METHODS ARE USED LANDSCAPING DESIGN REQUIREMENTS AND SPECIFICATIONS NOT REVIEWED
- SOIL CONDITIONS FOR GRADING DESIGN AND THESE CIVIL DRAWINGS ARE BASED UPON THE SOILS REPORT BY LITTLEHORN ENGINEERING, DATED JANUARY 5, 2022. POORLY GRADED SAND WITH SILT, GRAVEL, COBBLES AND BOULDERS PASSIVE EQUIV. FLUID PRESSURE - 275 P.C.F. (DRAINED) EQUIV. FLUID UNIT SOIL WEIGHT - 46 P.C.F. (DRAINED) COEFFICIENT OF FRICTION - 0.35 ALLOWABLE BEARING PRESSURE - 2750 P.S.F. ON UNDISTURBED SOIL.

SOIL CONDITIONS SHALL BE VERIFIED BY GEOTECH DURING CONSTRUCTION CONTACT ENGINEER FOR INSPECTION OF ALL RETAINING WALLS, STRUCTURAL FILLS, AND ROCK LINED SWALES.

CIVIL SHEET INDEX	
SHEET#	SHEET DESCRIPTION
C0	COVER SHEET & SITE CONSTRUCTION GENERAL NOTES
C1	PROPOSED <u>OVERALL</u> SITE PLAN WITH OVERALL DRIVEWAY AND PARKING AND SNOW REMOVAL
C1.1	PROPOSED SITE PLAN <u>DETAIL</u> WITH DRIVEWAY AND PARKING
C2	EROSION CONTROL PLAN
C3	SITE CONSTRUCTION DETAILS
C4	EROSION CONTROL SPECIFICATIONS & DETAILS
-	BUILDING HEIGHT ANALYSES IS BY OTHERS
6	SHEETS TOTAL WITH COVER PAGE (24X36 SHEETS)



DIG SAFELY - CALL 811 GAS/ELECTRIC/TELEPHONE/CABLE WWW.UCC2.ORG

**CODES GOVERNING MATERIALS AND WORKMANSHIP\***

IRC 2018	INTERNATIONAL RESIDENTIAL BUILDING CODE
ACI	REINFORCED CONCRETE DETAILING MANUAL
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
AWWA	AMERICAN WATER WORKS ASSOCIATION
BRBD	BLUE RIVER BUILDING DEPARTMENT (BUILDINGS & SITE RELATED WORK EXCEPT FOR OWTS)
SCCHD	SUMMIT COUNTY COUNTY ENVIRONMENTAL HEALTH DEPARTMENT (WASTEWATER SYSTEM & DRIVEWAY)
A.F.C.	BLUE RIVER COUNTY PLANNING DEPARTMENT (SETBACKS, ZONING, ETC.)
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASSE	AMERICAN SOCIETY OF SANITARY ENGINEERS
MSDS	MATERIAL SAFETY DATA SHEETS

\*ALL OF THE ABOVE CODES MAY NOT BE USED FOR CONSTRUCTION IN THE SPECIFIC PROJECT. WHEN APPLICABLE, THE CODE SHALL APPLY.

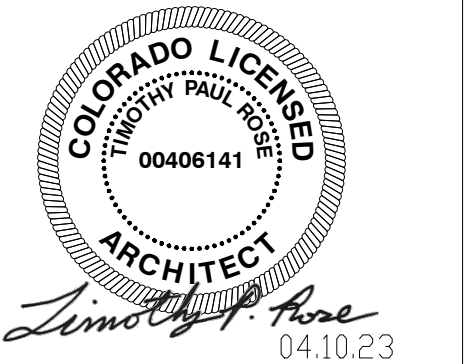
**SOME ABBREVIATIONS USED IN THESE DRAWINGS**

NOT ALL ABBREVIATIONS ARE USED IN THESE DRAWINGS. ABBREVIATIONS MAY OR MAY NOT CONTAIN PERIODS. THIS CHART IS FOR INFORMATION PURPOSES ONLY. CONTACT ENGINEER FOR ANY MISSING ABBREVIATIONS USED.

A.B.	ANCHOR BOLT	FG	FINISH GRADE	P.L.Y.	PLYWOOD
ABV.	ABOVE	FIN.	FINISH(ED)	P.S.F.	POUNDS PER SQUARE FOOT
ADD'L	ADDITIONAL	FLR.	FLOOR	P.S.I.	POUNDS PER SQUARE INCH
A.F.F.	ABOVE FINISHED FLOOR	FDN.	FOUNDATION	P.T.	PRESSURE TREATED
A.L.G.	ARCHITECTURAL GRADE	FDN.	FOUNDATION	PWR.	POWER (CABINET)
ALUM.	ALUMINUM	F.O.C.	FACE OF CONCRETE	QTY.	QUANTITY
ALT.	ALTERNATE	F.O.M.	FACE OF MASONRY	QUA.	QUARRY
APPRX.	APPROXIMATE(LY)	F.O.S.	FACE OF STUD	RAD.(R)	RADIUS
ARCH.	ARCHITECTURAL	F.O.W.	FACE OF WORK	REF.	REFERENCE OR REFER TO
AWG.	AMERICAN WIRE GAUGE	F.S.	FINISH SURFACE	REIN.F.	REINFORCEMENT(S)
AWN.	AWNING	FT.(F)	FOOT (FEET)	REQ'D.	REQUIRED
B.LDG.	BUILDING	FTG.	FOOTING	RES.	RIGID GALVANIZED STEEL
BLK.	BLOCK	GAL.	GALVE	R.O.U.	ROUGH SAWN
BM.	BEAM	GAL.	GALVANIZE(D)	SCH(D).	SCHEDULE
B.O.F.	BOTTOM OF FOOTING	GEN.	GENERAL	SF	SQUARE FEET
BOT	BOTTOM OF TANK	G.F.I.	GROUND FAULT CIRCUIT INTER.	SHT.	SHEET
BRS.	BEARING	GPS.	GLOBAL POSITIONING SYSTEM	SIM.	SIMILAR
CAB.	CABINET	GPLD	GALLONS PER DAY	SPEC.	SPECIFICATION(S)
CANT.	CANTILEVER(ED)	GRND.	GROUND	SQ.	SQUARE
C.I.P.	CAST IN PLACE	HRZ.	HORIZONTAL	S.S.	STAINLESS STEEL
C.L.	CENTERLINE	H OR HT.	HEIGHT	STA	SOIL TREAT. AREA (LEACH FIELD)
CLG.	CEILING	IN.(T)	(IN)CHES	STD.	STANDARD
CLR.	CLEAR	INSUL.	INSULATION	STL.	STEEL
COL.	COLUMN	INT.	INTERIOR	STRUC.	STRUCTURAL
COMP.	COMPOSITE	INT.	INTERIOR	T&B	TOP AND BOTTOM
CONC.	CONCRETE	LB.(#)	LBS	T&G	TONGUE AND GROOVE
CONN.	CONNECTION(OR)	L.F.	LINEAR FEET (FOOT)	T.B.D.	TO BE DETERMINED
CONST.	CONSTRUCTION	L.	LONG(TUDINAL) OR LENGTH	TEMP.	TEMPORARY OR TEMPERED
CONT.	CONTINUOUS	MAS.	MASONRY	THK.	THICK(NESS)
CSMT.	CASEMENT	M.	MAXIMUM	THRU	THROUGH
DBL.	DOUBLE	M.B.	MACHINE BOLT	T.N.	THE NAIL
DEPT.	DEPTH	MECH.	MECHANICAL	T.O.C.	TOP OF CURB
DIAG.	DIAGONAL	MFG.	MANUFACTURER	T.O.F.	TOP OF FOOTING
DIM.	DIMENSION	MFR.	MANUFACTURER	T.O.M.	TOP OF MOUND
DLT.	DETAIL	MIL.	MILLIMETER	T.O.P.	TOP OF PLATE (PARAPET)
DWG.	DRAWING(S)	MIN.	MINIMUM	T.O.S.	TOP OF SLAB
DWL.	DOWEL(S)	MISC.	MISCELLANEOUS	T.O.T.	TOP OF SAND (LEACH FIELD)
E.	EACH	MTL.	METAL	T.O.R.	TOP OF RISER
E.A.	ELEVATION	N.I.C.	NOT IN CONTRACT	T.O.T.	TOP OF TANK
ELEC.	ELECTRICAL	N.O.(#)	NUMBER	T.O.W.	TOP OF WALL



**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**



PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

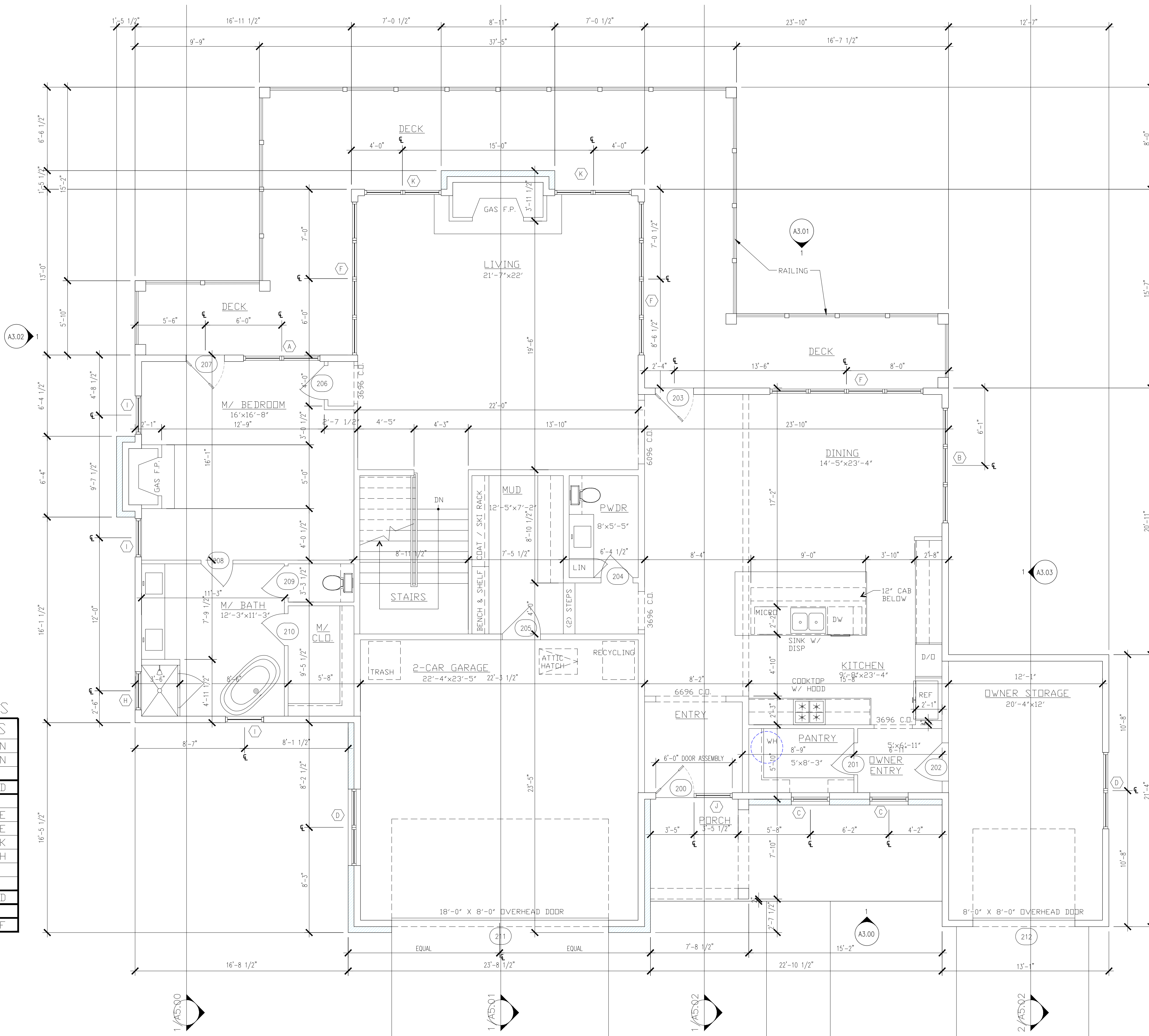
FOR PERMIT

**A2.00**

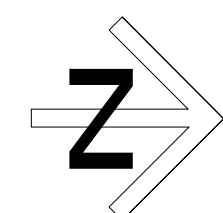
**FLOOR PLAN**  
**UPPER LEVEL**

SQUARE FOOTAGE CALCS

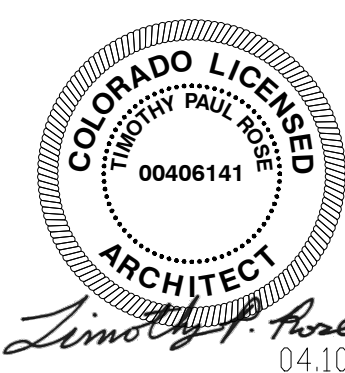
SF	AREAS
1967	UPPER LEVEL FLOOR PLAN
1744	LOWER LEVEL FLOOR PLAN
3711	TOTAL CONDITIONED
508	2-CAR GARAGE
274	1-CAR GARAGE
664	2ND FLOOR DECK
187	PORCH
5447	TOTAL UNCONDITIONED
1633	TOTAL UNDER ROOF



1 FLOOR PLAN - UPPER LEVEL  
 1/4" = 1'-0"



**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424



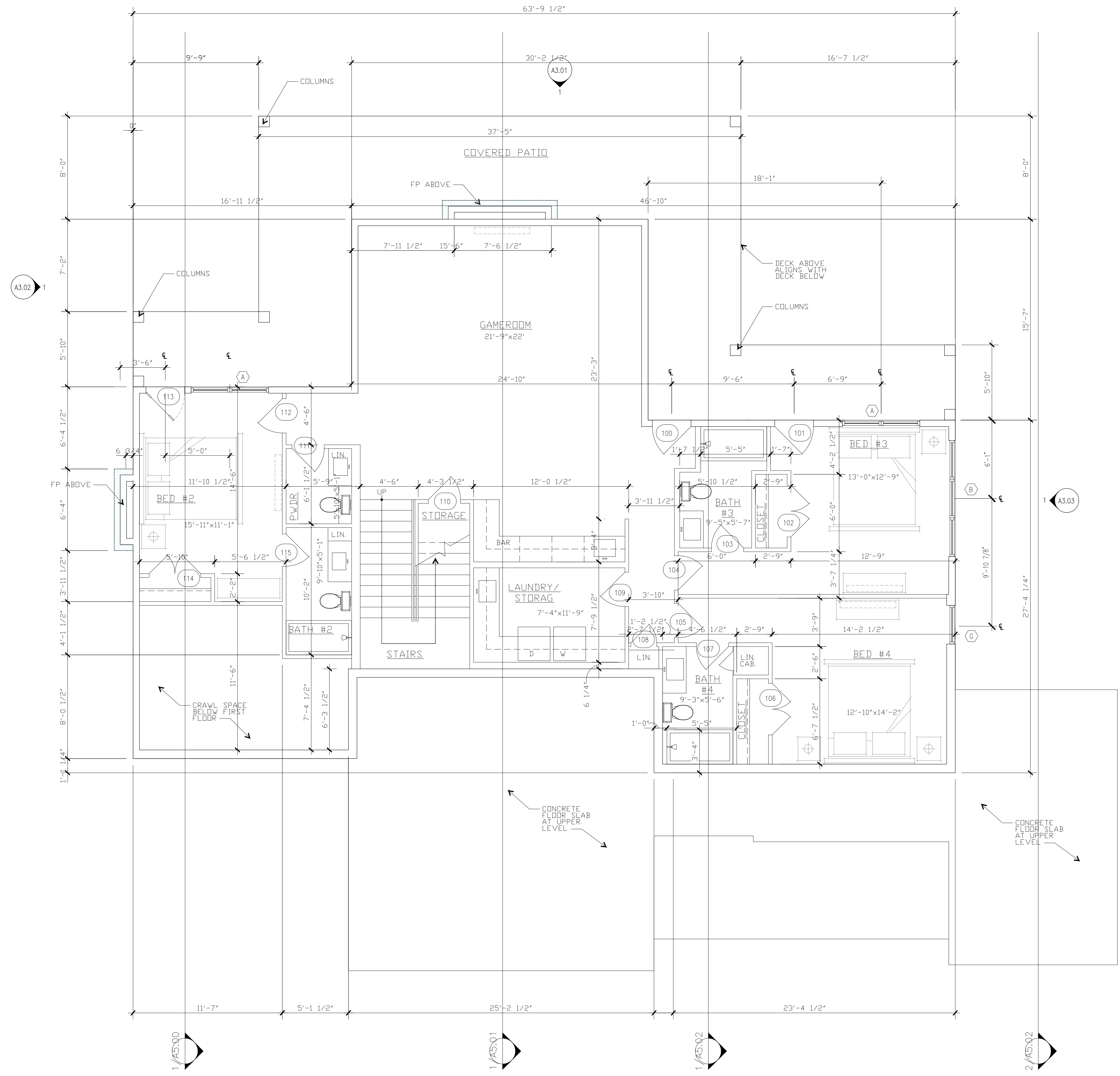
PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

FOR PERMIT

**A2.01**  
**FLOOR PLAN**  
**LOWER LEVEL**



**1 FLOOR PLAN - LOWER LEVEL**  
 1/4" = 1'-0"

**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424

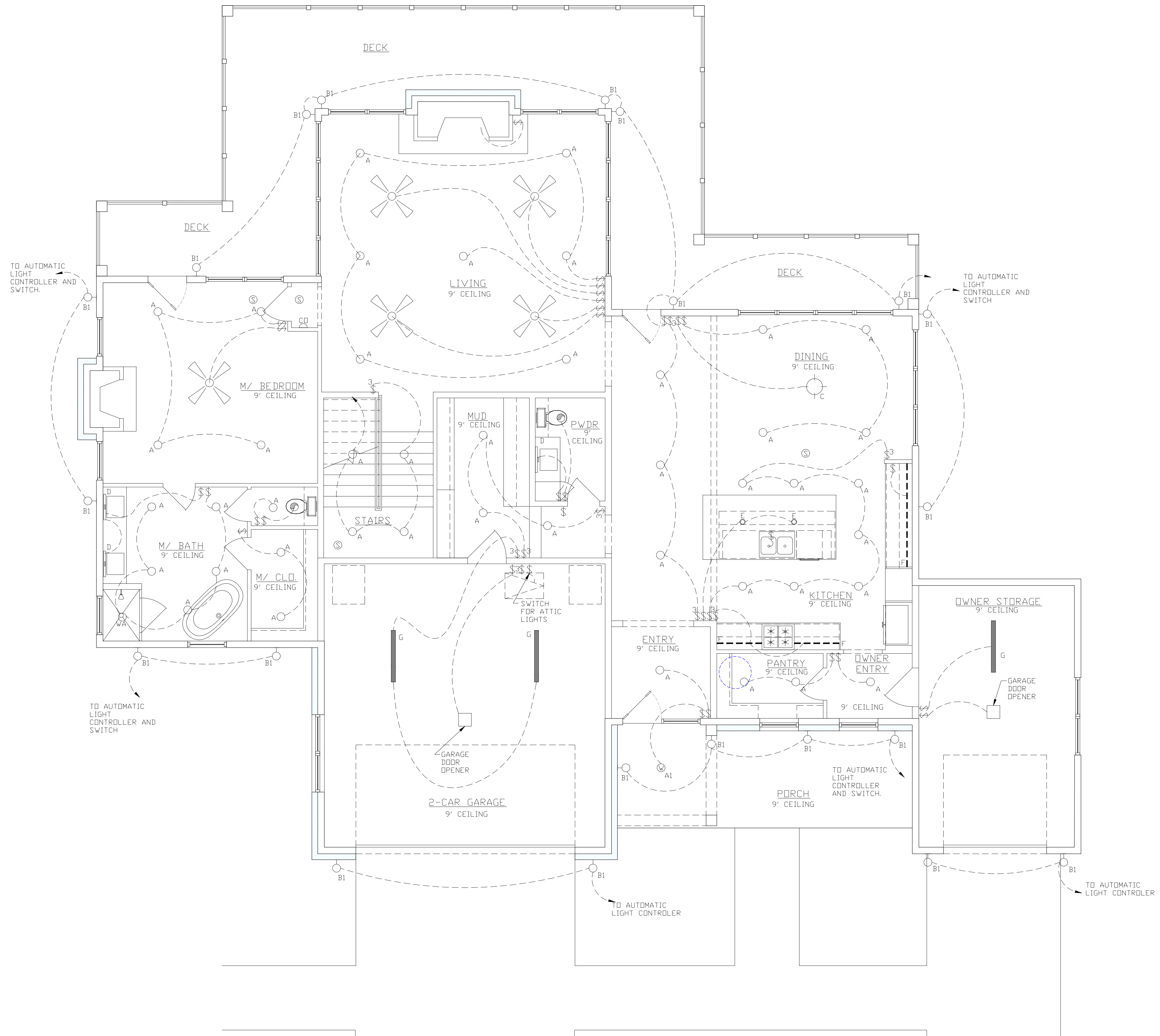


PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT

**A2.02**

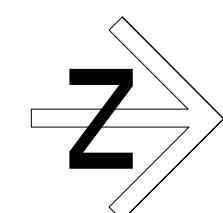
**RCP PLAN  
 UPPER LEVEL**



REFLECTED CEILING LEGEND

DEVICE	DESCRIPTION	TYPE
⊙	SMOKE DETECTOR	--
⊖	EXHUAUST FAN	--
⊗	CEILING FAN	--
○	RECESSED CAN LIGHT	A
⊙	RECESSED CAN LIGHT - WET LOCATION	A1
⊙	SCONCE LIGHT EXTERIOR	B1
⊙	SCONCE LIGHT INTERIOR	B2
⊙	CHANDELIER	C
—	WALL MOUNTED VANITY LIGHT	D
○	PENDANT LIGHTS	E
—	LED UNDER CABINET LIGHTS	F
⊔	CARBON MONOXIDE DETECTOR	CD
—	LED LIGHT	G

1 REFLECTIVE CEILING PLAN - UPPER LEVEL  
 1/4" = 1'-0"

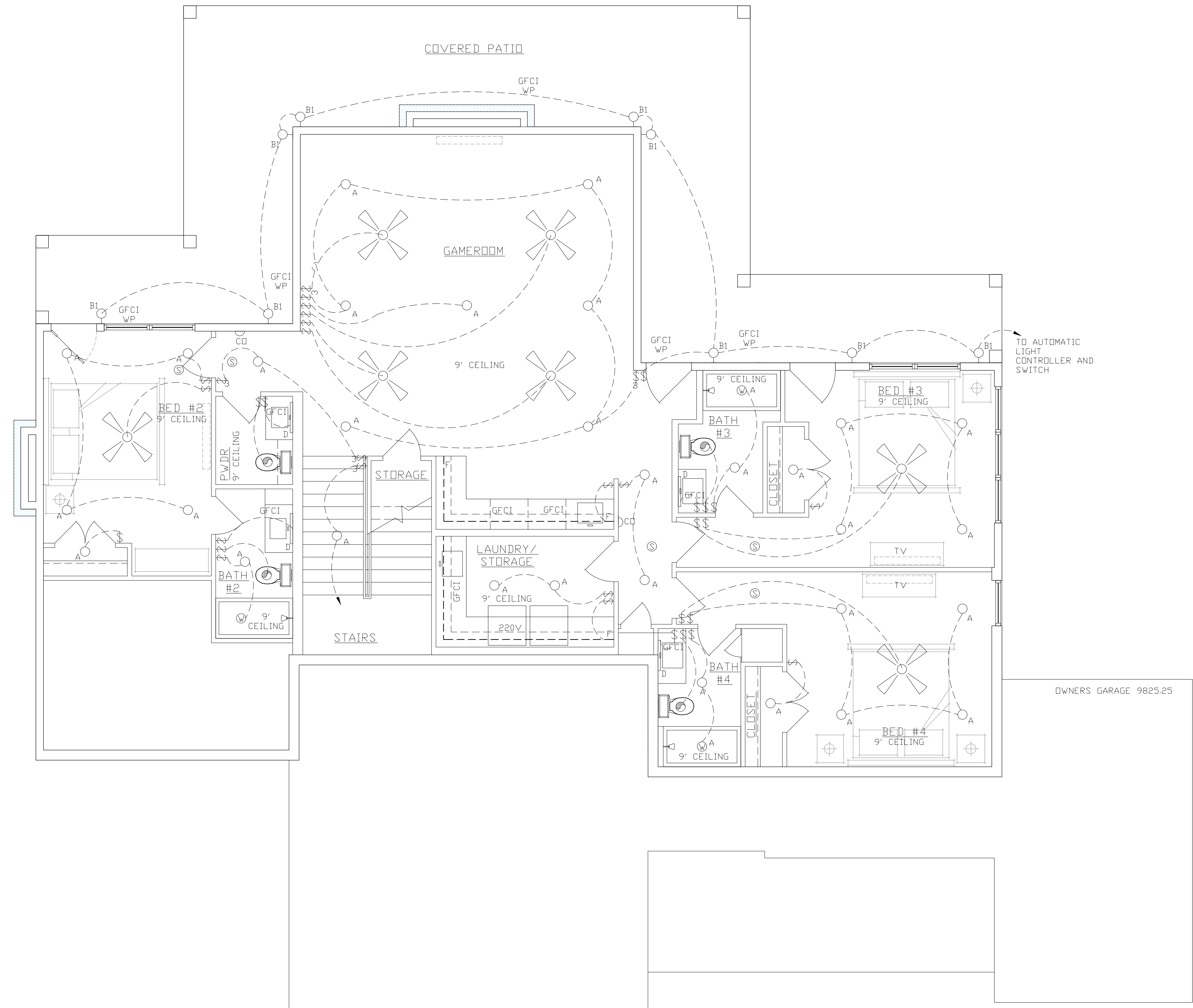




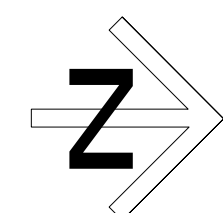
**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424

REFLECTED CEILING LEGEND

DEVICE	DESCRIPTION	TYPE
	SMOKE DETECTOR	--
	EXHUAUST FAN	--
	CEILING FAN	--
	RECESSED CAN LIGHT	A
	RECESSED CAN LIGHT - WET LOCATION	A1
	SCONCE LIGHT EXTERIOR	B1
	SCONCE LIGHT INTERIOR	B2
	CHANDELIER	C
	WALL MOUNTED LIGHT	D
	PENDANT LIGHTS	E
	LED UNDER CABINET LIGHTS	F
	CARBON MONOXIDE DETECTOR	CD



1 REFLECTED CEILING PLAN - UPPER LEVEL  
1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

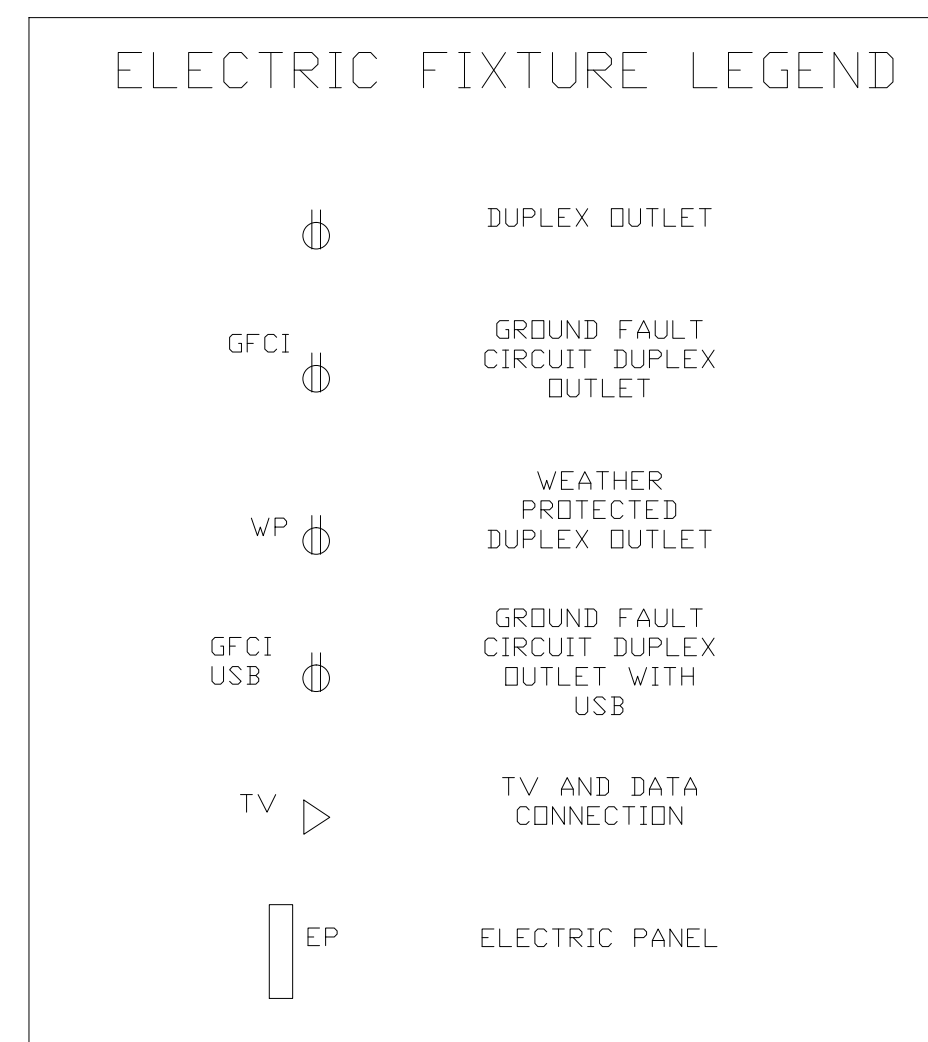
No.	Description	Date

FOR PERMIT

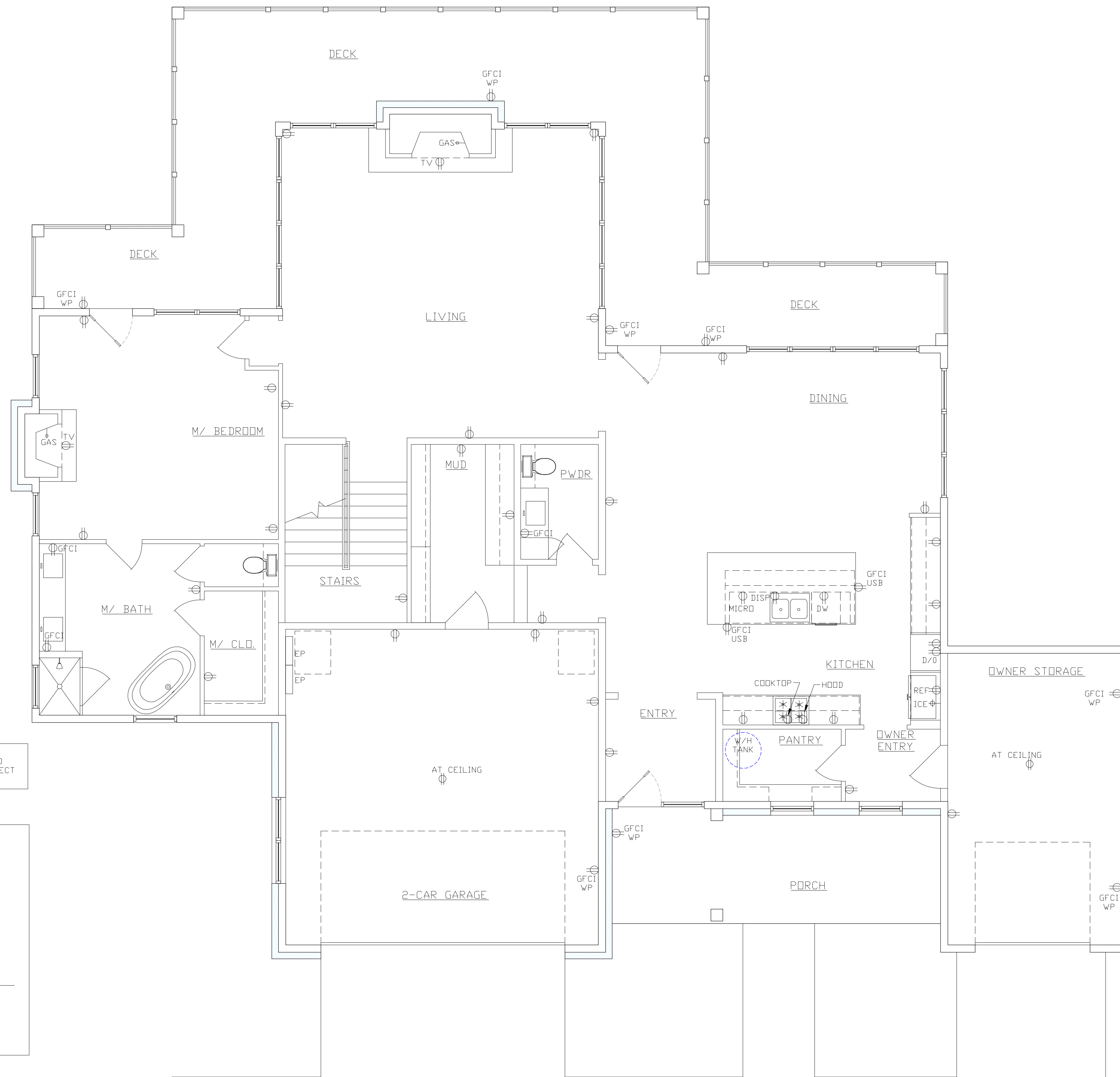
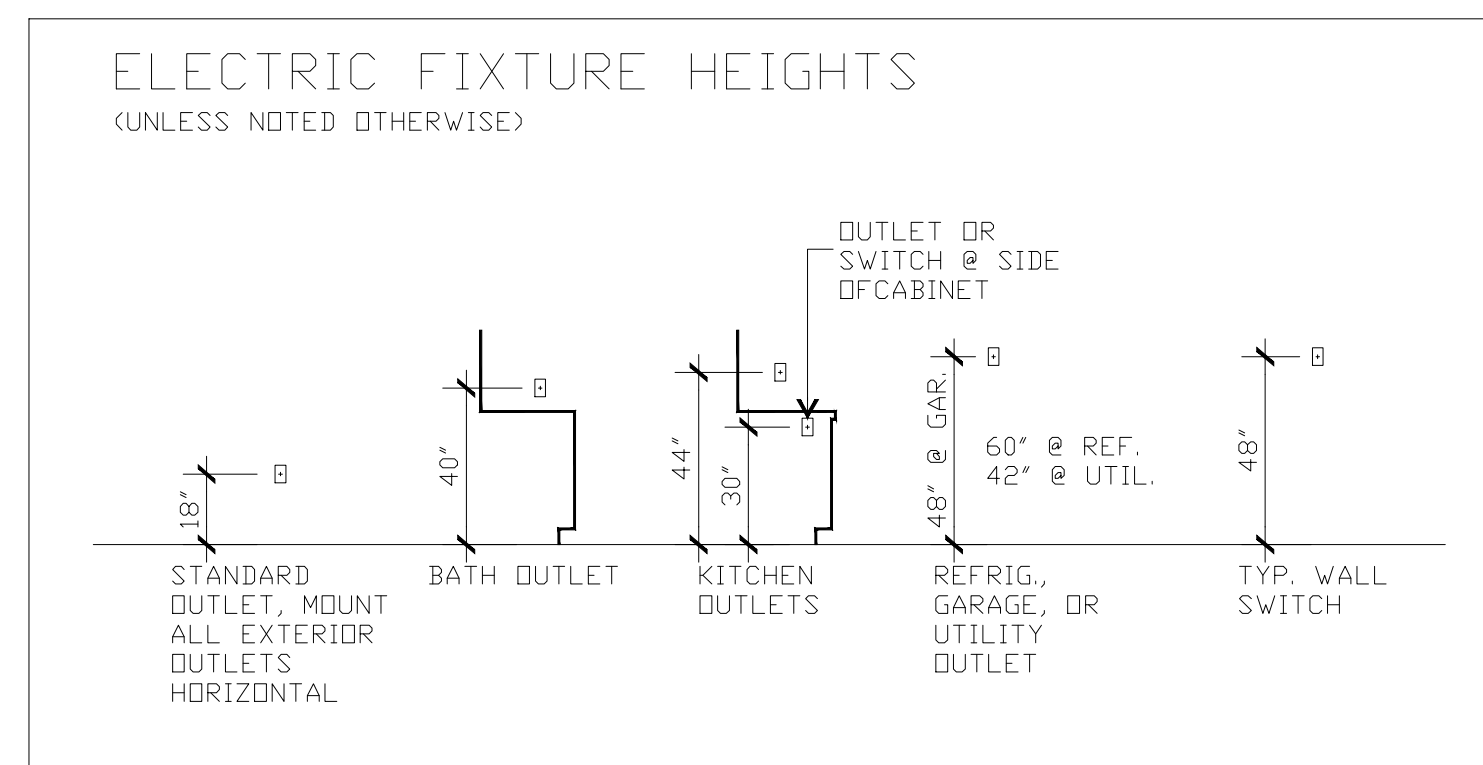
**A2.03**

**RCP PLAN  
LOWER LEVEL**

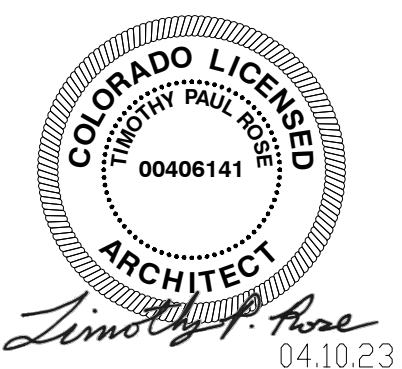
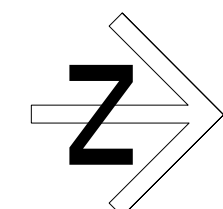
**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424



G.C. TO VERIFY OUTLET HEIGHTS AT KITCHEN AND BATHROOMS WITH ARCHITECT PRIOR TO INSTALLATION



1 POWER PLAN - UPPER LEVEL  
 1/4" = 1'-0"



PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

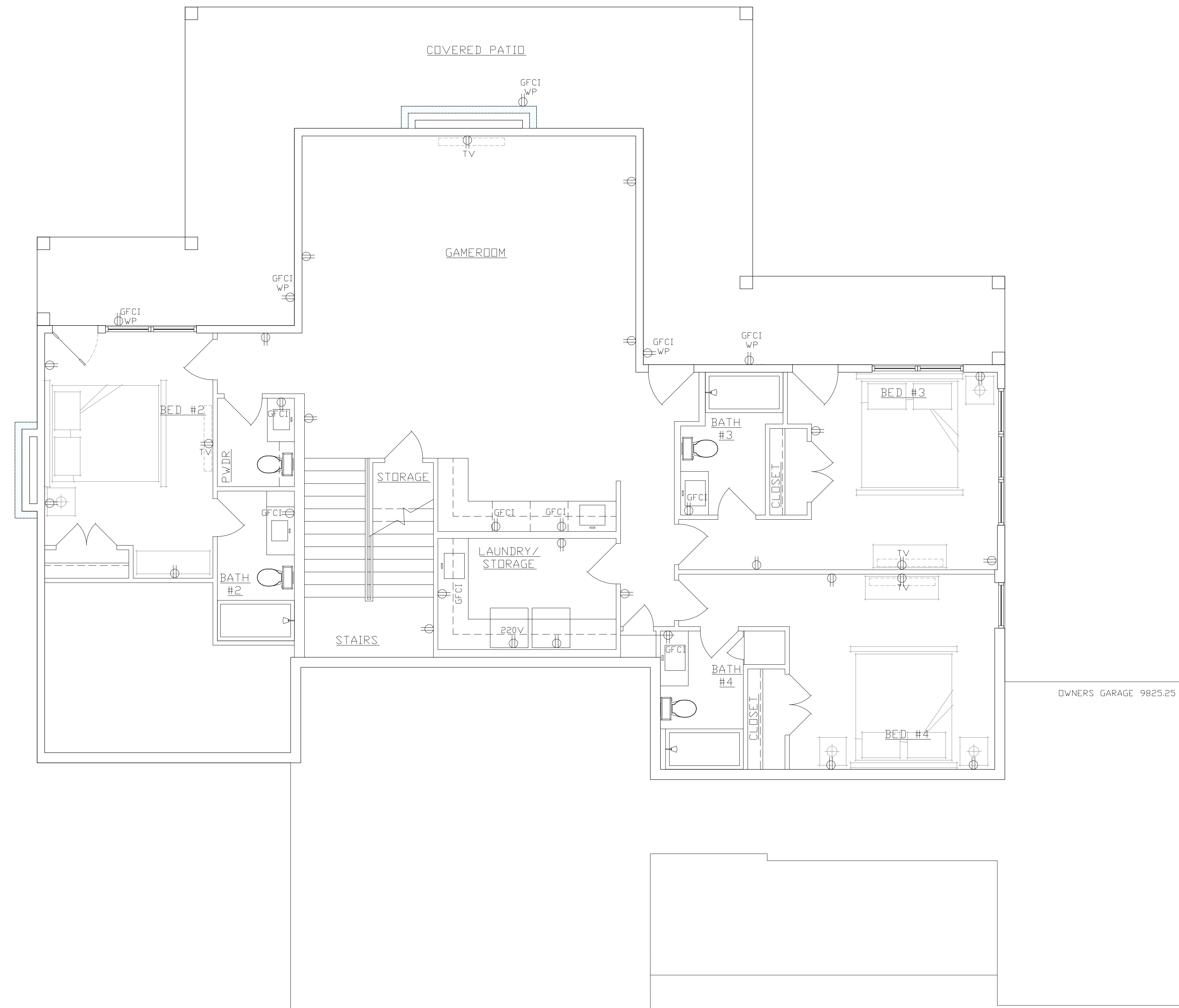
FOR PERMIT

**A2.04**

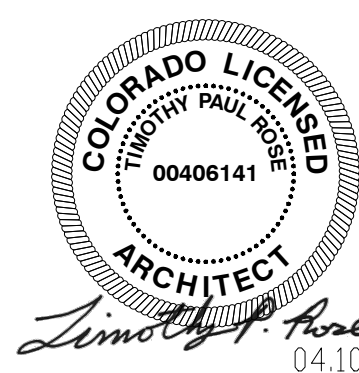
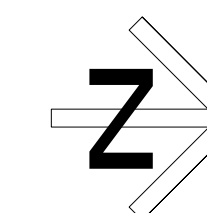
**POWER PLAN  
 UPPER LEVEL**

**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424

- ⊕ DUPLEX OUTLET
- GFCI ⊕ GROUND FAULT CIRCUIT DUPLEX OUTLET
- WP ⊕ WEATHER PROTECTED DUPLEX OUTLET
- GFCI USB ⊕ GROUND FAULT CIRCUIT DUPLEX OUTLET WITH USB
- TV ▷ TV AND DATA CONNECTION
- EP ELECTRIC PANEL



1 POWER PLAN - UPPER LEVEL  
 1/4" = 1'-0"



PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT

**A2.05**  
**POWER PLAN**  
**LOWER LEVEL**

**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424



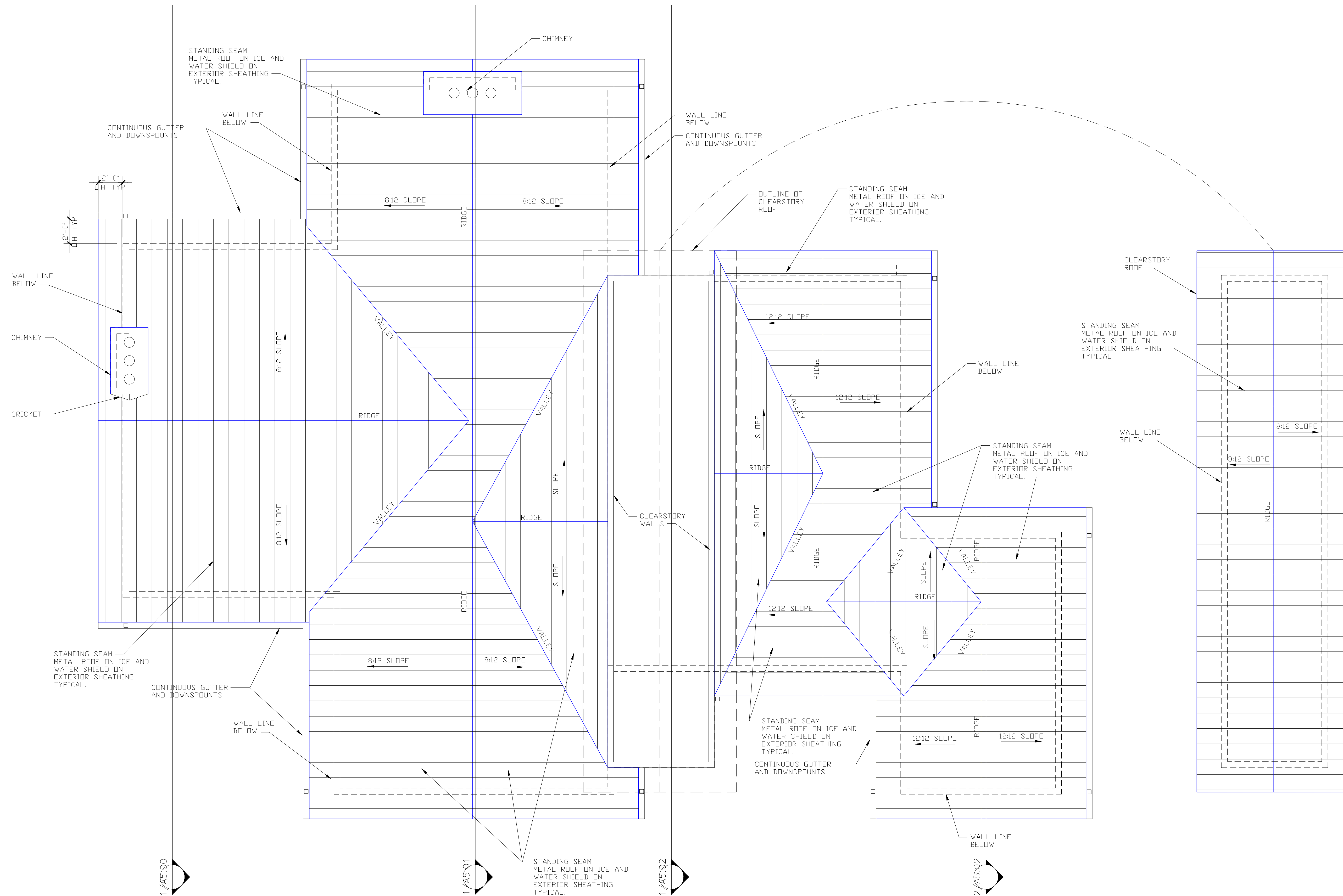
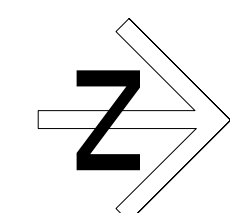
PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

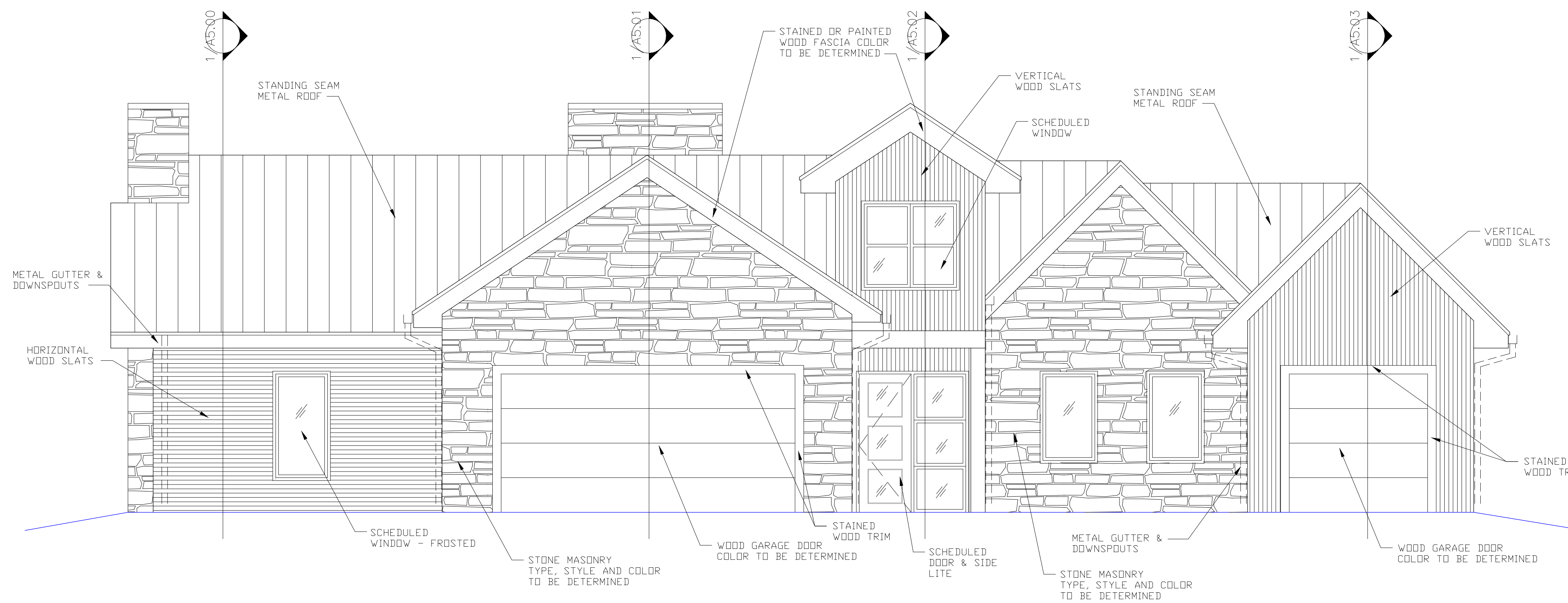
FOR REVIEW

**A2.08**  
**ROOF**  
**PLAN**



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

**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424



1 EXTERIOR ELEVATION - EAST - STREET VIEW  
 1/4" = 1'-0"



PROJECT NUMBER 22066

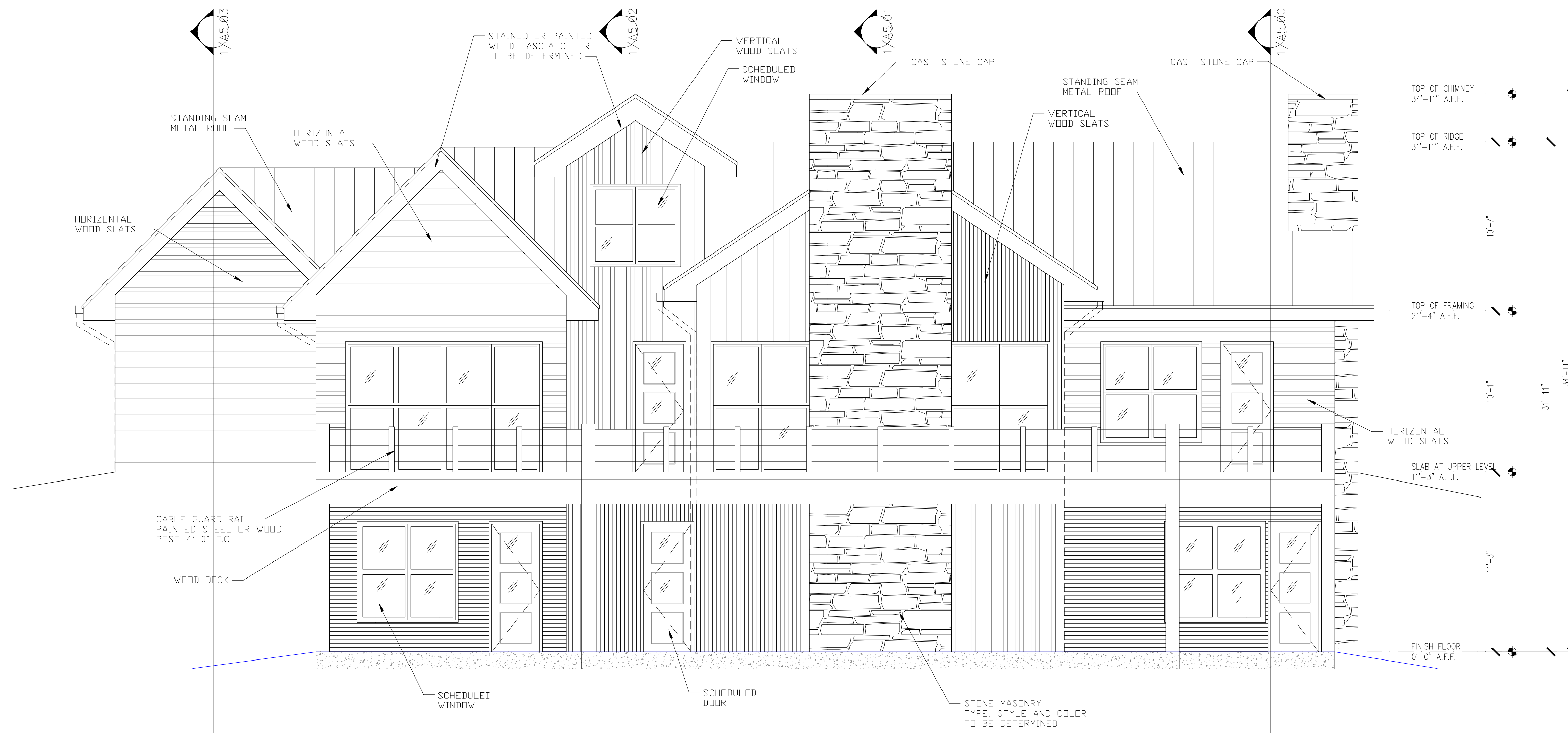
REVISIONS

No.	Description	Date

FOR PERMIT

**A3.00**  
 EXTERIOR  
 ELEVATIONS

**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424



1 EXTERIOR ELEVATION - WEST - RIVER VIEW  
1/4" = 1'-0"



PROJECT NUMBER 22066

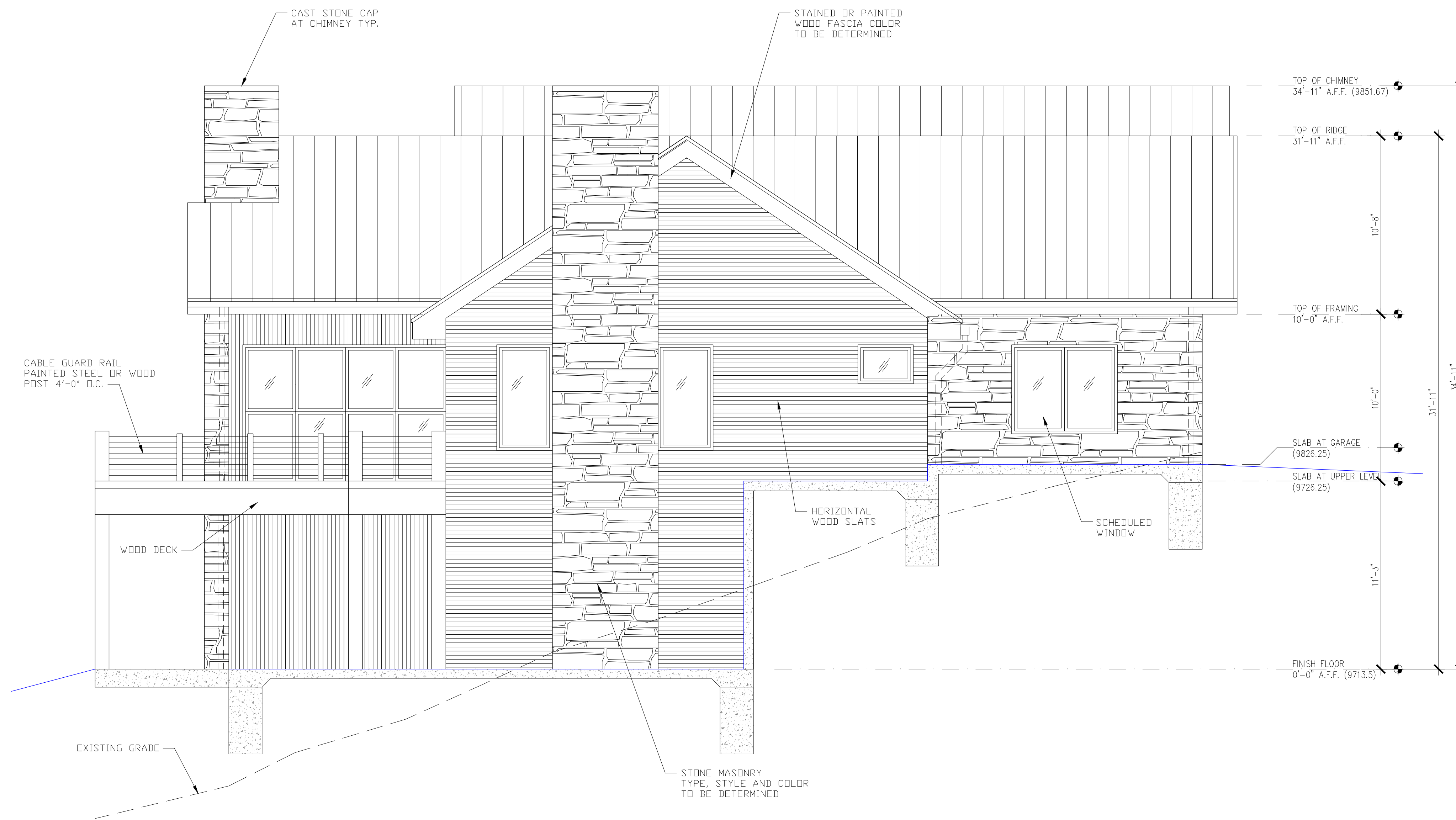
REVISIONS

No.	Description	Date

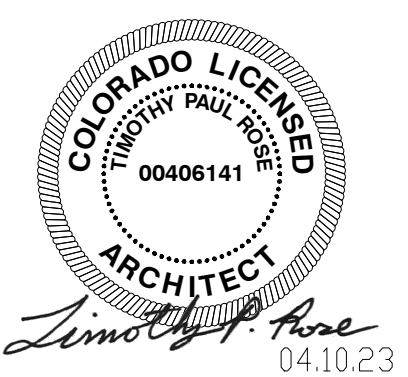
FOR PERMIT

**A3.01**  
EXTERIOR  
ELEVATIONS

**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424



1 EXTERIOR ELEVATION - SOUTH - LAKE DIRECTION  
1/4" = 1'-0"



PROJECT NUMBER 22066

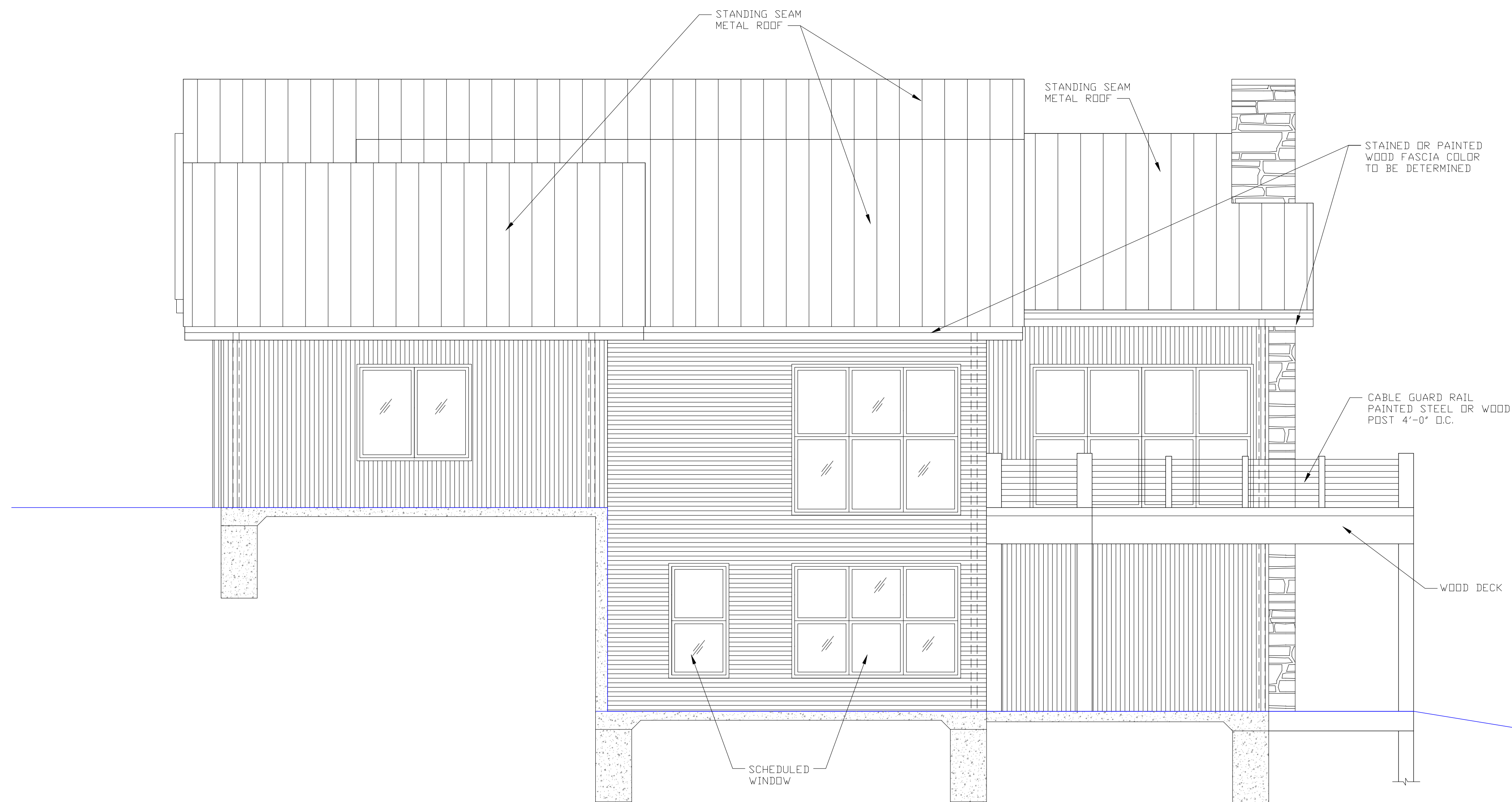
REVISIONS		
No.	Description	Date

FOR PERMIT

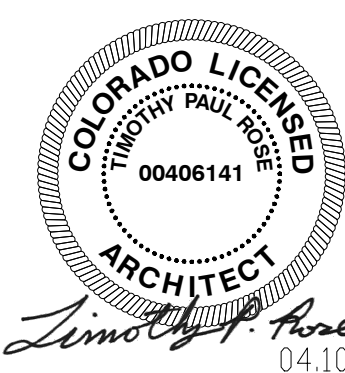
**A3.02**  
EXTERIOR  
ELEVATIONS



**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**



1 EXTERIOR ELEVATION – NORTH – TOWN DIRECTION  
 1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

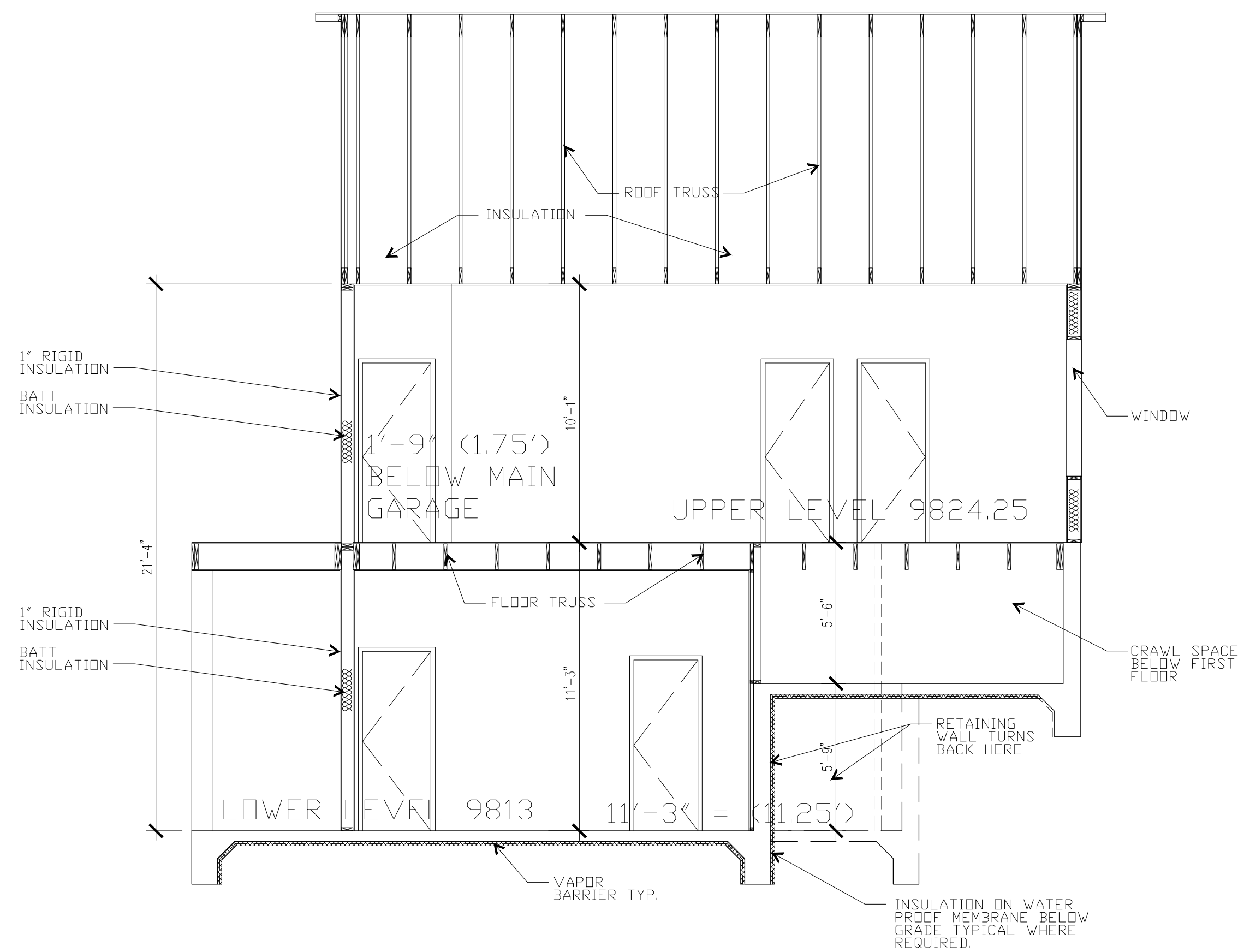
FOR PERMIT

**A3.03**  
**EXTERIOR ELEVATIONS**





**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**



1 BUILDING SECTION  
 1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

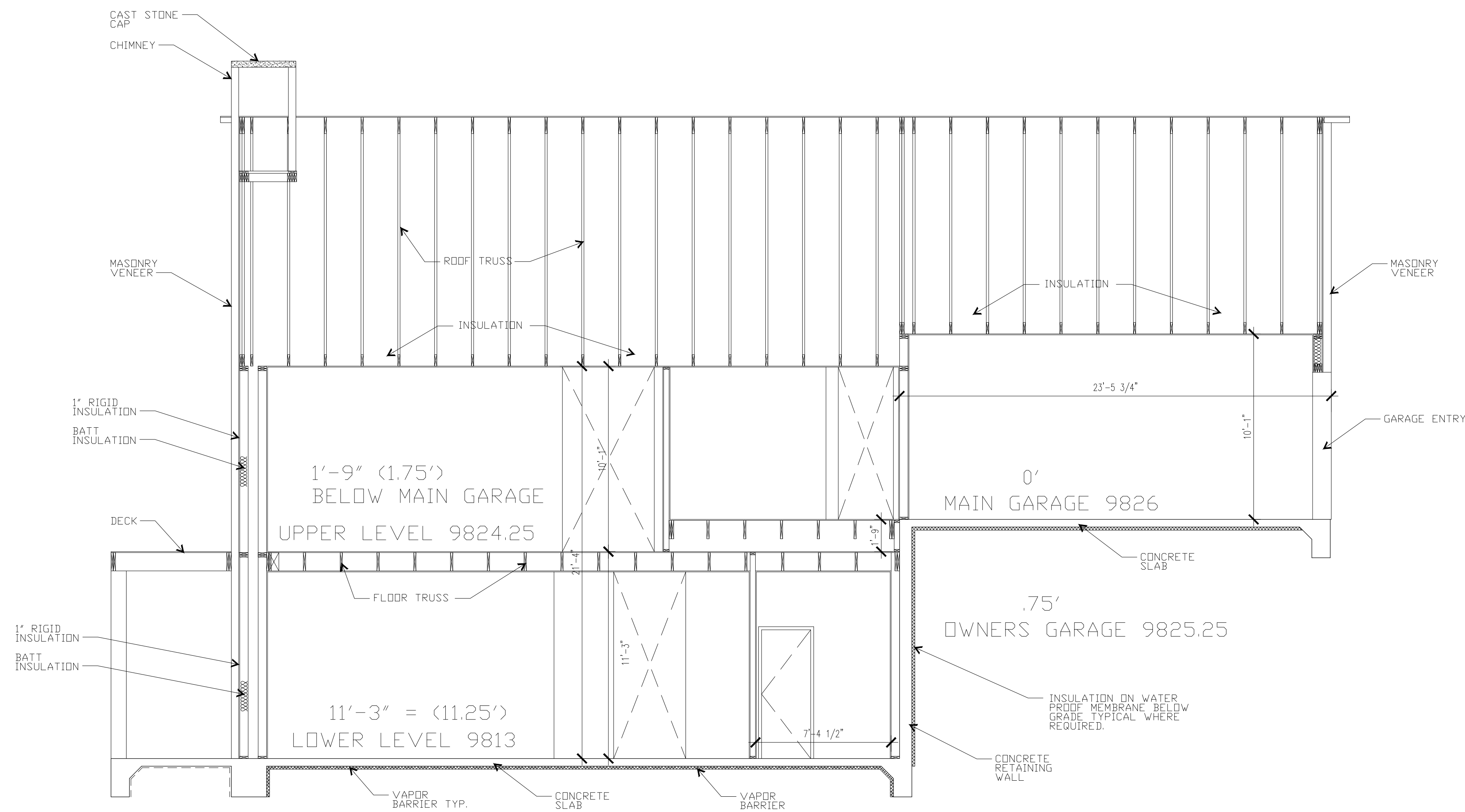
FOR PERMIT

**A5.00**

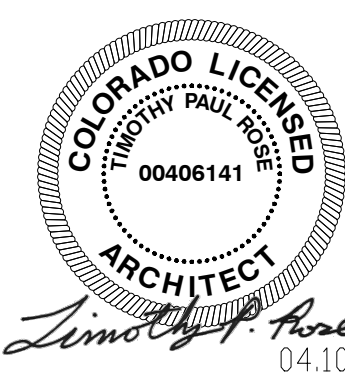
**BUILDING SECTION**



**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**



1 BUILDING SECTION  
 1/4" = 1'-0"



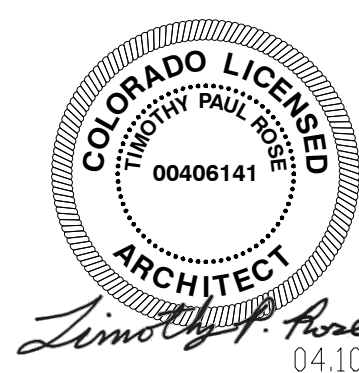
PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT

**A5.01**

**BUILDING SECTION**

**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424

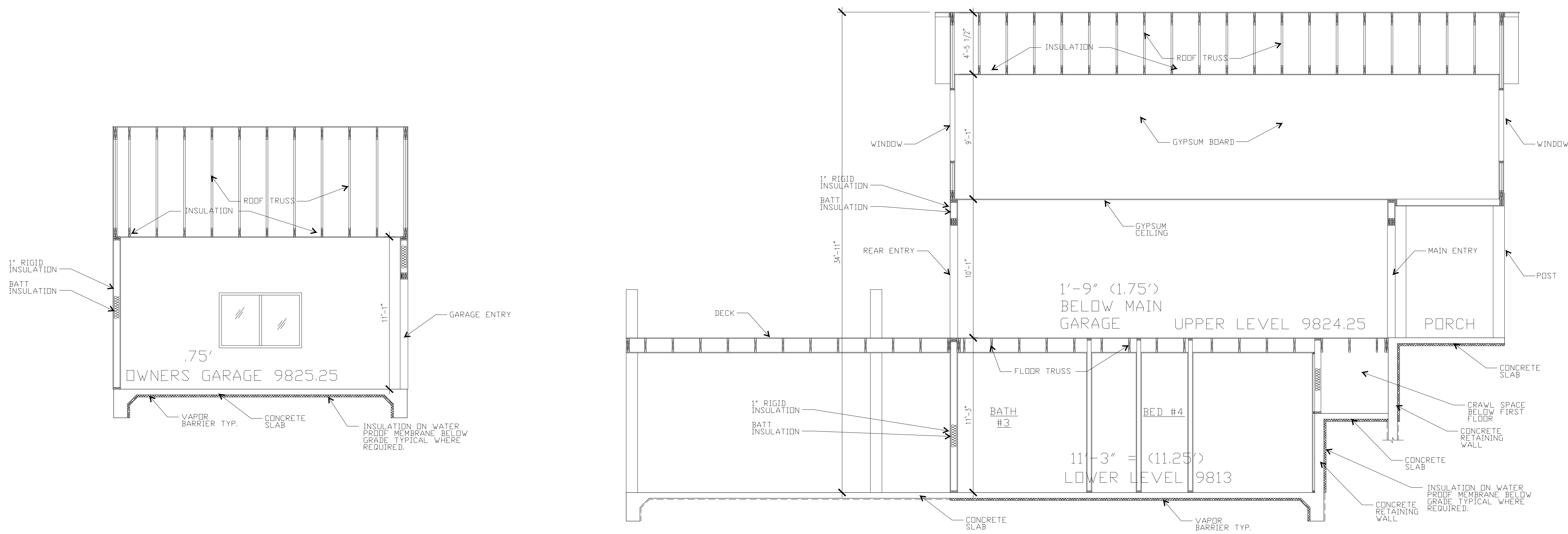


PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT

**A5.02**

**BUILDING SECTION**

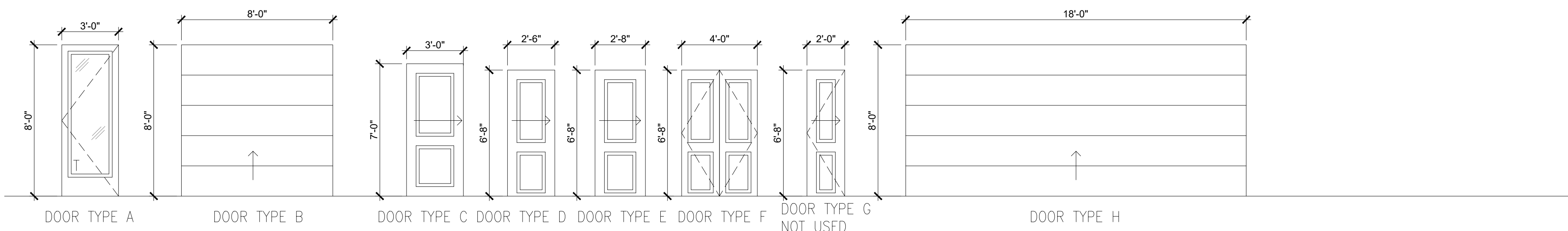


2 BUILDING SECTION  
 1/4" = 1'-0"

1 BUILDING SECTION  
 1/4" = 1'-0"



T - IMPACT RESISTANT TEMPERED GLASS Z97-1975



**DOOR / HARDWARE SCHEDULE**

DOORS				DETAILS					INTERIOR FRAME		EXTERIOR FRAME		HARDWARE SET	REMARKS		
MARK	SINGLE	PAIR	TYPE	THICKNESS	MATERIAL	FINISH	GLASS	HEAD	JAMB	SILL	MATERIAL	FINISH			MATERIAL	FINISH
100	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
101	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
102		X	F	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
103	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
104	X		E	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
105	X		H	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
106		X	F	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
107	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
108	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
109	X		E	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
110	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
111	X		G	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
112	X		E	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
113	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
114		X	F	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
115	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
200	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
201	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
202	X		C	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
203	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
204	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
205	X		C	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
206	X		E	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
207	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
208	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
209	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
210	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
211	X		H	--	METAL	PAINTED					WOOD	PAINTED	SIDING TRIM	PAINTED	--	BY MANUFACTURE
212	X		B	--	METAL	PAINTED					--	--	SIDING TRIM	PAINTED	--	BY MANUFACTURE

GL-01: 1/4" THICK, HUMAN IMPACT RESISTANT PER ANSI Z97-1975. CLEAR LOW-E GLASS.  
 GL-02: 1/4" CLEAR TEMPERED GLASS, ALL INTERIOR GLASS (I.E. ROOM DOORS AND SHOWER DOORS, ETC.)  
 GLASS ENERGY NOTES: SGHC: .8  
 NOTE:  
 1) S.C.W.D. = SOLID CORE WOOD DOOR, REFER TO ARCHITECT FOR STAIN COLOR.  
 2) GLAZING SHALL CONFORM TO 2018 IBC SECTION 2406.3 AND 2604.04. ALL GLASS/ALUM DOOR SHALL BE CLASS "A"

CONTRACTOR TO PROVIDE SUBMITTAL DRAWINGS FOR DOORS AND WINDOWS FOR REVIEW BY ARCHITECT.

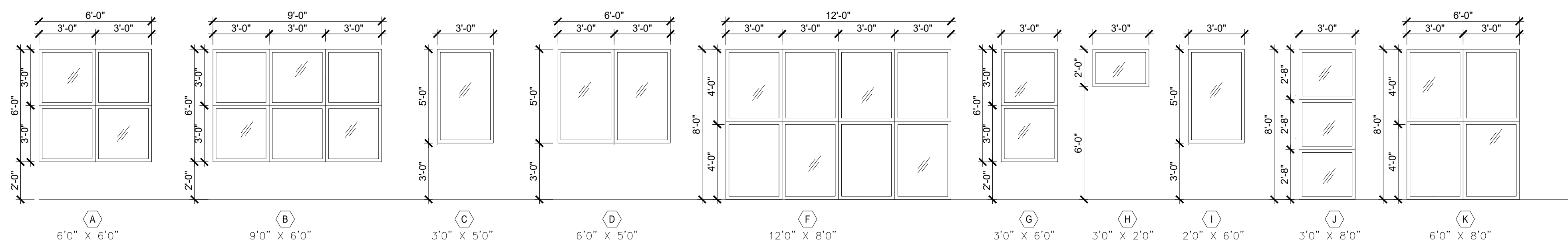
**DOOR NOTES:**

1. PROVIDE CYLINDERS AND MASTER KEYING OF ALL LOCKS PER DIRECTION OF OWNER.
2. THE HARDWARE CONTRACTOR SHALL PROVIDE AS PART OF THE BID, ANY INCIDENTAL HARDWARE ITEMS TO COMPLETE THE HARDWARE SPECIFIED AND SHALL PROVIDE A LIST OF SUCH ADDITIONAL HARDWARE ITEMS WITH THE BID.
3. LABELED FRAMES MUST BE PROVIDED AT DOORS SCHEDULED TO BE PROVIDED WITH A UL LABEL RATING, AS REQUIRED.
4. PROVIDE WEATHER PROOF MEMBRANE FLASHING AT ALL EXTERIOR DOOR AND WINDOW HEAD, JAMB AND SILL AS REQUIRED, TYPICAL.
5. CONTRACTOR TO VERIFY SWING OF DOOR WITH FLOOR PLAN. SWING ADDED FOR CONVENIENCE ONLY.

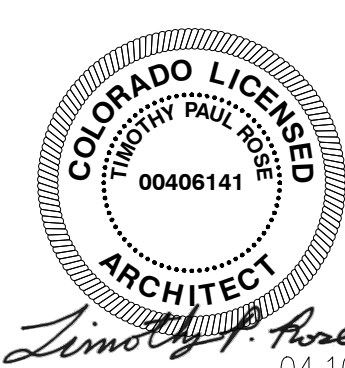
**WINDOW SCHEDULE**

MARK	FRAME OPENING SIZE WIDTH X HEIGHT	MATERIAL	GLASS	FINISH	HEAD	JAMB	SILL	REMARKS
A	6'-0" x 6'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - SINGLE HUNG
B	9'-0" x 6'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
C	9'-0" x 8'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
D	6'-0" x 5'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
E	NOT USED							
F	12'-0" x 8'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
G	3'-0" x 6'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - SINGLE HUNG
H	3'-0" x 2'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
I	3'-0" x 5'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
J	3'-0" x 8'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
K	6'-0" x 8'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
L	6'-0" x 9'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
M	6'-0" x 3'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED

NOTE:  
 GL-01: 1/4" THICK, HUMAN IMPACT RESISTANT PER ANSI Z97-1975. CLEAR LOW-E GLASS.  
 GLASS ENERGY NOTES:  
 WINDOWS: SGHC: .4  
 U FACTOR = .55  
 1) PROVIDE WEATHER PROOF MEMBRANE FLASHING AT ALL EXTERIOR DOOR AND WINDOW HEAD, JAMB AND SILL AS REQUIRED, TYPICAL.  
 2) GLAZING SHALL CONFORM TO 2018 IBC SECTION 2406.



**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424



PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT  
**A6.00**  
 DOOR AND WINDOWS



# Compliance Certificate

Project Blue River Mountain Home

Energy Code: **2009 IECC**  
 Location: **Blue River, Colorado**  
 Construction Type: **Single-family**  
 Project Type: **New Construction**  
 Conditioned Floor Area: **3,711 ft2**  
 Glazing Area: **24%**  
 Climate Zone: **7 (11500 HDD)**  
 Permit Date:  
 Permit Number:

Construction Site:  
 311 Wagon Road  
 Blue River, CO 8024

Owner/Agent:  
 Landyn Hacketbeil  
 405 Front St.  
 Combort, TX 78013  
 830-741-3400  
 landyn@ttcustomhomes.com

Designer/Contractor:  
 Timothy Paul Rose  
 Rose-Villacorte Architecture LLC  
 Houston, TX 77060  
 346-498-3808  
 timothy@rvaarch.com

**Compliance: Passes using UA trade-off**

Compliance: **4.5% Better Than Code** Maximum UA: **667** Your UA: **637**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

NOTE: Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

## Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Floor 1: Slab-On-Grade:Unheated Insulation depth: 4.0'	2,910		15.0	0.655	0.028	0	0
North wall: Wood Frame, 16" o.c.	971	20.0	3.8	0.047	0.057	33	40
Window 1: Wood Frame:Double Pane with Low-E	254			0.290	0.350	74	89
Window 5: Wood Frame:Double Pane	18			0.270	0.350	5	6
South Wall: Wood Frame, 16" o.c.	913	20.0	3.8	0.047	0.057	35	42
Window 2: Wood Frame:Double Pane with Low-E	168			0.290	0.350	49	59
East Wall: Wood Frame, 16" o.c.	785	20.0	3.8	0.047	0.057	22	27
Window 6: Wood Frame:Double Pane with Low-E	18			0.370	0.350	7	6
Window 7: Wood Frame:Double Pane with Low-E	79			0.290	0.350	23	28
Door 1: Solid	200			0.470	0.350	94	70
Door 2: Glass	21			0.350	0.350	7	7
West Wall: Wood Frame, 16" o.c.	1,487	20.0	3.8	0.047	0.057	50	60
Window 3: Wood Frame:Double Pane with Low-E	217			0.370	0.350	80	76

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Window 4: Wood Frame:Double Pane with Low-E	108			0.290	0.350	31	38
Door 3: Glass	105			0.350	0.350	37	37
Ceiling 1: Flat Ceiling or Scissor Truss	2,930	49.0	0.0	0.026	0.026	76	76
Crawl 1: Solid Concrete or Masonry Wall height: 5.7' Depth below grade: 5.7' Insulation depth: 4.0'	144	0.0	3.8	0.140	0.065	7	3
Crawl 2: Solid Concrete or Masonry Wall height: 5.5' Depth below grade: 5.5' Insulation depth: 4.0'	144	0.0	3.8	0.140	0.065	7	3

*Compliance Statement:* The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2009 IECC requirements in REScheck Version 4.7.2 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

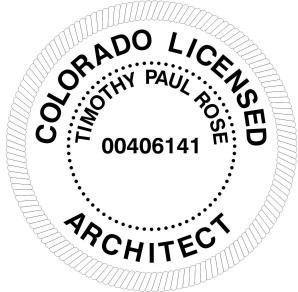
Timothy Paul Rose, Architect

04.17.23

Name - Title

Signature

Date



*Timothy P. Rose*



# Inspection Checklist

Energy Code: 2009 IECC

Requirements: 51.0% were addressed directly in the REScheck software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.2 [PR1] <sup>1</sup> 	Construction drawings and documentation demonstrate energy code compliance for the building envelope.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
103.2, 403.7 [PR3] <sup>1</sup> 	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the commercial code.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.6 [PR2] <sup>2</sup> 	Heating and cooling equipment is sized per ACCA Manual S based on loads per ACCA Manual J or other approved methods.	Heating: Btu/hr _____ Cooling: Btu/hr _____	Heating: Btu/hr _____ Cooling: Btu/hr _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------

Section # & Req.ID	Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1 [FO1] <sup>1</sup>	Slab edge insulation R-value.	R-____ <input type="checkbox"/> Unheated <input type="checkbox"/> Heated	R-____ <input type="checkbox"/> Unheated <input type="checkbox"/> Heated	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2, 402.2.8 [FO2] <sup>1</sup>	Slab edge insulation installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
402.1.1 [FO3] <sup>1</sup>	Slab edge insulation depth/length.	____ ft	____ ft	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
402.2.9 [FO7] <sup>1</sup>	Unvented crawl space wall insulation R-value.	R-____ R-____	R-____ R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2 [FO8] <sup>1</sup>	Unvented crawl space wall insulation installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
402.2.9 [FO9] <sup>1</sup>	Unvented crawl space continuous vapor retarder installed over exposed earth, joints overlapped by 6 in. and sealed, extending at least 6 in. up and attached to the wall.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
402.2.9 [FO10] <sup>1</sup>	Unvented crawl space wall insulation depth of burial or distance from top of wall.	____ in.	____ in.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2.1 [FO11] <sup>2</sup>	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement is not applicable.
403.8 [FO12] <sup>2</sup>	Snow- and ice-melting system controls installed.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
------------------------	--------------------------	-----------------------



Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.4 [FR1] <sup>1</sup>	Door U-factor.	U- ____	U- ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
402.1.1, 402.3.1, 402.3.3, 402.5 [FR2] <sup>1</sup>	Glazing U-factor (area-weighted average).	U- ____	U- ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.1.3 [FR4] <sup>1</sup>	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
402.4.4 [FR20] <sup>1</sup>	Fenestration that is not site built is listed and labeled as meeting AAMA/WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
402.4.5 [FR16] <sup>2</sup>	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
403.2.1 [FR12] <sup>1</sup>	Supply ducts in attics are insulated to ≥R-8. All other ducts in unconditioned spaces or outside the building envelope are insulated to ≥R-6.	R- ____ R- ____	R- ____ R- ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.2 [FR13] <sup>1</sup>	All joints and seams of air ducts, air handlers, filter boxes, and building cavities used as return ducts are sealed.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.3 [FR15] <sup>3</sup>	Building cavities are not used for supply ducts.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3 [FR17] <sup>2</sup>	HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥R-3.	R- ____	R- ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.4 [FR18] <sup>2</sup>	Circulating service hot water pipes are insulated to R-2.	R- ____	R- ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5 [FR19] <sup>2</sup>	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

1 High Impact (Tier 1)    2 Medium Impact (Tier 2)    3 Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13] <sup>2</sup>	All installed insulation is labeled or the installed R-values provided.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
402.1.1, 402.2.4, 402.2.5 [IN3] <sup>1</sup>	Wall insulation R-value. If this is a mass wall with at least 1/2 of the wall insulation on the wall exterior, the exterior insulation requirement applies.	R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel	R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2 [IN4] <sup>1</sup>	Wall insulation is installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
------------------------	--------------------------	-----------------------

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.2.1, 402.2.2 [F11] <sup>1</sup>	Ceiling insulation R-value. Where > R-30 is required, R-30 can be used if insulation is not compressed at eaves. R-30 may be used for 500 ft <sup>2</sup> or 20% (whichever is less) where sufficient space is not available.	R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.1.1.1, 303.2 [F12] <sup>1</sup>	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft <sup>2</sup> .			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
402.2.3 [F13] <sup>1</sup>	Attic access hatch and door insulation ≥ R-value of the adjacent assembly.	R-____	R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
402.4.2, 402.4.2.1 [F17] <sup>1</sup>	Building envelope tightness verified by blower door test result of <7 ACH at 50 Pa. This requirement may instead be met via visual inspection, in which case verification may need to occur during Insulation Inspection.	ACH 50 = ____	ACH 50 = ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
403.2.2 [F14] <sup>1</sup>	Post construction duct tightness test result of ≤8 cfm to outdoors, or ≤12 cfm across systems. Or, rough-in test result of ≤6 cfm across systems or ≤4 cfm without air handler. Rough-in test verification may need to occur during Framing Inspection.	____ cfm	____ cfm	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.1.1 [F19] <sup>2</sup>	Programmable thermostats installed on forced air furnaces.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.1.2 [F110] <sup>2</sup>	Heat pump thermostat installed on heat pumps.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.4 [F111] <sup>2</sup>	Circulating service hot water systems have automatic or accessible manual controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
404.1 [F16] <sup>1</sup>	50% of lamps in permanent fixtures are high efficacy lamps.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
401.3 [F17] <sup>2</sup>	Compliance certificate posted.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
303.3 [F118] <sup>3</sup>	Manufacturer manuals for mechanical and water heating equipment have been provided.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

1 High Impact (Tier 1)    2 Medium Impact (Tier 2)    3 Low Impact (Tier 3)

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------



# 2009 IECC Energy Efficiency Certificate

Insulation Rating	R-Value
Above-Grade Wall	23.80
Below-Grade Wall	3.80
Floor	15.00
Ceiling / Roof	49.00
Ductwork (unconditioned spaces):	_____

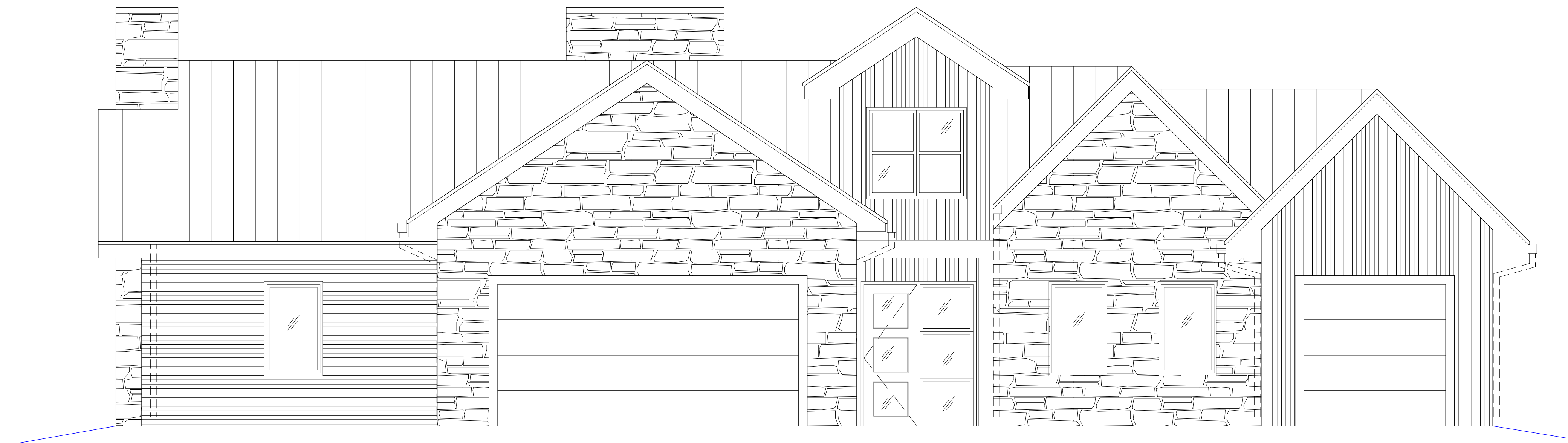
Glass & Door Rating	U-Factor	SHGC
Window	0.29	
Door	0.47	

Heating & Cooling Equipment	Efficiency
Heating System: _____	_____
Cooling System: _____	_____
Water Heater: _____	_____

\_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_\_

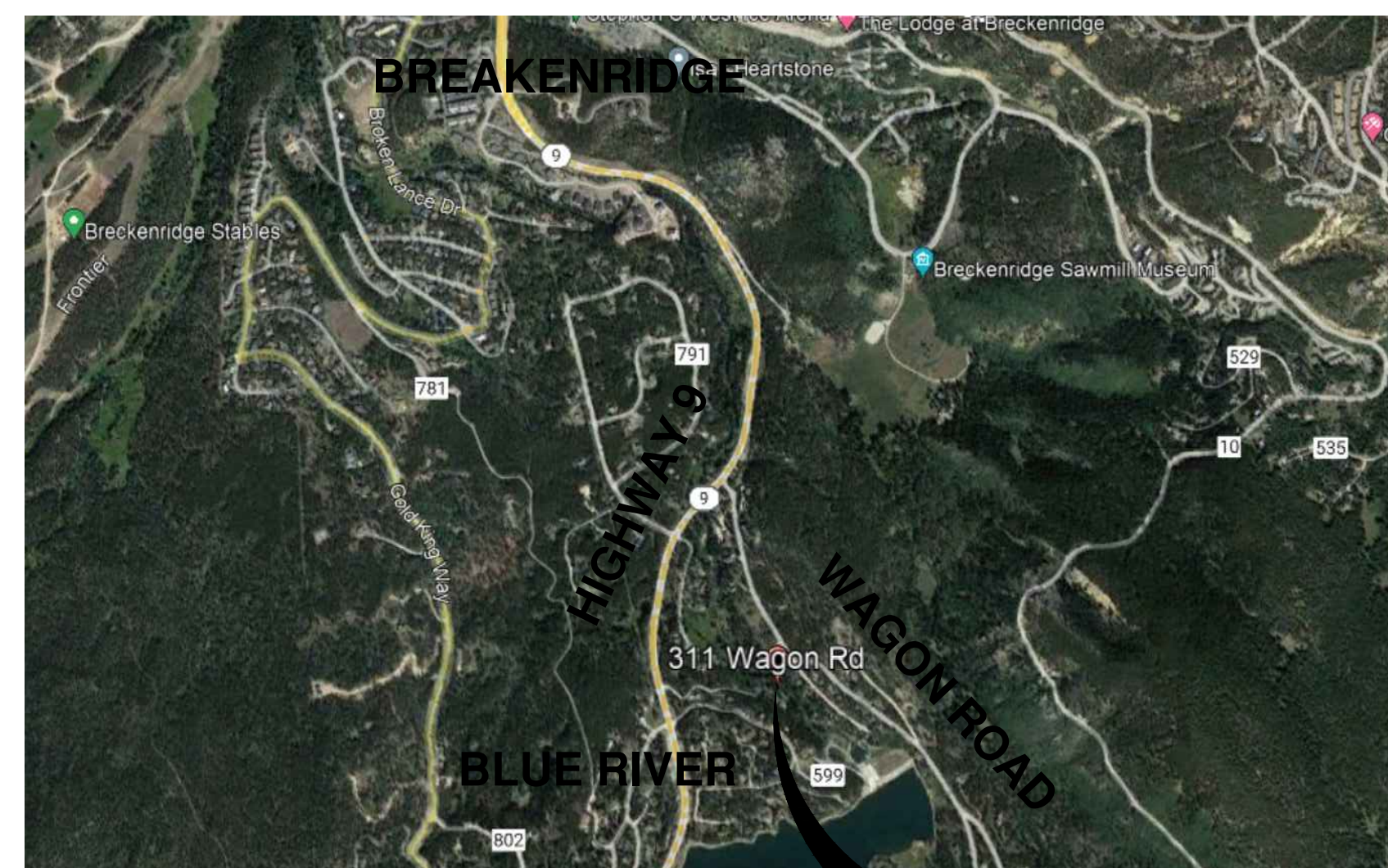
Comments



# Blue River Mountain Home

## 311 Wagon Road, Blue River, CO 80424

### LOCATION MAP



**PROJECT SITE**

### SETS ISSUED:

04.14.23 FOR PERMIT

### CONTACTS

#### PRESENTED BY

**405 Front Street  
Comfort, TX 78013  
830-741-3400  
Landyn Hacketbeil  
llandyn@ttcustomhomes.com**

#### ARCHITECT

**ROSE-VILLACORTE ARCHITECTURE LLC  
480 N Sam Houston Parkway E, Suite 110  
Houston TX 77060  
346-498-3808  
Timothy Paul Rose, Architect #26947  
timothy@rvaarch.com**

#### STRUCTURAL ENGINEER

**Sarab Structural & Civil LLC  
13831 Northwest Freeway, Suite 245  
Houston, TX 77040  
832-922-1145  
Karim S. Dadelahi P.E.  
sscllc@sarabstructural.com**

#### CIVIL ENGINEER

**Littlehorn Engineering LLC  
351 U.C. Highway 285  
Fiarplay, CO 80440  
719-836-7120  
John J Littlehorn P.E.**

#### ELECTRICAL ENGINEER

n/a

### DRAWING INDEX

COVER TITLE, INDEX  
A0.00 CODE SHEET

#### CIVIL

- C0 COVER SHEET & CONSTRUCTION DETAILS
- C1 OVERALL SITE PLAN
- C1.1 SITE AND GRADING PLAN DETAIL
- C2 SITE CONSTRUCTION DETAILS
- C3 EROSION CONTROL PLAN
- C4 EROSION DETAILS AND SPECIFICATIONS
- COVER OWTS
- D0 GENERAL CONSTRUCTION & SITE NOTES
- D1 DESIGN & INSTALLATION NOTES
- D2 OVERALL SITE PLAN FOR OWTS
- D2.1 SITE PLAN DETAIL FOR OWTS
- D3 STA DETAILS AND NOTES
- D4 SEPTIC TANK DETAILS & SPECIFICATIONS
- D4.1 ORENCO ADVANTEX AX-RT MFG. DRAWINGS 1 OF 2
- D4.2 ORENCO ADVANTEX AX-RT MFG. DRAWINGS 2 OF 2
- D5 OWTS DETAILS & EXCAVATION NOTES
- D6 OWTS MAINTENANCE REQUIREMENTS
- D7 SOILS TESTING & PUMP CALCULATIONS

#### LANDSCAPE

N/A - BY OWNER

#### ARCHITECTURAL

- A2.00 UPPER LEVEL FLOOR PLAN
- A2.01 LOWER LEVEL FLOOR PLAN
- A2.02 UPPER LEVEL REFLECTED CEILING PLAN
- A2.03 LOWER LEVEL REFLECTED CEILING PLAN
- A2.04 UPPER LEVEL POWER PLAN
- A2.05 LOWER LEVEL POWER PLAN
- A2.08 ROOF PLAN
- A3.00 EXTERIOR ELEVATIONS
- A3.01 EXTERIOR ELEVATIONS
- A3.02 EXTERIOR ELEVATIONS
- A3.03 EXTERIOR ELEVATIONS
- A5.00 BUILDING SECTIONS
- A5.01 BUILDING SECTIONS
- A5.02 BUILDING SECTIONS
- A5.03 BUILDING SECTIONS
- A6.00 DOOR & WINDOW SCHED. & DETAILS

#### STRUCTURAL

#### MECHANICAL

N/A - BY OWNER

#### ELECTRICAL

N/A - BY OWNER

#### PLUMBING

N/A - BY OWNER



# CIVIL SITE AND GRADING PLANS FOR A SINGLE-FAMILY RESIDENCE

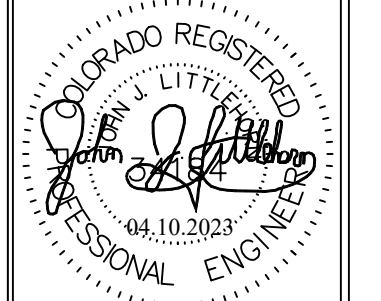


## 311 WAGON ROAD, TOWN OF BLUE RIVER, CO

A PERMIT IS REQUIRED FROM THE TOWN OF BLUE RIVER TO EXCAVATE & INSTALL A DRIVEWAY AND EXCAVATE ON THIS SITE AND FROM SUMMIT COUNTY FOR THE OWTS RELATED WORK

<b>PROPERTY INFORMATION</b> 311 WAGON ROAD BLUE RIVER, CO 80424 SPILLWAY SUB. #1, LOT 14	<b>DRAWING PREPARED FOR:</b> LANDYN AND MICHELLE HACKEBEIL 405 FRONT STREET COMFORT, TX 78013
<b>BUILDING ARCHITECT:</b> ROSE-VILACORTE ARCHITECTURE, LLC 480 NORTH SAM HOUSTON PARKWAY EAST, SUITE 110 HOUSTON, TX 77060 OFFICE # (346) 498-3808	<b>CONTRACTOR:</b> TBD

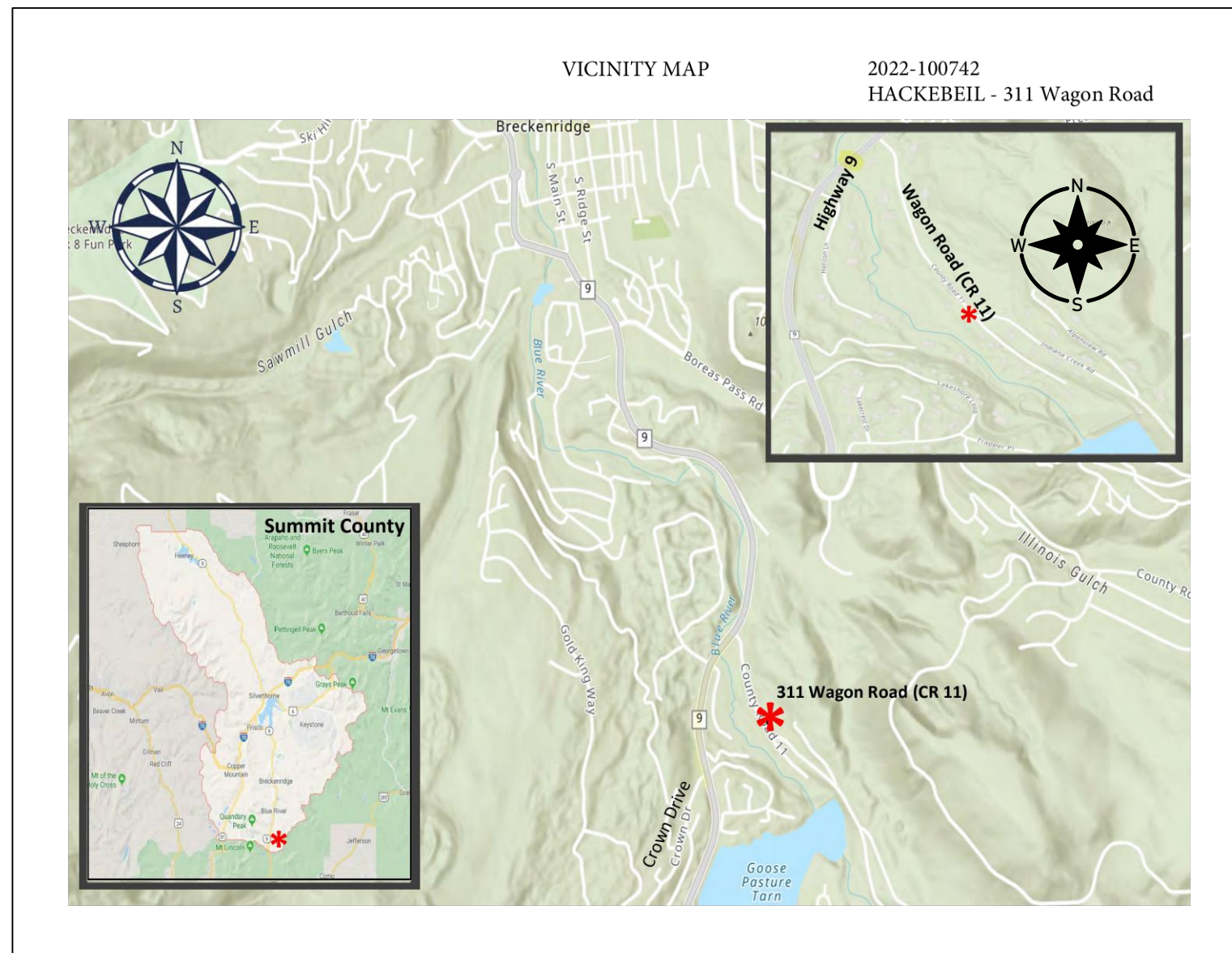
THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.



**CONSTRUCTION NOTES** - Construction notes shall govern ALL civil drawings

**GENERAL CONSTRUCTION AND PROJECT NOTES**

- PERMITS. IT IS THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL RETAINING WALLS ARE INSTALLED APPROPRIATELY AND WITH THE PERMISSION OF THE COUNTY AND H.O.A. AND SOMETIMES THE FIRE DEPARTMENT (VERIFY). THE CONTRACTOR IS RESPONSIBLE FOR PROCUREMENT OF ALL NECESSARY PERMITS. COUNTY AND FIRE ACCESS REQUIREMENTS FOR DRIVEWAY STANDARDS MUST BE MET. IF SITE DISTURBANCE RESULTS IN MORE THAN 10 ACRES OF DISTURBANCE, A PERMIT FROM THE STATE OF COLORADO IS REQUIRED.
- GREAT CARE AND PROFICIENCY HAVE GONE INTO THE PREPARATION OF THESE PLANS AND BLUE PRINTS. HOWEVER, DUE TO THE IMPOSSIBILITY OF PROVIDING "ON-SITE" SUPERVISORY CONTROL OVER ACTUAL CONSTRUCTION AND BECAUSE OF GREAT VARIATIONS IN LOCAL BUILDING CODES, SOILS, GROUNDWATER, BUILDING CONDITIONS, AND WEATHER CONDITIONS, THE ENGINEER ASSUMES NO LIABILITY EXCEPT AS DESCRIBED IN THE CONTRACT FOR PROFESSIONAL SERVICES. THE ENGINEER HAS DESIGNED THE PROJECT FROM GENERALLY ACCEPTED ENGINEERING PRACTICES AS IS TYPICAL IN THE LOCAL AREA TO ASSURE THAT THE DESIGNED ITEMS ARE SOUND.
- DISCREPANCIES IN BUILDING PLANS OFTEN EXIST, THEREFORE THE HOME OWNER AND THE CONTRACTOR MUST INTERPRET THE BLUE PRINTS AND VERIFY PRIOR TO CONSTRUCTION COMMENCEMENT: SITE CONDITIONS, CONSTRUCTION SETBACKS, BUILDING LOCATION, DIMENSIONS, MATERIALS, COLORS, QUANTITIES, ELEVATIONS, AND FINISHES. ALL WORK SHALL COMPLY WITH APPLICABLE GOVERNING CODES, BUILDING DEPARTMENT ORDINANCES, LAWS, AND MANUFACTURER'S SPECIFICATIONS. ANY CHANGES OR ITEMS REQUIRED FOR CONSTRUCTION WHICH ARE NOT CLEAR SHALL BE REPORTED TO THE ENGINEER ( & OTHER DESIGNERS/SURVEYORS) FOR APPROVAL.
- THESE PLANS ARE NOT AN INSTALLATION MANUAL AND DO NOT SHOW ALL DETAILS AND HAVE NOT AND CAN NOT CONSIDER EVERY CONCEIVABLE EVENT WHICH MAY OCCUR, AS THAT WOULD RENDER THE DESIGN AND FABRICATION OF THE PROJECT EXCESSIVELY EXPENSIVE. APPLICABLE INSTALLATION MANUALS AND CODES, AS LISTED IN THE SECTION LABELED "CODES", MUST BE REFERENCED AND USED FOR CONSTRUCTION. USE OF THESE DRAWINGS CONSTITUTES ACCEPTANCE OF RESPONSIBILITY FOR HAVING READ AND FULLY UNDERSTOOD THE CONSTRUCTION DRAWINGS AND THE ENGINEER'S LIABILITY. IF THE CLIENT OR CONTRACTOR HAS ANY QUESTIONS, PLEASE CONTACT THE ENGINEER PRIOR TO FABRICATION.
- LOCATE ALL BURIED UTILITIES PRIOR TO ANY CONSTRUCTION.
- A SOILS ENGINEER SHALL VERIFY ALL SOILS BEFORE & DURING PLACEMENT OF ANY APPURTENANCES, RETAINING WALLS, ASPHALT, OR CONCRETE.
- ALL MATERIALS SHALL BE PROTECTED WITH SUITABLE TEMPORARY WEATHER FACILITIES AS MAY BE REQUIRED TO PROTECT MATERIALS FROM DAMAGE DURING CONSTRUCTION.
- JOB-SITE SAFETY IS BEYOND THE SCOPE OF THESE DRAWINGS AND THE ABILITY OF THE ENGINEER TO MANAGE. THE OWNER AND CONTRACTORS BEAR ALL RESPONSIBILITY FOR THEIR OWN SAFETY AND THE SAFETY OF EMPLOYEES, WORKERS, AND PASSERSBY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL METHODS OF CONSTRUCTION, INCLUDING TEMPORARY BRACING OR SHORING AS REQUIRED AND CONSTRUCTION SEQUENCING. CONTRACTOR SHALL PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE LINES AND DIMENSIONS OF THE CONTRACT DOCUMENTS AND SHALL PROVIDE FOR THE SAFETY OF THE WORKERS. SITE VISITS BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE.
- WEATHER PROTECTION AND SNOW REMOVAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND OWNER.
- DO NOT SCALE DRAWINGS. VERIFY LINES & DIMENSIONS ON STRUCTURAL DRAWINGS W/ ARCHITECTURAL DRAWINGS PRIOR TO ANY WORK. CALL ENGINEER FOR ANY DIMENSIONING QUESTIONS. DIMENSIONS ON DRAWINGS DO NOT ACCORD FOR FINISHES.
- SUBMIT ALL SHOP DRAWINGS TO THE ENGINEER. ENGINEER'S REVIEW OF SHOP DRAWINGS IS PROVIDED AS AN AID TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEW AND CORRECTNESS OF SHOP DRAWINGS. SHOP DRAWINGS DO NOT REPLACE CONTRACT DOCUMENTS. SHOP DRAWINGS (ONLY REVIEWED UPON CLIENT'S REQUEST) ARE SOMETIMES PROVIDED ON CULTURTS, FLARED END SECTIONS, GEOGRID FABRICS, FILTER FABRICS, SLOPE NETTING, EROSION MATS, AND OTHER SITE RELATED WORK.
- OTHERS SUBMITTING ENGINEERED DESIGN AND LAYOUT SHALL BEAR RESPONSIBILITY FOR SUCH WORK. AS AN ENGINEER FOR THE DRIVEWAY ONLY, WE SHALL BE LISTED OR RECOGNIZED AS THE ENGINEER OF RECORD FOR THE ENTIRE PROJECT.
- THE CONTRACTOR SHALL NOTIFY ENGINEER OF DETAILS NOT SHOWN ON PLANS THAT ARE NECESSARY FOR THE WORK TO PROCEED.
- ALTERNATES PROVIDED FOR THE CONTRACTOR'S CONVENIENCE SHALL REQUIRE THE CONTRACTOR TO PROVIDE ALL CHANGES AND COORDINATE ALL DETAILS NECESSARY SHOULD THE CONTRACTOR CHOOSE AN ALTERNATE.
- DRIVEWAYS: DRIVEWAYS SHALL CONFORM TO THE REQUIREMENTS OF THE COUNTY OR MUNICIPALITY WHICH INCLUDE THE DIMENSIONS OF DRIVEWAY WIDTHS, OPENINGS, AND THE CENTERLINE CURVE RADIUS. FOR THE TOWN OF BLUE RIVER THIS IS MAX. 6.0% FOR THE FIRST 20 FEET, THEN UP TO 12% WITH TOWN APPROVAL THEREAFTER. PARKING AREAS SHALL HAVE A MAXIMUM GRADE OF 4%, AND A MINIMUM GRADE OF 1.0% TO FACILITATE DRAINAGE. ALL GRADES MUST SLOPE AWAY FROM STRUCTURE REGARDLESS OF WHAT IS SHOWN ON ANY GRADING PLAN. DRAINAGE FROM DRIVEWAYS SHALL BE DIVERTED TO ROADSIDE DITCHES OR OTHER APPROPRIATE DRAINAGE WAY.
- PLEASE NOTE THAT ANY TIME A DRIVEWAY IS CUT INTO THE HILL SIDE FROM THE DIRECTION OF THE PREVAILING WINDS, DRIFTING WILL OCCUR. THIS DRIFTING AND SNOW BUILD-UP MAY MAKE THE DRIVE IMPASSABLE IN THE WINTER.
- PARKING AND DRIVEWAY SURFACES: RECYCLED ASPHALT, PAVING, OR CONCRETE IS USUALLY RECOMMENDED TO FACILITATE SNOW REMOVAL. PAVING IS NOT REQUIRED FOR PARKING AREA AND DRIVES SERVING SINGLE-FAMILY UNITS, OR FOR DUPLEXES WHERE THE ROAD PROVIDING ACCESS IS NOT PAVED. WHERE ROADS ARE PAVED, PARKING AREAS AND DRIVES FOR DUPLEXES MUST BE PAVED. PARKING AREAS NOT PAVED SHALL BE COVERED WITH 1-2 INCHES OF DRIVEWAY GRAVEL OR 2 INCHES OF RECYCLED ASPHALT (OWNER TO SPECIFY). WHEN PAVING IS USED, VERIFY ALL UNDERLYING SOILS WITH GEOTECH.
- PARKING STANDARDS: PARKING SHALL CONFORM TO COUNTY AND ANY APPLICABLE HOA REQUIREMENTS. FIELD VERIFY THE NUMBER OF PARKING SPACES REQUIRED.
- WHENEVER ROADWAYS, DRIVEWAYS, PARKING AREA, BRIDGES, REC. PATHS OR OTHER TYPES OF CONSTRUCTION RESULT IN EARTH DISTURBANCE, REVEGETATION AND/OR LANDSCAPING IS REQUIRED. REVEGETATION AND/OR LANDSCAPING WORK SHALL BE IN ACCORDANCE WITH THE COUNTY LAND USE AND DEVELOPMENT CODE AND IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AS PART OF PERMIT ISSUANCE.
- HISTORICAL FLOW QUANTITIES AND PATTERNS SHALL BE VERIFIED AND MAINTAINED. CHANGES TO SITE DRAINAGE CAN CAUSE ADVERSE EFFECTS TO NEIGHBORING PROPERTIES.
- SNOW STACK SPACE: SNOW STORAGE FOR DRIVEWAYS SHALL BE PROVIDED ON THE OWNER'S PROPERTY. USE OF THE RIGHT-OF-WAY FOR SNOW STORAGE BY PRIVATE INDIVIDUALS OR COMPANIES IS PROHIBITED (C.R.S. 43-5-303). SNOW STORAGE AREA IS SHOWN ON SITE PLAN.
- IF EARTH DISTURBANCE RESULTS IN CUT OR FILL SLOPES THAT CAN NOT BE TAPERED BACK INTO EXISTING GRADES AT THE GRADES SHOWN HEREIN, A RETAINAGE SYSTEM SHALL BE REQUIRED. IF THE PROPOSED RETAINING SYSTEM IS LESS THAN 4.0 FT IN HEIGHT, A DETAIL OF THE PROPOSED RETAINING SYSTEM MUST BE PROVIDED TO THE COUNTY FOR THEIR APPROVAL, PRIOR TO INSTALLATION.
- LOCATE BUILDINGS PER COUNTY REGULATIONS AND WHEN APPLICABLE, SUBDIVISION REGULATIONS. BOTH HAVE BUILDING SETBACKS AND STANDARDS AND BOTH SHALL BE CONSULTED PRIOR TO CONSTRUCTION.
- TREE CLEARING SHALL BE COMPLETED IN ACCORDANCE WITH FIRE REGULATIONS, SUBDIVISION REGULATIONS (WHEN APPLICABLE), AND COUNTY REGULATIONS.
- MINOR GRADE CHANGES MAY BE MADE ON-SITE TO MEET SITE CONDITIONS, HOWEVER, COUNTY AND HOA STANDARDS MUST BE MAINTAINED.
- EROSION CONTROL SYSTEMS ARE ILLUSTRATIVE AND SHALL BE VERIFIED BY OTHERS TO MEET ACTUAL CONSTRUCTION NEEDS.



**VEHICLE CONSTRUCTION ENTRANCE**

- WHEN CONSTRUCTION VEHICLES LEAVE ACTIVE CONSTRUCTION AREAS, SEDIMENT CONTROLS SHALL BE INSTALLED TO CONTROL SEDIMENT FROM LEAVING THE SITE. A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND SHALL CONSIST OF A STONE PAD OR EQUIVALENT CONTROL MATS LOCATED WHERE VEHICLES WILL LEAVE THE CONSTRUCTION SITE. THE PAD SHALL CONSIST OF AT LEAST 6 INCHES OF LARGE GRAVEL OR RIP RAP. THE PAD/ROCK ENTRANCE SHOULD BE AT LEAST 25 FT LONG, HOWEVER, LONGER ENTRANCES MAY BE REQUIRED TO ADEQUATELY CLEAN TIRES. GEOTEXTILE FABRIC MAY BE NEEDED UNDER THE ROCK TO PREVENT MIGRATION OF MUD FROM THE UNDERLYING SOIL INTO THE STONE. IF TIRES ARE CLEANED WITH WATER, THE WASH WATER SHOULD BE DIRECTED TO A SUITABLE SETTLING AREA. WHEN REQUIRED, A PIPE OR CULVERT AND/OR SMALL BERM SHALL BE CONSTRUCTED AT THE ENTRANCE.
- MONITORING AND MAINTENANCE: VEHICLE CONSTRUCTION PADS SHALL BE INSPECTED BY THE CONTRACTOR AS NEEDED AND AFTER RAIN ACTIVITIES. ANY EVIDENCE OF EROSION PROBLEMS SHALL BE REPAIRED AS QUICKLY AS POSSIBLE. SEDIMENT SHALL BE REMOVED AS APPROVED AND DISPOSED OF OUTSIDE THE FLOODPLAIN, WETLANDS AND BUFFER AREAS IN AN APPROVED DISPOSAL SITE OR FILL AREA AND THEN STABILIZED. WHENEVER THE EXISTING ROCK (OR MATS) BECOME BURIED OR FILLED WITH MUD, THE PAD WILL REQUIRE TOP-DRESSING WITH ADDITIONAL ROCK, OR REMOVAL AND RE-INSTALLATION. AREAS USED FOR SEDIMENT TRAPPING ALSO NEED TO BE CLEANED ROUTINELY. IF CONDITIONS ON THE SITE ARE SUCH THAT THE MAJORITY OF THE MUD IS NOT REMOVED BY THE VEHICLES TRAVELING OVER THE GRAVEL, ADDITIONAL SEDIMENT TRACKING CONTROL MEASURES SHOULD BE ADDED TO PREVENT THE TRACKING OF MUD OR DIRT ONTO THE PUBLIC ROADWAY.

**ELECTRICAL/PLUMBING/MECHANICAL SYSTEMS**

- THESE SYSTEMS ARE NOT BE WITHIN THE SCOPE OF THESE PLANS THROUGH THESE SYSTEMS SHOULD BE ENGINEERED. THE ENGINEER CAN NOT ACCEPT ANY RESPONSIBILITY WITH REGARD TO THESE SYSTEMS. ALL DESIGN AND INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE OWNER, BUILDER AND THEIR CONTRACTORS. IF THE CLIENT CHOOSES, THESE SYSTEMS CAN BE PROFESSIONALLY ENGINEERED. FOLLOW MANUFACTURER'S AND BUILDING MUNICIPALITY MECHANICAL, PLUMBING, AND ELECTRICAL CODES WHEN INSTALLING THESE SYSTEMS.

**HIGH DENSITY POLYETHYLENE PIPE (HDPE) - CULVERT PIPE**

- CULVERTS SPECIFIED SHALL BE APPROVED HIGH DENSITY POLYETHYLENE PIPE (HDPE) OR CORRUGATED METAL TYPE PIPE (CMP). WHEN CULVERTS ARE INSTALLED IN THE COUNTY RIGHT OF WAY THE CONTRACTOR SHALL VERIFY THE CULVERT TYPE WITH THE COUNTY BEFORE INSTALLATION.

PIPE DIAMETER	TRENCH WIDTH
12"	31"
15"	34"
18"	39"
24"	48"
30"	66"

- ALL HDPE PIPE SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS: A) THICKNESS ASTM D751 & D1593, B) DENSITY ASTM D1505, C) TENSILE ASTM D438, D) PUNCTURE RESISTANCE ASTM F7510IC METHOD 2065, E) LOW TEMPERATURE BRITTLTENESS ASTM D744, F) ENVIRONMENTAL STRESS CRACK RESISTANCE ASTM D5397.
- PIPE SHOULD BE STOCKPILED ON LEVEL GROUND AND IF STACKED, BLOCKING SHOULD BE PROVIDED TO PREVENT ROLLING. STACKED PIPE SHOULD BE PLACED TO PREVENT DEFORMING AND DAMAGE. ALL MATERIALS SHALL BE PROPERLY STORED.
- TRENCHING SHOULD BE COMPLETED IN EXISTING SOILS WITH SIDEWALLS REASONABLY VERTICAL TO THE TOP OF THE PIPE. FOR POSITIVE PROJECTION EMBANKMENT INSTALLATIONS, WHEN EXCAVATION DEPTHS OR SOIL CONDITIONS REQUIRE SHORING OR USE OF A TRENCH BOX, THE BOTTOM OF THE SHORING OR TRENCH BOX SHOULD BE PLACED NO LOWER THAN THE TOP OF THE PIPE. THE FOLLOWING TRENCH WIDTHS ARE RECOMMENDED TRENCH WIDTHS FOR MOST INSTALLATIONS TO PERMIT PROPER PLACEMENT AND COMPACTION OF BACKFILL MATERIAL IN THE HAUNCHES AND AROUND THE PIPE.
- EMBEDMENT MATERIALS ARE THOSE USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL. ALL EMBEDMENT MATERIALS SHOULD BE FREE FROM LUMPS OF FROZEN SOIL, DEBRIS, STICKS, WOOD, AND ICE WHEN PLACED. ADDITIONALLY, EMBEDMENT MATERIALS SHOULD BE PLACED AND COMPACTED AT OPTIMUM MOISTURE CONTENT. FOR THIS PROJECT WE RECOMMEND CLASS I, CLASS II, OR CLASS III FOR EMBEDMENT MATERIALS (CLASS I - ANGULAR CRUSHED STONE OR ROCK, DENSE OR OPEN GRADED WITH LITTLE OR NO FINES (1/4 INCH TO 1 1/2 INCHES IN SIZE); CLASS II - CLEAN, COARSE GRAINED MATERIALS, SUCH AS GRAVEL, COARSE SANDS AND GRAVEL/SAND MIXTURES (1 1/2 INCHES MAXIMUM IN SIZE); CLASS III - COARSE GRAINED MATERIALS WITH FINES INCLUDING SILTY OR CLAYEY GRAVELS OR SANDS. GRAVEL OR SAND MUST COMPRISE MORE THAN 50 PERCENT OF CLASS III MATERIALS (1/2 INCHES MAXIMUM SIZE).
- PIPE FOUNDATION: THE TRENCH BOTTOM SHALL BE FREE OF ICE, SNOW, AND DEBRIS AND BE CAPABLE OF SUPPORTING 2500 PSF.
- THOROUGHLY CLEAN THE BELL AND SPIGOT ENDS PER MANUFACTURER'S RECOMMENDATIONS.
- REMOVE SHIPPING COLLARS (WHERE PROVIDED) PRIOR TO LOWERING THE PIPE IN THE TRENCH. PROPERLY DISPOSE OF SHIPPING COLLARS OUTSIDE THE PIPE TRENCH. DO NOT INSTALL PIPE WITH SHIPPING COLLARS ON THE PIPE AND DO NOT DISPOSE OF SHIPPING COLLARS IN THE TRENCH.
- LUBRICANT SHOULD BE LIBERALLY APPLIED TO BOTH THE BELL AND SPIGOT ENDS OF THE PIPE. CARE SHOULD BE TAKEN TO ENSURE LUBRICANT IS APPLIED TO THE CHAMFERED LEADING EDGE OF THE BELL.
- ALIGN THE PIPE AND PUSH THE SPIGOT HOME ON GRADE. JOINTS SHOULD BE INSTALLED WITH BELLS FACING UPSTREAM FOR PROPER INSTALLATION. GENERALLY, PIPES SHOULD BE LAID STARTING AT THE DOWNSTREAM END AND WORKING UPSTREAM. SMALL DIAMETER PIPE (BELOW 24") CAN USUALLY BE INSTALLED BY PUSHING THE JOINT HOME BY HAND. LARGER DIAMETERS MAY NECESSITATE USING A BAR OR EQUIPMENT TO PUSH HOME. IF A BAR OR EQUIPMENT IS UTILIZED A WOOD BLOCK SHOULD BE USED TO PREVENT DAMAGE TO THE BELL. WHEN PUSHING THE JOINT HOME, MAKE SURE BEDDING MATERIAL IS NOT PULLED INTO THE BELL BY THE SPIGOT. MATERIAL SUCH AS SMALL STONES AND SAND PULLED INTO THE BELL AS THE PIPE IS JOINED CAN CAUSE LEAKS.
- MINIMUM COVER: CULVERTS ARE TYPICALLY PROVIDED WITH AT LEAST 12 INCHES (MEASURED FROM THE TOP OF THE PIPE TO THE GROUND SURFACE) OF SUITABLE COMPACTED SOIL COVER FOLLOWED BY DRIVEWAY GRAVEL OR ASPHALT (REF. PLAN). IF 12 INCHES CAN NOT BE MAINTAINED, CULVERT DISPLACEMENT MAY OCCUR.

**SURVEY NOTES**

- ANY BOUNDARY PINS OR CORNERS & TOPOGRAPHY IN QUESTION SHALL BE VERIFIED. IF CHANGES TO THE CIVIL DRAWINGS ARE REQUIRED, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY AND PRIOR TO CONSTRUCTION IF POSSIBLE. FOR THIS PROJECT THE BOUNDARY AND TOPOGRAPHIC SURVEY WERE COMPLETED BY OTHERS.
- EXISTING CONTOURS: EXISTING CONTOURS ARE SHOWN. LITTLEHORN IS NOT RESPONSIBLE FOR DEFECTS IN THE TOPOGRAPHIC SURVEY WHEN THE SURVEY IS PERFORMED BY OTHERS.

**GRADING AND MATERIAL SPECIFICATIONS**

- A PRE-GRADING MEETING WITH THE SITE OWNER, PROJECT ENGINEER AND CONTRACTOR IS HIGHLY RECOMMENDED AND SHOULD BE PERFORMED TO FACILITATE PROJECT INSTALLATION.
- WHEN THE GRADING OPERATIONS ENCOUNTER REMAINS OF PREHISTORIC PEOPLE'S DWELLING SITES, REMAINS, OR ARTIFACTS OF HISTORICAL, PALEONTOLOGICAL OR ARCHAEOLOGICAL SIGNIFICANCE, THE OPERATIONS SHALL BE TEMPORARILY DISCONTINUED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PROMPTLY CONTACT THE PROPER AUTHORITIES TO DETERMINE THE DISPOSITION THEREOF. IF REQUIRED BY STATE OR FEDERAL AUTHORITIES, THE CONTRACTOR SHALL PRESERVE THE AREA OF SIGNIFICANCE TO ALLOW AUTHORITIES TO EXCAVATE AND RECOVER THE ITEMS OF SIGNIFICANCE.
- AT ALL TIMES, PRECAUTIONS SHALL BE TAKEN FOR THE PROTECTION OF CULVERTS, EROSION CONTROL STRUCTURES, IRRIGATION CROSSINGS, MAIL BOXES, DRIVEWAY APPROACHES, VALVE BOXES, MANHOLES, SURVEY MONUMENTS, UNDERGROUND OR OVERHEAD UTILITY LINES AND ALL OTHER PUBLIC OR PRIVATE INSTALLATIONS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. ANY DAMAGE TO SUCH STRUCTURES SHALL BE REPAIRED, DOCUMENTED AND SUBMITTED TO THE APPROPRIATE AUTHORITY PRIOR TO ISSUANCE OF ANY CERTIFICATE OF COMPLETION FOR THE SITE.

- CLEARING AND GRUBBING: CLEARING AND GRUBBING CONSISTS OF REMOVING AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF THE APPROVED GRADING PLANS WHERE THE DRIVEWAY, SOIL TREATMENT AREA, HOUSE, WELL/WELL LINES, AND WASTEWATER LINES ARE TO BE LOCATED. CLEARING AND GRUBBING SHALL BE PERFORMED ONLY WHERE NECESSARY. THE PRESERVATION OF ALL VEGETATION AND ANY OTHER TREES AND OBJECTS SHOULD REMAIN WHERE FEASIBLE AND AS OUTLINED AND WITHIN LOCAL FIRE DEPARTMENT RECOMMENDATIONS. STUMP HOLES AND OTHER HOLES FROM WHICH OBSTRUCTIONS ARE REMOVED, SHALL BE BACKFILLED WITH SUITABLE MATERIALS AND COMPACTED AS REQUIRED. MATERIALS AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH STATE AND COUNTY REGULATIONS, WITH OWNER'S AND COUNTIES PERMISSION, ROOTS MAY BE BURIED ON-SITE.

- TOPSOIL: ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED. TOPSOIL SHALL CONSIST OF LOOSE FRIABLE LOAM REASONABLY FREE OF ADMIXTURES OF SUBSOIL, REFUSE, STUMPS, ROOTS, ROCKS, BRUSH, WEEDS, OR OTHER MATERIAL WHICH WOULD BE DETRIMENTAL TO THE PROPER DEVELOPMENT OF VEGETATIVE GROWTH. MATERIALS SELECTED FOR TOPSOIL, AND LYING WITHIN THE LIMITS OF THE PROJECT SHALL BE EXCAVATED AND STOCKPILED AS REQUIRED AND WHERE PERMISSIBLE. TOPSOIL SHALL BE PLACED AND SPREAD AT LOCATIONS AND TO THE THICKNESS SHOWN ON THE PLANS AND SHALL BE KEVED TO THE UNDERLYING MATERIALS BY THE USE OF HARROWS, ROLLERS, OR OTHER EQUIPMENT SUITABLE FOR THE PURPOSE. FOR SITES THAT DON'T CONTAIN ENOUGH REUSABLE TOP SOIL, APPROVED TOP SOIL WILL HAVE TO BE IMPORTED TO THE SITE.

- GENERAL EXCAVATION AND EMBANKMENT: EXCAVATION AND EMBANKMENT GRADING CONSISTS OF EXCAVATION, DISPOSAL, SHAPING, OR COMPACTION OF ALL MATERIAL ENCOUNTERED WITHIN THE LIMITS OF THE GRADING PLANS INCLUDING EXCAVATION FOR DITCHES AND CHANNELS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT IN ACCORDANCE WITH THE GRADING PLANS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, AND TYPICAL CROSS-SECTIONS SHOWN ON THE PLANS. THE EXCAVATION AND EMBANKMENTS SHALL BE FINISHED TO REASONABLY SMOOTH AND UNIFORM SURFACES. GRADING OPERATIONS SHALL BE CONDUCTED SO THAT MATERIAL OUTSIDE OF THE LIMITS OF SLOPES WILL NOT BE DISTURBED. PRIOR TO BEGINNING GRADING OPERATIONS IN ANY AREAS, ALL NECESSARY CLEARING AND GRUBBING AND TOPSOIL, IN THAT AREA SHALL HAVE BEEN PERFORMED IN ACCORDANCE WITH THE CLEARING AND GRUBBING AND TOPSOIL PROVISIONS. WHERE MATERIAL ENCOUNTERED WITHIN THE LIMITS OF GRADING ARE CONSIDERED UNSUITABLE FOR EMBANKMENT FOUNDATIONS, STREETS/ROADS, OR STRUCTURAL AREAS BY THE SOILS ENGINEER, SUCH MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SUITABLE MATERIAL. SOME EXAMPLES OF UNSUITABLE MATERIAL INCLUDE SOILS WHICH CONTAIN SIGNIFICANT AMOUNTS OF ORGANIC MATERIAL AND/OR LARGE DIAMETER ROCKS, CONCRETE, OR ASPHALT. EXCESS UNSUITABLE EXCAVATED MATERIAL, INCLUDING ROCK AND BouldERS, THAT CANNOT BE USED IN EMBANKMENTS MAY BE PLACED IN NON-STRUCTURAL AREAS AS APPROVED BY THE SOILS ENGINEER.

- UTILITIES: WHEN UTILITY DEVICES ARE TO BE INSTALLED WITHIN THE COUNTY OR TOWN'S ROAD RIGHT-OF-WAY, THE COUNTY OR TOWN POLICY ON UTILITY USE OF COUNTY RIGHTS-OF-WAY SHALL APPLY. BEFORE BEGINNING ANY EXCAVATION, CALL FOR A UTILITY LOCATE.

- TRAFFIC CONTROL: APPROVED BARRICADES, WARNING SIGNS, AND FLAGMEN SHALL BE USED AS NECESSARY.

- DRIVEWAY SUBBASE: ALL MATERIAL SHALL BE OF SOUND PARTICLES AND SHALL BE FREE OF ORGANIC MATTER. COMPACTION OF MATERIAL SHALL BE VERIFIED BY THE ENGINEER BEFORE PLACEMENT OF CONCRETE, ASPHALT, TANKS, PIPES, OR OTHER STRUCTURES. SUBBASE AND BASECOURSE SHALL BE COMPACTED AS REQUIRED FOR STRUCTURAL FILL (SEE COMPACTION REQUIREMENTS). THE SUBBASE IS CONSIDERED THE NATIVE SOIL OR IMPORTED, APPROVED, STRUCTURAL FILL. IF SUBBASE DEPTHS EXCEED 12 INCHES, CONTACT THE ENGINEER FOR INSPECTION AND COMPACTION TESTING. THE SUBBASE SHALL BE FREE OF STICKS, ROCKS LARGER THAN 8 INCHES IN DIAMETER, SNOW, ICE, AND OTHER DEBRIS.

- SURFACE COURSE: INSTALL A 3 INCHES AGGREGATE SURFACE COURSE UNDER ALL PAVED AREAS. THE SURFACE COURSE IS USUALLY 1/2-INCH TO 2 INCHES IN DEPTH. SURFACE COURSE SHALL BE 1" MINUS MATERIAL AND MUST BE A HARD ROCK CRUSHED AGGREGATE WITH:

SIEVE SIZE	% PASSING
1"	100
#4	5-15
#10	0-8
#200	0-4

- WATERING: WATER SHALL BE APPLIED TO THE TOPSOIL AT THE LOCATIONS AND IN THE AMOUNTS WHERE REQUIRED. WATER SHALL BE APPLIED IN A FINE SPRAY BY NOZZLES OR SPRAY BARS IN SUCH A MANNER THAT IT WILL NOT WASH OR ERODE THE TOPSOIL. AREA ALL WATER USED SHALL BE FREE OF ANY MINERAL SALTS OR CONTAMINATING MATERIAL WHICH MIGHT RESULT IN EXPANSION OF MATERIALS AFTER PLACEMENT. SPRINKLING EQUIPMENT SHALL BE OF A TYPE WHICH ENSURES UNIFORM AND CONTROLLED DISTRIBUTION OF WATER WITHOUT PONDING OR WASHING. DUST PALLIATIVES SHALL BE APPLIED ON PORTIONS OF THE PROJECT AND ON HAUL ROADS AT THE LOCATIONS AND IN THE AMOUNTS AS MAY BE NECESSARY AND AS APPROVED. DUST PALLIATIVES MAY CONSIST OF WATER OR OTHER SUBSTANCES APPROVED BY THE COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT. WATER USED IN LANDSCAPING SHALL BE PROVIDED FOR SEEDING, MULCHING, PLANTING, TRANSPLANTING, SODDING, AND SOIL STERILIZATION, AND ANY OTHER LANDSCAPING WORK AS REQUIRED.

- COMPACTION: FIELD DENSITY TESTS SHALL BE MADE BY THE SOILS ENGINEER AS SPECIFIED IN THE SOILS REPORT. WHEN A SOILS REPORT DOES NOT EXIST, CONTACT LITTLEHORN FOR TESTING REQUIREMENTS. WHEN TESTING IS NOT PERFORMED IN ROADWAYS, IN EXCAVATED TRENCH AREAS, AND AROUND TANKS AND THE HOUSE, SETTLEMENT IS LIKELY.

- SLOPE STANDARDS: CUT SLOPES (I.E., EXCAVATED SLOPES) SHALL BE NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL UNLESS SPECIFICALLY IDENTIFIED OTHERWISE IN THESE PLANS. FILL SLOPES SHOULD NOT EXCEED TWO (2) HORIZONTAL TO ONE (1) VERTICAL OR AS SPECIFIED IN THE PLANS. ALL PERMANENT CUT AND FILL SLOPES SHALL BE CONSTRUCTED AT SLOPES WHICH ENSURE LONG TERM SLOPE STABILITY AND THAT WILL NOT CAUSE ACCELERATED EROSION. THE TOPS AND TOES OF CUT AND FILL SLOPES SHALL BE SET BACK FROM PROPERTY BOUNDARIES AS FAR AS NECESSARY FOR SAFETY OF THE ADJOINING PROPERTIES AND TO PREVENT DAMAGE RESULTING FROM WATER RUN-OFF OR EROSION OF THE SLOPE. THE TOPS AND TOES OF CUT AND FILL SLOPES SHALL BE SET BACK FROM STRUCTURES AS FAR AS IT IS NECESSARY FOR ADEQUACY OF FOUNDATION SUPPORT AND TO PREVENT DAMAGE AS A RESULT OF WATER RUN-OFF OR EROSION OF THE SLOPES. FOR SLOPES WHICH EXCEED 30% TERRACES AT LEAST EIGHT (8) FEET IN WIDTH SHALL BE ESTABLISHED. AT LEAST A TWO (2) PERCENT GRADIENT SHALL BE MAINTAINED FROM BUILDING PADS TO DRAINAGE FACILITIES UNLESS OTHERWISE APPROVED.

- GUARANTEES: ALL CONSTRUCTION SHALL BE GUARANTEED BY THE CONSTRUCTION FIRM OR CONSTRUCTING INDIVIDUAL FOR A MINIMUM OF ONE YEAR TO MEET THE CONTINUAL STANDARDS TO WHICH IT WAS CONSTRUCTED. SUCH GUARANTEE MAY BE BY BOND, CASH DEPOSIT, PLEDGED SECURITIES, OR OTHER VALUABLE CONSIDERATIONS ACCEPTABLE BY THE OWNER.

**DESIGN CRITERIA AND OTHER NOTES**

- WIND LOADING ON RETAINING WALLS: V<sub>w</sub> = 110 MPH, EXPOSURE C (90 MPH V<sub>asd</sub> OR NOMINAL WIND - 2018 IRC) PROVISIONS FOR DETENTION POND NOT REVIEWED OR REQUIRED PER THE TOWN OF BLUE RIVER STANDARD ACCEPTED EROSION CONTROL METHODS ARE USED LANDSCAPING DESIGN REQUIREMENTS AND SPECIFICATIONS NOT REVIEWED
- SOIL CONDITIONS FOR GRADING DESIGN AND THESE CIVIL DRAWINGS ARE BASED UPON THE SOILS REPORT BY LITTLEHORN ENGINEERING, DATED JANUARY 5, 2022. POORLY GRADED SAND WITH SILT, GRAVEL, COBBLES AND BOULDERS PASSIVE EQUIV. FLUID PRESSURE - 275 P.C.F. (DRAINED) EQUIV. FLUID UNIT SOIL WEIGHT - 46 P.C.F. (DRAINED) COEFFICIENT OF FRICTION - 0.35 ALLOWABLE BEARING PRESSURE - 2750 P.S.F. ON UNDISTURBED SOIL.

SOIL CONDITIONS SHALL BE VERIFIED BY GEOTECH DURING CONSTRUCTION CONTACT ENGINEER FOR INSPECTION OF ALL RETAINING WALLS, STRUCTURAL FILLS, AND ROCK LINED SWALES.

CIVIL SHEET INDEX	
SHEET#	SHEET DESCRIPTION
C0	COVER SHEET & SITE CONSTRUCTION GENERAL NOTES
C1	PROPOSED OVERALL SITE PLAN WITH OVERALL DRIVEWAY AND PARKING AND SNOW REMOVAL
C1.1	PROPOSED SITE PLAN DETAIL WITH DRIVEWAY AND PARKING
C2	EROSION CONTROL PLAN
C3	SITE CONSTRUCTION DETAILS
C4	EROSION CONTROL SPECIFICATIONS & DETAILS
-	BUILDING HEIGHT ANALYSES IS BY OTHERS
6	SHEETS TOTAL WITH COVER PAGE (24X36 SHEETS)



DIG SAFELY - CALL 811 GAS/ELECTRIC/TELEPHONE/CABLE WWW.UCC2.ORG

**CODES GOVERNING MATERIALS AND WORKMANSHIP\***

IRC 2018	INTERNATIONAL RESIDENTIAL BUILDING CODE		
ACI	REINFORCED CONCRETE DETAILING MANUAL		
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION		
AWWA	AMERICAN WATER WORKS ASSOCIATION		
BRBD	BLUE RIVER BUILDING DEPARTMENT (BUILDINGS & SITE RELATED WORK EXCEPT FOR OWTS)		
SCCHD	SUMMIT COUNTY COUNTY ENVIRONMENTAL HEALTH DEPARTMENT (WASTEWATER SYSTEM & DRIVEWAY)		
A.F.D.	ABOVE FINISHED FLOOR	FDN.	FOUNDATION
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS		
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS		
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE		
ASSE	AMERICAN SOCIETY OF SANITARY ENGINEERS		
MSDS	MATERIAL SAFETY DATA SHEETS		

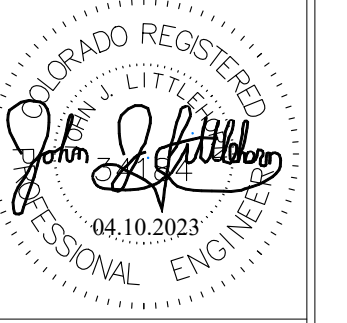
\*ALL OF THE ABOVE CODES MAY NOT BE USED FOR CONSTRUCTION IN THE SPECIFIC PROJECT. WHEN APPLICABLE, THE CODE SHALL APPLY.

**SOME ABBREVIATIONS USED IN THESE DRAWINGS**

NOT ALL ABBREVIATIONS ARE USED IN THESE DRAWINGS. ABBREVIATIONS MAY OR MAY NOT CONTAIN PERIODS. THIS CHART IS FOR INFORMATION PURPOSES ONLY. CONTACT ENGINEER FOR ANY MISSING ABBREVIATIONS USED.			
A.B.	ANCHOR BOLT	FG	FINISH GRADE
ABV.	ABOVE	FIN.	FINISH(ED)
ADD'L	ADDITIONAL	FLR.	FLOOR
A.F.F.	ABOVE FINISHED FLOOR	FDN.	FOUNDATION
A.F.O.	ARCHITECTURAL	FDN.	FOUNDATION
ALUM.	ALUMINUM	F.O.C.	FACE OF CONCRETE
ALT.	ALTERNATE	F.O.M.	FACE OF MASONRY
APPRX.	APPROXIMATE(LY)	F.O.S.	FACE OF STUD
ARCH.	ARCHITECTURAL	F.O.W.	FACE OF WALL
AWG.	AMERICAN WIRE GAUGE	F.S.	FINISH SURFACE
AWN.	AWNING	FT.(F)	FOOT (FEET)
BLDG.	BUILDING	FTG.	FOOTING
BLK.	BLOCK	GA.	GAUGE
BM.	BEAM	GAL.	GALVANIZE(D)
B.O.F.	BOTTOM OF FOOTING	GEN.	GENERAL
BOT	BOTTOM OF TANK	G.F.I.	GROUND FAULT CIRCUIT INTER.
BRS.	BEARING	GPS.	GLOBAL POSITIONING SYSTEM
CAB.	CABINET	GPD	GALLONS PER DAY
CANT.	CANTILEVER(ED)	GRND.	GROUND
C.I.P.	CAST IN PLACE	HRZ.	HORIZONTAL
CENTERLINE	CENTERLINE	H OR HT.	HEIGHT
CLG.	CEILING	IN.(T)	(INCHES)
CLR.	CLEAR	INSUL.	INSULATION
COL.	COLUMN	INT.	INTERIOR
COMP.	COMPOSITE	L.F.(#)	LAG BOLTS
CONC.	CONCRETE	LB.	LINEAR FEET (FOOT)
CONN.	CONNECTION(OR)	L.	LONG(TUDINAL) OR LENGTH
CONST.	CONSTRUCTION	MAS.	MASONRY
CONT.	CONTINUOUS	MAX.	MAXIMUM
CSMT.	CASEMENT	M.B.	MACHINE BOLT
DBL.	DOUBLE	MECH.	MECHANICAL
DEPT.	DEPTH	MFG.	MANUFACTURER
DIAG.	DIAGONAL	MFR.	MANUFACTURER
DIM.	DIMENSION	MIL.	MILLIMETER
DTL.	DETAIL	MIN.	MINIMUM
DWG.	DRAWING(S)	MISC.	MISCELLANEOUS
DOWL(S)	DOWEL(S)	MTL.	METAL
EA.	EACH	N.I.C.	NOT IN CONTRACT
EL.	ELEVATION	NO.(#)	NUMBER
ELC.	ELECTRICAL	N.T.S.	NOT TO SCALE
ELEV.	ELEVATION OR ELEVATOR	OC.	ON CENTER
EN.	EDGE NAIL	OPNG.	OPENING
ENG.	ENGINEER	P/C	PRECAST CONCRETE
EDA.	EDGE OF ASPHALT	PC	POINT OF CURVATURE
EQ.	EQUIPMENT	PEB.	PEDESTAL
EXP.	EXPANSION	PERF.	PERFORATED
EXP.(E)	EXISTING	PLT.	PLATE
EXT.	EXTERIOR	PL	PLATE
FAB.	FABRICATION(OR)	POB	POINT OF BEGINNING
F.D.	FLOOR DRAIN	POI	POINT OF INTERSECTION
F.F.	FINISH FLOOR	PT	POINT OF TANGENT
		PT	POINT OF TANGENT

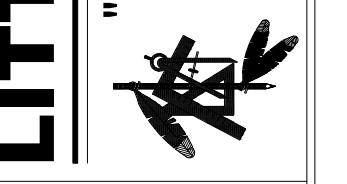
#3

THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, L.L.C. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.



OVERALL SITE PLAN  
311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB#1, LOT 14

LITTLEHORN ENGINEERING & SURVEYING  
"PEACE OF MIND THROUGH HOLISTIC DESIGN"  
351 HIGHWAY 285, SUITE #201  
FAIRPLAY, COLORADO 80440  
MAIN OFFICE 719.836.7120  
SILVER CLIFF PHONE 719.783.3757



PROJECT NO.  
2022-100742

CLIENT  
LANDYN AND MICHELLE HACKEBEIL

DATE  
04.10.2023

REVISION:  
△ -  
△ -

C1

LEGEND	
3	RETAINING WALL HEIGHT (ABOVE GRADE HEIGHT WITHOUT KEY)
—SS—	PROPOSED SEWER LINE
—W—	PROPOSED WATER LINE
—○—○—	PROPOSED SILT FENCE
+++++	PROPOSED STRAW WATTLE
---	EXISTING CONTOUR
100	EXISTING CONTOUR LABEL
100	PROPOSED CONTOUR
100	PROPOSED CONTOUR LABEL
●	PROPERTY PIN
●	ELEVATION POINT (0.1 FEET ±)
□	UTILITY
←	DRAINAGE ROUTE
14p	TREE TYPE & SIZE (PINE/ASPEN, Ø)
▨	PROPOSED SNOW STORAGE
▨	WETLANDS (IF DELINEATED)
▨	BLOCK RETAINING WALL
▨	BOULDER RETAINING WALL
▨	EXISTING ASPHALT ROADWAY
▨	PROPOSED GRAVEL ROADWAY

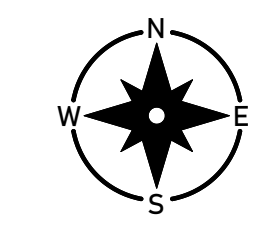
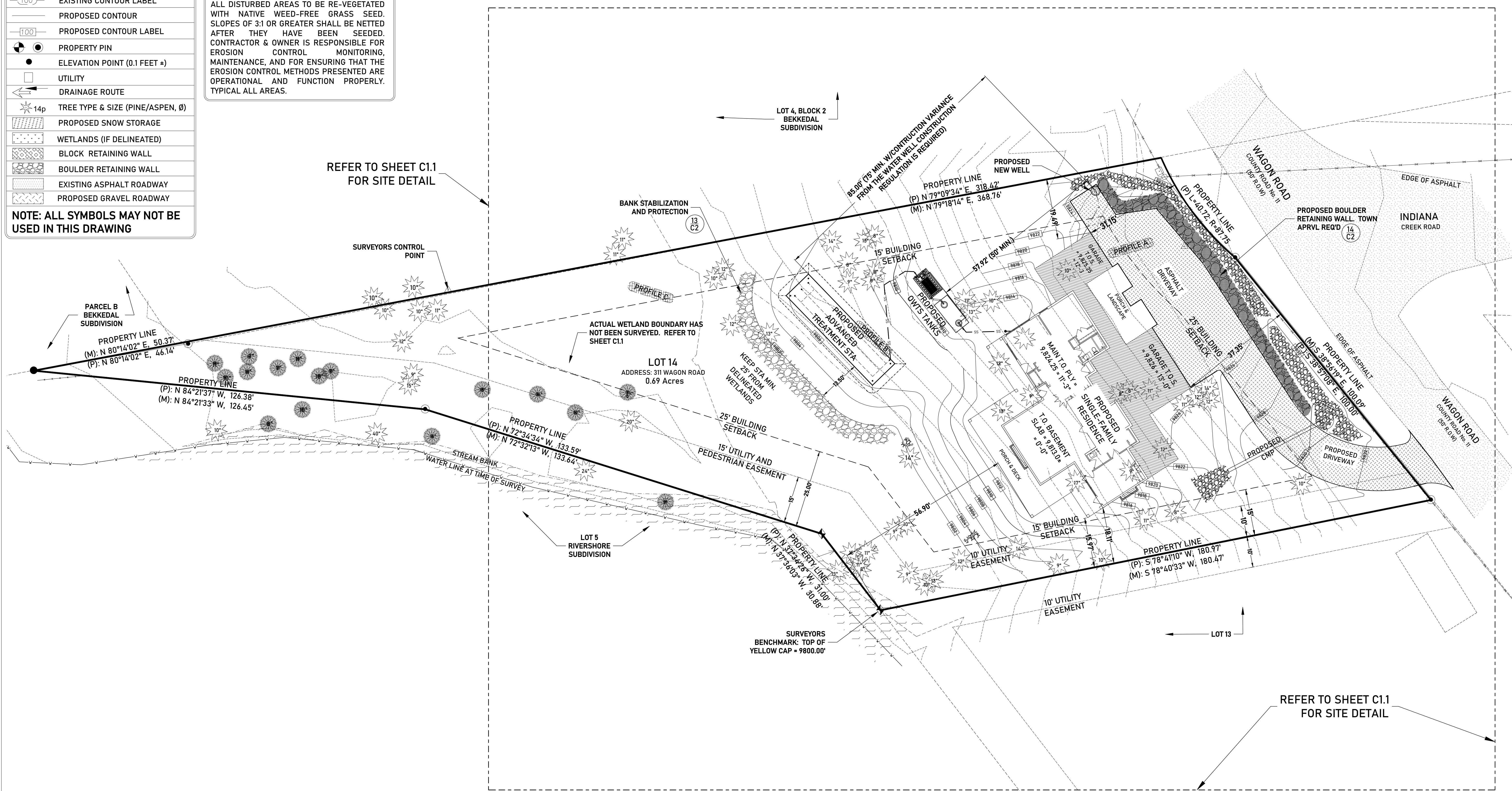
NOTE: ALL SYMBOLS MAY NOT BE USED IN THIS DRAWING

IN AREAS WHERE IT IS NOT POSSIBLE TO MAINTAIN A 1:1 CUT SLOPE, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL NECESSARY SHORING, BRACING, SLOPE STABILIZATION AND DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORKERS AS WELL AS MATERIALS AND WORKMANSHIP ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AND KEEPING THE SITE DE WATERED.

ALL DISTURBED AREAS TO BE RE-VEGETATED WITH NATIVE WEED-FREE GRASS SEED. SLOPES OF 3:1 OR GREATER SHALL BE NETTED AFTER THEY HAVE BEEN SEEDED. CONTRACTOR & OWNER IS RESPONSIBLE FOR EROSION CONTROL MONITORING, MAINTENANCE, AND FOR ENSURING THAT THE EROSION CONTROL METHODS PRESENTED ARE OPERATIONAL AND FUNCTION PROPERLY. TYPICAL ALL AREAS.

DRIVEWAY DESIGNED SLIGHTLY STEEPER THAN 10% (AND WITH RETAINING WALLS). ALL EFFORTS WERE MADE TO KEEP THE DRIVEWAY AT 10% MAX AND REDUCE THE FRONT RETAINING WALL HEIGHT; HOWEVER, THE NATURAL SITE GRADES, BEING OVER 30% IN MANY AREAS, AND THE HOUSE DESIGN DICTATED A STEEPER DRIVEWAY. A STEEPER DRIVEWAY DID REDUCE THE HOUSE HEIGHT. TOWN AND FIRE DEPARTMENT APPROVAL IS REQUIRED.

NOTE: ENTRANCE INTO THE RESIDENTIAL GARAGES MAY REQUIRE A 3-POINT TURN.



### Site and Grading Plan

NOTE: 0'-0" ARCH = 9,813.00 USGS (VERIFY)



PLOTTED SCALE 1" = 15'



#4

LEGEND	
3	RETAINING WALL HEIGHT (ABOVE GRADE HEIGHT WITHOUT KEY)
—SS—	PROPOSED SEWER LINE
—W—	PROPOSED WATER LINE
—○—	PROPOSED SILT FENCE
	PROPOSED STRAW WATTLE
---	EXISTING CONTOUR
100	EXISTING CONTOUR LABEL
---	PROPOSED CONTOUR
100	PROPOSED CONTOUR LABEL
●	PROPERTY PIN
●	ELEVATION POINT (0.1 FEET ±)
□	UTILITY
→	DRAINAGE ROUTE
14p	TREE TYPE & SIZE (PINE/ASPEN, Ø)
☄	PROPOSED SNOW STORAGE
▨	WETLANDS (IF DELINEATED)
▩	BLOCK RETAINING WALL
▧	BOULDER RETAINING WALL
▨	EXISTING ASPHALT ROADWAY
▨	PROPOSED GRAVEL ROADWAY

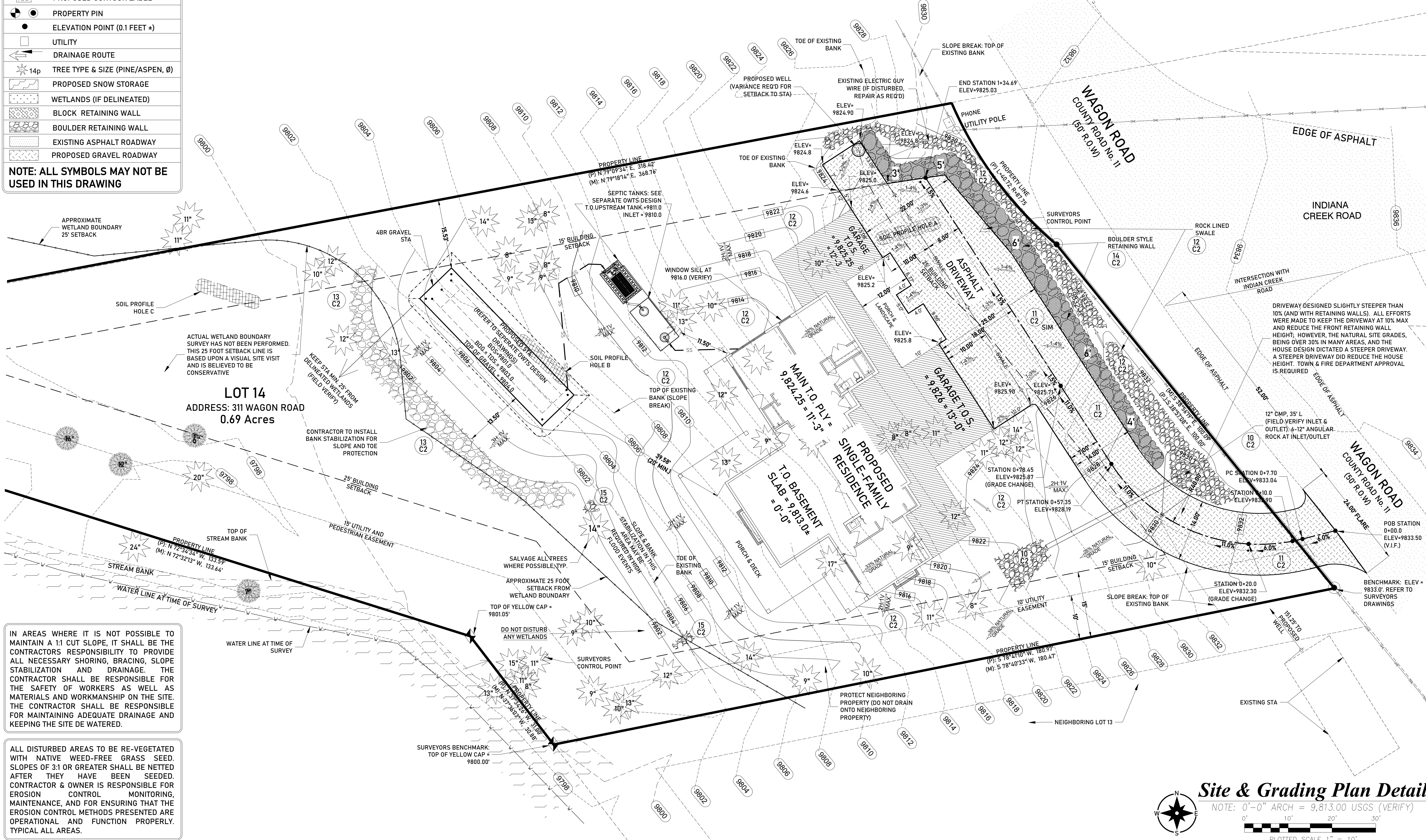
**NOTE: ALL SYMBOLS MAY NOT BE USED IN THIS DRAWING**

THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.



**LITTLEHORN ENGINEERING & SURVEYING**  
 "PEACE OF MIND THROUGH HOLISTIC DESIGN"  
 3511 HIGHWAY 285, SUITE #201  
 FAIRPLAY, COLORADO 80440  
 MAIN OFFICE 719.836.7120  
 SILVER CLIFF PHONE 719.783.3757

**SITE & GRADING PLAN DETAIL**  
 311 WAGON ROAD  
 TOWN OF BLUE RIVER, CO  
 SPILLWAY SUB#1, LOT 14



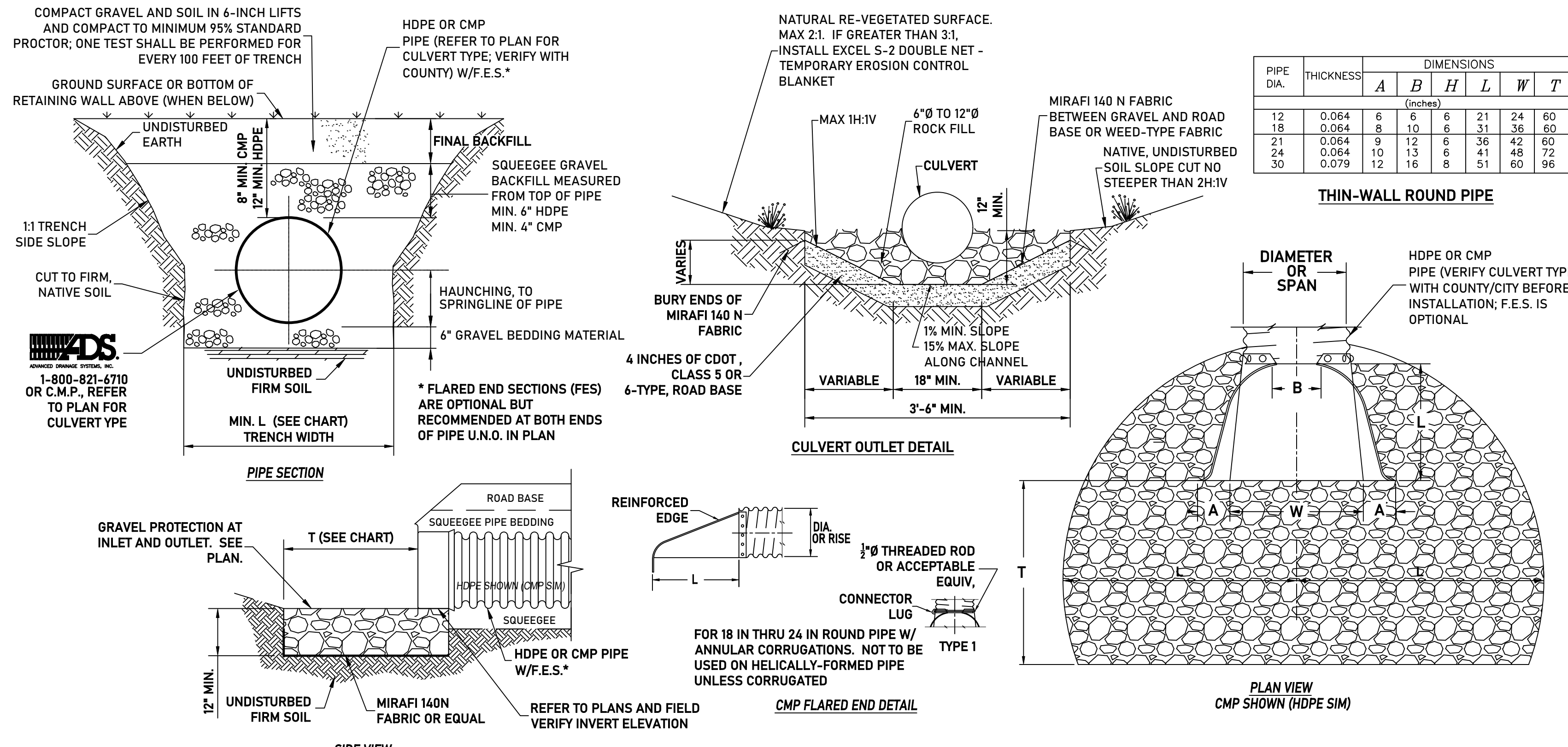
IN AREAS WHERE IT IS NOT POSSIBLE TO MAINTAIN A 1:1 CUT SLOPE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY SHORING, BRACING, SLOPE STABILIZATION AND DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORKERS AS WELL AS MATERIALS AND WORKMANSHIP ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AND KEEPING THE SITE DE WATERED.

ALL DISTURBED AREAS TO BE RE-VEGETATED WITH NATIVE WEED-FREE GRASS SEED. SLOPES OF 3:1 OR GREATER SHALL BE NETTED AFTER THEY HAVE BEEN SEEDED. CONTRACTOR & OWNER IS RESPONSIBLE FOR EROSION CONTROL MONITORING, MAINTENANCE, AND FOR ENSURING THAT THE EROSION CONTROL METHODS PRESENTED ARE OPERATIONAL AND FUNCTION PROPERLY. TYPICAL ALL AREAS.

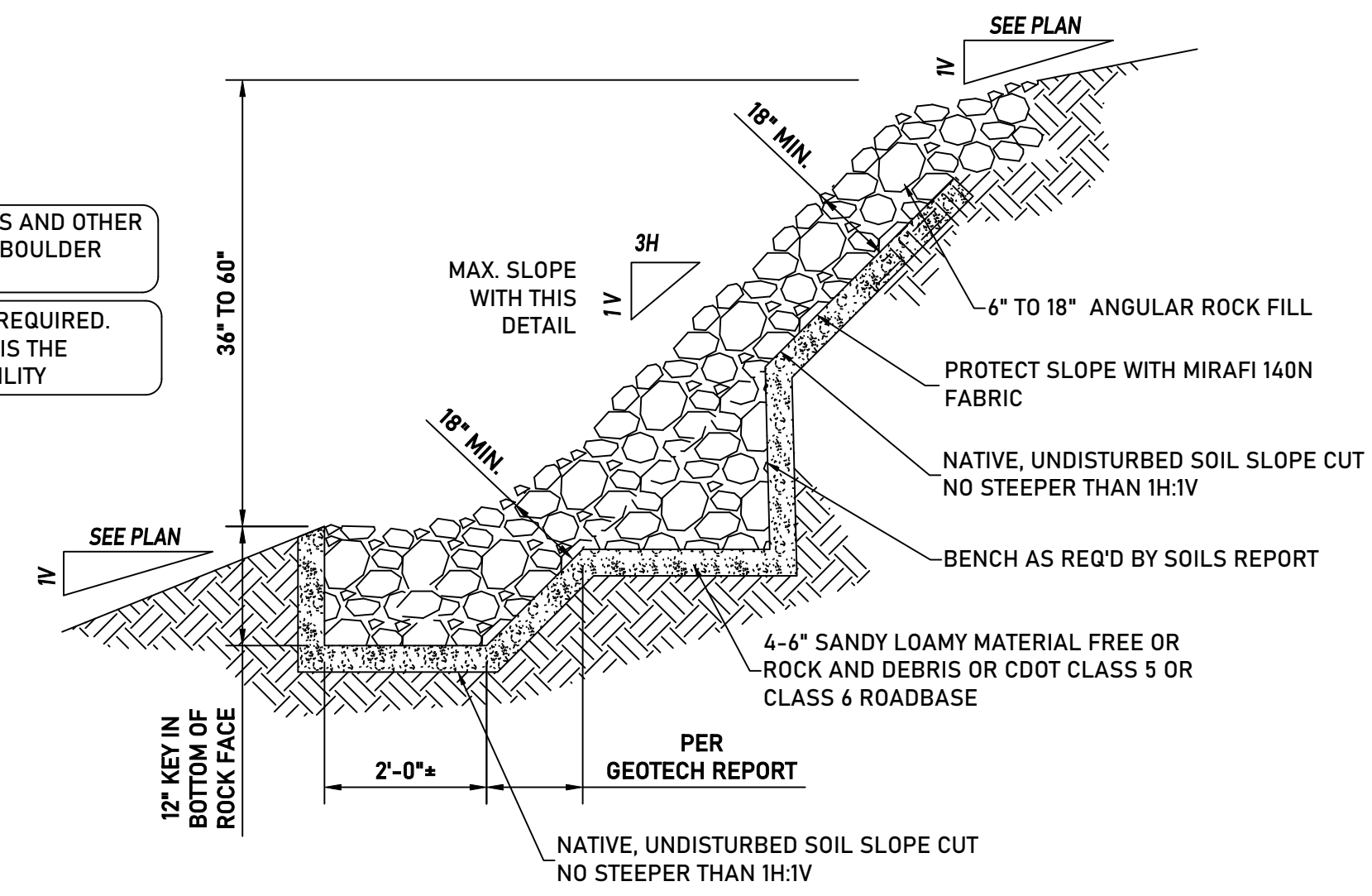
**Site & Grading Plan Detail**  
 NOTE: 0'-0" ARCH = 9,813.00 USGS (VERIFY)  
 0' 10' 20' 30'  
 PLOTTED SCALE 1" = 10'

PROJECT NO. 2022-100742  
 CLIENT LANDYN AND MICHELLE HACKEBEIL  
 DATE 04.10.2023  
 REVISION:  
 △ -  
 △ -  
**C1.1**

#5

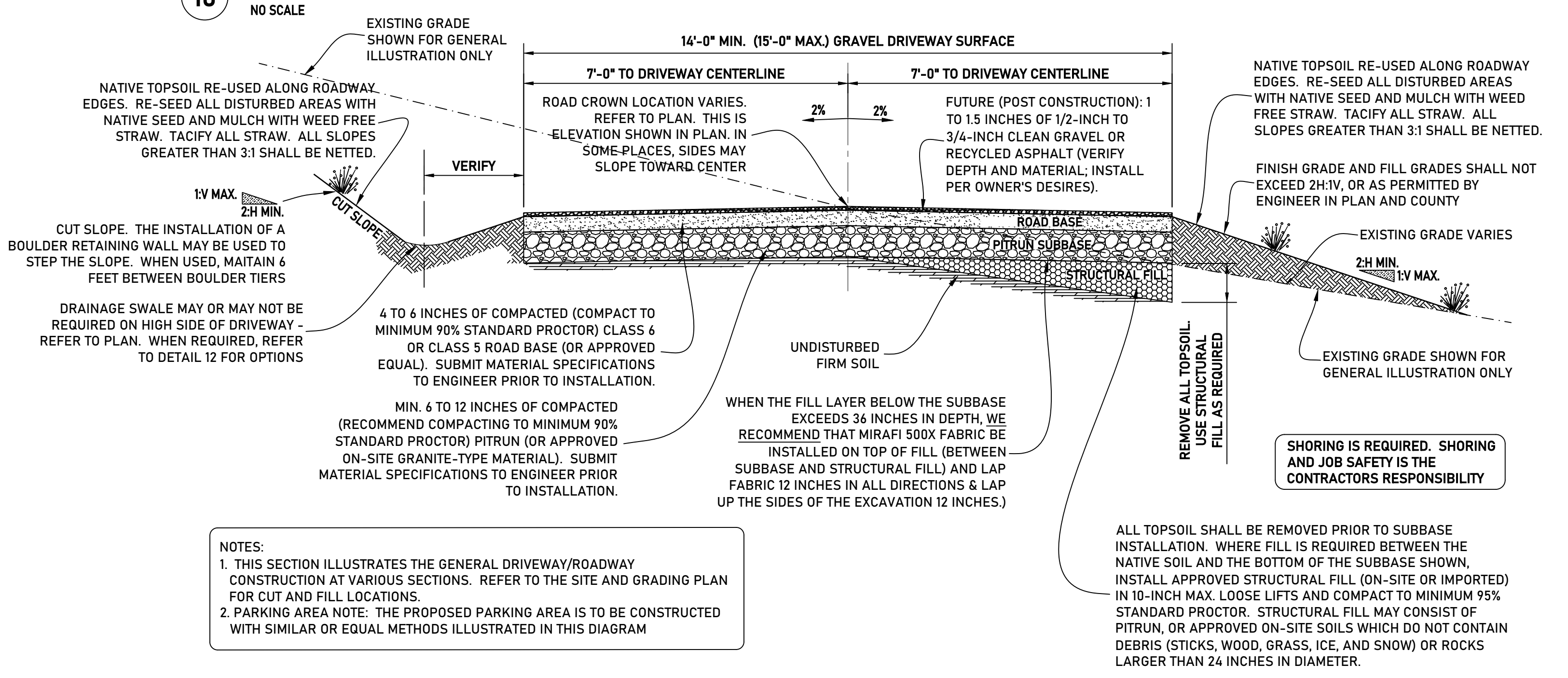


INSPECTION REQUIREMENTS AND OTHER REQUIREMENTS: REFER TO BOULDER RETAINING WALL NOTES  
SHORE ALL TRENCHES AS REQUIRED. SHORING AND JOB SAFETY IS THE CONTRACTORS RESPONSIBILITY



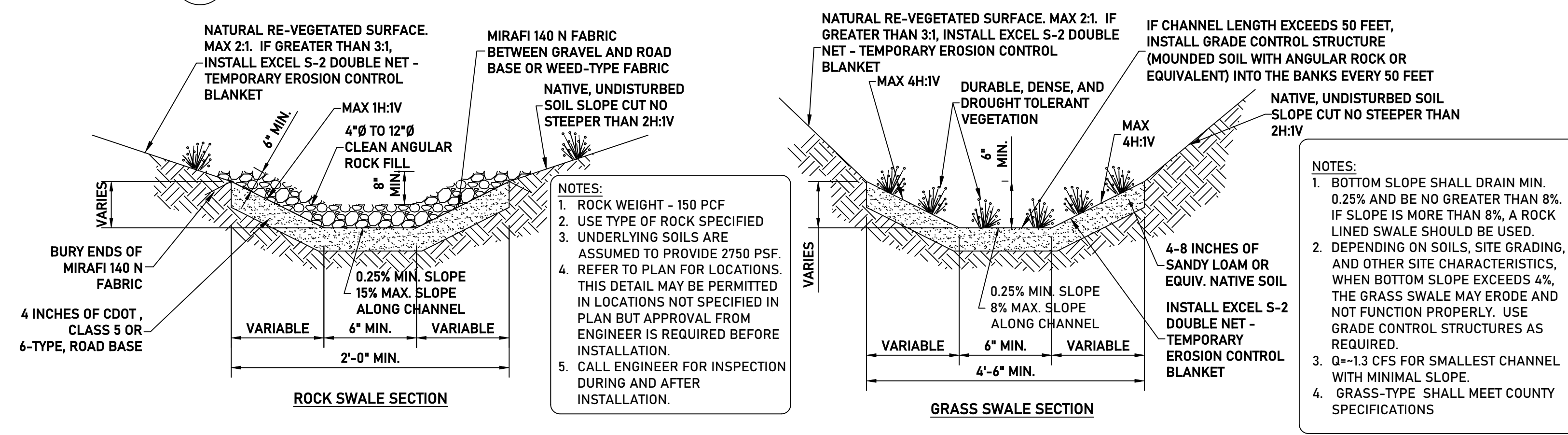
13 SLOPE AND BANK STABILIZATION DETAIL  
1/2"=1'-0"

10 CULVERT DETAILS  
NO SCALE



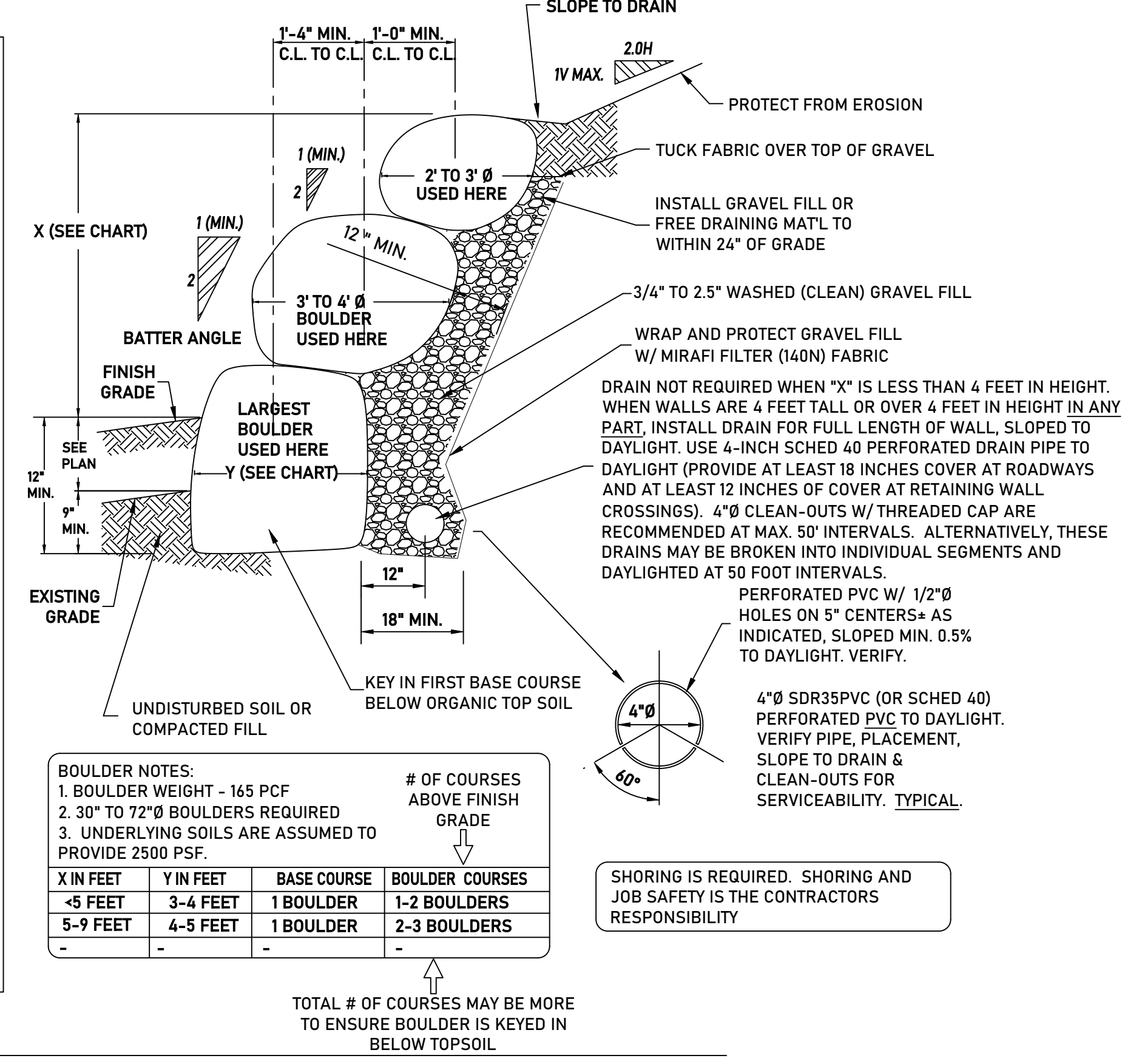
NOTES:  
1. THIS SECTION ILLUSTRATES THE GENERAL DRIVEWAY/ROADWAY CONSTRUCTION AT VARIOUS SECTIONS. REFER TO THE SITE AND GRADING PLAN FOR CUT AND FILL LOCATIONS.  
2. PARKING AREA NOTE: THE PROPOSED PARKING AREA IS TO BE CONSTRUCTED WITH SIMILAR OR EQUAL METHODS ILLUSTRATED IN THIS DIAGRAM

11 GENERIC DRIVEWAY SECTION  
NO SCALE



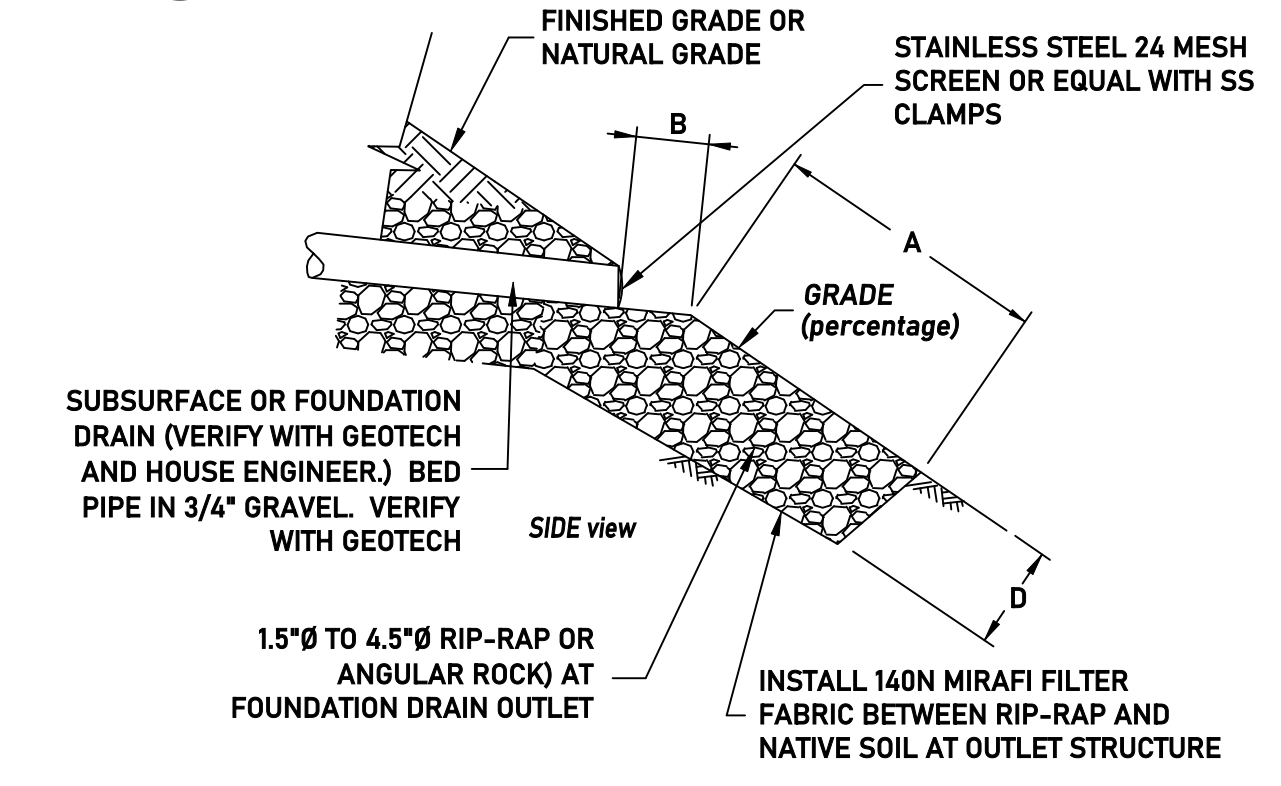
12 ROCK LINED AND GRASS-TYPE LANDSCAPE SWALE OPTIONS  
NO SCALE

NOTES:  
1. REFER TO PLAN FOR WALL HEIGHTS AND LOCATIONS. HEIGHTS SHOWN IN THE PLANS INCLUDE THE WALL HEIGHT ABOVE FINISH GRADE AT THE FACE OF THE WALL AND DO NOT INCLUDE THE DEPTH OF THE WALL HEIGHT BELOW THE FINISH GRADE AT THE TOE.  
2. DO NOT EXCEED THE HEIGHTS SHOWN IN THIS DETAIL FOR ANY REASON. CALL ENGINEER IF THERE ARE DISCREPANCIES BEFORE INSTALLATION.  
3. PLACE BOULDERS SO THEY INTERLOCK BOTH VERTICALLY AND HORIZONTALLY. BACKFILL SOIL AND BASE SOIL INSTALLATION AND COMPACTION SHALL BE VERIFIED BY THE SOILS ENGINEER DURING CONSTRUCTION OF WALL.  
4. WALLS ARE DESIGNED WITHOUT SEISMIC ANALYSIS.  
5. THIS WALL DETAIL IS NOT PERMITTED TO BE USED WITHIN 25 FEET OF AN SOIL TREATMENT AREA.  
6. CALL ENGINEER DURING AND AFTER INSTALLATION OF ALL BOULDER WALLS. ENGINEERING INSPECTION AND APPROVAL OF WALL DRAINS, BOULDERS, GRAVEL BACKFILL, AND GRADES ARE REQUIRED BY THE ENGINEER. USUALLY TWO TO FOUR INSPECTIONS ARE REQUIRED DURING THE CONSTRUCTION OF EACH WALL. A FINAL INSPECTION IS ALSO REQUIRED AFTER WALL CONSTRUCTION AND REVEG.  
7. WHEN BUILDING BOULDER WALLS, KEY IN THE BASE BELOW ANY EXISTING TOPSOIL, USE APPROPRIATELY SIZED BOULDERS, AND INSTALL TO BATTER ANGLE (TAPER) SHOWN.  
8. THE BASE OF THE BOULDER WALL SHALL BEAR ON UNDISTURBED SOIL FREE OF ORGANIC MATERIAL, SOFT OR WET SOILS, DEBRIS, ICE, OR SNOW.  
9. THIS WALL REQUIRES ROUTINE MAINTENANCE AND IS NOT THE BEST WALL TO CONSTRUCT WITH. THIS DETAIL IS PROVIDED AS A COURTESY TO THE CLIENT. A BETTER RETAINING WALL IS A WALL SIMILAR TO REDI-ROCK. THESE RETAINING WALLS ARE STRONGER AND LAST LONGER AND ARE STRONGLY RECOMMENDED BUT MORE EXPENSIVE TO CONSTRUCT. THESE BOULDER WALLS ARE NOT DESIGNED TO RESIST EARTHQUAKE-TYPE LOADS.  
10. CONTACT ENGINEER FOR ANY QUESTIONS.



X IN FEET	Y IN FEET	BASE COURSE	# OF COURSES ABOVE FINISH GRADE	
			1 BOULDER	2-3 BOULDERS
-5 FEET	3-4 FEET	1 BOULDER	1-2 BOULDERS	
5-9 FEET	4-5 FEET	1 BOULDER	2-3 BOULDERS	

14  
1/2"=1'-0"



15 TYPICAL DRAIN DAYLIGHT DETAIL  
NO SCALE

SITE GRADE (percentage)	DIMENSIONS (inches)		
	A	B	D
0-5%	30	6	12
5%-10%	42	8	12
10%-15%	48	10	12
15%-20%	60	12	8
20%-30%	72	14	8
30%-50%	84	16	8
50%-80%	96	18	8
>80%	CONTACT ENGINEER		

NOTE: THE LOCATION OF THIS OUTLET MUST BE AWAY FROM THE STA, SEPTIC TANK AND WELL AND MUST DAYLIGHT ON THE SUBJECT PROPERTY. DRAIN SHALL NOT CREATE A WATER PROBLEM FOR ANY NEIGHBORING PROPERTY

SITE CONSTRUCTION DETAILS

"PEACE OF MIND THROUGH HOLISTIC DESIGN"

PROJECT NO. 2022-100742  
CLIENT LANDYN AND MICHELLE HACKEBEIL  
DATE 04.10.2023  
REVISION:  
C2

THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

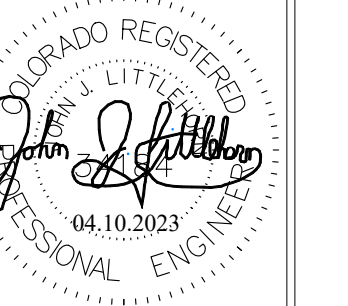
351 HIGHWAY 285, SUITE #201  
FAIRPLAY, COLORADO 80440  
MAIN OFFICE 719.836.7120  
SILVER CLIFF PHONE 719.783.3757

311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB#1, LOT 14

LITTLEHORN ENGINEERING & SURVEYING

REGISTERED PROFESSIONAL ENGINEER  
64.10.2023

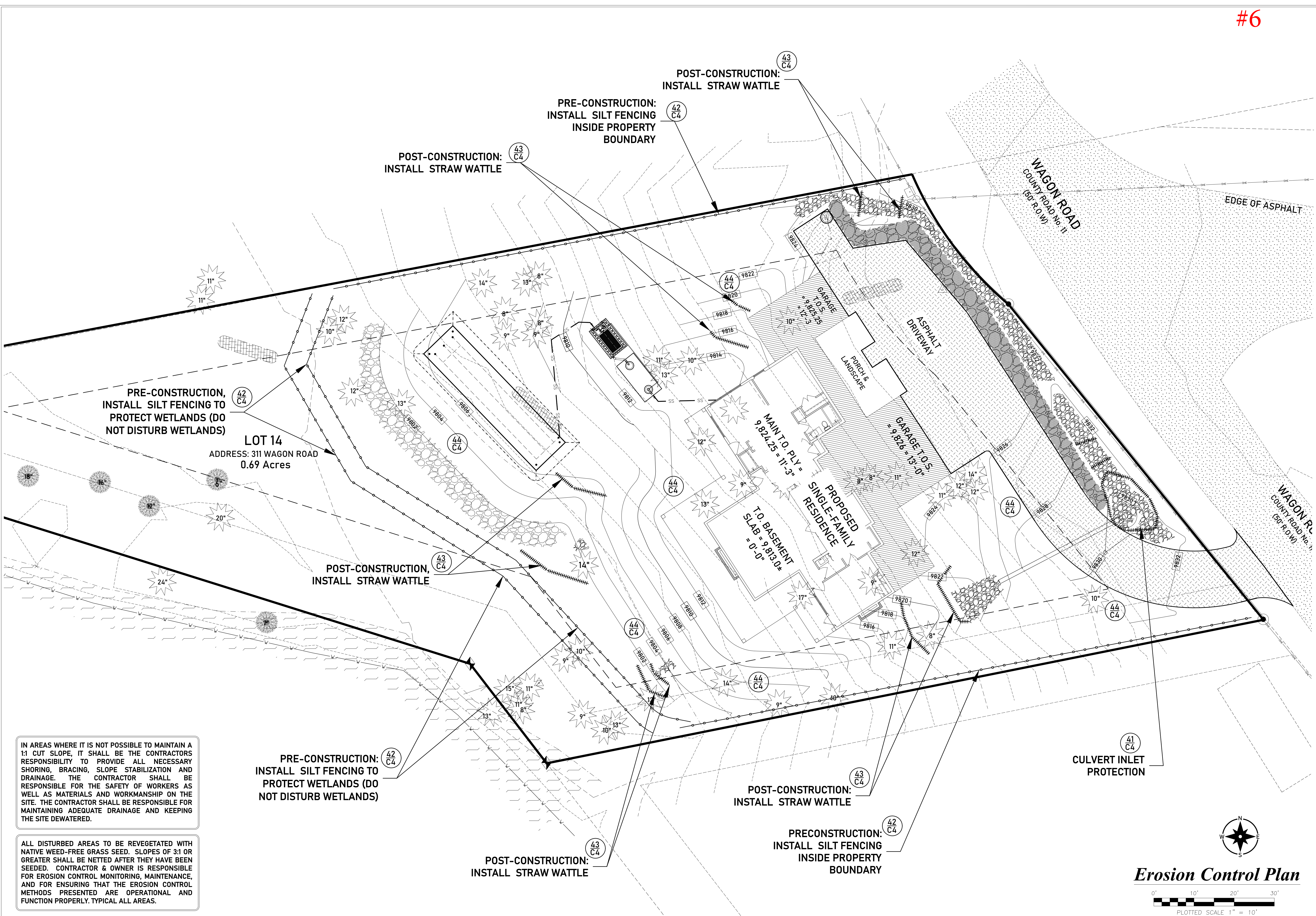
THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.



EROSION CONTROL PLAN  
311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB#1, LOT 14

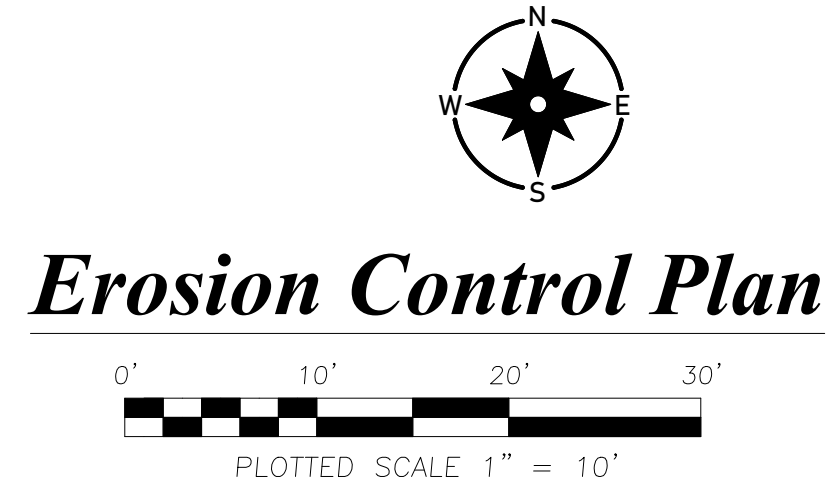
"PEACE OF MIND THROUGH HOLISTIC DESIGN"  
LITTLEHORN ENGINEERING & SURVEYING  
351 HIGHWAY 285, SUITE #201  
FAIRPLAY, COLORADO 80440  
MAIN OFFICE 719.836.7120  
SILVER CLIFF PHONE 719.783.3757

PROJECT NO. 2022-100742  
CLIENT LANDYN AND MICHELLE HACKEBEIL  
DATE 04.10.2023  
REVISION:  
△ -  
△ -  
C3

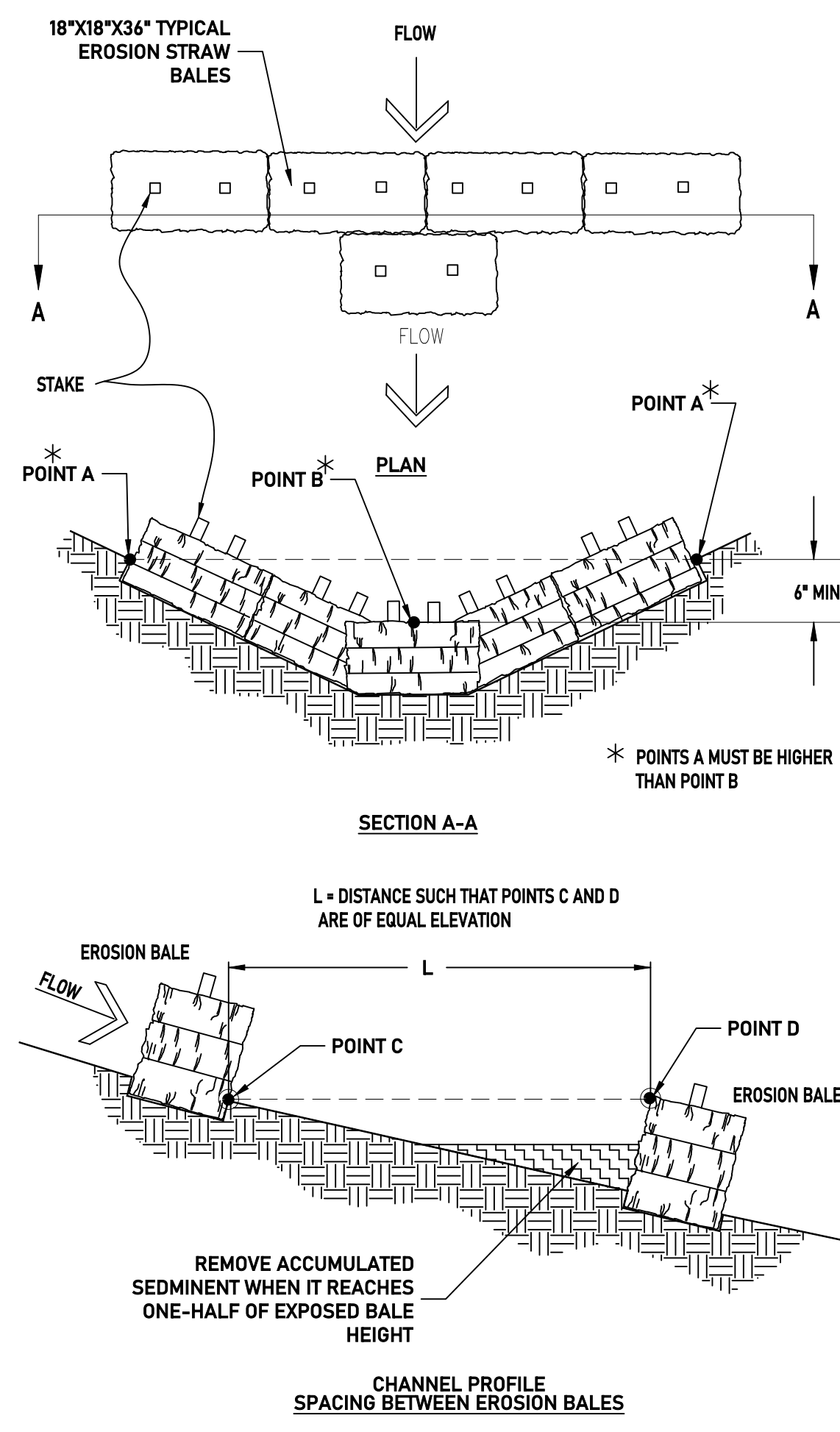


IN AREAS WHERE IT IS NOT POSSIBLE TO MAINTAIN A 1:1 CUT SLOPE, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL NECESSARY SHORING, BRACING, SLOPE STABILIZATION AND DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORKERS AS WELL AS MATERIALS AND WORKMANSHIP ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AND KEEPING THE SITE DEWATERED.

ALL DISTURBED AREAS TO BE REVEGETATED WITH NATIVE WEED-FREE GRASS SEED. SLOPES OF 3:1 OR GREATER SHALL BE NETTED AFTER THEY HAVE BEEN SEEDED. CONTRACTOR & OWNER IS RESPONSIBLE FOR EROSION CONTROL MONITORING, MAINTENANCE, AND FOR ENSURING THAT THE EROSION CONTROL METHODS PRESENTED ARE OPERATIONAL AND FUNCTION PROPERLY. TYPICAL ALL AREAS.



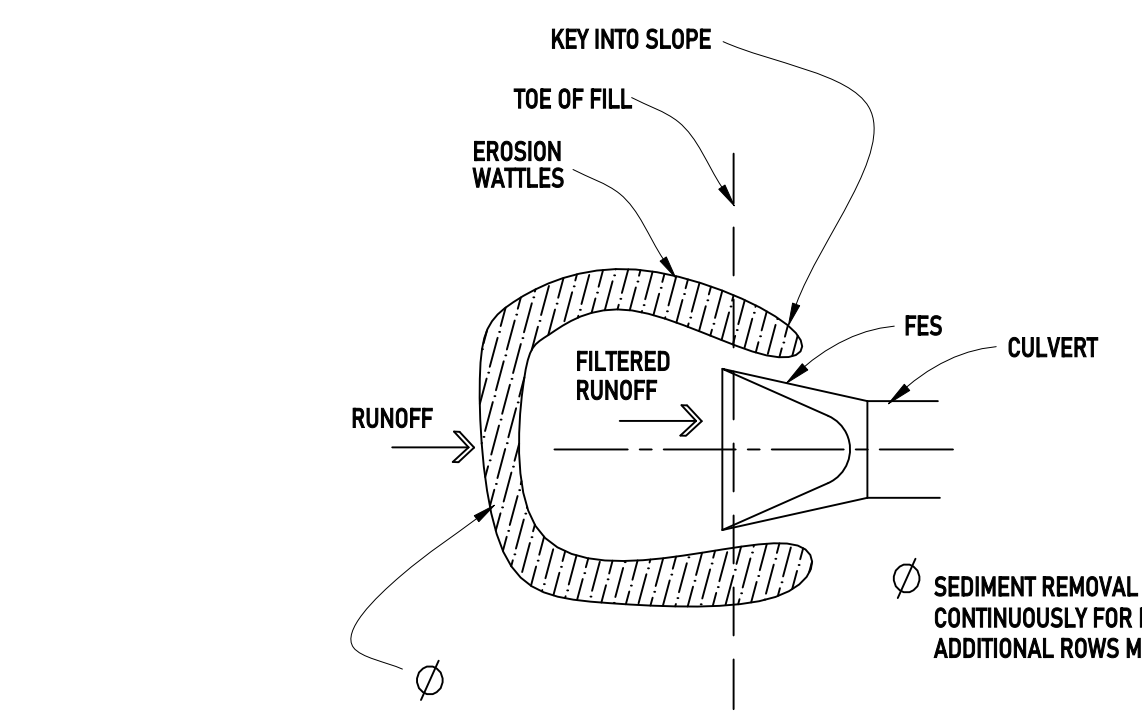
Erosion Control Plan



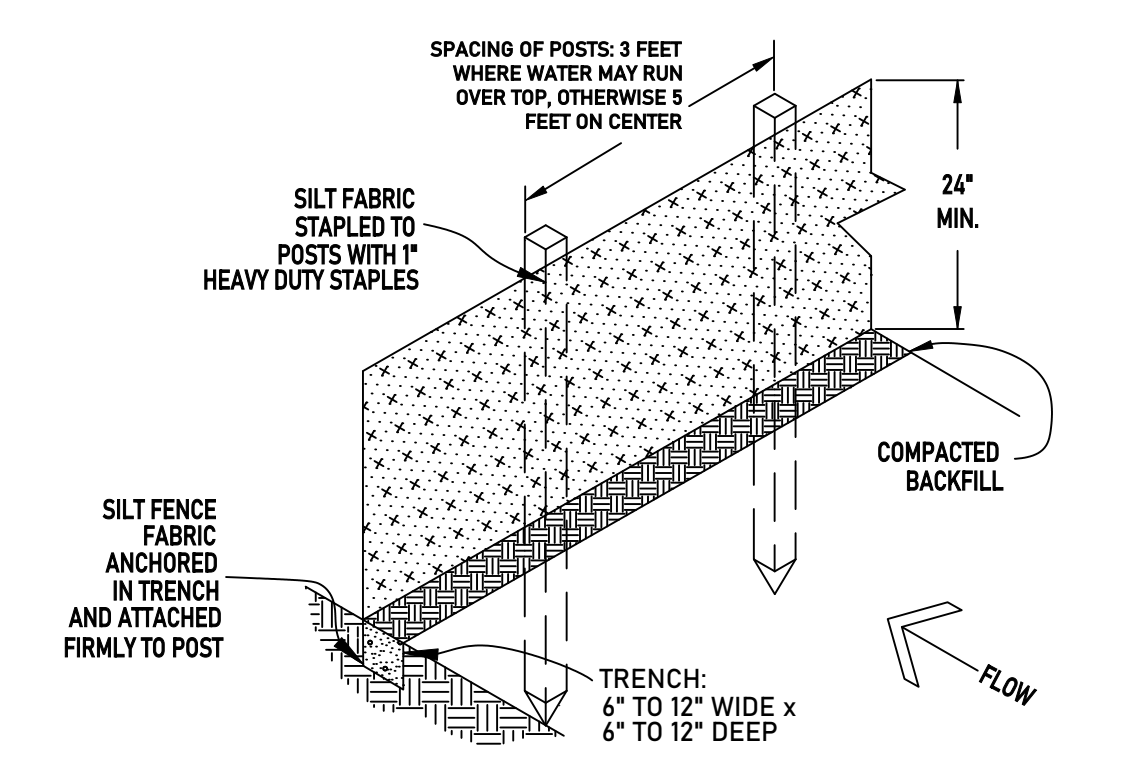
NOTE: A STRAW BALE BARRIER CONSISTS OF STRAW BALES PLACED END TO END ALONG A LEVEL CONTOUR IN A SHALLOW TRENCH AND THEN STAKED TO HOLD THEM IN PLACE. THE STRAW BALE BARRIER DETAINS AND FILTERS STORMWATER RUNOFF, CREATING A SMALL POND BEHIND THE BARRIER WHERE SEDIMENTATION OCCURS. STRAW BALE BARRIERS CAN BE INSTALLED BELOW SLOPES, ALONG PAVED AREAS, ALONG STREAM BANKS AND MANY OTHER LOCATIONS WITHOUT REQUIRING VEHICLE ACCESS OR HEAVY EQUIPMENT. STRAW BALE BARRIERS CAN BE INSTALLED BY HAND OR BY USING A SMALL PIECE OF TRENCHING EQUIPMENT (PROVIDED THE AREA IS OUTSIDE A WETLAND AREA). PROPER INSTALLATION IS NECESSARY TO ENSURE GOOD EROSION CONTROL. IMPROPERLY INSTALLED STRAW BALE BARRIERS CAN ACTUALLY WORSEN EROSION BY CONCENTRATING STORMWATER RUNOFF INSTEAD OF SLOWING AND DETAINING. STRAW BALE BARRIERS ARE OFTEN USED INTERCHANGEABLY WITH SILT FENCE. HOWEVER, SILT FENCE HAS A MUCH HIGHER EFFICIENCY IN REDUCING SEDIMENT, WILL LAST LONGER, AND MAY BE MORE COST-EFFECTIVE. A STRAW BALE BARRIER TYPICALLY HAS A MAXIMUM LIFE OF 3 MONTHS PRIOR TO EXCESSIVE DETERIORATION AND ROT. STRAW BALE BARRIERS ARE OFTEN USED IN TWO ROWS OF BALES, OR WITH A LAYER OF GEOTEXTILE FABRIC ACROSS THE FRONT, OR IN CONJUNCTION WITH OTHER EROSION CONTROL DEVICES, IN ORDER TO IMPROVE THE SEDIMENT REMOVAL CAPABILITIES OF STRAW BALES. A SINGLE ROW OF STRAW BALE BARRIER MAY REMOVE APPROXIMATELY 60% OF THE SEDIMENT IF CAREFULLY INSTALLED AND MAINTAINED. EFFICIENCY IS MAINTAINED PRIMARILY BY REPLACING STRAW BALES WHICH HAVE DETERIORATED IN A TIMELY MANNER. SUITABLE APPLICATIONS INCLUDE THE FOLLOWING:

1. ALONG THE PERIMETER OF THE SITE EXCEPT DO NOT USE WITHIN A ROADWAY R.O.W.
2. ALONG STREAMS AND CHANNELS, OR TO PROTECT SENSITIVE AREAS.
3. AROUND TEMPORARY SPOIL AREAS AND OTHER SMALL CLEARED AREAS.
4. AT THE BOTTOM OF EXPOSED AND SIGNIFICANT ERODIBLE SLOPES.
5. WITHIN A SWALE OR DITCH THAT HAS GENTLE SLOPES AND DRAINAGE AREA LESS THAN 1 ACRE.

**40 STRAW BALE DETAILS**

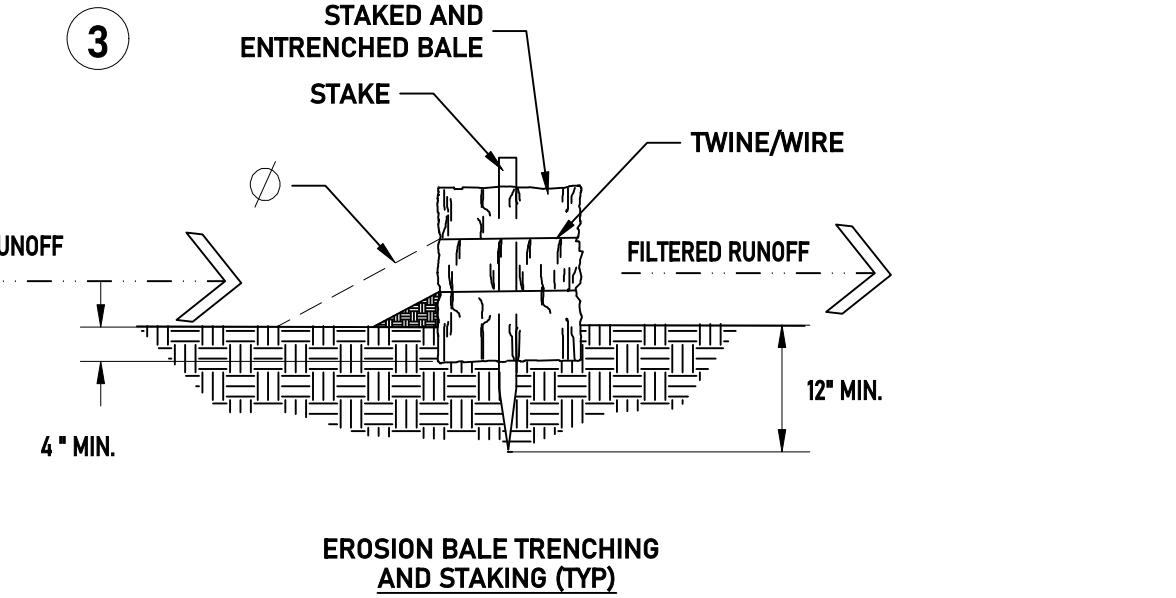
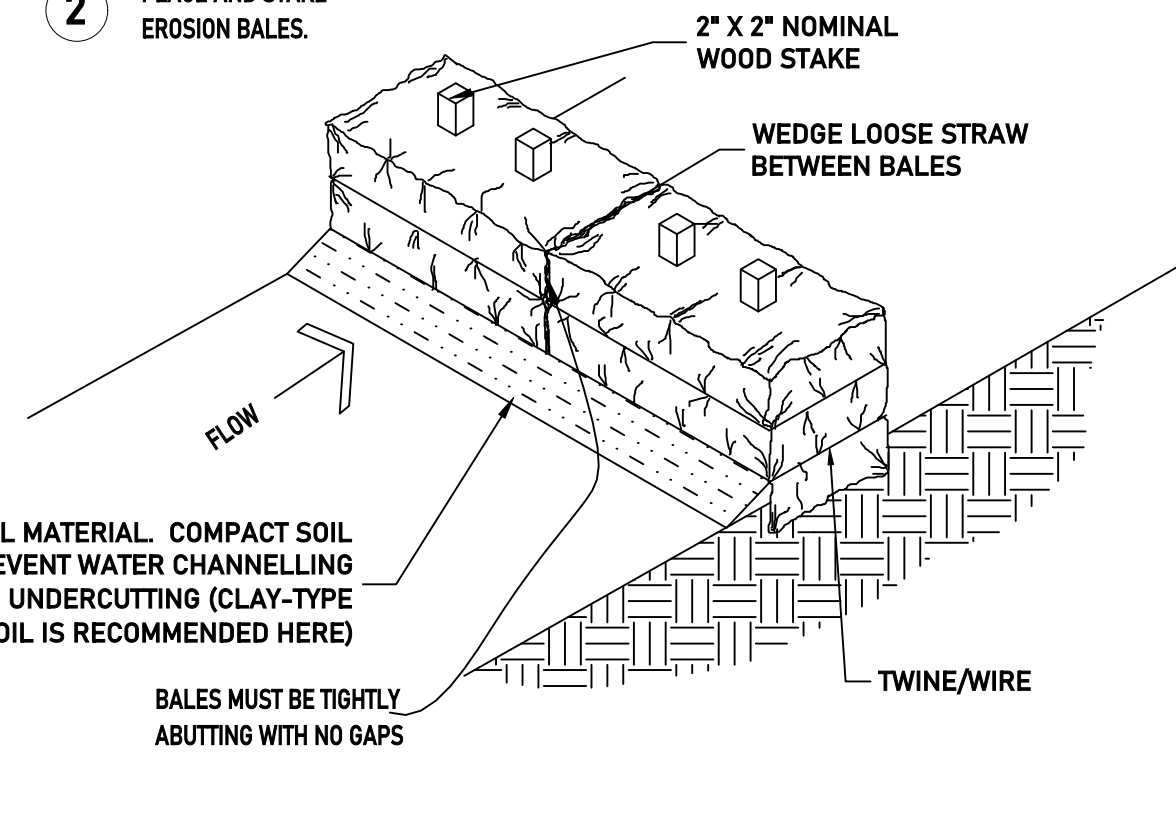
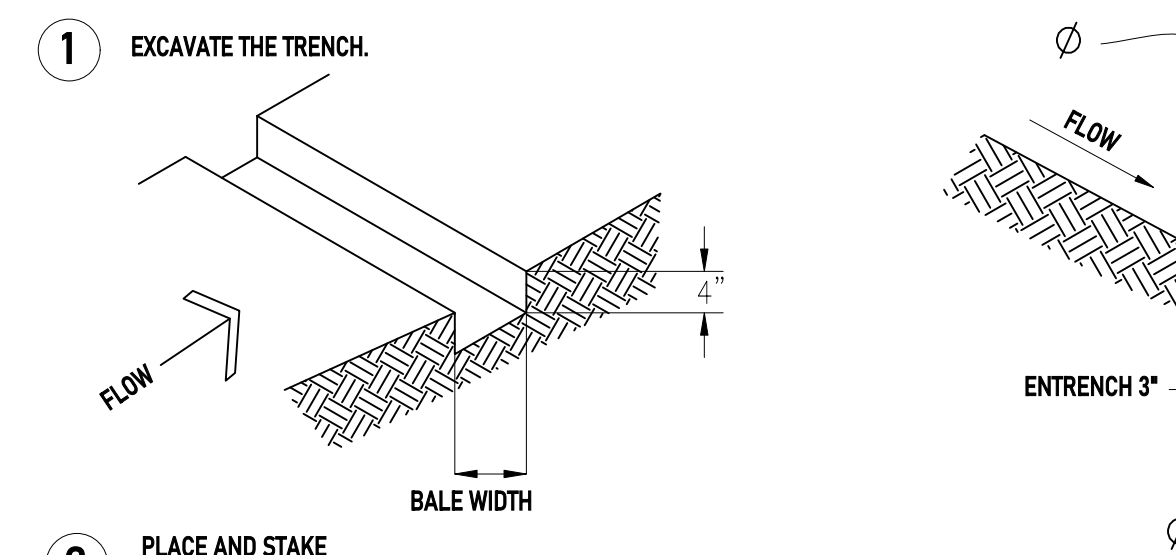


**41 CULVERT INLET PROTECTION**



1. SILT FENCE MAY BE SUBSTITUTED IN LIEU OF STRAW WATTLES.
2. WHERE SILT FENCING IS SPECIFIED IN THE PLAN, STRAW WATTLES MAY NOT BE SUBSTITUTED.
3. WHERE JOINTS IN SILT FENCE ARE REQUIRED, POSTS SHALL BE JOINED TOGETHER, THEN ROTATED 180 DEGREES AND DRIVEN INTO THE GROUND. POSTS SHALL OVERLAP AT JOINTS SUCH THAT NO GAPS IN FENCING EXIST.
4. CREATE J-HOOKS AT ENDS OF SILT FENCE.

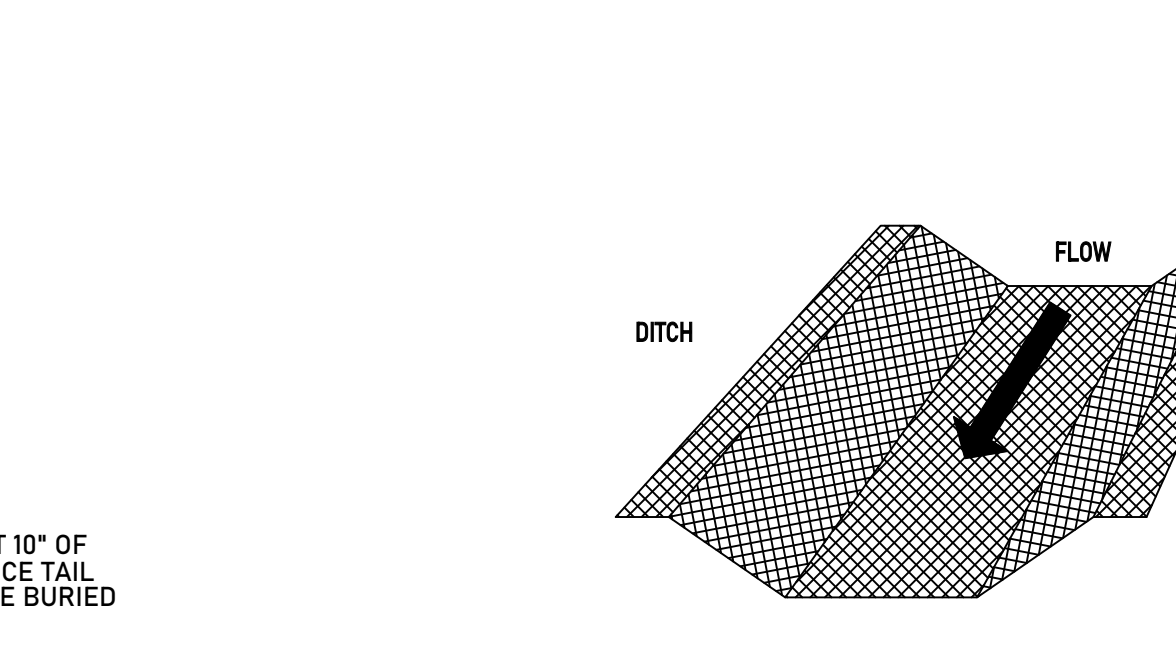
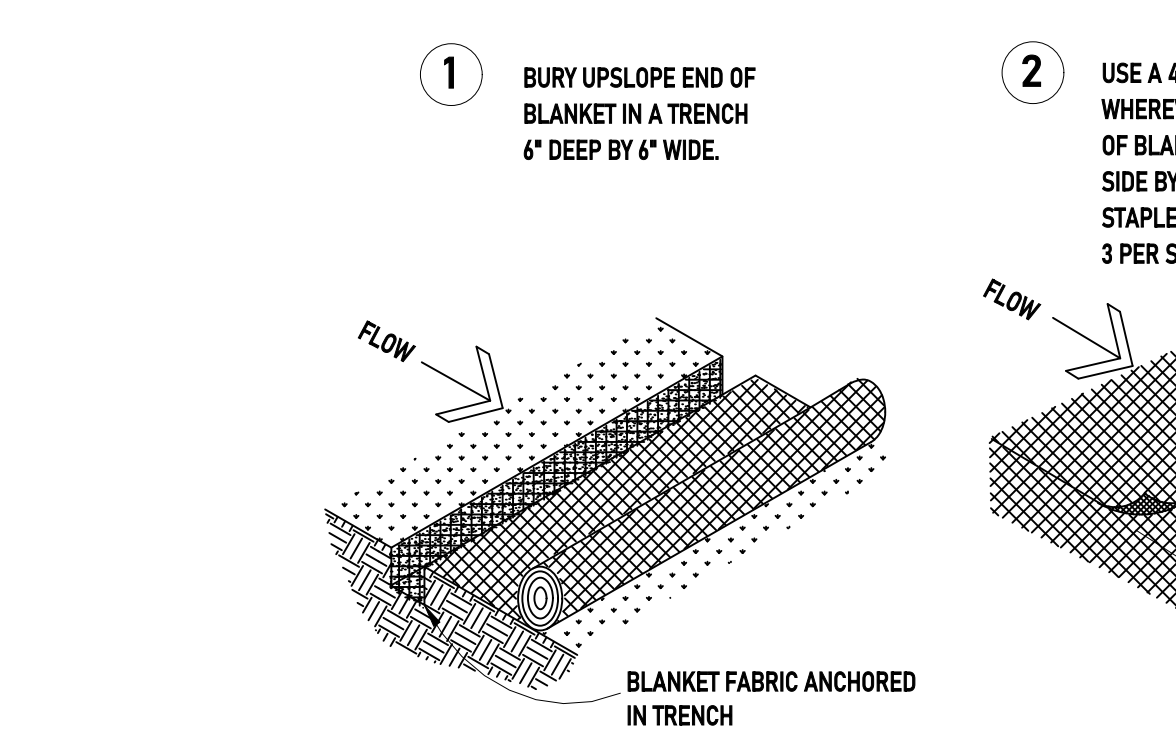
**42 SILT FENCE DETAIL**



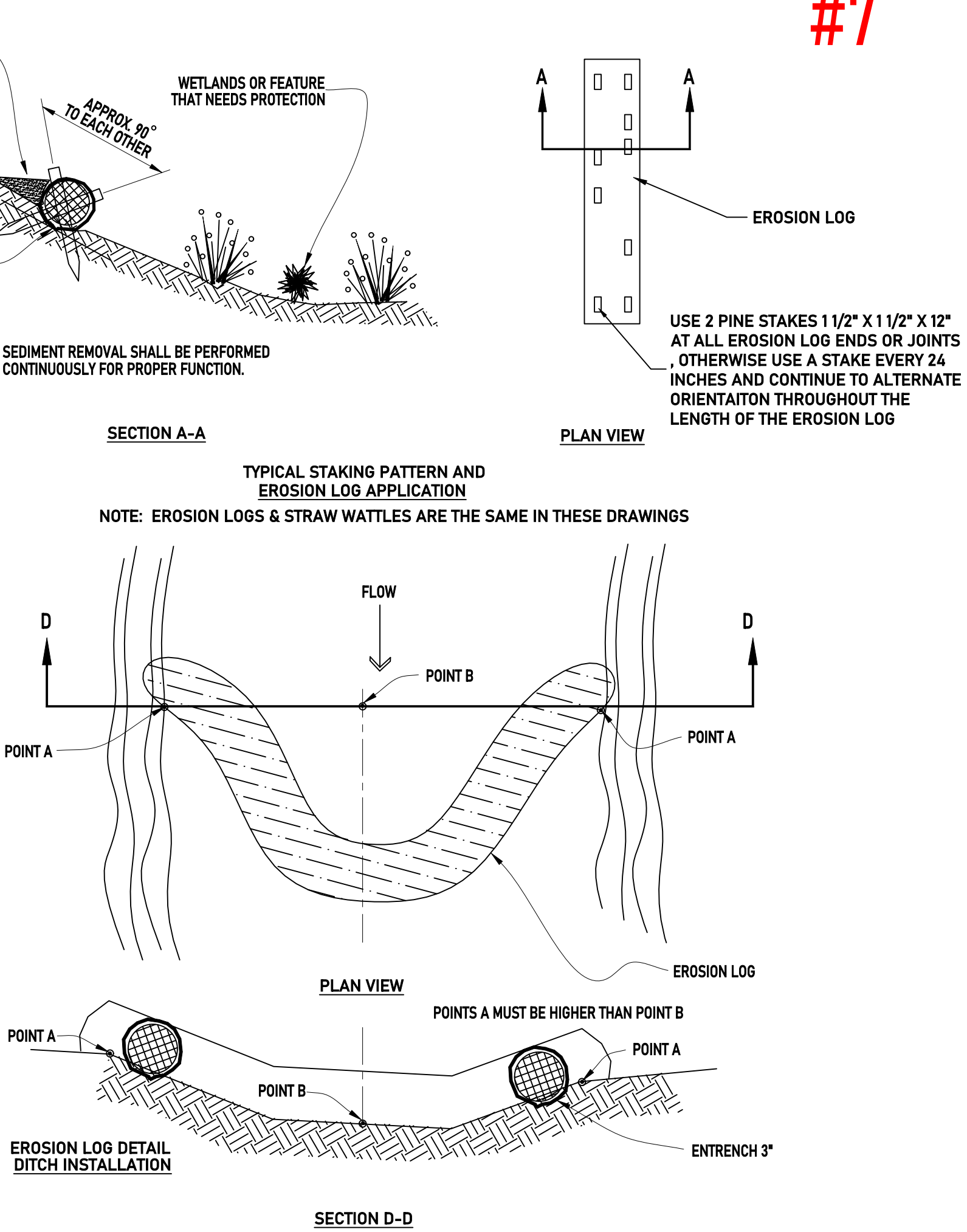
**43 EROSION LOG DETAILS**

ALL DISTURBED AREAS TO BE REVEGETATED WITH NATIVE WEED-FREE GRASS SEED. SLOPES OF 3:1 OR GREATER SHALL BE NETTED AFTER THEY HAVE BEEN SEEDED. CONTRACTOR & OWNER IS RESPONSIBLE FOR EROSION CONTROL MONITORING, MAINTENANCE, AND FOR ENSURING THAT THE EROSION CONTROL METHODS PRESENTED ARE OPERATIONAL AND FUNCTION PROPERLY. TYPICAL ALL AREAS.

ONE (1) YEAR AFTER PROJECT COMPLETION (WHEN THE CERTIFICATE OF OCCUPANCY IS OBTAINED AND DELIVERED TO THE HOME OWNER), THE CONTRACTOR SHALL VISIT THE SITE AND PERFORM ROUTINE MAINTENANCE REQUIREMENTS AND ASSUMING THE RE-VEGETATION PROCESS IS COMPLETE, ALL TEMPORARY EROSION PRODUCTS (SEE ITEM 4 ON THIS SHEET) CAN BE REMOVED



**44 SOIL RETENTION BLANKETS**



**47 EROSION LOG DETAILS**

- EROSION CONTROL:**
1. THE CONTRACTOR AND OWNER SHALL PROVIDE ALL SUPERVISION, LABOR, MATERIALS, TOOLS, EQUIPMENT AND RELATED ITEMS REQUIRED FOR PREPARING GROUND, PROVIDING FOR SOWING OF SEEDS AND FERTILIZING, MULCHING WITH STRAW, WATERING WEED CONTROL, AND OTHER MANAGEMENT PRACTICES REQUIRED FOR EROSION CONTROL AND TO OBTAIN A GRASS COVER. AREAS REQUIRING SEEDING FOR EROSION CONTROL WILL INCLUDE THE LEVEE AND ROADWAY SUBGRADE, DRAINAGE DITCHES, CUTTALL CHANNEL, ALL BORROW AREAS, AND ALL AREAS DISTURBED BY CONSTRUCTION, INCLUDING THE WORKING EASEMENT.
  2. SEEDING. SEED SHALL COMPLY WITH U.S. DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT. BAGS OF FERTILIZER SHALL BE LABELED COMPLYING WITH APPLICABLE STATE FERTILIZER LAWS AND SHALL BEAR THE NAME, TRADE NAME, TRADEMARK, AND WARRANTY OF PRODUCER. CONTRACTOR SHALL INSPECT AND MAKE SURE THAT ALL WORK IS IN COMPLIANCE AS REQUIRED WITH REGARD TO THE SEED BED PREPARATION, FERTILIZER APPLICATION RATE, PLANTING SEED RATE, PLANTING SEED UNIFORMITY, AND APPLICATION OF MULCH.
  3. HYDRO SEEDING MULCH. HYDRO SEEDING MULCH FIBER (IF USED) SHALL BE PRODUCED FROM A NATURAL OR RECYCLED STRAW FIBER; THESE MATERIALS SHOULD BE FREE FROM PLASTIC MATERIALS OR OTHER NON BIODEGRADABLE SUBSTANCES. FIBER SHALL BE OF SUCH CHARACTER THAT THE FIBER WILL DISPERSE INTO UNIFORM SLURRY WHEN MIXED WITH WATER. IT IS IMPERATIVE THAT THE MULCH BE APPLIED AT THE SPECIFIED RATE; TOO WET OF A MIXTURE WILL CAUSE THE FIBERS TO BE BURIED. WATER CONTENT OF THE FIBER MUST EXCEED 14 PERCENT OF THE DRY MASS FIBER. THE PERCENTAGE OF MOISTURE CONTENT OF THE FIBER SHALL BE CLEARLY MARKED ON THE PACKAGE. FIBER SHALL BE COLORED GREEN TO CONTRAST THE AREA ON WHICH THE FIBER IS BEING APPLIED, AND SHALL NOT STAIN CONCRETE OR OTHER SURFACES IN WHICH IT COMES INTO CONTACT WITH. FIBER AND OTHER MULCH INGREDIENTS SHALL BE FREE FROM GROWTH OR GERMINATION INHIBITING INGREDIENTS.
  4. MAINTENANCE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AREAS DURING PLANTING PERIOD AND UNTIL OTHER WORK UNDER CONTRACT HAS BEEN COMPLETED. MAINTENANCE SHALL CONSIST OF PROTECTION, REPLANTING, MAINTAINING EXISTING GRADES, AND REPAIR OF EROSION DAMAGE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING GRADES OF SLOPES AFTER COMMENCEMENT OF PLANTING OPERATIONS AND DURING MAINTENANCE PERIOD. PROMPTLY REPAIR ANY DAMAGE TO FINISHED SURFACE GRADES. PROMPTLY REPAIR DAMAGE IN THE EVENT EROSION OCCURS FROM RAINFALL OR OTHER CAUSES. CORRECT RUTS, RIDGES, TRACTS AND OTHER SURFACE IRREGULARITIES AND RECLAIM AREAS WHERE REQUIRED PRIOR TO ACCEPTANCE. ALWAYS INSPECT EROSION CONTROL METHODS ON THE SITE WEEKLY, IF NOT DAILY. IF THE PROPOSED SYSTEM IS NOT FUNCTIONING WELL, CONTACT THE ENGINEER IMMEDIATELY. SILT FENCES SHOULD ALWAYS BE INSPECTED BEFORE AND AFTER STORMS. SILT FENCE IS TYPICALLY DESIGNED ONLY TO PERFORM FOR A PERIOD OF WEEKS. REMOVE EXCESS SEDIMENT PERIODICALLY, AT A MINIMUM WHEN THE SEDIMENT REACHES ONE-FOURTH OF THE SILT FENCE HEIGHT. EROSION CONTROL FENCES CAN BE REMOVED ONCE THE AREA HAS BEEN SUCCESSFULLY REVEGETATED SUCCESSFULLY AND THE CONSTRUCTION IS COMPLETE.
  5. WATERING. APPLY WATER AFTER COMPACTION AND SEEDING. APPLY WATER USING PORTABLE PIPE OR HOSE LINES WITH ROTATING SPRINKLERS WITHIN 24 HOURS AFTER SEEDING. SPRINKLING MAY BE DONE WITH WATER TRUCKS AND HOSES IN CERTAIN LOCATIONS WHERE IT IS IMPRACTICAL TO USE PORTABLE LINES OR HOSES. SUPERVISE SPRINKLING TO PREVENT RUNOFF OF WATER. THE CONTRACTOR SHALL FURNISH ALL PUMPS, HOSES, PIPE LINES, WATER TRUCKS AND SPRINKLING EQUIPMENT REQUIRED. WATER AS REQUIRED TO ACHIEVE ACCEPTABLE GRASS COVERAGE. DO NOT WATER AT RATES EXCEEDING 2,000 GAL/AC/HR. TO PREVENT RUNOFF.
  6. WEEDING. KEEP ALL SEEDED AREAS RELATIVELY FREE FROM WEEDS AND UNDESIRABLE GRASSES, USING APPROVED METHODS, MATERIALS AND TIMING.
  7. SILT FENCE. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG DRIVEN 1/4\"/>

**LITTLEHORN ENGINEERING & SURVEYING**  
 "PEACE OF MIND THROUGH HOLISTIC DESIGN"  
 3511 HIGHWAY 285, SUITE #201  
 FAIRPLAY, COLORADO 80440  
 MAIN OFFICE 719.836.7120  
 SILVER CLIFF PHONE 719.783.3757

PROJECT NO.  
 2022-100742  
 CLIENT  
 LANDY AND  
 MICHELLE  
 HACKEBEIL  
 DATE  
 04.10.2023  
 REVISION:  
 △ -  
 △ -  
**C4**

THESE PLANS ARE THE PROPERTY OF LITTLEHORN ENGINEERING, LLC. ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

**EROSION DETAILS & SPECIFICATIONS**  
 311 WAGON ROAD  
 TOWN OF BLUE RIVER, CO  
 SPILLWAY SUB#1, LOT 14



# AN ADVANCED TREATMENT ADVANTEX AX-25RT-(MODE 3B) PRESSURIZED GRAVEL ON-SITE WASTEWATER TREATMENT SYSTEM

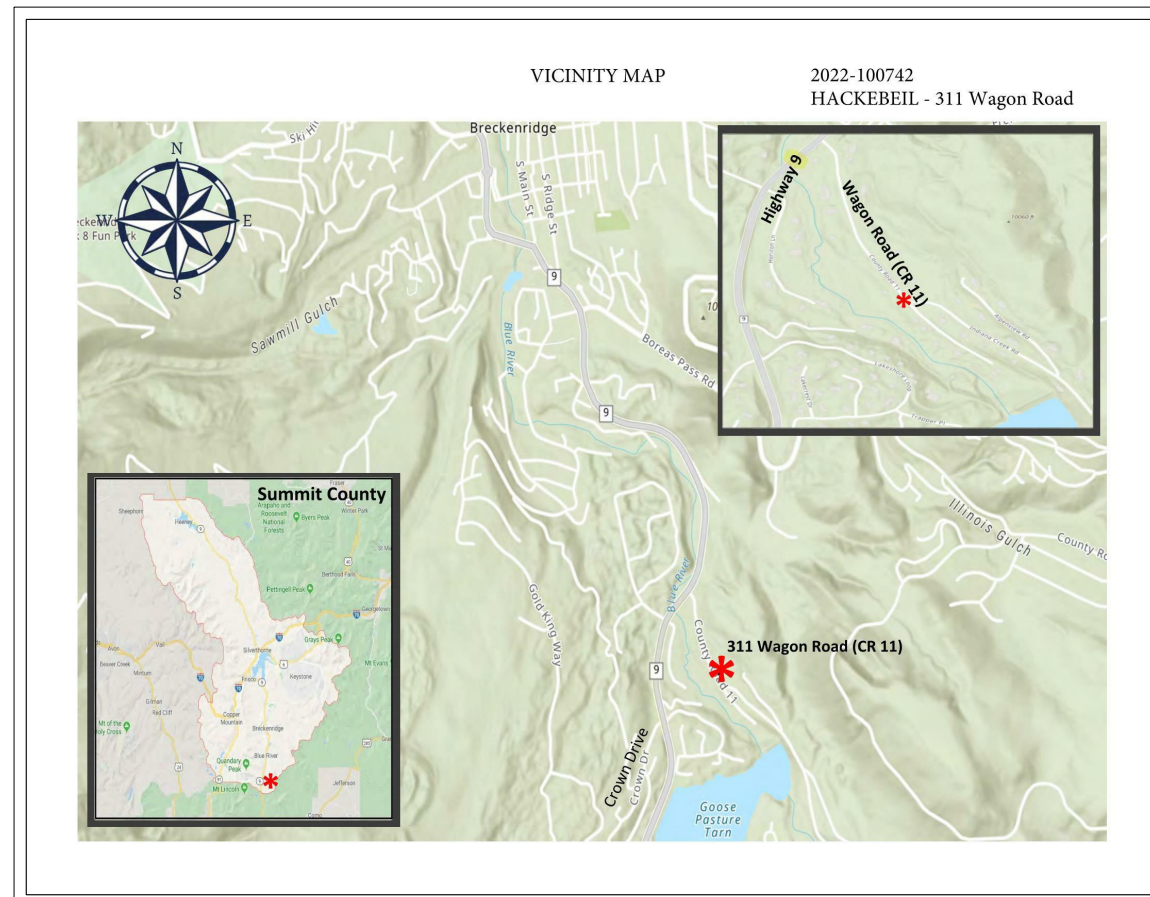
**311 WAGON ROAD, BLUE RIVER, CO 80424**  
A PERMIT IS REQUIRED FROM SUMMIT COUNTY TO INSTALL THIS 4 BEDROOM  
OWTS SYSTEM

**INSPECTION REQUIREMENTS:**

1. THE COUNTY WILL CONDUCT INSPECTIONS AS REQUIRED BY THEIR PERMIT.
2. IT IS HIGHLY RECOMMENDED THAT THE CLIENT CONTACT THE ENGINEER AND SCHEDULE A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED LAYOUTS AND DESIGN.
3. THE ENGINEER SHALL BE CONTACTED TO PERFORM THREE INSPECTIONS OF THE SEPTIC SYSTEM:
  1. AN OPEN HOLE OF THE SEPTIC TANK AND STA.
  2. A PRE-COVER INSPECTION (PRIOR TO BACKFILL).
  3. A FINAL GRADE INSPECTION AFTER BACKFILL. ANY EQUIPMENT SHOULD BE OPERATIONAL AND ACCESSIBLE DURING THIS INSPECTION. IF A POTABLE WELL IS PLANNED, IT SHOULD BE DRILLED BY THE TIME OF THIS INSPECTION.
4. SOILS COMPACTION SHALL BE TESTED AS REQUIRED (REFER TO SHEET D5 FOR COMPACTION NOTES).
5. IF RETAINING WALLS ARE TO BE INSTALLED WITHIN 25 FEET OF THE STA, THESE SHALL BE INSPECTED AT THE BEGINNING OF THE INSTALLATION, DURING THE INSTALLATION, AND AFTER COMPLETION.

**SOME ABBREVIATIONS USED:**

- AM: AS MEASURED WITH HAND TAPE
- BOC: BOTTOM OF CHAMBER
- BOG: BOTTOM OF GRAVEL
- BOS: BOTTOM OF SAND
- BR: BEDROOM
- CH: INFILTRATOR CHAMBER
- EXT: EXISTING
- OWTS: ON-SITE WASTEWATER TREATMENT SYSTEM (PREVIOUSLY KNOWN AS ISDS)
- RV: RECREATIONAL VEHICLE OR CAMPER
- SFR: SINGLE-FAMILY RESIDENCE
- STA: SOIL TREATMENT AREA (AKA LEACH FIELD OR ABSORPTION BED)
- TBD: TO BE DETERMINED
- TOCH: TOP OF CHAMBER
- TOG: TOP OF GRAVEL
- TOR: TOP OF RISER
- TOS: TOP OF SAND
- TOT: TOP OF TANK



**VICINITY MAP**

**PROPERTY INFORMATION**  
SPILLWAY SUB #1, LOT 14  
311 WAGON ROAD  
BLUE RIVER, CO 80424  
COUNTY SCHED. #100742

**DRAWINGS PREPARED FOR:**  
LANDYN & MICHELLE HACKEBEIL  
405 FRONT STREET  
COMFORT, TX 78013

THE SEPTIC TANK AND ON-SITE WASTEWATER TREATMENT SYSTEM SHALL BE COMPRISED OF THE MATERIALS AND EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE COUNTY HEALTH DEPARTMENT AND THE STATE OF COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT. OPERATING PERMITS ARE REQUIRED FOR CERTAIN TYPES OF SYSTEMS. REFER TO THE COUNTY REGULATIONS FOR MORE INFORMATION.

SHEET INDEX	
SHEET#	SHEET DESCRIPTION
COVER	OWTS COVER SHEET
D0	GENERAL CONSTRUCTION & SITE NOTES <span style="float: right; color: red; font-weight: bold;">#8</span>
D1	DESIGN & INSTALLATION NOTES
D2	OVERALL SITE PLAN FOR OWTS
D2.1	SITE PLAN DETAIL FOR OWTS
D3	STA DETAILS & NOTES
D4	SEPTIC TANK DETAILS & SPECIFICATIONS
D4.1	ORENCO ADVANTEX AX-RT MFG. DRAWING 1 OF 2
D4.2	ORENCO ADVANTEX AX-RT MFG. DRAWING 2 OF 2
D5	OWTS DETAILS & EXCAVATION NOTES
D6	OWTS MAINTENANCE REQUIREMENTS
D7	SOILS TESTING & PUMP CALCULATIONS

CONTRACTOR SHALL OBTAIN COUNTY APPROVAL BEFORE ORDERING MATERIALS AND PRIOR TO ANY CONSTRUCTION.

**CONTRACTOR INSTALLATION REFERENCE TABLE:**

**SEPTIC TANK:**

VALLEY PRECAST 1500 GALLON TOP SEAM 2 COMPARTMENT CONCRETE TANK WITH EFFLUENT FILTER  
- ITEM #1500T-2CP-F (UPSTREAM)  
-ADVANTEX AX-25RT-(MODE 3B) ADVANCED TREATMENT UNIT (DOWNSTREAM)

**SOIL TREATMENT AREA:**

SIZE: 10'X40' GRAVEL BED OVER 15'X45' SAND BASIN AREA

DEPTH: 54" MAX. ALONG THE HIGH SIDE OF SAND BASIN. KEY IN SAND AT LEAST 10" ALONG THE LOW SIDE OF SAND BASIN.

MATERIALS: 24" CLEAN SECONDARY-TYPE SAND, 1" OR 1.5"Ø GRAVEL. 8.5" GRAVEL BELOW PIPE AND 2" GRAVEL ABOVE PIPE.

LATERALS: 3, 1.5"Ø SCH 40 PVC, USE ORIFICE SHIELDS BY SIM/TECH (STF-106D) OR ORENCO (OS150).

ORIFICES: 7/32"Ø @ 24" O.C. AT 6:00 WITH ORIFICE SHIELDS. 19 ORIFICES PER LATERAL, 57 TOTAL.



DIG SAFELY - CALL 811  
GAS/ELECTRIC/TELEPHONE/CABLE  
WWW.UNCC2.ORG

Section IV, Item D.

ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

OWTS COVER SHEET

**LITTLEHORN ENGINEERING, LLC**

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

"PEACE OF MIND THROUGH  
HOLISTIC DESIGN"



PROJECT NO.  
2022-100742

CLIENT  
LANDYN AND  
MICHELLE  
HACKEBEIL

DATE  
04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

**COVER** 277

# CONSTRUCTION NOTES- CONSTRUCTION NOTES SHALL GOVERN ALL SEPTIC (OWTS) DRAWINGS

#9

Section IV, Item D.

### GENERAL

1. THE SITE IS NOT SERVED BY A PUBLIC WASTEWATER SYSTEM SO THE PROPOSED RESIDENCE WILL HAVE TO BE SERVED BY A PRIVATE, ON-SITE WASTE DISPOSAL TREATMENT SYSTEM (OWTS). AS REQUESTED, WE HAVE PREPARED THESE DESIGN DRAWINGS TO PRESENT THE METHODOLOGY AND ENGINEERING FOR THE NEW DISPOSAL SYSTEM.
2. CONTRACTOR SHALL PROVIDE MATERIALS AND WORKMANSHIP AS MAY BE REQUIRED TO COMPLETE THE NECESSARY WORK IN ACCORDANCE WITH THE DESIGN DRAWINGS AND ANY MUNICIPALITY REQUIREMENTS. THE DESIGN DRAWINGS AND SPECIFICATIONS HEREIN REFER TO THE ONSITE WASTEWATER TREATMENT SYSTEM (OWTS). THIS INCLUDES WASTEWATER PIPING LOCATED OUTSIDE THE RESIDENCE. PIPING WITHIN THE RESIDENCE IS REGULATED BY OTHER APPLICABLE BUILDING & PLUMBING REGULATIONS.
3. THE OWNER AND BUILDER SHALL BE RESPONSIBLE FOR AND VERIFY, PRIOR TO CONSTRUCTION COMMENCEMENT: 1) PERMIT ISSUANCE, 2) SITE CONDITIONS, 3) ALL SITE SETBACKS, 4) BUILDING LOCATIONS, 5) COMPONENT DIMENSIONS, 6) MATERIALS, 7) QUANTITIES, AND 8) ELEVATIONS AND GRADE FINISHES. ALL WORK SHALL COMPLY WITH APPLICABLE GOVERNING CODES, HEALTH DEPARTMENT ORDINANCES, LAWS, AND MANUFACTURER'S SPECIFICATIONS.
4. IT IS THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE DISPOSAL SYSTEM IS: 1) DESIGNED FOR THE CORRECT NUMBER OF BEDROOMS AND APPLIANCES, 2) WILL MEET ALL SETBACK REQUIREMENTS, AND 3) IS INSTALLED PER THIS ENGINEERED DESIGN, COUNTY GUIDELINES, NATIONAL ELECTRIC CODE, AND COLORADO STATE GUIDELINES.
5. IF NOT ALREADY COMPLETED, A REGISTERED SURVEYOR SHOULD CONDUCT A BOUNDARY SURVEY TO ENSURE THAT THE PROPERTY PINS ARE IN THEIR CORRECT LOCATIONS AND HAVE NOT BEEN MOVED.
6. THESE PLANS ARE NOT AN INSTALLATION MANUAL. INSTALLATION MANUALS AND CODES ARE LISTED ON THIS SHEET. THE CONTRACTOR SHALL NOTIFY ENGINEER OF DETAILS NOT SHOWN ON PLANS THAT ARE NECESSARY FOR THE WORK TO PROCEED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL METHODS OF CONSTRUCTION AND CONSTRUCTION SEQUENCING, INCLUDING TEMPORARY BRACING OR SHORING REQUIRED TO PROTECT WORKERS, THE EXCAVATED TRENCHES, AND ANY EXCAVATED HOLES, AS MAY BE REQUIRED. SITE VISITS BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE. JOB-SITE SAFETY IS BEYOND THE SCOPE OF THESE DRAWINGS AND THE ABILITY OF THE ENGINEER TO MANAGE. THE OWNER AND CONTRACTOR BEAR ALL RESPONSIBILITY FOR THEIR OWN SAFETY AND THE SAFETY OF EMPLOYEES, WORKERS, AND ALL PASSERSBY'S.
8. LOCATE ALL BURIED UTILITIES PRIOR TO ANY CONSTRUCTION.
9. ALL MATERIALS SHALL BE PROTECTED WITH SUITABLE TEMPORARY WEATHER FACILITIES AS MAY BE REQUIRED TO PROTECT MATERIALS FROM DAMAGE DURING CONSTRUCTION. WEATHER PROTECTION AND SNOW REMOVAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND OWNER.
10. DO NOT SCALE DRAWINGS. VERIFY LINES & DIMENSIONS ON DRAWINGS PRIOR TO ANY WORK. CALL ENGINEER FOR ANY DIMENSIONING QUESTIONS.
11. SURFACING OF PARKING AND DRIVE AREAS: IF THE AREA ABOVE THE TANK OR SEWER LINE IS TO BE PAVED WITH CONCRETE OR ASPHALT OR SIMILAR MATERIALS, THE ENGINEER SHALL BE NOTIFIED FOR SOILS TESTING OF THE BACKFILL PLACED WITHIN ANY EXCAVATED TRENCHES AND HOLES. IF SOILS TESTING IS NOT PERFORMED, THE SOIL MAY SETTLE AND CRACK THE ASPHALT OR CONCRETE PAVING. WHERE THE ACCESS ROAD IS PAVED, DRIVES ARE USUALLY PAVED (THIS MAY BE REQUIRED BY THE MUNICIPALITY).
12. RE-VEGETATION, LANDSCAPING WORK, AND EROSION CONTROL SYSTEMS ARE OUTSIDE THE SCOPE OF THESE PLANS. THIS WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE LAND USE AND DEVELOPMENT CODE.
13. IF A RETAINING WALL OR SUBSURFACE DRAIN IS TO BE LOCATED BELOW AND WITHIN 25 FEET OF THE STA, IT SHALL BE DESIGNED BY AN ENGINEER REGARDLESS OF THE HEIGHT.
14. SNOW STACK SPACE: THE STA, SEPTIC TANK, AND SEWER PIPE AREAS SHALL NOT BE USED AS A SNOW STORAGE AREA.

### CODES GOVERNING MATERIALS AND WORKMANSHIP:

ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS.  
 CDPHE: COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT.  
 IRC: RESIDENTIAL/BUILDING CODE & ADOPTED PLUMBING CODE & ELECTRICAL CODE  
 MSDS: MATERIAL SAFETY DATA SHEETS  
 NSF: NATIONAL SANITATION FEDERATION INTERNATIONAL  
 OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
 SCEHD: SUMMIT COUNTY ENVIRONMENTAL HEALTH DEPARTMENT  
 UL: UNDERWRITERS LABORATORIES, INC.  
 WATER: STATE OF COLORADO & DIVISION OF WATER RESOURCES

15. THE RESIDENCE AND DRIVEWAY DIMENSIONS MAY BE GENERALLY SHOWN. THE PROPOSED DRIVEWAY AND RESIDENCE LOCATION, DIMENSIONS, SITE LAYOUT, ETC. SHALL BE VERIFIED PRIOR TO CONSTRUCTION. IF DEVELOPMENT PLANS ARE DIFFERENT FROM WHAT IS SHOWN HEREIN, PLEASE NOTIFY THE ENGINEER.
16. TREE CLEARING SHALL BE COMPLETED IN ACCORDANCE WITH FIRE REGULATIONS, SUBDIVISION REGULATIONS, HOME OWNERS DESIRES, AND COUNTY REGULATIONS.
17. INSULATION: THE STA, SEPTIC TANK, AND SEWAGE PIPING HAS BEEN DESIGNED WITH A MINIMUM SPECIFIED SOIL COVER. THE MINIMUM SOIL COVER ASSUMES THE SYSTEM IS USED PROPERLY, ON A FULL-TIME BASIS, AND IS MAINTAINED PROPERLY. IF ANY OF THESE THREE ITEMS ARE LACKING, THE SYSTEM MAY FREEZE. AS AN EXTRA PRECAUTIONARY METHOD THE SEPTIC TANK, BUILDING SEWER, AND EFFLUENT SEWER LINE MAY BE INSULATED OR HEAT-TAPED ON THE EXTERIOR. THE STA SHALL NOT BE INSULATED AS THE "FOAM" WILL HINDER EVAPORATION FROM THE STA. REFER TO SYSTEM MAINTENANCE AND OPERATION GUIDELINES.



### GROUND AND IRRIGATION WATER:

1. WATER AND MOISTURE IN AND AROUND STA'S IS A MAJOR PROBLEM IN THE MOUNTAIN AREAS, DUE TO SNOW MELT. TO MITIGATE WATER APPROPRIATELY AWAY FROM THE OWTS, THE STA HAS BEEN DESIGNED TO BE A VERY SPECIFIC VERTICAL DISTANCE ABOVE THE AVERAGE SEASONAL WATER TABLE. REFER TO STA CROSS SECTION FOR DESIGN DEPTHS.
2. SEPTIC TANKS SHALL NOT BE PLACED WITHIN A 100 YEAR FLOOD PLAIN OR NEAR ANY TYPE OF FLOODWAY UNLESS OTHERWISE APPROVED BY THE ENGINEER. WHEN PLACED IN OR NEAR THESE AREAS, APPROVAL FROM THE ENGINEER IS REQUIRED. TYPICALLY THE TOP OF THE TANK IS MAINTAINED AT LEAST 18 INCHES ABOVE THE BASE FLOOD ELEVATION AND PROTECTED BY A SURROUNDING DRAIN/SUMP. SEPTIC TANKS WHICH ARE PLACED IN HIGH GROUND WATER AREAS SHALL BE WATERPROOFED AND A TOP SEAM TANK SHALL BE USED. SOME COUNTIES NOW REQUIRE TOP SEAM TANKS FOR ALL SEPTIC TANKS.
3. FOUNDATION DRAINS AND WATER SOURCES MUST NOT BE DIRECTED TOWARDS SEPTIC TANKS, STA'S, WELLS, OR BURIED UTILITIES. EROSION MUST ALSO BE CONSIDERED AND MITIGATED PER COUNTY REQUIREMENTS AT DAYLIGHT LOCATIONS.
4. LAWN SPRINKLER HEADS, SNOW BUILDUP AND IMPROPER WATER MITIGATION PRACTICES CAN CAUSE REAL PROBLEMS FOR THE SEPTIC SYSTEM AND MUST BE APPROPRIATELY CONTROLLED.

### WATER SUPPLY

1. WHEN WATER FOR THE RESIDENCE IS TO BE OBTAINED FROM A PRIVATE WELL OR DEVELOPED SPRING, IT SHALL BE DRILLED/INSTALLED/DEVELOPED AT THE MINIMUM SPECIFIED DISTANCE SHOWN IN THE SITE PLAN FROM THE STA AND AT LEAST 50 FEET FROM THE SEPTIC TANK AND SEWER LINES. ALL SPRINGS/WELLS REQUIRE STATE APPROVAL.
2. ACCESS, UTILITY LINES, EASEMENTS, AND OTHER CRITERIA MUST BE EVALUATED BY A QUALIFIED WELL DRILLER TO ENSURE THE WELL CAN BE DRILLED AT THE PROPOSED LOCATION SHOWN. THE ATTACHED PLAN SHOWS A LOCATION FOR THE WELL THAT IS ONLY INTENDED TO MEET THE SETBACK REQUIREMENTS.
3. EXISTING AND PROPOSED WELL LOCATIONS WITHIN 200 FEET OF THE PROPOSED SEPTIC SYSTEM ARE TYPICALLY DEPICTED IN THE DRAWINGS. SOMETIMES DUE TO SNOW COVER, BUILDINGS, OR OTHER ISSUES ALL NEIGHBORING WELLS CAN NOT BE LOCATED. THE CONTRACTOR SHALL VERIFY SUCH LOCATIONS BEFORE THE WASTE DISPOSAL SYSTEM IS INSTALLED.
4. THE WELL SHALL BE GROUTER PER STATE AND COUNTY REQUIREMENTS.

### GRADING AND EXCAVATION SPECIFICATIONS:

1. ALL FINISH SLOPES MUST SLOPE AWAY FROM BUILDINGS, BUILDING SEWER, SEPTIC TANK(S), EFFLUENT LINES, AND STA AREAS. WHEN INSTALLING BERMS, SUBSURFACE DRAINS, AND OTHER METHODS TO MITIGATE THE WATER AWAY FROM THESE AREAS, BE SURE THE HISTORICAL FLOW QUANTITIES AND PATTERNS ARE VERIFIED AND MAINTAINED FOR ANY WATER LEAVING THE SITE.
2. WHEN THE GRADING/EXCAVATION OPERATIONS ENCOUNTER REMAINS OF PREHISTORIC PEOPLE'S DWELLING SITES, REMAINS, OR ARTIFACTS OF HISTORICAL, PALEONTOLOGICAL OR ARCHAEOLOGICAL SIGNIFICANCE, THE OPERATIONS SHALL BE TEMPORARILY DISCONTINUED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PROMPTLY CONTACT THE PROPER AUTHORITIES TO DETERMINE THE DISPOSITION THEREOF. IF REQUIRED BY STATE OR FEDERAL AUTHORITIES, THE CONTRACTOR SHALL PRESERVE THE AREA OF SIGNIFICANCE TO ALLOW AUTHORITIES TO EXCAVATE AND RECOVER THE ITEMS OF SIGNIFICANCE.
3. AT ALL TIMES, PRECAUTIONS SHALL BE TAKEN FOR THE PROTECTION OF CULVERTS, EROSION CONTROL STRUCTURES, IRRIGATION CROSSINGS, SURVEY MONUMENTS, UNDERGROUND OR OVERHEAD UTILITY LINES AND ALL OTHER PUBLIC OR PRIVATE INSTALLATIONS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. ANY DAMAGE TO SUCH STRUCTURES SHALL BE REPAIRED, DOCUMENTED AND SUBMITTED TO THE APPROPRIATE AUTHORITY.
4. CLEARING AND GRUBBING. ALL TREES AND OTHER VEGETATION SHALL BE SALVAGED WHERE POSSIBLE (VERIFY WITH THE HOME OWNER BEFORE REMOVING TREES). STUMP HOLES AND OTHER HOLES FROM WHICH OBSTRUCTIONS ARE REMOVED, SHALL BE BACKFILLED (AND COMPACTED WHEN REQUIRED) WITH SUITABLE MATERIALS. STUMPS, DEBRIS, AND WOOD SHALL NOT BE PLACED IN ANY TRENCHES OR USED FOR ANY BACKFILL. ALL TREES AND SHRUBS WITHIN 10 FEET OF THE STA AND SEPTIC TANK AND WITHIN 5 FEET OF THE WASTE WATER PIPING SHALL BE CLEARED. MATERIALS AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH STATE AND COUNTY REGULATIONS. WITH OWNER APPROVAL, STUMPS MAY BE BURIED ON-SITE AT AN APPROVED LOCATION.
5. TOPSOIL. ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED. TOPSOIL SHALL CONSIST OF LOOSE FRIABLE LOAM REASONABLY FREE OF ADMIXTURES OF SUBSOIL, REFUSE, STUMPS, OR TREE ROOTS. MATERIALS SELECTED FOR TOPSOIL SHALL BE EXCAVATED AND STOCKPILED AS REQUIRED. TOPSOIL SHALL BE KEYED TO THE UNDERLYING MATERIALS BY THE USE OF HARROWS, ROLLERS, OR OTHER EQUIPMENT SUITABLE FOR THE PURPOSE. FOR SITES THAT DON'T CONTAIN ENOUGH REUSABLE TOP SOIL, APPROVED TOP SOIL WILL HAVE TO BE IMPORTED TO THE SITE. SITES WITH MORE THAN 1.0 ACRE OF DISTURBANCE REQUIRE SPECIAL PERMITTING.
6. EXCAVATION. VIBRATORY EQUIPMENT AND OTHER EQUIPMENT WHICH MIGHT COMPACT THE SOILS SHALL BE KEPT OUT OF THE STA BED. IF A RUBBER Tired VEHICLE ABSOLUTELY MUST BE USED WITHIN THE STA, SCARIFY THE SOILS VERY CAREFULLY BEFORE STA CONSTRUCTION TO ENSURE THE UNDERLYING SOILS ARE NOT COMPACTED. SHORTCUTTING GOOD CONTRACTOR PRACTICE WILL CAUSE PREMATURE STA FAILURE (SEE COMPACTION BELOW).
7. WHEN GROUND WATER IS ENCOUNTERED, THE CONTRACTOR SHALL PUMP, OR OTHERWISE REMOVE ANY WATER THAT ACCUMULATES IN THE TRENCHES, TANK HOLE, AND STA. MATERIALS SHALL NOT BE CONSTRUCTED IN WATER AND WATER SHALL NOT BE ALLOWED TO DRAIN THROUGH THE SEWER PIPE. AT THE END OF THE DAY, THE OPEN END OF THE PIPE SHALL BE KEPT CLOSED BY PLACING A WATERTIGHT FITTING PLUG INTO THE BELL END TO PREVENT WASHING OF ANY FOREIGN MATTER INTO THE LINE. ALL WATER REMOVED FROM THE CONSTRUCTION SITE SHALL BE CONVEYED IN A PROPER MANNER TO A SUITABLE POINT OF DISCHARGE AND SHALL COMPLY WITH THE APPLICABLE EROSION, SEDIMENTATION AND WATER CONTROL LAWS.
8. BACKFILLING SHALL BE THE RESPONSIBILITY OF THE OWNER/CONTRACTOR. ALL DISTURBED AREAS SHOULD BE RESEDED TO MITIGATE EROSION. IT IS GOOD PRACTICE TO SLIGHTLY MOUND THE AREA OVER THE TRENCHES, THE TANK, AND THE STA AREAS TO MITIGATE SURFACE WATER AWAY FROM THESE AREAS.
9. COMPACTION. ALL PLACED FILL SHALL BE BROUGHT TO THE PROPER MOISTURE CONTENT AND ADEQUATELY COMPACTED TO PREVENT SETTLEMENT. CALL ENGINEER FOR INSPECTION OF THE ABOVE ITEMS AS REQUIRED. SOILS WHICH ARE NOT TESTED FOR COMPACTION ADEQUACY MAY SETTLE AND LEAD TO SYSTEM FREEZING AND PREMATURE FAILURE. A) HOUSE: SOILS BELOW THE BUILDING SLAB AND BELOW ANY HOUSE FOOTINGS SHALL BE ADEQUATELY COMPACTED AS REQUIRED BY THE HOUSE GEOTECHNICAL ENGINEER OF RECORD; B) SEPTIC TRENCHES AND SEPTIC TANK: SOILS SHOULD BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR AND WITHIN 2% OF OPTIMUM MOISTURE. COMPACT SOILS UNDER PIPE IN TRENCHES AND UNDER SEPTIC TANK AREA WITH SHEEPSFOOT ROLLERS, MULTIPLE-WHEEL PNEUMATIC-TIRED ROLLERS, OR OTHER APPROVED EQUIPMENT. FILL-TYPE SOILS SHALL BE PLACED IN NO MORE THAN 10-INCH LOOSE LIFTS; C) SOIL TREATMENT AREA: AREAS UNDER THE STA SHALL NOT BE COMPACTED; KEEP TIRED AND TRACK-TYPE EQUIPMENT OUT OF THE EXCAVATED BED WHEN THE LAST 12 INCHES IS EXCAVATED. WHEN AN STA CONTAINS MORE THAN 24 INCHES OF SAND, THE SAND SHALL BE CONSOLIDATED BY THE APPLICATION OF CLEAN WATER OVER EVERY 12-INCH SAND LAYER/LIFT. ANY TYPE OF MECHANICAL COMPACTION OF THE SAND & STA IS PROHIBITED.

GENERAL CONSTRUCTION & SITE NOTES

LITTLEHORN ENGINEERING, LLC

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

"PEACE OF MIND THROUGH  
HOLISTIC DESIGN"



PROJECT NO.  
2022-100742

CLIENT  
LANDYNN AND  
MICHELLE  
HACKEBEIL

DATE  
04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

DO

278

ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

PROJECT SUMMARY AND SOILS TESTING

1. THE OWNERS ARE PREPARING TO INSTALL A NEW WASTEWATER DISPOSAL SYSTEM FOR A PROPOSED SINGLE-FAMILY RESIDENCE. A CONVENTIONAL-TYPE SEPTIC SYSTEM CANNOT BE PLACED ON THE PROPERTY AND MEET COUNTY REQUIRED SETBACKS. ACCORDINGLY AN ADVANCED-TREATMENT TYPE SEPTIC SYSTEM IS DESIGNED.
4. THE SURFACE GEOLOGY OF THE LOT IS COMPRISED GENERALLY OF ORGANIC TOPSOIL WITH PINE TREES, NATIVE GRASSES, AND SHRUBS.
3. WE VISITED THE REFERENCED SITE ON OCTOBER 4, 2022 WHEN THE WEATHER WAS CLEAR AND SITE WAS ENTIRELY CLEAR OF SNOW. PROFILE AND SOIL TESTING HOLES WERE EXCAVATED ON THE PROPERTY IN THE AREA OF THE PROPOSED STA AND EXAMINED. THESE HOLES REVEALED THE FOLLOWING:

Soil Profile Hole B (96-inch depth)

HOLE	DEPTHS	DESCRIPTION	SHAPE	GRADE	TYPE	COLOR
ROCK	55%	0 - 4"	GR	WK	2A	Dark brown
SLOPE SHAPE	LV					
NOTES ↓	4 - 96"	Sandy loam with gravel cobble and boulders. Fine roots to 60"	BK	WK	R2/2A	Tan
No standing water. No smearing.						

Soil Profile Hole C (96-inch depth)

HOLE	DEPTHS	DESCRIPTION	SHAPE	GRADE	TYPE	COLOR
ROCK	60%	0 - 4"	GR	WK	2A	Dark brown
SLOPE SHAPE	LL					
NOTES ↓	4 - 96"	Sandy loam with gravel cobble and boulders. Fine roots to 60"	BK	WK	R2/2A	Tan
No standing water. No smearing.						

DESIGN CRITERIA

1. BASED ON THE DATA RECORDED FROM THE REFERENCED SITE, R2/SOIL TYPE 2A WILL BE USED FOR THE DESIGN.
2. A SEASONAL HIGH GROUND WATER TABLE IS POSSIBLE AT 54" BELOW THE SURFACE. (TO BE SPRING VERIFIED)

GENERAL SETBACKS NOTES:

1. STA: PLACE STA AT LEAST (A) 10' FROM ALL PROPERTY LINES, (B) 20' FROM ANY STRUCTURE WITH A FOUNDATION DRAIN; (C) 10' FROM ANY STRUCTURE WITHOUT A FOUNDATION DRAIN; (D) 25' FROM A LAKE, WATER COURSE, IRRIGATION DITCH, STREAM, AND/OR WETLAND WITH ADVANCED TREATMENT (TL3N); (E) 5' FROM SEPTIC TANK; (F) AT LEAST 100 FEET FROM ANY POTABLE SPRING/WELL (WITHOUT JUSTIFICATION), OR SUCTION LINE. FOR TL3N EFFLUENT, A REDUCTION TO 75 FEET IS ALLOWED IF A VARIANCE FROM THE WATER WELL CONSTRUCTION REGULATIONS IS OBTAINED.; (G) 25' FROM A DRY GULCH, CUTBANK, OR SWALE AND; (H) 100' FROM ANY WATER CISTERN UNLESS A VARIANCE IS OBTAINED IN ACCORDANCE WITH DIVISION OF WATER RESOURCES, RULE 18.2.
2. SEPTIC TANK: PLACE SEPTIC TANK AT LEAST (A) 50' FROM ALL WELL HEADS AND SPRINGS, (B) 10' FROM ALL PROPERTY LINES, (C) 5' FROM ANY DWELLING OR OCCUPIED STRUCTURE, (D) 50' FROM A LAKE, WATER COURSE, STREAM, WATER CISTERN, IRRIGATION DITCH AND/OR WETLAND (E) 10' FROM FROM A DRY GULCH OR SWALE.
3. WATER LINES: ALL POTABLE WATER SUPPLY LINES SHALL BE POSITIONED A MINIMUM OF 10' FROM THE SEPTIC TANK AND SEWAGE PIPING AND 25' FROM AN STA.
4. SEWAGE PIPING: ALL SEWAGE PIPING SHALL BE LOCATED AT LEAST 50' FROM A WELL HEAD, LAKE, WATER COURSE, STREAM, WATER CISTERN, IRRIGATION DITCH AND/OR WETLAND, 10' FROM ALL PROPERTY LINES, AND 3 FEET FROM ANY DECK FOOTING OR

OWTS DESIGN FLOWS AND CALCULATIONS

1. THE AVERAGE FLOW AND DESIGN SEWAGE WASTE FLOWS DISCHARGED TO THE SOIL TREATMENT AREA (STA) EVERY DAY, AS REQUIRED BY THE COUNTY AND AS LISTED UNDER THE RESIDENTIAL WASTEWATER DESIGN FLOW TABLE FOR A FOUR (4) BEDROOM SINGLE-FAMILY RESIDENCE WITH A CLOTHES WASHER, ONE (1) AUTOMATIC DISHWASHERS, A GARBAGE DISPOSAL.

AVERAGE FLOW : 4 BEDROOM = 600 GALLONS PER DAY (GPD)  
(TABLE 13-1)

2. DUE TO SOIL TYPE, A PUMP IS REQUIRED BY SUMMIT COUNTY. PER TABLE 15-1, A TANK THAT IS AT LEAST 1500 GALLONS IS REQUIRED. A 1500 GALLON TWO COMPARTMENT TANK (TOTAL TANK CAPACITY IS 1509 GALLONS) SHALL BE INSTALLED ALONG WITH AN ORENCO ADVANTEX AX25RT-3B ADVANCED TREATMENT UNIT (CONTAINING THE DISCHARGE PUMP) DOWNSTREAM OF THE PRIMARY TANK. THE LIQUID VOLUME OF 1500 GALLONS SHALL BE PROVIDED IN THE FIRST TWO COMPARTMENTS OF THE PRIMARY TANK. THIS WILL PROVIDE 2.52 DAYS (1509/600) OF RETENTION FOR THE WASTEWATER PRIOR TO THE PUMPING VAULT.
3. WITH A DESIGN FLOW OF 600 GPD AND 5 DOSES PER DAY, A 120 (600/5) GALLON DOSE IS RECOMMENDED. A 12-INCH DRAW-DOWN EQUATES TO A 121+/- GALLON DOSE. USE AN ORENCO MODEL PF5005 HIGH HEAD EFFLUENT PUMP IN THE TANK. TIMED DOSING IS REQUIRED BY THE COUNTY. THE TANK MANUFACTURER, VALLEY PRECAST, SHALL INSTALL THE PUMP CONTROL PANEL AS REQUIRED BY ADOPTED COUNTY AND STATE REGULATIONS AND PER MANUFACTURER SPECIFICATIONS.
4. FOR AN STA WITH TL3N EFFLUENT TREATMENT (ORENCO ADVANTEX AX25-RT MODE 3B) AT THE SEPTIC TANK AND DISCHARGE INTO A DEEP SECONDARY SAND FILTER AND THEN TO A NATIVE SOIL TYPE R2/ 2A INTERFACE AT THE BOTTOM OF THE SAND FILTER:

APPLICATION FACTORS

BED IS PRESSURE DOSED: 1.0 (TABLE 16-1)

BED IS GRAVEL: 1.0 (TABLE 16-2)

(NO APPLICATION FACTORS ALLOWED FOR R-TYPE SOILS)

TOP OF SAND/BOTTOM OF GRAVEL

- 4.1 RECEIVING SOIL IS SAND VIA TREATMENT LEVEL 3N: FLOW/LTAR FOR SAND = 600 GPD /1.55 LTAR X 1.0 = 388 SQFT.
- 4.2 A GRAVEL BED THAT IS 10 FEET X 40 FEET IS PROPOSED. THIS WILL PROVIDE 400 SQUARE FEET.
- 4.3 SAND LOADING RATE WILL BE 15 GALLONS PER LINEAR FOOT (600 GPD/ 40 FEET.)

BOTTOM OF SAND FILTER UNDER THE STA

- 4.4 FLOW/LTAR FOR INSITU SOIL TYPE 2A, TL3N = 600 GPD /0.9 LTAR X 1.0 = 667 SQFT.
- 4.5 A SAND BED THAT HAS A BASIL AREA OF 15 FEET IN WIDTH AND 45 FEET IN LENGTH SHALL BE INSTALLED. THIS WILL PROVIDE 675 SF.
- 4.6 SOIL LOADING RATE WILL BE 13.3 GALLONS PER LINEAR FOOT (600 GPD/ 45 FEET.)

5. NOTE: THE ABOVE SIZES AND CALCULATIONS ARE FROM THE OWTS REGULATIONS WHICH ARE PRESCRIPTIVE IN THE REQUIRED SAND AND GRAVEL STA SIZES.

SOIL TREATMENT AREA (STA):

1. STRIP ALL TOPSOIL (SEE GRADING & EXCAVATION SPECIFICATIONS ON SHEET D0) IN THE AREA OF THE NEW BED AND EXCAVATE A LEVEL BED WHERE SHOWN IN THE SITE PLAN THAT IS 50 INCHES IN DEPTH (ALONG THE HIGH SIDE) X 15 FEET WIDE X 45 FEET IN LENGTH. BE SURE TO KEEP RUBBER TIERED AND OTHER EXCAVATION-TYPE EQUIPMENT OUT OF THE STA BED WHEN THE LAST 12 INCHES OF THE BED IS EXCAVATED.
2. INSTALL AT LEAST 24 INCHES OF SECONDARY-TYPE CLEAN SAND\*\* \*\* THAT IS FREE OF ORGANIC MATTER, DIRT, DEBRIS, SNOW, ICE, AND ROCKS THAT MEETS THE FOLLOWING ASTM 33 CRITERIA SHALL:
  - 2.1. PASS A SCREEN HAVING FOUR MESHES TO THE INCH;
  - 2.2. HAVE AN EFFECTIVE SIZE BETWEEN 0.15 AND 0.60 MM;
  - 2.3. FINES PASSING A #200 SIEVE SHALL NOT EXCEED 3%;
  - 2.4. HAVE A UNIFORMITY COEFFICIENT OF 7.0 OR LESS.

3. AFTER SAND APPROVAL\* AND SAND INSTALLATION, INSTALL AT LEAST 8-9 INCHES OF CLEAN (DIRT AND SAND FREE) GRADED, COARSE 1" OR 1-1/2" GRAVEL\* IN THE ENTIRE BED TO BE USED AS THE STA CONFORMING TO THE FOLLOWING TABLE:

SIEVE SIZE%	PASSING BY WEIGHT%
2 1/2"	100
3/4 -1"	0-20
4	0-3

\* SUBMIT A MATERIAL ANALYSIS TO LITTLEHORN; IF A SIEVE AND MATERIAL ANALYSIS IS UNAVAILABLE, A SAMPLE OF THE MEDIA MUST BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.  
\*\* THE BASIL AREA OF THE SAND BED SHALL BE KEYED IN BELOW ALL ORGANIC TOPSOIL

- 3.1 WHEN THE GRAVEL IS INSTALLED, IT MUST CREATE A LEVEL AREA FOR THE DISTRIBUTION PIPING.
  - 3.2 ALL GRAVEL MUST BE FREE OF DIRT; AVOID PICKING UP DIRT, DEBRIS (STICKS, ROOTS, LEAVES) AND ANY ICE AND SNOW WITH THE LAST BUCKETS OF GRAVEL PUT ON THE STA.
  - 3.3 FOR SOME ADDED PROTECTION, THE OWNER SHOULD STRONGLY CONSIDER INSTALLING 1 TO 3 INCHES OF ADDITIONAL GRAVEL UNDER THE PIPING.
4. AFTER THE INITIAL GRAVEL LAYER IS INSTALLED, INSTALL LEVEL DISTRIBUTION PIPING FOLLOWED BY 6 MORE INCHES OF GRAVEL (GRAVEL WILL BE AT LEAST 12" THICK; GRAVEL MUST BE AT LEAST 2 INCHES ABOVE THE PIPE AND LEVEL). ALL GRAVEL THAT IS NOT CLEAN WILL BE REJECTED BY THE ENGINEER AND SHALL BE REPLACED.

5. INSTALL APPROVED FILTER (MAX. 2 OZ. PER SQUARE YARD) FABRIC [BOWMAN CONSTRUCTION (303) 696-8960] OVER THE GRAVEL FIELD. THEN INSTALL AT LEAST 18 INCHES OF SOIL COVER AND NO MORE THAN 36 INCHES OF SOIL COVER OVER THE FILTER FABRIC PER COUNTY GUIDELINES TO MITIGATE FREEZING.
6. CREATE A MOUND OVER THE BED TO PREVENT SURFACE WATER PONDING AND FACILITATE RAIN WATER AND SNOW MELT RUN-OFF. WHEN A MOUND IS CREATED, USE 3:1 (3 FEET HORIZONTAL TO 1 FOOT VERTICAL) SIDE SLOPES ON THE MOUND BACKFILL. FINISH GRADING AROUND THE ENTIRE STA AREA MUST MITIGATE WATER AWAY FROM THE STA.
7. RESEED DISTURBED AREAS WITH NATIVE GRASSES AND WILD FLOWERS HAVING A SHALLOW ROOT SYSTEM TO PREVENT EROSION PROBLEMS. SIDE SLOPES OF MOUNDED STA'S SHOULD BE NETTED TO PREVENT EROSION. IF EROSION BEGINS IN ANY PART OF THE DISPOSAL SYSTEM, CONTACT US IMMEDIATELY (REFER TO GENERAL NOTES ON SHEET D0).



#10

Section IV, Item D.

ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

DESIGN & INSTALLATION NOTES

LITTLEHORN ENGINEERING, LLC

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

"PEACE OF MIND THROUGH HOLISTIC DESIGN"



PROJECT NO.  
2022-100742

CLIENT  
LANDYNN AND  
MICHELLE  
HACKEBEIL

DATE  
04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

D1

279

ENGINEERING, LLC.  
ANY REPRODUCTION  
OR COPYING OF THE  
INFORMATION  
CONTAINED  
IN THESE PLANS IS  
CONSIDERED AN  
INFRINGEMENT ON  
COPYRIGHT LAWS.

OVERALL SITE PLAN FOR OWTS

311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB #1, LOT 14

**LITTLEHORN ENGINEERING, LLC**

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

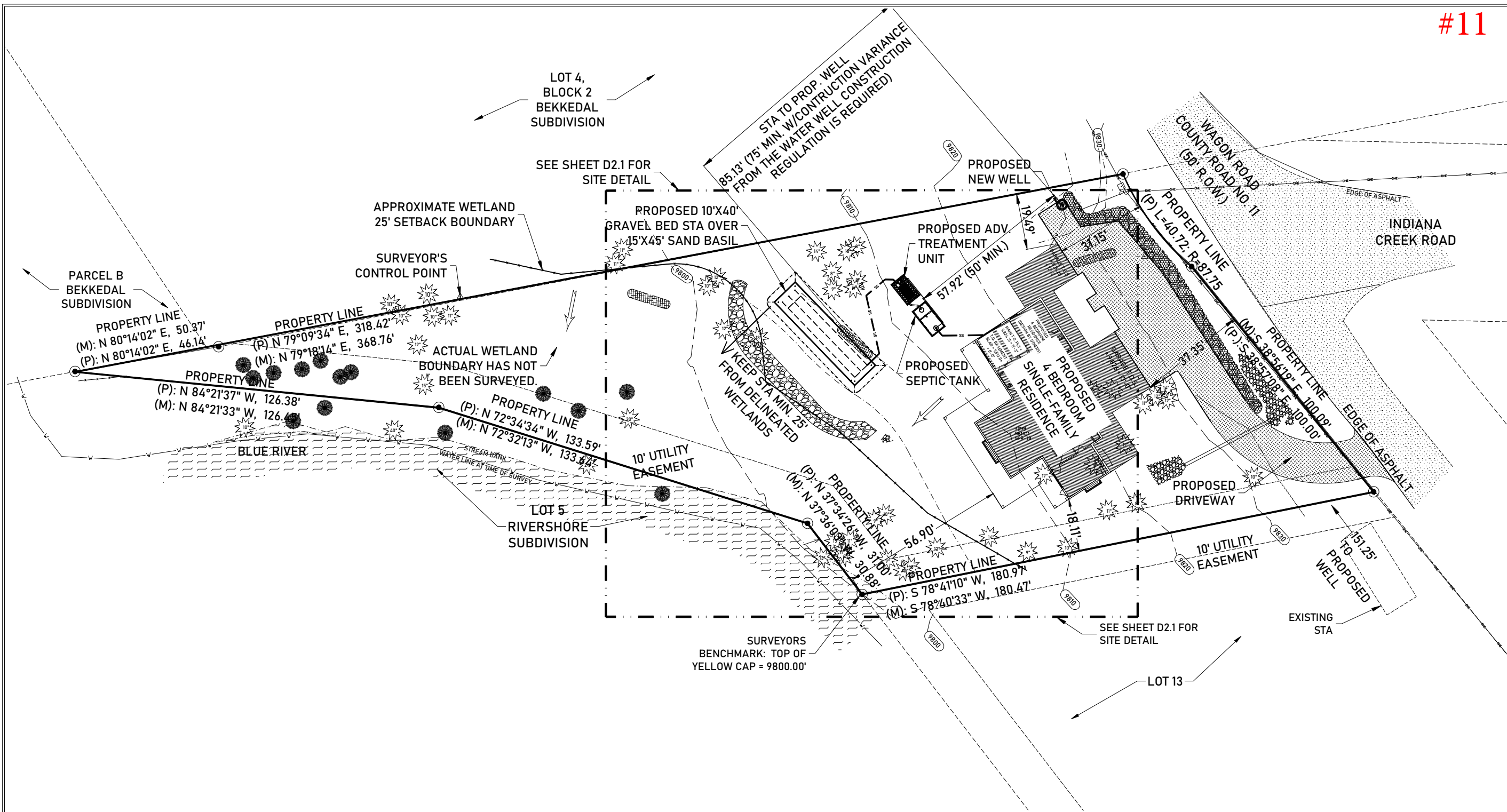
"PEACE OF MIND THROUGH  
HOLISTIC DESIGN"



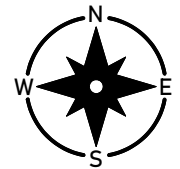
PROJECT NO.  
2022-100742

CLIENT  
LANDYN AND  
MICHELLE  
HACKEBEIL  
DATE  
04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A



PROPOSED OWTS SITE PLAN  
PLOTTED AT 1" = 35'-0" (11x17)



WASTE DISPOSAL DESIGN  
ONLY. THIS IS NOT A  
SURVEY.

- GENERAL NOTES:**
- HOUSE ENGINEERING IS BY OTHERS.
  - DRIVEWAY ENGINEERING IS BY LITTLEHORN, REFER TO SEPERATE CIVIL DWGS.
  - VERIFY ALL BUILDING SETBACKS AND BUILDING DESIGN PRIOR TO PLACING CONCRETE AND PRIOR TO OWTS INSTALLATION. VERIFICATION AND CONSTRUCTION STAKING SHOULD BE PERFORMED BY A LICENSED SURVEYOR.
  - ALL DISTURBED AREAS TO BE RE-VEGETATED WITH NATIVE WEED-FREE GRASS SEED.
  - SHORING AND JOB-SITE SAFETY IS THE RESPONSIBILITY OF OTHER QUALIFIED CONTRACTORS AND PERSONNEL.
  - DRAWING BASED ON SURVEY PERFORMED BY 'SCHMIDT LAND SURVEYING, INC.' ON JUNE 10, 2021.

**LEGEND: SEE SHEET D0 FOR DRAWING ABBREVIATIONS**

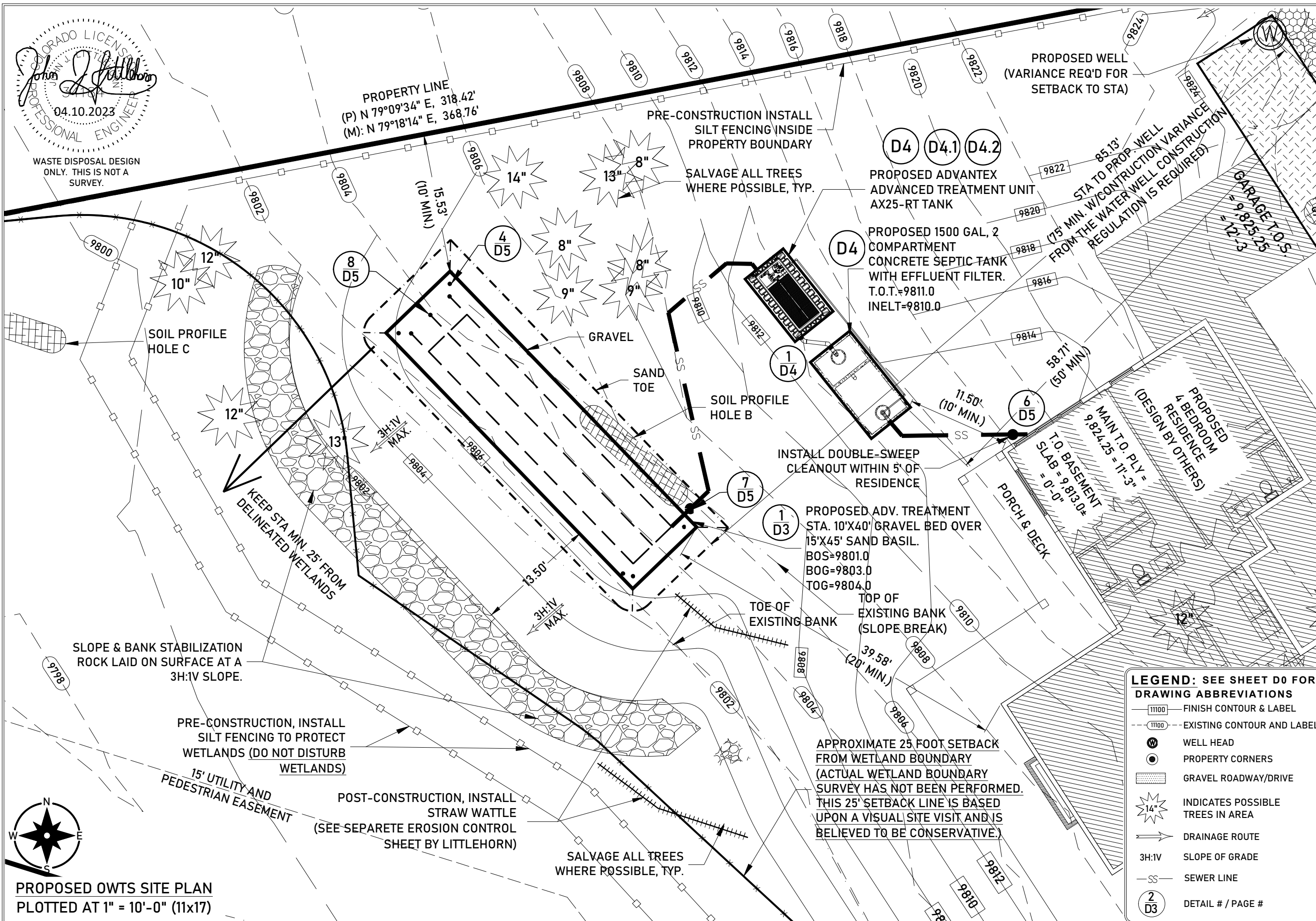
	EXISTING CONTOUR & LABEL
	WELL HEAD
	PROPERTY CORNERS
	GRAVEL ROADWAY/DRIVE
	DRAINAGE ROUTE
	SLOPE OF GRADE
	SEWER LINE
	DETAIL # / PAGE #



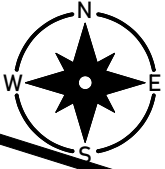


WASTE DISPOSAL DESIGN ONLY. THIS IS NOT A SURVEY.

PROPERTY LINE  
(P) N 79°09'34" E, 318.42'  
(M): N 79°18'14" E, 368.76'



PROPOSED OWTS SITE PLAN  
PLOTTED AT 1" = 10'-0" (11x17)



**LEGEND: SEE SHEET D0 FOR DRAWING ABBREVIATIONS**

—11100—	FINISH CONTOUR & LABEL
- - -11100-	EXISTING CONTOUR AND LABEL
⊙	WELL HEAD
●	PROPERTY CORNERS
▨	GRAVEL ROADWAY/DRIVE
★	INDICATES POSSIBLE TREES IN AREA
→	DRAINAGE ROUTE
3H:1V	SLOPE OF GRADE
—SS—	SEWER LINE
② D3	DETAIL # / PAGE #

Section IV, Item D.

ENGINEERING, LLC.  
ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

#12

SITE PLAN DETAIL FOR OWTS

311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB #1, LOT 14

**LITTLEHORN ENGINEERING, LLC**

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

"PLACE OF MIND THROUGH  
HOLISTIC DESIGN"



PROJECT NO.  
2022-100742

CLIENT  
LANDYN AND MICHELLE HACKEBEIL  
DATE  
04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

D2.1

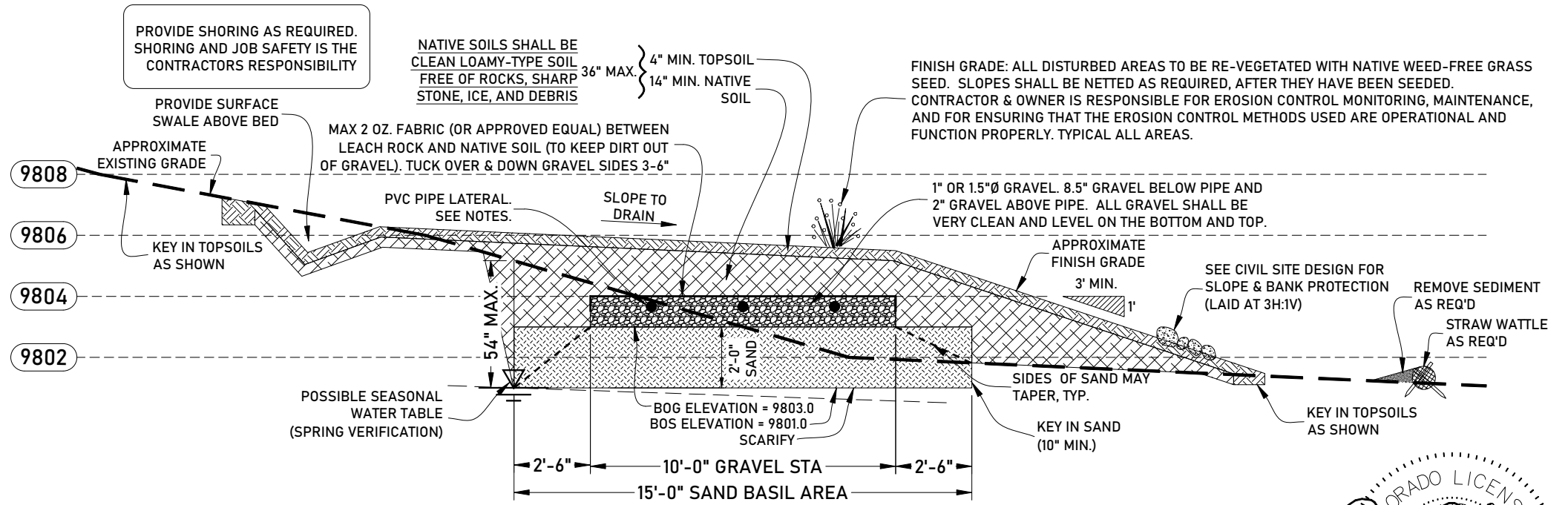
281

BUILDING SEWER AND WASTEWATER PIPING:

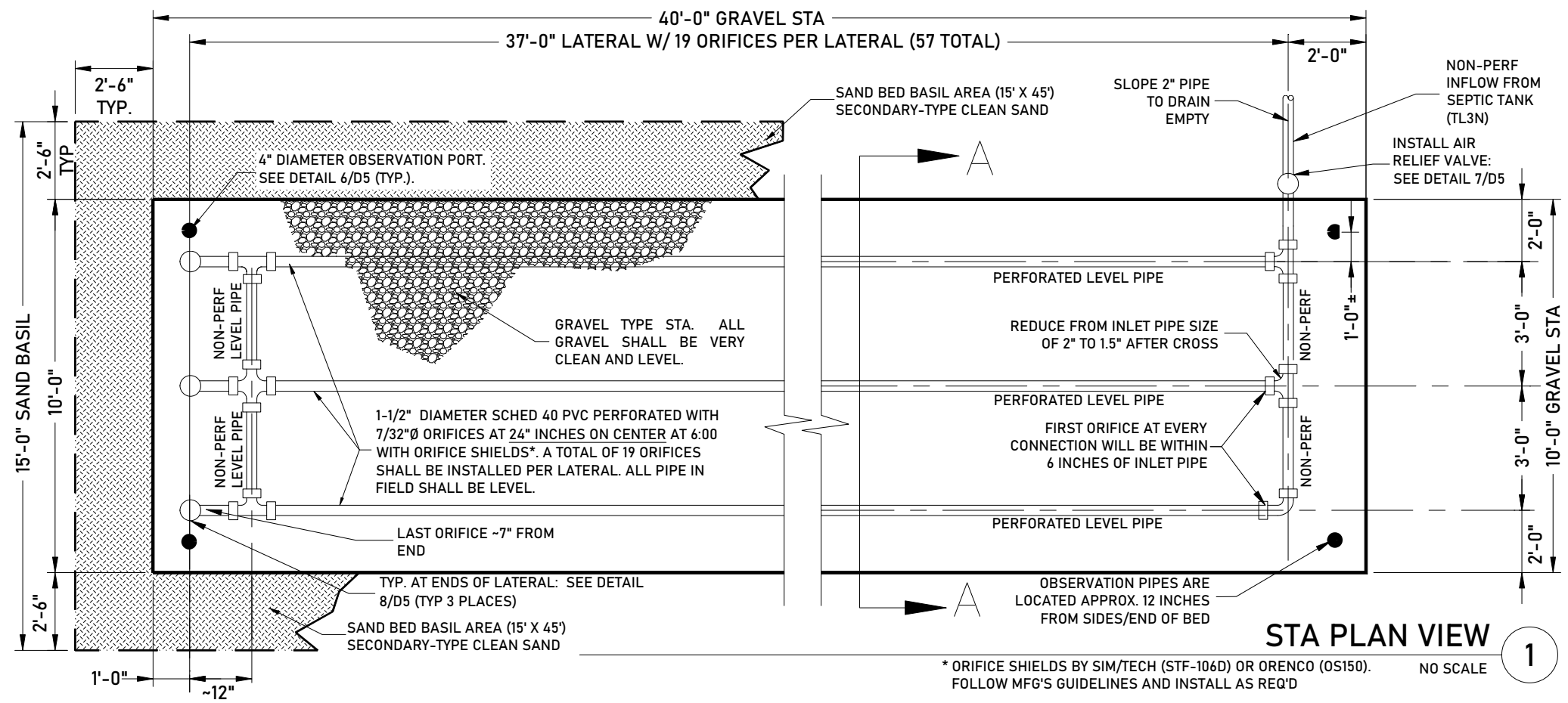
#13

Section IV, Item D.

- ALL PIPING JOINTS MUST BE WATERTIGHT, ROOT PROOF, AND LAID WITH THE FLARED ENDS IN THE PROPER DIRECTION.
- ALL PIPING SHALL BE ADEQUATELY BEDDED WITH SAND, PEA GRAVEL, OR APPROVED EQUAL COMPACTED IN PLACE WITH A VIBRATORY-TYPE COMPACTOR TO PREVENT SETTLEMENT AND HAVE AT LEAST 18 INCHES OF SOIL COVER (i.e. MOUNDING IS PERMITTED WITH COMPACTED STRUCTURAL FILL PER NOTES ON SHEET D5) TO MITIGATE FREEZING; ALL PIPING LAID WITHIN 5 FEET AND BELOW A VEHICULAR TRAFFIC AREA SHALL HAVE A MINIMUM OF 3 FEET OF SOIL COVER UNLESS OTHERWISE APPROVED.
- ALL BENDS IN ANY PART OF THE SEWER LINE GREATER THAN 45° SHALL BE LONG SWEEP ELBOWS.
- ALL PIPING WHICH IS INSTALLED IN A VEHICULAR TRAFFIC AREA SHALL BE MINIMUM SCHEDULE 40 PVC PIPE OR EQUIVALENT. PIPING NOT WITHIN A VEHICULAR TRAFFIC AREA SHALL BE SDR35 OR BETTER U.N.O. IN THE SITE PLAN.
- LAYING PIPE IN TRENCH. EVERY PRECAUTION SHALL BE TAKEN TO PREVENT FOREIGN MATERIAL FROM ENTERING THE PIPE DURING PLACEMENT. DURING LAYING OPERATIONS, NO DEBRIS, TOOLS, CLOTHING OR OTHER MATERIAL SHALL BE PLACED IN THE PIPE. SEE DETAILS AND SHEET D5 FOR BEDDING INSTRUCTIONS.
- PIPING FROM THE RESIDENCE TO THE SEPTIC TANK: USE 4-INCH DIAMETER SCHEDULE 40 PVC PIPE, OR EQUIVALENT, LAID WITH A DOWNWARD SLOPE OF 2% TO 10% (1/4-INCH PER FOOT TO 1.2-INCH PER FOOT) EXCEPT FOR THE LAST 5 FEET WHERE THE SLOPE MUST NOT EXCEED 4%. IT IS BETTER TO LAY THIS PIPE AT A CONSTANT GRADE WITHOUT FLUCTUATIONS. IF A 2% TO 10% PERCENT GRADE CANNOT BE MAINTAINED AND STEP DOWNS ARE REQUIRED, USE 22 OR 45 DEGREE ELBOWS.
- INSTALL 4-INCH CLEAN-OUTS:
  - WITHIN 5 FEET OF THE RESIDENCE (USE A DOUBLE SWEEP CLEAN OUT HERE)
  - AT INTERVALS OF 50 FEET OR LESS BETWEEN THE HOUSE AND TANK AND NO MORE THAN 50 FEET BETWEEN THE TANK AND THE STA. BE SURE TO USE INSULATED PRESSURIZED CAP DETAILS WHERE CLEAN-OUTS ARE INSTALLED ON A PRESSURIZED LINE.
  - WHERE THE LINE BENDS AT ANGLES 45 DEGREES OR MORE.
  - USE TRAFFIC RATED RISERS WHERE REQUIRED.
- FOR PIPING FROM THE SEPTIC TANK TO THE STA: USE 2-INCH DIAMETER SCHEDULE 40 PVC PIPE, LAID WITH A MINIMUM DOWNWARD SLOPE OF 2% TO ALLOW DRAINING OF THE PIPE AT THE END OF THE PUMP CYCLE. ACCORDINGLY, THE PIPE SHALL DRAIN EMPTY AT THE END OF THE PUMP CYCLE.
- FOR PIPING IN THE STA, INSTALL 1.5"Ø PIPING, SCHED. 40 PVC, SET ON A LEVEL GRADE USING A BUILDER'S OR ENGINEER'S LEVEL INSTRUMENT WITH PERFORATIONS AS SHOWN.
- NO PART OF THE SYSTEM CAN BE BACKFILLED PRIOR TO INSPECTION. IF ANY PART OF THE SYSTEM IS BACKFILLED WITHOUT THE APPROVAL OF THE ENGINEER AND THE COUNTY, BACKFILL WILL BE REQUIRED TO BE REMOVED FOR EXAMINATION AND PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE. IT IS THE CONTRACTORS RESPONSIBILITY TO BUILD THE SYSTEM IN COMPLIANCE WITH THE ENGINEERS SPECIFICATIONS, COUNTY REGULATIONS, AND STATE REGULATIONS, AS REQUIRED.
- FOR BACKFILL, ALL PIPE SHALL BE INSTALLED AND BEDDED PROPERLY. THIS WILL REQUIRE MOISTURE TO BE APPLIED TO THE BACKFILL TO OBTAIN PROPER COMPACTION. REFER TO SHEET D5.



2 STA CROSS SECTION A-A  
NO SCALE



1 STA PLAN VIEW  
NO SCALE

\* ORIFICE SHIELDS BY SIM/TECH (STF-106D) OR ORENCO (OS150). FOLLOW MFG'S GUIDELINES AND INSTALL AS REQ'D



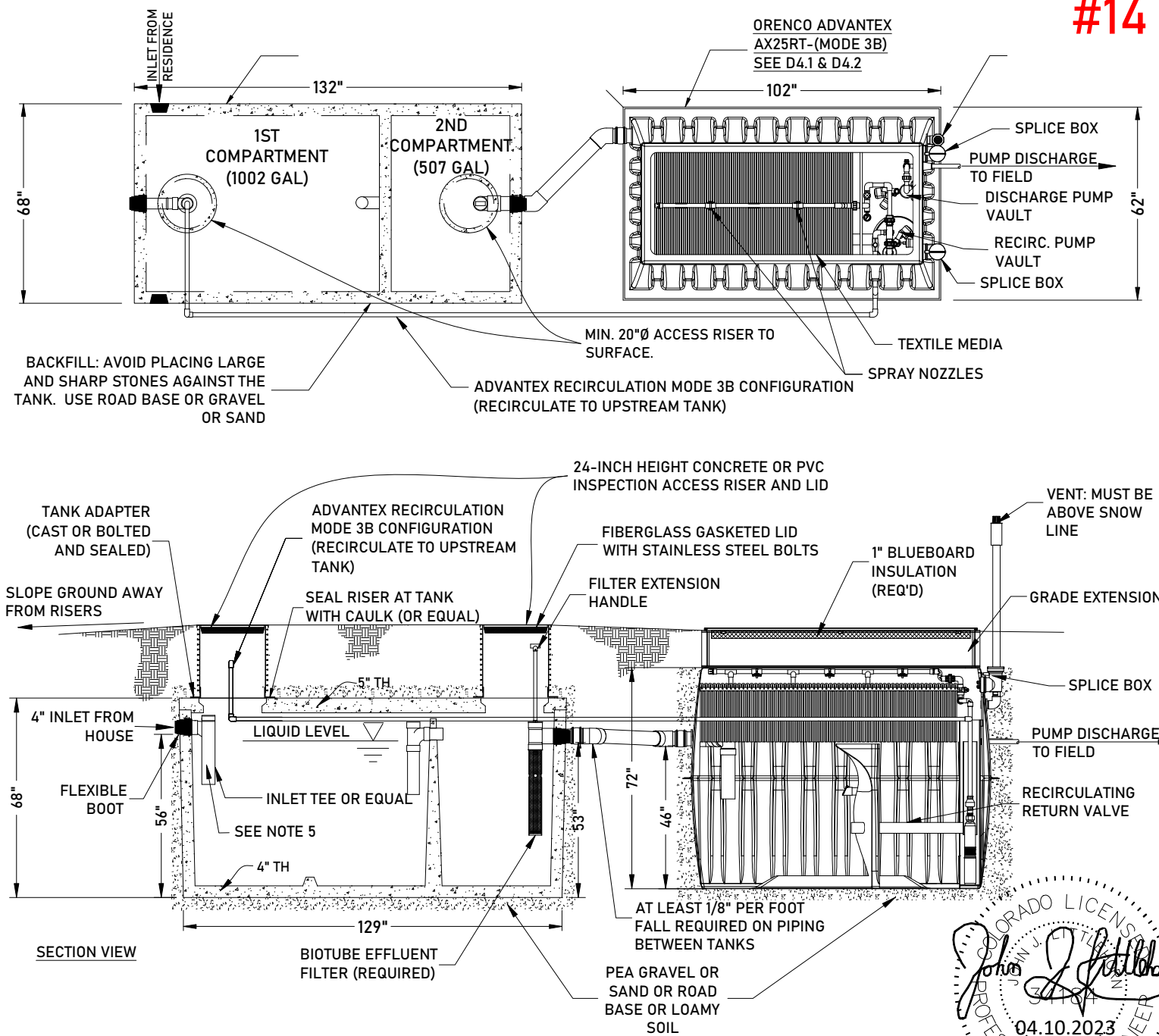
STA DETAILS AND NOTES  
311 WAGON ROAD  
TOWN OF BLUE RIVER, CO  
SPILLWAY SUB #1, LOT 14

**LITTLEHORN ENGINEERING, LLC**  
351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757  
"PEACE OF MIND THROUGH HOLISTIC DESIGN"

PROJECT NO.	2022-100742
CLIENT	LANDYD AND MICHELLE HACKEBEIL
DATE	04.10.2023
REVISION:	
△	N/A
△	N/A
△	N/A

**SEPTIC TANK:**

1. THE PRIMARY SEPTIC TANK SHALL HAVE A MINIMUM HOLDING CAPACITY OF 1500 GALLONS IN THE FIRST TWO COMPARTMENTS (1509 GALLON TANK CAPACITY TOTAL). THIS TANK WILL SERVE AS PRIMARY TREATMENT AND ALL EFFLUENT DISCHARGED WILL ENTER THE ORENCO ADVANTEX AX25RT-(MODE 3B) ADVANCED TREATMENT UNIT.
2. ORENCO ADVANTEX AX25RT-(MODE 3B): EFFLUENT ENTERING THE ADVANCED TREATMENT UNIT (ORENCO ADVANTEX AX25RT) IS RECIRCULATED OVER A SERIES OF TEXTILE MEDIA UTILIZING A SELF-CONTAINED RECIRCULATION PUMP. NATURAL BACTERIA IN THE UNIT BECOME "FIXED" OR ATTACHED TO THE STATIONARY TEXTILE MEDIA. THIS IS WHERE THE ABUNDANT, DIVERSE, SELF-REGULATING POPULATION OF MICROBES CONSISTENTLY METABOLIZE THE RECIRCULATED WASTE. DUE TO THE NATURAL AEROBIC PROCESSES OCCURRING, A PASSIVE VENT IS ATTACHED TO THE UNIT. THE PASSIVE VENT MUST EXTEND ABOVE SNOWLINE. AN ADDITIONAL DISCHARGE PUMP IS USED TO PUMP THE TREATED WATER TO THE SOIL TREATMENT AREA. FOR THE DISCHARGE PUMP, USE AN ORENCO PUMP MODEL PF5005 HIGH HEAD EFFLUENT PUMP, 2-INCH DISCHARGE, 1/2 HP, 115V OR 230V [(719) 395-6764]. FOR THIS SYSTEM, THE PUMP IS DESIGNED FOR A FLOW RATE OF 68.4 GPM WITH A TOTAL DYNAMIC HEAD OF 25.9 FEET.
3. THE ORENCO EFFLUENT DISCHARGE PUMP SHALL BE EQUIPPED WITH A COLD WEATHER DISCHARGE ASSEMBLY WITHOUT CHECK VALVE. THE COLD WEATHER ASSEMBLY WILL ENABLE THE LINE TO EMPTY AT END OF PUMPING CYCLE. INSTALL CONTROL PANEL AND FLOATS FOR DEMAND DOSING PER MANUFACTURER REQUIREMENTS. A REDUNDANT UL LISTED FLOAT SHOULD BE INSTALLED TO ENSURE THE PUMP DOES NOT RUN DRY. THE FLOATS SHOULD BE SET FOR A 12-INCH DRAW DOWN TO DOSE THE FIELD WITH 121 GALLONS (PIPE DRAINS TO FIELD). INSTALL PUMP CONTROL PANEL WITH BOTH AUDIBLE AND VISUAL ALARM SIGNALS WITHIN THE INTERIOR OF THE HOME OR GARAGE IN A DRY AND SECURE PLACE. AN ELAPSED TIME METER AND COUNTER IS REQUIRED. THE INSTALLER SHALL PERFORM ALL ELECTRICAL WIRING IN ORDER TO AVOID THE HAZARDOUS AREA (REF. TO COUNTY REGULATIONS). NON-METALLIC PVC OR THREADED RIGID METAL CONDUIT WILL BE REQUIRED BETWEEN THE JUNCTION BOX WITHIN THE TANK AND THE ELECTRICAL EQUIPMENT OUTSIDE OF THE TANK. CONDUIT SEALS SHALL BE USED WHEN ENTERING OR LEAVING THE ELECTRICAL CONTROL BOX. BE SURE THE HIGH WATER ALARM AND PUMP ARE CONNECTED TO SEPARATE CONTROL BREAKERS
4. THE TANK SHALL BE WATERPROOFED AND INSULATED WITH AT LEAST 2 INCHES OF RIGID FOAM BOARD APPROVED FOR BELOW GROUND USE OR EQUAL. FOAM BOARD SHALL BE INSTALLED ON TOP OF TANK AND ALONG THE SIDES AT LEAST 2 FEET FROM THE TOP. AT LEAST 1" OF RIGID FOAM BOARD WILL BE ATTACHED TO THE INSIDE TOP LID OF THE AX25-RT UNIT. DO NOT PLACE THE BOTTOM OF THE TANK DEEPER THAN 72 INCHES BELOW THE EXISTING SURFACE OR THE TANK MAY FLOAT IN A HIGH WATER TABLE EVENT.
5. THE DISCONNECT/CONTROL EQUIPMENT ENCLOSURE MUST BE WEATHERPROOF.
6. THE EFFLUENT PUMPING SYSTEM AND CONTROL PANEL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ALL STATE AND LOCAL REGULATIONS. THE PUMP SHALL BE PRIMED PROPERLY PRIOR TO START-UP.
7. THE SEPTIC TANK SHALL BE A WATERTIGHT PRECAST CONCRETE (EQUIPPED WITH LIFTING RINGS) VAULT MEETING ASTM C1227-13. THE TANK SHALL HAVE TWO COMPARTMENTS SEPARATED BY INTEGRAL OR SEPARATELY CAST WALLS, KEYED INTO THE SIDES OF THE TANK. THE TANK SHALL CONFORM TO SUMMIT COUNTY REGULATIONS. IN PART THESE REGULATIONS STATE THE FOLLOWING: A) THE FIRST COMPARTMENT SHALL HAVE THE SPECIFIED MINIMUM LIQUID CAPACITY. B) THE LIQUID DEPTH IN THE TANK SHALL BE NO LESS THAN 30". C) FREE VENTILATION BETWEEN COMPARTMENTS SHALL BE PROVIDED IMMEDIATELY BELOW THE VAULT CEILING. D) AN INLET TEE OR Baffle SHALL BE PROVIDED AND SHALL EXTEND ABOVE THE SURFACE OF THE LIQUID AT LEAST 5" AND SHALL EXTEND A MINIMUM OF 8" BELOW THE LIQUID SURFACE. E) Baffle SYSTEMS SHALL BE PROVIDED TO DISSIPATE ENERGY AND PREVENT SHORT CIRCUITING FLOW THROUGH THE COMPARTMENTS (35 TO 40% OF THE LIQUID DEPTH). F) THE INLET INVERT SHALL BE AT LEAST 2" ABOVE THE OUTLET INVERT. J) THE Baffles SHALL EXTEND TO 14" BELOW THE OUTLET INVERT. I) THE SEPTIC TANK AND EQUIPMENT AND MATERIALS WITHIN THE TANK SHALL BE MANUFACTURED FROM DURABLE AND CHEMICALLY RESISTANT MATERIALS WHICH ARE UNAFFECTED BY GASES AND FLUIDS ASSOCIATED WITH DOMESTIC SEWAGE.
8. ACCESS RISERS: ACCESS OPENINGS WITH A MINIMUM DIMENSION OF 20 INCHES SHALL BE PROVIDED OVER EACH COMPARTMENT WITH THE EXCEPTION OF THE DOSING COMPARTMENT, WHERE A 24"Ø RISER IS REQUIRED. CONCRETE, PVC OR FIBERGLASS RISERS WITH SECURE CLOSING MECHANISMS OR OF SUFFICIENT WEIGHT SHALL BE PROVIDED OVER EACH ACCESS OPENING AS NECESSARY TO PROVIDE ACCESS FROM FINISH GRADE. RISERS SHALL BE ATTACHED TO THE TANKS SUCH THAT A WATERTIGHT SEAL IS PROVIDED; MECHANICAL FASTENERS ARE RECOMMENDED TO AUGMENT THE SAFETY (& SEAL) OF POSITIVE CLOSURE OF THE LID. TO MITIGATE FREEZING, AT LEAST 18-INCH TALL RISERS SHALL BE USED. TANK HEATERS ARE A MUST IN PART-TIME SYSTEMS & WHEN THE TANK IS MORE THAN 50 FEET FROM THE HOUSE. USE TRAFFIC RATED LIDS WHERE REQUIRED.
9. TANK SUB-GRADE/WATERPROOFING: THE TANK SHALL BE INSTALLED ON A LEVEL SUBGRADE OF UNDISTURBED SOIL OR WELL COMPACTED BACKFILL CAPABLE OF SUPPORTING A 2000 PSF LOAD (TESTING IS HIGHLY RECOMMENDED IF YOU'RE NOT SURE). THE TANK SHALL BE BACKFILLED WITH SUITABLE GRANULAR SOIL (FREE OF CLAY, ORGANIC MATTER, COBBLES, SNOW, OR ICE), SAND, PEA GRAVEL, OR SQUEEGEE. IN AREAS OF HIGH GROUND WATER, THE TANK SHOULD BE PROTECTED BY APPLYING A HEAVY CEMENT-BASE WATERPROOF COATING IN COMPLIANCE WITH TANK MANUFACTURER.
10. DRAINAGE: ROOF DRAINS, FOUNDATION DRAINS, AREA DRAINS, AND SPRINKLER HEADS MUST BE DIRECTED AWAY FROM THE SEPTIC TANK. MAKE SURE ALL AREAS AROUND THE TANK ARE GRADED TO MITIGATE GROUND WATER AWAY FROM THE TANK LIDS TO PREVENT WATER INFILTRATION INTO THE TANK.
11. PIPING: FOR THE INFLOW LINE, SET THE TANK AT A DEPTH THAT PERMITS GRAVITY INFLOW AS SPECIFIED. ALL PIPING SHALL BE ADEQUATELY SUPPORTED ON COMPACTED SELECT BACKFILL TO PREVENT FAILURE FROM DIFFERENTIAL SETTLEMENT. BACKFILLING AROUND THE SEPTIC TANK SHALL BE ACCOMPLISHED IN A MANNER THAT PREVENTS SETTLEMENT AND AVOIDS UNDUE STRAIN ON THE PIPES ENTERING AND EXITING THE SEPTIC TANK.
12. GENERAL: NO STRUCTURE SHALL BE CONSTRUCTED OVER ANY PORTION OF THE SEPTIC TANK. FOR INSTALLATION IN TRAFFIC AREAS, THE TANK SHALL BE DESIGNED TO WITHSTAND AN AASHTO H20-44 WHEEL LOAD + THE EQUIVALENT SOIL WEIGHT ON THE TANK + A 30 PSF FLUID UNIT SIDE WALL PRESSURE. ALL TANKS MUST BE WATERTIGHT.



**MANUFACTURER NOTES\*:**

- ORENCO ADVANTEX AX25RT INSTALLATION TO BE PERFORMED BY AN ADVANTEX TRAINED INSTALLER ONLY.
- ORENCO ADVANTEX AX25RT START-UP AND SERVICE TO BE PERFORMED BY AN ADVANTEX TRAINED SERVICE PROVIDER ONLY.
- TANK TO BE SET ON 5" MIN. SAND BED OR PEA GRAVEL
- TANK TO BE BACKFILLED UNIFORMLY ON ALL SIDES IN LIFTS LESS THAN 24" AND MECHANICALLY COMPACTED
- EXCAVATION SHOULD BE DEWATERED
- FILL TANK WITH CLEAN WATER PRIOR TO BEING PUT IN SERVICE WHEN WATER TABLE IS WITHIN 24" OF TANK TOP.

\*SEE INSTALLATION GUIDE ON WEBSITE

PRIMARY TANK	TOTAL CAPACITY	APPROXIMATE WEIGHTS		
	1509 GALLONS	TANK 11,180 LBS	TOTAL 14,780 LBS	LID 3,600 LBS

**1 SEPTIC TANK DETAILS**  
NO SCALE FOR THIS PROJECT, A VALLEY PRECAST TANK IS SPECIFIED (719-395-6764). IF A DIFFERENT TANK MFG IS CHOSEN BY THE CONTRACTOR, SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

**#14**

Section IV, Item D.

ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

**LITTLEHORN ENGINEERING, LLC**  
 351 US HWY 285, #201  
 FAIRPLAY, CO 80440  
 FAIRPLAY OFFICE 719.836.7120  
 SILVER CLIFF OFFICE 719.783.3757

"PEACE OF MIND THROUGH HOLISTIC DESIGN"

PROFESSIONAL ENGINEER  
 JOHN J. LITTLEHORN  
 04.10.2023

GENERAL OWTS DESIGN ONLY. NO TANK STRUCTURALS.

PROJECT NO. 2022-100742  
 CLIENT LANDYNN AND MICHELLE HACKEBEIL  
 DATE 04.10.2023  
 REVISION:  
 △ N/A  
 △ N/A  
 △ N/A

**D4** 283

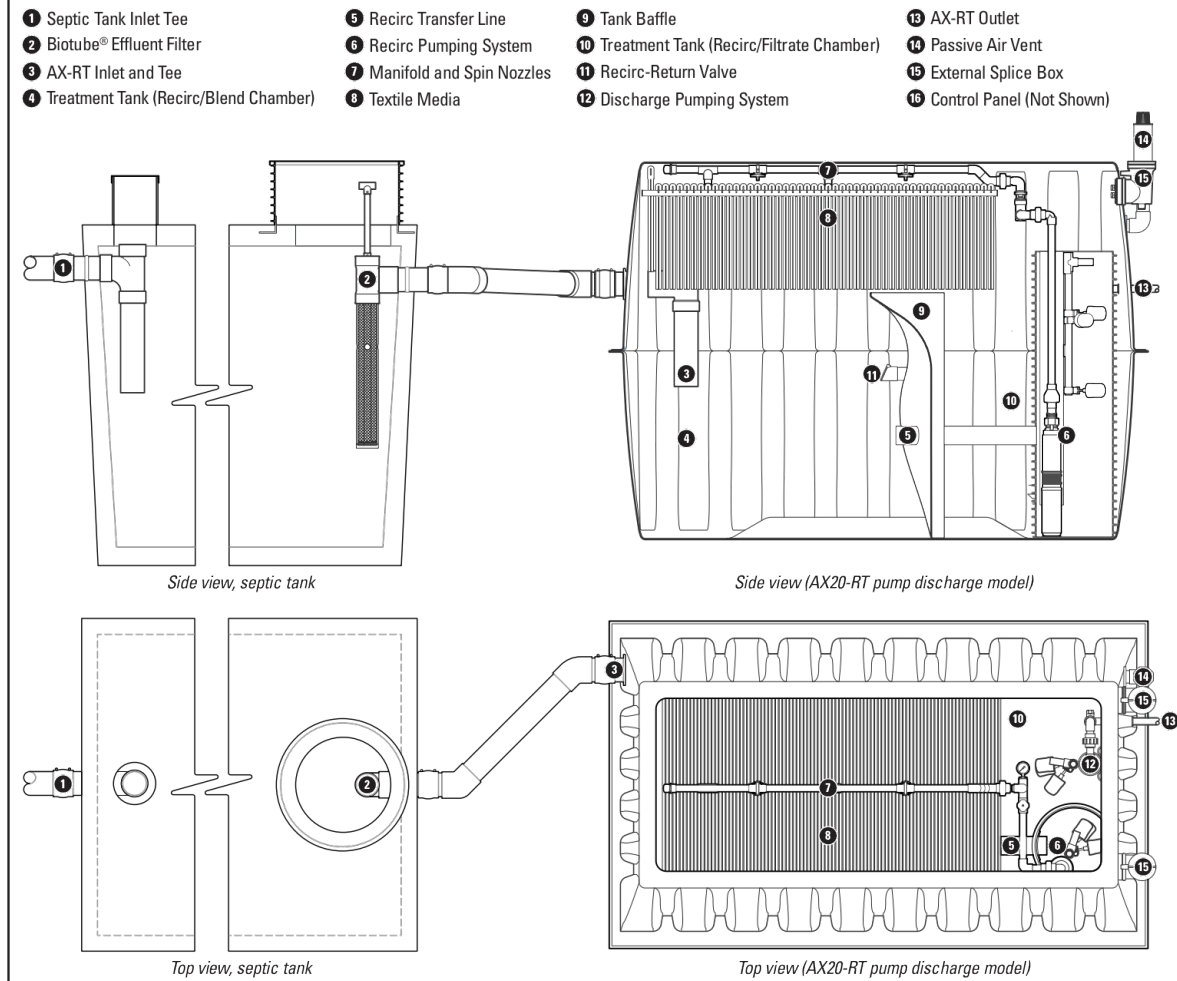
## Introduction: AdvanTex® AX-RT Treatment Unit Operation

This supplement contains information to help you successfully operate and maintain an AdvanTex® AX-RT Treatment System. The AX-RT operates similarly to the AdvanTex AX20 Treatment System, but there are some differences to be aware of when performing O&M activities. A big difference is that the AX-RT consists of a single, self-contained module for recirculation, treatment, and dosing, instead of separate units.

Another difference is that the AX-RT has no Recirculating Splitter Valve (RSV). Effluent percolates down through the textile media and is split — by means of a tank baffle — between the recirc/blend chamber and the recirc/filtrate chambers of the AX-RT recirculating treatment tank.

Raw sewage enters the septic tank through its inlet tee. In the septic tank, the raw sewage separates into three distinct zones — a scum layer, a sludge layer, and a clear zone. Effluent from the clear layer passes through a Biotube® effluent filter and is discharged by gravity to the recirc/blend chamber of the AX-RT unit. The effluent then flows through the recirc transfer line to the recirc pumping system. The recirc pumping system pumps effluent from the recirc/blend chamber through the manifold to the spray nozzles in the top of the unit. Effluent percolates down through the textile media and is divided — by means of a tank baffle — between the recirc/blend chamber and the recirc/filtrate chamber inside of the unit.

**Figure 1. AdvanTex® AX-RT Functional Areas and Components (AX20-RT Shown):**



Copyright Orenco Systems®, Inc. Property of Orenco Systems®, Inc. Do not reproduce or distribute without written authorization from Orenco: 800-348-9843. • AIM-OM-ATX-SUP-1, Rev. 4.0, 01/18

1

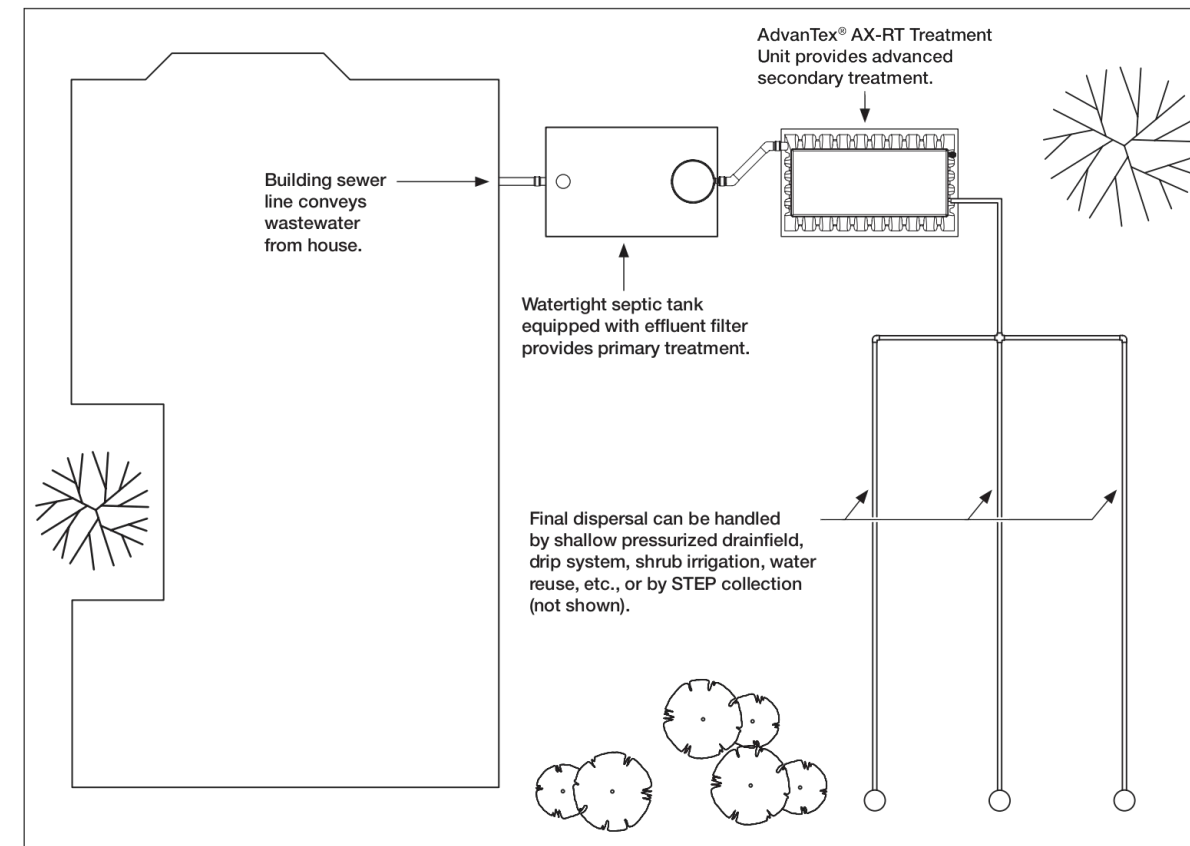
THIS DRAWING IS PROVIDED FOR ILLUSTRATION AND ADVANTEX UNIT SPECIFICATIONS ONLY. REFER TO SHEET D4 FOR THE FULL CONFIGURATION WITH PRIMARY TANK. ORENCO ADVANTEX AX25RT INSTALLATION TO BE PERFORMED BY AN ADVANTEX TRAINED INSTALLER ONLY. ALL SERVICE AND MAINTENCE ON ORENCO TO BE PERFORMED BY AN ADVANTEX TRAINED SERVICE PROVIDER ONLY.

## Introduction to AdvanTex AX-RT, continued

The recirc pump's operation is controlled by a timer in the control panel. It allows the pump to dose the textile media for short periods (usually 0.8 to 1.0 minutes), typically 72 times a day. These frequent "micro-doses," which optimize the treatment process, occur 24 hours a day, to maintain the proper biological environment.

Treated effluent can be discharged to the drainfield by means of a discharge pump system or by gravity discharge. The "High Level Alarm" and "ON" floats for the discharge pump are set at the factory and are non-adjustable. Dose volume for the discharge pump system is determined by adjustments to the "OFF" float. AX-RT units with gravity discharge simply discharge when the level of treated effluent in the recirc/filtrate chamber is at the level of the discharge outlet. For units equipped with UV disinfection, the effluent passes through the UV treatment unit before being pumped or flowing by gravity to final dispersal.

## Typical Site Plan for an AdvanTex AX-RT Treatment Unit



AIM-OM-ATX-SUP-1, Rev. 4.0, 01/18 • Copyright Orenco Systems®, Inc. Property of Orenco Systems®, Inc. Do not reproduce or distribute without written authorization from Orenco: 800-348-9843.

2

ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

ORENCO ADVANTEX AX-RT MFG. DRAWING 1 OF 2

**LITTLEHORN ENGINEERING, LLC**

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

"PEACE OF MIND THROUGH HOLISTIC DESIGN"



PROJECT NO.  
2022-100742

CLIENT  
LANDYD AND MICHELLE HACKEBEIL

DATE  
04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

## AdvanTex O&M Manual: Changes Specific to the AX-RT

The following shows AX-RT-specific information not found in Parts 1 and 2 of the *AdvanTex® O&M Manual* that are relevant to operating and maintaining the AdvanTex AX-RT Treatment Unit. Use the general information found in the *O&M Manual* along with this information to start up and properly service AX-RT systems.

### Start-Up Checklist Changes Primary Treatment

**Note:** All pumping equipment is contained in the AX-RT unit. Substitute the checklist item below for the checklist items in the "Process Tank Pumping Equipment" and "Process Tank Pumping System" sections.

#### Septic Tank

- Biotube® filter installed correctly on the septic tank outlet.

**Note:** There is no recirculating splitter valve (RSV) or separate discharge basin in an AX-RT system. Floats in the recirculation pump system are set at the factory for correct performance. Do not adjust the floats in the recirculation pump system. Substitute the checklist items below for the checklist items in the "Secondary Treatment" section.

#### Secondary Treatment AX-RT Unit

- AX-RT unit installed level.
- All piping properly covered and compacted.

#### Ventilation System

- Passive air vent on AX-RT unit properly installed.

#### Recirculation Pump System

- Floats operate properly.
- Pump plumbing connected correctly to manifold.

#### Recirculation Pump System Operation

- Pump operates in "Manual."
- Pump operates in "Automatic."
- Pump run amps: \_\_\_\_\_
- Pump rest volts: \_\_\_\_\_ run volts: \_\_\_\_\_

#### AX-RT Filter Operation

- Complete, square spray square pattern with full coverage of sheets

#### AX-RT Discharge Unit (pump discharge only)

- Floats operate properly.
- Pump discharge plumbing connected correctly.
- "Off" float adjusted for correct discharge dose to dispersal.

### Setting Timers for New Systems

Initial timer settings for an AX-RT should be established based upon expected average daily flows and a recirculation ratio of 4:1 (filter recirculation ratio). Table 1 provides recommended timer settings. If flows vary significantly from expected flows, timer settings should be adjusted accordingly. Contact Orenco for more information.

**Table 1. Recommended Timer Settings for New Systems**

Models AX20-RT, AX20-RTUV	Number of Residents	Time On Setting Min (Sec)	Avg Daily Flow, gpd (L/day)	Time Off Setting Min
	2	0.8 (48)	100 (379)	36.1
	3	0.8 (48)	150 (568)	23.8
	4	0.8 (48)	200 (757)	17.6
	5	0.8 (48)	250 (946)	13.9
	6	0.8 (48)	300 (1136)	11.5
	7	0.8 (48)	350 (1325)	9.7
	8	0.8 (48)	400 (1514)	8.4
Model AX25-RT	Number of Residents	Time On Setting Min (Sec)	Avg Daily Flow, gpd (L/day)	Time Off Setting Min
	2	0.7 (42)	100 (379)	47.7
	3	0.7 (42)	150 (568)	31.6
	4	0.7 (42)	200 (757)	23.5
	5	0.7 (42)	250 (946)	18.7
	6	0.7 (42)	300 (1136)	15.4
	7	0.7 (42)	350 (1325)	13.1
	8	0.7 (42)	400 (1514)	11.4
	9	0.7 (42)	450 (1703)	10.1
	10	0.7 (42)	500 (1893)	9.0
	11	0.7 (42)	550 (2082)	8.1
	12	0.7 (42)	600 (2271)	7.4

• Assumes water usage of 50 gal. (190 L) per person per day and a return recirculation ratio of 3:1. (Filter recirculation ratio of 4:1.)

• Override OFF cycle time is set at one-half of the OFF cycle time. Override ON cycle time is set the same as the ON cycle time.

### Setting Discharge Dose Volume

The AX-RT is pre-set at the factory for a discharge dose volume of 43 gal/dose (162 L/dose). If necessary, use the discharge pump "Off" float to make adjustments to the discharge dose volume. Each 1-in. (25 mm) increase or decrease in "Off" float height is equal to approximately 8.7 gal. (33 L) change in dose volume.

Do not adjust the settings of the "High-Level Alarm" and "On" floats.

**Table 2. Dose Volume Information**

Pump gal./min (L/sec)	10 (0.6)	20 (1.3)	30 (1.9)	50 (3.2)
Factory float setting*, in. (mm)	30 (762)	30 (762)	30 (762)	30 (762)
Lowest "Off" setting, in. (mm)	16 (406)	18 (457)	20 (508)	24 (610)
Max dose volume, gal. (L)	156 (591)	139 (526)	123 (466)	90 (341)

\*Settings are measured from the bottom of the discharge side of the AX-RT unit.

### Perform Field Sampling

When you arrive at the site, remove the lid from the AX-RT and take your sample from the recirc/filtrate side of the AX-RT unit before doing anything else, so that the sample won't be contaminated by material that you stir up while working.

When you collect effluent samples, be careful not to touch the textile sheets, unit walls, or other components. Disturbing the sheets, walls, or other components could contaminate the samples. Also, be sure to thoroughly clean and dry your sampling device between uses to avoid cross-contamination.

### Measure Sludge and Scum

Measure sludge and scum in the septic tank AND on the recirc/blend side of the AX-RT unit. Follow the instructions for pumpouts found in the *AdvanTex O&M Manual* for the process tank.

**NOTE:** A light buildup of solids is expected to form in the AX-RT unit over time. After the second year that the system is in use, we recommend measuring solids accumulation in the AX-RT whenever you perform regularly scheduled maintenance.

If more than trace amounts of scum or solids are found in the recirc/blend side of the AX-RT unit, check the recirc/filtrate side of the unit for solids and scum, schedule a pumpout, and begin troubleshooting the system. The Advanced Service Tips and Troubleshooting Guide can help you determine the cause. You may need to change timer settings or discuss household habits with the system users.

### Notes

THIS DRAWING IS PROVIDED FOR ILLUSTRATION AND ADVANTEX UNIT SPECIFICATIONS ONLY. REFER TO SHEET D4 FOR THE FULL CONFIGURATION WITH PRIMARY TANK. ORENCO ADVANTEX AX25RT INSTALLATION TO BE PERFORMED BY AN ADVANTEX TRAINED INSTALLER ONLY. ALL SERVICE AND MAINTENANCE ON ORENCO TO BE PERFORMED BY AN ADVANTEX TRAINED SERVICE PROVIDER ONLY.

ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

ORENCO ADVANTEX AX-RT MFG. DRAWING 2 OF 2

LITTLEHORN ENGINEERING, LLC

"PEACE OF MIND THROUGH HOLISTIC DESIGN"



PROJECT NO.  
2022-100742

CLIENT  
LANDYN AND  
MICHELLE  
HACKEBEIL

DATE  
04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

D4.2

ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

OWTS DETAILS & EXCAVATION NOTES

**LITTLEHORN ENGINEERING, LLC**

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

"PEACE OF MIND THROUGH HOLISTIC DESIGN"



PROJECT NO. 2022-100742

CLIENT LANDYNN AND MICHELLE HACKEBEIL

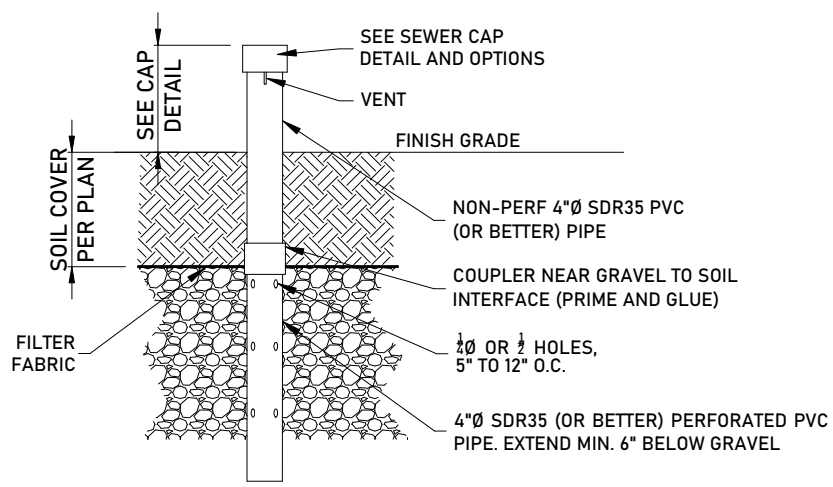
DATE 04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

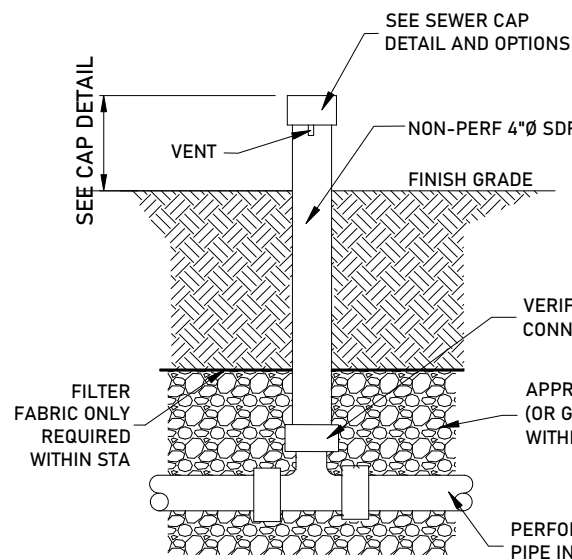
D5

**LEGEND:**

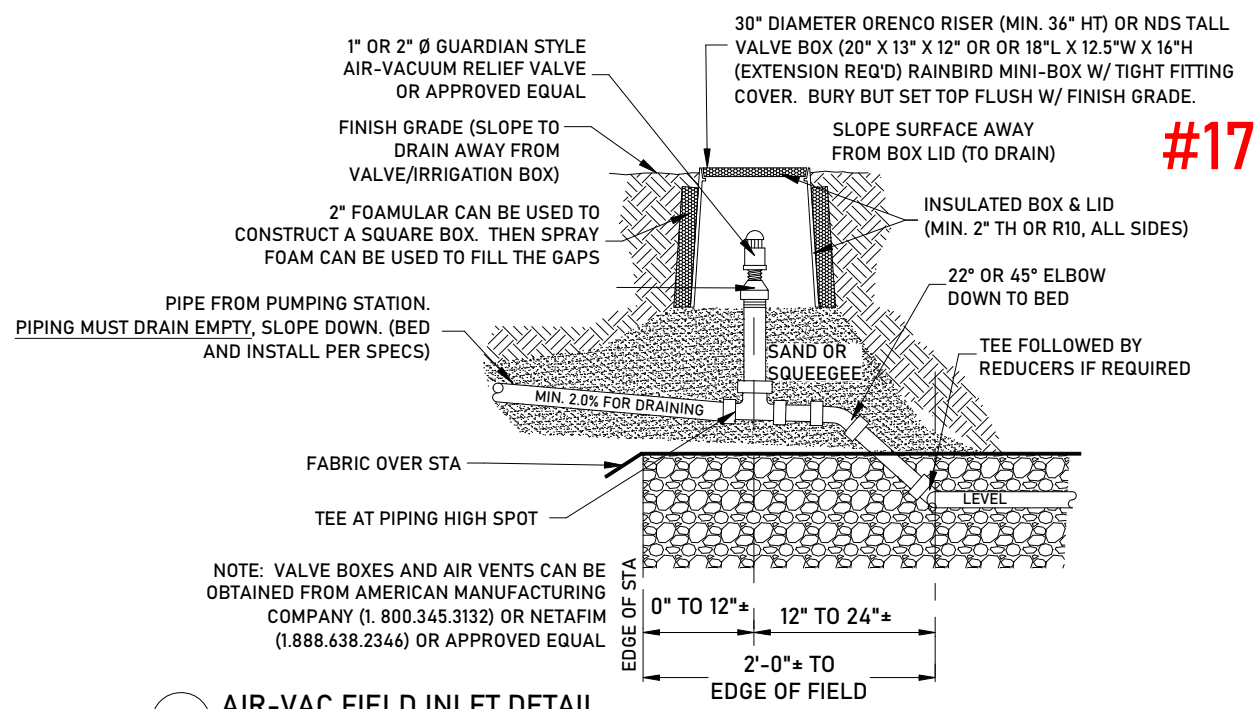
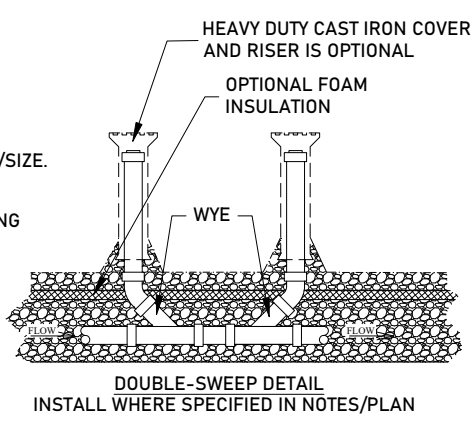
- CLEAN GRAVEL
- APPROVED BEDDING
- COMPACTED TOPSOIL
- INSULATION



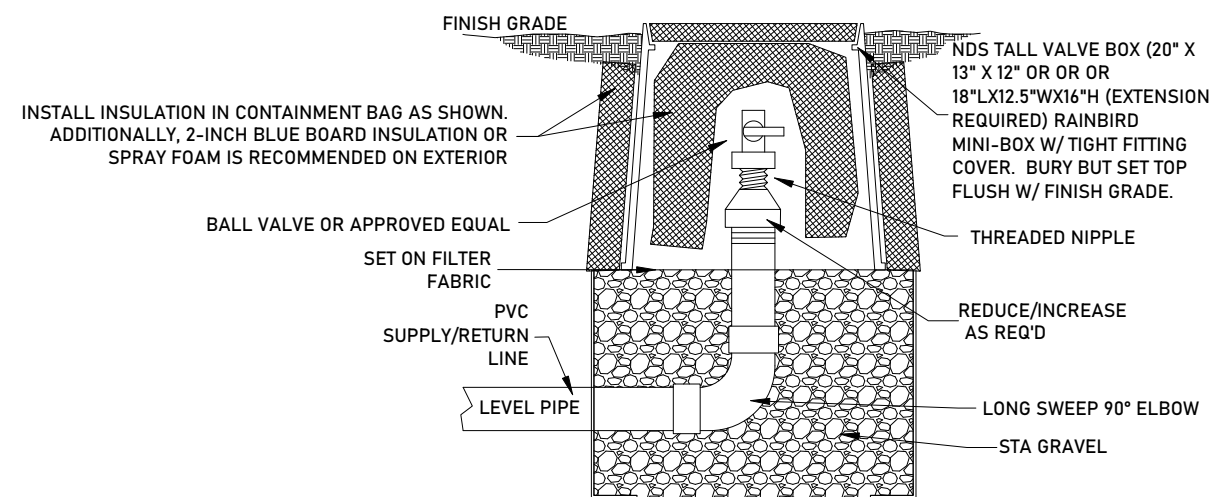
**4 4" STA OBSERVATION/VENT DETAIL**  
NO SCALE



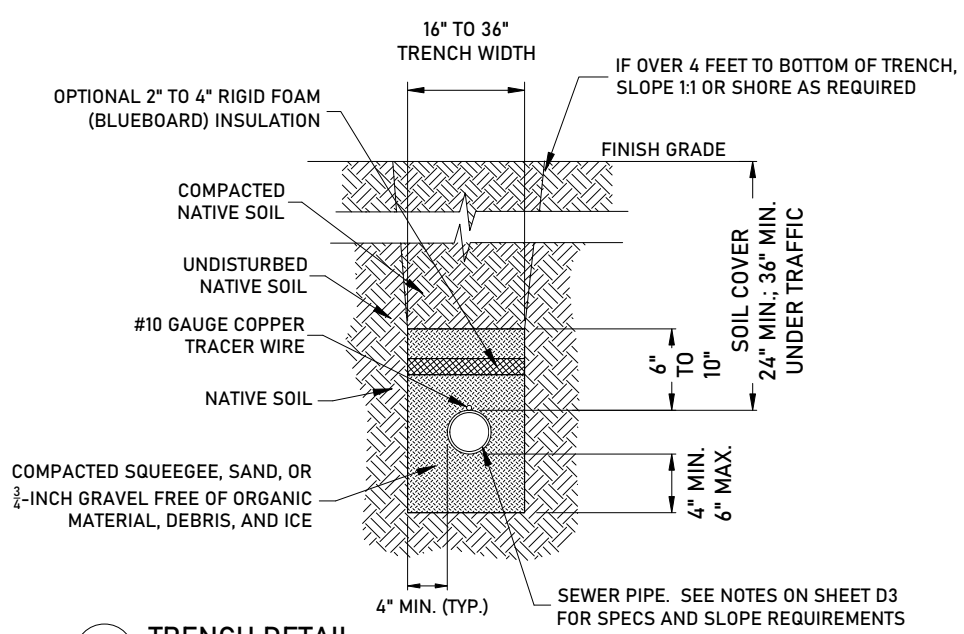
**5 4" OBSERVATION/VENT PIPE DETAIL**  
NO SCALE



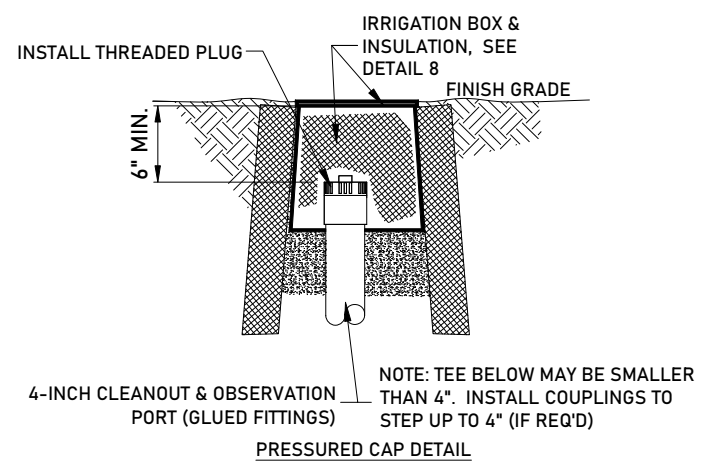
**7 AIR-VAC FIELD INLET DETAIL**  
NO SCALE



**8 FLUSHING VALVE ASSEMBLY IN BED**  
NO SCALE

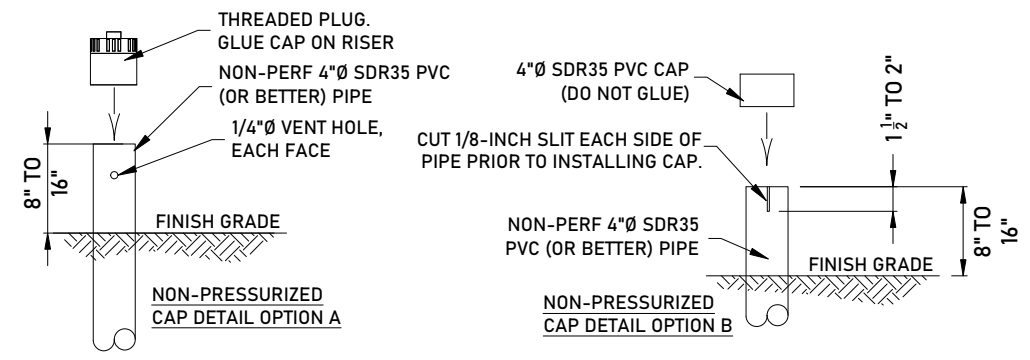


**6 TRENCH DETAIL**  
NO SCALE



**9 SEWER CAP DETAIL & OPTIONS**  
NO SCALE

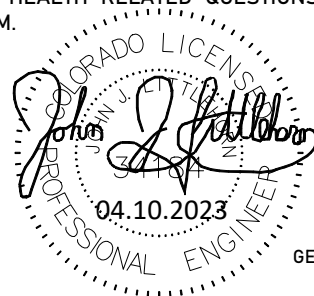
WHEN PORT IS WITHIN PRESSURIZED PIPE SYSTEM, USE PRESSURIZED CAP DETAIL.



OPTION A AND B NOT PERMITTED FOR PRESSURIZED SYSTEMS

**IMPORTANT**  
**SAVE**  
**TO BE GIVEN TO PROPERTY TENANTS**  
**(POST IN MECH. ROOM)**

1. AN OPERATION AND MAINTENANCE CONTRACT IS REQUIRED FOR ALL ADVANCED TREATMENT SYSTEMS. THIS ENTAILS HAVING A QUALIFIED SERVICE PROVIDER (NAWT O&M 2 CERTIFIED OR EQUAL) MAINTAIN AND INSPECT THE SYSTEM ROUTINELY. IN GENERAL, MAINTENANCE SHALL BE PERFORMED EVERY SIX (6) MONTHS FOR HIGHER LEVEL TREATMENT SYSTEMS. THE COUNTY MAY AMEND OPERATION PERMITS TO REDUCE OR INCREASE THE MAINTENANCE FREQUENCY BASED ON THE INFORMATION CONTAINED IN THE REQUIRED INSPECTION REPORTS.
2. SYSTEMS WHICH ARE ABUSED BY IMPROPER USE AND NOT PROPERLY MAINTAINED WILL FAIL AND CAN FREEZE DURING THE COLD SEASON.
3. IT IS THE PROPERTY OWNER'S RESPONSIBILITY TO USE THE SYSTEM CORRECTLY, OBSERVE THE OPERATION OF THE SYSTEM, AND TO PERFORM REGULAR MINOR MAINTENANCE TO ALLOW FOR PROPER, LONG-TERM FUNCTIONING OF THE DISPOSAL SYSTEM.
4. HAVE YOUR SYSTEM INSPECTED BY A QUALIFIED INSPECTOR OR CONTRACTOR AT LEAST ONCE EVERY TWO YEARS.
5. AN OPERATION AND MAINTENANCE CONTRACT WITH AN ON-SITE WASTEWATER COMPANY IS REQUIRED TO ENSURE PROPER OPERATION AND LONGEVITY.
6. DO NOT DRIVE OR PARK OVER YOUR SEPTIC TANK OR ANY PART OF YOUR ABSORPTION FIELD. THIS CAN COMPACT THE SOIL AND CRUSH YOUR SYSTEM RENDERING IT INOPERABLE. TRAFFIC BARRIERS SHOULD BE INSTALLED AROUND THE PERIMETER OF THE ABSORPTION FIELD AND SEPTIC TANK.
7. PRACTICE WATER CONSERVATION.
8. REPAIR DRIPPING FAUCETS AND LEAKING TOILETS AND USE WATER-SAVING FEATURES IN SHOWER HEADS, FAUCETS, AND TOILETS. LARGE GATHERINGS WILL OVERLOAD THE SYSTEM SINCE SEVERAL PEOPLE MAY BE USING THE SYSTEM IN A SHORT PERIOD OF TIME. FAILURE TO PROPERLY CONSERVE WATER MAY DAMAGE YOUR SEPTIC SYSTEM OR CAUSE COMPLETE FAILURE.
9. TOILET SEALS SHOULD BE REPLACED AS NEEDED OR EVERY 3 YEARS.
10. SEPTIC TANKS CONTAIN HARMFUL, HAZARDOUS GASES. ONLY QUALIFIED PERSONNEL SHOULD ENTER THE SEPTIC TANK IF REQUIRED WITH AN APPROPRIATE AIR SUPPLY.
11. STA OR LEACH FIELD AREAS MUST BE KEPT FREE OF ASPEN TREES, SHRUBS, OR ANY PLANT SPECIES HAVING A DEEP ROOT SYSTEM. DISTURBED AREAS SHOULD BE RE-SEEDED WITH NATIVE GRASSES HAVING A SHALLOW ROOT SYSTEM. MONITOR SOIL EROSION AROUND THE OSWTS.
12. FREEZING CAN OCCUR DURING PERIODS OF STARTUP, WHEN THE SYSTEM IS USED ON A PART TIME BASIS, AND DURING THE WINTER. IN THE DESIGN DRAWINGS WE HAVE SPECIFIED A MINIMAL SOIL COVER. SIX INCHES TO 12 INCHES OF ADDITIONAL SOIL COVER OVER THE ENTIRE SYSTEM CAN HELP TO MITIGATE FREEZING HOWEVER THE BEST OPTION TO MITIGATE FREEZING IS TO INSTALL A SEPTIC HEATER (MODEL A100 OR T100) [719.395.6764] AT THE TANK AND RISER AT THE STA. IN LIEU OF THE HEATER A 115 VOLT SUBMERSIBLE FLOATING TANK HEATER CAN BE USED (BUT IS NOT AS EFFECTIVE AND MAY BE ILLEGAL IF NOT PROPERLY INSTALLED) IN EACH COMPARTMENT OF THE SEPTIC TANK(S) BUT THESE TANK HEATERS WILL NOT MITIGATE LEACH FIELD FREEZING.
13. IF YOU PLAN TO INSTALL A JACUZZI, HOT TUB, THERAPEUTIC OR RECREATIONAL BATHING FACILITY, THIS OFFICE SHALL BE NOTIFIED TO INCLUDE THIS PROVISION IN THE DESIGN OF THE SYSTEM. DO NOT CONNECT THESE ITEMS TO THE SYSTEM WITHOUT CONSULTING WITH US TO PREVENT PERMANENT DAMAGE OR COMPLETE FAILURE.
14. BE AWARE OF YOUR ENVIRONMENT. REPORT ANY SURFACE WATER SEEPING OUT OF THE SOIL THAT HAS AN ODOR.
15. USE PHOSPHATE-FREE OR LOW PHOSPHATE AUTOMATIC DISH WASHING DETERGENTS.
16. NOTIFY THE ENGINEER OF ANY UNUSUAL CONDITIONS AS SOON AS THEY ARE DISCOVERED.
17. CONTACT THE ENGINEER OR THE COUNTY HEALTH DEPARTMENT FOR ANY HEALTH RELATED QUESTIONS AND FOR ANY QUESTIONS ABOUT THE INSTALLATION OR MAINTENANCE OF THE SEPTIC SYSTEM.



GENERAL OWTS DESIGN ONLY.

ADVANTEX® **HOMEOWNER'S** MANUAL

**AXN SUPPLEMENT**

Your home includes a reliable, carefully engineered AdvanTex®-AXN Treatment System for the collection and treatment of residential wastewater. This AdvanTex-AXN Treatment System has been evaluated by the National Sanitation Foundation (NSF) and has been certified by NSF to meet the requirements of NSF-ANSI Standard 40 for Class I Systems.

Your AdvanTex-AXN Treatment System can effectively treat household-strength waste. And it can recycle precious water resources because the treated effluent can be returned harmlessly to the soil, where it receives final polishing and filtration for groundwater recharge.

Your AdvanTex-AXN Treatment System comes with an initial, two-year service contract, which includes regular testing and servicing after system start-up by an authorized AdvanTex Service Provider. All testing and servicing activities are to be performed three to six months after start-up; and an annual field-service inspection, including sampling, is to be scheduled in late spring or in early summer, with a minimum of four inspections during the first two years and annual inspections thereafter. For a complete description of those services, consult your service contract. An extended service contract is also available. Consult your AdvanTex-AXN Treatment System Dealer or Service Provider for a complete description of those services.

Many people are responsible for the care and maintenance of your AdvanTex-AXN Treatment System:

**Homeowner's Responsibilities** – Homeowners and other system users are responsible for preventive maintenance. You need to know what can go into the wastewater treatment system and what cannot. Read and practice the "Do's and Don'ts" in your Homeowner's Manual and instruct all system users to do the same.

Also, you need to know what to do in the event a problem arises or service is required:

- First, call your authorized Service Provider. Your Service Provider's name and phone number are on the back page of your Homeowner's Manual.
- If you cannot reach your Service Provider, call your authorized AdvanTex Dealer. Your AdvanTex Dealer's name and phone number are on the back page of your Homeowner's Manual.
- If you cannot reach either your Service Provider or your AdvanTex Dealer, call the manufacturer: Orenco Systems®, Inc., at **800-348-9843**.

(You'll also find the manufacturer's name and address on the System Data Plate affixed to the inside of the filter pod.)

Finally, ask for and retain copies of all maintenance and service calls on your system.

**Service Provider's Responsibilities** – Authorized AdvanTex Service Providers are responsible for regular testing and servicing of your system, as spelled out in your initial service contract. Service Providers are also responsible for alarm response, in the event of a problem.

In addition, Service Providers should be present at system installation (so that they are familiar with your individual system, especially the location of service lines, conduits, and connections that get buried), and at system start-up.

**Manufacturer's Responsibilities** – Orenco Systems is responsible for training authorized AdvanTex Dealers and providing Dealers with training materials for authorized AdvanTex Service Providers. As long as the system is serviced in accordance with the initial service contract by an authorized AdvanTex Service Provider, Orenco Systems® will replace or repair any AdvanTex Treatment System components that fail because of defects in workmanship or materials.

One last note: If your AdvanTex-AXN Treatment System is used intermittently or if extended periods of non-use are anticipated, no special action needs to be taken. That's one of the advantages of the AdvanTex technology. Within the first day of operation after start-up or after extended periods of non-use, AdvanTex units achieve treatment removal efficiencies of 80% or greater. The system may be left running even during periods of vacancy, as the electrical consumption is negligible and the unit will continue to break down organic and inorganic wastewater constituents, even when the system isn't continually loaded. Nevertheless, it is always good practice to periodically observe your system and verify that it is functioning and that the effluent quality is consistent with the expectations described in your O&M manual.

With your preventive maintenance and with regular maintenance by an authorized Service Provider, your AdvanTex-AXN Treatment System should function for decades, providing better wastewater treatment than many municipal systems, without degradation to rivers and oceans. Congratulations, again, for making an environmentally sound investment.

Congratulations!



**Orenco Systems®**  
Incorporated

*Changing the Way the World Does Wastewater®*

**800-348-9843**  
[www.orenco.com](http://www.orenco.com)

ABR-OM-2  
Rev. 1.2, © 11/05  
Orenco Systems®, Inc.

NO REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

#18

OWTS MAINTENANCE REQUIREMENTS

LITTLEHORN ENGINEERING, LLC

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

"PEACE OF MIND THROUGH HOLISTIC DESIGN"



PROJECT NO.  
2022-100742

CLIENT  
LANDYNN AND  
MICHELLE  
HACKEBEIL

DATE  
04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

# LITTLEHORN ENGINEERING, LLC

205 FOURTH STREET, SILVER CLIFF, CO 81252  
(719) 836-7120 - FAIRPLAY (719) 783-3757 - SILVER CLIFF

## Sieve Test Results - Profile Hole B

Project Number: 2022-37729

Property Information

Date of Testing: 25-Oct-22

311 Wagon Road

Client: Hackeibel

Blue River, CO (Summit County)

### Soil Classification:

Soil Group - Poorly graded gravel with sand (GP)

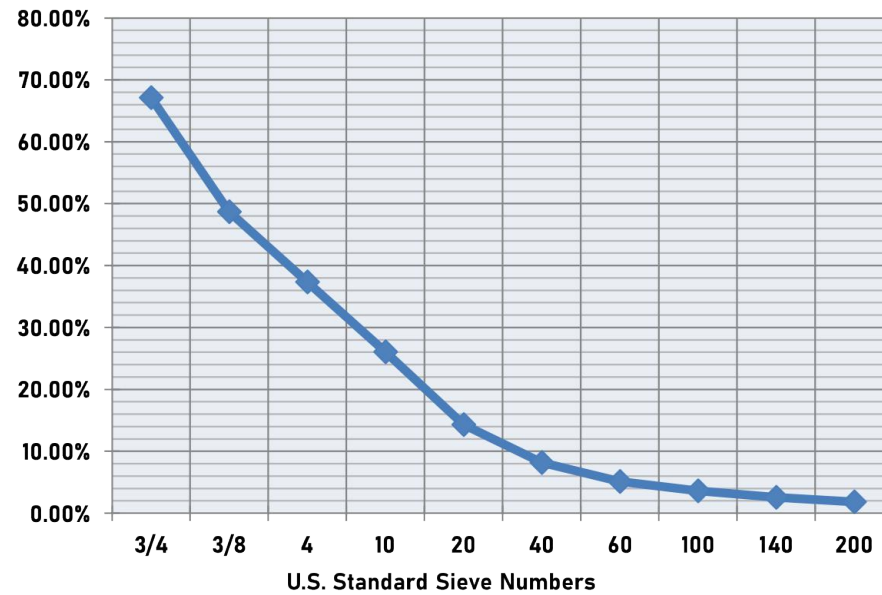
### Soil Type:

LTAR Soils Type - Sandy Loam (R2/2A)

### Typical Grain Size Distribution Curve

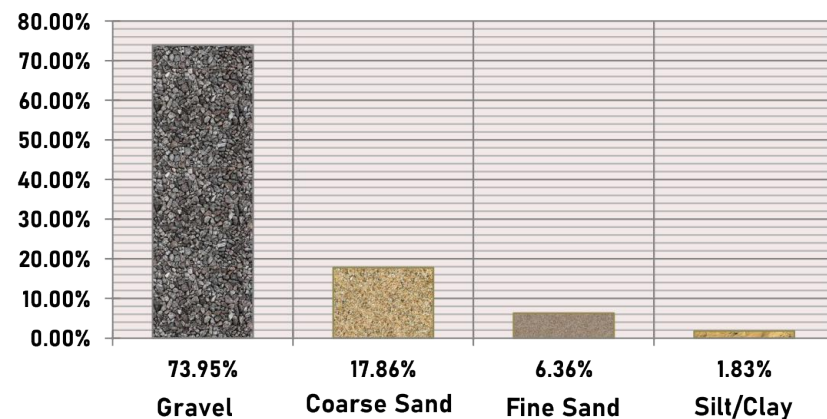
Moisture Content: 4.16%

Percent Finer by Weight



### AASHTO Classification By Particle Size

Percent Of Total Weight



Uniformity Coefficient (Cu): 6.15      Curvature Coefficient (Cc): 4.72

## Pump Selection for a Pressurized System - Single Family Residence Project

HACKEIBEL / 2022-100742

#19

### Parameters

Discharge Assembly Size	2.00	inches
Transport Length	33	feet
Transport Pipe Class	40	
Transport Line Size	2.00	inches
Distributing Valve Model	None	
Max Elevation Lift	5	feet
Manifold Length	6	feet
Manifold Pipe Class	40	
Manifold Pipe Size	2.00	inches
Number of Laterals per Cell	3	
Lateral Length	37	feet
Lateral Pipe Class	40	
Lateral Pipe Size	1.50	inches
Orifice Size	7/32	inches
Orifice Spacing	2	feet
Residual Head	4	feet
Flow Meter	None	inches
'Add-on' Friction Losses	4.6	feet

### Calculations

Minimum Flow Rate per Orifice	1.19	gpm
Number of Orifices per Zone	57	
Total Flow Rate per Zone	68.4	gpm
Number of Laterals per Zone	3	
% Flow Differential 1st/Last Orifice	4.7	%
Transport Velocity	6.6	fps

### Frictional Head Losses

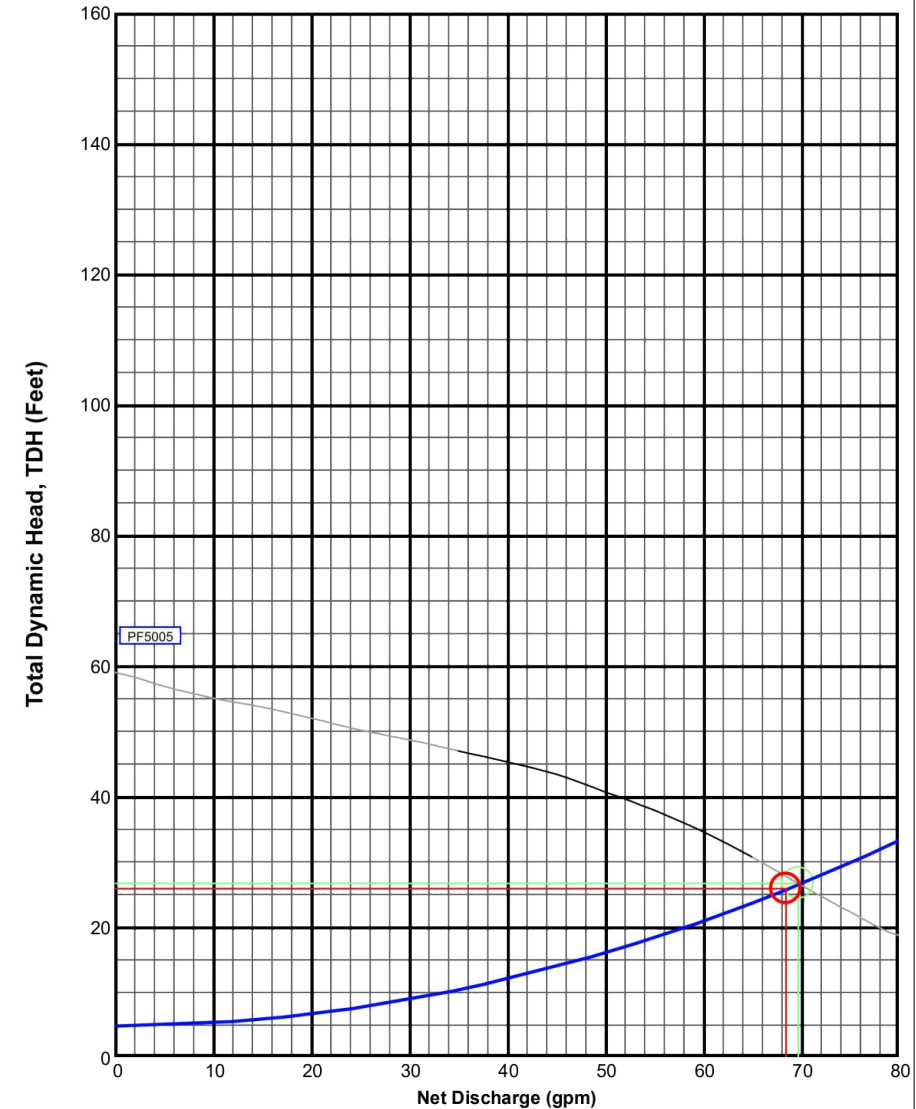
Loss through Discharge	9.4	feet
Loss in Transport	2.4	feet
Loss through Valve	0.0	feet
Loss in Manifold	0.1	feet
Loss in Laterals	0.4	feet
Loss through Flowmeter	0.0	feet
'Add-on' Friction Losses	4.6	feet

### Pipe Volumes

Vol of Transport Line	5.8	gals
Vol of Manifold	1.0	gals
Vol of Laterals per Zone	11.7	gals
Total Volume	18.5	gals

### Minimum Pump Requirements

Design Flow Rate	68.4	gpm
Total Dynamic Head	25.9	feet



### PumpData

PF5005 High Head Effluent Pump  
50 GPM, 1/2HP  
115/230V 1Ø 60Hz, 200/230V 3Ø 60Hz

### Legend

System Curve:	—
Pump Curve:	—
Pump Optimal Range:	—
Operating Point:	●
Design Point:	○



Section IV, Item D.

ANY REPRODUCTION OR COPYING OF THE INFORMATION CONTAINED IN THESE PLANS IS CONSIDERED AN INFRINGEMENT ON COPYRIGHT LAWS.

SOILS TESTING & PUMP CALCULATIONS

LITTLEHORN ENGINEERING, LLC

351 US HWY 285, #201  
FAIRPLAY, CO 80440  
FAIRPLAY OFFICE 719.836.7120  
SILVER CLIFF OFFICE 719.783.3757

"PEACE OF MIND THROUGH HOLISTIC DESIGN"

PROJECT NO. 2022-100742

CLIENT LANDYN AND MICHELLE HACKEIBEL

DATE 04.10.2023

REVISION:  
△ N/A  
△ N/A  
△ N/A

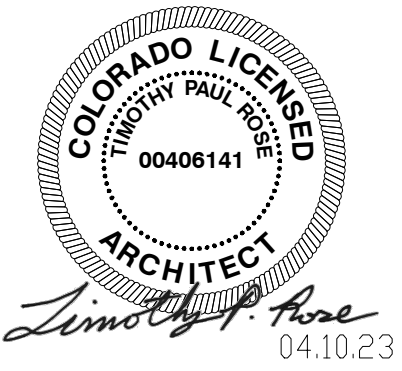
D7

288



#20

**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

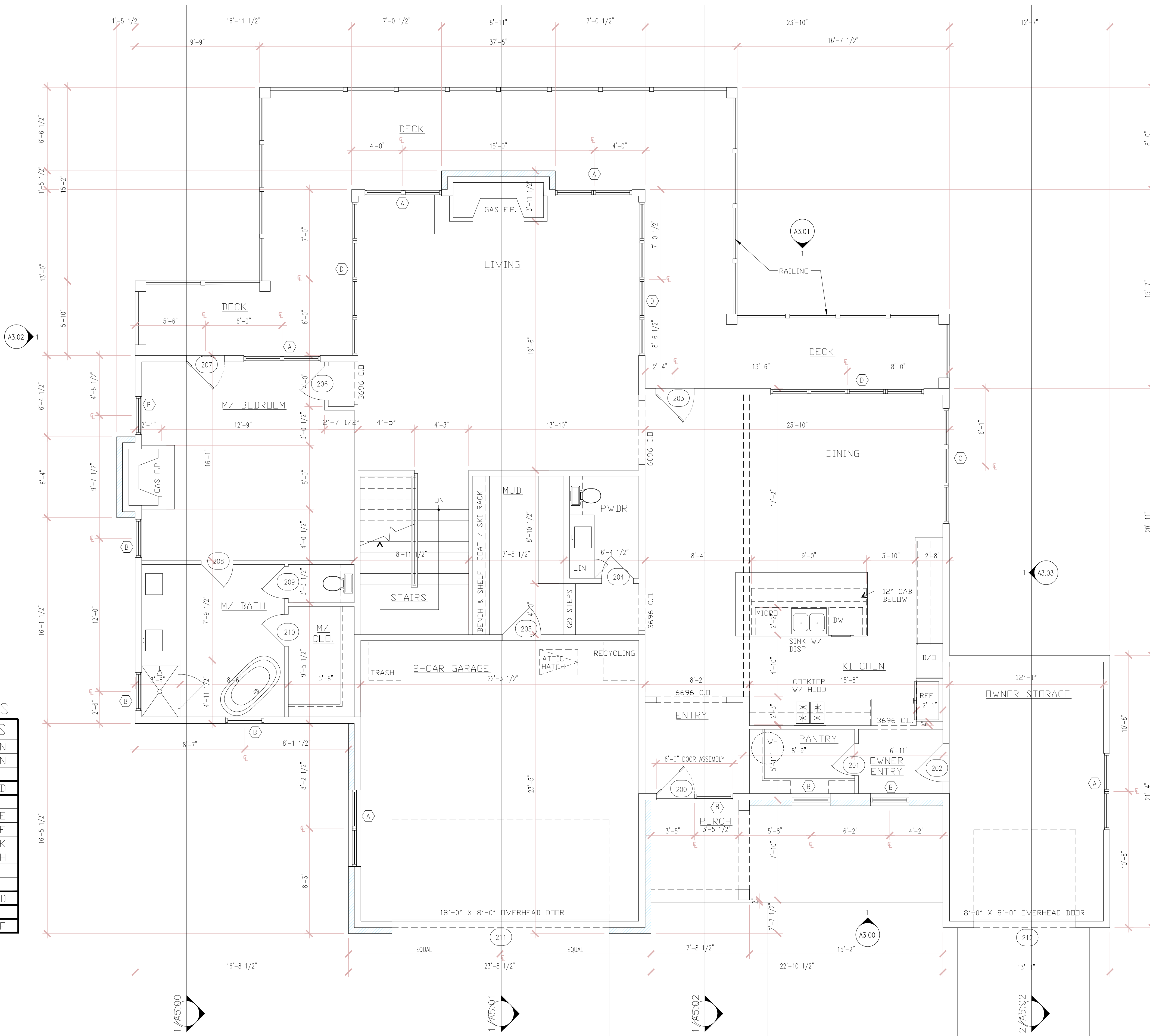
FOR PERMIT

**A2.00**

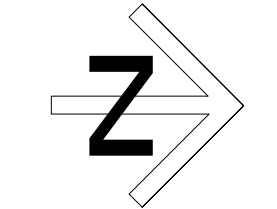
**FLOOR PLAN  
 UPPER LEVEL**

SQUARE FOOTAGE CALCS

SF	AREAS
1967	UPPER LEVEL FLOOR PLAN
1744	LOWER LEVEL FLOOR PLAN
3711	TOTAL CONDITIONED
508	2-CAR GARAGE
274	1-CAR GARAGE
664	2ND FLOOR DECK
187	PORCH
5447	TOTAL UNCONDITIONED
1633	TOTAL UNDER ROOF



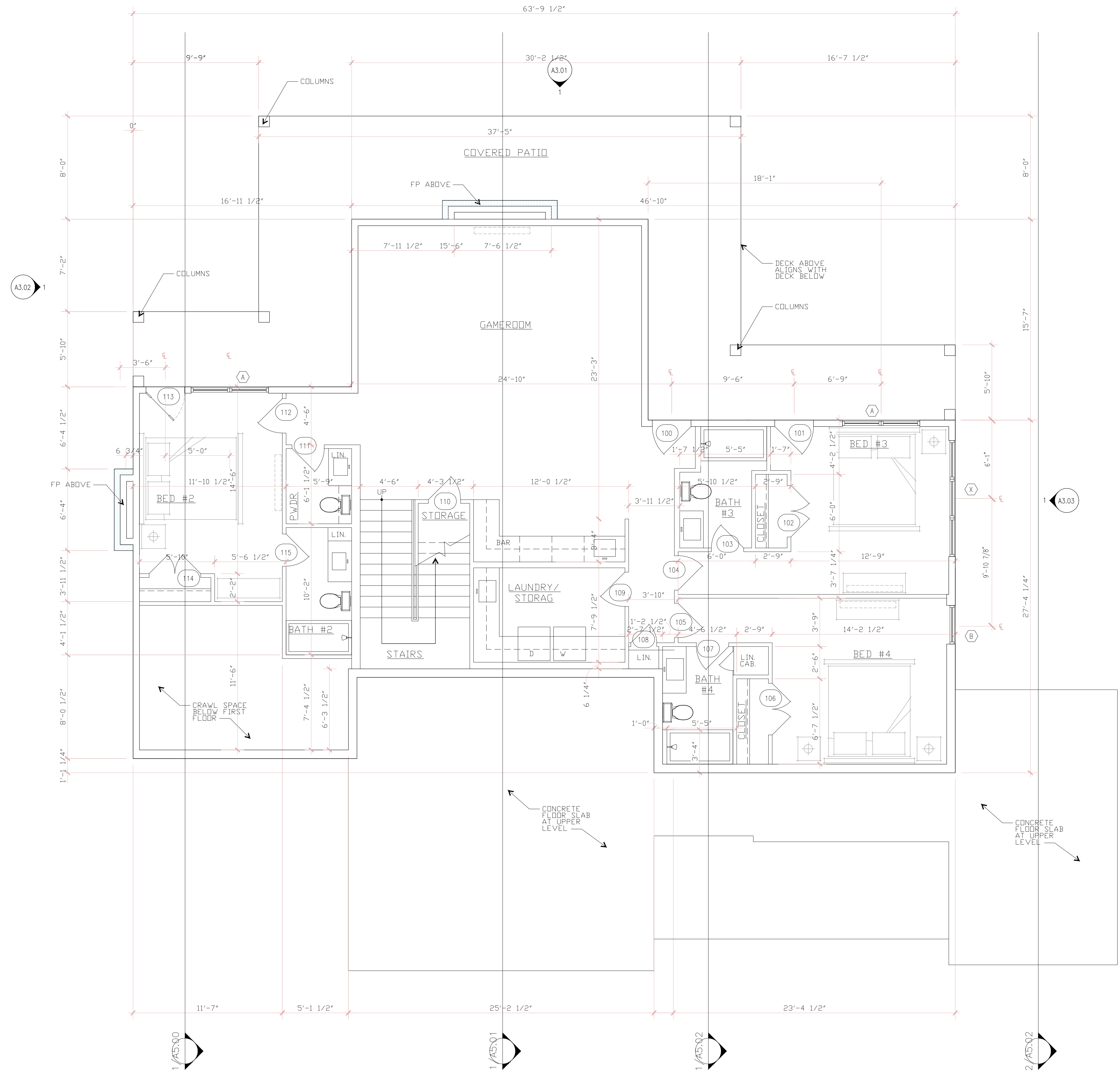
1 FLOOR PLAN - UPPER LEVEL  
 1/4" = 1'-0"



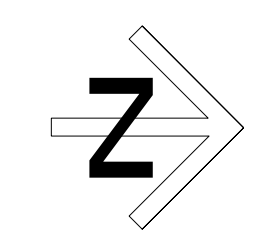
#21



**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**



**1 FLOOR PLAN - LOWER LEVEL**  
 1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

FOR PERMIT

**A2.01**

**FLOOR PLAN**  
**LOWER LEVEL**

#22



**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424

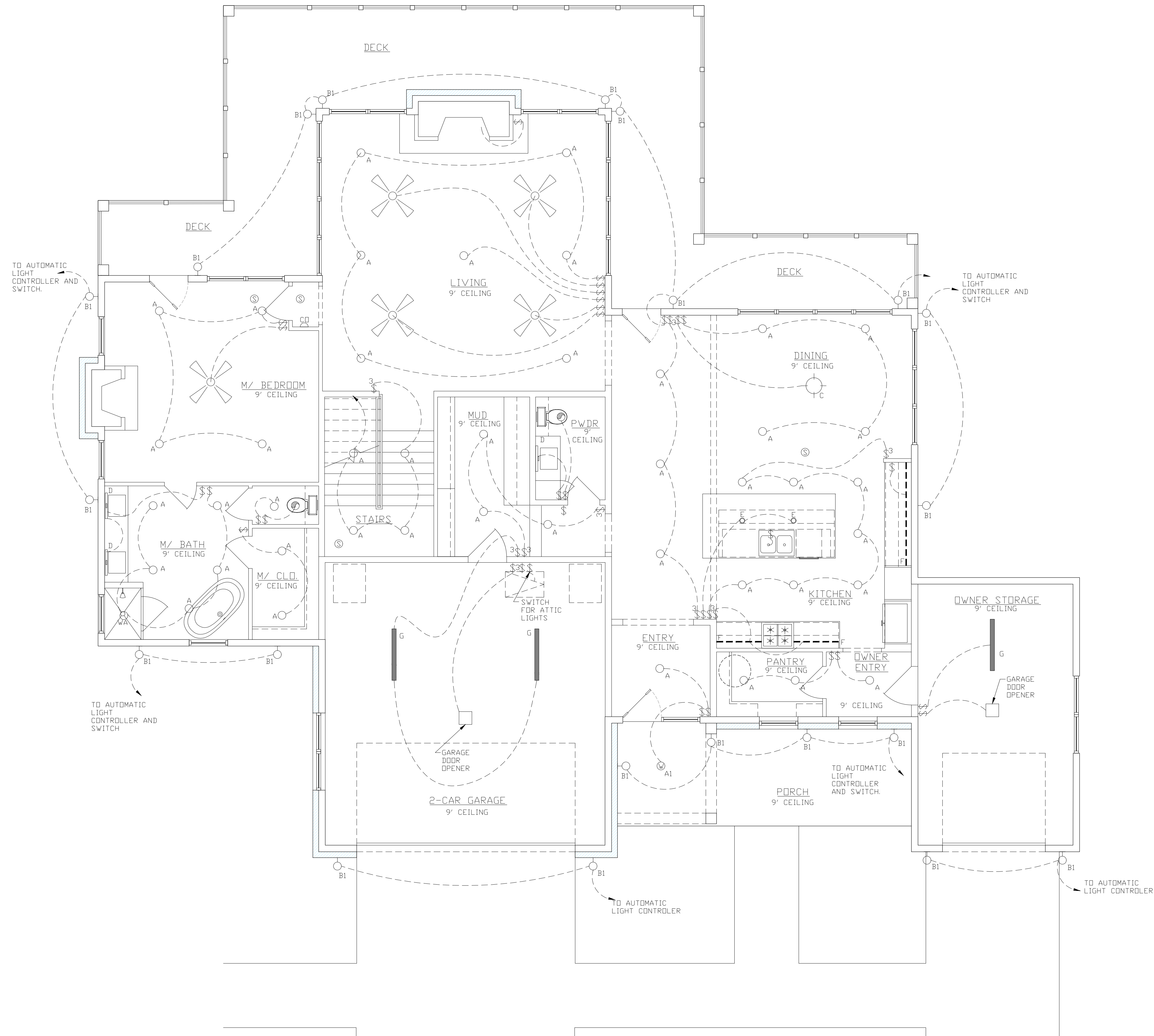
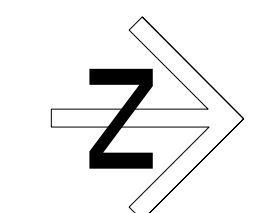


PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT

**A2.02**

**RCP PLAN  
 UPPER LEVEL**



REFLECTED CEILING LEGEND

DEVICE	DESCRIPTION	TYPE
⊙	SMOKE DETECTOR	--
⊖	EXHUAUST FAN	--
⊗	CEILING FAN	--
○	RECESSED CAN LIGHT	A
⊙	RECESSED CAN LIGHT - WET LOCATION	A1
⊕	SCONCE LIGHT EXTERIOR	B1
⊕	SCONCE LIGHT INTERIOR	B2
⊙	CHANDELIER	C
—	WALL MOUNTED VANITY LIGHT	D
○	PENDANT LIGHTS	E
—	LED UNDER CABINET LIGHTS	F
⊔	CARBON MONOXIDE DETECTOR	CD
—	LED LIGHT	G

1 REFLECTIVE CEILING PLAN - UPPER LEVEL  
 1/4" = 1'-0"

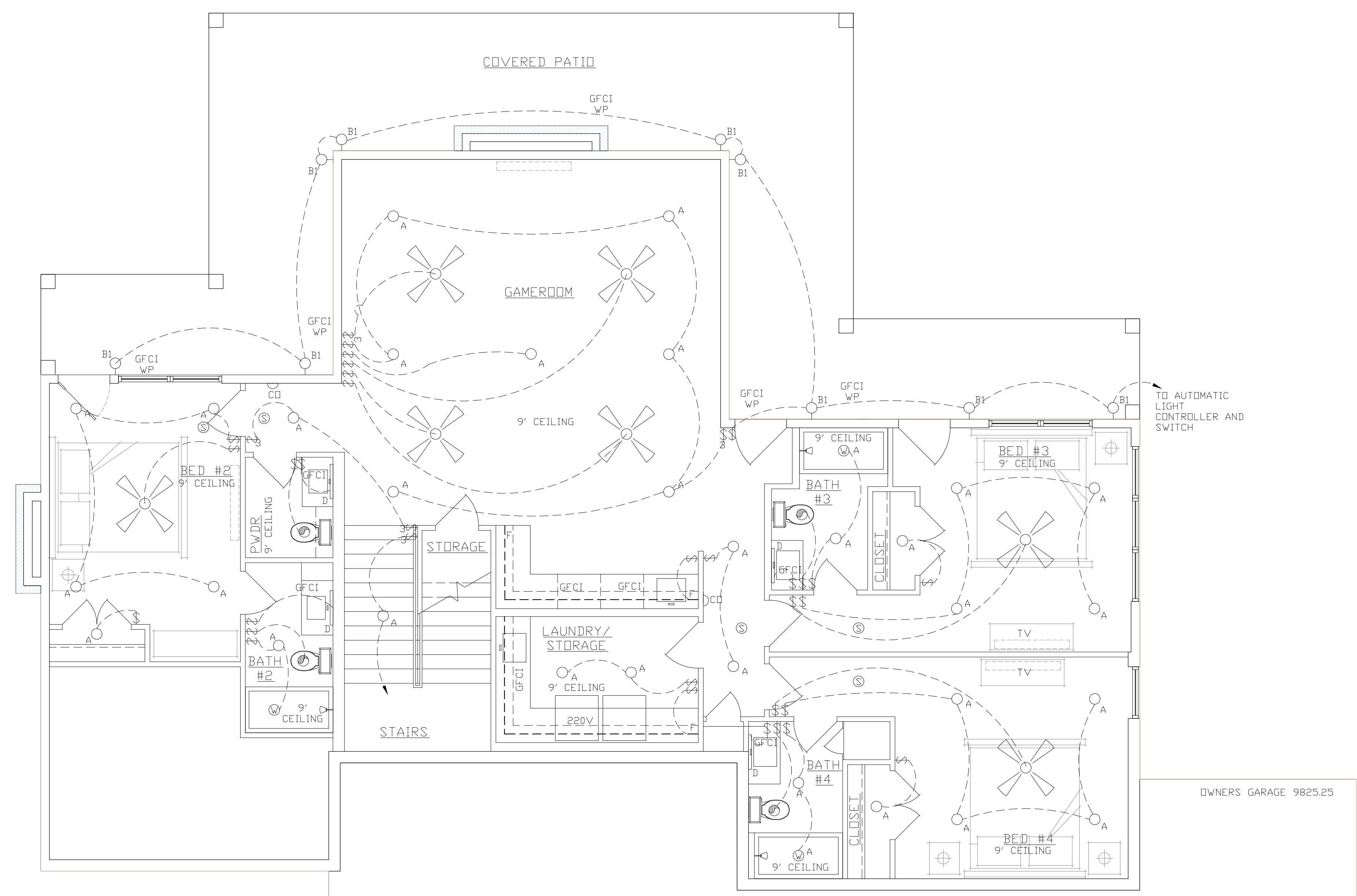
#23



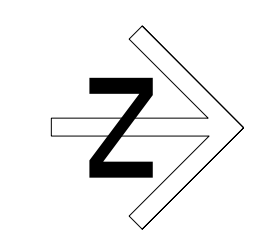
**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424

REFLECTED CEILING LEGEND

DEVICE	DESCRIPTION	TYPE
	SMOKE DETECTOR	--
	EXHUAUST FAN	--
	CEILING FAN	--
	RECESSED CAN LIGHT	A
	RECESSED CAN LIGHT - WET LOCATION	A1
	SCONCE LIGHT EXTERIOR	B1
	SCONCE LIGHT INTERIOR	B2
	CHANDELIER	C
	WALL MOUNTED LIGHT	D
	PENDANT LIGHTS	E
	LED UNDER CABINET LIGHTS	F
	CARBON MONOXIDE DETECTOR	CD



1 REFLECTED CEILING PLAN - UPPER LEVEL  
 1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

FOR PERMIT

**A2.03**

**RCP PLAN  
 LOWER LEVEL**

#24

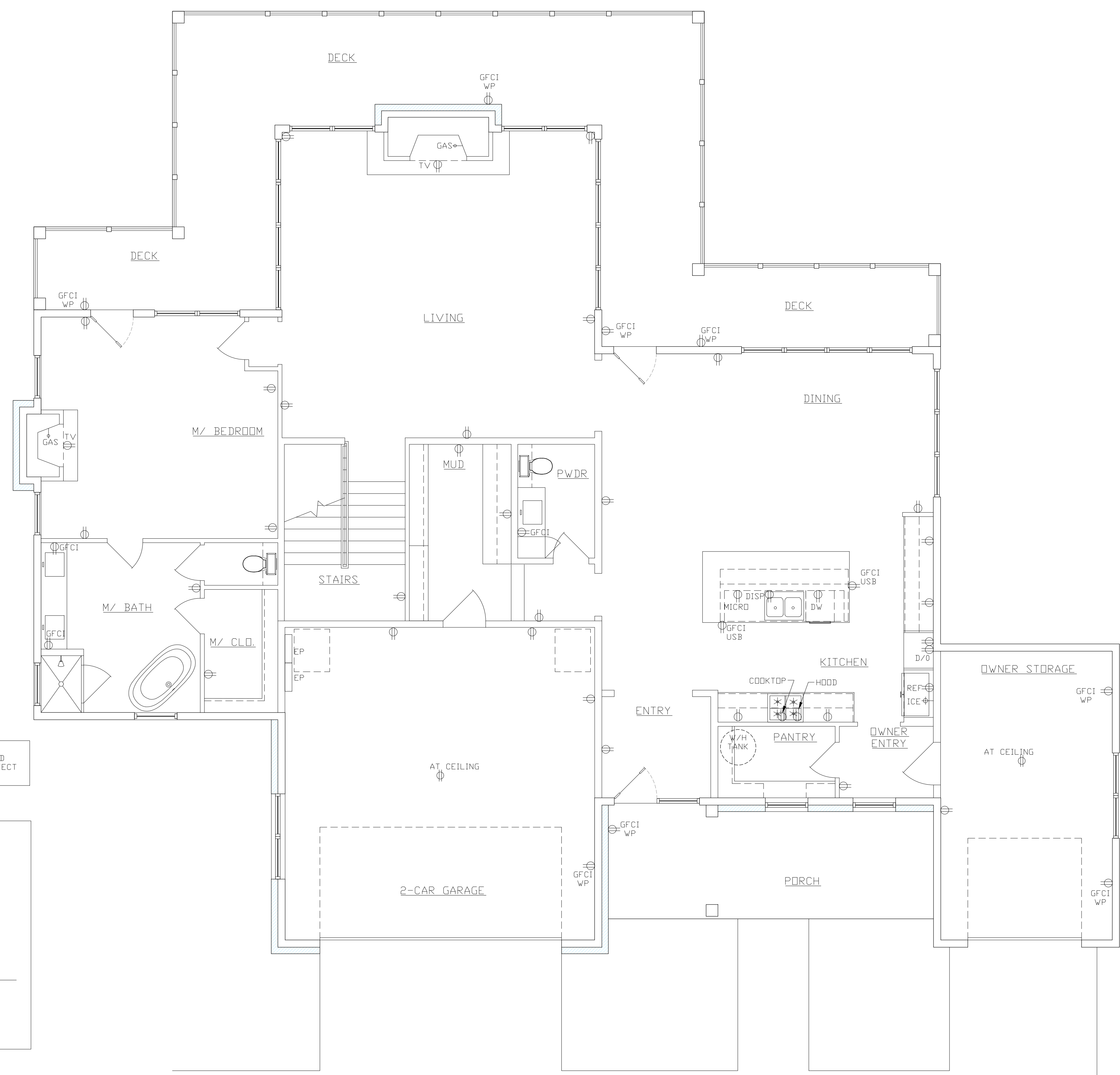
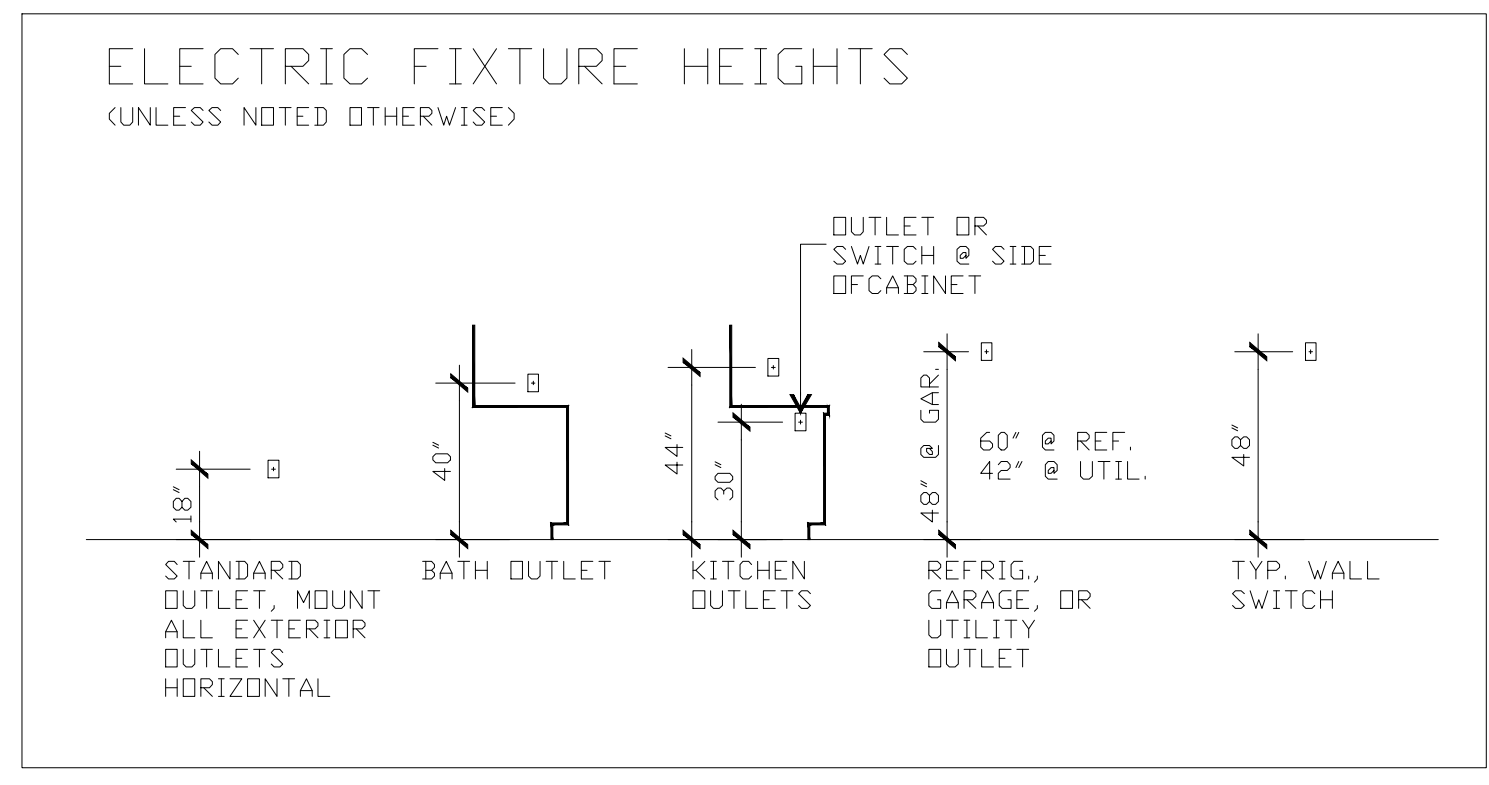


**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**

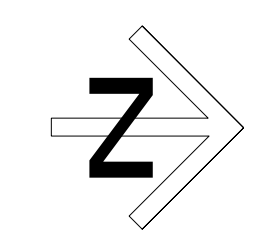
**ELECTRIC FIXTURE LEGEND**

	DUPLEX OUTLET
	GROUND FAULT CIRCUIT DUPLEX OUTLET
	WEATHER PROTECTED DUPLEX OUTLET
	GROUND FAULT CIRCUIT DUPLEX OUTLET WITH USB
	TV AND DATA CONNECTION
	ELECTRIC PANEL

G.C. TO VERIFY OUTLET HEIGHTS AT KITCHEN AND BATHROOMS WITH ARCHITECT PRIOR TO INSTALLATION



1 POWER PLAN - UPPER LEVEL  
 1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

FOR PERMIT




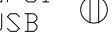


**A2.04**

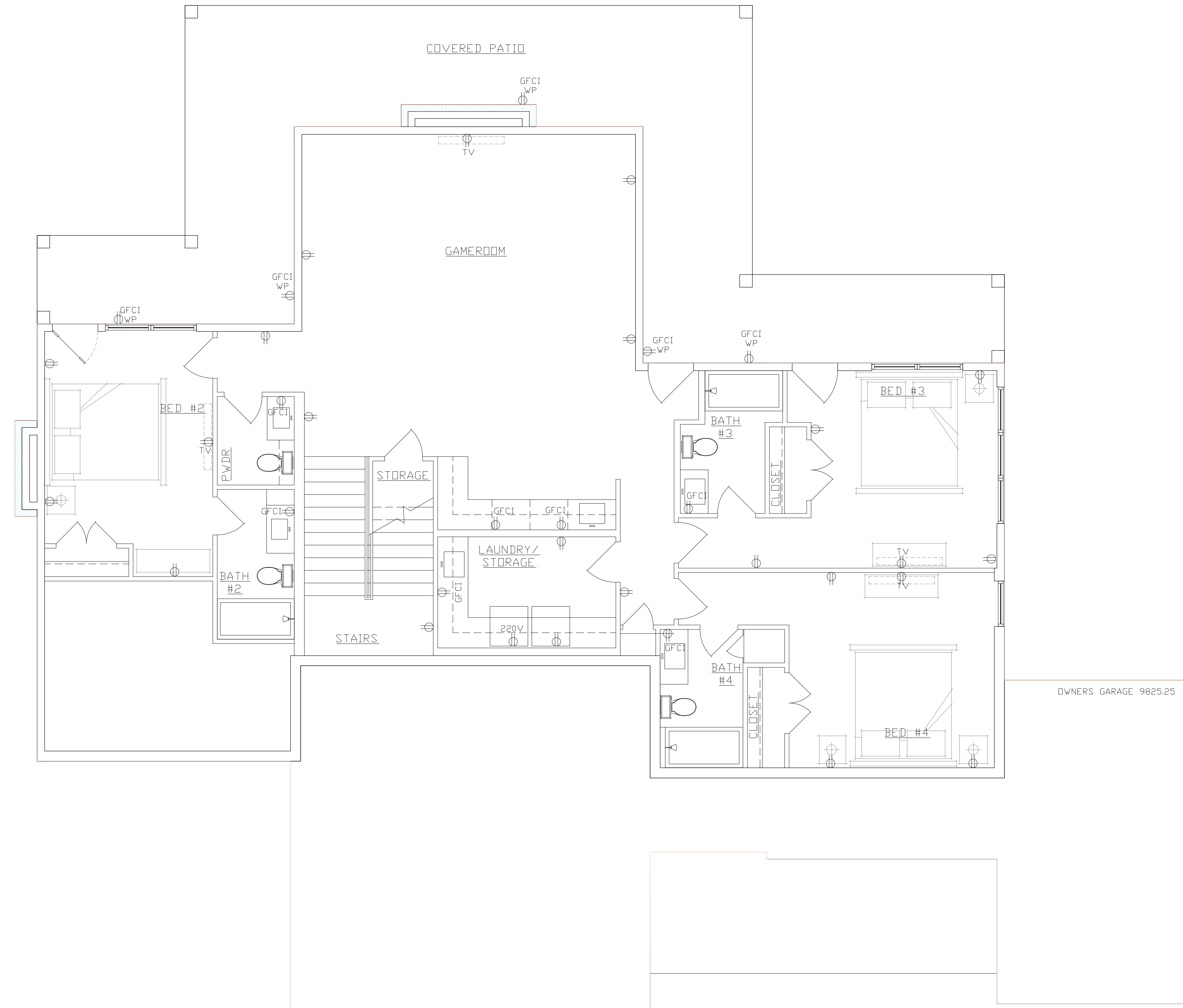
**POWER PLAN UPPER LEVEL**

#25

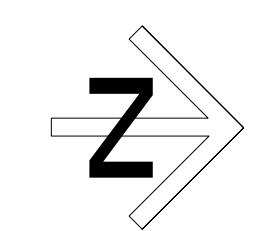


**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424

-  DUPLEX OUTLET
-  GFCI GROUND FAULT CIRCUIT DUPLEX OUTLET
-  WP WEATHER PROTECTED DUPLEX OUTLET
-  GFCI USB GROUND FAULT CIRCUIT DUPLEX OUTLET WITH USB
-  TV TV AND DATA CONNECTION
-  EP ELECTRIC PANEL



1 POWER PLAN - UPPER LEVEL  
 1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

FOR PERMIT

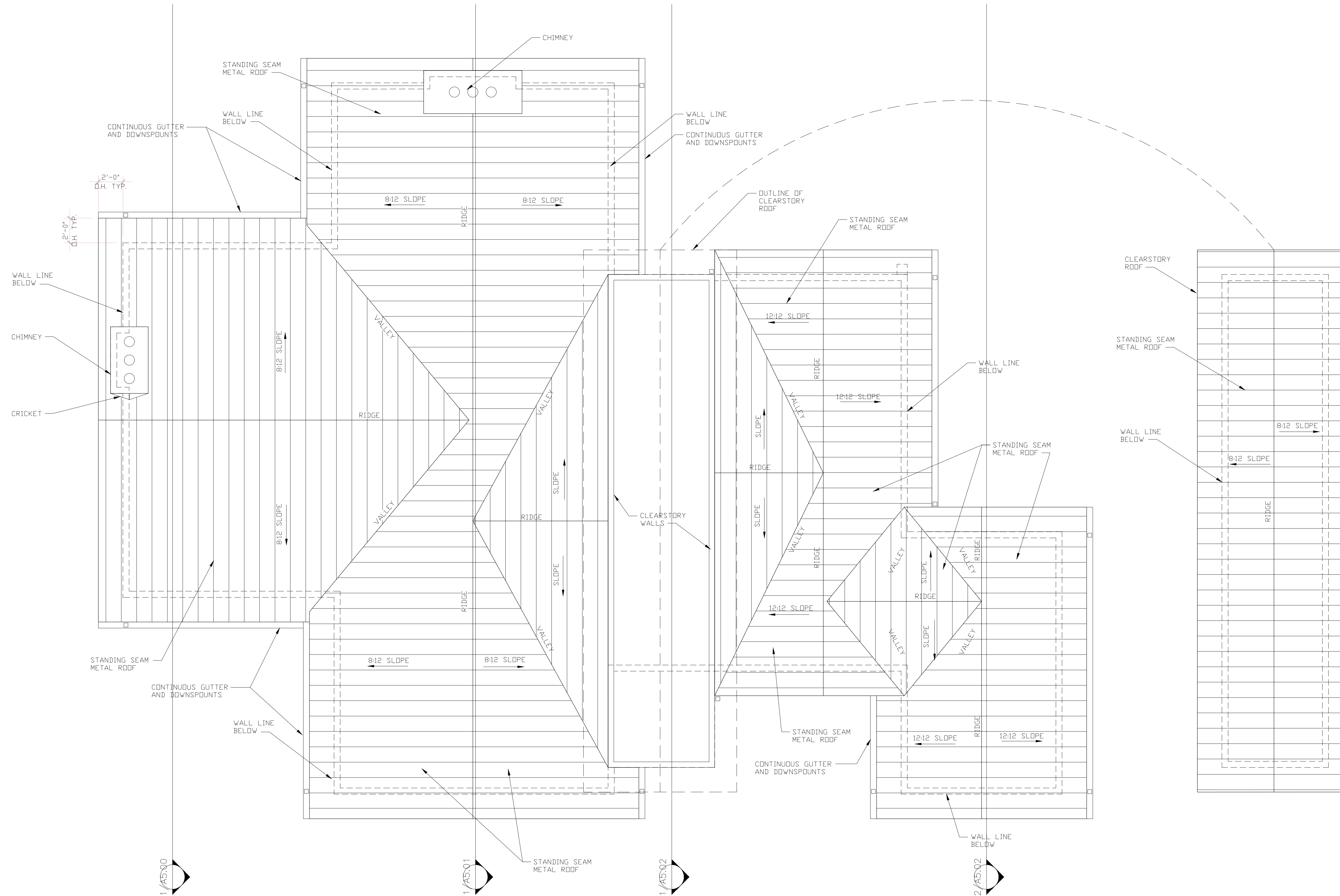
**A2.05**

**POWER PLAN  
 LOWER LEVEL**

#26



**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**



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



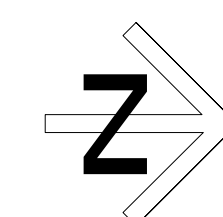
PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

FOR REVIEW

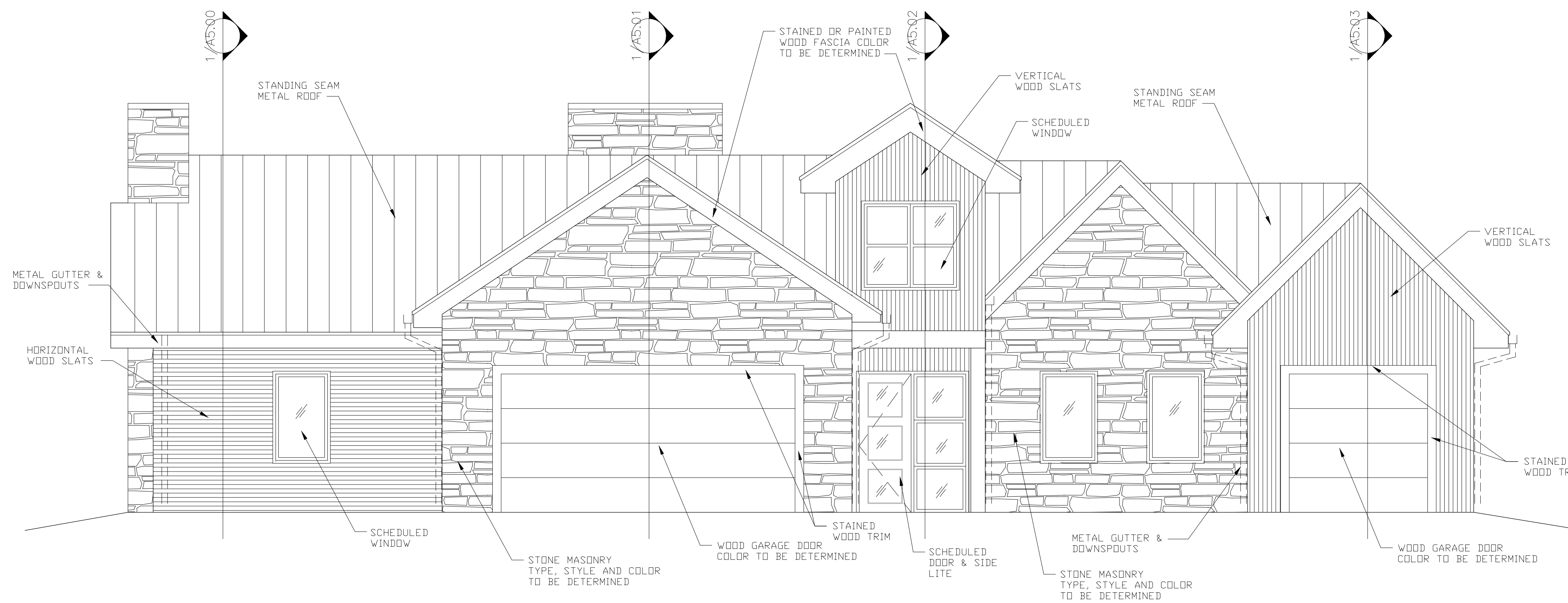
**A2.08**  
**ROOF**  
**PLAN**



#27



**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424



1 EXTERIOR ELEVATION - EAST - STREET VIEW  
1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

FOR PERMIT

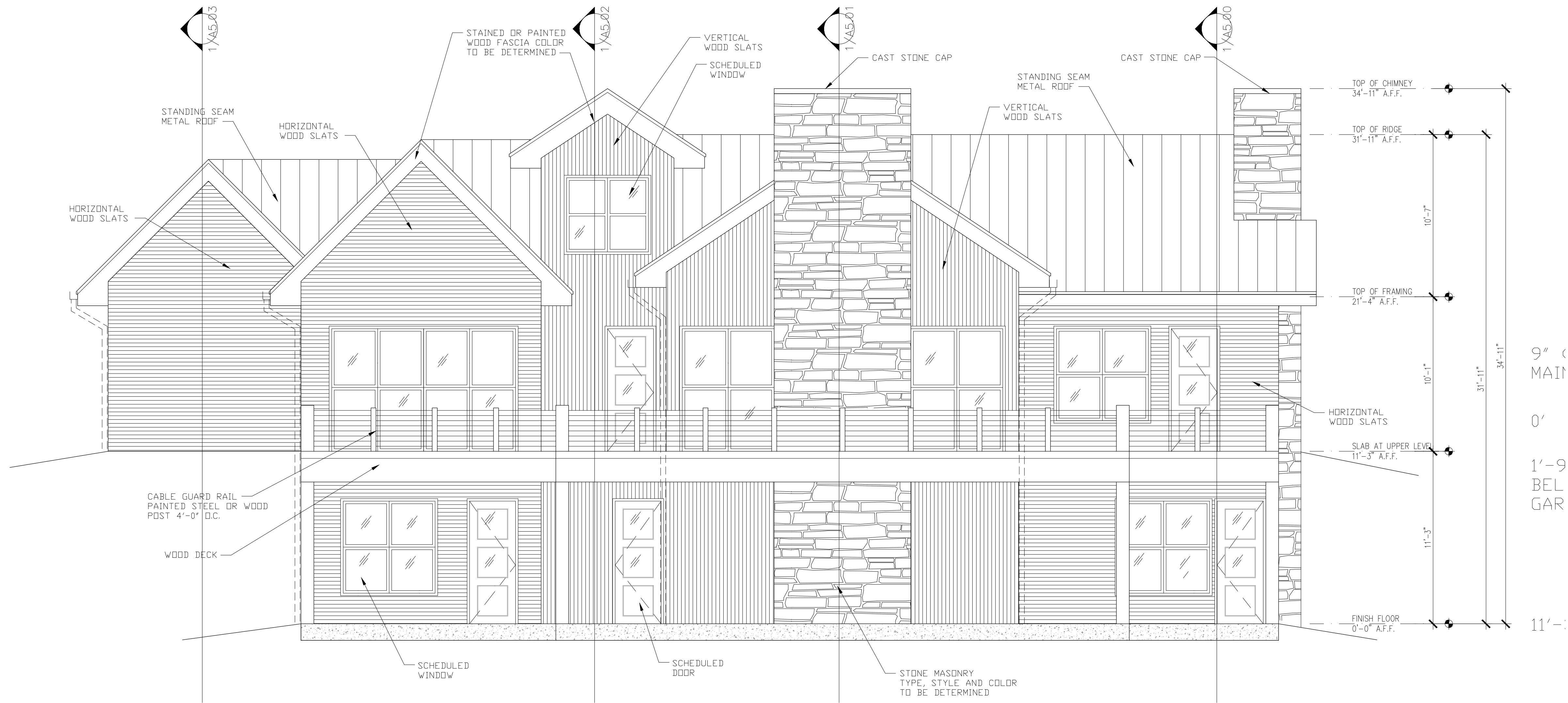
**A3.00**  
EXTERIOR  
ELEVATIONS



#28



**BLUE RIVER MOUNTAIN HOME**  
**311 WAGON ROAD**  
**BLUE RIVER, COLORADO 80424**



1 EXTERIOR ELEVATION - WEST - RIVER VIEW  
 1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

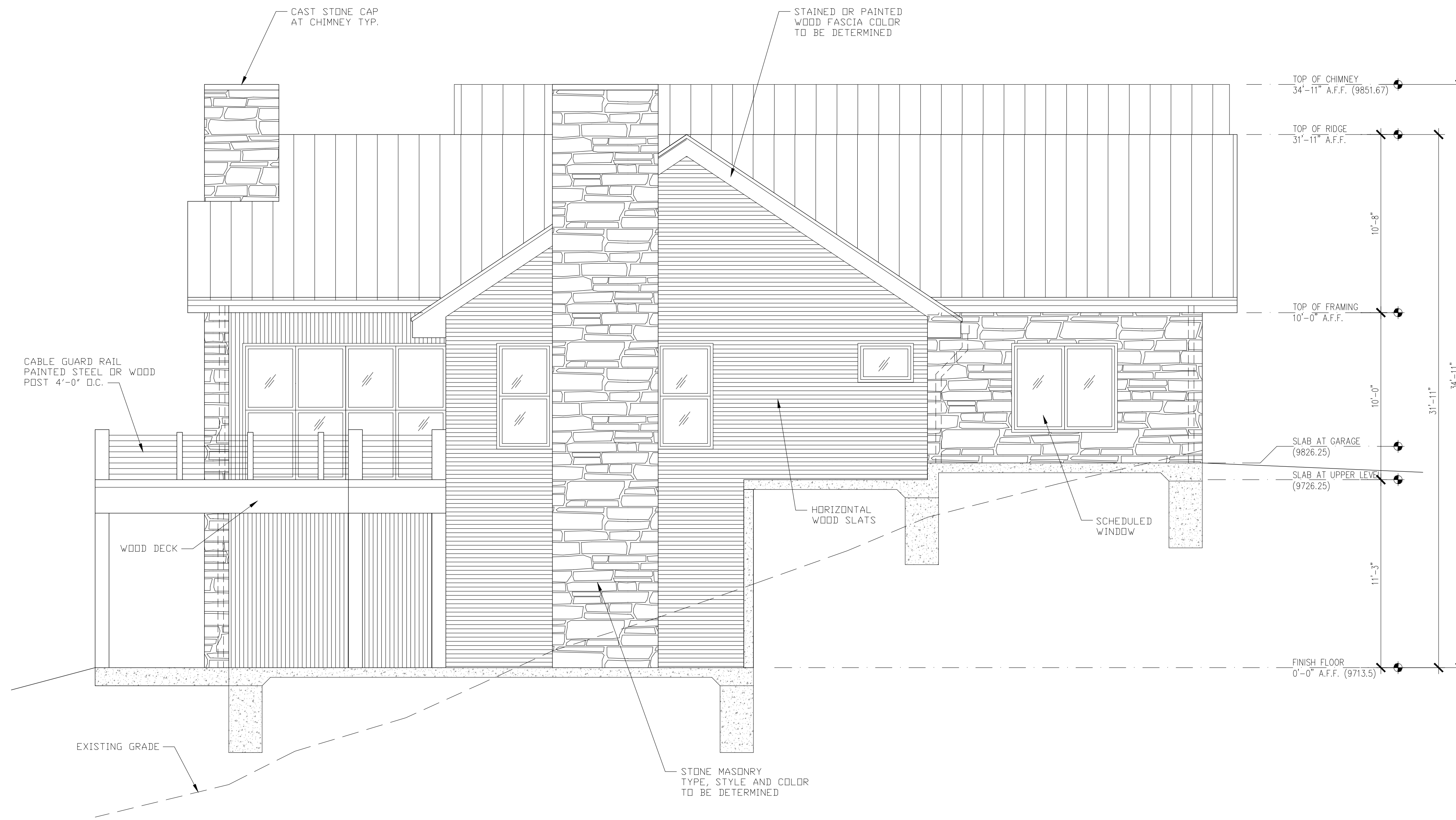
FOR PERMIT

**A3.01**  
**EXTERIOR**  
**ELEVATIONS**

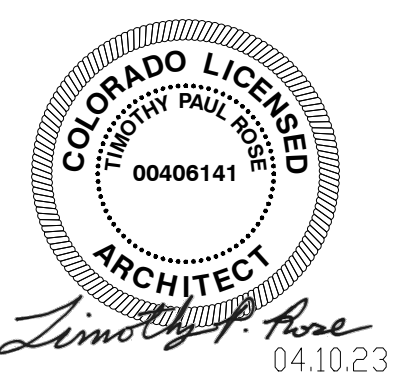
#29



**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424



1 EXTERIOR ELEVATION - SOUTH - LAKE DIRECTION  
1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

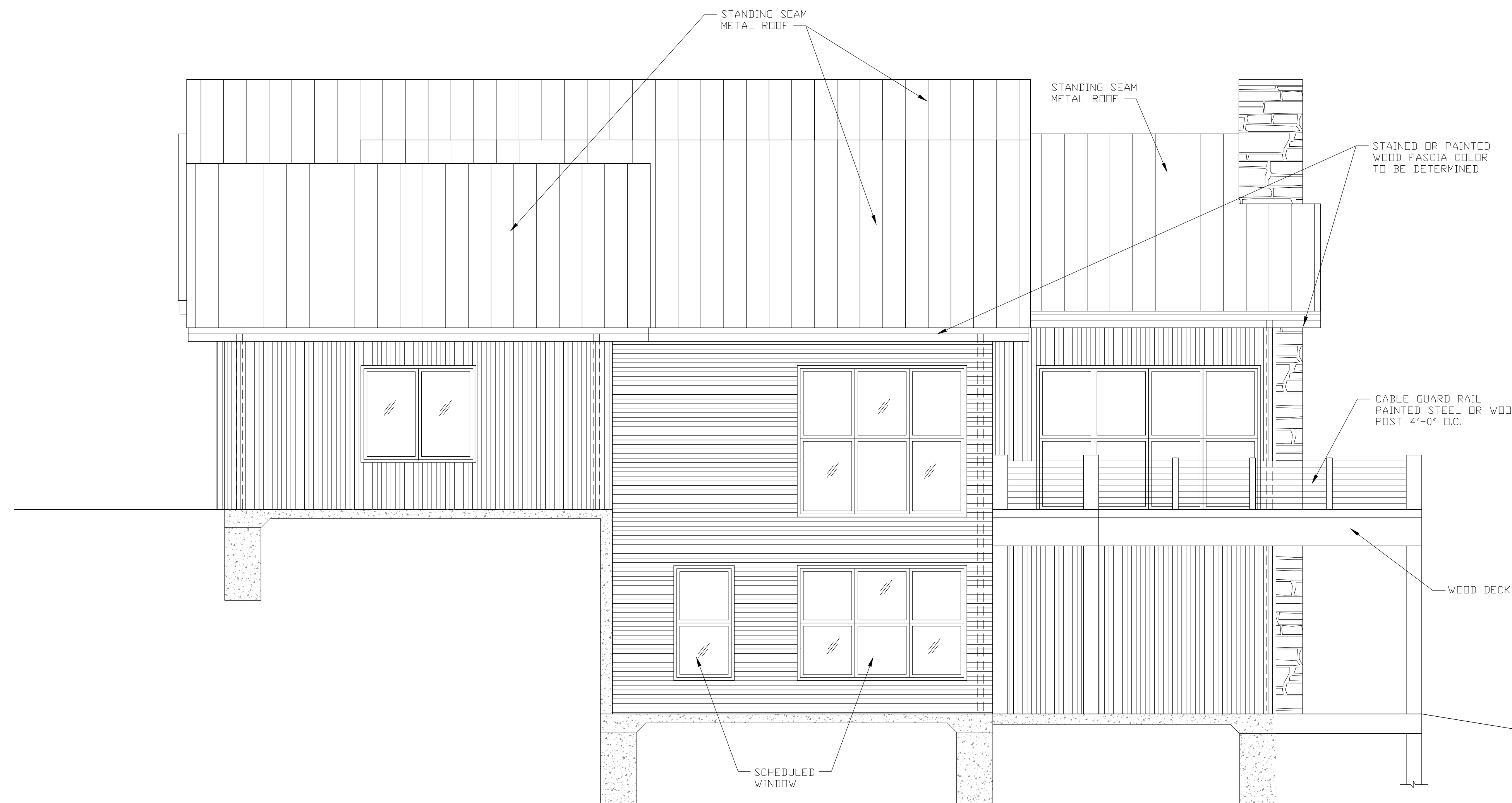
FOR PERMIT

**A3.02**  
EXTERIOR  
ELEVATIONS

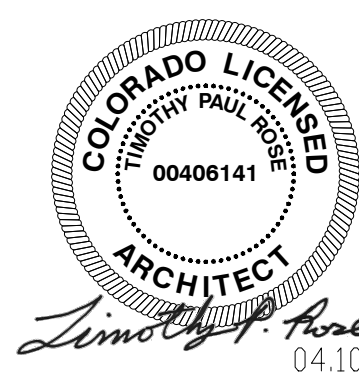
#30



**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424



1 EXTERIOR ELEVATION - NORTH - TOWN DIRECTION  
1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

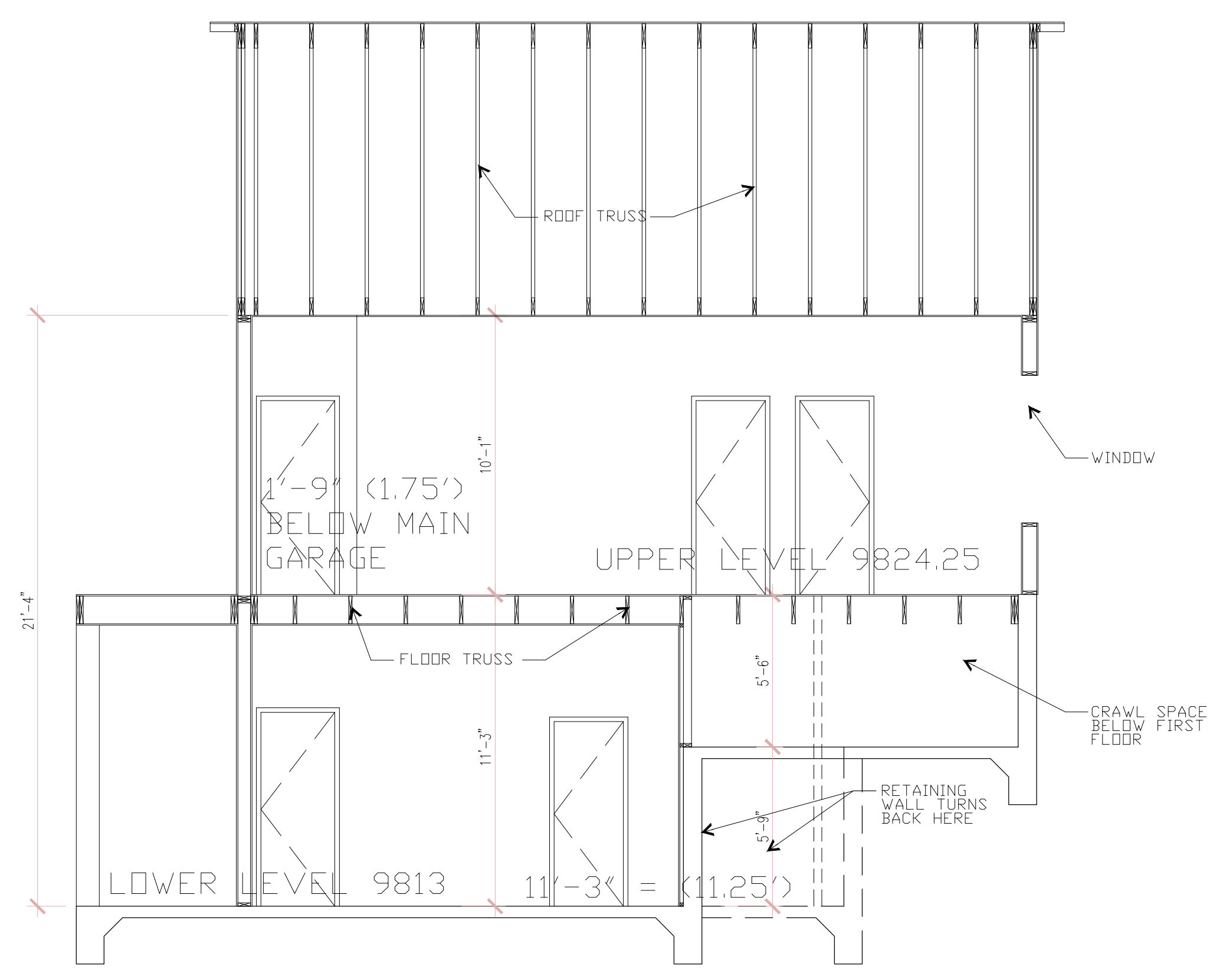
FOR PERMIT

**A3.03**  
EXTERIOR  
ELEVATIONS

#31



**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424



1 BUILDING SECTION  
1/4" = 1'-0"



PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT

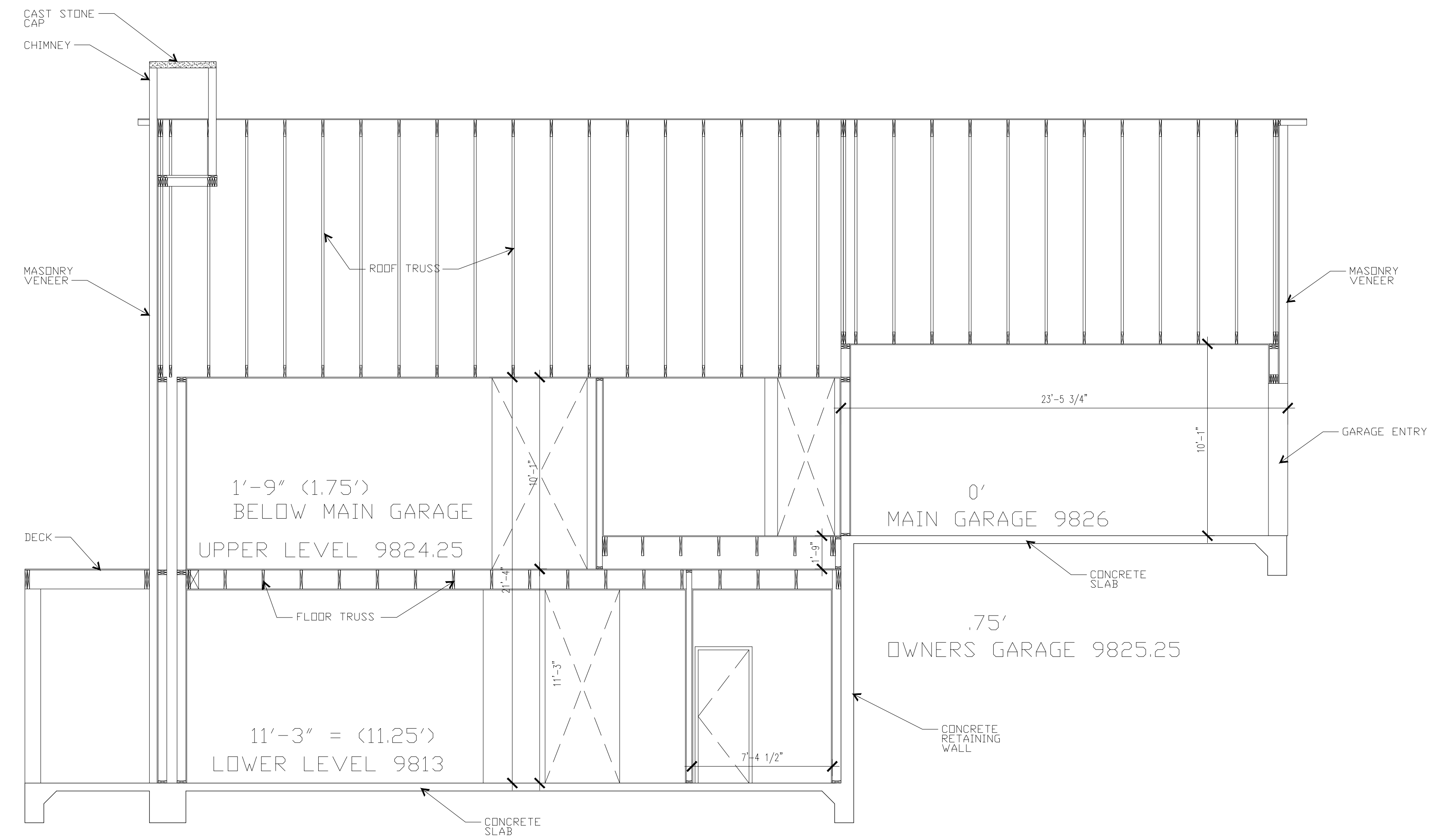
**A5.00**

**BUILDING SECTION**

#32



**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424



1 BUILDING SECTION  
1/4" = 1'-0"



PROJECT NUMBER 22066

REVISIONS

No.	Description	Date

FOR PERMIT

**A5.01**

**BUILDING SECTION**

#33



**BLUE RIVER MOUNTAIN HOME**  
311 WAGON ROAD  
BLUE RIVER, COLORADO 80424

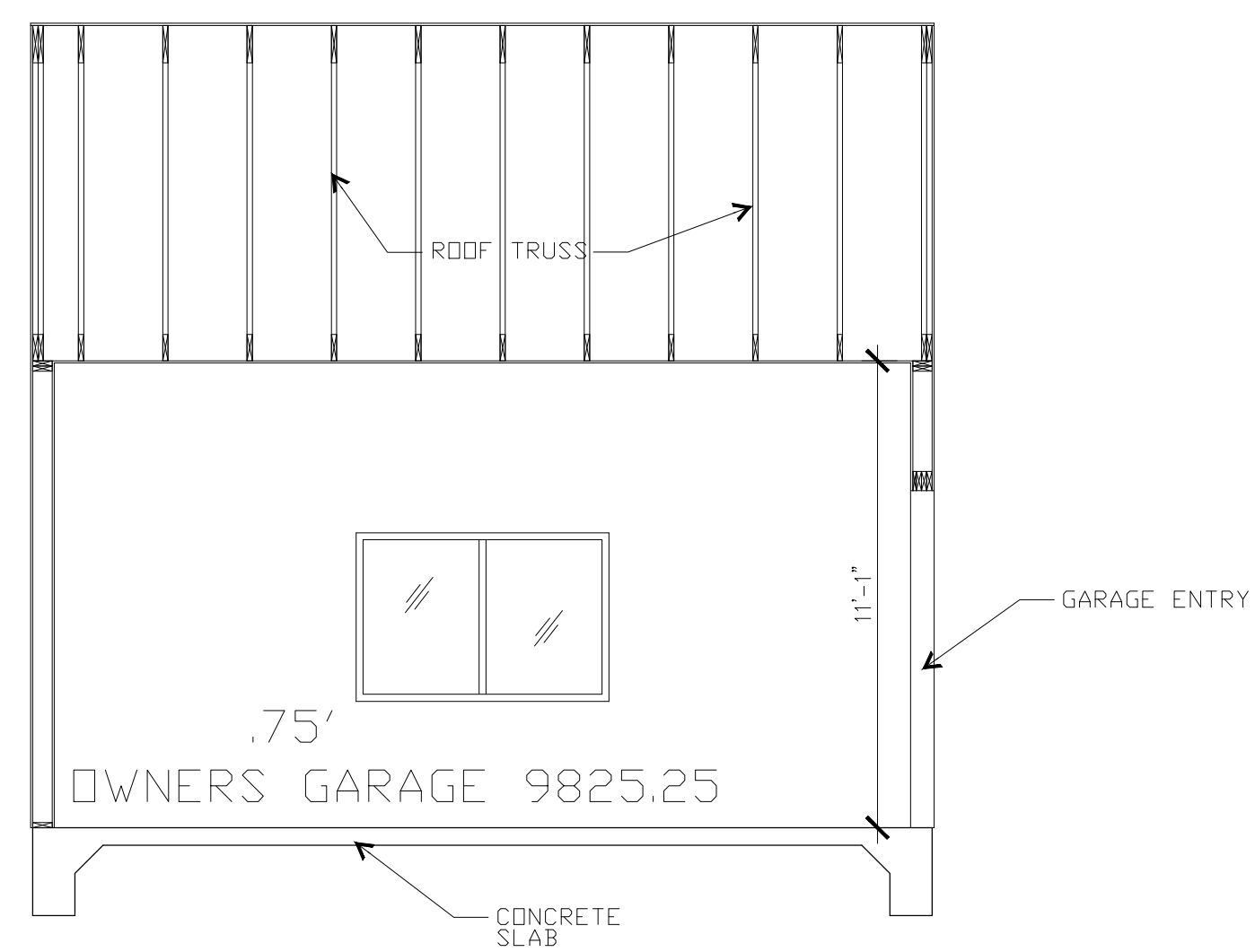


PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

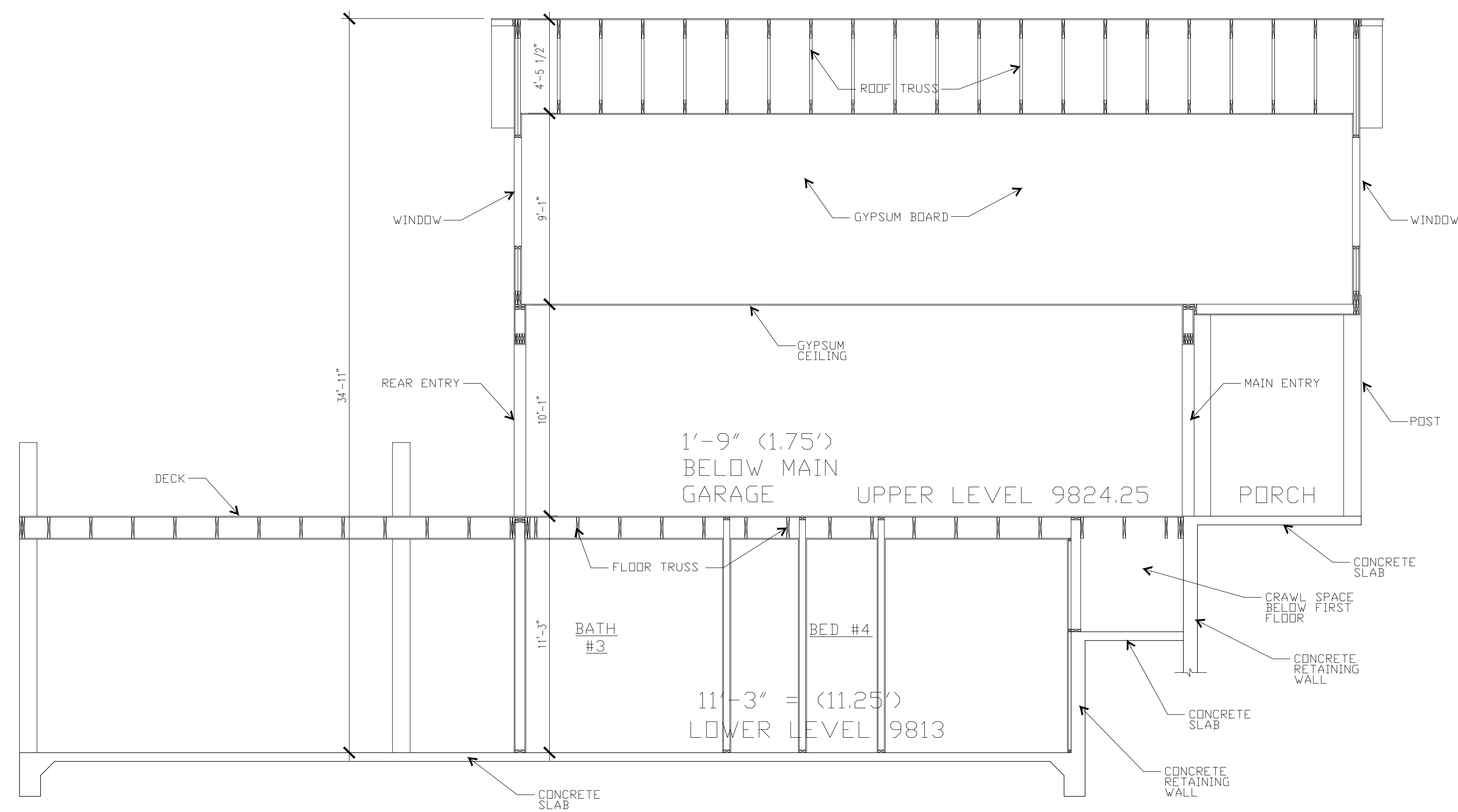
FOR PERMIT

**A5.02**

**BUILDING SECTION**



2 BUILDING SECTION  
1/4" = 1'-0"

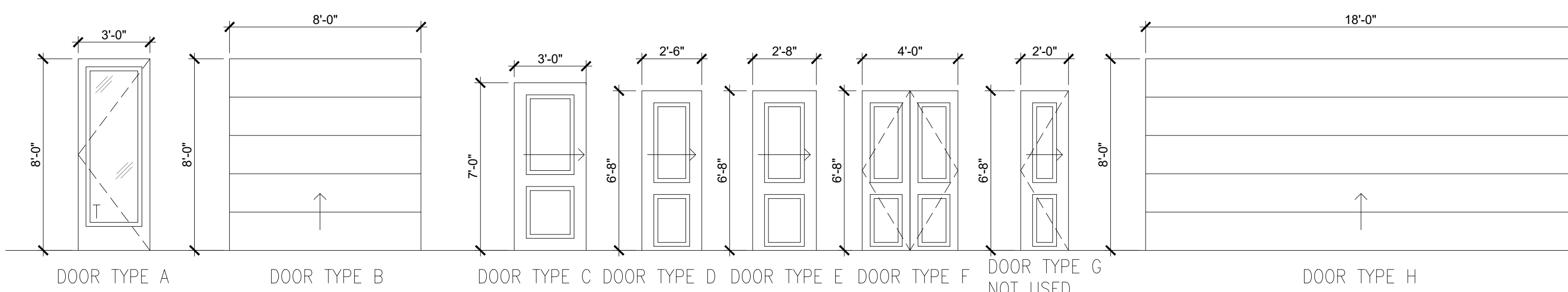


1 BUILDING SECTION  
1/4" = 1'-0"

#34



T - IMPACT RESISTANT TEMPERED GLASS Z97-1975



DOOR / HARDWARE SCHEDULE																
DOORS				DETAILS					INTERIOR FRAME		EXTERIOR FRAME		HARDWARE SET	REMARKS		
MARK	SINGLE	PAIR	TYPE	THICKNESS	MATERIAL	FINISH	GLASS	HEAD	JAMB	SILL	MATERIAL	FINISH			MATERIAL	FINISH
100	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
101	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
102		X	F	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
103	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
104	X		E	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
105	X		H	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
106		X	F	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
107	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
108	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
109	X		E	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
110	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
111	X		G	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
112	X		E	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
113	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
114		X	F	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
115	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
200	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
201	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
202	X		C	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
203	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
204	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
205	X		C	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
206	X		E	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
207	X		A	1 3/4"	S.C.W.D./GLASS	PAINTED	G-01				WOOD	PAINTED	SIDING TRIM	PAINTED	LOCK SET	SELF CLOSING HARDWARE
208	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
209	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			LOCK SET	
210	X		D	1 3/4"	S.C.W.D.	PAINTED					WOOD	PAINTED			PASSAGE	
211	X		H	--	METAL	PAINTED					WOOD	PAINTED	SIDING TRIM	PAINTED	--	BY MANUFACTURE
212	X		B	--	METAL	PAINTED					--	--	SIDING TRIM	PAINTED	--	BY MANUFACTURE

GL-01: 1/4" THICK, HUMAN IMPACT RESISTANT PER ANSI Z97-1975. CLEAR LOW-E GLASS.  
 GL-02: 1/4" CLEAR TEMPERED GLASS, ALL INTERIOR GLASS (I.E. ROOM DOORS AND SHOWER DOORS, ETC.)

GLASS ENERGY NOTES: SGHC: .8

NOTE:  
 1) S.C.W.D. = SOLID CORE WOOD DOOR, REFER TO ARCHITECT FOR STAIN COLOR.  
 2) GLAZING SHALL CONFORM TO 2018 IBC SECTION 2406.3 AND 2604.04. ALL GLASS/ALUM DOOR SHALL BE CLASS "A"

CONTRACTOR TO PROVIDE SUBMITTAL DRAWINGS FOR DOORS AND WINDOWS FOR REVIEW BY ARCHITECT.

**DOOR NOTES:**

1. PROVIDE CYLINDERS AND MASTER KEYING OF ALL LOCKS PER DIRECTION OF OWNER.
2. THE HARDWARE CONTRACTOR SHALL PROVIDE AS PART OF THE BID, ANY INCIDENTAL HARDWARE ITEMS TO COMPLETE THE HARDWARE SPECIFIED AND SHALL PROVIDE A LIST OF SUCH ADDITIONAL HARDWARE ITEMS WITH THE BID.
3. LABELED FRAMES MUST BE PROVIDED AT DOORS SCHEDULED TO BE PROVIDED WITH A UL LABEL RATING, AS REQUIRED.
4. PROVIDE WEATHER PROOF MEMBRANE FLASHING AT ALL EXTERIOR DOOR AND WINDOW HEAD, JAMB AND SILL AS REQUIRED, TYPICAL.
5. CONTRACTOR TO VERIFY SWING OF DOOR WITH FLOOR PLAN. SWING ADDED FOR CONVENIENCE ONLY.

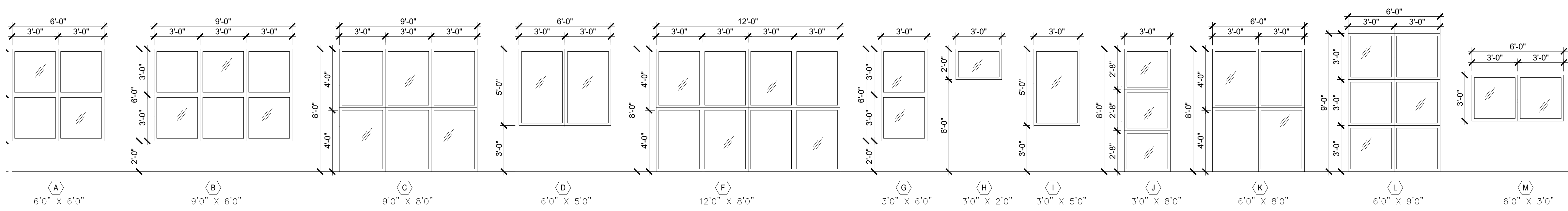
**WINDOW SCHEDULE**

MARK	FRAME OPENING SIZE WIDTH X HEIGHT	MATERIAL	GLASS	FINISH	HEAD	JAMB	SILL	REMARKS
A	6'-0" x 6'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - SINGLE HUNG
B	9'-0" x 6'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
C	9'-0" x 8'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
D	6'-0" x 5'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
E	NOT USED							
F	12'-0" x 8'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
G	3'-0" x 6'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - SINGLE HUNG
H	3'-0" x 2'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
I	3'-0" x 5'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
J	3'-0" x 8'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
K	6'-0" x 8'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
L	6'-0" x 9'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED
M	6'-0" x 3'-0"	VINYL & GLASS	G-01	BLACK				G.C. TO VERIFY ROUGH OPENING SIZE - FIXED

NOTE:  
 GL-01: 1/4" THICK, HUMAN IMPACT RESISTANT PER ANSI Z97-1975. CLEAR LOW-E GLASS.

GLASS ENERGY NOTES:  
 WINDOWS: SGHC: .4  
 U FACTOR = .55

- 1) PROVIDE WEATHER PROOF MEMBRANE FLASHING AT ALL EXTERIOR DOOR AND WINDOW HEAD, JAMB AND SILL AS REQUIRED, TYPICAL.
- 2) GLAZING SHALL CONFORM TO 2018 IBC SECTION 2406.

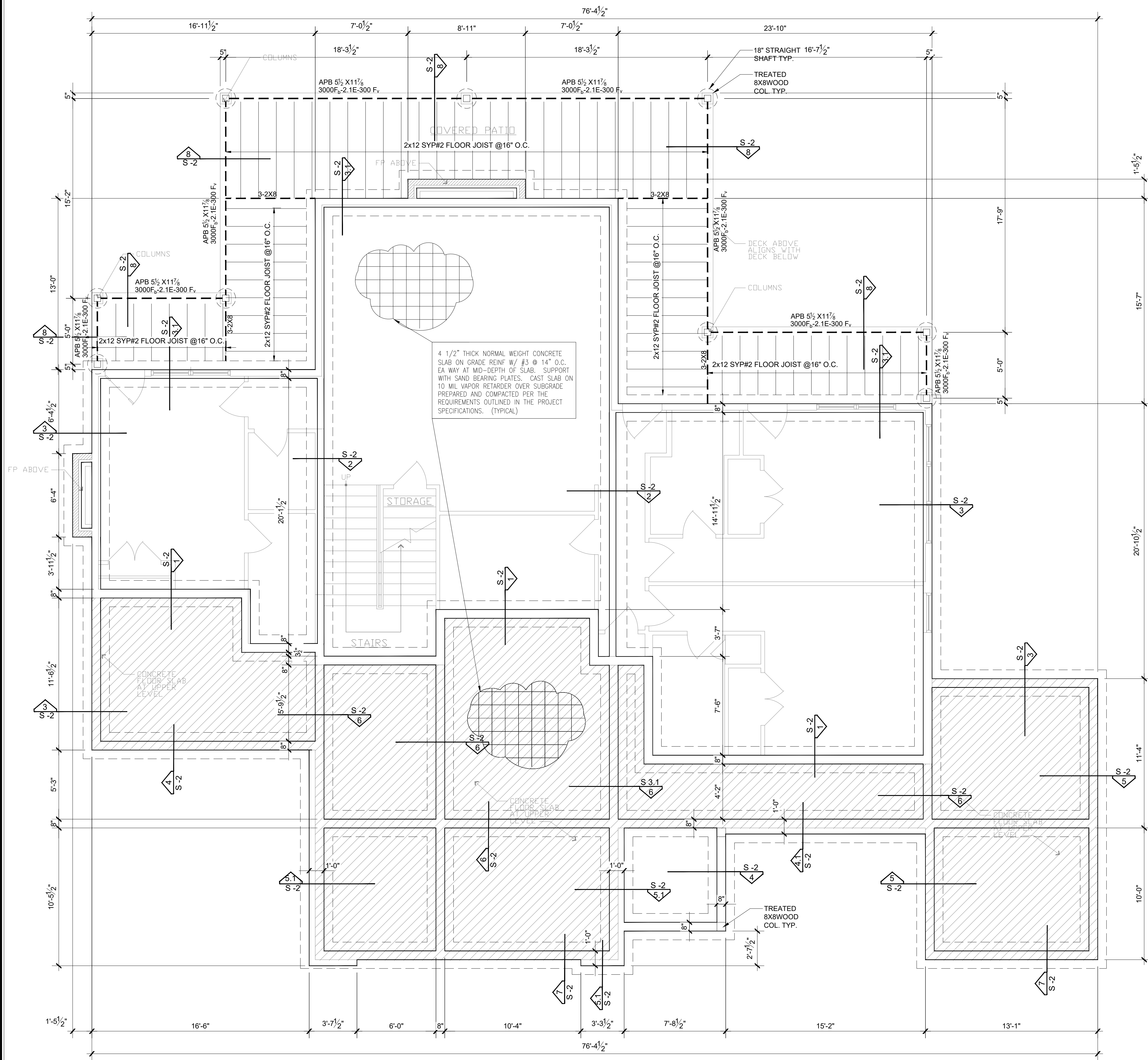


**BLUE RIVER MOUNTAIN HOME**  
 311 WAGON ROAD  
 BLUE RIVER, COLORADO 80424



PROJECT NUMBER	22066	
REVISIONS		
No.	Description	Date

FOR PERMIT  
**A6.00**  
 DOOR AND WINDOWS



**PROPOSED FOUNDATION PLAN**  
**SCALE: 1/4" = 1'-0"**

**FOUNDATION NOTES**

1. THE DETAILS SHOWN ON THIS DRAWING ARE TO BE USED IN A RIGID MONOLITHIC SLAB DESIGNED IN ACCORDANCE WITH THE BUREAU OF RESEARCH AND ADVISORY BOARD (BRAB) AS EXTENDED IN THE CRITERIA FOR THE SELECTION AND DESIGN OF SLABS ON GROUND.
2. WORK THIS DRAWING IN CONFORMANCE WITH THE NOTES SPECIFIED HEREIN AFTER, AND WITH THE GENERAL NOTES ON THE FOUNDATION DRAWING.
3. RE-BARS LAPS OR SPLICES MUST BE A MINIMUM OF 30 BAR DIAMETER LONG.
4. LAPS OF REINFORCING BARS MUST BE STAGGERED A MINIMUM OF 5" IN CASE A WELDED WIRE FABRIC IS USED INSTEAD OF THE #3 AT RE - BARS SHOWN. ( NO WWF IS ALLOWED THIS CASE SMALLER THAN 6X6 W2.9 X W2.9 ).

**SITE PREPARATION**

- SUBGRADE PREPARATION AND COMPACTION SHALL BE PERFORMED ACCORDING TO THE SOIL REPORT, DATED 2/2/2023 PREPARED BY STEPHEN GEORGE P.E.
1. CLEAN THE SITE BENEATH THE SLAB OF ALL GRASS AND WEEDS BY REMOVING THE TOP 6 INCHES OF SOIL AND DISPOSE. REMOVE BY GRUBBING TO CREATE DEPTHS TREES AND LARGE BUSHES AND ALL DECAYED OR DYING ORGANIC MATERIALS. REMOVE ALL TREE WITHIN 15 FEET OF THE FOUNDATION.
  2. THE NATURAL SUBGRADE SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 18 INCHES. THE SCARIFIED SOILS SHOULD THEN BE RECOMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR DENSITY TEST (ASTM D-698). THE MOISTURE CONTENT SHOULD RANGE FROM -1% TO +3% OF OPTIMUM MOISTURE.
  3. STRUCTURAL FILL SHALL BE SANDY CLAY. CLEAN FROM ALL ORGANIC MATERIAL, AND SHALL HAVE A PLASTICITY INDEX BETWEEN 7 AND 20.
  4. STRUCTURAL FILL SHALL BE PLACED IN LAYERS, NOT TO EXCEED 8", AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY. (ASTM D698)
  5. A BEDDING LAYER OF LEVELLING # STONE, A MAXIMUM OF FOR (4) INCHES THICK MAY BE PLACED IMMEDIATELY BENEATH THE FLOOR SLAB. A VAPOR BARRIER CONSISTING OF SIX MIL PLASTIC SHEETING SHOULD BE PLACED OVER THE SAND CUSHION TO PREVENT WATER MIGRATION THROUGH THE CONCRETE SLAB. THE EXCAVATIONS FOR THE GRADE BEAMS SHOULD BE CLEAN AND FREE OF ANY LOOSE MATERIALS PRIOR TO CONCRETE PLACEMENT.
  6. AFTER THE SLAB HAS BEEN COMPLETED. THE STABILITY OF ITS MOISTURE CONTENT MUST BE MAINTAINED.
  7. BACKFILL AROUND THE EXTERIOR BEAMS OF THE STRUCTURE SHALL BE MOISTENED AND COMPACTED AND SHOULD BE SLOPED TO DRAIN AWAY FORM THE STRUCTURE IN ALL DIRECTIONS. NO PONDING IS TO BE ALLOWED NEXT TO THE STRUCTURE.
  8. AFTER THE SLAB HAS BEEN COMPLETED. THE STABILITY OF ITS MOISTURE CONTENT MUST BE MAINTAINED.

**RE-BAR NOTES**

1. REINFORCING BARS MUST BE DEFORMED, GRADE 60 CONFORMING TO ASTM A - 615.
2. WELDED WIRE FABRIC MUST BE 65 KSI AS PER ASTM A - 185, MUST BE LAPPED IN ACCORDANCE WITH ACI 318 LATEST EDITION.
3. RE-BARS MUST CONFORM TO THE DETAILS & NOTES SHOWN ON THE FOUNDATION DETAILS DRAWING. ATTENTION MUST BE GIVEN TO THE PLACEMENT OF CORNER BARS AND BARS PLACED AT INTERSECTION OF INTERIOR TO EXTERIOR BEAMS.
4. SLAB REINFORCEMENT AS DESIGNED MUST BE #3 @ 14 INCHES ON CENTER EACH WAY, IN CASE WELDED WIRE FABRIC IS USED INSTEAD. IT SHOULD HAVE THE SAME STEEL AREA AS THE #3 @ 14 INCHES ON CENTER IT REPLACES.
5. STIRRUPS IN GRADE BEAMS SHALL BE #3 @ 18 INCHES ON CENTER STARTING AT 10 INCHES FROM CORNERS AND INTERSECTIONS.

**CONCRETE NOTES**

1. CONTRACTOR, BUILDER MUST VERIFY ALL DIMENSIONS, DROPS AND OFFSETS AGAINST ARCHITECTURAL DRAWINGS AND MUST REPORT ANY DISCREPANCIES TO THE ENGINEER OR THE ARCHITECT PRIOR TO COMMENCING THE JOB.
2. CONCRETE IN FOUNDATION MUST HAVE A MINIMUM OF 3000 PSI COMPRESSIVE STRENGTH AFTER 28 DAYS.
3. WATER-CEMENT RATIO IN CONCRETE MIX SHALL BE LOW (3 INCHES SLUMP ). ADDITION OF ADD MIXTURE SUCH AS CALCIUM CHLORIDE SHALL NOT EXCEED 2% BY WEIGHT OF CEMENT.
4. A 6 MIL POLYVINYL VAPOR BARRIER SHALL BE PLACE BETWEEN THE FOUNDATION AND THE SOIL IT BEARS ON AND MUST BE LAPPED. LAPS MUST BE TAPED.
5. FORMS MUST CONFORM TO THE SIZE AND SHAPE OF THE FOUNDATION. BE SECURELY TIGHT, PREVENT LEAKING AND ALLOW CONCRETE TO BE VIBRATED WITHOUT DISPLACEMENT.

CONTRACTOR

FIRM



ENGINEER



ISSUED FOR:	<input type="checkbox"/> DESIGN DEVELOPMENT	<input type="checkbox"/> PROGRESS 100 %	<input type="checkbox"/> PERMIT	<input type="checkbox"/> CONSTRUCTION DOCUMENT	<input type="checkbox"/> CLIENT
REVISION:					
DATE:					

**SINGLE-FAMILY RESIDENCE**  
 311 Wagon Rd, Blue River, CO 80424

**Foundation Plan**

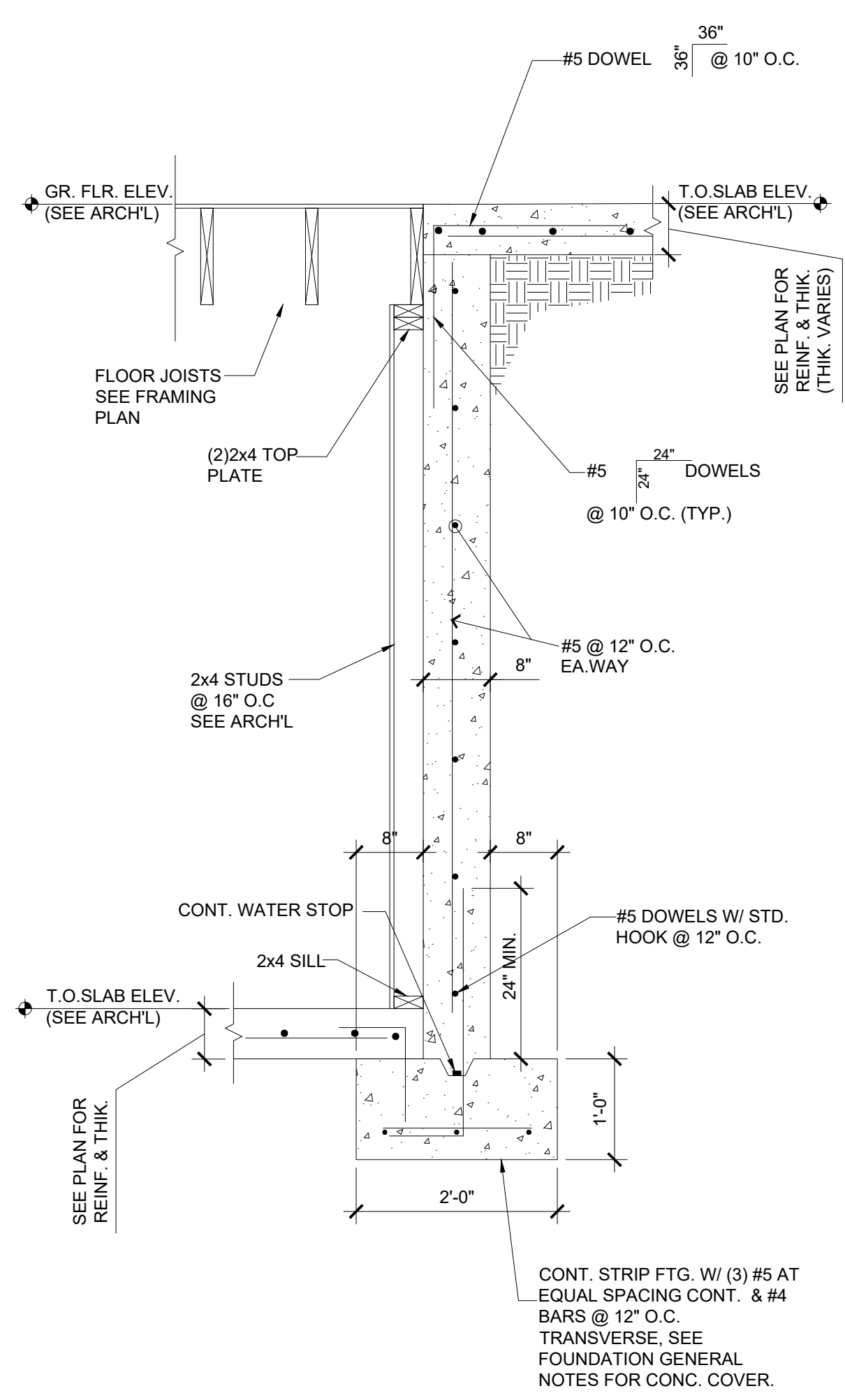
PROJECT LOCATION:

DATE: 04/10/2023

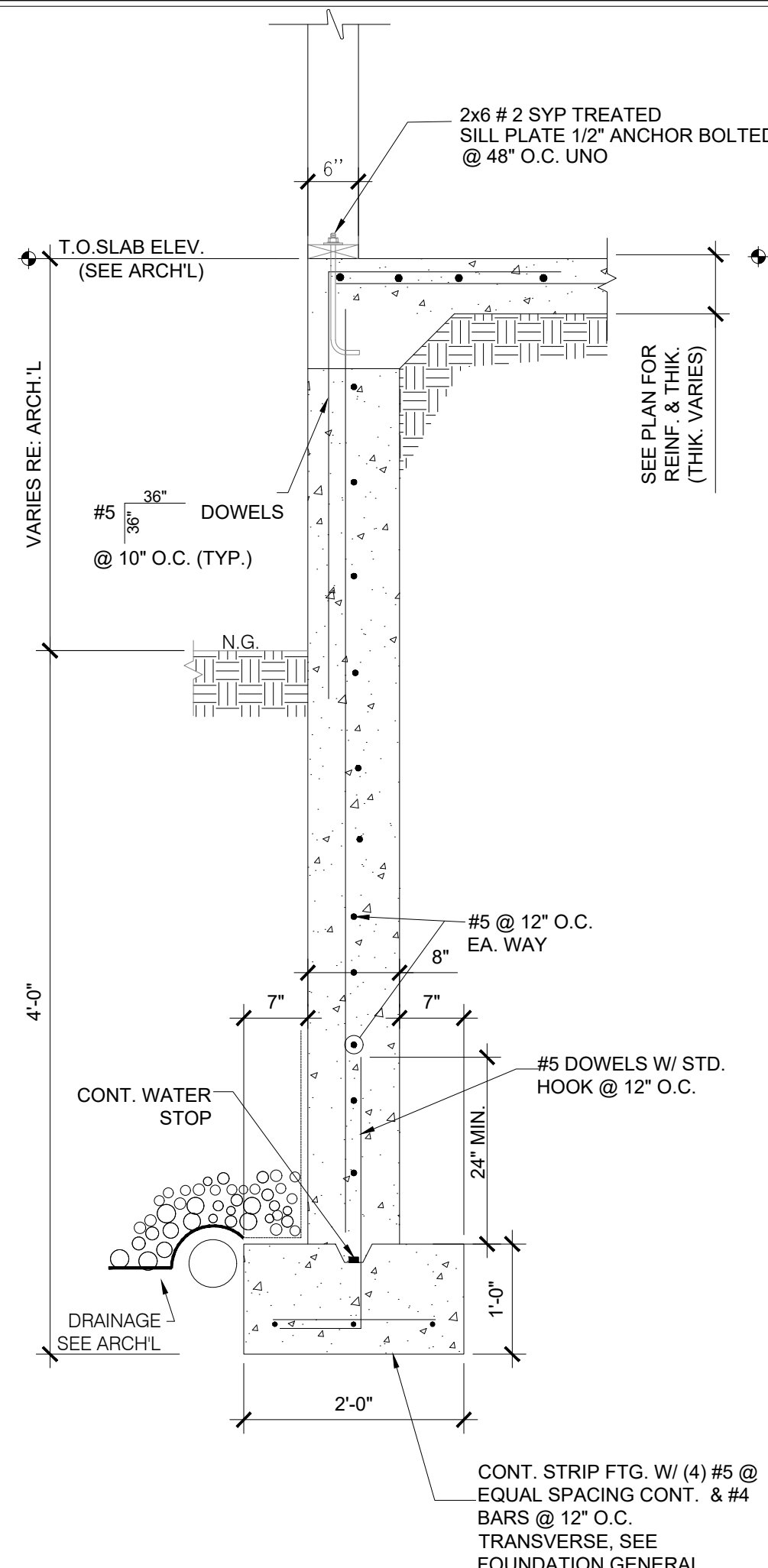
SHEET

S-1

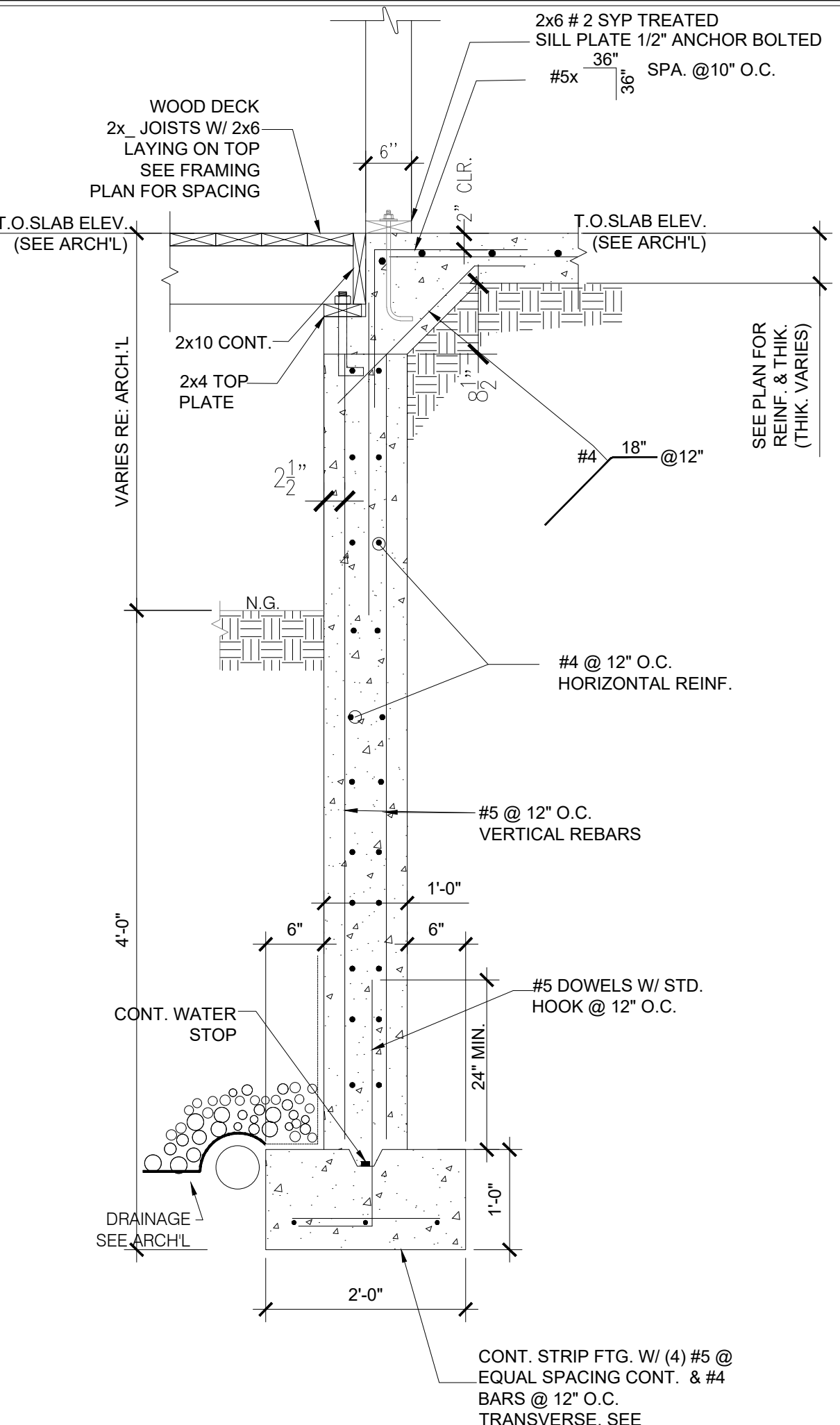




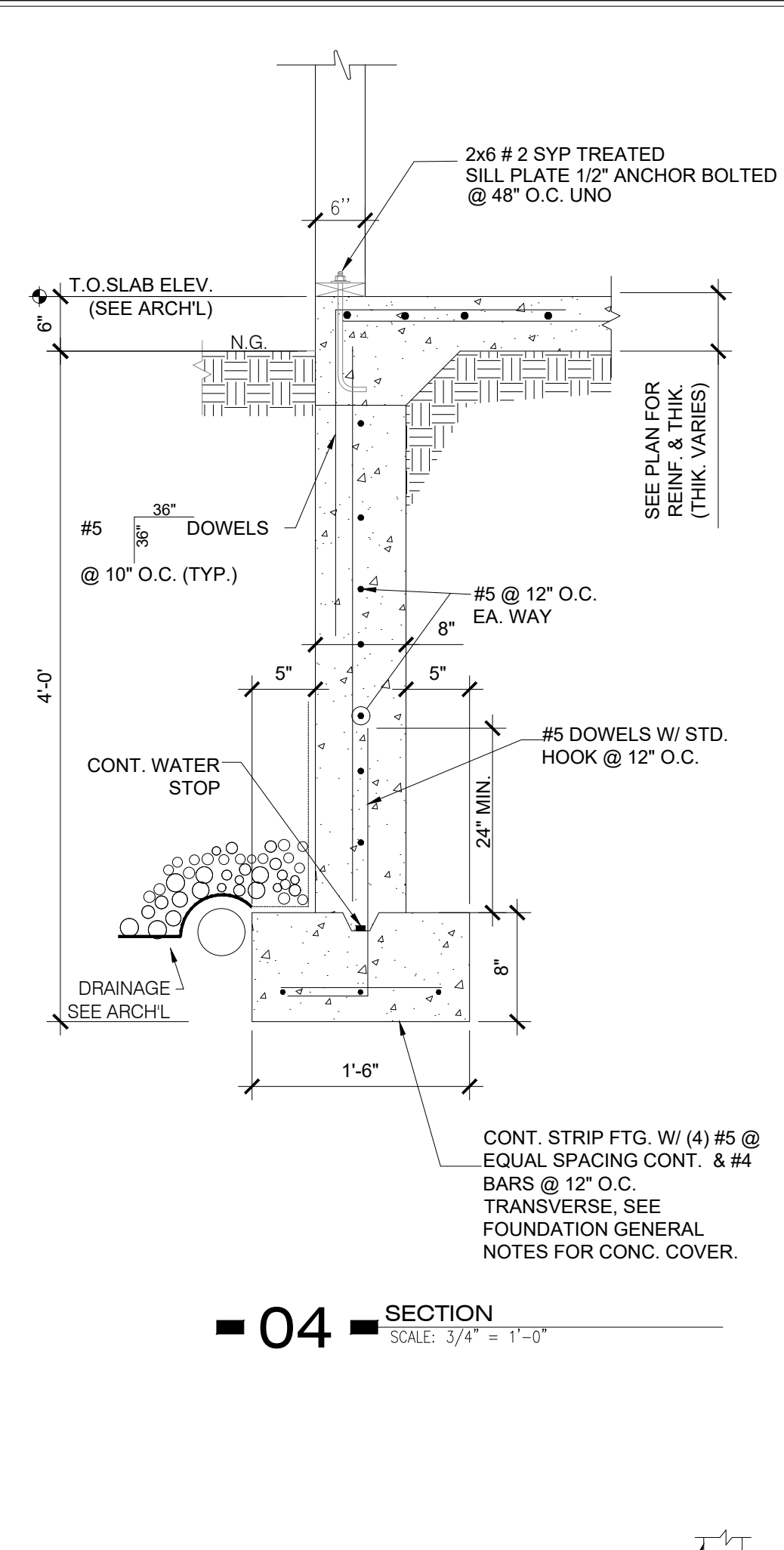
01 SECTION SCALE: 3/4" = 1'-0"



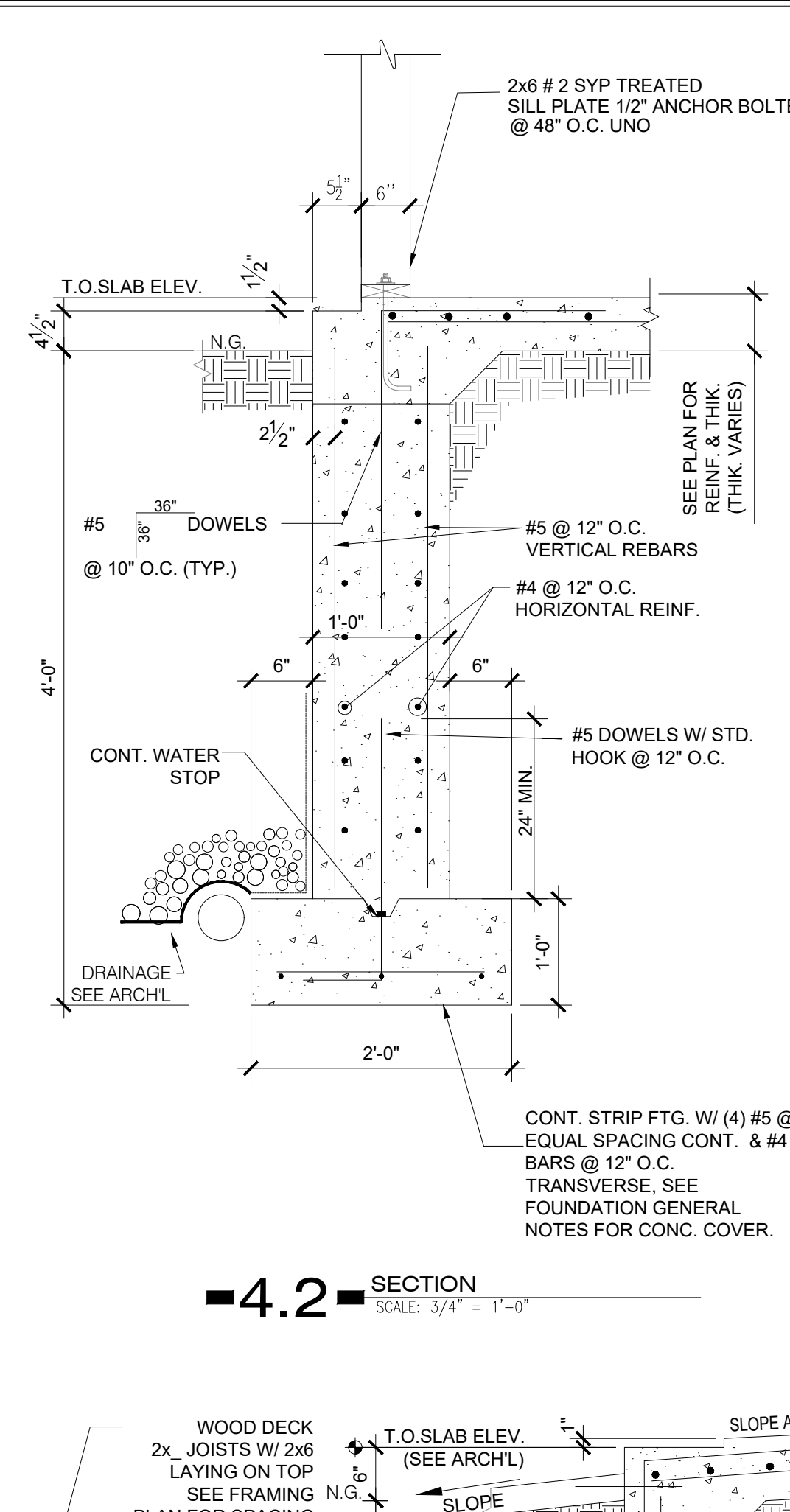
03 SECTION SCALE: 3/4" = 1'-0"



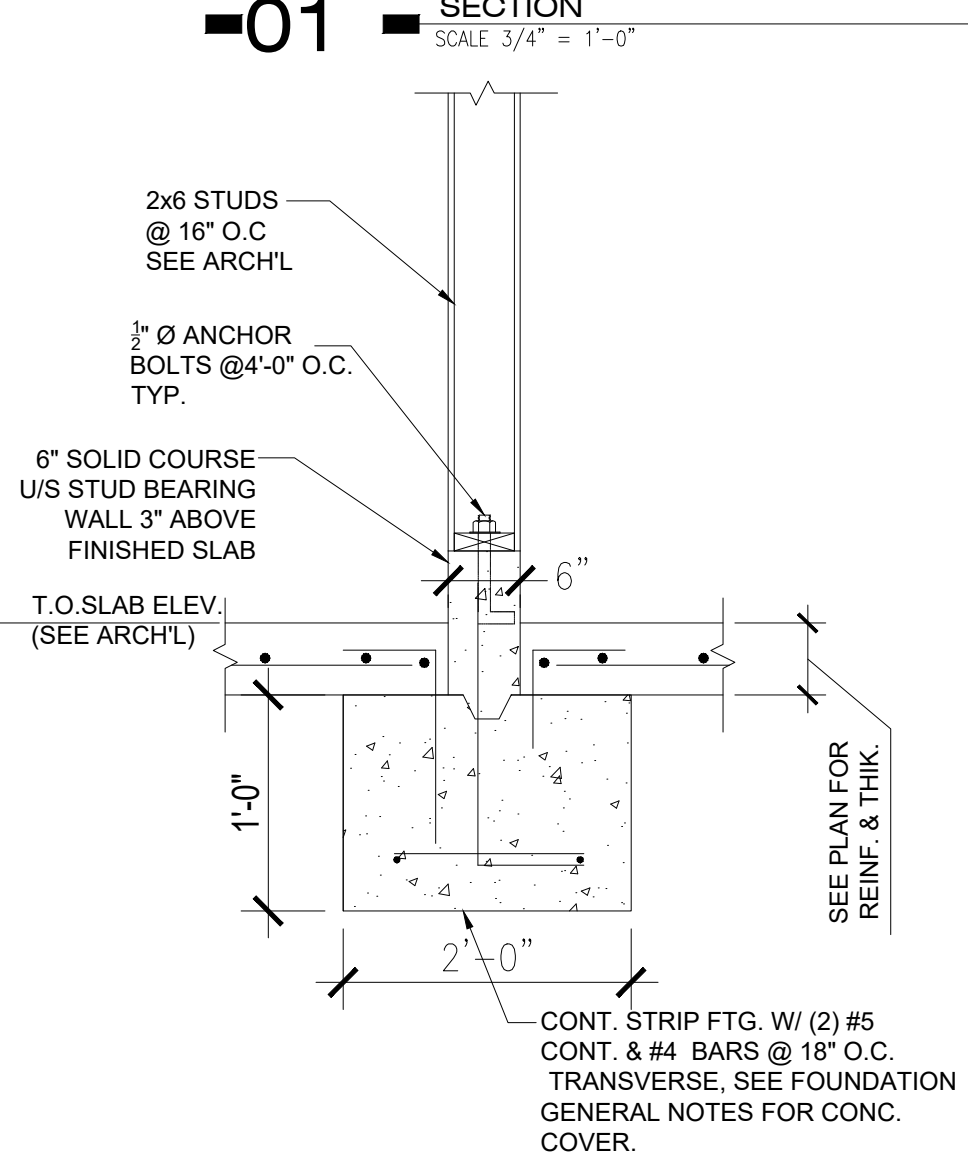
04 SECTION SCALE: 3/4" = 1'-0"



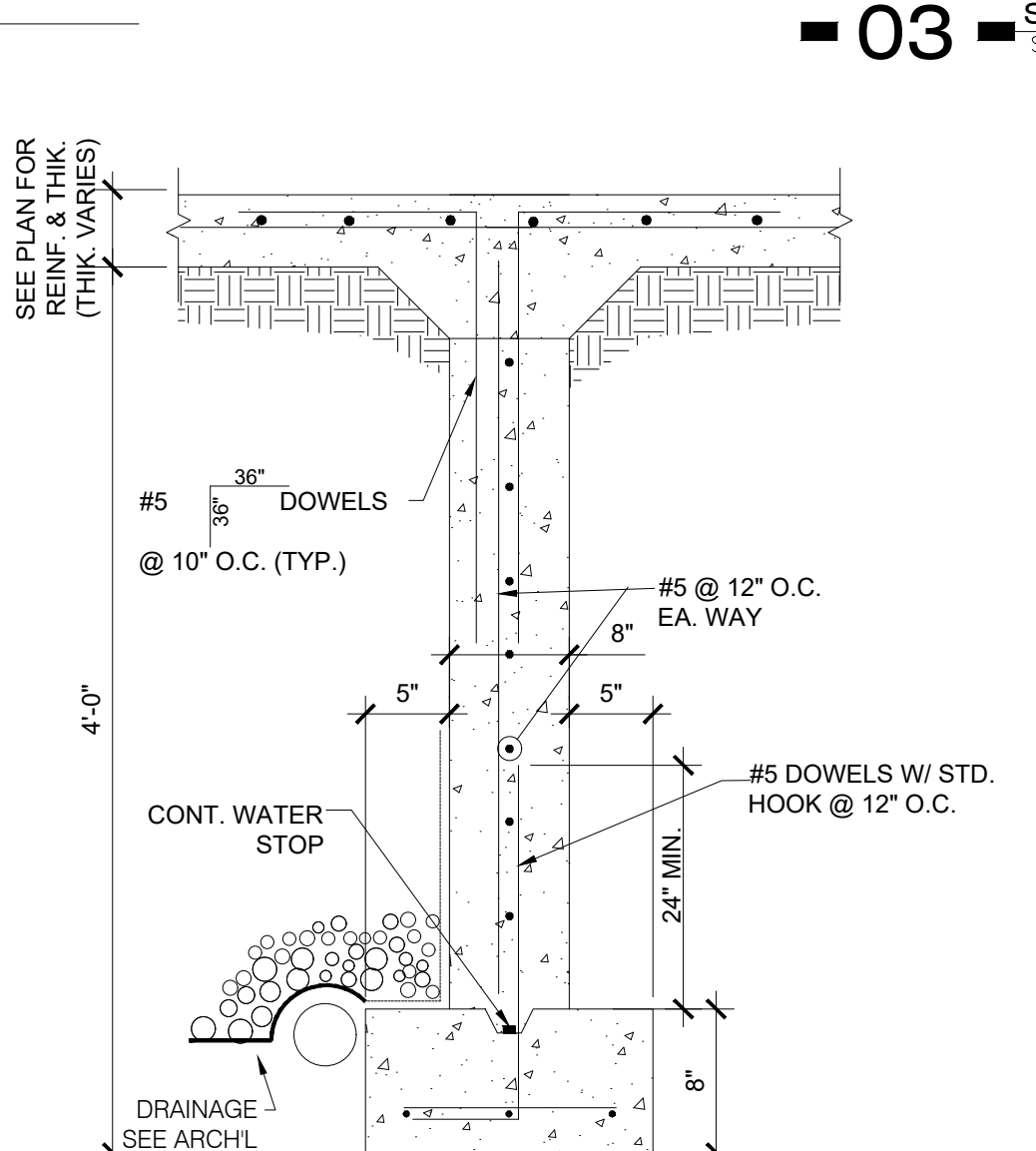
4.2 SECTION SCALE: 3/4" = 1'-0"



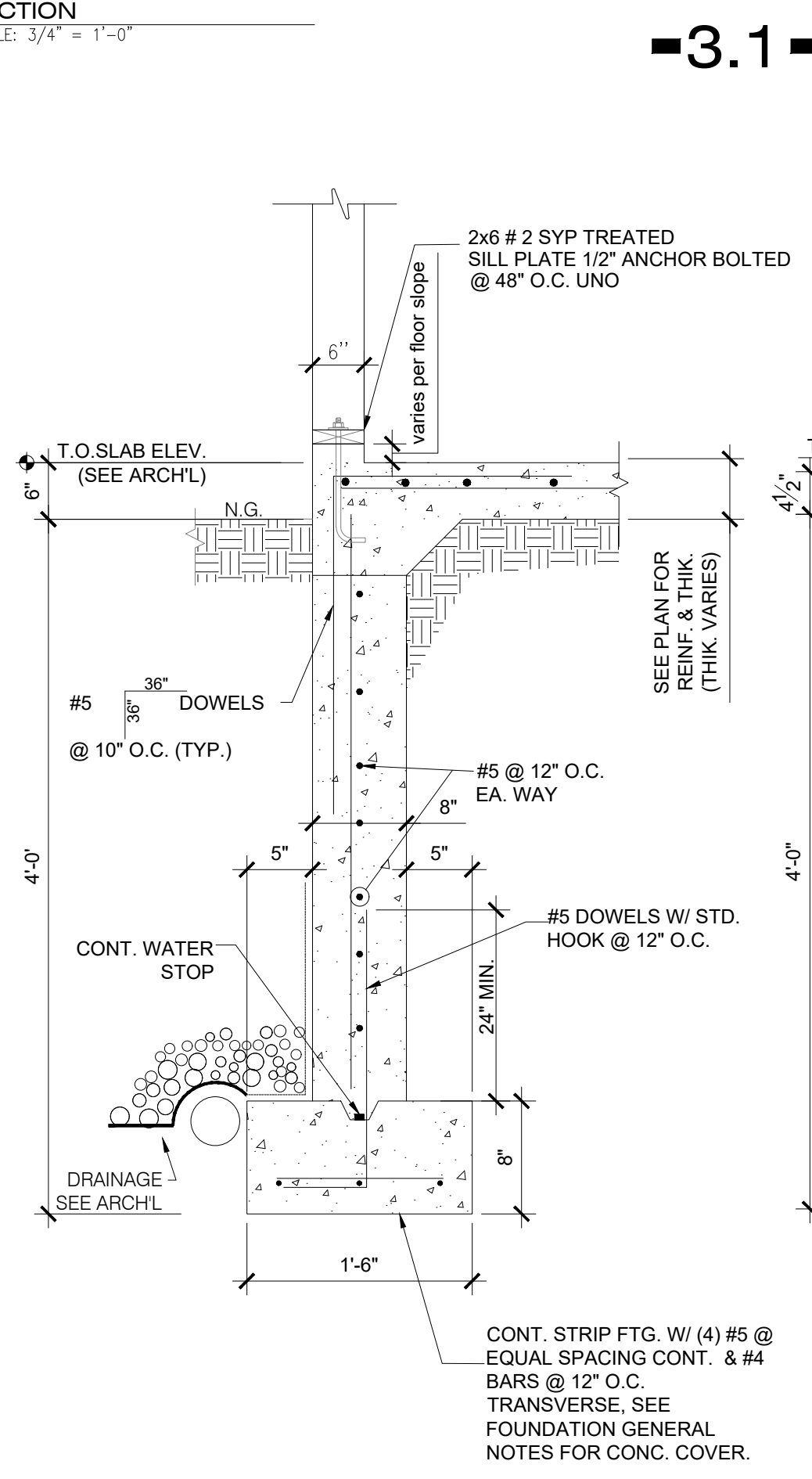
4.1 TYP. POST BASE CONNECTION DET. SCALE: NTS



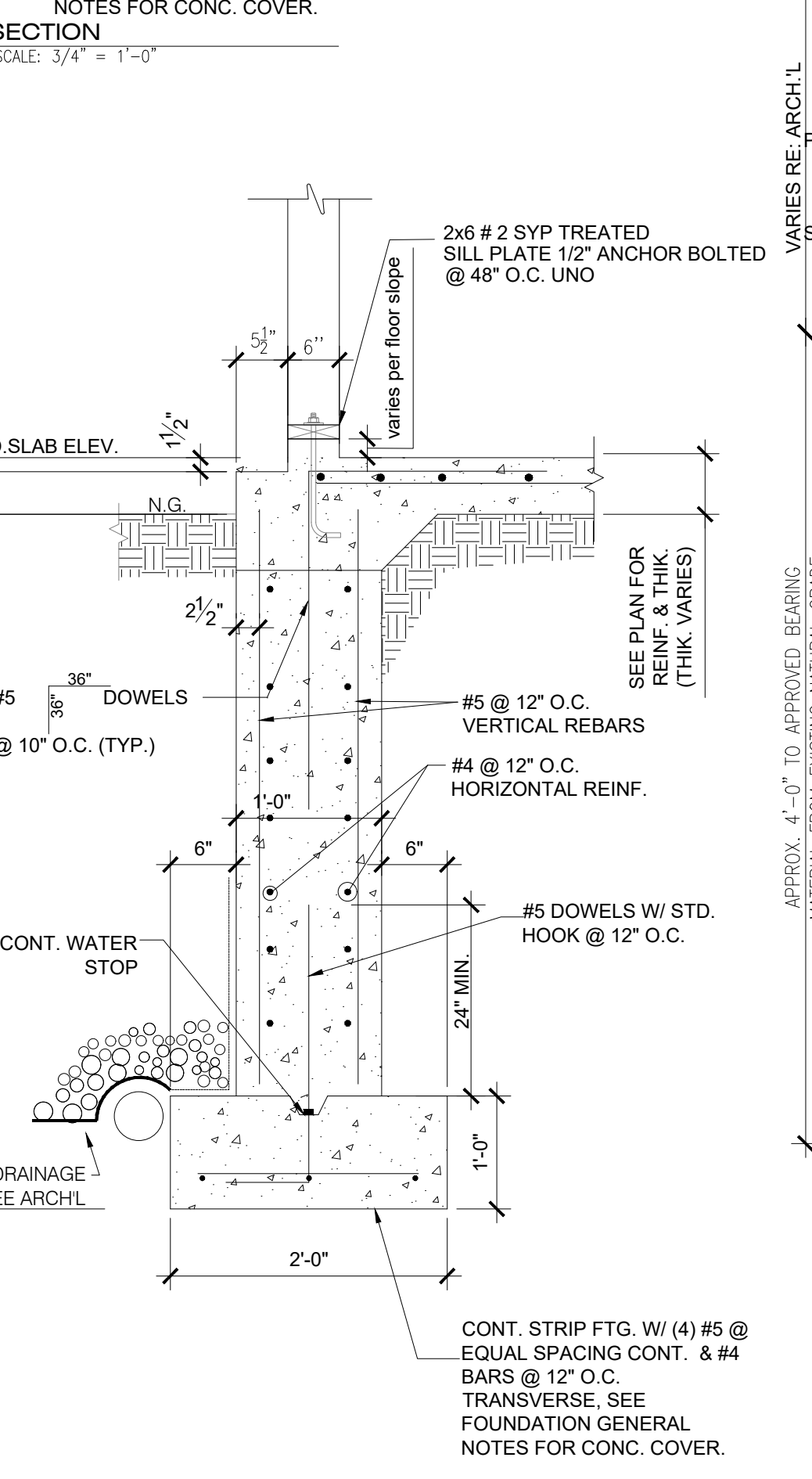
02 SECTION SCALE: 3/4" = 1'-0"



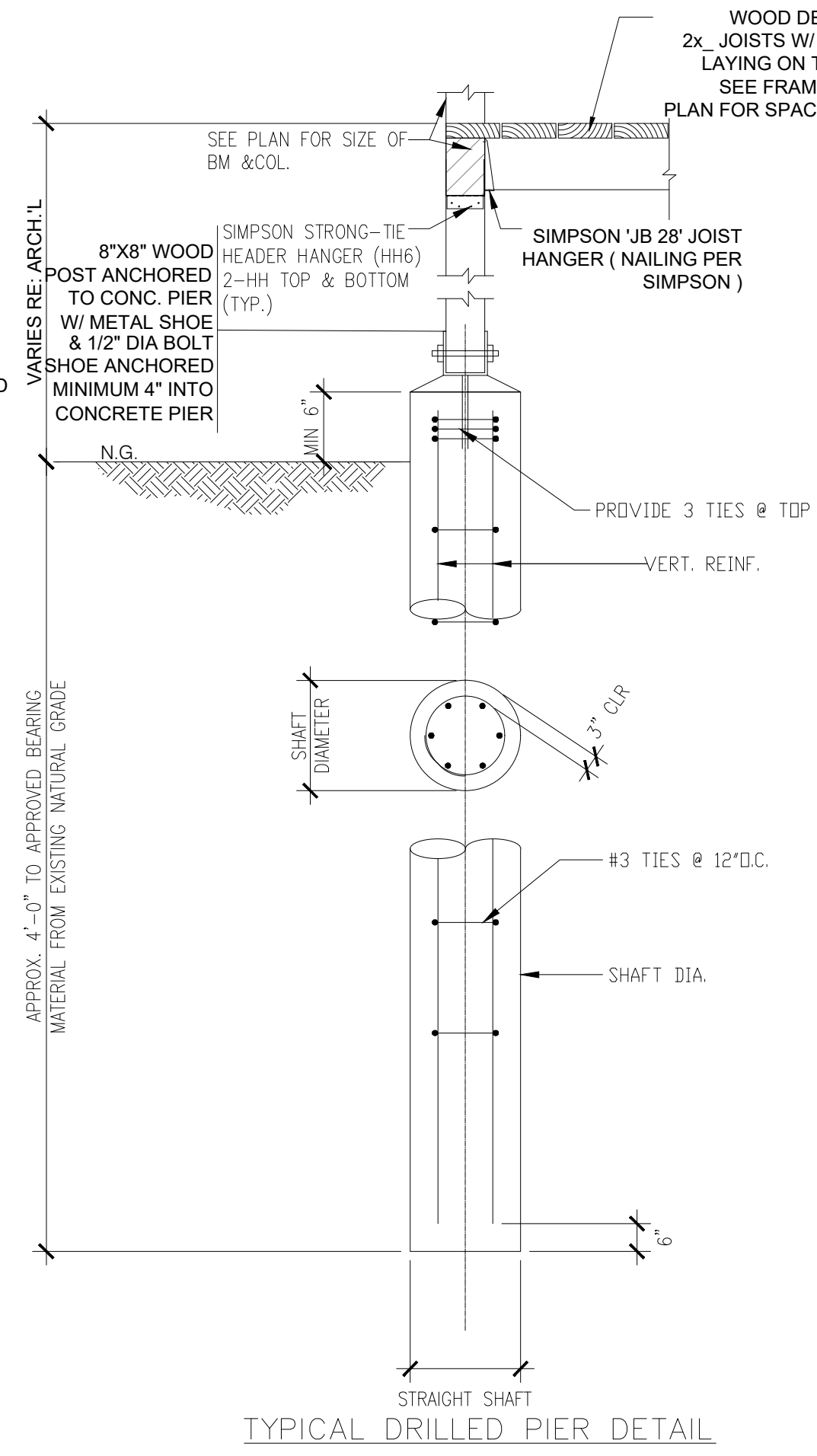
06 SECTION SCALE: 3/4" = 1'-0"



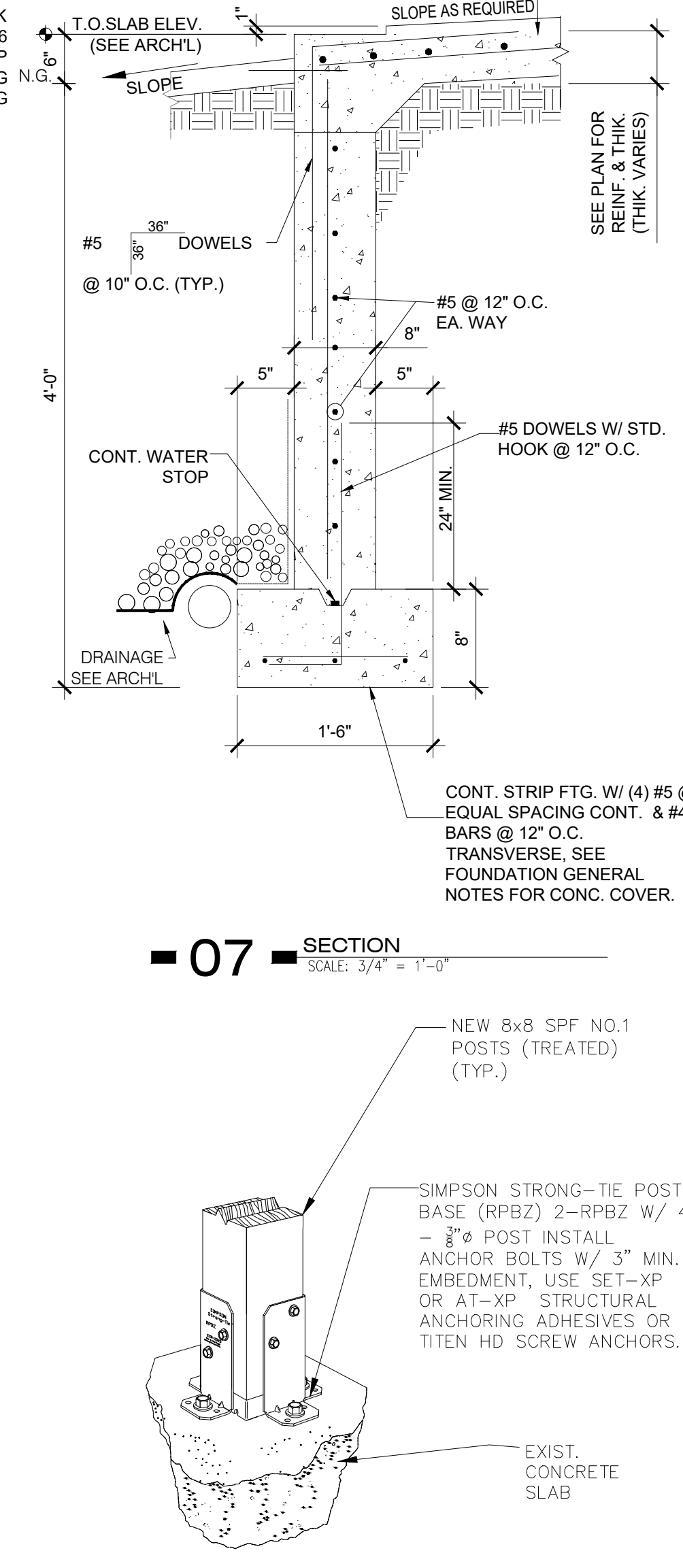
05 SECTION SCALE: 3/4" = 1'-0"



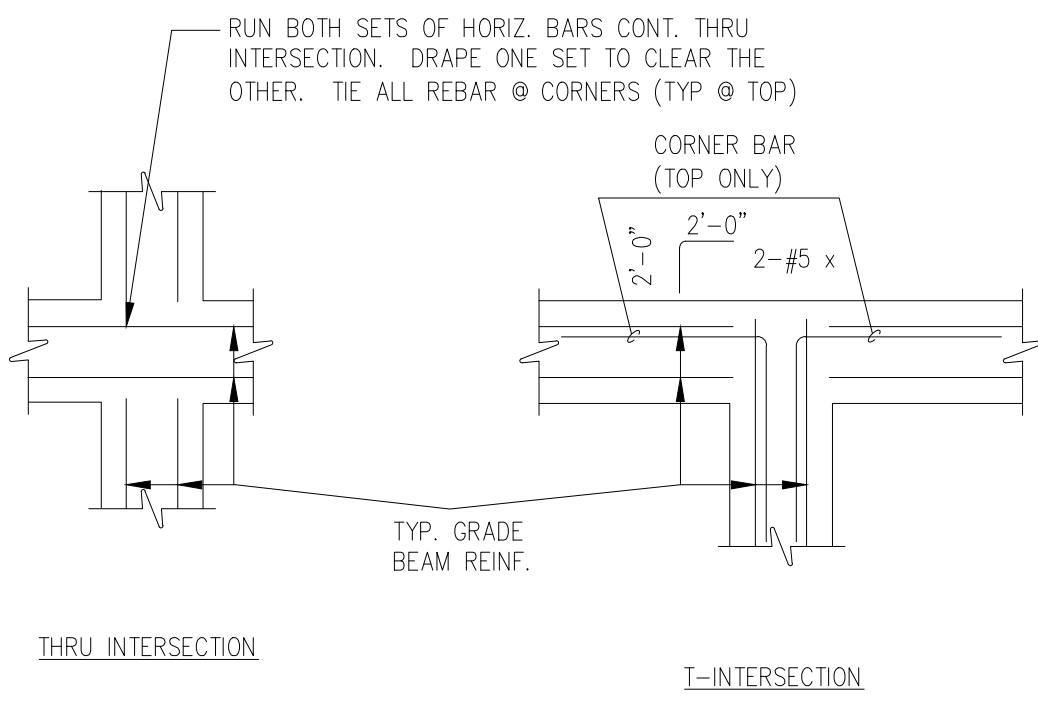
5.1 SECTION SCALE: 3/4" = 1'-0"



TYPICAL DRILLED PIER DETAIL



07 SECTION SCALE: 3/4" = 1'-0"



BEAM DETAIL INTERSECTIONS SCALE: NTS

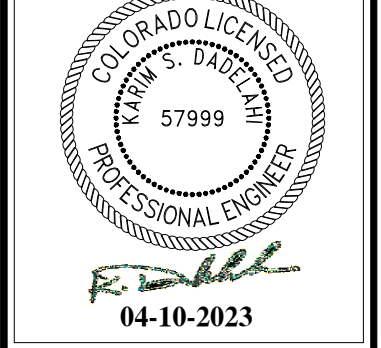
SHAFT REINFORCEMENT	
SHAFT DIA.	VERT. REINF.
18"Ø	6-#6

CONTRACTOR

FIRM

**SSC**  
 Sarah Structural & Civil, LLC  
 Sarah Structural & Civil, LLC  
 13831 Northwest Freeway, Suite 245  
 Houston, Texas 77040 (832) 922-1145  
 Office: (713) 485-5641

ENGINEER



ISSUED FOR:

<input type="checkbox"/> DESIGN DEVELOPMENT	<input type="checkbox"/> PROGRESS 100 %
<input type="checkbox"/> BRIDGING	<input type="checkbox"/> PERMIT
<input type="checkbox"/> CONSTRUCTION DOCUMENT	<input type="checkbox"/> CLIENT

REVISION	DATE

PROJECT LOCATION: SINGLE-FAMILY RESIDENCE 311 Wagon Rd, Blue River, CO 80424

SHEET TITLE: Foundation Details

DATE: 04/10/2023

SHEET: S-2

GENERAL NOTES: FOUNDATION SYSTEM

(THESE NOTES SHALL CONTROL UNLESS OTHERWISE NOTED ON PLANS AND DETAIL.)

SOILS REPORT

1. IT IS CONTRACTOR'S RESPONSIBILITY TO REVIEW THIS REPORT FOR SITE PREPARATION AND GRADE BEAMS/ FOOTINGS.

SUBGRADE PREPARATION:

- 1. STRIP AREAS WITHIN BUILDING LINES REMOVE ALL VEGETATION, TOP SOIL AND DEBRIS.
2. FOLLOWING STRIPPING, PROOF ROLL EXPOSED SUBGRADE TO IDENTIFY WEAK OR SOFT AREAS SUCH ZONES SHALL BE REMOVE AND REPLACE WITH SELECTED FILL.
3. PROVIDE A UNIFORM LEVEL GRADE FOR THE PLECEMENT OF VOID BOXES, USE LEVELING SAND IF & AS REQUIRED.

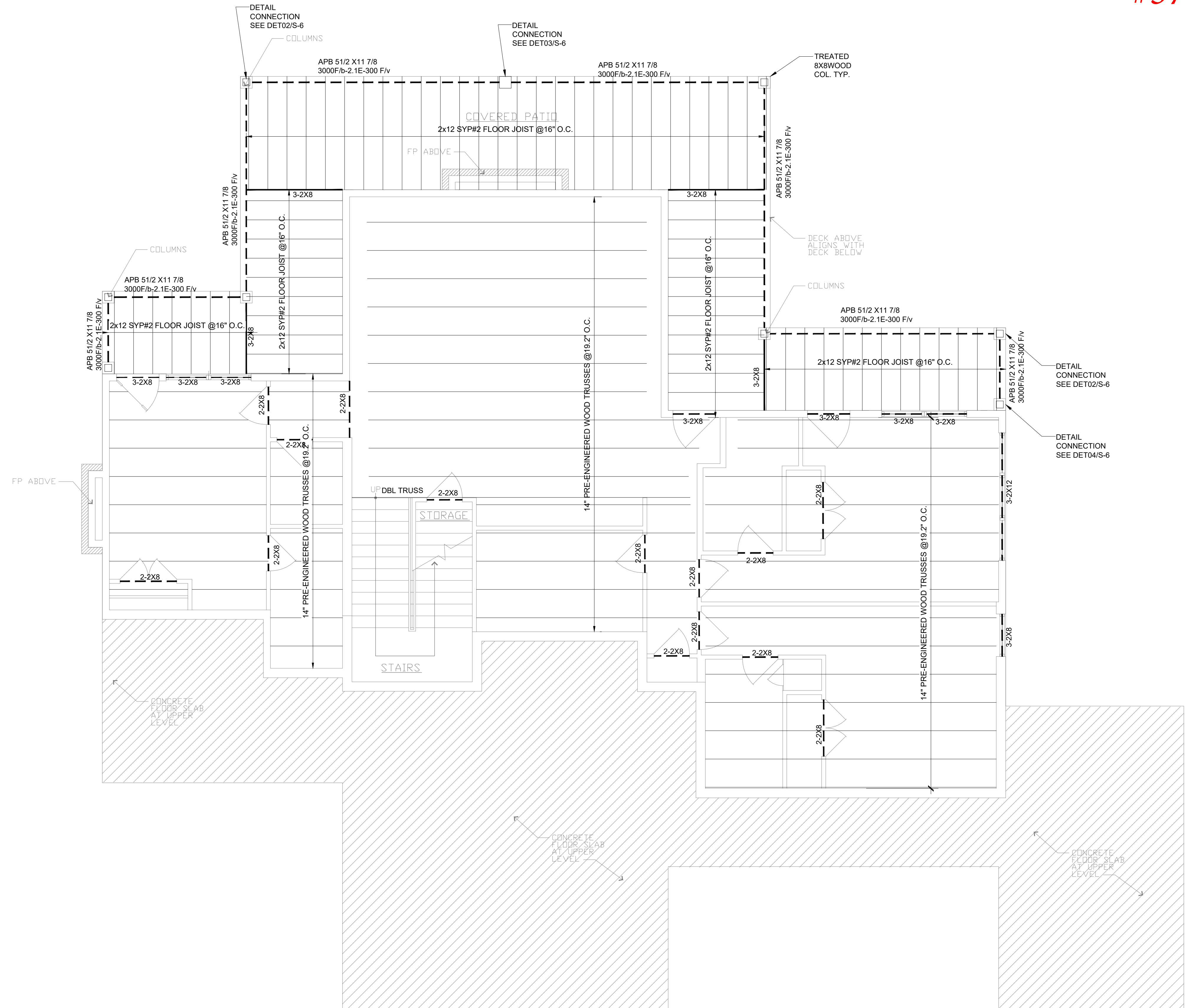
SURFACE DRAINAGE:

THE FOLLOWING DRAINAGE PRECAUTIONS SHOULD BE OBSERVED DURING CONSTRUCTION AND AT ALL TIMES AFTER THE STRUCTURE HAS BEEN COMPLETED. BUILDER SHALL ADVISE OWNER OF THESE PRECAUTIONS.

- 1. BACKFILL AROUND THE STRUCTURE SHOULD BE A COHESIVE SOIL MATERIAL WHICH SHOULD BE MOISTENED AND COMPACTED TO AT LEAST NINETY (90) PERCENT OF STANDARD PROCTOR DENSITY.
2. THE GROUND SURFACE SURROUNDING THE EXTERIOR OF THE STRUCTURE SHOULD BE SLOPED TO DRAIN AWAY FROM THE STRUCTURE IN ALL DIRECTIONS MINIMUM DISTANCE OF FIVE (5) FEET.
3. IN NO SUCH INSTANCE SHALL SURFACE DRAINAGE BE ALLOWED TO CROSS OVER ANY SIDE OR BACK PROPERTY LINES UNLESS A COMMON DRAINAGE AGREEMENT OR COMMON AREA AGREEMENT IS IN FORCE.
4. WHERE LANDSCAPING IS TO BE INSTALLED NEXT TO PERIMETER GRADE BEAMS, A MOISTURE BARRIER OR OTHER SUITABLE MEANS SHOULD BE INSTALLED TO PREVENT MOISTURE FROM ENTERING THE UNDERLYING CLAY SOILS.
5. ROOF DOWNSPOUTS AND DRAINS SHOULD DISCHARGE WELL AWAY FROM THE LIMITS OF THE FOUNDATION OR EDGE OF PERIMETER GRADE BEAMS.

GENERAL WOOD FRAMING NOTES:

- 1. DESIGN CRITERIA:
A. CODES:
IRC 2015
AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (TIMBER CONSTRUCTION MANUAL, LATEST EDITION).
BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (A.C.I. 318).
2. TIMBER SPECIFICATIONS:
A. STRUCTURAL TIMBER SHALL BE MACHINE STRESS RATED (MSR) 1950 F-1.7 E SOUTHERN YELLOW PINE (M.C.-19%), OR APPROVED (BY THE STRUCTURAL ENGINEER) EQUAL UNLESS OTHERWISE NOTED ON DRAWINGS, WITH ALLOWABLE STRESSES AS FOLLOWS:
BENDING STRESS..... 1,950 PSI
SHEAR STRESS.....90 PSI
COMPRESSION STRESS PARALLEL TO GRAIN.... 1,800 PSI
MODULUS OF ELASTICITY.....1,700,000 PSI
B. STRUCTURAL GLUE LAMINATED TIMBER SHALL BE VISUALLY GRADED (MC 15%) SOUTHERN PINE WITH THE FOLLOWING MINIMUM ALLOWABLE STRESSES:
BENDING STRESS..... 3,000 PSI
SHEAR STRESS..... 290 PSI
MODULUS OF ELASTICITY..... 2,100,000 PSI
C. FLOOR JOISTS - OPEN WEB MANUFACTURED WOODEN TRUSSES TO BE ENGINEERED BY OTHERS. WOOD TRUSSES TO BE SPACED AS SHOWN ON FRAMING PLANS, FLOOR DEAD LOAD 10 PSF, FLOOR LIVE LOAD 40 PSF DEFLECTION LIMIT: LIVE LOAD L/360 & TOTAL LOAD L/240 ADHESIVES TO MEET REQUIREMENTS OF ASTM D-2559-94 (WET USE) EXPOSURE CONDITIONS.
D. PLYWOOD SHEATHING:
I. EACH CONSTRUCTION AND INDUSTRIAL PANEL SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL MEET THE REQUIRMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS 1 OR APA PRP-108 PERFORMANCE STANDARDS. ALL PANELS WHICH HAVE ANY EDGE OR SURFACE PERMANENTLY EXPOSED TO THE WEATHER SHALL BE CLASSED EXTERIOR.
II. PANEL ROOF, WALL, AND FLOOR SHEATHING SHALL BE 3/4" THICK APA STRUCTURAL I RATED SHEATHING EXP. 2. (UNLESS OTHERWISE NOTED ON DRAWINGS). SHEATHING PERMANENTLY EXPOSED TO WEATHER SHALL BE CLASSED EXTERIOR.
III. NAIL PANELS WITH COMMON NAILS AT 3" O.C. ALONG SUPPORTED PANEL EDGES AND AT 6" O.C. AN INTERMEDIATE SUPPORTS.
E. WOOD TO WOOD FRAMED CONNECTIONS ARE TO BE MADE WITH BOLTS AND/OR JOIST HANGERS AS SHOWN. TOE-NAILING IS NOT PERMITTED.
F. MAXIMUM SPANS OF DIMENSIONAL LUMBER USED FOR JACK RAFTERS AT HIPPED ROOF SECTIONS SHALL BE IN ACCORDANCE WITH "SPAN TABLES FOR JOISTS AND RAFTERS" AS PUBLISHED BY THE NATIONAL PRODUCTS ASSOCIATION.
3. GENERAL CONSTRUCTION:
A. PROVIDE BEARING OR SOLID BLOCKING AT JOIST MORE THAN 10 FT.
B. PROVIDE INTERMEDIATE SOLID BLOCKING AT LOAD BEARING STUD.
C. PROVIDE 3-STUD AT CORNER CONDITION AND AT DIAGONAL TRUSSES BEARING.
D. NAILING SHALL BE PER IBC REQUIREMENT.
E. CONNECTORS FOR WOOD CONSTRUCTION SHALL BE MANUFACTURED BY "SIMPSONSTRONG TIE COMPANY INC." CONNECTORS SHALL BE PROPERLY SIZED ACCORDING TO MEMBER SIZE AND APPLICABLE LOADS.



1st FLOOR FRAMING PLAN
SCALE: 1/4"=1'-0"

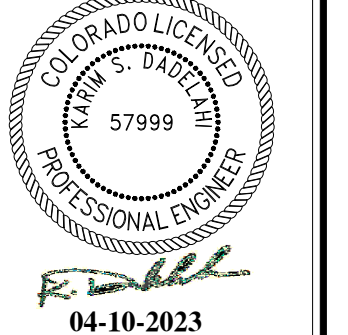


Table with 2 columns: ISSUED FOR, and 5 rows of checkboxes for DESIGN DEVELOPMENT, PROGRESS, PERMIT, CONSTRUCTION DOCUMENT, and CLIENT.

Table with 2 columns: REVISION, and 5 rows for tracking changes.

SINGLE-FAMILY RESIDENCE
311 Wagon Rd, Blue River, CO 80424
Framing 1st Floor Plan

PROJECT LOCATION:
SHEET TITLE:

DATE: 04/10/2023

SHEET

S-3

GENERAL CODES & DESIGN LOADS

CODE: RESIDENTIAL BUILDING CODE--2015

DESIGN LOADS:

- 1. ROOF LIVE LOADS 20PSF (SUBJECT TO SLOPE & TRIBUTARY AREA REDUCTION FACTORS)
2. FLOOR LIVE LOADS (RESIDENTIAL BUILDING CODE-2015) FOLLOW:

Table with 4 columns: USE, LOAD (PSF), USE, LOAD (PSF). Rows include EXTERIOR BALCONIES, DECKS, STAIRS, GUADRAILS & HANDRAILS, SLEEPING ROOMS, OTHER ROOMS, ATTIC W/ STORAGE, ATTIC W/O STORAGE.

- (b) INDIVIDUAL STAIR TREADS SHALL BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED LIVE LOAD OR A 300-POUND CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQUARE INCHES,WHICHEVER PRODUCES THE GREATER STRESSES.
(c) A SINGLE CONCENTRATED LOAD APPLIED IN ANY DIRECTION @ ANY POIN ALONG THE TOP.

3. WIND LOAD ULTIMATE WIND DESIGN SPEED 115 MPH

EXPOSURE: B RISK CATEGORY: II

4. SNOW LOAD 70 PSF

GENERAL NOTES: COORDINATION W/ARCH.DWGS.

- 1. CONTRACTOR SHALL REVIEW ARCHITECTURAL AND STRUCTURAL DRAWINGS JOINTLY TO ENSURE COORDINATION OF ALL PHASES OF CONSTRUCTION DESCRIBED IN DRAWING. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BOTH ARCHITECT AND ENGINEER, PRIOR TOP PROCEEDING WITH CONSTRUCTION WORK.
2. THE FOLLWING ITEMS, IN PARTICULAR,HAVE TO BE CLOSELY COORDINATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS:
A. ALL DIMENSION;
B. SLAB AND FLOOR ELEVATION, SLOPES ,LOCATIONS AND DIMENTION OF ANY RECESSES, INCLUDING THOSE INTENDED FOR SHOWERS, ELEVATORS, FLOORING MATERIALS,FLUSH HEARTHES, ETC.;
C. PLUMBING, GAS, VENT & ELECTRICAL OUTLETS, ETC.;
D. CURBS AND VENEER LEDGES;
E. CEILING HEIGHTS AND CEILING CONDITION
F. ROOF GEOMETRY AND SLOPES.

3. CONTRACTOR IS ADVISED THAT IN ITEMS LISTED UNDER PARAGRAPH 2 ABOVE, ARCHTECTURAL DRAWINGS WILL GENERALLY TAKE PRECEDENCE OVER STRUCTURAL DRAWINGS

NOTES ON PRESSURE-TREATED LUMBER:

- 1. ALL WOOD MEMBERS IN CONTACT WITH CONCRETE, OR EXPOSED TO WEATHER OR MOISTURE (SUCH AS PORCH & BALCONY FRAMING) SHALL BE PRESSURE-TREATED.
2. CURRENTLY THE PRODUCT COMMONLY USED FOR PRESSURE TREATMENT IS ALKLINE COPPER QUATERNARY (ACQ). THIS MATERIAL IS EXTREMELY CORROSIVE. ONLY HOT-DIPPED GALVANIZED ANCHOR BOLTS, THRU BOLTS, NAILS, OR OTHER CORROSIVE-RESISTANT FASTENERS,SHALL BE USED WITH ACQ-TREATED LUMBER. FASTENER MANUFACTURER OR SUPPLIER SHALL BE CONSULTED ON THE SUITABILITY OF GALVANIZED FASTENER FOR USE WITH TREATED LUMBER.

NOTE: PIPES THROUGH THE BEAMS SHALL BE SLEEVED 2 PIPE SIZE LARGER THAN THE PIPE, AND SHALL SHEDULE 40 PIPE.

CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS, AND DETAILS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION & BIDDING. ANY DISCREPANCY IF FOUND SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. FAILURE TO DO SO SHALL OBLIGATE THE CONTRACTOR FOR ANY JOB EXPENSE ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.

GENERAL NOTES: WOOD FRAMING SYSTEM

(THESE NOTES SHALL CONTROL UNLESS NOTED OTHERWISE ON PLANS AND DETAIL.)

BEAMS AND HEADERS

ROOF RAFTERS :-----NO 3 SOUTHERN YELLOW PIPE (SYP), KD, S4S
CEILING JOISTS:-----NO 3 SOUTHERN YELLOW PIPE (SYP), KD, S4S
BEAMS & HEADERS :-----NO 2 SOUTHERN YELLOW PIPE (SYP), KD, S4S
STUDS: -----STUD GRADE, SYP, KD, S4S
WOOD POSTS:-----NO, 2 SYP SURFACE, GREEN

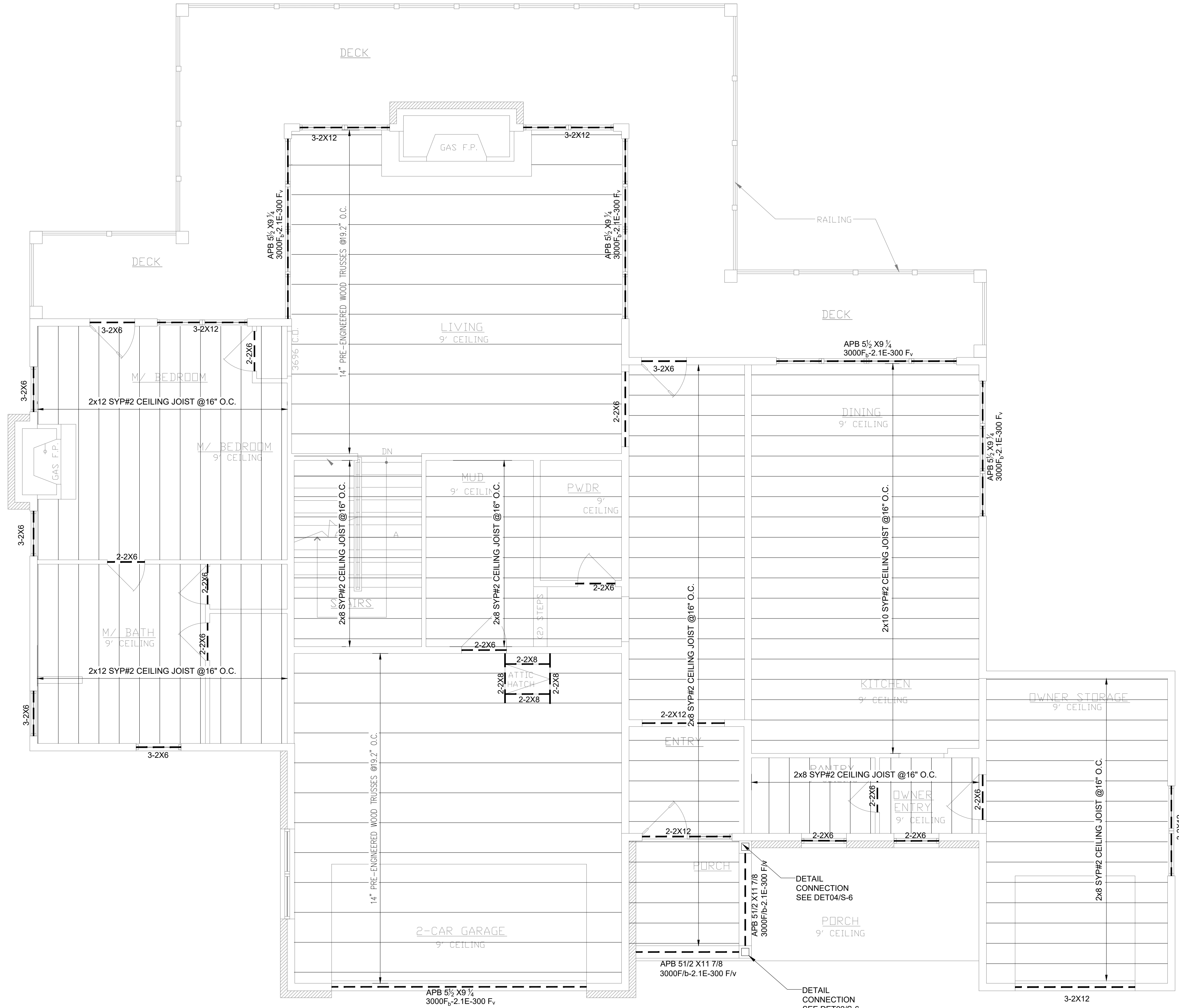
- 1. AT BEAM MADE UP OF A NUMBER OF 2x JOISTS, EACH JOIST WILL BEAM ON A WALL STUD (I.E. NUMBER OF WALL STUD SHALL MATCH NUMBER OF JOISTS BEARING ON THESE STUD. THE CENTERLINE OF THE BEAM SHALL BE THE CENTERLINE OF THE SUPPORTING WALL STUDS.
2. ALL BEAM MADE UP OF A NUMBER OF 2x JOISTS SHALL BE FASTENED AS FOLLOWS. FOR THE MAXIMUM HORIZONTAL SPACING OF BOLTS.
2-2x12 16g NAILS @ 12" TOP AND BOTTOM STAGGER, EA. FACE
3-2x12 20g NAILS @ 12" TOP AND BOTTOM STAGGER, EA. FACE
3. ALL DOOR AND WINDOW HEADERS (OR HEADERS AT ANY OTHER OPENING) THAT ARE NOT SPECIFIED ON PLANS SHALL BE AS FOLLOWS:
CEILING FRAMING: 2-2x8
4. MINIMUM BEARING ANY BEAM OF HEADER AT A STUD WALL IS 3 1/2".

JOISTS

- 1. JOISTS BLOCKING
A) JOISTS WITH A DEPTH GREATER THAN 6" SHALL BE Laterally SUPPORTED AT EACH END AND AT EACH SUPPORT BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF JOISTS ARE NAILED INTO A HEADER, BANDOR DIM JOISTS OR TO AN ADJOINING STUD. SOLID BLOCKING SHALL MATCH THE DEPTH OF THE JOIST.
2. JOISTS HOLES AND NOTCHES
A) NOTCHES IN TOP OR BOTTON OF JOISTS SHALL NOT EXCEED ONE SIXTH (1/6) THE JOIST DEPTH AND SHALL NOT BE LOCATED WITHIN MIDDLE THIRD OF THE SPAN.
B) HOLES SHALL NOT BE CLOSER THAN 2" TO TOP OR BOTTON OF JOIST, THE DIAMETER OF ANY HOLE SHALL NOT EXCEED ONE FOURTH (1/4) BE JOIST DEPTH UNLESS APPROVED BY THE ENGINEER.

CONNECTORS AND FASTENERS.

- 1. CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. SAN LEANDRO, CA, OR NAIL ALL NAIL HOLES.
2. PROVIDE BASE AND CAP CONNECTORS AT ALL COLUMNS 4x4 OR LARGER, AS FOLLOWS:
COLUMN BASE CONNECTOR: GB SERIES
COLUMN CAP CONNECTOR: PC SERIES (OR EPC AT BM ENDS)
USE APPLICABLE COLUMN/BEAM MODEL NUMBERS.
3. WHERE REQUIRED JOISTS HANGERS SHALL BE 16 GA., GALVANIZED "U-STANDARD" JOIST HANGERS APPLICABLE TO CORRESPONDING SIZE, INCLUDING DOUBLED OR TRIPLED JOISTS.
4. WHERE REQUIRED, JOIST HANGERS SHALL BE 12 GA., GALVANIZED, "B-SERIES" APPLICABLE TO CORRESPONDING SIZE.
5. PROVIDE 1/2" X 0"-10" LONG ANCHOR BOLT @ 4"-0" O.C. AT ALL EXTERIOR WALL SILL PLATES, WITH 2" PROJECTION AND 1" THREAD.
6. WHERE CALLED OUT, ALL THROUGH BOLTS BE ASTM A-370, PROVIDE STANDARD WASHERS AT ALL WOOD SURFACES.
7. ALL BOLTS, NUTS, WASHERS, NAIL & OTHER FASTENERS EXPOSED TO WEATHER SHALL BE HOT-DIPPED GALVANIZED.



CEILING FRAMING PLAN
SCALE: 1/4"=1'-0"

CONTRACTOR

FIRM



ENGINEER

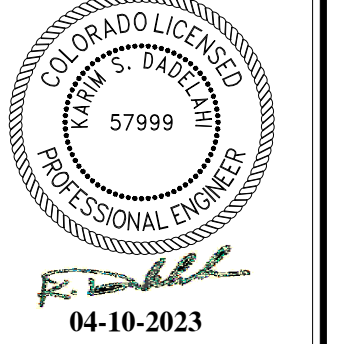


Table with 2 columns: ISSUED FOR, and checkboxes for DESIGN DEVELOPMENT, PROGRESS 100%, BIDDING, PERMIT, CONSTRUCTION DOCUMENT, CLIENT.

REVISION

DATE

SINGLE-FAMILY RESIDENCE
311 Wagon Rd, Blue River, CO 80424

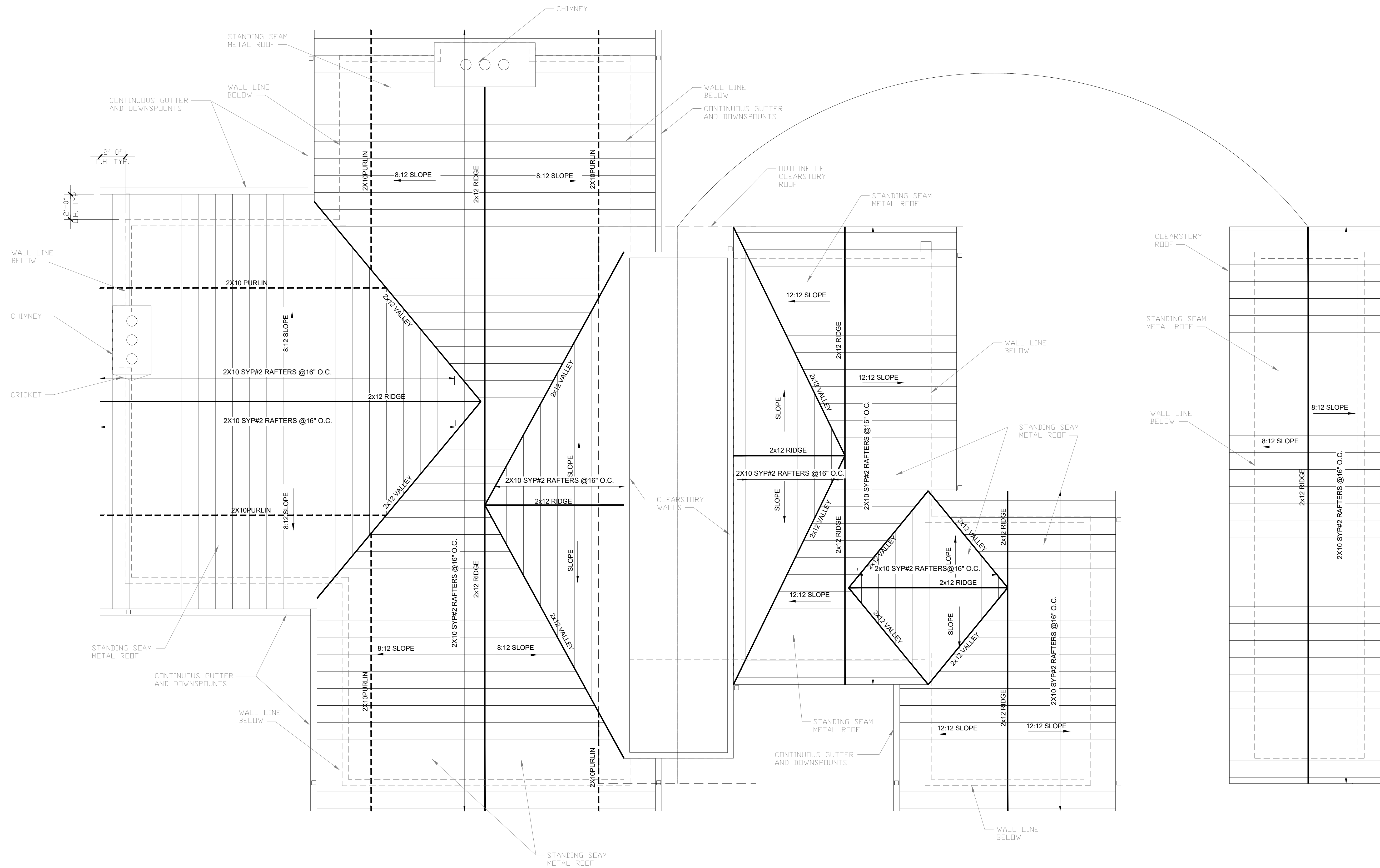
Ceiling Framing Plan

PROJECT LOCATION:

DATE: 04/10/2023

SHEET

S-4



**ROOF FRAMING PLAN**  
SCALE: 1/4" = 1'-0"

SNOW LOAD = 56 PSF  
LIVE LOAD = 20 PSF  
DEAD LOAD = 15 PSF  
BASIC COMBINATIONS:  
 $T_1 = D + S$   
 $T_2 = D + 0.75L + 0.75(L \text{ or } R)$   
TOTAL LOAD = 72 PSF

CONTRACTOR

FIRM  
**SSC**  
Sarah Structural & Civil, LLC  
13831 Northwest Freeway, Suite 245  
Houston Texas 77040 (832) 922-1145  
Office: (713) 485-5641

ENGINEER  
COLORED LICENSE  
KATHY S. BARTLETT  
57999  
PROFESSIONAL ENGINEER  
04-10-2023

ISSUED FOR:  
 DESIGN DEVELOPMENT  
 PROGRESS 100 %  
 BIDDING  
 PERMIT  
 CONSTRUCTION DOCUMENT  
 CLIENT

REVISION	DATE

PROJECT LOCATION:  
SINGLE-FAMILY RESIDENCE  
311 Wagon Rd, Blue River, CO 80424

SHEET TITLE:  
**Roof Framing Plan**

DATE: 04/10/2023

SHEET  
**S-5**

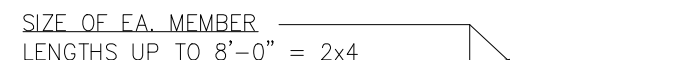
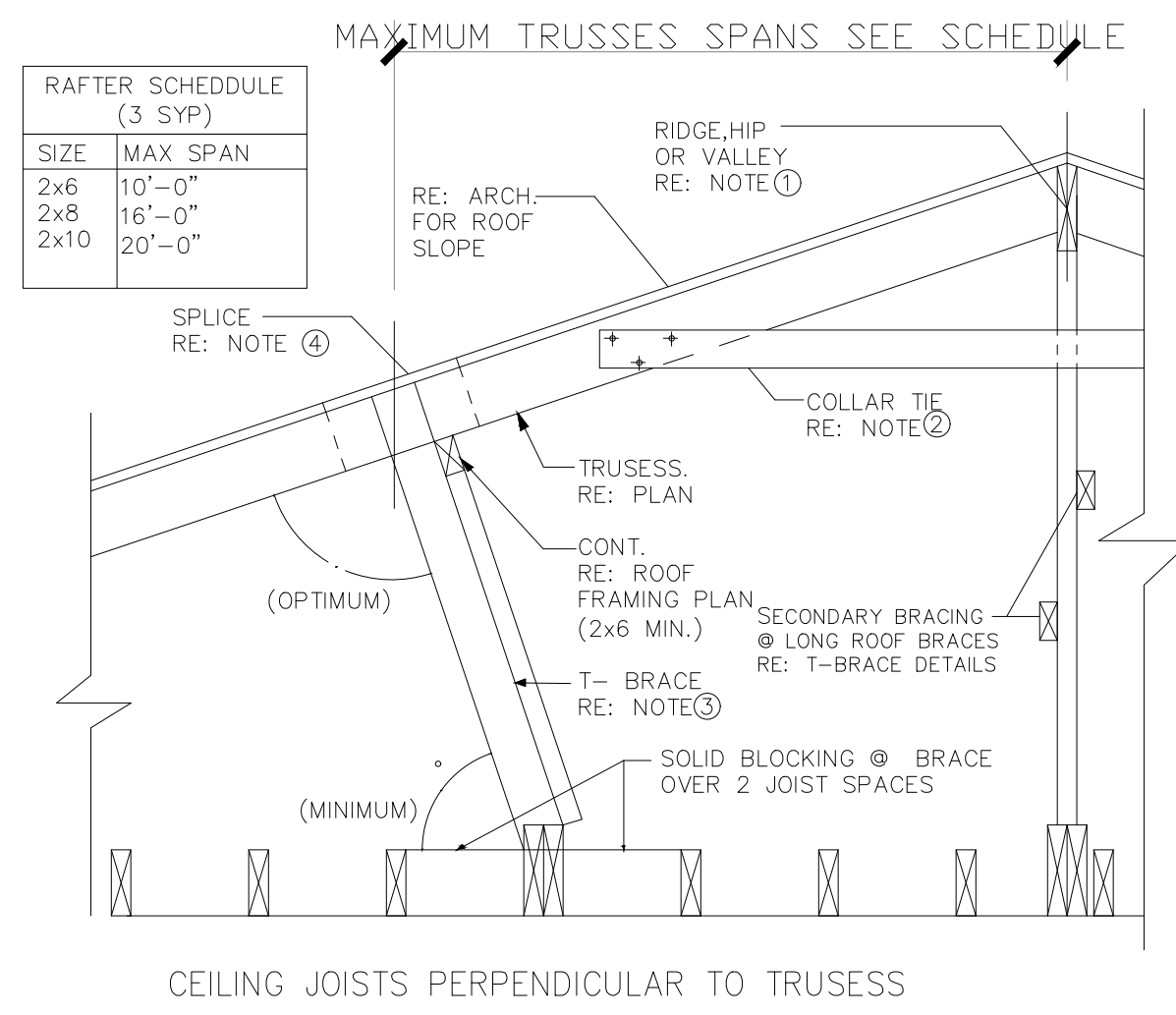
#40

NAILING SCHEDULE -- FRAMING MEMBERS

CONNECTED MEMBERS	NAIL SIZE (NOTE)	NUMBER OR NAILING PATTERN
BRIDGING TO JOIST	8d	2 TOE NAIL EA. END
SOLE PLATE TO JOIST OR BLOCKING	16d	Ø 16" O.C. FACENAIL.
TOP PLATE TO STUD	16d	2 END NAIL.
STUD TO SOLE PLATE	8d OR 16d	4 TOE NAIL 2 END NAIL
DOUBLE STUD	16d	Ø 24" FACE NAIL
DOUBLE TOP PLATES	16d	Ø 16" FACE NAIL
TOP PLATES: LAPS & INTERSECTIONS	16d	2 FACE NAIL.
CONTINUOUS HEADER, TWO PIECE.	16d	Ø 16" FACE NAIL ALONG EA. EDGE
CEILING JOISTS TO PLATE	8d	3 TOE NAIL
CONTINUOUS HEADER TO STUD	8d	4 TOE NAIL
CEILING JOISTS, LAPS OVER PARTITIONS.	16d	3 FACE NAIL
CEILING JOISTS TO PARALLEL RAFTERS.	16d	3 FACE NAIL
RAFTERS TO PLATE.	8d	3 TOE NAIL
1" BRACE TO EACH STUD & PLATE.	8d	2 TOE NAIL
BUILT UP CORNER STUDS.	16d	Ø 24" FACE NAIL
CONTINUOUS HEADER, 3 OR MORE PIECE & BUILT UP GIRDS OR BEAMS	BOLTS	RE: GEN. NOTES

NOTES: ALL NAIL SHALL BE COMMON UNLESS NOTED OTHERWISE.

TYPICAL WOOD FRAMING DETAIL



NAILING SCHEDULE--FLOOR & ROOF DECK

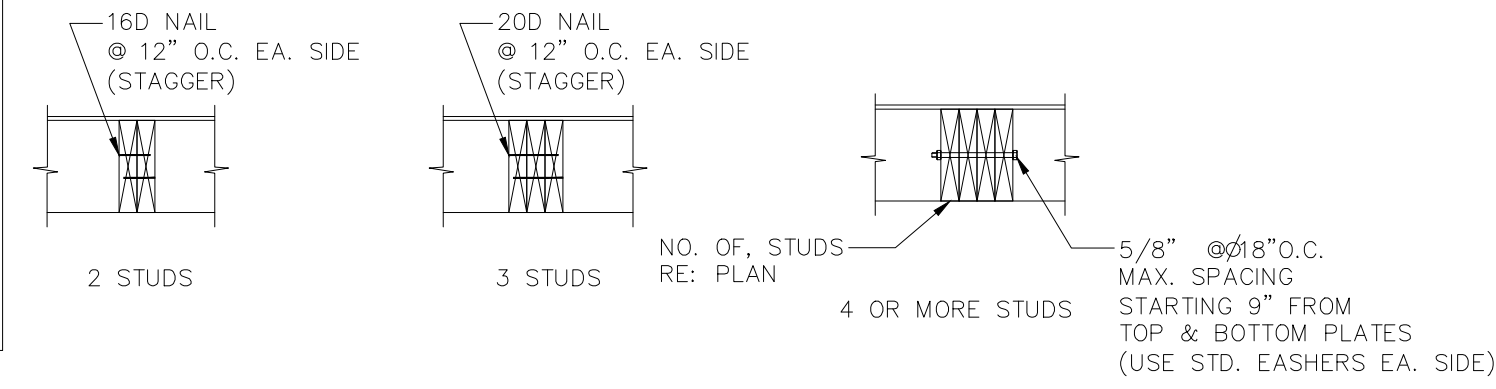
DECK TYPE & THICKNESS	NAIL SIZE (NOTE 1)	NUMBER OR NAILING PATTERN
PLYWOOD OR PARTICLE		
1/2" OR LESS	6" COMMON DEFORMED SHANK OR STAPLE (1)	6" O.C. @ PANEL EDGES
19/32" THRU 3/4"	8d COMMON OR 8d DEFORMED SHANK	10" O.C. @ INTERMEDIATE SUPPORTS TYPICAL ( TYPICAL)
7/8" THRU 1" (FLR.)	8d COMMON OR DEFORMED SHANK	
1 1/8" THRU 1 1/4" (FLR.)	10d COMMON OR 8d DEFORMED SHANK	

NOTES: (1) CORROSION-RESISTANT STAPLES

TYPICAL ROOF T-BRACE DETAILS

TYPICAL ROOF BRACING DETAILS

RIDGE BEAM, HIP & VALLEY TRUSSES & PURLIN



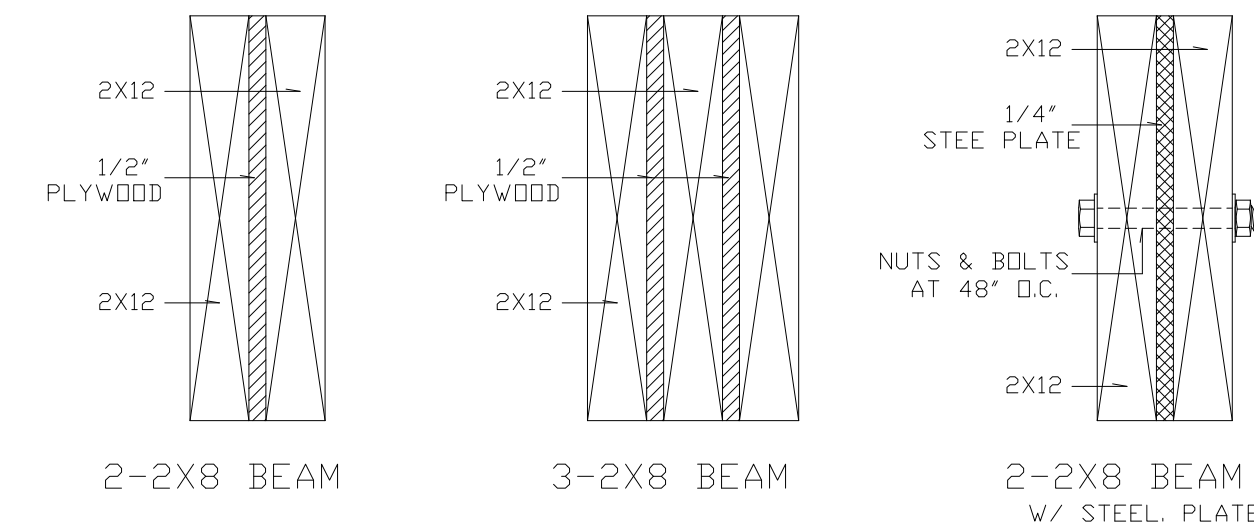
NAILING SCHEDULE--WALL SHEATHING AND SIDING

SHEATHING TYPE & THICKNESS	FASNER SIZE & TYPE	NAILING PATTERN
PLYWOOD & PARTICLE BOARD		
LESS THAN 1/2"	6d COMMON DEFORMED SHANK OR STAPLE	6" O.C. @ PANEL EDGES
1/2" THRU 3/4"	8d COMMON OR 6d DEFORMED SHANK	12" O.C. @ INTERMEDIATE SUPPORTS
FIBERBOARD		
1/2" OR LESS	8d COMMON NAILS OR	12" O.C. @ INTERMEDIATE SUPPORTS
	NO.11 GA. NAILS (2) OR, NO.16 GA. STAPLES (3) OR, NO.16 GA. STAPLES (3) OR,	4" O.C. @ PANEL EDGES
25/32"	8d COMMON NAILS OR NO.11 GA. NAILS (2) OR, NO.16 GA. STAPLES (3)	6" O.C. @ INTERMEDIATE SUPPORTS
GYPSUM SHEATHING		
1/2" OR 5/8"	12. GA. (4)	4" O.C. @ EDGES Ø" O.C. @ INTERMEDIATE SUPPORTS
GYPSUM WALLBOARD		
1/2"	1 3/8" DRYWALL NAILS	7" O.C. @ CEILINGS
5/8"	1 1/2" DRYWALL NAILS	8" O.C. @ WALLS
PANEL SIDING (TO FRAMING)		
1/2" OR LESS	6d (1)	1 EACH PANEL
5/8"	8d (1)	

1. NOTES ON "NAIL--WALL SHEATHING & SIDING"

- CORROSION-RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQUIREMENTS OR IBC 2012.
- CORROSION-RESISTANT ROOFING NAIL WITH 7/16-INCH DIAMETER HEAD AND 1 1/2 INCH IN LENGTH FOR 1/2-INCH SHEATHING AND 1 3/4-INCH LENGTH FOR 25/32-INCH SHEATHING CONFORMING TO THE REQUIREMENT OF IBC 2012.
- CORROSION RESISTANT STAPLES WITH NOMINAL 7/16-INCH CROWN AND 1 1/8-INCH LENGTH FOR 1/2-INCH SHEATHING AND 1 1/2-INCH LENGTH FOR 25/32-INCH SHEATHING CONFORMING TO THE REQUIREMENT OF IBC 2012.
- CORROSION RESISTANT, LARGE HEAD.

TYPICAL BEAM DETAILS



STUD WALLS

- STUD SHALL BE AS FOLLOWS:  
2x4 @ 16" AT ALL FLOORS IN ONE- OR TWO- STORY STRUCTURES.  
DBL 2x4 OR 2x6 @ 16" AT ALL THIRD WALL AT FIRST FLOOR AREAS DIRECTLY BELOW A THIRD FLOOR.
- PROVIDE A MINIMUM OF TWO (2) STUDS AT EACH SIZE OPENINGS LARGER THAN 4"-Ø" FULL HEIGHT OF WALL (KING STUDS).
- MAXIMUM STUD WALL HEIGHT SHALL BE AS FOLLOWS:  
2x4 STUDS 10' o.c.  
2x6 STUDS 13' o.c.  
2x6 STUDS 16' o.c.
- BLOCKING & LATERAL BRACING:  
A. PROVIDE BLOCKING AND/OR TEMPOLARY CROSS BRACING AS REQUIRED TO ENSURE STUD STRAIGHTNESS ACCORDING TO SPECIFIED TOLERANCES.  
B. MAXIMUM TOLERANCE FOR STUD STRAIGHTNESS IN EITHER DIRECTION IS 1/4 INCH PER TEN (10) FEET OF STUD HEIGHT.  
C. MINIMUM BLOCKING:  
1 ROW FOR STUD HEIGHT UP TO 9'-0"  
2 ROW FOR STUD HEIGHT UP TO 15'-0"  
3 ROW FOR STUD HEIGHT UP TO 15'-0".

HURRICANE CLIPS:

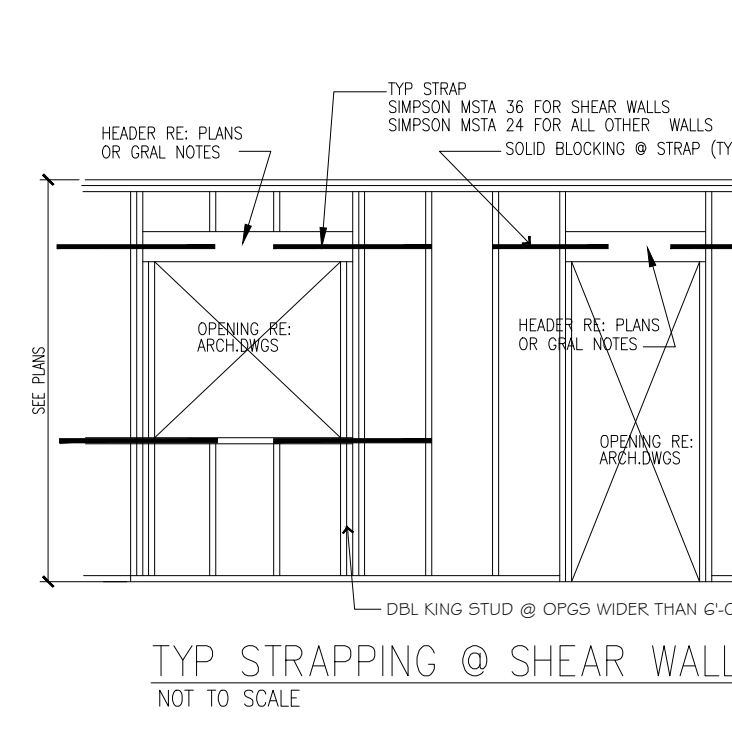
PROVIDE HURRICANE CLIP @ EVERY OTHER ROOF TRUSS OR RAFTER. (SIMPSON H1)

MISCELLANEOUS:

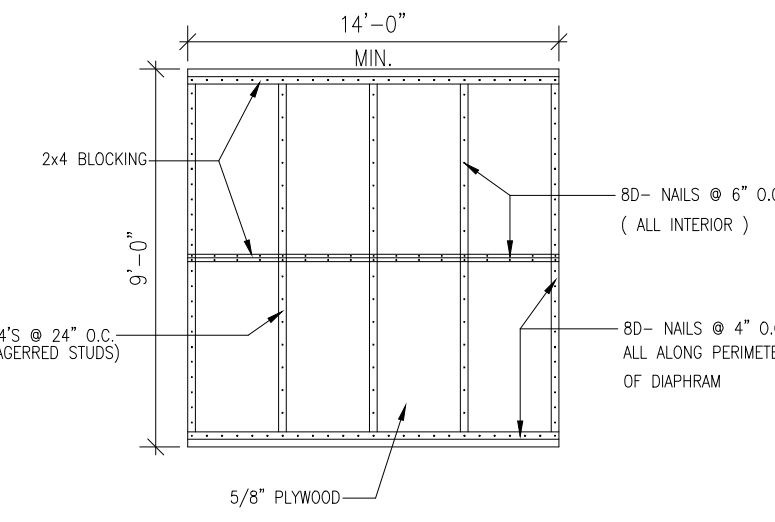
ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE TREATED LUMBER.

ROOF DECK:

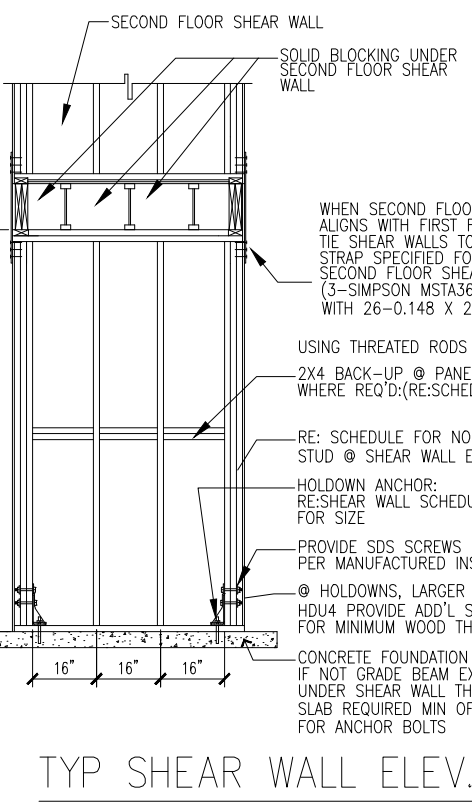
- MINIMUM THICKNESS SHALL BE 1/2" THICK MATERIAL SHALL BE CDX PLYWOOD.
  - ORIENTED STRAND BOARD (OSB) MAY BE USED IN LIEU OF PLYWOOD.
  - MINIMUM NAILING SHALL BE AS REQUIRED BY THE BUILDING CODE.
  - PLYWOOD CLIPS SHALL BE INSTALLED @ ROOF DECKING TO RESULT IN A 1/8" GAP BETWEEN ALL PANEL EDGES PROVIDE 1 CLIP PER SPAN (JOIST SPACING). CLIPS SHALL BE SIMPSON PSCL. TO MATCH CORRESPONDING PLYWOOD THICKNESS.
- PLYWOOD FLOOR DECK:  
1. PLYWOOD SHALL BE 1 1/8" THICKNESS AND SHALL BE RATED STURO-I-FLOOR (2-4-1) EXPOSURE 1  
2. PAY PANELS IN A STAGGERED PATTERN  
3. BLOCK ALL EDGES W/ 2-2x4 BLOCKING.  
4. GLUE & NAIL TO FRAMING MEMBERS AS FOLLOWS:  
A. GLUE SHALL CONFORM TO APA SPECIFICATION AF6-01, APPLIED IN A CONTINUOUS BEAD & IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION  
B. ALL NAIL SHALL BE Ø 13/16 RING OR SCREW SHANK. NAIL SPACING SHALL BE 4" O.C. @ PANEL EDGES & 12" O.C @ INTERMEDIATE SUPPORTS.



TYP STRAPPING @ SHEAR WALL NOT TO SCALE

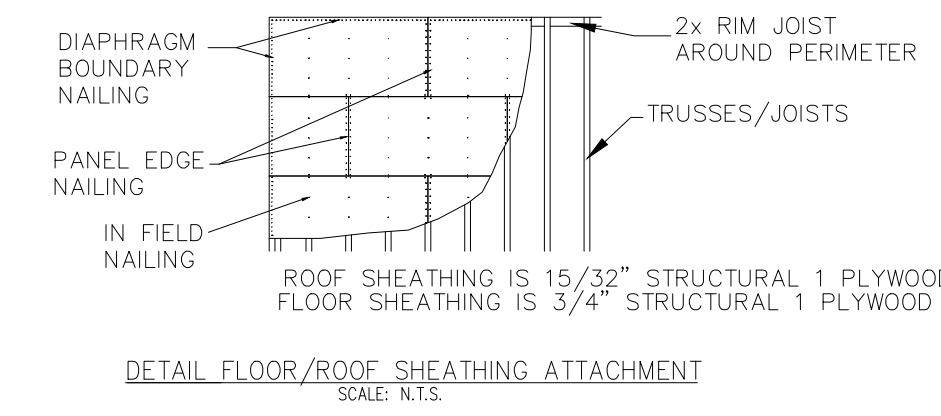


SHEAR WALL SCALE: N.T.S.

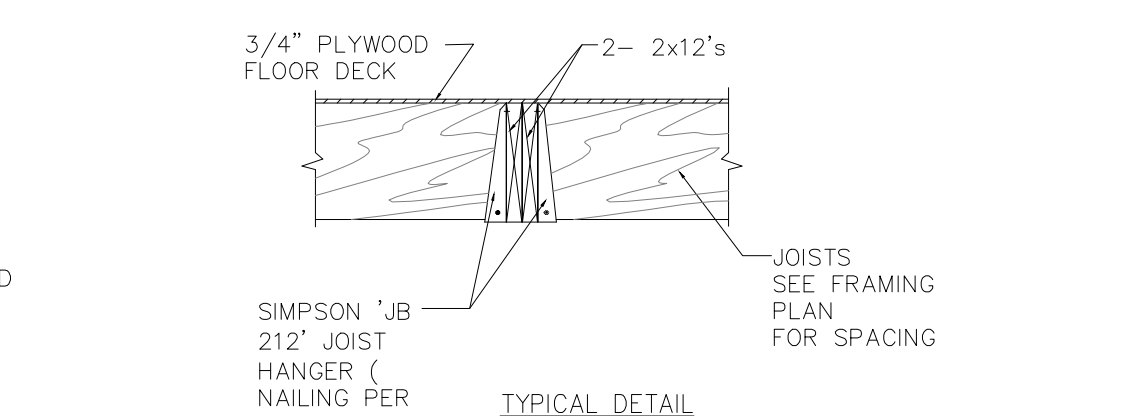


TYP SHEAR WALL ELEV.

05 TYPICAL BEAM TO BEAM CONNECTION SCALE: N.T.S.



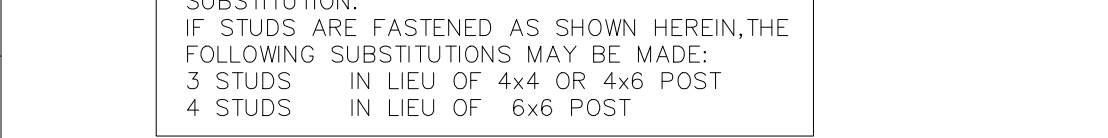
DETAIL FLOOR/ROOF SHEATHING ATTACHMENT SCALE: N.T.S.



TYPICAL DETAIL SCALE: N.T.S.

INTEGRAL COLUMN @ WALL END (BEAM PARALLEL W/ WALL)

INTEGRAL COLUMN @ WALL (BEAM PERPENDICULA TO WALL)



DETAIL: MULTIPLE-STUD COLUMN NOT TO SCALE

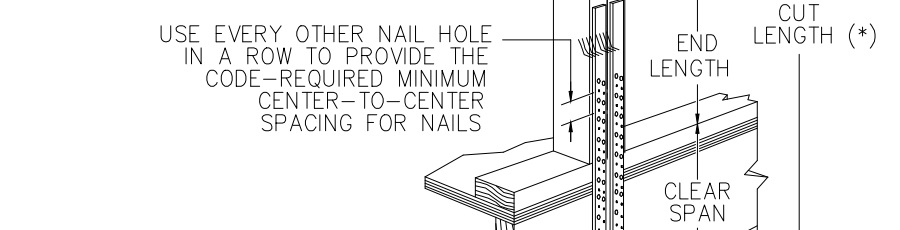
INTEGRAL COLUMN @ WALL END (BEAM PARALLEL W/ WALL)

NOTES

ALL BEAMS MADE UP OF MULTIPLE 2x MEMBERS SHALL BE SUPPORTED @ EA. END BY A POST EQUAL IN THICKNESS TO THE BEAM (MIN.) IE. 2-2x12 BEAM SHALL REQUIRE 2-2x STUD POST (MIN.) SOLID SAWN LUMBER MAY BE SUBSTITUTED FOR BUILT-UP POSTS. COLUMNS MADE UP OF MULTIPLE 2x MEMBERS SHALL BE GLUED & FASTENED TO ACT AS A UNIT AS DETAILED BELOW. UNLESS NOTED OTHERWISE, PARALLEL STRAND LUMBER (PSL) AND LAMINATED LUMBER (LSL & LVL) BEAMS & HEADERS SHALL BE SUPPORTED AT EACH END AS FOLLOWS:  
3 1/2" WIDE MEMBERS ..... 3-2x STUDS OR 4x6 POST  
5 1/2" WIDE MEMBERS UP TO 14" DEPTH..... 4-2x STUDS OR 4x6 POST  
5 1/2" WIDE MEMBERS OVER 14" DEPTH..... 5-2x STUDS OR 4x8 POST  
7" WIDE MEMBERS..... 5-2x STUDS OR 4x8 POST  
MAX. COLUMN OR POST HEIGHT: 10'-0". RE: PLANS OR CONSULT ENGINEER FOR LARGER HEIGHTS.

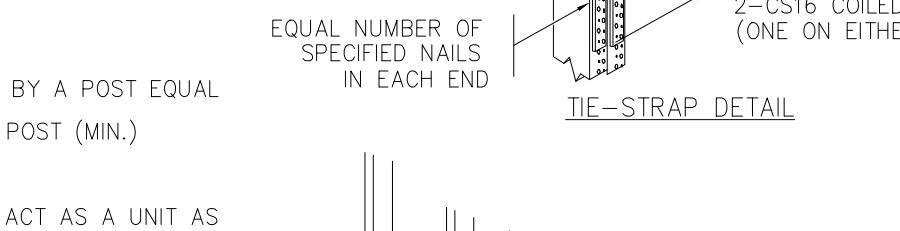
MINIMUM END LENGTH	MIN. NUMBER OF NAILS (EACH END)	STRAP SPACING
18"± 1ST TO 2ND FLOOR	(8)-10d COMMON	42" o.c.
10"± APB TO 1ST FLOOR	(8)-10d COMMON	32" o.c.

THIS DETAIL MUST BE USED AT ALL EXTERIOR WALL TO WALL CONNECTIONS AT A FLOOR, AND CONNECTIONS WALL TO BEAM



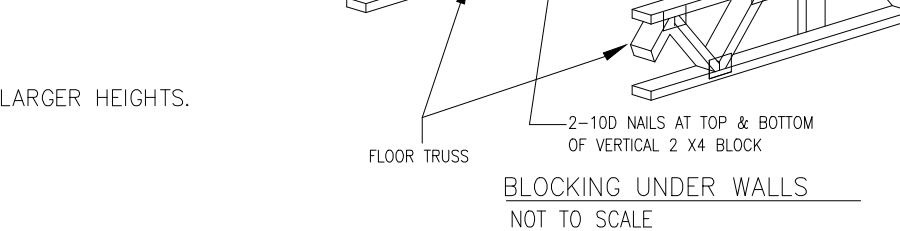
TIE-STRAP DETAIL

BEAM TO 8x8 COL



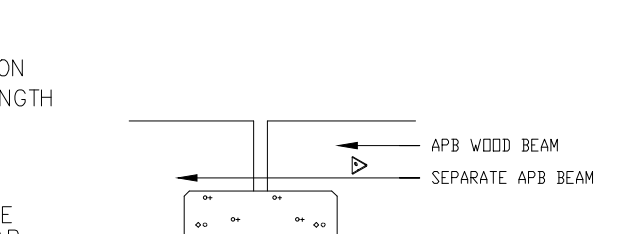
TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.

03 TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.



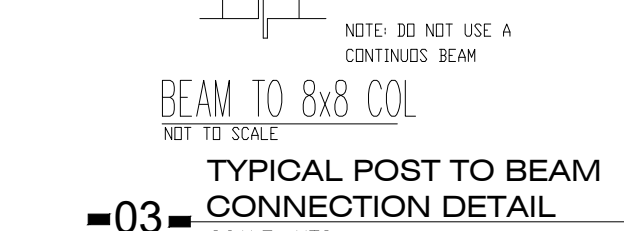
TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.

02 TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.



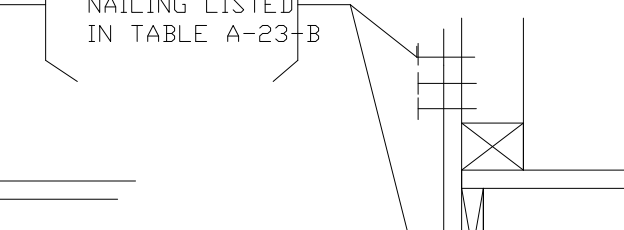
TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.

01 TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.



TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.

04 TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.



TYPICAL POST TO BEAM CONNECTION DETAIL SCALE: N.T.S.

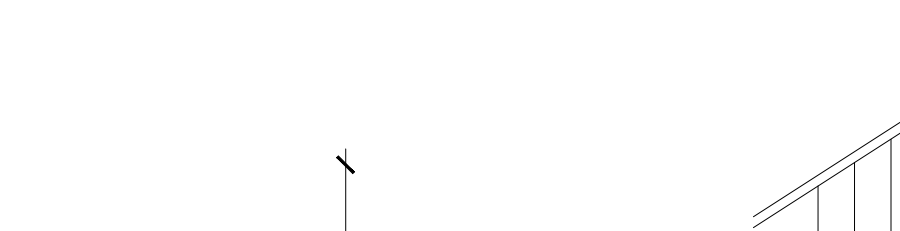
TIE-STRAPS AT FOUNDATION



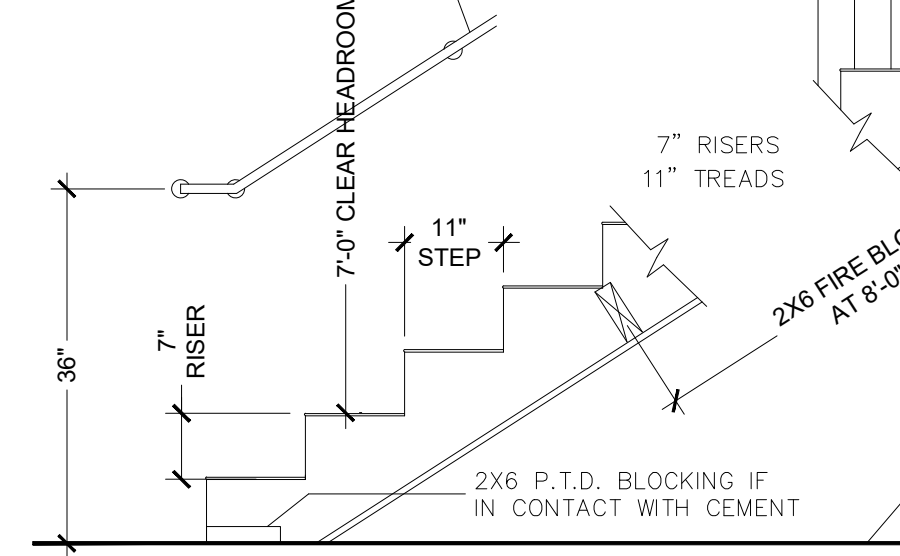
TIE-STRAPS AT FOUNDATION

NOMINAL SIZE AND SPACING OF HANDRAILS AND GRAB BARS

- THE MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS FOR GUARDRAILS, AND HANDRAILS SHALL BE A SINGLE CONCENTRATED LOAD OF 200 LBS. P.S.F. APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP.
- 100LB UNIFORM LOAD REQUIRED FOR STAIRS.
- 300LB CONCENTRATED LOAD REQUIRED FOR STAIR TREADS.

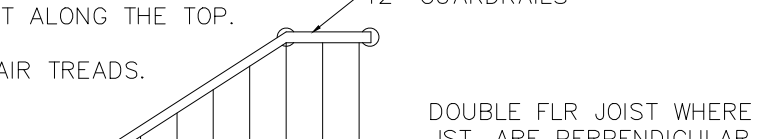


TYPICAL STAIR DETAIL N.T.S.



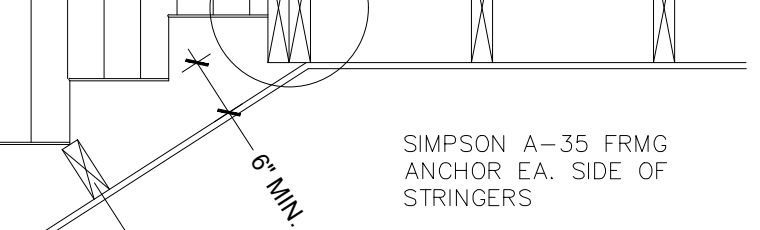
TYPICAL STAIR DETAIL N.T.S.

DOUBLE FLR JOIST WHERE JST. ARE PERPENDICULAR TO STRINGER OR SINGLE RIM JOIST WHERE JOIST ARE PARALLEL



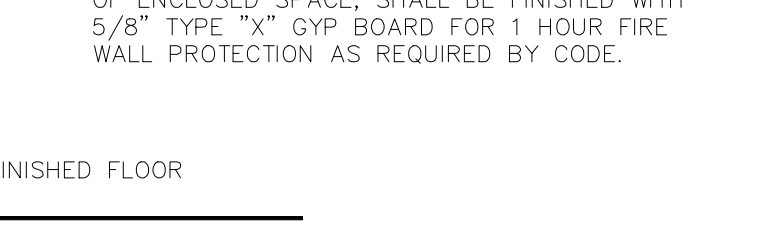
DOUBLE FLR JOIST WHERE JST. ARE PERPENDICULAR TO STRINGER OR SINGLE RIM JOIST WHERE JOIST ARE PARALLEL

LANDING



LANDING

NOTE: WHERE THERE IS AN ENCLOSED USEABLE SPACE UNDER STAIRS, WALL AND CEILING OR SOFFITS OF ENCLOSED SPACE, SHALL BE FINISHED WITH 5/8" TYPE 'X' GYP BOARD FOR 1 HOUR FIRE WALL PROTECTION AS REQUIRED BY CODE.



NOTE: WHERE THERE IS AN ENCLOSED USEABLE SPACE UNDER STAIRS, WALL AND CEILING OR SOFFITS OF ENCLOSED SPACE, SHALL BE FINISHED WITH 5/8" TYPE 'X' GYP BOARD FOR 1 HOUR FIRE WALL PROTECTION AS REQUIRED BY CODE.

CONTRACTOR

FIRM

**SSC**  
Sarab Structural & Civil, LLC  
Sarab Structural & Civil, LLC  
13831 Northwest Freeway, Suite 245  
Houston Texas 77040 (832) 922-1145  
Office: (713) 485-5641

ENGINEER

**W. S. BAKER**  
CORPORATE LICENSED PROFESSIONAL ENGINEER  
57999  
04-10-2023

ISSUED FOR:  
DESIGN DEVELOPMENT  
PROGRESS 100%  
BIDDING  
PERMIT  
CONSTRUCTION DOCUMENT  
CLIENT

REVISION

DATE

SINGLE-FAMILY RESIDENCE  
311 Wagon Rd, Blue River, CO 80424

Framing Typical Details

PROJECT LOCATION:

SHEET TITLE:

DATE: 04/10/2023

SHEET: S-6

SINGLE-FAMILY RESIDENCE  
311 Wagon Rd, Blue River, CO 80424

Framing Typical Details

PROJECT LOCATION:

SHEET TITLE:

DATE: 04/10/2023

SHEET: S-6

⚠ This is a beta release of the new ATC Hazards by Location website. Please [contact us](#) with feedback.

ℹ The ATC Hazards by Location website will not be updated to support ASCE 7-22. [Find out why.](#)

# ATC Hazards by Location

## Search Information

**Address:** 311 Wagon Rd, Blue River, CO 80424, Statele Unite ale Americii

**Coordinates:** 39.4575863, -106.0331066

**Elevation:** 9846 ft

**Timestamp:** 2023-03-30T18:14:14.930Z

**Hazard Type:** Wind



### ASCE 7-16

MRI 10-Year .....	77 mph
MRI 25-Year .....	83 mph
MRI 50-Year .....	88 mph
MRI 100-Year .....	92 mph
Risk Category I .....	100 mph
Risk Category II .....	105 mph
Risk Category III .....	112 mph
Risk Category IV .....	115 mph

### ASCE 7-10

MRI 10-Year .....	76 mph
MRI 25-Year .....	84 mph
MRI 50-Year .....	90 mph
MRI 100-Year .....	96 mph
Risk Category I .....	105 mph
Risk Category II .....	115 mph
Risk Category III-IV .....	120 mph

### ASCE 7-05

ASCE 7-05 Wind Speed ..... 90 mph

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Please note that the ATC Hazards by Location website will not be updated to support ASCE 7-22. [Find out why.](#)

## Disclaimer

Hazard loads are interpolated from data provided in ASCE 7 and rounded up to the nearest whole integer. Per ASCE 7, islands and coastal areas outside the last contour should use the last wind speed contour of the coastal area – in some cases, this website will extrapolate past the last wind speed contour and therefore, provide a wind speed that is slightly higher. NOTE: For queries near wind-borne debris region boundaries, the resulting determination is sensitive to rounding which may affect whether or not it is considered to be within a wind-borne debris region.

Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.

While the information presented on this website is believed to be correct, ATC and its sponsors and contributors assume no responsibility or liability for its accuracy. The material presented in the report should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. ATC does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the report provided by this website. Users of the information from this website assume all liability arising from such use. Use of the output of this website does not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the report.

# A TOPOGRAPHIC MAP OF LOT 14, THE SPILLWAY FILING No. 1

#42

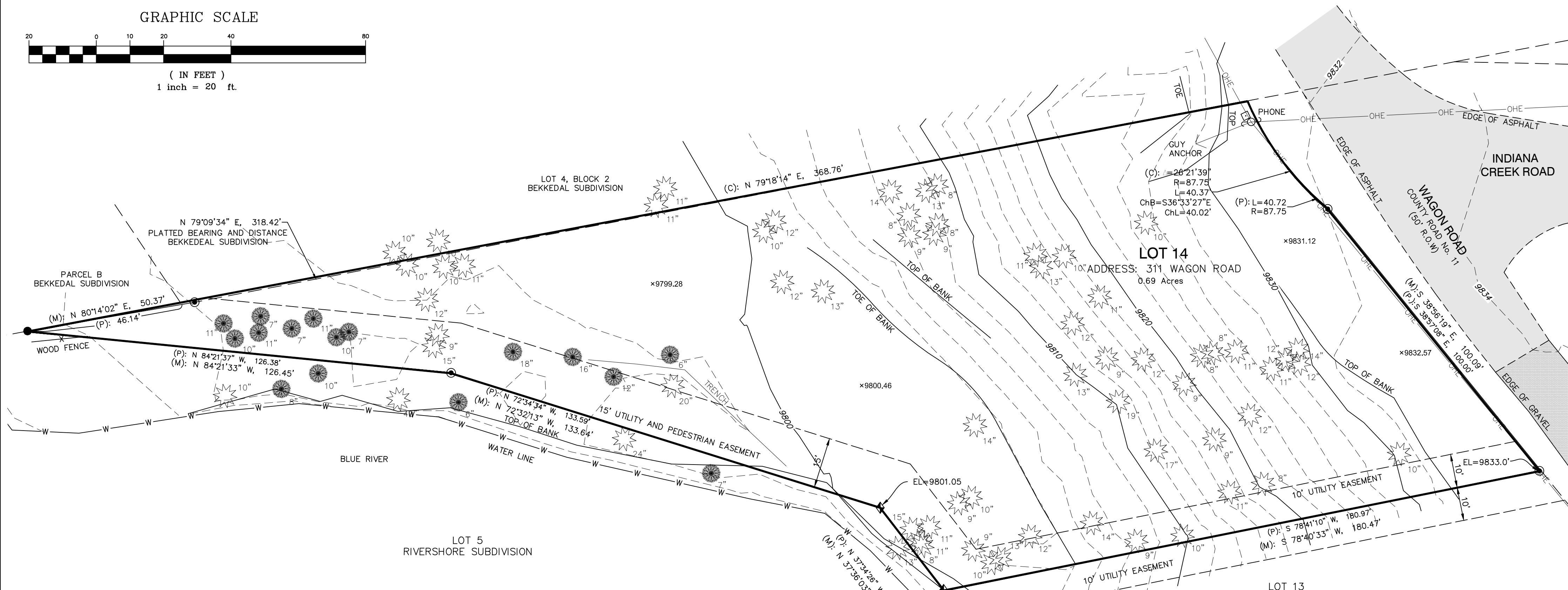
SECTION 7, TOWNSHIP 7 SOUTH, RANGE 77 WEST OF THE 6TH P.M.  
TOWN OF BLUE RIVER, SUMMIT COUNTY, COLORADO



GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.



**GENERAL NOTES**

- DATE OF SURVEY: SEPTEMBER 22 & 23, 2020. IMPROVEMENT SURVEY PLAT. MAY 20, 2021. TOPOGRAPHIC SURVEY.
- PROJECT BENCHMARK: HELD ELEVATION 9800.0' AT SOUTHERN-MOST PROPERTY CORNER, INTERPOLATED FROM SUMMIT COUNTY GIS MAPPING.
- THE PLAT OF THE SPILLWAY FILING No. 1, RECEPTION No. 117258 WAS RECORDED AUGUST 26, 1970 IN THE SUMMIT COUNTY CLERK AND RECORDER'S OFFICE.
- LOT 14 IS SUBJECT TO THE NOTES, DEDICATIONS AND EASEMENTS AS SHOWN ON THE PLAT OF THE SPILLWAY, FILING No. 1.
- BASIS OF BEARING: THE FOUND MONUMENTS AT THE SOUTHEAST AND SOUTHWEST PROPERTY CORNERS OF LOT 14.
- SCHMIDT LAND SURVEYING, INC. DID NOT PERFORM A TITLE SEARCH OF THE SUBJECT PROPERTY TO ESTABLISH OWNERSHIP, EASEMENTS OR RIGHTS-OF-WAY OF RECORD. DOCUMENTS USED IN THE PREPARATION OF THIS SURVEY WERE PROVIDED BY TITLE COMPANY OF THE ROCKIES, ORDER NUMBER 1016244-C DATED AUGUST 26, 2020.

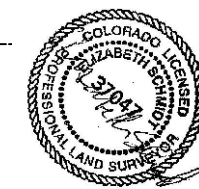
**LEGEND**

- REBAR & PLASTIC CAP -PLS No. 37047
- #4 REBAR
- REBAR & ALUM. CAP -PLS No. 23901
- ◆ REBAR & PLASTIC CAP -PLS No. 4974
- (P): PLATTED BEARING AND DISTANCE
- (M): MEASURED BEARING AND DISTANCE
- (C): COMPUTED BEARING AND DISTANCE
- UTILITY POLE
- UTILITY PEDESTAL
- OHE— OVERHEAD ELECTRIC LINE
- W— WATERLINE
- PINE TREE WITH TRUNK DIAMETER
- SPRUCE TREE WITH TRUNK DIAMETER

**SURVEYOR'S CERTIFICATE**

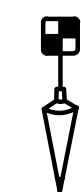
I, ELIZABETH K. SCHMIDT, A PROFESSIONAL LAND SURVEYOR REGISTERED UNDER THE LAWS OF THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS TOPOGRAPHIC MAP WAS MADE BY ME AND UNDER MY SUPERVISION, AND THAT THE MAP IS ACCURATE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

DATE: \_\_\_\_\_



*Elizabeth K. Schmidt*  
ELIZABETH K. SCHMIDT  
COLORADO P.L.S. 37047

Drawn BNT/TMB	Dwg 2428 TP.dwg	Project 2428
Date 6/10/21	Scale 1" = 20'	Sheet 1 of 1



**SCHMIDT**  
LAND SURVEYING, INC.  
P.O. Box 5761  
FRISCO, CO 80443 970-409-9963

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 CERTIFICATION SHOWN HEREON.



Rose-Villacorte Architect

#43  
Section IV, Item D.

346-498-3808

[www.rvaarch.com](http://www.rvaarch.com)

April 20, 2023

VIA: Blue River City Portal Submission

Landyn Hackebeit  
Texas Traditions Designs & Renovations  
43485 INTERSTATE 10 W  
Boerne, TX 78006

Re: Building Permit Application for 0311 Wagon Road, Blue River CO, 80424

Dear: Building Permit Reviewers,

The Material/Color Samples have not been selected at this time. Please consider this portion of the application as a deferred submittal.

If you have any questions, please email or call me.

Sincerely

A handwritten signature in black ink that reads 'Timothy P. Rose'.

Timothy Rose, Registered Architect  
TX # 26947, CO # 00406141, OK # a7508, ID # AR-986903,  
VT # 003.0134390, NH # 05013, ME # ARC5319, MD # 21078  
[timothy@rvaarch.com](mailto:timothy@rvaarch.com)  
346-498-3808  
[www.rvaarch.com](http://www.rvaarch.com)



TO: Michelle Eddy, CMC/CPM - Town Manager/Clerk  
 FROM: Kyle Parag, Plan Reviewer - CAA  
 DATE: May 30, 2023  
 RE: Planning/Zoning/Architectural Guidelines review –  
 311 Wagon Rd

Below please find staff’s analysis that outlines the review with the Town’s Zoning regulations and adopted Architectural Design Guidelines for the structure proposed at 0311 Wagon Rd

**Staff Recommendation:**

Staff recommendation is to approve the planning review. A thorough understanding of the impacts and appearance of the front retaining wall should be understood. Final colors should be understood by the board, as they were not located by the reviewer, but expected to be natural colors. Other elements of concern such as now storage and parking will be addressed in subsequent reviews.

**Zoning Regulation analysis –**

Proposal: A new single-family residence in the design with stone. Total living area is indicated at 3,711 Sqft plus two separate garages totaling 782 sqft.

Zoning district: R1

Lot Size: ~ 30,433 sq. ft.  
 80,000 sq. ft. Required– Existing Non-Conforming

Lot Width: ~ 141’  
 100 ft. Required - Complies

Setbacks: Setbacks are indicated and comply with the zoning requirements.  
 Retaining wall is in the front setback.

Height: Height is indicated on the drawings at 34’ 11”, measured from the lowest finish floor level to the top of chimney. Town measurement definition has an estimated height of 29’ 2”, Complies.

Garage Stds: The proposed garage is 782, which is under the maximum of 1200 sqft permitted for this property.

Parking Stds: Parking requirements will be met through the proposed garage parking.

**Architectural Design Guideline analysis -**

Please note the following key to the interpretation of the analysis table:

Y	Element is in substantial compliance with the design guidelines
N	Does not comply with the design guidelines
	Requires additional information from applicant
N/A	Not Applicable to the application

STANDARD	NOTES/REMARKS	SUBSTANTIAL COMPLIANCE
<b>DEVELOPMENT STANDARD</b>		
VI. B. Building Envelope	The proposed principal residence is properly sited within required setbacks. The submitted site plan depicts compliance.	Y
VI. C. Building Siting	The property has a slope down to the back of the property to the Blue River. The home sits forward on the lot and that created the need for a large retaining wall to access the forward facing garages.	Y
VI. D. Grading and Drainage	Final grading is proposed to avoid unnaturally broad, flat surfaces. Grading is indicated to gradually slope down to river, minimally impacting natural drainage.	Y

<p>VI. E. Driveways</p>	<p>Proposed driveway without an indicate of material. <b>Snow storage area calculations are not provided, and snow storage is not provided. Retaining wall reduces the snow storage potential in front of home. Snow storage was left bank on application.</b> Driveway width is scaled at 13'9" Culvert is indicate to drain from the retaining wall to under driveway.</p>	
<p>VI. F. Parking / Garages</p>	<p>The proposed attached two separate garages with a combined 3 cars meets the minimum standards. <b>The single garage is indicated as storage, not as parking</b> on the drawings. If that garage is not designed for parking, the exterior parking will be within the setback and not permitted.</p>	
<p>VI. G. Exterior Equipment and Satellite Dishes</p>	<p>No exterior equipment is indicated</p>	<p>Y</p>
<p>VI. H. Easements and Utilities</p>	<p>Easements are indicated</p>	<p>Y</p>
<p>VI. I. Recreation Facilities</p>	<p>No facilities are indicated</p>	<p>Y</p>
<p>VI. J. Signage</p>	<p>No signage is indicated</p>	<p>Y</p>
<p>VI. K. Pathways /Walkways</p>	<p>No walking paths are proposed or indicated</p>	<p>Y</p>
<p>VI. L. Wetlands</p>	<p>Wetlands are partially identified on the plan. The exact location of wetlands has not been surveyed. Army Corps of Engineers survey may be required prior to permit issuance</p>	<p>Y</p>
<p>VI. M. Wildfire Regulations</p>	<p>Many of the required regulations are operational requirements post-construction. Firewise construction details are proposed and compliant</p>	<p>Y</p>
<p><b>ARCHITECTURAL GUIDELINES</b></p>		

VI. B. Building Forms	Proposed foundation walls merge with the existing grade. Foundation walls are omitted from the elevation views and materials or coverings are not indicated. Base mass is not indicated. Exposed foundation walls are not permitted.	
VII. C. Setbacks	The proposed structures sit within the required setbacks per the submitted site plan.	Y
VII. D. Building Height	Building height is indicated at 34' 11" but is not measured according to Blue River definitions. The actual height is indicated is estimated at 29'2" which is compliant.	
VII. E. Roofs	Roof design is gabled. Roof material is standing seam metal. <b>Color could not be located.</b> Roof slopes are not clearly indicated, but appear compliant in elevations	Y
VII. F. Exterior Wall Materials	Exterior walls are primarily a combination of horizontal and vertical wood slates with largely stone front of home. Colors could not be located.	Y
VII. G. Exterior Trim	Trim colors are not indicated. Sizing appears appropriate.	Y
VII. H. Windows and Doors	Windows, doors, and garage doors are proportional to the structure and appear in general compliance.	Y
VII. I. Balconies and Railings	Railings are cable design with substantial posts.	Y
VII. J. Chimneys and Roof Vents	Two chimneys are indicated, both substantial in size and blend with the materials and design of the home.	Y
VII. K. Exterior Colors	<b>Color Board could not be located.</b> Application packet indicates the colors are located on page 43, which is not located.	
VII. L.	Trash and storage areas are not indicated.	Y

Solid Waste Collection and Service Areas		
<b>SITE ELEMENTS</b>		
VIII. A. Retaining Walls, Landscape Walls, Fences, and Screening	Retaining wall is located in front of property. Retaining wall is indicated as boulder retaining wall. <b>Retaining walls are not permitted in the front setback.</b> Retaining wall is constructed in possible current snow storage area for the Town roads. Landscaping is not indicated on the top or bottom of the wall as recommended in the guidelines. Final height is 4-6' as indicated on C1.1	N
VIII. B. Terraces, Patios, Walkways and Decks	Deck is in the building envelope and complements the site and structure.	Y
VIII. C. Driveway Paving Surfaces	Driveway and parking area material is not provided, assumed gravel.	
VIII. D. Exterior Landscape Lighting	Proposed exterior lighting is in general conformance. Specific information could not be located.	Y