NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Ridgway Planning Commission will hold a **PUBLIC HEARING** at the Town Hall Community Center, 201 N. Railroad Street, Ridgway, Colorado, on <u>Tuesday, May 28th, 2019 at 5:30 p.m.</u>, to receive and consider all evidence and reports relative to the application described below:

Application for: Preliminary Plat

Location: Property at SE Corner of Sherman/Hwy 62 and S. Railroad

Address: TBD Railroad/Hwy 23

Zoned: Historic Business (HB)

Applicant: Ridgway Cohousing, LLC

Property Owners: Ridgway Cohousing, LLC

DATED: May 17, 2019

ALL INTERESTED PARTIES are invited to attend said hearing and express opinions or submit written testimony for or against the proposal, to the Town Clerk.

FURTHER INFORMATION on the above application may be obtained or viewed at Ridgway Town Hall, or by phoning 626-5308, Ext. 222.

Shay Coburn, Town Planner



TOWN HALL PO Box 10 | 201 N. Railroad Street | Ridgway, Colorado 81432 | 970.626.5308 | www.town.ridgway.co.us

Official Use Only
Receipt # 987376 CHV +1003
Date Received: 2/22 9
Initials: SC

Planning Commission Hearing Request

General Information			CE SERVICE LEGEL
Applicant Name ConteRRA W			Application Date 02/22/20
Mailing Address Po Box 401 Pi	DGULAY	Co. 81432	1-
Phone Number 976 626 4471	Email OFF	ICE 2. CONTERPA 6	GMAL.COM
Owner Name PIDGWAY Cotton	sinly L	-LC	
Phone Number 970-325. 0405	the same of the sa	The second secon	Locoly
Address of Property for Hearing 780, Co			
Zoning District HB	*		
Action Requested	HART P		
Deviation to Single-Family Home Design Stand Temporary Use Permit 7-3-13(C) Conditional Use 7-3-14 Change in Nonconforming Use 7-3-15	dards 6-6	☐ Variance 7-3-16 ☐ RezonIng 7-3-17 ☑ Subdivision 7-4 ☐ Other	
Brief Description of Requested Action		Bustens estas.	
PRELIMINARY PLAT RE	VIEW F	OR ALPENGLO	W Co House Co
A 26-UNIT RESIDE	TIAL	SUBDIVISION	
Required Fee Pavable to the Town of Ride	Lau se se se		
The state of the s	Men and Annie an	Subdivisions	
Required Fee Payable to the Town of Ridge Temporary Use Permit Conditional Use	\$100.00	Subdivisions a. Sketch Plan	
Temporary Use Permit	\$100.00 \$100.00	a. Sketch Plan	\$200.00 (plus \$10.00 / lot or unit)
Temporary Use Permit Conditional Use	\$100.00		
Temporary Use Permit Conditional Use Change in Nonconforming Use	\$100.00 \$100.00 \$100.00	a. Sketch Plan b. Preliminary Plat	\$200.00 (plus \$10 00 / lot or unit) \$400.00 (plus \$20.00 / lot or unit)
Temporary Use Permit Conditional Use Change in Nonconforming Use Variances & Appeals	\$100.00 \$100.00 \$100.00 \$150.00	a. Sketch Plan b. Preliminary Plat c. Final Plat	\$200.00 (plus \$10.00 / lot or unit) \$400.00 (plus \$20.00 / lot or unit) \$300.00
Temporary Use Permit Conditional Use Change in Nonconforming Use Variances & Appeals Rezoning	\$100.00 \$100.00 \$100.00 \$150.00 \$200.00	a. Sketch Plan b. Preliminary Plat c. Final Plat d. Minor Subdivision	\$200.00 (plus \$10.00 / lot or unit) \$400.00 (plus \$20.00 / lot or unit) \$300.00 \$200.00 \$100.00
Conditional Use Change In Nonconforming Use Variances & Appeals Rezoning Other Reviews Pursuant to 7-3-18	\$100.00 \$100.00 \$100.00 \$150.00 \$200.00 \$100.00	a. Sketch Plan b. Preliminary Plat c. Final Plat d. Minor Subdivision e. Lot Spilt	\$200.00 (plus \$10.00 / lot or unit) \$400.00 (plus \$20.00 / lot or unit) \$300.00 \$200.00

Applicant and owner shall be jointly and severally responsible for legal, engineering, planning, administrative and miscellaneous fees, including recording costs, if incurred. (R.M.C. 7-3-20(B) and 7-4-12(B)). Water and sewer tap fees and development excise taxes are due at approval of final plats.



TOWN HALL PO Box 10 | 201 N. Railroad Street | Ridgway, Colorado 81432 | 970.626.5308 | www.town.ridgway.co.us

Attachinents: Required
For ALL Applications
Evidence of ownership or written notarized consent of legal owner(s). FRON SKETCH PLAN FINE
Information proving compliance with applicable criteria (see the Ridgway Municipal Code for criteria), like a narrative, site plans, and/or architectural drawings drawn to scale on paper size of 8.5 x 11 or 11 x 17.
Conditional Use Permits The site plan shall show the location of building(s), abutting streets, all dimensions, off-street parking requirements, and landscaping.
Architectural drawings shall include elevations and details of building(s).
Changes in Nonconforming Use Description of existing non-conformity.
Variance The site plan shall show the details of the variance request and existing uses within 100 ft. of property.
Rezoning Legal description, current zoning, and requested zoning of property.
Subdivision All requirements established by Municipal Code Section 7-4.
Sketch plan submittals shall be submitted at least 21 days prior to the Planning Commission hearing at which the applicant wishes to have the application considered.
Preliminary plat submittals shall be submitted at least 30 days prior to the Planning Commission hearing at which the applicant wishes to have the application considered.
Final plat submittals shall be submitted at least 30 days prior to the Planning Commission hearing at which the applicant wishes to have the application considered.
Please note that incomplete applications will be rejected.
CHMECKEL CONTERPALIORESHOP 02/22/2019
Applicant Signature Date
A MA +
Owner Signature Date Date
Date /



February 22, 2019

Shay Coburn Ridgway Town Planner 201 N. Railroad Street Ridgway, Colorado 81432

Re: Alpenglow CoHousing Residential Subdivision, request for Preliminary Plat Review

Dear Shay:

On behalf of Ridgway Cohousing LLC (RCL), we hereby request a preliminary plat review for a subdivision map for a 4.46 acre parcel of land located across from North Railroad Street on Highway 62 (Previous Railroad Yard) as described in Exhibit A - Title Commitment. RCL has purchased this property from Railroad Street Station, Inc. The owners have given permission to Conterra Workshop, LLCto process a Preliminary Plat as the Owner's Agent. The property is presently undeveloped and zoned Historic Business.

This Preliminary Plat proposal is to subdivide the property into two separate parcels, Parcel A - a commercial lot; and Parcel B - a twenty six (26) unit residential cohousing complex. Attached herewith are various plans and support documents required for this submittal including,

- Existing Site Conditions
- Site Plan and Narrative
- Subdivision Lot Plan
- Subdivision Calculations
- Construction Cost Estimate
- Civil Grading, Drainage, and Utility Plans and Profiles
- Rendered Landscape Plan

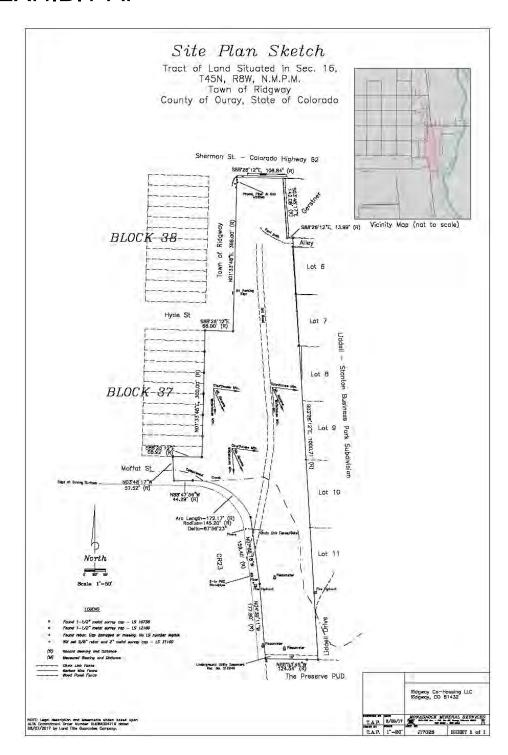
We thank you in advance for your consideration.

Sincerely,

John Baskfield



EXHIBIT A:



Alpenglow CoHousing Community

Preliminary Plat Submittal February 22, 2019

What is Cohousing?

"Cohousing communities are intentional, collaborative neighborhoods created with a little ingenuity. They bring together the value of private homes with the benefits of more sustainable living. That means residents actively participate in the design and operation of their neighborhoods, and share common facilities and good connections with neighbors. All in all, they stand as innovative and sustainable answers to today's environmental and social problems..."

-- From www.cohousing.org, The Cohousing Association of the United States

Since its inception in Denmark over 50 years ago, "Cohousing" has provided a successful framework for intentional communities that share space and resources while forming strong bonds between neighbors and across generations.

Alpenglow Cohousing History

Ridgway Cohousing LLC was formed in 2017 after a small group of locals discovered that "Cohousing" was the best model for them in forming an intentional community for themselves and others here in Ridgway. They hired Kathryn McCammant, perhaps the leading US expert on Cohousing, to advise their team on the process of developing a Cohousing Community. After the site was purchased in November 2017 and design was begun, Alpenglow CoHousing was born.

Ridgway Cohousing LLC and Alpenglow CoHousing are both Non-Profit. Members are donating their time and investing their personal savings to develop this community for themselves and others. Like regular "for-profit" developers, they have taken on real financial risk. However, unlike regular developers, no financial profits will be made. Their only hopedfor reward is the creation of this shared Cohousing community within the larger community of Ridgway.

The project has been through Ridgway's "sketch plan" review (3) times in the past two years and received strong public support. The most recent sketch plan hearing on Oct 30, 2018 directed the CoHousing group to work with Town staff to address:

- Traffic safety at vehicular points of entry
- Dedicating a wide public right-of-way at the project's northern entry point (as proposed this right-of-way provides public access *through* the overall parcel)
- Provision of public sidewalks along existing rights-of-way

In the months following, the Alpenglow design team worked with Town Planners to address these concerns. After concerns were addressed with Town Staff, the CoHousing group agreed to invest in the design, engineering and cost-estimating necessary to prepare this proposal.

Existing Site

Ridgway Cohousing purchased the 4.46 acre parcel in 2017. The narrow lot's long axis centers on an old north-south length of the abandoned rail line. Since the railroad was abandoned in the 1950's, the site has been undeveloped. The parcel is long/narrow (north-south oriented), with the terrain generally falling from West to East.

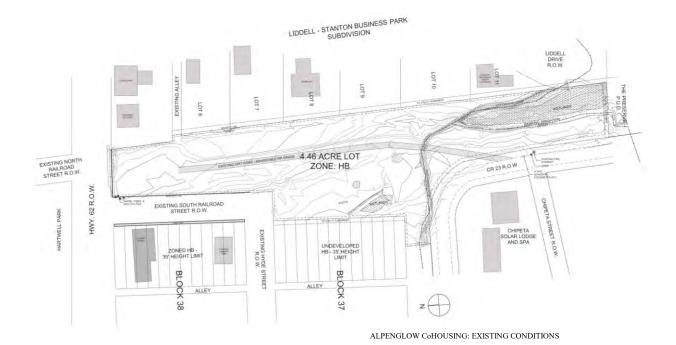
Cottonwood Creek crosses the parcel toward the South end, providing both challenges and amenity to the development. An intermittent drainage ditch enters the site from the south and terminates into the creek.

Manmade wetlands, attributed to both the drainage ditch and the old railroad grade (which obstructs the natural drainage flows from the west), are marginal in nature. The wetlands have been assessed by the USCOE, resulting in a wetland mitigation plan, which includes developing and protecting wetlands both on-site and off-site under a USCOE wetlands permit.

Existing vegetation on the site is sparse, with scattered cottonwoods and grasses. The site is greatly disturbed from vehicular activity and the old railroad grade that runs through the site. Existing access to the property is from Railroad Street and Hyde Street on the north and County Road 23 to the south.

The property lies fully within the historic business (HB) zoning district. Surrounding land use zoning is mostly historic business (HB), with residential (R) to the south. A mix of existing commercial and residential buildings exists near the site. Land to the south and west is currently vacant. Chipeta Solar Springs Lodge lies to the southwest across Cty Rd 23. An existing residence and businesses of the Liddell Subdivision are to the East. Sherman Street (Hwy 62) and Hartwell Park are just north of the site.

Existing utilities, including town water, sanitary sewer, and storm sewer are located near or adjacent to the site. See attached utility plan maps.



Proposed Development

The current proposal is to subdivide the property into two (3) separate parcels:

- On the north, a small .35 acre commercial lot facing highway 62 ("red" on vicinity map)
- On the south, a much-larger <u>4 acre parcel for Alpenglow CoHousing ("orange" on vicinity map)</u>
- Between the properties, a .12 acre right-of-way to be dedicated to the Town of Ridgway ("blue" on vicinity map)



ALPENGLOW CoHOUSING: VICINITY MAP

Commercial Lot (.35 acres, "red" on vicinity map)

On the north, a small commercial lot facing Hwy 62/Sherman street is proposed to be sold to help make the project financially viable. The zoning of this small lot will remain historic business (HB). The possibility of using this small lot to achieve alignment of North Railroad Street across hwy 62 has been studied carefully with the Town of Ridgway. After abundant discussion and engineering studies, the Town needs substantially more time to further assess viability and potentially acquire funding for this potential connection. The proposal here has been carefully designed to allow this street alignment to be made if the Town determines it is viable. If so, a possible land sale to the Town could provide Ridgway the ability to rework South Railroad Street as deemed beneficial to public interest.

The remainder of this proposal will focus on the merits of the Alpenglow Cohousing development. It is simply understood that the 0.35 acre Commercial Lot will be subdivided and sold (to the Town or other buyer TBD), as a separate parcel, in the future.

Public Right-of-Way (.12 acres, "blue" on vicinity map)

Between the Commercial Lot and Alpenglow Cohousing parcels, a 40'wide public right of way is proposed to be dedicated to the Town. An existing off-site 16' wide Town right-of-way lies just to the east of this proposed 40' wide ROW. To support public east-west connection, the Alpenglow CoHousing group is proposing to construct a gravel alley on the Town's behalf across the Town's existing 16' right-of-way, providing a public alley connection between Liddell and South Railroad Streets.

Alpenglow CoHousing Lot (4 acres, "orange" on vicinity map)

Zoning for the Alpenglow Community will remain historic business (HB), with all uses proposed considered "use by right." The proposal consists of twenty-six private residential units densely spaced around a central common space.

The site provides "walkable" convenience to Town amenities. Each private unit has its own traditional amenities (like private kitchens), however ownership at Alpenglow also includes shared amenities like the common spaces, gardens and pathways, the Common House (for community meals and social gatherings) and a shared workshop.

The CoHousing neighborhood is bordered on the north by a 40'w public right-of-way (to be dedicated to the Town, see above). On the far south, a 10'w public pedestrian easement is planned, to provide public access across Alpenglow Cohousing's land, from Cty Rd 23 to the Uncompanger River. Both the 40'w right-of-way and the 10'w public-access easement appear "blue" on attached vicinity map.

The vast majority of parking for the community is on the north and south ends of the site. Residents walk along the "pedestrian promenade" from their designated parking areas (north or south). The pedestrian promenade provides pedestrian-only circulation through the neighborhood core and also provides restricted vehicle access for heavy deliveries or emergency vehicles through the heart of the community.

The northern vehicle access to the site is off the proposed 40'w right-of-way, which will tie into Hyde Street and the existing alley off Liddell Street. South vehicular access to the site is from County Road 23. A small 4-car parking lot is provided near the common house, for visitors. Access to this small lot is from the corner of S. Railroad and Hyde Streets. Vehicular points of access have been studied by SGM Engineering and the Town Engineer. See "line of sight" diagrams (exhibits 1 & 2), illustrating safe safe access, prepared by SGM Engineering.

Public sidewalks: Along the existing rights-of-way bordering the project, Alpenglow CoHousing is proposing to design and construct public sidewalks: along South Railroad/Hyde Streets; and along Cty Rd 23.

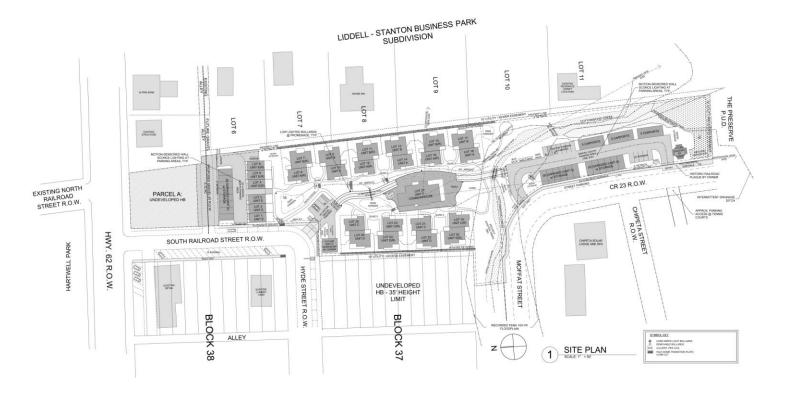
Adhering to a strong theme in "Cohousing" design, the project is designed to bring residents together through the movements of their daily regimens (like walking to their homes or getting the mail) while also encouraging residents to participate in planned neighborhood functions (like common dinners or social gatherings at the common house). The common space and common elements are essential in the community-building theme of any "Cohousing" community.

Site Lighting: Tight-knit neighborhoods, where residents feel closely connected to their neighbors, help foster safety. Alpenglow CoHousing members are also proponents of "dark sky" initiatives. Preliminary site lighting design calls for minimum outdoor lighting necessary to provide safety from "trip/fall." All lighting will have minimum "lumen" capacity to achieve this and will be downcast and shielded. Parking lots will be lit by low-lumen motion-sensor lights on buildings. Approaches and internal site lighting will be provided by downcast "bollard" lighting fixtures, supplemented by photovoltaic landscape lighting as necessary. No overhead streetlights are expected or desired. Final site lighting design will be provided by an electrical engineering consultant and reviewed by the Town during the building permit submittal process.

The project is designed to accommodate snow storage at parking areas. Trash pick-up exists at the north & south parking areas. Mail delivery and the bus stop for the neighborhood will be at the south parking area. As proposed, water and sewer utilities have been coordinated with existing Town infrastructure and Town Engineering. The project benefits existing Town utility infrastructure by providing redundant "loops" for water, gas and electric services. Dry utilities such as gas and electric have been coordinated with local providers. See attached utility plan maps.

In addition to the twenty six (26) private residential units of various sizes proposed, common amenities include parking/carports/garages, a 3,000 square foot common house, an 800 square foot (future) workshop, and landscaped common areas and pathways. Off-street parking is provided for both residents and guests: 56 total parking spaces including (3) HC parking stalls (net result = two (2) spaces per private residence plus four (4) total guest parking spaces).

Cottonwood Creek is a strong feature of the site and lies just south of the neighborhood core. The creek forms the southern border of the "lawn" at the common house, which is envisioned as the "outdoor living room" for the site. Native vegetation will be planted and encouraged along the creek drainage, and gravel paths and picnic areas are arranged along the edge of the creek. The railroad history of the site will be memorialized at these picnic areas through plaque/s, artwork or descriptive monument/s to be determined.



ALPENGLOW CoHOUSING: SITE PLAN

Unit Matrix						
Qty	Type	Size	Bdr	Bath	Height	Est. Price
6	Unit A - Duplex Unit	913 sf	1	1.5	1-story	\$389,000
6	Unit B - Duplex Unit	1,207 sf	2	2	1-story	\$514,000
4	Unit C - Duplex Unit	1,388 sf	2	2.5	2-story	\$599,000
4	Unit D - Duplex Unit	1,628 sf	3	2.5	2-story	\$682,000
6	Unit E - Garage Loft	728 sf	1	1	2-story	\$310,000
1	Unit F - Common House	2,989 sf	1	1.5	1-story	INCLUDED
20	Unit G - Garage	357 sf	0	0	1-story	INCLUDED
1	Unit H - Workshop	800 sf	0	.5	1-story	INCLUDED
	Total		45		_	

Parking Matrix		
Qty	Type	
26	Garage Stalls	
15	Carports	
11	Parking	
4	Guest Parking (open)	
56	Total Parking Stalls	

As proposed, two (2) parking spaces are provided for each residential unit. In addition, four (4) additional off-street (guest) parking spaces are provided for a total of 56 off-street parking stalls.

Compliance with Town Standards

Conformance with the master plan and zoning regulations

The project is located within the Historic Business zoning district with all proposed uses falling within a use by right. This proposal is therefore understood as a "use by right" subdivision, not a planned unit development (PUD). The cohousing proposal provides a mix of attainable housing units as desired under the 2009 affordable housing action plan.

Relationship of development to topography, soils, drainage, flooding, potential natural hazard areas and other physical characteristics

The project is designed to work with the natural topography and drainage patterns. The existing old railroad grade, which impedes the natural flow across the site, will be removed. Storm water will be retained on-site and released in a managed flow according to an engineered storm water plan. Proposed landscaping uses native, low water consumption plants, and makes use of the (generally moist) storm water flow and retention elements as "rain gardens." These "rain gardens" are landscape focus areas, where plants and trees benefit from soil moisture that results naturally from retaining and managing storm water on site. Improvements to Cottonwood Creek include replacing the damaged culvert, new trees and plantings, and paths and boulders to help establish the creek as a natural amenity to the CoHousing community. Mature trees will remain in the creek bed (wherever possible). The CoHousing community plans to encourage native plants and trees within the channel, while members are also aware that occasional storm or snowmelt surges will scour-away most plants. All proposed buildings lie outside of the 100-year FEMA flood plain map.

Availability of water, means of sewage collection and treatment, access and other utilities and services

Water will be extended easterly from Hyde Street and looped centrally through the project site southward to the existing main at the intersection of Chipeta Street and County Road 23. Sanitary Sewer will run northward, centrally through the site, and gravity feed east down the existing alley to the existing sewer main at Liddell Street (see attached utility plans). A 20'wide access easement will be established within the subdivision for future utility maintenance.

ALPENGLOW CoHOUSING Water & sewer Demand Calculations

Units	Туре	Bdrs	Persons	Gal/Day	TOTAL
26	Private Residential	44	2	75	6600
1	Common House	1	2	75	150
	Kitchen & Community Use		10	10	100
1	Workshop		5	10	50
		45			
		Estim	ated daily	demand	6,900

Dry utilities will include electric, CATV, phone, fiber and natural gas, all of which are stubbed to the site.

Compatibility with the natural environment, wildlife, vegetation and unique natural features

The property encompasses the old railroad grade and is highly disturbed. The proposed development will maintain significant landscape areas and open space. The wetlands have been assessed by the USCOE, resulting in a wetland mitigation plan, which includes developing and protecting wetlands both on-site and off-site under a USCOE wetlands permit.

Public costs, inefficiencies and tax hardships

Alpenglow Cohousing is not aware of public costs, inefficiencies or tax hardships associated with this project. The project expects to pay all Town fees requested by the Town. Alpenglow Cohousing has already expended significant professional and engineering fees toward providing the Town an opportunity to re-align Railroad Street across Hwy 62, which may, in the future, add value to the Town's efficiency of roads infrastructure.

Public Benefits

The town is challenged by housing availability and housing costs. This project provides a diversity of attainable housing units that will meet the needs for a variety of user groups. Its central location will encourage pedestrian and bicycle use and minimize its impact on infrastructure. In the dense historic business (HB) zone, this project will contribute to landscaping, open space and public sidewalks.

- Provide sidewalk and curb/gutter along Hyde Street (off site)
- Provide sidewalk and curb/gutter along South Railroad Street (off site)
- Provide sidewalk along Cty Rd 23
- Provide HC half-dome crosswalk traction and curb cut at Hyde and South Railroad street (off site)
- Dedicate 40' w right-of-way between Hyde and Liddell Streets (Dedicated to Town)
- Construct gravel alley across Town alley right-of-way East of CoHousing parcel (off site, provide physical vehicular connection between Hyde and Liddell Streets on Town's behalf)
- Provide redundant loops for water and sewer (on-site and off-site, reinforces Town infrastructure)



www.mountainlawfirm.com

<u>Glenwood Springs – Main Office</u> 201 14th Street, Suite 200 P. O. Drawer 2030 Glenwood Springs, CO 81602 Aspen 323 W. Main Street Suite 301 Aspen, CO 81611 Montrose 1544 Oxbow Drive Suite 224 Montrose, CO 81402 Andrew A. Mueller *Partner*

aam@mountainlawfirm.com

Office: (970) 945-2261 Fax: (970) 945-7336

*Direct Mail to Glenwood Springs

Office

November 30, 2017

Re: Ridgway Co-Housing PUD Application

Dear Town of Ridgway Planning Department:

Applicant has provided in its Application for Preliminary Plat Approval for the Ridgway Cohousing PUD a copy of the current title commitment for the subject property. The title commitment prepared by Land Title Guarantee reflects that the property's minerals have not been severed from the surface. As such, title to the property's mineral estate is unified with title to the property's surface and is vested in the surface owner, the Ridgway Cohousing, LLC who is the Applicant under the Preliminary Plat application. No notice to the Applicant under CRS § 24-65.5-103(1) is required. To the extent the Town requires certification in writing of Applicant's compliance with the CRS § 24-65.5-103(1) notification requirements in this scenario, this writing serve as such certification.

Very truly yours,

Andrew A. Mueller

AAM



Touchstone Energy' Cooperatives
The power of human connections"

Date:	9-5-2017	
Daw.	7-2-2011	

To whom it may concern:

This is a "will-serve" letter for <u>ALPENGLOW COHOUSING</u>

I have reviewed the plans based on drawing <u>ALPENGLOW COHOUSING SCHEMATIC SITE</u> PLANS PROVIDED BY CONTERRA WORKSHOP

SMPA will be the electric service provider for ALPENGLOW COHOUSING LLC and has sufficient capacity and ability to provide electrical service subject to the provisions of the Service Connection and Line Extension Policy as found in SMPA's Rules, Regulations, and Policies.

If you have any questions please feel free to contact me at our Ridgway office.

Best regards,
Ollane Dollane

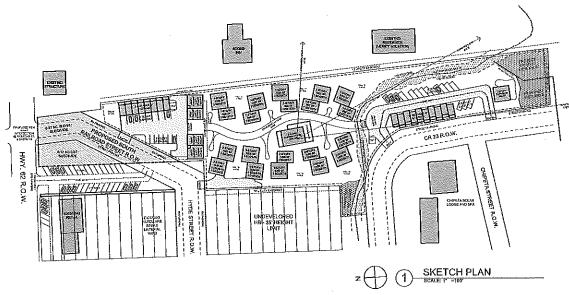
Duane DeVeny Service Planner

Mobile: (970) 209-5684 Office: (970) 626-5549 x214

SAN MIGUEL POWER ASSOCIATION

Hrs: MON.-THUR. 7:00 a.m. - 5:30 p.m.

San Miquel Power is an equal opportunity provider and employer



/RCHITECT:

LOCATION

PROJECT INFORMATION

ADDRESS 180 REKZWAY, CO, 81432

CHOUSTIG CONSULTANT.

SCOTE CARMICHAEL
WALTER ENAPOSITIESTAL & ENGL GROUP
PO BOX 3567
GRAND AUNCTION, CO. 81503

PROJECT DATA

TOTAL PROPERTY ACREAGE: PROP, SUBD. HORTH PARCEL: CAPALISTS SITE ZORNYO: TOTAL WATE:

PARKERS

PROPOSEO GARAGES: PROPOSEO CARPORT SPACES PROPOSEO PARXINO SPACES TOTAL OFF-STREET PARXING 34 ACRES 2 ACRES .15 ACRES

DESIGN DATA

IND 2006 EDITION & PER GENERAL NOTES \$5 PSG (FER SITE SLEV, AND DITTY STANDARDS) \$6 PSF \$0 UPH 40' QME

SKETCH PLAN - TOWN SUBMITTAL

B/31/2017

ALPENGLOW COHOUSING SCHEMATIC SITE PLANS RIDGWAY, COLO. 81432

conterraworkshop.com (970) 626-4471



January 21,2019

Donald Swartz

Apenglow Cohousing

To whom it may concern,

After review of the plans presented to us by Apenglow Cohousing, Ridgway School District R-2 find that the location indicated on the plans for the bus pick-up/drop-off is an acceptable and valid bus stop.

As we already have a route that by-passes the proposed location it would not add any extended ride time to existing students on said route.

If you have and questions or concerns please feel free to contact me at any time.

Respectfully,

Shane Ayer Agent for Ridgway School District

Director of Maintenance and Transportation

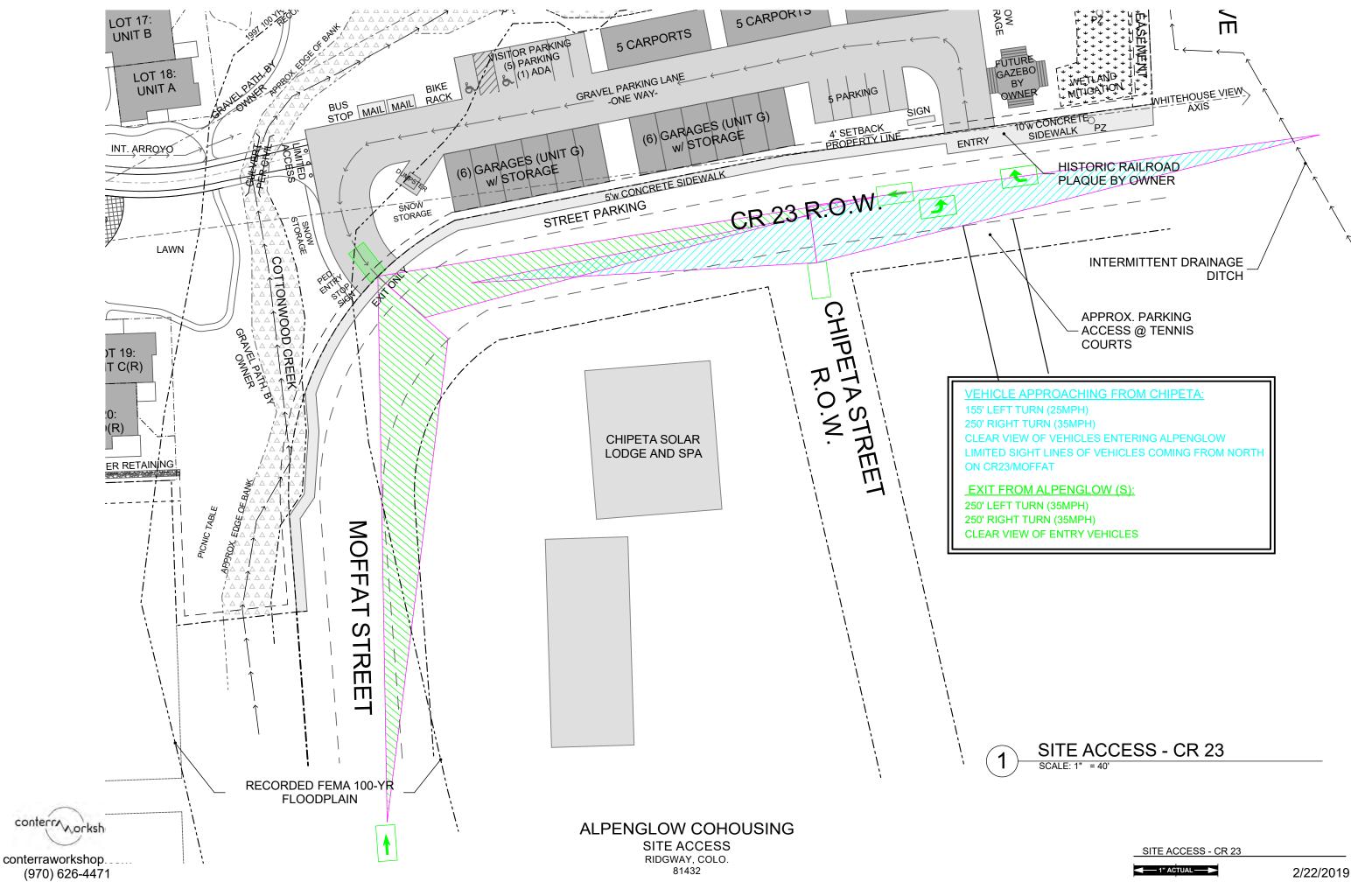
Ridgway School District R-2

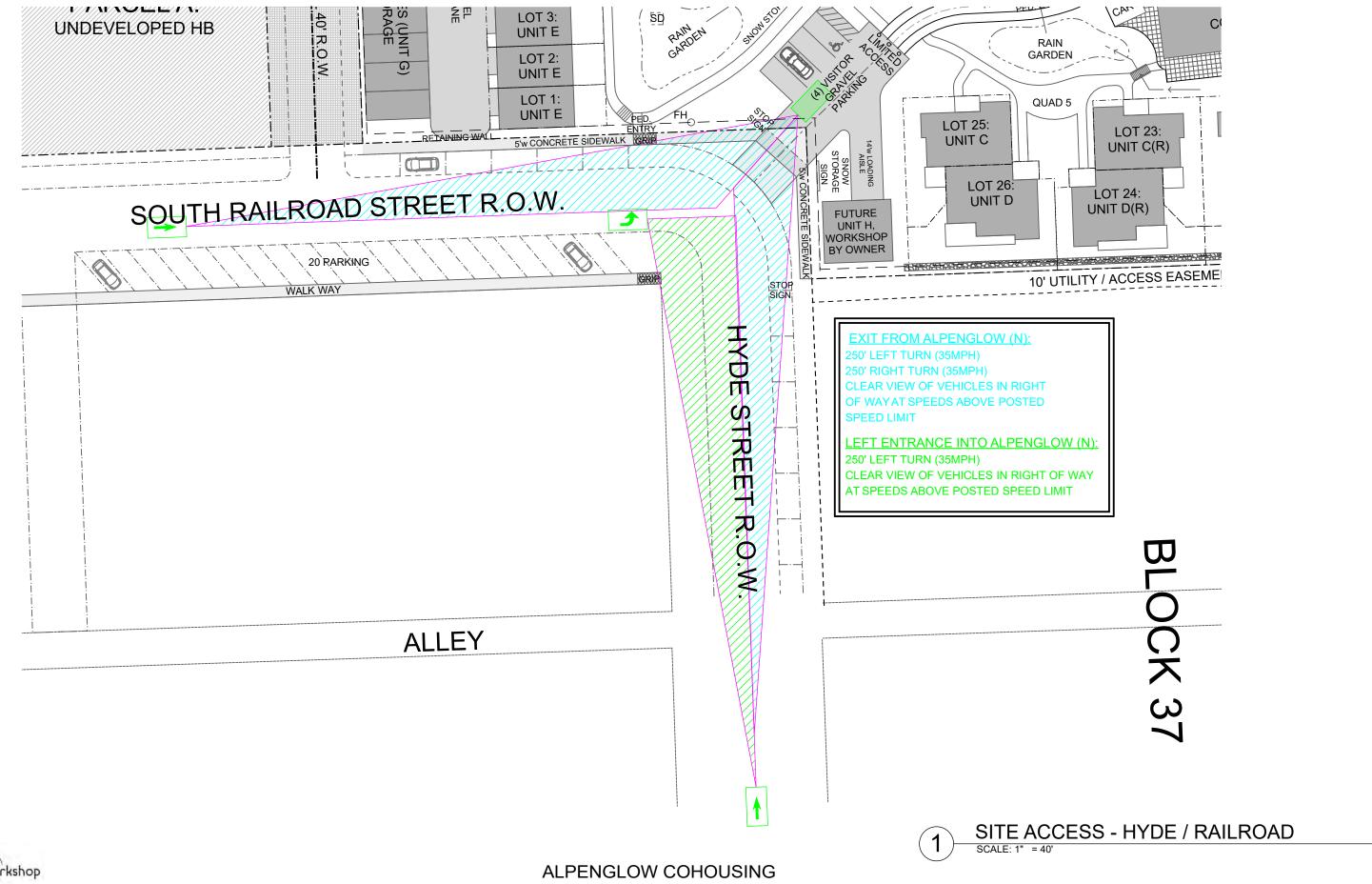
1115 W. Clinton St Ridgway Co, 81430

Work :(970)626-4320

Cell :(970)318-6590

Email: sayer@ridgway.k12.co.us





conterraworkshop.com (970) 626-4471

ALPENGLOW COHOUSING SITE ACCESS RIDGWAY, COLO. 81432

SITE ACCESS - HYDE / RAILROAD

ALPENGLOW COHOUSING DEVELOPMENT DECLARATION

OF

COVENANTS, CONDITIONS, AND RESTRICTIONS (CC&Rs)

Draft: May 8, 2019

If this document contains any restriction based on race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, familial status, marital status, disability, genetic information, national origin, source of income, or ancestry, that restriction violates state and federal fair housing laws and is void.

ALPENGLOW COHOUSING DEVELOPMENT

DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS (CC&Rs)

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Exhibit A – Site Plan

Exhibit B - Garage/Storage Units Assigned to Town Homes

Exhibit C – Maintenance Responsibilities

ALPENGLOW COHOUSING DEVELOPMENT

DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS (CC&Rs)

- A. The Declarant owns Property in Ridgway, Colorado on which it will build a 26-unit Town Home Development, Alpenglow CoHousing (the "Development") which will be partly owned and managed by Alpenglow CoHousing Association (the "Association"). The Development consists of lots 1 thru 26 and a Common Area and Improvements thereon shown on the map attached as Exhibit A (the "Map") to this Declaration. Lots 1 thru 26 each has thereon one Town Home of the Development; these 26 lots are owned by the 26 Town Home Owners (the "Owners"). The Common Area of the Development and is owned by the Association; it includes all the land of Parcel B of the Property that is not in any of lots 1 thru 26, and all Improvements thereon.
- B. The Town Homes are subject to the covenants, conditions and restrictions contained in this Declaration of Covenants, Conditions, and Restrictions (the "Declaration").
- C. The covenants, restrictions, benefits, burdens, rights and duties set forth in this Declaration constitute equitable servitudes and covenants running with the land that benefit and bind each Town Home and each Owner and successive Owner thereto.

THE DECLARATION IS AS FOLLOWS:

ARTICLE 1 Definitions

Unless the context indicates otherwise, the following terms shall have the following definitions:

- 1.1 Applicable Laws. All federal, state and local laws, statutes, acts, ordinances, rules, regulations, permits, licenses and requirements of all governmental authorities (including any agency, authority, board, branch, division, department or similar unit of any federal, state, county, town, district or other governmental entity having jurisdiction over the Development) that now or hereafter during the term of this Declaration may be applicable to a residential common interest development.
- 1.2 <u>Architectural Committee</u>. The Architectural Committee described in **Section 7.1**.
- 1.3 <u>Articles</u>. The Articles of Incorporation of the Association and any amendments thereto.

- 1.4 <u>Association</u>. Alpenglow CoHousing Association, a Colorado nonprofit corporation.
 - 1.5 Board. The Board of Directors of the Association.
 - 1.6 Bylaws. The Bylaws of the Association and any amendments thereto.
- 1.7 <u>Common Area</u>. The entire area of the Development shown on the Map, excluding Lots 1 thru 26, and all Improvements on such area, including the private roadways, walkways, parking spaces, common house, work shop, garages, carports, and recreational facilities, if any. The Common Area is owned by the Association.
 - 1.8 <u>Declarant</u>. Ridgway Cohousing LLC, a Colorado corporation.
- 1.9 <u>Declaration</u>. This Declaration of Covenants, Conditions, and Restrictions (CC&Rs) and any amendments or corrections thereto.
- 1.10 <u>Development</u>. The residential development to be constructed on Parcel B of the Property shown on the Map and subject to all the provisions in this Declaration, including the Town Homes and all other Improvements thereon.
- 1.11 <u>Development Agreements</u>. The agreements, rules or regulations the Association may adopt from time to time pursuant to the authority of **Section 5.5.2**.
- 1.12 <u>Exclusive Use Carports</u>. There are fifteen carports in the Common Area (see the Map of **Exhibit A**); each carport is assigned to, but not deeded to, one Town Home Owner for their exclusive use. The Town Home to which a carport is assigned may change from time to time, depending on the parking needs of Occupants of the Development.
- 1.13 Exclusive Use Garage/Storage Areas. There are twenty garage/storage areas in the Common Area (see the Map of **Exhibit A**); each garage/storage area is assigned to, but not deeded to, the Owners of one of Town Homes 7 thru 26 permanently (see **Exhibit B**). The exclusive use of each garage/storage area moves with its assigned Town Home to a new Owner when the Town Home is sold.
- 1.14 Exclusive Use Parking Spaces. Each of the twenty-six Town Homes has a garage within it or a garage/storage area for its exclusive use. The Development has fifteen carports assigned exclusively for the use of Occupants having more than one vehicle kept for local use in the area. If there are not enough garages and carports to house all of the vehicles of Occupants in the local area, up to five open parking spaces are available for the exclusive use of Occupants having such extra vehicle(s). These five parking spaces are shown on the Map of **Exhibit A** across the driveway from the southern-most carport building.

- 1.15 <u>Governing Documents</u>. This Declaration, the Articles of Incorporation, the Bylaws. and the Development Agreements of the Association.
 - 1.16 <u>Improvements</u>. Any property in the Development constituting a fixture.
- 1.17 <u>Maintain, Maintained, Maintaining or Maintenance</u>. Unless expressly stated otherwise, "maintain", "maintained", "maintaining" or "maintenance" as used in this Declaration includes inspection, cleaning, maintenance, repair, upgrading and/or replacement.
- 1.18 <u>Map</u>. The subdivision map of the Final Plat of Alpenglow CoHousing Development, recorded at reception number ______, (**Exhibit A** of this Declaration).
 - 1.19 Member. A member of the Association.
- 1.20 <u>Mortgage</u>. A recorded mortgage or deed of trust against one or more Town Homes in the Development.
- 1.21 <u>Mortgagee</u>. A mortgagee under a Mortgage or a beneficiary under a deed of trust recorded against a Town Home in the Development.
- 1.22 Occupant(s). Any Person entitled to use and reside in a Town Home pursuant to an ownership right or any lease, license or other similar agreement with the Owner of the Town Home.
- 1.23 Owner. The record owner, whether one or more Persons, of a fee simple or life estate to any Town Home in the Development.
 - 1.24 Permittee(s). All Owners and Occupants and their agents and invitees.
- 1.25 <u>Person</u>. Any natural person, partnership, trust, corporation, limited liability company, or other legal entity.
- 1.26 <u>Property</u>. Parcel B (consists of lots 1 thru 27) shown on the Map, together with all Improvements thereon.
 - 1.27 <u>Town</u>. The Town of Ridgway, Colorado.
- 1.28 <u>Town Home</u>. A fee simple or life estate to real property consisting of two elements: (i) a Town Home Lot, and (ii) the portion of a duplex or triplex building situated on the Lot.
- 1.29 <u>Town Home Building</u>. A duplex building containing two living Units on two Town Home Lots; there are ten duplex buildings in the Development; or a triplex

building containing three living Units on three Town Home Lots; there are two triplex buildings in the Development.

- 1.30 Town Home Lot(s). Town Home Lots 1 thru 26 shown on the Map.
- 1.31 <u>Unit</u>. The portion of a Town Home Building that is on one Town Home Lot.

ARTICLE 2 Property Rights and Easements

- 2.1 <u>Type of Development</u>. This Development is a town home project and consists of 26 Town Homes and Association-owned Common Area.
- 2.2 <u>Ownership Interests</u>. Each Owner owns a fee simple or life estate to a Town Home. In addition, each Owner is a Member of the Association. The Association owns the fee simple estate in the Common Area.
- 2.3 Garages, Carports, and Open Parking Spaces. All Town Homes have at least one exclusive parking space for its Occupants (see Exhibit B). If the Occupants of a Town Home have more than one vehicle regularly used for transportation in the area of the Development, they will be required to purchase from the Association the exclusive use of a carport or parking space for their other vehicle(s), if such carport or parking space is available.
- 2.3.1 Each Town Home in a triplex building has a garage within its lot for the exclusive use of its Occupant(s). Each Town Home in a duplex building has a garage/storage area within the Common Area assigned to the Town Home for the exclusive use of its Occupant(s) (see **Exhibits A & B**). When a Town Home changes ownership, any assigned garage/storage area assigned to the Town Home automatically moves to the exclusive use of the new Owner, whether or not the instrument of transfer specifically includes the exclusive use of the garage/storage area in its description of the purchased property.
- 2.3.2 The Development has fifteen carports in the Common Area (see Section 1.12). Occupant(s) having two vehicles for use in the area of the Development must purchase the exclusive use of a carport from the Association, if such a carport is available. If no carport is available, the Occupant(s) must purchase the exclusive use of an open parking space from the Association, if such an open parking space is available (see **Section 1.14**). Occupant(s) having three vehicles must purchase the exclusive use of a carport and an open parking space from the Association, if such carport and open parking space are available.

- 2.4 <u>Easements</u>. The Development, including each Town Home and the Common Area, is subject to the applicable easements described in this **Section 2.4** and the general easement rights described in **Section 2.5**.
- 2.4.1 <u>Common Area Easements</u>. The Common Area as the servient tenement is subject to an easement in favor of each Town Home as the dominant tenement for:
- (i) ingress and egress over the walkways and drive aisles within the Association Common Area;
- (ii) access to and use of (including the right to install or maintain) any utility lines, cables, wires, pipes, meters or other equipment installed within, on or over the Association Common Area that provides utility service to the dominant tenement, including water, electricity, gas, telecommunications, storm drainage and sanitary sewer services, and life safety system, if any.
- 2.4.2 <u>Utility Easement</u>. As a part of the original construction of the Development, certain owned Town Homes may have utilities that traverse the owned Town Home Lot or Unit that serve some or all of the other Town Home(s). Each served Town Home has an easement over the owned Town Home Lot or Unit containing the utilities for utility chases, shafts, vents, ducts, lines and other equipment that traverse and provide utility service to the served Town Home (the "Utility Facilities"). The location of the easement is the location of the Utility Facilities installed as a part of the original construction of the owned Town Home or as subsequently installed with the consent of the Owner of the owned Town Home. The easement right granted hereunder includes access to the owned Town Home as may be necessary to maintain the Utility Facilities. The Occupants of the owned Town Home shall not take any action that would in any manner interfere with the operation of the Utility Facilities.
- 2.4.3 <u>Maintenance Easement</u>. The Association and each Town Home Owner has an easement over each other Town Home for purposes of providing the agents of the Association such access as may be necessary to perform the Association's maintenance duties as described in **Section 4.2**, including access to the other Town Home.
- 2.4.4 Pedestrian Pathway and Surface Drainage Area Easements. As a part of the original construction of the Development, certain Town Homes Lots may have pedestrian pathways and/or surface drainage areas that encroach on the Town Home Lot that serve pedestrians using the pathways and the Development in general. Each pedestrian using the pathways and all Members and the Association have an easement over the Town Home so that such pedestrian pathways and surface drainage areas may be used for the purposes for which they were constructed, and may not be altered by any action or according to any order of the Town Home Owner. In addition, the Association shall have the authority to provide for any maintenance or modification to such pathways and surface drainage areas that the Association determines is desirable for its intended usage.

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- 2.5 <u>General Easement Rights</u>. Each easement described in **Section 2.4** shall be subject to, and construed in accordance with, the following provisions, except as otherwise expressly provided for elsewhere in this Declaration:
- (i) the easement shall be appurtenant to the respective Town Homes and any transfer of a Town Home automatically transfers the easement appurtenant thereto regardless of whether the easement is described in the instrument of transfer:
- (ii) the easement is in perpetuity unless otherwise terminated by operation of law;
- (iii) no easement may be modified or relocated except with the written consent of the Owners of all affected Town Homes;
- (iv) the Owner of the Town Home benefiting from the easement shall indemnify, defend and hold harmless the easement providing Owner against any claims, liabilities, damages, judgments or expenses, including reasonable attorneys' fees (collectively, "Claim"), from any injury or death to any Person or damage to any property that occurs in connection with the use or maintenance of the easement as a result of any act or omission by the benefitting Owner, Occupant, or their Permittee, except to the extent the Claim is a covered claim under insurance maintained by the Association or an Owner (any deductibles or costs in excess of available coverage amounts shall be paid by the Owner);
- (v) all easement uses shall comply with the covenants, rights, duties and restrictions set forth in this Declaration, with all Applicable Laws and with any Development Agreements adopted by the Association under the provisions of **Section 5.5.2**:
- (vi) each easement granted hereunder exists by virtue of this Declaration, without the necessity of confirmation by any other documents;
- (vii) the easements are nonexclusive unless expressly provided otherwise;
- (viii) no nonexclusive easement provided or reserved under this Declaration shall restrict the easement providing Owner from granting other easements or interests therein as long as the other easement or interest does not unreasonably interfere with the easement rights of the benefitting Owner; and
- (ix) easement access and use rights are subject to the rights reserved in **Section 2.7**.
- 2.6 Other Rights. Each Town Home and the Common Area benefit and are bound by such other easements, rights-of-way, or dedications as may be granted or reserved on the Map, any deed to the Town Home or Common Area, or in any other appropriate public record.
- 2.7 <u>Reservation of Rights</u>. Notwithstanding any property rights, including easements, described herein, each Town Home and the Common Area, as the case may be, are subject to each of the following:
- (i) the right of the Association's agents to enter any Town Home to cure any violation or breach of this Declaration or the Bylaws or the Development

Agreements, provided that at least thirty (30) days' prior written notice of such violation or breach (except in the cases of emergency) has been given to the Owner and provided that within the thirty (30) day period such Owner has not acted to cure such violation or breach;

- (ii) the right of the Association's agents to enter any Town Home to perform its obligations and duties under this Declaration, including the obligations and the duties with respect to maintenance;
- (iii) the right of the Association to suspend an Owner's right to use any recreational facilities as described in **Section 5.5**; limit the number of guests to use any Common Area; adopt and enforce the Development Agreements; and assign, rent, license or otherwise designate and control the use of any recreational facilities located within the Common Area; and
 - (iv) the rights reserved in **Sections 2.8** and **2.10**.
- 2.8 <u>Authority Over Common Area</u>. The Association shall have the power and the right in the name of the Association and all of the Owners as their attorney-in-fact to grant, convey or otherwise transfer to any Owner or any other Person fee title, easements, leasehold estates, exclusive use easements or rights, licenses, lot-line adjustments, rights-of-way and/or dedications in, on, over or under the Common Area in order to:
- (i) construct, erect, operate, maintain or replace lines, cables, wires, conduits or other devices for electricity, cable television, internet services, fiber optics and other telecommunications equipment, power, telephone and other purposes, public sewers, storm water drains and pipes, water systems, sprinkling systems, water, heating and gas lines or pipes and any similar public or quasi-public Improvements or facilities;
- (ii) accommodate any encroachment that in the sole discretion of the Association does not unreasonably interfere with the use and enjoyment of the Common Area: or
- (iii) accomplish any other purpose that in the sole discretion of the Association is in the interest of the Association and its Members and does not unreasonably interfere with the use and enjoyment of the Common Area.

Each Owner in accepting a deed to a Town Home expressly consents to such action and authorizes and appoints the Association as attorney-in-fact of such Owner to execute and deliver all documents and interests to accomplish the action, including, but not limited to, grant deeds, easements, subdivision maps, and lot-line adjustments. Notwithstanding anything herein to the contrary, in no event shall the Association take any action authorized hereunder that would permanently and unreasonably interfere with the use, occupancy and enjoyment by any Owner of his or her without the prior written consent of that Owner. Furthermore, the conveyance of fee title to any portion of the Common Area as authorized in this **Section 2.8** (other than conveyances made as a part of lot-line adjustments) shall require the consent of two-thirds of the total voting power of the Association and such consent of the Mortgagees as may be required by **Article 10**.

2.9 <u>Delegation of Use Rights</u>. An Owner's Permittees as may be permitted by the Development Agreements may use and enjoy any Common Area Improvements, including any recreational facilities. All such use shall be subject to restrictions contained in this Declaration and the Development Agreements. If an Owner leases their Town Home, neither the Owner nor the Owner's Permittees shall be entitled to use any Common Area Improvements including the recreational facilities other than such use as is directly related to the Owner's rights and duties as a landlord. Such rights may be enjoyed by the Occupant and Occupant's Permittees during the term of the rental agreement.

Any Owner who rents their Town Home must comply with the requirements of **Section 3.2**.

- 2.10 Conveyance of Common Area. The Common Area will be conveyed to the Association. The Association Common Area as the servient tenement is subject to the Grant of Easement as the dominant tenement for ingress and egress over the private streets and walkways situated on the servient tenement, for access to and use of any recreational facilities located on the servient tenement, for access to and use of the Exclusive Use Common Areas located therein, for access to and use of (including the right to install, maintain, repair or replace) any utility or related lines and equipment installed within, on or over the servient tenement in order to provide utility or related service to the dominant tenement, including water, electricity, telephone, gas, cable television, fiber optic cable, and sanitary sewer or storm drainage lines and equipment. The Association may adopt Development Agreements regulating the use of the Common Area, provided such Development Agreements do not interfere with the exercise of the foregoing easement rights and are consistent with the restrictions contained in this Declaration.
- 2.11 <u>Noise Transmissions</u>. The Development has been designed to meet the acoustical building code standards in effect at the time the Development was constructed. The standards establish minimum performance criteria and do not eliminate all noise transmissions. Occupants will hear noise from other Units and noises from outside the Town Home Building, including, but not limited to, noise from music, television sets, stereo and other audio equipment, foot traffic from other Units, plumbing fixture operations, trash disposals, entry gate operations, truck traffic, sirens and other street noises and aircraft noise.
- 2.12 Rental Restrictions, Requirements, and Procedures. In order to maintain a stable housing environment, to protect the ability of the Owners and prospective Owners to finance their Town Homes and to preserve the character of a cohousing community, including active participation by members of the community; in addition to **Section 3.2**, the Association and may adopt Development Agreements imposing restrictions on the rights of Owners to rent their Town Homes. These restrictions may include, but are not limited to, restrictions that limit the number of Town Homes that may be rented at any one time and the duration of the period that a Town Home may be rented.

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Notwithstanding the foregoing, no more than eight Town Homes may be rented at any time; all rental periods will be 32 days or more; rental periods may be for up to one year, and renewable yearly with the approval of the Owner and the Association.

ARTICLE 3 Restrictions

3.1 <u>Residential Use</u>. Each Town Home shall be used for residential purposes only; and no part of the Development shall be used or caused, allowed or authorized to be used in any way, directly or indirectly, for any business, commercial, manufacturing, mercantile, storing, vending or other nonresidential purpose. Notwithstanding the foregoing, Owners or Occupants of the Town Homes may use a room or rooms in the

residence as an office, provided that the primary use of the Town Home is as a residence, no advertising or signage is used in any manner in connection with the office use, no customers, clients or patients enter the Town Home on any regular basis, and the use is in compliance with all local ordinances. The Association shall have the authority to adopt Development Agreements regarding the use of offices within the Development in order to maintain the residential characteristics of the Development.

- 3.2 Renting. Subject to the provisions of **Section 2.12**, the Owner may rent his or her Town Home provided each of the following conditions is satisfied:
- (i) the rental must comply with all rental conditions imposed by Applicable Laws.
- (ii) the Owner must obtain the approval of the Association prior to the rental, to insure that the maximum number of rentals allowed in the Development is not exceeded.
 - (iii) the rental agreement must be in writing;
- (iv) the rental agreement must contain a provision that the rental agreement is subject to this Declaration, the Bylaws and the Development Agreements, and that any violation of any of the foregoing shall be a default under the rental agreement; and
- (v) before commencement of the rental agreement, the Owner shall provide the Association with the names of the Occupants who will reside in the Condominium and the address, telephone number and email address of the Owner.

Any Owner that rents his or her Town Home shall keep the Association informed at all times of the Owner's address, telephone number and email address. Any rental agreement shall be subject to this Declaration, the Bylaws and the Development Agreements, and any breach of any of the foregoing shall constitute a breach by the Owner and also a default under the rental agreement, regardless of whether it so provides in the rental agreement. If any tenant breaches any restriction contained in this Declaration, the Bylaws or the Development Agreements, the Owner, on demand from the Association, immediately shall take such steps as may be necessary to correct the breach, including, if necessary, eviction of the Occupant.

- 3.3 <u>Nuisance</u>. No activity shall be conducted in any Town Home or the Common Area that constitutes a nuisance or unreasonably interferes with the use or quiet enjoyment of the Town Homes or Common Area by Occupants of any other Town Home. No use is allowed which creates conditions that are hazardous, noxious or offensive through the emission of odor, fumes, smoke, cinders, dust, gas, vibrations, glare, refuse, water-carried waste, or excessive noise. No activity may be carried on which causes any insurance policy to be cancelled or not renewed or which will impair the structural integrity of any Town Home or Association Building within the Development.
- 3.4 <u>Vehicle and Parking Restrictions</u>. All parking spaces within the Common Area, except the Exclusive Use Common Area garage, carport and open parking spaces, shall remain open and available to occupants of the Town Homes and their invitees on a first-come, first-serve basis, subject to any Development Agreements the Association may adopt from time to time regulating the parking of vehicles in the unassigned open parking spaces, including regulations that prohibit Occupants from parking in all or part of these spaces, so that the spaces are available exclusively for guest parking.
- 3.4.1 No mobile home, camper or recreational vehicle, boat, truck or similar equipment shall be parked anywhere within the Development except as otherwise authorized by the Association. For purposes herein, "truck" does not include a pickup truck that does not exceed one ton, or a sports utility vehicle.
- 3.4.2 Occupants of Town Homes shall park their vehicles in their Exclusive Use Parking Spaces so that any unassigned parking spaces are available primarily for guests, provided that if the Owner has more vehicles than Exclusive Use Parking Spaces, the additional vehicles may be parked in the unassigned spaces not reserved for guests or others. The Occupants of each Town Home shall have up to the number of Exclusive Use Parking Spaces as Occupants with legal drivers licenses, if they have as many local-use vehicles as legal drivers; however, no Town Home Owner shall have less than one nor more than three Exclusive Use Parking Spaces.
- 3.4.3 No garage or carport space may be converted into any use that would prevent its use as a garage or carport space unless authorized by the Association.
- 3.5 <u>Towing Authority</u>. The Association may install a sign at each vehicular entrance to the Development containing a statement that public parking is prohibited and that all vehicles not authorized to park within the Development will be removed at the owner's expense.
- 3.5.1 The Association may cause the removal of any vehicle wrongfully parked within the Development, including vehicles owned by an Occupants. If the identity of the registered owner of the vehicle is known or readily ascertainable, any authorized Association Member within a reasonable time thereafter, shall notify the

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owner of the removal in writing by personal delivery or first-class mail. Notwithstanding the foregoing, the Association may cause the removal, without notice, of any vehicle parked in a marked fire lane, within 15 feet of a fire hydrant, in a parking space designated for handicapped without proper authority, or parked in a manner which interferes with any entrance to, or exit from, the Development or any Town Home, parking space or carport located thereon. The Association shall not be liable for any damages incurred by the vehicle owner because of the removal in compliance with this section or for any damage to the vehicle caused by the removal unless such damage resulted from the intentional act of any agent of the Association.

- 3.5.2 Unless the Association provides otherwise, any director or officer, any manager or manager's agent, or any Owner authorized to do so by any director or officer shall have the authority to act on behalf of the Association to cause the removal of any vehicle wrongfully parked within the Development.
- 3.6 <u>Animals</u>. Animals may be maintained within the Development in compliance with Applicable Laws and the following conditions:
 - (i) no animal shall be maintained for any commercial purposes;
- (ii) the use of the Common Area by animals shall be subject to such Development Agreements as may be adopted by the Association;
 - (iii) the animal's owner immediately shall clean up after his or her animal;
- (iv) the Town Home Owner shall be responsible for any damage to any Common Area caused by any animal maintained by any Occupant or visitor of the Owner's Town Home.
- 3.6.1 The Association, after notice and a hearing, may require the permanent removal from the Development of any animal that the Association, in its discretion, determines is a nuisance, a danger to the health or safety of any Occupant, or otherwise interferes with the quiet use and enjoyment of Occupants of any Town Home. The Association may find that an animal is a nuisance if the animal or the animal's owner continue to violate the Development Agreements regulating animals after receipt of a demand from the Association to comply with the Development Agreements.
- 3.7 <u>Television or Radio Equipment</u>. No television, video or radio poles, antennae, satellite dishes, cables or other transmission and/or reception fixtures or personal property (individually and collectively the "Antenna Equipment") shall be installed or maintained on any Town Home except as follows:
- (i) Antenna Equipment that is one meter or less in length or diameter or diagonal measurement, provided that the location, color and screening requirements shall be in accordance with any guidelines imposed by the Association or the Architectural Committee, which guidelines shall comply with Applicable Laws regulating restrictions on Antenna Equipment; and
- (ii) Antenna Equipment not covered under subparagraph (i) above, the installation of which is approved in advance by the Association or the Architectural Committee in accordance with the procedures described in Article 7.

Under no circumstances shall any Antenna Equipment be installed within any Association Common Area or the exterior of any Town Home Building, including any exterior wall, railing, deck or floor without the prior written approval of the Association, the Architectural Committee or a designated committee.

Nothing herein shall be construed to restrict in any manner the Association's right to authorize a cable television franchisee or other provider of similar services to provide cable television, satellite dish, radio or other similar services to the Development.

- 3.8 <u>Signs</u>. No sign of any kind shall be displayed from any Town Home that is visible from any other Town Home except any sign approved by the Association either on an individual basis or pursuant to Development Agreements adopted by the Association or as may be otherwise authorized by Applicable Laws.
- 3.9 <u>Vehicle Maintenance</u>. There shall be no major maintenance performed on any vehicle except for any emergency repairs that are necessary in order to move the vehicle to a proper repair facility or as authorized by the association in writing. If necessary, the Association may adopt Development Agreements or guidelines identifying examples of what is considered "major" maintenance or repair for purposes of this **Section 3.9**.
- 3.10 Alterations, Modifications, Additions, or Replacements. There shall be no alterations, modifications or additions, made to any Town Home or any Improvement thereon, or any replacement of a partially or wholly destroyed Town Home, except in compliance with the provisions of **Article 7**. In no event shall such alteration, modification, addition, or replacement result in a Town Home that includes any portion of the Town Home extending outside the footprint of the Town Home as originally built.
- 3.11 <u>Compliance with Law</u>. No Owner or Occupant shall permit anything to be done or kept in his or her Town Home that violates any Applicable Laws. Nothing shall be done or kept in any Town Home that might increase the rate of or cause the cancellation of any insurance maintained by the Association or another Town Home Owner.
- 3.12 <u>Sound Transmissions</u>. No Town Home shall be altered in any manner that would increase sound transmissions, resonances, or reverberations to any adjoining or other Town Home, including, but not limited to, the replacement, modification, or penetration of any flooring or floor covering, or the penetration of any wall, floor or ceiling that increases sound transmissions, resonances or reverberations to any other Town Home except as authorized by the Architectural Committee in writing.
- 3.13 <u>Fencing</u>. Owners shall be permitted to erect fences on their respective Lots. Materials permitted for fencing shall be approved by the Association. Fences to the rear of the back wall of a Town Home shall be limited to a maximum of six feet in height. Fences to the front of the back wall of a Town Home shall be limited to four

feet in height, and shall be for the purpose of protecting plants or for other purposes approved by the Association.

3.14 <u>Additional Restrictions</u>. In accordance with Applicable Laws the Association from time to time may adopt Development Agreements regulating: (i) the use of Town Home decks and yards, including Development Agreements regulating clotheslines; and (ii) the color, type and/or quality of exterior window coverings.

ARTICLE 4 Maintenance and Landscaping Obligations

- 4.1 <u>Owner's Maintenance and Landscaping Obligations</u>. Each Owner shall be responsible for maintaining his or her Town Home and any Improvements therein in good condition and repair at all times, normal wear and tear excepted.
- 4.1.1 <u>General</u>. Each Owner's maintenance responsibilities include, but are not limited to, interior doors and walls, floors, cabinets, appliances, and all electrical, heating, plumbing, and other utility fixtures, such as electrical outlets and exhaust ducting from bathrooms or kitchen range hoods. Each Owner, at that Owner's cost, shall periodically clean and maintain any exterior doors and windows, skylights, and screens and screen doors that serve the Owner's Town Home. Each Owner shall maintain its garage or garage/storage unit, and its carport (if applicable). If damage to any of the foregoing is covered by insurance maintained by the Association, the Association, on request from the Owner, shall submit an appropriate claim, if the claim exceeds the deductible, and shall remit any available insurance proceeds to the Owner on receipt of satisfactory evidence that the proceeds are or will be used for repair. Any deductible amount shall be borne by the Owner. Each Owner shall maintain its Town Home's porch and/or deck and any yard areas, including any landscaping, in a neat and clean condition at all times.
- 4.1.2 <u>Trash and Recycle</u>. Each Owner shall be responsible for the removal of all the trash and refuse and recyclable waste from that Owner's Town Home to the central collection points located within the Development for trash and recycle collection. The Association may adopt Development Agreements regulating the trash and recycle collection sites.
- 4.1.3 <u>Smoke Detectors</u>. Each Owner shall maintain any smoke detectors located in the Owner's Town Home.
- 4.1.4 <u>Failure to Maintain</u>. If any Owner fails to maintain his or her Town Home as required herein, the Association, after notice and hearing, may, but is not obligated to, enter the Town Home and perform the necessary maintenance. The Association may levy a reimbursement assessment against the Town Home in the manner described in **Section 6.5**.

- 4.1.5 <u>Other Maintenance</u>. In addition to the foregoing, each Owner shall comply with each of the following in performing the Owner's maintenance obligations:
 - (i) the Guidelines described in **Section 4.5**, and
 - (ii) commonly-accepted homeowners' maintenance obligations.
- 4.1.6 Owner's Landscaping Obligations. Each Owner shall maintain the landscaping within their lot. Maintenance shall include regular fertilization, mowing, irrigation, pruning and other prudent landscaping practices, if applicable. All lawns shall be kept neatly mown and bushes neatly trimmed and pruned at all times.
- 4.2 <u>Association's Maintenance and Landscaping Obligations</u>. The Association shall maintain in good condition and repair at all times: private streets, trash and recycle collection areas, mailboxes area, walkways, parking spaces, and Common Area recreational facilities (if any) and landscaping.
- 4.2.1 <u>Utilities</u>. Unless otherwise maintained by a governmental entity or public or private utility company, the Association shall maintain in good condition and repair all utilities and sanitary sewer and storm drainage facilities situated within the Common Area and Town Home Lots, including, but not limited to, meters, distribution lines, catch basins, storage tanks, wires, ducts, flues, pumps, boilers, and pipes, but excluding any utility equipment and fixtures located within a Town Home Building. The Association shall maintain the following:
 - (i) electrical service up to each Town Home's breaker panel,
 - (ii) water and gas lines up to each Town Home's shut-off valves,

and

- (iii) sewers below ground floors.
- 4.2.2 <u>Pests</u>. The Association shall have the Common Area and Town Home yards periodically inspected for wood-destroying pests and organisms and shall take appropriate corrective measures therefor.
- 4.2.3 <u>Landscaping</u>. All landscaping in the Common Area is to be maintained by the Association in a healthy and weed-free environment. Maintenance shall include regular fertilization, mowing, irrigation, pruning and other prudent landscaping practices. All lawns shall be kept neatly mown at all times. All trees in the Development (Common Area and Town Home Lots) shall be maintained by the Association, keeping them neatly trimmed and pruned at all times. The Association immediately shall remove and replace all dying or dead vegetation in the Common Area, and all dying or dead trees and bushes from the entire Development (Town Home Lots and the Common Area). The Association shall take appropriate steps to maintain the irrigation of the landscaping in all of the Development, and to prevent damage resulting from misdirected and/or excessive watering.
- 4.3 <u>Water Leaks</u>. Water leaks have the potential for causing costly repair needs throughout the Development. The Association and all Owners have responsibilities in preventing, detecting, and fixing water leaks.

- 4.3.1 <u>Association Responsibilities</u>. In order to reduce the potential for water damage (including mold growth), the Association shall perform each of the following steps:
- (i) periodically inspect all portions of the Common Area, Town Home yards, and all building exteriors for water leaks, other evidence of water intrusion (such as condensation on windows or walls, water stains or other types of water damage) and for the presence of molds, fungi and their spores (collectively "Mold");
- (ii) if any water leaks, water intrusion and/or Mold are detected, immediately take appropriate corrective steps to repair the leak and/or reduce water intrusion and repair any resulting water damage (including the removal of any Mold);
- (iii) maintain proper ventilation within Common Area and crawl spaces of all Development buildings to reduce the risk of water damage (including Mold growth);
- (iv) periodically inspect any water-retaining equipment in or on all buildings to ensure that they are properly functioning and not leaking water or otherwise creating water damage (including Mold growth); and
- (v) take such other prudent steps as may be appropriate to prevent water leaks and water intrusion and to repair all leaks, sources of water intrusion and water damage (including Mold growth).
- 4.3.2 <u>Owner Responsibilities</u>. In order to reduce the potential for water damage (including mold growth) within its Town Home, Owner shall perform each of the following steps:
- (i) periodically inspect the interior of the Town Home for water leaks, other evidence of water intrusion (such as condensation on the windows or

walls, water stains or other types of water damage) and for the presence of molds, fundi and their spores (collectively "Mold");

- (ii) if any water leaks, water intrusion and/or Mold are detected, immediately take appropriate corrective steps to repair the leak and/or reduce water intrusion and repair and resulting water damage (including the removal of any Mold);
- (iii) maintain proper ventilation (particularly in the bathrooms) and humidity levels to reduce the risk of water damage (including Mold growth);
- (iv) periodically inspect refrigerator condensation pans, air conditioners (if applicable) and any other water-retaining appliances to ensure they are properly functioning and not leaking water or otherwise creating water damage to the Town Home (including Mold growth);
- (v) periodically inspect carpeting or similar types of floor covering in bathrooms and kitchen that may be conducive to Mold growth;
- (vi) replace heating and air conditioning filters not less frequently than quarterly or as recommended by the manufacturer; and
- (vii) take such other prudent steps as may be appropriate to prevent water leaks and water intrusion and to repair all leaks, sources of water intrusion and water damage (including Mold growth) within the Town Home.

- 4.3.3 Water Damage from Town Home Source. In the event of any water leak or overflow from any Town Home source that damages the Common Area or any other Town Home(s), the Owner and occupants of the Town Home that is the source of the water leak or overflow (the "Responsible Owner") shall cooperate with the Association in the inspection and correction of the problem. Cooperation shall include access to the Town Home to inspect and to correct the problem and/or repair any damage. The Responsible Owner shall reimburse the Association or other Town Home Owner(s) for their repair cost(s) to the extent the cost(s) are not paid through insurance maintained by the Association or other Town Home Owner(s). The Association may levy a reimbursement assessment to recover the cost(s). If the damage may be covered by insurance maintained by the Association and/or other Owner(s), the Association and/or other Owner(s) shall submit appropriate claim(s). Any deductible amount shall be paid by the Responsible Owner.
- 4.3.4 <u>Water Damage from Association Source</u>. In the event of any water leak or overflow from any Association source that damages any Town Home(s), the Association shall inspect and correct the problem. The affected Town Home Owner(s) and Occupants shall provide access to their Town Home(s) by Association officials and repair personnel to inspect and to correct the problem and/or repair any damage. The Association shall bear all repair cost(s), to the extent the cost(s) are not paid through insurance maintained by the Association or affected Town Home Owner(s). The Association may levy a reimbursement assessment to recover the cost(s). If the damage may be covered by insurance maintained by the Association and/or other Owner(s), the Association and/or other Owner(s) shall submit appropriate claim(s). Any deductible amount shall be paid by the Association.
- 4.4 <u>Maintenance Responsibility List</u>. Attached to this Declaration as **Exhibit C** is a list that identifies whether the Association or the Condominium Owner is responsible for the maintenance of certain items located in or in close proximity to a Town Home. The purpose of this List is to identify certain items maintained either by the Association or the Owner as described in **Sections 4.1** and **4.3**. It is not intended to change the allocations. The Association from time to time may update Exhibit C by posting an amended **Exhibit C** in the common house. The consent of the Members is not required as long as the allocation of the maintenance responsibilities as reflected in the amended **Exhibit C** is consistent with the allocation responsibilities described in **Sections 4.1** and **4.3**.
- 4.5 <u>Inspection and Maintenance Guidelines and Schedules</u>. The Association will provided each Owner with inspection and maintenance guidelines and schedules, including manufacturers' guidelines and schedules, for the inspection and maintenance of certain Improvements and personal property situated within the Development (collectively, the "Guidelines"). Each Owner and the Association shall retain the Guidelines and shall take all appropriate steps to implement and comply with the Guidelines as required herein. Each Owner, on the transfer of the Owner's Residential Town Home, shall deliver the Guidelines or complete copies thereof to the transferee

on or before title is transferred. The Association periodically and at least once every three years shall review and update the Guidelines for all Improvements maintained by the Association and the Owners.

- 4.6 <u>Cooperation and Access</u>. Each Owner and Occupant shall fully cooperate with the agents of the Association in the performance of the Association's maintenance obligations described in **Section 4.2** above. Such cooperation shall include, but is not limited to, immediate notification to the Association or its managing agent of any maintenance problems for which the Association is responsible and access to the Owner or Occupant's Town Home as may be necessary to inspect and, if appropriate, to perform any necessary maintenance.
- 4.7 <u>Reimbursement and Indemnification</u>. An Owner may be responsible for damage caused by the Owner to the Association or another Owner.
- 4.7.1 <u>Willfulness or Negligence</u>. If the Association incurs any maintenance costs because of the willful or negligent act or omission of any Owner or Occupant or their family members, guests, agents or pets, the Association shall charge the cost to the Owner of the Town Home responsible for the costs and may levy a reimbursement assessment as described in **Section 6.5**. The Owner immediately shall pay the charge or reimbursement assessment to the Association, together with interest thereon at the rate of 12% per annum, but not in excess of the maximum rate authorized by law. If the Owner disputes the charge, the Owner shall be entitled to notice and a hearing as provided in **Section 5.5.4**. The Association shall not charge the Owner to the extent that the cost is met through insurance maintained by the Association. Any deductible amount shall be paid by the Owner.

ARTICLE 5 The Association

- 5.1 <u>Governing Body</u>. The Association is a nonprofit corporation formed under the laws of the State of Colorado. The governing body of the Association shall be the Board. It shall be the responsibility of the Board to ensure that the Association exercises its rights and performs its duties as described within this Declaration, the Articles, the Bylaws and any amendments thereto.
- 5.2 <u>Membership</u>. Each Owner who is a person shall automatically be a Board Member of the Association. If there is more than one fee title Owner of a Town Home, each Owner shall be a Board Member. The holder of a security interest in a Town Home shall not be a Member of the Association except and until that holder obtains both the legal and equitable interest in the Town Home. Membership shall be appurtenant to the Town Home and may not be separated therefrom. Any transfer of an Owner's interest in a Town Home (other than a security interest), by operation of law or otherwise, automatically transfers the membership to the Owner's successor in interest. No Owner may resign or revoke his or her membership for any reason.

- 5.3 <u>Voting Rights</u>. Owners shall be entitled to one vote for each Town Home in which he or she owns an interest. If more than one Owner owns an interest in a Town Home, only one vote may be cast with respect to that Town Home. Except as otherwise provided in this Declaration or the Bylaws, all matters requiring the approval of the Owners shall be:
- (i) approved at a duly-called regular or special meeting at which a quorum was present, either in person or by proxy, by Owners holding at least two-thirds of the total voting power of all Owners present, either in person or by proxy;

(ii) approved by written ballot by at least two-thirds of all Owners;

or

(iii) approved by unanimous written consent of all the Owners.

The vote that is attributed to each Town Home may not be cast on a fractional basis. If a Town Home has more than one Owner and the Owners are unable to agree as to how the vote shall be cast, the vote shall be forfeited on the matter in question. Any vote cast by an Owner for any Town home is presumed conclusively to be the vote cast by all the Owners of that Town Home. If more than one Owner casts a vote attributed to a Town Home on any matter on which only one vote could be cast for that Town Home, the votes cast by such Owners shall be counted as one vote if the votes are the same; and if the votes are different, the vote cast by such Owners shall not be counted and shall be forfeited.

- 5.4 <u>Quorum</u>. In order to conduct Association business and make decisions at a meeting of the Board, a quorum of Members from thirteen Town Homes must be present at the beginning of the meeting in person or by proxy. Decisions at such meetings require approval by at least two-thirds of those Town Homes voting.
- 5.5 Powers of the Association. The Association shall have all the powers of a nonprofit corporation organized under the general nonprofit corporation laws of Colorado, subject only to such limitations on the exercise of these powers as are set forth in the Articles, Bylaws and this Declaration. The Association shall have the power to do any lawful thing that may be authorized, required or permitted to be done by the Association under this Declaration, the Articles and the Bylaws and to do and perform any act that may be necessary or proper for or incidental to the exercise of any of the express powers of the Association, including, without limitation, each of the following:
- 5.5.1 <u>Levying Assessments</u>. The Association shall establish, fix and levy assessments against the Town Homes and collect and enforce payment of such assessments in accordance with the provisions of Article 6 of this Declaration.
- 5.5.2 Adopting Development Agreements. The Association may adopt, amend and repeal Development Agreements as it considers appropriate. Development Agreements shall apply generally to the management and operation of the Development and/or the conduct of the business and affairs of the Association and may regulate the use and enjoyment of the Common Area, the use of any commonly-metered utilities that are paid by the Association and such other matters as are authorized in this Declaration. A copy of the Development Agreements as adopted,

amended or repealed shall be mailed or otherwise delivered to each Owner; and a copy shall be posted in a conspicuous place within the Development. If any provision of this Declaration, the Articles or the Bylaws is inconsistent with or materially alters any Development Agreements, this Declaration, the Articles and the Bylaws shall control to the extent of any such inconsistencies. Members shall have the same access to the Development Agreements as they have to the accounting books and records of the Association. Any Development Agreements adopted by the Association shall apply to all Owners or Occupants in a uniform and nondiscriminatory manner. The Association may adopt a Development Agreement as the result of an act or omission of any Owner or Occupant or their family members or guests or a Development Agreement that does not directly affect all Owners or Occupants in the same manner, as long as the Development Agreement applies to all Owners and Occupants.

- 5.5.3 <u>Borrowing Money</u>. The Association may borrow money to meet any anticipated or unanticipated cost of the Association and may mortgage, encumber or pledge Association assets (including, but not limited to, assessments) as security for such borrowing.
- 5.5.4 Imposing Disciplinary Action. In addition to any other enforcement rights described in this Declaration and the Bylaws or as may be authorized by Applicable Laws and subject to the due process requirements imposed by this Declaration, the Bylaws or by Applicable Laws, the Board may take any of the following actions against any Person whose act or failure to act violates or threatens to violate any provisions of this Declaration, the Bylaws or Development Agreements: (a) impose monetary penalties, including late charges and interest; (b) suspend voting rights in the Association; (c) commence any legal or equitable action for damages, injunctive relief or both; and (d) suspend use privileges for any recreational facilities within the Development subject to the restrictions in **Section 5.10(i)**. Subject to the provisions of **Section 13.8**, the determination of whether to impose any of the foregoing sanctions shall be within the sole discretion of the Association. Any legal action may be brought in the name of the Association on its own behalf and on behalf of any Owner who consents; and, except as otherwise provided herein, the prevailing party in such action shall be entitled to recover costs and reasonable attorneys' fees. The Association, in its sole discretion, may resolve or settle any dispute, including any legal action in which the Association is a party, under such terms and conditions as it considers appropriate.
- (i) If the Association adopts a policy imposing monetary penalties, including any fee on any Member for a violation of the governing documents or the Development Agreements, including any monetary penalty relating to the activity of a Member, or Member's Permittee or the Member's Occupant or their Permittee, the Association shall adopt and distribute to each Member, by personal delivery or first-class mail or email, a schedule of the monetary penalties that may be assessed. The Association may change the schedule from time to time and shall distribute a notice of such changes to the Members in the same manner as the schedule of penalties.
- (ii) The imposition of any disciplinary action, including, but not limited to, the imposition of monetary penalties or the suspension of use and/or voting privileges

except as otherwise noted herein, shall be subject to the following procedures and requirements:

- (a) Notice of Hearing: Prior to the time the Association meets to consider or impose discipline upon a Member, the Association shall notify the Member, by either personal delivery or first-class mail or email, at least fifteen (15) days prior to the meeting. The notice shall contain, at a minimum, the date, time and place of the meeting, the nature of the alleged violation for which the Member may be disciplined, and a statement that the Member has a right to attend and may address the Association at the meeting.
- (b) Hearing: If requested by the Member, the Association shall conduct the disciplinary proceeding in executive session. The Member, the Member's legal counsel, and the Association's legal counsel shall be entitled to attend the executive session meeting. The Association may interview witnesses and other interested parties in executive session.
- (c) Notice of Action Taken: If the association elects to impose discipline on the Member, the Association shall notify the Member of the disciplinary action within ten (10) days following the election to impose the disciplinary action.
- (d) No Forfeiture: Under no circumstances may the Association cause a forfeiture or abridgment of an Owner's right to the full use and enjoyment of the Owner's Town Home on account of the failure of the Owner to comply with the provisions of this Declaration, Articles, Bylaws or Development Agreements, except by judgment of a court or decision of an arbitrator or on account of a foreclosure or sale under power of sale for failure of the Owner to pay assessments duly levied by the Association.
- (e) Assessment Charges: The provisions of this **Section 5.5.4** do not apply to charges imposed against a Member for reasonable late payment penalties or charges to reimburse the Association for loss of interest and for costs reasonably incurred (including attorneys' fees) in collecting delinquent assessments.
- 5.5.5 <u>Delegating Duties</u>. Except as may be limited by the Bylaws, the Association may delegate any of the Association's powers and duties to its employees, committees or agents, including a professional management agent.
- 5.5.6 <u>Implementing Special Fees</u>. The Association may implement special fees to reimburse the Association for special costs incurred as a result of actions taken by Owners. By way of example, the Association may establish a moving fee to reimburse the Association for excess trash collection costs resulting from such an action. Fees not paid in a timely manner may be collected through a reimbursement assessment levied against the Owner's Town Home.
- 5.5.7 <u>Dispute Resolution Procedures</u>. The Association shall implement dispute resolution procedures that comply with the requirements of the laws of Colorado.
- 5.6 <u>Duties of the Association</u>. In addition to the duties described in the Articles or Bylaws, or elsewhere in this Declaration, the Association shall have the duty

to manage the Common Area, perform the maintenance as described in **Section 4.2**, prepare, periodically update, and comply with the maintenance and inspection guidelines described in **Section 4.5**, prepare and distribute financial statements, reports and the other documents and notices described in **Section 5.9**, levy and collect assessments as described in **Article 6**, prepare when required the reserve studies described in **Section 6.3** and annually review and implement adjustments as required, and procure, maintain and review the insurance as described in **Article 8**. The Association shall perform such other acts as may be reasonably necessary to exercise its powers to perform its duties under any of the provisions of this Declaration, the Articles, Bylaws, Development Agreements or Association resolutions.

- 5.7 <u>Taxes and Assessments</u>. The Association shall pay all real and personal property taxes and assessments and all other taxes levied against the Association, the Common Area or the personal property owned by the Association. Such taxes and assessments may be contested or compromised by the Association, provided that all pertinent legal procedures are followed.
- 5.8 <u>Utility Service</u>. The Association shall acquire, provide and pay for water, trash collection, electrical, sewer, and other necessary utility services for the Common Area and any utility service provided to the Town Homes but charged to the Association.
- 5.9 Reporting and Notice Requirements. The Association shall prepare and distribute the documents described in this **Section 5.9**. The annual budget report required under **Section 5.9.1** and the annual policy statement required under **Section 5.9.3** shall be delivered to each Member by individual delivery or other appropriate means. The Association shall deliver either a summary or the full report, if the Member has requested to receive all reports in full.
- 5.9.1 <u>Annual Budget Report</u>. An annual budget report for each fiscal year shall be distributed not less than thirty (30) days nor more than ninety (90) days before the beginning of the Association's fiscal year containing the following information:
- (1) A preliminary operating budget showing the estimated revenue and expenses on an accrual basis.
 - (2) A summary of the Association's reserves.
 - (3) A summary of the reserve funding plan adopted by the Board.
- (4) A statement as to whether the Association has determined to defer or not undertake repairs or replacement of any major component.
- (5) A statement as to whether the Association has determined or anticipates that the levy of one or more special assessments will be required to repair, replace or restore any major component.
- (6) A statement as to whether the Association has any outstanding loans when the loan is scheduled to be retired.

- (7) A summary of the Association's property, general liability, earthquake, flood and fidelity insurance policies, including the policies have lapsed, been cancelled and not immediately renewed or restored or if there is a significant change such as a reduction in coverage or limits or an increase in the deductible for any policy.
- 5.9.2 <u>Assessment and Reserve Funding Disclosure Summary</u>. An Assessment and Reserve Funding Disclosure Summary shall be distributed with each annual budget report or summary.
- 5.9.3 <u>Annual Policy Statement</u>. The association shall distribute an annual policy statement that provides the Members with information about Association policies, which shall include the following information:
- (1) The name and address of the person designated to receive official notices sent to the Association.
 - (2) The location, if any, designated for posting of a general notice.
- (3) A statement describing the Association's policies and practices in enforcing lien rights or other legal remedies for default in the payment of assessments.
- (4) A statement describing the Association's discipline policy, if any, including any schedule of penalties for violations of the Governing Documents.
 - (5) A summary of dispute resolution procedures.
- (6) A summary of any requirements for Association approval of a physical change to property.
 - (7) The mailing address for overnight payment of assessments.
- (8) Any other information that is required by law or the Governing Documents or that the Association determines to be appropriate for inclusion.
- 5.10 <u>Limitations on Authority of the Association</u>. The Association is prohibited from taking any of the following actions:
- (i) except as otherwise provided in law, or order of the court, or an order pursuant to a final and binding arbitration decision, the Association shall not deny an Owner or Occupant physical access to his or her Town Home;
- (ii) adopt a Rule or regulation that arbitrarily or unreasonably restricts an Owner's ability to market the Owner's Town Home; or
- (iii) establish an exclusive relationship with a real estate broker through which the sale or marketing of Town Homes is required to occur. This restriction does not apply to the sale or marketing of Common Areas owned by the Association.
- 5.11 <u>Access to Association Records</u>. The Association shall provide Members with access to the Association records.

ARTICLE 6 Assessments

- 6.1 Obligations to Pay Assessments. The Owner of each Town Home is obligated to pay any assessments levied against that Owner's Town Home on or before the due date of the assessment. If there is more than one Owner of the Town Home, the obligation is joint and several. Each Owner on acceptance of a deed to a Town Home automatically personally assumes the obligation to pay any assessments against the Owner's Town Home (including, but not limited to, any portion of the annual regular assessment not yet due and payable) and agrees to allow the Association to enforce any assessment lien established hereunder by nonjudicial proceedings under the power of sale or by any other means authorized by Applicable Laws. The Owner shall be liable for the full assessment levied against that Owner's Town Home regardless of the Owner's possession or use of the Town Home, the Common Area or any services rendered by the Association. The Owner has no right or power to commit or omit any act, such as waiving the right to use the Common Area in an attempt to eliminate or reduce the assessments against that Owner's Town Home. An assessment shall be both a personal obligation of the Owners of the Town Home against which the assessment is levied and, on the recordation of a notice of delinquent assessment, a lien against the Town Home. Any Owner who transfers a Town Home shall remain personally liable for any unpaid assessments that accrued on or before the date of the transfer. No Owner shall be liable for any defaults of the Owner's predecessor in interest in the payment of any assessment that has accrued prior to the Owner taking title to the Town Home unless that Owner expressly assumes the obligation to cure the delinquent assessments. Notwithstanding the foregoing, any Owner who takes title to a Town Home on which a lien for a delinquent assessment has been established will take title subject to the lien and the Association's enforcement remedies as a result thereof unless the Owner takes title under a foreclosure or trustee sale resulting from a foreclosure or exercise of a power of sale under a Mortgage, deed of trust, or other lien recorded before the recordation of the notice of delinquent assessment and except as provided in **Section 10.3**.
- 6.2 Annual Regular Assessment. Prior to the beginning of each fiscal year of the Association, the Association shall meet for the purpose of establishing the annual regular assessment for the forthcoming fiscal year. At such meeting, the Board shall review the preliminary pro forma operating budget prepared for the forthcoming fiscal year, any written comments received from Members and Mortgagees, and such other related information that has been made available to the Association. After making any adjustments that the Association considers appropriate and subject to such Member approval as may be required by **Section 6.6**, the Association will establish an annual regular assessment for the forthcoming fiscal year. Each annual regular assessment may include a portion for reserves as described in **Section 6.3**. If the Association for any reason fails to take the appropriate steps to establish the annual regular assessment for the next fiscal year, the annual regular assessment for the preceding fiscal year shall continue in effect subject to the Association's right at any time during

the next fiscal year to adjust the assessment pursuant to the procedures described herein.

- 6.3 Reserves, Reserve Accounts, and Reserves Study. Each annual regular assessment shall include a portion for reserves in such amount as the Association in its discretion considers appropriate to meet the cost of the future repair, replacement or additions to the major components as described in **Section 5.9.1** that the Association is obligated to maintain.
- 6.3.1 <u>Reserve Funds</u>. For all purposes in this Declaration and in the Bylaws, reserve accounts shall mean:
- (a) the funds that the Association has identified for the foregoing purposes ("Regular Reserve Funds"); and
- (b) the funds received and not yet expended or disposed from either a compensatory damage award or settlement to the Association from any Person for injuries to property, real or personal arising from any construction or design defects (the "Construction Reserve Funds").
- (c) Construction Reserve Funds shall be separately itemized from funds designated as Regular Reserve Funds.
- 6.3.2 Reserve Accounts. Reserve funds shall be deposited in a separate account; and the signatures of at least two persons, who shall be Members of the Board but Owners of different Town Homes, shall be required to withdraw monies from the reserve account. Reserve funds may not be expended for any purpose other than the maintenance of, or litigation involving the maintenance of, major components that the Association is obligated to maintain. Notwithstanding the foregoing, the Association may authorize the temporary transfer of money from a reserve fund to the Association's general operating fund to meet short-term cash-flow requirements or other expenses.
- 6.3.3 Reserves Study. At least once every three (3) years, the Association shall cause to be conducted a reasonably competent and diligent visual inspection of the accessible areas of the major components that the Association is obligated to restore or maintain as a part of a study of the reserve account requirements of the Development. The Association shall review this study annually and shall consider and implement necessary adjustments to the Association's analysis of the reserve account requirements as a result of that review. The study, at a minimum, shall include:
- (i) identification of the major components that the Association is obligated to repair, replace, restore, or maintain that, as of the date of the study, have a remaining useful life of less than thirty (30) years;
- (ii) identification of the probable remaining useful life of the major components identified in subparagraph (i) as of the date of the study;
- (iii) an estimate of the cost of repair, replacement, restoration, or maintenance of the major components identified in subparagraph (i) during and at the end of its useful life;

(iv) an estimate of the total annual contribution necessary to defray the cost to repair, replace, restore, or maintain the major components during and at the end of its useful life after subtracting total reserve funds as of the date of the study; and

(v) a reserve funding plan that indicates how the Association plans to fund the contribution identified in paragraph (iv) to meet the Association's obligations for the repair and replacement of all major components with an expected remaining life of thirty (30) years or less, not including those components that the Association has determined will not be replaced or repaired. The plan shall include a schedule of the date and amount of any change in regular or special assessments that would be needed to sufficiently fund the reserve funding plan. The plans shall be adopted by the Board at an open meeting before the membership of the Association. If the Association determines that an assessment increase is necessary to fund the reserve funding plan, any increase shall be approved in a separate action of the Board.

- 6.4 <u>Special Assessments</u>. Subject to the restrictions described in **Section** 6.6, the Association may levy a special assessment if the Board in its discretion determines that the Association's available funds are or will become inadequate to meet the estimated expenses of the Association, including, but not limited to, expenses resulting from inadequate reserves, unanticipated delinquencies, costs of construction, unexpected repairs or replacements of capital Improvements, inadequate insurance proceeds, or other unanticipated expenses. The Association may levy the entire special assessment immediately or levy it in installments over a period the Association considers appropriate.
- 6.5 Reimbursement Assessments. The Association shall have the authority to levy reimbursement assessments against one or more Town Home Owners to reimburse the Association for any costs incurred or to be incurred by the Association as the result of any act or omission of any Owner or Occupant or their Permittees or pets. The levy shall not include any portion that is paid or will be paid by any insurer under a policy maintained by the Association or an Owner. Payment of the deductible amount shall be the responsibility of the Owner and is subject to a reimbursement

assessment. If payment is not made when due as set by the Association, the payment shall be considered a delinquent assessment and the Association may enforce the delinquent assessment as described in **Section 6.9** subject to the non-judicial foreclosure restrictions described in this **Section 6.5**.

In addition to reimbursing the Association for costs necessary to repair any Common Area or other property that is maintained by the Association, the Association may seek reimbursement for any costs incurred by the Association, including attorneys' fees, to bring the Owner or Occupant or the Owner's Town House into compliance with this Declaration, the Articles, Bylaws or Development Agreements. A reimbursement assessment may not be levied against any Town Home until notice and hearing have been provided the Owner as described in **Section 5.5.4**.

- 6.6 <u>Assessment Increase Restrictions</u>. The Association shall provide notice by personal delivery, e-mail or by first-class mail to the Owners of any increase in the regular or special assessments not less than thirty (30) days nor more than sixty (60) days prior to the due date of the increased assessment.
- 6.7 <u>Due Dates of Assessments</u>. Unless otherwise directed by the Association, the annual regular assessment shall be collected in twelve (12) equal monthly installments; and each installment shall be due and payable on the first day of each month. If any monthly installment is delinquent, the Board, at its election, may accelerate the remaining installment payments so that the entire remaining balance of the annual regular assessment is immediately due and payable. Special assessments and reimbursement assessments shall be due and payable on such date or dates as selected by the Association. The notice shall be deemed received on the date described in **Section 13.11**.

Any annual regular assessment installment (including any accelerated installments), special assessment or reimbursement assessment not paid within fifteen (15) days after the due date shall be delinquent, shall bear interest at the rate of twelve percent (12%) per annum from thirty (30) days after the due date until paid, and shall incur a late penalty in an amount to be set by the Association from time to time, not to exceed the maximum amount permitted by Applicable Laws.

- 6.8 Allocation of Costs. All costs shall be allocated equally among the Town Homes. Notwithstanding anything herein to the contrary, if the use of any Town Home, the equipment or facilities maintained in any Town Home or any related reason results in an increase in the Association costs, including, but not limited to, increases in maintenance costs, trash removal costs, commonly-metered utility costs or insurance costs, the Association may allocate the amount of the increase to the Town Home(s) responsible for the increase.
- 6.9 <u>Enforcement of Delinquent Assessments</u>. The Association may elect to pursue one or more of the following remedies in the event of a delinquent assessment:
- 6.9.1 <u>Personal Obligation</u>. The Association may bring a legal action directly against the Owner for breach of the Owner's personal obligation to pay the assessment and in such action shall be entitled to recover the delinquent assessment or assessments, accompanying late charges, interest, costs and reasonable attorneys' fees. Commencement of a legal action shall not constitute a waiver of any lien rights as described in **Section 6.9.2**.
- 6.9.2 <u>Assessment Lien</u>. Except as otherwise provided in **Section 6.5**, the Association may impose a lien against the Owner's Town Home for the amount of the delinquent assessment or assessments, plus any costs of collection (including attorneys' fees), late charges and interest by taking the following steps:
- (i) At least thirty (30) days prior to recording a lien upon the Owner's Town Home to collect a delinquent assessment, the Association shall notify the Owner in writing by certified mail of the following (the "Delinquency Notice"):

(a) A general description of the collection and lien enforcement procedures of the Association and the method of calculation of the amount.

(b) An itemized statement of the charges owed by the Owner, including items on the statement which indicate the amount of any delinquent assessments, the fees and reasonable costs of collection, reasonable attorneys' fees, any late charges, and interest, if any.

(c) The right to request a meeting with the Board as provided by **Section 6.9.2(iv)**.

(d) The right to dispute the assessment debt by submitting a written request for dispute resolution to the Association.

(ii) Prior to recording a lien or commencing an action to foreclose a lien for delinquent assessments, the Association shall offer the Owner and, if so requested by the Owner, participate in dispute resolution. The decision to pursue dispute resolution or a particular type of alternative dispute resolution shall be the choice of the Owner.

(iii) The decision to record a lien for delinquent assessments shall be made only by the Board. The Board shall approve the decision by a two-thirds vote of the Board Members in an open meeting and shall record the vote in the minutes of that meeting.

(iv) An Owner may submit a written request to meet with the Board to discuss a payment plan for the delinquent assessment. The Association may designate a committee of one or more Members to meet with the Owner. Payment plans shall not impede the Association's ability to record a lien on the Owner's Town Home to secure payment of delinquent assessments. In the event of a default on any payment plan, the Association may resume its efforts to collect the delinquent assessments from the time prior to entering into the payment plan.

ARTICLE 7 Architectural Review

- 7.1 Architectural Committee. An Architectural Committee may be established by the Board. The Architectural Committee shall meet at such times and places as it shall designate. Meetings of the Architectural Committee shall be open to all Members of the Association. The Architectural Committee may adopt guidelines regarding the type, location, quality, size, height and other matters relating to any Improvements or landscaping to be constructed or installed in the Development and may establish a procedure for reviewing all plans and specifications submitted to it for prior approval and shall be responsible for periodic review and modification of the guidelines. The guidelines shall comply with the use restrictions described in **Article 3**. Factors that shall be considered in approving proposed plans and specifications shall include without limitation:
 - (i) harmony of external design with other Town Homes in the
 - (ii) effect of the proposed location on neighboring Town Homes;
- (iii) relation of the topography, grade and finished ground elevation to that of adjoining Town Homes;

- (iv) proper facing of elevations with respect to nearby streets and adjoining Town Homes;
- (v) overall conformity with the general purpose of the Development and the restrictions in this Declaration; and
 - (vi) other guidelines established by the Architectural Committee.
- 7.2 <u>Approval Needed</u>. None of the following actions shall take place anywhere within the Development without the prior written approval of the Architectural Committee:
- (i) any construction, installation, addition, repair (including exterior painting), replacement, alteration or removal of any Town Home Improvement that is part of a building structure (including flooring, interior and exterior walls) or any portion of any Town Home Improvement that can be seen from the Common Area or any other Town Home;
- (ii) any planting or landscaping in the Common Area (including the removal of any tree);
- (iii) removal of any tree or any screening vegetation between Town Homes from any Town Home Lots;
- (iv) any replacement or modification to any floor coverings or wall or ceiling materials or any penetration or other disturbance of any wall, floor, or ceiling if the replacement, modification, penetration or disturbance could result in any increase in the sound or impact transmission from the Town Home to any other Town Home.
- (v) installation, addition, repair, replacement, alterations, or removal of Photovoltaic Solar Equipment.
- 7.2.1 <u>Submit Plan</u>. Approval shall require the applicant to submit to the Architectural Committee plans and specifications in a manner and form satisfactory to the Committee.
- 7.2.2 Interior Work. Notwithstanding anything herein to the contrary, any Owner may repaint the interior of the Owner's Town Home in any color the Owner desires or remodel the Town Home with prior written approval of the Architectural Committee which approval shall be granted if the Committee finds the remodeling does not in any manner remove or adversely affect any bearing wall or fire rated wall, alter the exterior appearance of any Town Home Building, or increase the sound or impact transmissions from the Town Home to any other Town Home. It shall be the Owner's responsibility to comply with all building code requirements and permitting requirements in connection with any modification to the Owner's Town Home.
- 7.2.3 <u>Committee Funds</u>. The Architectural Committee may establish reasonable fees to reimburse the Committee for any out-of-pocket costs incurred by the Committee in reviewing plans and specifications. Except as paid or reimbursed by the applicant, any costs incurred by the Committee in the performance of its duties shall be paid by the Association.

- 7.2.4 <u>Approval Conditions</u>. The Architectural Committee may impose terms and conditions on any approval, including:
- (i) contractor licensing and insurance requirements (including workers compensation and liability insurance);
- (ii) completion and labor and material bonds or other acceptable collateral; and
- (iii) construction regulations such as authorized hours of construction, access restrictions, noise restrictions and clean-up requirements.
- 7.2.5 <u>Inspections</u>. Any member of the Architectural Committee or any authorized agent of the Committee from time to time and anytime during normal business hours may enter any Town Home for the purpose of inspecting any construction to confirm compliance with the plans and specifications as approved by the Committee.
- 7.3 Architectural Committee's Decision. The decision on any proposed work shall be in writing. If a proposed change is disapproved by the Committee, the written decision shall include both an explanation of why the proposed change is disapproved. If disapproved, the applicant is entitled to reconsideration by the Association at an open meeting of the Board. Reconsideration by the Association does not constitute a dispute resolution procedure described in **Section 5.5.7**.
- 7.4 <u>Completion of Work</u>. On receipt of approval, the Owner shall commence the work as soon as reasonably practicable and shall diligently pursue the completion of the work. If the work is not commenced within ninety (90) days after receipt of approval or completed within one hundred eighty (180) days or such later date as the Committee shall approve in writing, the approval automatically shall be deemed revoked and no further work shall be done without again obtaining the written approval of the Committee as described herein. The work shall be done in strict compliance with the approved plans except for minor non-material changes as may be necessary during the course of construction.
- 7.5 Non-liability. The Association, the Architectural Committee, and the other Town Home Owners, and their respective successors or assigns, shall not be liable to any Person submitting plans to the Committee for approval or to any other Town Home Owners or Occupants by reason of any act or omission arising out of or in connection with the approval or disapproval of any plans or specifications. Approval shall not constitute any warranty or representation by the Committee or its members that the plans satisfy Applicable Laws or that any Improvement constructed in accordance with the plans shall be fit for the use for which it was intended and safe for use and occupancy. Applicants shall make their own independent verifications of the foregoing and shall not rely on the Committee or its members in any manner in this regard.
- 7.6 <u>Enforcement</u>. If any Owner or Occupant violates the provisions of this **Article 7**, the Association, in addition to levying monetary fines or penalties and in addition to any other remedy available at law or equity, may bring an action to compel

compliance, including an action for a court order mandating the removal of any Improvement or other property constructed or installed in violation of the provisions of this **Article 7**. In such action, the prevailing party shall be entitled to recover costs and reasonable attorneys' fees.

- 7.7 <u>Board's Authority</u>. If for any reason the Architectural Committee is not established or not active, the Board may appoint a committee to perform the duties of the Architecture Committee, or the Board shall perform the duties itself and shall have the rights of the Architectural Committee as described in this **Article 7**. Notwithstanding anything herein to the contrary, modifications, changes or additions to any Common Area Improvements authorized by the Board shall not require approval from the Architectural Committee.
- 7.8 <u>Governmental Approval</u>. Before commencement of any addition of any Improvement or any alteration to any Improvement approved by the Architectural Committee, the Owner shall comply with all Applicable Laws. Approval by the Committee does not satisfy the appropriate approvals that may be required from any governmental entity with appropriate jurisdiction.

ARTICLE 8 Insurance

- 8.1 <u>Liability Insurance</u>. The Association shall obtain and maintain the following liability policies:
- 8.1.1 General Liability Policy. A general liability insurance policy insuring the Association, any manager, the Association's directors and officers, and the Owners and Occupants of the Town Homes and their respective family members against any liability incident to any bodily injury or property damage from any accident or occurrence within the Common Area. The policy shall also cover any liability incident to any bodily injury or property damage from any accident or occurrence within any Town Home related to any maintenance or repair work required to be performed on any Town Home by the Association pursuant to this Declaration, including, but not limited to, work performed in any Common Area. The policy shall include, if obtainable, a cross liability or severability of interest endorsement insuring each insured against the liability to each other. The limits of such insurance shall not be less than \$2,000,000 covering all claims for death, personal injury and property damage arising out of a single occurrence. Such insurance shall include coverage against water damage liability, liability for non-owned and hired automobiles, liability for property of others, and other liability or risk customarily covered.
- 8.1.2 <u>Directors and Officers Liability Policy</u>. A directors and officers liability policy containing such terms and conditions as are normally and customarily carried for directors and officers of a residential town home association.

- 8.1.3 <u>Crime Insurance</u>. A blanket commercial crime insurance policy covering the Association, any organization or Person who either handles or administers or is responsible for Association funds, whether or not any Person receives compensation for services. The policy amounts shall satisfy the Federal National Mortgage Association ("FNMA") and Federal Housing Administration ("FHA") requirements and in no event shall be less than the sum of three (3) months of assessments on all Town Homes subject to assessments plus reserves.
- 8.2 <u>Association Common Area Insurance</u>. The Association shall obtain and maintain a master property insurance policy that satisfies each of the following conditions:
- 8.2.1 <u>Property Covered</u>. The policy shall cover the following real and personal property:
- (a) Common Area. All Common Area Improvements, including Common Area Buildings and any additions or extensions thereto; all fixtures, machinery and equipment permanently affixed to the Building; windows; fences; monuments; lighting fixtures; interior walls and doors; ceiling, floor and wall surface materials (e.g., paint, wallpaper, mirrors, carpets, and hardwood floors); utility fixtures (including gas, electrical and plumbing); cabinets; built-in appliances; heating and airconditioning systems; water heaters; exterior signs; and personal property owned or maintained by the Association; and recreational facilities; but excluding land; foundations; excavations; and other items typically excluded from property insurance coverage;
- (b) Landscaping. Lawn, trees, shrubs and plants located in the Common Area.
- 8.2.2 <u>Dollar Limit</u>. The dollar limit of the policy shall not be less than the full insurable replacement value of the covered property described in **Section 8.2.1** above based on insurance industry standards for determination of replacement costs, provided that there may be lower dollar limits for specified items as is customarily provided in property insurance policies.
- 8.2.3 <u>Waiver of Subrogation</u>. The policy shall waive all subrogation rights against any Owner or Occupant and their family members and invitees.
- 8.3 <u>Association's Authority to Revise Insurance Coverage</u>. Subject to the provisions of **Section 8.4**, the Association shall have the power and right to deviate from the insurance requirements contained in this **Article 8** in any manner that the Association, in its discretion, considers to be in the best interests of the Association.
- 8.3.1 <u>Settlements</u>. The Board is authorized to negotiate and agree on the value and extent of any loss under any policy carried by the Association, including, but not limited to, the right and authority to compromise and settle any claim or enforce any claim by legal action or otherwise and to execute releases in favor of any insurer.

- 8.3.2 <u>Association is Attorney-in-Fact</u>. Each Owner, by acceptance of a deed to a Town Home, irrevocably appoints the Association or the Insurance Trustee, described in **Section 8.5**, as that Owner's attorney-in-fact for purposes of procuring, negotiating, accepting, compromising, releasing, settling, distributing and taking other related actions in connection with any insurance policy maintained by the Association and any losses or claims related thereto and agrees to be bound by the actions so taken as if the Owner had personally taken the action.
- 8.4 <u>Periodic Insurance Review</u>. The Association periodically (and not less than once every three years) shall review the Association's insurance policies and make such adjustments to the policies' terms and conditions as the Board considers to be in the best interests of the Association.
- 8.5 FNMA and FHLMC and FHA Requirements. Notwithstanding anything herein to the contrary, the Association shall maintain such policies, containing such terms, amount of coverage, endorsements, deductible amounts, named insureds, loss payees, standard mortgage clauses, notice of changes or cancellation, and an appropriate insurance company rating that shall satisfy the minimum requirements imposed by the Federal National Mortgage Association ("FNMA") and the Federal Home Loan Mortgage Corporation ("FHLMC") and the Federal Housing Administration ("FHA") or any successor thereto. If the FNMA or FHLMC or FHA requirements conflict, the more stringent requirements shall be met.
- 8.6 Insurance Trustee. All property insurance proceeds payable to the Association under any property insurance policy procured by the Association as described in **Section 8.2**, subject to the rights of Mortgagees under **Article 10**, may be paid to a trustee as designated by the Association to be held and expended for the benefit of the Owners and Mortgagees as their respective interests shall appear.
- 8.7 Other Association Insurance. In addition to the policies described in **Sections 8.1** and **8.2**, the Association may obtain and maintain the following insurance:
- (i) Workers Compensation Insurance to the extent required by Applicable Law; and
- (ii) such other insurance as the Association in its discretion considers necessary or advisable.
- 8.8 Owners' Property Insurance. Each Owner shall obtain and maintain property insurance against losses to real and personal property within and on their Town Home, and to any upgrades or additions to any fixtures or Improvements located within or on their Town Home. Each Owner shall obtain and maintain liability insurance against any liability resulting from any injury or damage occurring within or on their Town Home. The Association's insurance policies will not provide coverage against any of the foregoing. The Association has no obligation to ensure that Owners are maintaining property insurance. Any insurance maintained by an Owner must contain

a waiver of subrogation rights by the insurer as to the other Owners, the Association, and any first Mortgagee of the Owner's Town Home.

- 8.8.1 <u>Don't Insure Association Property</u>. No Owner shall separately insure any property covered by the Association's property insurance policy as described in **Section 8.2** above. If any owner violates this provision and, as a result, there is a diminution in insurance proceeds otherwise payable to the Association, the Owner will be liable to the Association to the extent of the diminution. The Association may levy a reimbursement assessment against the Owner's Town Home to collect the amount of the diminution.
- 8.8.2 <u>Consider Additional Insurance</u>. Each Owner is strongly advised to seek the advice of a qualified insurance consultant regarding:
- (i) the amount of personal liability insurance coverage the Owner should maintain because of the Owner's ownership interest in the Common Area and his or her Town Home, and
 - (ii) the availability of loss assessment insurance coverage.

ARTICLE 9 Damage or Destruction

- 9.1 <u>Restoration Defined</u>. As used in this Article 9, the term "restore" shall mean repairing, rebuilding or reconstructing Improvements damaged or destroyed as a result of a fire or other casualty to substantially the same condition and appearance in which they existed prior to fire or other casualty damage.
- 9.2 Insured Casualty. If any Improvement is damaged or destroyed from a risk covered by the insurance required to be maintained by the Association and/or Owners and the insurance proceeds are sufficient to cover the loss, then the Association and all affected Owners, to the extent permitted under Applicable Laws and except as otherwise authorized under this Article 9, shall restore the Improvement subject to such change as may be approved by the Architectural Committee or required by Applicable Laws. The Association and all affected Owners shall proceed with the filing and adjustment of all claims arising under the existing insurance policies. The insurance proceeds shall be paid to and held by the Association or an insurance trustee selected under the provisions of **Section 8.6**. If the insurance proceeds exceed the costs of restoration, the excess proceeds shall be paid into reserves and held for the benefit of the Association. If an affected Owner does not receive sufficient insurance proceeds to restore the Owner's Town Home, the Owner shall pay the additional sum needed to the Association to restore the Owner's Town Home.
- 9.3 <u>Inadequate Insurance Proceeds or Uninsured Loss</u>. If the insurance proceeds are insufficient to restore the damaged Improvement or the loss is uninsured, the Association shall add to any available insurance proceeds all reserve account funds designated for the repair or replacement of the damaged Improvement.

- 9.4 <u>Additional Special Assessment</u>. If the total funds available to restore the damaged Improvement as provided in **Section 9.3** are insufficient, then a meeting of the Members shall be called for the purpose of approving a special assessment to make up all or a part of the deficiency ("Additional Special Assessment").
- 9.5 Association Leads Restoration. Each Owner irrevocably appoints the Association as that Owner's attorney-in-fact and irrevocably grants to the Association the full power in the name of the Owner to effect any alteration to any Town Home or Association Common Area as authorized above, including, but not limited to, the execution, delivery and recordation of any Town Home Plans, amendments, deeds or other instruments.

ARTICLE 10 Rights of Mortgagees

- 10.1 <u>Lender Definitions</u>. Unless the context indicates otherwise, the following terms as used in this **Article 10** shall have the definitions contained in this **Section 10.1**. An "institutional" Mortgagee is a first Mortgagee that is:
- (i) a federally or state chartered or licensed bank or savings and loan association:
- (ii) a mortgage company or other entity chartered or licensed under federal or state laws whose principal business is lending money on the security of real property or investing in such loans;
 - (iii) an insurance company;
- (iv) a federal or State agency or instrumentality including, without limitation, the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation; or
- (v) an insurer or governmental guarantor of a first Mortgage including the Federal Housing Authority and the Veterans Administration.

A "first Mortgage" or "first Mortgagee" is one having a priority as to all other Mortgages encumbering the same Town Home or other portions of the Development. An "eligible Mortgage holder" shall mean a first Mortgagee who has requested the Association to notify the first Mortgagee of any proposed action that requires the consent of a specified percentage of eligible Mortgage holders.

- 10.2 <u>Encumbrance</u>. Any Owner may encumber his or her Town Home with a Mortgage or Mortgages.
- 10.3 <u>Rights of Institutional Mortgagees</u>. Any institutional Mortgagee who obtains title to a Town Home pursuant to the remedies provided in the first Mortgage, including judicial foreclosure or nonjudicial foreclosure under a power of sale (but excluding voluntary conveyance to the first Mortgagee), shall take the Town Home free of any obligation to pay any assessments that were delinquent as of the date the institutional Mortgagee acquired title to the Town Home, including any interest, penalties or late charges in connection therewith. The institutional Mortgagee as Owner of the Town Home shall be obligated to pay any assessments that were not

delinquent as of the date the institutional Mortgagee took title to the Town Home and all future assessments levied against the Town Home as long as the institutional Mortgagee remains in title, including any special assessments levied by the Association to raise operating or reserve funds needed because of uncollected delinquent assessments, as long as the special assessment is allocated among all the Town Homes as provided in **Section 6.8**.

- 10.4 Subordination. Any assessment lien established under the provisions of this Declaration is expressly made subject to and subordinate to the rights of any Mortgage that encumbers all or any portion of the Development or any Town Home made in good faith and for value and recorded before the recordation of a notice of delinquent assessment. No assessment lien shall in any way defeat, invalidate or impair the obligation or priority of such Mortgage unless the Mortgagee expressly subordinates in writing its interest to such lien. If any Town Home is encumbered by a Mortgage made in good faith and for value, the foreclosure of any assessment lien cannot operate to effect or impair the lien of any Mortgage recorded prior to the recordation of the notice of delinquent assessment. Upon the foreclosure of any priorrecorded Mortgage, any lien for delinquent assessment shall be subordinate to the Mortgage lien; and the purchaser at the foreclosure sale shall take title free of the assessment lien. By taking title, the purchaser shall be obligated to pay only assessments or other charges that were not delinquent at the time the purchaser acquired title or that were levied by the Association on or after the date the purchaser acquired title to the Town Home. Any subsequently-levied assessments or other charges may include previously-unpaid assessments, provided all Owners, including the purchaser and its successors and assigns, are required to pay their proportionate share of such unpaid assessments.
- 10.5 Breaches. No breach of any provision of this Declaration shall invalidate the lien of any Mortgage made in good faith or for value; but all of the covenants, conditions and restrictions shall be binding on any Owner whose title is derived through foreclosure sale, trustee sale or otherwise.

ARTICLE 11 Amendments

- 11.1 <u>Amendment of Declaration</u>. This Declaration may be corrected as described in **Section 11.3** or amended or rescinded in any respect with the vote or written consent of the holders of not less than two-thirds of the voting rights of the total voting power of the Association. Notwithstanding anything herein to the contrary, the easements appurtenant to any Town Home as described in **Sections 2.4** and **2.5** may not be modified or terminated without the prior written consent of the Owner of the Town Home.
- 11.2 <u>Special Amendment Requirements</u>. Notwithstanding anything herein to the contrary, no amendment affecting the dimensions of any Town Home or the interests in the Common Area shall be effective without the consent of all Owners

whose Town Homes or Common Area interests rights are affected by the amendment, except as authorized in **Section 2.7**. The provisions of this **Section 11.2** may not be amended without the consent of two-thirds of the total voting power of the Association.

- 11.3 <u>Corrections</u>. Notwithstanding anything herein to the contrary, the Association reserves the right as the attorney-in-fact for each Town Home Owner to record an amendment or appropriate instrument of correction to correct any errors in this Declaration, or any exhibits thereto, including any Town Home plans, and the consent of any Town home Owner shall not be required provided that if the correction affects the size, location or access or use rights to any Town Home appurtenant to that Unit, the consent of that Town Home Owner shall be required. The amendment shall be effective when signed by an authorized agent of the Association.
- 11.4 Mortgagee Reserved Amendment Rights. Notwithstanding anything herein to the contrary, the Association reserves the right to amend this Declaration as may be necessary or advisable in order to include provisions that satisfy the requirements of the Federal National Mortgage Association (FNMA), the Federal Home Loan Mortgage Corporation (FHLMC), the Federal Housing Administration (FHA) and/or the U.S. Department of Veterans Affairs (VA). The Association and each Owner shall fully cooperate in the delivery, execution and recordation of any documents necessary to effect the amendments.

ARTICLE 12 Declarant Disputes

- 12.1 <u>Claims Against Declarant</u>. Any claim, dispute or other controversy between:
 - (i) the Association and/or any Owner(s) and
- (ii) the Declarant or any affiliated general contractor or affiliated contractor who is a builder, or any director, officer, member, shareholder, partner, employee or agent thereof (individually and collectively the "Declarant" for purposes of this **Article 12**), and/or any non-affiliated general contractor, non-affiliated contractor, subcontractor, material supplier, individual product manufacturer, design professional or any other Person that provided materials or services to the Development on behalf of the Declarant, relating to this Declaration, the use, condition, design, specifications, surveying, grading, construction, installation and/or operation of any Improvements or landscaping located within the Development (individually and collectively the "Claim"), shall be subject to claims procedures set by the Association.
- 12.2 <u>Association Claims</u>. The claims procedures referred to in **Section 12.1** do not apply to any action taken by the Association to enforce delinquent assessments against the Declarant, which shall be governed by **Section 6.9** of this Declaration.

ARTICLE 13 Miscellaneous Provisions

- 13.1 <u>Headings</u>. With the exception of **Article 1**, the headings used in this Declaration are for convenience only and are not to be used to interpret the meaning of any of the provisions of this Declaration.
- 13.2 <u>Severability</u>. The provisions of this Declaration shall be deemed independent and severable, and the invalidity or partial invalidity or unenforceability of any provision or provisions or any portion thereof shall not invalidate any other provision or any portion of the provisions not found invalid or unenforceable.
- 13.3 Cumulative Remedies. Each remedy provided for in this Declaration shall be cumulative and nonexclusive. Failure to exercise any remedy provided for in this Declaration shall not, under any circumstances, be construed as a waiver of the remedy.
- 13.4 <u>Discrimination</u>. No Owner shall execute or cause to be recorded any instrument that imposes a restriction on the sale, leasing or occupancy of the Owner's Town Home on the basis of race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, familial status, marital status, disability, genetic information, national origin, source of income, or ancestry.
- 13.5 <u>Notification of Sale</u>. No later than five (5) days after the closing of the sale of any Town Home, the new Owner shall notify the Association of such sale. Such notification shall be in writing and shall set forth the name and address of the new Owner and the date of sale.
- 13.6 <u>Reservation or Grant of Easements</u>. Any easements referred to in this Declaration shall be deemed reserved or granted, or both reserved and granted, by reference to this Declaration in any deed to any Town Home.
- 13.7 <u>Incorporation of Exhibits</u>. All exhibits referred to herein and attached to this Declaration are incorporated herein by reference as fully set forth herein.
- 13.8 <u>Enforcement Rights and Remedies</u>. The covenants, restrictions, rights and duties contained in this Declaration constitute covenants running with the land and equitable servitudes that benefit and bind each Town Home in the Development, each Owner, and each successive Owner thereto, and may be enforced by the Association or any Owner in any legal or equitable action pursuant to the procedures described herein.
- 13.8.1 Equitable Relief. Each Owner acknowledges and agrees that if any Person breaches any of the restrictions contained herein, money damages may not be adequate compensation. As a result, each Owner agrees that in the event of a breach, the non-breaching party, in addition to any other remedy available at law or equity, shall

be entitled to equitable relief, including, but not limited to, an order compelling the breaching party to perform an act which the party is required to perform under this Declaration or which is necessary to bring the breaching party or the breaching party's Town Home into compliance with restrictions contained herein or prohibiting the breaching party from performing any act that violates the restrictions.

- 13.8.2 Assessments. Notwithstanding anything herein to the contrary, the Association shall have the exclusive right to levy assessments and to take appropriate action to enforce delinquent assessments, including imposition of an assessment lien and the foreclosure of the lien. Furthermore, the Association shall have the primary responsibility for enforcing the restrictions contained in Article 3 and the architectural provisions contained in Article 7. If any Owner or Occupant desires the Association to take any enforcement action, the Owner or Occupant shall notify the Association in writing of the alleged violation. On receipt, the Board shall review the matter and shall determine what action, if any, to take. Neither the Board nor the Association or any director, officer or agent thereof shall be liable if the Board in the exercise of its judgment elects not to take any action. To the extent applicable, the Board shall comply with the due process requirements described in this Declaration. If within ninety (90) days after receipt of the notice, the Board has failed to take any corrective action and the alleged violation has not been cured and is continuing, any Owner may bring an action on the Owner's behalf for appropriate legal and/or equitable relief. In such action, the Owner shall bear his or her own costs and attorneys' fees, provided that the prevailing party in such action shall be entitled to recovery of such costs and fees.
- 13.9 <u>Assignment By Declarant</u>. The Declarant may assign all or any portion of its rights and delegate all or any portion of its duties to any other Person; and from and after the date of such assignment and/or delegation, the Declarant shall have no further rights and/or duties hereunder with respect to the rights assigned and duties delegated. The Association shall execute an instrument assuming the rights and duties of the Declarant assigned and delegated hereunder and thereafter shall be entitled to exercise all the rights of the Declarant so assigned and shall be obligated to perform all the Declarant's duties so delegated, provided the Association shall not be liable in any manner for any act or omission committed or omitted by the Declarant before the date the Association succeeded to the rights of the Declarant hereunder.
- 13.10 <u>Attorneys' Fees</u>. Except as otherwise provided herein, in the event of any litigation or alternative dispute resolution procedure arbitration regarding the rights or duties under the Governing Documents of the Association or any Member, the prevailing party in such proceeding, in the discretion of the judge or decision-maker, shall be entitled to recover costs, including reasonable attorneys' fees.
- 13.11 <u>Notices</u>. Any notice permitted or required by this Declaration, the Articles, Bylaws or Development Agreements shall be considered received on the date the notice is personally delivered to the recipient or forty-eight (48) hours after the notice is deposited in the United States mail, first-class, registered or certified, postage

fee prepaid, and addressed to the recipient at the address that the recipient has provided the Association for receipt of notice or, if no such address was provided, at the recipient's Town Home address in the Development.

13.12 No Enforcement Waiver. Failure to enforce a restriction in the past in and of itself shall not constitute a defense to any action brought against any Owner for violation of any restriction contained herein. Each Owner, by acceptance of a deed to a Town Home in the Development, acknowledges that the enforcement of these restrictions may vary as a result of different Owners, Boards or Architectural Committees, changing conditions, or other reasons, and agrees that the failure of any Owner, Board or Committee to enforce any particular restriction, even if such failure is for an extended period of time, shall not in any manner restrict or estop the right of any Owner, Board or Committee to enforce these restrictions at any future time.

The Association has executed this Declaration as of	_, 2019.
ALPENGLOW COHOUSING DEVELOPMENT a Colorado nonprofit corporation	
By:	
Print Name:	
Title:	

Exhibit A - Site Plan

Exhibit B - Garage/Storage Units Assigned to Town Homes

Exhibit C - Maintenance Responsibilities

Note: This Exhibit is not intended to be an all-inclusive list of the items maintained either by the Owner or the Association. Its purpose is to describe maintenance responsibilities over certain items where there may be some uncertainty as to the responsible maintaining party. Unless otherwise limited, maintenance means



Official Use Only
Date Received:
Initials:

Flood Plain Development Permit Pursuant to RMC § 6.2.2

General Information	n						
Applicant				Application Date	Application Date		
Property Owner Same							
Phone		Email					
Address of Proposed Development TBD, Intersection of Hyde and S. Railroad Sts.							
Subdivision			Filing	Lot	Block		
Type of Development Residential Construction Non-Residential Construction							
Project Description (select all that	□ New Construction □ Addition or Improvements □ Subdivision □ On a single lot □ Manufactured Home						
apply)	☐ Fill	Watercourse	alteration	her			

Required Documentation

Attach to the application the following information where applicable. Plans in duplicate, drawn to scale showing the nature, dimensions, and elevations of the areas in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing.

- 1. Mean Sea Level (MSL) elevation of the lowest floor (including basement) of all structures
- 2. MSL elevation to which any structure is floodproofed
- 3. Certification by a registered professional engineer or architect that the floodproofing methods meet the community floodproofing criteria
- 4. A description of the extent to which any watercourse will be altered or relocated
- 5. Base (100-year) flood elevation data for a development or subdivision greater than 50 lots or 5 acres
- 6. Copies of: 404 permit, Mined Land Reclamation Permit, discharge permit, air pollution control permit and other necessary state and federal permits
- 7. Certification by a registered professional engineer that development in the flood way will not result in the increase of flood levels during the occurrence of the base flood discharge
- 8. Any other information and plans necessary to show compliance with flood plain management regulations
- 9. Name, address and telephone number of the owner of the property affected
- 10. Legal description of the affected property



TOWN HALL PO Box 10 | 201 N. Railroad Street | Ridgway, Colorado 81432 | 970.626.5308 | www.town.ridgway.co.us

Applicant and owner agree that as a condition of permit approval, applicant and owner will provide maintenance within an altered or relocated portion of any watercourse so that flood-carrying capacity will not be diminished.				
Applicant Signature	Date			
Property Owner Signature	Date			
Official Use Only				
The proposed development is located in the	☐ Flood Fringe			
The Base Food Elevation or depth at the development site is _				
Source Documents				
Plan Review				
 MSL Elevation or depth number to which the structur MSL Elevation or depth number to which the structur All necessary information and certificates are attached 	re is to be proofed:feet.			
Permit is approved (subject to the conditions below proposed development and find them in compliance with the conditions below proposed development and find them in compliance with the conditions are subject to the conditions below proposed development and find them in compliance with the conditions are subject to the conditions below proposed.	w). I have reviewed the plans and materials submitted in support of the with applicable Flood Plain Management standards.			
Referral to the Board of Adjustment for Variance. Management Standards (explanation attached).	The proposal is not in conformance with applicable Flood Plain			
Permit is denied. The proposed development is no (explanation attached)	ot in conformance with applicable Floodplain Management Standards			
Approved by (Building Official)	Date			
Building Construction Documentation				
 The certified as-built MSL elevation of the lowest floo The certified as-built MSL flood proofed elevation of t 				
Certificate of Occupancy or Compliance Issued:	-			
Approved by (Building Official)	Date			



Conditions of the Permit

- 1. This permit is issued only pursuant to the Flood Plain Management Regulation requirements. All other applicable requirements of ordinances, regulations, statutes and laws of the town, county, state and federal governments shall apply in accordance with their terms.
- 2. This permit does not grant any authority to enter upon the property of another.
- 3. This permit may be revoked for failure to comply with the conditions hereof, misrepresentation of any of the information required in the application, or failure to comply in all respects with the Flood Plain Management Regulations.
- 4. Applicant shall supply the Town with the necessary engineering information to obtain a FEMA map.
- 5. Revision and assumption of all costs associated therewith.

MEMORANDUM

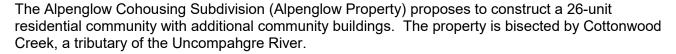
TO: Shay Coburn, Town of Ridgway

FROM: Diana Rooney, P.E.

DATE: April 22, 2019

SUBJECT: Alpenglow Cohousing Floodplain Development Permit

Project narrative



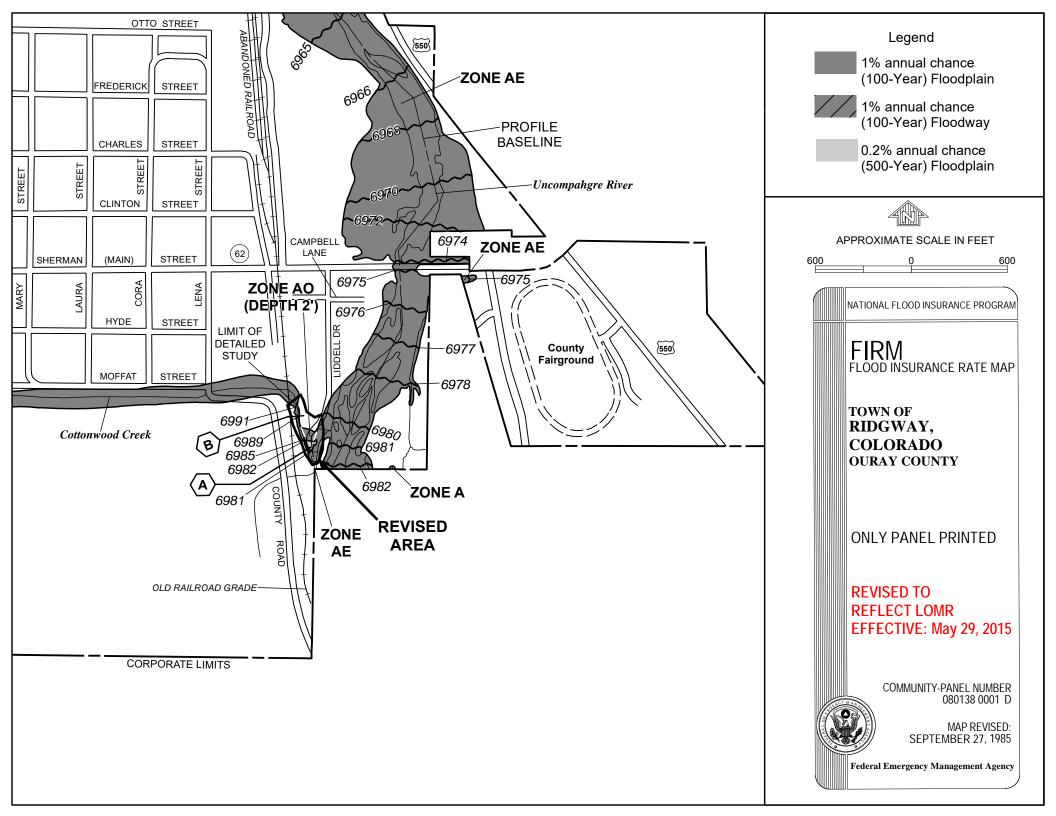
The most recent updates to Cottonwood Creek flood plain were done by a LOMR filed for Lot 11 of the Liddell Drive subdivision. This LOMR study, directly downstream of the Alpenglow property, identifies the 100-year flow of Cottonwood creek as 346 cfs. The FEMA Flood Plain Map (FIRM#080138 0001D) showing the Alpenglow property identifies an area of 100-year floodplain surrounding the creek.

The project proposes to reconstruct the culvert which crossed the property, and to perform minor regrading of the stream channel in accordance with a Nationwide 29 Army Corps 404 Permit. The proposed buildings are located outside of the 100-year floodplain. The permit also allows up to 300 feet of stream channel re-grading, which the project intends to use to widen the stream bank slopes in areas where the slope is over 1H:1V and repair a large deep scour hole. These proposed improvements will not negatively affect the hydraulic capacity of the creek, as soil will be removed from the stream channel.

During the development process, areas of wetlands were identified on the property, and approximately 0.32 acres of wetlands are proposed to be disturbed due to the proposed development. The Applicant has included mitigation of these wetlands in their draft Army Corps PCN application and is considering using a wetlands mitigation bank to compensate for the disturbed wetlands.

A draft copy of the Preliminary Construction Notice (PCN) with the Army Corps, including all figures and attachments, will be provided to the Town for review upon completion of the draft.

SGM



GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

GEOTECHNICAL ENGINEERING STUDY

FOR

ALPENGLOW CoHOUSING PROJECT RIDGEWAY, COLORADO

March 12, 2018

Prepared For:

Mr. Mick Graff Ridgeway CoHousing, LLC

Project Number: 55042GE

PN: 55	042GE
Date: 3	3/12/2018

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1.0 REPORT INTRODUCTION

This report presents our geotechnical engineering recommendations for the Alpenglow Multi- Family Residential Project site. This report was requested by Ridgeway Consulting, LLC, c/o Mick Graff, client's representative. The field study was completed on January 19, 2018. The laboratory study was completed on February 10, 2018.

Geotechnical engineering is a discipline which provides insight into natural conditions and site characteristics such as; subsurface soil and water conditions, soil strength, swell (expansion) potential, consolidation (settlement) potential, and often slope stability considerations (when needed). The information provided by the geotechnical engineer is utilized by many people including the project owner, architect or designer, structural engineer, civil engineer, the project builder and others. The information is used to help develop a design and subsequently implement construction strategies that are appropriate for the subsurface soil and water conditions, and slope stability considerations. It is important that the geotechnical engineer be consulted throughout the design and construction process to verify the implementation of the geotechnical engineering recommendations provided in this report. The recommendations and technical aspects of this report are intended for design and construction personnel who are familiar with construction concepts and techniques, and understand the terminology presented below.

The geotechnical engineering report is the beginning of a process involving the geotechnical engineering consultant on any project. It is common for unforeseen, or otherwise variable subsurface soil and water conditions to be encountered during construction. As discussed in our proposal for our services, it is imperative that we be contacted during the foundation excavation stage of the project to verify that the conditions encountered in our field exploration were representative of those encountered during construction. Compaction testing of fill material and testing of foundation concrete are equally important tasks that should be performed by the geotechnical engineering consultant during construction. We should be contacted during the construction phase of the project and/or if any questions or comments arise as a result of the information presented below.

The following outline provides a synopsis of the various portions of this report;

- Sections 1.0 and 2.0 provide an introduction and an establishment of our scope of service
- Sections 3.0 and 4.0 of this report present our geotechnical engineering field and laboratory studies
- Sections 5.0 through 8.0 presents our geotechnical engineering design parameters and recommendations which are based on our engineering analysis of the data obtained.
- Section 9.0 provides a brief discussion of construction sequencing and strategies which may influence the geotechnical engineering characteristics of the site.

The discussion and construction recommendations presented in Section 9.0 are intended to help develop site soil conditions that are consistent with the geotechnical engineering recommendations presented previously in the report. Ancillary information such as some background information regarding soil corrosion and radon considerations is presented as general reference. The construction considerations section is not intended to address all of the construction planning and needs for the project site, but is intended to provide an overview to aid the owner, design team, and contractor in understanding some construction concepts that may influence some of the geotechnical engineering aspects of the site and proposed development.

The data used to generate our recommendations are presented throughout this report and in the attached figures.

1.1 Scope of Project

We understand that the proposed project will consist of the design and construction of a 4.48 acre parcel into a 20 unit multi-family housing development with associated parking and infrastructure. Based on a review of the preliminary site plan, the residential structures are attached 1- and 2-story duplexes than range in size from about 900 to 1500 square feet per unit. Other structures include a 2-story, 4,000 square foot common house, workshop, and garage units.

2.0 GEOTECHNICAL ENGINEERING STUDY

This section of this report presents the results of our field and laboratory study and our geotechnical engineering recommendations based on the data obtained.

Our services include a geotechnical engineering study of the subsurface soil and water conditions for development of this site for multi-family residential use.

2.1 Geotechnical Engineering Study Scope of Service

The scope of our study which was delineated in our proposal for services, and the order of presentation of the information within this report, is outlined below.

Field Study

• We advanced eight (8) continuous flight test borings at the project within the areas we understand are planned for construction of the proposed structures and paved parking areas.

• Select driven sleeve and bulk soil samples were obtained from the test borings and returned to our laboratory for testing.

<u>Laboratory Study</u>

- The laboratory testing and analysis of the samples obtained included;
 - Moisture content and dry density,
 - Estimates of soil strength parameters, partially based on direct shear strength tests, to help establish a basis for development of soil bearing capacity and lateral earth pressure values,
 - Soil unconfined compressive strength tests,
 - Swell/consolidation tests to help assess the expansion and consolidation potential
 of the support soils on this site to help estimate potential uplift associated with
 expansive soils and to help estimate settlement of the foundation system, and,
 - Plastic and liquid limit tests to determine the Plasticity Index of the soil,
 - Sieve analysis tests,
 - Moisture content/dry density relationship (Proctor) test, and,
 - California Bearing Ratio (CBR) test.

Geotechnical Engineering Recommendations

• This report addresses the geotechnical engineering aspects of the site and provides recommendations including;

Geotechnical Engineering Section(s)

- Subsurface soil and water conditions that may influence the project design and construction considerations
- Geotechnical engineering design parameters including;
 - ✓ Viable foundation system concepts including soil bearing capacity values.
 - ✓ settlement considerations for the foundation system concepts that are viable for this project, and,
 - ✓ Lateral Earth Pressure values for design of retaining structures,
 - ✓ Flexible asphalt concrete pavement thickness considerations
- Soil support considerations for interior and exterior concrete flatwork,

Construction Consideration Section

- Fill placement considerations including cursory comments regarding site preparation and grubbing operations,
- Considerations for excavation cut slopes,
- Natural soil preparation considerations for use as backfill on the site,
- Compaction recommendations for various types of backfill proposed at the site.
- Cursory exterior grading considerations
- This report provides design parameters, but does not provide foundation design or design of structure components. The project architect, designer, structural engineer or builder may be contacted to provide a design based on the information presented in this report.
- Our subsurface exploration, laboratory study and engineering analysis do not address environmental or geologic hazard issues

3.0 FIELD STUDY

3.1 *Project location*

The project is located on 2 parcels which total 4.46 acres within the historic business zone in Ridgeway, Colorado.



Figure 1. Project location, Ridgeway, Colorado

3.2 Site Description and Geomorphology

The site is generally flat with a slight average inclination down to the east. Slope inclinations on the lot are generally less than ten to one (10:1, horizonal to vertical). The north side of the lot is bounded by US Highway 62 (Sherman Street) and the in the southern portion of the lot the western boundary if formed by CR 23 as it approaches the lot from the west and forms an approximate 90 degree curve toward the south. An abandoned north-south trending railroad grade roughly bisects the lot.

We understand that the project site was utilized as a rail road yard in the past. Other historic uses of the project area are not known at this time. It is evident that some placement of fill and general alteration of the natural topography on the project site has occurred in the past. The degree to which the original undisturbed site was altered for past uses is unclear. Variable depths and quality of previously placed fill materials should be expected during the project excavation process.

Cottonwood Creek enters the southwestern area of the project site and generally flows to the east. We understand the creek historically turned to the northeast towards the Uncompagre River at a point east of the project area. We understand that at some time in the past the stream channel was rerouted to the present configuration, trending south along the eastern side of the interior of the project site. The current stream channel exits the southeast corner of the project site.

3.3 Subsurface Soil and Water Conditions

The approximate locations of our test borings are shown on Figures 2 and 3 below. Figure 2 indicates our test boring locations relative to the preliminary project layout. Figure 3 indicates our test boring locations relative to Google Earth imagery. The logs of the soils encountered in our test borings are presented in Appendix A.

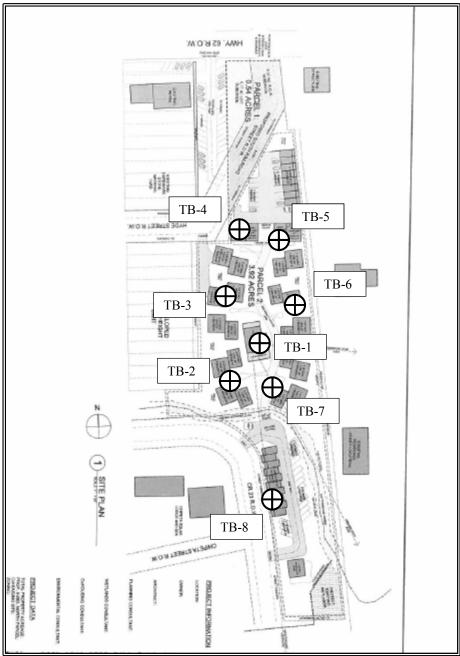


Figure 2. Approximate test boring locations relative to proposed site plan.

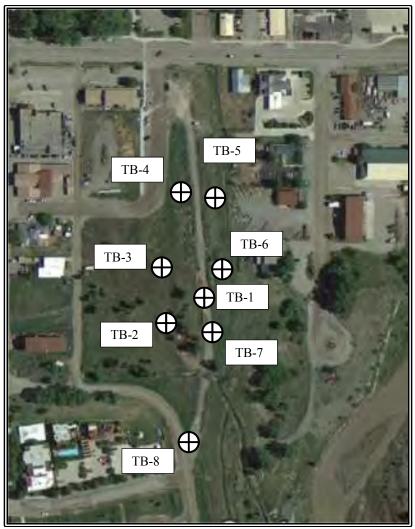


Figure 3. Approximate test boring locations relative to aerial imagery.

The approximate locations of our test borings shown on the figures presented above were prepared using notes taken during the field work and are intended to show the approximate test boring locations for reference purposes only.

We advanced eight test borings in the vicinity of the proposed structures. Test Boring 1 was advanced in the central portion of the lot with our 3 ½" inside diameter hollow stem auger to a depth of seventy-one feet with in-situ sampling at regular intervals in order to develop a more detailed subsurface profile. Test Borings 2 through 8 were advanced with 4" outside diameter solid stem auger to depths ranging from nine to twenty-nine feet.

We encountered variable subsurface conditions across relatively short horizontal distances throughout the project site. Although the upper twenty to thirty-five feet of soils mainly consisted of clay soils (CL), the consistency, moisture content, groundwater elevation, and many of the associated engineering properties of the soils varied considerably with test boring location.

We advanced Test Boring 1 through about four feet of gravel and cobble railroad embankment fill. Below the fill material, we encountered clay (CL) soils that transitioned from very moist to wet where, we encountered the water table at about fourteen feet below the existing surface. Based on standard penetration tests, the soils were in a medium stiff to soft condition. At about thirty-five feet we encountered medium dense to loose gravel and sand (GC-SC) soils until the bottom of the test boring at seventy-one feet.

The following table presents a summary of the some of the laboratory data that we collected from test boring 1.

Depth (ft)	Moisture Content	Notes
7.5	31.6	Saturation ≈ 95%, Cc≈.15
8.5 - 14.5	30.4	USCS Classification: CL
14.5	26.5	Saturation≈100%
19	28.3	Cc≈.09
29.5	35.9	USCS Classification: CH
49.5	14.3	6.5% fines
69	28.8	

We encountered subsurface conditions similar to Test Boring 1 in Test Borings 2,3,7 and 8. Typical conditions included very moist to saturated clays in a soft to medium stiff condition. In place samples from an approximate four foot depth contained organic material, and we encountered groundwater at depths ranging from about seven to seventeen feet.

The clay soils described above classify as having moderate to high swell (expansion) potential based on correlated index properties, however, in-place samples did not exhibit significant laboratory swell pressures due to their high natural water content and associated degree of saturation.

In Test Borings 4,5, and 6 we encountered sandy clay (CL) soils in a stiff to very stiff condition. The soils generally had a higher sand content and much lower moisture content than the soils described above. In Test Boring 5, we encountered a medium dense gravel (GC) layer at about twenty-two feet.

An in-place sample from the approximate shallow foundation elevation from Test Boring 4 exhibited a swell pressure of about 2,000 pounds per square foot (psf) and expansion of 3.0% when saturated under a 100 psf vertical surcharge load. We estimate an expansion potential of about 1.5% under typical building loads.

The logs of the subsurface soil conditions encountered in our test borings are presented in Appendix A. The logs present our interpretation of the subsurface conditions encountered exposed in the test borings at the time of our field work. Subsurface soil and water conditions are often variable across relatively short distances. It is likely that variable subsurface soil and water conditions will be encountered during construction. Laboratory soil classifications of samples obtained may differ from field classifications.

3.4 Site Seismic Classification

The seismic site class as defined by the 2009 International Building Code is based on some average values of select soil characteristics such as shear wave velocity, standard penetration test result values, undrained shear strength, and plasticity index.

We encountered soft, saturated clay soils in our test borings. Based on our standard penetration field tests and laboratory test results we feel that the subsurface conditions for the project are consistent with the criteria for Site Class E as outlined in the 2009 International Building Code, Table 1613.5.2

The table below presents seismic site coefficients for the project site based on a Site Class_designation in conjunction with the mapped short period acceleration and long period acceleration. The spectral response maps and subsequent seismic site coefficients were obtained from the 2009 International Building Code Specifications.

Mapped Spectral Short Period Acceleration S _s (Figure 1613.5(1))	Mapped Spectral 1-second Acceleration S ₁ (Figure 1613.5(2))	Short Term Period Site Coefficient F _a (Table 1613.5.3 (1))	Long Term Period Site Coefficient F _v (Table 1613.5.3 (2))
35%g	9%g	2.2	3.5

4.0 LABORATORY STUDY

The laboratory study included tests to estimate the strength, swell and consolidation potential of the soils tested. We performed the following tests on select samples obtained from the test borings.

Moisture content and dry density; the moisture content and in-situ dry density of some of the soil samples were assessed in general accordance with ASTM D2216

Atterberg Limits; the plastic limit, liquid limit and plasticity index of some of the soil samples was determined in general accordance with ASTM D4318.

Sieve Analysis Tests; We performed sieve analysis tests on select samples of soil in general accordance with ASTM D422 and/or ASTM C136, depending upon the nature of the materials sampled and tested. The primary use of the sieve analysis test, in conjunction with the Atterberg Limits is for classification and characterization of the materials tested.

Direct Shear Strength tests; Direct shear strength tests were performed on select remolded clay sample to estimate the soil strength characteristics in general accordance with ASTM D3080. The failure envelope exhibited some curvature, which is typical of softened, remolded clays. We used an average angle of internal friction (phi) of 23 degrees and a cohesion of about 250 pounds per square foot in our analysis of bearing capacity for unsaturated soils.

Unconfined Compressive Strength of Cohesive Soils; the unconfined compressive strength of in-situ liner from TB -2 at 8.5' was obtained in general accordance with ASTM D2166. The test was performed on 1.94 inch diameter by approximate four (4) inch long "in-situ" extracted liner sample. Based on the results of the test, we used a value of 700 psf for the intact cohesion of the clay soils. For our bearing capacity analysis of the saturated clay soils, we used an internal friction angle of phi=0.

Swell-Consolidation Tests; the one dimensional swell-consolidation potential of some of the soil samples obtained was determined in general accordance with constant volume methodology. The soil sample tested is exposed to varying loads and usually the addition of water. The one-dimensional swell-consolidation response of the soil sample to the loads and/or water is represented graphically in Appendix B.

Moisture content-dry density relationship (Proctor) tests; We performed laboratory moisture content-dry density tests to assess the relationship between the soil moisture content and dry density. The Proctor tests were performed in general accordance with ASTM D1557. The results of the laboratory Proctor tests are presented in Appendix B.

California Bearing Ratio (CBR) Tests; We assessed the pavement section support characteristics of select composite soil samples in general accordance with ASTM D1883. The results of the CBR tests are presented in Appendix B.

A synopsis of some of our laboratory data for some of the samples tested is tabulated below.

Sample Designation	Moisture Content (percent)	Dry Density (PCF)	Measured Swell Pressure* (PSF)	Swell Potential (% under 100 psf load)
TB – 1@ 7.5'	31.6	88.9	Consolidated	N/A
TB – 1 @ 14.5	26.5	98.6	Consolidated	N/A
TB – 1 @ 19.5	28.3	95.3	Consolidated	N/A
TB – 2 @ 3'	27.0	97.7	Consolidated	N/A
TB – 3 @ 4'	23.3	101.0	Consolidated	N/A
TB – 4 @ 4'	10.7	111.6	2000	3.0
TB – 6 @ 5.5'	7.6	110.2	900	1.0
TB – 7 @ 4'	15.6	103.7	800	0.5

*NOTE: We determine the swell pressure as measured in our laboratory using the constant volume method. The graphically determined swell pressure may be different from that measured in the laboratory.

5.0 FOUNDATION RECOMMENDATIONS

There are two general types of foundation system concepts, "shallow" and "deep", with the designation being based on the depth of support of the system. More common deep foundation system concepts include driven piles, drilled piers and steel helical piers. Shallow foundation system concepts include mats or rafts, and conventional spread footings with stem walls. There are numerous similar foundation design concepts, but the concepts listed above are of the more common types used in western Colorado.

Deep foundation system design concepts which include isolation of shallow components including floor systems from shallow soils are less likely to experience post-construction movement due to volume changes in the site soil.

Shallow Foundation System Considerations

There are numerous types of shallow foundation systems and variants of each type. Generally the most common shallow foundation design concepts which have been used in western Colorado include spread footings, and mat (or raft) foundation systems. Based on phone conversations, we understand that the shallow foundation types currently under consideration include spread footings, mat/raft, and post tensioned slab.

The integrity and long-term performance of each type of system is influenced by the quality of workmanship which is implemented during construction. It is imperative that all excavation and fill placement operations be conducted by qualified personnel using appropriate equipment and techniques to provide suitable support conditions for the foundation system.

5.1 *Spread Footings*

Conventional spread footing and stem wall foundation systems have been used successfully in western Colorado for most residential and many commercial applications. The spread footing foundation system consists of a footing which dissipates, or spreads, the loads imposed from the stem wall (or beam) from the structure above.

Some of the site soils are prone to long term consolidation and associated settlement of structures under additional loading, while others soils exhibit the potential to swell if they are exposed to additional moisture. Since these different soil characteristics will affect the design considerations of the shallow footings, we suspect that if shallow footings are utilized, their designed may need to be implemented on a structure by structure basis depending on its location. This option may require additional drilling in order to more precisely locate the transitional boundaries between the different subsurface conditions.

The following design parameters are provided for the two general soil conditions that we encountered at the site which include the generally soft saturated conditions encountered in Test Borings 1, 2, 3, 7, 8 and the generally stiff unsaturated conditions encountered in Test Borings 4, 5, and 6.

5.1.1 *Site clay soils under saturated conditions*

Continuous spread footings located away from sloped areas may be designed using a maximum *net allowable* bearing capacity of 1,300 psf. This bearing capacity provides for the undrained loading condition that will tend to occur with these soil types. Wider spread footing will allow for lower designed soil pressure for a given building load, however the increased width will tend to influence a larger volume of soil and may increase settlement for a given design pressure. The

following figure presents a preliminary estimate of soil settlement vs. continuous footing width for a bearing pressure of 1,300 psf. Development of the final footing design width is usually an iterative process based on evaluation of design pressures, footing widths and the thickness of compacted structural fill beneath the footings. We should be contacted as the design process continues to re-evaluate the design capacities above based on the actual proposed footing geometry.

Footing Width	Settlement (in)	Settlement (in)
(feet)	Footing placed on native clay	Footing Placed on one (1) Foot of
		Compacted Structural Fill
2	1	0.75
4	1.5	1
6	2.25	2
8	2.75	2.25

Table 1. Estimated settlement of shallow continuous footings placed on saturated clay. Settlement values are based on 1,300 psf vertical footing load.

We recommend that the footings be designed with a low dead load and supported by a layer of moisture conditioned and compacted natural soil which is overlain by a layer of compacted structural fill material. This concept is outlined below;

- The foundation excavation should be excavated to at least one (1) foot below the proposed footing support elevation.
- The natural soils exposed in the bottom of the excavation should be scarified to a depth of about six (6) to eight (8) inches
- The scarified soil should be thoroughly moisture conditioned to about two (2) percent above the laboratory determined optimum moisture content and then compacted.
- After completion of the compaction of the moisture conditioned natural soil a one (1) foot thick layer of granular aggregate base course structural fill material should be placed, moisture conditioned and compacted.
- The moisture conditioned natural soil material and the granular soils should be compacted as discussed under the Compaction Recommendations portion of this report, below.

A stabilized structural fill section with fabric will likely be required due to yielding of the underlying clay soils. Section 9.1.0 of this report outlines our recommendations for mechanically stabilizing soft or yielding subgrade materials.

Due to the potential for differential settlement we recommend that if possible isolated footings for support of interior column loads be avoided. A more rigid structure consisting of interior continuous footings and grade beams will help reduce the potential for damage.

Additional risks to consider include the potential for differential settlement to occur if the footings of a single structure are partially supported by soils with variable consolidation or swell characteristics.

5.1.2 Site clay soils under unsaturated conditions

Spread footings located away from sloped areas may be designed using the allowable bearing capacity information tabulated below. The bearing capacities provided were estimated from the laboratory direct shear data and assuming drained loading conditions.

Minimum Depth of	Continuous Footing Design	Isolated Footing Design
Embedment (Feet)	Capacity (psf)	Capacity (psf)
1	1,500	Not Recommended
2	1,900	Not Recommended
3	2,300	Not Recommended

The bearing capacity values above were based on footing placed directly on the natural soils and on a continuous spread footing width of one and one-half (1.5) feet. Larger footings and/or footings placed on a blanket of compacted structural fill will have a higher design soil bearing capacity. Development of the final footing design width is usually an iterative process based on evaluation of design pressures, footing widths and the thickness of compacted structural fill beneath the footings. We should be contacted as the design process continues to re-evaluate the design capacities above based on the actual proposed footing geometry.

Due to the swell pressure of the soils tested and potential for differential movement we recommend that if possible isolated footings for support of interior column loads be avoided. A more rigid structure consisting of interior continuous footings and grade beams will help reduce the potential for damage due to swelling soils.

The soil samples tested from the anticipated support elevations in our test borings had a maximum measured swell pressure of about 2,000 pounds per square foot and a swell potential magnitude of about 3.0 percent under a 100 pound per square foot surcharge load, and we estimate an expansion potential of about 1.5% under typical building loads.

The owner must understand that regardless of the expansive soil mitigation design concepts presented above, if the swell pressure generated by the expansive soil on this site exceeds the minimum dead load which is imposed by the spread footing or other structural components, and the expansive site soils become wetted, uplift of the foundation system and other structural components is highly likely. Drilled piers, or other deep foundation system design will provide the least likelihood of post construction movement associated with soil volume changes.

The actual magnitude of the potential uplift of the foundation system depends on the volume (or depth) of the support soils which become moistened after construction. It is difficult to predict the amount of soil which will become moistened after construction, some theories suggest that with time the entire soil mantle may become moistened. Based on our experience in the area we feel that it is possible for at least two (2) to three (3) feet of soil below the footings to be influenced by subsurface moisture. Based on the assumed depth of moistened soil, laboratory test data, and the soil characteristics we estimate that the magnitude of the potential uplift associated with swelling of the expansive support soil materials may be in the range of about 1/2 inch. If the entire soil mantle becomes moistened the total potential uplift may be considerably higher.

Typically uplift associated with swelling soils occurs only where the foundation support soils have been exposed to water; therefore the uplift may impose shear stresses in the foundation system. The magnitude of the imposed shear stress is related to the swell pressure of the support soil, but is difficult to estimate. Properly designed and constructed continuous spread footings with stem walls (or beams) have the ability to distribute the forces associated with swelling of the support soil. The rigidity of the system helps reduce differential movement and associated damage to the overlying structure. Swelling of the soil supporting isolated pad footings will result in direct uplift of the columns and structural components supported by the columns. Damage to the structure due to this type of movement can be severe. If possible, we recommend that isolated pad footings be avoided and that the foundation system be designed as rigid as is reasonably possible.

High foundation dead load, careful preparation of the support soils, placement of granular compacted structural fill, careful placement and compaction of stem wall backfill and positive surface drainage adjacent to the foundation system all help reduce the influence of swelling soils on the performance of the spread footing foundation system.

We recommend that the footings be designed with a high dead load and supported by a layer of moisture conditioned and compacted natural soil which is overlain by a layer of compacted structural fill material. This concept is outlined below;

- The foundation excavation should be excavated to at least one (1) foot below the proposed footing support elevation.
- The natural soils exposed in the bottom of the excavation should be scarified to a depth of about six (6) to eight (8) inches
- The scarified soil should be thoroughly moisture conditioned to about two (2) percent above the laboratory determined optimum moisture content and then compacted.
- After completion of the compaction of the moisture conditioned natural soil a one (1) foot thick layer of granular aggregate base course structural fill material should be placed, moisture conditioned and compacted.

• The moisture conditioned natural soil material and the granular soils should be compacted as discussed under the Compaction Recommendations portion of this report, below.

The settlement of the spread footing foundation system will be influenced by the footing size and the imposed loads. We estimated the total post construction settlement of the footings based on our laboratory consolidation data, the type and size of the footing. Our analysis below assumed that the highest bearing capacity value tabulated above was used in the design of the footings. The amount of post construction settlement may be reduced by placing the footings on a blanket of compacted structural fill material.

Due to the potential for differential settlement we recommend that if possible isolated footings for support of interior column loads be avoided. A more rigid structure consisting of interior continuous footings and grade beams will help reduce the potential for damage.

The estimated settlement for continuous footing with a nominal width of about one and one-half $(1\frac{1}{2})$ to two and one-half $(2\frac{1}{2})$ are tabulated below

Thickness of Compacted	Estimated Settlement
Structural Fill (feet)	(inches)
0	1/2 - 3/4
B/4	1/3 - 1/2
B/2	1/3

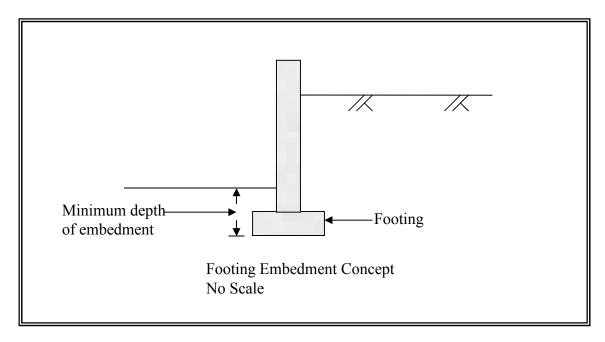
B is the footing width

5.1.3 General Comments for Shallow Foundations

We recommend that a subsurface drain system be considered behind foundation walls where expansive soils have been identified. Topographic conditions on the site may influence the ability to install a subsurface drain system which promotes water flow away from the foundation system. The subsurface drain system concept is discussed under the Subsurface Drain System section of this report, below.

The footing embedment is a relatively critical, yet often overlooked, aspect of foundation construction. The embedment helps develop the soil bearing capacity, increases resistance of the footing to lateral movement and decreases the potential for rapid moisture changes in the footing support soils, particularly in crawl space areas. Interior footing embedment reduces the exposure of the crawl space support soils to dry crawl space air. Reduction in drying of the support soil helps reduce downward movement of interior footings due to soil shrinkage.

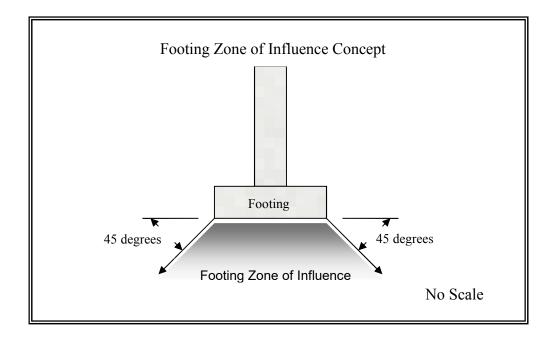
All footings should have a minimum depth of embedment of at least one (1) foot. The embedment concept is shown below.



All footings should be supported at an elevation deeper than the maximum depth of frost penetration for the area. This recommendation includes exterior isolated footings and column supports. Please contact the local building department for specific frost depth requirements.

The post construction differential settlement may be reduced by designing footings that will apply relatively uniform loads on the support soils. Concentrated loads should be supported by footings that have been designed to impose similar loads as those imposed by adjacent footings.

The compacted structural fill should be placed and compacted as discussed in the Construction Considerations, "Fill Placement Recommendations" section of this report, below. The zone of influence of the footing (at elevations close to the bottom of the footing) is often approximated as being between two (2) lines subtended at 45 degree angles from each bottom corner of the footing. The compacted structural fill should extend beyond the zone of influence of the footing as shown in the sketch below.



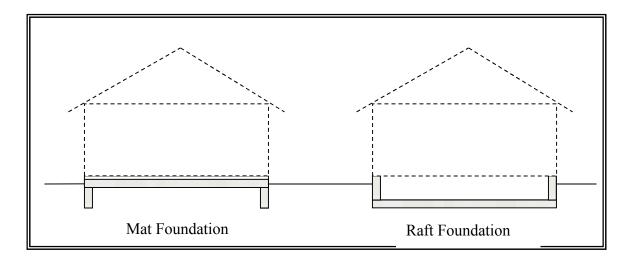
A general and simple rule to apply to the geometry of the compacted structural fill blanket is that it should extend beyond each edge of the footing a distance which is equal to the fill thickness

Under no circumstances should any footing be supported by more than three (3) feet of compacted structural fill material unless we are contacted to review the specific conditions supporting these footing locations.

The design concepts and parameters presented above are based on the soil conditions encountered in our test borings. We should be contacted during the initial phases of the foundation excavation at the site to assess the soil support conditions and to verify our recommendations.

5.2 Mat Foundations

Mat or raft foundations are commonly used to support structures on sites with soft and/or wet soil conditions. The design concepts of either system are similar, but their configurations are slightly different. This is shown in the sketch below.



Depending on the subsurface conditions, the depth of the support elevation of a raft foundation may be varied as needed to improve the support characteristics for the raft.

The discussion presented below is appropriate for either concept. For purposes of clarity we will use the term "mat" for the remainder of our discussion below.

Mat foundations must not be confused with slab-on-grade floors with a turned down edge. Slabs with turned down edges are generally thinner components that do not have the rigidity necessary to distribute loads from the structure. Mat foundations are typically lightly loaded members with limited rigidity; therefore they are often not considered as suitable for use on sites with expansive soil conditions. Since they are lightly loaded they particularly prone to movement and uplift associated with swelling of the support soils.

As described above, we encountered saturated clay soils in portions of the project site that did not exhibit expansion potential due to their high natural water content. However, we obtained a maximum measured swell pressure of about 2,000 pounds per square foot with a swell potential magnitude of about 3.0 percent under a 100 pound per square foot load for the soils representative of the conditions that we encountered in Test Borings 4, 5, and 6. Mat foundations which impose loads lighter than the measured swell pressure may experience movement and damage if the support soils swell. Since these different soil characteristics will affect the design considerations and feasibility of the mat foundation, we suspect that if this foundation type is utilized, its designed may need to be implemented on a structure by structure basis depending on its location. This option may require additional drilling in order to more precisely locate the transitional boundaries between the different subsurface conditions.

We calculated a *net allowable* bearing capacity of 1,300 psf for the clay soils under saturated conditions, however we suspect that the design load of a mat foundation will be limited by the allowable settlement of the structure rather than the soil bearing capacity. The following table shows the estimated settlement of a 40' x 40'mat foundation vs. the design load of the mat. The load is assumed to be evenly distributed across the entire mat area. If the mat is designed with sufficient rigidity, the total settlement will tend to equal the difference between the maximum and minimum settlement values. However, damage to the structure is likely if the mat foundation cannot resist the differential settlement.

Design Load (psf)	Maximum Settlement	Minimum Settlement	Estimated Total
	(in)	(in)	Settlement (in)
	Under Center of Mat	Under Corner of Mat	
800	4.5	2	2.5
600	3.5	1	2.5
400	2.4	.7	1.7

In order to for the mat foundation to provide sufficient rigidity, we recommend that a modulus of subgrade reaction of 50 pounds per cubic inch (pci) is used for the design.

If a raft foundation system is being considered, we should be provided with the dimensions of the raft and an estimate of the average design pressure which will be imposed by the soil. Based on this information and depending on the final grades of the lot, we can analyze the system and provide recommendations for a support elevation, or depth of embedment, for the bottom of the raft. The only way to ensure negligible *theoretical* settlement of the structure is to design a fully compensated raft foundation in which the design foundation load is equal to the weight of the soil excavated for the foundation.

Please refer to portions of the construction considerations portion of this report for site preparation and soil stabilization considerations for areas supporting the mat foundation systems.

5.2.1 Post-Tensioned Mat Foundation Comments

We have provided general geotechnical engineering parameters that are typically included format foundation design as well as information obtained from "Design and Construction of Post-Tensioned Slabs-on-Ground", 1996, Second Edition, Post-Tensioning Institute (PTI) for design of post-tensioned slabs below. It should be noted that there are later versions of this design manual, but since this empirical information, while useful, is of dubious merit given the multitude of potential variables at the site, we feel is appropriate for inclusion for the proposed design. We utilized our soil test results and followed the procedures contained within the manual to develop the PTI parameters for estimated differential swell and edge moisture variation distance, and estimated depth to constant soil suction.

It should be noted that the information provided from the PTI manual is useful, however there are numerous site specific conditions and characteristics that cannot be predicted within a general manual of design procedures. For example, there are two distinct conditions identified within the manual including "Edge Lift", or Center Lift" conditions. These conditions are influenced not only by the loading regime, but are influenced by moisture changes that may occur on sites with expansive, or "shrink-swell", conditions. On a site with an expansive soil that is in an arid climate, but the in-situ soil conditions are moist, the most likely conditions is shrinkage of the soils around the slab perimeter after construction. Conversely, if postconstruction capillary moisture rise under the slab causes accumulation under the mat foundations in an expansive soil with an initial medium moist to dry condition, the end result would be swelling of the soil under the center of the slab. Both of these conditions effectively result in a center lift condition. A similar dialogue could be developed for an edge lift scenario if the expansive soils are dry initially, and become wetted due to irrigation, or other influences after construction which would cause swelling of the soil supporting the edge. Given that the current moisture of the soil mantle within about 3-4 feet of the ground surface will be different now than when our samples were taken, and given that the moisture content during the future construction will also be different than either now, or during our geotechnical engineering exploration and testing, the PTI parameters provided may need to be verified if these are a critical component of the design. Furthermore, the scope of service of our geotechnical engineering study did not include hydrometer analyses of the soils, therefore the parameters provided are based on our estimates of the percentage of clay rather than on hydrometer analyses test results.

Mat Foundation Design Parameters

We calculated a *net allowable* bearing capacity of 1,300 psf for the clay soils under saturated conditions, however we suspect that the design load of a mat foundation will be limited by the allowable settlement of the structure rather than the soil bearing capacity. The table presented above shows the estimated settlement of a 40' x 40'mat foundation vs. the design load of the mat.

From the PTI Manual

The Thornthwaite moisture index obtained from Figure A.3.2, (PTI Manual) for the Ridgeway area is nominally 0. Correspondingly the Edge moisture Variation Distance (e_m) for and Edge Lift Condition is nominally 3 to 4 feet and for a Center Lift nominally $3\frac{1}{2}$ to 5 feet.

Center Lift Condition

Given that the soils generally ranged from about 62 to 98 percent passing the #200 sieve (accounting for both silt and clay) we estimate that the highest estimated montmorillonite

component of the soil is nominally about 60%. Using the estimated depth to constant suction of 5 feet, an $e_m = 4$ feet the estimate differential swell range of 0.217 to 0.485 inch (using soil suction of 3.2 - 3.4 pF respectively) for a center lift scenario is estimated. (From Table A.3.14)

Edge Lift Condition

For an Edge Lift condition and the same general parameters discussed above the estimated differential swell ranges from about 0.202 to 0.415 inch (using soil suction of 3.2 - 3.4 pF respectively) for an edge lift scenario is estimated. (From Table A.3.29)

We do not know if a center lift or edge lift condition is more likely to occur than the other without additional data, including a moisture condition analysis of the site soil conducted immediately prior to construction.

5.3 General Shallow Foundation Considerations

Some movement and settlement of any shallow foundation system will occur after construction. Movement associated with swelling soils also occurs occasionally. Utility line connections through and foundation or structural component should be appropriately sleeved to reduce the potential for damage to the utility line. Flexible utility line connections will further reduce the potential for damage associated with movement of the structure.

Deep Foundation Design Considerations

Since the support elevation of any deep foundation system is at depths where the support materials are not typically influenced by climatic conditions, deep foundation systems are less susceptible to movement associated with either the swelling of expansive support materials, or consolidation of soft, wet materials. Deep foundation systems with structurally supported floors provide the best protection of the structure from post construction volume changes (either consolidation or expansion) and are therefore the design with the least likelihood of post-construction movement of the foundation that could result in cosmetic or structural damage to the proposed building.

We feel two viable deep foundation design concepts for this project include driven piles and helical piers. Piles are typically driven into the ground until the appropriate set criteria or end bearing elevation is attained. Steel "H-Piles" and steel "Pipe Piles" are common pile types which have been installed in western Colorado. A helical pier is a foundation element consisting of a central shaft with at least one helix plate located on the shaft with its axis positioned parallel to the shaft's length. The helical pier is rotated while being advanced to the proper bearing stratum. In either case the deep foundation system is often capped with a grade beam or similar structural component which is intended to distribute the imposed structural loads to each deep foundation system component.

In a Helical Pier system, the correct rotational rate versus advancement rate is critical for proper performance of the pier. Typically, the installation torque is monitored during installation and utilized to assess the load carrying capacity of the pier. The torque verse load carrying capacity relationship is established by the pier manufacturer.

There are many types and brands of helical piers available. Since there are numerous proprietary helical pier suppliers, each manufacturer has different techniques to estimate the load carrying capacity of their product. Helical piers which are not installed to appropriate bearing elevations may not provide sufficient support for the proposed structure.

We encountered relatively loose to medium dense sand and gravel starting at a depth of approximately 40 feet to the bottom of our test boring at 71 feet. We feel that there may be a potential for a helical pier to achieve the proper torque and provide an adequate load carrying capacity for the pier in the site sand and gravels. If a helical pier foundation system is being considered as a foundation system alternative, we recommend contacting a helical pier contractor to provide additional information after review of our study. In addition, we recommend advancement of a test helical pier(s) and load testing be performed. We are available to provide assistance or further information to the helical pier contractor if desired.

6.0 RETAINING STRUCTURES

We understand that laterally loaded walls may be constructed as part of this site development. Lateral loads will be imposed on the retaining structures by the adjacent soils and, in some cases, surcharge loads on the retained soils. The loads imposed by the soil are commonly referred to as lateral earth pressures. The magnitude of the lateral earth pressure forces is partially dependent on the soil strength characteristics, the geometry of the ground surface adjacent to the retaining structure, the subsurface water conditions and on surcharge loads.

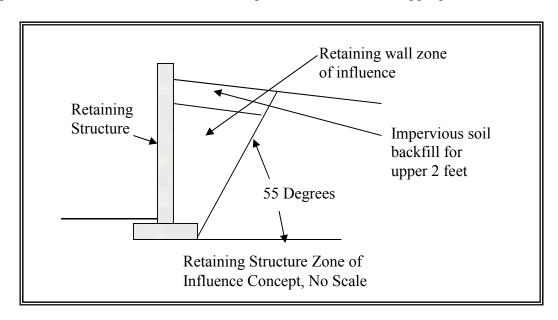
The site soils generally have a poor suitability as retaining wall backfill. The retaining walls may be designed using the lateral earth pressure values for imported granular soil that are tabulated below.

Type of Lateral Earth Pressure	Level Granular Soil Backfill	
	(pounds per cubic foot/foot)	
Active	35	
At-rest	55	
Passive	460	
Allowable Coefficient of Friction	0.45	

The granular soil that is used for the retaining wall backfill may be permeable and may allow water migration to the foundation support soils. There are several options available to help reduce water migration to the foundation soils, two of which are discussed here. An impervious geotextile layer and shallow drain system may be incorporated into the backfill, as discussed in Section 9.5, *Landscaping Considerations*, below. A second option is to place a geotextile filter material on top of the granular soils and above that place about one and one-half (1½) to two (2) feet of moisture conditioned and compacted site clay soils. It should be noted that if the site clay soils are used volume changes may occur which will influence the performance of overlying concrete flatwork or structural components.

The values tabulated above are for well drained backfill soils. The values provided above do not include any forces due to adjacent surcharge loads or sloped soils. If the backfill soils become saturated the imposed lateral earth pressures will be significantly higher than those tabulated above.

The granular imported soil backfill values tabulated above are appropriate for material with an angle of internal friction of thirty-five (35) degrees, or greater. The granular backfill must be placed within the retaining structure zone of influence as shown below in order for the lateral earth pressure values tabulated above for the granular material to be appropriate.



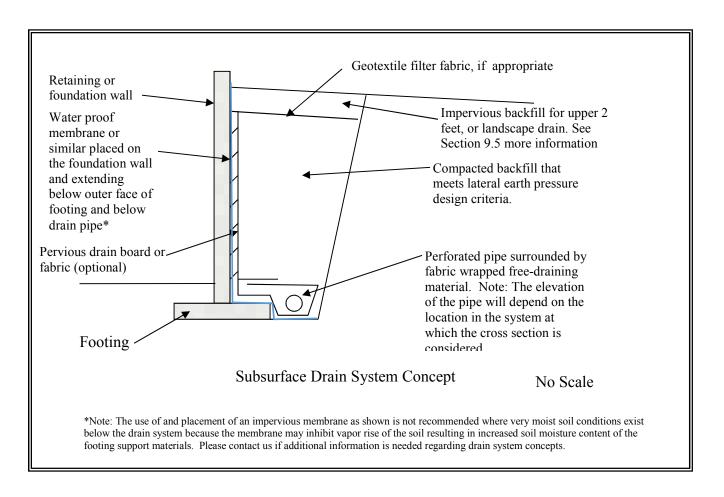
If a granular backfill is chosen it should not extend to the ground surface. Some granular soils allow ready water migration which may result in increased water access to the foundation soils. The upper few feet of the backfill should be constructed using an impervious soil such as silty-clay and clay soils from the project site, if these soils are available.

Backfill should not be placed and compacted behind the retaining structure unless approved by the project structural engineer. Backfill placed prior to construction of all appropriate structural members such as floors, or prior to appropriate curing of the retaining wall concrete (if used) may result in severe damage and/or failure of the retaining structure.

7.0 SUBSURFACE DRAIN SYSTEM

A subsurface drain system and/or weep holes should be included in the retaining structure design. Exterior retaining structures may be constructed with weep holes to allow subsurface water migration through the retaining structures. A drain system constructed with a free draining aggregate material and a perforated pipe should be constructed adjacent to retaining structures or adjacent to foundation walls on sites with expansive soil conditions. We suggest that the system consist of a fabric-wrapped aggregate, or a sand material (some sands may not need fabric, we are available to discuss this with you) which surrounds a rigid perforated pipe. We typically do not recommend use of flexible corrugated perforated pipe since it is not readily possible to establish a uniform gradient of the flexible pipe throughout the drain system alignment. Corrugated drain tile is perforated throughout the entire circumference of the pipe and therefore water can escape from the perforations at undesirable locations after being collected. The nature of the perforations of the corrugated material further decreases its effectiveness as a subsurface drain conduit.

The drain system pipe should be graded to surface outlets or a sump vault. Typically a minimum gradient of about two (2) percent is preferred for subsurface drain systems, but site geometry and topography may influence the actual installed pipe gradient. Water must not be allowed to pool along any portion of the subsurface drain system. An improperly constructed subsurface drain system may actually promote water access to undesirable locations. The drain system pipe should be surrounded by about two (2) to four (4) cubic feet per lineal foot of free draining aggregate or sand. If a sump vault and pump are incorporated into the subsurface drain system, care should be taken so that the water pumped from the vault does not recirculate through pervious soils and obtain access to the basement or crawl space areas. A generalized



subsurface drain system concept is shown below.

There are often aspects of each site and structure which require some tailoring of the subsurface drain system to meet the needs of individual projects. We are available to provide consultation for the subsurface drain system for this project, if desired.

8.0 CONCRETE FLATWORK

We understand that both interior and exterior concrete flatwork will be included in the project design. Concrete flatwork is typically lightly loaded and has a limited capability to resist shear forces associated with uplift from swelling soils and/or frost heave. It is prudent for the design and construction of concrete flatwork on this project to be able to accommodate some movement associated with swelling soil conditions, if possible.

The soil samples tested have maximum a measured swell pressure of 2,000 pounds per square foot and a magnitude swell potential of about 3.0 percent under a 100 pound per square foot surcharge load.

Due to the measured swell potential and swell pressure we feel that interior floors supported over a crawl space are less likely to experience movement than are concrete slabs support on grade. The following recommendations are appropriate for garage floor slabs and for interior floor slabs if the owner is willing to accept the risk of potential movement of interior floor slabs supported on grade.

8.1 Interior Concrete Slab-on-Grade Floors

A primary goal in the design and construction of interior concrete slab-on-grade floors is to reduce the amount of post construction uplift associated with swelling soils, or downward movement due to consolidation of soft soils. A parallel goal is to reduce the potential for damage to the structure associated with any movement of the slab-on-grade which may occur. There are limited options available to help mitigate the influence of volume changes in the support soil for concrete slab-on-grade floors, these include;

- Preconstruction scarification, moisture conditioning and re-compaction of the natural soils in areas proposed for support of concrete flatwork, and/or,
- Placement and compaction of granular compacted structural fill material.

Damage associated with movement of interior concrete slab-on-grade floor can be reduced by designing the floors as "floating" slabs. The concrete slabs should not be structurally tied to the foundations or the overlying structure. Interior walls or columns should not be supported on the interior floor slabs. Movement of interior walls or columns due to uplift of the floor slab can cause severe damage throughout the structure. Interior walls may be structurally supported from framing above the floor, or interior walls and support columns may be supported on interior portions of the foundation system.

The only means to completely mitigate the influence of volume changes on the performance of interior floors is to structurally support the floors. Floors that are suspended by the foundation system will not be influenced by volume changes in the site soils. The suggestions and recommendations presented below are intended to help reduce the influence of swelling soils on the performance of the concrete slab-on-grade floors.

Interior concrete slab-on-grade floors may be supported by a composite fill blanket which is composed of a six (6) inch thick lower layer of scarified, moisture conditioned natural soil that is overlain by a twelve (12) inch thick blanket of compacted structural fill. The scarified fill material and the compacted structural fill material should be constructed as discussed under the Construction Considerations, "Fill Placement Considerations" section of this report below."

Capillary and vapor moisture rise through the slab support soil may provide a source for moisture in the concrete slab-on-grade floor. This moisture may promote development of mold or mildew in poorly ventilated areas and may influence the performance of floor coverings and mastic placed directly on the floor slabs. The type of floor covering, adhesives used, and other considerations that are not related to the geotechnical engineering practice will influence the design. The architect, builder and particularly the floor covering/adhesive manufacturer should be contacted regarding the appropriate level of protection required for their products.

Comments for Reduction of Capillary Rise

One option to stop capillary rise through the floor slab is to place a layer of clean aggregate material, such as washed concrete aggregate for the upper four (4) to six (6) inches of fill material supporting the concrete slabs.

Comments for Reduction of Vapor Rise

To reduce vapor rise through the floors slab a moisture barrier such as a 6 mil (or thicker) plastic, or similar impervious geotextile material is often be placed below the floor slab. The material used should be protected from punctures that will occur during the construction process.

There are proprietary barriers that are puncture resistant that may not need the underlying layer of protective material. Some of these barriers are robust material that may be placed below the compacted structural fill layer. We do not recommend placement of the concrete directly on a moisture barrier unless the concrete contractor has had previous experience with curing of concrete placed in this manner. As mentioned above, the architect, builder and particularly the floor covering/adhesive manufacturer should be contacted regarding the appropriate level of moisture and vapor protection required for their products.

The project structural engineer should be contacted to provide steel reinforcement design considerations for the proposed floor slabs. Any steel reinforcement placed in the slab should be placed at the appropriate elevations to allow for proper interaction of the reinforcement with tensile stresses in the slab. Reinforcement steel that is allowed to cure at the bottom of the slab will not provide adequate reinforcement.

8.2 Exterior Concrete Flatwork Considerations

Exterior concrete flatwork includes concrete driveway slabs, aprons, patios, and walkways. The desired performance of exterior flatwork typically varies depending on the proposed use of the site and each owner's individual expectations. As with interior flatwork, exterior flatwork is particularly prone to movement and potential damage due to movement of the support soils. This movement and associated damage may be reduced by following the recommendations discussed under interior flatwork, above. Unlike interior flatwork, exterior flatwork may be exposed to frost heave, particularly on sites with high silt-content soils. It may be prudent to remove silt soils from exterior flatwork support areas where movement of exterior flatwork will adversely affect the project, such as near the interface between the driveway and the interior garage floor slab. If silt soils are encountered, they should be removed to the maximum depth of frost penetration for the area where movement of exterior flatwork is undesirable.

If some movement of exterior flatwork is acceptable, we suggest that the support areas be prepared by scarification, moisture conditioning and re-compaction of about four (4) inches of the natural soils followed by placement of about four (4) to six (6) inches of compacted granular fill material. The scarified material and granular fill materials should be placed as discussed under the Construction Considerations, "Fill Placement Recommendations" section of this report, below.

It is important that exterior flatwork be separated from exterior column supports, masonry veneer, finishes and siding. No support columns, for the structure or exterior decks, should be placed on exterior concrete unless movement of the columns will not adversely affect the supported structural components. Movement of exterior flatwork may cause damage if it is in contact with portions of the structure exterior.

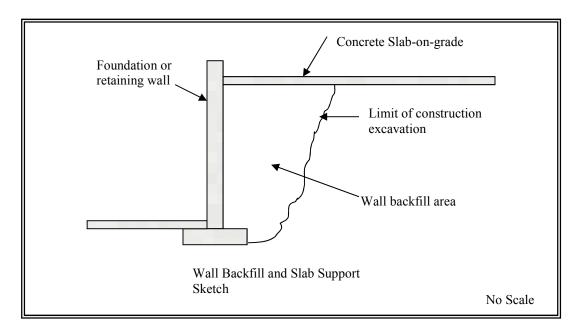
It should be noted that silt and silty sand soils located near the ground surface are particularly prone to frost heave. Soils with an appreciable silt content have the ability to retain significant moisture. The ability for the soils to accumulate moisture combined with a relatively shallow source of subsurface water and the fact that the winter temperatures in the area often very cold all contribute to a high potential for frost heave of exterior structural components. We recommend that the silt soils be removed from the support areas of exterior components that are sensitive to movement associated with frost heave. These soils should be replaced with a

material that is not susceptible to frost heave. Aggregate road base and similar materials retain less water than fine-grained soils and are therefore less prone to frost heave. We are available to discuss this concept with you as the plans progress.

Exterior flatwork should not be placed on soils prepared for support of landscaping vegetation. Cultivated soils will not provide suitable support for concrete flatwork.

8.3 General Concrete Flatwork Comments

It is relatively common that both interior and exterior concrete flatwork is supported by areas of fill adjacent to either shallow foundation walls or basement retaining walls. A typical sketch of this condition is shown below



Settlement of the backfill shown above will create a void and lack of soil support for the portions of the slab over the backfill. Settlement of the fill supporting the concrete flatwork is likely to cause damage to the slab-on-grade. Settlement and associated damage to the concrete flatwork may occur when the backfill is relatively deep, even if the backfill is compacted.

If this condition is likely to exist on this site it may be prudent to design the slab to be structurally supported on the retaining or foundation wall and designed to span to areas away from the backfill area as designed by the project structural engineer. We are available to discuss this with you.

9.0 CONSTRUCTION CONSIDERATIONS

This section of the report provides comments, considerations and recommendations for aspects of the site construction which may influence, or be influenced by the geotechnical engineering considerations discussed above. The information presented below is not intended to discuss all aspects of the site construction conditions and considerations that may be encountered as the project progresses. If any questions arise as a result of our recommendations presented above, or if unexpected subsurface conditions are encountered during construction we should be contacted immediately.

9.1 Fill Placement Recommendations

There are several references throughout this report regarding both natural soil and compacted structural fill recommendations. The recommendations presented below are appropriate for the fill placement considerations discussed throughout the report above.

All areas to receive fill, structural components, or other site improvements should be properly prepared and grubbed at the initiation of the project construction. The grubbing operations should include scarification and removal of organic material and soil. No fill material or concrete should be placed in areas where existing vegetation or fill material exist.

We observed evidence of previous site use and existing man-placed fill during our field work and we encountered some man-placed fill in our test borings. We suspect that man-placed fill and subterranean structures may be encountered as the project construction progresses. All existing fill material should be removed from areas planned for support of structural components. Excavated areas and subterranean voids should be backfilled with properly compacted fill material as discussed below.

9.1.1 Subgrade Soil Stabilization

We encountered subsurface water within our test borings above the elevation of some of the anticipated footing support elevations. We suspect that soft, yielding soil conditions may be encountered at various locations on the project site during construction. This material may be challenging to compact in preparation for placement of overlying fill material. We have provided two (2) general categories of concepts to stabilize these soils to provide a suitable substrate for placement and compaction of overlying compacted fill. These include:

- 1.) Mechanical Stabilization; using soil and/or geotextile materials, and,
- 2.) Chemical Stabilization; using dry Portland cement.

Mechanical stabilization of soil often includes placement of aggregate material and/or larger cobbles (3-4 inch size) into an area where the soils are yielding. The most predictable technique is to over-excavate these soft areas by about 8 to 12 inches, (or more, if needed) lightly proof compact the exposed soil, place a layer of geogrid-type material, such as Tensar TX-140 (or BX-1100 if available), or similar material, followed by placement of a "clean crushed aggregate" material with a nominal maximum size of one (1) inch and not more than about five (5) percent passing the #4 sieve. This clean crushed aggregate material should then be consolidated with a plate-type compactor. A less robust fabric, such as a spun filter fabric, or a woven geotextile, (such as Mirafi rs280i, or less desirable, but often suitable, Mirafi 500X) is placed on top of this aggregate layer followed by placement and compaction of the overlying fill material. For sites with extremely soft conditions it may be necessary to increase the clean aggregate layer to about 18 inches and place an intermediate layer of geogrid (or fabric) at mid-height of this layer.

Chemical stabilization using Portland cement is effective for most soils. Generally this technique is more suitable for isolated soft areas. Generally dry Portland cement powder may be placed on the surface of the soft yielding material and subsequently mixed into the soil. The effectiveness of this technique is partially dependent upon the thoroughness of the mixing. If it can be thoroughly mixed the application rate of the Portland cement need not be more than 10 percent, and often an application of 5 to 7 percent will provide a significant decrease in free water and stabilize the material. After mixing, the material should be allowed to "rest" for about two of more hours prior to compaction. The treated material will often yield some during initial compaction, but will generally increase in rigidity as the process of hydration begins takes place. If yielding under compaction is excessive, the material should be allowed "cure" additionally prior to continued compaction effort being applied. Often it takes more time, such as overnight, to allow the cement to fully stabilize the material so this strategy is often implement in an area at the end of a work day and allowed to cure overnight followed by subsequent fill placement on the following day.

9.1.2 Natural Soil Fill

Any natural soil used for any fill purpose should be free of all deleterious material, such as organic material and construction debris. Natural soil fill includes excavated and replaced material or in-place scarified material.

Due to low strength and potentially expansive characteristics of the natural soil we do not recommend that it be used as fill material for direct support of structural components. The natural soils may be used to establish general site elevation.

The natural soils should be moisture conditioned, either by addition of water to dry soils, or by processing to allow drying of wet soils. The proposed fill materials should be moisture conditioned to between about optimum and about two (2) percent above optimum soil moisture content. This moisture content can be estimated in the field by squeezing a sample of the soil in the palm of the hand. If the material easily makes a cast of soil which remains in-tact, and a minor amount of surface moisture develops on the cast, the material is close to the desired moisture content. Material testing during construction is the best means to assess the soil moisture content.

Moisture conditioning of clay or silt soils may require many hours of processing. If possible, water should be added and thoroughly mixed into fine grained soil such as clay or silt the day prior to use of the material. This technique will allow for development of a more uniform moisture content and will allow for better compaction of the moisture conditioned materials.

The moisture conditioned soil should be placed in lifts that do not exceed the capabilities of the compaction equipment used and compacted to at least ninety (90) percent of maximum dry density as defined by ASTM D1557, modified Proctor test. We typically recommend a maximum fill lift thickness of six (6) inches for hand operated equipment and eight (8) to ten (10) inches for larger equipment. Care should be exercised in placement of utility trench backfill so that the compaction operations do not damage the underlying utilities.

Typically the maximum lift thickness is about six (6) to eight (8) inches, therefore the maximum allowable rock size for natural soil fill is about six (6) inches. If smaller compaction equipment is being used, such as walk behind compactors in trenches, the maximum rock size should be less than about three (3) inches.

9.1.3 Granular Compacted Structural Fill

Granular compacted structural fill is referenced in numerous locations throughout the text of this report. Granular compacted structural fill should be constructed using an imported commercially produced rock product such as aggregate road base. Many products other than road base, such as clean aggregate or select crusher fines may be suitable, depending on the intended use. If a specification is needed by the design professional for development of project specifications, a material conforming to the Colorado Department of Transportation (CDOT) "Class 6" aggregate road base material can be specified. This specification can include an option for testing and approval in the event the contractor's desired material does not conform to the Class 6 aggregate specifications. We have provided the CDOT Specifications for Class 6 material below:

Grading of CDOT Class 6 Aggregate Base-Course Material		
Sieve Size Percent Passing Each Sieve		
³ / ₄ inch	100	
#4	30 – 65	
#8 25 – 55		
#200	3 – 12	

Liquid Limit less than 30

All compacted structural fill should be moisture conditioned and compacted to at least ninety (90) percent of maximum dry density as defined by ASTM D1557, modified Proctor test. Areas where the structural fill will support traffic loads under concrete slabs or asphalt concrete should be compacted to at least ninety-five (95) percent of maximum dry density as defined by ASTM D1557, modified Proctor test.

Although clean-screened or washed aggregate may be suitable for use as structural fill on sites with sand or non-expansive silt soils, or on sites where shallow subsurface water is present, clean aggregate materials must not be used on any site where expansive soils exist due to the potential for water to accumulate in the voids of the clean aggregate materials.

Clean aggregate fill, if appropriate for the site soil conditions, must not be placed in lifts exceeding eight (8) inches and each lift should be thoroughly vibrated, preferably with a plate-type vibratory compactor prior to placing overlying lifts of material or structural components. We should be contacted prior to the use of clean aggregate fill materials to evaluate their suitability for use on this project.

9.2 Excavation Considerations

Unless a specific classification is performed, the site soils should be considered as an Occupational Safety and Health Administration (OSHA) Type C soil and should be sloped and/or benched according to the current OSHA regulations. Excavations should be sloped and benched to prevent wall collapse. Any soil can release suddenly and cave unexpectedly from excavation walls, particularly if the soils is very moist, or if fractures within the soil are present. Daily observations of the excavations should be conducted by OSHA competent site personnel to assess safety considerations.

We encountered free subsurface water in our test borings. If water is encountered during construction, it may be necessary to dewater excavations to provide for suitable working conditions

If possible excavations should be constructed to allow for water flow from the excavation the event of precipitation during construction. If this is not possible it may be necessary to remove water from snowmelt or precipitation from the foundation excavations to help reduce the influence of this water on the soil support conditions and the site construction characteristics.

9.2.1 Excavation Cut Slopes

We anticipate that some permanent excavation cut slopes may be included in the site development. Temporary cut slopes should not exceed five (5) feet in height and should not be steeper than about one to one (1:1, horizontal to vertical) for most soils. Permanent cut slopes of greater than five (5) feet or steeper than two and one-half to one (2½:1, h:v) must be analyzed on a site specific basis.

We did not observe evidence of existing unstable slope areas influencing the site, but due to the steepness and extent of the slopes in the area we suggest that the magnitude of the proposed excavation slopes be minimized and/or supported by retaining structures.

9.3 Utility Considerations

Subsurface utility trenches will be constructed as part of the site development. Utility line backfill often becomes a conduit for post construction water migration. If utility line trenches approach the proposed project site from above, water migrating along the utility line and/or backfill may have direct access to the portions of the proposed structure where the utility line penetrations are made through the foundation system. The foundation soils in the vicinity of the utility line penetration may be influenced by the additional subsurface water. There are a few options to help mitigate water migration along utility line backfill. Backfill bulkheads constructed with high clay content soils and/or placement of subsurface drains to promote utility line water discharge through the foundation drain system.

Some movement of all structural components is normal and expected. The amount of movement may be greater on sites with problematic soil conditions. Utility line penetrations through any walls or floor slabs should be sleeved so that movement of the walls or slabs does not induce movement or stress in the utility line. Utility connections should be flexible to allow for some movement of the floor slab.

9.4 Exterior Grading and Drainage Comments

The ground surface adjacent to the structure should be sloped to promote water flow away from the foundation system and flatwork. Snow storage areas should not be located in areas which will allow for snowmelt water access to support soils for the foundation system or flatwork.

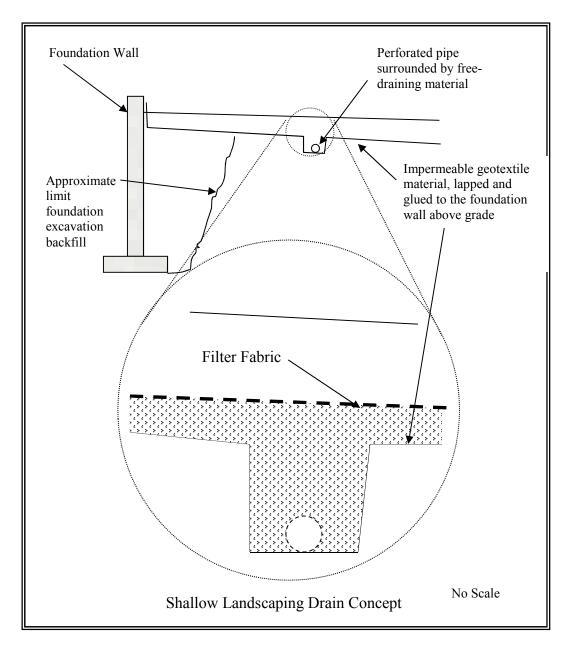
Water flow from the roof of the structure should be captured and directed away from the structure. If the roof water is collected in an eave gutter system, or similar, the discharge points of the system must be located away from areas where the water will have access to the foundation backfill or any structure support soils. If downspouts are used, provisions should be made to either collect or direct the water away from the structure.

The project civil engineering consultant or builder should develop a drainage scheme for the site. We typically suggest a minimum fall of about eight (8) to ten (10) percent away from the structure, in the absence of design criteria from others. Care should be taken to not direct water onto adjacent property or to areas that would negatively influence existing structures or improvements.

9.5 Landscaping Considerations

We recommend against construction of landscaping which requires excessive irrigation. Generally landscaping which uses abundant water requires that the landscaping contractor install topsoil which will retain moisture. The topsoil is often placed in flattened areas near the structure to further trap water and reduce water migration from away from the landscaped areas. Unfortunately almost all aspects of landscape construction and development of lush vegetation are contrary to the establishment of a relatively dry area adjacent to the foundation walls. Excess water from landscaped areas near the structure can migrate to the foundation system or flatwork support soils, which can result in volume changes in these soils.

A relatively common concept used to collect and subsequently reduce the amount of excess irrigation water is to glue or attach an impermeable geotextile fabric or heavy mill plastic to the foundation wall and extend it below the topsoil which is used to establish the landscape vegetation. A thin layer of sand can be placed on top of the geotextile material to both protect the geotextile from punctures and to serve as a medium to promote water migration to the collection trench and perforated pipe. The landscape architect or contractor should be contacted for additional information regarding specific construction considerations for this concept which is shown in the sketch below.



A free draining aggregate or sand may be placed in the collection trench around the perforated pipe. The perforated pipe should be graded to allow for positive flow of excess irrigation water away from the structure or other area where additional subsurface water is undesired. Preferably the geotextile material should extend at least ten (10) or more feet from the foundation system.

Care should be taken to not place exterior flatwork such as sidewalks or driveways on soils that have been tilled and prepared for landscaping. Tilled soils will settle which can cause damage to the overlying flatwork. Tilled soils placed on sloped areas often "creep" down-slope. Any structure or structural component placed on this material will move down-slope with the tilled soil and may become damaged.

9.6 Soil Sulfate Content, Corrosion Issues

The requested scope of our services did not include assessment of the chemical constituents of corrosion potential of the site soils. Most soils in southwest Colorado are not typically corrosive to concrete. There has not been a history of damage to concrete due to sulfate corrosion in the area.

We are available to perform soluble sulfate content tests to assess the corrosion potential of the soils on concrete if desired.

9.7 Radon Issues

The requested scope of service of this report did not include assessment of the site soils for radon production. Many soils and formational materials in western Colorado produce Radon gas. The structure should be appropriately ventilated to reduce the accumulation of Radon gas in the structure. Several Federal Government agencies including the Environmental Protection Agency (EPA) have information and guidelines available for Radon considerations and home construction. If a radon survey of the site soils is desired, please contact us.

10.0 PAVEMENT SECTION THICKNESS DESIGN RECOMMENDATIONS

10.1 Flexible Pavement

We performed a California Bearing Ratio (CBR) test on a composite sample of soil obtained from shallow depth of our test borings. Based on the results of the CBR test, we used a correlated subgrade resilient modulus (M_r)equal to 2,900 psi for the following pavement section thickness design.

Due to the presence of existing man placed fill at the site as well as the saturated conditions of portions of the site, we anticipate there may be soft/yielding areas that will need to be addressed during subgrade preparation and proof rolling operations.

We recommend that the subgrade soils be proof-rolled prior to the scarification and processing operations. Any soft areas observed during the proof-rolling operations should be removed and replaced with properly processed materials and/or granular aggregate materials as part of the subgrade preparation.

The site subgrade pavement section support soils must be scarified to a depth of twelve (12) inches, moisture conditioned and compacted prior to placement of the overlying aggregate pavement section materials. The material should be moisture conditioned to within about two (2) percent of the optimum moisture content and compacted to at least ninety (90) percent of maximum dry density as determined by the modified Proctor test, ASTM D1557.

The surface of the subgrade soil should be graded and contoured to be approximately parallel to the finished grade of the asphalt surface.

The aggregate materials used within the pavement section should conform to the requirements outlined in the current Specifications for Road and Bridge Construction, Colorado Department of Transportation (CDOT). The aggregate base material should be a three-quarter (3/4) inch minus material that conforms to the CDOT Class 6 aggregate base course specifications and have an R-value of at least 78. The aggregate sub-base course should conform to the CDOT specifications for Class 2 material and should have a minimum R-value 70. Other material may be suitable for use in the pavement section, but materials different than those listed above should be tested and observed by us prior to inclusion in the project design or construction. Aggregate sub-base and base-course materials should be compacted to at least ninety-five (95) percent of maximum dry density as defined by the modified Proctor test, ASTM D1557.

We recommend that the asphalt concrete used on this project be mixed in accordance with a design prepared by a licensed professional engineer, or an asphalt concrete specialist. We should be contacted to review the mix design prior to placement at the project site. We recommend that the asphalt concrete be compacted to between ninety-two (92) and ninety-six (96) percent of the maximum theoretical density.

The CBR test was performed on a composite of soil materials obtained from shallow depths of our test borings. The value that we used for the design is based on ninety (90) percent relative compaction of the maximum dry density as obtained from ASTM D1557/AASHTO T-180 (Modified Proctor) for the samples tested. A CBR correlated subgrade resilient modulus M_r equal to 2,900 psi was used for our pavement section thickness design recommendations provided below. Other assumptions made for our analysis are listed below.

- Reliability Factor R(%)=75%
- Overall Standard Deviation, S₀=.44
- Estimated Total 18-kpe ESAL value=50,000 and 100,000

- Effective Roadbed Soils Resilient Modulus (psi), M_r=2,900
- Change is serviceability index, \triangle PSI=2.5
- Structural Coefficient of Asphalt Pavement = 0.44
- Structural Coefficient of Aggregate Base Course=0.11
- Structural Coefficient of Aggregate Sub-Base Course=0.09
- Modifying Structural Layer Coefficients for aggregate base course and aggregate subbase course layers, m_i=1.0 (fair drainage conditions with 5%-25% saturation frequency)

Based on the above assumptions and laboratory test data obtained for the native on-site soil materials, we obtained a structure number (SN) of 2.63 for 50,000 18K ESAL, and 2.92 for 100,000 18K ESAL.

We have provided pavement section thicknesses for both 50,000 and 100,000 - 18,000 pound equivalent single axle loads (18k ESAL). We are available to provide additional design sections based on alternative traffic loads and design parameters, if these are desired. The project civil engineer, or contractor can evaluate the best combination of materials for economic considerations.

Pavement Section Design Thickness 50,000 18k ESAL

Pavement Section Component	Alternative Thicknesses of Each Component									
	(inches)									
Asphalt Concrete	4	4	4	3						
Class 6	8	4	3	4						
Class 2	0	5	6	10						
Reconditioned Subgrade	12	12	12	12						

Pavement Section Design Thickness

100,000 18k ESAL

Pavement Section Component Alternative Thicknesses of Each Comp										
	(inches)									
Asphalt Concrete	5	5	4	4	4					
Class 6	7	3	11	6	4					
Class 2	0	5	0	6	8					
Reconditioned Subgrade	12	12	12	12	12					

The pavement section thicknesses tabulated above are appropriate for the post-construction residential traffic use. Heavy construction equipment traffic will have a significant influence on the quality, character, and design life of the pavement sections tabulated above. If possible we recommend that a partial section be constructed followed by construction of an overlay after completion of the construction operations. We are available to discuss this with you as the project progresses.

10.2 General Parking Area Considerations

Water intrusion into the pavement section support materials will negatively influence the performance of the parking lot surface. Water from irrigation, water from natural sources that migrates into the soils beneath landscapes surface, and water from any source that gains access to the support materials can all decrease the life of the parking lot surface. Care should be taken along curbs and any edge of the parking lot to develop an interface between the material that will reduce subsurface and surface water migration into the support soil and pavement section materials. Landscape islands and other irrigated features often promote water migration since no surface flow from these features typically occurs. The same can occur along perimeter cub areas.

Water will often migrate along the interface of concrete curbs and gutter areas early in the life of any parking area. The tendency for this type of migration often decreases with time, but can be reduced by compaction of materials along the outside base of curb areas adjacent to the interface of the concrete curb and the underlying soil prior to placement of landscaping soil above this interface.

10.3 Rigid Pavement

Our pavement thickness recommendations for rigid Portland Cement Concrete pavements are based on an assumed traffic volume and a modulus of subgrade reaction obtained from the California Bearing Ratio test performed on the composite subgrade soil sample obtained during our field study. A modulus of subgrade reaction of 50 pounds per cubic inch was used in our rigid pavement section analysis. The thickness of the proposed Portland Cement Concrete Pavement is dependent on traffic loading, the strength of the concrete, and the type of material supporting the concrete. We recommend the rigid concrete pavement be supported by at least a six (6) inch thick blanket of compacted Class 6 road base aggregate compacted to ninety (90) percent of maximum dry density as defined by ASTM D1557. The thickness of the concrete pavement and the strength of the concrete are presented below.

28-Day Concrete Compressive Strength	Concrete Thickness Based on the Type of Support Material*								
(PSI)	A	В	C						
3,200	7	6	51/2						
3,650	$6\frac{1}{2}$	6	5						
4,150	6	$5\frac{1}{2}$	5						
4,750	$5\frac{1}{2}$	5	$4\frac{1}{2}$						

^{*}the type of support materials are listed below

- A Twelve (12) inch thick layer of natural soil scarified, moisture conditioned and compacted top ninety (90) percent of maximum dry density as defined by ASTM D1557, modified Proctor test
- B Six (6) inch thick blanket of compacted Class 6 road base aggregate compacted to ninety (90) percent of maximum dry density as defined by ASTM D1557
- C Six (6) inch thick blanket of compacted cement treated Class 6 road base aggregate compacted to ninety (90) percent of maximum dry density as defined by ASTM D1557.

Concrete sidewalks should have a nominal thickness of four (4) inches in areas where no vehicle traffic will be allowed and at least five (5) inches where traffic will be allowed on or across the sidewalks.

All concrete or compacted road base aggregate materials should be supported on prepared subgrade which is at least six (6) inches thick. The prepared subgrade should consist of either compacted structural fill to establish subgrade elevation or natural soils which are scarified to a depth of six (6) inches, moisture conditioned to near optimum moisture content, and recompacted to at least ninety 90 percent of the maximum dry density as defined by ASTM D1557, modified moisture content-dry density relationship (proctor) test. If during subgrade preparation any loose or yielding area or any areas of poorly constructed man-placed fill are encountered they should be removed and replaced with compacted structural fill. Suggestions for constructing compacted structural fill are presented below.

The Portland cement concrete should be from an approved concrete mix design stating the proportions and mixtures of the mix. We recommend verification of the mix design prior to paving. The coarse and fine aggregate used in the concrete mix should be tested for their suitability for use as concrete aggregate.

The concrete pavement should be appropriately jointed and structurally reinforced to help control the location of cracking. The structural engineer should be contacted to provide structural design recommendations or structural reinforcement and joint design of the concrete pavement.

11.0 CONSTRUCTION MONITORING AND TESTING

Construction monitoring including engineering observations and materials testing during construction is a critical aspect of the geotechnical engineering contribution to any project. Unexpected subsurface conditions are often encountered during construction. The site foundation excavation should be observed by the geotechnical engineer or a representative during the early stages of the site construction to verify that the actual subsurface soil and water conditions were properly characterized as part of field exploration, laboratory testing and engineering analysis. If the subsurface conditions encountered during construction are different than those that were the basis of the geotechnical engineering report then modifications to the design may be implemented prior to placement of fill materials or foundation concrete.

Compaction testing of fill material should be performed throughout the project construction so that the engineer and contractor may monitor the quality of the fill placement techniques being used at the site. Generally we recommend that compaction testing be performed for any fill material that is placed as part of the site development. Compaction tests should be performed on each lift of material placed in areas proposed for support of structural components. In addition to compaction testing we recommend that the grain size distribution, clay content and swell potential be evaluated for any imported materials that are planned for use on the site. Concrete tests should be performed on foundation concrete and flatwork. If asphaltic concrete is placed for driveways or aprons near the structure we are available to provide testing of these materials during placement. We are available to develop a testing program for soil, aggregate materials, concrete and asphaltic concrete for this project.

12.0 CONCLUSIONS AND CONSIDERATIONS

This site has shallow subsurface water, and associated soft low-strength soil conditions in some portions of the site. Other portions of the site contain stiff, potentially expansive clay soils. While we feel that it is feasible to develop this site as planned using relatively conventional techniques we feel that it is prudent for us to be part of the continuing design of this project to review and provide consultation in regard to the proposed development scheme as the project progresses to aid in the proper interpretation and implementation of the recommendations presented in this report. This consultation should be incorporated in the project development prior to construction at the site. As described in Section 4, we feel that many of our recommendations may need to be implemented on a structure by structure basis, especially those pertaining to shallow foundations.

The recommendations presented above are intended to be used only for this project site and the proposed construction which was provided to us. The recommendations presented above are not suitable for adjacent project sites, or for proposed construction that is different than that outlined for this study.

Our recommendations are based on limited field and laboratory sampling and testing. Unexpected subsurface conditions encountered during construction may alter our recommendations. We should be contacted during construction to observe the exposed subsurface soil conditions to provide comments and verification of our recommendations. We are available to review and tailor our recommendations as the project progresses and additional information which may influence our recommendations becomes available.

Please contact us if you have any questions, or if we may be of additional service.

Respectfully, Reviewed

TRAUTNER GEOTECH LLC

Jordan Townsend, E.I., Engineer Intern

Tom R. Harrison, P.E. Geotechnical Engineer

APPENDIX A

Field Study Results

	TRAUTNER® GEOTECHLLC			Field Engineer : T.Harrison Hole Diameter : 3.25" I.D. Hollow Drilling Method : Continuous Flight Auger Sampling Method : Mod. California Sampler Date Drilled : 11/18/2018 Total Depth (approx.) : 71 feet					LOG OF BORING TB-1			
				Total Depth (approx.) Location	: 71 feet : See Figure in	Repo	rt		F	penglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado		
ŀ		0 1 7	147.1			1			T F	Project Number: 55042GE		
	Depth in feet	Sample Type Mod. California Sampler Bag Sample Standard Split Spoon DESCR	<u>\</u>	/ater Level During Drilling /ater Level After Drilling	nscs	GRAPHIC	Samples	Blow Count	Water Level	REMARKS		
-	0-					10	<u>σ</u>		>			
	0- 1- 2- 3- 4-	Man Placed Fill - GRAVEL and sandy, dense, moist, brown CLAY, medium stiff to stiff, very			GP-GC			40/6 13/6 7/6		water level measured about 12 hours after drilling		
	5- 6- 7-	CLAY, medium sun to sun, very			CL							
	2- 3- 4- 5- 5- 8- 10- 11- 12-	CLAY, medium stiff, very moist t	to wet, g	ray	CL			3/6 12/6				
vay\Logs of Test Borings\Alpenglow TB-1.bor	123	CLAY, medium stiff to soft, wet,			CL			5/6 4/6 1/6 3/8				
01-23-2018 T:\Current GE\55000GE thru 55099GE\55042GE, Alpenglow Co-Housing, Ridgeway\Logs of Test Borings\Alpenglow TB-1.bor	3357890	GRAVEL, clayey, sandy, few co dense, wet, brown Bottom of test boring at seventy			SC-GC			80/6 1 / 60/6 1 / 60/6				

	TRA	UTNER® GEOTECH	LLC	Drilling Method Sampling Method	: T.Harrison : 4" Solid : Continuous F : Mod. Californ : 11/18/2018				LO	G OF BORING TB-2	
				Total Depth (approx.) Location	: 9 feet : See Figure in	ı Repoi	rt		Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado		
					1		1		T F	Project Number: 55042GE	
	Depth in feet	Sample Type Mod. California Sampler Bag Sample Standard Split Spoon DESCRI	_	/ater Level During Drilling /ater Level After Drilling	nscs	GRAPHIC	Samples	Blow Count	Water Level	REMARKS	
01-23-2018 T:\Current GE\55000GE thru 55099GE\55042GE, Alpenglow Co-Housing, Ridgeway\Logs of Test Borings\Alpenglow TB-2.bor	0	CLAY, soft, very moist, brown to	gray		CL			2/6 2/6 1/6 3/6	▼	Set monitoring well to nine (9) feet organics in sampler water level measured about 12 hours after drilling	
Jurrent	9-	Bottom of test boring at nine (9) f	eet				1 <u>/ </u>	3/0			
01-23-2018 T:\C	10	(0)									

TR	TRAUTNER GEOTECHLLC	Drilling Method Sampling Method	: J.Townsend : 4" Solid : Continuous F : Mod. Californ : 11/18/2018				LOG OF BORING TB-3			
		,	: 14 feet : See Figure in	Repoi	t		Alpenglow CoHousing Proj Ridgeway CoHousing, LLo c/o Mick Graff Ridgeway, Colorado Project Number: 55042Gl			
Dep in fee	Bag Sample Standard Split Spoon	/ater Level During Drilling /ater Level After Drilling	USCS	GRAPHIC	Samples	Blow Count	Water Level	REMARKS		
co-Housing, Ridgeway/Logs of Test Borings/Alpenglow TB-3.bor	2 - CLAY, soft, wet, brown to gray		CL			2/6 4/6 push/12 3/4 4/6		water level measured about 12 hours after drilling organics in sampler		
01-23-2018	Bottom of test boring at fourteen (14) fee	et								

	TRA	UTNER GEOTECHL	LC	Drilling Method Sampling Method	: J.Townsend : 4" Solid : Continuous F : Mod. Californi : 11/19/2018				LO	G OF BORING TB-4		
				Total Depth (approx.)	: 19 feet : See Figure in	Repoi	t		Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado			
	Depth in feet	Mod. California Sampler	<u> </u>	ater Level During Drilling ater Level After Drilling	nscs	GRAPHIC	Samples	Blow Count	Water Level	Project Number: 55042GE REMARKS		
01-23-2018 T:\Current GE\55000GE thru 55099GE\55042GE, Alpenglow Co-Housing, Ridgeway\Logs of Test Borings\Alpenglow TB-4.bor	10	CLAY, sandy, few gravels, few cobslightly moist, brown CLAY, medium stiff to soft, slightly			CL			12/6 12/6 12/6		clay soils similar to soils encountered in TB-2		
01-23-2018	19— - - 20—	Bottom of test boring at nineteen (19) fee	et		•///			1			

	TRA	RAUTNER GEOTECHLLC	Drilling Method : Sampling Method :	J.Townsend 4" solid Continuous Fl Mod. Californi 11/19/2018 29 feet				Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado			
				Location :	See Figure in	rt					
			1011		1		I I		F	Project Number: 55042GE	
		Sample Type Mod. California Sampler	Water	Level /ater Level During Drilling							
		Bag Sample		/ater Level After Drilling							
		Standard Split Spoon		3				Ę	Ne		
	Depth in				J _w	₩	oles	Sor	r Le	REMARKS	
	feet	DESCR	IPTIO	N	nscs	GRAPHIC	Samples	Blow Count	Water Level	KEWIAKKS	
	0-					1	1 07 1				
	1-	Man Placed Fill - GRAVEL and (sandy, dense, moist, brown	COBBLE	ES, slightly clayey,							
	2-				GP-GC					Old raildoad embankment	
	3-										
	- 4-										
	5-	CLAY, sandy, few gravels, stiff to brown	o very st	tiff, slightly moist,							
	-	Siowii									
	6-										
.por	7-										
/ TB-5	8-										
nglow	9-							34/12			
s\Alpe	10-										
3oring	11 –										
Test	12-										
ogs of	13 <i>-</i> -				CL						
way∖L	14 —										
Ridge	15 <i>-</i>										
using,	16-										
30-Hot	17 <i>-</i> -										
glow (18-										
Alpen	19-										
12GE,	20 –										
15504	21-										
J99GE	22-	GRAVEL and CLAY, sandy, med	dium dei	nse, slightly moist to							
ıru 55(23-	dry, brown									
GE th	24 –										
5500C	25 –				GC-CL						
nt GE	26-										
Currer	27 —										
√:L 8	28-										
01-23-2018 T:\Current GE\55000GE thru 55099GE\55042GE, Alpenglow Co-Housing, Ridgeway\Logs of Test Borings\Alpenglow TB-5.bor	29-	Bottom of test boring at twenty n	ine (29)	feet	1		1		1		
1-,	30 —	, , , ,	· -/								

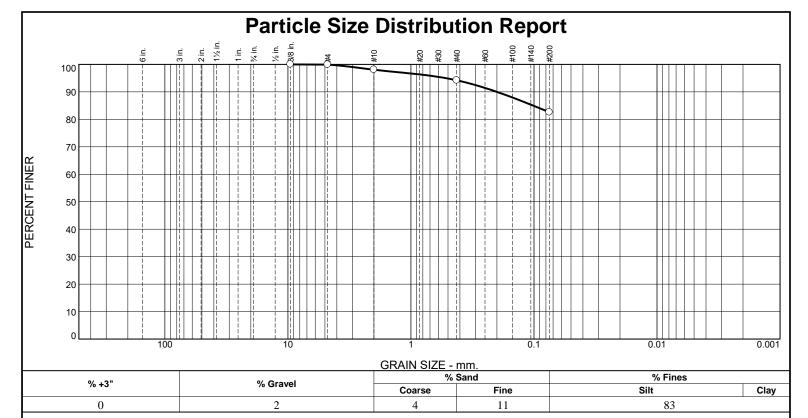
	TRA	RAUTNER GEOTECHLLC		Sampling Method	: J.Townsend : 4" solid : Continuous I : Mod. Califord : 11/19/2018				LO	G OF BORING TB-6		
				Total Depth (approx.) Location	: 9 feet : See Figure i	n Repo	rt		Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado			
	Depth in feet	Mod. California Sampler	▼ W	Level 'ater Level During Drilling 'ater Level After Drilling	nscs	GRAPHIC	Samples	Blow Count	Water Level	Project Number: 55042GE REMARKS		
01-23-2018 T:\Current GE\55000GE thru 55099GE\55042GE, Alpenglow Co-Housing, Ridgeway\Logs of Test Borings\Alpenglow TB-6.bor	0	CLAY, sandy, few gravels, stiff to v brown	very st	iff, slightly moist,	CL			10/6 11/6 8/6 8/6 9/6		Set monitoring well to nine (9) Feet		
01-23-20	- 11—	Bottom of test boring at ten and on	e-half	(10.5) feet								

TRA	UTNER® GEOTECH	LLC	Drilling Method : Sampling Method : Date Drilled :	J.Townsend 4" solid Continuous F Mod. Californ 11/19/2018				LOG OF BORING TB-7			
			Total Depth (approx.) : 19 feet Location : See Figure in Report					Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado			
	Camanda Tama	10/-4	Laval		<u> </u>			F	Project Number: 55042GE		
Depth in feet	Sample Type Mod. California Sampler Bag Sample Standard Split Spoon DESCR	<u>~</u> w	/ater Level During Drilling /ater Level After Drilling	SOSO	GRAPHIC	Samples	Blow Count	Water Level	REMARKS		
0- 1- 2- 3-	Man Placed Fill - GRAVEL and sandy, dense, moist, brown			GP-GC					Old raildoad embankment		
4-	CLAY, sandy, gravelly, stiff, slig			CL			9/6 7/6		hole collapsed, no water measurement after drilling		
11— 12— 13— 14— 15— 16— 18— 19— 20—	CLAY, soft to medium stiff, very	moist, g	ray	CL			1/6 2/6 4/6				
17 — 18 — 19 —	CLAY, soft , wet, gray Bottom of test boring at ninetee	n (10) fo	ot .	CL				▼			
20-	poulon or lest boning at hineteer	ı (ı ə) ıe	σι								

	TRA	TRAUTNER® GEOTECHLLC		Drilling Method : Sampling Method :	J.Townsend 4" solid Continuous F Mod. Californ 11/19/2018				LOG OF BORING TB-8			
				Total Depth (approx.) : Location :	19 feet See Figure in	Repoi	t		Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado			
		0 1 7	10/ 1		1	1			F	Project Number: 55042GE		
	Depth in feet	Sample Type Mod. California Sampler Bag Sample Standard Split Spoon DESCR	<u> </u>	/ater Level During Drilling /ater Level After Drilling	nscs	GRAPHIC	Samples	Blow Count	Water Level	REMARKS		
	0- - 1- 2-	Man Placed Fill - GRAVEL and sandy, dense, moist, brown			GP-GC					Existing roadway shoulder embankment		
penglow TB-8.bor	3	CLAY, medium stiff, slightly moi	st to mo	ist, brown to gray	CL			4/6 5/6 7/6		hole collapsed, no water measurement after drilling		
01-23-2018 T:\Current GE\55000GE thru 55099GE\55042GE, Alpenglow Co-Housing, Ridgeway\Logs of Test Borings\Alpenglow TB-8.bor	10	CLAY, soft to medium stiff, very	moist, b	rown to gray	CL				•			
-23-2018 T:\Curren	18 — - - 19 —	Bottom of test boring at nineteer	า (19) fe	et	CL							
01	20 –											

APPENDIX B

Laboratory Test Results



	TEST RESULTS												
Opening	Percent	Spec.*	Pass?										
Size	Finer	(Percent)	(X=Fail)										
.375	100												
#4	100												
#10	98												
#40	94												
#200	83												

Material Description CL-Lean Clay with Sand Atterberg Limits (ASTM D 4318) **PL=** 18 Classification
AASHTO (M 145)= USCS (D 2487)= CL A-6(17)Coefficients D₉₀= 0.2004 D₅₀= D₁₀= D₈₅= 0.1016 D₃₀= C_u= Remarks Date Received: 1-23-18 **Date Tested:** 1-26-18 Tested By: C. Campbell & G. Jadrych Checked By: J. Townsend Title: EI

* (no specification provided)

Location: Bulk Sample Number: 12049-AH Date Sampled: 1-23-18

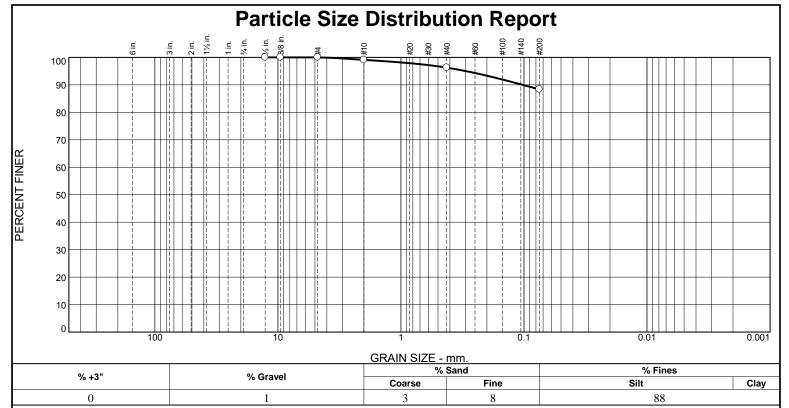
TRAUTNER GEOTECHILC

Client: Ridgeway CoHousing LLC/Mick Graff

Project: Alpenglow Co-Housing, Ridgeway

Project No: 55042GE Figure

Tested By: Checked By:



	TEST RESULTS				
Opening	Percent	Spec.*	Pass?		
Size	Finer	(Percent)	(X=Fail)		
.50	100				
.375	100				
#4	100				
#10	99				
#40	96				
#200	88				
* ,	:C::: d - d)				

	<u>Materia</u>	<u> Description</u>			
CL-Lean Clay					
PL= 20	Atterberg Lim	nits (ASTM D 4318)	24		
PL= 20	LL= 4	+	24		
11000 (D.0407)		sification	A 7 ((22)		
USCS (D 2487)=	CL	AASHTO (M 145)=	A-7-6(22)		
		efficients			
D ₉₀ = 0.1024 D ₅₀ =	D ₈₅ = D ₃₀ =	D ₆₀ = D ₁₅ =			
D ₁₀ =	C _u =	C _C =			
	D.	emarks			
	10	ciliai ko			
Date Received	: 1-24-18	Date Tested:	1-25-18		
Tested Bv	Tested By: J. Townsend & G. Jadrych				
Checked By					
Title: EI					

Date Sampled: 1-24-18

(no specification provided)

Location: Test Boring 1 Sample Number: 12049-E

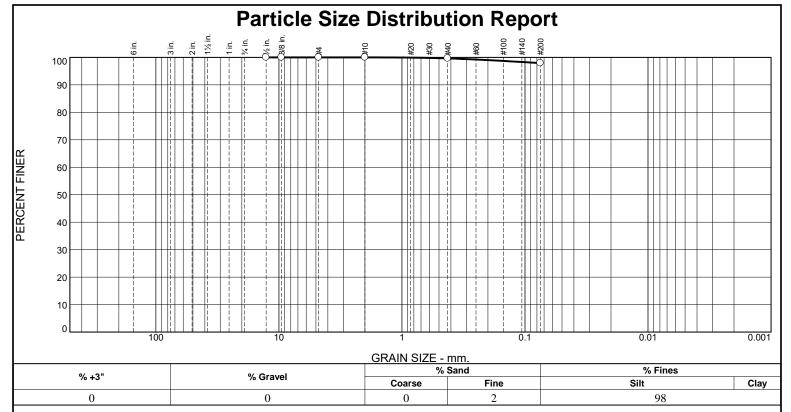
Depth: 8 1/2'-14 1/2'

Client: Ridgeway CoHousing LLC/Mick Graff
Project: Alpenglow Co-Housing, Ridgeway

TRAUTNER GEOTECHILC

Project No: 55042GE Figure

Tested By: _____ Checked By: ____



TEST RESULTS			
Opening	Percent	Spec.*	Pass?
Size	Finer	(Percent)	(X=Fail)
.50	100		
.375	100		
#4	100		
#10	100		
#40	100		
#200	98		
*			

	<u>Material</u>	Description			
CH-Fat Clay					
	Atterberg Limi	its (ASTM D 4318)			
PL= 22	LL= 61	PI=	39		
USCS (D 2487)=		sification AASHTO (M 145)=	A-7-6(43)		
	Coef	fficients			
D ₉₀ = D ₅₀ =	D ₈₅ = D ₃₀ =	D ₆₀ =			
D ₁₀ =	C _u =	D ₁₅ = C _c =			
Remarks					
Date Received: 1-24-18 Date Tested: 1-25-18					
Tested By: G. Jadrych & J. Townsend					
Checked B	Checked By: J. Townsend				
Title	e: <u>EI</u>				

Date Sampled: 1-24-18

(no specification provided)

Location: Test Boring 1
Sample Number: 12049-I
Depth:

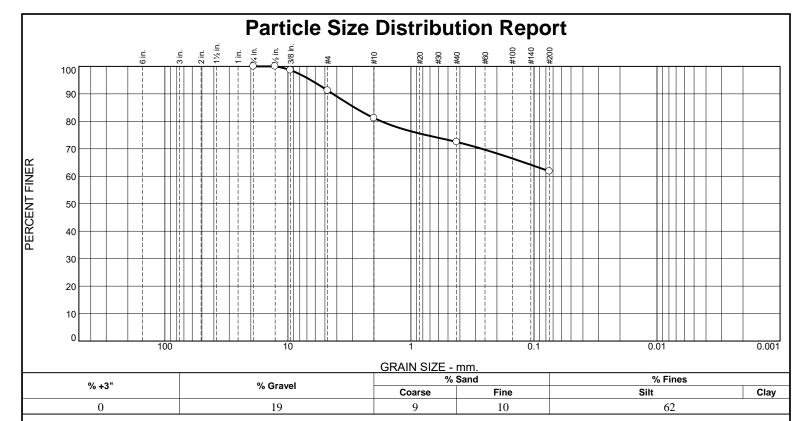
Depth: 29 1/2'

TRAUTNER GEOTECHLLC

Client: Ridgeway CoHousing LLC/Mick Graff
Project: Alpenglow Co-Housing, Ridgeway

Project No: 55042GE Figure

Tested By: _____ Checked By: ____



	TEST RESULTS			
	Opening	Percent	Spec.*	Pass?
	Size	Finer	(Percent)	(X=Fail)
Г	.75	100		
	.50	100		
	.375	99		
	#4	91		
	#10	81		
	#40	72		
	#200	62		
_		1		

	Material Description				
CL-Sandy Lean Cl	lay				
		(10=11=1010)			
PL= 17	Atterberg Limit LL= 41	s (ASTM D 4318) PI=	24		
		fication			
USCS (D 2487)=	CL A	AASHTO (M 145)=	A-7-6(12)		
D ₉₀ = 4.3135 D ₅₀ = D ₁₀ =	D ₈₅ = 2.86. D ₃₀ = C _u =	<u>icients</u> 50 D ₆₀ = D ₁₅ = C _c =			
	Remarks				
Date Received	Date Received: 1-24-18 Date Tested: 1-26-18				
Tested By: G. Jadrych					
Checked By	y: J. Townsend				
Title	Title: EI				

Date Sampled: 1-24-18

Figure

(no specification provided)

Location: Test Boring 4
Sample Number: 12049-V
De

Depth: 5'-14'

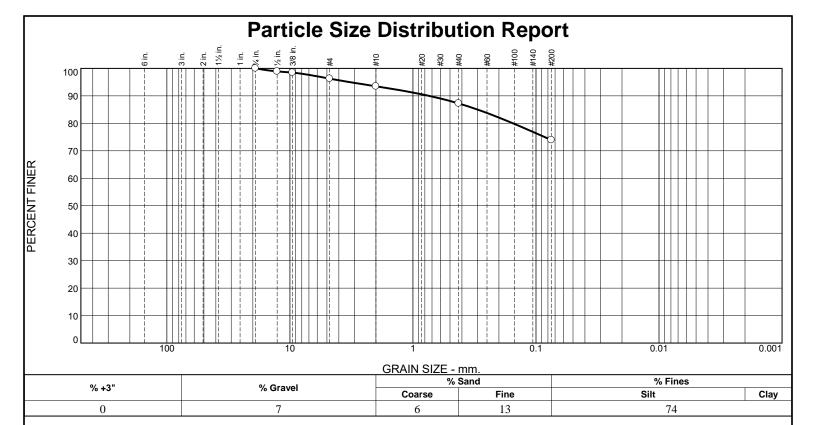
Client: Ridgeway CoHousing LLC/Mick Graff
Project: Alpenglow Co-Housing, Ridgeway

55042GE

Tested By: Checked By:

Project No:

TRAU	ITNER	C GEC	DTECH	LLC



TEST RESULTS			
Opening	Percent	Spec.*	Pass?
Size	Finer	(Percent)	(X=Fail)
.75	100		
.50	99		
.375	98		
#4	96		
#10	93		
#40	87		
#200	74		
* /			

Material Description CL-Lean Clay with Sand Atterberg Limits (ASTM D 4318) LL= 37 Pl= **PL=** 18 Classification AASHTO (M 145)= USCS (D 2487)= CL A-6(13)Coefficients D₉₀= 0.7407 D₅₀= D₁₀= D₈₅= 0.2983 D₃₀= C_u= Remarks Date Received: 1-24-18 **Date Tested:** 1-26-18 Tested By: C. Campbell & G. Jadrych Checked By: J. Townsend Title: EI

Date Sampled: 1-24-18

(no specification provided)

Location: Test Boring 5
Sample Number: 12049-X
Depth: 0'-9'

Client: Ridgeway CoHousing LLC/Mick Graff

Project: Alpenglow Co-Housing, Ridgeway

Project No: 55042GE Figure

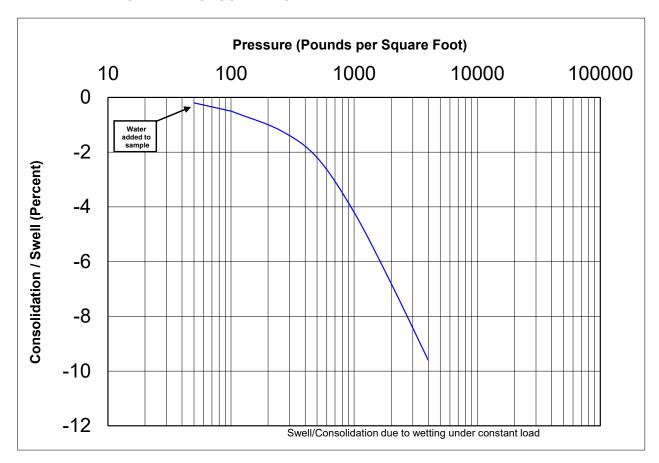
TRAUTNER GEOTECHLLC

Tested By: _____ Checked By: _____

TRAUTNER® GEOTECHLLC

GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

SWELL - CONSOLIDATION



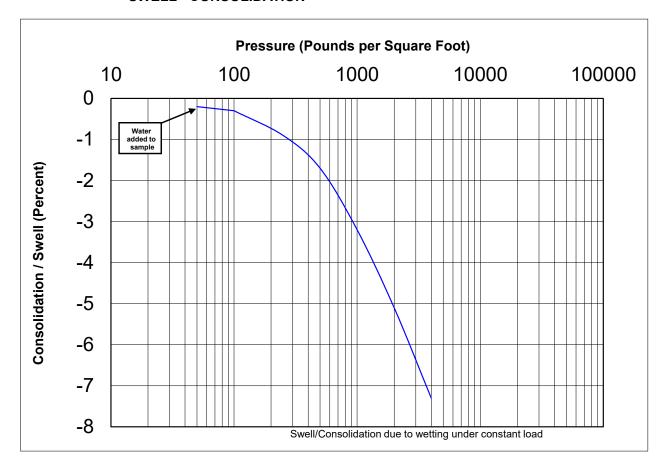
SUMMARY OF TEST RESULTS				
Sam	ple Source:	TB	3 - 1 @ 7.5'	
Soil	Description:		CL	
Constant Volume	e Swell Press	sure (P.S.F):	Consoli	dated
Graphica	al Swell Pressure (P.S.F):		Consolidated	
			Initial	Final
	Moisture Content (%):		31.6	28.4
	Dry Density (P.C.F):		88.9	96.8
	Height (in.):		1.000	0.904
	Di	ameter (in.):	1.94	1.94

Project Number:	55042GE
Date:	1/24/2018
Figure:	4.1

TRAUTNER® GEOTECHILC

GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

SWELL - CONSOLIDATION



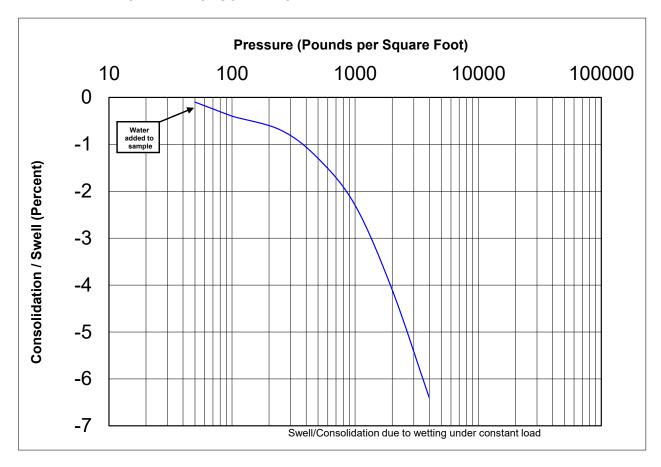
SUMMARY OF TEST RESULTS				
Sam	iple Source:	TB	- 1 @ 14.5'	
Soil	Description:		CL	
Constant Volume	e Swell Press	sure (P.S.F):	Consoli	dated
Graphica	al Swell Pressure (P.S.F):		Consolidated	
			Initial	Final
	Moisture Content (%):		26.5	23.7
	Dry Density (P.C.F):		98.6	108.1
	Height (in.):		1.000	0.927
	Di	ameter (in.):	1.94	1.94

Project Number:	55042GE
Date:	1/24/2018
Figure:	4.2

TRAUTNER® GEOTECHLLC

GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

SWELL - CONSOLIDATION



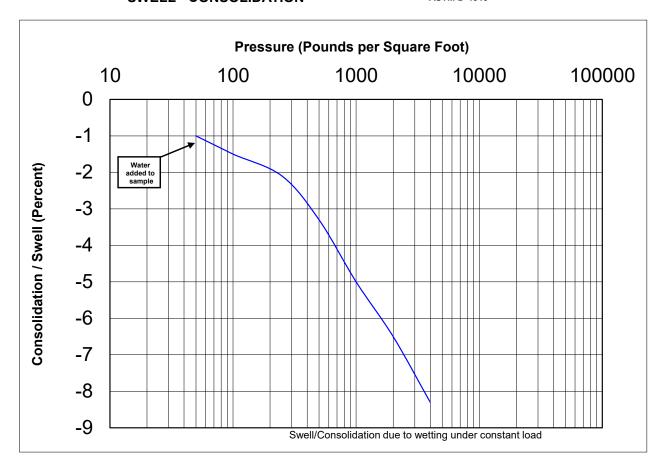
SUMMARY OF TEST RESULTS				
Sam	ple Source:	TB	- 1 @ 19.5'	
Soil	Description:		CL	
Constant Volume	e Swell Press	sure (P.S.F):	Consoli	dated
Graphical Swell Pressure (P.S.F):		Consoli	dated	
			Initial	Final
	Moisture Content (%):		28.3	27.1
	Dry Density (P.C.F):		95.3	101.2
	Height (in.):		1.000	0.936
	Diameter (in.):		1.94	1.94

Project Number:	55042GE
Date:	1/24/2018
Figure:	4.3

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GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

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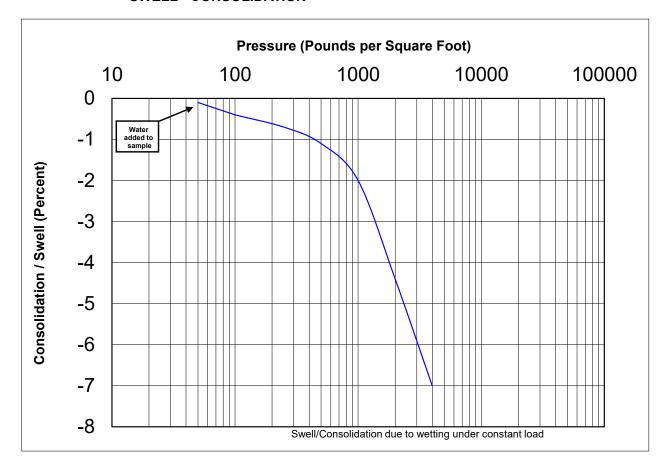
SUMMARY OF TEST RESULTS				
Sam	nple Source:	Т	B - 2 @ 3'	
Soil	Description:		CL	
Constant Volume	e Swell Press	sure (P.S.F):	Consoli	dated
Graphical Swell Pressure (P.S.F):		Consoli	dated	
			Initial	Final
	Moisture Content (%):		27.0	22.7
	Dry Density (P.C.F):		97.7	106.4
	Height (in.):		1.000	0.917
	Diameter (in.):		1.94	1.94

Project Number:	55042GE
Date:	1/25/2018
Figure:	4.4

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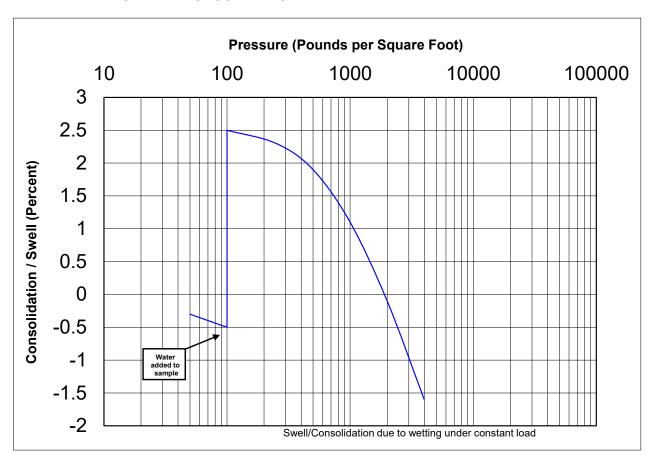
SUMMARY OF TEST RESULTS				
Sam	ple Source:	TE	3 - 3 @ 4'	
Soil	Description:		CL	
Constant Volume	Swell Press	sure (P.S.F):	Consoli	dated
Graphical Swell Pressure (P.S.F):		Consolidated		
			Initial	Final
	Moisture	Content (%):	23.3	22.3
	Dry Density (P.C.F):		101.0	108.4
	Height (in.):		1.000	0.930
	Di	ameter (in.):	1.94	1.94

Project Number:	55042GE
Date:	1/25/2018
Figure:	4.5

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GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

SWELL - CONSOLIDATION



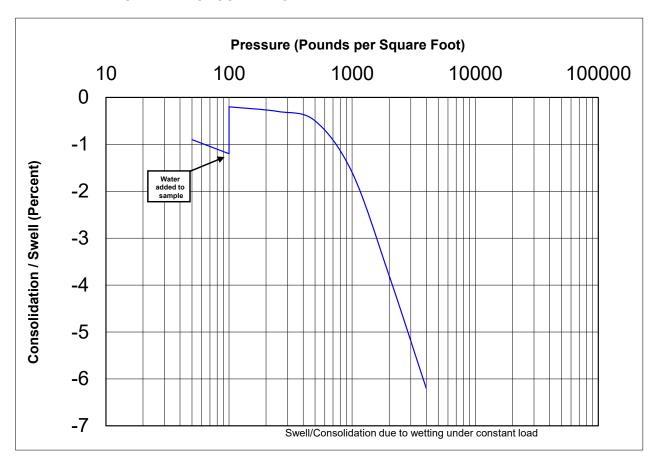
SUMMARY OF TEST RESULTS				
Sam	ple Source:	TI	B - 4 @ 4'	
Soil	Description:		CL-SC	
Constant Volume	e Swell Press	sure (P.S.F):	2,03	30
Graphica	Graphical Swell Pressure (P.S.F):		3,300	
			Initial	Final
	Moisture Content (%):		10.7	18.3
	Dry Density (P.C.F):		111.6	114.6
	Height (in.):		1.000	0.984
	Diameter (in.):		1.94	1.94

Project Number:	54042GE
Date:	1/25/2018
Figure:	4.6

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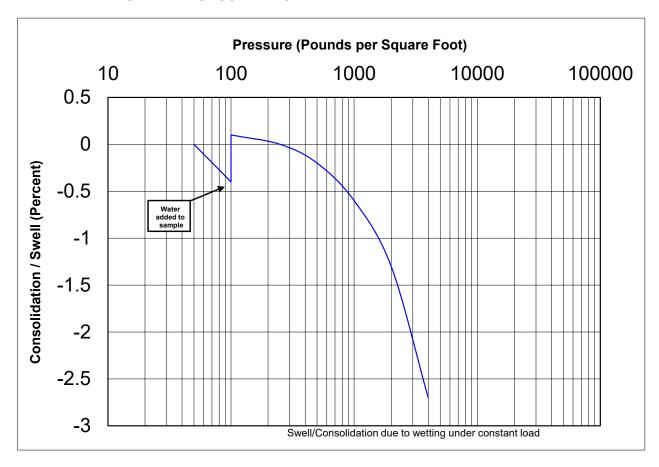
SUMMARY OF TEST RESULTS				
Sam	ple Source:	TB	3 - 6 @ 5.5'	
Soil	Description:		CL	
Constant Volume	Swell Press	sure (P.S.F):	70	0
Graphical Swell Pressure (P.S.F):		90	0	
			Initial	Final
	Moisture Content (%):		7.6	17.2
	Dry Density (P.C.F):		110.2	116.1
	Height (in.):		1.000	0.938
	Diameter (in.):		1.94	1.94

Project Number:	54042GE
Date:	1/25/2018
Figure:	4.7

TRAUTNER® GEOTECHILG

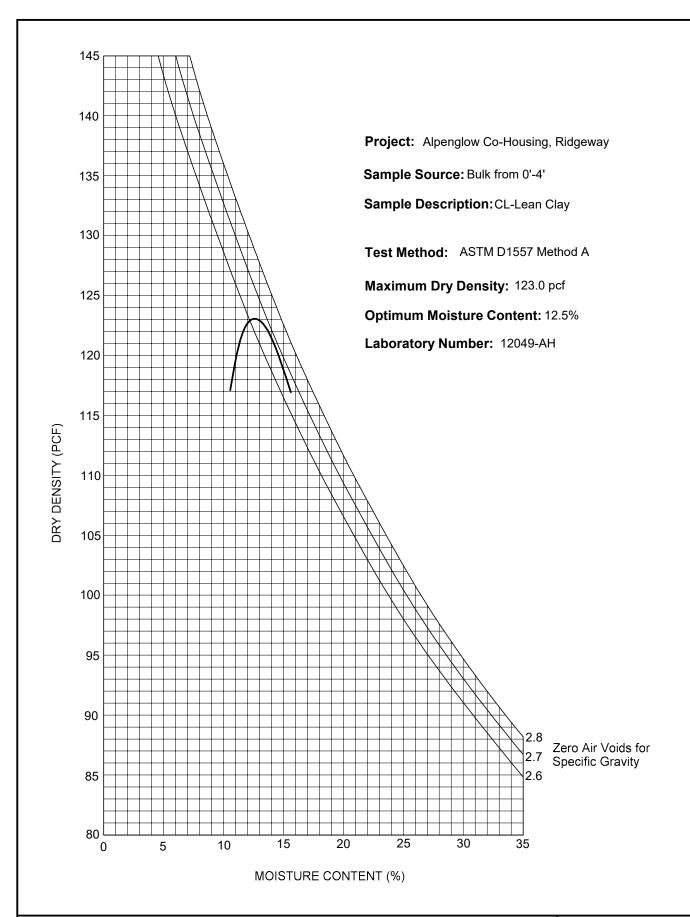
GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

SWELL - CONSOLIDATION



SUMMARY OF TEST RESULTS				
Sam	ple Source:	Т	B - 7 @ 4'	
Soil	Description:		CL	
Constant Volume	e Swell Press	sure (P.S.F):	60	0
Graphical Swell Pressure (P.S.F):		80	0	
			Initial	Final
	Moisture Content (%):		15.6	20.0
	Dry Density (P.C.F):		103.7	107.1
	Height (in.):		1.000	0.973
	Diameter (in.):		1.94	1.94

Project Number:	54042GE
Date:	1/30/2018
Figure:	4.8





Project No.: 55042GE

Date: 1/24/18

Figure:



California Bearing Ratio Test Results ASTM D-1883

PROJECT NAME:	Alpenglow	SAMPLE DATE:	1/19/2018
PROJECT #:	55042GE	TEST DATE:	2/2/2018

Sample Source: Bulk from 0' to 4'

Sample Description: CL

Proctor Method: ASTM D 1557-A

Max Dry Density: 123.0 PCF Optimum Moisure Content: 12.5 %

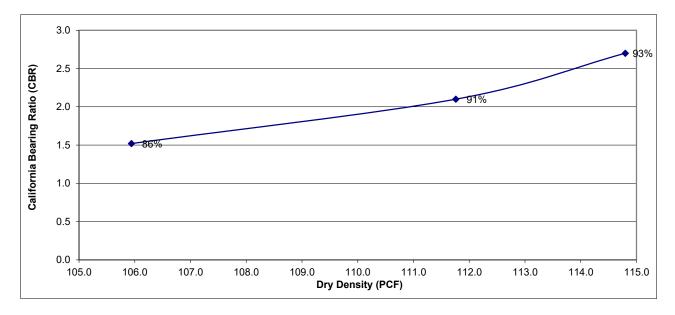
Condition: soaked
Surcharge: 15 Lbs

Pre-Soak After 72 hour Soak

Dry Density Moisture Relative (PCF) Content (%) Compaction 105.9 13.2 86% 13.0 91% 111.8 114.8 13.1 93%

	Content of		
Dry Density	Top One (1)		CBR (0.100"
(PCF)	Inch (%)	Swell (%)	penetration)
101.7	24.9	2.8	1.5
105.6	24.4	2.5	2.1
106.1	23.7	3.6	2.7

Moisture



CBR @ 90% Compaction: 2.0 GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

Direct Shear Test Results:

ASTM D-3080

Direct Shear Test Results:

1000

500

0

1000

2000

3000

4000

Normal Stress (PSF)

5000

6000

7000

Project: Project Number: 54042GE

Laboratory Number: 12049-F Sample Date: 1/18/2018 1/22/2018 **Test Date:** Technician: JT

Alpenglow		
Sample Source:	TB - 1 @ 8.5' - 14.5'	
Visual Soil Description:	CL	
Type of Specimen:	Remolded Square Shear Box	

Diameter: 2.5 in 1.0 in Height:

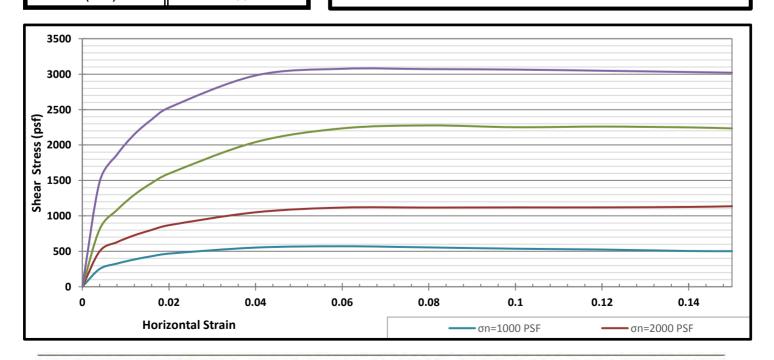
Summary of Sample Data:	σ_n =4000 PSF
Initial Moisture Content (%):	30.2
Intial Dry Density (PCF):	95.1
Final Moisture Content (%):	25.5
Final Dry Density (PCF):	108.1

Summary of Sample Data:	σ_n =2000 PSF
Initial Moisture Content (%):	29.8
Intial Dry Density (PCF):	94.0
Final Moisture Content (%):	25.5
Final Dry Density (PCF):	103.0

Summary of Sample Data: σ_n =1000 PSF			
Initial Moisture Content (%):	30.5		
Intial Dry Density (PCF):	99.0		
Final Moisture Content (%):	26.9		
Final Dry Density (PCF):	103.9		

ESTIMATED AVERAGE STRENGTH PARAMETERS			
Angle of Internal	23		
Friction, φ (°):	23		
Cohesion (PSF):	250		

Normal St	ress, σ _n (PSF):	6000	4000	2000
Ultimate Shear Stress, τ _{ult} (PSF): 3			2200	1100
3500				$\overline{\Box}$
Shear Stress (PSF) 0000 00000 00000	4,000 PSF		6,000 PS	
Ultimate Sh	2,000 PSF			



TRAUTNER GEOTECHLLC

GEOTECHNICAL ENGINEERING, MATERIAL TESTING AND ENGINEERING GEOLOGY

September 7, 2018

Ridgway Cohousing, LLC c/o Mick Graff, Client's representative: mickgraff4@gmail.com
(970) 325-0405
2490 County Rd 17
Ridgway, Colorado 81432

PN:55042GE

Subject: Alpenglow CoHousing Project

Addendum of Geotechnical Engineering Recommendations

Ridgeway, Colorado

Mr. Graff,

This letter presents additional geotechnical engineering recommendations for the Alpenglow CoHousing project based on our observations of the additional test holes advanced on August 31, 2018 at the project site. This letter is an addendum to our March 12, 2018 report presenting our Geotechnical Engineering Recommendations for the subject project.

We observed the soil conditions exposed in five (5) additional test holes excavated with a rubber-tired backhoe at the project site to supplement the subsurface soil and water information from our original report. We obtained hand drive samples and performed Torvane Shear tests on the soils exposed in some of the test holes. The Torvane shear tests resulted in an average maximum shear value of 9 ksf (kips per square foot) in the unsaturated clay soils and 2.6 ksf in the saturated clay soils.

We have not performed any additional laboratory testing at this time; however, we are available to perform additional laboratory tests, if desired. The approximate locations of the additional test holes are presented in Figure 2 at the end of this letter after the signature. The logs of the test holes are presented at the end of this letter.

We observed previously placed fill material, likely associated with the old railroad yard, from the existing ground surface to depths of 2 to 4 feet in Test Holes 9, 10, and 13. The fill material consisted of pit run type material overlying a layer of gravel to cobble sized lump coal material. Below the fill and from the ground surface in the Test Holes 11 and 12, we observed sandy clay soil material to the bottom of the test holes. Organics were observed in the upper 1 to 2 feet. The moisture content of the clay soils increased significantly in Test Holes 9, 10, 12, and 13 at depths of 4, 5, 3, 6 feet, respectively. We observed a transition of moisture content in Test Hole 13 between depth of 6 feet to 8 feet, where half of the soils exposed in the test hole were very moist and the other half was only slightly moist. We feel this test hole was advanced along the line from where the soils transition from slightly moist to very moist.

Based on the information obtained in the test holes and observations of the vegetation changes on the ground surface, we have a drawn an approximate transition line in Figure 1 below where we feel the shallow site soils had a significant increase in moisture content. We suspect this increase in moisture is related to Cottonwood Creek and existing site drainage.

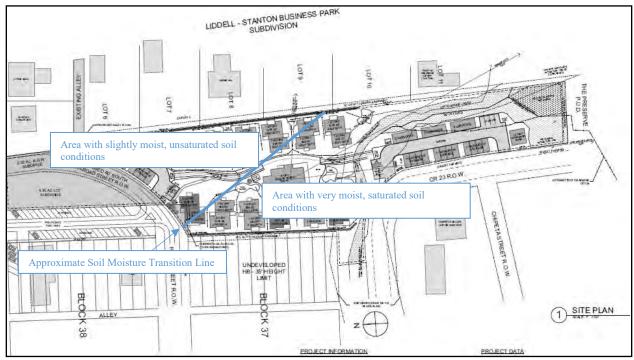


Figure 1; Approximate moisture content transition line

We observed free subsurface water at depths between 8 and 9 feet directly after the test holes where advanced. We allowed the water to rise in Test Hole 10 during our field visit and the subsurface water elevation rose from 8.5 feet to 7 feet after approximately 2 hours on-site. We measured water level in the stand pipe piezometers we installed during our original field study in Test Borings 2 and 6. We measured water in Test Boring 2 at 7.3' during our August 31, 2018 site visit. Test Boring 6 piezometer was dry.

Based on the additional subsurface soil and water information obtained, we feel in the areas with slightly moist, unsaturated shallow soil conditions, the recommendations provided in Section 5.1.2 in our March 12, 2018 report are appropriate for the site conditions observed.

In the areas where very moist, saturated, shallow soils we observed, the recommendations presented in Section 5.1.1 of our March 12, 2018 report should be modified to include the following;

- The bearing capacity of the foundation systems in the saturated soil area may be designed using a net allowable bearing capacity of 1,300 psf, with 3 feet of footing embedment. The bearing capacity will be lower if the embedment depth of the footing is less than 3 feet. All footings should have a minimum depth of embedment of at least 1 foot. We should be contacted for additional recommendations if the footings will be embedded less than 3 feet.
- The foundation excavation should be excavated to at least two (2) feet below the bottom of footing support elevation.
- The natural soils should be proof compacted followed by placement of a geogrid material, such as Tensar's TriAx TX140.
- A two (2) foot layer of clean screened aggregate material should be placed in 6 to 8-inch lifts and vibratory plate compacted. The clean screened aggregate material should have a nominal maximum aggregate size of one (1) inch with no more than 5% passing the #4 sieve.



PN:55042GE September 7, 2018 Page 3

- The lateral extent of the geogrid and structural fill should extend a minimum horizontally at least equal to the thickness of the structural fill.
- If organics or existing fill material is encountered at the bottom of the excavation, then the excavation should be extended down through these materials, and replaced with compacted structural fill material. No more than three (3) feet of structural fill should be placed under structural components.
- We should be contacted to observe the conditions exposed in the foundation excavation prior to placement of the clean screened aggregate fill material.

In areas where a building is located along the soil moisture transition line, then these foundation designs should follow the design recommendations for saturated soil conditions.

The recommendations contained in this letter are based on our field observations, our previous Geotechnical Engineering Study and our experience in the area. We make no warranty as to these recommendations, either expressed or implied. All other recommendations from our previous report should be followed unless otherwise noted. We should provide continued consultation as the design process progresses. We are also available to provide additional laboratory/field testing for the subject project at your request.

Please contact us if you have any questions or desire additional information.

Respectfully, Trautner Geotech LLC

Tom R. Harrison, PE



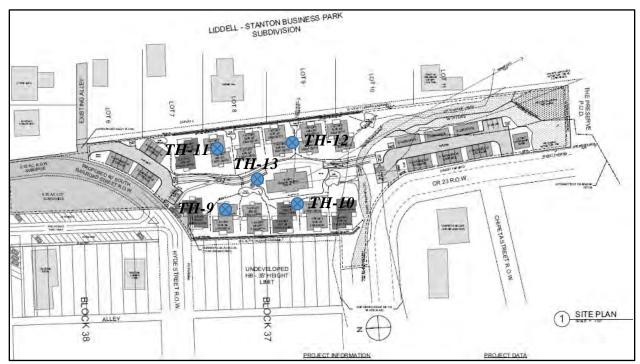


Figure 2; Approximate Test Hole location map

TRA	UTNER® GEOTECH	LLC	Hole Diameter : 4 Drilling Method : B Sampling Method : H	.Townsend " solid ackhoe land Sample 8/31/2018	r		LC)G	OF TEST HOLE TH-9	
			Total Depth (approx.) : 1 Location : S	0 feet See Figure 2	in Lett		Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado			
	0 1 7	10/ 1						P	roject Number: 55042GE	
	Sample Type	Water								
	Hand Drive Sample		/ater Level During Excavatio	n						
	Bag Sample	_	/ater Level After Excavation					1_1		
					ပ	,	Blow Count	Water Level		
Depth in				S	푼) 	ပိ	ا يًا	REMARKS	
feet	DESCRI	PTIO	N	nscs	GRAPHIC	Samples	NO.	ate	NEWARKS	
	DESCIN	1101	<u> </u>	ä	Ö	ű	<u> </u>			
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27	Man-placed fill, Coal, sandy, loos	se, mois	t, black to brown							
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3-				СО						
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'-	CLAY, soft to medium stiff, very i	moist, b	rown to gray			IN /II				
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	Clay, soft to medium stiff, wet, br	own to	gray							
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10-										
'	Bottom of Test Hole at 10 feet									
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11-										

TRA	UTNER® GEOTECH	LLC	Drilling Method Sampling Method Date Drilled	: J.Townsend : 4" solid : Backhoe : Hand Sample : 08/31/2018	r		LC	G (OF TEST HOLE TH-10	
			Total Depth (approx.) Location	: 10 feet : See Figure 2 i	in Lett	er		Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado		
	Sample Type	Water	l evel						Project Number: 55042GE	
	Hand Drive Sample		/ater Level During Excava	tion						
	Bag Sample		/ater Level After Excavation							
			ator Edvor/ ittor Excavation	5			±	<u>ē</u>		
Depth					GRAPHIC	es	Blow Count	Water Level		
in feet	DECODI	DTIO	\1	USCS	₹	Samples) w	ater	REMARKS	
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-	Man-placed fill, Coal, sandy, loos	se, mois	t, black to brown							
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2-	CLAY, medium stiff, slightly moist	t to moi	st, brown							
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3-										
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4-						<i>7///</i> //				
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7-									Water rose to 7 feet after	
]									approxiamtely 2 hours	
8-										
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10	Bottom of Test Hole at 10 feet				<u> </u>					
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TRA	UTNER GEOTECH	LLC	Hole Diameter Drilling Method Sampling Method	: J.Townsend : 4" solid : Backhoe : Hand Sample	r		LO	G (OF TEST HOLE TH-11			
			Total Depth (approx.)						Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado Project Number: 55042GE			
Depth in feet	Sample Type Hand Drive Sample Bag Sample DESCR		/ater Level During Excavat /ater Level After Excavatio		GRAPHIC	Samples	Blow Count	Water Level	REMARKS			
0-	CLAY, silty, organics, moist, brow	wn		CL								
1— 2— 3— 4— 5— 6— 7— 8—	Clay, sandy, shale fragments, sti	iff, slight	tly moist, brown	CL					Gravel layer at 5 feet			
9-	Bottom of Test Hole at 8 feet											
11—												

TRA	UTNER® GEOTECH	LLC	Drilling Method Sampling Method Date Drilled	: J.Townsend : 4" solid : Backhoe : Hand Sample : 08/31/2018	r		LC	G (OF TEST HOLE TH-12	
			Total Depth (approx.) Location	: 9 feet : See Figure 2	in Lett	er		Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado Project Number: 55042GE		
	Sample Type	Water	l evel						Toject Number: 33042GL	
	Hand Drive Sample		/ater Level During Excava	ation						
	Bag Sample		/ater Level After Excavati							
							nt	 		
Depth					₹	les	Cou	È	D=144 D160	
in feet	DESCRI	DTIO	NI	nscs	GRAPHIC	Samples	Blow Count	Water Level	REMARKS	
	DESCIN	- 1101	<u> </u>		ত	ιχ	B			
0-	CLAY, silty, organics, moist, brov	vn								
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	Clay, soft to medium stiff, wet, br	own to	gray							
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	Bottom of Test Hole at 9 feet									
10-										
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11-										

TRA	UTNER® GEOTECH	LLC	Drilling Method : Sampling Method :	J.Townsend 4" solid Backhoe Hand Sample 08/31/2018	r		LO	G	OF TEST HOLE TH-13	
			Total Depth (approx.) : Location :	8 feet See Figure 2	in Lett		Alpenglow CoHousing Project Ridgeway CoHousing, LLC c/o Mick Graff Ridgeway, Colorado			
				1	1	I		1	Project Number: 55042GE	
	Sample Type	Water								
	Hand Drive Sample		/ater Level During Excavation							
	Bag Sample	$\overline{\Delta}$ M	/ater Level After Excavation					_		
Depth					_ ⊆	ر س	unu	eve		
in				ပ္ပ	풀	ble	3	l le	REMARKS	
feet	DESCR	IOITGI	N	SOSU	GRAPHIC	Samples	Blow Count	Water Level		
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"	Man Placed Fill - GRAVEL and C	COBBLE	S, slightly clayey,							
	sandy, organics, loose, moist, br	own								
]				GP						
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1										
-	Man-placed fill, Coal, sandy, loos	se, mois	t, black to brown							
2-										
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]				со						
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-										
4-										
"	CLAY, stiff, slightly moist, brown									
-										
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5-				CL						
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-										
6-									Half of the soils exposed in the test	
	Clay, soft to medium stiff, slightly	/ moist t	o very moist, brown			1			hole was very moist from 6 to 8 feet	
	to gray								and half was slightly moist	
7-				CL						
]						1				
-						1				
8-										
	Bottom of Test Hole at 8 feet									
-										
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10-										
<u>, </u>										
11-										

DRAINAGE REPORT

ALPENGLOW COHOUSING TOWN OF RIDGWAY OURAY COUNTY COLORADO

May 2019 Revised: April 2019 SGM Project No: 2018-134.001

Prepared by



744 HORIZON COURT, SUITE 250 GRAND JUNCTION, CO 8 I 506 970.245.257 I



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 - 1. Storm Sewers Report



CERTIFICATION

I hereby certify that this "Drainage Report" for the design of Alpenglow CoHousing development in the Town of Ridgway was prepared by me (or under my direct supervison) in accordance with the provisions of the Town of Ridgway's stormwater management standards for the owners thereof. I understand that the Town of Ridgway does not and will not assume liability for drainage facilities designed by others.

Registered Professi

State of Colorado No.



EXECUTIVE SUMMARY

SGM performed an in-depth drainage analysis for the proposed residential Ridgway Cohousing Project. This development is on a 4.5 acre parcel in the Town of Ridgway, south of Sherman Street, west of the Uncompanyanger River, with Cottonwood Creek running through the middle of it. The drainage is split to the north and south by the creek. The site is sloped west to east towards the Uncompanyanger River. Current runoff from the north drainage area flows to the northeast corner of the property, passes through a culvert under Sherman Street, and is retained by the ditch with no downstream outfall. Runoff from the south drainage area flows into Cottonwood Creek.

The proposed development is a dense arrangement of townhomes, garages, and common areas. The onsite drainage plan consists of multiple distributed small detention ponds, swales, an underground detention chamber, and a storm drain collection system. The proposed runoff from the north drainage areas will be collected in the Town's existing storm sewer system in Sherman Street. Runoff from the south drainage areas are routed to the creek, same as existing. The surface drainage features will provide additional benefit as landscaping features and rain gardens for the Cohousing community.

The Town of Ridgway requires drainage conditions of proposed developments to match existing conditions for the 10 year and 100 year precipitation events. The proposed routing and detention facilities reduce the 10- and 100-year peak flows as compared to the existing condition. However, due to shorter flow paths and channelized flows, time to peak flow decreases. This is mitigated by the the smaller peak flow rates and the improved stormwater management at the proposed outfall of the north drainage area. Overall, the proposed plan improves drainage for the site because runoff is directed into the storm sewer system or Cottonwood Creek as opposed to flowing unmanaged into adjacent properties as it does in the existing condition.

For full Drainage Report, contact Town Hall.



Certificate of Dedication and Ownership:

KNOW ALL MEN BY THESE PRESENTS that the undersigned, being the owner(s) of certain lands in the Town of Ridgway, Colorado, to wit:

A tract of land located in Section 16, Township 45 North, Range 8 West, New Mexico Principal Meridian, Town of Ridgway, County of Ouray, State of Colorado, described in a Warranty Deed dated 12—3—1999 and recorded at Reception No. 171272 in the office of the Ouray County Clerk & Recorder, being more particularly described as follows:

Beginning at the Northeast corner of said Block 38 of said Town of Ridgway; thence South 88° 32' 06" East 66.00 feet along the South right-of-way line of Sherman Street (also being Colorado State Highway No. 62) to the true point of beginning, defined by a rebar and 2-inch metal survey cap, LS 28662, whence the Southwest Corner of the Liddell-Stanton Business Park Subdivision Plat, Ouray County Public Records Reception No. 135151, defined by a rebar and 1-1/2-inch metal survey cap, LS 10738, bears South 09° 32′ 16″ East 1159.35 feet, all bearings described herein being relative thereto; thence South 88° 32' 06" East 102.55 feet to a Witness Corner to the Northwest corner of a tract described by Quiet Title Decree recorded in Book 212, Page 398, Ouray County public records, and as shown on Boundary Agreement Plat recorded at Reception No. 142777, Ouray County public records, defined by a rebar and 2—inch metal survey cap, LS 28662; thence South 88° 32' 06" East 6.00 feet; thence South 03° 59' 27" East 142.94 feet to the Southwest corner of the tract described in said Quiet Title Decree and Boundary Agreement Plat, defined by a 5/8—inch rebar and 2—inch metal survey cap, LS 31160; thence North 87° 44' 22" East 14.02 feet to the Northwest corner of the alley shown on the said Liddell—Stanton Business Park Subdivision Plat, defined by a rebar and 1-1/2-inch metal survey cap, LS 12180; thence South 03° 25' 04" East 1000.29 feet to the Southwest corner of said subdivision, being the South boundary of the N1/2 SW1/4 of said Section 16 defined by a rebar and 1-1/2—inch metal survey cap, LS 10738; thence North 89° 00′ 56" West 124.51 feet along said South boundary to the East right-of-way line of Ouray County Road No. 23, defined by a 5/8—inch rebar and 2—inch metal survey cap, LS 31160; thence North 04° 28′ 14" West 177.79 feet along said right-of-way to a rebar and 1-1/2-inch metal survey cap. LS 12180: thence North 07° 40' 13" West 159.13 feet along said right-of-way to a rebar and 1-1/2-inch metal survey cap, LS 12180; thence 172.62 feet along the arc of a non-tangent curve to the left, said curve having a central angle of 68° 06' 54", a radius of 145.20 feet and chord of North 57° 34 '09" West 162.63 feet to a rebar and 1-1/2-inch metal survey cap, LS 12180; thence along the North right-of-way of said County Road No. 23, South 89°09′34″ West 44.31 feet to a 5/8—inch rebar and 2-inch metal survey cap, LS 31160; thence North 02° 57′ 30″ West 57.53 feet to the South boundary of Block 37 of said Town of Ridgway, defined by a rebar and 1-1/2-inch metal survey cap, LS 10738; thence South 88° 35' 41" East 69.16 feet to the Southeast corner of said Block 37, defined by a rebar and 1-1/2-inch metal survey cap, LS 10738; thence North 01° 26′ 54″ East 300.12 feet to the Northeast corner of said Block 37, defined by a rebar and 1-1/2-inch metal survey cap. LS 10738: thence South 88° 36' 09" East 66.26 feet to a rebar and 1-1/2-inch metal survey cap, LS 12180; thence North 01° 25' 11" East 365.62 feet to the true point of beginning, an area of 4.47 acres by these

Legal Description Prepared by Robert A. Larson, PLS 31160 For and on behalf of: Monadnock Mineral Services 342 7th Ave. Ouray, CO 81427

Has (Have) by these presents laid out, platted and subdivided the same into lots, as shown on this plat, under the name of ALPENGLOW COHOUSING SUBDIVISION, and does (do) hereby dedicate, grant and convey to the Town of Ridgway, State of Colorado, for the use of the public the Street as hereon shown. Also the following easements are dedicated, granted and conveyed to the Town of Ridgway, Colorado

Utility easements for Town utilities (including storm drainage) and public utilities;

Sidewalk Easement;

10' Public Pedestrian/Non-Motorized Easement.

Private easements are reserved, granted or conveyed for purposes as indicated on

Parcel A as indicated on plat shall be retained by signer.

Executed this _____, A.D. 20___.

type in Owners'Name(s) as of record

by						
,	(type	in	name	and	representative	capacity
STATE OF COLORAD	0))	ss.			

COUNTY OF Ouray) The foregoing Certificate of Ownership and Dedication was acknowledged before

me this _____ day of ______(type in

name of signatory),
_____(type in representative capacity), of ______

(type in owner's name).
Witness my hand and official seal.

My Commission expires ______

Notary Public

PRELIMINARY PLAT ALPENGLOW COHOUSING SUBDIVISION

A tract of land located in Section 16, Township 45 North, Range 8 West, New Mexico Principal Meridian, Town of Ridgway, County of Ouray, State of Colorado

subdivision, any applicant of agreements property	sert Reception # an able subdivision impr		reby joins in this
of easements, propert Type in lienholders nar	me of record		
By (Type STATE OF COLORADO	\	and representative	capacity)
COUNTY OF OURAY	´) ss.		
The foregoing Certifica	•	d before me this	day of
, A.D. 20_			·
capacity), of (type in Witness my hand and My Commission expires	lienholder's name.) official seal.		
Surveyor's Certificate:			Notary Public
l, Timothy A. Barnett, supervision and that s conforms to all require Town of Ridgway regul shown.	said survey is accurd ements of the Color	ite to the best of mado Revised Statutes	ny knowledge, s, and all applicable
License No. 38404			
Attorney's Certificate:			
practice before the co examined the title of dedicator(s) and owne dedicated free and cle (state record name of	ourts of record of Co all land herein platto rs, and that the pro ear of all liens and o	ed and that title to operty dedicated here encumbrances, excep	ertify that I have such land is in the eon has been t as follows:
Dated this	_ day of		, A.D., 20
		Attorney at La	N
Engineer's Certificate:			
for this subdivision are specifications, are ade	quate to serve the		
vate:			
Certificate of Improver	Engineer ments Completion:	J	ion Number
	Engineer ments Completion: Manager of the To ities required by the been installed in th own except for the division regulations:	wn of Ridgway, do c current Subdivision iis Subdivision in acc	ertify that all Regulations of the cordance with the
Certificate of Improver The undersigned, Town improvements and util Town of Ridgway have specifications of the Tpursuant to Town sub-(leave room)	Engineer ments Completion: Manager of the To ities required by the been installed in th own except for the division regulations:	wn of Ridgway, do c current Subdivision is Subdivision in acc following which have	ertify that all Regulations of the ordance with the been secured
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Reception No._____

<u>Notes</u>

1. All outdoor lighting fixtures shall comply with Town regulations.

2. Each lot is limited to one principal dwelling unit for which applicable excise tax has been paid.

3. The property platted herein, other than streets or other tracts dedicated to the Town, is subject to the Alpenglow CoHousing Declaration of Covenants, Conditions and Restrictions as recorded in the Ouray County Records at Reception No.______.

4. The property platted hereon is subject to the prior easements as shown hereon.

5. The owners of lots 1 through 26 within this subdivision shall be jointly and severally liable for the following:

a. Operation and maintenance of the irrigation system, ditches and pipelines on said lots and the Common Area
b. The operation and Maintenance of the storm water system, including maintenance of the grade and unobstructed area of any surface drainage ways, and the detention ponds located in the Common Area.
c. Maintenance of landscaping, weed control, structures, bridges, and all other items located in the Common Area.
d. Maintenance of all retaining walls located within lots 1—26 and Common

In the event that said maintenance is not properly performed, the Town of Ridgway may cause the work to be done, assess the cost to the said owners, may certify such charges as delinquent charges to the County Treasurer to be collected similarly to taxes, may record a lien on said lots which may be foreclosed in any lawful manner, or may pursue any other remedy available in order to collect such charges. These obligations shall run with the land and be binding upon all successors in interest to the said lot(s).

6. Soils throughout the Ridgway area have been found to have the potential to swell, consolidate and cave. All owners, contractors, and engineers are required to investigate soil, groundwater, and drainage conditions on a particular lot prior to design and construction. On March 12, 2018, and amended September 7, 2018, Trautner Geotech LLC issued a Geotechnical Engineering Study for the Alpenglow CoHousing Project, Project #55042GE discussing soil characteristics in the Alpenglow CoHousing Community which all owners, contractors and engineering are encouraged to obtain and review prior to building. By accepting a deed to real property located in this subdivision, the owners of land herein agree to hold the Town of Ridgway harmless from any claim related to soils conditions present in this subdivision.

7. Any driveways owned by: 1) the owners' association, if any, or 2) jointly held by the owners of more than one division of real property located in the Alpenglow CoHousing Subdivision, or 3) subject to a reciprocal driveway use or access agreement or plat note, shall be jointly responsible for the maintenance of said driveways, unless said maintenance responsibilities are addressed by this subdivision's Covenants Conditions and Restrictions, if any, filed with the Ridgway County Clerk and Recorder's Office for the County of Ouray, Colorado, in which case said driveway maintenance shall be as set forth in said Covenants Conditions and Restrictions. This provision shall run with the land in the Alpenglow CoHousing Community subdivision, and shall be a benefit and a burden to the owners of all lots final platted thereon, and shall be applicable to said owners, their successors, heirs, and assigns, and all parties claiming by through or under them.

8. Common elements, Duplexes

A. The unit owners shall be individually and severally responsible for the maintenance and repair of all Common Elements, except any Limited Common Elements, which shall be subject to the maintenance and repair obligations of the respective unit.

B. The units depicted on this plat shall have uniform exterior appearance. Future improvements, modifications and repair to the units' exteriors shall be done in accordance with any applicable covenants and regulations of the owner's association, and performed in such a manner as to ensure uniformity and compatibility of the exterior of the units.

C. Easements are reserved on, over, and under the Common Elements and the units as shown on the Plat, for construction, maintenance and repair of public utilities.

D. Party Walls exist over and along the common boundaries between the units. The unit owners shall be deemed to own the necessary easements for the perpetual lateral and subjacent support, maintenance and repair of the respective Party Wall with equal rights of joint use.

9. The 10' Public Pedestrian/Non-Motorized Easement is hereby dedicated, granted and conveyed to the Town of Ridgway for the use of the public for recreational uses as authorized by the Town.

The Town will provide for maintenance of any future recreation path on the 10' Public Pedestrian/Non-Motorized Easement as it deems appropriate in accordance with Town budgets and regulations and has a right of access to do so. No improvements may be installed on the 10' Public Pedestrian/Non-Motorized Easement which would restrict the Town's access. The individual lot owners are jointly and severally liable for the proper maintenance of the Common Area including that portion within the 10' Public Pedestrian/Non-Motorized Easement outside of the payed path in accordance with applicable Town ordinances. Such maintenance may be performed by an owners association. In the event that such maintenance is not properly performed or in order to abate any nuisance thereon, the Town may cause the maintenance to be done, assess the costs thereof against the lots in this subdivision or certify such amounts as a delinquent charge to the County Treasurer to be collected similarly as taxes against the lots in this subdivision, or collect such costs from the owners in any lawful manner.

10. The zoning of this property is HB, as shown on the Town's Official Zoning Map, and defined and described by the Town of Ridgway Municipal Code at the time of approval and recordation of this plat, and is subject to change.

11. Basis of Bearings: Bearings shown hereon are based on a bearing of South 09° 32' 16" East, between the Northwest Corner of Parcel A and the Southwest Corner of the Liddell—Stanton Business Park Subdivision Plat, both corners being monumented as shown hereon.

12. Date of field survey: March, 2019

13. Units of linear measurements are displayed in US Survey Feet.

14. SGM will not be responsible for any changes made to this document after it leaves our possession. Any copy, facsimile, etc., of this document must be compared to the original signed, sealed and dated document to insure the accuracy of the information shown on any such copy, and to insure that no such changes have been made.

15. The property shown hereon is subject to all easements, rights—of—way, building setbacks or other restrictions of record, as such items may affect this property. This survey does not represent a title search by this surveyor to determine ownership or to discover easements or other encumbrances of record. All information pertaining to ownership, easement and other encumbrances of record has been taken from the title insurance commitment issued by Land Title Guarantee Company, Commitment No. OUC85004719—10, having an effective date of October 2, 2017.

16. Vertical Information:

Datum: Elevation information shown hereon is based upon that Topographic Survey supplied by Monadnock Mineral Services, performed on November 30, 2017, NAVD88 Datum, and relative to a benchmark elevation of 6992.35 feet at National Geodetic Survey (NGS) Benchmark "K19" (PID JL0358) and relative to a Site Benchmark with an elevation of 6993.96 feet at the top of the aluminum cap at the northwest corner of Parcel A as shown hereon.

Contour Interval: 5 Feet.

17. Utility information shown hereon is based upon that Topographic Survey supplied by Monadnock Mineral Services, performed on November 30, 2017.

18. Property Description shown heron is based on the corrected legal description supplied by Monadnock Mineral Services on March 13, 2019.

Suite 250 81506

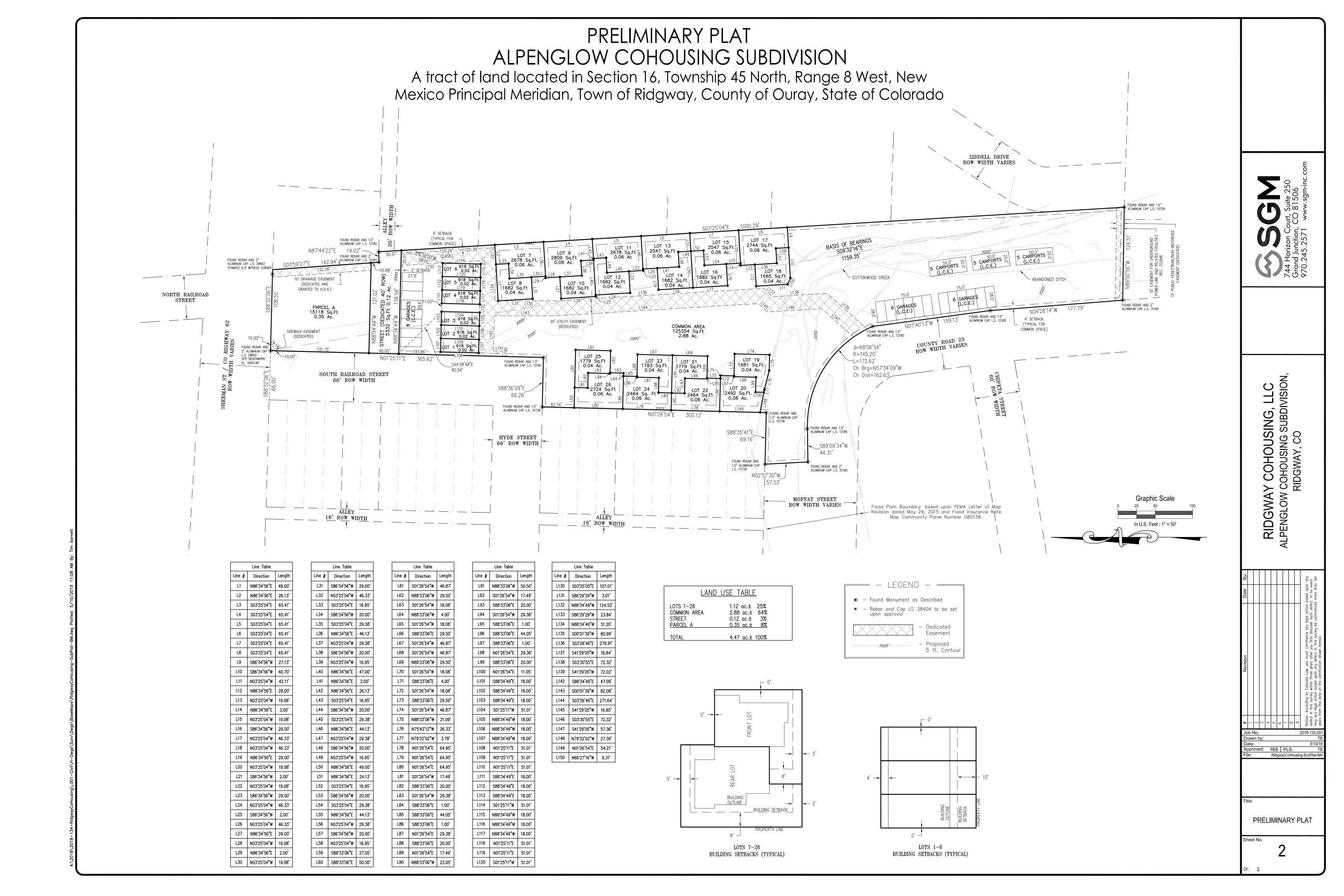
744 Horizon Court, Suite 2 Grand Junction, CO 8150, 970.245.2571 www.sgn

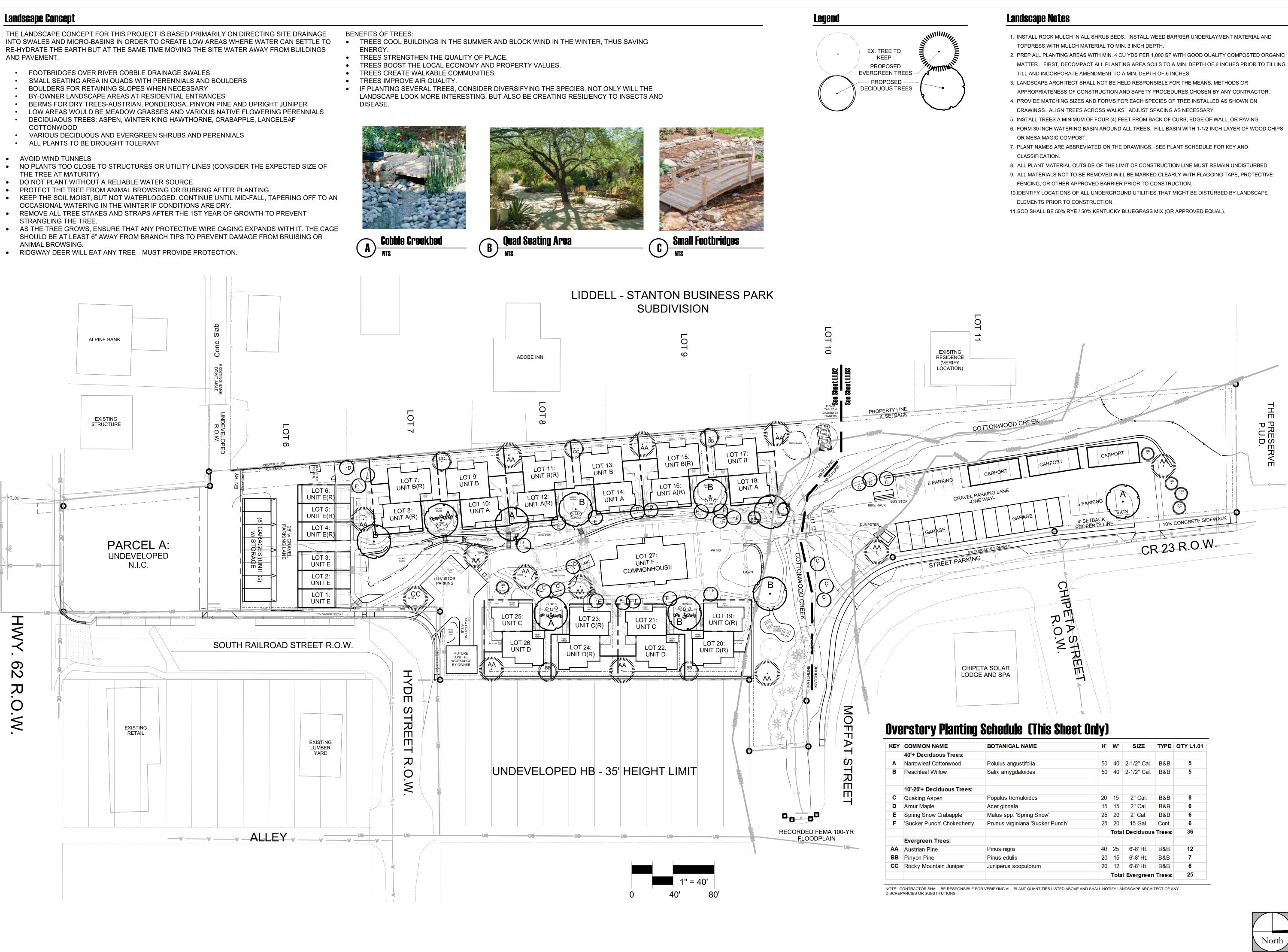
RIDGWAY COHOUSING, LLC
ALPENGLOW COHOUSING SUBDIVISION,
RIDGWAY, CO

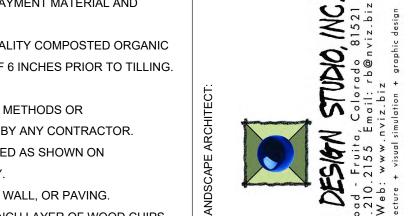
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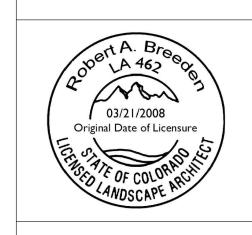
PRELIMINARY PLAT

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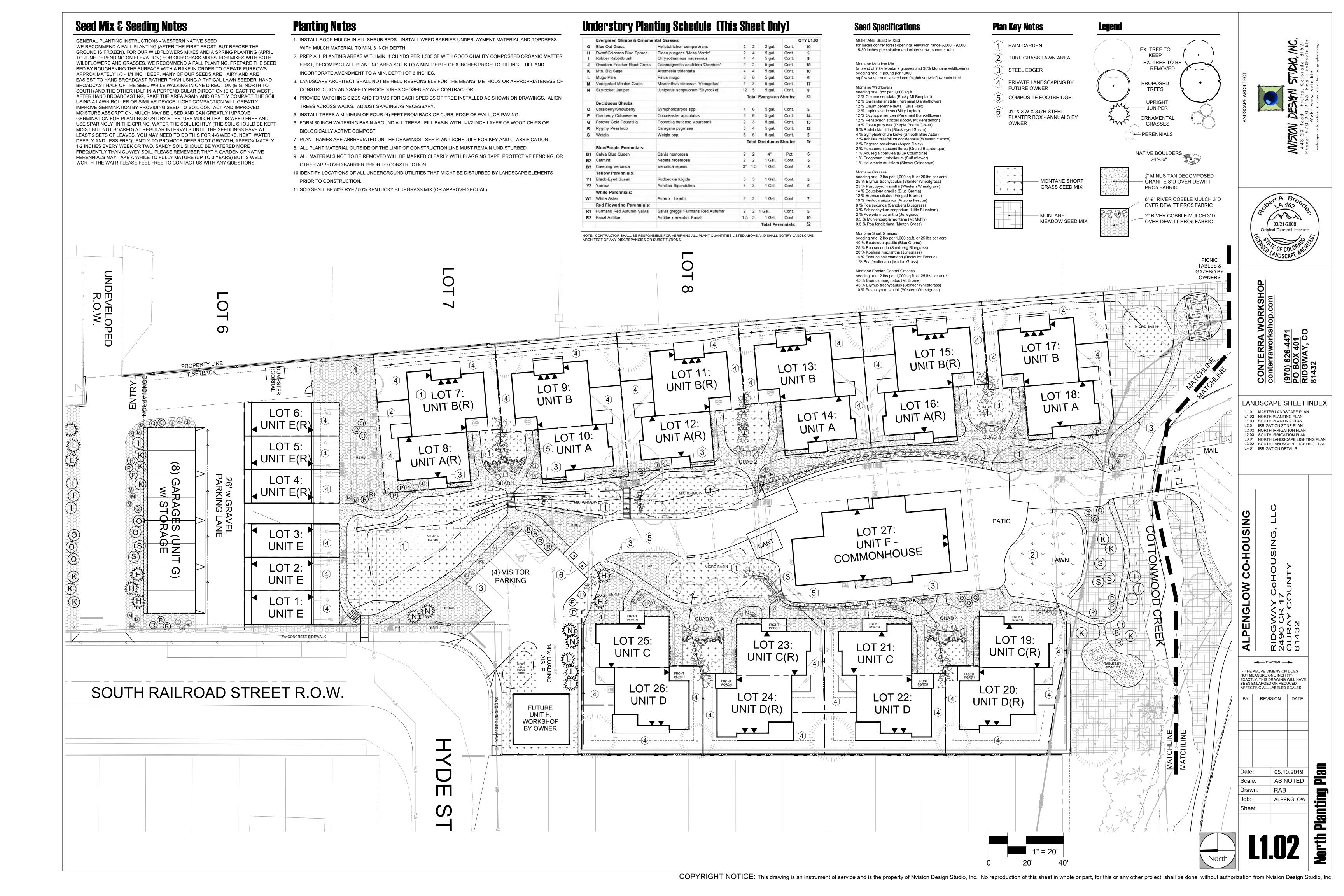
LANDSCAPE SHEET INDEX L1.01 MASTER LANDSCAPE PLAN
L1.02 NORTH PLANTING PLAN
L1.03 SOUTH PLANTING PLAN
L2.01 IRRIGATION ZONE PLAN
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L2.03 SOUTH IRRIGATION PLAN L3.01 NORTH LANDSCAPE LIGHTING PLAN L3.02 SOUTH LANDSCAPE LIGHTING PLAN L4.01 IRRIGATION DETAILS

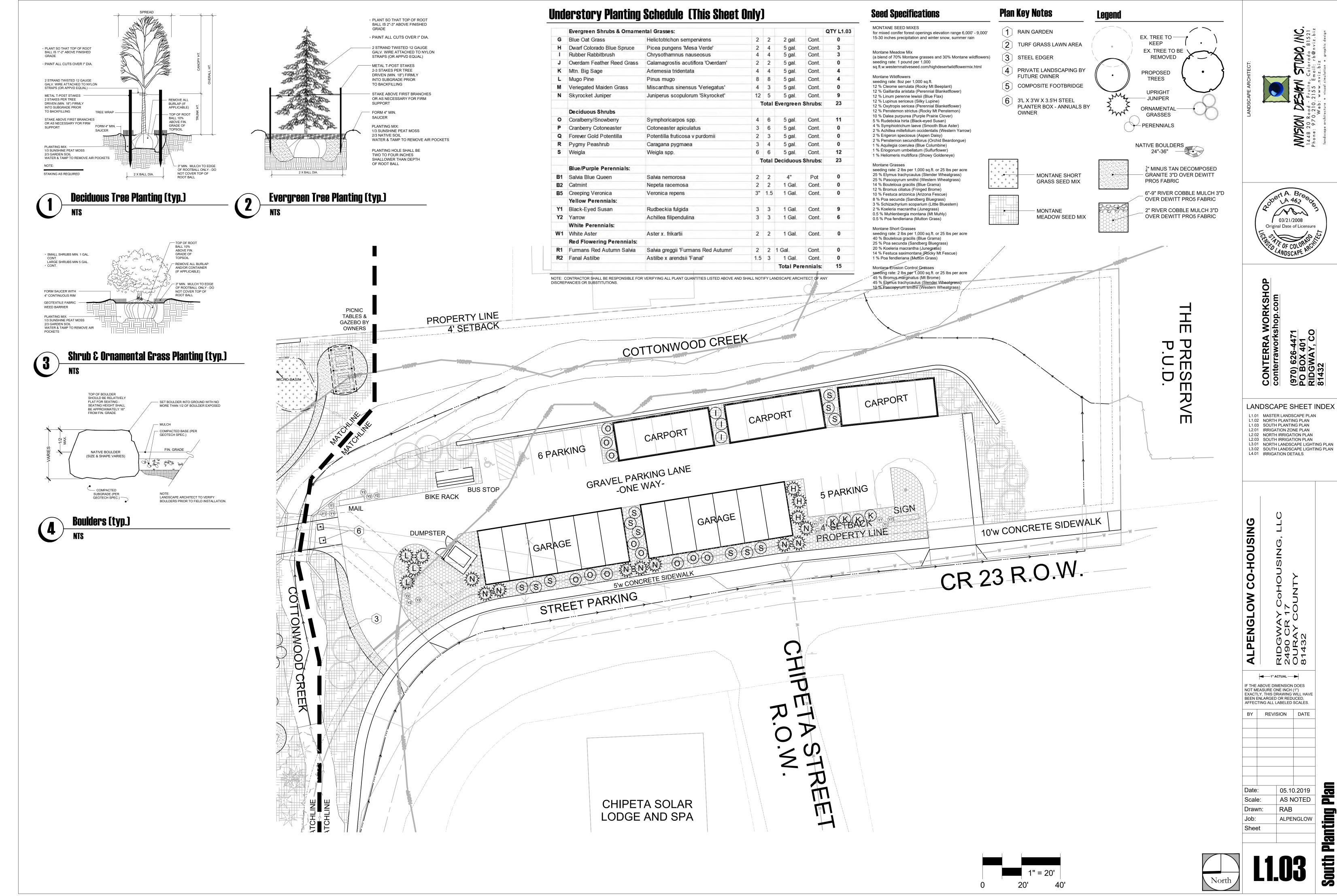
■ 1" ACTUAL — ► IF THE ABOVE DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING WILL HAVE BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES BY REVISION DATE

05.10.2019 AS NOTED Drawn: RAB Job: ALPENGLOW









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Irrigation Notes

ADOBE INN

ALPINE BANK

HWY.

62

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O. ≪ 1. VERIFY OPERATING PRESSURE AT POINT OF CONNECTION PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM. NOTIFY PLAN PREPARER IF MEASURED PRESSURE IS MORE THAN 95 P.S.I. OR LESS THAN 60 P.S.I. THE SYSTEM IS DESIGNED FOR AN OPERATING PRESSURE OF 60 P.S.I. AND A FLOW RATE AT INLET PIPE OF 12 GPM. VERIFY ALL FLOW RATES ON-SITE PRIOR TO INSTALLATION.

2. NOTIFY LANDSCAPE ARCHITECT SIX (6) DAYS PRIOR TO INSTALLATION FOR A PRE-INSTALLATION CONFERENCE AND FIELD REVIEW COORDINATION FOR TRENCH DEPTHS, ASSEMBLY REVIEW, PRESSURE TESTS, COVERAGE TESTS, PRE-MAINTENANCE AND FINAL REVIEWS.

3. A CONTINUITY TEST WILL BE REQUIRED FOR CONTROL WIRE STUBOUTS. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE PLAN PREPARER.

4. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH LOCAL CODES, MANUFACTURERS AND INSTRUCTIONS. AVOID ANY CONFLICTS BETWEEN SPRINKLER SYSTEM, PLANTING, AND ARCHITECTURAL FEATURES. NOTIFY PLAN PREPARER, PRIOR TO INSTALLATION, OF ANY AREA OF GRADE DIFFERENCES OR OBSTRUCTIONS NOT INDICATED ON THE PLANS.

5. PRIOR TO CUTTING INTO SOIL, LOCATE ALL CABLES, CONDUITS, SEWERS, AND OTHER UTILITIES OR ARCHITECTURAL FEATURES THAT ARE COMMONLY ENCOUNTERED UNDERGROUND AND TAKE PROPER PRECAUTIONS NOT TO DAMAGE OR DISTURB SUCH IMPROVEMENTS. ANY DAMAGE MADE DURING THE INSTALLATION OF THE IRRIGATION SYSTEM OF THE AFOREMENTIONED ITEMS SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL EXPENSE TO THE OWNER.

6. LOCATION OF CONTROLLER TO BE DETERMINED AT JOBSITE BY OWNER AND CONTRACTOR (IF APPLICABLE). CONNECT TO EXISTING 120 VOLT ELECTRICAL SUPPLIES. USE THIN WALL METAL CONDUIT ABOVE GRADE. INSTALL PER MANUFACTURERS SPECIFICATIONS. PROVIDE AND INSTALL RECHARGEABLE BATTERY BACK-UP FOR CONTROLLERS. CONTROLLERS SHALL BE PROPERLY GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRIC CODE AND CONFORM TO LOCAL REGULATIONS. INSTALL AS DETAILED. SEAL ALL CONDUIT HOLES WITH SILICONE OR EQUAL. PROGRAM CONTROLLERS TO IRRIGATE SLOPES USING MULTIPLE REPEAT CYCLES OF SHORT DURATIONS. CARE SHALL BE TAKEN TO PREVENT RUNOFF OF WATER AND SOIL EROSION DUE TO PROLONGED APPLICATIONS OF

- 7. USE APPROPRIATE SOLVENT AND APPLICATOR, AND PRIMER IF REQUIRED, FOR PIPE SIZE AND TYPE APPLICATIONS. APPLY PER MANUFACTURER'S RECOMMENDATIONS.
- 8. INSTALL ALL ELECTRIC VALVES, PRESSURE REGULATORS, BALL OR GATE VALVES, PIPING, BACKFLOW PREVENTION DEVICES (IF APPLICABLE), CONTROLLERS PER MANUFACTURERS SPECIFICATIONS.

LIDDELL - STANTON BUSINESS PARK

SUBDIVISION

- 9. INSTALL FLOOD BUBBLERS ON UP HILL SIDE OF PLANT AND/OR WITHIN PLANT WELL.
- 10. POLYETHYLENE PIPE (IF APPLICABLE) INSTALLED SHALL BE PRODUCED FROM ALL VIRGIN UNION CARBIDE RESIN.
- 11. MAINTENANCE CONSIDERATIONS:
 A. FILTER CLEANING AND FLUSHING SHOULD START OUT AS A MONTHLY PROCEDURE AND
- CONTINUE AS NEEDED AFTER SIX (6) MONTHS.

 B. VISUALLY CHECK FOR INDICATIONS OF PIPE BREAKS OR CLOGGED EMITTERS OR OUTLETS.

 C. WATER QUALITY SHOULD BE MEASURED ON A QUARTERLY BASIS AND AMENDMENTS ADDED AS NECESSARY TO ENSURE THE SURVIVAL RATE OF THE PLANT MATERIAL.

12. ALL WIRING UNDER PAVEMENT SHALL BE INSTALLED IN PVC SCHEDULE 40 ELECTRICAL CONDUIT. ELECTRICAL CONDUIT SHALL EXTEND TWELVE INCHES (12") BEYOND EDGE OF PAVEMENT OR CURB. CONTRACTOR HAS THE OPTION TO INSTALL PVC SCHEDULE 40 SLEEVING FOR ALL PIPING UNDER ASPHALT AND CONCRETE PAVEMENTS AT HIS OWN EXPENSE. INSTALL SAND FOR BACKFILL IN ASPHALT PAVEMENT AREAS TO 6" COVER ABOVE PIPE. SURROUND PIPE WITH SAND IN AREAS WHERE ROCKY TERRAIN IS ENCOUNTERED.

13. ALL VALVE CONTROL WIRE SHALL BE MINIMUM NO. 14 AWG COPPER UL APPROVED FOR DIRECT BURIAL IN GROUND. CONNECT WIRES AS DETAILED PER MANUFACTURERS SPECIFICATIONS. RUN ONE (1) EXTRA CONTROL WIRE OF DIFFERENT COLOR THROUGH ALL VALVE LOCATIONS FROM EACH CONTROLLER. EACH WIRE AT VALVES SHALL HAVE 24" EXCESS COILED LOOP. TAPE WIRES IN BUNDLES EVERY TEN FEET (10').

EXISITNG

RESIDENCE (VERIFY LOCATION) 14. ALL PIPES SHALL BE TESTED AT 125% OF DESIGN PRESSURE FOR 1 HOUR. ADD WATER SLOWLY TO PIPES TO AVOID WATER HAMMER DAMAGE, BLEED SYSTEM TO INSURE ALL AIR IS OUT OF PIPES AND PRESSURIZE SYSTEM TO LEVELS STATED ABOVE. VISUALLY INSPECT FOR LEAKS WHILE SYSTEM IS HOLDING PRESSURE CONSTANT.

15. ALL BACKFILL MATERIAL SHALL BE FREE OF ROCKS, CLODS, AND OTHER EXTRANEOUS MATERIALS. COMPACT BACKFILL TO ORIGINAL DENSITY OF SOIL.

16. AT JOB COMPLETION, SUPPLY OWNER WITH TWO (2) KEYS FOR EACH CONTROLLER.

17. GUARANTEE THE IRRIGATION SYSTEM AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.

18. INSTALL PUMP, CONTROLLER, AND RELAY SWITCH PER MFR. INSTRUCTIONS.

Reduced Pressure Backflow Assembly (RPBA)

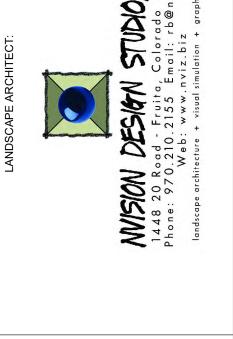
ONLY ONE RPBA IS REQUIRED TO SERVE THE WHOLE SYSTEM; CONTROL VALVES CAN BE LOCATED DOWNSTREAM OF (AFTER) THE RPBA.

• RPBAS MUST BE INSTALLED A MINIMUM OF 12" ABOVE GROUND LEVEL.

 RPBAS MUST BE TESTED BY A STATE CERTIFIED BACKFLOW PREVENTER TESTER AT THE TIME OF INSTALLATION, ANNUALLY, AND WHEN MOVED OR REPAIRED.

IN AN RPBA-EQUIPPED SYSTEM, FERTILIZER AND OTHER AGRICULTURAL CHEMICALS MAY BE INTRODUCED DOWNSTREAM OF (AFTER) THE RPBA (FOR IRRIGATION SYSTEMS ONLY).

RPBA MAXIMUM DESIGN FLOW FOR RESIDENTIAL SYSTEMS ON A ¾ INCH SERVICE AND METER SHOULD NOT EXCEED 15 GALLONS PER MINUTE (GPM). HIGHER FLOWS CAN DAMAGE THE METER. ALL DEVICES SHOULD BE INSTALLED IN A MANNER THAT ALLOWS ADEQUATE CLEARANCE FOR TESTING AND REPAIRS. BEFORE INSTALLING A NEW SPRINKLER SYSTEM THAT WILL USE DOMESTIC WATER, THE OWNER OR OWNER'S REPRESENTATIVE IS REQUIRED TO GET A BUILDING PERMIT FROM THE LOCAL BUILDING DEPARTMENT.





CONTERRA WORKSHOl conterraworkshop.com (970) 626-4471 PO BOX 401 RIDGWAY. CO

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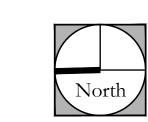
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L3.02 SOUTH LANDSCAPE LIGHTING PLAN
L4.01 IRRIGATION DETAILS

ALPENGLOW CO-HOUSING
RIDGWAY COHOUSING, LLC
2490 CR 17
DURAY COUNTY

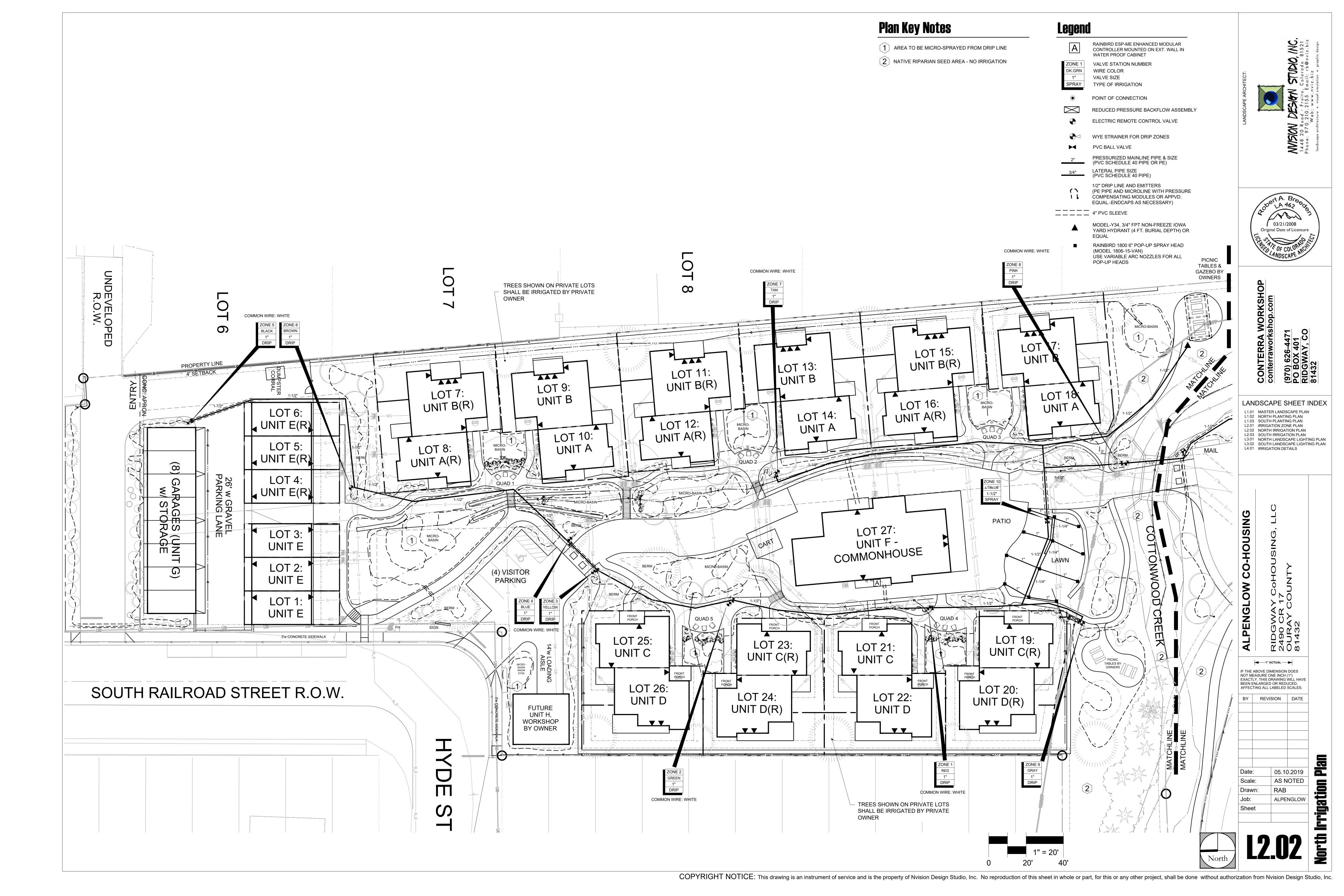
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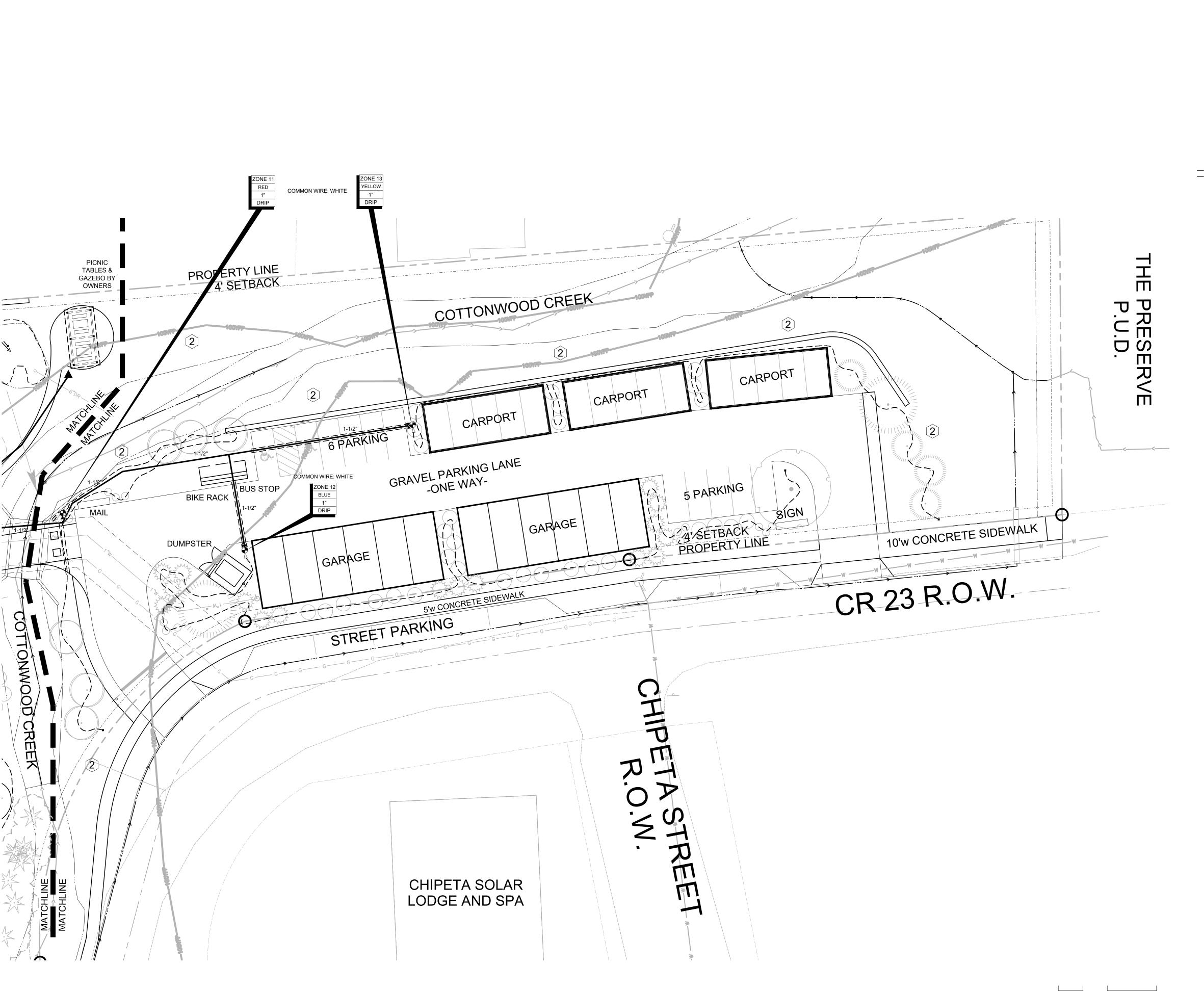
BY REVISION DATE

Date: 05.10.2019
Scale: AS NOTED
Drawn: RAB
Job: ALPENGLOW









1 AREA TO BE MICRO-SPRAYED FROM DRIP LINE

Plan Key Notes

2 NATIVE RIPARIAN SEED AREA - NO IRRIGATION

Legend

A

RAINBIRD ESP-ME ENHANCED MODULAR CONTROLLER MOUNTED ON EXT. WALL IN WATER PROOF CABINET



1 VALVE STATION NUMBER
N WIRE COLOR
VALVE SIZE
Y TYPE OF IRRIGATION

POINT OF CONNECTION

REDUCED PRESSURE BACKFLOW ASSEMBLY

ELECTRIC REMOTE CONTROL VALVE

WYE STRAINER FOR DRIP ZONES

■ PVC BALL VALVE

PRESSURIZED MAINLINE PIPE & SIZE (PVC SCHEDULE 40 PIPE OR PE)

LATERAL PIPE SIZE

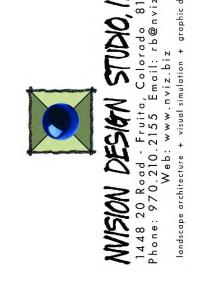
LATERAL PIPE SIZE
(PVC SCHEDULE 40 PIPE)

1/2" DRIP LINE AND EMITTERS
(PE PIPE AND MICROLINE WITH PRESSURE

> MODEL-Y34, 3/4" FPT NON-FREEZE IOWA YARD HYDRANT (4 FT. BURIAL DEPTH) OR EQUAL

COMPENSATING MODULES OR APPVD.

RAINBIRD 1800 6" POP-UP SPRAY HEAD (MODEL 1806-15-VAN) USE VARIABLE ARC NOZZLES FOR ALL POP-UP HEADS





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81432

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L2.02 NORTH IRRIGATION PLAN
L2.03 SOUTH IRRIGATION PLAN
L2.03 SOUTH IRRIGATION PLAN
L3.01 NORTH LANDSCAPE LIGHTING PLAN
L3.02 SOUTH LANDSCAPE LIGHTING PLAN
L4.01 IRRIGATION DETAILS

LPENGLOW CO-HOUSING

DGWAY COHOUSING, LLC
190 CR 17
URAY COUNTY

IF THE ABOVE DIMENSION DOES
NOT MEASURE ONE INCH (1")
EXACTLY, THIS DRAWING WILL HAVE
BEEN ENLARGED OR REDUCED,
AFFECTING ALL LABELED SCALES.

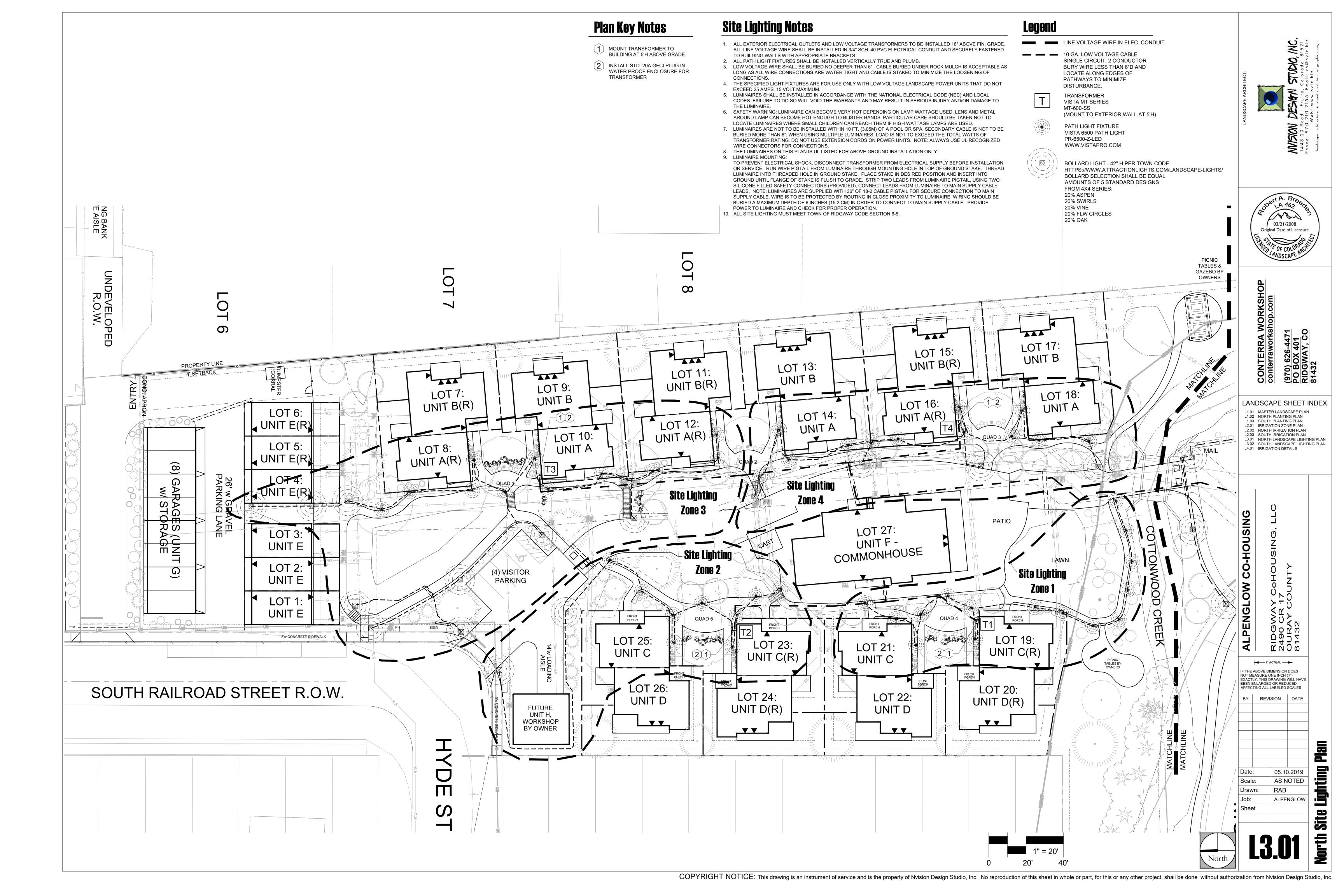
BY REVISION DATE

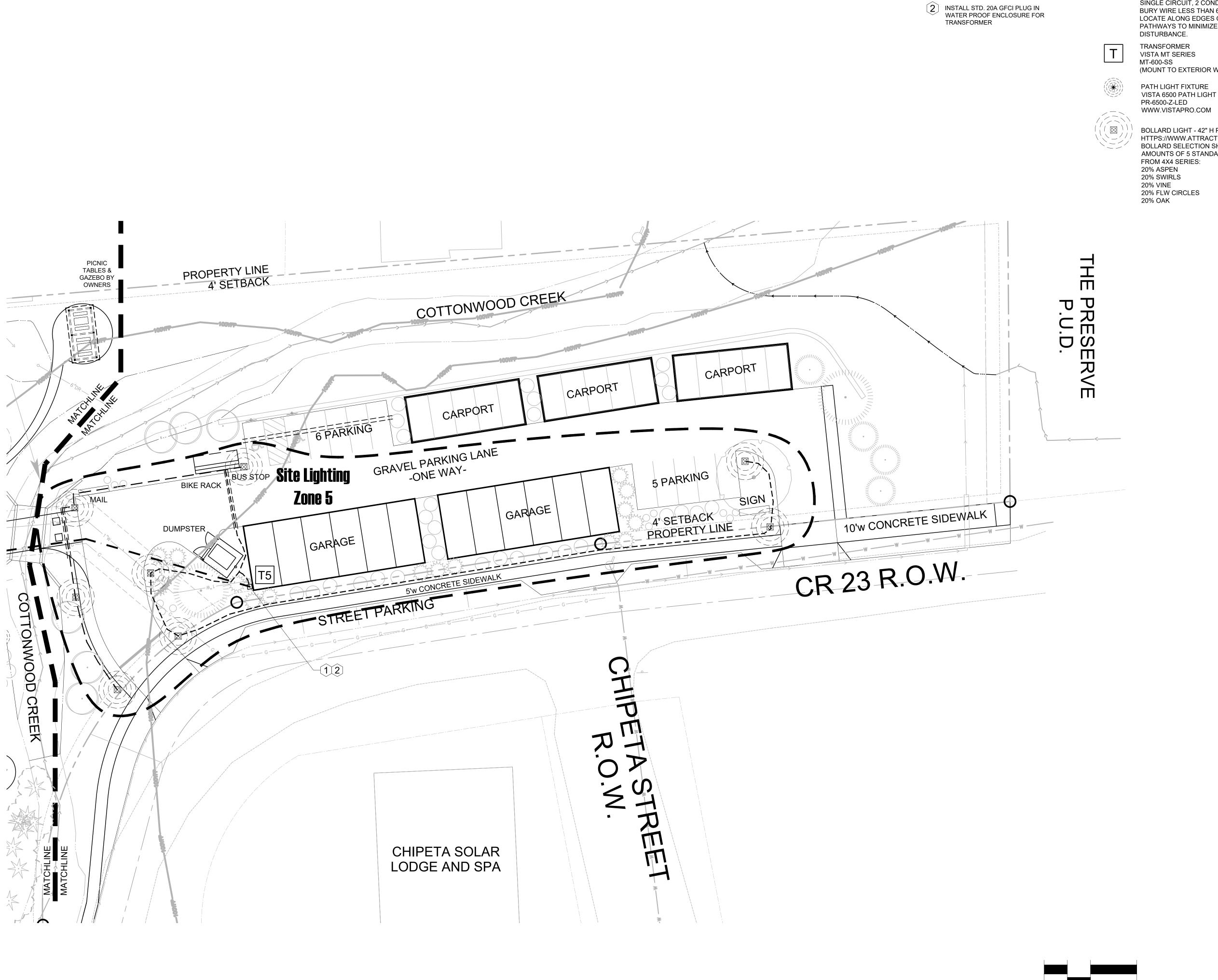
Date: 05.10.2019
Scale: AS NOTED
Drawn: RAB
Job: ALPENGLOW

North

Date: 05.10.2019
Scale: AS NOTED
Drawn: RAB
Job: ALPENGLOW
Sheet

L2.03





Legend

Plan Key Notes

MOUNT TRANSFORMER TO BUILDING AT 5'H ABOVE GRADE.

LINE VOLTAGE WIRE IN ELEC. CONDUIT

10 GA. LOW VOLTAGE CABLE SINGLE CIRCUIT, 2 CONDUCTOR BURY WIRE LESS THAN 6"D AND LOCATE ALONG EDGES OF PATHWAYS TO MINIMIZE

(MOUNT TO EXTERIOR WALL AT 5'H) PATH LIGHT FIXTURE

BOLLARD LIGHT - 42" H PER TOWN CODE HTTPS://WWW.ATTRACTIONLIGHTS.COM/LANDSCAPE-LIGHTS/ BOLLARD SELECTION SHALL BE EQUAL AMOUNTS OF 5 STANDARD DESIGNS

FROM 4X4 SERIES: 20% FLW CIRCLES

03/21/2008 Original Date of Licensure

CONTERRA WORKSHOP conterraworkshop.com

LANDSCAPE SHEET INDEX

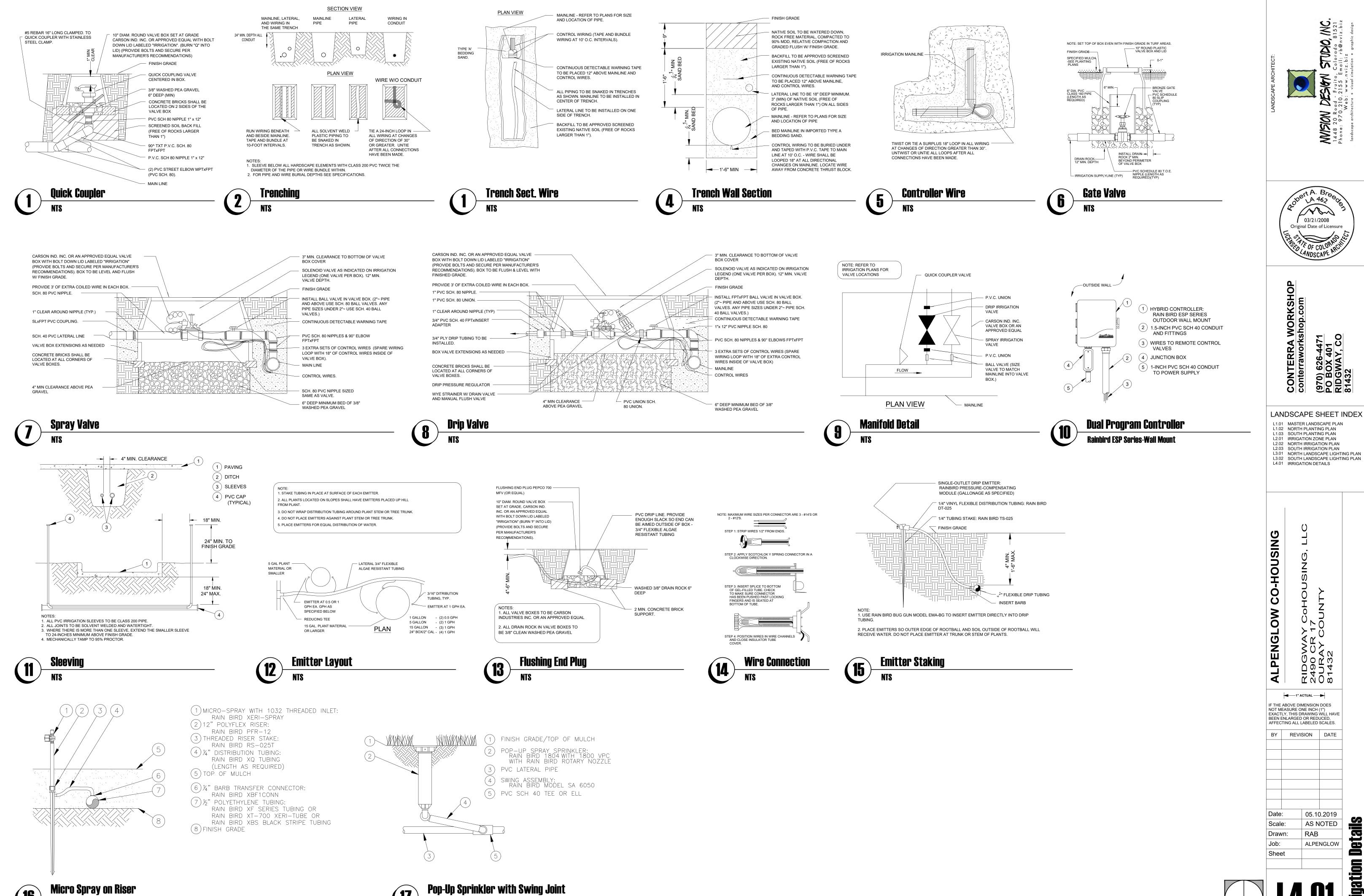
L1.01 MASTER LANDSCAPE PLAN
L1.02 NORTH PLANTING PLAN
L1.03 SOUTH PLANTING PLAN
L2.01 IRRIGATION ZONE PLAN
L2.02 NORTH IRRIGATION PLAN
L2.03 SOUTH IRRIGATION PLAN L3.01 NORTH LANDSCAPE LIGHTING PLAN L3.02 SOUTH LANDSCAPE LIGHTING PLAN L4.01 IRRIGATION DETAILS

IF THE ABOVE DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING WILL HAVE BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES.

BY REVISION DATE

Job:

Plan



—1" ACTUAL
—▶

05.10.2019

AS NOTED

ALPENGLOW

RAB

Details

03/21/2008 Original Date of Licensure

CONTERRA WORKSHOP conterraworkshop.com

Ridgway Cohousing, LLC

Alpenglow CoHousing Preliminary Plat Submission



Vicinity Map

Scope of Work

Preliminary Plat Design of a 26 unit co-housing residential development.



744 Horizon Court, Suite 250 Grand Junction, CO 81506 970.245.2571 www.sgm-inc.com

Project Engineer

Diana L. Rooney, P.E. 52927



Architect

Conterra Workshop, LLC 153 N Highway 550 Ridgway, CO 81432

Landscape Architect

NVISION Design Studio, Inc.

1448 20 Road
Fruita, CO 81521

Owner/Applicant

Ridgway Cohousing, LLC
2490 CR 17
Ouray, CO 81432

Mick Graff - President

Preliminary Plat Submission
May 2019

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C142 - C145	Town of Ridgway Standard Details

Bulk Requirements

	TOWN	OF RIDGWAY ZONING TA	BLE			
	ZONING DIST	RICT: "HB" Historic Busines				
	ITEM	PERMITTED / REQUIRED	PROVIDED			
		Residential Duplexes,	Residential Duplexes, Mult			
SITE		Multi-Family residences,	Family residences, Arts and			
		Arts and Crafts Studios,	Crafts Studios, Accessory			
	Land Use	Accessory Uses	Uses			
	Minimum Lot Width	25				
	Minimum Lot Size	N/A	3.79 Ac			
	Max. Lot Coverage %	N/A	23%			
	Minimum Setbacks					
BUILDING	Front	8/4	4			
₫	Side	8/4	4/2			
BU	Rear		4			
	Parking Space Size	8' x 20'	9' x 20'			
PARKING AND ACCESS	Minimum Number of Spaces	2 SP per Dwelling Unit	2.15 SP per Dwelling unit			
1G /	Min. Number of Spaces Calcuated	48 Total	26 Garage Spaces			
KING A			15 Carports			
AF.			15 Spaces			
			56 Total			
WALLS	Max. Fence, Hedge, Wall Height	6 Feet	5 Feet			



Know what's **below. Call** before you dig.

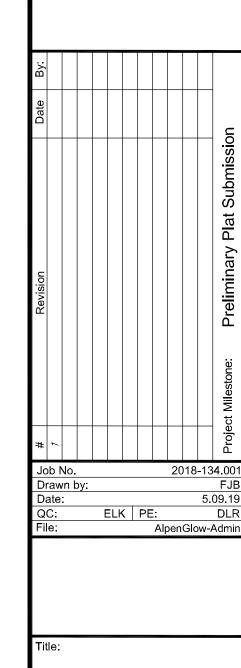
CNCC 1-800-922-1987

onterranorkshop

744 Horizon Court, Suite 250 370.245.2571 www.sgm-inc.co



Ridgway Cohousing, LLC Alpenglow CoHousing, Ridgway, CC



Cover Sheet

C101

Abbreviations MAXMAXIMUM **DEGREE** MANHOLE DIAMETER MINIMUM NUMBER MISCELLANEOUS AGGREGATE BASE COURSE MEGALUG ADA AMERICANS W/ DISABILITIES ACT MILE POST ANGLE POINT MILES PER HOUR AS *ASPHALT* MECHANICALLY STABILIZE EARTH MSE *ASPH ASPHALT* NORTHING **BENCHMARK** NOT APPLICABLE BACK OF SIDEWALK BOW NATIVE GRASS AREA BEGIN PROJECT, BEGINNING POINT BVCE BVCS BEGINNING VERTICAL CURVE ELEVATION NORTHEAST BEGINNING VERTICAL CURVE STATION NUMBER BWBOTTOM OF WALL NOT TO SCALE NORTHWEST CURB CUT OFFSET 0/5 CDOT COLORADO DEPARTMENT OF ON CENTER OCTRANSPORTATION OUTLET CONTROL STRUCTURE CUBIC FEET ODOUTSIDE DIAMETER CURB AND GUTTER POINT OF CURVATURE CIPCAST IN PLACE CENTERLINE POINT OF COMPOUND CURVATURE PCCCMPCORRUGATED METAL PIPE PED PEDESTRIAN CMU CO CONCRETE MASONRY UNIT PERM PERMANENT CONCRETE PGPAGE CONC CONT COR CONCRETE PROFILE GRADE LINE PGLCONTINUOUS POINT OF INTERSECTION CORNER PROPERTY LINE CRB CY CONCRETE REACTION BLOCK CUBIC YARD POINT ON CURVE POT DIA DIP POINT ON TANGENT DIAMETER POINT OF REVERSE CURVE DUCTILE IRON PIPE PRCDMHDRAIN MANHOLE PROP PROPOSED DRDRAIN PRESSURE REDUCING VALVE DRIVEWAY POINT OF TANGENCY *EASTING* POLYVINYL CHLORIDE EXISTING GRADE POINT OF VERTICAL INTERSECTION ELEVATION PAVEMENT ELEVATION POINT OF VERTICAL TANGENCY EOA EOD EDGE OF ASPHALT PEAK DISCHARGE EDGE OF DRIVEWAY EOC EOG EOM EDGE OF CONCRETE REMOVE AND REPLACE EDGE OF GRAVEL RADRADIUS EDGE OF MILLINGS EOP EDGE OF PAVEMENT RCPREINFORCED CONCRETE PIPE END PROJECT, END POINT REFERENCE ELECTRIC SERVICE REQUIRED *ESMT* **EASEMENT** REVEG REVEGETATE EVCE EVCS END VERTICAL CURVE ELEVATION ROW RIGHT OF WAY END VERTICAL CURVE STATION RADIUS POINT EΧ EXISTING RETAINING WALL **EXIST** SANITARY SAN FES FLARED END SECTION STORM DRAIN FINISHED FLOOR SOUTHEAST FINISHED GRADE FIRE HYDRANT SQUARE FEET FLOWLINE SHLDR SHOULDER FEET SANITARY SEWER LINE GAS SANITARY SEWER MANHOLE GAL GALV *GALLONS* SOD SOD GRASSED AREA *GALVANIZED* SANITARY SEWER SERVICE GRADE BREAK SSD STOPPING SIGHT DISTANCE **GRAVEI** STA *GRAV* GRAVEL STBK SETBACK GS GAS SERVICE SIDEWALK OR SOUTHWEST GATE VALVE SQUARE YARDS HANDICAP RAMP HORIZONTAL CONTROL LINE *TANGENT* HIGH DENSITY POLYETHYLENE TOP BACK OF CURB HOT MIXED ASPHALT THRUST BLOCK HORIZ TOP OF CURB HIGH OCCUPANCY VEHICLE TEMPORARY CONSTRUCTION EASEMENT HIGH POINT TELE TELEPHONE HPG HIGH PRESSURE GAS TEMPORARY TEMP HWL HWY HIGH WATER LINE TOP OF PIPE HIGHWAY HYDHYDRANT TRANSITION INSIDE DIAMETER TRAFFIC FLANGE OF FIRE HYDRANT TRFLG TOP OF WALL INTERSECTION INV *INVERT* TYPICAL JUNCTION BOX VERTICAL CURVE VALLEY PAN POUNDS WIDE LINEAR FOOT WITH LOW PRESSURE FORCE MAIN WATER LINE LOW POINT WATER SERVICE LUMP SUM WELDED WIRE MESH LSA LANDSCAPED AREA CROSS SLOPE X–S LIGHT POLE MATERIAL

744 Horizon Court, Suite 250 Grand Junction, CO 81506 970.245.2571 www.sgm-inc.cor



Ridgway Cohousing, LLC Alpenglow CoHousing, Ridgway, Co

Job No. 2018-134.001
Drawn by: FJB
Date: 5.09.19
QC: ELK PE: DLR
File: AlpenGlow-Admin

Legend and Abbreviations

g No.

C102

GENERAL NOTES:

- 1. THESE PLANS REPRESENT OVERALL SITEWORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE WORK TO BE PERFORMED IS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS MAY NOT COMPLETELY REPRESENT ALL SPECIFIC SITE DETAILS OF INSTALLATION REQUIRED FOR SITEWORK CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL IMPROVEMENTS REQUIRED TO ACHIEVE CONSTRUCTION DEPICTED ON THESE PLANS.
- 2. THE CONTRACTOR SHALL PROVIDE WRITTEN REQUESTS FOR INFORMATION TO THE OWNER AND OWNER'S ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM, IF ANY SITEWORK ITEM DEPICTED ON THE PLANS WARRANTS ADDITIONAL ENGINEERING INFORMATION REQUIRED FOR CONSTRUCTION AND IS NOT RELATED TO MEANS AND METHODS OF CONSTRUCTION. THE REQUEST FOR INFORMATION SHALL BE IN A FORM ACCEPTABLE TO OWNER AND OWNER'S ENGINEER. THE CONTRACTOR SHALL BE SPECIFICALLY RESPONSIBLE FOR CORRECTING SITEWORK ITEMS INSTALLED DIFFERENTLY THAN INTENDED AS DEPICTED ON THE PLANS IN THE ABSENCE OF SUBMITTING AND RECEIVING REVIEWS AND/OR DIRECTION ON WRITTEN REQUESTS FOR INFORMATION. REQUESTS FOR INFORMATION SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED.
- 3. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD VERIFY EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND OWNER'S ENGINEER PRIOR TO COMMENCEMENT OF WORK. THIS INCLUDES A TOPOGRAPHIC SURVEY OF ALL AREAS WHERE THE CONTRACTOR REQUIRES ADDITIONAL TOPOGRAPHIC INFORMATION. ANY CONDITIONS THAT DIFFER FROM THE SURVEY SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND OWNER'S ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR A CHANGE
- 4. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION ON THE DRAWINGS. CONTRACTOR SHALL SPECIFICALLY REVIEW ALL PLANS, PROFILES AND ANY INFORMATION/DATA TABLES FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S ENGINEER IN WRITING PRIOR TO CONSTRUCTION.
- 5. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED ON SHEETS THROUGHOUT THE PLAN SET AND AVAILABLE REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL APPLICABLE REQUIREMENTS.
- 6. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE TOWN STANDARDS. WHERE THERE IS A CONFLICT BETWEEN THE TOWN STANDARDS AND THE PROJECT PLANS, CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE TOWN ENGINEER FOR A RESOLUTION.

GENERAL CONSTRUCTION NOTES:

- 1. A GEOTECHNICAL INVESTIGATION FOR SITE DEVELOPMENT WAS PREPARED BY TRAUTNER GEOTECH, LLC, DATED MARCH 12, 2018, AND AMENDED SEPTEMBER 7, 2018. REFER TO REPORT FOR ROAD STRUCTURE, FOUNDATION, AND SITE GRADING RECOMMENDATIONS.
- 2. EXISTING FIELD CONDITIONS MAY VERY FROM THE CONTRACT BID DOCUMENTS. THE CONTRACTOR SHALL VERIFY ACTUAL FIELD CONDITIONS PRIOR TO BIDDING PROJECT.
- 3. THE CONTRACTOR SHALL LIMIT ALL CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 4. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES.
- 5. CONTROL OF SURFACE RUNOFF AND REPAIR OF DAMAGES RESULTING FROM RUNOFF IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE COST TO CONTROL SURFACE RUNOFF OR REPAIR DAMAGES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
- 6. THE CONTRACTOR SHALL KEEP EXISTING DRAINAGE STRUCTURES FUNCTIONAL AND MAINTAIN DRAINAGE TO THOSE STRUCTURES. MAINTAINING DRAINAGE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DELIVERY OF IRRIGATION WATER DURING CONSTRUCTION. DELIVERY OF IRRIGATION WATER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
- 8. LIMITS OF CONSTRUCTION SHALL BE 5' BEYOND GRADING LIMITS. BASE OF FILL SLOPES OR TOP OF CUT SLOPES, AND 20' EITHER SIDE OF THE CENTERLINE OF UTILITY INSTALLATIONS, BUT NOT BEYOND FENCE LINE OR RIGHT-OF-WAY LINES. PROJECT LIMITS SHALL ADDITIONALLY INCLUDE ANY DESIGNATED BORROW AREAS, EXCAVATION DISPOSAL AREAS OR MATERIAL OR TOPSOIL STOCKPILE AREAS. RESPECT ALL TREE/VEGETATION PRESERVATION ZONES (PER SPECS).
- 9. TRAFFIC CONTROL REQUIREMENTS:
- 9.a. TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE MUTCD AND TOWN OF RIDGWAY
- 9.b. COORDINATE ALL TRAFFIC CONTROL AND ROAD WORK WITH THE TOWN OF RIDGWAY.
- 9.c. MAINTAIN ACCESS TO OTHER STRUCTURES AT ALL TIMES. TEMPORARY CLOSURE ALLOWED FOR UTILITY WORK -- PROVIDE FOR EMERGENCY ACCESS CONTINUOUSLY.
- 10. THE CONTRACTOR SHALL CERTIFY THAT ALL AGGREGATES USED ON THIS PROJECT ARE FREE FROM HAZARDOUS COMPONENTS IN EXCESS OF THE THRESHOLD CONCENTRATIONS ESTABLISHED BY THE E.P.A.
- 11. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH APPLICABLE SECTIONS OF THE GEOTECHNICAL ENGINEERING REPORT. CONTRACTOR TO NOTE REQUIREMENTS FOR EXCAVATION, BACKFILL AND SUPPORT
- 12. SLOPE SOILS AWAY FROM BUILDING AS PER SITE GEOTECHNICAL ENGINEERING REPORT. SLOPE ROADWAYS AND SIDEWALKS AWAY FROM BUILDING AS SHOWN ON GRADING PLAN.
- 13. SPOT ELEVATIONS ALONG CURB/GUTTER ARE TO FLOWLINE UNLESS OTHERWISE NOTED.
- 14. SOURCE OF MAPPING: EXISTING FIELD CONDITIONS ARE REFERENCED FROM A DRAWING ENTITLED "TOPOGRAPHIC SURVEY - TRACT OF LAND SITUATED IN SEC. 16. T45N. R8W. N.M.P.M. TOWN OF RIDGWAY. COLORADO" BY MONADNOCK MINERAL SERVICES, DATED NOVEMBER 30, 2017. UTILITIES WERE GENERATED FROM A COMPOSITE OF FIELD SURVEY, MAPS PROVIDED BY THE TOWN, AND MAPS FROM RESPECTIVE UTILITY COMPANIES.
- 15. ZONE A FLOOD PLAIN LIMITS ARE SHOWN PER FEMA MAP #080138 0001 D, REVISED MAY 29, 2015.
- 16. THROUGHOUT ALL PHASES OF CONSTRUCTION, UNTIL THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CLEAN AND FREE FROM RUBBISH AND DEBRIS. THE CONTRACTOR SHALL ALSO ABATE DUST NUISANCE AS NECESSARY BY CLEANING, SWEEPING AND SPRINKLING WITH WATER OR OTHER MEANS AS NECESSARY. THE CONTRACTOR SHALL HAVE TWENTY—FOUR (24) HOURS AFTER THE DEPOSIT OF ANY EARTH, GRAVEL OR OTHER EXCAVATED MATERIAL TO REMOVE SUCH DEPOSIT. IN THE EVENT THAT THE EARTH, GRAVEL OR OTHER EXCAVATED MATERIAL IS NOT REMOVED, THE ENGINEER SHALL CAUSE SUCH REMOVAL AND THE COST INCURRED SHALL BE DEDUCTED FROM THE BOND. DUST CONTROL WILL ONLY BE REQUIRED IF ADJACENT PROPERTY OWNERS ARE ADVERSELY AFFECTED OR IF DUST ADVERSELY AFFECTS MAINTENANCE OF TRAFFIC DURING THE PROJECT SUCH THAT, IN THE OPINION OF ENGINEER, A WATERING PROGRAM IS APPROPRIATE. IT IS ANTICIPATED DUST CONTROL WILL BE REQUIRED ON THIS PROJECT.

<u>UTILITY NOTES:</u>

- 1. THE APPROXIMATE LOCATION OF ALL KNOWN UTILITIES (WATER, SEWER, GAS, PHONE, ELECTRIC, CABLE, ETC.) ARE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS TO VERIFY BOTH LOCATION AND DEPTH OF UTILITIES BEFORE ANY WORK BEGINS. CONTRACTOR SHALL BEAR THE RESPONSIBILITY FOR THE PROTECTION OF UTILITIES DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR UTILITIES LOCATED BUT NOT SHOWN IN DRAWINGS.
- 2. EXISTING UTILITY LOCATIONS ARE A COMBINATION OF SURVEYED FIELD LOCATIONS, OBSERVATIONS, AND EXISTING MAPPING. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
- 3. THE CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING ANY DISTURBED AREAS IN ACCORDANCE WITH SPECIFICATIONS.
- 4. ALL WORK TO BE DONE IN STRICT COMPLIANCE WITH RESPECTIVE UTILITY COMPANY AND TOWN REQUIREMENTS.
- 5. SHALLOW UTILITIES SHOWN ON THE PLANS, INCLUDING ELECTRIC, ARE SCHEMATIC IN NATURE. FINAL UTILITY ALIGNMENT TO BE BASED ON FIELD REQUIREMENTS.
- 6. PROVIDE CONDUIT SIZE AND TYPE PER LOCAL UTILITY PROVIDER.
- 7. DUCT TAPE EACH UTILITY CONDUIT GROUPING (I.E. TELEPHONE, CABLE, ELEC.) TOGETHER ABOVE GRADE AND LABEL.
- 8. PROVIDE PULL STRING IN EACH CONDUIT.
- 9. ALL SITE CLEANUP AND LANDSCAPING TO BE COMPLETE BY CONTRACTOR/DEVELOPER.
- 10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO DISPOSE OF EXCESS MATERIALS OR SPOILS.
- 11. ELEC— CONTRACTOR TO INSTALL (2) 3"Ø CONDUIT TO TRANSFORMER PAD LOCATION; BED CONDUIT WITH 3/4" MINUS MATERIAL, 4" BELOW TO 4" ABOVE CONDUIT. PULL CORD TO BE FURNISHED AND INSTALLED BY
- 12. 48" OF COVER TO BE PROVIDED ON ALL PRIMARY BURIED ELECTRIC LINES, 24" MIN. COVER ON SECONDARY FEEDS, PER SAN MIGUEL POWER ASSOCIATION.
- 13. TELE— CONTRACTOR TO SUPPLY 4" SCHEDULE 40 PVC CONDUIT. SWEEPS TO HAVE A MINIMUM 9 FOOT RADIUS.
- 14. TELE- SWEEPS TO BE GLUED IN PLACE, EXTEND AT LEAST 12" ABOVE GROUND, AND TO BE PLACED CLOSELY TOGETHER TO FIT INSIDE A SINGLE PEDESTAL.
- 15. FOLLOW ALL CDPHE (COLORADO DEPARTMENT OF HEALTH & ENVIRONMENT) REGULATIONS FOR WATER AND SEWER LINE CROSSINGS & SEPARATION REQUIREMENTS.

LANDSCAPE AND EROSION CONTROL NOTES:

- 1. SEE LANDSCAPE PLANS FOR PLANTING AND REVEGETATION INFORMATION.
- 2. CONTRACTOR TO COMPLY WITH CDPHE REGULATIONS FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION
- 3. PROVIDE EROSION CONTROL BLANKET ON ALL SLOPES OF 3:1 OR STEEPER.
- 4. PRIOR TO REVEGETATION, PLANTING OR TOPSOIL PLACEMENT, ALL CUT OR FILL SLOPES WILL BE CONTOURED TO BLEND WITH ADJACENT TERRAIN. VARIOUS SLOPE MOLDING TECHNIQUES WILL BE USED TO ENHANCE THE AESTHETIC QUALITY OF THE SLOPE, WHILE MAXIMIZING THE REVEGETATION POTENTIAL. ALL CUT AND FILL SLOPES ALSO BEING ROUNDED AT THE TOE TO BLEND WITH THE EXISTING TERRAIN. ADDITIONALLY, WHERE SOILS AND STEEPNESS OF SLOPES PERMIT, TERRACES WILL BE CONSTRUCTED TO AID THE REVEGETATION PROCESS.
- 5. SEEDING SHALL BE DONE BY HYDROSEEDING, DRILLING, OR HAND BROADCASTING. HYDROSEED SHALL BE APPLIED IN A WATER AND LIGHT MULCH SLURRY AFTER WHICH MULCH WILL BE APPLIED TO COVER THE SEED. ANY AREAS THAT CANNOT BE REACHED BY HYDROSEEDING OR DRILL SEEDING SHALL BE HAND BROADCAST. AREAS SEEDED BY HAND BROADCASTING SHALL BE LIGHTLY RAKED.
- 6. DRYLAND SEEDING SHALL BE PERFORMED AS SOON AS PRACTICAL AFTER COMPLETING OF CONSTRUCTION, WITHIN THE APPROPRIATE SEASON. SEEDING SHALL BE PERFORMED AFTER SPRING THAW UNTIL JUNE 30TH, OR AFTER SEPTEMBER 1 UNTIL CONSISTENT GROUND FREEZE.



ng Ridgy Alpenglo

Drawn by:

AlpenGlow-Adm

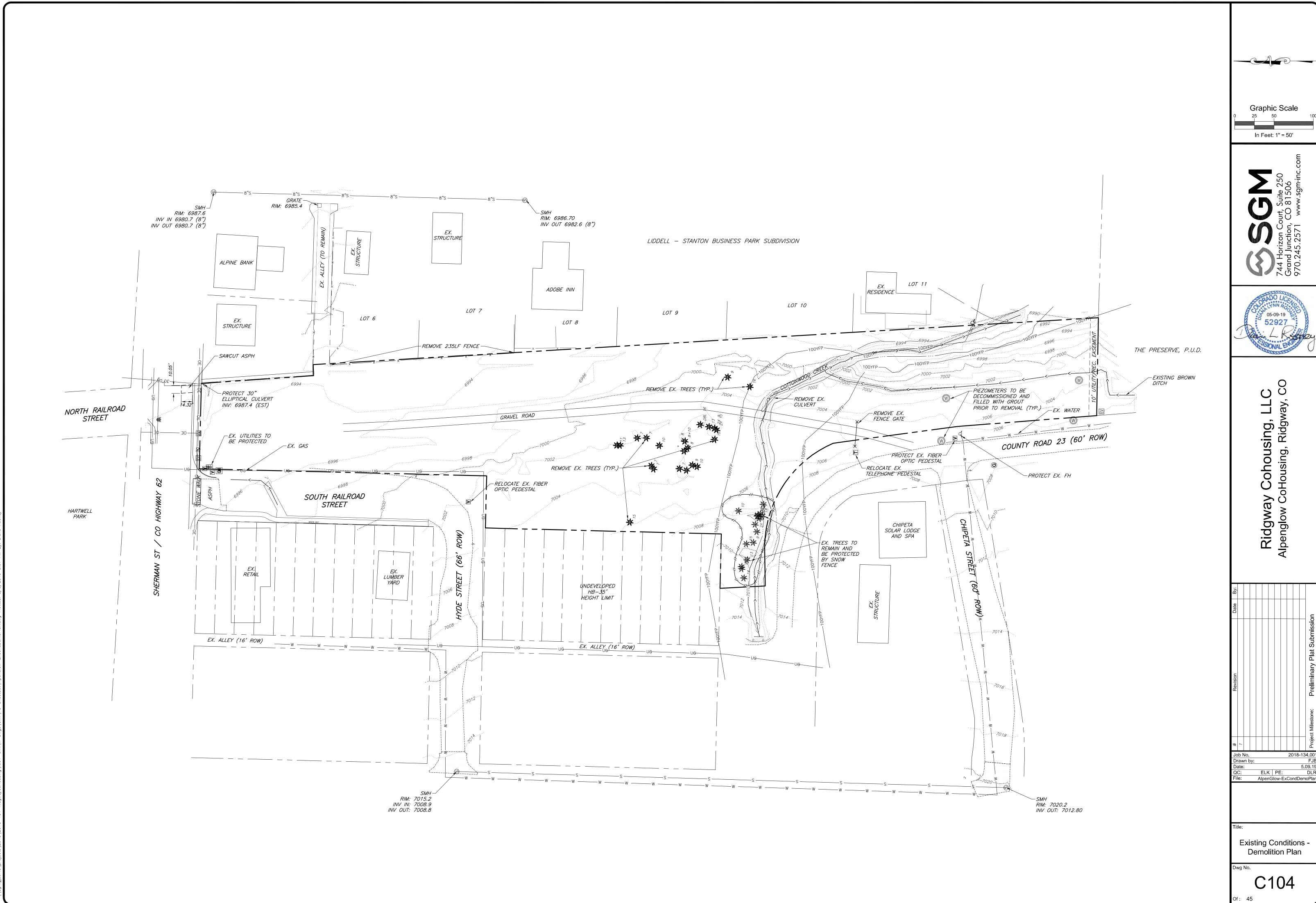
PHONE: CENTURYLINK, AL PEREZ (970) 244-4916. TOWN OF RIDGWAY WATER / SANITARY: CHASE JONES (970) 626-5308 X221 GAS: BLACK HILLS ENERGY: SCOTT HUNTER (970) 255-7543 JOHN COLEMAN

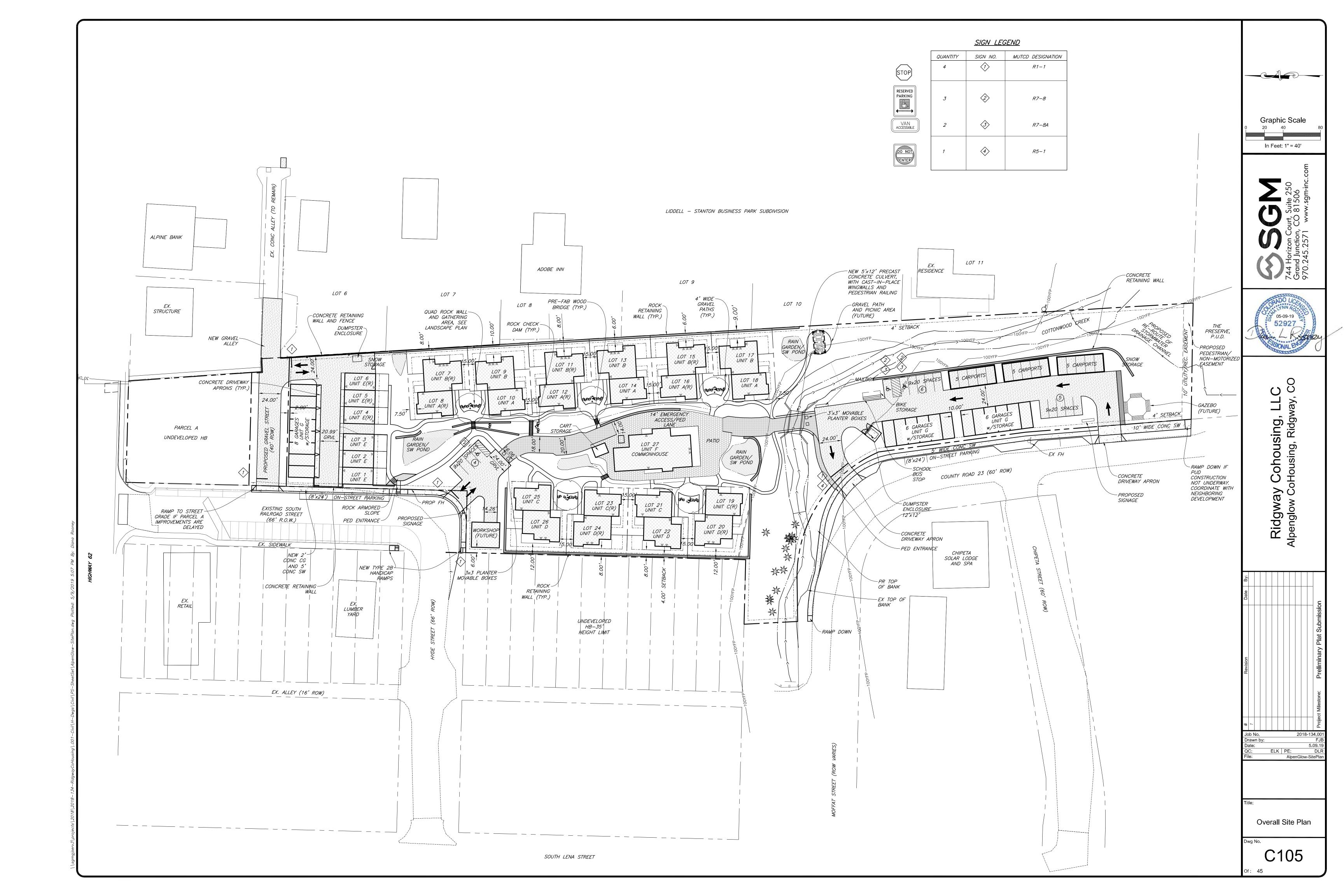
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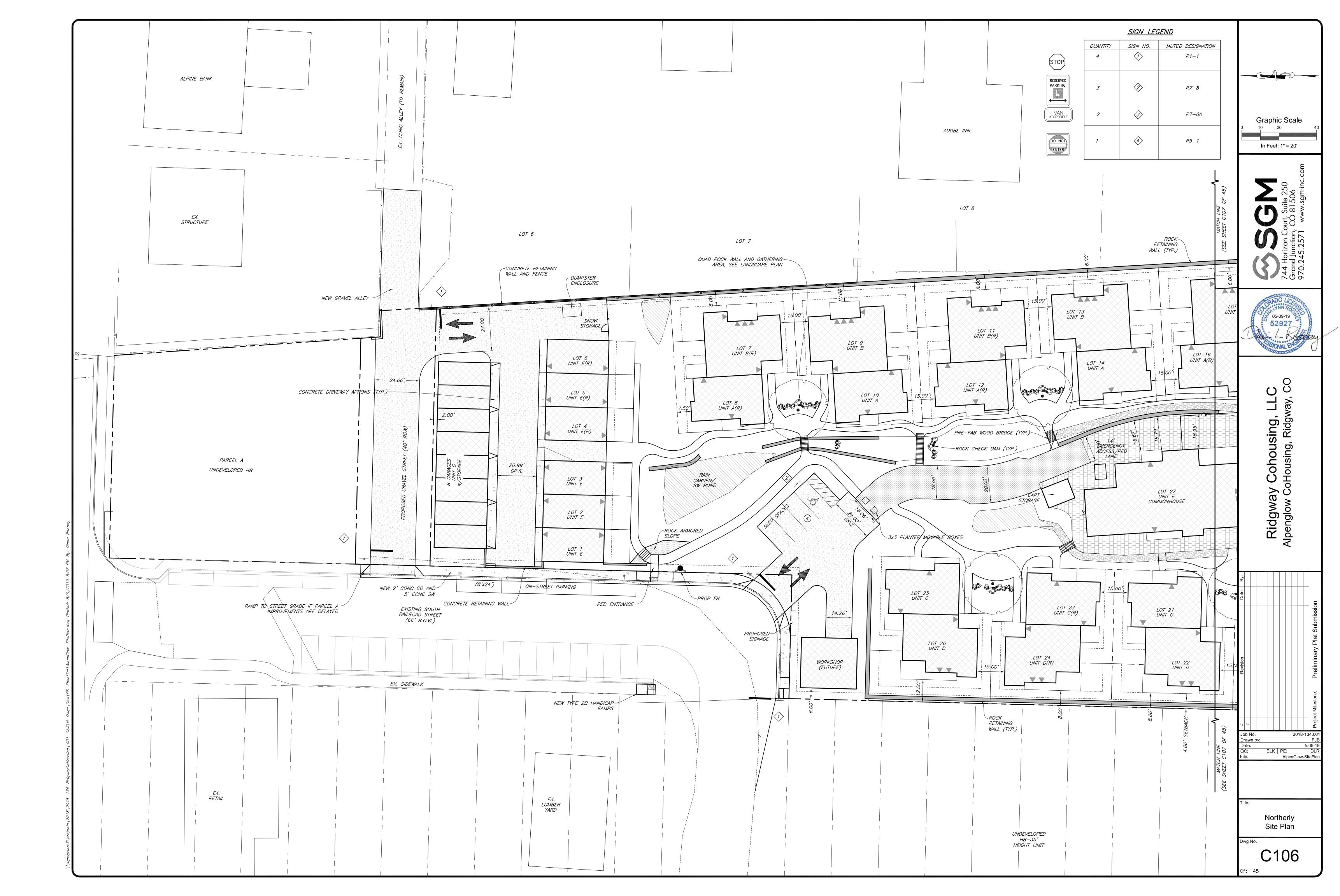
ELECTRICAL: SAN MIGUEL POWER ASSOC. DUANE DEVENY (970) 626-5549 X 214

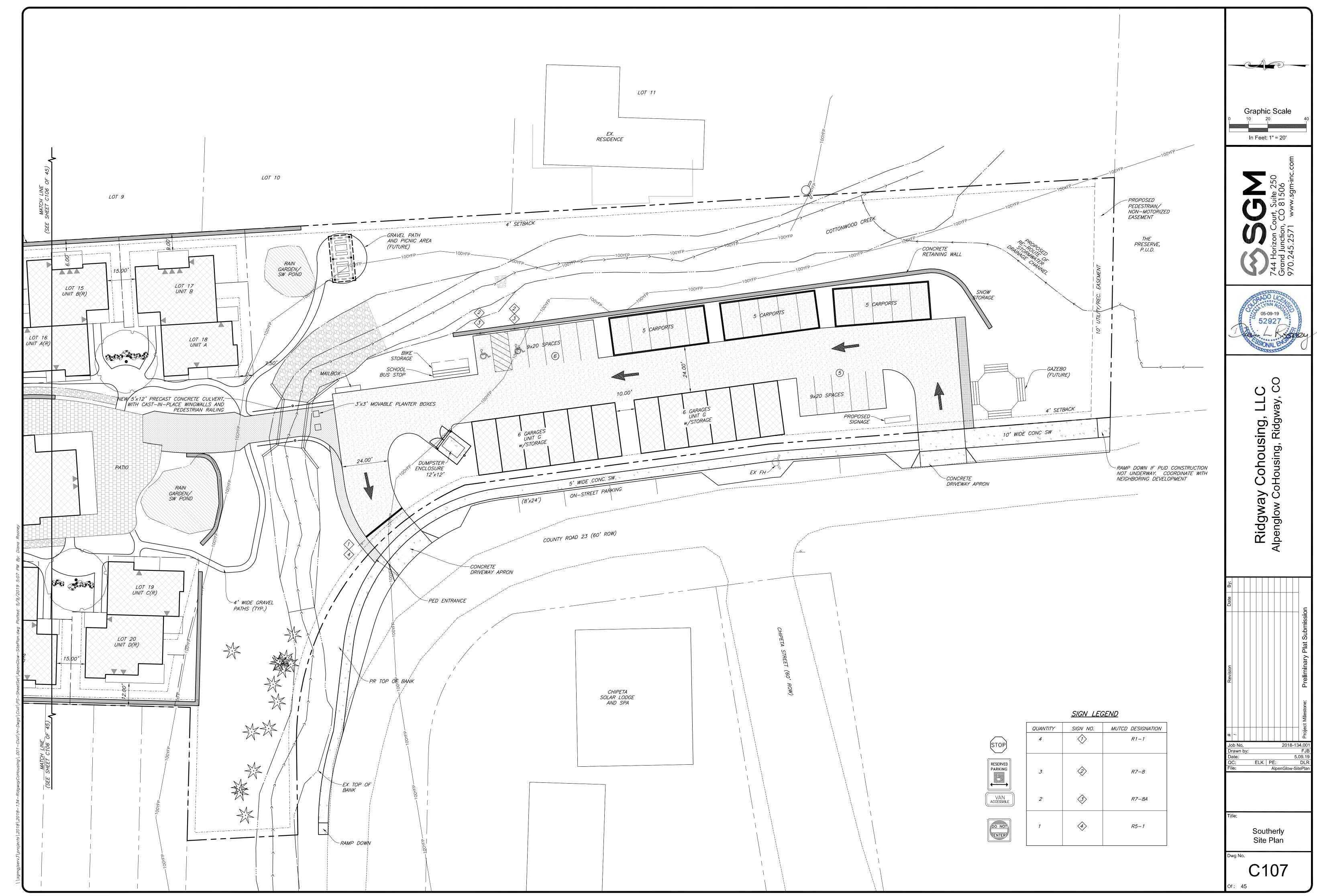
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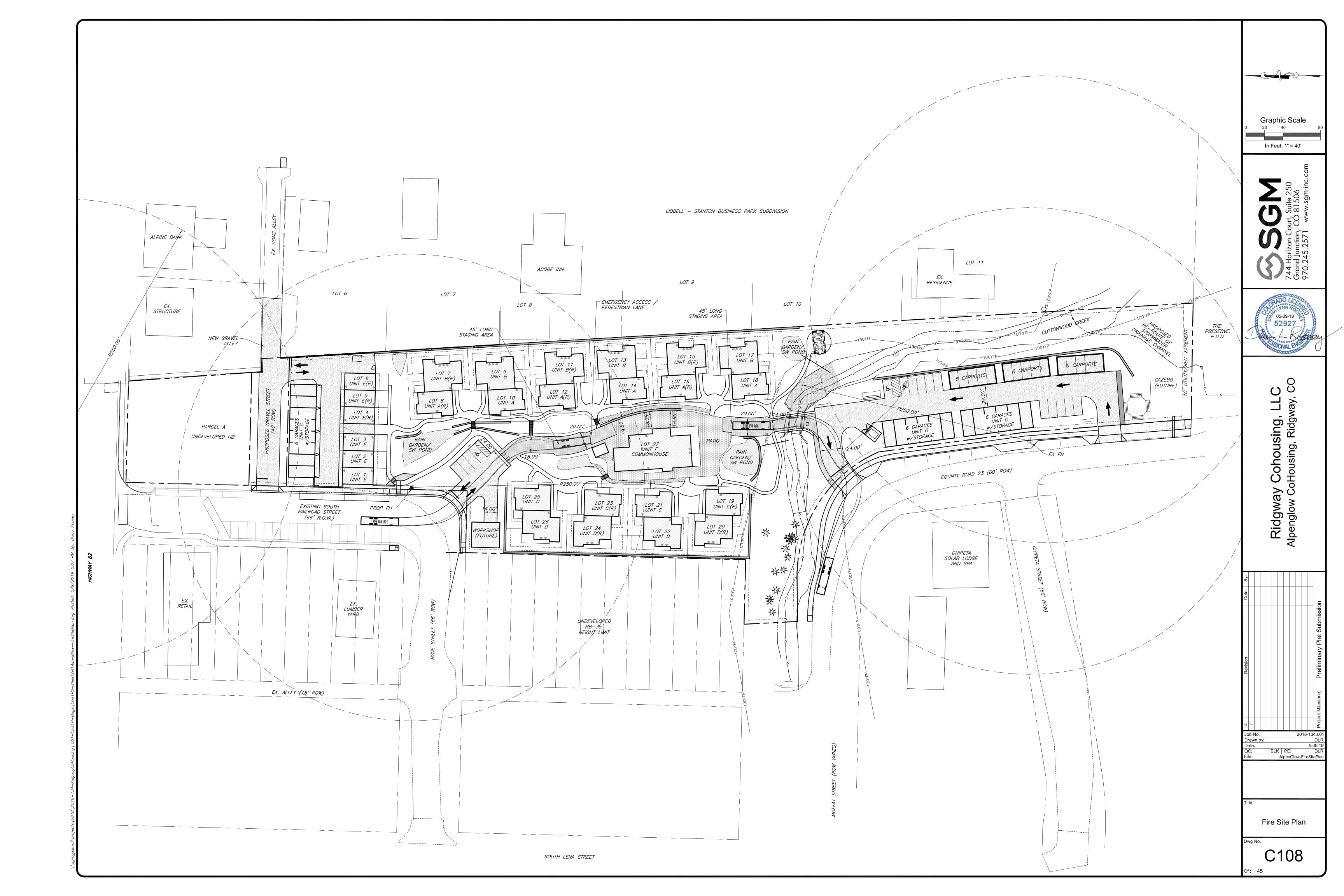
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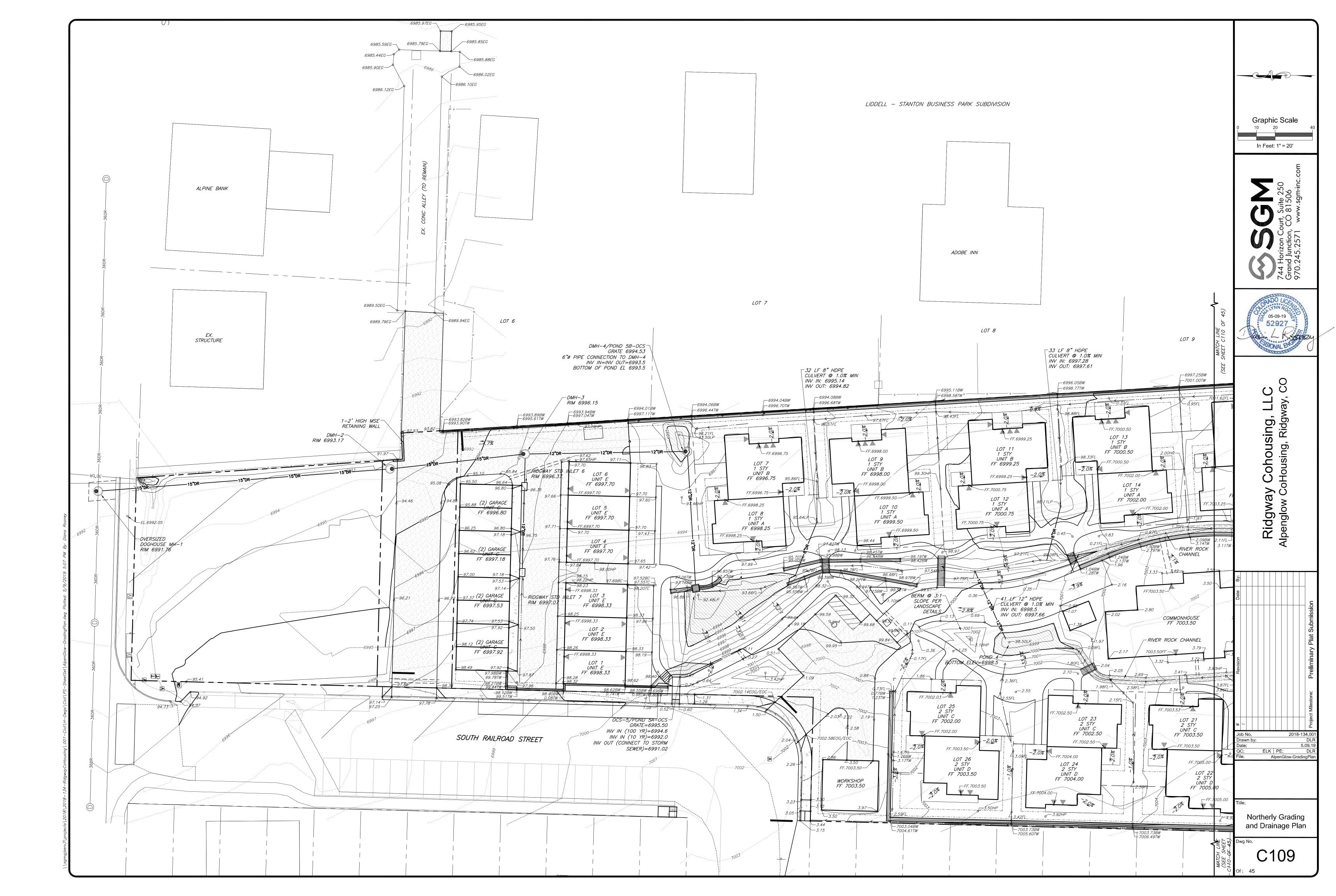


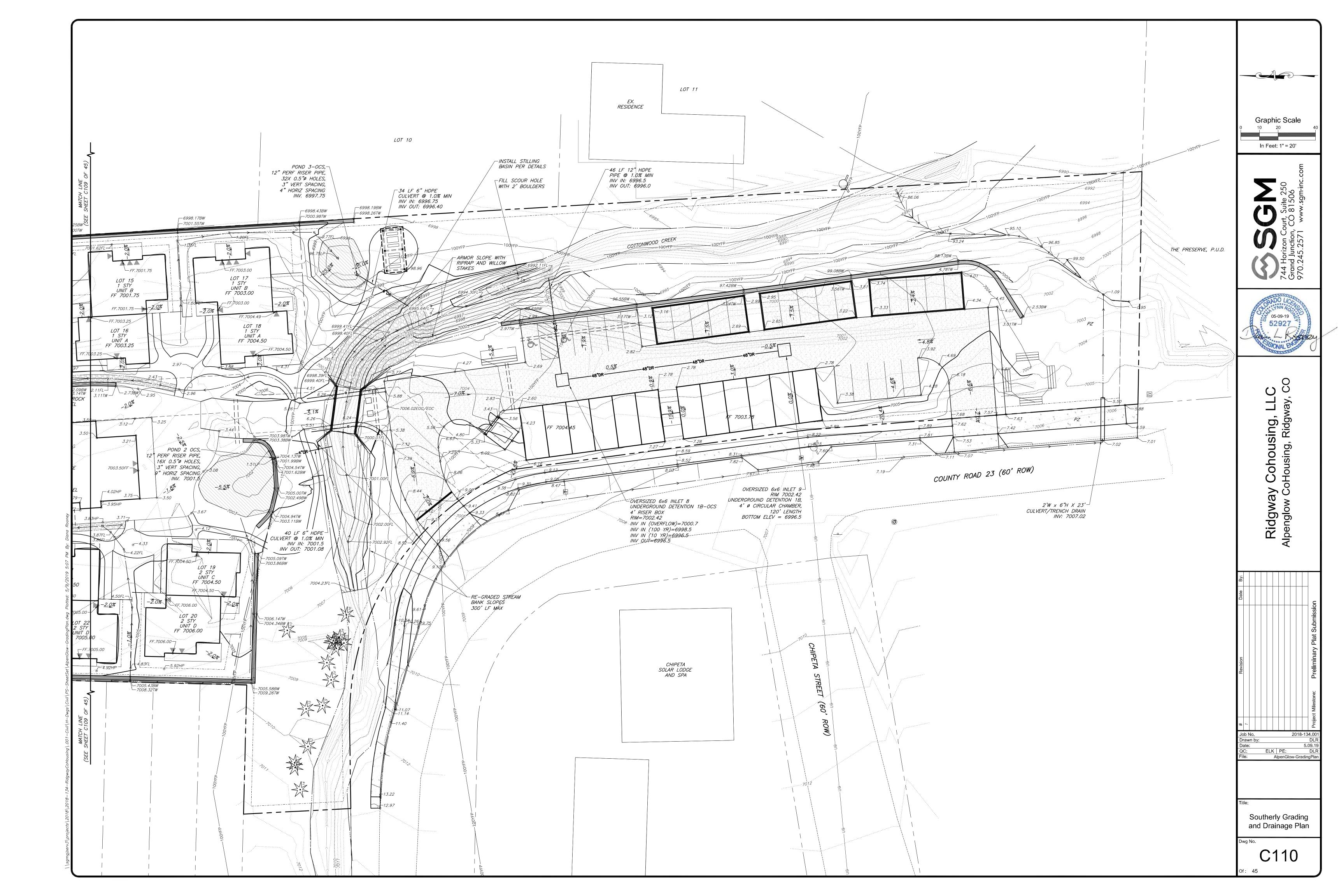




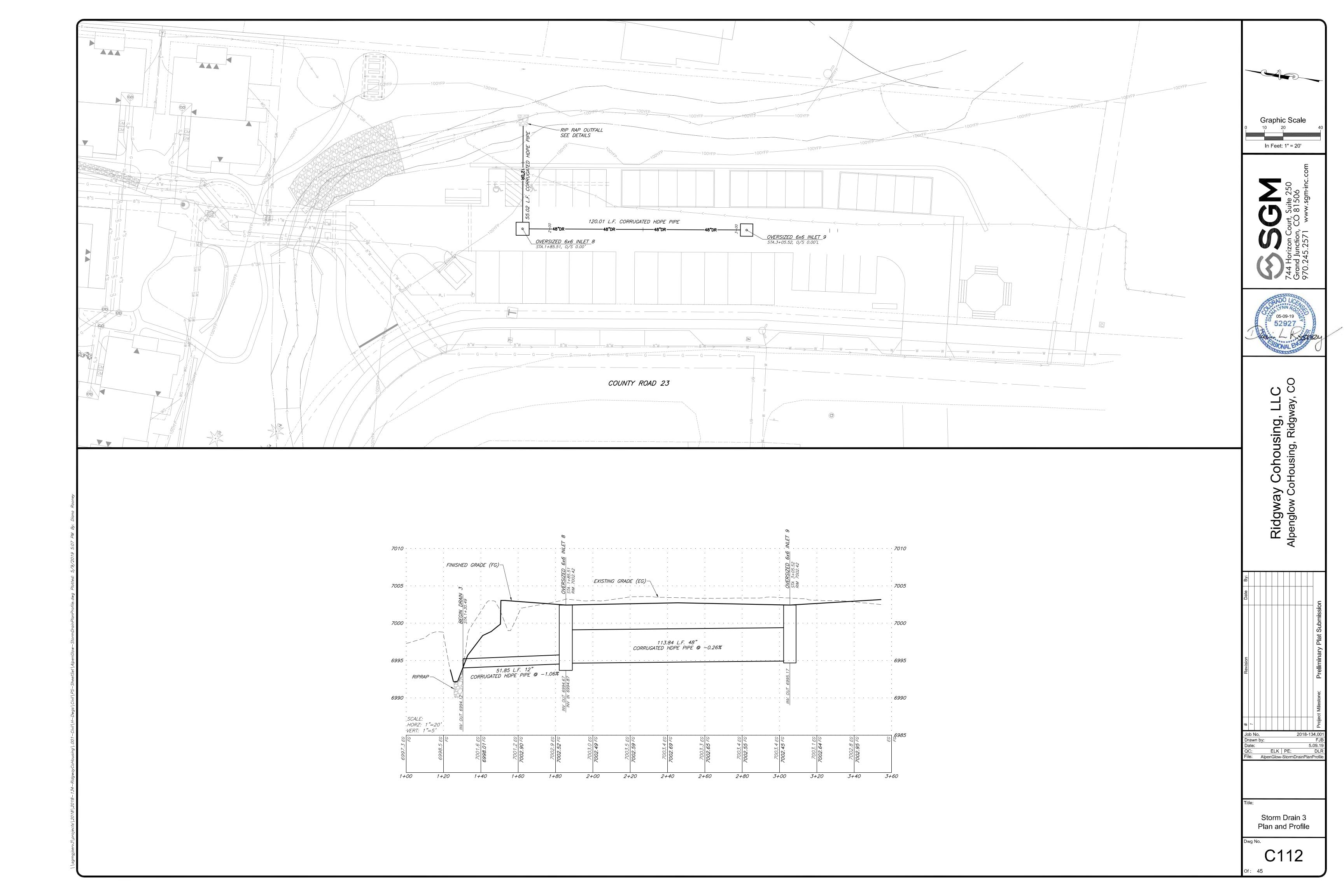


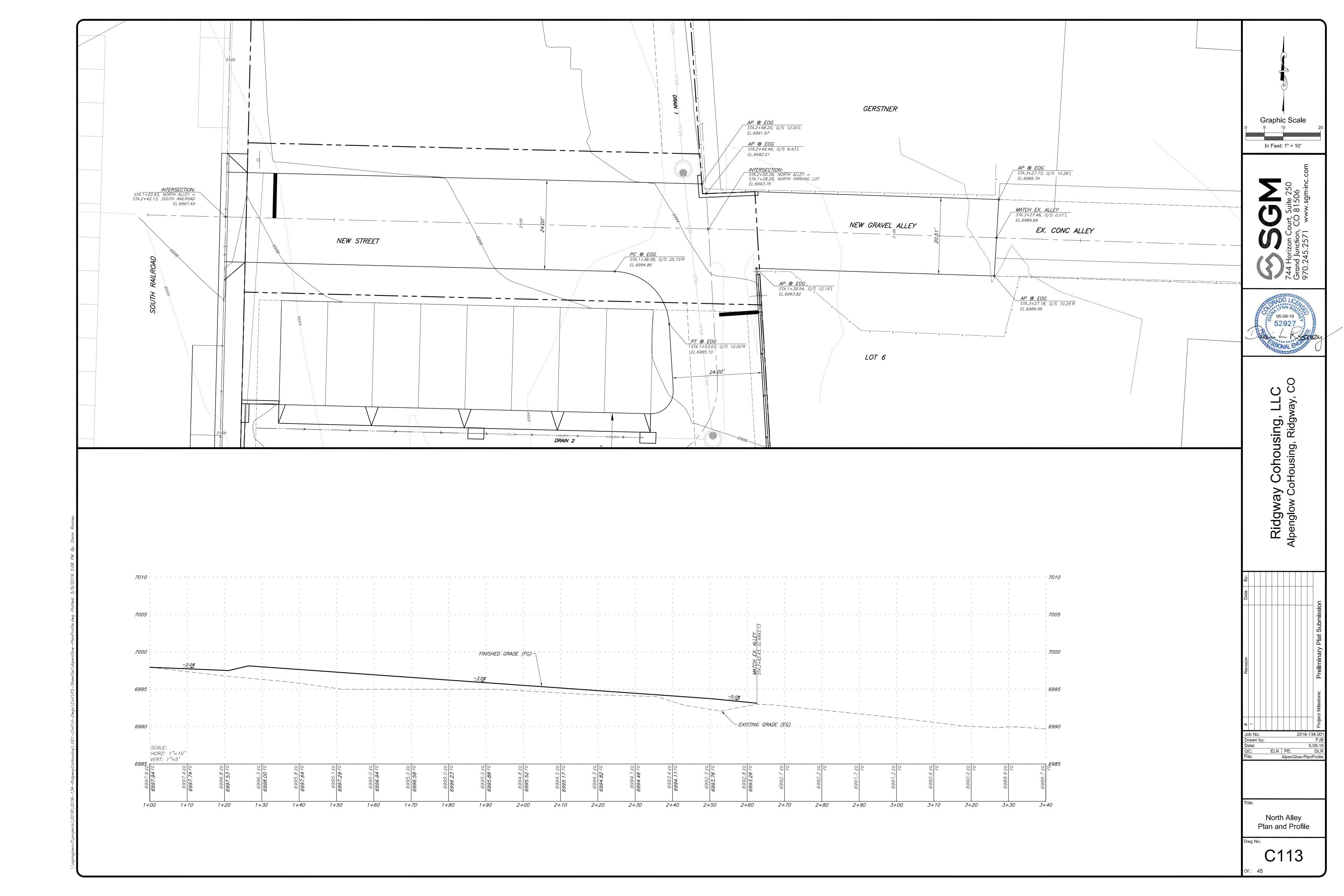






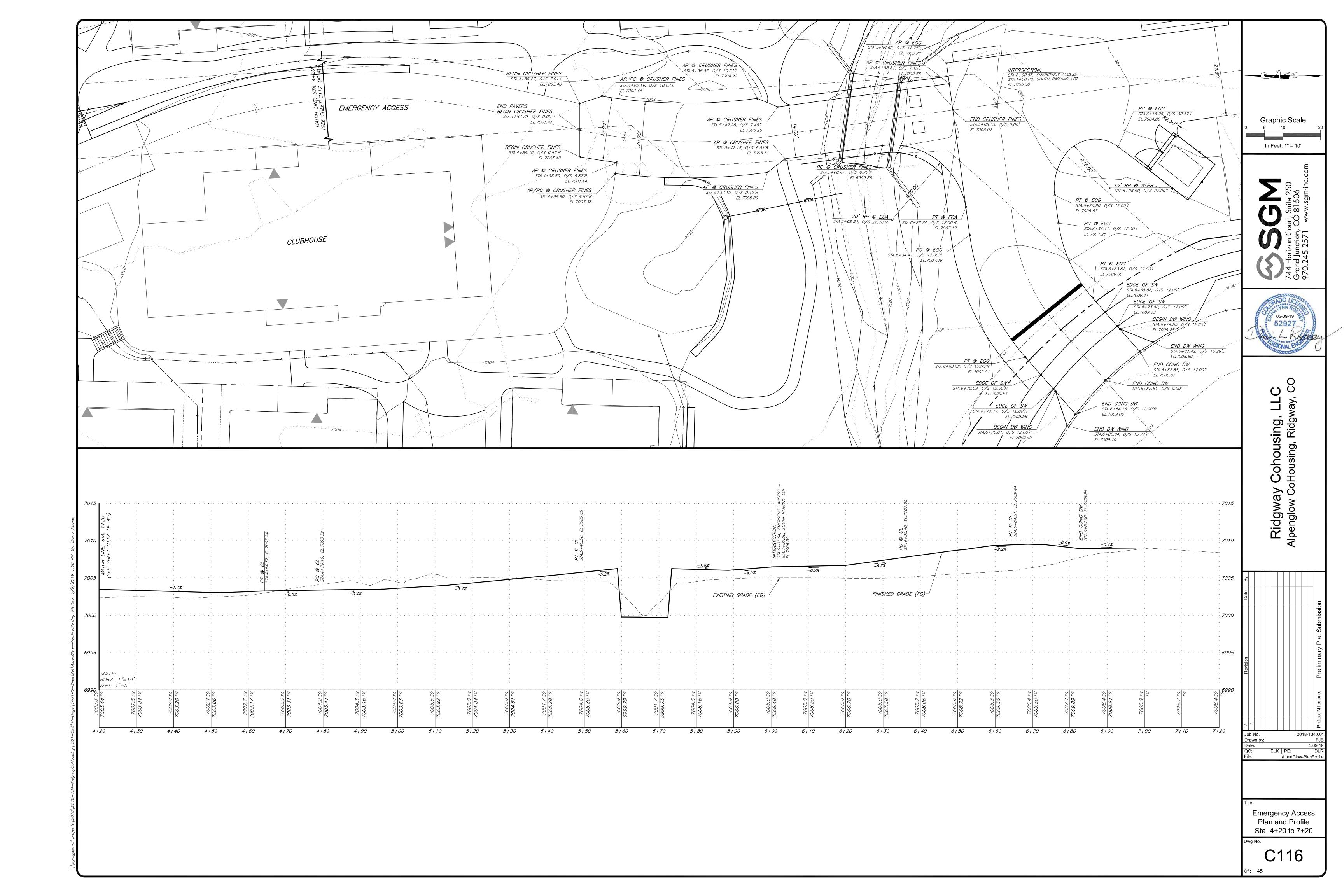


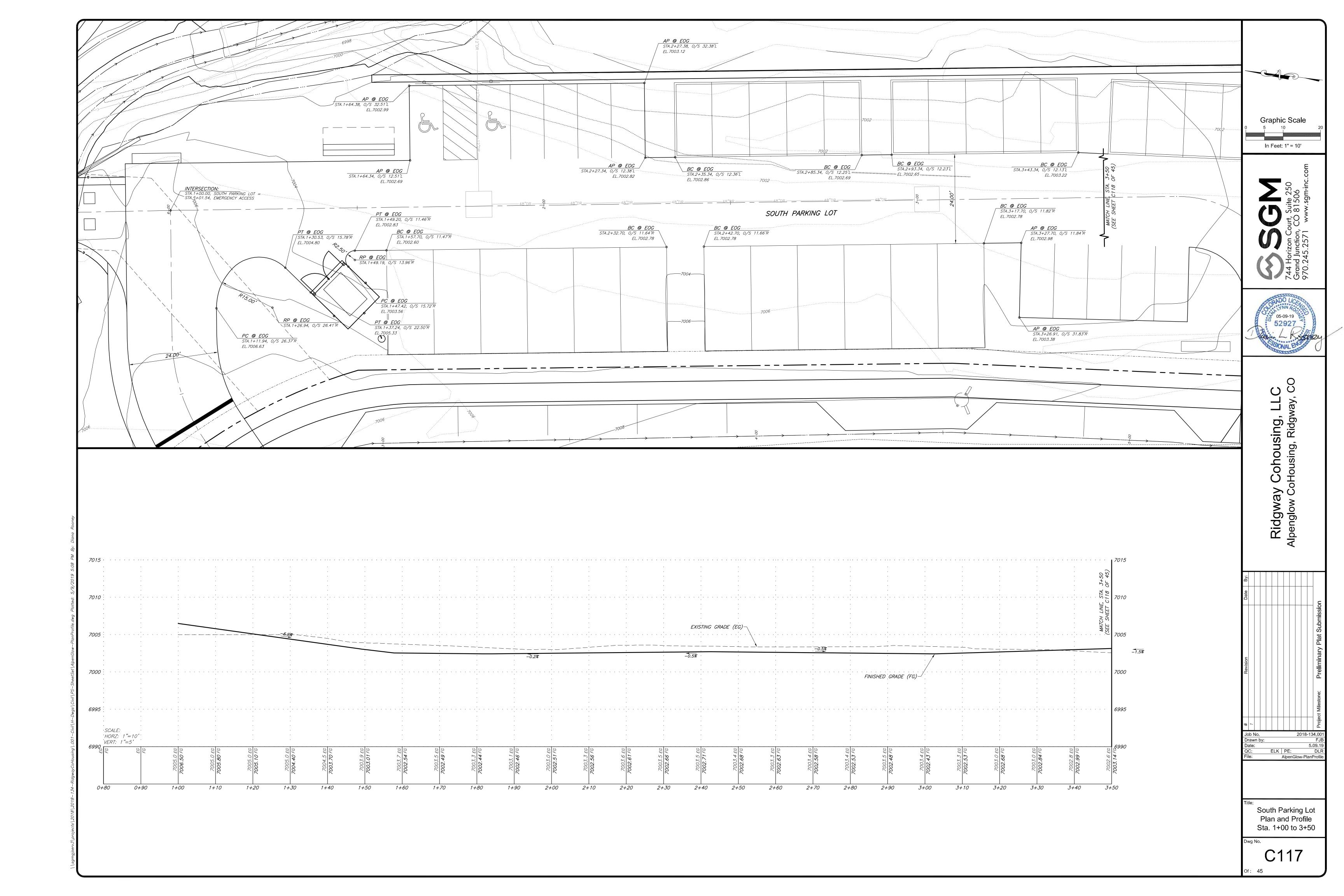


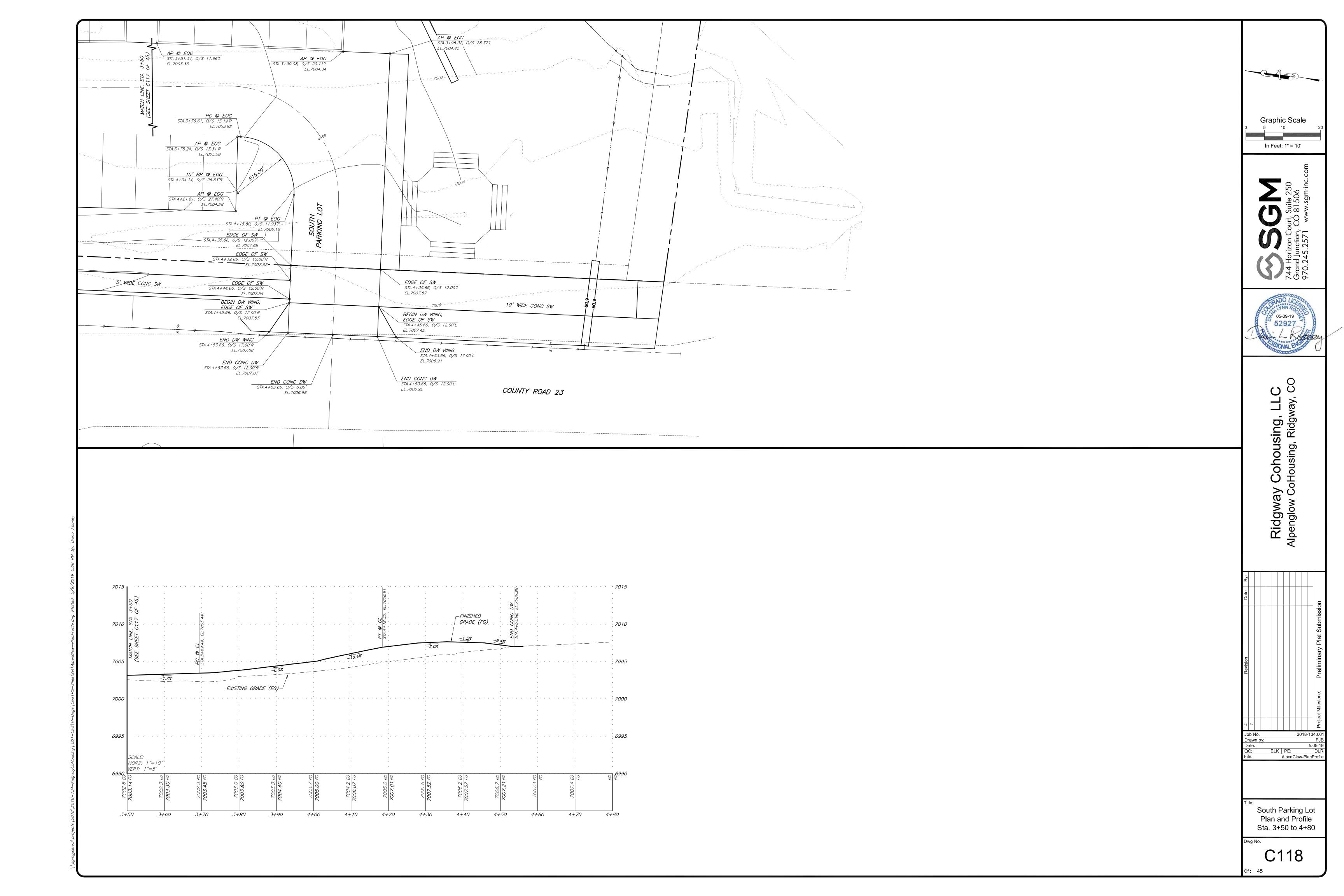


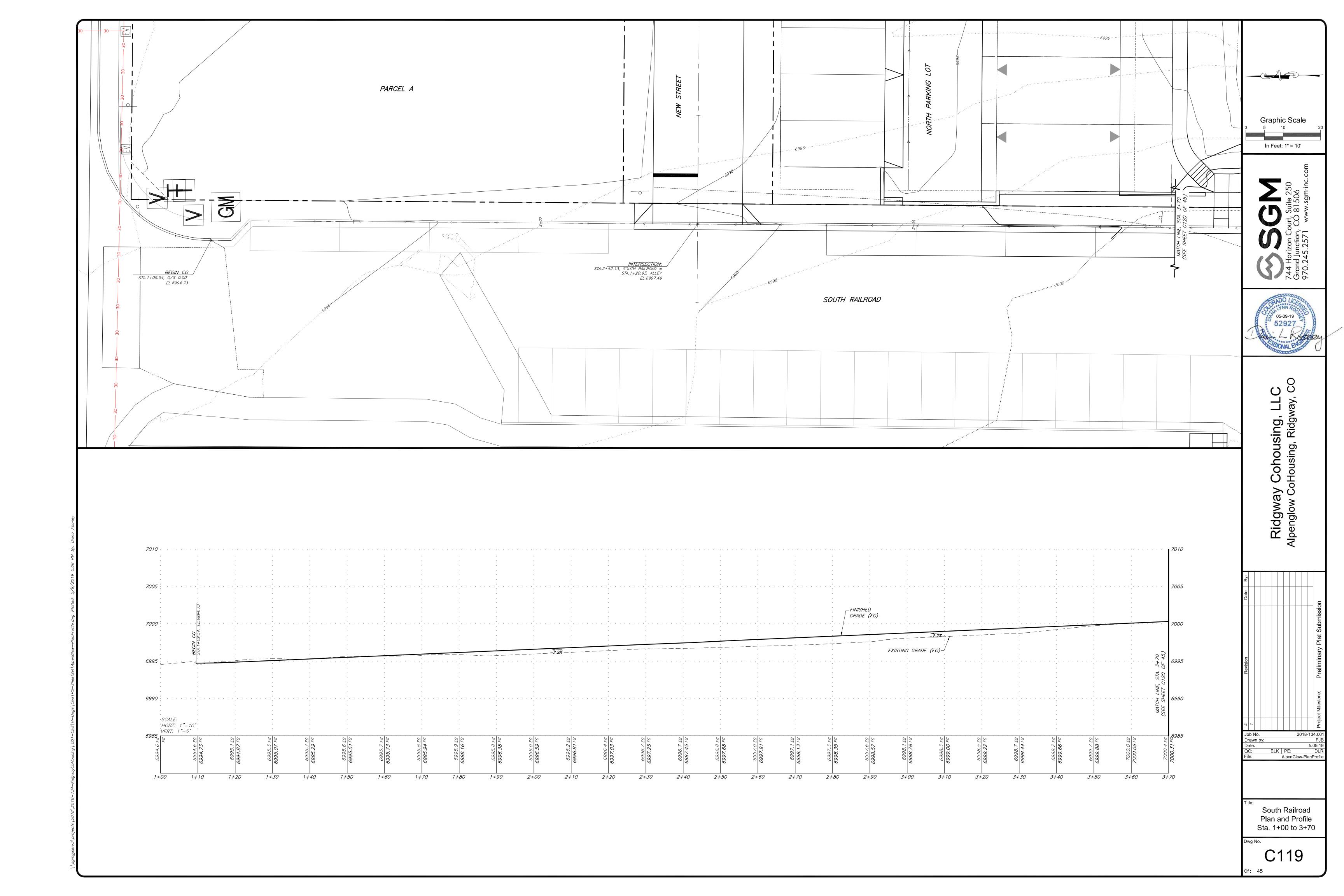


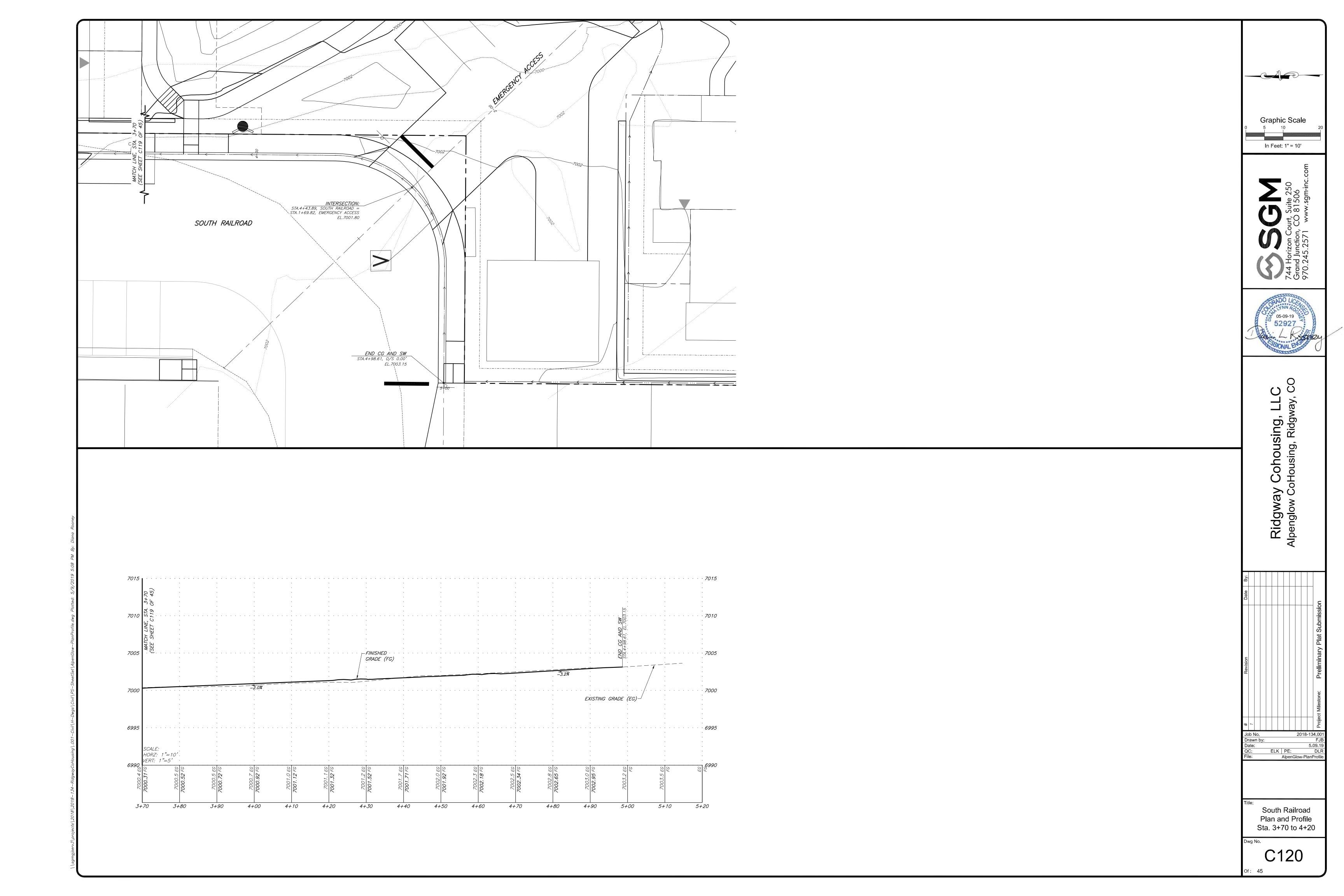


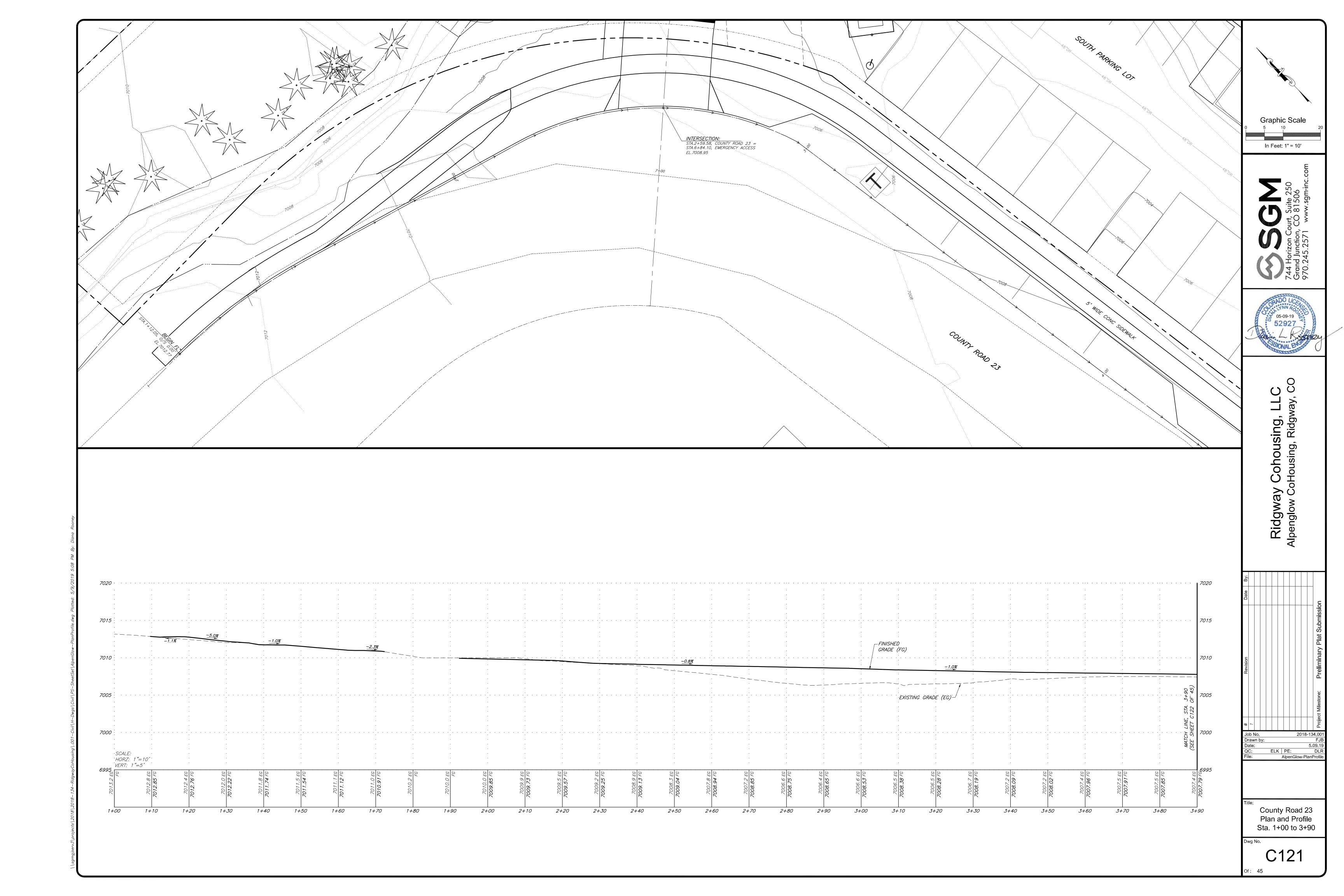


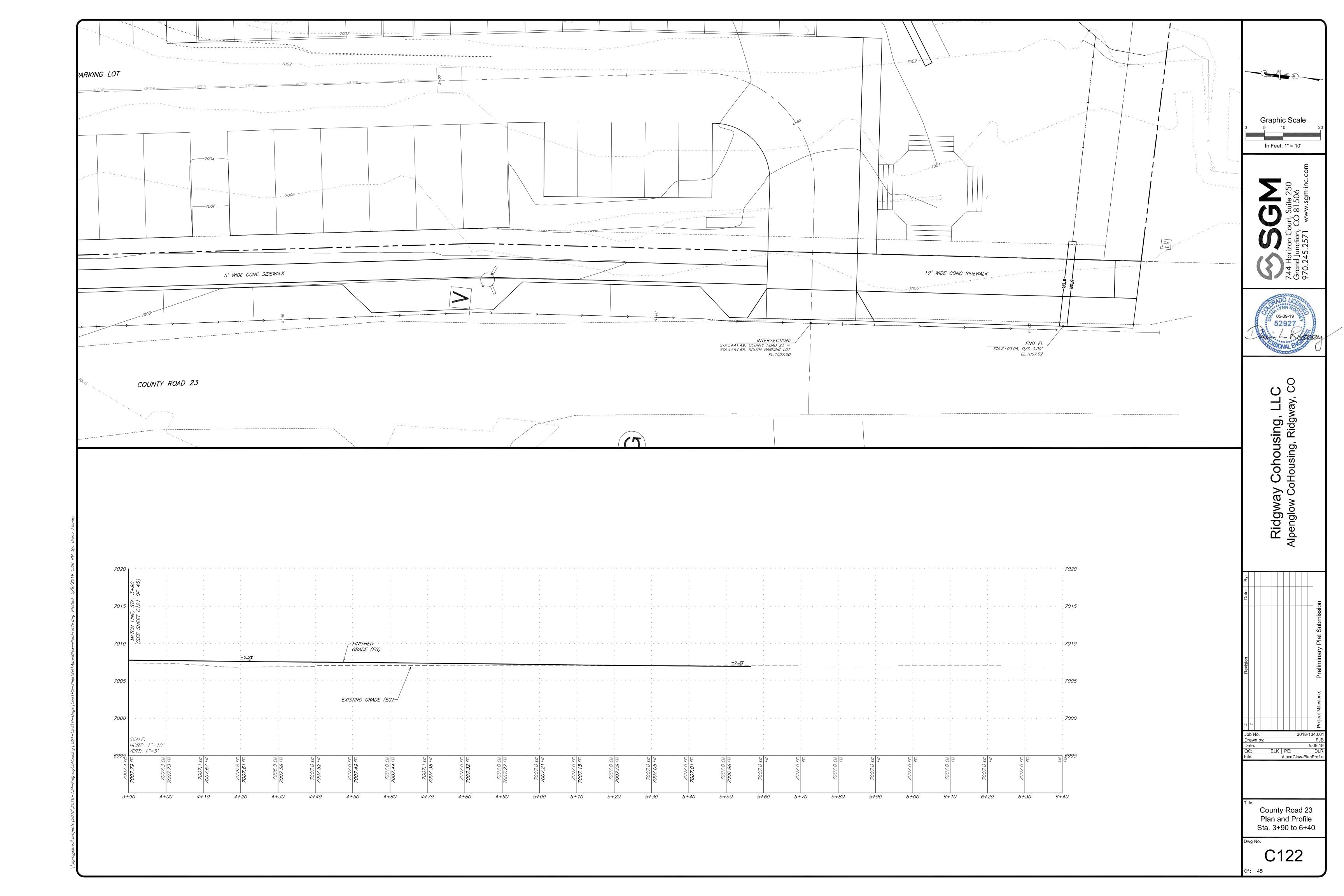


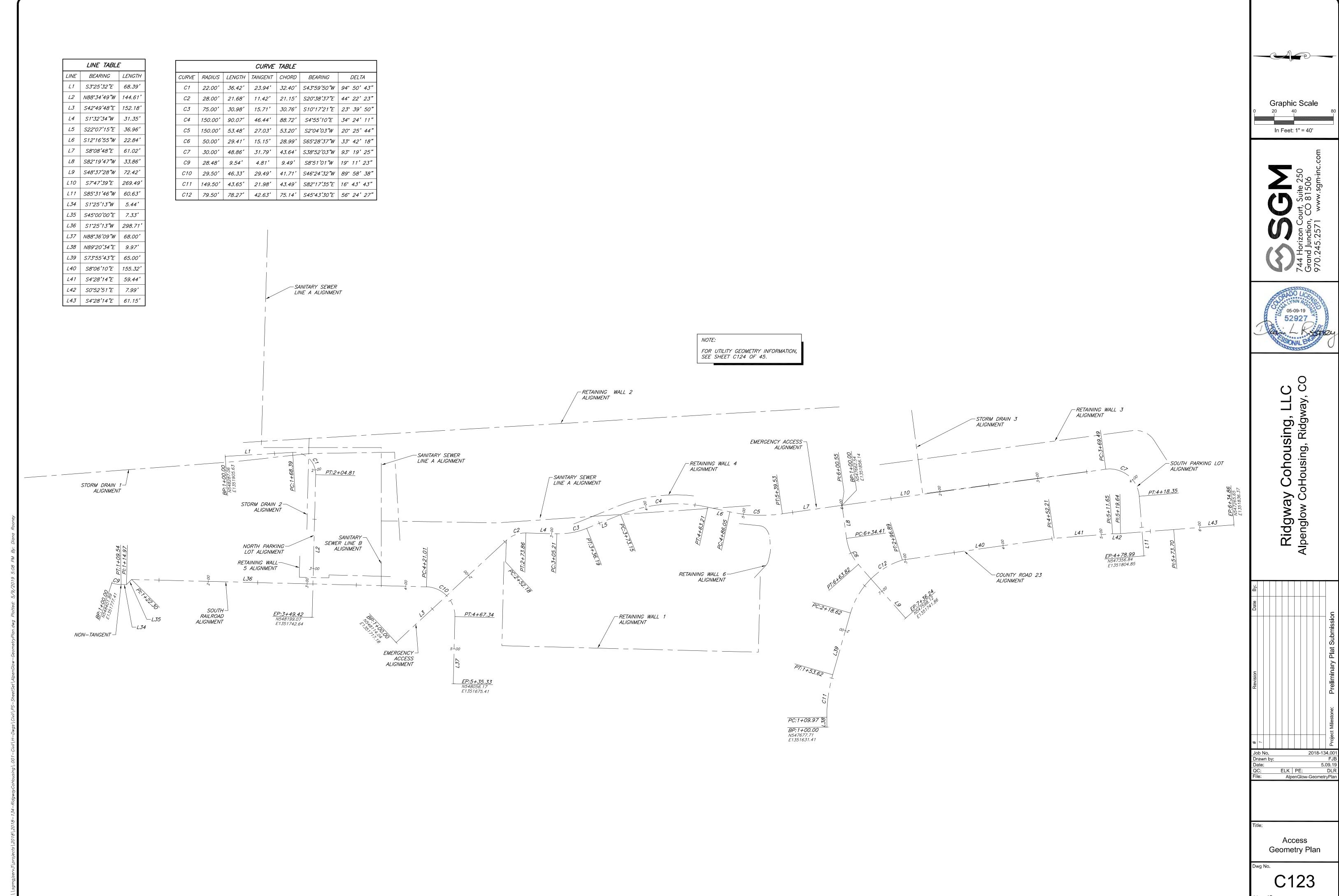


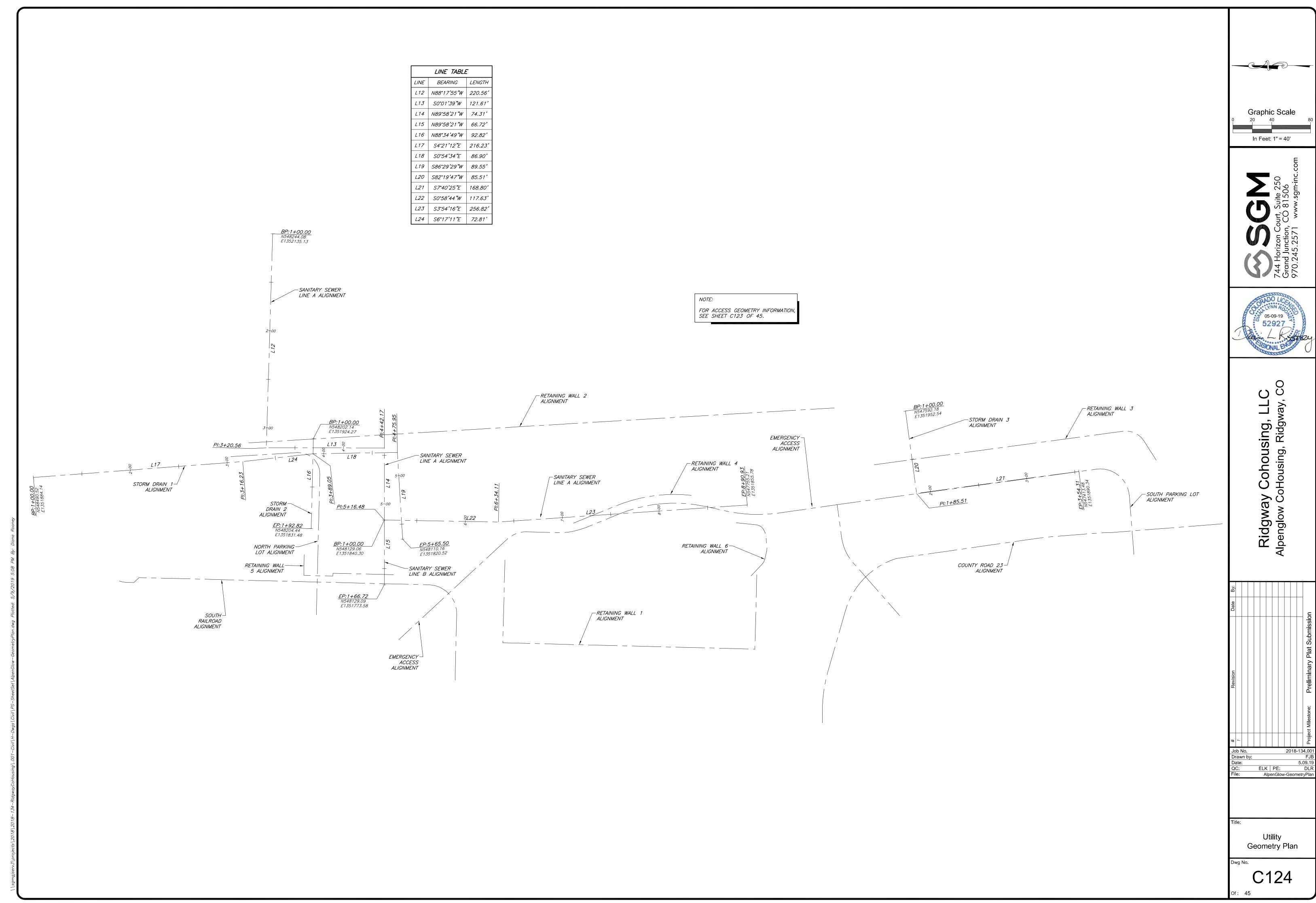


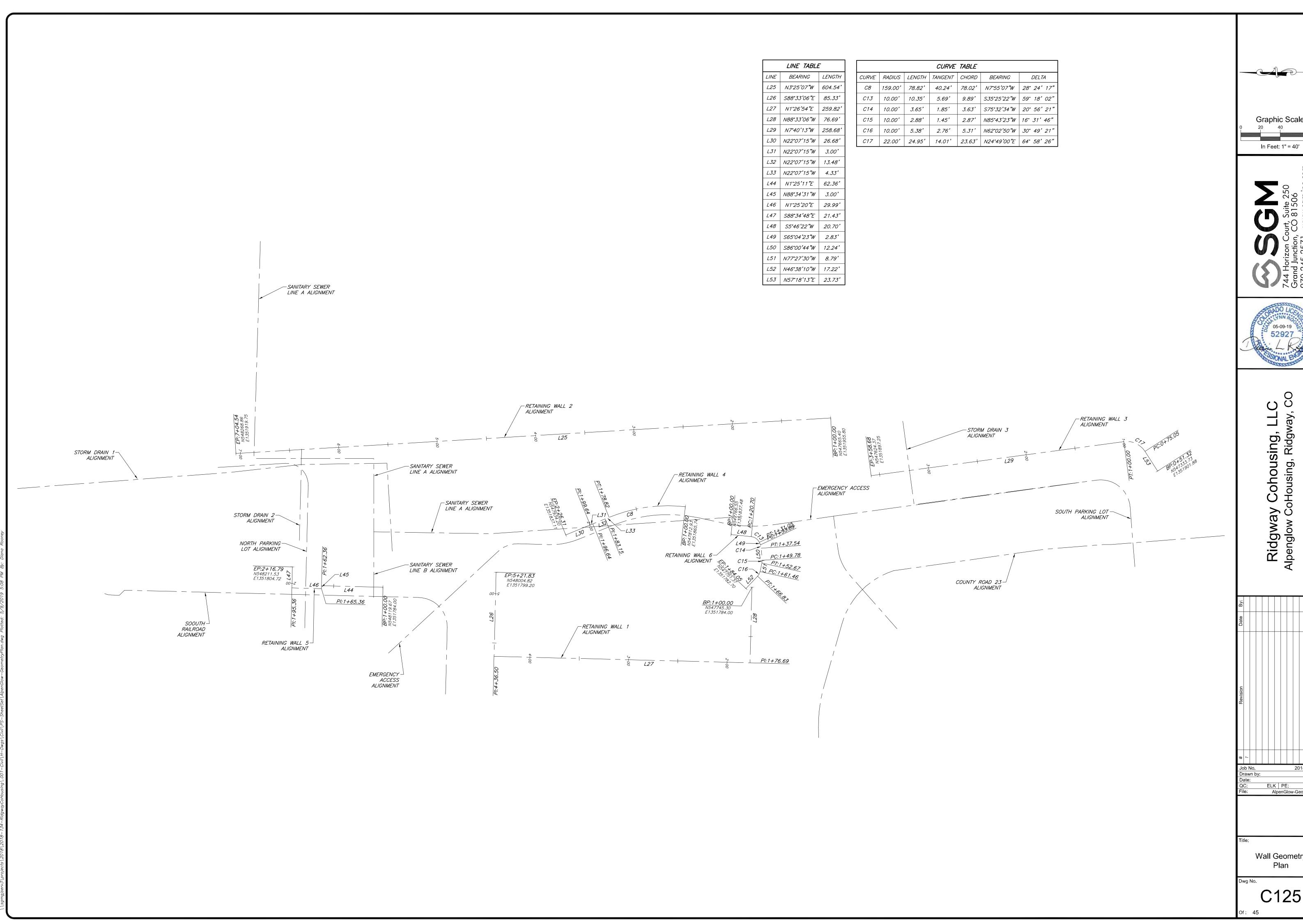










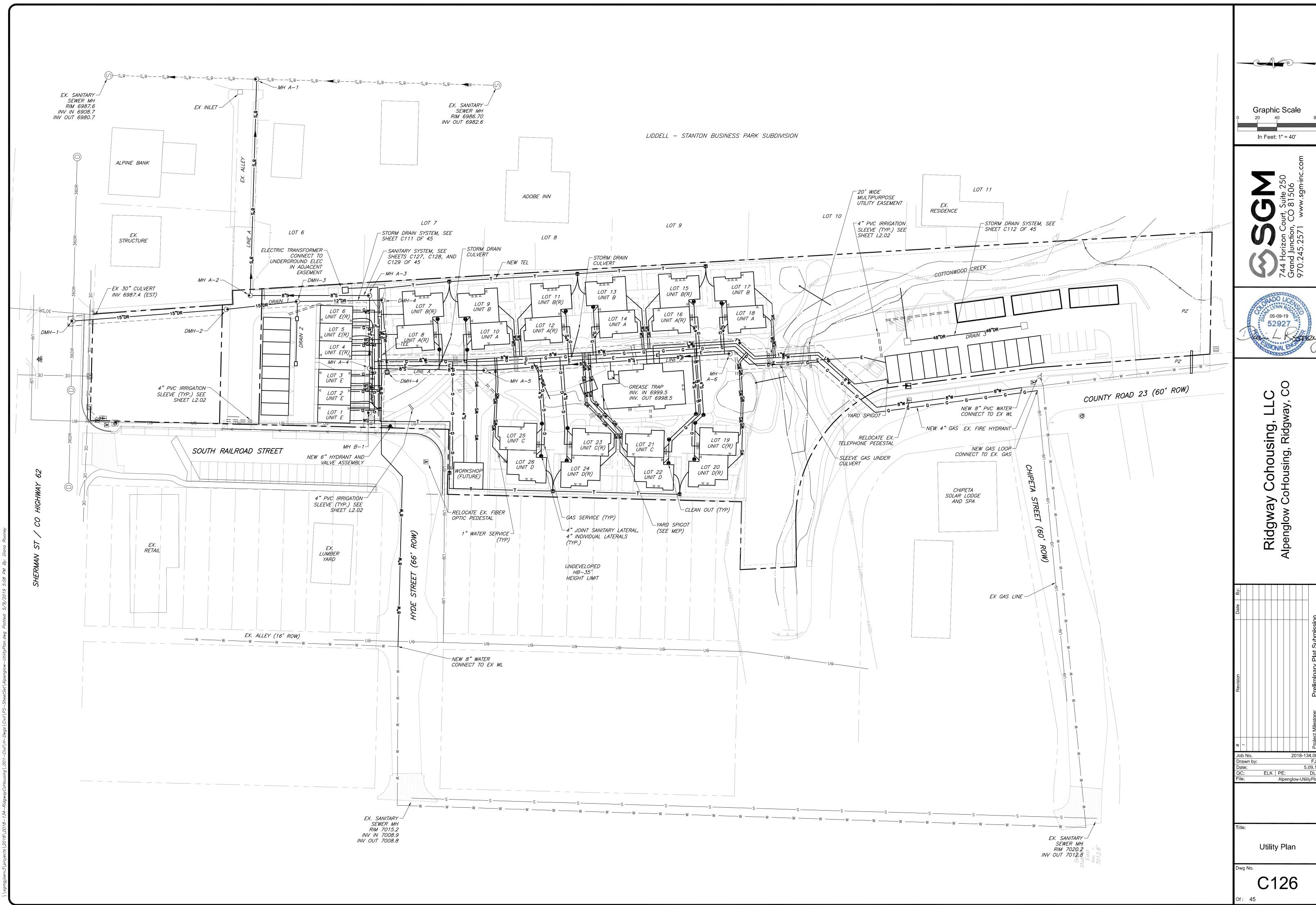




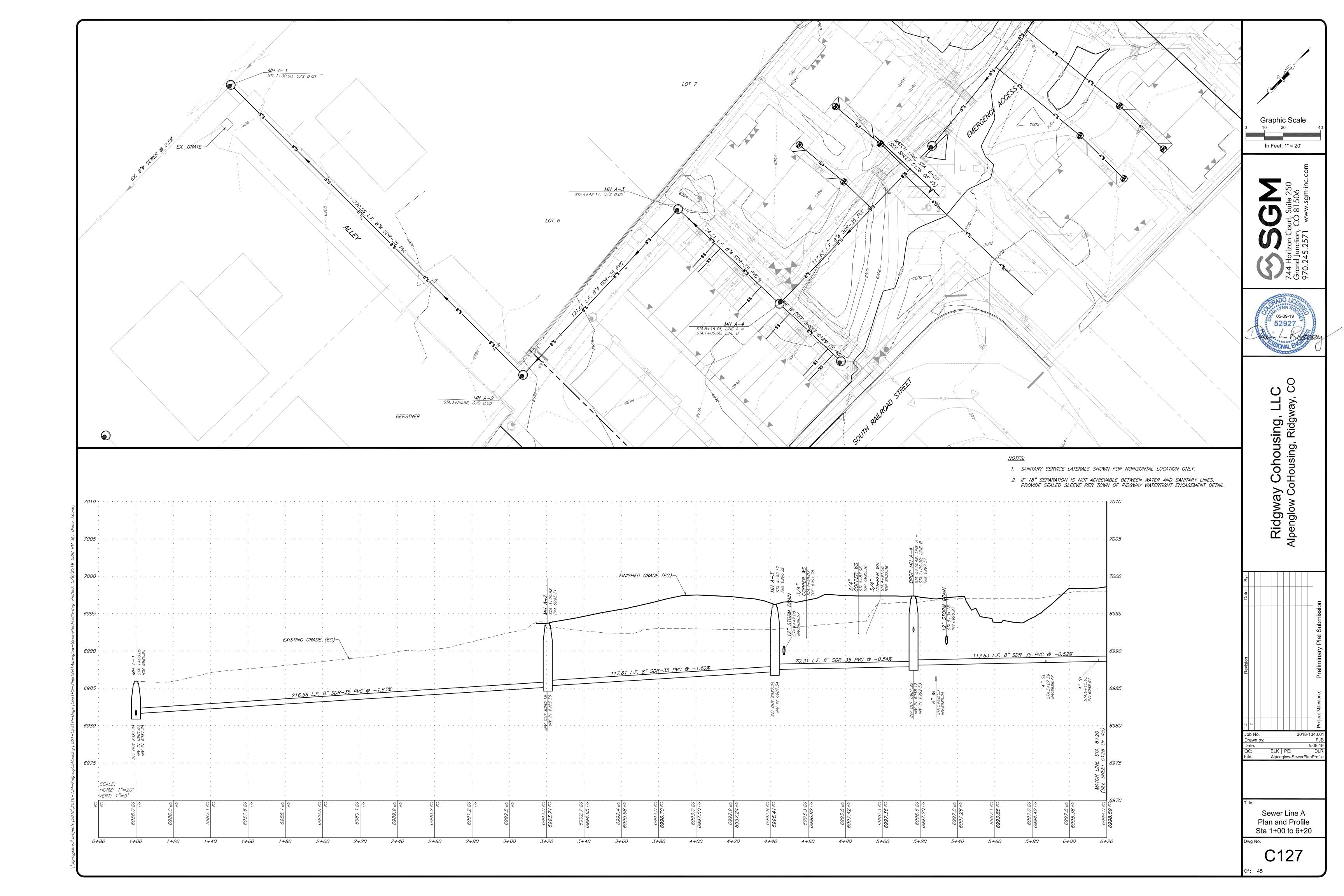
shousing, I using, Ridgw **Ridgway** Alpenglow Co

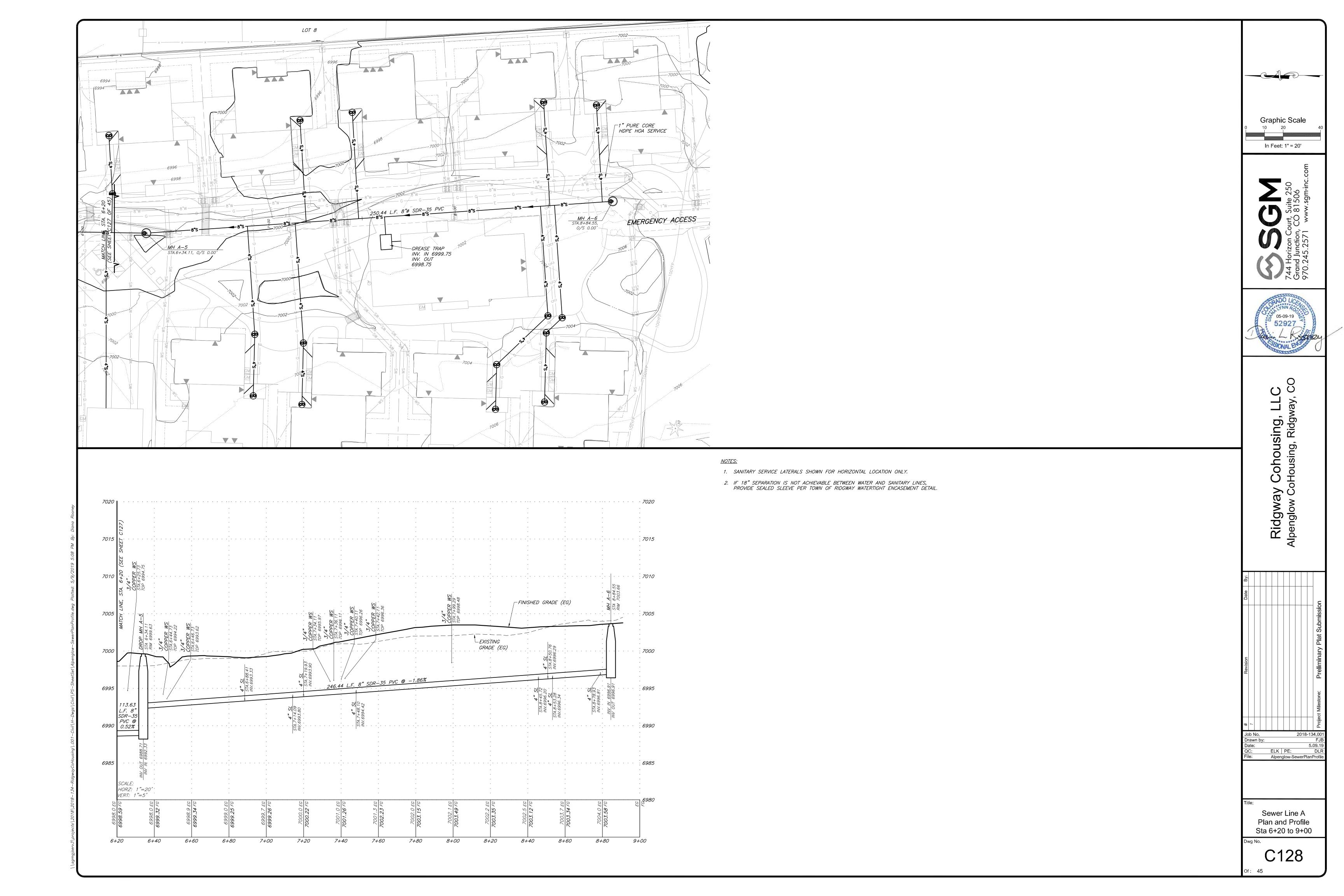
ELK PE: DLR
AlpenGlow-GeometryPlan

Wall Geometry Plan



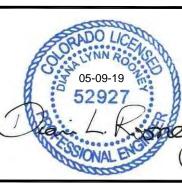








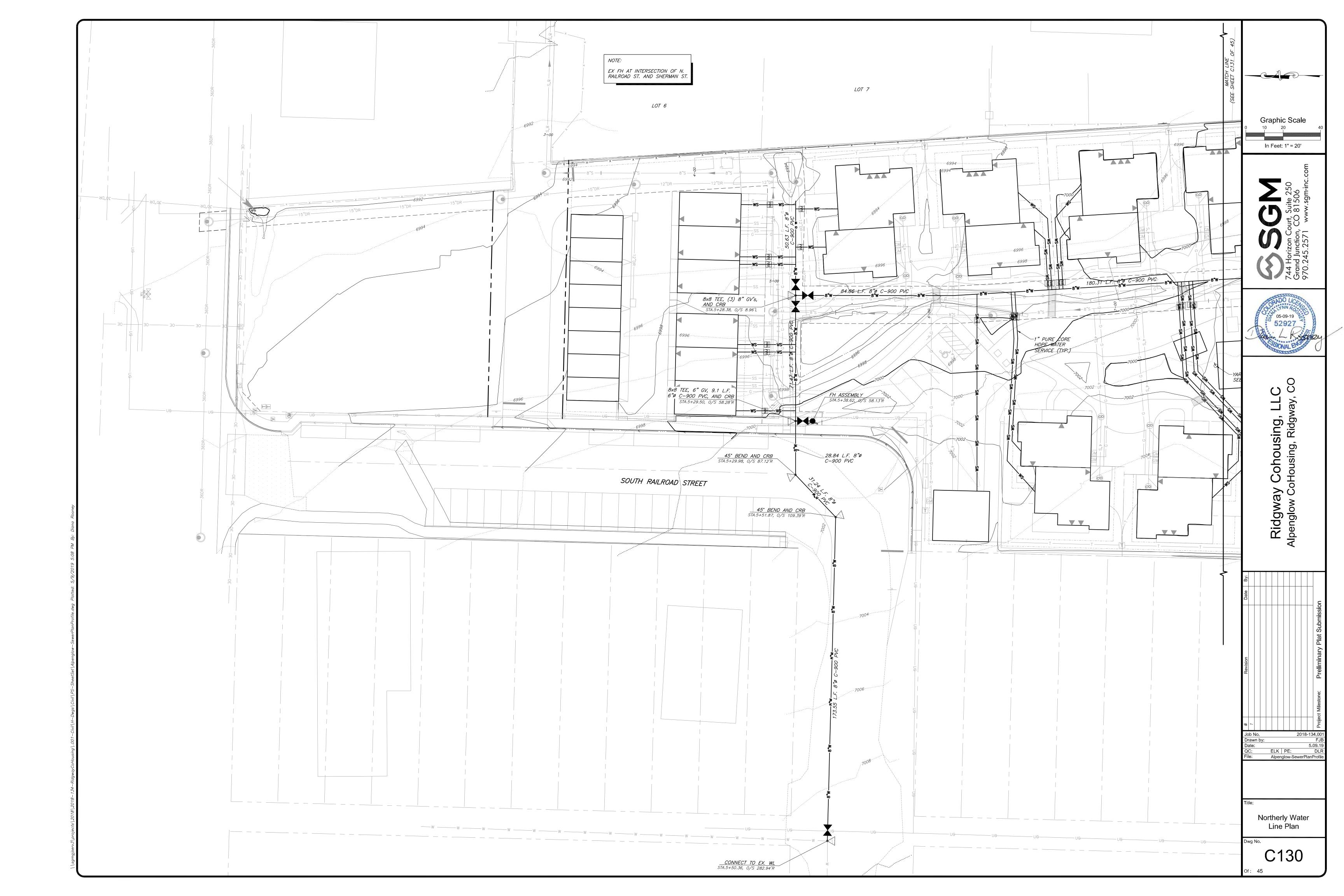
In Feet: 1" = 20'



Ridgway Alpenglow Co

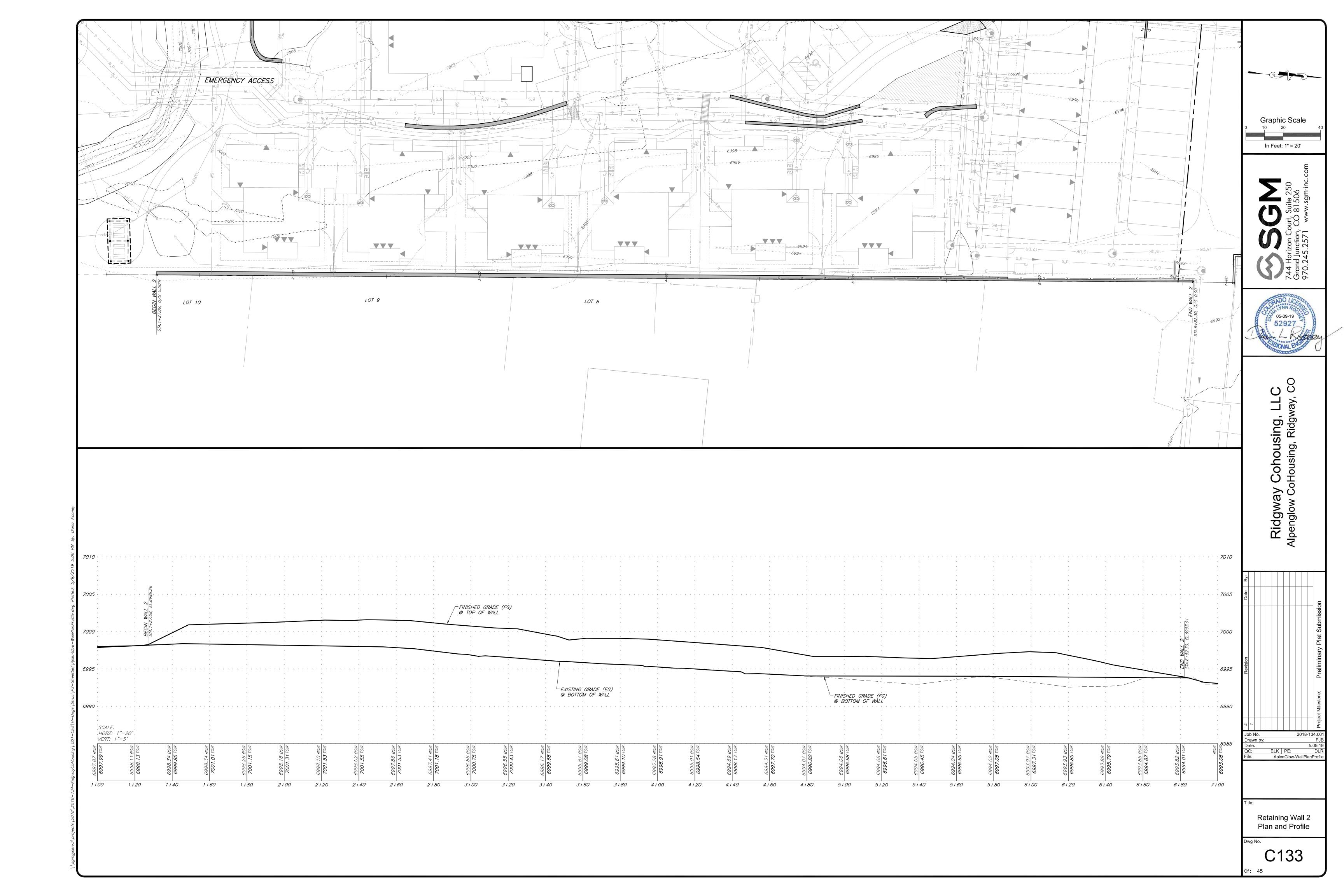
Sewer Line B Plan and Profile

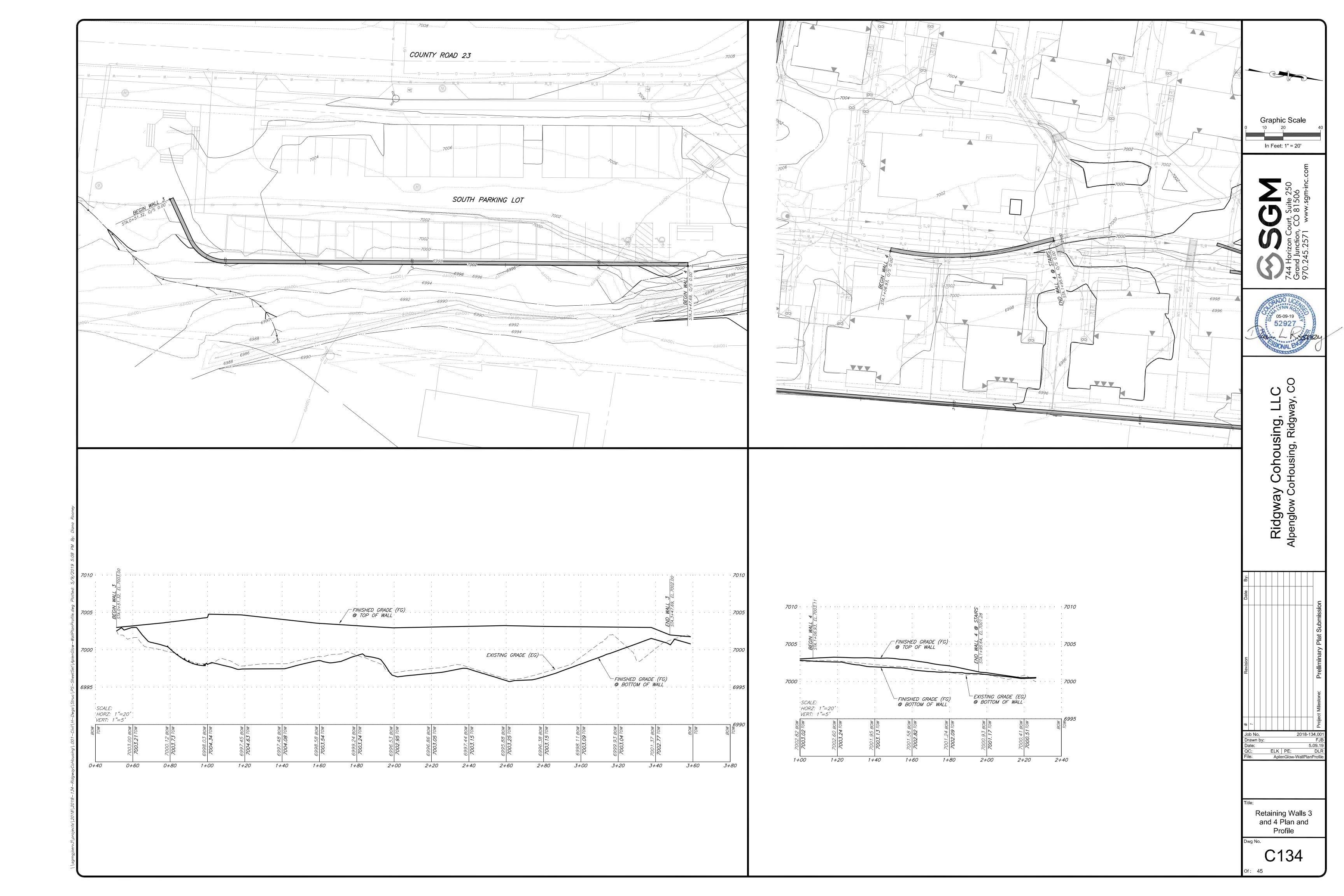
ELK PE: DLR
Alpenglow-SewerPlanProfile

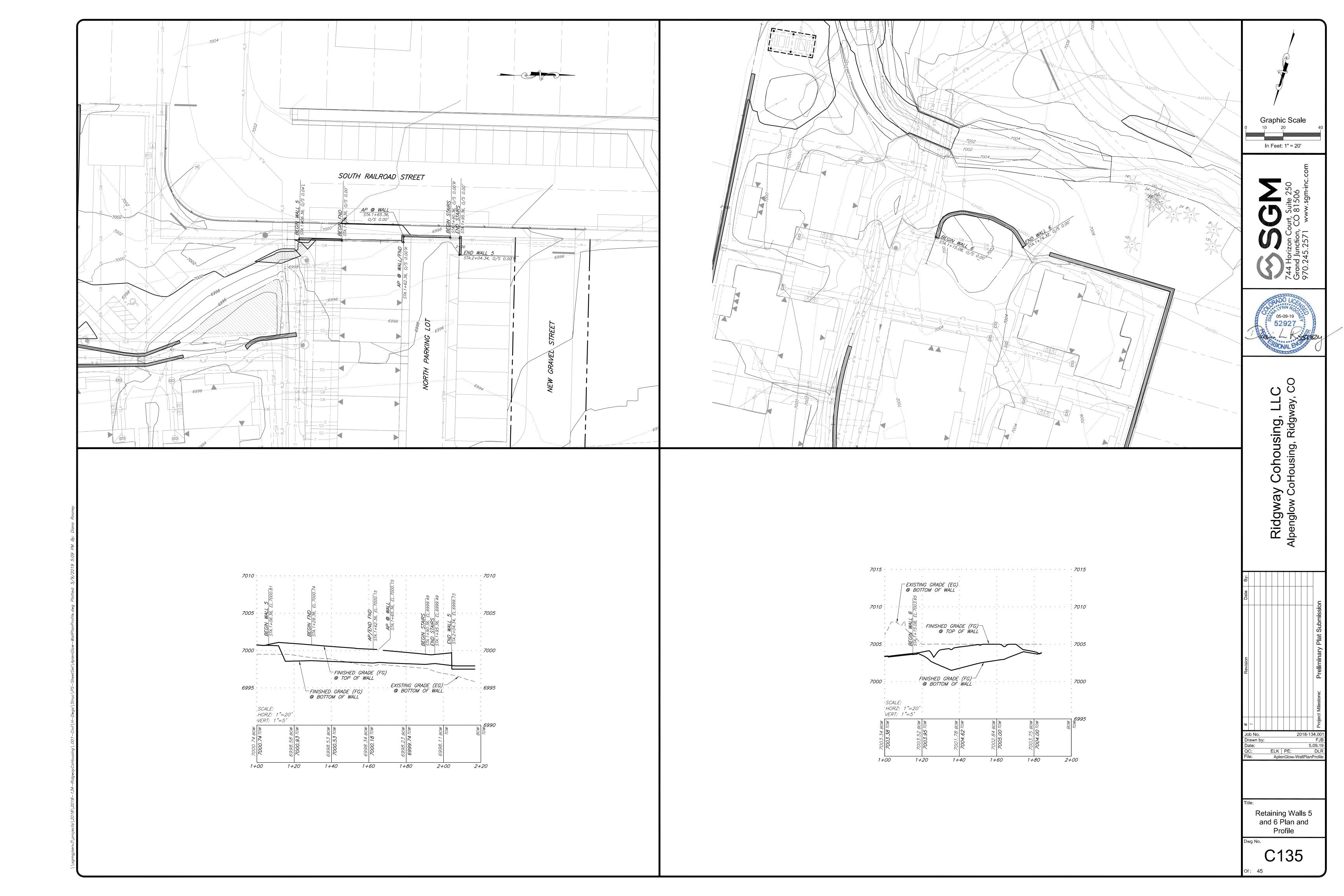


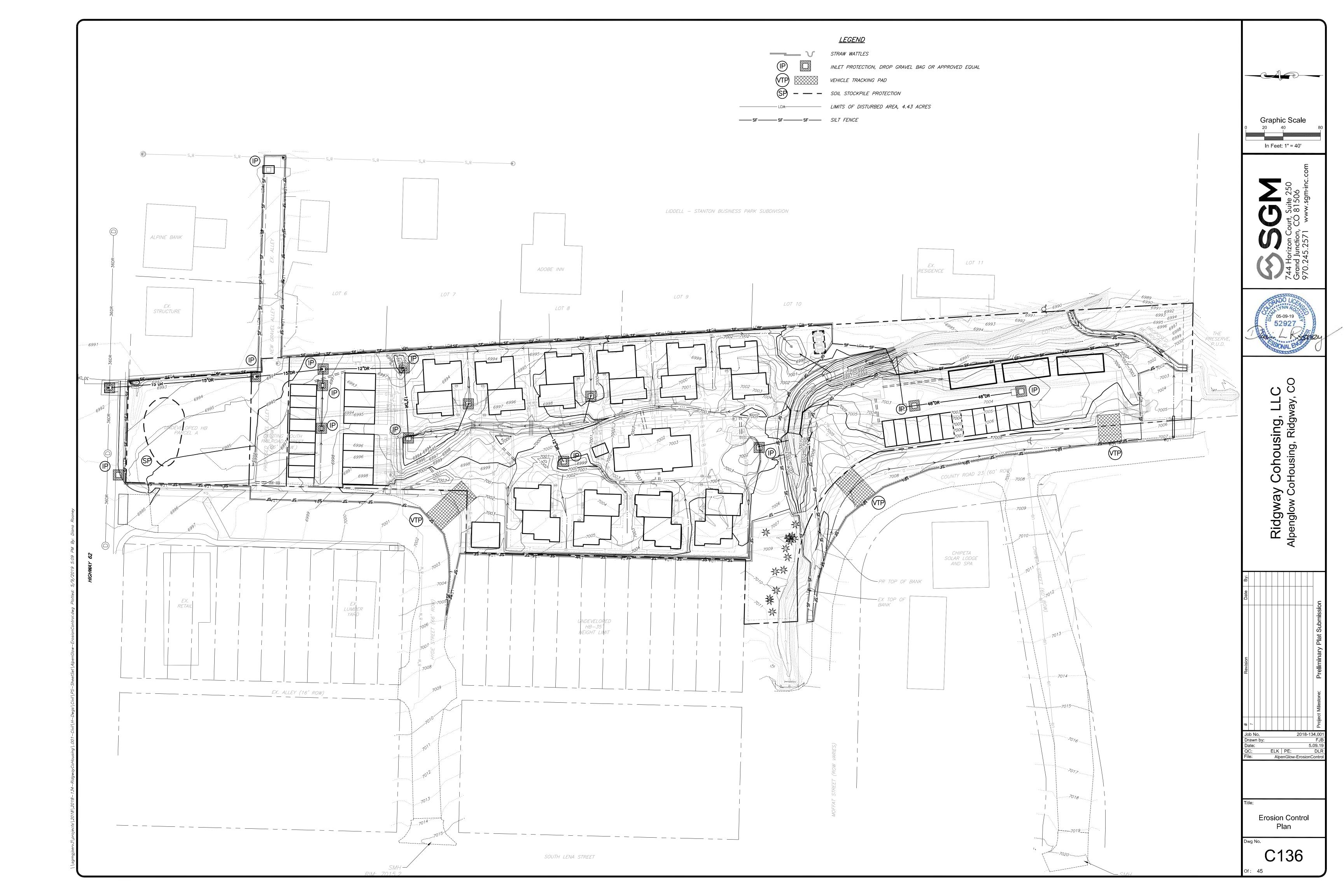












GENERAL NOTES:

- 1. ALL EROSION CONTROL MEASURES ARE PER CDPHE REQUIREMENTS.
- 2. LIMITS OF DISTURBANCE SHOWN IN THE PLANS ARE BASED ON A MAXIMUM 10' OFFSET OUTSIDE OF THE GRADING LIMITS. TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 4.51 ACRES.
- 3. STORING, STOCKPILING AND STAGING AREAS WILL BE IDENTIFIED BY THE CONTRACTOR AND SUBJECT TO APPROVAL BY THE TOWN OF RIDGWAY. THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL UPDATE THE STORM WATER MANAGEMENT PLAN TO
- 4. CONCRETE WASHOUT AND VEHICLE TRACKING PADS WILL BE IDENTIFIED BY THE CONTRACTOR AND SUBJECT TO APPROVAL BY THE TOWN OF RIDGEWAY. THE CONTRACTOR SHALL UPDATE THE SWMP TO REFLECT THESE AREAS. APPROPRIATE BMPs WILL BE INSTALLED PER THE SWMP.
- 5. REVEGETATE DISTURBED AREAS AS SOON AS PRACTICAL, PER REVEGETATION NOTES.

REFLECT THESE AREAS. APPROPRIATE BMPs WILL BE INSTALLED PER THE SWMP.

REVEGETATION NOTES:

- 1. <u>SEEDING</u>. SEED SHALL BE UNIFORMLY APPLIED OVER THE ENTIRE AREA. IN AREAS WHERE THE SLOPE IS 3:1 OR FLATTER, SEEDING WILL BE DONE WITH A SEED DRILL, "BRILLION" SEEDER, OVERSEEDER IF APPROPRIATE, OR OTHER EQUIPMENT AS APPROVED BY THE OWNER'S REPRESENTATIVE. THE EQUIPMENT SHALL BE OPERATED IN A DIRECTION GENERALLY PERPENDICULAR TO THE DIRECTION OF THE SLOPE. DRILL SEED 1/2 INCH DEEP WITH ROWS SPACED NO MORE THAN 7 INCHES APART.
- 2. ON ALL SLOPES STEEPER THAN 3:1, OR WHEN BROADCAST SEEDING IS APPROVED BY THE OWNER'S REPRESENTATIVE, SEED SHALL BE APPLIED BY MEANS OF MECHANICAL BROADCASTER OR HYDROSEEDER AT DOUBLE THE RATE REQUIRED FOR DRILL SEEDING SPECIFIED ABOVE. ALL SEED SOWN BY MECHANICAL BROADCASTERS SHALL BE RAKED OR DRAGGED INTO THE SOIL TO A DEPTH OF 1/2". CARE SHALL BE TAKEN TO INSURE UNIFORM COVERAGE OF SEED.
- 3. NATIVE SEEDING. NATIVE SEED MIX SHALL BE DRILLED AT THE RATE OF 15 LBS. PURE LIVE SEED (PLS) PER ACRE (.34 LB. PURE LIVE SEED (PLS) PER 1000 SQ. FT.) OR AS SPECIFIED IN THE DRAWINGS. SEEDING IN NON-IRRIGATED AREAS SHALL BE RESTRICTED ACCORDING TO THE FOLLOWING SCHEDULE:

6000' TO 7000' FLEVATION: SPRING SEEDING SHALL OCCUR BETWEEN SPRING THAW TO AUGUST 1ST. FALL SEEDING SHALL OCCUR BETWEEN OCTOBER 1ST UNTIL CONSISTENT GROUND FREEZE.

- 4. <u>STRAW MULCHING</u>. NATIVE GRASS STRAW MULCH, WHEN PERMITTED BY THE OWNER'S REPRESENTATIVE, SHALL BE APPLIED AT THE RATE OF TWO TONS PER ACRE (APPROXIMATELY 2 BALES PER 1000 SQ. FT.). IT SHALL BE UNIFORMLY CRIMPED IN WITH A CRIMPER OR OTHER APPROVED METHOD TO A MINIMUM DEPTH OF 3". THE SEEDED AREAS SHALL BE MULCHED AND CRIMPED WITHIN 24 HOURS AFTER SEEDING. SEEDING AREAS THAT HAVE BEEN DISTURBED PRIOR TO OR DURING MULCHING OPERATIONS SHALL BE RE-SEEDED AT THE CONTRACTOR'S EXPENSE. AREAS NOT PROPERLY MULCHED OR DAMAGED SHALL BE REPAIRED OR RE-MULCHED IN AN ACCEPTABLE MANNER. MULCHING OPERATIONS SHALL NOT TAKE PLACE DURING WINDY CONDITIONS.
- HYDROMULCHING. HYDRAULIC MULCHING EQUIPMENT SHALL INCLUDE A PUMP CAPABLE OF BEING OPERATED AT 100 GALLONS PER MINUTE AND 100 POUNDS PER SQUARE INCH PRESSURE, UNLESS OTHERWISE DIRECTED. THE EQUIPMENT SHALL HAVE AN ACCEPTABLE PRESSURE GAUGE AND NOZZLE ADAPTABLE TO HYDRAULIC SEEDING REQUIREMENTS. STORAGE TANKS SHALL HAVE A MEANS OF AGITATION AND A MEANS OF ESTIMATING THE VOLUME USED OR REMAINING IN THE TANK. AS REQUIRED, CELLULOSE FIBER MULCH SHALL BE ADDED WITH THE PROPORTIONATE QUANTITIES OF WATER AND OTHER APPROVED MATERIALS IN THE SLURRY TANK. ALL INGREDIENTS SHALL BE MIXED TO FORM A HOMOGENEOUS SLURRY. USING THE COLOR OF THE MULCH AS A METERING AGENT, THE OPERATOR SHALL SPRAY-APPLY THE SLURRY MIXTURE UNIFORMLY OVER THE DESIGNATED SEEDED AREA. UNLESS OTHERWISE SPECIFIED, WOOD CELLULOSE FIBER MULCH SHALL BE APPLIED AT THE RATE OF 2000 LBS. PER ACRE FOR TURF SEEDING AND 1500 LBS. PER ACRE FOR DRYLAND SEEDING. HYDRAULIC MULCHING SHALL NOT BE DONE IN THE PRESENCE OF FREE SURFACE WATER RESULTING FROM RAINS, MELTING SNOW OR OTHER CAUSES. CLEAN ALL EXCESS HYDROMULCH OVER_SPRAY FROM BUILDINGS, SIDEWALKS, SITE FURNISHINGS, ETC. AS SOON AS POSSIBLE.
- EROSION CONTROL FABRIC INSTALLATION. ON SLOPES STEEPER THAN 3:1, MULCHING SHALL BE ACCOMPLISHED WITH EXCELSIOR EROSION CONTROL BLANKET OR APPROVED EQUAL. THE EXCELSIOR BLANKET SHALL BE SPREAD SMOOTHLY AND EVENLY WITHOUT STRETCHING. THE BLANKETS MUST BE INSTALLED PER DETAILS OR PER MANUFACTURER'S RECOMMENDATIONS. EDGES SHOULD BE BUTTED SNUGLY OR OVERLAPPED AND STAPLED IN PLACE. ANY AREA DAMAGED BEFORE FINAL ACCEPTANCE OF THE WORK SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- PROTECTION OF SEEDED AREAS. THE CONTRACTOR SHALL ERECT SUITABLE SIGNS AND BARRIERS AS REQUIRED AT IMPORTANT POINTS NOTIFYING THE PUBLIC TO KEEP OFF THE SEEDED AREAS UNTIL THE GRASS IS WELL ESTABLISHED. ANY DAMAGE THAT MAY OCCUR PRIOR TO FINAL ACCEPTANCE OF THE WORK SHALL BE REPAIRED AND RE-SEEDED IN ACCORDANCE WITH THE SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING THE SIGNS AND BARRIERS AS NECESSARY. CONTRACTOR SHALL SUBMIT METHODS OF SEED PROTECTION FOR APPROVAL BY THE OWNER AND OWNER'S REPRESENTATIVE.
- R. SEEDING MATERIAL TO BE USED FOR RECLAMATION:

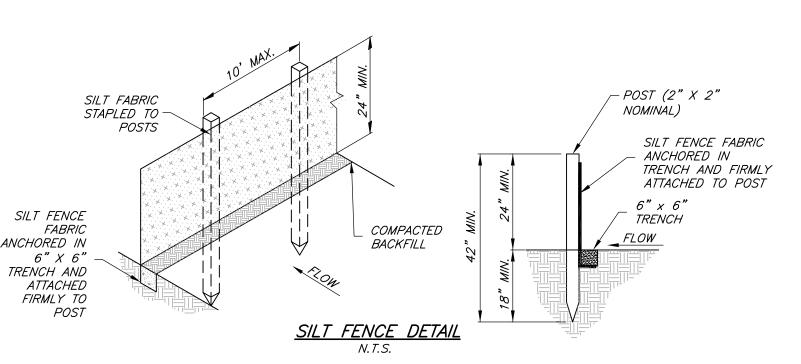
DRAINAGE SEED MIX

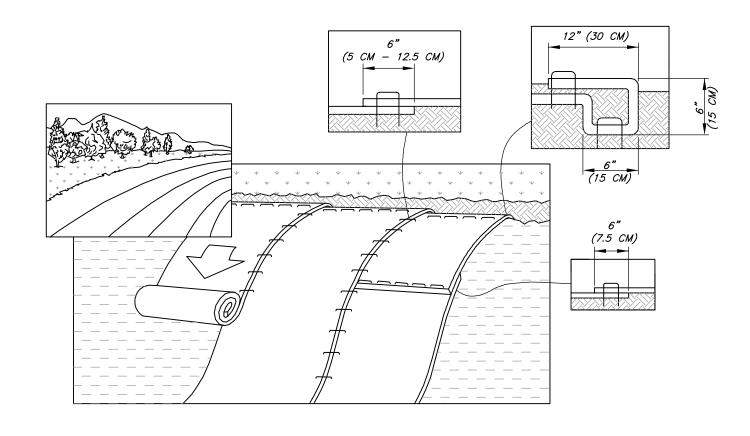
COMMON NAME	BOTANIC NAME	PLS LBS/ACRE
REDTOP	AGROSTIS ALBA	1
TUFTED HAIRGRASS	DESCHAMPSIA CESPITOSA	1
SWITCHGRASS	PANICUM VIRGATUM	3
FOWL BLUEGRASS	POA PALUSTRIS	2
COMMON SPIKERUSH	ELEOCHARIS PALUSTRIS	0.5
SODAR' STREAMBANK WHEATGRASS	"SODAR" ELYMUS LANCEOLATUS"	2
	707	

TOTAL 9.5 LBS/ACRE

*SEEDING RATE BASED ON 100 PURE LIVE SEEDS (PLS) PER SQUARE FOOT, BROADCAST OR DRILL-SEEDED. THE SEEDING APPLICATION RATE SHALL BE DOUBLED FOR HAND BROADCAST APPLICATION.

UPLAND SEED MIX				
		PLS		
COMMON NAME	BOTANIC NAME	LBS/ACRE		
ARRIBA WESTERN WHEATGRASS PUBESCENT LUNA WHEATGRASS	PASCOPYRUM SMITHII "ARRIBA" THINOPYRUM INTERMEDIUM	4		
	SSP. BARULATUM	<i>3.5</i>		
INDIAN RICEGRASS "RIMROCK"	ACHNATHERUM HYMENOIDES	1.5		
TALL FESCUE	FESTUCA ARUNDINACIEA	1		
GARNET MOUNTAIN BROME	BROMUS MARGINATUS	<i>3.5</i>		
BLUE FLAX	LINUM LEWISII	1		
LOVINGTON BLUE GRAMA	BOUTELOUA GRACILIS "LOVINGTON"	1		
GULF (LONESTAR)ANNUAL RYE	LOLIUM PERENNE SSP. MULTIFLORU	M 3.5		
	PURSHIA TRIDENTATA	<i>0.125</i>		
SALTBRUSH-FOURWING	ATRIPLEX CANESCENS	<i>0.375</i>		
SMALL BURNET-DELAR	SANQUISORBA MINOR	<i>0.75</i>		
BLUE WILDRYE	ELYMUS GLAUCUS	<i>2.75</i>		
"RYEGRASS, WILD RUSSIAN				
BOZOISKY"	PSATHYROSTACHYS JUNCEA	1.5		
	TOTAL	24.5 LBS/ACRE		

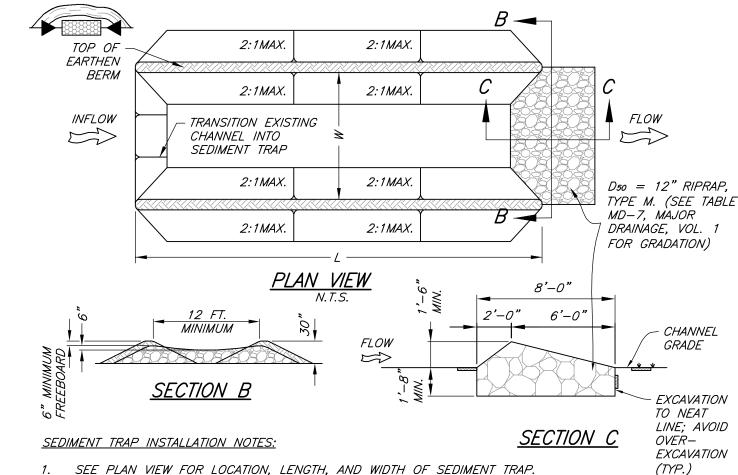




SLOPE INSTALLATION NOTES:

- 1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- 2. WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 3. BEGIN AT TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
- 4. ROLL THE RECP'S DOWN OR HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 5. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5 CM -12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
- 6. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.
- 7. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLES/STAKES LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

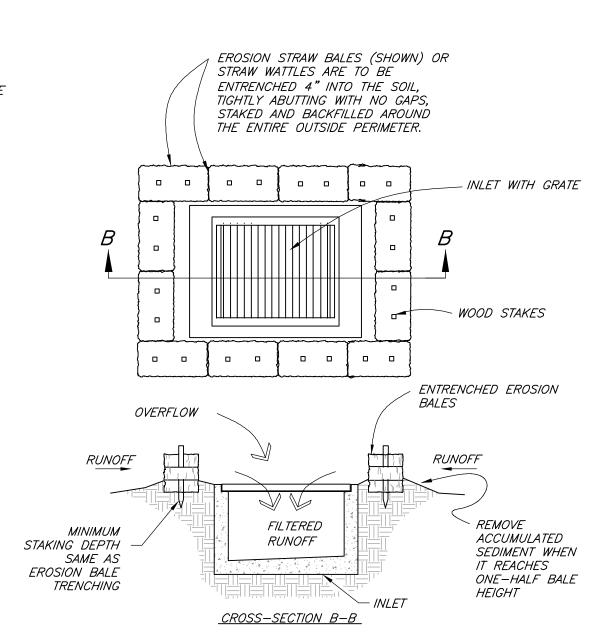
<u>SLOPE EROSION PROTECTION DETAIL</u>



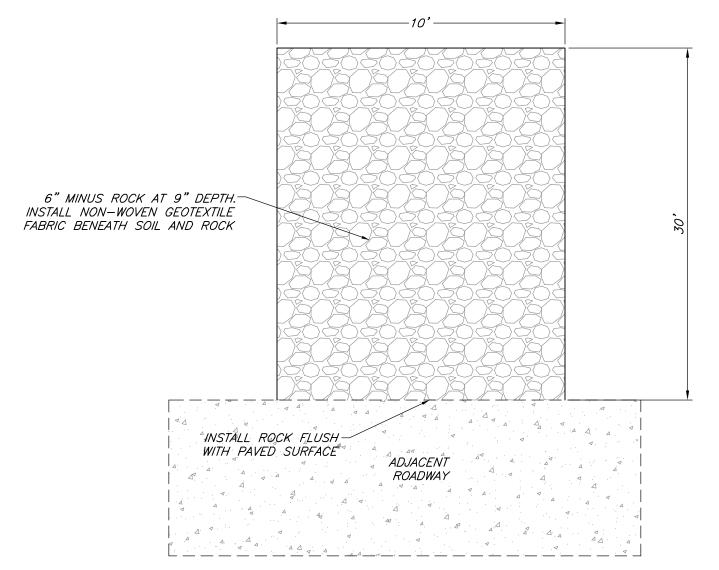
- 1. SEE PLAN VIEW FOR LOCATION, LENGTH, AND WIDTH OF SEDIMENT TRAP.
- 2. SEDIMENT TRAPS INDICATED ON PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
- 3. SEDIMENT TRAP BERM SHALL BE CONSTRUCTED OF MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
- 4. RIPRAP OUTLET SHALL BE CONSTRUCTED WITH $D_{50} = 12$ " RIPRAP WITH A MINIMUM OVERFLOW OF 6". 5. THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE
- RIPRAP OUTLET STRUCTURE. 6. THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE A MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

SEDIMENT TRAP MAINTENANCE NOTES:

- 1. THE SWMP MANAGER SHALL INSPECT SEDIMENT TRAPS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
- 2. SEDIMENT ACCUMULATED UPSTREAM OF RIPRAP SHALL BE REMOVED WHEN THE UPSTREAM DEPTH IS WITHIN 1/2 THE HEIGHT OF THE RIPRAP OUTLET STRUCTURE.
- 3. SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVERAGE IS APPROVED BY THE LOCAL JURISDICTION.
- 4. WHEN SEDIMENT TRAPS ARE REMOVED, THE DISTRUBED AREA SHALL BE COVERED WITH TOP SOIL, DRILLED SEEDED, AND CRIMP MULCHED OR STABILIZED IN A MANNER APPROVED BY LOCAL



EROSION CONTROL INLET PROTECTION N.T.S.



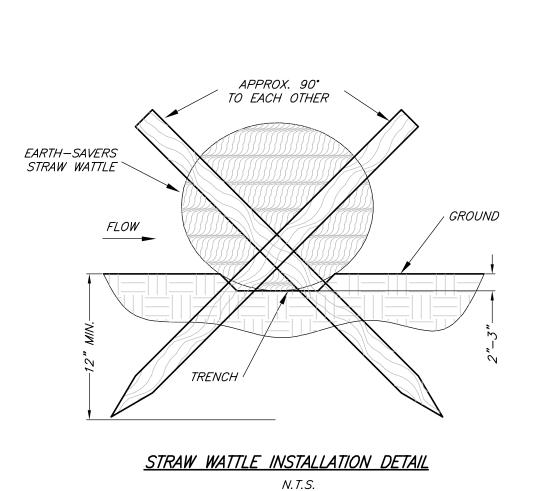
VTC INSTALLATION NOTES:

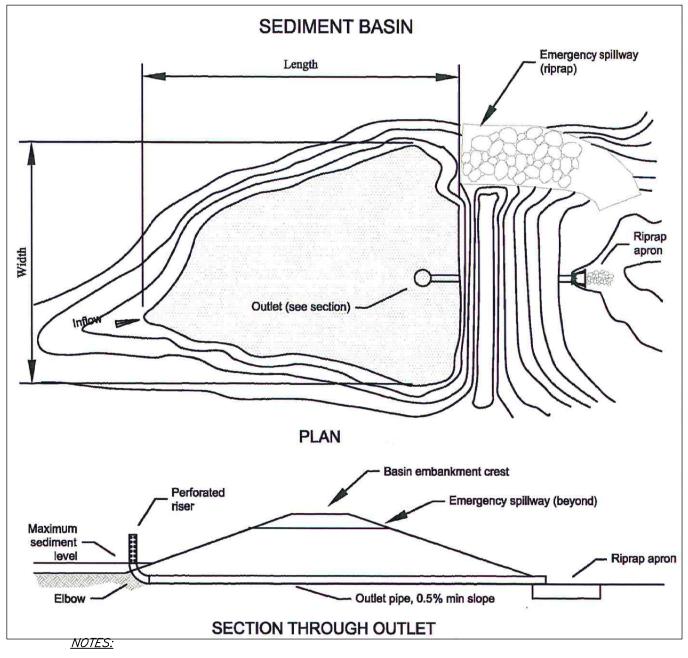
- CONTRACTOR TO DETERMINE FINAL LOCATION OF CONSTRUCTION SITE ENTRANCE. VTC SHALL
- 2. VTC SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- INSPECT VTC DAILY AND MAINTAIN IN EFFECTIVE OPERATING CONDITION. INSPECT ALL BMPS AFTER ANY PRECIPITATION EVENT AND PERFORM NECESSARY MAINTENANCE.

BE LOCATED AT ALL ACCESS POINTS TO PUBLIC OR PRIVATE ROADWAY CORRIDORS.

- 4. ROCK SHALL BE REPLACED OR REGRADED TO MAINTAIN CONSISTENT DEPTH.
- SEDIMENT TRACKED ONTO PAVED ROADS SHALL BE REMOVED THROUGHOUT THE DAY AND AT THE END OF EACH WORK DAY BY SHOVELING AND SWEEPING. SEDIMENT SHALL NOT BE DISPOSED OF INTO STORM DRAIN SYSTEM.

VEHICLE TRACKING PAD DETAIL





- 1. BASIN MUST BE CLEANED OF SEDIMENT PRIOR TO COMPLETION OF PROJECT AND TURN OVER TO A PERMANENT STORMWATER CONTROL BASIN PER PLANS.
- 2. EMERGENCY SPILLWAY MUST NOT BE CONSTRUCTED OVER FILL MATERIAL. PROTECT
- 3. REMOVE SEDIMENT WHEN LEVEL REACHES THE INVERT OF THE LOWEST ORIFICE AT 50% OF THE STORAGE VOLUME.
- 4. OUTLET TO BE MINIMUM 8" DIAMETER PVC. RISER TO INCLUDE PERFORATIONS TO DRAIN VOLUME BELOW EMERGENCY SPILLWAY IN 40 HOURS.

Graphic Scale

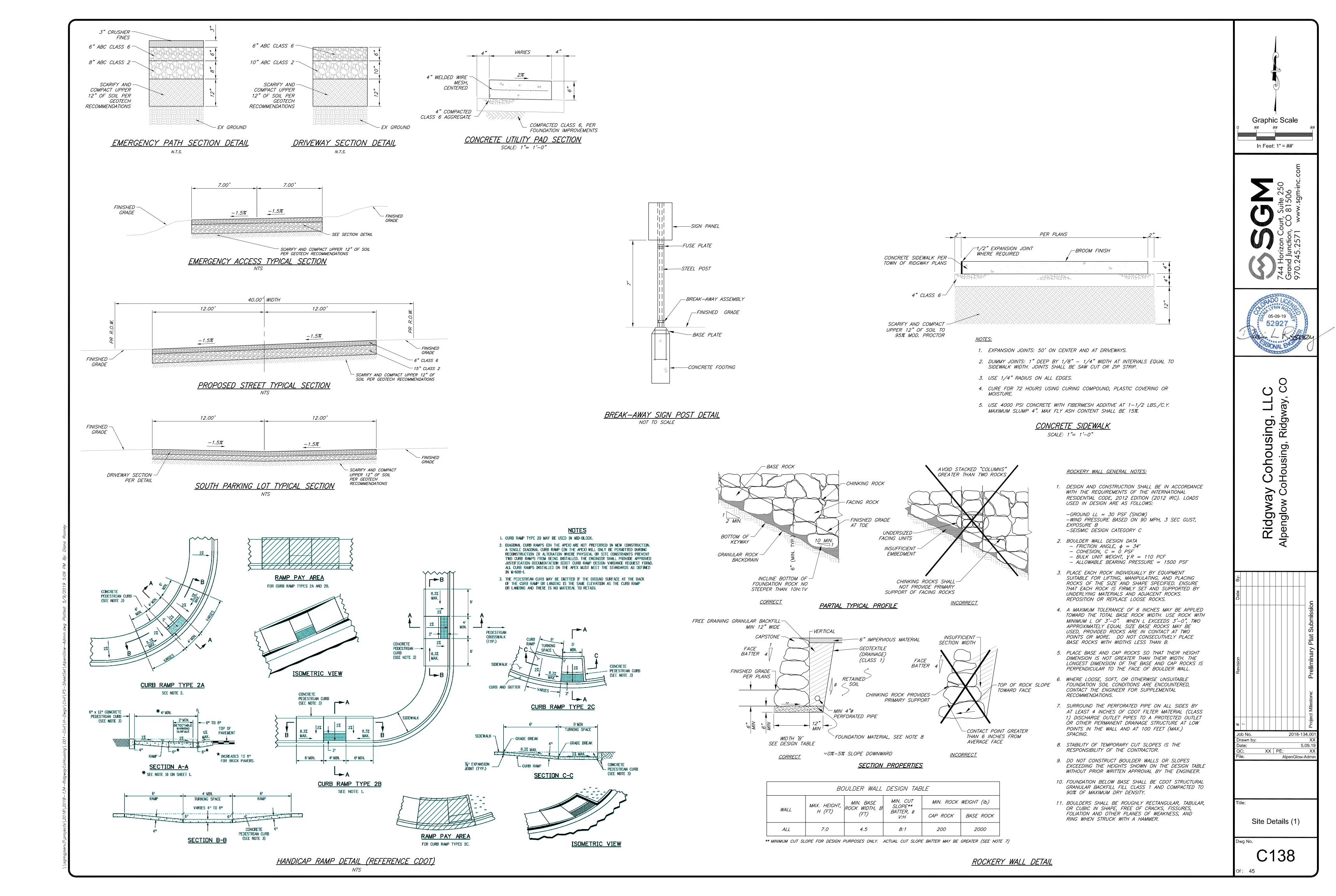
In Feet: 1" = ##'

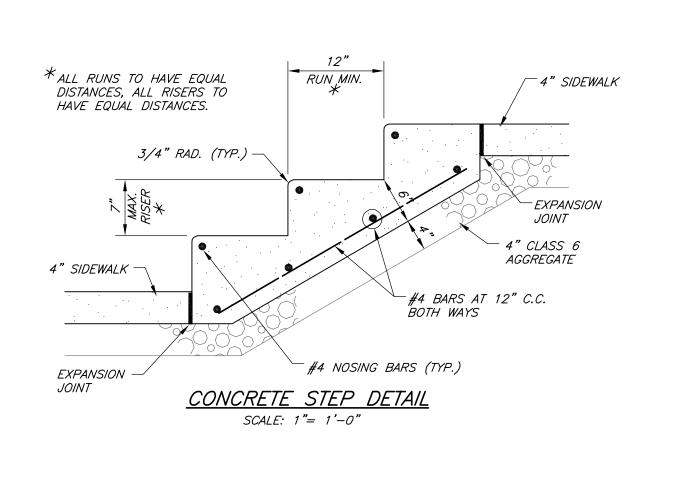
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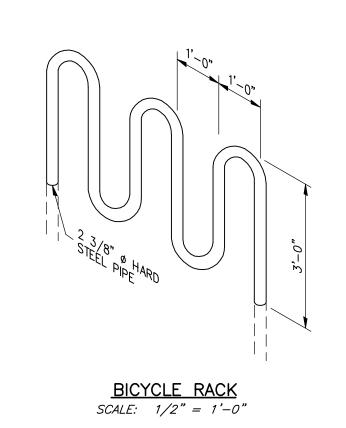
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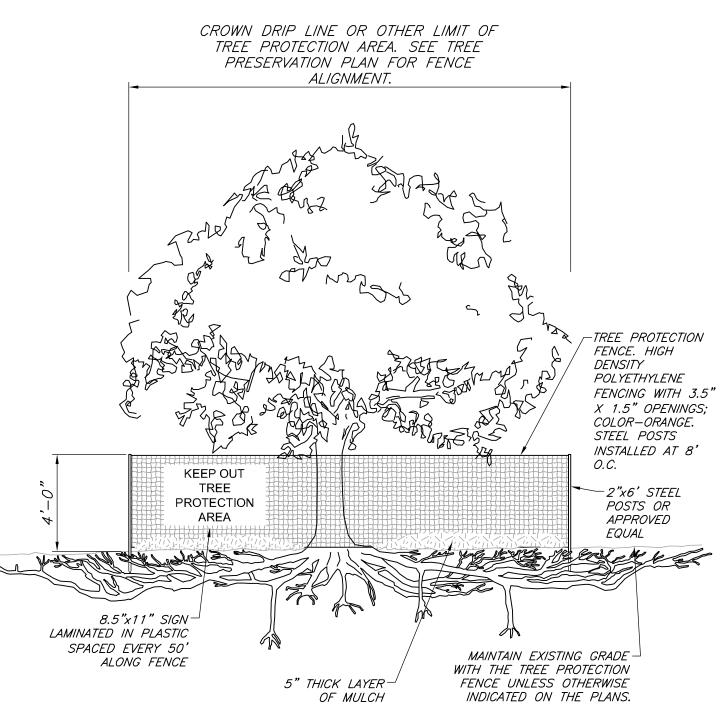
AlpenGlow-ErosionCo

Erosion Control Notes and Details



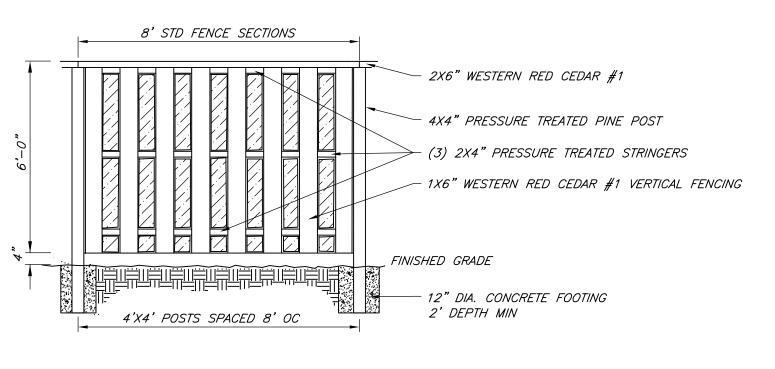






NOTES:

- 1. SEE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
- 2. IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.
- 3. NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
- 4. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.
- 5. SEE SITE PREPARATION PLAN FOR ANY MODIFICATIONS WITH THE TREE PROTECTION AREA.



— CLASS 6 AND ASPHALT PER DETAIL

~ TRIAXIAL

– 24" A.B.C. CLASS 2 *

UNSUITABLE MATERIAL EXCAVATION

GEOGRID *

* EXCAVATION OF

ENGINEER

UNSUITABLE MATERIALS WILL BE COMPLETED AS

DIRECTED BY THE

CLASS A-

FABRIC *

GEOTEXTILE SEPARATOR

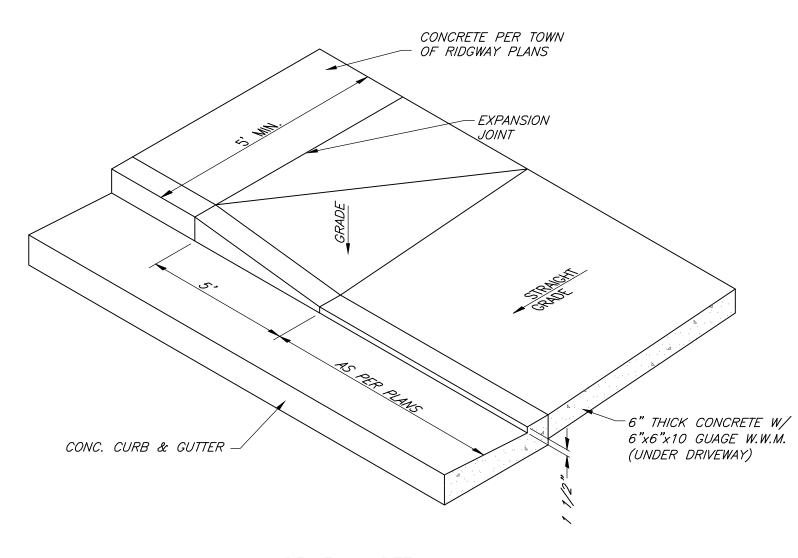
UNSUITABLE

MATERIALS

(WHERE

REQ'D)*

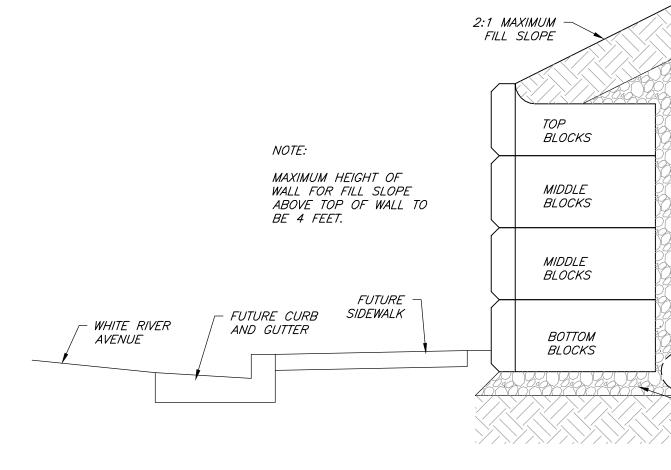
6' HIGH SCREEN FENCE



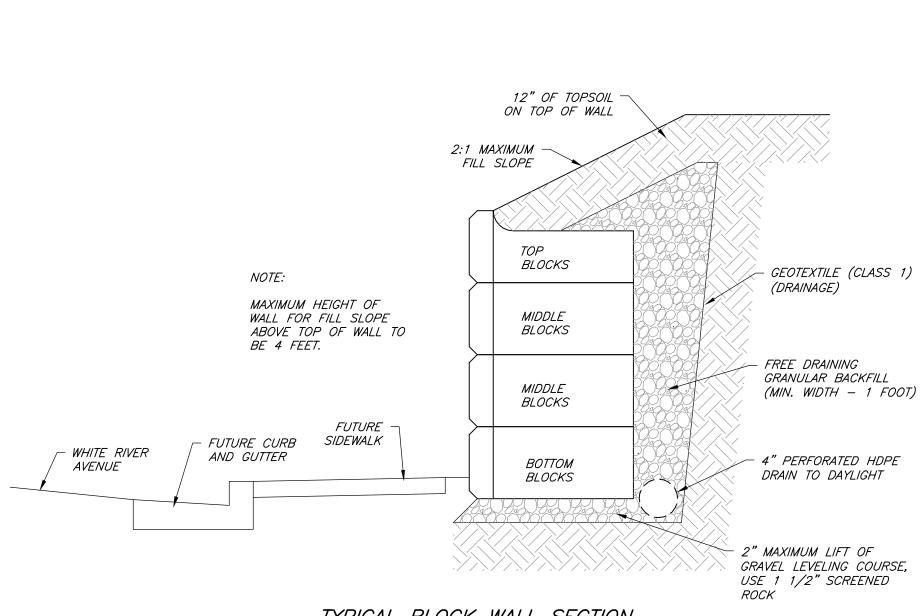
DRIVEWAY DETAIL

NOT TO SCALE





TYPICAL BLOCK WALL SECTION

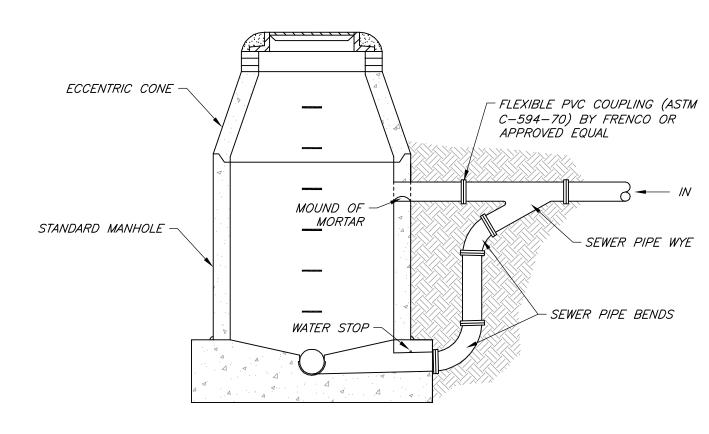


Graphic Scale In Feet: 1" = ##'

Ridgway Alpenglow Co

ELK PE: AlpenGlow-Admi

Site Details (2)



DROP CONNECTION TO STANDARD MANHOLE

N.T.S.

NOTE:

45° BEND -

DROP MANHOLE TO BE CONSTRUCTED IN ACCORDANCE WITH TOWN OF RIDGWAY STANDARD DETAILS FOR TYPICAL MANHOLE

SEWER SERVICE — FROM BUILDING

GRADE 1/8" PER FOOT MIN.

— WYE SADDLE, WYE FITTING, OR EQUIVALENT

1. IN—LINE WYE FOR EXISTING STRUCTURES

SEWER SERVICE CONNECTION DETAIL

N.T.S.

3. BACKFILL UNDER WYE TO BE SCREENED ROCK OR CLASS 6 AGGREGATE, 95% COMPACTION DENSITY PER ASTM D-698.

2. WYE SADDLE FOR OTHER SERVICES.

4. MINIMUM COVER — 4 FEET.

STAINLESS STEEL
STRAPS (2 EACH)

NOTES:



Graphic Scale

In Feet: 1" = ##'

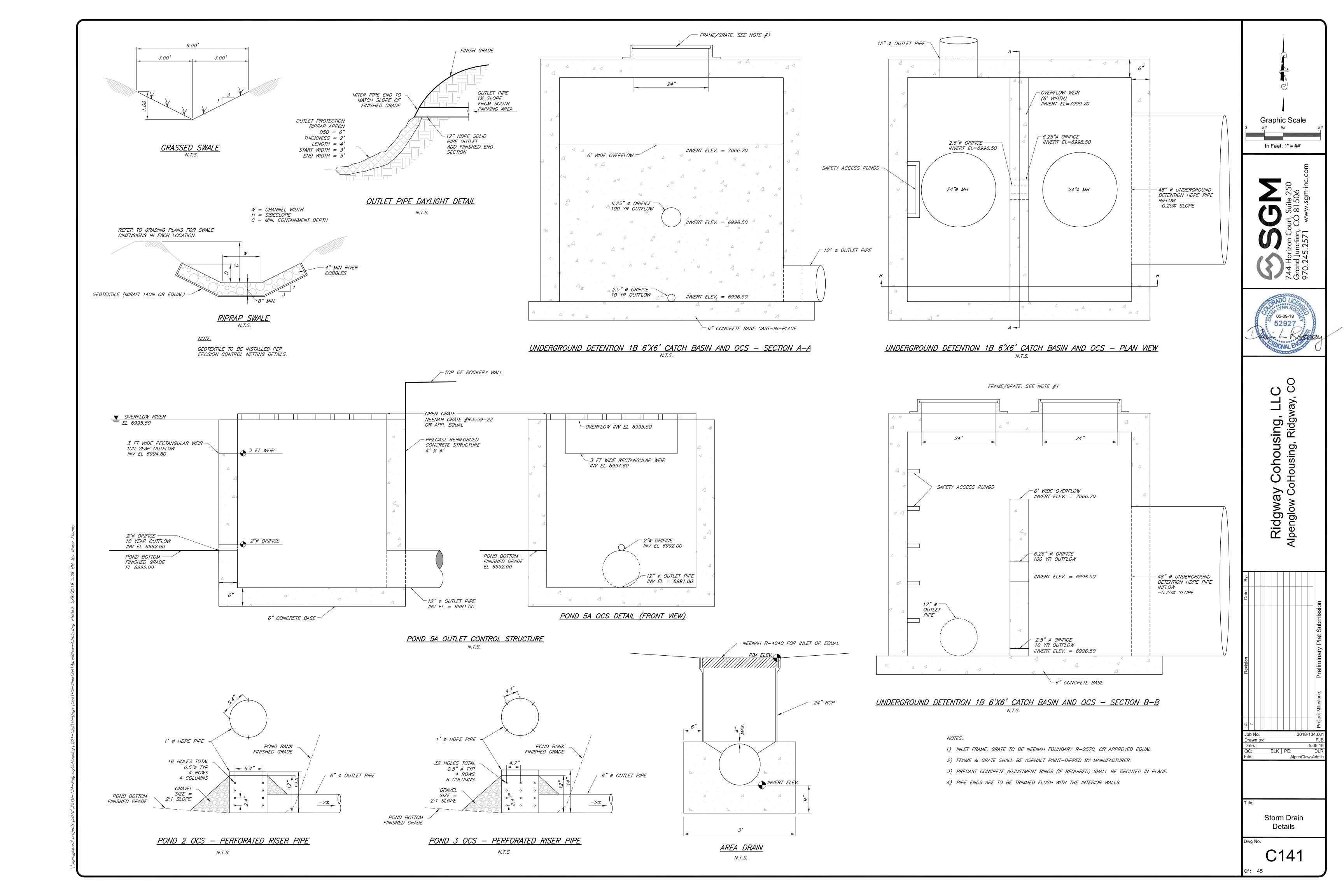
Ridgway Cohousing, LLC Alpenglow CoHousing, Ridgway, CO

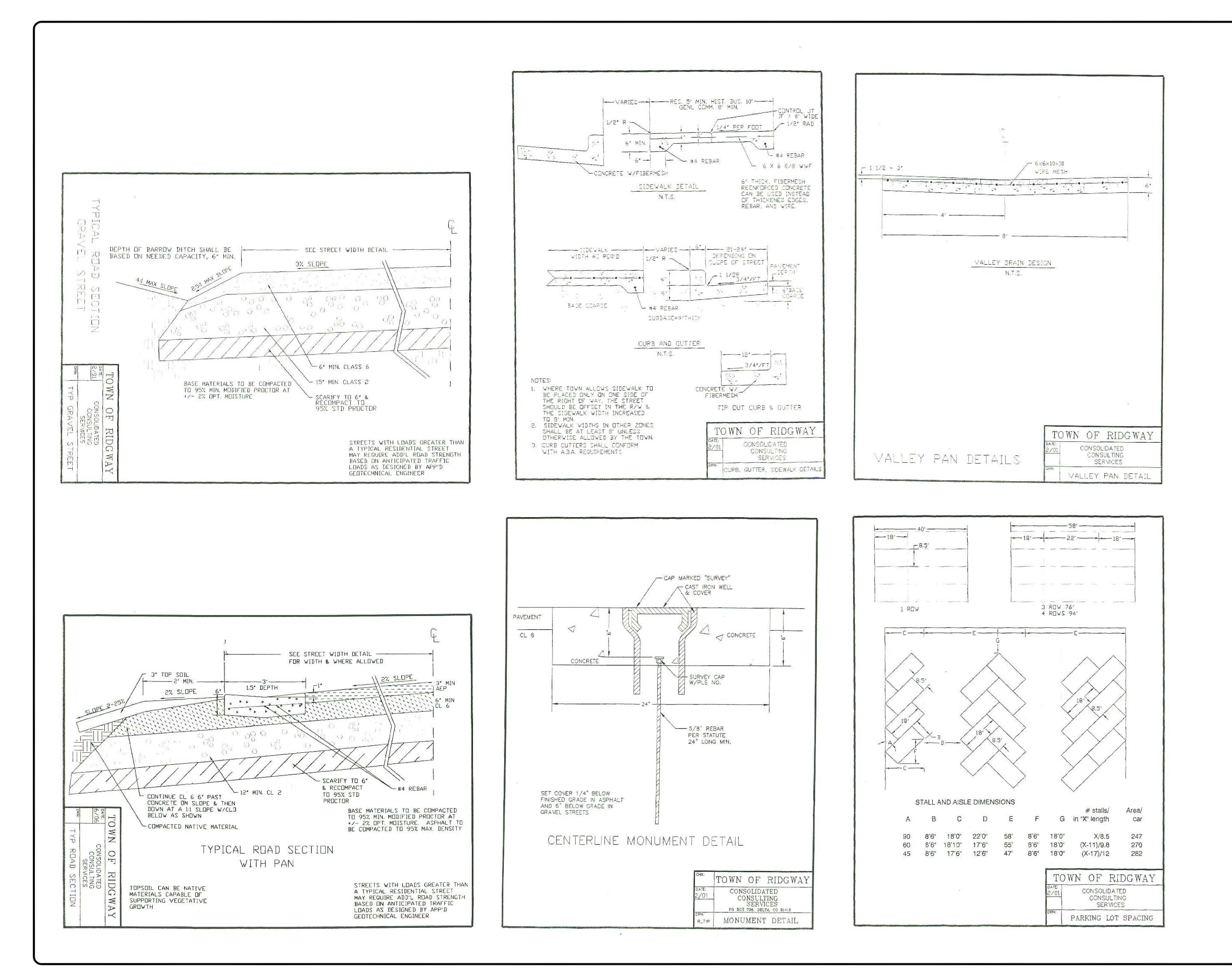
b No. 2018-134.001
rawn by: FJB
ate: 5.09.19
C: ELK PE: DLR
e: AlpenGlow-Admin

Sanitary Sewer and Drainage Details

C140

Of: 45



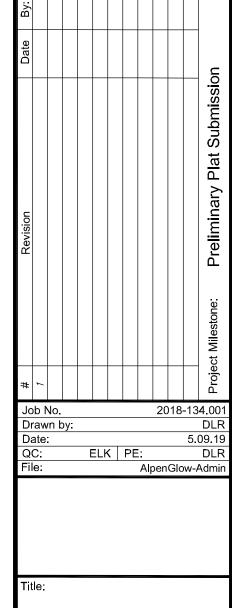


y Cohousing, LLC

CoHousing, Ridgway, CO

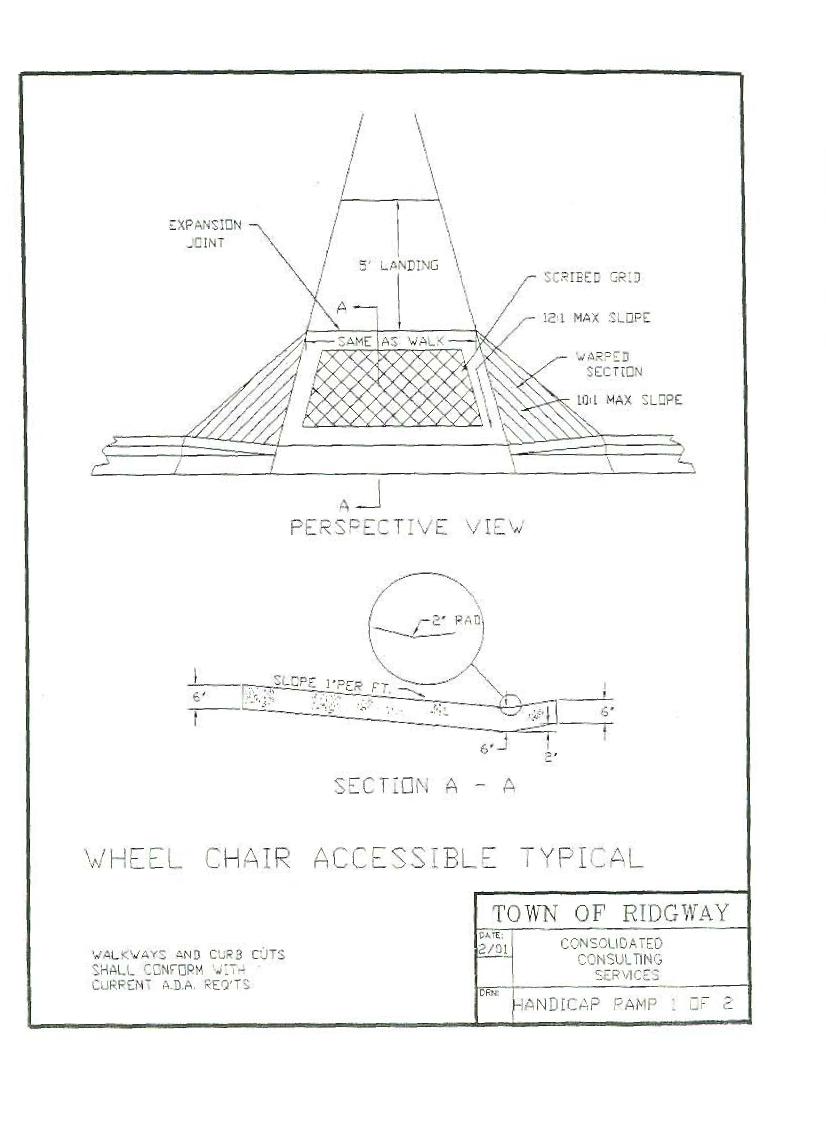
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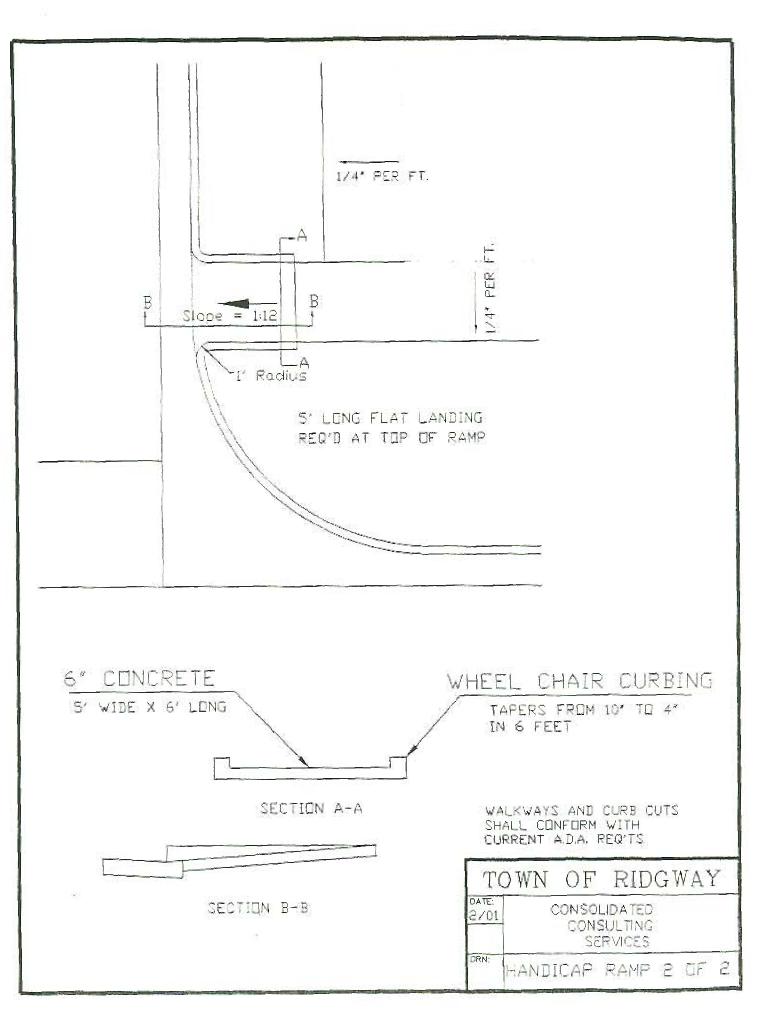
Ridgway Cohousing, Alpenglow CoHousing, Ridgw

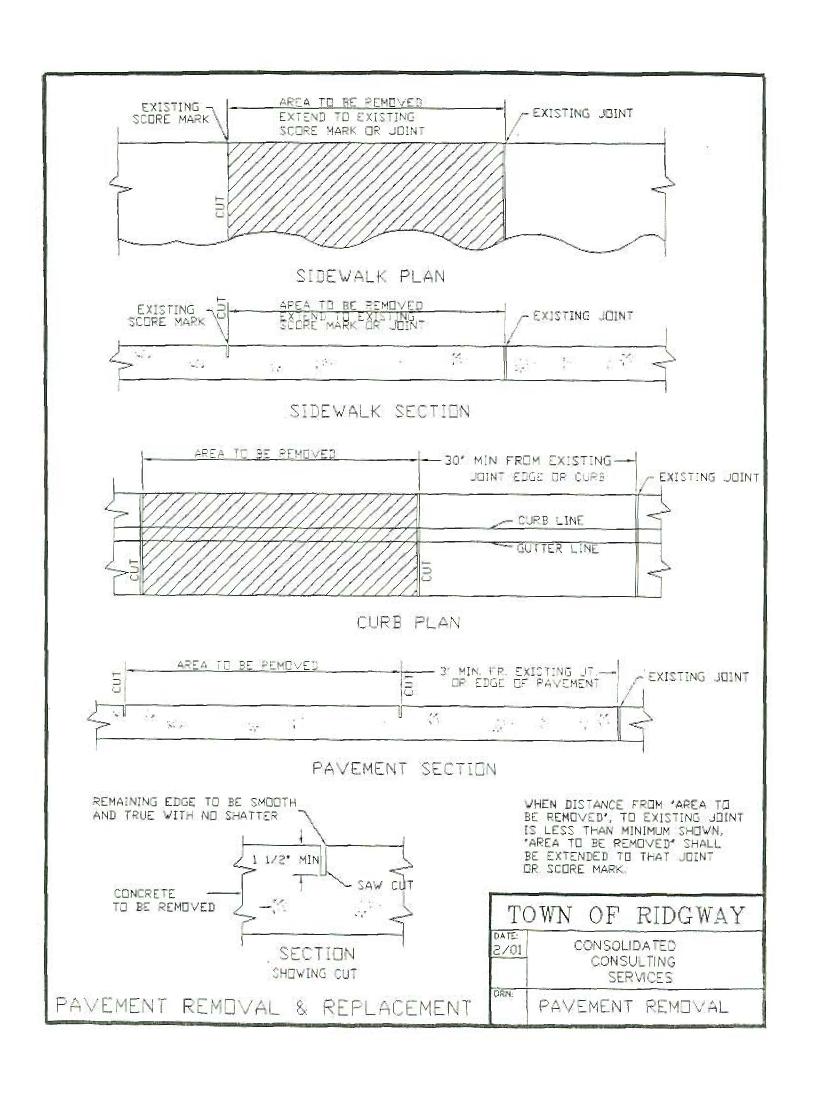


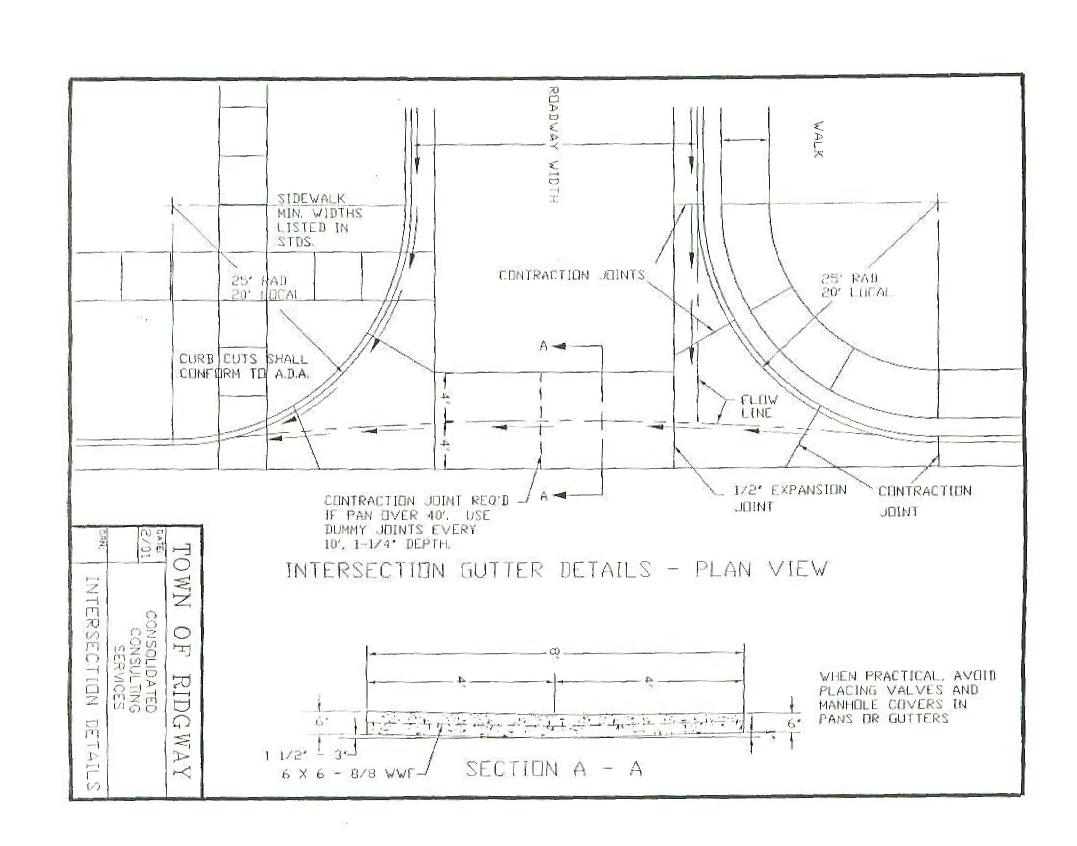
Ridgway Standard

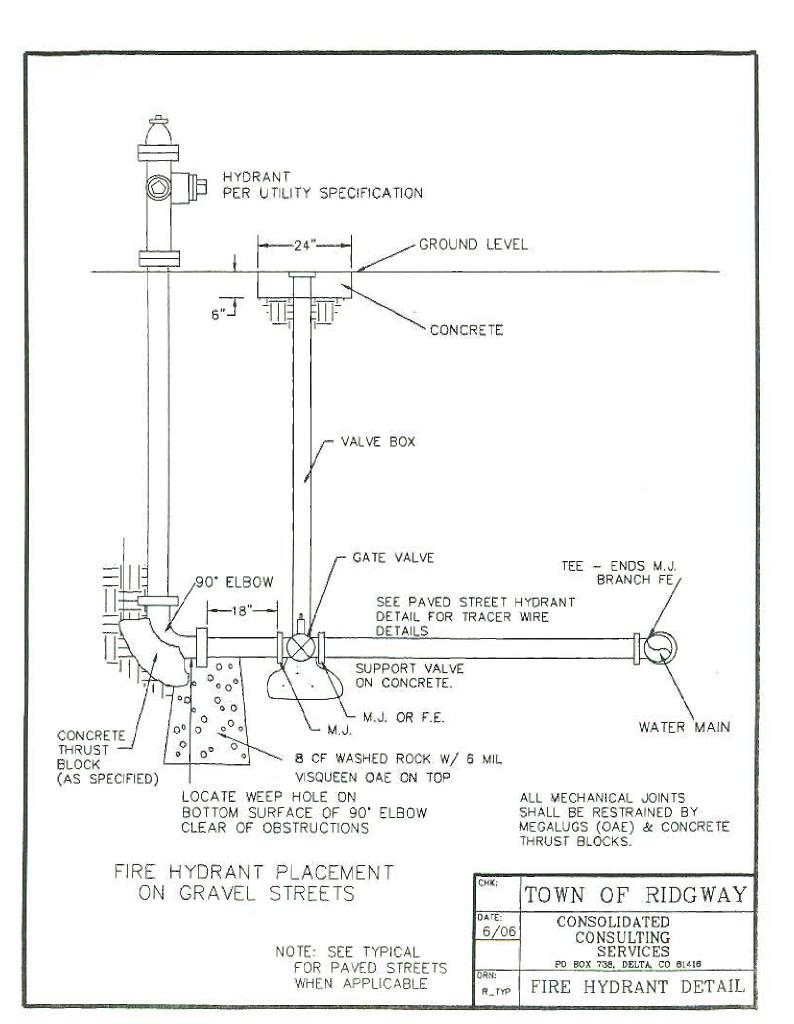
Details

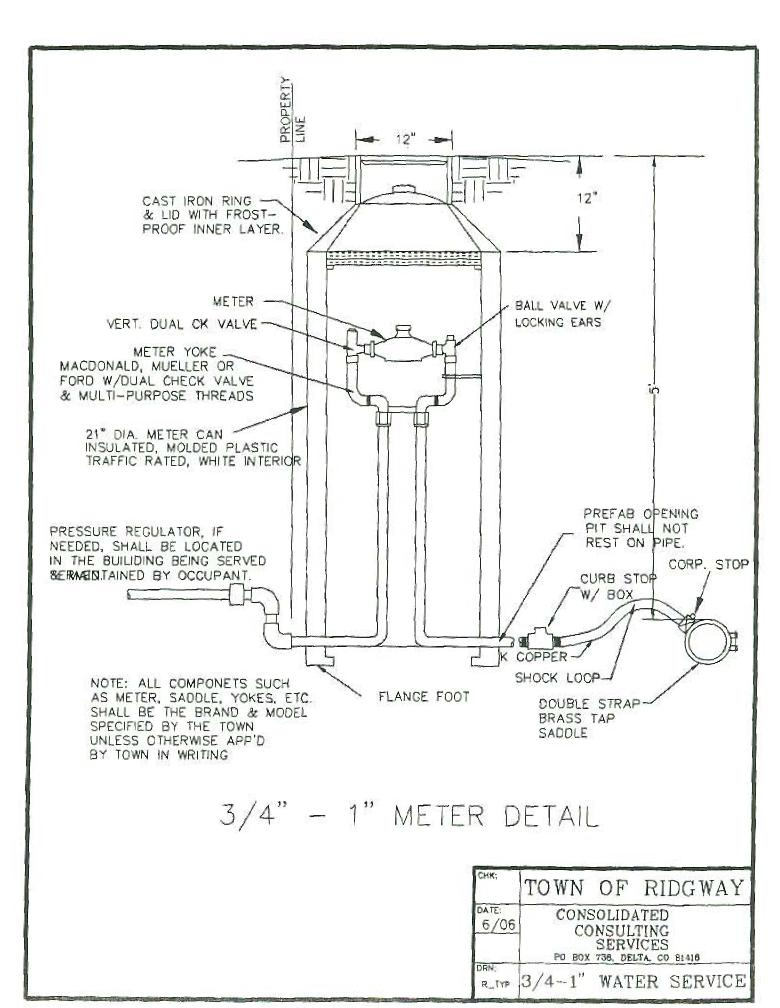


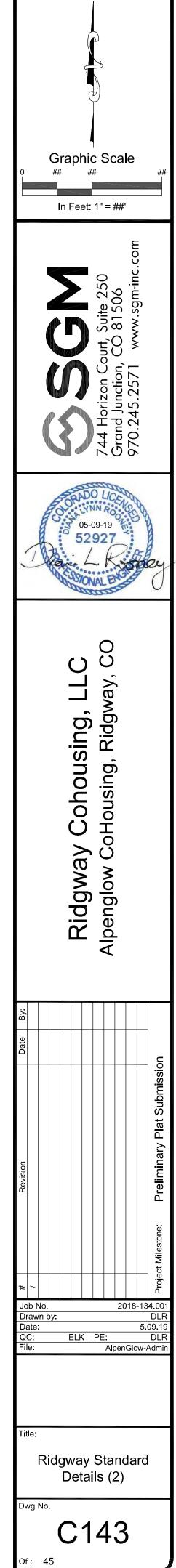


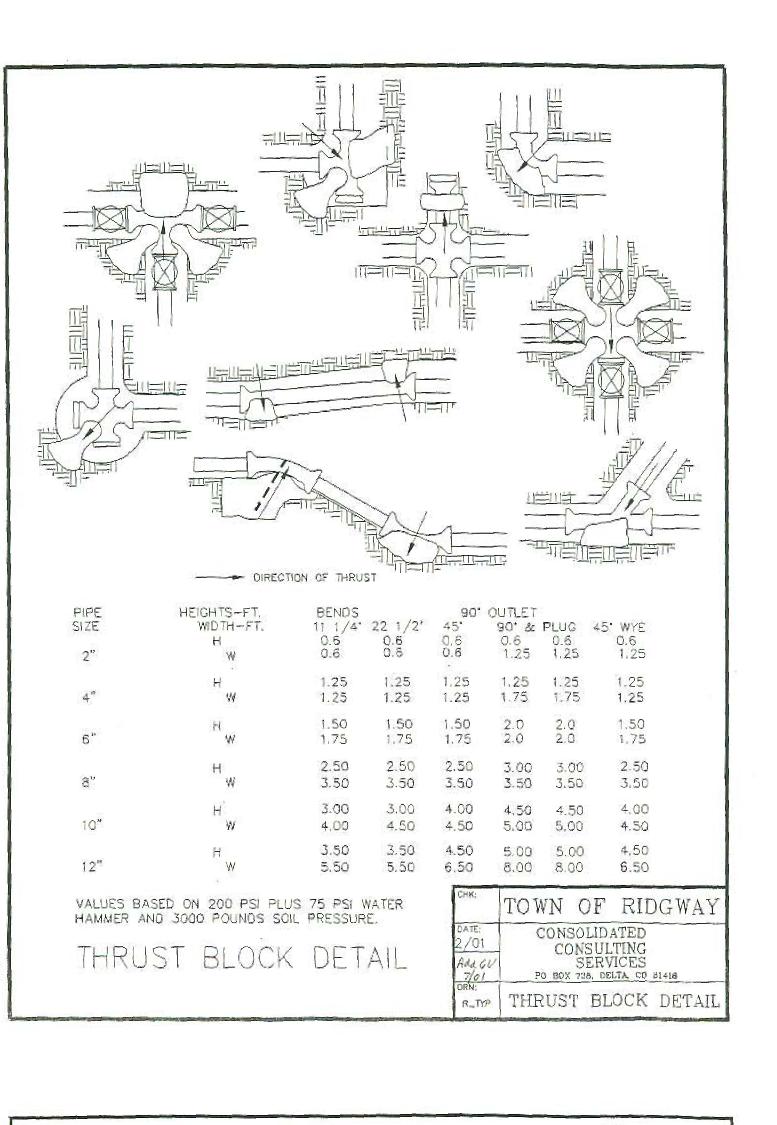


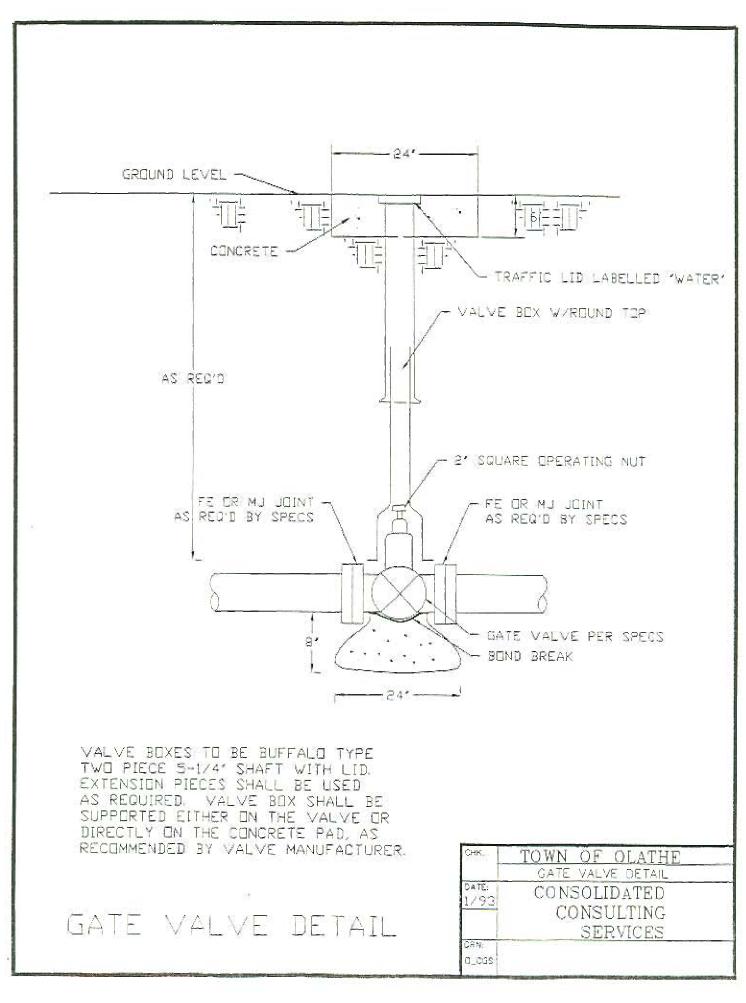


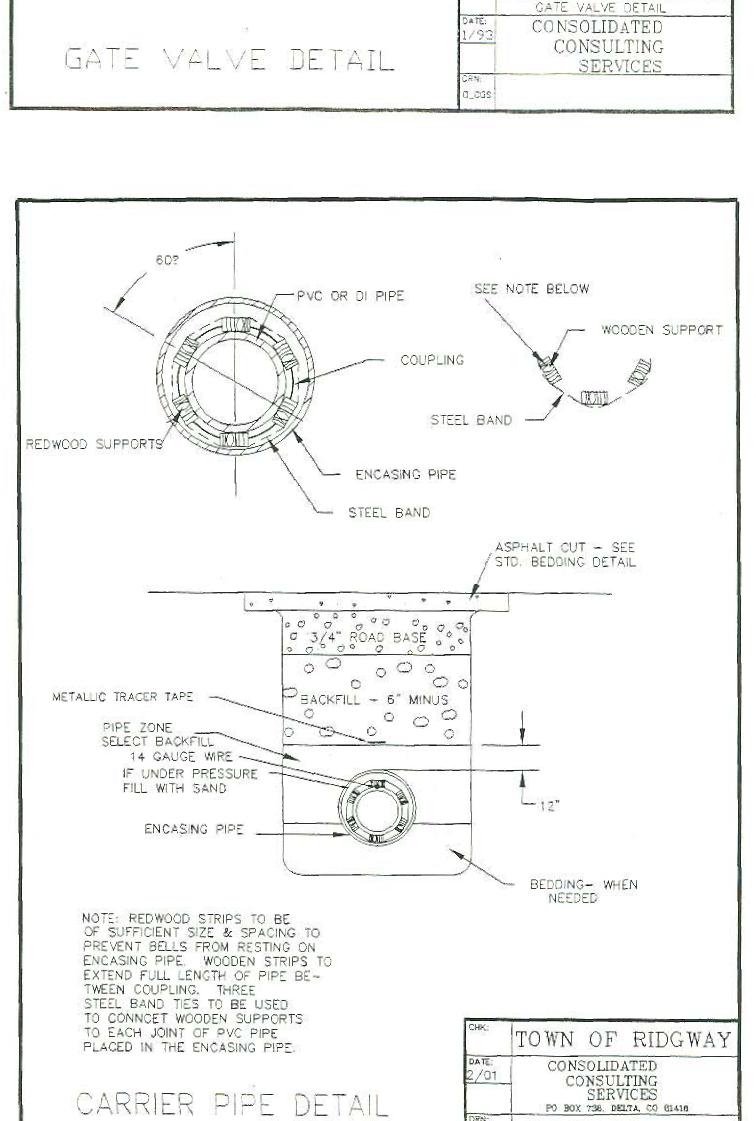






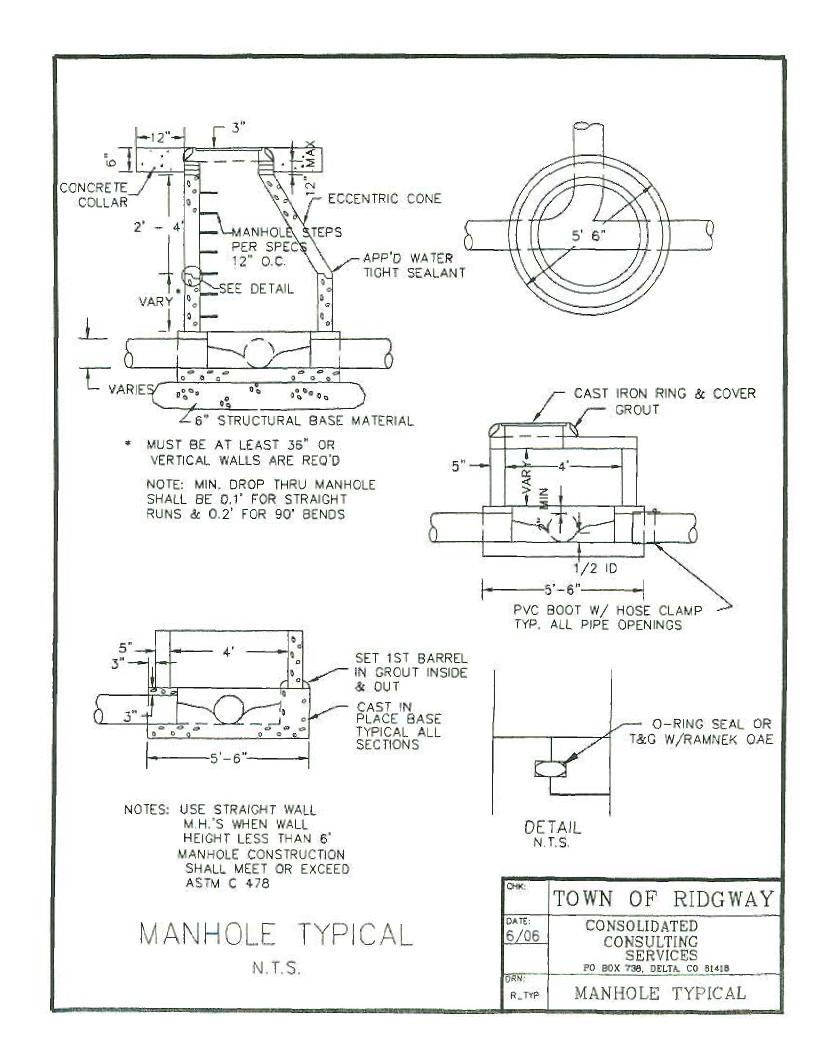


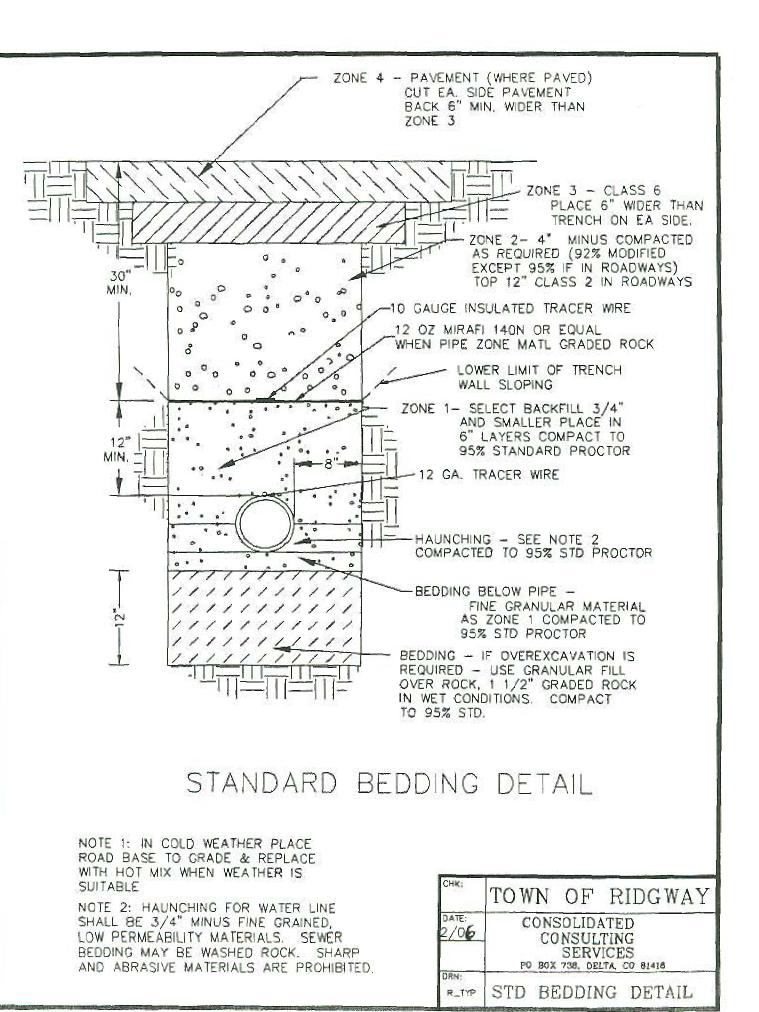




PO BOX 738, DELTA, CO 61416

R_TYP | CARRIER PIPE DETAIL



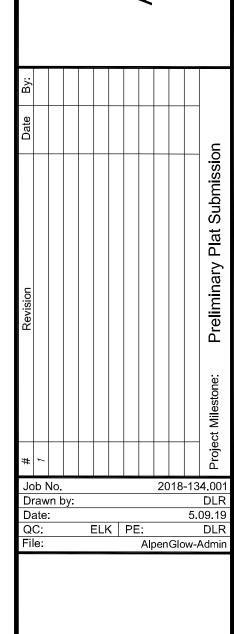




Graphic Scale

In Feet: 1" = ##'



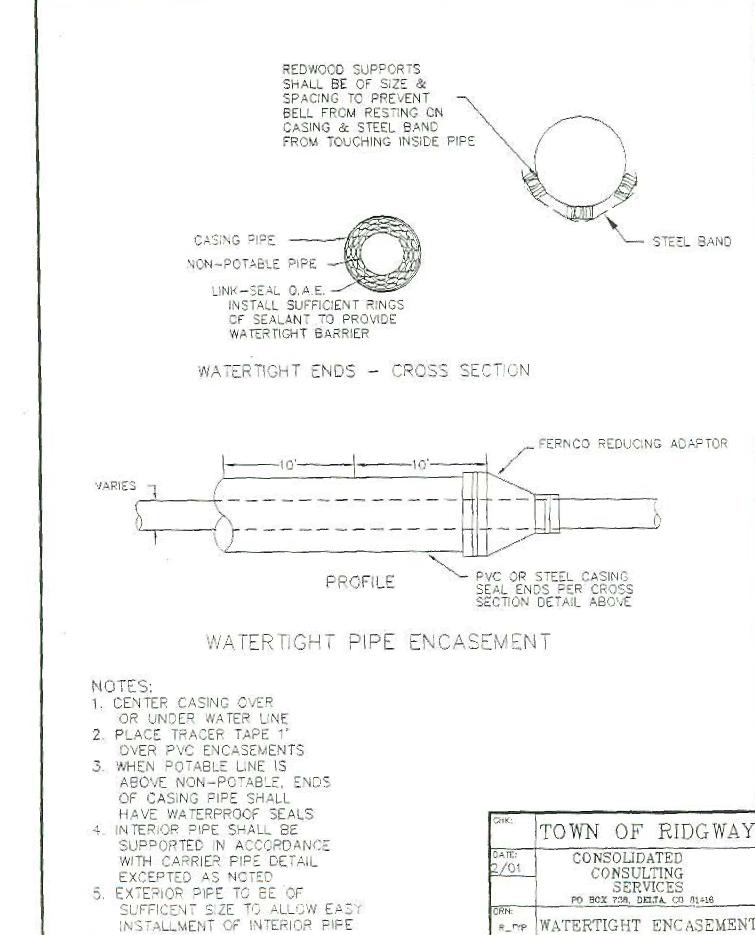


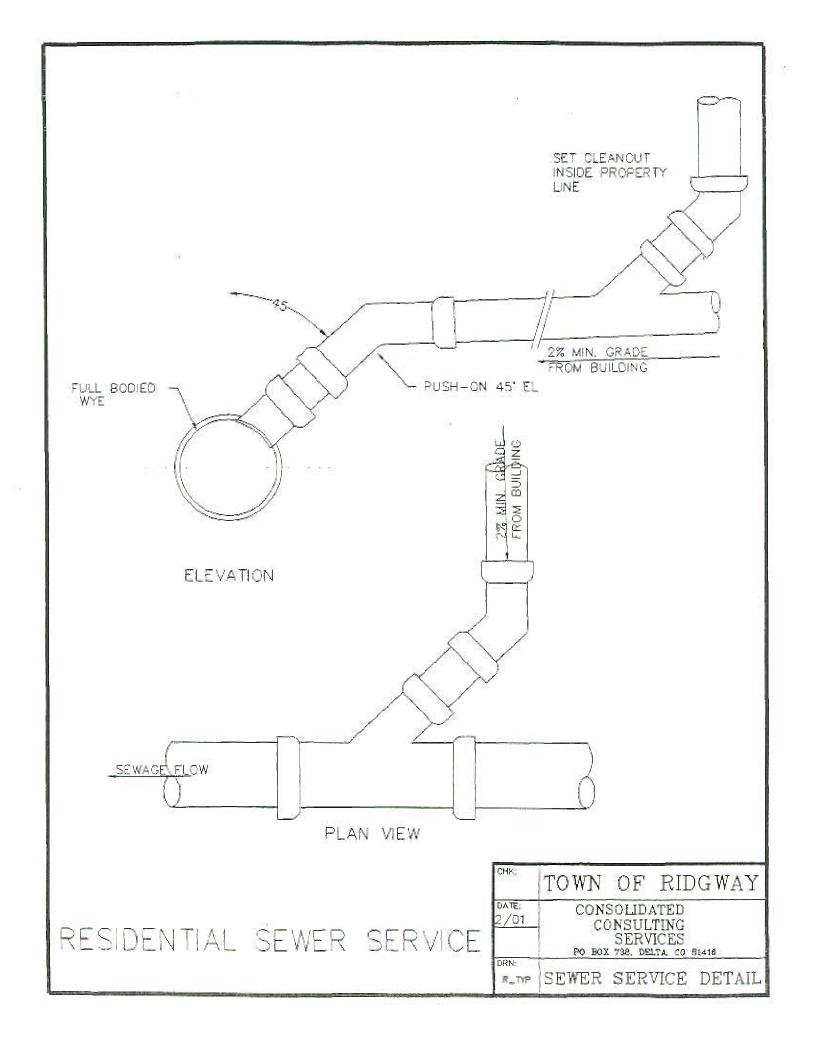
Ridgway Standard

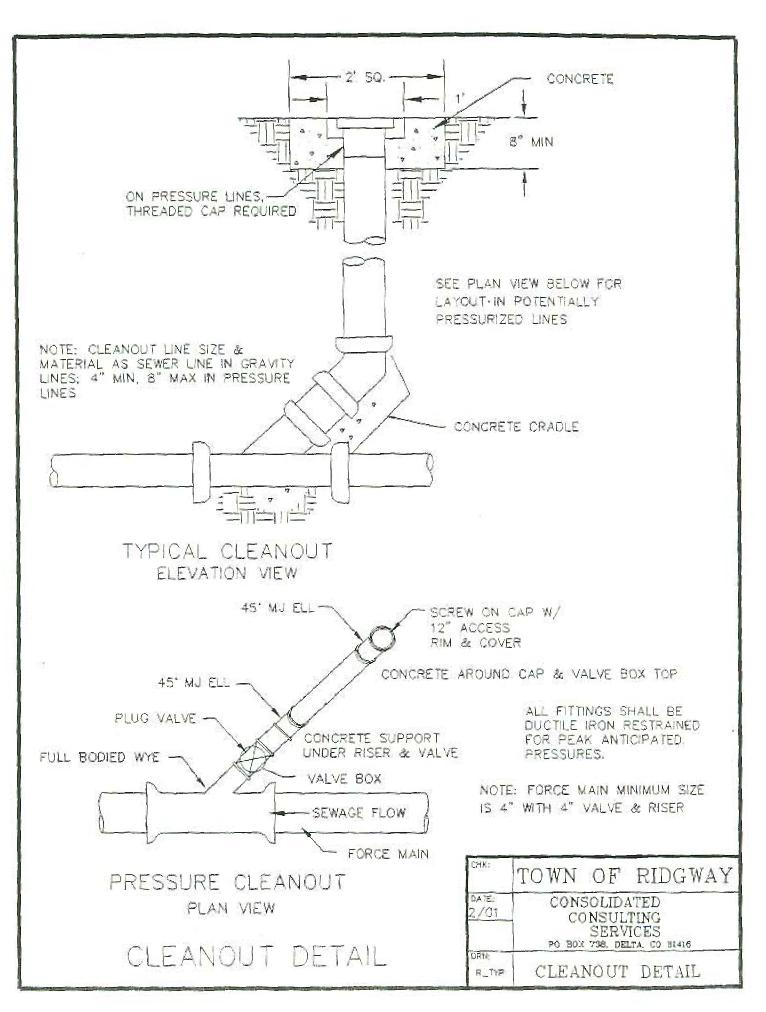
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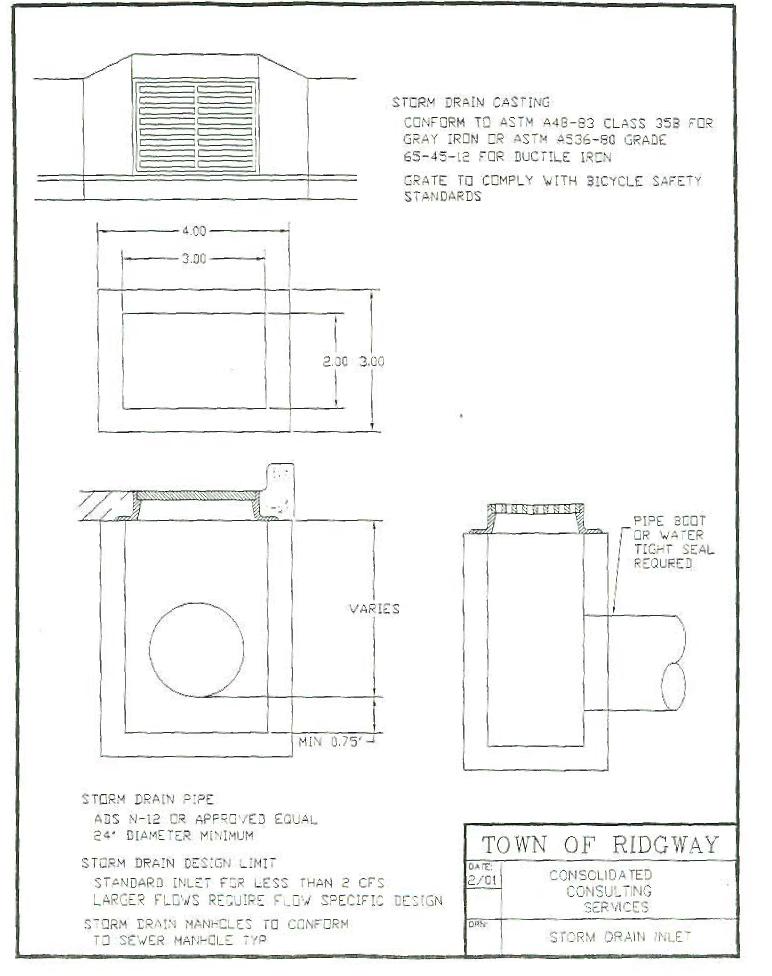
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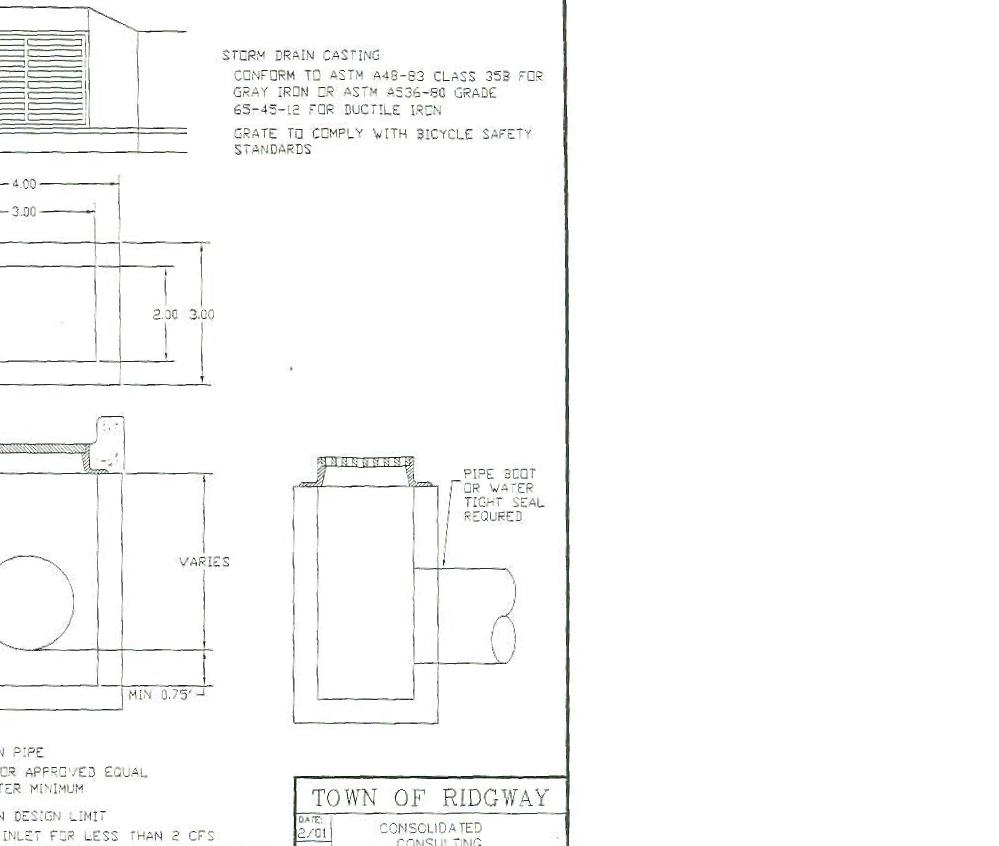
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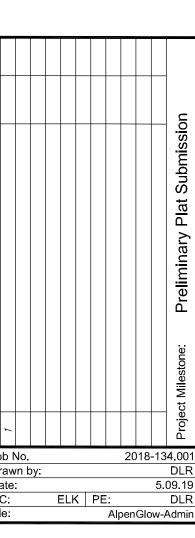




05-09-19

Graphic Scale

In Feet: 1" = ##'



Ridgway Standard Details (4)

STAFF REPORT

Request: Preliminary Plat

Legal: S: 16 T: 45 R: 8 614 AC IN N1/2SW1/4

Address: TBD

Parcel #: 430516300005
Zone: Historic Business

Applicant: Ridgway Cohousing, LLC
Owners: Ridgway Cohousing, LLC
Initiated By: Shay Coburn, Planner

Date: May 20, 2019

BACKGROUND

Applicant is submitting a preliminary plat for a proposed subdivision. This development is planned for the Warlick or Railroad property located at the southeast corner of Sherman/Hwy 62 and South Railroad Street. The property is 4.47 acres total.

The development plan includes 26 residential units/lots in 10 duplex buildings and 6 units above garages, plus a common house, future workshop, future gazebo, and parking facilities. This cohousing development would encompass approximately 4 acres — inclusive of all shared spaces (garages, carports, storage areas, open spaces, shared building, etc.) this averages to about 6,701 sq. ft. of property per dwelling unit, or 6.5 dwelling units per acre. The remainder of the property will include a 0.12-acre street and a 0.35-acre lot on the north side of the subject, along Sherman Street, that would not be developed as part of this proposal.



The units will include 6 garage loft units at 728 sq. ft., 6 units at 913 sq. ft., 6 units at 1,207 sq. ft., 4 units at 1,388 sq. ft., and 4 units at 1,629 sq. ft. The development also includes a mix of single-car garages, car ports, open parking space, a 3,000 sq. ft. common house, and an 800 sq. ft. workshop.

This development has had the following public meetings and outcomes:

- Informal discussion with the Planning Commission August 29th, 2017 well received
- Sketch Plan hearing with the Planning Commission September 26, 2017 Approved
- Sketch Plan hearing with the Planning Commission March 27, 2018 Approved
- Sketch Plan hearing with the Planning Commission October 30, 2018 Approved

The Applicant have already worked with Town staff on one round of reviews to the preliminary plat.

Submitted with this public hearing application are the following:

• Hearing Application

- Request Letter
- Updated Narrative
- Mineral Rights Certification
- SMPA Will-Serve Letter
- School District Bus Stop Location Letter
- Site Access and Safety Exhibits
- HOA Declarations and CCRs
- Draft Flood Plain Development Permit
- Geotech Engineering Study and Addendum
- Updated Drainage Report
- Preliminary Plat Map
- Landscaping, Irrigation, and Lighting Plans
- Civil Plans

The property has been noticed and posted in accordance with the Ridgway Municipal Code (RMC).

CODE REQUIREMENTS AND ANALYSIS

RMC 7-4-5(B) Preliminary Plat

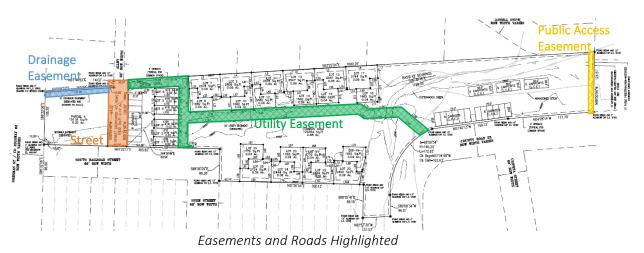
- (1) (4) Submittal Requirements Substantially conforming.
- (5) The preliminary plat shall contain at a minimum the following:
 - (a) The name of the subdivision, date of the preparation of the map, name and address of the engineer or surveyor preparing the plat, and total area of the subdivision.

Substantially conforming.

(b) The scale used and direction of true north. Substantially conforming.

- (c) The location and dimensions of all existing and proposed streets, alleys and easements, street lights, street signs and other improvements.
 - The Applicant have been in discussion with the Town regarding realigning South Railroad Street to match the location of North Railroad Street. This would have a positive impact on the traffic flow in this area. After a Town Council workshop, the Town and Applicant agreed upon a layout that could work for both parties. The Town is investigating the options for this realignment while this development is moving forward with development plans and approvals. This potential realignment would impact Parcel A and would join right in with the proposed road between Parcel A and the cohousing property.
 - This plan proposes a street, a 40' right-of-way, that will run east west connecting South Railroad to the existing alley south of Alpine Bank. This will be one of the development's main access points and was discussed in some detail at one of the Sketch Plan Hearings. See red area on map below.
 - This plan proposes a 10' drainage easement for the east side of Parcel A, the parcel in which no development is being proposed along Sherman Street. See blue area on map below.

- This plan proposes a triangular shaped sidewalk easement on the NW corner of Parcel A so that when the sidewalk is built on Parcel A, there can be some space for it to work with the established intersection.
- This plan proposes stops sign at all exits from the development and one on Hyde for vehicles traveling east.
- On the plat map, east of Lot 6 there are dimension of 129.29 and 129.39'. To what lines do those calls belong?
- The garages and carports need dimensions on the plat map so one can locate them on the ground.
- Dimensions are needed on the plat map to find where the easement starts along CR23, S Railroad, and the new street.
- The south line may need to be called out as a section line.
- Once the details of the storm drainage system are finalized, it will be important to ensure proper dedication language on the plat map, likely to be dedicated to the owner's association. A plat note may be need to address if the owner's association fails to preform proper maintenance, that the Town can do so and assess it back to the HOA.
- If there is a blanket utility and drainage easement over the common areas, this should be in the dedication language on the plat map.
- Once the utility plan is finalized, the Applicant should check that all easements are adequate.



- (d) The location of water courses, including lakes, swamps, ditches, flood prone areas; the location of existing utility lines, pipes, poles, towers, culverts, drains, and drainage ways.

 Received.
- (e) The location, size and dimension of all lots and blocks, and the location of properties and easements to be reserved for particular uses or to be dedicated to the Town.
 - The Applicant is proposing a utility easement through about the center of the property for utility providers, including the Town, to access and maintain the utilities in that area. See green area on map above.
 - At a previous Sketch Plan hearing the Planning Commission asked if the Application would provide a 10' public access easement at the south end of their lot. This 10' area is already a utility easement. The Applicant has provided for such easement. See yellow area on map above.

- It seems like owners will not want a public path on their property and that the paths should be shown as a general common element on the plat if for no other reason than to put buyers and owners on notice. Town strongly recommends moving the shared pathway off of individual properties.
- (f) Five foot elevation contours at a minimum.

 Received proposed contours on the plat map. The map only needs to have existing contours on it.
- (g) Any building setback lines, height restrictions, or other building or use restrictions. Need building setback line in the legend.
- (h) A vicinity sketch map. Received.
- (i) An indication of the total area of streets and alleys, area of lots and area of any property dedicated to public or other uses.
 - A 40' right-of-way will be dedicated to the Town. The area of this street is 0.12 acres or 5,332 square feet.
 - A 10' public access easement, as described above, will be dedicated to the Town.
- (6) Accompanying the preliminary plat or included upon it shall be plans, drawings or information for the following:
 - (a) Plans for any proposed sanitary sewer system showing location, grade, pipe sizes and invert elevations.

The Applicant is proposing to build a new sewer main that will run through the middle of the development and connecting to the Town's system on Liddell Street via the alley. The sewer main is to be dedicated to the Town while the service lines will be the responsibility of the Applicant. The dedication of the sewer main needs to be added to the dedication language on page 1 of the plat.

Concerns/comments on the proposed sewer system:

- The sewer line going down Liddell appears to only be about 1' from the alley right-of-way line. This does not give town the access needed to maintain the line. The minimum distance from the right-of-way line is about 4 feet. The Applicant and staff will need to coordinate this with the concrete alley that is in place today.
- The Town Engineer needs to further review the sewer system.
- (b) Plans for the water system and fire protection system showing locations, pipe sizes, valves, storage tanks and fire hydrants.

The Applicant is proposing to build a new water main starting at Chipeta and CR 23 then going through the middle of the property north then looping west on Hyde Street. The water main is to be dedicated to the Town while the service lines will be the responsibility of the Applicant. The dedication of the water main needs to be added to the dedication language on page 1 of the plat.

The Town Engineer needs to further review the water system.

Page C108 was provided to show a 250' radius from the one existing fire hydrant on CR 23 and the proposed hydrant on South Railroad. The Town's Standard Specs say "Fire hydrants shall be placed

at the intervals recommended by the State Insurance Services office, generally, at 500 foot intervals." The two hydrants on the plans appear to be about 765' apart. A new hydrant needs to be added to address the gap.

(c) Plans for the storm drainage system showing location, pipe sizes, drains, surface drainage ways and discharge points.

The development and association will own and maintain this private stormwater system that is mostly raingardens that then connect with the Town's system on Sherman street. The Town Engineer needs to further review the storm drainage plan. As proposed, there is not an inlet where the storm drain would tie in which would require cutting the highway. Town would like to discuss alternate locations to see if there is one with less impact to the new street, curb, gutter, and sidewalk.

- (d) Plans for proposed streets, alleys, sidewalks, curbs and gutters, lighting, bikepaths and walkways showing the grade and cross section, and plans for any other proposed public improvements. (Ord 12-2008)
 - The Applicant is including sidewalks along all of the cohousing property, along South Railroad, Hyde, and CR 23 as required by 7-4-6(A)(10).
 - Staff has discussed options for sidewalk along Parcel A. Pursuant to 7-4-6(A)(10), sidewalks must be constructed along all property unless proper grade cannot be determined, in which case the Planning Commission and Town Council can make this determination and then make an agreement for future construction. Since Parcel A is not being proposed for development at this time, and South Railroad is not paved, this may make sense to delay this portion of sidewalk. This could be included in the Subdivision Improvements Agreement for construction at a later date as long as this is approved by the Town Council. It would be helpful for the Commission to discuss this item.
 - Exterior lighting plan Applicant provided town with an explanation of how the lighting interfaces with the utility plan and easements. This information should be added to the engineering plans.
 - The Town Engineer needs to further review these items.
- (e) The subdivider shall send a notice, at least 30 days prior to the Planning Commission's hearing or consideration, to mineral estate owners, by certified mail, return receipt requested, or a nationally recognized overnight courier, in accordance with the requirements of CRS 24-65.5-103(1). A copy of the notice shall be given to the Town along with the subdividers certification of compliance with said notification requirements. Provided this notice is not required if notice was previously sent and such certification previously provided with respect to the same surface development, or the application is only for platting an additional single lot, unless a mineral estate owner has requested notice pursuant to CRS 24-6-402(7). (Ord 4-2009)

Substantially met. We need a title commitment that is dated near the date of this preliminary plat submission.

(f) Any proposed covenants, condominium declaration or articles of incorporation and by-laws for any homeowners' association, or contracts for maintenance of improvements.

An owner's association will be established with a final plat for the cohousing property. This will not include Parcel A. Staff has the following comments on the CCRs:

- Consider inserting additional language in 2.4.2 or 2.4.3 to recognize the utility easement being dedicated to the Town, which will affect the common areas.
- 2.12 may be good to note the Town's short-term rental regulations which supersede the CCRs.
- 3.4 May want to look at explicit language regarding emergency vehicles See 38-33.3-106.5
- 3.6 May want to further define animals as domestic animals (dogs cats)
- 3.8 is a violation of CCIOA See 38-33.3-106.5
- Please submit exhibits for review.
- (g) A soils report prepared by a geologist or licensed qualified engineer which addresses building foundation design requirements shall be submitted where geologic hazards and considerations dictate the need for such analysis.

An addendum to the report was submitted and needs to be reviewed by the Town Engineer.

(h) Written approval or access permit from the State Department of Highways for any access to highways under its jurisdiction, directly from any lot and for any new street serving the subdivision which intersects with a State highway.

Town has worked with the Applicant to get an access permit from CDOT for this development and for the realignment of South Railroad Street. If South Railroad Street is not realigned, Town will need to work with the Applicant to determine if another CDOT access permit needs to be submitted. Staff is unsure what the implications may be if South Railroad Street is not realigned – it may trigger CDOT to limit the access in and out of South Railroad Street to right-in and right-out only. Staff will continue to work with the Applicant and CDOT as the feasibility of realigning South Railroad is determined.

(i) Estimated water consumption and sewage generation.

To be reviewed by the Town Engineer.

(j) Description of any geologic hazards.

To be reviewed by the Town Engineer.

(k) Landscape plans and, as appropriate, irrigation plans. (Ord 12-2008)

The Historic Business district has minimal landscaping requirements. The proposed plan will preserve maybe about half of the exiting trees. The landscaping plans propose a mix of types, and a number of trees and bushes. The proposal also shows a small lawn area with mostly low grasses and native flowers. Most of the landscaping plan seems to be based on accommodating and managing storm drainage.

The Applicant needs to remove trees that are shown to be located on top of utility lines. If the other improvements (i.e.: bridges, rain gardens, retaining walls) remain in the utility easement, please add a plat note stating, "Any landscaping or improvements located within any public utility easement shall not be the responsibility of the Town of Ridgway. Additionally, the cost of any removal and replacement of such landscaping or improvements will be assessed to the Owner's Association in the event of needed utility repairs, maintenance, replacement, etc.".

The irrigation plan shows only common areas being irrigated. This is beneficial in that each property owner can decided what they want to do with their yard like xeriscape or have a flower garden; however, there is landscaping proposed on private yards that will then not be irrigated by

the owner's association. This seems to occur on the rear lots where most lots have one tree but not all. For example, lot 26 has two trees and lot 7 has none. Also, will each home/lot have access to an outside water hook up so they can add an irrigation system or water as needed? This is not a requirement, just something for the Applicant to think through. The Applicant should also note that if the backflow prevention devise is not blown out each winter, it will break.

Town Engineer needs to further review these items.

- (I) A list of proposed uses for each lot consistent with Town Zoning Regulations. (Ord 12-2008)

 In the Historic Business district, residential uses are a use by right. The majority of this proposed subdivision will be residential. Parcel A will remain undeveloped at this time and the zoning will remain Historic Business.
- (7) Repealed by Ord 4-2009
- (8) The Planning Commission may approve, conditionally approve or disapprove the preliminary plat. It may continue its consideration of the plat to another meeting when additional time is needed, or to allow the subdivider time to revise or supplement the plan to bring it into compliance with these regulations or proposed conditions of approval. The reason for continuance, disapproval, or any conditions of approval, shall be included in the minutes of the Planning Commission's proceedings and provided to the subdivider in writing upon request. Consideration of the matter may also be continued upon the subdividers request. The plat may be disapproved if it or the proposed improvements and required submittals are inadequate or do not comply with the requirements of these Regulations. (Ord 12-2008)
- (9) The Planning Commission's decision shall be submitted to the Town Council as a recommendation along with the plat for review at its next regular meeting. The Town Council shall issue its decision approving, conditionally approving or disapproving the plat, based upon compliance with the provisions of these regulations. The Town Council may continue its consideration of the preliminary plat until such time as proposed conditions for approval, are met by the subdivider. (Ord 12-2008)
- (10) Except as otherwise expressly provided by the Town Council, all conditions of approval shall be met within 90 days of such approval or the plat shall be deemed disapproved.

RMC 7-4-6 Required Improvements

There are a number of improvements that are required with subdivision in this section. Staff is highlighting only a portion of these requirements here:

Subsection (A)(6) Streets within and adjacent to the subdivision as necessary to provide access to each lot. Existing streets maintained by the Town for public use shall be improved by the subdivider to the extent necessary to provide access to abutting lots and to provide proper drainage, grade and sidewalk grade. Streets shall be paved in circumstances where required by Town street specifications. Streets shall be dedicated to the Town.

One of the required improvements when doing a subdivision includes providing streets to access the development or making improvements to existing streets. Besides just providing adequate access to the

property, the improvements are to provide proper drainage and grades. As stated above, the Applicant is proposing to dedicate a 40' right-of-way to the Town that will connect the existing alley off of Liddell Street to South Railroad Street. The Applicant has also been asked by the Planning Commission to build the roughly 70' long portion of alley to connect the proposed street to the existing alley. This new street will be one of the development's main access locations with 14 garages and trash access located just off of this new street. This access cannot be an alley because 7-4-7(C)(2) requires that all lots shall have access to a street connected to the public street system.

Subsection (B) Subdivision Improvements Agreement (SIA) In part, this section reads as follows in Sections (1) and (2):

- (1) No final plat shall be approved or recorded until the subdivider has properly completed, and the Town has approved, the street base, lights and traffic control devices, and water, sewer, electricity, gas, telephone, and drainage system as adequate to serve each lot, and has submitted, and the Town Council has approved, a Subdivision Improvements Agreement guaranteeing construction of all other required improvements and as-builts therefore, which have not previously been completed and approved by the Town. The Subdivision Improvements Agreement shall list the improvements to be made and as builts required, estimated costs, and completion dates.
- (2) All improvements shall be completed and accepted within 2 years following approval of the final plat by the Town, unless a longer interval is provided for in the Subdivision Improvements Agreement.

The Applicant has told staff that they will want to do an SIA. They are currently working on a list of items that they expect to be part of this SIA. This list will be helpful to agree upon before the final plat, when the SIA would be finalized, as to avoid any delays. The Applicant should note the language of (B)(1) above as some items are not eligible for an SIA.

RMC 7-4-7 Design Standards

There are a number of standards required in this section. Staff is highlighting only a portion of these Standards here:

Subsection (B) All subdivisions shall be developed in accordance with the Town's Master Plans, Zoning Regulations, Flood Plain Regulations, and other applicable Town ordinances, regulations and specifications.

All private lots and structures are outside of the floodplain; however, the Applicant has submitted a draft Flood Plain Development Permit for site work. The Applicant is working on a USACOE Nationwide 404 Permit which will include off-site wetlands mitigation, stream improvements for the stream crossing, stream widening, and slope stabilization. This USACOE permit is needed to finalize the Town's Flood Plain Development Permit. This can be a condition of approval; however, it should be noted that the Applicant has requested more than the 90 days the code allows for to meet all conditions of preliminary plat approval. While the Applicant noted that they would hope to have this completed sooner, they are requesting up to two years to meet this condition. It should be noted that no matter how long the Applicant has to meet this condition, no work can commence in the floodplain until this is addressed. In addition, the design of the elements in the floodplain will need to be reviewed by the Town Engineer.

Subsection (J) Plat Notes

This section addresses plat notes required by the Town. Additional edits to the Plat Map are included in this section.

- 1. If the Applicant wants to ask permission from the Commission and Council to build the sidewalk on Parcel A at a later date, and the Applicant doesn't want to add the sidewalk to the SIA, the Applicant will have to add a plat note that addresses the creation of a district for improvements so that the Town can, at a later date, create an improvement district to pay for the sidewalk.
- 2. Note 5b add that this includes but is not limited to pipes, inlets, manholes, detention facilities.
- 3. Note 7 there is no "Ridgway County Clerk and Recorder" change to Ouray County.
- 4. Note 8 should include a description and further definition of a party wall under the CCRs, and the plat can then reference the same.

RMC 7-3 Zoning Regulations

RMC 7-3-10 Dimensional & Off-Site Parking Requirements

- Parcel A is 0.35 acres and about 108' wide on Sherman Street.
- Structure height limited to 35' in the HB district.
- Minimum or maximum lot coverage or size none in this district.
- Lot width 25' minimum in the HB district. Lot width varies within the development: 18' for the 6 garage apartments, about 46' for the duplex unit in front, and about 18'-19' of public area frontage for the rear duplexes but at is largest point averages about 65' wide. Each lot does not have street frontage along a public street so it is not possible to measure as our code describes; however, this development proposal shows individual lots to be created internal to the subdivision. This variation requires variances for lots 1-6 and possibly the rear duplex lots depending on how the Commission would like to measure them. When measuring street frontage for the full cohousing property along South Railroad, Hyde and CR 23 the total is about 940'. When that is divided by the 26 lots created you end up with just over 36' of lot width at a public street per lot.
- Setbacks
 - Rear setback minimum is 8' unless it is along an alley then it can be 2'. The setback from the proposed gravel street is 2', the setback along the east property line ranges from 6' to 10', while the setbacks from the west property line range from 8'-12'. However, when considering individual lot lines, lots 1-6 have a 4' or 10' setbacks depending which is the rear side of the lot. The remaining duplex lots appear to have 8' to 0' rear setbacks. If we consider the rear of lots 1-6 to have a 10' rear setback, and the rear duplex units to all have an 8' setbacks (except possibly lot 13 and 15) then this application needs to include a variance request for all front duplex lots and lots 13 and 15.
 - Front and side setbacks can range from 8'-4'-0' depending on design and drainage. Lots 1-6 have a 4' front setbacks and meets the criteria in the code to have a 4' front setback. The side setbacks on lot 1-6 are 0'. The middle unit meets the criteria to have a 0' side setback but it is unclear without building plans that the end units will. This will be a variance request for side setback. The duplex lots show front and side setbacks ranging from 0' to 5'. Where the units are connected, the 0' setback criteria will be met and it is likely that the criteria for a 4' min. setback is also met. Where front and side setbacks are 0', and are not connected to another building, a variance will be required.

When the Commission is considering a variance request per RMC 7-3-16 the Applicant must prove practical difficulty or unnecessary hardships in the way of carrying out the strict letter of the Zoning Ordinance and that the spirit of the ordinance will be observed, the public health, safety and welfare secured and substantial justice done by granting the variance. The request for lot width, rear setback, and front and side setback variances seems due to the nature of building a cohousing development. The Applicant could have built a standard single-family home subdivision but rather chose to develop a different housing type that doesn't fit perfectly into our code. When considering the full property being developed, the Applicant can show that lot width and most all setbacks meet the minimum requirements. In addition, the Applicant could have gone through the PUD process, but is able to meet almost all of the Town's regulations except the ones noted above.

Parking – Under RMC 7-3-10(A), 2 parking spaces are required for residences greater than a studio size of 600 sf. All 26 units are above 600 sq. ft. thus requiring a minimum of 52 spaces, which are provided in a combination of surface parking, garages, and carports. There will also be 4 guest parking spaces. In addition, the Applicant is proposing to improve the public right-of-way along CR 23 which will contribute to extra residential parking and visitor parking.

Misc. Comments and Edits

RMC 6-4 Fence, Hedge and Wall Restrictions

The Applicant is proposing quite a few retaining walls around the development. These retaining walls average about 2-3' tall. In addition, private yards are planned to be fenced by the owners. The fences will be 4' tall between units and 6' tall on the edge of the property (rear and sides) where desired for privacy. Garage apartment units may have a 4' fence at front yards. These items are addressed in the HOA CCRs.

RMC 7-3-13(I) Short Term Rental Regulations

Per the HOA documents, all rentals must be 32 days or more. This means that no short-term rentals will be allowed.

Commercial Design Guidelines

These apply to Historic Business properties; however, this is a residential development so many of the guidelines are not applicable. For example, we do not have architectural plans so looking at the architectural design and materials is not possible. Also, the sign planning guidelines do not really work or apply to a residential development. The one section of the Commercial Design Guidelines that apples is the screening and buffers section. Staff asked the Applicant about how the development will look from public rights-of-way given it appears that the backs of garages is all that will be visible. The Applicant said that the design team is working on this and that they are looking at incorporating a variety of exterior building materials and landscaping to add to the visual appeal of this development and minimize the massing of the garages.

STAFF RECOMMENDATION

Given the complexity of a larger project like this, it is extremely important to discuss the details of this plan and address a number of edits needed prior to any approval of a preliminary plat. While the Town Engineer needs to finish review of this preliminary plat, it appears as if most of the large requirements have been met and that staff can work with the Applicant to finalize all of the engineering and related documents. As such, staff recommends that the Commission recommends approval of this preliminary plat to Town Council with the condition that all updates and modifications described in this report,

including working with staff to incorporate engineering comments, are addressed before the Town Council hearing.

<u>Staff also recommends approval of the variance requests for lot width, rear setbacks, front setbacks, and side setbacks given the criteria have been met.</u>

This is a significant development review for which a number of modifications and decisions are needed. While we have done our best to insure a complete and accurate report, this is complex and there may be some omissions or oversights here that will need addressed in future reviews.



From Hwy 62/Sherman looking south



From CR 23 looking north east



From Hyde looking south



From South Railroad Street looking east