

**fisher architecture**  
palmer lake, co 719 660 4356

**The Shire At Old Ranch**  
Howells & Old Ranch Road  
Colorado Springs, CO

**GENERAL GRADING NOTES**

- UTILITY INFORMATION CONTAINED IN THESE DRAWINGS IS APPROXIMATE. NEW OR EXISTING UTILITIES INCLUDING EXISTING ON-SITE WASTEWATER TREATMENT FACILITIES, SHALL BE PRECISELY LOCATED PRIOR TO COMMENCING ANY EARTH WORK. CONTACT LOCATORS AND/OR UTILITY COMPANIES AND MAY REQUIRE POT-HOLING. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR DUE TO CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PROTECT ALL EXISTING UTILITIES.
- VERIFY ALL EXISTING SITE CONDITIONS & REPORT ANY DISCREPANCIES TO ARCHITECT/ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
- REMOVE WEEDS, TRASH, DEBRIS, RUBBLE, BROKEN ASPHALT, AND ORGANIC MATERIAL (EXCLUDING TOPSOIL), AND ANY OTHER MATERIAL. NOT SUITABLE AS FILL OR FOUNDATION BEARING SOIL.
- CONTOUR INTERVALS ARE 2.0 FT. TYPICAL. 1.0' CONTOURS SHOWN AT SOME LOCATIONS.
- GENERAL CONTRACTOR SHALL COORDINATE ALL FINE GRADING TO ASSURE PROPER ALIGNMENT OF ALL FINISHED SURFACES INCLUDING PAVEMENT, CURBS, SIDEWALKS, GRASS, AND OTHER GROUNDCOVERS. COORDINATE WITH LANDSCAPE PLAN.
- MINIMIZE SITE DISTRUPTION. EXISTING RESIDENCES AND THEIR YARDS REMAIN. PRESERVE EXISTING WOODED SITE AREAS & GRASSLAND. CONFINE ALL OPERATIONS TO DEVELOPING AREAS.
- FINISH GRADING SHALL INSURE POSITIVE DRAINAGE AWAY FROM FOUNDATIONS AND STRUCTURES IN ACCORDANCE WITH GEOTECH ENGINEERING RECOMMENDATIONS.
- GENERAL CONTRACTOR IS RESPONSIBLE TO ASSURE ALL GRADING IS DONE IN ACCORDANCE WITH THIS GRADING PLAN.
- ALL WORK SHALL BE DONE IN STRICT ACCORD WITH ALL APPLICABLE CODES & REGULATIONS. OBSERVE ALL SAFETY BEST PRACTICES.
- SEE EROSION CONTROL PLAN. PROVIDE ALL NECESSARY MEASURES TO ASSURE SAFETY AND PROTECT EXISTING PROPERTY, DRIVES, ROADS, AND PEOPLE.
- PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE W/ THE EL PASO COUNTY LDM.

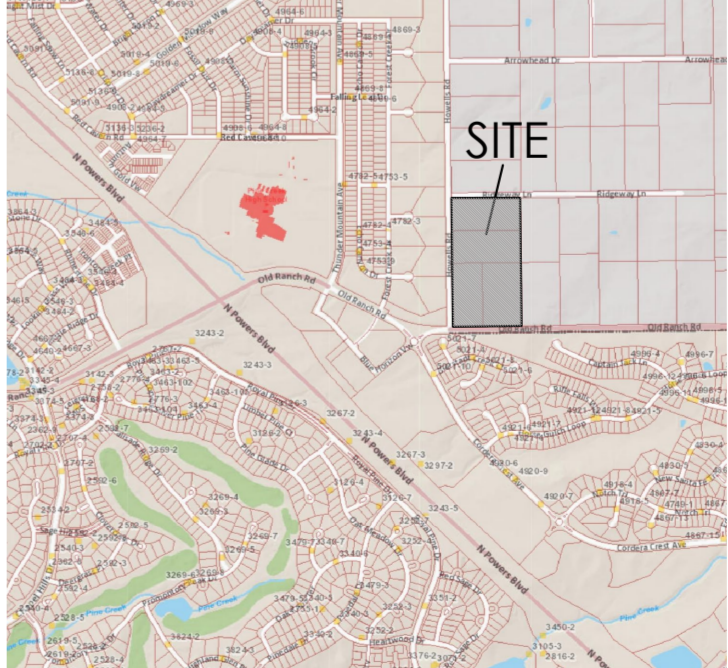
**GRADING KEYED NOTES**

- ELPASO COUNTY STANDARD ENTRY APRON DETAIL NO'S SD2-23, SD2-25,
- RIGHT IN RIGHT OUT W/ "PORK CHOP" ISLAND PER EL PASO COUNTY ECM.
- INFILTRATION PONDS - SEE DRAINAGE REPORT. NOT ALL PONDS ARE DESIGNATED ON THIS PLAN.
- INFILTRATION PONDS - SEE DRAINAGE REPORT. NOT ALL PONDS ARE DESIGNATED ON THIS PLAN.
- DRAINAGE BIOSWALES W/ GRASS AND OTHER LANDSCAPING. SEE LS PLANS AND DRAINAGE REPORT.
- CURB - SEE DRAINAGE STUDY

**GRADING PLAN LEGEND**

	EXISTING INTERMEDIATE CONTOURS (2' INTERVAL)		EPCO CURB CUT APRON - SEE SP2
	EXISTING INDEX CONTOURS (10' INTERVAL)		NEW 4" D. BREEZE PEDESTRIAN PATH
	NEW INTERMEDIATE CONTOURS (2' INTERVAL)		NEW GABION RETAINING WALLS
	NEW INDEX CONTOURS (10' INTERVAL)		ZONING BUILDING SETBACK LINE
	NEW 5" FULL DEPTH ASPHALT (PER GEOTECH.) PAVED PARKING LOT/DRIVE - STRIPING & ACCESSIBLE SPACES WHERE SHOWN, NUMBER = COUNT. TIMBER PARKING BUMPERS ADJACENT PEDESTRIAN WALKS.		PROPERTY LINES
	CONCRETE PAVED OUTDOOR PRODUCT DISPLAY AREA		EXISTING VEGETATION - MINIMIZE DISTURBANCE
	NEW HARD SURFACE WALKS (SEE LS PLAN)		EXISTING BUILDINGS TO REMAIN
	NEW PARKING/DRIVE SURFACE GRAVEL PAVED, NUMBER INDICATES LOCAL AREA SPACE COUNT		EXISTING BUILDINGS TO BE REMOVED
	NEW BUILDINGS & SECONDARY ADDRESSING NO.		NEW BUILDINGS & SECONDARY ADDRESSING NO.

**VICINITY MAP**



**SIGNATURES**

RESUBMITTALS	

PROJECT	19.8.1
DATE	Feb. 23, 2024
PHASE	Final Plan
DRAWN	WLF
CHECKED	WLF
REV'D	

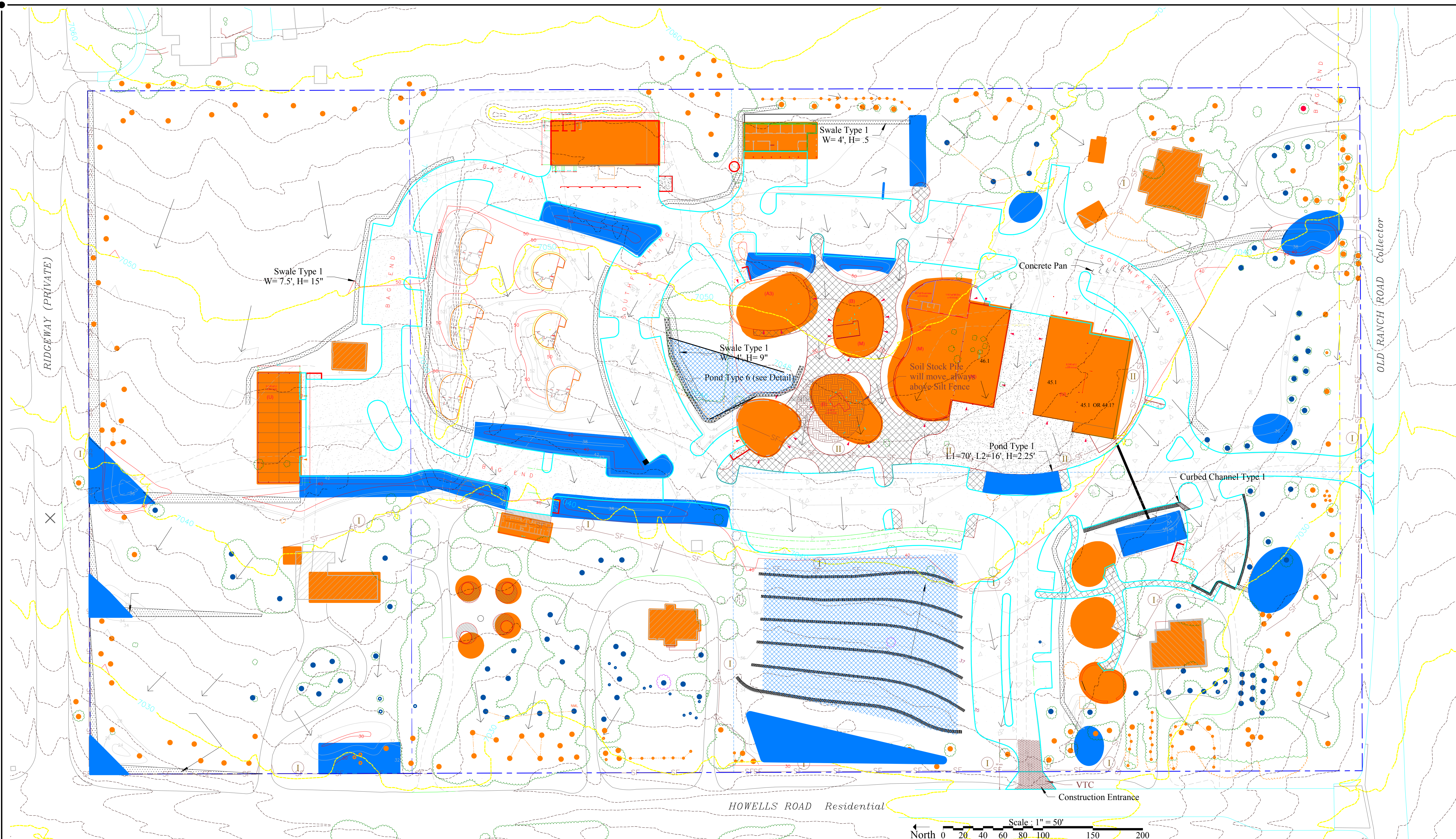
**GRADING PLAN**

**SG 1**

1"=50'



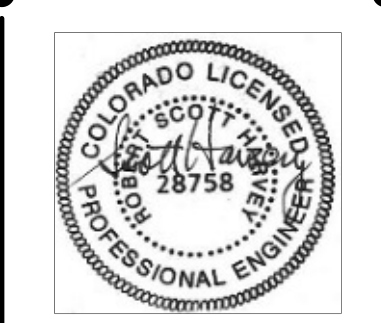




- Erosion Control Measures**  
The planned sequence of construction is to:
1. Install all off-site erosion control measures; Silt Fences, Sediment Control Logs, Strawbales and Vehicle Tracking Control along downslope perimeter and protecting interior residential spaces.
  2. Install all utilities that go under roads and to OWTS in the NW.
  3. Grade the interior, generally including the entrance drives, the main loop road (less Bagend, far north loop) and commercial core area. Left ungraded for this phase is everything outside the main loop road except entrance drives.
  4. Build all drainage features as both short and long term stormwater management strategies with intermediate and final erosion control elements. This includes areas along the north, west and south sides. Silt fences would border downhill sides of grass lined swales and ponds. this is our primary erosion control strategy.
  5. Build some of the commercial core buildings (Coop and greenhouses). Buildings would be built sequentially.
  6. Construct roadways
  7. Revegetate disturbed areas. This includes gardens and landscaping.
  8. The three craft studios (SW) the north greenhouse, the six energy independent Hobbit houses, bath house and yurts will follow after the commercial core is functioning.
- I - Initial Erosion Control Measure - generally on the downhill perimeter of the project to prevent erosion off site. Also used uphill from existing residences to prevent erosion into their space. Many of these measures will remain in place until work is complete and vegetation is re-established.
- II - Intermediate Erosion Control Measures - These will be installed on the downhill side of the western roads and remain until paved. Soil stock piles will have silt fences around downslope sides. As item 4 above proceeds, some sediment control logs and silt fence will be utilized.
- III - Final Erosion Control Measures - Silt Fences, Sediment Control Logs and Strawbales will be used until vegetation is established.

General		Drainage Elements		Erosion Control Elements		Utilities Elements	
	Existing Building		Gabion Curb Type 1		Drainage direction		Sanitary Sewer
	New Building		Conventional Concrete Curb		Strawbales SBB		Water Supply
	Vegetation, Aerial Identified		Grass Lined Swale		Sediment Control Logs SCL		Water System Nodes
	Vegetation, Human Identified or New		Berm 0 to ~2 ft tall		Silt Fence SF		Yard Hydrant @ Node
	Driveway, Concrete		Rectangular Infiltration Pond, Type 1		Initial Erosion Control Measures		Electric Lines OH w/ Poles
	Driveway, Gravel		Triangular Infiltration Pond, Type 2		Intermediate Erosion Control Measures		Electric Lines UG
	Sidewalk		Elliptical Infiltration Pond, Type 3		Final Erosion Control Measures		Gas
	Existing/Native Contour Lines						
	New Contour Lines						

The drawings and representations shown here are Copyrighted under the laws of the United States of America. These drawings are to be used only for the Project and address indicated to the right and remain the property of the designer. © 2024 Art of Engineering, Inc.  
General Contractor must verify all conditions, dimensions and notify designer of any discrepancies or omissions prior to starting work or fabrication. Drawings are intended to be sealed for even multiples of that but... DO NOT SCALE DRAWINGS



**The Shire At Old Ranch**  
Howells & Old Ranch Road  
Colorado Springs, CO

**Art of Engineering, Inc.**  
Architectural, Civil and Construction Services  
PO Box 704 Colorado Springs, CO 80901  
Phone: 719-528-1557  
Email: Services@AroEngineering.com

Client Information:  
The Shire at Old Ranch  
3820 Old Ranch Rd.  
Colorado Springs, CO 80908

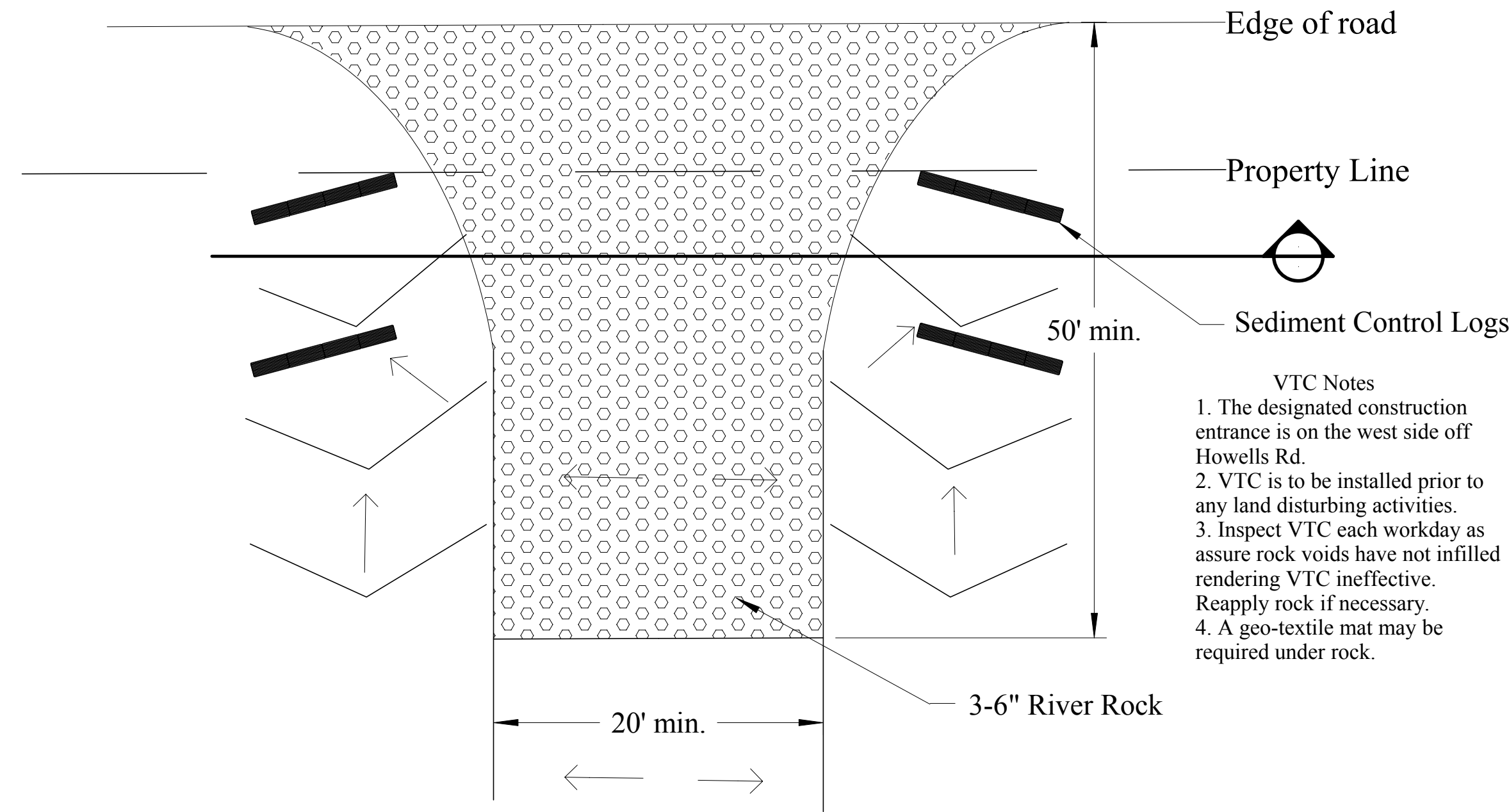
Mark Phelan 719-243-2678

Number	Date	Revision	Purpose

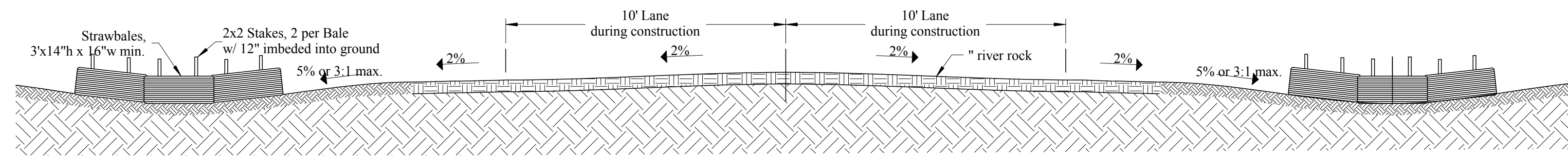
Project Number: 14010  
Project Phase: Development Plan  
Drawn by: RSH  
Drawing Date: 20 Feb 2024

EC-1  
Erosion Control Plan

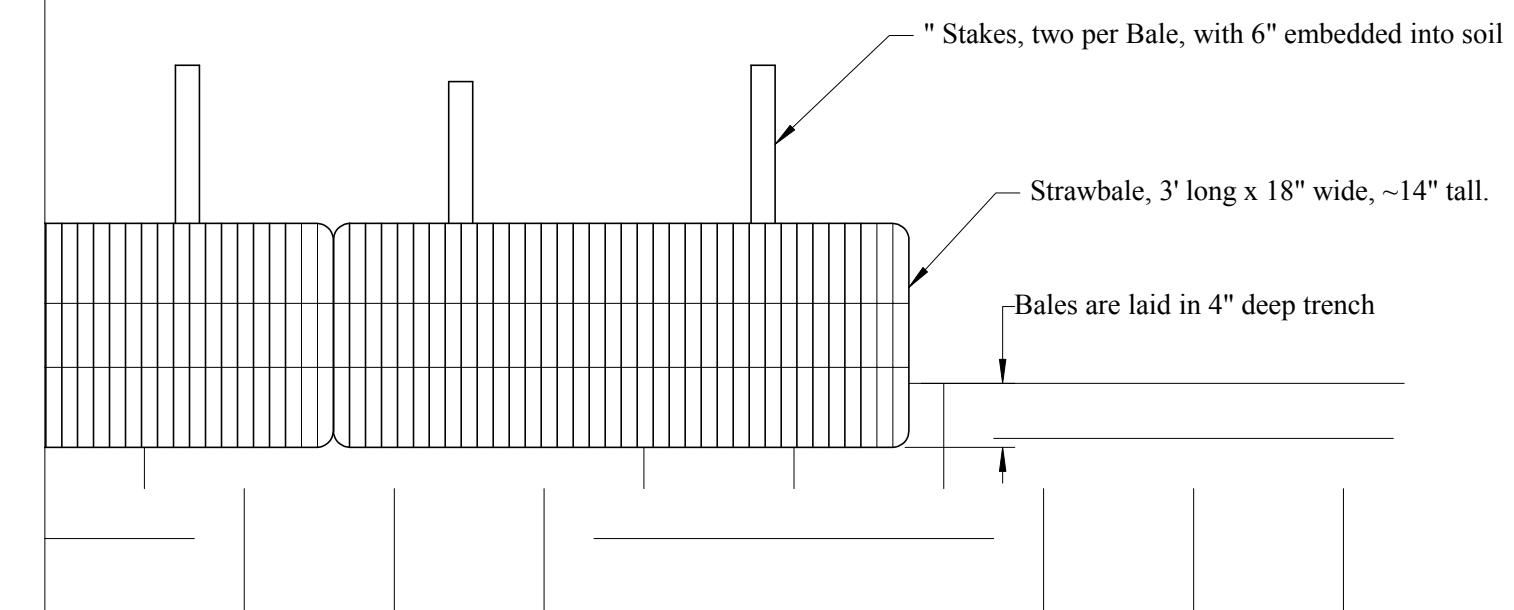
**Vehicle Tracking Control Pad - VTC**



- VTC Notes**
1. The designated construction entrance is on the west side off Howells Rd.
  2. VTC is to be installed prior to any land disturbing activities.
  3. Inspect VTC each workday as assure rock voids have not infilled rendering VTC ineffective. Reapply rock if necessary.
  4. A geo-textile mat may be required under rock.



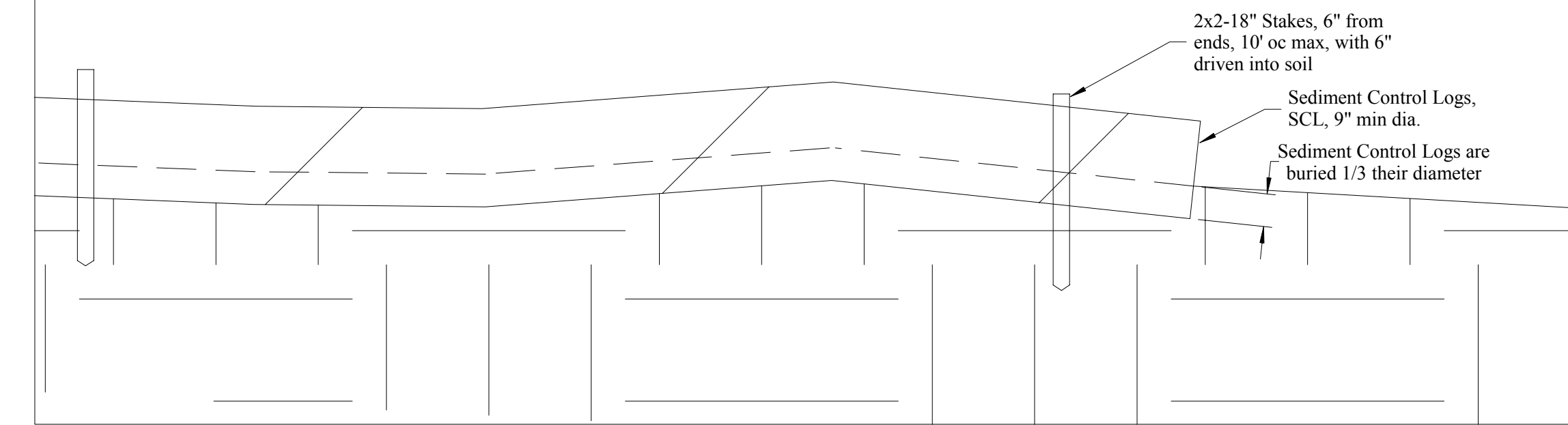
**Strawbale Barrier SBB**



**Strawbale Notes**

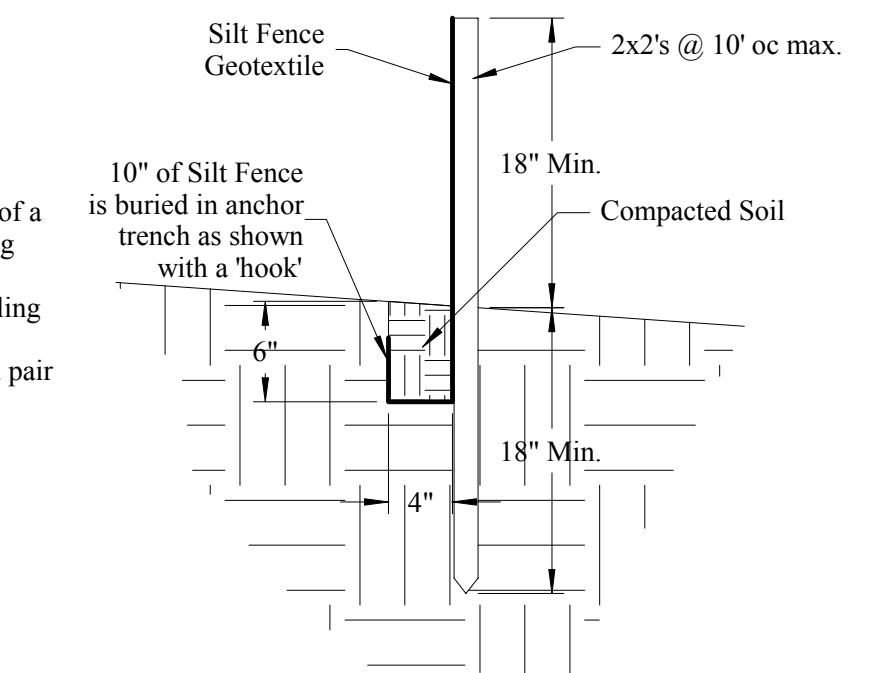
1. Bales in a series are tight together.
2. Bales are laid in a 4" deep trench.
3. Select bales that are weed free.
4. Bales are set with straw vertical and strings horizontal.

**Sediment Control Logs - SCL**



**Silt Fence SF**

Join Fence segments by lapping at the end posts



**Site Fence Notes**

0. Silt Fence is installed prior to land being disturbed.
1. Install generally along contours with a depressed area uphill to allow for ponding.
2. When silt fence is not on contours, a portion at the end of a section shall be turned uphill to avoid waters from flowing along silt fence.
3. Te anchor trench is necessary to avoid textile from pulling out. Compact soil in anchor trench.
4. Join end of segments as shown, use ties or wire around pair of posts.

**Pond Construction Details**

Pond Number	Location	Pond Type	Shape	Surface Dimensions, Full			Pond Perimeter Dimensions		
				L1	L2	H	L1	L2	H
11a	S	3	Oval	40	30	2			2.5
40c	SW	1	Rectangular	65	27	2			2.5
54a		3	Oval	20	15	2			2.5
58	NW	1	~ Rectangular	100	30	2.5			3
59	E	~	Rectangular	70	15	2			2.5
60	E	4	~ Rectangular	58	12	2.5			3
61	E	4	~ Rectangular	50	5	2.5			3
62	W		Rectangular	58	12	2			2.5
70a	SW	3	Oval	70	50	2			2.5
71a	W		Series of Ponds						
85	NW	~	Rectangular	175	15	1.25			1.75
86	NW	1	~ Rectangular	200	20	1.75			2.25
87	NW	2	Triangular	74	105	3			3.5
88	Middle	2	Triangular	See Plan					
89	NW	2	Triangular	43	61	3			3.5
91		3	Oval	55	40	3			3.5
93	NE	1	~ Rectangular	113	30	3			3.5
94	NW	1	Rectangular	80	30	2.5			3
95	NW	2	Rectangular	38	54	3			3.5

The drawings and representations shown here are Copyrighted under the laws of the United States of America. These drawings are to be used only for the Project and address indicated to the right and remain the property of the designer. © 2024 Art of Engineering, Inc.  
General Contractor must verify all conditions, dimensions and notify designer of any discrepancies or omissions prior to starting work or fabrication. Drawings are intended to be sealed for even multiples of that but... DO NOT SCALE DRAWINGS



**The Shire At Old Ranch**

Howells & Old Ranch Road  
Colorado Springs, CO

**Art of Engineering, Inc.**

Architectural, Civil and Construction Services

PO Box 704 Colorado Springs, CO 80901  
Phone: 719-528-1557  
Email: Services@AtoEEngineering.com

Client Information:  
The Shire at Old Ranch  
3820 Old Ranch Rd.  
Colorado Springs, CO 80908

Mark Phelan 719-243-2678

**REVISIONS**

Number	Date	Purpose

Project Number: 14010

Project Phase: Development Plan

Drawn by: RSH

Drawing Date: 20 Feb 2024

EC-2  
Erosion Control Details