ENTECH
ENGINEERING, INC.
505 ELKTON DRIVE
COLORADO SPRINGS, CO 80907
PHONE (719) 531-5599

SOILS AND GEOLOGY STUDY
ASPEN WILLOW SUBDIVISION
PARCEL NO. 61000-00-298
1480 E. HIGBY ROAD
EL PASO COUNTY, COLORADO

Prepared for:

Charles Woodall
1480 E. Higby Road
Monument, Colorado 80132

August 21, 2026

PCD No.

Entech Job No. 261137

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1 SUMMARY

Project Location

The project site is located within the SE¼ of Section 20, Township 11 South, Range 66 West of the 6th Principal Meridian in El Paso County, Colorado. The site is located approximately 2 miles east of the town of Monument, Colorado at the southeastern corner of Higby Road and Happy Landing Drive in El Paso County, Colorado. The location of the site is as shown in the Vicinity Map (Figure 1).

Project Description

A four-lot rural residential subdivision is proposed for the 35-acre parcel. An existing equine hospital is located on the property and will remain on proposed Lot 1 with plans for a future residence in the southwestern portion the lot. Lots 2 through 4 will be located on the eastern half of the site. The lots will be five (5) to twenty (20) acres and will be serviced by individual water wells and on-site wastewater treatment systems (OWTS).

Scope of Report

This report presents the results of our geologic evaluation and treatment of engineering geologic hazard study with respect to the proposed subdivision.

Land Use and Engineering Geology

This site was found to be suitable for the proposed development; however, geologic conditions in certain areas will impose some minor constraints on development and land use. These include areas of artificial fill, potentially collapsible soils, potentially expansive soils, potential seasonally shallow groundwater areas, and the potential for elevated radon levels. These conditions are discussed in greater detail in this report.

In general, it is our opinion that the development can be achieved if the observed geologic conditions on site are either properly mitigated or avoided. All recommendations are subject to the limitations discussed in the report.

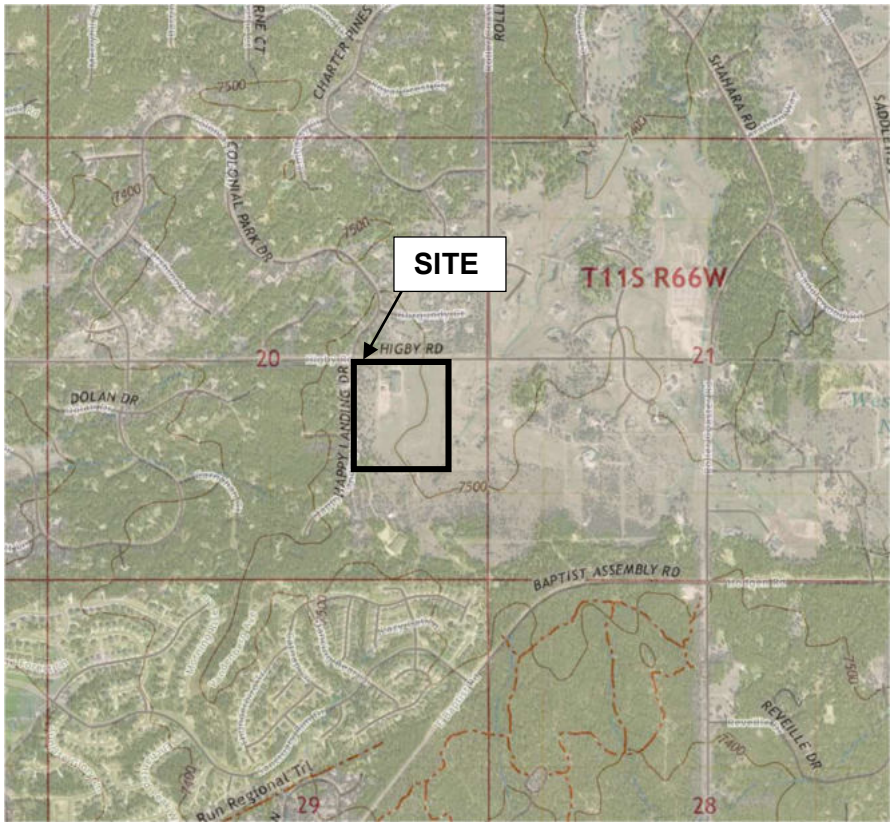
2 GENERAL SITE CONDITIONS AND PROJECT DESCRIPTION

The topography of the site is generally gradually to moderately sloping to the east, with two minor drainage swales in the northern and southern portions of the site. The drainage swales were dry at the time of our site observations. A tributary of West Cherry Creek is located northeast of the of the site. The site boundaries are indicated in the USGS Map (Exhibit 1). Previous land uses have included agricultural grazing and an existing equine hospital. Vegetation observed on the site includes field grasses, weeds, and Ponderosa Pines primarily in the western portion of the site. Site photographs are included in Appendix A.

The project consists subdividing of the 35-acres into four rural residential lots. The lots will be five (5) to twenty (20) acres and will be serviced by individual water wells and OTWS. The proposed lot configuration is shown in the Site and Exploration Plan (Figure 2). Grading plans were not available at the time of this investigation, however, grading is anticipated to be minimal, and limited to road grading associated with private access driveways.

Exhibit 1: USGS Topography Map

Monument Quadrangle - 2022



3 SCOPE OF THE REPORT

The scope of this report includes a general geologic analysis utilizing published geologic data. Detailed site-specific mapping was conducted to obtain general information with respect to major geographic and geologic features, geologic descriptions, and their effects on the development of the property in accordance with the El Paso Land Development Code.

4 FIELD INVESTIGATION

Our field investigation consisted of the preparation of a geologic map of any bedrock features and significant surficial deposits. The site was also evaluated using the Web Soil Survey from the Natural Resource Conservation Service (NRCS), formerly known as the Soil Conservation Service (SCS). The position of mappable units within the subject property is shown on the Geologic Map. Our mapping procedures involved both field reconnaissance and measurements and air photo reconnaissance and interpretation. The same mapping procedures have also been utilized to produce the Geology/Engineering Geology Map, which identified pertinent geologic conditions affecting development. The field mapping was performed by personnel of Entech on June 10, 2026. Site photographs are included in Appendix A.

Three (3) test borings were drilled and three (3) tactile test pits were excavated on the site to evaluate the soil conditions and to determine the classification and engineering characteristics of the soils. The borings were drilled to depths of 20 feet using a truck-mounted, continuous flight auger drilling rig supplied and operated by Entech. The test pits were excavated with a mini-excavator operated by Entech to depths of 8 feet.

The locations of the test boring and test pits are indicated on the Site and Exploration Plan (Figure 2). The Test Boring and Test Pit Logs are included in Appendix B, and Laboratory Test Results are included in Appendix C. The results of the testing will be discussed later in this report.

Laboratory testing was performed to classify and determine the engineering characteristics of the soils. Laboratory tests included moisture content testing (ASTM D2216), grain-size analysis (ASTM D6913), and Atterberg Limits testing (ASTM D4318). Results of the laboratory testing are included in Appendix C.

4.1 Previous Investigations

Information from the following reports were used in evaluating the site, 1) Entech, *Soils, Geology, Geologic Hazard, and Wastewater Study, JT Ranch,* (Reference 2), and 2) the Entech, *Soils, Geology, Geologic Hazard, and Wastewater Study, Happy Landing Estates Filing No. 1* (Reference 3).

5 SOIL, GEOLOGY, AND ENGINEERING GEOLOGY

5.1 General Geology

The site lies in the western portion of the Great Plains Physiographic Province along the Palmer Divide. A major structural feature known as the Rampart Range Fault lies approximately 6 miles to the west. This fault marks the boundary between the Great Plains Physiographic Province and the Southern Rocky Mountain Province. The site exists within the southwestern edge of a large structural feature known as the Denver Basin. Bedrock in the area tends to be very gently dipping in a northeasterly direction (Reference 1). The rocks in the area of the site are sedimentary in nature and typically Tertiary to Cretaceous in age. The bedrock underlying the site consists of the Dawson Arkose Formation of Tertiary to Cretaceous Age. Overlying this formation are unconsolidated deposits of alluvium, colluvium, sheetwash, and residual soils of Quaternary Age. The alluvial deposits consist of water deposited sands and gravels, and the residual soils are produced by the in-situ action of weathering of the bedrock on site. Some colluvial soils deposited by gravity and sheetwash exist. The site's stratigraphy will be discussed in more detail in Section 5.3.

5.2 Soil Conservation Survey

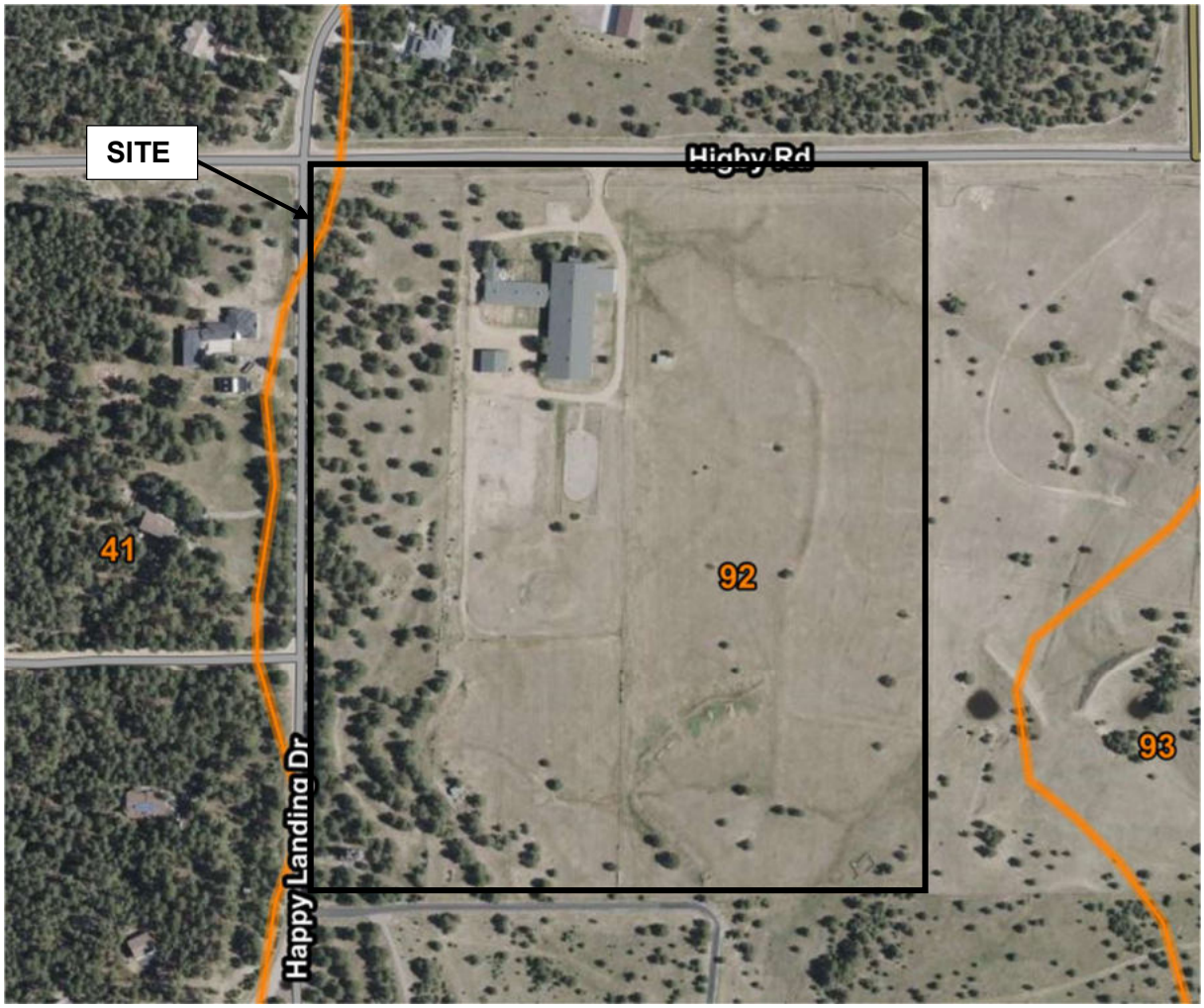
The Natural Resource Conservation Service (Reference 4), previously the Soil Conservation Service (Reference 5), has mapped two soil types on the site. In general, they are gravely loamy sands to loamy sands. The soils are described in Exhibit 2, and shown in Exhibit 3.

Exhibit 2: Soil Survey Description

Type	Description
41	Kettle gravelly loamy sand, 8 to 40% slopes
92	Tomah-Crowfoot loamy sands, 3 to 8% slopes

Exhibit 3: USDA – Web Soil Survey

Soil Map – El Paso County Area, Colorado



Complete descriptions of each soil type are presented in Appendix D. The soils have generally been described as having moderately high to high permeabilities. Limitations on development include limited ability to support a load, shrink-swell potential, and frost action potential. Possible hazards with soil erosion are present on the site. The erosion potential can be controlled with vegetation. The soils have been described to have moderate erosion hazards.

5.3 Site Stratigraphy

The Geologic Map of the Monument Quadrangle showing the site is presented in Exhibit 4 below (Reference 6). The Geology/Engineering Geology Map prepared for the site is presented in Figure 4. Three mappable units were identified on this site that are described as follows:

Qaf ***Artificial Fill of Holocene Age:*** These are man-made fill deposits associated with erosion berms and earthen dams on-site.

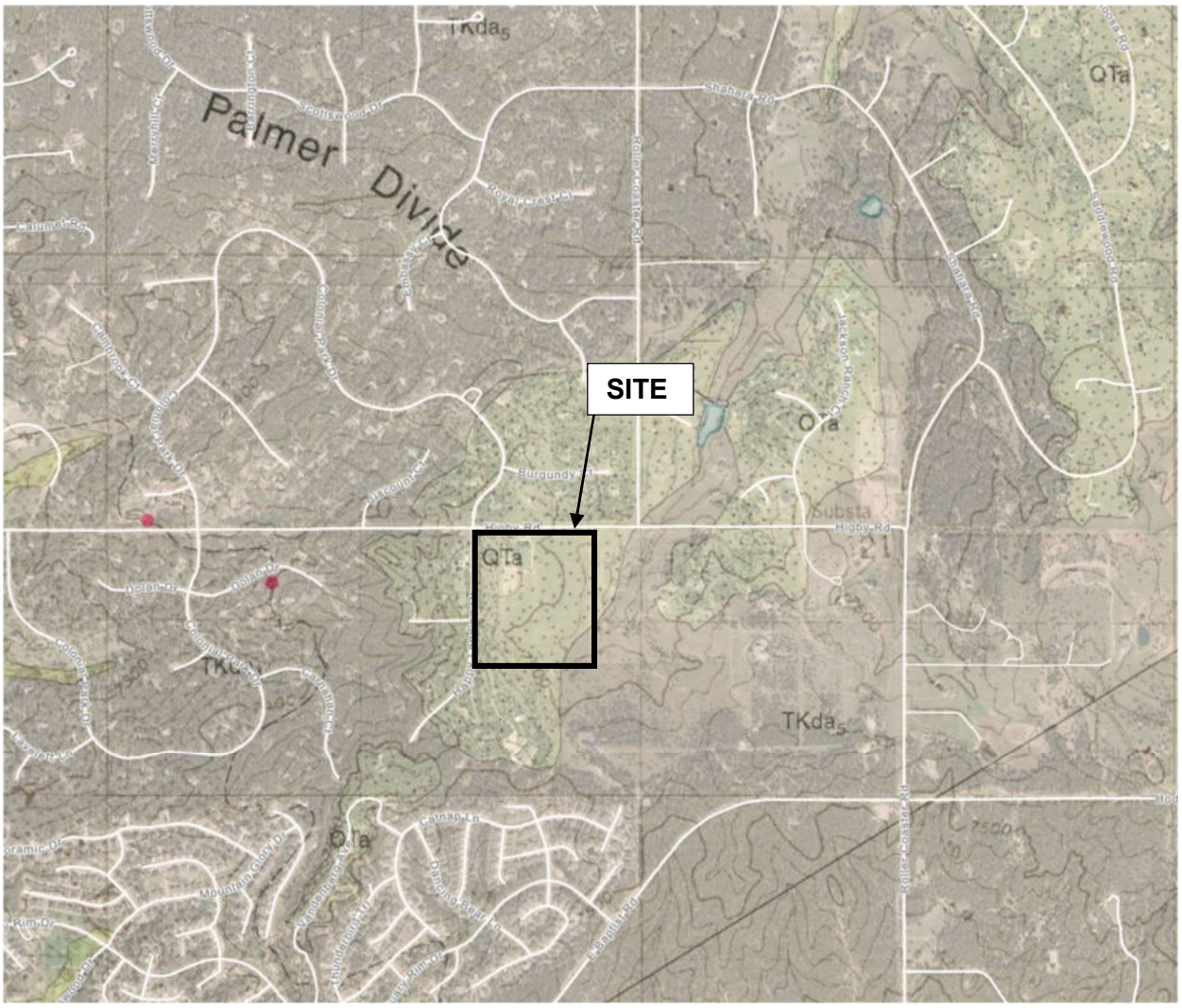
QTa **Alluvium of Plamer Divide of Quaternary Age:** These materials consist of water-deposited stream terrace deposits. They typically consist of silty to clayey sands with gravelly lenses and may contain areas of pebble and cobble lenses. Much of the material encountered in the profile holes consisted of fine grained sands.

Qc/Tkd **Colluvium of Quaternary Age overlying Dawson Formation of Tertiary to Cretaceous Age:** The Dawson Formation typically consists of arkosic sandstone with interbedded fine-grained sandstone, siltstone, and claystone. Overlying this formation is a variable layer of colluvium and residual soils. The residual soils were derived from the in-situ weathering of the bedrock materials on-site. These soils consist of clayey sands and sandy clays. The colluvial materials are derived from the bedrock materials and have been re-deposited by the action of sheetwash and gravity.

The soils listed above were mapped from site-specific mapping, the *Geologic Map of the Monument Quadrangle* distributed by the Colorado Geological Survey in 2003 (Reference 6), the *Geologic Map of the Colorado Springs-Castle Rock Area*, distributed by the US Geological Survey in 1979 (Reference 7), and the *Geologic Map of the Denver 1^0 x 2^0 Quadrangle*, distributed by the US Geological Survey in 1981 (Reference 8). The Test Borings and Test Pit Logs used in evaluating the site are included in Appendix B. The Geology/Engineering Geology Map prepared for the site is presented in Figure 3.

Exhibit 4: Geologic Map of the Monument Quadrangle

Colorado Geological Survey – OF-02-04



5.4 Soil Conditions

The soils encountered in the test borings drilled on the site can be grouped into two general soil and rock types. The soils were classified using the Unified Soil Classification System (USCS).

Soil Type 1 classified as a silty sand (SM). The sand was encountered in all test borings at the existing surface and extending to depths 18 feet below the existing grade surface (bgs) and to the termination depth of TB-1 and TB-3 (20 feet). The sand was encountered at medium dense to dense states and moist to dry conditions.

Soil Type 2 classified as highly weathered sandstone or silty sand when classified as a soil (SM). The sandstone was encountered in TB-2 at a depth of 18 feet bgs and extending to the termination the boring (20 feet). The sandstone was encountered at dense states and moist conditions.

Although clays, claystone, or siltstone were not encountered in the test borings, they are common in the area of the project site. Claystone and siltstone are commonly interbedded in the Dawson Formation. Clays, claystone, and siltstone in the project area are typically expansive.

The test boring logs and laboratory test results pertaining to this investigation are included in Appendix B.

5.5 Groundwater

Groundwater was not encountered in the test borings during or subsequent to drilling which were drilled to 20 feet. Additionally, redoximorphic features were not encountered in the test pits which were excavated to 8 feet. Areas of potentially seasonal shallow groundwater have been mapped in the drainage swales in the northern and southern portions of the site. These areas are discussed in the following section. Fluctuation in groundwater conditions may occur due to variations in rainfall and other factors including development of the site and surrounding areas.

For the sandy materials on site, it should be noted that some groundwater conditions might be encountered due to the variability in the soil profile. Isolated sand and gravel layers within the soils, sometimes only a few feet in thickness and width, can carry water in the subsurface. Groundwater may also flow on top of the underlying bedrock or clays. Builders and planners should monitor potential occurrences of such subsurface water features during construction on-site and mitigate as necessary at the time of construction.

6 ENGINEERING GEOLOGY – IDENTIFICATION AND MITIGATION OF GEOLOGIC HAZARDS

Detailed mapping has been performed on this site to produce a Geology/Engineering Geology Map (Figure 3). This map shows the location of various geologic conditions the developers should monitor during the planning, design, and construction stages of the project. No significant geologic hazards were identified on the site; however, the following constraints have been identified on the site: artificial fill, potentially collapsible soils, potentially expansive soils, potential seasonally shallow groundwater areas, and the potential for elevated radon levels. These constraints and the recommended mitigation techniques are discussed below.

Artificial Fill – Constraint

These are areas of man-placed fill associated with the existing erosion berms on the site. Other areas of fill may exist on the site other than those mapped.

Mitigation: The erosion berms if located within proposed building areas can be removed or regraded with future development on the lots. Any uncontrolled fill encountered beneath foundations will require removal and recompaction at a minimum of 95% of the Modified Procter (ASTM D1557) maximum dry density.

Collapsible Soils – Constraint

The majority of the soils encountered on site do not exhibit collapsible characteristics, however, areas of very silty potentially collapsible soils are common in the area.

Mitigation: Should loose or collapsible soils be encountered beneath foundations, recompaction of the loose soils to a minimum of 95% of the Modified Procter (ASTM D1557) maximum dry density may be necessary. Depths of recompaction should be determined for each lot after additional investigation of the building site. Exterior flatwork and driveway areas may also experience movement. Proofrolling and recompaction of soft areas should be performed during site work.

Potentially Expansive Soils – Constraint

The site is classified in an area of low swell potential according to the *Map of Potentially Swelling Soil and Rock in the Front Range Urban Corridor, Colorado* by Hart, 1974 (Reference 7). Clay soils or claystone were not encountered in the test borings or test pits completed as part of this investigation. Expansive clays and claystone bedrock are commonly interbedded in the Dawson Formation. These occurrences are typically sporadic; therefore, none have been indicated on the

maps. These clays, if encountered beneath foundations, can cause differential movement in the structure foundation. The sand and sandstone soils are anticipated to exhibit low expansion potentials. If potentially expansive materials are found during excavation, they will need to be mitigated. Expansive soils were not encountered in the test borings. Expansive soils should be identified and mitigated on an individual basis.

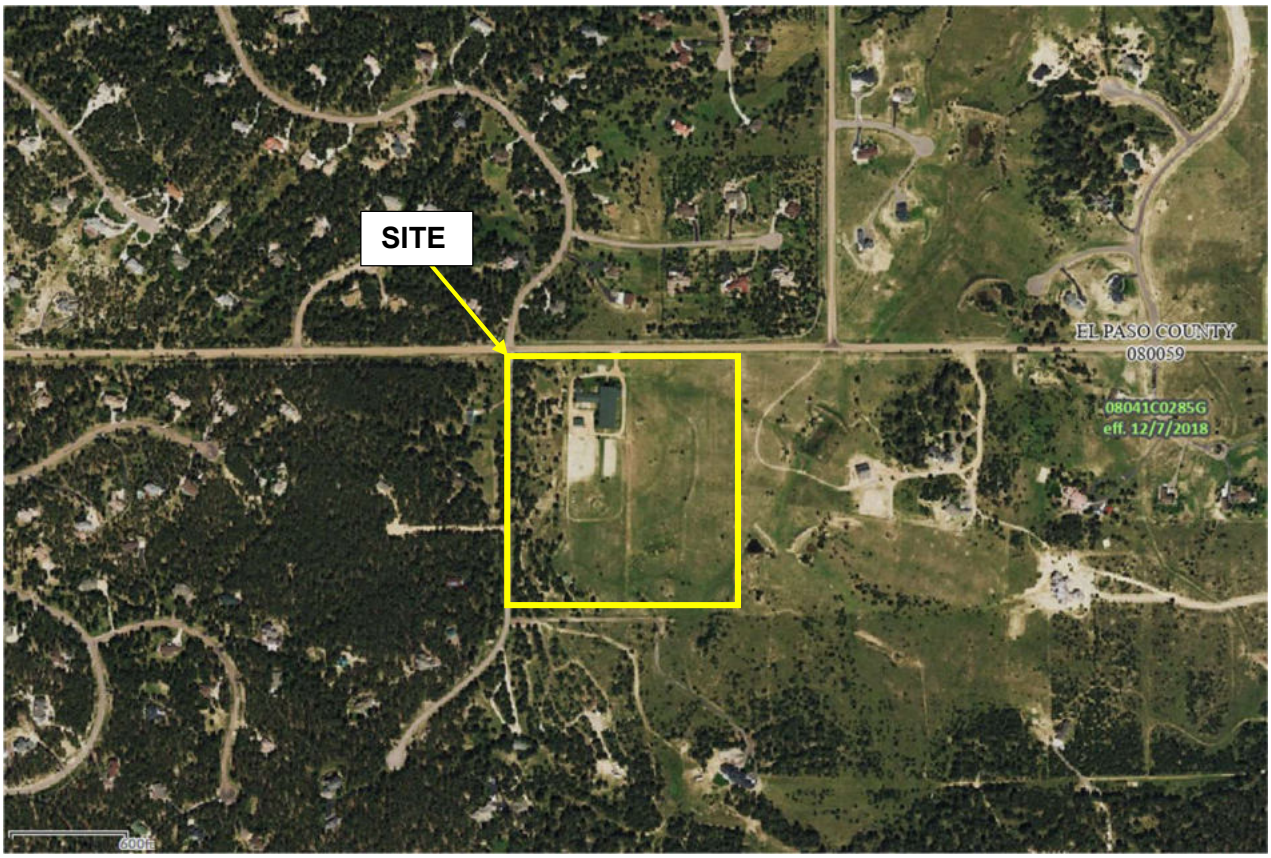
Mitigation: Should expansive soils be encountered beneath foundations; mitigation will be necessary. Mitigation of expansive soils will require special foundation design. Overexcavation and replacement with non-expansive soils at a minimum of 95% of the Modified Proctor (ASTM D1557) maximum dry density is a suitable mitigation, which is common in the area. Overexcavation depths of 3 to 5 feet may be necessary depending on soil conditions. Another alternative in areas of highly expansive soils is the use of drilled pier foundation systems. Typical minimum pier depths are on the order of 25 feet or more and require penetration into the bedrock material a minimum of 4 to 6 feet, depending upon building loads. Floor slabs on expansive soils should be expected to experience movement. Overexcavation and replacement have been successful in minimizing slab movements. The use of structural floors should be considered for basement construction on highly expansive clays. Final recommendations should be made after additional investigation of each building site.

Drainage and Floodplain Areas – Constraint

The site is not located within any mapped floodplains according to FEMA Map No. 08041C0285G (Figure 6, Reference 10). The topography of the site is generally gradually to moderately sloping to the east, with two minor drainage swales in the northern and southern portions of the site. The drainage swales were dry at the time of our site observations. A tributary of West Cherry Creek is located northeast of the of the site. The drainages onsite were dry at the time of our site observations, however, the potential for seasonal shallow groundwater exists in these areas. These areas are discussed further below. Specific drainage studies and floodplain locations are beyond the scope of this report.

Exhibit 4: FEMA Flood Map

FEMA Map No. 08041C0285G, eff. 12/7/2018



Potentially Seasonal Shallow Groundwater Areas – Constraint

The areas identified with this constraint are the minor drainage swales in the northern and southern portion of the site. In these areas, we would anticipate periodic high subsurface moisture conditions and frost heave potential on a seasonal basis. Groundwater was not encountered in the test borings during or subsequent to drilling. Redoximorphic features were encountered in TP-6 at a depth of 6 feet during excavation, but were not encountered in the remaining test pits. Due to the size of the lots these areas can be avoided by future residences or OWTS's. Any structures in or adjacent to potentially shallow groundwater areas should follow the mitigation discussed below.

Mitigation: Foundations on this site must have a minimum 30-inch depth for frost protection. Buildings should typically be set a minimum of 3 feet above groundwater levels if possible. Subsurface perimeter drains are recommended for any usable below-grade. If groundwater is encountered within 3 feet of foundation

grade, additional drains that may include but are not limited to interceptor drains, underslab drains (capillary break) may be required. Overexcavation drains may be needed in areas of expansive soils. Typical drain details are presented in Figures 4 through 6. Any grading in these areas should be done to direct surface flows around structures to avoid areas of ponded water. Structures should not block drainages. All organic material should be completely removed prior to any fill placement.

Slope Stability and Landslide Susceptibility – Hazard

The majority of the slopes on the site are gradually to moderately sloping and do not exhibit any past or potential unstable slopes or landslides. Any future site grading should be no steeper than 3:1 unless specifically analyzed.

Debris Flow Susceptibility – Hazard

The site is not located within an area of debris flow susceptibility according to the *Debris Flow Susceptibility Map of El Paso County, Colorado* by McCoy et al. in 2018 (Reference 12).

Radon – Hazard

Radon is a colorless, tasteless radioactive gas with a United States Environmental Protection Agency (EPA) specified action level of 4.0 picocuries per liter (pCi/L) of air. Radon gas has a very short half-life of 3.8 days. Radon levels for the area have been reported by the Colorado Geologic Survey in the open file, Report No. 91-4 (Reference 13). The average radon level for the 80132 zip code is 5.77 pCi/l. The average radon levels are presented in Exhibit 2 below.

Exhibit 5: Average Radon Levels

Average Radon Levels for the 80132 Zip Code	
0 < 4 pCi/L	33.33%
4 < 10 pCi/L	66.67%
10 < 20 pCi/L	0.00%
> 20 pCi/L	0.00%

Mitigation: The potential for high radon levels is present for the site. Build-up of radon gas can usually be mitigated by providing increased ventilation of basement and crawlspace and sealing joints. **Specific requirements for mitigation should be based on site specific testing.**

6.1 Relevance of Geologic Conditions to Land Use Planning

We understand that the development will be rural residential with four lots proposed. The lots will be five (5) to twenty (20) acres in size. The existing equine hospital located on proposed Lot 1 will remain. Records for the existing OWTS located on the property are included in Appendix E. It is our opinion that the existing geologic and engineering geologic conditions will impose some minor constraints on the proposed development. The most significant constraints will be those associated with the artificial fill, potentially collapsible soils, potentially expansive soils, potential seasonally shallow groundwater areas, and the potential for elevated radon levels. The constraints/hazards on the site may be satisfactorily mitigated through proper engineering design and construction practices.

The granular soils were generally encountered at medium dense to very dense states. The granular soils encountered in the upper soil profiles of the test boring should provide good support for foundations. Foundations anticipated for the site are standard spread footings on the medium dense granular soils or sandstone bedrock.

The majority of the soils encountered on site do not exhibit collapsible characteristics, however, areas of very silty potentially collapsible soils are common in the area. Should loose or collapsible soils be encountered beneath foundations, recompaction of the loose soils to a minimum of 95% of the Modified Procter (ASTM D1557) maximum dry density may be necessary. Depths of recompaction should be determined for each lot after additional investigation of the building site. Exterior flatwork and driveway areas may also experience movement. Proofrolling and recompaction of soft areas should be performed during site work.

Expansive layers may also be encountered in the soil and bedrock on this site. Areas of expansive soils on site are expected to be sporadic; therefore, none have been indicated on the maps. Expansive soils, if encountered, will require special foundation design and/or overexcavation. These soils will not prohibit development. Overexcavation and replacement with non-expansive soils is a suitable mitigation. Site-specific subsurface investigations will need to be conducted.

In summary, development of the site can be achieved if the items mentioned above are mitigated. These items can be mitigated through proper design and construction or through avoidance. Investigation of the individual lots and building sites is required prior to construction.

7 ECONOMIC MINERAL RESOURCES

Some of the sandy materials on site could be considered a low-grade sand resource. According to the *El Paso County Aggregate Resource Evaluation Map* (Reference 14), the site is not mapped within any aggregate resources. According to the *Atlas of Sand, Gravel and Quarry Aggregate Resources, Colorado Front Range Counties* distributed by the Colorado Geological Survey (Reference 15), areas of the site are not mapped with any resources. According to the *Evaluation of Mineral and Mineral Fuel Potential* (Reference 16), the area of the site has been mapped as "fair" for industrial minerals. It is possible that sand materials on site could be an aggregate resource. However, considering the silty nature of many of these materials, the abundance of similar materials throughout the region, and the proximity to developed land, they would be considered to have little significance as an economic resource.

According to the *Evaluation of Mineral and Mineral Fuel Potential of El Paso County State Mineral Lands* (Reference 16), the site is mapped within the Denver Basin Coal Region. However, the area of the site has been mapped as "Poor" for coal resources. No active or inactive mines have been mapped near the site. No metallic mineral resources have been mapped on the site (Reference 16).

The site has been mapped as "Fair" for oil and gas resources (Reference 16). No oil or gas fields have been discovered near the site. The sedimentary rocks in the area may lack the geologic structure for trapping oil or gas; therefore, they may not be considered a significant resource. Hydraulic fracturing is a new method used to extract oil and gas from rocks. It utilizes pressurized fluid to extract oil and gas from rocks that would not normally be productive. The area of the site has not been explored to determine if the rocks underlying the site would be commercially viable utilizing hydraulic fracturing. The practice of hydraulic fracturing has come under review due to concerns about environmental impacts, health, and safety.

8 EROSION CONTROL

The soil types observed on the site are mildly to highly susceptible to wind erosion and moderately to highly susceptible to water erosion. A minor wind erosion and dust problem may be created for a short time during and immediately after construction. Should the problem be considered severe enough during this time, watering of the cut areas or the use of chemical palliative may be required to control dust. However, once construction has been completed and vegetation re-established, the potential for wind erosion should be considerably reduced.

Regarding water erosion, loosely compacted soils will be the most susceptible to water erosion; residually weathered soils and weathered bedrock materials become increasingly less susceptible to water erosion. For the typical soils observed on site, allowable velocities or unvegetated and unlined earth channels would be on the order of 3 to 4 feet/second, depending upon the sediment load carried by the water. Permissible velocities may be increased through the use of vegetation to something on the order of 4 to 7 feet/second, depending upon the type of vegetation established. Should the anticipated velocities exceed these values, some form of channel lining material may be required to reduce erosion potential. These might consist of synthetic channel lining materials available on the market or conventional riprap. In cases where ditch-lining materials are still insufficient to control erosion, small check dams or sediment traps may be required. The check dams will serve to reduce flow velocities as well as provide small traps for containing sediment. The determination of the amount, location, and placement of ditch linings, check dams, and special erosion control features should be performed by or in conjunction with the drainage engineer who is more familiar with the flow quantities and velocities.

Cut and fill slope areas will be subjected primarily to sheetwash and rill erosion. Unchecked rill erosion can eventually lead to concentrated flows of water and gully erosion. The best means to combat this type of erosion is, where possible, the adequate re-vegetation of cut and fill slopes. Cut and fill slopes having gradients more than three (3) horizontal to one (1) vertical become increasingly more difficult to revegetate successfully. Therefore, recommendations pertaining to the vegetation of the cut and fill slopes may require input from a qualified landscape architect and/or the Soil Conservation Service.

9 PRIVATE DRIVEWAY AND ROADWAY CONSTRUCTION RECOMMENDATIONS

The site soils encountered in the test boring are suitable for the proposed embankments, driveways and roads. Any areas to receive fill should have all topsoil, organic material, or debris removed. Prior to fill placement, Entech should observe the subgrade. Fill must be properly benched and compacted to minimize potentially unstable conditions in slope areas. Fill slopes should be 3:1 or flatter unless specifically analyzed. The subgrade should be scarified and moisture conditioned to within 2% of optimum moisture content and compacted to a minimum of 95% of the Modified Proctor (ASTM D1557) maximum dry density prior to placing new fill. Areas receiving fill may require stabilization with rock or fabric if shallow groundwater conditions are encountered.

New fill should be placed in thin lifts not to exceed 6 inches after compaction while maintaining at least 95% of the Modified Proctor (ASTM D1557) maximum dry density. These materials should be placed at a moisture content conducive to compaction, usually 0 to +/-2% of the Proctor optimum moisture content. The placement and compaction of fill should be observed and tested by Entech during construction. Entech should approve any imported materials prior to placing or hauling them to the site. Additional investigation will be required for roadway improvements.

10 CLOSURE

It is our opinion that the existing geologic engineering and geologic conditions will impose some minor constraints on the proposed development and construction. The site conditions can be mitigated through proper engineering design and construction practices. The proposed development and use are consistent with anticipated geologic and engineering geologic conditions.

It should be pointed out that because of the nature of data obtained by random sampling of such variable and non-homogeneous materials as soil and rock, it is important that we be informed of any differences observed between surface and subsurface conditions encountered in construction and those assumed in the body of this report. Construction and design personnel should be made familiar with the contents of this report. Additional investigation is recommended on each lot as plans are generated prior to construction.

This report has been prepared for Chuck Woodall for application to the proposed project in accordance with generally accepted geologic soil and engineering practices. No other warranty, expressed or implied, is made.

We trust that this report has provided you with all the information that you require. Should you require additional information, please do not hesitate to contact Entech Engineering, Inc.

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Logan L. Langford, P.G.
Sr. Geologist

Reviewed by:

COLORADO LICENSED
JOSEPH COLLIN GOODE
23725
PROFESSIONAL ENGINEER

Digitally signed by Joseph C Goode Jr.
Date: 08/21/26

Joseph C. Goode, Jr., P.E.
President

LLL/JCG

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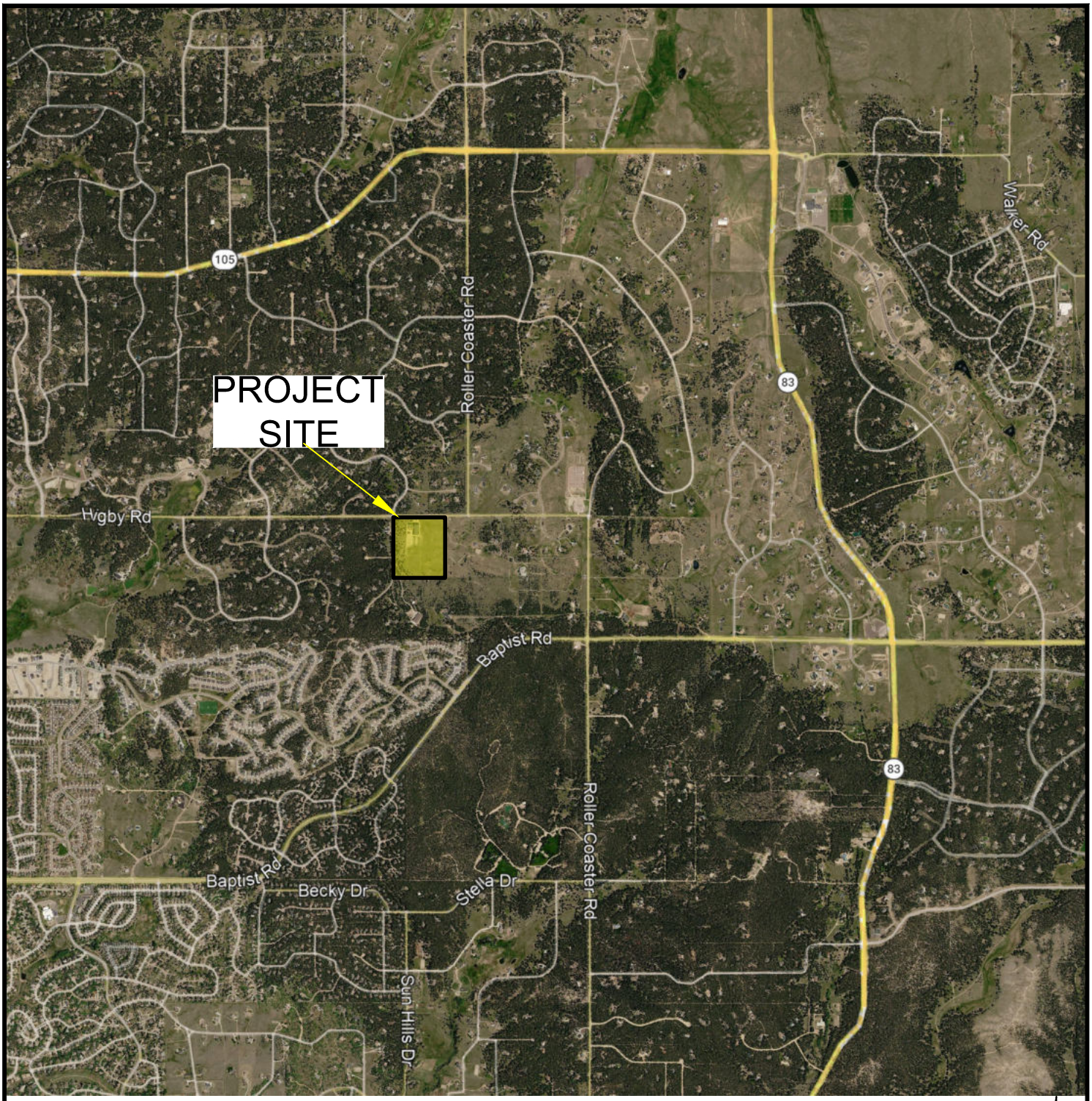
FIGURES



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ENTECH ENGINEERING, INC.

VICINITY MAP

ASPEN WILLOW SUBDIVISION
CHALRES WOODALL

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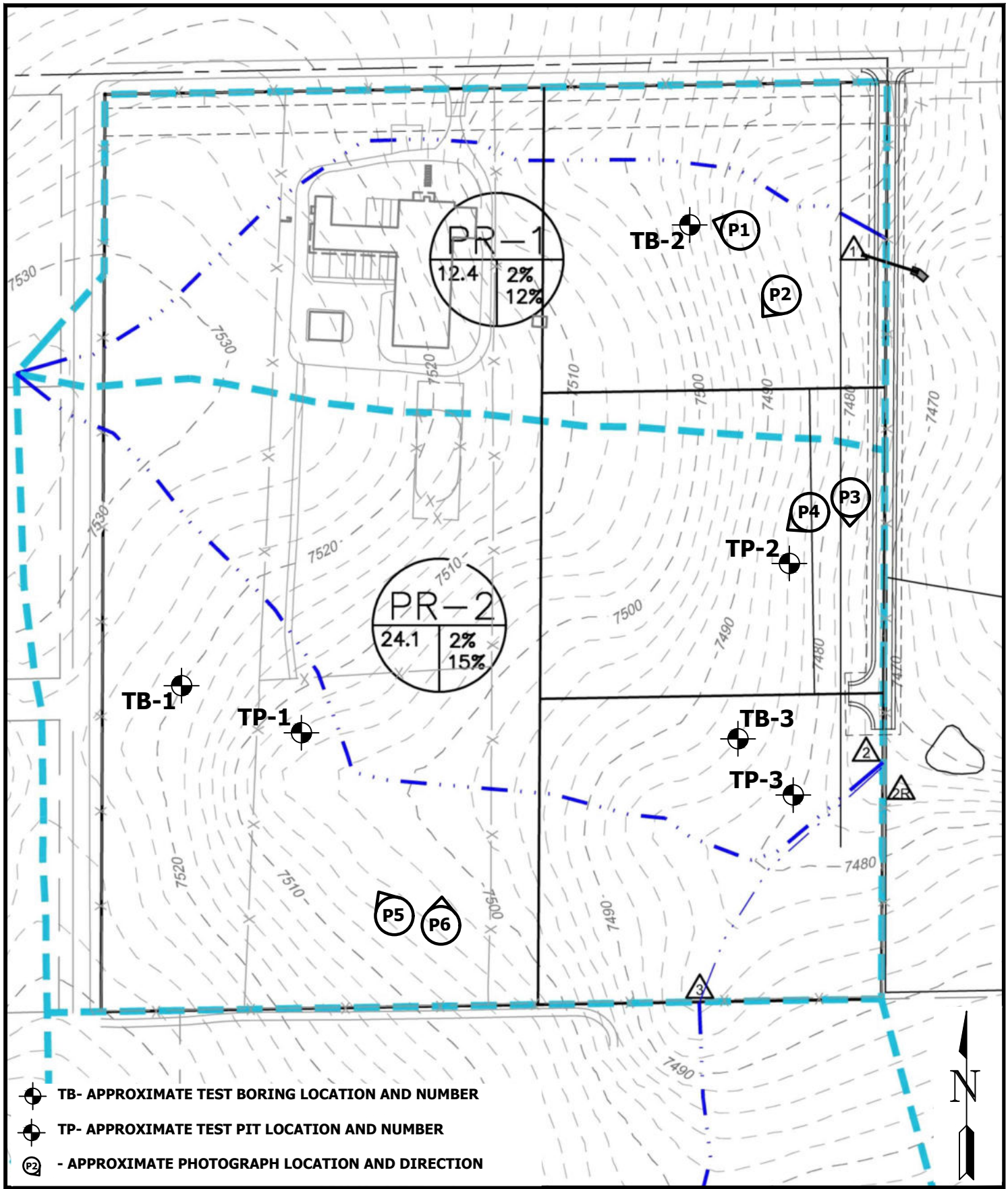
261137

FIG. 1



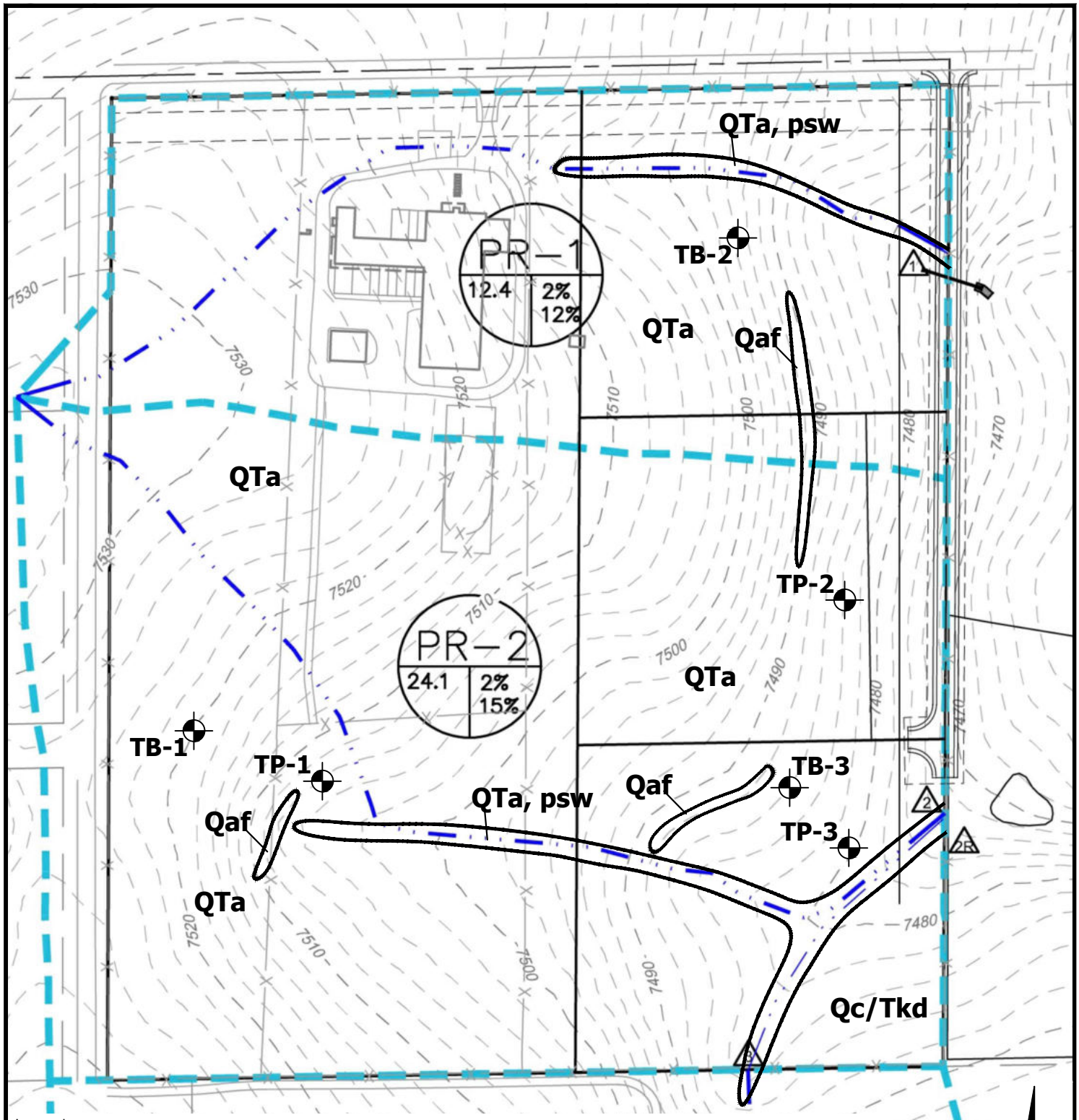
ENTECH ENGINEERING, INC.

SITE & EXPLORATION PLAN

NORTH PARK SUBDIVISION
NORTH PARK, LLC

JOB NO.
260494

FIG. 3



Legend:

Qaf - Artifical Fill of Holocene Age: man placed fill deposits

QTa - Alluvium of Palmer Divide of early Pleistocene or Pliocene? Age: water deposited sands and gravel

Qc/Tkd - Colluvium of Quaternary Age overlying the Dawson Formation of Tertiary to Cretaceous Age: Sheetwash and residual soil deposits overlying arkosic sandstone with interbedded claystone and siltstone

psw - potential seasonally shallow groundwater area

ENTECH ENGINEERING, INC.

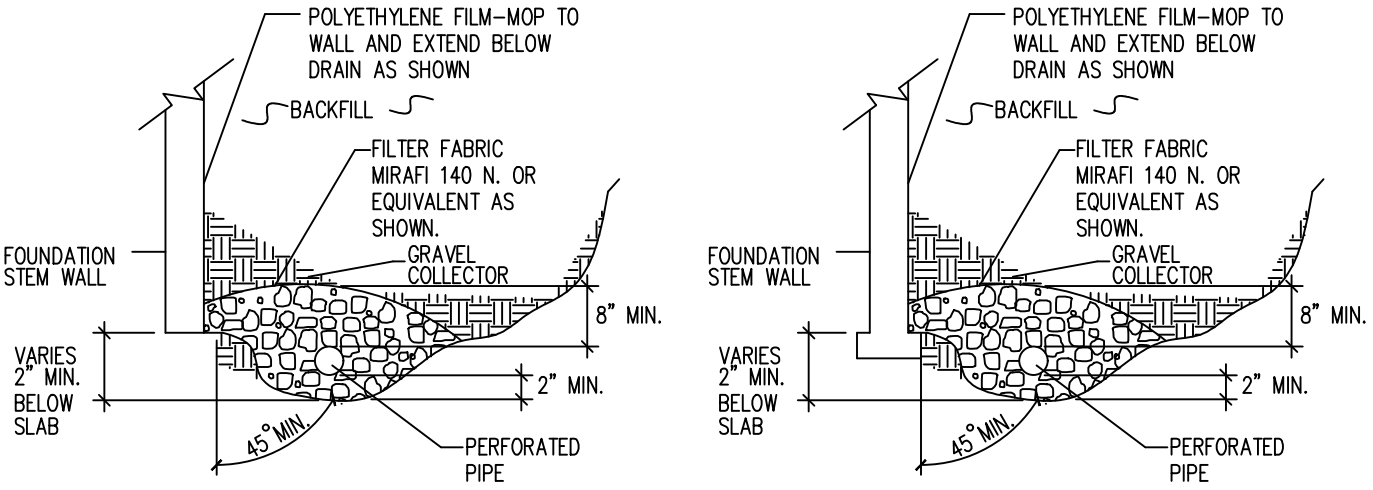
GEOLOGY/ENGINEERING GEOLOGY MAP

ASPEN WILLOW SUBDIVISION

CHARLES WOODALL

JOB NO. 261137

FIG. 3



NOTES:

–GRAVEL SIZE IS RELATED TO DIAMETER OF PIPE PERFORATIONS–85% GRAVEL GREATER THAN 2x PERFORATION DIAMETER.

–PIPE DIAMETER DEPENDS UPON EXPECTED SEEPAGE. 4–INCH DIAMETER IS MOST OFTEN USED.

–ALL PIPE SHALL BE PERFORATED PLASTIC. THE DISCHARGE PORTION OF THE PIPE SHOULD BE NON–PERFORATED PIPE.

–FLEXIBLE PIPE MAY BE USED UP TO 8 FEET IN DEPTH, IF SUCH PIPE IS DESIGNED TO WITHSTAND THE PRESSURES. RIGID PLASTIC PIPE WOULD OTHERWISE BE REQUIRED.

–MINIMUM GRADE FOR DRAIN PIPE TO BE 1% OR 3 INCHES OF FALL IN 25 FEET.

–DRAIN TO BE PROVIDED WITH A FREE GRAVITY OUTFALL, IF POSSIBLE. A SUMP AND PUMP MAY BE USED IF GRAVITY OUT FALL IS NOT AVAILABLE.

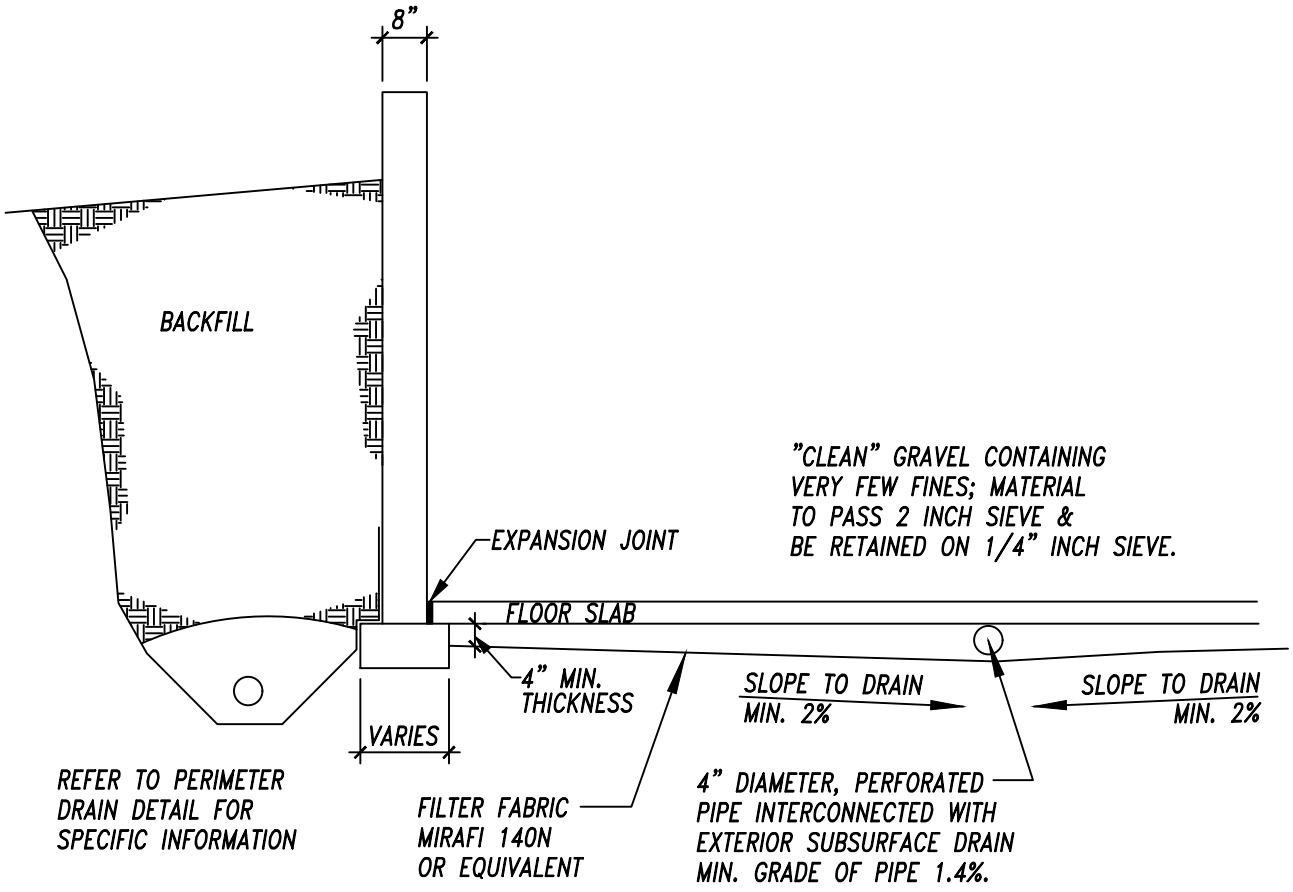
ENTECH ENGINEERING, INC.

PERIMETER DRAIN DETAIL

ASPEN WILLOW SUBDIVISION
CHARLES WOODALL

JOB NO. 261137

FIG. 4



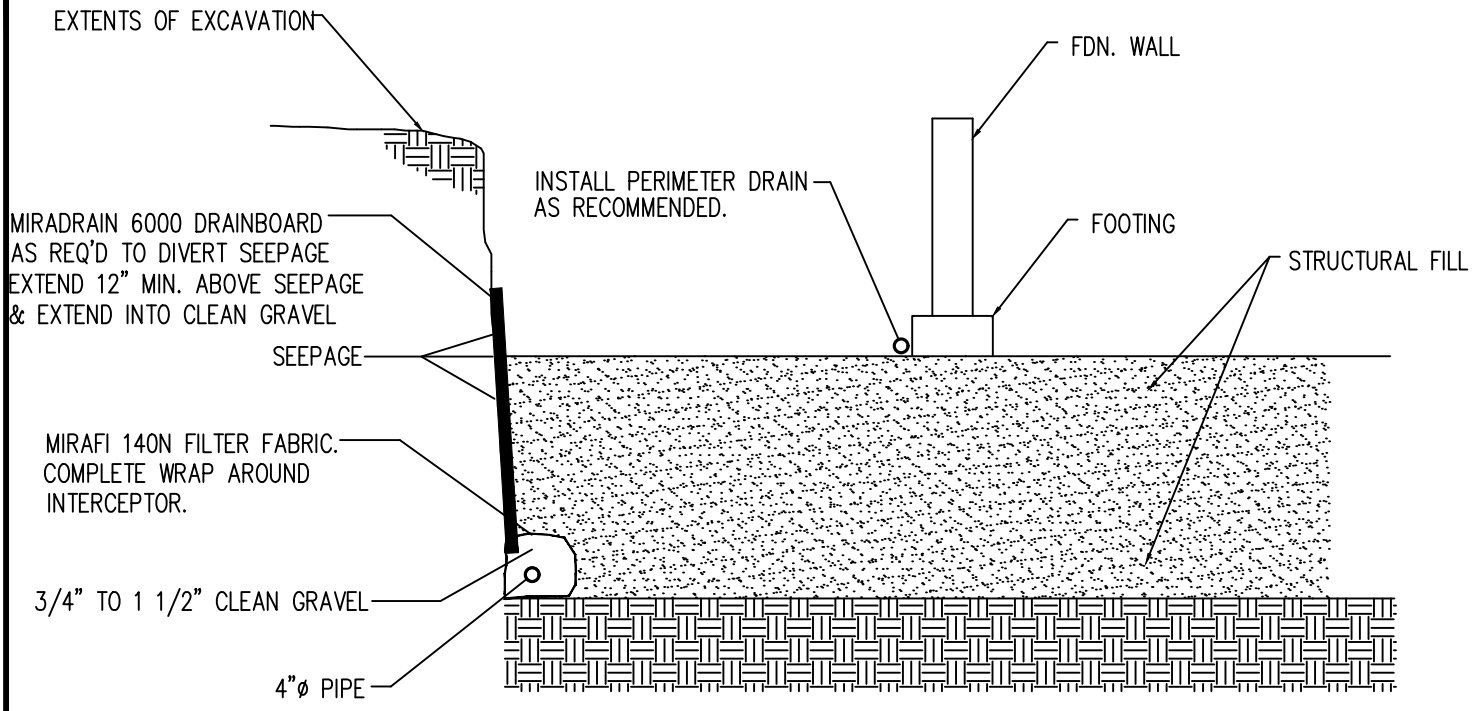
ENTECH ENGINEERING, INC.

TYP. UNDERSLAB DRAINAGE LAYER (CAPILLARY BREAK)

ASPEN WILLOW SUBDIVISION
CHARLES WOODALL

JOB NO.
261137

FIG. 5



NOTE:
EXTEND INTERCEPTOR DRAIN TO UNDERDRAIN OR TO SUMP.
BENCH DRAIN INTO NATIVE SOILS 12 INCHES MINIMUM.

INTERCEPTOR DRAIN DETAIL

N.T.S.

ENTECH ENGINEERING, INC.

INTERCEPTOR DRAIN DETAIL

ASPEN WILLOW SUBDIVISION
CHARLES WOODALL

JOB NO.
261137

FIG. 6

APPENDIX A: Site Photographs

1

Looking west from the northeastern portion of the site.

June 10, 2026

2

Looking southwest from the northeastern portion of the site.

June 10, 2026

Job No. 261137

3

Looking south from the eastern side of the site.

June 10, 2026

4

Looking southwest from the eastern side of the site.

June 10, 2026

Job No. 261137

5

Looking northwest from the southern portion of the site.

June 10, 2026

6

Looking north from the southern portion of the site.

June 10, 2026

Job No. 261137

APPENDIX B: Test Boring and Test Pit Logs

TEST BORING 1
DATE DRILLED 6/10/2026

REMARKS

DRY TO 20', 6/10/26

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
			12	7.4	1
5			20	4.0	1
10			21	4.4	1
15			12	7.6	1
20			18	8.4	1

6" TOPSOIL
SAND, SILTY, TAN, MEDIUM DENSE, MOIST

TEST BORING 2
DATE DRILLED 6/10/2026

REMARKS

DRY TO 20', 6/10/26

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
			18	4.1	1
5			22	3.7	1
10			17	5.3	1
15			20	6.9	1
20			44	5.2	2

6" TOPSOIL
SAND, SILTY, TAN, MEDIUM DENSE, MOIST

SANDSTONE, EXTREMELY WEAK, TAN, HIGHLY WEATHERED (SAND, WITH SILT, DENSE, MOIST)

ENTECH ENGINEERING, INC.

TEST BORING LOGS

1480 E. HIGBY ROAD
CHARLES WOODALL

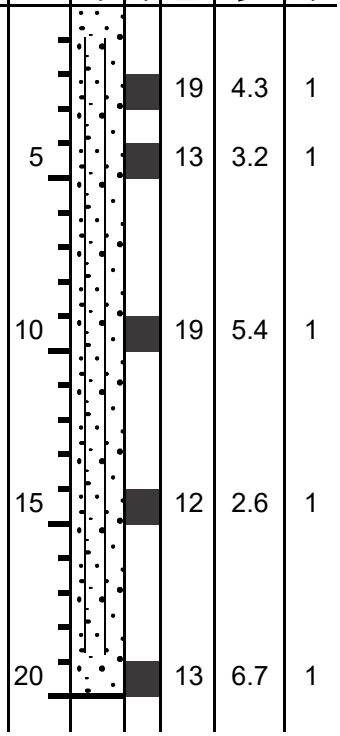
JOB NO. 261137

FIG. B-1

TEST BORING 3
DATE DRILLED 6/10/2026

REMARKS

DRY TO 20', 6/10/26



Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
	6" TOPSOIL SAND, SILTY, TAN, MEDIUM DENSE, MOIST to DRY		19	4.3	1
5			13	3.2	1
10			19	5.4	1
15			12	2.6	1
20			13	6.7	1

ENTECH ENGINEERING, INC.

TEST BORING LOGS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. B-2

TEST PIT 1
DATE DRILLED 6/10/2026

REMARKS	Depth (ft)	Symbol	Samples	Structure Shape	Structure Grade	Soil Type
topsoil, sandy loam, dark brown, moist	1					
sandy loam, fine to medium grained, light brown, moist	2					
	3			gr	w	2A
	4					
	5					
sandy loam with gravel, fine to coarse grained, light brown, moist	6			gr	w	2A
	7					
	8					
	9					
	10					

TEST PIT 2
DATE DRILLED 6/10/2026

REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
topsoil, sandy loam, brown, moist	1					
sandy loam, fine to mdeium grained, light brown, moist	2					
	3		gr	m	3	
	4					
	5					
sandy clay, fine to medium grained, light brown, moist	6		gr	w	2A	
	7					
	8					
	9					
	10					

Soil Structure Shape
granular - gr
platy - pl
blocky - bl
prismatic - pr
single grain - sg
massive - ma

Soil Structure Grade
weak - w
moderate - m
strong - s
loose - l

ENTECH ENGINEERING, INC.

TEST BORING LOGS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. B-3

TEST PIT 3
DATE DRILLED 6/10/2026

REMARKS	Depth (ft)	Symbol	Samples	Structure Shape	Structure Grade	Soil Type
topsoil, sandy loam, dark brown, moist	1					
sandy loam, fine to medium grained, light brown, moist	2			gr	w	2A
	3					
	4					
loamy sand, fine to coarse grained, light brown, moist	5			sg		1
	6					
	7					
	8					
	9					
	10					

REMARKS	Depth (ft)	Symbol	Samples	Structure Shape	Structure Grade	Soil Type
	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					

Soil Structure Shape
granular - gr
platy - pl
blocky - bl
prismatic - pr
single grain - sg
massive - ma

Soil Structure Grade
weak - w
moderate - m
strong - s
loose - l

ENTECH ENGINEERING, INC.

TEST BORING LOGS

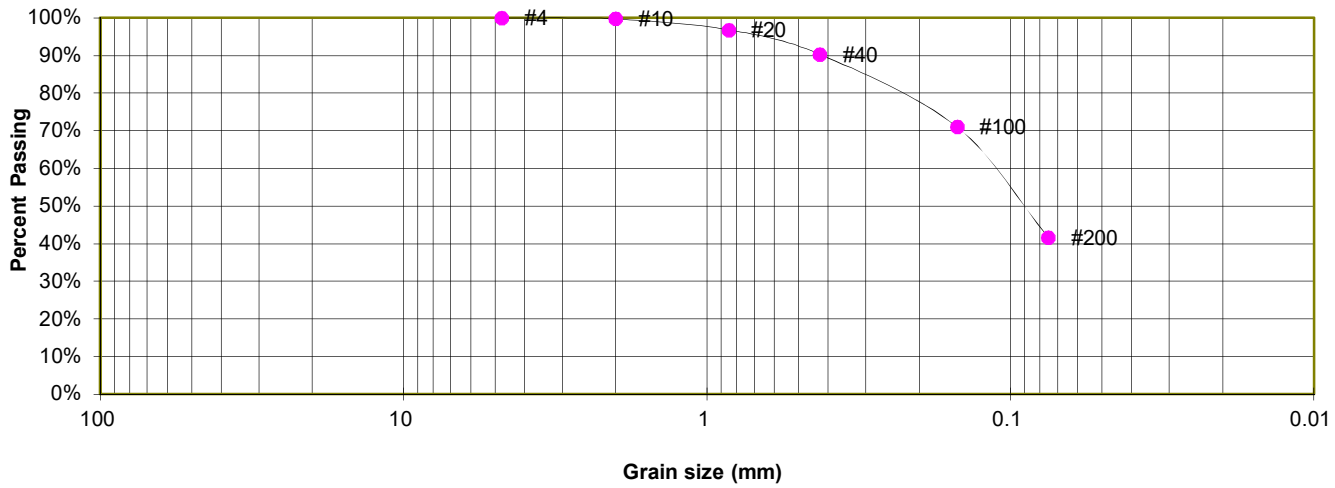
1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO. 261137

FIG. B-4

APPENDIX C: Laboratory Test Results

TEST BORING	1	SOIL DESCRIPTION	SAND, SILTY
DEPTH (FT)	2-3		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.8%
20	96.8%
40	90.3%
100	71.0%
200	41.6%

ATTERBERG LIMITS

Plastic Limit	NP
Liquid Limit	NV
Plastic Index	NP

SOIL CLASSIFICATION

USCS CLASSIFICATION: SM

ENTECH ENGINEERING, INC.

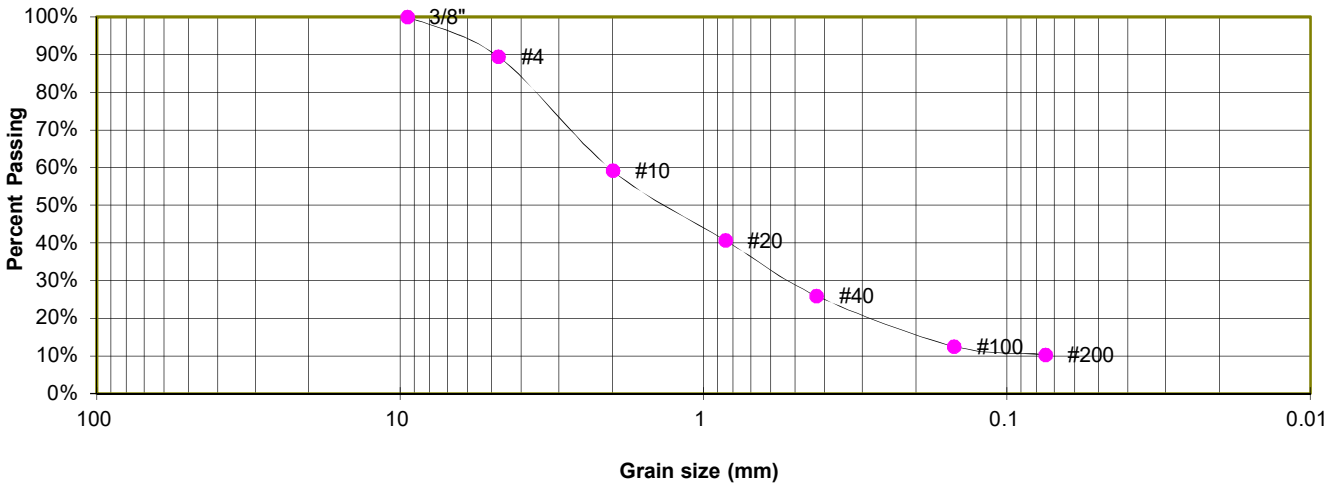
LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-1

TEST BORING	2	SOIL DESCRIPTION	SANDSTONE (SAND, WITH SILT)
DEPTH (FT)	20		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	89.4%
10	59.2%
20	40.7%
40	25.9%
100	12.5%
200	10.3%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SW-SM

ENTECH ENGINEERING, INC.

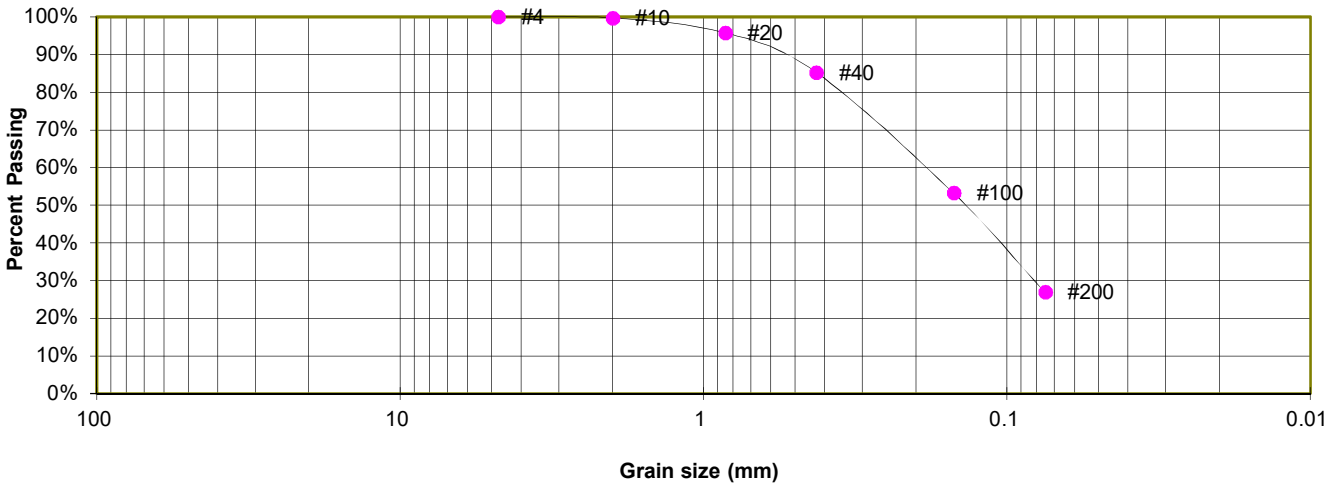
LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-2

TEST BORING	3	SOIL DESCRIPTION	SAND, SILTY
DEPTH (FT)	10		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.7%
20	95.8%
40	85.2%
100	53.2%
200	26.9%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SM

ENTECH ENGINEERING, INC.

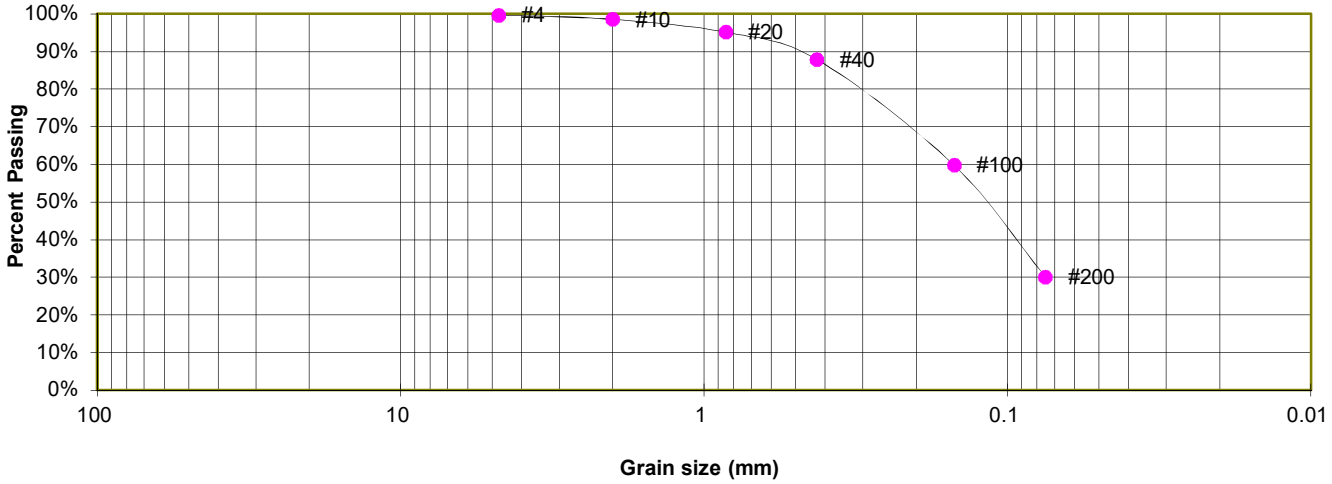
LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-3

TEST BORING	TP-1	SOIL DESCRIPTION	SAND, SILTY
DEPTH (FT)	3-4	SOIL TYPE #	2



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	99.7%
10	98.6%
20	95.2%
40	87.9%
100	59.8%
200	30.1%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SM

ENTECH ENGINEERING, INC.

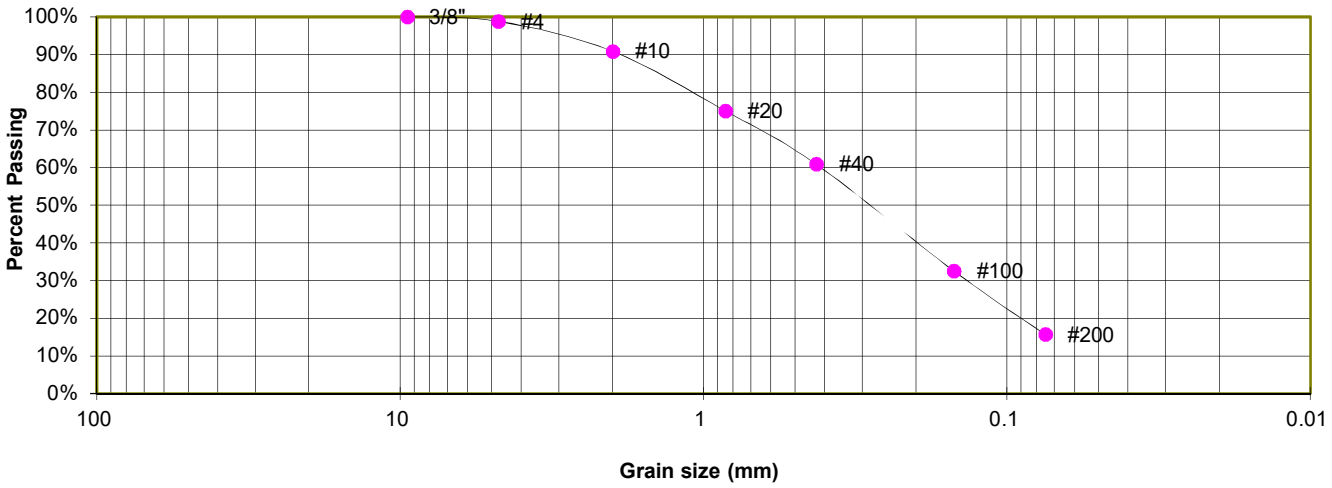
LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-4

TEST BORING	TP-1	SOIL DESCRIPTION	SAND, SILTY
DEPTH (FT)	6-7	SOIL TYPE #	1



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	98.8%
10	90.9%
20	75.1%
40	60.9%
100	32.6%
200	15.7%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SM

ENTECH ENGINEERING, INC.

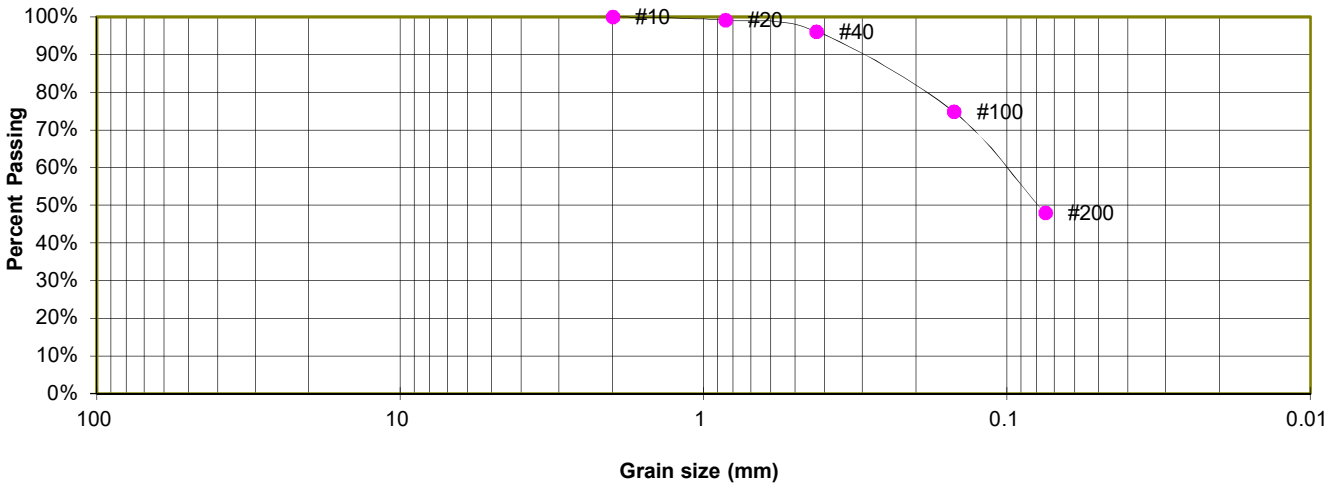
LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-5

TEST BORING	TP-2	SOIL DESCRIPTION	SAND, SILTY
DEPTH (FT)	2-3	SOIL TYPE #	3



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	99.1%
40	96.2%
100	74.8%
200	47.9%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SM

ENTECH ENGINEERING, INC.

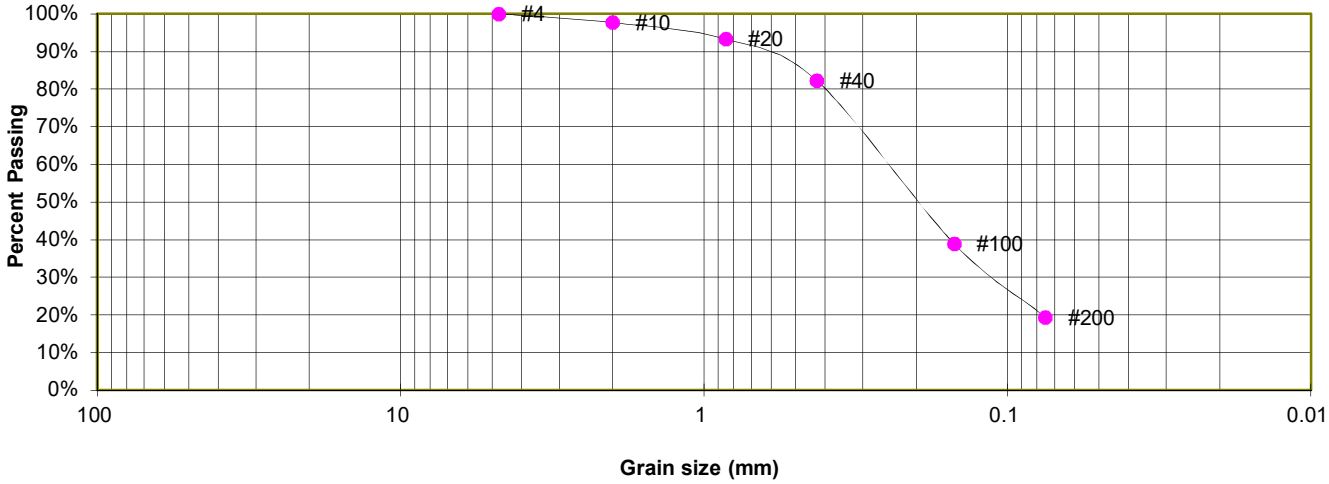
LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-6

TEST BORING	TP-2	SOIL DESCRIPTION	SAND, SILTY
DEPTH (FT)	5-6	SOIL TYPE #	1



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	97.7%
20	93.4%
40	82.3%
100	39.0%
200	19.4%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SM

ENTECH ENGINEERING, INC.

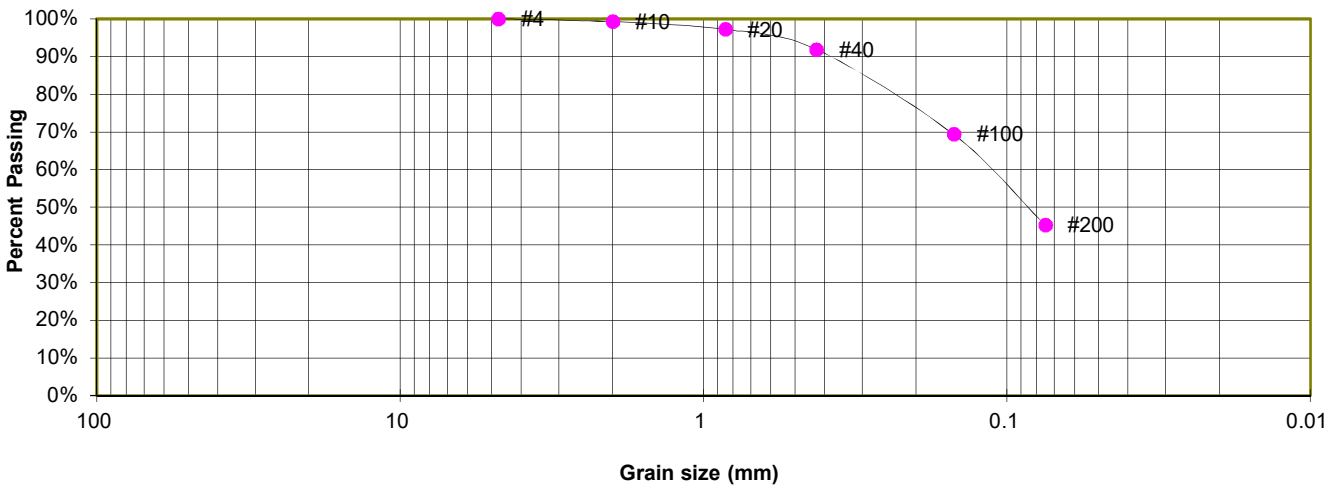
LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-7

TEST BORING	TP-3	SOIL DESCRIPTION	SAND, SILTY
DEPTH (FT)	2-3	SOIL TYPE #	3



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.2%
20	97.2%
40	91.9%
100	69.4%
200	45.4%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SM

ENTECH ENGINEERING, INC.

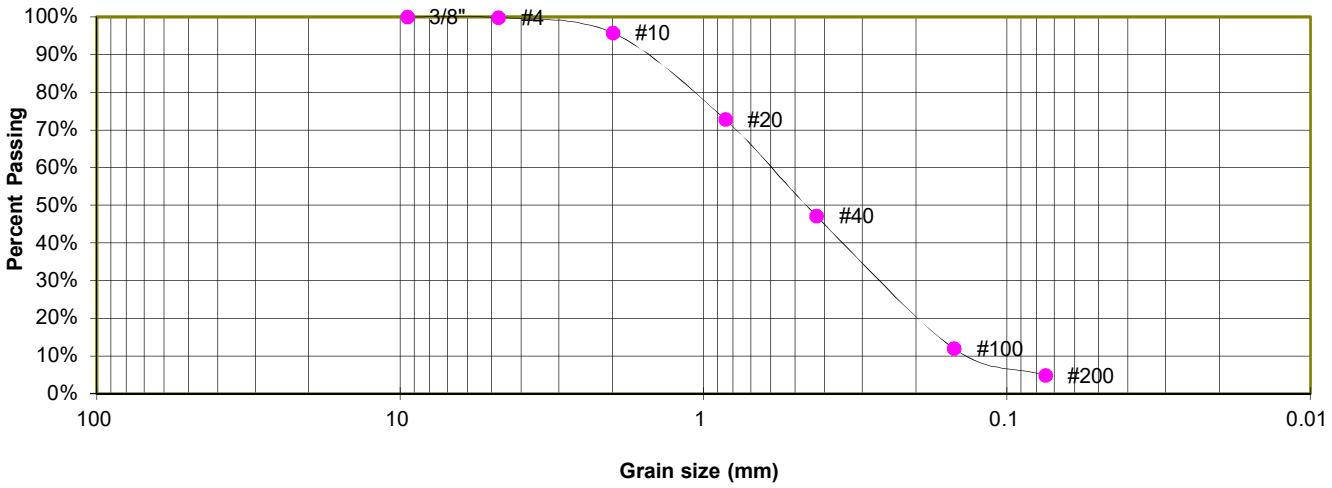
LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-8

TEST BORING	TP-3	SOIL DESCRIPTION	SAND, SLIGHTLY SILTY
DEPTH (FT)	5-6	SOIL TYPE #	1



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	99.9%
10	95.8%
20	72.8%
40	47.1%
100	12.0%
200	4.9%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SW

ENTECH ENGINEERING, INC.

LABORATORY TEST RESULTS

1480 E. HIGBY ROAD
CHARLES WOODALL

JOB NO.
261137

FIG. C-9

APPENDIX D: USDA Soil Survey Descriptions

El Paso County Area, Colorado

41—Kettle gravelly loamy sand, 8 to 40 percent slopes

Map Unit Setting

National map unit symbol: 368h
Landscape: Uplands
Elevation: 7,000 to 7,700 feet
Farmland classification: Not prime farmland

Map Unit Composition

Kettle and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kettle

Setting

Landscape: Uplands
Landform: Hills
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy alluvium derived from arkose

Typical profile

E - 0 to 16 inches: gravelly loamy sand
Bt - 16 to 40 inches: gravelly sandy loam
C - 40 to 60 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 8 to 40 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: F048AY908CO - Mixed Conifer
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 10 percent
Hydric soil rating: No

Pleasant

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 23, Aug 29, 2025

El Paso County Area, Colorado

92—Tomah-Crowfoot loamy sands, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 36b9
Elevation: 7,300 to 7,600 feet
Farmland classification: Not prime farmland

Map Unit Composition

Tomah and similar soils: 50 percent
Crowfoot and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tomah

Setting

Landform: Alluvial fans, Hills
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from arkose and/or residuum weathered from arkose

Typical profile

A - 0 to 10 inches: loamy sand
E - 10 to 22 inches: coarse sand
Bt - 22 to 48 inches: stratified coarse sand to sandy clay loam
C - 48 to 60 inches: coarse sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: R049XY216CO - Sandy Divide
Hydric soil rating: No

Description of Crowfoot

Setting

Landform: Hills, Alluvial fans
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 12 inches: loamy sand
E - 12 to 23 inches: sand
Bt - 23 to 36 inches: sandy clay loam
C - 36 to 60 inches: coarse sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: R049XY216CO - Sandy Divide
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 15 percent
Hydric soil rating: No

Pleasant

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 23, Aug 29, 2025

APPENDIX E: Existing El Paso County Health Department Septic Records

EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
INDIVIDUAL SEWAGE DISPOSAL SYSTEM INSPECTION FORM

Permit # 4174
Date 11-08-02

APPROVED: YES X NO ____ ENVIRONMENTALIST Sid Darden

Address 0-1480 1480 E. Higby Rd. Owner Charles Woodall

Legal Description ____

Residence ____, # of bedrooms ____; Commercial X ; System Installer J&K Exc.

SEPTIC TANK:

Commercial X ; Noncommercial ____, L ____, W ____, WD ____

Construction Material Precast concrete, capacity 1000 gallons.

DISPOSAL FIELD:

Rock Systems:

Trench: depth ____, width ____, total length ____, sq. feet ____

Bed: depth 12-18", length 33', width 14', sq. feet 462

Rock type Gravel, depth 12", under PVC 6", over PVC 2"

Seepage Pits: # of pits ____, total # of rings ____, working depth(s) ____

size of pit(s) L X W ____, lining material ____, total sq. feet ____

Rockless Systems:

Chamber: Type ____, number of chambers ____, bed ____, trench ____

sq. ft./section ____, reduction allowed ____%, sq. ft required ____

total sq. ft. installed ____, depth of installation ____

Engineer Design (Y) or N, Designing Engineer Paul Bryant,

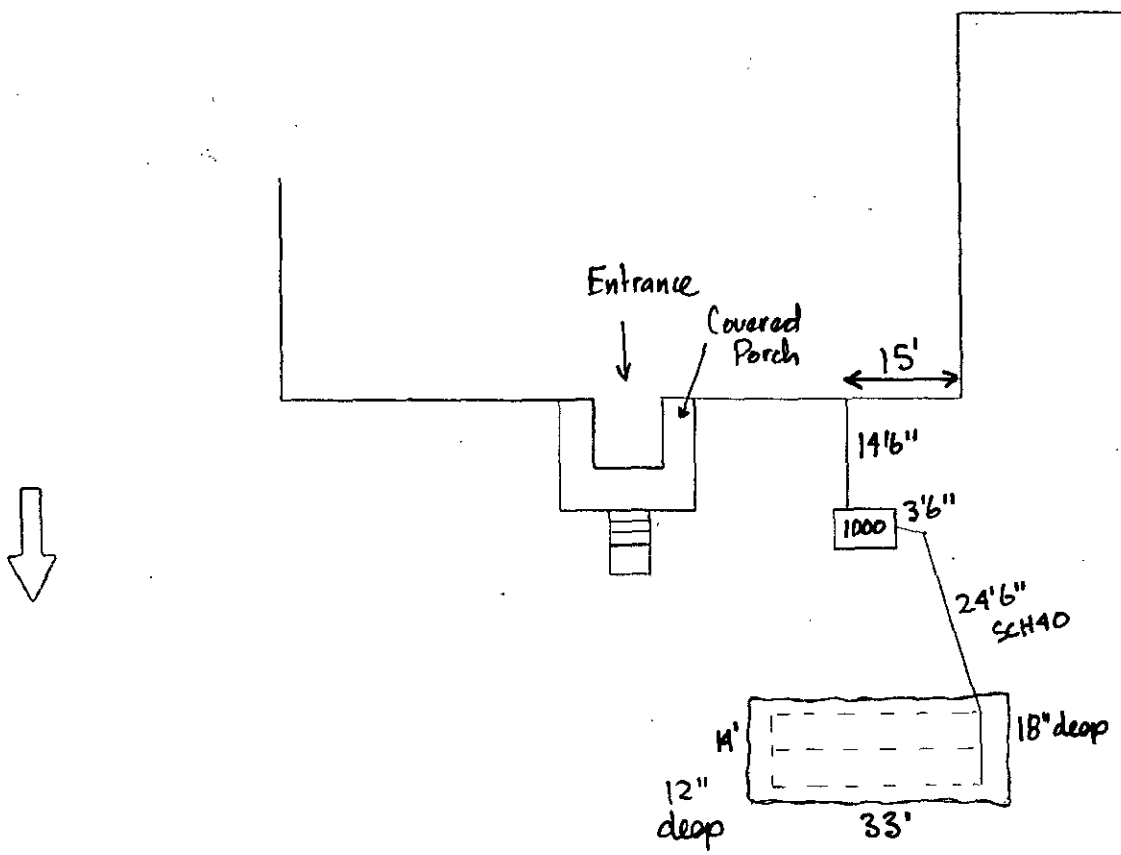
Approval letter provided? (Y) or N

Well 50 feet from tank (Y) or N 100 feet from leach field (Y) or N

Well installed at time of septic system inspection (Y) or N Public Water ____

*Approval will be revoked if in the future the well is found to be within 50 feet of the septic tank and/or 100 feet of the disposal field.

NOTES: Not connected to existing system as planned.



EL PASO COUNTY

DEPARTMENT OF HEALTH AND ENVIRONMENT

[illegible]01 S Union Blvd, Colorado Springs, Colorado 719-575-8636

INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT

OWNER NAME: CHARLES WOODALL
ADDRESS: 1480 E HIGBY RD
CITY,STATE,ZIP: MONUMENT CO 80132
INSTALLED BY:

PERMIT NUMBER: ON0004174
DATE PERMITTED: 10/18/2002
PHONE NUMBER: 7194924123

This permit is issued in accordance with 25-10-107 Colorado Revised Statues. PERMIT EXPIRES upon completion-installation of sewage-disposal system or at the end of twelve (12) months from date of issue- whichever occurs first-(unless work is in progress). If both a building and an ISDS permit are issued for the same property and construction has not commenced prior to the expiration date of the building permit, the ISDS permit shall expire at the same time as the building permit. This permit is revokable if all stated requirements are not met.
Sewage disposal system to be installed by an El Paso County Licensed System Contractor or the property owner.

THIS PERMIT DOES NOT DENOTE APPROVAL OF ZONING AND ACREAGE REQUIREMENTS.

Rosemary C. Bakes-Martin

DIRECTOR, EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT

PERMIT EXPIRATION DATE :
Expires twelve months from date of issue

David Farley 578-8117

ENVIRONMENTALIST / PHONE NUMBER*

* NOTE: FOR INSPECTIONS CALL 575-8699 BEFORE 8:30 A.M. OF THE DAY TO BE INSPECTED.
(WEEKENDS & HOLIDAYS EXCLUDED)
LEAVE THE ENTIRE SEWAGE DISPOSAL SYSTEM UNCOVERED FOR FINAL INSPECTION.

WATER SOURCE: WELL

MINIMUM SEPTIC TANK SIZE : P.E. Design **GALLONS** **MINIMUM ABSORPTION AREA REQUIRED** P.E. Design **SQ FT**

PLANNING DEPARTMENT O/C **ENUMERATION** O/C **FLOOD PLAIN** O/C **WASTEWATER** N/A

COMMENTS:

SEPTIC REPAIR/ADDITION SHALL BE INSTALLED PER PROFESSIONAL ENGINEER DESIGN DATED 8/23/02 IN ACCORDANCE WITH COUNTY ISDS REGULATIONS. NEW LEACH FIELD SHALL BE INSTALLED IN AREA OF PERCOLATION TEST DATED 9/18/02. AN APPROVAL LETTER FROM ENGINEER IS REQUIRED AFTER FINAL INSTALLATION INSPECTIONS. MAINTAIN ALL REQUIRED DISTANCES.

The Health Office shall assume no responsibility in case of failure or inadequacy of a sewage-disposal system, beyond consulting in good faith with the property owner or representative. Free access to the property shall be authorized at reasonable time for the purpose of making such inspections as are necessary to determine compliance with requirements of this law.

FOR ADMINISTRATIVE USE ONLY

Permit Ready: _____ Called _____ Mailed

Final Inspection Requested: BY: JOHN J+K Date Called In: 11/7 1:33 pm

Phone # 331-4321 Septic Site will be ready: NOW

Inspector _____ Dist #17 Record I.D. 4174

EL PASO COUNTY ENVIRONMENTAL HEALTH SERVICES

301 South Union Boulevard • Colorado Springs, CO • 80910-3123 • (719) 578-3126 • Fax: (719) 578-3188

APPLICATION FOR AN ON-SITE TREATMENT SYSTEM:

☐NEW CONSTRUCTION ☐MINOR REPAIR ☒MAJOR REPAIR/ADD ☐P.E. DESIGN

Owner Charles P. Woodall Daytime Phone call John Nelson → 632-3384 719-492-4123

Address of Property 1480 E Highway Rd, Monument, CO City & Zip Monument, CO 80132

Legal Description (SEE ATTACHED)

Owner's MAILING Address (Same as above) City, State & Zip _____

Lot Size 35AC Tax Schedule # 6100000298

Septic Contractor _____ Daytime Phone # _____

Type of Building: ☐Frame ☐Modular ☐Mobile ☒Commercial ☐Manufactured ☐Other _____

Water Supply: ☒Well or Spring ☐Cistern ☐Public Inside City Limits: ☒No ☐Yes-City _____

☐MAIL PERMIT OR ☒PICK UP PERMIT ☐THERE IS AN ADDITIONAL RESIDENCE ON THIS PROPERTY

MAXIMUM POTENTIAL BEDROOMS COMMERCIAL

Percolation Test Attached (Y) N Garbage Disposal Y (N) Basement Y (N) Clothes Washer Y (N)

I have supplied a plot plan as described on the back of this form. I acknowledge the completeness of the application is conditional upon such further mandatory and additional tests and reports as may be required by the Department to be made and furnished by an applicant for purposes of evaluating the application, and issuance of the permit is subject to such terms and conditions as deemed necessary to ensure compliance with rules and regulations adopted pursuant to C.R.S. 25-10-107 et. seq. I hereby certify all represented to be true and correct to the best of my knowledge and belief, and are designed to be relied on by the El Paso County Department of Health and Environment in evaluating the same for purposes of issuing the permit applied for herein. I further understand any falsification or misrepresentation may result in the denial of the application or revocation of any permit granted based upon said application and in legal action for perjury as provided by law.

OWNER'S SIGNATURE Charles P. Woodall Jr Date 9/12/02

DEPARTMENT OF HEALTH USE ONLY

P.E. Design	P.E. Design	10/11/02
Minimum Absorption Area	Minimum Tank Capacity	Date of Site Inspection

REMARKS (ok) dated 8/23/02

Septic repair/addition shall be installed per P.E. Design in accordance with county ISDS regulations. New leach field shall be installed as shown at there test dated 9/18/02. An approval letter from engineer is required after final installation inspections. Maintain all required distances.

EHS INSPECTOR _____ DATE 10/18/02 (APPROVED) DENIED

FEE AS OF 8/1/00: NEW CONSTRUCTION $315. + County Surcharge of $30. = $345.00
MAJOR REPAIR/ADDITION $150
MINOR REPAIR/ADDITION $75

DATE TO PLANNING / WASTEWATER: 10/11
DATE TO FLOODPLAIN: _____

* 10/17/02. Notified John Nelson of addressing & floodplain disapprovals. Additionally, need calcs. from P.E. on design. DF

1) We rec[illegible]nal of your PE[illegible]COLATION (PERC) TEST with an original professional engineer's (PE) st[illegible]well [illegible]lot of the percolation test holes.

2) **PROPERTY ADDRESS OR LOT [illegible]MBER MUST BE POSTED AND CLEARLY VISIBLE FROM ROAD. PERC HOLES MUST BE [illegible]LEARLY MARKED.**

3) A **PLOT PLAN** must be drawn (not to scale) on an **8 ½ x 11** sheet of paper. The plot plan must include:
   1) a north bearing
   2) property lines
   3) property dimensions
   4) all buildings (proposed or existing)
   5) proposed septic system site
   6) alternate septic system site
   7) driveway (proposed or existing and name of adjoining street)

4) Initial any of the following features that apply to your property and **INCLUDE them on your PLOT PLAN.**

   ___ Well(s) ___ Adjacent property well(s) ___ Subsoil drain
   ___ Cistern ___ Water line

5) Initial any of the following that are within 100 feet of your proposed septic system and **INCLUDE on your PLOT PLAN.**

   ___ Spring(s) ___ Lake(s)
   ___ Pond(s) ___ Stream(s)
   ___ Dry Gulch(es) ___ Natural drainage course(s)

6) GIVE COMPLETE DIRECTIONS TO THE PROPERTY FROM A MAIN HIGHWAY

THE PROPERTY IS JUST WEST OF THE INTERSECTION OF HIGBY RD. & ROLLER COASTER RD. ON SOUTH SIDE OF ROLLERCOASTER.