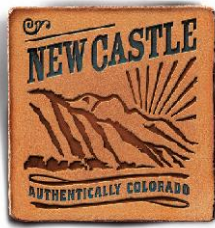


Posted: \_\_\_\_\_

Remove:



**Town of New Castle**

450 W. Main Street  
PO Box 90  
New Castle, CO 81647

**Administration Department**

**Phone:** (970) 984-2311

**Fax:** (970) 984-2716

[www.newcastlecolorado.org](http://www.newcastlecolorado.org)

**Agenda**

**New Castle Planning and Zoning Commission Regular VIRTUAL Meeting**

**Wednesday, May 27, 2020, 7:00 PM**

**Call to Order, Roll Call, Meeting Notice**

**Conflicts of Interest** (Disclosures are on file with Town Clerk & Secretary of State)

**Citizen Comments on Items NOT on Agenda**

**Public Hearing**

- [A.](#) Consider Resolution PZ-2020-06 Regarding Combined Preliminary/Final Application for Subdivision and PUD Development Plans in Castle Valley Ranch, Filing 11  
(Continued from May 13, 2020)

**Comments/Reports**

**Review Minutes of Previous Meetings**

- B. Draft Minutes May 13, 2020

**Adjournment**

**Item Attachment Documents:**

- A. Consider Resolution PZ-2020-06 Regarding Combined Preliminary/Final Application for Subdivision and PUD Development Plans in Castle Valley Ranch, Filing 11  
(Continued from May 13, 2020)

**TOWN OF NEW CASTLE, COLORADO  
RESOLUTION NO. PZ-2020-6**

**A RESOLUTION OF THE NEW CASTLE PLANNING AND ZONING COMMISSION RECOMMENDING [CONDITIONAL APPROVAL] [DENIAL] OF A COMBINED PRELIMINARY/FINAL PUD DEVELOPMENT PLAN AND PRELIMINARY/FINAL SUBDIVISION PLAT FOR CASTLE VALLEY RANCH FILING 11, BEING A PORTION OF PA 17 AND PA 19.**

WHEREAS, CVR Investors, Inc. (“Applicant”) is the owner of certain real property within the Town of New Castle described in the attached Exhibit A, which property as part of Planning Areas 17 and 19 of the Castle Valley Ranch Master Plan (the “Property,” or Filing 11); and

WHEREAS, the Applicant has submitted an application requesting approval of a combined Preliminary/Final PUD Development Plan and a Preliminary/Final Plat for the first phase of the development, which application is further defined in Section 2 of this Resolution (the “Application”); and

WHEREAS, the Applicant proposes to construct a total of 91 residential units in 27 multi-family buildings on 27 lots on 13.538 acres; and

WHEREAS, the PA 19 portion of the Property is zoned Residential (R), and the PA 17 portion is zoned Mixed Use (MU); and

WHEREAS, the Applicant intends to develop and plat the Property in phases, with the first phase including ten (10) lots, ten (10) multi-family buildings, and 32 residential units and the public improvements associated with the same; and

WHEREAS, the Town of New Castle Planning & Zoning Commission (“Commission”) held a duly noticed public hearing on May 13, 2020 to consider the Application; and

WHEREAS, the Commission listened to testimony from Staff, the Applicant, and members of the public concerning the Application; and

WHEREAS, subject to compliance with the terms and conditions of this Resolution, the Commission **finds/does not find**:

1. that the Application is generally compatible with adjacent land uses;
2. that the Application is consistent with the Town’s Comprehensive Plan;
3. that the Town has the capacity to serve the proposed uses with water, sewer, fire and police protection;
4. that the uses proposed within the PUD are uses permitted outright within the zoning district contained within the PUD;
5. the number of dwelling units permitted by the underlying zone district is not exceeded by the PUD plan;

6. the PUD utilizes the natural character of the land, includes compatible land uses, provides for fire and police protection, off-street parking, vehicular, pedestrian, and bicycle circulation, outdoor recreation, is of overall compatible architectural design, achieved adequate screening, buffering and aesthetic landscaping, avoids development of areas of potential hazard, ensures compliance with performance standards, and meets all other provisions of the applicable ordinances of the Town; and

WHEREAS, based on the Application and the testimony heard, the Commission recommends that Town Council approve/deny the Application, subject to the terms and conditions set forth below.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF NEW CASTLE, COLORADO:

1. Recitals. The foregoing recitals are incorporated by reference as findings and determinations of the Planning and Zoning Commission.
2. Definition of the Application. The “Application” consists of the documents and information identified by the Town Clerk on Exhibit B, plus all representations of and other documents presented by the Applicant reflected in the minutes of the Planning and Zoning Commission public hearing on May 13, 2020.
3. Recommendation: The Application proposes:
  - a. The construction of ninety-one (91) residential units in twenty-seven (27) multi-family buildings on twenty-seven (27) lots, with the same to be platted and developed in accordance with the phasing plan included in the Application;
  - b. That the first phase of Filing 11 will include ten (10) lots, ten (10) multi-family buildings, and 32 residential units and the public improvements associated with the same; and
  - c. That the platting of future phases of Filing 11, including subdividing the Property into lots and amending final plats as the multi-family buildings are constructed, be approved at a the staff level, provided that the future phase plats and amended final plats are in substantial conformance with the Application.

The Planning Commission hereby recommends that Town Council **approve/deny** the Application as a combined Preliminary/Final PUD Development Plan pursuant to Sections 17.100.070 and 080 of the New Castle Municipal Code and approve/deny the Phase 1 plat include in the Application as a combined Preliminary/Final Subdivision Plat pursuant to Sections 16.16.020 and 030 of the Code, subject to the terms and conditions of this Resolution.

5. Zoning. The development and use of the Property shall be subject to the restrictions and requirements of the MF-1 Zone District of the Castle Valley Ranch PUD Zoning Regulations, Section 17.104.080 of the Code (Zone District), as may be modified by the final plats for the Property; all other applicable provisions of the Code; and all applicable Ordinances of the Town. In the event of any conflict between the Zone District text and the final plats for the Property, the final plats shall control.

6. Conditions.

- a. Future phase plats may be approved on a staff level. As buildings are constructed on lots, one or more amended final plats to define the boundaries of the individual units within each building shall be prepared for each building envelope based on as-built surveys after construction, which may be approved on staff level.
- b. The form of the final plat for all phases of Filing 11 and any amended final plat once units are constructed shall be subject to review and approval by the Town staff prior to recordation.
- c. Sale of individual units may not occur until a plat creating the unit is recorded with Garfield County.
- d. Applicant shall submit an exhibit and conveyance document(s) in a form acceptable to the Town Attorney outlining the necessary water rights (potable and/or raw) required for Filing 11.
- e. Prior to the recordation of any Filing 11 phase plat, the Applicant shall enter into a subdivision improvements agreement with the Town for each phase of the development in a form acceptable to the Town Attorney.
- f. All representations of the Applicant made verbally or in written submittals presented to the Town in conjunction with the Application before the Commission or Town Council shall be considered part of the Application and binding on the Applicant.
- g. The Applicant shall comply with all applicable building, residential, electrical and municipal code requirements, including all sign code regulations, when developing the Property according to the Plan, as amended;
- h. The Applicant shall reimburse the Town for any and all expenses incurred by the Town regarding this approval, including, without limitation, all costs incurred by the Town's outside consultants such as legal and engineering costs

SO RESOLVED this 13th day of May, 2020, by a vote of \_\_\_\_ to \_\_\_\_.

TOWN OF NEW CASTLE  
PLANNING & ZONING  
COMMISSION

---

Chuck Apostolik, Chairman

ATTEST:

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Mindy Andis, Deputy Town Clerk

**EXHIBIT A**  
Legal Description

**Parcel A:** A PARCEL OF LAND SITUATE IN THE NE1/4 SECTION 31 AND THE NW1/4 SECTION 32, TOWNSHIP 5 SOUTH, RANGE 90 WEST OF THE 6TH P.M., COUNTY OF GARFIELD, STATE OF COLORADO, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE WEST 1/16 CORNER BETWEEN SAID SECTIONS 29 AND 32 A REBAR AND ALUMINUM CAP LS NO. 36572 SET IN PLACE; THENCE S 01° 19' 34" E 1570.62 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY OF LINE CASTLE VALLEY BOULEVARD, AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED JANUARY 9, 2001 UNDER RECEPTION NO. 574735, ALSO BEING A POINT ON THE EASTERLY BOUNDARY LINE OF CASTLE VALLEY RANCH PUD AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED AUGUST 10, 1983 UNDER RECEPTION NO. 344590 THE TRUE POINT OF BEGINNING; THENCE DEPARTING SAD RIGHT OF WAYS 01°19' 34" E AND ALONG SAID EASTERLY BOUNDARY LINE 1066.16 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF SAID CASTLE VALLEY RANCH, P.U.D.; THENCE ALONG SAID SOUTHERLY BOUNDARY LINE THE FOLLOWING FOUR (4) COURSES: 1. N 89° 40' 24" W 1195.15 FEET; 2. N 00° 19' 36" E 120.00 FEET; 3. N 89° 40' 24" W 180.00 FEET; 4. N 00° 05'00" W 210.20 FEET; THENCE DEPARTING SAID SOUTHERLY BOUNDARY LINE N 00° 05'00" W 983.59 FEET; THENCE S 89° 56' 5" W 552.43 FEET TO A POINT ON THE EASTERLY BOUNDARY LINE OF CASTLE VALLEY RANCH, PA19A AND PA19B AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED NOVEMBER 29, 2005 UNDER RECEPTION NO. 687288; THENCE N 40° 33' 51" E ALONG SAID EASTERLY BOUNDARY LINE 283.40 FEET; THENCE CONTINUING ALONG SAD EASTERLY BOUNDARY LINE N 55° 43' 05" E 455.98 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF CASTLE VALLEY BOULEVARD; THENCE DEPARTING SAD EASTERLY BOUNDARY LINE AND ALONG SAID SOUTHERLY RIGHT OF WAY LINE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 862.01 FEET; AN ARC LENGTH OF 591.51 FEET (CHORD BEARS S61° 39' 09" E 579.98 FEET); THENCE CONTINUING ALONG SAID SOUTHERLY RIGHT OF WAY LINE THE FOLLOWING SEVEN (7) COURSES: 1.S 81° 18' 39" E 261.25 FEET; 2. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 719.98 FEET, AN ARC LENGTH OF 342.58 FEET (CHORD BEARS S 67° 40' 47" E 339.36 FEET); 3. ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 115.42 FEET, AN ARC LENGTH OF 19.02 FEET (CHORD BEARS S 14° 30' 47" E 19.00 FEET); 4. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 82.00 FEET, AN ARC LENGTH OF 110.68 FEET (CHORD BEARS S 48° 27' 33" E 102.47 FEET); 5. ALONG THE ARC OF A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 115.42 FEET, AN ARC LENGTH OF 20.06 FEET (CHORD BEARS S 82° 08' 49" E 20.03 FEET); 6. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 719.98 FEET, AN ARC LENGTH OF 57.30 FEET (CHORD BEARS S 41° 01' 02" E 57.29 FEET); 7. S 38° 44' 14" E 193.94 FEET TO THE POINT OF BEGINNING.

**Parcel B:** A PARCEL OF LAND SITUATE IN THE NE1/4 SECTION 31, TOWNSHIP 5 SOUTH, RANGE 90 WEST OF THE 6TH P.M. COUNTY OF GARFIELD, STATE OF COLORADO, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE WEST 1/16 CORNER BETWEEN SAID SECTIONS 29 AND 32, A REBAR AND ALUMINUM CAP LS NO. 36572 SET IN PLACE; THENCE S29° 45' 20" W 2647.04 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF CASTLE VALLEY RANCH, P.U.D. AS FLED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED AUGUST 10, 1983 UNDER RECEPTION NO. 344590, THE TRUE POINT OF BEGINNING; THENCE ALONG SAID SOUTHERLY BOUNDARY LINE THE FOLLOWING FOUR (4) COURSES: 1. N 89° 50' 34" W 450.00 FEET; 2. N 00° 09' 26" E 75.00 FEET; 3, N 89° 50' 34" W 275.00 FEET; 4, N 000 09' 26" E 150.00 FEET; THENCE DEPARTING SAID SOUTHERLY BOUNDARY LINE N00° 47' 28" W 548.03 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF CASTLE VALLEY RANCH, PA 19A & WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED NOVEMBER 29, 2005 UNDER RECEPTION NO. 687288; THENCE ALONG SAID SOUTHERLY BOUNDARY LINE N 40° 33' 51" E 273.86 FEET; THENCE DEPARTING SAID SOUTHERLY BOUNDARY LINE N 89° 56' 25" E 552.43 FEET; THENCE S 00° 0500" E 983,59 FEET TO THE POINT OF BEGINNING

**EXHIBIT B**  
Application Materials

- 1) PUD & Subdivision Combination Applications
- 2) Application Narrative
- 3) Applicant Response to Referrals - SGM
- 4) Referral - Colorado Parks & Wildlife
- 5) Referral - Colorado Fire River Fire and Rescue
- 6) Referral - Town of New Castle Public Works
- 7) Referral - Town Engineer
- 8) Referral + Redlined Plat -Town Attorney
- 9) Referral - Town of New Castle Police Chief
- 10) Referral - Garfield RE-2 School District
- 11) Will Serve Letter - Xcel
- 12) Public Notice
- 13) List of Property owners within 250' of Development
- 14) Affidavit as to Notice of Public Hearing
- 15) Agreement to Pay Consulting Fees & Expenses, February 15<sup>th</sup>, 2019
- 16) Title Commitment + Legal Description
- 17) Soils Report - A.G. Wassenaar
- 18) Drainage Calculations - SGM
- 19) Utility Report - SGM
- 20) Traffic Impact Study - SGM
- 21) Construction Drawings -
- 22) Architectural Floorplans -

May 18, 2020

Planning and Zoning Commissioners  
Town of New Castle  
450 W. Main Street  
New Castle, CO 81647

Dear Commissioners,

We are writing to clarify we, as homeowners on South Wildhorse and Mount Harvard, understood about future development and to amplify the community letter opposing the Filing 11 development as proposed by CVR Investors.

When we purchased our homes in 2009 and 2010, we did our due diligence. We looked at the town map posted on the New Castle website, which showed single-family lots. We also talked with a town representative who confirmed that most of the land was privately owned and single-family homes would eventually be built. At no time were triplexes or quadraplexes shown on any town map or indicated as a potential for development. Had that been the case, we would not have bought our homes. This purchase represented a very large and important decision, as with many homeowners whose equity is invested in their homes. So, to be clear, as prospective homeowners, we checked with the town and looked at the town's map before our purchases. Had we known that a quadraplex could possibly be built less than 70 feet behind our backyards, or that a 91-unit high-density development was proposed in the adjacent 14 acres, we would NOT have bought our homes.

The town planner noted that if this development is built as currently planned, it will decrease our property values. While we agree with the town's goal to have a diversity of housing, including housing that is affordable, it is patently unfair to do so when it adversely affects existing homeowners who sought out town information a decade ago. "Softening" the transition with trees, or worse, a fence is an inadequate resolution to this very significant problem.

We see two possibilities: greatly increase the buffer between single family homes and high-density housing, which would have the added value of helping wildlife along that corridor (we see deer in that field every single night), creating a more usable and aesthetic open space, retaining the natural drainage (intermittent ponds occur in that field during snow melt and rain events), and establishing a more welcoming trail addition for all citizens. The developer currently has given very little land to this buffer. Open Space A totals just .82 acres, which as the developer notes, is just 59-72 feet between property lines. This include the unbuildable hill owned by the town. As we view the application, this is about 20 feet of the developer's land running the length of Open Space A. While we recognize that redrawing the planned development represents a cost to the developer, we also know that CVR did not respond to concerns by town staff regarding the abrupt transition between housing in the staff report for the sketch plan. Instead of creating a larger buffer in the preliminary/final application, the developer changed three triplexes to quadraplexes immediately behind the single-family homes. We maintain that this is not a response to town or community concerns at all, and that the developer should have adjusted the width of the buffer before submitting a preliminary/final application.

A second possibility is to build single family homes in the lots adjacent to South Wildhorse and Mount Harvard, as indicated in the town map at the time we purchased our homes. The final application puts 22 units (four quadraplexes and two triplexes) on six lots adjacent to South Wildhorse. Building six single family homes would be more protective of property values for the existing homes than what is proposed. The lots could be maintained as shown, just with 16 fewer units. Construction of single-family homes is underway on South Wildhorse and Mount Yale Court, and homes have sold well, so there is a market for single-family homes.

Regarding the community letter, the support for which continues to grow, it sends a clear message: this is a development that is not in concert with a sense of place as outlined in the goals of the comprehensive plan. Should you approve this development as is, you will not only harm adjacent homeowners, but you will also approve a development that has identified issues regarding parking, congestion, public safety, fire danger, lack of recreational opportunities, and with open space that is virtually unusable (either next to a high-traffic street, Open Space B, or a the narrow pedestrian trail in the buffer area along South Wildhorse and Mount Harvard, Open Space A, or small areas inside the development).

As a community, we have the chance to create a development that complements our sense of place and the unique character of New Castle or settle for a development that does the opposite. We urge you to make the right choice for the citizens of New Castle.

Thank you for the opportunity to respond.

Sincerely,

Denise and Steve Scheberle

Virginia and Wayne Shelton

Ines Baquero

May 20, 2020

TO: Planning and Zoning Commissioners and Paul Smith, Planner  
RE: Preliminary/Final Filing 11 application

We urge you to NOT approve the application of CVR Investors, Inc. (CVR) as proposed. Beyond the rationale described in the previous communication dated May 1, 2020 to the Planning and Zoning Commissioners and Paul Smith, Planner for the City of New Castle, this communication addresses the discussion and outcome of the May 14, 2020 Planning and Zoning Commissioners meeting. First, we would like to acknowledge the work of the Commissioners and Paul Smith during the 3 ½ hour meeting on May 14 and attended via Zoom by nearly 40 residents of Castle Valley Ranch. Although the meeting length left no time for residents' input, we appreciate the decision of the Commissioners to carry over the discussion and decision making on the application to May 27 in order to receive citizen input on the Filing 11 application. Second, we must also acknowledge coming away from the meeting with a dispirited outlook of finality in favor of CVR with little consideration given to the concerns of current residents. Looking to the future of New Castle as a bedroom community to Glenwood Springs rather than a Colorado mountain town destination seems more the reality than the exception with the sea of rooftops arising from Filing 11 with little regard to the Smart Growth Principles in New Castle's Comprehensive Plan.

As owners on Foxwood LN, we would like to address the issues related to the North Wildhorse community bounded by Redstone and Foxwood LN in order to correct some misconceptions of the reality of living in that area.

*Parking.* The density of townhomes with only three additional parking spaces simply pushes more parking onto the streets obstructing vision by motorized and nonmotorized vehicles. These obstructions put residents, particularly children, in danger as they ride their bikes and scooters throughout the streets. Backing out of one's driveway becomes a challenge year-round. These situations will be recreated by the high density of construction on South Wildhorse and Mt. Harvard if not given consideration prior to approval of Filing 11.

*Snow removal and storage.* There is little room for town and contractor vehicles to navigate and manage snow removal and storage processes with streets overcrowded with vehicles. Driver vision becomes impeded, and navigation of driveways at times nearly impossible, with snow deposits handicapping vision and cars using the streets for parking become snow mounds of their own.

*Wildland fire.* We were particularly alarmed by the seemingly lack of concern given to egress issues presented by wildfires as climate change exacerbates these dangers. The safety of the town's residents to know how they will be protected from fire is paramount. Where is the current emergency evacuation management plan? How is this plan being addressed in conjunction with Filing 11? With the continued housing development, what mitigation efforts are being addressed? What are the escape routes for the residents? There is a need to know before fire is upon us and the density of development hampers the safety of its citizens.

As stated in the letter dated May 1, 2020, "In October 2019, many residents witnessed the fire on the hill that is adjacent to the land in Filing 11. We were lucky that time, due to the amazing work of our firefighters and the availability of air support. Next time we may not be so lucky. This issue is paramount

in the minds of many Castle Valley Ranch residents and must be considered with any development, but especially in ones with high density that compounds traffic concerns.....” We strongly urge the Commission *to know* what the emergency management escape routes are for wildland fire before approving the Filing 11 application.

We urge the Commission and Council to work with the residents to support livable neighborhoods enfolded within the mountain town environment we love to live in. Keep Front Range-type living on the Front Range.

Respectfully submitted,

Myrna Candreia, 26 Foxwood LN, New Castle, CO 81647

Jean Huyser, 34 Foxwood LN, New Castle, CO 81647

May 21, 2020

TO: Planning and Zoning Commissioners and Paul Smith, Planner  
FR: Residents of New Castle (updated to 70 names and addresses below)  
RE: Preliminary/Final Filing 11 application

We urge you not to approve the Filing 11 application for development of the property behind South Wildhorse Drive and Mount Harvard Court by CVR Investors, Inc. (CVR), a company located in Castle Rock, CO. Our rationale is described in more detail below, but in short, this high-density development offers very little open space, provides insufficient buffers between multiple-unit housing and single-family homes, inadequately considers the impact of the development to surrounding property values, ignores the need to maintain wildlife migration patterns, does not adequately provide for pedestrian/traffic interface on Castle Valley Boulevard, has not adequately addressed viewsheds and ridgelines, may not provide for natural drainage from the storm water pipes on both sides of Castle Valley Boulevard, increases traffic loading onto Castle Valley Boulevard, does not provide adequate additional parking for new residents during Phase 1, and may increase costs to the town as it addresses traffic, safety, fire, and other infrastructure issues. It also limits the town's ability to provide mixed-use development. Moreover, it does not reflect the goals of New Castle's Comprehensive Plan, leaving the town with a densely packed sea of rooftops that does little to make the town unique or desirable. We recognize the right of CVR to develop this property; however, that right is not absolute in much the same way as we are governed by the requirements of a homeowner's association. If this development is allowed as currently presented, we have much to lose, as described below.

### **1. Too much density**

The planned net density for the development is 10.45 dwelling units per acre (91 units on 13.5 acres). This far exceeds the average density in the town, creating many potential problems for the town, surrounding homeowners and future residents. The town will face higher costs in traffic control, snow removal, fire response, infrastructure maintenance, etc. After the coronavirus devastates the economy, we are also likely to face a recession, at least in the short term, and the town may be saddled with costs at a time where it is most difficult to meet them. This means that we will all face higher costs. The surrounding homeowners will likely suffer from greatly reduced property values, which seems very unfair, and the town has a responsibility to not damage current homeowners in permitting a new development. Moreover, future residents of the development will face inadequate parking (only four extra parking spaces are provided in the application), few amenities, noise and congestion. A recent example can be found in the newly developed triplexes on Redstone Drive and Foxwood Lane, where congestion and parking are on-going issues. Building fewer fourplexes and triplexes would go a long way in improving the development, helping preserve property values, and preserving the town's sense of community.

### **2. Insufficient buffer between single-family and multiple family homes**

Concerns about an urban buffer were identified in the town planning staff report to the Town Council in response to CVR's initial sketch plan on October 1, 2019. The staff report noted concerns about the "blunt transition" from large single-family homes to high density homes. Very little action has been taken to meet those concerns since that report. Instead, more fourplexes now border the buffer between the single-family homes on South Wildhorse/Mount Harvard than were in the sketch plan.

The preliminary/final application allows just 59 to 72 feet of buffer behind the homes on South Wildhorse/Mount Harvard, including the hill owned by the town. The developer provides very little, as the buffer includes the natural drainage down the hill, as well as the town's property. In order to protect the value of the homes along the development, this buffer needs to be much larger. This is a win-win-win for residents and the town. Increasing the buffer not only brings the development into greater compliance with the goals of the Town of New Castle Comprehensive Plan and helps protect property values, both outside and inside the development, it has the added benefit of adding much-needed open space for the pedestrian walkway and offers a corridor for wildlife. The Colorado Division of Wildlife has identified this area as an important deer habitat, and residents view deer everyday grazing and bedding in this field.

The visual impact analysis was not available for review on the town's website, so we cannot comment. If this analysis exists, we would like to review it. If not, one should be done considering the buffer concerns.

### **3. Insufficient open space**

At first glance, it appears that CVR's application has met the minimal requirements for open space (1.5 acres dedicated open space in the 13.5 acres to be built). However, a closer look at the four open spaces shown on Overall Site Plan Map (page 7 of the application) tells a different story. Municipal Code Sec.17.104.010 encourages a creative approach to the development of land and an integrated open space system throughout the Castle Valley Ranch PUD. The Town of New Castle's Comprehensive Plan calls for pedestrian networks, recognizes the importance that citizens put on open spaces and calls for preserving open space and natural beauty whenever possible. We call attention to Comprehensive Plan Goal CG-1: Ensure that new development substantially conforms to the New Castle Comprehensive Plan principles, goals and policies and includes: Policy CG-1B: Applicants will be required to clearly demonstrate substantial conformity with the comprehensive plan in all applications; and, Policy CG-1D: Non-compliant land-use applications shall be modified to conform substantially to the comprehensive plan or will be rejected. (Town of New Castle Comprehensive Plan, p.50)

The Comprehensive Plan further calls for the creation of park space so to meet the standard of an additional 14 acres of usable park land for every thousand person increase in the town's population. Data from the Comprehensive Plan showed that the town was just under the minimum in 2007 (13.6 acres to service roughly 4,000 people). The addition of Dancing Bear Park is welcomed, but does not add enough park space to meet the standard. Thus, more park space is needed as development continues.

The developer proposes that "Open Space B" be a neighborhood park maintained by the town. The idea of a park is welcomed; however, this parcel of land has issues. First, it is directly adjacent to Castle Valley Boulevard, and provides for little buffer between the street and the park. In contrast, the newest park, Dancing Bear, is separated from the main street. Second, at just one-third of an acre (14,000 square feet), this "open space" largely represents what would be needed to provide a buffer between the street and the development anyway, as is the case with the homes along Castle Valley Boulevard to the north. The staff report pointed to the need for open space recreation, and this does not meet that need. This area is also suggested for snow removal for the Town, which further hampers the appeal of Open Space B.

Open Space A is the buffer area that roughly parallels the homes on South Wildhorse. As described above, it does not meet the stated desire of the town to have natural green ways and open space

corridors, in that it is much too narrow for this purpose. By increasing this open space, the developer would retain the natural beauty of the area, as well as enhance the desirability of the multi-family units and help to offset the negative impacts of the development. One can imagine a networked pedestrian trail connecting both sides of the development along Castle Valley Boulevard.

Another issue is drainage and slope. The storm water drain for run-off from the east side of Castle Valley Boulevard creates an intermittent pond during snow melt that runs fully into the open space areas. The slope of this open space area is also significant and further limits its use. Open space should be space that is accessible to the public, not undevelopable space. A hydrological study was not available for review, but even at current flow rates, standing water is not likely to be fully solved by the proposed re-routing of the storm drain and placement of rip-rap along the hill.

Also troubling is the pedestrian walkway that currently is designed to end at Castle Valley Boulevard. There is no provision for safe crossing of the street; there are no sidewalks that join that area. The only crosswalk that exists is on the north side the South Wildhorse/Castle Valley Boulevard intersection.

Open Space C is a pocket park in the center of the 91-unit development; Open Space D is a very small area also in the center of the development, much too small to be considered viable open space. These may serve the residents of the development but are not easily accessible to other citizens. We concur with the staff report that urged that the development have more open space than currently proposed.

#### **4. Wildfires and other considerations**

As the town's population increases, we must consider a second street to allow people in Castle Valley Ranch to enter/leave. Traffic loading is already apparent on Castle Valley Boulevard, the only street out of Castle Valley Ranch. However, this inconvenience may become a very serious danger should a wildfire sweep the area, as people have no way out other than one street. In October 2019, many residents witnessed the fire on the hill that is adjacent to the land in Filing 11. We were lucky that time, due to the amazing work of our firefighters and the availability of air support. Next time we may not be so lucky. This issue is paramount in the minds of many Castle Valley Ranch residents and must be considered with any development, but especially in ones with high density that compounds traffic concerns. Connecting to C Street should be discussed as a way of potentially saving lives.

Additionally, as noted in the staff report, concerns continue regarding how the remaining lots on the other side of Castle Valley Boulevard, along North Wildhorse, and VIX Park will be developed. The town has a great opportunity to consider the prominent value residents place on open spaces, with connected trail systems in thinking about future development. It also must consider where and how multiple-use building will occur. Finally, we encourage the town to carefully consider infrastructure capacity. We saw no stormwater management study in the materials for Filing 11.

In sum, we have an opportunity to make New Castle a highly desired gem of a town through careful development, but once that opportunity is lost, we've lost it forever. The Town of New Castle has an opportunity to promote development that aligns with its comprehensive plan, Smart Growth Principles, and the stated desires of the community to protect the town's scenic quality and open space. **We urge you to not approve this application until it more closely represents these goals as stated in the Comprehensive Plan and the municipal code. We stand ready as residents to assist the town that we all love in honoring the New Castle Comprehensive Plan and vision as set forth.**

**Signatures for the letter** (Because of the stay-at-home/safer at home orders, gathering signatures was not possible. However, everyone provided their name and address, often by email, noting their interest in signing the letter.)

|                       |                        |
|-----------------------|------------------------|
| Denise Scheberle      | 507 S. Wildhorse Drive |
| Steve Scheberle       | 507 S. Wildhorse Drive |
| Wayne Shelton         | 501 S. Wildhorse Drive |
| Virginia Shelton      | 501 S. Wildhorse Drive |
| Myrna Candreia        | 26 Foxwood Ln.         |
| Jeanne Huyser         | 34 Foxwood Ln.         |
| Karen Skalsky-Schwenk | 511 S. Wildhorse Drive |
| Tom Schwenk           | 511 S. Wildhorse Drive |
| Paul Gonnerman        | 51 Mt Yale Ct          |
| Susan J Bilstad       | 51 Mt Yale Ct.         |
| Jes Dooling           | 729 S. Wildhorse Drive |
| Ines Baquero          | 73 Mount Harvard Ct.   |
| Dee Demming-Kressner  | 156 N. Wildhorse Drive |
| Robert Wang           | 655 S. Wildhorse Drive |
| Lynne Cassidy         | 655 S. Wildhorse Drive |
| Jeff Andrews          | 715 Storm King Circle  |
| Diana Andrews         | 715 Storm King Circle  |
| Sue Cooke             | 26 Buckskin Circle     |
| Gary Cooke            | 26 Buckskin Circle     |
| Khmasea Bristol       | 351 Buckthorn Rd.      |
| Bay Bristol           | 351 Buckthorn Rd.      |
| Connie Davis          | 818 Ute Circle         |
| Rick Davis            | 818 Ute Circle         |
| JR Torrez             | 882 Ute Circle         |
| Stephanie Torrez      | 882 Ute Circle         |
| Kristi Stark          | 829 Ute Circle         |
| Jeff Stark            | 829 Ute Circle         |

|                         |                            |
|-------------------------|----------------------------|
| Pat Gunther             | 695 Cheyenne               |
| John Gunther            | 695 Cheyenne               |
| Larry Dragon            | 845 Ute Circle             |
| Ruth Belda              | 845 Ute Circle             |
| Erin Courtney Quinn     | 142 W. Cathedral Ct.       |
| Jamin Heady-Smith       | 39 S. Painted Horse Cir    |
| Stephanie Dani Carballo | 309 Maroon Ct.             |
| Bert Carballo           | 309 Maroon Ct.             |
| Sally Linden            | 805 Ute Circle             |
| Janet Kinghorn          | 379 Maroon Ct.             |
| Mark Kinghorn           | 379 Maroon Ct.             |
| Joni Owens              | 235 W. Capital Ct.         |
| David Bristol           | 386 W. Main #4             |
| Lee Teran               | 386 W. Main #4             |
| Brittney Street         | 680 Cheyenne               |
| Jeff Street             | 680 Cheyenne               |
| Tom Elder               | 247 N. 7 <sup>th</sup> St. |
| Mary Johnson            | 247 N. 7th St.             |
| Shirley Williams        | 0981 County Road 245       |
| Jenna Bontempo          | 44 Foxwood Lane            |
| Toni Main               | 48 Foxwood Lane            |
| Ken Collins             | 48 Foxwood Lane            |
| Sandy Weaver            | 308 Penny Royal            |
| Andy Hawley             | 120 Deer Valley Dr.        |
| Diane Blasingame        | 382 Faas Ranch Rd.         |
| Hobson Wildenthal       | 18 Redstone Dr.            |
| Adele Wildenthal        | 18 Redstone Dr.            |
| Cathy Hess Bassett      | 119 Redstone Dr.           |
| Edward Landeros         | 51 Redstone Dr.            |

|                  |                     |
|------------------|---------------------|
| Deann Landeros   | 51 Redstone Dr.     |
| Hollie Soltis    | 103 Redstone Dr.    |
| R.C. Lee         | 123 Redstone Dr.    |
| Michael Callveri | 122 Redstone Dr     |
| Bonnie Daniels   | 33 Buckskin Circle  |
| Patrick English  | 33 Buckskin Circle  |
| Eric Baquero     | 16 Deer Valley      |
| Cathie Baquero   | 16 Deer Valley      |
| Karen Trowbridge | 160 North Wildhorse |
| Gerry Trowbridge | 160 North Wildhorse |
| Stuart Tomeske   | 148 Kit Carson      |
| Pam Tomeske      | 148 Kit Carson      |
| Lisa Miller      | 171 Blackhawk Drive |
| Ron Miller       | 171 Blackhawk Drive |

May 19, 2020

Town of New Castle  
450 W. Main Street  
PO Box 90  
New Castle, CO 81647  
Attn: Paul Smith, Town Planner

RE: CVR Filing 11 – Public Comment

Dear Members of the New Castle Planning and Zoning Commission,

We oppose development CVR Filing 11, filed by CVR Investors, Castle Rock, Colorado. This proposed development neighbors S. Wildhorse Drive and Mt. Harvard Court. Our objections to this development include, but are not limited to, the following:

- ***The development is too dense.*** The plans show 91 units and provides the number of units per acre. However, the document does not state the development's *population density*. Assuming an average of 3 people per household, the population squeezed into this small acreage development will surpass 270 people. This density fails to provide a positive quality of life for CVR Filing 11 residents and their neighbors.
- ***This development will increase traffic delays already experienced during peak commuting hours.*** Many residents of CVR Filing 11 will likely be commuting workers. Currently, on many weekday mornings from 7:00 am to 8:00 am, stalled traffic backs up from the intersection of Highway 6 and 24, upward on Castle Valley Boulevard, to the Colorado River Fire Station, and beyond. Each evening, from 5:30 pm to 6:30 pm, vehicles sit idle on the I-70 off ramp, traffic again jammed at the intersection of Highway 6 and 24. Most households have at least two vehicles, and it is possible 180 to 270 vehicles would leave and return to the CVR Filing 11 development every day during peak commute times. The proposed roundabout located at the intersection of Highway 6 and 24 will not adequately accommodate this additional volume or mitigate the pollution caused by idling vehicles. The traffic problems will only worsen with the construction of apartments near the Colorado River Fire Station.
- ***The designed density of CVR Filing 11 fails to create a uniform transition to the existing Castle Valley neighborhoods.*** The construction of multiple unit buildings is out of character with the single-family homes constructed on neighboring S. Wildhorse Drive and Mt. Harvard Court. CVR Filing 11 is better suited in an area where multiple housing units already exist.
- ***CVR Filing 11 does not provide adequate green or open space.*** A small park alone does not provide a buffer between proposed units and existing neighborhoods and does not create a desire to live in the development. Require more green space within this development to build a better quality of life for residents and to provide a wildfire barrier.

- ***The lack of open space within CVR Filing 11 further reduces limited wildlife habitat and wildlife corridors.*** The current open space near and within Castle Valley is home to fox, elk, deer, bluebirds, meadow larks, coyote, and hawks. Again, require from the developer more open space to preserve and protect the remaining wildlife resources, or work with the developer to make this parcel dedicated open space.

CVR Filing 11 is contrary to the character and quality of life already existing in Castle Valley. The density of this development creates an over-crowded population, increased pollution, unmanageable traffic, further taxation of diminishing water and wildlife resources, and increased need for public safety services. It contributes to limited evacuation possibilities in the event of an emergency. CVR Filing 11 fails to build and sustain a balanced, healthy, and positive community.

Please reject CVR Filing 11 as currently proposed.

Sincerely,

Willa M. Kane  
Michael T. Kane

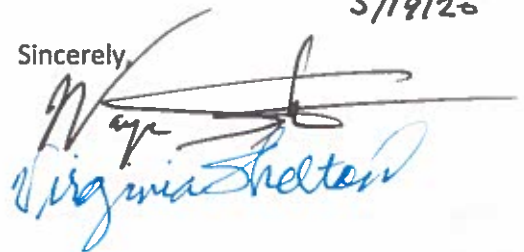
610 S. Wildhorse Drive  
New Castle, CO 81647

Wayne and Virginia Shelton  
501 S. Wild Horse Dr.  
New Castle, Co 81647

I attended the virtual meeting on the May 13<sup>th</sup> and came away with the following impressions and observations:

1. As 11-year residents of South Wild Horse, I feel the commission should realize we as home owners did our due diligence as far as considering the future of the R-11 area. We understood at the time it was zoned for single family houses and NOT triplexes and 4-plexes. This is a completely different future than what we had planned.
2. This plan as presented greatly increases the density of the area without providing any additional benefits to the area residents or the perspective buyers. They are offering no new amenities, just increasing the pressure on the existing infrastructure.
3. The investor reiterated numerous times about the amount of money they had invested in the present plan. Based on my observations their money was spent to maximize their profit to the detriment of the community. I felt they presented a cavalier attitude and weren't interested in making this a community friendly development.
4. The above statement was shown by the comments that they had met the minimum open space requirements. From looking at plan the areas they designated as open space were probably unbuildable land anyway and because of the topography was of little use other than to have a green area on the side of a hill or next to Castle Valley Boulevard.
5. Their snow storage area, by there own admission, was designated on areas that were not convenient to build on and not for the ease and convenience of the residents or city crews. The newly proposed plan for snow storage would even further exacerbate the parking problems by taking away even more areas from the already congested street parking.
6. Parking, although mentioned was not addressed at all. The problems with the Redstone Drive area triplexes will be even worse with the addition of 4-plexes. I would like to ask the commission to please consider all the parking and snow removal problems with the present multi-unit neighborhood and not let this become an even worse problem.
7. I did see that there was additional parking proposed on the plans, however it seemed it would be inconvenient for most of the residents for having to park up to 2 blocks from there house and very inconvenient in the winter for whose is going to be responsible for keeping the sidewalks clean in an area where there are no homes. ALSO this additional parking looks like it will only be available after the third phase is completed. Leaving Phase 1 and Phase 2 residents without this limited benefit that may not be available for several years.
8. I would be very doubtful if any of these developers are going to be residents of this neighborhood and that they would strongly object to having a project like this built next to their homes.
9. If there are no solutions to the many problems facing this development before it is approved then all the problems will become permanent after it is built out.
10. There was a mention of an October meeting that was to outline this development process. To the best of my knowledge none of the local residents were aware of this meeting so there was very little local involvement or comment on this process.

Sincerely,

5/19/20  
  
Virginia Shelton

May 17, 2020

New Castle Planning and Zoning Commission  
Attn: Mindy Andis, Deputy Clerk

After listening to the three hour plus planning meeting on May 13<sup>th</sup>, we have multiple concerns about the proposed development by CVR Investors, Inc. (CVR). We think it's crucial that the commission not approve this resolution.

The developer gave the strong impression they're not willing to work with the city on key issues (such as workable open areas and the transition area between the new development and houses on South Wildhorse Drive and Mount Harvard Court). In addition to the concerns outlined below, we believe approving this proposal will set the stage for what CVR can deny responsibility for in future developments, setting up future problems for the Town of New Castle.

Outlined below are key concerns we have with the proposed development.

**1. Parking.** In a 91-unit development, you can expect each unit to have at least 2 cars. Most of the units use the one-car garages as storage, leaving six cars to find a spot per triplex. That spills out into the road very quickly, creating obtrusions to sidewalks especially during the snowy season. You can see the problems that Redstone Dr. has – CVR said nothing to convince us that the new development will be any different.

**2. Traffic concerns on Castle Valley Blvd.** Castle Valley Blvd is a highly trafficked road. Adding a potential for 180 new cars driving will not only clog that road further, but also create higher noise levels. Putting in such a large multi-family community will accelerate the need for more infrastructure that the town will pay for.

**3. Drainage concerns.** Like parking and traffic, drainage is an issue that the developer will walk away from and leave it up to the town to make the costly fixes. For example, Redstone Dr. has a large dip in the road from poor construction that fills with water, creating a large ice patch in snowy seasons. This type of error is something we need to safeguard against by rejecting the current proposal.

**4. Wildlife migration patterns.** Wildlife is an integral part of living in New Castle. Despite the blanket statement made at the meeting that wildlife doesn't like to be around people and dogs, anyone living in New Castle can tell you that's not true. A big migration pattern of our Elk was already disrupted when Lakota Ridge Senior Apartments were built. New Castle is not a sprawling suburban town crammed with housing – please keep it from becoming such by respecting open areas that allow for wildlife flow to continue.

**5. Fire danger.** We are not satisfied that concerns about traffic on Castle Valley Blvd and access to Mt Medaris during a fire emergency are sufficiently addressed at this time. We live in an increasingly dry climate that experiences threats of wildfire. With the limited roads for evacuation, we believe the large multi-family development will stress the current access and lead to the town footing the bill to expand Castle Valley Blvd – something that few residents want to see.

Knowing that this developer is responsible for Redstone Dr. (which has known large parking and drainage problems) and that they will be working on further developments in New Castle, we think it's important to make sure CVR adheres by the values of the town and doesn't create multiple developments that leave the city and it's residents with lasting problems.

A developer quickly builds according to minimum specs (as proven by the comments by CVR in the town meeting) and then moves on. Leaving the town to clean up any problems due to poor road planning, large increase in traffic, decreased property values for existing residents, a less desirable community, and a sharp increase in population.

We strongly urge that you not approve the Filling 11 application for development as it stands. If this development is allowed to continue as currently proposed, CVR and the Planning and Zoning Commission could leave New Castle residents with a large monetary burden to fix the problems left by this current plan.

Please place this letter in the agenda packet for the May 27<sup>th</sup> meeting.

Thank you for your attention to this matter.

Sincerely,

Adele & Hobson Wildenthal  
18 Redstone Dr.



**Town of New Castle**  
450 W. Main Street  
PO Box 90  
New Castle, CO 81647

**Planning & Code Administration  
Department**  
**Phone:** (970) 984-2311  
**Fax:** (970) 984-2716

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### Staff Report

#### **Castle Valley Ranch - Filing 11//Portion of PA17 & Remaining PA19 Combined Preliminary/Final for PUD & Subdivision Development Plans Planning Commission – May 13, 2020**

Report Compiled: 5/7/2020

### Project Information

|                                     |                                                                                                                                                                                                                           |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name of Applicant:</b>           | CVR Investors, Inc and its assigns                                                                                                                                                                                        |
| <b>Applicant's Mailing Address:</b> | 1038 Country Club Estates Dr., Castle Rock, CO                                                                                                                                                                            |
| <b>Phone/Email:</b>                 | 303-549-1916; aa@hackstafflaw.com                                                                                                                                                                                         |
| <b>Property Owner:</b>              | CVR Investors, Inc. (Aaron Atkinson)                                                                                                                                                                                      |
| <b>Owner Mailing Address</b>        | Same as Applicant                                                                                                                                                                                                         |
| <b>Proposed Use:</b>                | 27 Multifamily Lots (MF1), 3-plexes and 4-plexes; 91 total residential units;                                                                                                                                             |
| <b>Legal Description:</b>           | Section: 32 Township: 5 Range: 90 A PCL IN THE NE4 OF SEC 31 & NW4 OF SEC 32 CONT 48.695 AC AKA PARCEL 2<br><br>Section: 31 Township: 5 Range: 90 A PARCEL OF LAND SITUATE IN THE N1/2 SEC 31 CONT 15.505 AC AKA PARCEL 5 |
| <b>Street Frontage:</b>             | North – Castle Valley Blvd;                                                                                                                                                                                               |
| <b>Existing Zoning:</b>             | Residential (R) & Mixed Use (MU)                                                                                                                                                                                          |
| <b>Surrounding Zoning:</b>          | Single Family (SF2) – North & South Wildhorse Dr.<br>Mixed Use (MU1) & Multifamily (MF1) – Redstone Dr.                                                                                                                   |

## **I Application Exhibits:**

(Documents 1-22 submitted prior to the P&Z hearing on May 13<sup>th</sup>, 2020)

- A. PUD & Subdivision Combination Applications
- B. Application Narrative
- C. Applicant Response to Referrals - SGM
- D. Referral - Colorado Parks & Wildlife
- E. Referral - Colorado Fire River Fire and Rescue
- F. Referral - Town of New Castle Public Works
- G. Referral - Town Engineer
- H. Referral + Redlined Plat -Town Attorney
- I. Referral - Town of New Castle Police Chief
- J. Referral - Garfield RE-2 School District
- K. Resident Comment – Wayne & Virginia Shelton
- L. Will Serve Letter - Xcel
- M. Public Notice
- N. List of Property owners within 250' of Development
- O. Affidavit as to Notice of Public Hearing
- P. Agreement to Pay Consulting Fees & Expenses, February 15<sup>th</sup>, 2019
- Q. Title Commitment + Legal Description
- R. Soils Report - A.G. Wassenaar
- S. Drainage Calculations - SGM
- T. Utility Report - SGM
- U. Traffic Impact Study - SGM
- V. Snow Storage Sheet – SGM
- W. Construction Drawings - SGM
- X. Architectural Floorplans – SGM



## **II Progression of Application:**

### *Sketch Plan*

A sketch plan application for Filing 11 was reviewed by the Planning Commission on September 11, 2019 and by Council on October 1, 2019. At that time the development proposal contemplated 96 multi-family dwelling units comprised entirely of tri-plexes and four-plexes similar in style to existing units along Redstone Dr. and Foxwood Ln. in Castle Valley Ranch (CVR). The 15 acre proposal spanned both mixed-use and residential zones south of Castle Valley Blvd (CVB) and east of S Whitehorse Dr. The general concept of the sketch plan – lot sizes, open space, trails, & roads – tracked closely with a prior application submitted by Village Homes, Inc. in 2008. The 2008 application was for 62 single-family homes and was ultimately withdrawn.

At both meetings it was noted by the Applicant that the sketch plan demonstrated substantial compliance with the municipal code, adopted model codes, public works manual, and the Comprehensive Plan (CP). Staff acknowledged that the overall *design* conformance was substantial, however, it disputed the degree of continuity with the CP and aspects of the CVR Master Plan. Staff maintained that though strict compliance with the CP is not compulsory – and in some cases not practical – the CP is intended to provide qualitative and quantitative guidance for future land use. It is an instrument used to discover what manner of development

mutually benefits the needs of the Town and the aspirations of the developer.

The sketch plan process produced points of consensus and debate. Those included:

Points of Consensus:

- For a preliminary/final application, all submittal components need to be thorough and complete prior to meeting with Council.
- The Applicant's product – triplexes on Redstone Dr and Foxwood Ln – has generally been well received by buyers. The units are energy efficient with various modern amenities.
- The typical price-point has been competitive with Lower Valley multi-family development.
- High density residential is better suited along and south of Castle Valley Blvd. (CVB) rather than in the vacant parcels to the north of CVB.
- Land use proposals should prioritize the health and well-being of the community.
- The developer is currently party to a restrictive covenant committing them to no more than 303 additional residential units and no commercial development.
- An east-west connector trail should be integrated into the design.
- A looped raw water system is best practice for landscape irrigation.
- View planes should be preserved as much as feasible.

Points of Debate:

- Two-thirds of the proposed development consists within a mixed-use zone as specified by the CVR Master Plan. Areas of strategic, small-scale commercial development should be considered in fidelity with the vision of mixed-use in the *CP*.
- Pedestrian circulation should be improved to provide direct access to open space, parks, and other areas throughout the CVR PUD.
- Diversity of dwelling units should be included into the design rather than the same style throughout.
- The density and design of multi-family homes seemed misplaced when directly bordering larger single-family homes on S Wildhorse Dr. Transitions should be more subtle.
- Trail connectivity was limited. The proposed Open Space C was not useful. A park amenity would be a better use of that location.
- Off-street parking, though compliant with codes, would create ongoing challenges for traffic flow and snow storage given the density, road widths, attached sidewalks, and propensity of residents to have more than two cars per household or using their garages as storage.
- Snow storage was not adequately specified on the site plan.
- C Ave might be considered for a future emergency access road, in hindsight to the small fire that broke out on Mt. Medaris in the summer of 2019.
- There should be separation between the curb and sidewalk for pedestrian safety and snow storage.
- The proposal did not sufficiently represent the Smart-Growth model endorsed by the *CP*. Smart-Growth promotes sustainable communities with compact residential mixed with commercial amenities and services, all reasonably accessible without vehicles.

- There was dissatisfaction with not knowing the development plan with the neighboring parcels. Without visibility it would be difficult to assess the appropriateness of the current proposal with the overall community. A master plan amendment was recommended to flesh-out those details.

Per Council request, the Applicant presented the conceptual plan to the general public at an open house. The meeting unfortunately was not well attended, but the few attendees did provide feedback based on their perception of Redstone Dr. & Foxwood Ln. and their recollection of the original application for Filing 11 in 2008. The units have generally been well-built and at an attractive price-point to a variety of consumers. However there was comment that the build-out could have better planned for parking, traffic flow, and non-vehicular movement.

### **III Current P&Z Preliminary/Final Application:**

On February 10<sup>th</sup>, 2020 the Applicant submitted preliminary and final applications for a combined PUD & Subdivision plan in planning areas 17 & 19 of CVR (a.k.a. Filing 11). The application was considered complete on March 23<sup>rd</sup>, 2020. A preliminary/final application with P&Z should demonstrate rigorous compliance with the adopted codes, provisions for utilities and infrastructure, substantial conformance with the CP, and minimize any adverse impacts to the Town. The Commission's recommendation shall be delivered to Council within 30 days of the close of the hearing, per MC 17.100.080. The Commission can take one of the following actions at the hearing:

- Approve the application with or without conditions;
- Deny approval of the application;
- Continue the hearing pursuant to MC 16.08.040 § G.

In what follows, the application will be assessed according to the criteria outlined in MC 17.100.090:

1. Generally compatibility with adjacent land uses;
2. Consistency with the comprehensive plan;
3. Town's capacity to serve water and sewer and provide fire and police protection;
4. Whether land uses are permitted outright or by special review;
5. Whether number of dwelling units permitted by the underlying zoning districts is not exceeded by the PUD plan;
6. Whether the PUD utilizes:
  - i. the natural character of the land,
  - ii. provides for off-street parking, vehicular, pedestrian and bicycle circulation, outdoor recreation,
  - iii. is of overall compatible architectural design,
  - iv. achieves adequate screening, buffering and aesthetic landscaping,
  - v. avoids development of areas of potential hazard, ensures compliance with the performance standards and meets all other provisions of this title.

#### **IV CVR Purpose and Approval Criteria:**

##### *Castle Valley Ranch PUD – Purpose*

According to Municipal Code section 17.104.010, the purpose and intent of the Castle Valley Ranch PUD zone district regulations are to:

1. Encourage variety in the physical development pattern of Castle Valley Ranch;
2. Provide a variety of housing densities greater than would be normally possible;
3. Encourage the use of a more creative approach to the development of land;
4. Encourage a more efficient, aesthetic and desirable use of open space;
5. Encourage a more efficient use of energy through solar orientation, native vegetation, and water conservation;
6. Provide a variety of dwelling and building designs;
7. Provide high standards of development and provide amenities appropriate to the densities involved in the project;
8. Provide an integrated open space system throughout areas as outlined on the Castle Valley Ranch PUD zoning plan as well as throughout individual districts;
9. Provide for a variety of housing types in order to best meet the housing demands of all age groups;
10. Maintain and preserve the general alignment of drainage ways for aesthetic, energy and functional purposes;
11. Provide pedestrian networks throughout the open space districts as well as throughout individual districts thereby providing an integrated network throughout the entire development;
12. Provide landscape areas and tree plantings throughout the entire development.

It is helpful to have these priorities in mind when considering an application's degree of conformance with the following approval criteria.

##### *Approval Criteria*

#### **1) Is the proposal generally compatible with adjacent land uses?**

The property is surrounded by mixed-use and residential zoning. Currently all surrounding development consists of either single family homes or multifamily dwellings. The proposed units are modeled after the tri-plexes located off of Redstone Drive – sized between 1,600sf & 1,796sf – and include four designated open spaces.

**Staff Comment:** Since the adjacent land uses are comprised of residential and open space, and the proposal resembles the tri-plexes built in Filing 9 on Redstone Ln. and Foxwood Dr., it is reasonable to conclude that the proposal is broadly compatible with surrounding uses.

There is some apprehension with the blunt transition from large single family homes directly to the west (3,000-4,000 sf on S Wildhorse Dr.) to the higher density 3 & 4-plexes proposed. The transition to higher density may have some adverse effects on property assessments in one way or another. Because of added congestion, noise, loss of view planes, without additional amenities the homes on S Wildhorse Dr. could suffer from external obsolescence. Conversely the close proximity of the higher value homes to the proposed development may artificially inflate the property values

of the multi-family homes. These effects might be avoided by replacing some of the multi-family lots with smaller single family dwellings, particularly on the west side of Eagle Ridge Dr. Alternatively these threats might be mitigated with increased open space and ample landscape buffers.

Finally, it is difficult to assess future compatibility of the proposal with the undeveloped properties to the east – parcels which the Applicant currently owns. For example, were the current application to be approved, how would it impact the future design of the mixed-use zone PA17 to the east? At this time the expectation for this parcel is unknown. With greater visibility, however, the Town would be in a better position to determine the suitability of the current application.

Degree of Conformance: Moderate/High

## **2) Is the proposal consistent with the comprehensive plan?**

The CP anticipates future development to follow the Smart-Growth model (Goal CG-5). Values of smart-growth include:

- Livability
- Efficiency
- Affordability
- Environmentally Conscious

Central to this model is the concept of “place-making”. Place-making is a strategy promoting attractive, livable communities which, in turn, drive place-based business and investment while discouraging economic outsourcing. The community’s intrinsic strengths are primary to all development concepts. Incremental building, balanced housing types, transit alternatives, recreational opportunities, and even commercial services are believed to help create attractive communities which are environmentally friendly and compatible with the community’s needs. The CVR Master Plan purposely arranged mixed-use zones contiguous with residential zones to help preserve a place for services, amenities, and public wellness to achieve these ends.

**Staff Comment:** The Applicant proposes higher density townhomes. This is a helpful first-step in restraining sprawl and resonates with the more urban flavor specified by the CP. The proposal speculates that higher density should furnish more affordable options for young families, professionals, or those looking to downsize (CP Goal HO-2). Though this affordability is not at the level of deed restriction, the units should match an attractive price-point in the Valley.

Higher density should not, however, sacrifice health and wellness. Staff believes the current proposal risks sacrificing livability with the congestion caused by bulk residential growth. A balance might be struck by eliminating some buildings while increasing some tri-plexes to four-plexes. Or, reduce all four-plexes to three-plexes. With livability in mind this move would create greater buffer space between structures to meet the topography challenges, snow storage needs, trail placement, and parking limitations discussed below.

The CP expects a balance of land-uses particularly with development over 50 lots (CP Goal CG-4A) and especially when the development lies within a mixed-use zone. A mixture of home designs, integrated service amenities, non-vehicular connectivity, and generous open space will go a long way in improving community wellness and pairs better with the tenants of Smart-Growth.

The proposal demonstrates dedication of the required 10% of lands with a grade less than 35%. This amounts to ~1.5 acres of land. The adequacy of this dedication is discussed below. Other than space allocated to pedestrian paths, only Open Space C is reserved for potential recreation (CP Goal POST-2).

The Colorado Parks & Wildlife referral indicates that the current proposal would continue to compromise wildlife habitat. The referral concludes, "If the opportunity exists for creating wildlife movement corridors on the edges of this development, they should be reclaimed using appropriate vegetation and should contain visual and noise barriers. Some wildlife species may still attempt to access the area to the south of this development, so a vegetative barrier may provide some mitigation for the disruption at the site" (CP Goal EN-1).

Is the project sustainable? The CP (Goal CG-7) and MC (17.100.060) requires a fiscal impact study by final application to determine the future fiscal sustainability of public improvements. However because of the many variables and costs involved in a fiscal analysis, a full-on return on investment study was not requested. In theory, a fiscal analysis would indicate that the Town is better off with rather than without the proposed development. Some beta to help demonstrate this benefit:

- The Town has historical placed the burden of the initial infrastructure improvements on the developer (Goal I-1A).
- The application narrative explains that the 91 units will generate roughly \$1.66 million in permit fees, water taps, recreation fees, and use tax. However, other than use tax (~13% of permit fees or \$221,000 of the \$1.66 million) and recreation fees (\$45,500 for all 91 units), permit fees are usually a zero sum.
- The Town can expect revenues for infrastructure through a portion of the 8.551 mills on property assessments. For an average townhome in New Castle this amounts to \$210/year.
- The Town can expect revenues from sales tax (29% of all sales taxes is reserved for road maintenance and another 21% is reserved for parks and recreation).
- According to Public Works, the rule-of-thumb is that the Town typically depends on \$3,640/year per lane-mile for road paving and utility repair.

A fiscal impact study would combine these metrics with other dynamics to demonstrate the economic feasibility of development. For now it should help stimulate thought regarding known revenues and expenditures.

Degree of Conformance: Low/Moderate

**3) Does the town have the capacity to serve the proposed use with water, sewer, fire and police protection?**

Per the 2002 Second Amended Castle Valley Ranch Annexation Agreement, the Castle Valley Ranch PUD is has been allocated a maximum of 1400 total units. Currently an estimated 530 lots remain vacant. Dedicated water rights are still available for the proposed development.

**Staff Comment:** Public Works has confirmed that adequate water and sewer capacity are available for the number of lots proposed. According to the CP and the CVR Master Plan, a raw water loop for all landscape hydration should be featured. A water testing station for the Filing 11 has also tentatively been planned per Public Works recommendation.

All Staff have responded negatively to the width of the proposed road right-of-ways (ROW). Currently the proposed design is for 50' ROW or 37' flowline-to-flowline. This includes two 10.5' drive lanes, two 8' parking lanes, and two 5' attached sidewalks. This indeed is the minimum requirement for all local residential roads (MC 16.28.050 SH). To improve public safety, snow storage, and optimize the pedestrian experience, Public Works recommends detached sidewalks with an additional 5' green buffer. The result would be a 60' ROW similar to N Wildhorse Dr and other collector streets. The Police Chief would preference limiting parking to one side of street based on the poor track record of moving emergency personal and equipment in the Town's multi-family residential neighborhoods.



The 50' ROW in the higher density neighborhoods becomes increasingly problematic when snow storage is taken into account. Firstly, it is not easy to push snow down the middle of the street with 21' of total travel lane and vehicles parked on both sides. The driver must be attentive to snow "wake" or throwing snow from the blade into the sides of vehicles. Secondly, when snow storage is poorly located, snow



removal becomes highly inefficient and expensive. On heavy snow days, snow will be pushed into large piles in vacant parking spaces for staging until loaders and trucks haul it off – pushing snow is quick and inexpensive; Lifting and hauling snow is unreasonable when other alternatives for street design are available. Finally, with vehicles parked on both sides of the street, snow crews usually must return multiple times to clear area where vehicles were originally parked. In the end,

narrower ROWs usually bring a cost advantage to a developer. However for the Town of New Castle, the minimized widths have proven to be an ongoing challenge.

**Degree of Conformance: Moderate**

#### 4) Are the uses proposed within the PUD permitted outright or by special review?

The proposal spans two distinct zones according to the CVR Updated Master Plan Map. A residential zone, colored in dijon, comprises the northern third of the development (5.1ac). The southern two-thirds, identified in red, is zoned mixed-use (8.8ac). The Applicant indicates that the site specific zoning is entirely multi-family MF-1, defined as a “multifamily townhouse and patio home district allowing for creative approaches to development with housing alternatives that are sensitive to existing and surrounding land uses” (17.104.080 A.3). In both residential and mixed-use zones, townhomes are permitted by right.

**Staff Comment:** Though the use intended is one of several permitted by right, the commitment to only residential development in a zone dedicated to mixed-use is not how the code defines mixed use in CVR (MC 17.104.080). Mixed use is purposely designated for a mixture of uses in accordance with the Smart-Growth model discussed earlier:

- MU-1: “mixed use district providing a mix of residential and nonresidential land uses within close proximity to each other that are suitably located within the community core.”
- MU-2: “mixed use district providing a mix of residential and light industrial, office uses within close proximity to each other where complementary business uses may be permitted, and where higher intensity uses will be permitted that may not be suitable within the community core.”

Nevertheless, converting the MU zones to all residential has become an all too common practice for developers in New Castle. Understandably, the alternative – nonresidential/commercial development – comes with economic risk, for it is arguably more difficult to fill commercial space. However, as noted in a previous development application, the Town struggles to correct the current imbalance between residential and commercial, which has contributed to fiscal disparities.

Staff contends that demand from the community plus demand from business interests makes provisions for commercial services and vendors more viable than in years past. The current Lakota Canyon Ranch Deli and the former veterinary clinic on 7<sup>th</sup> Street are testaments to successful business approaches integrated within predominantly residential areas. Fourmile Mountain Market in Glenwood Springs, Southside Drive in Basalt, and Eagle Ranch in Eagle are further instances of discrete commercial ventures in the heart of established residential neighborhoods.

Staff maintains, then, that the developer consider strategic locations for smart commercial options in their development plans. One suggestion might be to negotiate a zoning change which dedicates specific locations and/or functions that are deemed viable commercial areas. To move forward without any considerations means the permanent loss of another nine acres of the Town’s limited mixed-use property.

**Degree of Conformance: Low/Moderate**

**5) Is the number of dwelling units permitted by the underlying zoning districts exceeded by the PUD plan?**

The number of dwelling units in Castle Valley Ranch is restricted in two ways: 1) total number of units for all of Castle Valley and 2) minimum lot area per dwelling unit provided in tables found in MC 17.104.080 §H. Currently there are approximately 530 vacant lots in the Castle Valley PUD. With approximately 186.5 usable acres remaining, the average density would approach 2.8 units per acre. Furthermore the Applicant has elected the MF-1 zoning designation which limits the lot size for residential units to no smaller than 2,200sf. At this lot size the allowed density could approach an unrealistic 19.8 units/acre. The Castle Valley mixed-use zones are also allocated up to 100,000 aggregate square feet of commercial space which, like Lakota Canyon Ranch, has yet to be developed.

**Staff Comment:** The present application represents 91 units on 15ac for a density of 6.1 units per acre which, though more than double the average remaining density in Castle Valley Ranch, is far less than the 19.8 units/acre which could be allowed. If this proposal were approved the average remaining density would then fall to 2.6 units/acre. Staff believes this is manageable in theory.

In sum, though the density is significantly higher than many parts of the overall PUD, it would not affect the build-out of other parcels too adversely. For this application density, strictly speaking, should not be in conflict with the code requirements.

Degree of Conformance: High

**6) Does the PUD proposal:**

- i. **Provide off-street parking** – Castle Valley requires two off-street parking spaces per unit (17.104.100). The proposed design shows single-vehicle garages, with the driveway providing the second off-street parking space. As observed on Redstone Drive, the Riverpark Condos, and the Pyramid Peak Townhomes, this design is less than optimal and, as discussed above, compromises quality of life. In practice, these garages are used for storage, the driveway used for one vehicle, and the ROW used for all remaining vehicles. Together with sidewalks without green buffers, garbage bins in the driveway, and cars along the curb the congestion makes for an unpleasant pedestrian experience and undermines the appeal of the community. Other options exist. Staff encourages the Applicant to consider alternatives.
- ii. **Utilize the natural character of the land** – Due to the moderately sloped topography of the proposed 15 acres, some cut-and-fill will be required for construction feasibility. On the north two-thirds of the property, the Application will provide stepped lots. The lot lines will likely require retaining features such



as simple stacked-rock walls or wood tie retention. To date, these details have not been furnished.



Moving south in the development creates greater design challenges and topography alterations. Buildings 12 & 13 will require up to 36' of structural fill at the base of Ganley Hill. To remain below an 8% road grade the natural land contours will require alteration. At some point significant fill material will likely need to be moved or imported to the future Filing 12 to match the eastern grade with Filing 11. To retain the property's natural character measures such as these should be kept to a minimum.

- iii. **Provide pedestrian and bicycle circulation** – Proposed sidewalks help to provide safe egress from the street-to-home or from home-to-home. The CP (CP Goal T-1) envisions more for pedestrian circulation. Specifically non-vehicular trail systems should contribute to local recreation. Staff feels the current design has a solid start with 8' paths included to the north and to the west of the development. Staff maintains that trail connectivity could be increased internal to the development with small modifications to the development plan. A connecting 8' trail at the south end of Filing 11 and one that bisects the development is advised.



- iv. **Provide outdoor recreation** – Other than the existing Avenue C trail and a small centrally located pocket park, there is no realistic component of outdoor recreation to this proposal. The 2008 application included a central one acre lot that was accessible from two streets. Staff encourages the development to have more useable open space than currently proposed. Elimination of Building 20 at a minimum with some grading changes will be a positive step in creating usable recreation space. An east-west connecting trail, is included in this plan set along the south end of Eagle Ridge Dr. to Bear Canyon Dr. Adding a landscape buffer of at least three feet along this trail will provide better safety for pedestrian travel.



- v. **Is of overall compatible architectural design, achieves adequate screening, and ensures compliance with performance standards** – The overall architecture will generally follow the design aspects of the approved townhomes located on Redstone Drive and Foxwood Ln. However, many of the buildings will be enlarged to four-plexes. Landscaping and screening are identified on sheets L1.0-3.0. All landscaping shall conform to requirements set forth by the relevant Town codes and verified by the Parks Department. The Applicant will be expected to agree to the performance standards adopted by the Town.

Degree of Conformance: Moderate

## **V. Subdivision Approval**

A subdivision application will be approved by Town Council only if it is found to be compliant with the criteria set forth in MC 16.16.030. A subdivision plat will be provided at the preliminary stage of the application and will be reviewed by the Town attorney and engineer for compliance. Per PZ 2019-5, "One or more amended plats to define the boundaries of the individual units within each building shall be prepared for each building envelope based on as-built surveys after construction, which may be approved on staff level." Sale of individual units may not occur until the amended plat is recorded with Garfield County. Any revisions and corrections will be made prior to Council meeting.

## **VI. Staff Recommendations:**

Staff recommends the Planning Commission explore the following alternatives to the proposal prior to deciding on Resolution 2020-06:

1. Integrate areas of strategic commercial development within the mixed-use zone of the CVR master plan.
2. Soften the transition created by the juxtaposition of large single-family homes with multi-family townhomes.
3. Improve the parking arrangement and resulting traffic congestion that results from parked vehicles along both sides of the streets.
4. Expand road ROWs to include 5' green buffers between road and sidewalk.
5. Improve pedestrian circulation to provide direct access to open space, parks, and other areas of Castle Valley Ranch. Create greater trail connectivity. Possibly add an east-to-west trail corridor throughout development and along the southern property border
6. Expand Open Space C to include useable recreation space.
7. Provide a general plan for the vacant parcel east of the proposed development in order to guide considerations for how best to use the mixed-use zone, trail routing, and road configuration.
8. Eliminate Buildings 12 & 13 in order to minimize fill material at the south end of the property and retain the natural topography.
9. Consider more strategic places for snow storage to minimize removal efforts by Public Works.
10. Design C Ave as part of a greater wildlife corridor potentially accessible by emergency vehicles when needed.
11. Street names be approved through Garfield County Communications to avoid any duplication of names in the county dispatch area.

**Administration Department**  
 (970) 984-2311  
 Fax: (970) 984-2716  
[www.newcastlecolorado.org](http://www.newcastlecolorado.org)



**Town of New Castle**  
 PO Box 90  
 450 W. Main Street  
 New Castle, Co 81647

## DEVELOPMENT APPLICATION

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| <b>Applicant:</b> CVR Investors, Inc. and its assigns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Address:</b><br>5282 Red Pass Way, Castle Rock, CO 80108                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Phone:</b> 303-549-1916<br><b>FAX:</b><br><b>E-mail:</b> <a href="mailto:aa@hackstafflaw.com">aa@hackstafflaw.com</a>                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Property Owner:</b> CVR Investors, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Address:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Phone:</b><br><b>FAX:</b><br><b>E-mail:</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Contact Person:</b> Aaron Atkinson                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Address:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Phone:</b><br><b>FAX:</b><br><b>E-mail:</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Property Location/Address:</b> Castle Valley Ranch, New Castle, CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Legal Description:</b><br>See Attached                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Acres:</b><br>Text                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Existing Zone</b> ( <a href="#">Not sure? Click here for help</a> ): R and M/U2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Existing Land Use:</b> Vacant Land                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>TYPE(S) OF LAND USE(S) REQUESTED</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Pre-Annexation Agreement<br/> <input type="checkbox"/> Annexation<br/> <input checked="" type="checkbox"/> Subdivision (Including Minor and Major Subdivisions, Lot Splits, Sketch Plans, Subdivision Preliminary Plans, Subdivision Final Plans, &amp; Condominiumizations)<br/> <input type="checkbox"/> Amended Plat<br/> <input checked="" type="checkbox"/> Planned Unit Development (Including PUD Sketch Plans, Preliminary PUD Development Plans, PUD Master Plans and Final PUD Development Plans)<br/> <input type="checkbox"/> Floodplain Development Permit         </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Lot Line Adjustment or Dissolution<br/> <input type="checkbox"/> Site Specific Development Plan/Vested Rights<br/> <input type="checkbox"/> Variance<br/> <input type="checkbox"/> Zoning<br/> <input type="checkbox"/> Zoning Amendment<br/> <input type="checkbox"/> Re-zoning<br/> <input type="checkbox"/> R-1-HC Identification<br/> <input type="checkbox"/> Conditional Use Permit or Special Review Use Permit<br/> <input type="checkbox"/> Other         </td> </tr> </table> <p style="text-align: right; color: red;">*Combined Preliminary/Final Application</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> Pre-Annexation Agreement<br><input type="checkbox"/> Annexation<br><input checked="" type="checkbox"/> Subdivision (Including Minor and Major Subdivisions, Lot Splits, Sketch Plans, Subdivision Preliminary Plans, Subdivision Final Plans, & Condominiumizations)<br><input type="checkbox"/> Amended Plat<br><input checked="" type="checkbox"/> Planned Unit Development (Including PUD Sketch Plans, Preliminary PUD Development Plans, PUD Master Plans and Final PUD Development Plans)<br><input type="checkbox"/> Floodplain Development Permit | <input type="checkbox"/> Lot Line Adjustment or Dissolution<br><input type="checkbox"/> Site Specific Development Plan/Vested Rights<br><input type="checkbox"/> Variance<br><input type="checkbox"/> Zoning<br><input type="checkbox"/> Zoning Amendment<br><input type="checkbox"/> Re-zoning<br><input type="checkbox"/> R-1-HC Identification<br><input type="checkbox"/> Conditional Use Permit or Special Review Use Permit<br><input type="checkbox"/> Other |
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| This development would create <u>91</u> residences and <u>0</u> square feet of commercial space.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Applicant must also complete and submit the appropriate <a href="#">checklist</a> for the type of land use requested. Both the applicant and the property owner must sign this application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Applicants are encouraged to schedule a pre-application meeting with the Town Administrator and/or Town Consultants prior to submitting this application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

**CVR INVESTORS, INC.**

5282 Red Pass Way  
Castle Rock, CO 80108  
303.549.1916

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April 30, 2020

Via Electronic Mail

Town of New Castle  
Attn: Planning & Zoning Commission  
P.O. Box 90  
New Castle, CO 81647

Re: *Application for Combined Preliminary/Final Plat Approval for Filing 11-AMENDED*

Dear Commissioners:

We are tendering our application for combined final/preliminary plat approval in regards to Filing 11 in Castle Valley Ranch. The following outlines our fundamental basis for the application.

As witnessed during the Sketch Plan process in late 2019, our application meets all the objective criteria outlined in section 17.100.090 of the Town Code. The only item from Sketch Plan which Staff identified as less than "Moderate" conformity with the Code involved the question of the uses proposed being within the PUD permitted outright or by special review. (Sketch Plan staff report of 9/9/19 at 5.)

With regard to the uses as being permitted, objectively the uses are permitted by right, as confirmed by Staff: "[i]n both residential and mixed-use zones, townhomes are permitted by right." (Sketch Plan staff report of 9/9/19 at 5.) As such, it is difficult for us to accept anything less than a "high" level of conformity with that requirement.

While we understand the Town's interest in being comfortable with the prospect of future commercial development, we have a pending application in which we've outlined our position on commercial development, which we incorporate here. In sum, like the Town, we are interested in smart growth in New Castle, and we firmly believe that this filing furthers that goal.

Nevertheless, in response to queries and concerns from both the Planning & Zoning Commission, as well as Town Council, we have made several alterations to our submittals. First, we have widened the southerly sidewalk to 8' as an east-west trail connector to future development. Further, we have added a bulk of parking spots at the

southern border of the parcel for both snow storage as well as to provide residents and guests with convenient parking which does not unduly restrict traffic flow. Finally, we conducted a community forum at the strong urging of both Town staff and City Council. While there were only three citizen attendees (not including a few Councilmen and staff members), we did address questions and concerns from them and were pleased to do so.

I. NATURE, DESIGN & APPROPRIATENESS OF PROPOSED LAND USE  
ARRANGEMENT FOR SIZE & CONFIGURATION OF PROPERTY  
INVOLVED

Castle Valley Ranch Filing No. 11 covers an area of Castle Valley Ranch (approximately 13.538 acres). Under the Master Plan, this parcel spans vacant land which is presently zoned for residential use, and also spans vacant land which is zoned as mixed use. Our company has a pending development application to have the entirety of Planning Area 17 (as well as the remainder of this company's holdings in New Castle) designated as "Residential" in the map attached to the Master Plan, which will include a portion of this filing.

Castle Valley Ranch Filing No. 11 will plat only the westerly half of the remaining undeveloped portion of Castle Valley Ranch immediately south of and adjacent to Castle Valley Boulevard.

As the Commission witnessed during the Sketch Plan process for this filing, the Applicant has met all of the objective requirements of the Town of New Castle for this development. Attached hereto are the other materials in compliance with section 16.16.020 and 16.16.030 of the New Castle Town Code.

The proposed development will contain triplex and four-plex structures conceptually similar to the product in Filing 9, which lies immediately north of Castle Valley Boulevard from this parcel. It is anticipated that there will be 27 lots, which will largely be comprised of triplexes with several four-plexes.

Nestled within the center of this development will be a neighborhood park for the enjoyment of the Castle Valley Ranch residents. It will be reached via a public sidewalk and trail system which will connect to the west to an extended existing pedestrian trail bisecting Filings 8 & 11 and reaching Castle Valley Blvd. at the northwest corner of Castle Valley Ranch Filing No. 11. This is the Avenue C trail connection.

Vehicular access to this community will be from a single point of connection, with a divided entry, to Castle Valley Blvd., as depicted on the Final Plat.

All road improvements for Castle Valley Ranch Filing No. 11 are designed to be public and include paved public streets and sidewalks built to localized street standards.

Public water lines will be provided and will connect with an existing water main in Castle Valley Blvd. to the north and existing water mains to the west, serving existing residents

in Castle Valley Ranch Filing No. 8. A sanitary sewer main tie-in to be constructed offsite from Avenue C to Castle Valley Ranch Filing No. 11 will connect these homes to the Town's sewer system. Storm drainage will be handled through the street system and off-site storm sewers leading to two detention ponds to be constructed within the open space south and west of this development and to an area just to the east of the Castle Valley Ranch Filing No. 11 boundary.

This neighborhood meets the standards as set out in Title 16 Subdivisions, Chapter 16.28 Design and Improvements Standards of the Town's code. There are no natural hazards on the property or land with slopes greater than 35%.

Lots will be designed to be compatible with the zone district regulations of MF-1 within the residential and MU-2 zoned areas of this property.

All homes will be subject to and made a part of the existing Castle Valley PUD Homeowners Association. In addition, these townhomes will be subject to and made a part of a new sub-association unto itself. The covenants of this sub-association will resemble those of the Filing 9 townhomes, and they will be at least as restrictive as the Filing 9 covenants. They will be more tailored to this particular development and will be reduced to writing as development progresses.

## II. STATEMENT OF PRESENT OWNERSHIP & LEGAL DESCRIPTION OF ALL LAND WITHIN PLANNED UNIT DEVELOPMENT

All of the land referenced in this application is owned by CVR Investors, Inc., and the legal descriptions of the parcels in question are attached hereto.

## III. GENERAL INDICATION OF ANTICIPATED DEVELOPMENT SCHEDULE

The proposed development schedule for Castle Valley Ranch Filing No. 11 will be broken into three phases; the first is depicted on the attached plat. We intend to commence development of Phase 1 as soon as an approved Final Plat for this development can be recorded. We would request that the approval of future phases in accordance with this application be approved through staff review without the necessity of the formal approval procedures (provided, of course, there is no substantial deviation from what is currently being proposed).

## IV. COMPLIANCE WITH COMPREHENSIVE PLAN

As far as the objectives of the New Castle Land Use Plan, this plan affords compatibility with the character of the overall community and enhancement of existing public infrastructure.

The homes and neighborhood we are proposing fit into both Castle Valley Ranch and New Castle, as they are an updated extension of existing neighborhoods. None of the character that exists in Castle Valley Ranch today will be lost.

One of the goals of the Town's Comprehensive Plan is to afford development of a variety of housing types: "[e]nsure a variety and mix of uses that complement the existing New Castle land-use patterns." (Compl. Plan at 33.) Even though the proposed structures of this subdivision are all multi-family in nature, we believe that this filing meets that objective. This is because the Comprehensive Plan did not limit its scope merely to each proposed filing. For example, in 2009 the Comprehensive Plan states that "The majority of [the 1657 estimated housing units at that time] are single-family residences." (Comp. P. at 19.) Those multi-family units identified by the Plan in 2009 essentially remain the only multi-family products in the Town to this day. Only 18% of the dwellings in 2009 were multi-family units. Across the map of The Town of New Castle, there has been a need for multi-family development, which is met by our filing.

The Plan seeks to enrich the community at large with a variety of housing types across the entire Town of New Castle. At present, there is a dearth of multi-family offerings in New Castle, and this is a very under-served market for New Castle residents according to the Comprehensive Plan. Our filing squarely meets that longstanding, community need, and promotes community growth. (Goals CG-1 and CG4E, Comp. Plan at 50 and 52.)

We have also provided for non-motorized access and interconnection between areas of the Town in our filing. (Compl. Plan at 33.) With the vital Avenue C trail connection, we are ensuring the cohesiveness of the entire New Castle community—bridging a geographical gap between the residences of Castle Valley Ranch and Lakota Canyon with the commercial enterprises of downtown New Castle. (Goal RT-1, Comp. Plan at 55.)

The attached plat incorporates open spaces and parks that are also part and parcel of the goals of the Comprehensive Plan (Comp. Plan at 33.) This is commensurate with the goal of providing different land-use categories within the filing: parks/open/space/trails, non-motorized access and large residential areas. (Goals CG-4 and POST-1, Comp. Plan at 52.) And, because irrigation will be accomplished through the use of raw water lines, there is recognition and appreciation for water use and energy conservation. (Goal I-1, Comp. Plan at 54.)

In short, this filing substantially complies with the terms of the Master Plan—even moreso given the market-based changes that we have witnessed since its creation in 2009. We have also exhibited an elevated level of compliance with the conditions in section 17.100.090 of the Town Code.

## V. FISCAL IMPACT

The proposed filing 11 will serve to bring more property taxes to Garfield County, and could also augment the sales tax revenues for the Town of New Castle through new

potential residents to the Town. The sales taxes are extensive, as well, given the goods and services that the new residents of Filing 11 will purchase from local businesses.

This is the most affordable product in the New Castle market at this time, and buyers of townhomes at Filing 9 have oftentimes been wealthy retirees. These individuals are typically a benefit to the New Castle community in that they do not require the use of much of the Town infrastructure (such as schools, for example), and have sufficient resources such that they do not draw off of the Town's resources.

There will also be a subassociation governing Filing 11, which will be subservient to the Castle Valley Ranch Master Association. These will obviously provide other layers of maintenance cost mitigation over this parcel, including upkeep of the open spaces and sidewalks. As the declarant of the Castle Valley Ranch Homeowners Association, and being familiar with the terms and provisions of the covenants of the PUD, we anticipate no obstacles to the success of the plat, the dedication of land and other attributes of this proposed filing.

The Town, for its part, will be assuming responsibility for long-term maintenance of sewer and water lines; and road maintenance, including re-surfacing the streets. However, we expect TONC building fees to be around \$18,000 per unit; when multiplied by 91 units, this totals \$1,638,000 of revenue to the Town upon complete build-out of the filing. It's also important to consider real estate property taxes, which are expected to at least cover the utilities and road maintenance in New Castle.

All in all we are very enthusiastic about our plans to build and develop in New Castle. It is important to us that we maintain close ties and work together with the Town in this and in all other facets of our development. Thank you.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. Aaron Atkinson". The signature is fluid and cursive, with the first name "J." being prominent and the last name "Atkinson" following in a similar style.

J. Aaron Atkinson  
President  
CVR Investors, Inc.



April 30, 2020

Mr. Dave Reynolds, Town Administrator  
Town of New Castle  
P.O. Box 90  
New Castle, Colorado 81647

**RE: Filing No. 11, Castle Valley Ranch Planning Area #17  
Preliminary and Final Plan Review - SGM Response**

Dear Dave,

The purpose of this letter serves to provide a summary response regarding the proposed development of Filing Number 11, PA #17 of Castle Valley Ranch Subdivision. We are responding to the survey, civil and infrastructure-related comments provided by the following:

1. Public Works Department
2. Burning Mountain Fire District
3. Town Engineer
4. Town Attorney

Following review of the above Town comments, we have the following response:

**1. Public Works Department**

- a. **Streets and sidewalks** – The proposed street section for Bear Canyon Drive is (2) 10.5 ft travel lanes, (2) 8 ft parking lanes, and (2) 5 ft sidewalks, a flowline to flowline width of 37 ft and a Right-of-Way (ROW) width of 50 ft. Bear Canyon Drive is planned to serve PA 17, and PA 19 to the east in the future. The future development area of PA 17 and 19 served by Bear Canyon Drive is approximately 33 acres.
  - i. Recently, relatively in the history of Castle Valley Ranch, the constructed streets of North and South Wildhorse Drive have a similar flowline to flowline width.
    1. North Wildhorse serves over 90 acres, has a ROW of 70 ft with detached sidewalks of 5 ft and 8 ft in width, 5 ft green belt. North Wildhorse is the access to VIX Park.
    2. South Wildhorse serves over 60 acres, has a ROW width of 50 ft with attached 5 ft sidewalks, no green belt.
  - ii. Based upon the development area served, Bear Canyon Drive is similar in nature to South Wildhorse Drive, with 50% of the development area. Bear Canyon Drive should be held to the same standard as South Wildhorse Drive.

- iii. Detached sidewalk has created drainage and road failure issues in Lakota Canyon Ranch
- b. **Falcon Ridge Court** is designed as a "K" turnaround and can be accessed by a Fire Truck which has the ability to utilize 74 ft and 115 ft legs for a 3-point turn similar to hammerhead in the Capital Court area of CVR. Comment #3 from BMFD accepts this as a fire truck turnaround.
- c. **Snow Storage** areas are not defined by Code or Public Works Manual in terms of location or required area. We have attached a plan showing proposed snow storage that considers temporary storage by phase and permanent storage locations. Below is a table based on the plan that provides the areas of those potential temporary and permanent locations.

| CVR PA 17 - SNOW STORAGE (SF) |            |       |                        |           |
|-------------------------------|------------|-------|------------------------|-----------|
| PHASE                         | PAVED AREA |       | AVAILABLE SNOW STORAGE |           |
|                               | @ 10%      | @ 15% | TEMPORARY              | PERMANENT |
| 1                             | 3300       | 5000  | 6000                   | 3300      |
| 2                             | 2500       | 3800  | 4000                   | 9900      |
| 3                             | 3300       | 5000  | 2000                   | 4200      |
| TOTAL                         | 9100       | 13800 |                        | 17400     |

- d. **Open Space** comments are noted and will be accommodated.
  - e. **Potable Water** – a sample station will be provided in the proposed location.
  - f. **Tracer wire** will be provided on all utilities.
  - g. **Fire Hydrants** will be Mueller brand.
- 2. Burning Mountain Fire District**
- a. **Project phasing** will provide Town-accepted infrastructure prior to vertical construction.
  - b. **Project phasing** will provide Fire Truck turnaround for each phase.
  - c. Remaining comments are noted.
- 3. Town Engineer**
- a. The comments are noted and will be addressed prior to Final Plan review by Council. The construction level detail nature of the comments can be addressed without changing the development or infrastructure layout. The comments will not affect the SIA to any significant percentage. Most of the comments pertain to either; infrastructure phasing detail, off-site sewer improvements (previously bid in 2008 by the Town), or recently implemented Subsurface Utility Engineering requirements; again, all technical comments that can be addressed without material change to the development or infrastructure plan.
- 4. Town Attorney**
- a. Redline comments will be coordinated with Garfield and Hecht and addressed prior to Final Plan review by Council.

SGM

  
 Dan Cokley, P.E.  
 Principal



## COLORADO

### Parks and Wildlife

Department of Natural Resources

711 Independent Avenue  
Grand Junction, CO 81505

April 2, 2020

Paul Smith  
Town of New Castle Planning Department  
450 W. Main Street  
New Castle, CO 81647

RE: Castle Valley Ranch filing 11 / Final application

Dear Mr. Smith:

I have reviewed the proposal for this development for the Town of New Castle. I had previously provided comments for this proposal in May of 2008. The previous comments for this development are still applicable.

The wildlife habitat and associated wildlife utilization of the area has not changed drastically since this proposal was first initiated. As previously mentioned, this development will impact wildlife by replacing marginal habitat with buildings, streets, and manicured landscaping. The quality and quantity of wildlife habitat in the area has been greatly compromised by cumulative development over the last 20-25 years.

If the opportunity exists for creating wildlife movement corridors on the edges of this development, they should be reclaimed using appropriate vegetation and should contain visual and noise barriers. Some wildlife species may still attempt to access the area to the south of this development, so a vegetative barrier may provide some mitigation for the disruption at the site.

Thank you for the opportunity to provide comments regarding land use issues for the Town of New Castle. If you have any questions, please contact me.

Sincerely,

Brian Gray  
District Wildlife Manager

cc: Kirk Oldham, Area Wildlife Manager  
file



Paul,

Reviewing the plans for Castle Valley Ranch I have the following comments:

1. The phasing of the construction does not say if Infrastructure is in place prior to construction of buildings. We need information on how the phasing will be done, roads, (all weather driving surface), waterlines and fire hydrants will be installed and in service. Buildings shall not be built prior to roads, hydrants and water supply being in service.
2. Phase 1 shows a dead end with provisions of a fire truck turnaround installed at the beginning of Falcon Ridge Court. Phase 2 shows no fire truck turnaround at the end of the street. Fire truck turnaround on all-weather driving surface is required.
3. All street names shall be cleared through Garfield County Communications to avoid any duplication of street names in the county dispatch area.

Address numbering shall be sequential and based on distance from entrance of street.

Fire Marshal will submit names to Communications for approval.

3. Falcon Ridge parking entrance will work for a fire truck turnaround on the street. Parking signage shall be installed on turnaround to disallow any parking other than the established parking spots. Wording on signage shall be approved by Fire Marshal.
4. Fire Hydrant Detail on plans will be strictly enforced as to finish grade elevation. Hydrants too low will be reviewed by fire marshal and New Castle public works to determine if an extension is needed prior to final approval.  
Any vegetation located near fire hydrants shall be planted to allow growth which will never obstruct a 3' radius around fire hydrant.

Please feel free to contact me with any questions or concerns.

THANK YOU,

ORRIN D. MOON  
PREVENTION DIVISION CHIEF/FIRE MARSHAL  
COLORADO RIVER FIRE RESCUE  
970-625-1243  
[orrin.moon@crfr.us](mailto:orrin.moon@crfr.us)

## Paul Smith

---

**From:** Orrin Moon <Orrin.Moon@Crfr.us>  
**Sent:** Friday, April 17, 2020 9:32 AM  
**To:** holmant@garco911.com  
**Cc:** Paul Smith; John Gredig  
**Subject:** New proposed Street Names in New Castle

---

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

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Tom,  
I am in the process of reviewing plans for a new subdivision in New Castle off of Castle Valley Blvd and they have listed the following street names on the plans. I just want to check with you to see if there is going to be any conflict with other street names in the county.  
The names are as follow:

Eagle Ridge Drive  
Bear Canyon Drive  
Falcon Ridge Court

Please let me know what you guys think.

**THANK YOU,**

**ORRIN D. MOON**  
**PREVENTION DIVISION CHIEF/FIRE MARSHAL**  
**COLORADO RIVER FIRE RESCUE**  
**970-625-1243**  
**[orrin.moon@crfr.us](mailto:orrin.moon@crfr.us)**



## Paul Smith

---

**From:** John Gredig <John.Gredig@Crfr.us>  
**Sent:** Friday, April 17, 2020 11:38 AM  
**To:** Orrin Moon; holmant@garco911.com  
**Cc:** Paul Smith  
**Subject:** RE: New proposed Street Names in New Castle

---

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

---

Orrin,

We already have an Eagle Ridge Drive in Parachute,

We currently have Bear Paw Ln, Bear Wallow Ln, Bear Ridge Rd, Black Bear Rd, Golden Bear Dr, and Little Bear Peak Dr

We do not have any roads named with Falcon,

John

---

**From:** Orrin Moon  
**Sent:** Friday, April 17, 2020 9:32 AM  
**To:** holmant@garco911.com  
**Cc:** Paul Smith (psmith@newcastlecolorado.org) <psmith@newcastlecolorado.org>; John Gredig <John.Gredig@Crfr.us>  
**Subject:** New proposed Street Names in New Castle

Tom,  
I am in the process of reviewing plans for a new subdivision in New Castle off of Castle Valley Blvd and they have listed the following street names on the plans. I just want to check with you to see if there is going to be any conflict with other street names in the county.  
The names are as follow:

Eagle Ridge Drive  
Bear Canyon Drive  
Falcon Ridge Court

Please let me know what you guys think.

THANK YOU,

**ORRIN D. MOON**  
**PREVENTION DIVISION CHIEF/FIRE MARSHAL**  
**COLORADO RIVER FIRE RESCUE**  
**970-625-1243**  
**[orrin.moon@crfr.us](mailto:orrin.moon@crfr.us)**

## Paul Smith

---

**From:** Cody Smith <[smithc@garco911.com](mailto:smithc@garco911.com)>  
**Sent:** Monday, April 20, 2020 1:27 PM  
**To:** Holman, Thomas  
**Cc:** Paul Smith; John Gredig; [Orrin.Moon@crfr.us](mailto:Orrin.Moon@crfr.us)  
**Subject:** RE: New proposed Street Names in New Castle

---

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

---

Hey Orrin,

I would say no on Eagle Ridge Dr. There is already one in Parachute and lots of others with Eagle in the name.

The others are okay.

---

**Cody Smith – IT Administrator**  
Garfield County Emergency Communications Authority  
970-625-8281

**From:** Holman, Thomas <[holmant@garco911.com](mailto:holmant@garco911.com)>  
**Sent:** Monday, April 20, 2020 10:51 AM  
**To:** Smith, Cody <[smithc@garco911.com](mailto:smithc@garco911.com)>  
**Subject:** Re: New proposed Street Names in New Castle

Cody, when you have final input on this could you reply back to Orrin Moon with it? Thanks.

On Fri, Apr 17, 2020 at 6:43 PM Smith, Cody <[smithc@garco911.com](mailto:smithc@garco911.com)> wrote:

Yeah.....Eagle Ridge probably isn't a good one. Let me check the MSAG and ill get back to you.

Cody

On Fri, Apr 17, 2020, 12:58 PM Holman, Thomas <[holmant@garco911.com](mailto:holmant@garco911.com)> wrote:

Cody, do you have an issue with these proposed street names? John listed some similarly named streets.

Thanks,

----- Forwarded message -----

**From:** Orrin Moon <[Orrin.Moon@crfr.us](mailto:Orrin.Moon@crfr.us)>  
**Date:** Fri, Apr 17, 2020 at 9:31 AM  
**Subject:** New proposed Street Names in New Castle  
**To:** [holmant@garco911.com](mailto:holmant@garco911.com) <[holmant@garco911.com](mailto:holmant@garco911.com)>  
**Cc:** Paul Smith ([psmith@newcastlecolorado.org](mailto:psmith@newcastlecolorado.org)) <[psmith@newcastlecolorado.org](mailto:psmith@newcastlecolorado.org)>, John Gredig <[John.Gredig@crfr.us](mailto:John.Gredig@crfr.us)>

Tom,

**Public Works Department**  
(970) 984-0669 ex200  
[jwenzel@newcastlecolorado.org](mailto:jwenzel@newcastlecolorado.org)



**Town of New Castle**  
801 W Main Street  
New Castle, CO 81647

April 8, 2020

Paul,

The Public Works Department has had the opportunity to review the Castle Valley Ranch Planning Area 17 & 19 application, and has the following comments:

#### **Streets and Sidewalks**

With the ultimate buildout of the adjacent property located to the east of PA 17 & 19, Bear Canyon Drive will likely have high traffic volumes and will function more as of a collector street than as a residential street. Our Municipal Code defines a collector street as: "those with low to medium traffic volumes, whose purpose is to provide access to residential areas and to channel traffic from residential areas to arterial streets." The Public Works Department recommends that Bear Canyon Drive have a right-of-way of 60 feet, to include 2/12' wide travel lanes, 2/8' wide parking lanes, 2/5' wide "green belts", and 2/5' wide sidewalks. The incorporation of the "green belt" will provide much needed snow storage space. The alternative to storing snow in the "green belt" is storing snow in the parking lane. Storing snow in the parking lane causes drivers to partially park in the travel lane, creating dangerous conditions for motorists. This can be especially hazardous on high volume roads.

Falcon Ridge Ct. has been designed as a dead-end street. The Town's Municipal Code does not permit this design standard. Dead-end streets do not efficiently and safely accommodate all modes of travel, particularly emergency vehicles, maintenance vehicles, and delivery vehicles. Dead-end streets often result in conflict between private property owners and vehicle operators, especially when vehicle operators require the use of private property to safely turn around.

#### **Snow Storage**

High density developments make snow removal services extremely difficult and time consuming. The close proximity and the large number of driveways greatly reduces snow storage availability. Additional design standards should be considered, including, "green belts", designated snow storage areas, and ample off street parking.

#### **Open Space**

The applicant indicates that Open Spaces B, C, and D are to be conveyed to the Castle Valley Ranch HOA. We should make sure that that is an acceptable situation with the Castle Valley Ranch HOA authorities. Otherwise, it may be necessary for the applicant to create a sub HOA.

Open Space A, to be dedicated to the Town, should be irrigated with raw water and should be landscaped with appropriate species. The town's parks department should have the opportunity to review and comment on the landscape design.

**Potable Water**

The Utility Department would like the applicant to install a ¾" potable water line to service a sample station. Sample stations allow crews to regularly test water quality. The ideal location for the station is near unit 14A.

Potable water service lines should include a tracer wire.

The Utility department request that all fire hydrants be manufactured by Muller.

April 24, 2020

Mr. Dave Reynolds, Town Administrator  
Town of New Castle  
P.O. Box 90  
New Castle, Colorado 81647

**RE: Filing No. 11, Castle Valley Ranch Planning Area #17  
Preliminary and Final Plan Review**

Dear Dave,

The purpose of this letter serves to provide comment, concerns and questions regarding the proposed development of Filing Number 11, PA #17 of Castle Valley Ranch Subdivision. In order to conduct this review, we are in receipt of a variety of pieces of information noted as follows:

1. A 44-sheet set of drawings prepared by SGM dated February 2020
2. Supplemental Information packet dated February 2020 containing the following:
  - a. Development Application
  - b. Certificate of Development Ownership
  - c. Application
  - d. Warranty Deed
  - e. Cost Estimates
  - f. Drainage Report
  - g. Soils Report
  - h. Architectural Renderings
3. March 18, 2020 PA 17 Utility Report
4. March 18, 2020 PA 17 Traffic Impact Study

Following our review of the above stated documents, we have determined that a variety of additional details need to be provided to bring the drawings to a construction level and to be definitive on the magnitude of public improvements that will ultimately need to be secured for this project. That being said, please note the following comments:

1. Prior to Final Plan review for Council, additional specificity needs to be provided for the proposed phasing of this project. Specifically, although phasing lines are noted on the street plans and the utility plans, additional detail is necessary to assure that the Phase 1 improvements are properly terminated. Likewise, drainage and erosion control best management practices (BMP's) specific to the Phase 1 public improvements need to be provided.

2. The project involves extension of water lines, sewer lines and the raw water lines in public right of way. Also, excavation area in excess of 22" exceeds 1,000 sf. As such, the project is subject to the Subsurface Utility Engineering (SUE) requirements of SB 18-167. Prior to construction plans approval, the project will need to provide SUE locates in accordance to SB 18-167.
3. Note that because of SB 18-167, all utilities will need to be installed in such a fashion as to be electronically locatable. Details will need to be revised to provide instruction to the contractor that provide tracer wire, magnetic tape, etc... on all subsurface utilities.
4. For the offsite utilities, the extents of pavement repair and surface restoration needs to be better defined. As an example, for the sewer installation on C Avenue, such information as the saw cut lines, paving patching and surface restoration needs to be identified. For the surfacing on C Avenue and the North Alley, surface restoration will require the need to replace the asphalt milling surfaces that currently exist with similar material. Road base replacement in lieu of millings is not acceptable. Other improvements such as potential impacts to driveway slabs, retaining walls and fences need to be identified and detailed for repair/replacement.
5. Existing property line locations depicted along the west side of C Avenue do not appear to be complete (ie., 114 N. C Avenue and 151 N. C Avenue). Concern exists as to the proposed sewer line location being able to be installed in the location proposed. If easements exist to aid in installation, then these need to be identified.
6. Clarification of whether the section of line that feeds the existing 6" line shown in the north/south alley west of C Avenue is to be replaced with new and how existing services are to be maintained during installation of the new line is to be provided.
7. For the sewer line installation on C Avenue, additional information is necessary. Locations of the storm drain, culvert and waterline main and service crossings need to be identified. Also, specific details of how the manhole tie onto the existing sewer line is to be performed needs to be provided.
8. For the offsite water tie in the southerly limits of Open Space A, provide specific detail of how the tie will be made. In essence, is there an existing blind flange and CRB that needs to be removed prior to tying onto the existing water line? What existing valves, services and procedures need to be put in place to perform flushing, sanitizing and testing of the new installation. This comment holds true for the water line tie to the line in the north east corner of the site in Castle Valley Boulevard right of way. With this particular tie, we would recommend that the valve shown be provided after the air release valve and prior to the tee. Also, the air vent for the air release valve needs to be shown with a "bollard" protection to assure that snow plowing of CVBLVD will not result in damaging the vent.

9. Note that all water line fittings are to be polywrapped ductile iron pipe fittings and not PVC.
10. Is a fence line proposed to be constructed south and east of the East detention pond? If so, what type of fence and what details are to be provided?
11. Provide clarification through notes, details and hatching as to the culvert outlet protection necessary for those culverts identified on sheet 9. Provide necessary straw waddles along the interface developed at the toe of slope in fill areas of the mass grading. Depict specific ditching and erosion protection that are necessary in Phase 1 to accomplish the goals of the overall grading plan. Provide specific grading for the Proposed East Pond complete with erosion control. Identify how access for maintenance to the temporary pond is to be provided.
12. Provide locations of transformers, pedestals and gas meter locations relative to providing electric, cable, telephone and gas service to the buildings. Provide this information in the context of assuring ample room remains for snow storage and is consistent with the landscape plan intent.
13. Clarify on street plans and profiles of how Phase 1 improvements are to be terminated regarding how curb, gutter, sidewalk, finish grading, pavement, temporary revegetation and erosion control are to be terminated.
14. Clarify on the respective utility plans of how Phase 1 improvements are to be properly terminated regarding how water, sewer and dry utilities are to be terminated. With the clarification, provide information on how testing, sanitizing, flushing, air release and subsequent phase operation of the utilities is performed.
15. For the infrastructure located in the deep fill areas (south east portion of site), provide clarification as to the anticipated rates of settlement that are expected to occur with both water and sewer utilities. We anticipate the need to provide structural fill to be provided below the manholes to mitigate settlement of the manholes. Given the anticipated rates of settlement, provide anticipated performance of the utilities and provide assurance that minimum grades and integrity of the utilities can be maintained. In essence, will settlement in a deep fill area cause a sewer line to lose its ability to drain by gravity?
16. Assure that all water/sewer crossings can be provided with a minimum separation of 18". This also holds true for all water/storm drain crossings. Assure that water/storm drain crossings provide adequate freeze protection at each crossing.

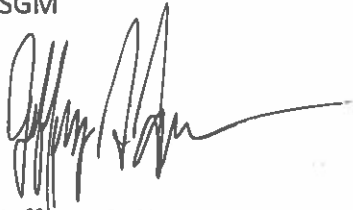
17. Note that all pavement ties to existing require a T-patch that involves rotomilling at least 24" of the existing pavement to allow the friction course of asphalt to span the joint of existing asphalt with the lower course of asphalt. Provide a detail that specifically identifies such.
18. Provide details identifying how new concrete improvements are to tie to existing.

Please note that as there are a variety of concerns and clarifications noted/requested, we have held back on the review of the cost estimate for the Subdivision Improvements Agreement. Once we confirm the specific scope of work and final construction drawings are prepared, we will provide a review of such. Although there are a variety of concerns and clarifications noted, we do not see that the issues cannot be technically resolved.

Upon your receipt and review, if you have any questions, please don't hesitate to call.

Respectfully,

SGM



Jefferey S. Simonson, P.E.  
Principal

**From:** [Haley Carmer](#)  
**To:** [Jeff Simonson](#); [Paul Smith](#); [John Wenzel](#); [David H. McConaughy](#)  
**Subject:** RE: Filing 11 plan set  
**Date:** Wednesday, March 4, 2020 2:06:31 PM

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Hi Paul,

We have the following questions/comments about the initial application materials:

1. A sub-association will be created for Filing 11, and Filing 11 will be subject to its own set of covenants similar to those for Filing 9. Eventually we'll need a copy of the covenants for Filing 11 specifically, but at this point it would be helpful to see the Filing 9 covenants so that we can get a sense of what the general and limited common elements will be.
2. The plat we received only subdivides the property into 10 lots. The application narrative says Filing 11 will include 27 lots and be developed in 2 phases. The phasing plan shows 3 phases. Is CVRI only platting the first phase now? If so, we'll want confirmation on the phasing (2 phases or 3) and that the first phase plat should only include 10 lots. If the plan is to subdivide the entire filing, we need an updated plat.
3. Is CVRI proposing to construct the public improvements for the entire filing at once or in phases? It's not clear if the cost estimate covers all of the improvements or just a portion, especially because the phasing plan conflicts with the statements in the application narrative.
4. The application narrative says the lots will be compatible with the SF2 and MF-1 standards but the plans identify MF-1 zoning. Which is it? I'm assuming MF-1 but that should be clarified.

The above comments shouldn't hold up scheduling the public hearing, but we'll need to work through them between now and the hearing. Please let us know the date of the hearing once it's scheduled. Thanks.

Best,

Haley

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**From:** Jeff Simonson [mailto:JeffS@sgm-inc.com]  
**Sent:** Wednesday, March 4, 2020 10:17 AM  
**To:** Paul Smith <psmith@newcastlecolorado.org>; John Wenzel <jwenzel@newcastlecolorado.org>; David H. McConaughy <dmcconaughey@garfieldhecht.com>; Haley Carmer <hcarmer@garfieldhecht.com>; Orrin.Moon@Crfr.us  
**Subject:** RE: Filing 11 plan set

Hi Paul,

I don't like this "Initial Property 1 and 2" - does this leave any remainder parcels not shown? If so, anything not included here needs to be > 35 acres or else depicted as a parcel. I'm hoping this shows the entirety of the remainder, which should be shown as one big parcel, not 2

change "shall be"  
to "is hereby" (no  
deed req'd)

what does Plans refer to

## Phase 1

Open Space Tract B for a trail to be constructed [who maintains that?]

## update - 2008?

8. Individual townhome units within Lots 1 through 10 shall not be separately conveyed until an amended plat showing the boundaries of such units is approved by New Castle Town Staff and recorded in the real estate records of Garfield County.

deal with this in 3

delete this line -  
entirety of  
remainder should  
be one parcel  
labeled as "future  
phases"

could put  
this in  
ord.

does this  
include  
future  
phases? It  
should.

| <b>CURVE #</b> | <b>ARC LENGTH</b> | <b>RADIUS</b> | <b>DELTA ANGLE</b> | <b>CHORD BEARING</b> | <b>CHORD LENGTH</b> |
|----------------|-------------------|---------------|--------------------|----------------------|---------------------|
| C54            | 159.17            | 975.00        | 9.21°13"           | S 47°30.11' W        | 158.05              |
| C55            | 27.55             | 975.00        | 1.60°28"           | S 52°59.22' E        | 27.55               |
| C56            | 32.00             | 1028.00       | 1.47°01"           | S 40°00.23' W        | 32.00               |
| C58            | 19.02             | 115.42        | 9.26°35"           | S 14°30.22' E        | 19.02               |
| C62            | 391.53            | 862.07        | 39.68°53"          | S 61°39.03' E        | 378.99              |
| C63            | 246.58            | 719.98        | 27.15°45"          | N 67°40.42' E        | 339.58              |
| C64            | 116.88            | 82.00         | 77.20°15"          | N 48°27.33' E        | 102.47              |
| C65            | 97.31             | 719.98        | 3.34°21"           | N 31°01.02' E        | 97.29               |
| C68            | 228.36            | 1025.00       | 12.45°53"          | S 47°24.58' W        | 227.89              |

should utility easement  
connect across lot  
lines throughout?

50.0'?

show setback  
dimension here  
and on lot 10

solid line

| LAND USE TABLE                                     |                                          |                                     |
|----------------------------------------------------|------------------------------------------|-------------------------------------|
| LOT 1                                              | 12,873 S.F.                              | 0.30 ac ±                           |
| LOT 2                                              | 13,820 S.F.                              | 0.32 ac ±                           |
| LOT 3                                              | 17,891 S.F.                              | 0.41 ac ±                           |
| LOT 4                                              | 14,306 S.F.                              | 0.33 ac ±                           |
| LOT 5                                              | 13,081 S.F.                              | 0.30 ac ±                           |
| LOT 6                                              | 16,439 S.F.                              | 0.38 ac ±                           |
| LOT 7                                              | 14,844 S.F.                              | 0.34 ac ±                           |
| LOT 8                                              | 15,029 S.F.                              | 0.35 ac ±                           |
| LOT 9                                              | 11,629 S.F.                              | 0.25 ac ±                           |
| LOT 10                                             | 10,243 S.F.                              | 0.23 ac ±                           |
| Martin-family<br>Res. Total                        | 129,571 S.F.                             | 3.70 ac ±                           |
| Esper Ridge Rd.<br>Esper Ridge Dr.<br>Ravens total | 56,507 S.F.<br>8,093 S.F.<br>58,600 S.F. | 1.16 ac ±<br>0.18 ac ±<br>1.30 ac ± |
| Open Space A                                       | 45,813 S.F.                              | 0.82 ac ±                           |
| Open Space B                                       | 38,024 S.F.                              | 0.69 ac ±                           |
| Total Open Space                                   | 83,837 S.F.                              | 1.51 ac ±                           |
| 10 LOTS                                            |                                          |                                     |
| Rooms                                              |                                          | 3.70 ac ± 21                        |
| Rooms                                              |                                          | 1.65 ac ± 21                        |
| <b>OPEN SPACE PARCELS</b>                          |                                          |                                     |
|                                                    |                                          | \$15.00 ac ± 100                    |

**PRELIMINARY -  
FOR REVIEW ONLY**

**Castle Valley Ranch Sub  
Filing 11**

### Final Plot

2

## Paul Smith

---

**From:** Haley Carmer <hcarmer@garfieldhecht.com>  
**Sent:** Monday, April 20, 2020 4:28 PM  
**To:** Paul Smith  
**Cc:** David H. McConaughy  
**Subject:** RE: G&H questions  
**Attachments:** Filing 11, Phase 1 Plat comments.PDF

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CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

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Hi Paul,

Thanks for forwarding Aaron's responses. Attached is a marked-up plat that includes changes and comments for CVRI to address along with the following:

- Refer to Filing 11 as "Filing 11, Phase 1" throughout
- Plat Note 3: Take out reference to Open Space Areas C & D as they are not shown on the plat. Are open space areas to be deeded to HOA once the developer has C.O.s for all Filing 11 units or just Phase 1 units? Per site plan, it appears Open Space Area C is supposed to be the park.
- Plat Note 4: No snow storage easement is shown on the plat
- Plat Note 11: Change "applicant" to "owner;" identify lot(s) subject to reserved right

Let us know if anyone has questions about our changes. Thanks.

Best,

Haley

---

**From:** Paul Smith [mailto:[psmith@newcastlecolorado.org](mailto:psmith@newcastlecolorado.org)]  
**Sent:** Monday, April 20, 2020 7:48 AM  
**To:** David H. McConaughy <[dmconnaughy@garfieldhecht.com](mailto:dmconnaughy@garfieldhecht.com)>; Haley Carmer <[hcarmer@garfieldhecht.com](mailto:hcarmer@garfieldhecht.com)>  
**Subject:** FW: G&H questions

David and Haley,

Attached (and below) are revisions to the Filing 11 application based on your comments.

Thanks,  
Paul

---

**From:** Aaron Atkinson [mailto:[aa@hackstafflaw.com](mailto:aa@hackstafflaw.com)]  
**Sent:** Friday, April 17, 2020 3:40 PM  
**To:** Paul Smith <[psmith@newcastlecolorado.org](mailto:psmith@newcastlecolorado.org)>  
**Cc:** Dan Cokley <[DanC@sgm-inc.com](mailto:DanC@sgm-inc.com)>; Dave Reynolds <[dreynolds@newcastlecolorado.org](mailto:dreynolds@newcastlecolorado.org)>  
**Subject:** Re: G&H questions

---

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Paul:

**Town of New Castle**

---

"Burning Mountain" - 1888

**Police Department**

---

801 West Main St

Castle, Colorado 81647

New

(970) 984-2302

To: Paul Smith N.C. Building and Planning  
P&Z Board Members

After Reviewing the Platt for the Atkinson Filing 11. I find that the roadways are too narrow to support parking on both sides of the roadway. We have ran into issues on roadways and subdivisions in town. Feildstone and Sandstone are classic examples, we recently experienced an emergent call for service where the street was blocked by BMFD Fire Truck and an Ambulance. Our Police Vehicle could not pass and were requested to respond emergent this was not possible due to the restriction of the width of roadway with parking on both sides of a narrow street.

Thank you for your consideration on this issue.

---

*Tony Pagni*  
Chief of Police #601  
(970) 984-2302 Ext. #301  
[apagni@newcastlecolorado.org](mailto:apagni@newcastlecolorado.org)



New Castle  
Police Department

---

801 West Main Street  
New Castle, CO 81647

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good evening Paul!

Thank you for extending an opportunity to the district to respond.  
I collected feedback from our Maintenance and Transportation Directors as well as the Principals that lead schools closest to the development.

They all feel there is minimal impact to their sites or scope of responsibilities, and have the capacity to absorb the growth the development would bring to the system.

Sincerely,

Heather Grumley

Interim Superintendent

"You must develop a feeling that there's no way you're going to lose!"

"Our Kids are Worth Whatever It Takes!" ~ Spence Rogers

On Tue, Apr 7, 2020 at 1:41 PM Paul Smith <[psmith@newcastlecolorado.org](mailto:psmith@newcastlecolorado.org)> wrote:

Hi Heather,

The Town of New Castle is currently processing an application for new development east of Castle Valley Ranch – 91 townhome units (page 6 “overall site plan”). Per the Town Code, we are required to solicit feedback from relevant outside agencies about potential impacts a development may have on their community and facilities.

In most cases the impacts are minimal. However we want to allow the school district a chance to voice their thoughts. The deadline for comment is April 17<sup>th</sup>. An email response is sufficient. If you do not usually handle these requests, please forward to the representative who oversees this area.

Thank you for the help,

Paul Smith

TONC Planner

May 11, 2020

TO: Planning and Zoning Commissioners and Paul Smith, Planner  
FR: Residents of New Castle (64 names and addresses below)  
RE: Preliminary/Final Filing 11 application

We urge you not to approve the Filing 11 application for development of the property behind South Wildhorse Drive and Mount Harvard Court by CVR Investors, Inc. (CVR), a company located in Castle Rock, CO. Our rationale is described in more detail below, but in short, this high-density development offers very little open space, provides insufficient buffers between multiple-unit housing and single-family homes, inadequately considers the impact of the development to surrounding property values, ignores the need to maintain wildlife migration patterns, does not adequately provide for pedestrian/traffic interface on Castle Valley Boulevard, has not adequately addressed viewsheds and ridgelines, may not provide for natural drainage from the storm water pipes on both sides of Castle Valley Boulevard, increases traffic loading onto Castle Valley Boulevard, does not provide adequate additional parking for new residents during Phase 1, and may increase costs to the town as it addresses traffic, safety, fire, and other infrastructure issues. It also limits the town's ability to provide mixed-use development. Moreover, it does not reflect the goals of New Castle's Comprehensive Plan, leaving the town with a densely packed sea of rooftops that does little to make the town unique or desirable. We recognize the right of CVR to develop this property; however, that right is not absolute in much the same way as we are governed by the requirements of a homeowner's association. If this development is allowed as currently presented, we have much to lose, as described below.

### **1. Too much density**

The planned net density for the development is 10.45 dwelling units per acre (91 units on 13.5 acres). This far exceeds the average density in the town, creating many potential problems for the town, surrounding homeowners and future residents. The town will face higher costs in traffic control, snow removal, fire response, infrastructure maintenance, etc. After the coronavirus devastates the economy, we are also likely to face a recession, at least in the short term, and the town may be saddled with costs at a time where it is most difficult to meet them. This means that we will all face higher costs. The surrounding homeowners will likely suffer from greatly reduced property values, which seems very unfair, and the town has a responsibility to not damage current homeowners in permitting a new development. Moreover, future residents of the development will face inadequate parking (only four extra parking spaces are provided in the application), few amenities, noise and congestion. A recent example can be found in the newly developed triplexes on Redstone Drive and Foxwood Lane, where congestion and parking are on-going issues. Building fewer fourplexes and triplexes would go a long way in improving the development, helping preserve property values, and preserving the town's sense of community.

### **2. Insufficient buffer between single-family and multiple family homes**

Concerns about an urban buffer were identified in the town planning staff report to the Town Council in response to CVR's initial sketch plan on October 1, 2019. The staff report noted concerns about the "blunt transition" from large single-family homes to high density homes. Very little action has been taken to meet those concerns since that report. Instead, more fourplexes now border the buffer between the single-family homes on South Wildhorse/Mount Harvard than were in the sketch plan.

The preliminary/final application allows just 59 to 72 feet of buffer behind the homes on South Wildhorse/Mount Harvard, including the hill owned by the town. The developer provides very little, as the buffer includes the natural drainage down the hill, as well as the town's property. In order to protect the value of the homes along the development, this buffer needs to be much larger. This is a win-win-win for residents and the town. Increasing the buffer not only brings the development into greater compliance with the goals of the Town of New Castle Comprehensive Plan and helps protect property values, both outside and inside the development, it has the added benefit of adding much-needed open space for the pedestrian walkway and offers a corridor for wildlife. The Colorado Division of Wildlife has identified this area as an important deer habitat, and residents view deer everyday grazing and bedding in this field.

The visual impact analysis was not available for review on the town's website, so we cannot comment. If this analysis exists, we would like to review it. If not, one should be done considering the buffer concerns.

### **3. Insufficient open space**

At first glance, it appears that CVR's application has met the minimal requirements for open space (1.5 acres dedicated open space in the 13.5 acres to be built). However, a closer look at the four open spaces shown on Overall Site Plan Map (page 7 of the application) tells a different story. Municipal Code Sec.17.104.010 encourages a creative approach to the development of land and an integrated open space system throughout the Castle Valley Ranch PUD. The Town of New Castle's Comprehensive Plan calls for pedestrian networks, recognizes the importance that citizens put on open spaces and calls for preserving open space and natural beauty whenever possible. We call attention to Comprehensive Plan Goal CG-1: Ensure that new development substantially conforms to the New Castle Comprehensive Plan principles, goals and policies and includes: Policy CG-1B: Applicants will be required to clearly demonstrate substantial conformity with the comprehensive plan in all applications; and, Policy CG-1D: Non-compliant land-use applications shall be modified to conform substantially to the comprehensive plan or will be rejected. (Town of New Castle Comprehensive Plan, p.50)

The Comprehensive Plan further calls for the creation of park space so to meet the standard of an additional 14 acres of usable park land for every thousand person increase in the town's population. Data from the Comprehensive Plan showed that the town was just under the minimum in 2007 (13.6 acres to service roughly 4,000 people). The addition of Dancing Bear Park is welcomed, but does not add enough park space to meet the standard. Thus, more park space is needed as development continues.

The developer proposes that "Open Space B" be a neighborhood park maintained by the town. The idea of a park is welcomed; however, this parcel of land has issues. First, it is directly adjacent to Castle Valley Boulevard, and provides for little buffer between the street and the park. In contrast, the newest park, Dancing Bear, is separated from the main street. Second, at just one-third of an acre (14,000 square feet), this "open space" largely represents what would be needed to provide a buffer between the street and the development anyway, as is the case with the homes along Castle Valley Boulevard to the north. The staff report pointed to the need for open space recreation, and this does not meet that need. This area is also suggested for snow removal for the Town, which further hampers the appeal of Open Space B.

Open Space A is the buffer area that roughly parallels the homes on South Wildhorse. As described above, it does not meet the stated desire of the town to have natural green ways and open space

corridors, in that it is much too narrow for this purpose. By increasing this open space, the developer would retain the natural beauty of the area, as well as enhance the desirability of the multi-family units and help to offset the negative impacts of the development. One can imagine a networked pedestrian trail connecting both sides of the development along Castle Valley Boulevard.

Another issue is drainage and slope. The storm water drain for run-off from the east side of Castle Valley Boulevard creates an intermittent pond during snow melt that runs fully into the open space areas. The slope of this open space area is also significant and further limits its use. Open space should be space that is accessible to the public, not undevelopable space. A hydrological study was not available for review, but even at current flow rates, standing water is not likely to be fully solved by the proposed re-routing of the storm drain and placement of rip-rap along the hill.

Also troubling is the pedestrian walkway that currently is designed to end at Castle Valley Boulevard. There is no provision for safe crossing of the street; there are no sidewalks that join that area. The only crosswalk that exists is on the north side the South Wildhorse/Castle Valley Boulevard intersection.

Open Space C is a pocket park in the center of the 91-unit development; Open Space D is a very small area also in the center of the development, much too small to be considered viable open space. These may serve the residents of the development but are not easily accessible to other citizens. We concur with the staff report that urged that the development have more open space than currently proposed.

#### **4. Wildfires and other considerations**

As the town's population increases, we must consider a second street to allow people in Castle Valley Ranch to enter/leave. Traffic loading is already apparent on Castle Valley Boulevard, the only street out of Castle Valley Ranch. However, this inconvenience may become a very serious danger should a wildfire sweep the area, as people have no way out other than one street. In October 2019, many residents witnessed the fire on the hill that is adjacent to the land in Filing 11. We were lucky that time, due to the amazing work of our firefighters and the availability of air support. Next time we may not be so lucky. This issue is paramount in the minds of many Castle Valley Ranch residents and must be considered with any development, but especially in ones with high density that compounds traffic concerns. Connecting to C Street should be discussed as a way of potentially saving lives.

Additionally, as noted in the staff report, concerns continue regarding how the remaining lots on the other side of Castle Valley Boulevard, along North Wildhorse, and VIX Park will be developed. The town has a great opportunity to consider the prominent value residents place on open spaces, with connected trail systems in thinking about future development. It also must consider where and how multiple-use building will occur. Finally, we encourage the town to carefully consider infrastructure capacity. We saw no stormwater management study in the materials for Filing 11.

In sum, we have an opportunity to make New Castle a highly desired gem of a town through careful development, but once that opportunity is lost, we've lost it forever. The Town of New Castle has an opportunity to promote development that aligns with its comprehensive plan, Smart Growth Principles, and the stated desires of the community to protect the town's scenic quality and open space. **We urge you to not approve this application until it more closely represents these goals as stated in the Comprehensive Plan and the municipal code. We stand ready as residents to assist the town that we all love in honoring the New Castle Comprehensive Plan and vision as set forth.**

**Signatures for the letter** (Because of the stay-at-home/safer at home orders, gathering signatures was not possible. However, everyone provided their name and address, often by email, noting their interest in signing the letter.)

|                       |                        |
|-----------------------|------------------------|
| Denise Scheberle      | 507 S. Wildhorse Drive |
| Steve Scheberle       | 507 S. Wildhorse Drive |
| Wayne Shelton         | 501 S. Wildhorse Drive |
| Virginia Shelton      | 501 S. Wildhorse Drive |
| Myrna Candreia        | 26 Foxwood Ln.         |
| Jeanne Huyser         | 34 Foxwood Ln.         |
| Karen Skalsky-Schwenk | 511 S. Wildhorse Drive |
| Tom Schwenk           | 511 S. Wildhorse Drive |
| Paul Gonnerman        | 51 Mt Yale Ct          |
| Susan J Bilstad       | 51 Mt Yale Ct.         |
| Jes Dooling           | 729 S. Wildhorse Drive |
| Ines Baquero          | 73 Mount Harvard Ct.   |
| Dee Demming-Kressner  | 156 N. Wildhorse Drive |
| Robert Wang           | 655 S. Wildhorse Drive |
| Lynne Cassidy         | 655 S. Wildhorse Drive |
| Jeff Andrews          | 715 Storm King Circle  |
| Diana Andrews         | 715 Storm King Circle  |
| Sue Cooke             | 26 Buckskin Circle     |
| Gary Cooke            | 26 Buckskin Circle     |
| Khmasea Bristol       | 351 Buckthorn Rd.      |
| Bay Bristol           | 351 Buckthorn Rd.      |
| Connie Davis          | 818 Ute Circle         |
| Rick Davis            | 818 Ute Circle         |
| JR Torrez             | 882 Ute Circle         |
| Stephanie Torrez      | 882 Ute Circle         |
| Kristi Stark          | 829 Ute Circle         |
| Jeff Stark            | 829 Ute Circle         |

|                         |                            |
|-------------------------|----------------------------|
| Pat Gunther             | 695 Cheyenne               |
| John Gunther            | 695 Cheyenne               |
| Larry Dragon            | 845 Ute Circle             |
| Ruth Belda              | 845 Ute Circle             |
| Erin Courtney Quinn     | 142 W. Cathedral Ct.       |
| Jamin Heady-Smith       | 39 S. Painted Horse Cir    |
| Stephanie Dani Carballo | 309 Maroon Ct.             |
| Bert Carballo           | 309 Maroon Ct.             |
| Sally Linden            | 805 Ute Circle             |
| Janet Kinghorn          | 379 Maroon Ct.             |
| Mark Kinghorn           | 379 Maroon Ct.             |
| Joni Owens              | 235 W. Capital Ct.         |
| David Bristol           | 386 W. Main #4             |
| Lee Teran               | 386 W. Main #4             |
| Brittney Street         | 680 Cheyenne               |
| Jeff Street             | 680 Cheyenne               |
| Tom Elder               | 247 N. 7 <sup>th</sup> St. |
| Mary Johnson            | 247 N. 7th St.             |
| Shirley Williams        | 0981 County Road 245       |
| Jenna Bontempo          | 44 Foxwood Lane            |
| Toni Main               | 48 Foxwood Lane            |
| Ken Collins             | 48 Foxwood Lane            |
| Sandy Weaver            | 308 Penny Royal            |
| Andy Hawley             | 120 Deer Valley Dr.        |
| Diane Blasingame        | 382 Faas Ranch Rd.         |
| Hobson Wildenthal       | 18 Redstone Dr.            |
| Adele Wildenthal        | 18 Redstone Dr.            |
| Cathy Hess Bassett      | 119 Redstone Dr.           |
| Edward Landeros         | 51 Redstone Dr.            |

|                  |                    |
|------------------|--------------------|
| Deann Landeros   | 51 Redstone Dr.    |
| Hollie Soltis    | 103 Redstone Dr.   |
| R.C. Lee         | 123 Redstone Dr.   |
| Michael Callveri | 122 Redstone Dr    |
| Bonnie Daniels   | 33 Buckskin Circle |
| Patrick English  | 33 Buckskin Circle |
| Eric Baquero     | 16 Deer Valley     |
| Cathie Baquero   | 16 Deer Valley     |

Wayne and Virginia Shelton

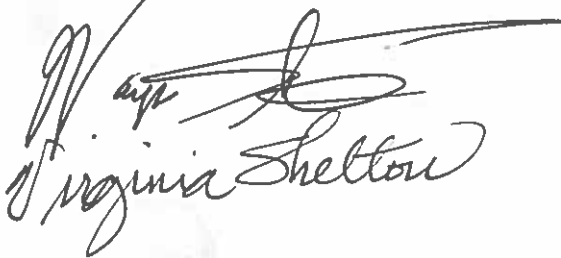
501 S. Wild Horse Dr.

New Castle, Co 81647

As 11 year residents of S. Wild Horse Drive that will be directly affected by R-11, we have several concerns.

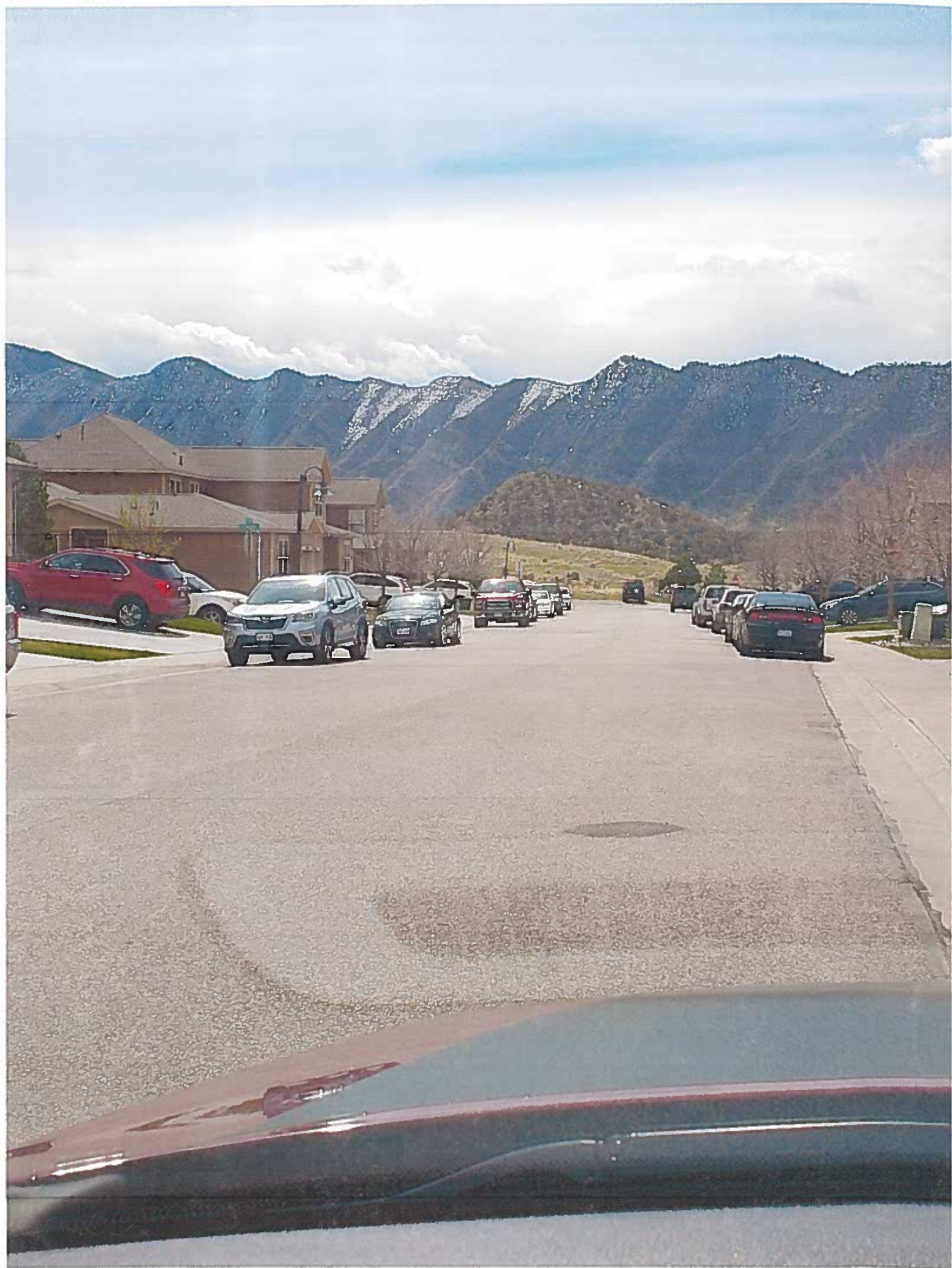
1. This greatly increased density does not seem appropriate for a single family neighborhood. It seems that a disproportionate number, 91 of the 540, approved housing units has been proposed and concentrated in only 14 acres. I believe a wider buffer zone and lesser density would be appropriate for this area.
2. These are 3 bedroom units so I would assume the occupancy rate would most likely be between 3 and 4 people per unit. This being the case you should assume 2 to 3 cars per unit which would necessitate 1 car in the garage, 1 in the driveway, and 1 parked in the street. There is little or no provision for parking in the street, due to the number of driveways and the density of the units. This would seem to lead to a very cluttered and probably unsightly density. All this can be verified by observing the problems in the existing triplex areas and would be even more exacerbated by an even larger number of proposed 3 and 4 plexs.
3. Based on the growing number of electric vehicles, I have seen no provision for outdoor access to the power supplies, unless you run dropcords across driveways, lawns, and sidewalks.
4. It looks like snow removal would be very problematic. The city recommends shoveling snow on to each lawn, however in snowy winters we have had to shovel the excess snow in to the street's parking area. This being the case for the increased density there would be even less lawn space, due to the number of driveways, to put the snow which would necessitate putting more snow into the already inadequate street parking.
5. Also based on past observations this density would be problematic for the trash collections due to the increased number of cars and winter snow placement along the streets.
6. The proposed open space seems entirely inadequate for the ultimate number of residents. It looks like most of the "open space" was based on land that would have been difficult to build on anyway and does not seem suitable for most accepted "open space" uses.

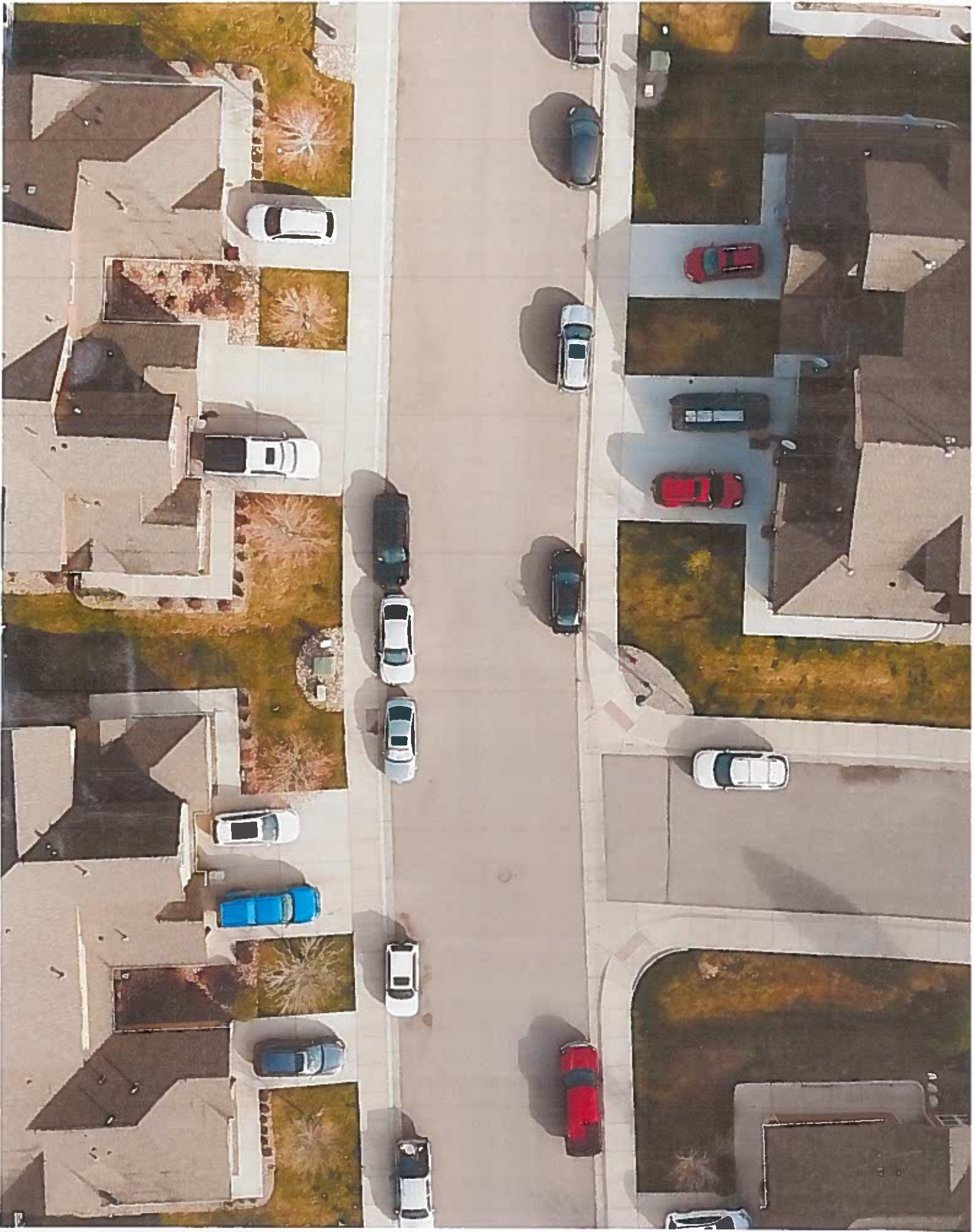
It would seem they are proposing this area for the increased density so they can make other areas more desirable for single family homes to their benefit. It should be remembered that the developer's effort to maximize profits will produce neighborhoods that we will all have to live with long after they are gone.



Virginia Shelton









## WILL SERVE LETTER

February 6, 2020

CVR Investors Inc  
Attn: Aaron Atkinson  
1038 Country Club Estates Dr  
Castle Rock, CO 80108

Re: Multi family units-Eagle Ridge Dr, Castle Valley Ranch Subdivision, New Castle

Dear Mr. Atkinson,

This letter is to confirm that Xcel Energy is your utility provider for natural gas and electrical service. In accordance with our tariffs, on file with and approved by the Colorado Public Utilities Commission, gas and electric facilities can be made available to serve the project at multi-family units Eagle Ridge Dr, Castle Valley Ranch Subdivision, New Castle.

Your utility service(s) will be provided after the following steps are completed:

- ***Application submitted to Public Service's "Builders Call Line (BCL)"*** – once your application is accepted you will be assigned a design department representative who will be your primary point of contact
- ***Utility design is completed*** – you must provide your design representative with the site plan, the one line diagrams, and panel schedules for electric and gas loads if applicable
- ***All documents provided by design representative are signed and returned***
- ***Payment is received***
- ***Required easements are granted*** - you must sign and return applicable easement documents to your Right-of-Way agent
- ***Site is ready for utility construction***

A scheduled in-service date will be provided once these requirements have been met.

It is important to keep in mind that the terms and conditions of utility service, per our tariffs, require that you provide adequate space and an easement on your property for all gas and electric facilities required to serve your project, including but not limited to gas and electrical lines and meters, transformers, and pedestals. General guidelines for these requirements can be found at [Site Requirements. https://www.xcelenergy.com/staticfiles/xe-responsive/Admin/Managed Documents & PDFs/Xcel-Energy-Standard-For-Electric-Installation-and-Use.pdf](https://www.xcelenergy.com/staticfiles/xe-responsive/Admin/Managed Documents & PDFs/Xcel-Energy-Standard-For-Electric-Installation-and-Use.pdf) Easement requirements can be found at [Utility Design and Layout](#).

Xcel Energy looks forward to working with you on your project and if I can be of further assistance, please contact me at the phone number or email listed below.

Sincerely,

Samantha Wakefield  
Xcel Energy Planner

Mailing address: Public Service Company of Colorado  
1995 Howard Ave  
Rifle, CO 81650

Version November 1, 2019

## NOTICE OF PUBLIC HEARING Town of New Castle

**Due to concerns related to COVID-19, this meeting will be held as a virtual meeting only. The public is invited to attend by computer or telephone.**

Date: May 13, 2020

Time: 7:00 PM

Place of hearing: **To join by computer, smart phone or tablet:**  
**<https://us02web.zoom.us/j/7096588400>**

**To Telephone into the meeting:**  
**Please call: 1-346-248-7799**  
**Meeting ID: 709 658 8400**

Public body  
conducting hearing: Planning & Zoning Commission

Brief description  
application: Combined Preliminary/Final Application for Subdivision and PUD Development Plans in Castle Valley Ranch, Filing 11

Legal description: Town of New Castle, Garfield County, State of Colorado:

- **Parcel A:** A PARCEL OF LAND SITUATE IN THE NE1/4 SECTION 31 AND THE NW1/4 SECTION 32, TOWNSHIP 5 SOUTH, RANGE 90 WEST OF THE 6TH P.M., COUNTY OF GARFIELD, STATE OF COLORADO, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE WEST 1/16 CORNER BETWEEN SAID SECTIONS 29 AND 32 A REBAR AND ALUMINUM CAP LS NO. 36572 SET IN PLACE; THENCE S 01° 19' 34" E 1570.62 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY OF LINE CASTLE VALLEY BOULEVARD, AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED JANUARY 9, 2001 UNDER RECEPTION NO. 574735, ALSO BEING A POINT ON THE EASTERLY BOUNDARY LINE OF CASTLE VALLEY RANCH PUD AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED AUGUST 10, 1983 UNDER RECEPTION NO. 344590 THE TRUE POINT OF BEGINNING; THENCE DEPARTING SAD RIGHT OF WAYS 01°19' 34" E AND ALONG SAID EASTERLY BOUNDARY LINE 1066.16 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF SAID CASTLE VALLEY RANCH, P.U.D.; THENCE ALONG SAID SOUTHERLY BOUNDARY LINE THE FOLLOWING FOUR (4) COURSES: 1. N 89° 40' 24" W 1195.15 FEET; 2. N 00° 19' 36" E 120.00 FEET; 3. N 89° 40' 24" W 180.00 FEET; 4. N 00° 05'00" W 210.20 FEET; THENCE DEPARTING SAID SOUTHERLY BOUNDARY LINE N 00° 05'00" W 983.59 FEET; THENCE S 89° 56' 5" W 552.43 FEET TO A POINT ON THE EASTERLY BOUNDARY LINE OF CASTLE VALLEY RANCH, PA19A AND PA19B AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED NOVEMBER 29, 2005 UNDER RECEPTION NO. 687288; THENCE N 40° 33' 51" E ALONG SAID EASTERLY BOUNDARY LINE 283.40 FEET; THENCE CONTINUING ALONG SAD EASTERLY BOUNDARY LINE N 55° 43' 05" E 455.98 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF CASTLE VALLEY BOULEVARD; THENCE DEPARTING SAD EASTERLY BOUNDARY LINE AND ALONG SAID SOUTHERLY RIGHT OF WAY LINE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 862,01 FEET; AN ARC LENGTH OF 591.51 FEET (CHORD BEARS S61° 39' 09" E

579.98 FEET); THENCE CONTINUING ALONG SAID SOUTHERLY RIGHT OF WAY LINE THE FOLLOWING SEVEN (7) COURSES: 1. S 81° 18' 39" E 261.25 FEET; 2. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 719.98 FEET, AN ARC LENGTH OF 342.58 FEET (CHORD BEARS S 67° 40' 47" E 339.36 FEET); 3. ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 115.42 FEET, AN ARC LENGTH OF 19.02 FEET (CHORD BEARS S 14° 30' 47" E 19.00 FEET); 4. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 82.00 FEET, AN ARC LENGTH OF 110.68 FEET (CHORD BEARS S 48° 27' 33" E 102.47 FEET); 5. ALONG THE ARC OF A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 115.42 FEET, AN ARC LENGTH OF 20.06 FEET (CHORD BEARS S 82° 08' 49" E 20.03 FEET); 6. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 719.98 FEET, AN ARC LENGTH OF 57.30 FEET (CHORD BEARS S 41° 01' 02" E 57.29 FEET); 7. S 38° 44' 14" E 193.94 FEET TO THE POINT OF BEGINNING.

- **Parcel B:** A PARCEL OF LAND SITUATE IN THE NE1/4 SECTION 31, TOWNSHIP 5 SOUTH, RANGE 90 WEST OF THE 6TH P.M. COUNTY OF GARFIELD, STATE OF COLORADO, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE WEST 1/16 CORNER BETWEEN SAID SECTIONS 29 AND 32, A REBAR AND ALUMINUM CAP LS NO. 36572 SET IN PLACE; THENCE S29° 45' 20" W 2647.04 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF CASTLE VALLEY RANCH, P.U.D. AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED AUGUST 10, 1983 UNDER RECEPTION NO. 344590, THE TRUE POINT OF BEGINNING; THENCE ALONG SAID SOUTHERLY BOUNDARY LINE THE FOLLOWING FOUR (4) COURSES: 1. N 89° 50' 34" W 450.00 FEET; 2. N 00° 09' 26" E 75.00 FEET; 3. N 89° 50' 34" W 275.00 FEET; 4. N 00° 09' 26" E 150.00 FEET; THENCE DEPARTING SAID SOUTHERLY BOUNDARY LINE N00° 47' 28" W 548.03 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF CASTLE VALLEY RANCH, PA 19A & WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED NOVEMBER 29, 2005 UNDER RECEPTION NO. 687288; THENCE ALONG SAID SOUTHERLY BOUNDARY LINE N 40° 33' 51" E 273.86 FEET; THENCE DEPARTING SAID SOUTHERLY BOUNDARY LINE N 89° 56' 25" E 552.43 FEET; THENCE S 00° 05' 00" E 983.59 FEET TO THE POINT OF BEGINNING (a/k/a Assessor Account No. R043084.)

Common address or Description: 13.538 acres east of S. Wild Horse Dr. (CVR Filing 8) & south of Castle Valley Blvd

Applicant: CVR Investors, Inc. and its assigns

Landowner: CVR Investors, Inc.

The complete application is available at the Town Clerk's office at 450 West Main Street, P. O. Box 90, New Castle, CO 81647. All interested persons are invited to appear and state their views, protests or objections. If you cannot appear personally at such hearing, then you are urged to state your views by letter.

## Garfield County Land Explorer

| Parcel       | Physical Address                    | Owner                                  | Account Num | Mailing Address                                                 |
|--------------|-------------------------------------|----------------------------------------|-------------|-----------------------------------------------------------------|
| 212331100002 | Not available NEW CASTLE            | CVR INVESTORS INC                      | R043084     | 5282 RED PASS WAY<br>CASTLE ROCK, CO 80108                      |
| 212331101001 | Not available NEW CASTLE            | GARFIELD COUNTY                        | R380315     | 108 8TH STREET, SUITE<br>213 GLENWOOD SPRINGS,<br>CO 81601-3363 |
| 212331101002 | Not available NEW CASTLE            | GELINEAU, TERI N                       | R380030     | 714 BENNETT AVENUE<br>GLENWOOD SPRINGS, CO<br>81601             |
| 212331101005 | 644 E MAIN ST NEW CASTLE            | GELINEAU, TERI N                       | R380200     | 714 BENNETT AVENUE<br>GLENWOOD SPRINGS, CO<br>81601             |
| 212331101006 | Not available NEW CASTLE            | MCCULLOUGH, ROBERT B                   | R380061     | 696 E MAIN STREET NEW<br>CASTLE, CO 81647                       |
| 212331101007 | 640 E MAIN ST NEW CASTLE            | ROBERTS, CALVIN D &<br>PATRICIA A      | R380062     | 1655 COUNTY ROAD 247<br>NEW CASTLE, CO 81647                    |
| 212331102010 | Not available NEW CASTLE            | CALLIES, STANLEY & CHASTAN,<br>MARIAH  | R380271     | 116 NORTH D AVENUE<br>NEW CASTLE, CO 81647                      |
| 212331102012 | 116 N D AVE NEW CASTLE              | CALLIES, STANLEY & CHASTAN,<br>MARIAH  | R380178     | 116 NORTH D AVENUE<br>NEW CASTLE, CO 81647                      |
| 212331102014 | 586 E MAIN ST NEW CASTLE            | JERKUNICA PROPERTIES LLC               | R082588     | 0262 S BILL CREEK ROAD<br>CARBONDALE, CO 81623                  |
| 212331102015 | 572 E MAIN ST NEW CASTLE            | TREVINO, MELINDA J &<br>GABRIEL SR     | R082589     | 572 E MAIN STREET NEW<br>CASTLE, CO 81647                       |
| 212331162001 | 16 KIT CARSON<br>PEAK CT NEW CASTLE | WILSON, DANE BRANDON &<br>KENDRA JONES | R042930     | 16 KIT CARSON PEAK<br>COURT NEW CASTLE, CO<br>81647             |
| 212331162025 | 538 S WILDHORSE<br>DR NEW CASTLE    | NEW CASTLE HOMES LLC                   | R042954     | 3768 HIGHWAY 82 #101<br>GLENWOOD SPRINGS, CO<br>81601           |
| 212331162026 | 526 S WILDHORSE<br>DR NEW CASTLE    | NEW CASTLE HOMES LLC                   | R042955     | 3768 HIGHWAY 82 #101<br>GLENWOOD SPRINGS, CO<br>81601           |
| 212331162027 | 520 S WILDHORSE<br>DR NEW CASTLE    | NEW CASTLE HOMES LLC                   | R042956     | 3768 HIGHWAY 82 #101<br>GLENWOOD SPRINGS, CO<br>81601           |
| 212331162028 | 510 S WILDHORSE<br>DR NEW CASTLE    | FLAHERTY, KENT & CINDY                 | R042957     | 510 S WILDHORSE DRIVE<br>NEW CASTLE, CO 81647                   |
| 212331162029 | 501 S WILDHORSE<br>DR NEW CASTLE    | SHELTON, WAYNE & VIRGINIA              | R042958     | 501 S WILD HORSE DRIVE<br>NEW CASTLE, CO 81647                  |
| 212331162030 | 507 S WILD HORSE<br>DR NEW CASTLE   | SCHEBERLE, STEVEN W &<br>DENISE L      | R042959     | 507 S WILD HORSE DRIVE<br>NEW CASTLE, CO 81647                  |
| 212331162031 | 513 S WILD HORSE<br>DR NEW CASTLE   | SCHWENK, THOMAS & KAREN                | R042960     | 513 SOUTH WILDHORSE<br>DRIVE NEW CASTLE, CO<br>81647            |
| 212331162032 | 519 S WILD HORSE<br>DR NEW CASTLE   | KIM, ELIS                              | R042961     | 3120 BLAKE AVENUE #D<br>GLENWOOD SPRINGS, CO<br>81601           |
| 212331162033 | 523 S WILD HORSE<br>DR NEW CASTLE   | HERNANDEZ, VICTOR & MARIA              | R042962     | 523 S WILD HORSE DRIVE<br>NEW CASTLE, CO 81647                  |
| 212331162034 | 529 S WILD HORSE<br>DR NEW CASTLE   | MEEKER, DAVID                          | R042963     | PO BOX 10926 ASPEN, CO<br>81612                                 |
| 212331162035 | 533 S WILD HORSE                    | ORTEGA, OTONIEL & VICTORIA             | R042964     | 533 S WILD HORSE DRIVE                                          |

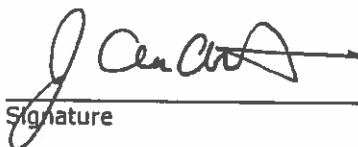
| Parcel       | Physical Address                    | Owner                                     | Account Num | Mailing Address                          |
|--------------|-------------------------------------|-------------------------------------------|-------------|------------------------------------------|
| 212332301001 | Not available NEW CASTLE            | KITCHEN, DEAN                             | R130318     | PO BOX 228 NEW CASTLE, CO 81647          |
| 212332301002 | 230 S E AVE NEW CASTLE              | MCCUNE, BARBARA CEBULA                    | R130319     | PO BOX 182 NEW CASTLE, CO 81647-0182     |
| 212332302001 | 700 BURNING MOUNTAIN AVE NEW CASTLE | BAILIE, ROBERT C LIVING TRUST             | R790003     | 3001 HOWARD AVENUE RIFLE, CO 81650       |
| 212332302002 | 702 BURNING MOUNTAIN AVE NEW CASTLE | TORRES, RAQUEL & VEGA TORRES, JOSE HERNAN | R790004     | PO BOX 1791 CARBONDALE, CO 81623         |
| 212332302003 | 704 BURNING MOUNTAIN AVE NEW CASTLE | HURTADO, JOSE M & URENO, AMPARO           | R790005     | 1900 WILLITS LANE NO 25 BASALT, CO 81621 |
| 212332302065 | Not available NEW CASTLE            | NEW CASTLE, TOWN OF                       | R790067     | PO BOX 90 NEW CASTLE, CO 81647-0166      |
| 212332302066 | Not available NEW CASTLE            | NEW CASTLE, TOWN OF                       | R006618     | PO BOX 90 NEW CASTLE, CO 81647-0166      |
| 212332304009 | Not available NEW CASTLE            | NEW CASTLE, TOWN OF                       | R130402     | PO BOX 90 NEW CASTLE, CO 81647-0166      |
| ROW          | Not available null                  |                                           |             |                                          |
| ROW          | Not available null                  |                                           |             |                                          |
| ROW          | Not available null                  |                                           |             |                                          |
| ROW          | Not available null                  |                                           |             |                                          |



## AFFIDAVIT AS TO NOTICE OF PUBLIC HEARING

I, AARON ATKINSON, do hereby certify that pursuant to ordinances of the Town of New Castle, Colorado, I provided notice of a public hearing before the New Castle Planning Commission/Town Council on MAY 13, 2020 regarding a DEVELOPMENT application by doing the following:

1. At least fifteen (15) days prior to such hearing, I sent a copy of the **attached** Notice of Public Hearing by certified mail to the owners of all property within two hundred fifty (250) feet of the subject property and to the Town of New Castle.
2. If required by Chapter 16.10 of the new Castle Municipal Code, at least thirty (30) days prior to such hearing, I sent a copy of the **attached** Notice of Public Hearing by certified mail to the owners of mineral estates who have requested notification with respect to the subject property at the Garfield County Clerk and Recorder.
3. At least fifteen (15) days prior to such hearing, I posted notice of the hearing on the property on a sign approved by the Town at least twenty-two (22) inches wide, twenty-six (26) inches high, with letters at least one (1) inch in height. The sign was posted so that it was visible from a public street.
4. At least (15) days prior to such hearing, the **attached** Notice of Public Hearing was published on the Town's website.

  
Signature

STATE OF COLORADO )  
 ) ss.

COUNTY OF )

Subscribed and sworn to before me this 1<sup>st</sup> day of May,  
by Aaron Atkinson

Witness my hand and official seal.

  
Notary Public  
My commission expires: 8/25/21

JOHN T SNOW  
NOTARY PUBLIC - STATE OF COLORADO  
Notary ID 20054033470  
My Commission Expires 8/25/2021

## AGREEMENT TO PAY CONSULTING FEES AND EXPENSES

It is the policy of the Town of New Castle that all land use applications must be filed in the Office of the Town Clerk to receive formal consideration. Please refer to the Town Clerk's Office for all applicable procedures.

However, the Town encourages land use applicants to consult informally with members of the Town Staff, including outside consultants, prior to filing applications if the applicant has questions regarding areas within Staff members' particular expertise; PROVIDED THAT THE POTENTIAL APPLICANT AGREES TO REIMBURSE THE TOWN FOR ALL FEES AND EXPENSES RELATING TO SUCH INFORMAL MEETINGS.

The Town employs outside consultants for engineering, surveying, planning, and legal advice. These consultants bill the Town on an hourly basis as well as for expenses including but not limited to copies, facsimile transmissions, and long distance telephone calls.

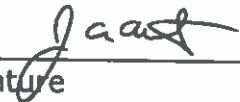
It is the Town's policy that all persons wishing to hold informal meetings with members of the Town Staff acknowledge responsibility for all fees and expenses charged by outside consultants by signing this Agreement below.

I acknowledge and agree to pay the Town of New Castle all actual costs incurred by the Town in relation to legal, engineering, surveying, planning, or other services performed by consultants to the Town as a result of such consultants' review and comment upon, or other services related to, land use proposals and/or applications proposed by me or on my behalf, regardless of whether or not such application is formally filed with the Town. Interest shall be paid at the rate of 1.5% per month on all balances not paid within thirty (30) days of the date of the statement. In the event the Town is forced to pursue collection of any amounts due and unpaid, the Town shall be entitled to collect all costs of collection in addition to the amount due and unpaid, including but not limited to reasonable attorney's fees and costs.

SO AGREED this 10th day of February, 2020.

J. Aaron Atkinson

Applicant (Print Name)

  
Signature

303-549-1916

Telephone

5282 Red Pass Way, Castle Rock, CO 80108

Mailing Address

CVR Investors, Inc.

Property Owner

Mailing Address If Different From Above

Authorized Representative

Relationship to Applicant or Potential Applicant

Type of application: Subdivision and PUD

Property description: See Attached



**Land Title Guarantee Company  
Customer Distribution**



**PREVENT FRAUD - Please remember to call a member of our closing team when initiating a wire transfer or providing wiring instructions.**

Order Number: **ABS63014515**

Date: 01/10/2020

Property Address: **TBD NEW CASTLE, NEW CASTLE, CO 81647**

**PLEASE CONTACT YOUR CLOSER OR CLOSER'S ASSISTANT FOR WIRE TRANSFER INSTRUCTIONS**

---

**For Closing Assistance**

**For Title Assistance**

Melissa Schroder  
5975 GREENWOOD PLAZA BLVD  
GREENWOOD VILLAGE, CO 80111  
(303) 270-0438 (Work)  
[mschroder@ltgc.com](mailto:mschroder@ltgc.com)

---

**Seller/Owner**

HACKSTAFF & SNOW LLC  
Attention: CVR INVESTERS C/O J AARON ATKINSON  
1601 BLAKE ST #310  
DENVER, CO 80202  
(303) 534-4317 (Work)  
(303) 534-4309 (Work Fax)  
[aa@hackstafflaw.com](mailto:aa@hackstafflaw.com)  
Delivered via: Electronic Mail

**ALTA COMMITMENT**

**Old Republic National Title Insurance Company**

**Schedule A**

**Order Number: ABS63014515**

**Property Address:**

TBD NEW CASTLE, NEW CASTLE, CO 81647

**1. Effective Date:**

12/06/2019 at 5:00 P.M.

**2. Policy to be Issued and Proposed Insured:**

"TBD" Commitment

\$0.00

Proposed Insured:

A BUYER TO BE DETERMINED

**3. The estate or interest in the land described or referred to in this Commitment and covered herein is:**

A Fee Simple

**4. Title to the estate or interest covered herein is at the effective date hereof vested in:**

CVR INVESTORS, INC., A COLORADO CORPORATION

**5. The Land referred to in this Commitment is described as follows:**

**PARCEL A:**

A PARCEL OF LAND SITUATE IN THE NE1/4 SECTION 31, TOWNSHIP 5 SOUTH, RANGE 90 WEST OF THE 6TH P.M. COUNTY OF GARFIELD, STATE OF COLORADO, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST 1/16 CORNER BETWEEN SAID SECTIONS 29 AND 32, A REBAR AND ALUMINUM CAP LS NO. 36572 SET IN PLACE;

THENCE S29° 45' 20" W 2647.04 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF CASTLE VALLEY RANCH, P.U.D. AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED AUGUST 10, 1983 UNDER RECEPTION NO. 344590, THE TRUE POINT OF BEGINNING; THENCE ALONG SAID SOUTHERLY BOUNDARY LINE THE FOLLOWING FOUR (4) COURSES:

1. N 89° 50' 34" W 450.00 FEET;

2. N 00° 09' 26" E 75.00 FEET;

3. N 89° 50' 34" W 275.00 FEET;

4. N 00° 09' 26" E 150.00 FEET;

THENCE DEPARTING SAID SOUTHERLY BOUNDARY LINE N00° 47' 28" W 548.03 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF CASTLE VALLEY RANCH, PA 19A & WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED NOVEMBER 29, 2005 UNDER RECEPTION NO. 687288;

THENCE ALONG SAID SOUTHERLY BOUNDARY LINE N 40° 33' 51" E 273.86 FEET;

THENCE DEPARTING SAID SOUTHERLY BOUNDARY LINE N 89° 56' 25" E 552.43 FEET;

THENCE S 00° 05' 00" E 983.59 FEET TO THE POINT OF BEGINNING. COUNTY OF GARFIELD STATE OF COLORADO.

**PARCEL B:**

A PARCEL OF LAND SITUATE IN THE NE1/4 SECTION 31 AND THE NW1/4 SECTION 32, TOWNSHIP 5 SOUTH, RANGE 90 WEST OF THE 6TH P.M., COUNTY OF GARFIELD, STATE OF COLORADO, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE WEST 1/16 CORNER BETWEEN SAID SECTIONS 29 AND 32 A REBAR AND ALUMINUM CAP LS NO. 36572

## ALTA COMMITMENT

Old Republic National Title Insurance Company

### Schedule A

Order Number: ABS63014515

RECORDER'S OFFICE RECORDED JULY 18, 2003 UNDER RECEPTION NO. 632116, THE TRUE POINT OF BEGINNING;

THENCE DEPARTING SAID WESTERLY LINE S 90° 00' 00" W 34.26 FEET;

THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 300.00 FEET; AN ARC LENGTH OF 123.32 FEET, CHORD BEARS S 78° 13' 25" W 122.46 FEET;

THENCE S66° 26' 50" W 88.64 FEET;

THENCE ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET, AN ARC LENGTH OF 180.86 FEET, CHORD BEARS S83° 43' 05" W 178.13 FEET;

THENCE N 79° 00' 40" W 277.49 FEET;

THENCE ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET, AN ARC LENGTH OF 273.25 FEET, CHORD BEARS N 52° 55' 05" W 263.90 FEET;

THENCE N 26° 49' 30" W 358.53 FEET;

THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 175.00 FEET; AN ARC LENGTH OF 218.29 FEET, CHORD BEARS N 62° 33' 33" W 204.41 FEET;

THENCE S 81° 42' 24" W 142.08 FEET;

THENCE S 08° 42' 12" E 51.58 FEET;

THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 855.84 FEET, AN ARC LENGTH OF 209.29 FEET, CHORD BEARS S 15° 42' 32" E 208.77 FEET;

THENCE S 65° 53' 03" W 97.34 FEET;

THENCE S 81° 23' 34" W 266.32 FEET;

THENCE S 51° 51' 16" W 126.84 FEET;

THENCE S 36° 47' 12" W 88.30 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF CASTLE VALLEY BOULEVARD AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDERS OFFICE RECORDED JANUARY 9, 2001 UNDER RECEPTION NO. 574735;

THENCE ALONG SAID NORTHERLY RIGHT OF WAY THE FOLLOWING NINE (9) COURSES:

1. S 34° 40' 33" E 927.02 FEET;

2. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 762.01 FEET, AN ARC LENGTH OF 620.22 FEET, CHORD BEARS S 57° 59' 36" E 603.25 FEET;

3. S 81° 18' 39" E 261.25 FEET;

4. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 819.98 FEET, AN ARC LENGTH OF 395.62 FEET, CHORD BEARS S 67° 29' 21" E 391.79 FEET;

5. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 140.42 FEET, AN ARC LENGTH OF 11.84 FEET, CHORD BEARS N 87° 15' 43" E 11.84 FEET;

6. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 86.00 FEET, AN ARC LENGTH OF 136.02 FEET; CHORD BEARS S 49° 50' 45" E 122.28 FEET;

7. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 170.42 FEET, AN ARC LENGTH OF 16.26 FEET, CHORD BEARS S 07° 16' 18" E 16.26 FEET;

8. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 819.98 FEET, AN ARC LENGTH OF 70.54 FEET, CHORD BEARS S 41° 12' 06" E 70.52 FEET;

9. S 38° 44' 14" E 63.19 FEET TO A POINT ON SAID WESTERLY LINE OF LAKOTA CANYON RANCH, FIRST AMENDED PLAT FILING NO. 1 AS FILED WITH THE GARFIELD COUNTY CLERK AND RECORDER'S OFFICE RECORDED JULY 18, 2003 UNDER RECEPTION NO. 632116 UNDER RECEPTION NO. 632116;

THENCE ALONG SAID WESTERLY LINE THE FOLLOWING NINE (9) COURSES:

1. N 01° 19' 33" W 284.64 FEET;

2. N 00° 50' 46" W 298.08 FEET;

3. N 01° 24' 24" W 405.00 FEET;

4. N 01° 13' 24" W 135.00 FEET;

5. N 03° 05' 23" E 23.82 FEET;

6. N 01° 46' 46" W 247.13 FEET;

7. S 88° 47' 17" W 2.05 FEET;

**ALTA COMMITMENT**

**Old Republic National Title Insurance Company**

**Schedule A**

**Order Number: ABS63014515**

**WILD HORSE DRIVE RIGHT OF WAY AS DESCRIBED IN THE SPECIAL WARRANTY DEED RECORDED SEPTEMBER 25, 2007 UNDER RECEPTION NO. 733780;**

**THENCE THE FOLLOWING THREE (3) COURSES ALONG SAID NORTH WILD HORSE DRIVE;**

**1. N 08° 42' 12" W A DISTANCE OF 17.22 FEET;**

**2. THENCE 390.97 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 668.49 FEET, A CENTRAL ANGLE OF 33° 30' 34" AND A SUBTENDING CHORD BEARING N 08° 03' 05" E A DISTANCE OF 385.42 FEET;**

**3. THENCE 228.11 FEET ALONG THE ARC OF A REVERSE CURVE HAVING A RADIUS OF 491.25 FEET, A CENTRAL ANGLE OF 26° 36' 20" AND SUBTENDING CHORD BEARING N 11° 30' 11" E A DISTANCE OF 226.07 FEET TO A POINT OF NON-TANGENCY;**

**THENCE 103.99 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 250.00 FEET, A CENTRAL ANGLE OF 23° 50' 00" AND A SUBTENDING CHORD BEARING S 79° 12' 35" E A DISTANCE OF 103.24 FEET;**

**THENCE S 67° 17' 36" E A DISTANCE OF 131.42 FEET;**

**THENCE S 30° 00' 58" W A DISTANCE OF 50.41 FEET;**

**THENCE S 18° 54' 59" W A DISTANCE OF 221.52 FEET;**

**THENCE S 16° 07' 55" W A DISTANCE OF 50.00 FEET;**

**THENCE 104.09 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 970.00 FEET, A CENTRAL ANGLE OF 6° 08' 55" AND A SUBTENDING CHORD BEARING S 11° 34' 51" W A DISTANCE OF 104.04 FEET TO A POINT OF NON-TANGENCY;**

**THENCE S 71° 43' 03" E A DISTANCE OF 57.57 FEET;**

**THENCE S 63° 30' 38" E A DISTANCE OF 55.33 FEET;**

**THENCE S 56° 40' 07" E A DISTANCE OF 55.13 FEET;**

**THENCE S 44° 48' 48" E A DISTANCE OF 174.82 FEET TO A POINT OF NON-TANGENCY;**

**THENCE 30.23 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 6° 17' 51" AND A SUBTENDING CHORD BEARING N 42° 06' 34" E A DISTANCE OF 30.21 FEET;**

**THENCE S 51° 02' 22" E A DISTANCE OF 247.25 FEET TO A POINT OF NON-TANGENCY;**

**THENCE 102.92 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 481.00 FEET, A CENTRAL ANGLE OF 12° 15' 34" AND SUBTENDING CHORD BEARING N 54° 54' 14" E A DISTANCE OF 102.72 FEET;**

**THENCE 122.69 FEET ALONG THE ARC OF A REVERSE CURVE HAVING A RADIUS OF 219.00 FEET, A CENTRAL ANGLE OF 32° 05' 53" AND A SUBTENDING CHORD BEARING N 44° 59' 05" E A DISTANCE OF 121.09 FEET;**

**THENCE N 28° 56' 08" E A DISTANCE OF 541.68 FEET;**

**THENCE N 14° 00' 12" E A DISTANCE OF 22.45 FEET; T**

**HENCE N 00° 55' 44" W A DISTANCE OF 289.40 FEET;**

**THENCE N 32° 41' 48" W A DISTANCE OF 88.46 FEET;**

**THENCE N 00° 02' 34" W A DISTANCE OF 167.50 FEET;**

**THENCE N 54° 50' 38" E A DISTANCE OF 173.10 FEET;**

**THENCE S 89° 54' 27" E A DISTANCE OF 116.87 FEET TO THE POINT OF BEGINNING, COUNTY OF GARFIELD, STATE OF COLORADO.**

**LESS AND EXCEPT THE FOLLOWING PROPERTIES FROM ALL OF THE ABOVE:**

**LOTS 1 THROUGH 19 AND OPEN SPACE,**

**CASTLE VALLEY RANCH SUBDIVISION PA12, FILING 9,**

**TOWN OF NEW CASTLE, COUNTY OF GARFIELD, STATE OF COLORADO, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 25, 2007 UNDER RECEPTION NO. 733785.**

**ALTA COMMITMENT**

**Old Republic National Title Insurance Company**

**Schedule B, Part I**

**(Requirements)**

**Order Number: ABS63014515**

**All of the following Requirements must be met:**

**This proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.**

**Pay the agreed amount for the estate or interest to be insured.**

**Pay the premiums, fees, and charges for the Policy to the Company.**

**Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.**

1. **RELEASE OF DEED OF TRUST DATED JANUARY 03, 2018 FROM CVR INVESTORS, INC., A COLORADO CORPORATION TO THE PUBLIC TRUSTEE OF GARFIELD COUNTY FOR THE USE OF ANB BANK TO SECURE THE SUM OF \$2,500,000.00 RECORDED JANUARY 03, 2018, UNDER RECEPTION NO. 901825.**

**SAID DEED OF TRUST WAS FURTHER SECURED IN ASSIGNMENT OF RENTS RECORDED JANUARY 03, 2018, UNDER RECEPTION NO. 901826.**

2. **WARRANTY DEED FROM CVR INVESTORS, INC., A COLORADO CORPORATION TO A BUYER TO BE DETERMINED CONVEYING SUBJECT PROPERTY.**

**NOTE: ADDITIONAL REQUIREMENTS OR EXCEPTIONS MAY BE NECESSARY WHEN THE BUYERS NAMES ARE ADDED TO THIS COMMITMENT. COVERAGES AND/OR CHARGES REFLECTED HEREIN, IF ANY, ARE SUBJECT TO CHANGE UPON RECEIPT OF THE CONTRACT TO BUY AND SELL REAL ESTATE AND ANY AMENDMENTS THERETO.**

**ALTA COMMITMENT**  
**Old Republic National Title Insurance Company**  
**Schedule B, Part II**  
**(Exceptions)**

Order Number: ABS63014515

14. RIGHT OF WAY FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AS RESERVED IN UNITED STATES PATENT RECORDED NOVEMBER 28, 1941, IN BOOK 73 AT PAGE [213](#).
15. AN UNDIVIDED ONE-HALF INTEREST IN ALL OIL, GAS AND OTHER MINERALS AS DESCRIBED IN INSTRUMENT RECORDED MARCH 25, 1980 IN BOOK 545 AT PAGE [681](#) ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN
16. AN UNDIVIDED ONE-HALF INTEREST OF ALL OIL, GAS AND OTHER MINERALS AS RESERVED IN INSTRUMENT RECORDED JULY 14, 1964 IN BOOK 359 AT PAGE [328](#) ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN
17. AN UNDIVIDED ONE-HALF INTEREST IN ALL OIL, GAS AND OTHER MINERALS AS RESERVED IN INSTRUMENT RECORDED MARCH 13, 1964 IN BOOK 356 AT PAGE [319](#) ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN
18. TERMS, CONDITIONS AND PROVISIONS OF RIGHT OF WAY AS RESERVED IN PATENTS RECORDED FEBRUARY 17, 1896 IN BOOK 12 AT PAGE [407](#).
19. TERMS, CONDITIONS AND PROVISIONS OF AGREEMENT RECORDED JANUARY 07, 1982 IN BOOK 590 AT PAGE [65](#).
20. MATTERS AS SHOWN ON THE MAP OF CASTLE VALLEY RANCH RECORDED AUGUST 10, 1983 UNDER RECEPTION NO. [344590](#) AS AMENDED BY AMENDED ANNEXATION AGREEMENT RECORDED MAY 30, 1989 IN BOOK 755 AT PAGE [38](#).
21. TERMS, CONDITIONS AND PROVISIONS OF ANNEXATION AGREEMENT RECORDED AUGUST 10, 1983 IN BOOK 632 AT PAGE [542](#), FIRST AMENDMENT TO ANNEXATION AGREEMENT RECORDED DECEMBER 31, 1984 IN BOOK 662 AT PAGE [243](#) AND AMENDED ANNEXATION AGREEMENT RECORDED MAY 30, 1989 IN BOOK 755 AT PAGE [38](#).
22. TERMS, CONDITIONS AND PROVISIONS OF SUBDIVISION IMPROVEMENTS AGREEMENT RECORDED AUGUST 15, 1983 IN BOOK 632 AT PAGE [951](#), AND AMENDMENT RECORDED MAY 30, 1989 IN BOOK 755 AT PAGE [62](#).
23. RESTRICTIVE COVENANTS, WHICH DO NOT CONTAIN A FORFEITURE OR REVERTER CLAUSE, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS CONTAINED IN INSTRUMENT RECORDED AUGUST 15, 1983, IN BOOK 632 AT PAGE [961](#).
24. TERMS, CONDITIONS AND PROVISIONS OF SUBDIVISION IMPROVEMENTS AGREEMENT RECORDED AUGUST 03, 1984 IN BOOK 654 AT PAGE [55](#).
25. TERMS, CONDITIONS AND PROVISIONS OF ORDINANCE NO. 99-8 RECORDED JUNE 08, 1999 IN BOOK 1133 AT PAGE [632](#).
26. TERMS, CONDITIONS AND PROVISIONS OF DEED OF EASEMENT RECORDED DECEMBER 21, 1999 IN BOOK 1165 AT PAGE [966](#).

**ALTA COMMITMENT**

**Old Republic National Title Insurance Company**

**Schedule B, Part II**

**(Exceptions)**

**Order Number: ABS63014515**

33. TERMS, CONDITIONS AND PROVISIONS OF ORDINANCE #2006-11 RECORDED AUGUST 08, 2006 IN BOOK 1829 AT PAGE [736](#).
34. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN DEED OF EASEMENT RECORDED MARCH 15, 2007 UNDER RECEPTION NO. [719068](#).
35. TERMS, CONDITIONS AND PROVISIONS OF WATER RIGHTS AGREEMENT RECORDED APRIL 17, 2007 IN BOOK 1915 AT PAGE [902](#).
36. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN AGREEMENT REGARDING TOWN AGREEMENTS RECORDED APRIL 17, 2007 UNDER RECEPTION NO. [721296](#).
37. RESTRICTIVE COVENANTS, WHICH DO NOT CONTAIN A FORFEITURE OR REVERTER CLAUSE, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS CONTAINED IN INSTRUMENT RECORDED APRIL 17, 2007, IN BOOK 1915 AT PAGE [960](#).
38. TERMS, CONDITIONS AND PROVISIONS OF AGREEMENT REGARDING GRANT OF EASEMENT RECORDED APRIL 17, 2007 IN BOOK 1915 AT PAGE [975](#).
39. TERMS, CONDITIONS AND PROVISIONS OF AGREEMENT REGARDING SILVERADO TRAIL RECORDED APRIL 17, 2007 IN BOOK 1915 AT PAGE [987](#).
40. TERMS, CONDITIONS AND PROVISIONS OF EASEMENT AGREEMENT RECORDED APRIL 17, 2007 IN BOOK 1915 AT PAGE [987](#).
41. TERMS, CONDITIONS AND PROVISIONS OF GRADING AGREEMENT RECORDED APRIL 17, 2007 IN BOOK 1916 AT PAGE [1](#).
42. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN CONSTRUCTION DEED OF TRUST, SECURITY AGREEMENT AND FIXTURE FILING WITH ASSIGNMENT OF RENT, PROCEEDS AND AGREEMENTS RECORDED APRIL 17, 2007 UNDER RECEPTION NO. [721304](#) AND AGREEMENT REGARDING PRIORITY RECORDED APRIL 17, 2008 UNDER RECEPTION NO. [746717](#).
43. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN DECLARATION AND ASSIGNMENT OF RESTRICTIVE COVENANTS RECORDED APRIL 17, 2008 UNDER RECEPTION NO. [746714](#).
44. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN ASSIGNMENT OF DECLARANT RIGHTS UNDER SECOND AMENDMENT TO THE DECLARANT RIGHTS UNDER SECOND AMENDMENT TO THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR CASTLE VALLEY RANCH, PLANNED UNIT DEVELOPMENT, AS AMENDED AND SUPPLEMENTED RECORDED APRIL 17, 2008 UNDER RECEPTION NO. [746715](#).
45. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN EASEMENT AGREEMENT RECORDED APRIL 17, 2008 UNDER RECEPTION NO. [746716](#).



## LAND TITLE GUARANTEE COMPANY DISCLOSURE STATEMENTS

**Note:** Pursuant to CRS 10-11-122, notice is hereby given that:

- (A) The Subject real property may be located in a special taxing district.
- (B) A certificate of taxes due listing each taxing jurisdiction will be obtained from the county treasurer of the county in which the real property is located or that county treasurer's authorized agent unless the proposed insured provides written instructions to the contrary. (for an Owner's Policy of Title Insurance pertaining to a sale of residential real property).
- (C) The information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder, or the County Assessor.

**Note:** Effective September 1, 1997, CRS 30-10-406 requires that all documents received for recording or filing in the clerk and recorder's office shall contain a top margin of at least one inch and a left, right and bottom margin of at least one half of an inch. The clerk and recorder may refuse to record or file any document that does not conform, except that, the requirement for the top margin shall not apply to documents using forms on which space is provided for recording or filing information at the top margin of the document.

**Note:** Colorado Division of Insurance Regulations 8-1-2 requires that "Every title entity shall be responsible for all matters which appear of record prior to the time of recording whenever the title entity conducts the closing and is responsible for recording or filing of legal documents resulting from the transaction which was closed". Provided that Land Title Guarantee Company conducts the closing of the insured transaction and is responsible for recording the legal documents from the transaction, exception number 5 will not appear on the Owner's Title Policy and the Lenders Policy when issued.

**Note:** Affirmative mechanic's lien protection for the Owner may be available (typically by deletion of Exception no. 4 of Schedule B, Section 2 of the Commitment from the Owner's Policy to be issued) upon compliance with the following conditions:

- (A) The land described in Schedule A of this commitment must be a single family residence which includes a condominium or townhouse unit.
- (B) No labor or materials have been furnished by mechanics or material-men for purposes of construction on the land described in Schedule A of this Commitment within the past 6 months.
- (C) The Company must receive an appropriate affidavit indemnifying the Company against un-filed mechanic's and material-men's liens.
- (D) The Company must receive payment of the appropriate premium.
- (E) If there has been construction, improvements or major repairs undertaken on the property to be purchased within six months prior to the Date of Commitment, the requirements to obtain coverage for unrecorded liens will include: disclosure of certain construction information; financial information as to the seller, the builder and or the contractor; payment of the appropriate premium fully executed Indemnity Agreements satisfactory to the company, and, any additional requirements as may be necessary after an examination of the aforesaid information by the Company.

No coverage will be given under any circumstances for labor or material for which the insured has contracted for or agreed to pay.



**JOINT NOTICE OF PRIVACY POLICY OF  
LAND TITLE GUARANTEE COMPANY,  
LAND TITLE GUARANTEE COMPANY OF SUMMIT COUNTY  
LAND TITLE INSURANCE CORPORATION AND  
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY**

This Statement is provided to you as a customer of Land Title Guarantee Company as agent for Land Title Insurance Corporation and Old Republic National Title Insurance Company.

We want you to know that we recognize and respect your privacy expectations and the requirements of federal and state privacy laws. Information security is one of our highest priorities. We recognize that maintaining your trust and confidence is the bedrock of our business. We maintain and regularly review internal and external safeguards against unauthorized access to your non-public personal information ("Personal Information").

In the course of our business, we may collect Personal Information about you from:

- applications or other forms we receive from you, including communications sent through TMX, our web-based transaction management system;
  - your transactions with, or from the services being performed by us, our affiliates, or others;
  - a consumer reporting agency, if such information is provided to us in connection with your transaction;
- and
- The public records maintained by governmental entities that we obtain either directly from those entities, or from our affiliates and non-affiliates.

Our policies regarding the protection of the confidentiality and security of your Personal Information are as follows:

- We restrict access to all Personal Information about you to those employees who need to know that information in order to provide products and services to you.
- We may share your Personal Information with affiliated contractors or service providers who provide services in the course of our business, but only to the extent necessary for these providers to perform their services and to provide these services to you as may be required by your transaction.
- We maintain physical, electronic and procedural safeguards that comply with federal standards to protect your Personal Information from unauthorized access or intrusion.
- Employees who violate our strict policies and procedures regarding privacy are subject to disciplinary action.
- We regularly assess security standards and procedures to protect against unauthorized access to Personal Information.

**WE DO NOT DISCLOSE ANY PERSONAL INFORMATION ABOUT YOU WITH ANYONE FOR ANY PURPOSE THAT IS NOT STATED ABOVE OR PERMITTED BY LAW.**

Consistent with applicable privacy laws, there are some situations in which Personal Information may be disclosed. We may disclose your Personal Information when you direct or give us permission; when we are required by law to do so, for example, if we are served a subpoena; or when we suspect fraudulent or criminal activities. We also may disclose your Personal Information when otherwise permitted by applicable privacy laws such as, for example, when disclosure is needed to enforce our rights arising out of any agreement, transaction or relationship with you.

Our policy regarding dispute resolution is as follows: Any controversy or claim arising out of or relating to our privacy policy, or the breach thereof, shall be settled by arbitration in accordance with the rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

**6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT**

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

**7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT**

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

**8. PRO-FORMA POLICY**

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

**9. ARBITRATION**

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at <http://www.alta.org/arbitration>.

IN WITNESS WHEREOF, Land Title Insurance Corporation has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A to be valid when countersigned by a validating officer or other authorized signatory.

Issued by:  
Land Title Guarantee Company  
3033 East First Avenue Suite 600  
Denver, Colorado 80206  
303-321-1880

*CB Rantz*

Senior Vice President



OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY  
A Stock Company  
400 Second Avenue South, Minneapolis, Minnesota 55401  
(612) 371-1111

By *C Monroe* President

Attest *David Wold* Secretary

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Land Title Insurance Corporation. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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## **A.G. Soils Report**

# A.G. Wassenaar

Geotechnical and Environmental Consultants

**Inc.**

2180 South Ivanhoe Street, Suite 5  
Denver, Colorado 80222-5710  
303-759-8100 Fax 303-756-2820  
www.agwassenaar.com

September 27, 2006

Village Homes of Colorado, Inc.  
100 Inverness Terrace East, Suite 200  
Englewood, Colorado 80112

Attention: Mr. Ron Hettinger

Subject: Addendum to the Preliminary Geotechnical Study  
Castle Valley Ranch  
West of Castle Valley Boulevard and Clubhouse Drive  
New Castle, Colorado  
Project Number 90114-A

Reference: "Preliminary Geotechnical Study  
Castle Valley Ranch  
West of Castle Valley Boulevard and Clubhouse Drive  
New Castle, Colorado"  
Project Number 90114  
Dated June 12, 2006  
Prepared by A. G. Wassenaar, Inc.

Dear Mr. Hettinger:

We have conducted additional field explorations for the proposed development at the subject site. Our summary of the data collected during our field and laboratory work and our analysis, opinions, and conclusions are presented below. The purpose of our study is to determine the excavatability of the sandstone and to determine the extent of collapsing soils in the proposed development.

In general, the subsurface materials encountered consist of topsoil, fill, sandy clay, interbedded clay and sand, and gravel, cobble, and boulders overlying bedrock. Claystone, sandstone, and/or shale bedrock was encountered at depths of 5 to 21 feet below the ground surface in all of the test borings. Ground water was not encountered during this study. Test Boring 23 refused at a depth of 16 feet.

## **Field Explorations**

Subsurface conditions were explored by drilling six test borings and excavating three test pits at the approximate locations indicated on Figure 1. The borings were advanced using a 4-inch diameter, continuous flight auger powered by a truck-mounted, CME 45 drilling rig. At frequent intervals, samples of the subsurface materials were taken using a Modified California sampler which is driven into the soil by dropping a 140-pound hammer through a free fall of 30 inches. The Modified California sampler is a 2.5-inch outside diameter by 2-inch inside diameter device. The

number of blows required for the sampler to penetrate 12 inches gives an indication of the consistency or relative density of the soils encountered. Results of the penetration tests and location of sampling are presented on the "Exploratory Boring Logs," Figure 2. The test pits were excavated using a hydraulic excavator. In addition to sampling and logging each boring for material types, ground water measurements were made at the time of drilling and again six days after drilling.

### ***Laboratory Testing***

Samples were returned to the laboratory where they were visually classified by a geotechnical engineer. Testing was then assigned to specific samples to evaluate their engineering properties. The laboratory tests included 14 settlement-swell tests to evaluate the effect of wetting and loading on the selected soils samples. The results of the settlement-swell tests are presented on Figures 3 through 9. In addition, a representative sample was tested for water soluble sulfates, pH, resistivity, and chlorides. The test results are summarized on Figure 2 and Table 1.

### ***Subsurface Conditions***

#### ***Test Borings***

The subsurface materials encountered in our test borings consisted of topsoil, fill, sandy clay, interbedded clay and sand, and gravel, cobble, and boulders overlying bedrock. Claystone, sandstone, and/or shale bedrock was encountered at depths of 5 to 21 feet below the ground surface in all of the test borings. Ground water was not encountered during this study. Test Boring 23 refused at a depth of 16 feet. A graphical depiction of the subsurface materials and ground water encountered is shown on Figure 2.

Topsoil was found in five of the six test borings. The topsoil encountered consisted of sandy clay, up to ½ foot thick, was organic and moist, and dark brown in color. The topsoil is not considered capable of supporting the structures and should be removed. Construction on topsoil is at the sole risk of the Owner.

Fill was found in one test boring (Boring 23). The fill material encountered consisted of sandy clay and was 1½ feet thick. It was compact in consistency and moist. It was mottled brown in color. This fill was placed prior to A. G. Wassenaar, Inc.'s involvement at this site. The fill was a stockpile located in the vicinity of the test boring. Construction on undocumented fill is at the sole risk of the Owner.

Slightly sandy clay was found in all of the test borings. The clay was generally stiff to very stiff, slightly moist to moist, and light brown to brown in color. It exhibited in-situ dry densities ranging from 95 to 110 pounds per cubic foot (pcf) at in-situ moisture contents ranging from 5 to 13 percent (%). The samples were visually of low plasticity. These soils exhibited compression to low swell (-1.7% to +0.4%) upon wetting and under a load of 1,000 pounds per square foot (psf). This soil is assessed to possess low expansion potential.

Interbedded clay and sand was encountered in one of the test borings. It was stiff/medium dense, moist, and brown to red brown in color. The sample was visually of low plasticity. This soil is assessed to possess low expansion potential.

Clayey gravel, cobbles, and boulders were encountered in three of the test borings. They were hard, slightly moist, mottled gray, brown to gray in color. The sample exhibited an in-situ dry density of 105 pcf at an in-situ moisture content of 9%. The samples were visually of low plasticity. These soils exhibited compression upon wetting and under a load of 1,000 psf. This soil is assessed to possess low expansion potential.

Claystone bedrock was encountered in three of the test borings. It was hard to very hard, silty, slightly sandy, iron stained, slightly moist to moist, and olive to rust in color. It exhibited in-situ dry densities of 115 to 124 pcf at in-situ moisture contents of 7 to 11%. The samples tested were of moderate plasticity. The claystone exhibited low to moderate (+0.5 to +3.3%) upon wetting and under a loading of 1,000 psf. It is considered to possess high expansion potential.

Sandstone bedrock was encountered in two of the test borings. The sandstone encountered was very hard, well cemented, silty, iron stained, slightly moist, and gray to red brown in color. The samples observed were visually of low plasticity. It is considered to possess low expansion potential.

Shale bedrock was encountered in one of the test borings. It was very hard, slightly moist, and olive in color. It was visually of low plasticity. The shale is considered to possess low expansion potential.

Interbedded claystone and shale was encountered in five of the test borings. It was very hard, slightly sandy, iron stained, slightly moist to moist, and olive to rust to brown in color. It exhibited an in-situ dry density of 108 pcf at an in-situ moisture content of 6%. The samples observed were visually of low to moderate plasticity. The interbedded claystone and shale exhibited compression (-0.9%) upon wetting and under a loading of 1,000 psf. It is considered to possess moderate expansion potential.

#### *Test Pits*

Three test pits were excavated with a light duty John Deere excavator to determine excavation difficulty. The test pits encountered up to ½ foot of topsoil over approximately 5 feet of sandy clay. Cobbles and boulders were encountered below the clay. Some of the boulders were not able to be excavated. Very hard sandstone was encountered in Test Pit 1 and the hydraulic excavator was not able to remove this material.

#### *Summary*

The recommendations in the referenced preliminary geotechnical study have been validated by these additional test borings and test pits. It appears that the collapsing soils may be isolated to

Village Homes of Colorado, Inc.  
Project Number 90114-A  
September 27, 2006  
Page 4

small pockets in the overall clay layer in the vicinity of Test Borings 23 and 24. The cobbles and boulders encountered in the test pits should be able to be excavated, and the sandstone encountered in Test Pit 1 appears to be rippable using a medium to heavy duty excavator equipped with a rock bucket. We believe that blasting should not be required.

If you have any questions regarding the contents of this letter or our analyses of the subsurface conditions which will influence the proposed development, please call us. We have appreciated the opportunity to provide this service for you.

Sincerely,

A. G. WASSENAAR, INC.

  
Kathleen A. Noonan, P.E.  
Project Engineer



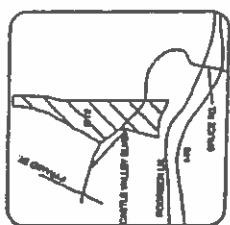
Reviewed by:

  
Keith D. Seaton, P.E.  
Senior Engineer

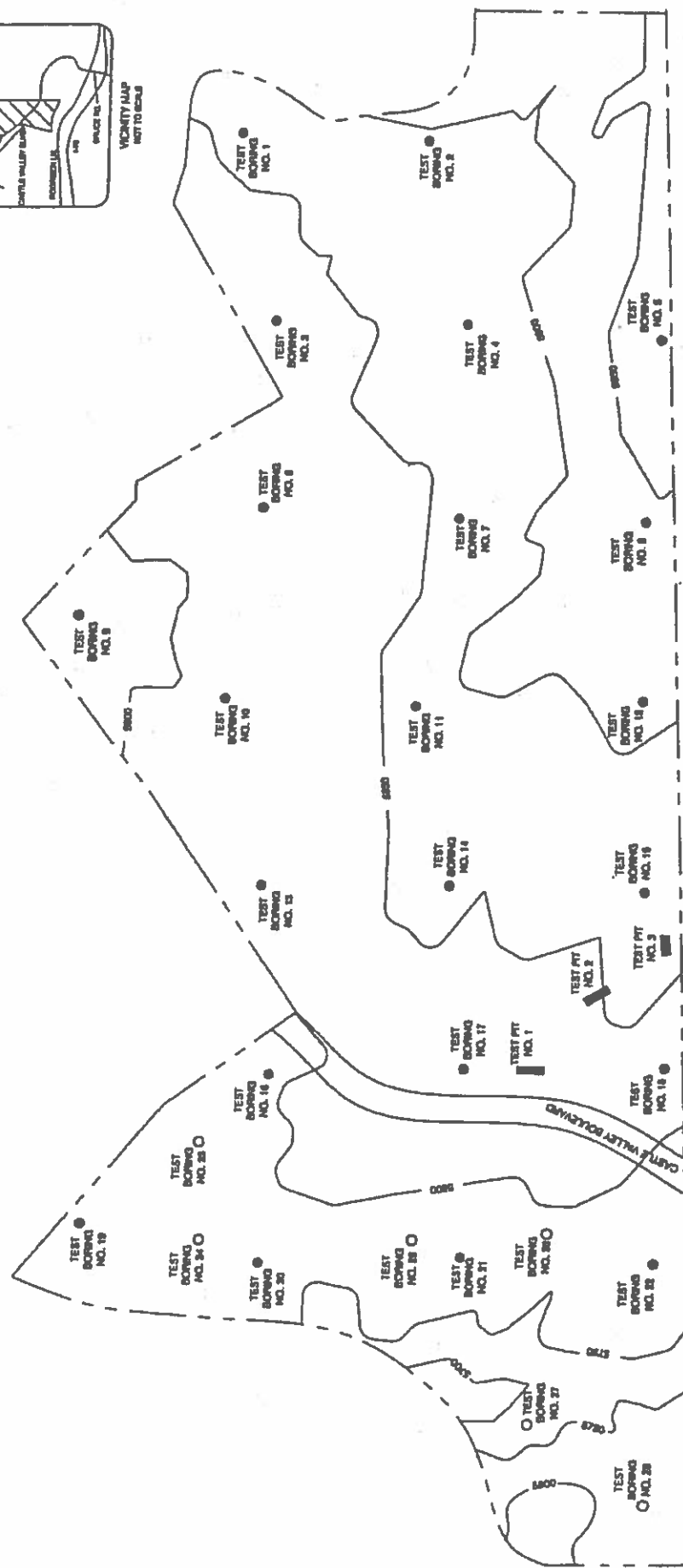
KAN/KDS/kan/lia

Attachments: Figures 1 through 9, Table I

Statement of Services



SCALE: 1" = 300'



800 ——— APPROXIMATE 800-FOOT CONTOUR LINE

● INDICATES TEST BORING DRILLED DURING OUR PREVIOUS STUDY

○ INDICATES TEST BORING DRILLED FOR THIS STUDY

|                                                                                                                 |                                 |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------|
| NOTE: ALL LOCATIONS ARE APPROXIMATE<br><b>A.G. Wassenaar</b><br>Environmental and Remediation Consultants, Inc. |                                 |
| SITE PLAN<br>AND<br>VICINITY MAP                                                                                | PROJECT NO. 2011-44<br>FIGURE 1 |

TEST  
BORING  
NO. 23  
ELEV. 5776

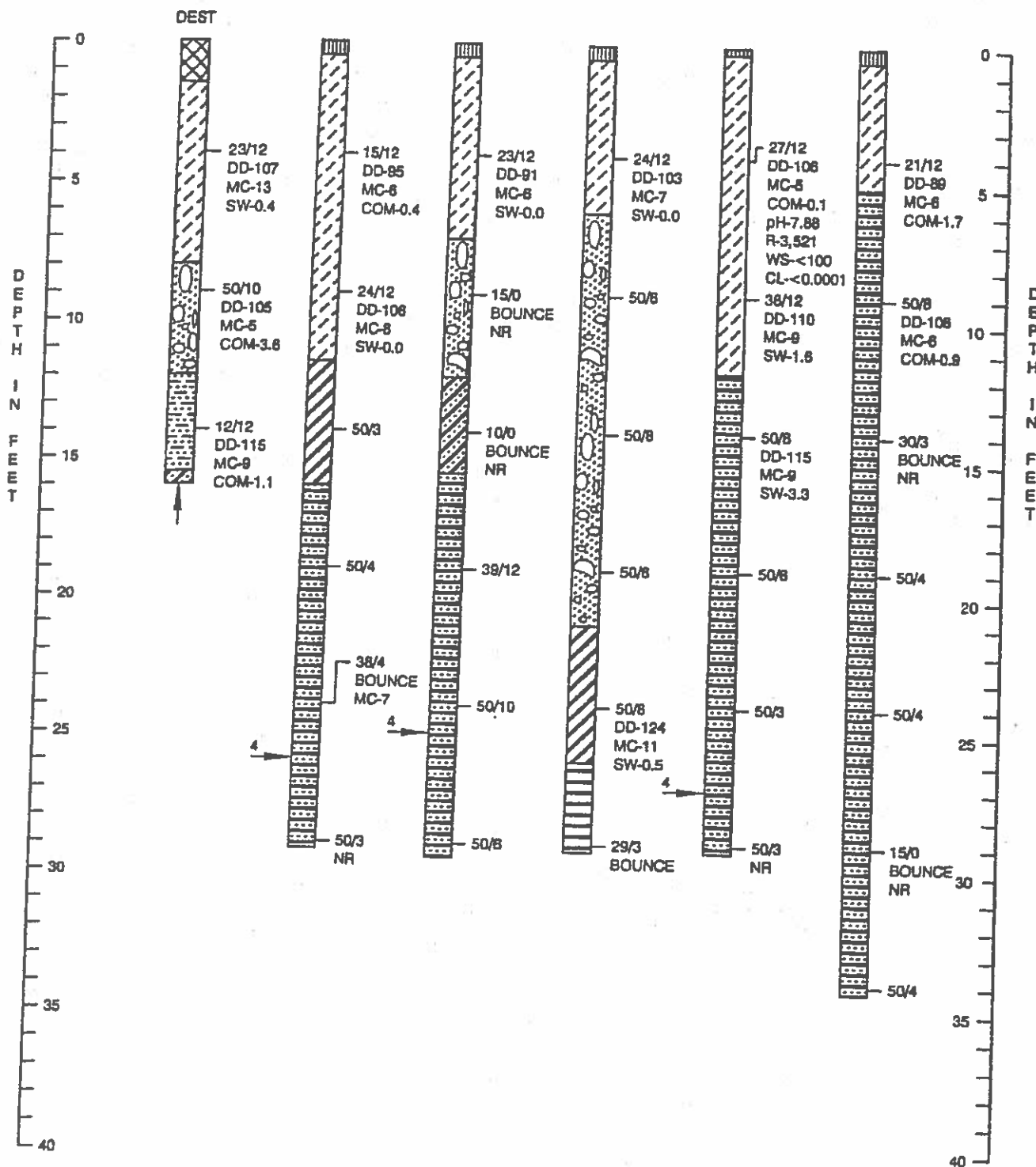
TEST  
BORING  
NO. 24  
ELEV. 5780

TEST  
BORING  
NO. 25  
ELEV. 5770

TEST  
BORING  
NO. 26  
ELEV. 5781

TEST  
BORING  
NO. 27  
ELEV. 5751

TEST  
BORING  
NO. 28  
ELEV. 5778



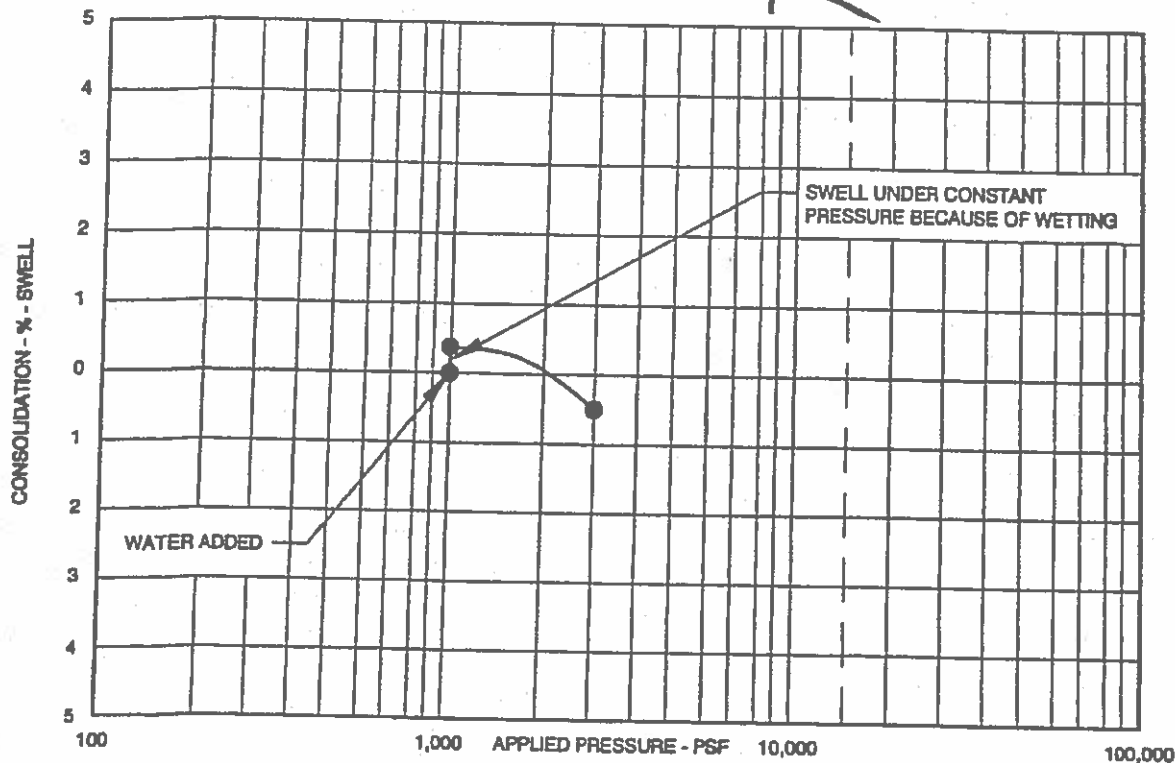
# **LEGEND**

|                                                                                    |                                                                                                                                       |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|   | TOPSOIL, CLAY, SANDY, ORGANIC, MOIST, DARK BROWN                                                                                      |
|   | FILL, CLAY, COMPACT, SANDY, MOIST, MOTTLED BROWN                                                                                      |
|   | CLAY, STIFF TO VERY STIFF, SLIGHTLY SANDY, SLIGHTLY MOIST TO MOIST, LIGHT BROWN TO BROWN                                              |
|   | GRAVELS, COBBLES, AND BOULDERS, CLAYEY, HARD, SLIGHTLY MOIST, GRAY TO BROWN                                                           |
|   | CLAY / SAND, INTERBEDDED, STIFF / MEDIUM DENSE, MOIST, BROWN TO RED BROWN                                                             |
|   | CLAYSTONE (BEDROCK), HARD TO VERY HARD, SILTY, SLIGHTLY SANDY, IRON STAINED, SLIGHTLY MOIST TO MOIST, OLIVE TO RUST                   |
|   | SANDSTONE (BEDROCK), VERY HARD, WELL CEMENTED, SILTY, IRON STAINED, MOIST, RED BROWN TO GRAY                                          |
|   | CLAYSTONE / SHALE (BEDROCK) INTERBEDDED, VERY HARD, IRON STAINED, SLIGHTLY SANDY, SLIGHTLY MOIST TO MOIST, OLIVE TO RUST TO BROWN     |
|   | SHALE (BEDROCK), VERY HARD, SLIGHTLY MOIST, OLIVE                                                                                     |
| 23/12                                                                              | INDICATES THAT 23 BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES WERE REQUIRED TO DRIVE A 2.5-INCH OUTSIDE DIAMETER SAMPLER 12 INCHES. |
| BOUNCE                                                                             | INDICATES THAT THE SAMPLER BOUNCED AT THE TERMINATION OF THE DRIVE.                                                                   |
| DEST                                                                               | INDICATES THE TEST BORING WAS DESTROYED WHEN WE RETURNED TO CHECK THE WATER LEVEL.                                                    |
|  | INDICATES THE DEPTH AT WHICH THE TEST BORING CAVED AND THE NUMBER OF DAYS AFTER DRILLING WHEN THE MEASUREMENT WAS TAKEN.              |
| DD                                                                                 | INDICATES DRY WEIGHT OF SAMPLE IN POUNDS PER CUBIC FOOT.                                                                              |
| MC                                                                                 | INDICATES MOISTURE CONTENT AS A PERCENTAGE OF DRY WEIGHT OF SOIL.                                                                     |
| SW                                                                                 | INDICATES PERCENT SWELL UNDER A SURCHARGE OF 1000 PSF UPON WETTING.                                                                   |
| COM                                                                                | INDICATES PERCENT COMPRESSION UNDER A SURCHARGE OF 1000 PSF UPON WETTING.                                                             |
| WS                                                                                 | INDICATES WATER SOLUBLE SULFATES IN PARTS PER MILLION.                                                                                |
| pH                                                                                 | INDICATES ACIDITY OR ALKALINITY OF SAMPLE IN pH UNITS.                                                                                |
| CL                                                                                 | INDICATES CHLORIDES IN PERCENT.                                                                                                       |
| R                                                                                  | INDICATES RESISTIVITY IN OHMS-CM.                                                                                                     |
| NR                                                                                 | INDICATES NO SAMPLE RECOVERED                                                                                                         |

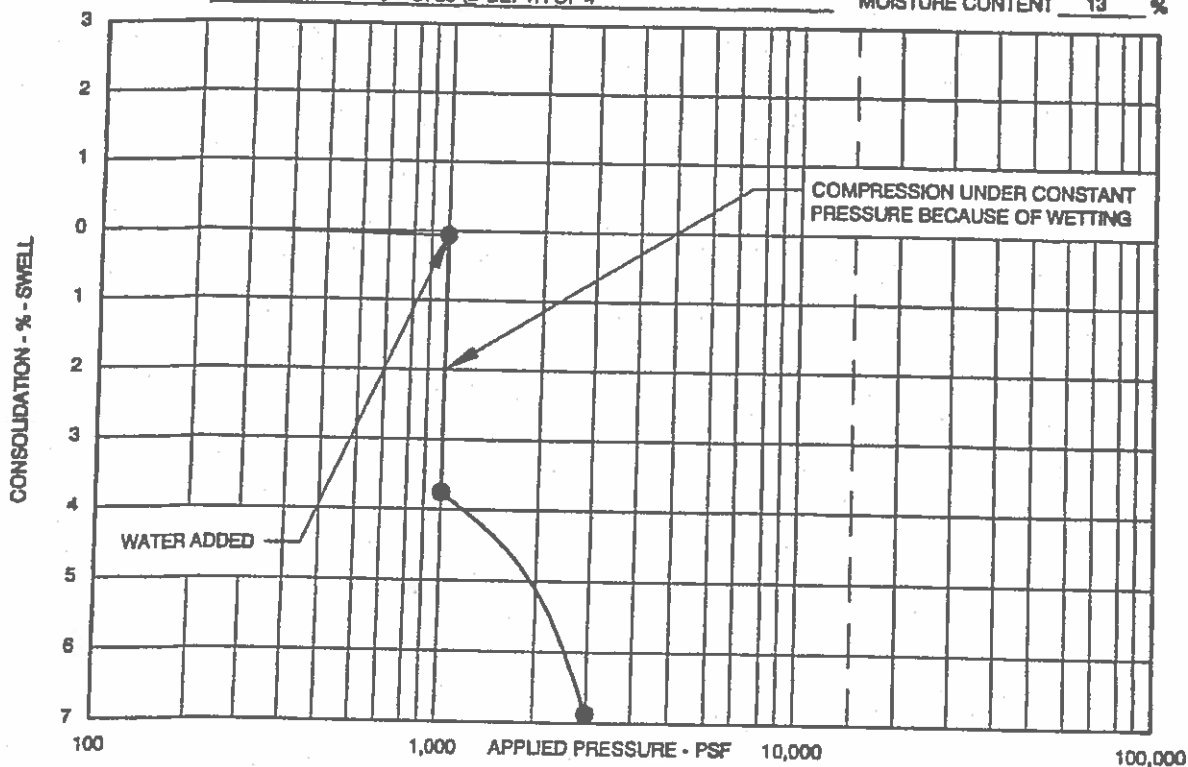
## **NOTES**

1. TEST BORINGS WERE DRILLED SEPTEMBER 2, 2006 WITH A 4-INCH DIAMETER, CONTINUOUS FLIGHT POWER AUGER.
2. LOCATIONS OF TEST BORINGS WERE MEASURED BY DISTANCE WHEEL FROM FEATURES SHOWN ON THE SITE PLAN PROVIDED BY OTHERS.
3. ELEVATIONS WERE PROVIDED BY OTHERS.
4. THE HORIZONTAL LINES SHOWN ON THE LOGS ARE TO DIFFERENTIATE MATERIALS AND REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIALS. THE TRANSITIONS BETWEEN MATERIALS MAY BE GRADUAL.
5. DRILL LOGS SHOWN IN THIS REPORT ARE SUBJECT TO THE LIMITATIONS, EXPLANATIONS, AND CONCLUSIONS OF THIS REPORT.

|                                                                                 |                                 |
|---------------------------------------------------------------------------------|---------------------------------|
| <b>A.G. Wassenaar</b><br>Geotechnical and Environmental Consultants <b>INC.</b> |                                 |
| EXPLORATORY<br>BORING LOGS                                                      | PROJECT NO. 90114-A<br>FIGURE 2 |



SAMPLE DESCRIPTION CLAY, SILTY DRY UNIT WT. 107 PCF  
LOCATION TEST BORING NO. 23 @ DEPTH OF 4' MOISTURE CONTENT 13 %

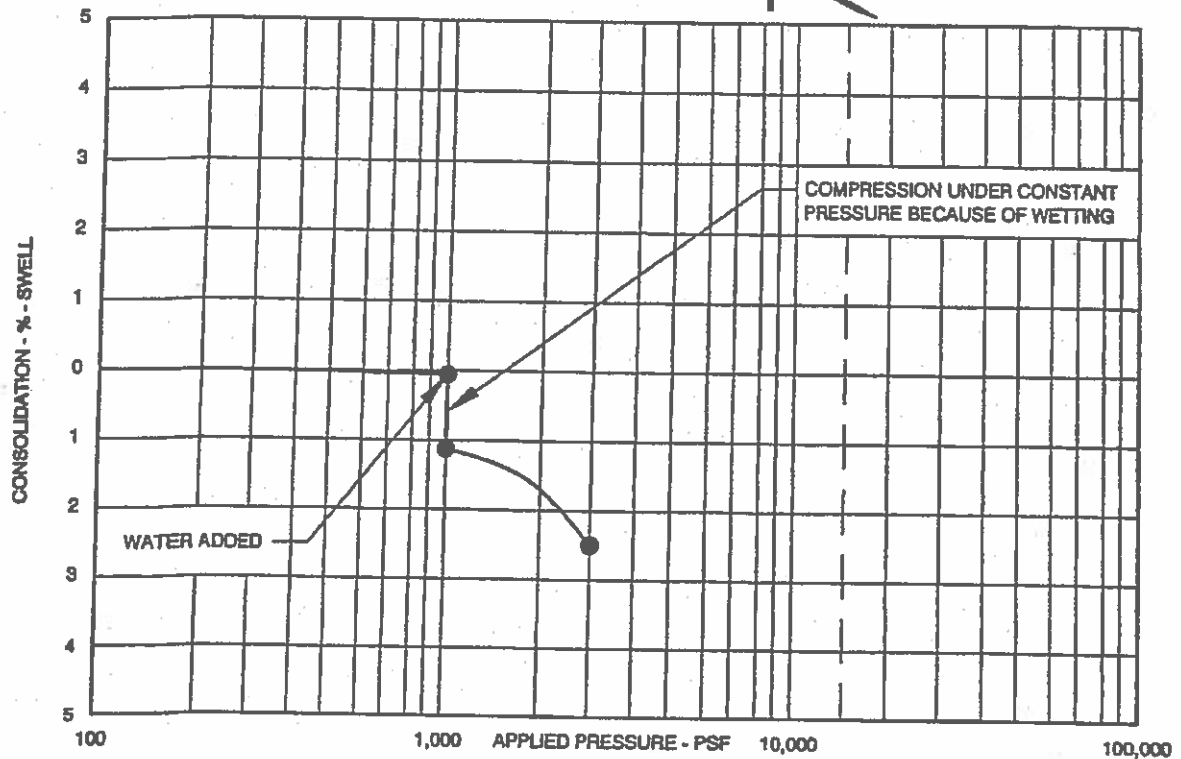


SAMPLE DESCRIPTION GRAVEL, CLAYEY (DISTURBED) DRY UNIT WT. 105 PCF  
LOCATION TEST BORING NO. 23 @ DEPTH OF 8' MOISTURE CONTENT 5 %

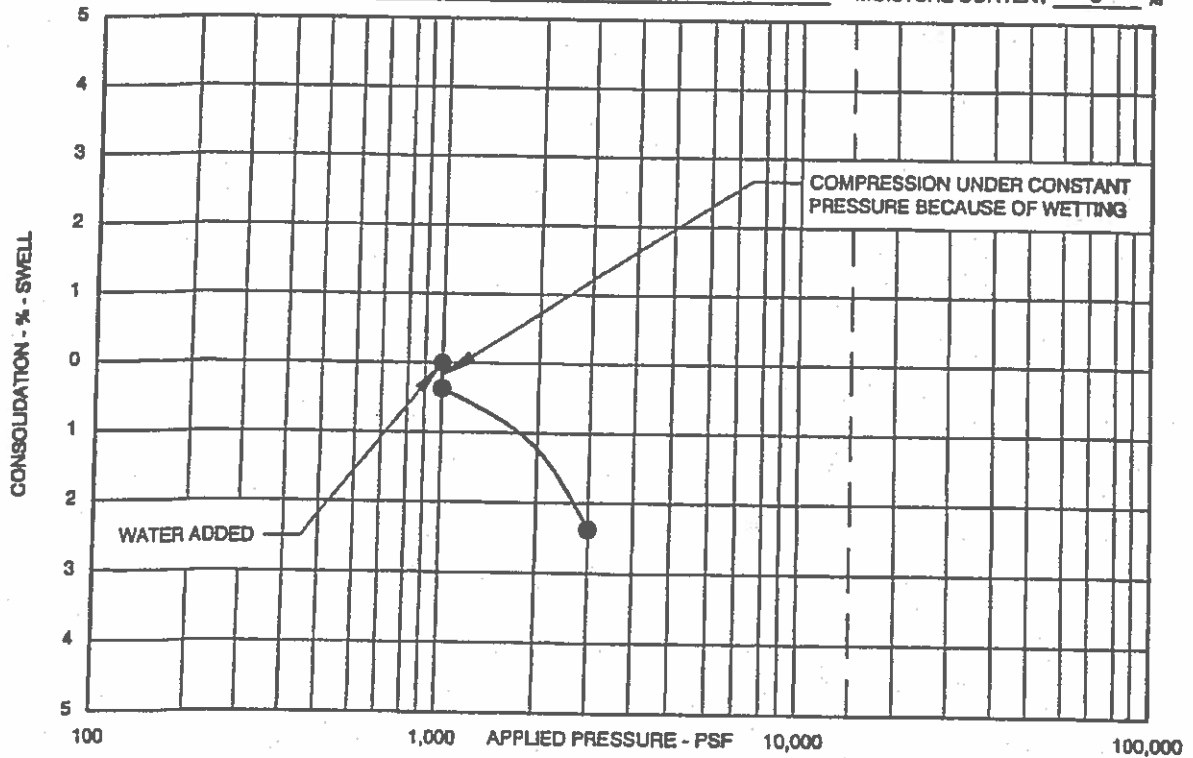
### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 3

PROJECT NO. 90114-A



SAMPLE DESCRIPTION CLAY / SAND, INTERBEDDED DRY UNIT WT. 115 PCF  
LOCATION TEST BORING NO. 23 @ DEPTH OF 14' MOISTURE CONTENT 9 %

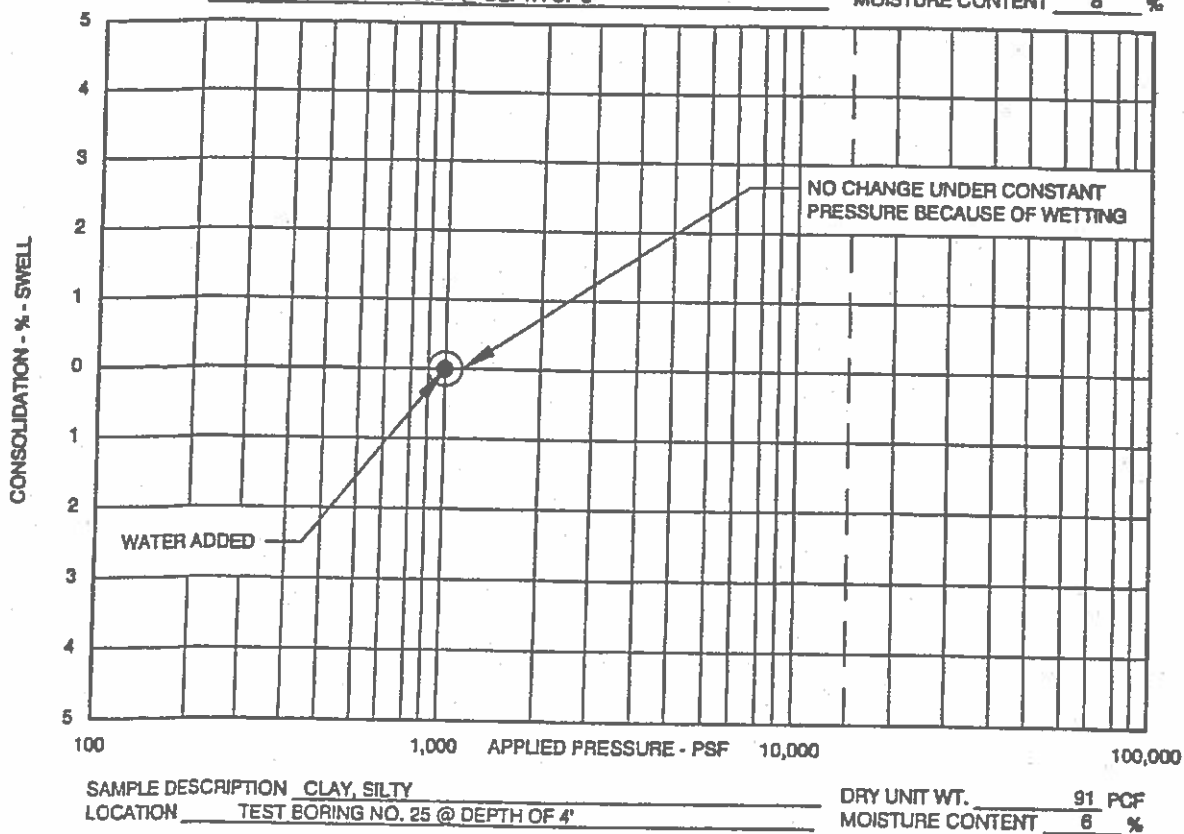
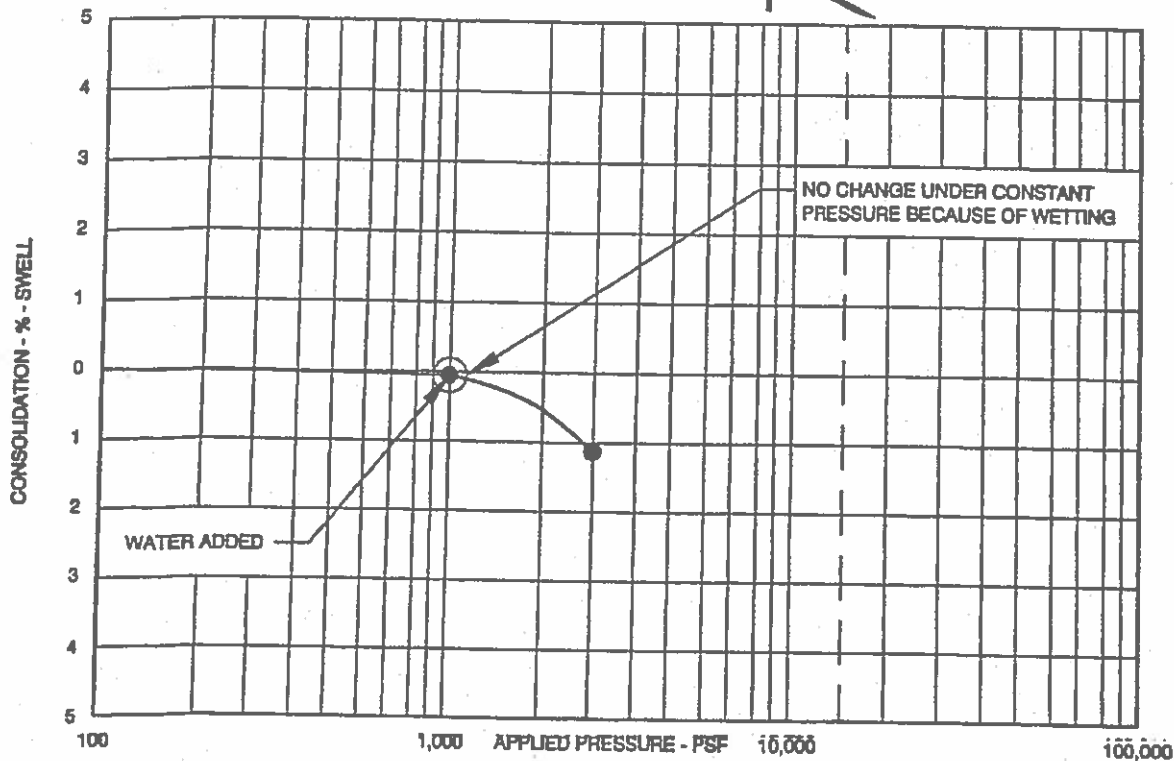


SAMPLE DESCRIPTION CLAY, SILTY DRY UNIT WT. 95 PCF  
LOCATION TEST BORING NO. 24 @ DEPTH OF 4' MOISTURE CONTENT 6 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 4

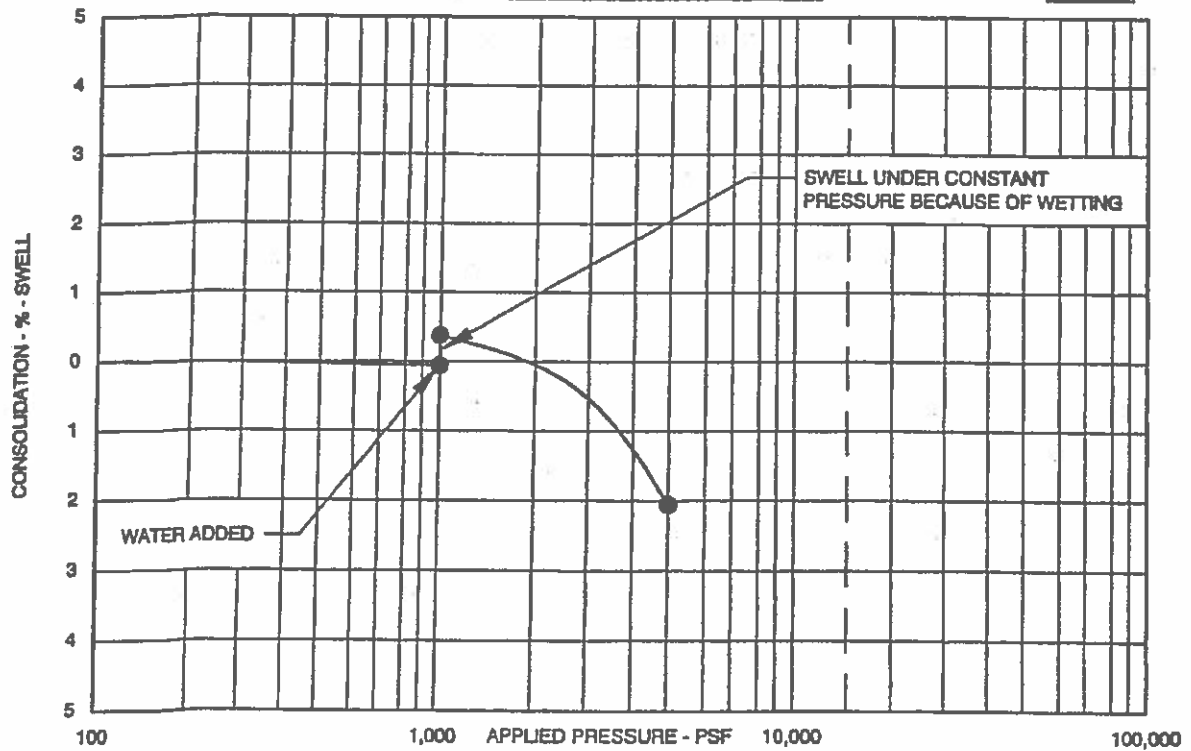
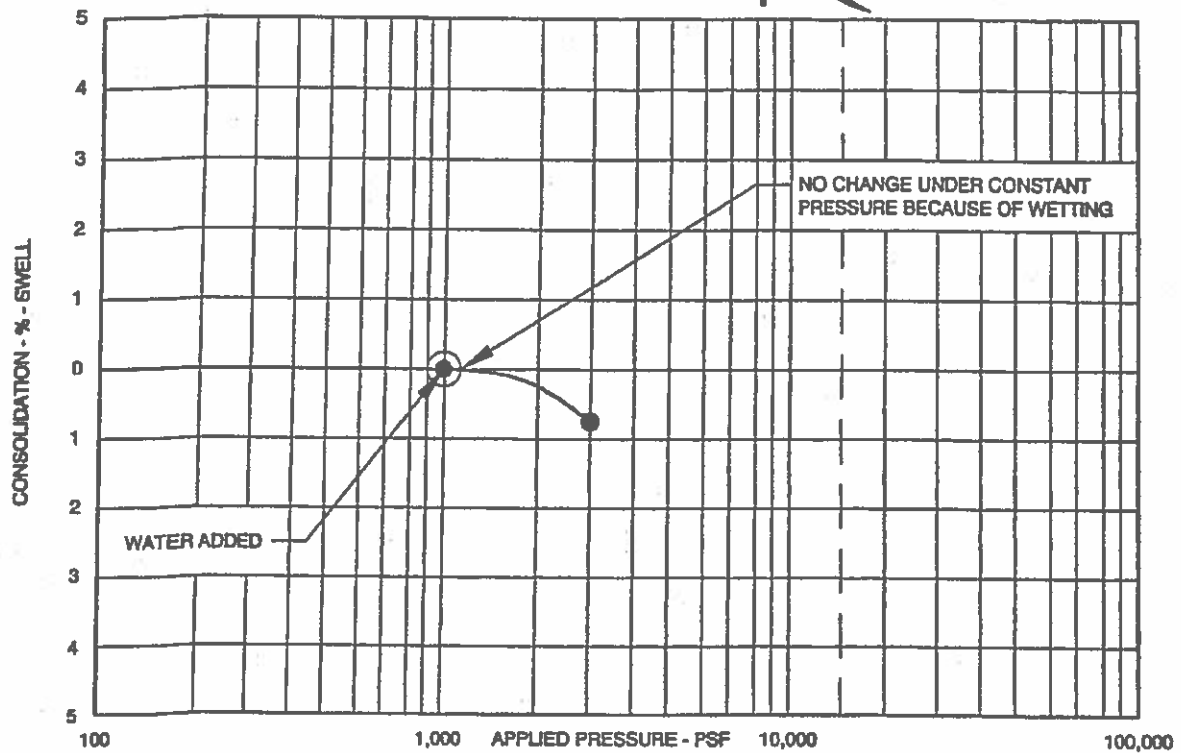
PROJECT NO. 90114-A



**SWELL - CONSOLIDATION TEST RESULTS**

FIGURE 5

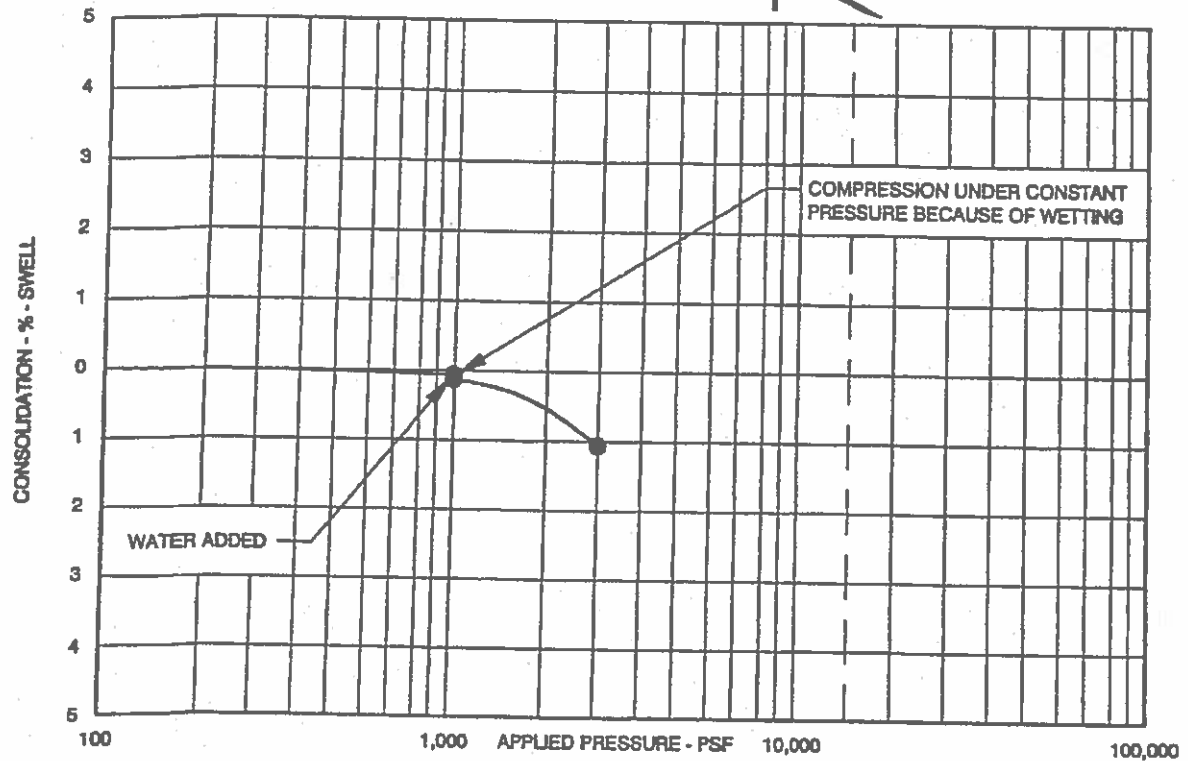
PROJECT NO. 90114-A



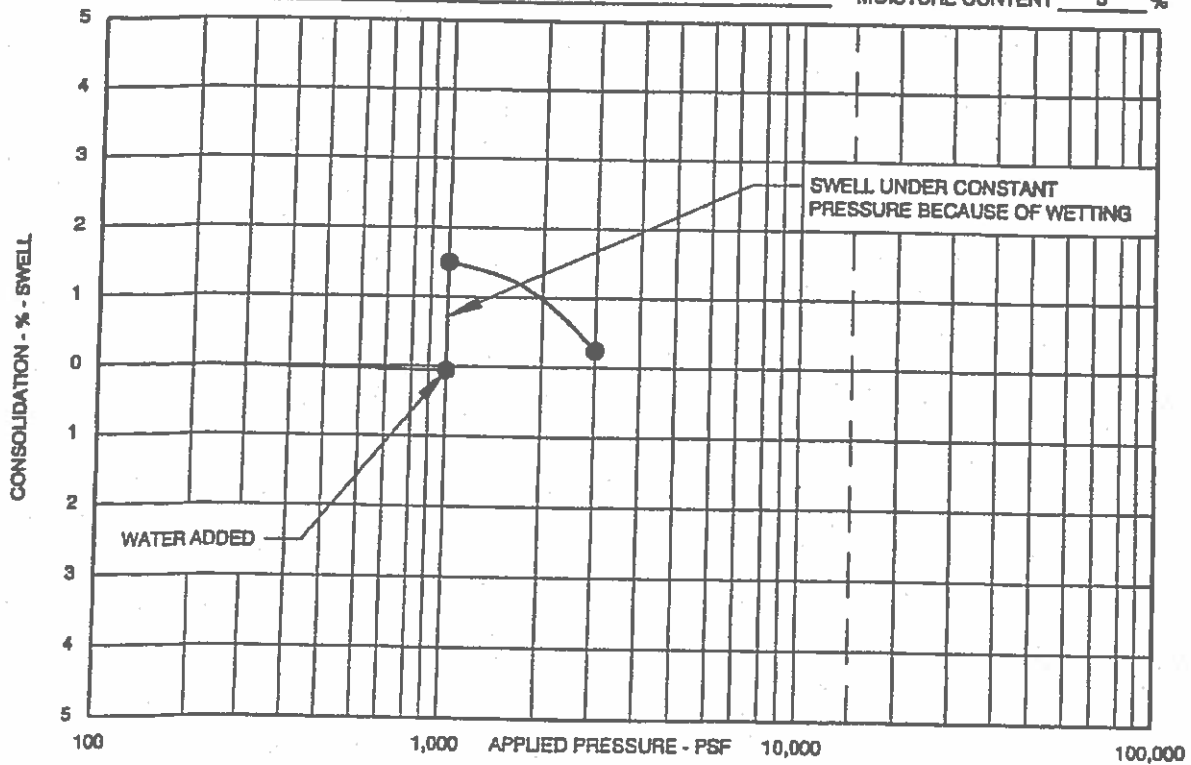
**SWELL - CONSOLIDATION TEST RESULTS**

FIGURE 6

PROJECT NO. 80114-A



SAMPLE DESCRIPTION CLAY, SILTY DRY UNIT WT. 108 PCF  
LOCATION TEST BORING NO. 27 @ DEPTH OF 4' MOISTURE CONTENT 5 %

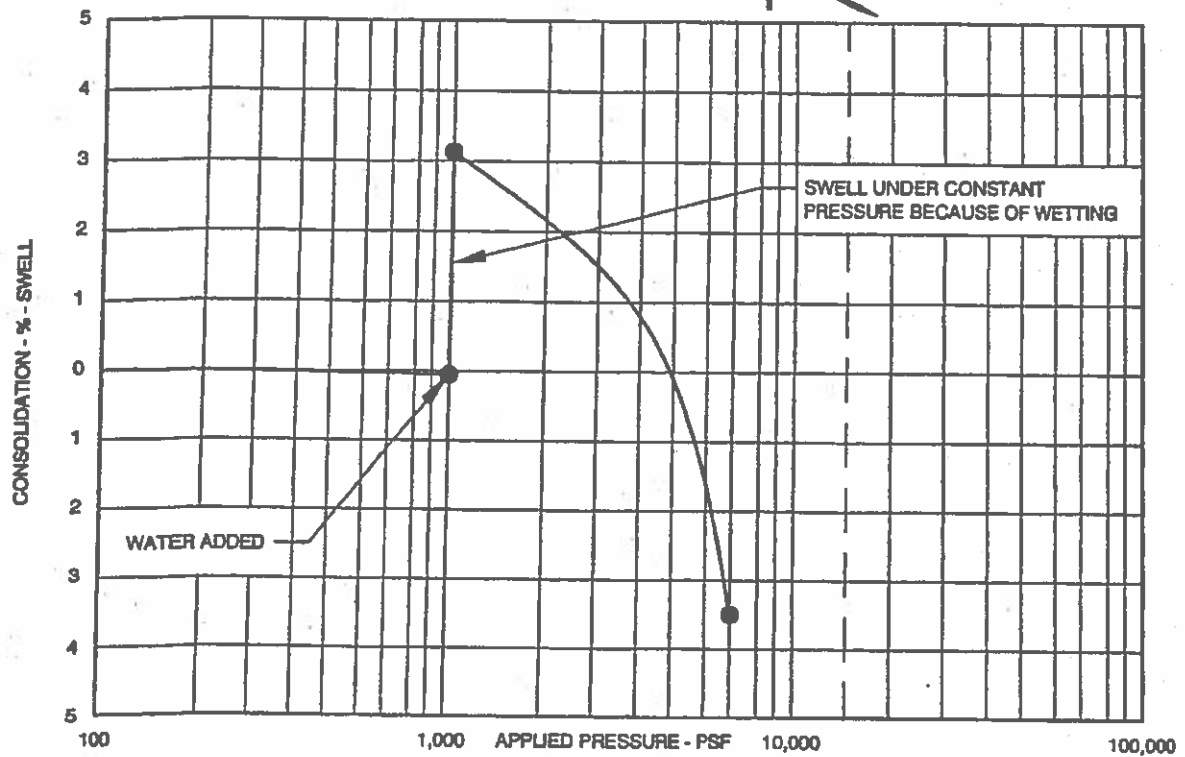


SAMPLE DESCRIPTION CLAY, SILTY DRY UNIT WT. 110 PCF  
LOCATION TEST BORING NO. 27 @ DEPTH OF 8' MOISTURE CONTENT 9 %

### SWELL - CONSOLIDATION TEST RESULTS

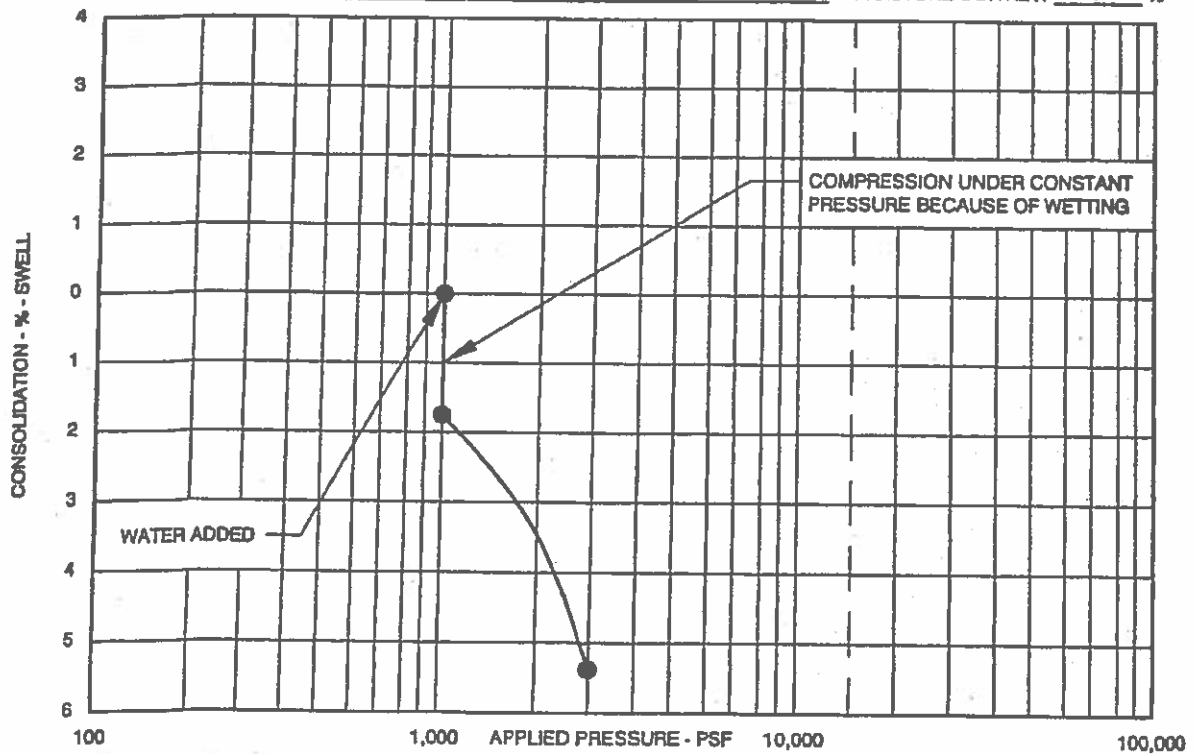
FIGURE 7

PROJECT NO. 90114-A



SAMPLE DESCRIPTION CLAYSTONE / SHALE, INTERBEDDED  
LOCATION TEST BORING NO. 27 @ DEPTH OF 14'

DRY UNIT WT. 115 PCF  
MOISTURE CONTENT 9 %



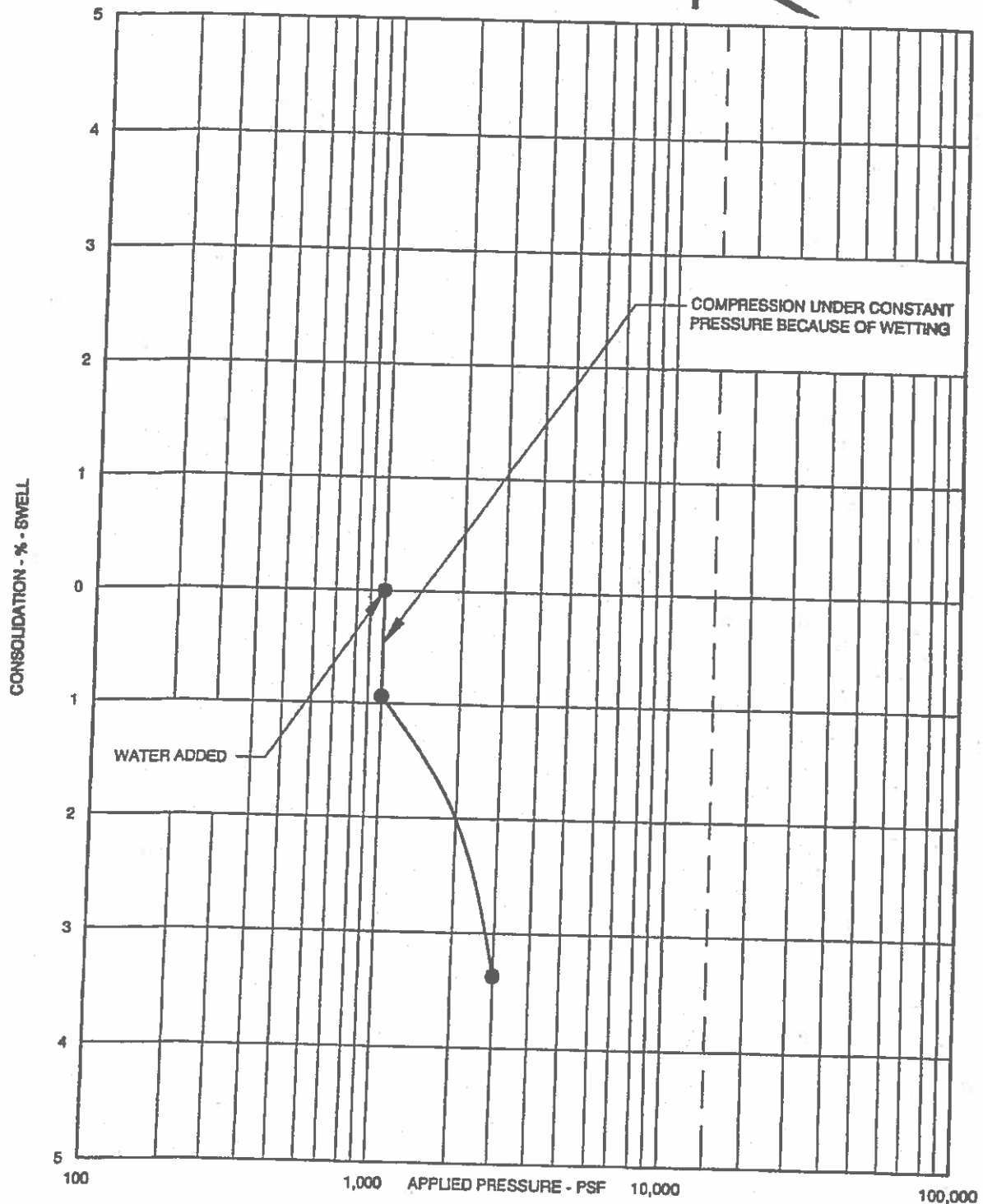
SAMPLE DESCRIPTION CLAY, SILTY  
LOCATION TEST BORING NO. 28 @ DEPTH OF 4'

DRY UNIT WT. 89 PCF  
MOISTURE CONTENT 6 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 8

PROJECT NO. 90114-A



SAMPLE DESCRIPTION CLAYSTONE / SHALE, INTERBEDDED  
LOCATION TEST BORING NO. 28 @ DEPTH OF 8'

DRY UNIT WT. 108 PCF  
MOISTURE CONTENT 6 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 9

PROJECT NO. 90114-A

| Test Boring No. | Depth (feet) | Soil Type                    | Natural Dry Density (pcf) | Natural Moisture (%) | Swell (+) / Consolidation (-) (%)* | Swell Pressure (psf) | pH   | Resistivity (ohm/cm) | Water Soluble Sulfates (ppm) | Chlorides (%) |
|-----------------|--------------|------------------------------|---------------------------|----------------------|------------------------------------|----------------------|------|----------------------|------------------------------|---------------|
| 23              | 4            | Clay, silty                  | 107                       | 13                   | +0.4                               | 2,100                |      |                      |                              |               |
|                 | 9            | Gravel, clayey (disturbed)   | 105                       | 5                    | -3.6                               |                      |      |                      |                              |               |
|                 | 14           | Clay/sand, interbedded       | 115                       | 9                    | -1.1                               |                      |      |                      |                              |               |
| 24              | 4            | Clay, silty                  | 95                        | 6                    | -0.4                               |                      |      |                      |                              |               |
|                 | 9            | Clay, silty                  | 106                       | 8                    | 0.0                                |                      |      |                      |                              |               |
|                 | 14           | Claystone, silty             |                           | 7                    | **                                 |                      |      |                      |                              |               |
| 25              | 4            | Clay, silty                  | 91                        | 6                    | 0.0                                |                      |      |                      |                              |               |
| 26              | 4            | Clay, silty                  | 103                       | 7                    | 0.0                                |                      |      |                      |                              |               |
|                 | 24           | Claystone, silty             | 124                       | 11                   | +0.5                               | 2,000                |      |                      |                              |               |
| 27              | 4            | Clay, silty                  | 106                       | 5                    | -0.1                               |                      | 7.88 | 3,521                | <100                         | <0.0001       |
|                 | 9            | Clay, silty                  | 110                       | 9                    | +1.6                               | 3,400                |      |                      |                              |               |
|                 | 14           | Claystone/shale, interbedded | 115                       | 9                    | +3.3                               | 5,000                |      |                      |                              |               |
| 28              | 4            | Clay, silty                  | 89                        | 6                    | -1.7                               |                      |      |                      |                              |               |
|                 | 9            | Claystone/shale, interbedded | 108                       | 6                    | -0.9                               |                      |      |                      |                              |               |
|                 |              |                              |                           |                      |                                    |                      |      |                      |                              |               |
|                 |              |                              |                           |                      |                                    |                      |      |                      |                              |               |
|                 |              |                              |                           |                      |                                    |                      |      |                      |                              |               |

Notes:

\* Indicates Percent Swell (+) or Consolidation (-) when wetted under a 1,000 psf load.

\*\* Sample fell apart during testing.

**A.G. Wassenaar**

Geotechnical and Environmental Consultants

*[Signature]*

**SUMMARY OF LABORATORY TEST RESULTS**

Village Homes of Colorado, Inc.

Castle Valley Ranch

Project Number 80114-A

September 27, 2006

**TABLE I**

Page 1 of 1

**PRELIMINARY GEOTECHNICAL STUDY FOR**

**CASTLE VALLEY RANCH  
WEST OF CASTLE VALLEY BOULEVARD  
AND CLUBHOUSE DRIVE  
NEW CASTLE, COLORADO**

*PREPARED FOR*

**VILLAGE HOMES OF COLORADO, INC.  
100 INVERNESS TERRACE EAST, SUITE 200  
ENGLEWOOD, COLORADO 80112**

**JUNE 12, 2006  
PROJECT NUMBER 90114**

---

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June 12, 2006

Village Homes of Colorado, Inc.  
100 Inverness Terrace East, Suite 200  
Englewood, Colorado 80112

Attention: Mr. Ron Hettinger

Subject: Preliminary Geotechnical Study  
Castle Valley Ranch  
West of Castle Valley Boulevard and Clubhouse Drive  
New Castle, Colorado  
Project Number 90114

Dear Mr. Hettinger:

We have conducted a preliminary geotechnical study for the proposed development at the subject site. Our summary of the data collected during our field and laboratory work and our analysis, opinions, and conclusions are presented in the attached report. The purpose of our study is to provide geotechnical design criteria for planning and site development, and preliminary design concepts for foundation systems, interior floor support, and drainage for the proposed development. Preliminary pavement thickness recommendations are also included.

In general, the subsurface materials encountered consist of topsoil, fill, sandy clay, silty to clayey sand and sand and gravel overlying bedrock. Claystone and/or sandstone bedrock was encountered at depths of four and one-half (4½) to 26 feet below the ground surface in 15 of the 22 test borings. Ground water was not encountered during this study. Six (6) of the 22 test borings caved at depths of 13 to 27½ feet one (1) to two (2) days after drilling.

Site development considerations should include provisions related to the presence of expansive clays and bedrock. Consideration should be given to the placement of a thick layer of moisture treated fill to mitigate the expansive materials. Well cemented, hard to very hard sandstone bedrock was found in five (5) borings which may cause construction difficulties.

Based upon the results of this preliminary study, we expect that the structures at the site will be founded on straight shaft piers drilled into competent bedrock or footings or footing pads. Preliminary foundation design concepts are given in the report.

Village Homes of Colorado, Inc.  
Project Number 90114  
June 12, 2006  
Page 2

Slabs-on-grade will require some special consideration because of the moderate to high swelling potential of some of the clay and the claystone. Where the structures are founded upon straight shaft piers, structural floors can be anticipated. Where footings are constructed, slabs-on-grade may be appropriate.

Perimeter subdrains will be necessary for all below grade areas.

Sulfate test results indicate that concrete in contact with the soils should be designed for very severe sulfate conditions.

Preliminary pavement sections are given in the following report. Overexcavation and placement of moisture treated fill in the streets during site grading may be advantageous in areas where claystone is found in the cut areas prior to pavement construction.

Additional recommendations are presented in the following report.

If you have any questions regarding the contents of this report or our analyses of the subsurface conditions which will influence the proposed development, please call us. We have appreciated the opportunity to provide this service for you.

Sincerely,

A. G. WASSENAAR, INC.

  
Kathleen A. Noonan, P.E.  
Project Engineer



Reviewed by:

  
Keith D. Seaton, P.E.  
Senior Engineer

KAN/KDS/kan/meg

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# **PRELIMINARY GEOTECHNICAL STUDY**

Castle Valley Ranch  
West of Castle Valley Boulevard and Clubhouse Drive  
New Castle, Colorado  
June 12, 2006

## **PURPOSE**

This report presents results of a geotechnical study for a proposed development located along Castle Valley Boulevard to the west of Clubhouse Drive in New Castle, Colorado. This study was conducted for the purpose of generating geotechnical data to assist in determining geotechnical design criteria for planning, site evaluation, and development considerations. Preliminary geotechnical design concepts are also presented for foundations, interior floor support, drainage, and street construction. Factual data gathered during the field and laboratory work is summarized on Figures 1 through 27 and Table I attached. Our opinions and recommendations presented in this report are based on the data generated during this field exploration, associated laboratory testing, our experience with similar type projects, and our understanding of the proposed project.

This report was not intended to provide design criteria for individual foundations or street construction. Additional geotechnical studies will be required to develop these types of final design criteria and construction recommendations.

## **PROPOSED CONSTRUCTION**

We understand the proposed 157 acre development will consist of single family and/or multi-family residential structures and the associated infrastructure. No details of structure construction are available at this time. Preliminary overlot grading plans were not available at the time of this study. We have assumed maximum cut/fill depths will not exceed 10 feet across the site.

## ***SITE CONDITIONS***

The site is located to the north and south of Castle Valley Boulevard west of Clubhouse Drive in New Castle, Colorado (see Figure 1). The site is vacant and slopes to the south and the west with a total relief of approximately 330 feet. Vegetation consists of native plants, grasses, and trees. It appears that the level areas of the parcel have been used for agricultural purposes. A creek runs along the southern boundary of the site. Cobbles and boulders were evident along the northern, eastern, and southern boundaries of the site.

## ***FIELD EXPLORATIONS***

Subsurface conditions were explored by drilling 22 test borings at the approximate locations indicated on Figure 1. The boring locations were located by this firm by reconnoitering from the topographic features on the site. The borings were advanced using a 4-inch diameter, continuous flight auger powered by a truck-mounted, CME 55 drilling rig. At frequent intervals, samples of the subsurface materials were taken using a Modified California sampler which is driven into the soil by dropping a 140-pound hammer through a free fall of 30 inches. The Modified California sampler is a 2.5-inch outside diameter by 2-inch inside diameter device. The number of blows required for the sampler to penetrate 12 inches gives an indication of the consistency or relative density of the soils encountered. Results of the penetration tests and location of sampling are presented on the "Exploratory Boring Logs," Figures 2 through 5. In addition to sampling and logging each boring for material types, ground water measurements were made at the time of drilling and again one (1) and two (2) days after drilling.

## ***LABORATORY TESTING***

Samples were returned to the laboratory where they were visually classified by a geotechnical engineer. Testing was then assigned to specific samples to evaluate their engineering properties.

The laboratory tests included 34 settlement-swell tests to evaluate the effect of wetting and loading on the selected soils samples. The results of the settlement-swell tests are presented on Figures 6 through 22. Nine (9) gradation analysis tests and Atterberg limits tests were conducted to evaluate grain size distribution and plasticity. These results are presented on Figures 23 through 27. In addition, representative samples were tested for water soluble sulfates, pH, resistivity, and chlorides. These results are discussed under the heading "Site Concrete and Corrosivity". The test results are summarized on Figures 2 through 5 and Table I.

### ***SUBSURFACE CONDITIONS***

The subsurface materials encountered in our test borings consisted of topsoil, fill, sandy clays, silty to clayey sands and sand and gravel over sedimentary bedrock. Claystone and/or sandstone bedrock was encountered at depths of four and one-half (4½) to 26 feet below the ground surface in 15 of the 22 test borings. Ground water was not encountered during this study. Six (6) of the 22 test borings had caved at depths of 13 to 27½ feet when checked one (1) to two (2) days after drilling. A graphical depiction of the subsurface materials and ground water encountered is shown on Figures 2 through 5.

Topsoil was found in 19 of the 22 test borings. The topsoil encountered consisted of sandy clay, up to one-half (½) foot thick, was organic and moist, and dark brown in color. The topsoil is not considered capable of supporting the structures and should be removed. Construction on topsoil is at the sole risk of the Owner.

Fill was found in one (1) test boring (Boring 22). The fill material encountered consisted of sandy clay and was 16 feet thick. It was compact in consistency and moist. It was mottled brown in color. It exhibited in-situ dry densities ranging from 102 to 119 pounds per cubic foot (pcf) at in-

situ moisture contents ranging from 10 to 12 percent (%). The samples tested were of low plasticity. These soils exhibited consolidation (-1.9% to -0.3%) upon wetting and under a load of 1,000 pounds per square foot (psf). This fill was placed prior to A. G. Wassenaar, Inc.'s involvement at this site. Therefore, it is not known if this fill was placed with the proper compactive effort and density compaction testing. Unless documentation is available for the fill which verifies proper placement and compaction, this fill is not considered capable of supporting the structures. Construction on undocumented fill is at the sole risk of the Owner.

Sandy clay was found in 19 of the 22 borings. The clay was generally stiff to very stiff, slightly moist to moist, and brown to red brown in color. It exhibited in-situ dry densities ranging from 78 to 120 pcf at in-situ moisture contents ranging from 6 to 18%. The samples tested were of low to moderate plasticity. These soils exhibited compression to high swell (+4.3%) upon wetting and under a load of 1,000 psf. Some samples from the southern portion of the site exhibited collapse. This soil is assessed to possess a low to high expansion potential.

Silty to clayey sand was encountered in 11 of the 22 test borings. The sand was dense to medium dense, slightly moist to moist, with some silt layers and scattered gravel and cobble and sandstone, and brown to light brown to red brown to gray in color. It exhibited in-situ dry densities of 87 to 123 pcf at an in-situ moisture contents of 2 to 8%. The samples tested were non-plastic or of low plasticity. The samples tested exhibited consolidation (-0.5%) to low swell (+1.7%) when wetted under a 1,000 psf surcharge load. The sands are considered to possess no to low expansion potential.

Claystone bedrock was encountered in 11 of the 22 borings. It was medium hard to very hard, silty to very silty, slightly sandy to sandy, iron stained, with sulfur and sulfate crystals, slightly moist

to moist, and olive to rust in color. It exhibited in-situ dry densities of 94 to 124 pcf at in-situ moisture contents of 6 to 16%. The samples tested were of moderate plasticity. The claystone exhibited consolidation (-7.5%) to very high swell (+6.0%) upon wetting and under a loading of 1,000 psf. It is considered to possess a high expansion potential.

Sandstone bedrock was encountered in five (5) of the 22 borings. The sandstone encountered was clean to silty to clayey, moderately to well cemented, firm to very hard, slightly moist to moist, and rust to brown in color. The sandstone tested exhibited an in-situ dry density of 120 pcf at an in-situ moisture content of 5%. The samples observed were visually of low plasticity. The sandstone exhibited low swell (+0.8%) upon wetting and under a loading of 1,000 psf. It is considered to possess a low expansion potential. A map showing the estimated depths to bedrock is shown on Figure 28.

### **GEOTECHNICAL CONCERNS**

Expansive clays and claystone bedrock were encountered across the site. The clays exhibited no to high swell when tested. The claystone exhibited no to very high swell when tested. In our opinion, the expansive properties of the soil and bedrock can be reduced with proper fill placement, drainage, future irrigation controls, and with the use of proper design and construction techniques. To eliminate use of deep foundations for expansive and collapse prone soils, overexcavation may be performed.

Hard to very hard sandstone bedrock was encountered in the test borings. Very hard, well cemented bedrock may cause construction difficulties during the various excavations to be made during development. It may become especially evident if cuts encounter the sandstone bedrock.

The sandstone may require light blasting or special equipment. The sandstone may require crushing in order to be re-used as fill.

Collapsing clays were encountered in Test Borings 19 and 21. The final concern is the presence of the collapse prone sandy clay. In the presence of moisture, these soils will consolidate, sometimes suddenly. This could cause significant settlements to structures (residence, pavements, etc.) supported by these soils. If left in-place, pier type foundations would be needed in these areas to prevent settlement of the structures. Due to the wide spacing of the test borings, the extent of the collapsing soils could not be accurately determined. We recommend a more in-depth study in the vicinity of these test borings be conducted in order to adequately delineate the areas of collapse potential.

Fill was encountered in Test Boring 22. The fill is approximately 16 feet thick and was placed prior to our involvement with this site. Construction on undocumented fill is the sole risk of the Owner. We recommend the removal of this fill.

## ***SITE DEVELOPMENT***

### **OVERLOT GRADING**

We assume the fill materials to be used at the site will be from on-site cut areas. In general, suitable inorganic on-site or off-site soils may be used for structural fill. Any topsoil, or soil containing vegetation or other deleterious material, should also be removed prior to placement of structural fill. Any materials that have been chemically contaminated should be removed from the site for proper disposal. Off-site material considered for structural fill should be evaluated by our office prior to hauling to the site.

Construction of the fill embankments throughout the site will consist of proper foundation preparation, constructing embankment benching where necessary, disposition of strippings, proper fill placement and compaction, and designing and vegetating slopes in accordance with the analysis performed and the applicable governing regulations. Following are general site grading recommendations:

1. It is recommended that we be called to observe and test the fill placement so that a uniform, compacted fill will be placed.
2. Based upon the subsurface information contained in this report, and our assumption that the near surface soils will be used as fill, we have provided general specifications for the project in the Appendix.
3. All vegetation and topsoil beneath planned fill areas should be thoroughly stripped and removed prior to fill placement. These soils should be removed from the site or stockpiled for future use in revegetating exposed slopes. In no case should these materials be used in the structural areas or where the stability of slopes will be affected by their low shear strength. If these materials are used in non-structural areas, they should only be placed in fills where the embankment section does not exceed five feet in height.
4. Any existing fill should be entirely removed prior to new fill placement.
5. Soft soils are anticipated near the existing drainage. Soft soils may need to be stabilized prior to fill placement where encountered. This may be accomplished by drying, addition of angular rock or with manufactured products such as geogrids or stabilization fabric. These areas will need to be field identified at the time of grading. Once the extent of these areas is identified, a stabilization method may be chosen.

6. Where natural slopes exceed an existing slope of 5:1 (horizontal to vertical), benching will be required for structural integrity of any fills. Benches should be constructed as shown on Figure 29.
7. After the foundation has been properly prepared, the natural foundation soils should be scarified to a minimum depth of 6 inches, brought to the proper moisture content and then compacted according to the Appendix.
8. The compaction and moisture control of the soils will be dependent upon material types. The specifications outlined in the Appendix are based upon providing a fill with sufficient shear strength to support structures and controlling residual swell of expansive soil used in fill sections.
9. Particular attention should be paid to compaction of the exterior faces of slopes (i.e., slopes should be compacted to the minimum specification to the surface of the fill embankment).
10. Other specifications outlined in the Appendix of this report should be followed.

#### MOISTURE TREATED FILL

An option to reduce the amount of swell of the expansive clays and claystone and potential for collapse of the clays would be to remove them from beneath the foundation and pavement areas and then to replace them as a moisture treated fill. This procedure generally results in a fill that is either able to support footing type foundations or reduces the swell of the materials sufficiently to allow the construction of minimum pier lengths. This procedure involves excavating to a depth below the foundations and pavements as determined by the amount of potential swell. The excavated soil is then wetted to above the optimum moisture content and then recompactd into the excavations. If this procedure is desired, it will be necessary to perform a more detailed study

of the proposed residential areas to better define the characteristics of the existing soil and bedrock. We are available to discuss this with you.

## **SLOPES**

A slope stability analysis was not conducted as part of this study. Based upon preliminary site specific observation, it appears that most of the existing slopes appear stable. The only instabilities noted were the result of erosion of banks along the various gullies and intermittent stream channels on the site. These areas will need to be laid back or removed during construction. Where natural slopes exceed 5 to 1, horizontal to vertical, benching to maintain structural integrity will be required. Planned excavations into the steeper natural slopes should be reviewed by this office when grading plans become available. Construction of conventional fill slopes should be limited to 2 to 1 or flatter. Cut slopes steeper than 2 to 1 should be evaluated for stability.

## **CONSTRUCTION EXCAVATIONS**

In our opinion, the site grading and utility excavations may be constructed using conventional earth-moving equipment for the area. The excavations in areas where bedrock is present at or near the surface will require additional effort where moderately to well cemented sandstone is encountered. The use of a large dozer (CAT D8 or D9) with a single shank ripper tooth will be required. In addition, some of the sandstone may require light blasting where well cemented. Excavations deeper than three feet should be properly sloped or braced to prevent collapse because of caving soils. Local, city, county, state, and federal (OSHA) regulations should be followed.

## **SITE DRAINAGE**

We recommend that provision be made to divert surface runoff away from foundation areas. This may reduce potential problems associated with excess water in the foundation bearing soils. The site should be designed such that a 10% slope can be established at the residences after foundation construction. Slopes of at least 2% should then be planned in landscaped areas once the water is away from the foundation.

## **SUBSURFACE DRAINAGE**

The ground water encountered is not anticipated to cause significant problems across most of the site during development except near the existing drainages. It may be necessary to construct blanket drains in the existing drainages if they are to be filled to significant depths.

The types of materials encountered across the site have a relatively low permeability, and are, therefore, susceptible to the creation of a perched water condition. Perched water, in conditions such as these, forms after construction has taken place, when extensive irrigation is introduced to the property.

For these reasons, we recommend an overall area drain be considered during site development. In addition, the overall area drain can also provide for a discharge and collection point for individual foundation drains. Because the sanitary sewer trench excavation is typically the deepest excavated trench area, underdrains can be designed and constructed with installation of the sanitary sewer system. The civil engineering company contracted to design the infrastructure should be able to provide this design. We are available to assist in drain design. For the system to work, the area drain must be graded to a positive discharge point. Given the topography of the site, it should be possible to lead the area drain to a gravity "daylight" outfall on the lower

topographic portions of the site. If a permanent outfall for an area drain cannot be determined, the area drain should not be constructed. If an area drain is not constructed, it would be advantageous to provide a gravity outfall for the sewer bedding material.

#### UTILITY CONSTRUCTION

Excavations into the overburden soils will encounter primarily sands, clays and some bedrock. The bedrock may be considered a "Type A" soil, where intact. The overburden clay above the ground water level may be considered a "Type B" soil, and the sands and any soil influenced by the ground water should be considered as a "Type C" soil. Final determination of the soil types must be made by the contractor's "competent person" at the time of construction. All excavations should be sloped or shored in the interest of safety, following local and federal (OSHA) regulations.

The bedrock, when encountered, may stand vertically unsupported, except where fractured or inundated with water. In the interest of safety, bedrock excavations should be sloped as outlined above. In our opinion, most of the utility excavations may be constructed using conventional earth-moving equipment for the area. Difficulty will be experienced where moderately to well cemented sandstone is found. Excavation with rock buckets or trenchers designed for the cemented rock should be anticipated. In addition, some light blasting may be required.

Trench backfill should be well compacted to prevent future settlement. Trenches, as a minimum, should be compacted to the same specifications as required for overlot grading. Trenches in streets should be compacted to Town of New Castle specifications. Density-compaction testing must be performed during trench backfilling.

## ***SITE CONCRETE AND CORROSIVITY***

Testing performed on selected soil samples indicates a water soluble sulfate content ranging from less than 50 ppm to 20,000 ppm. This is considered to be a negligible to very severe concentration relative to potential corrosive attack on concrete. Therefore, all concrete in contact with the soils on the site should be designed for very severe sulfate exposure in accordance with the American Concrete Institute (ACI) Design Manual, Section 318, Chapter 4.3, 2004 Edition.

The pH testing exhibited levels of 7.32 to 8.31. Resistivity testing at in-situ moistures resulted in levels from 516 to 3,984 Ohms/cm. Chloride test results indicated less than 0.0001% to 0.0068%. These results are summarized on Figures 2 through 5, and in Table I. The results of this testing should be used as an aid in choosing the construction materials in contact with these soils and will be resistant to the various corrosive forces. Manufacturer's representatives should be contacted regarding the specific corrosivity resistance to the stated levels of pH, resistivity, and chlorides for their particular product. In addition, local district specifications should be consulted when selecting pipe materials.

## ***PRELIMINARY FOUNDATION DESIGN CONCEPTS***

The foundation recommendations for each structure are dependent upon the subsurface profile and engineering properties of the materials encountered at and near to the depth of the proposed foundation. These are dependent upon the final configuration and construction methods used during overlot grading at the site and the type of structure to be constructed. Therefore, foundation design recommendations for each structure cannot be presented until site grading is complete. The information presented in the following sections presents preliminary foundation concepts which must be finalized for each building site upon completion of the overlot grading operations. We should be retained to provide an additional soil and foundation

exploration after completion of site grading to provide specific foundation design recommendations for each site.

## **PIERS**

A suitable foundation system for structures founded where claystone bedrock, moderate to highly expansive clay soils or collapse prone soils are found at or near to the bottom of the final excavations would be straight shaft piers drilled into bedrock. The piers will likely be designed for an end bearing pressure in the range of 15,000 to 30,000 pounds per square foot (psf), a minimum dead load pressure in the range of 15,000 to 20,000 psf, and a side shear in the range of 1,500 to 3,000 psf. The side shear would be applied for that portion of the pier in undisturbed bedrock with the exception of the upper 10 feet of each pier beneath the grade beam or foundation wall. Pier lengths on the order of 20 to 30 feet with bedrock penetration from eight (8) to 15 feet can be anticipated.

As an alternative, helical steel piers may be considered. These piers will need to be drilled to depths of 15 to 20 feet below the bottom of the foundation and bear into materials capable of supporting their design pressures. Due to the hardness of the bedrock, pre-drilling of the pier locations will likely be necessary. Heavy duty piers may be necessary. Additionally, refusal of the piers may occur in the well cemented sandstone.

## **FOOTINGS**

It is likely that some of the structures could be supported by spread footings or pad-type footings bearing on the natural sands, sandstone, and clays or thick, low expansive fill materials. If the expansive and collapse prone materials are overexcavated and replaced as moisture treated fill,

most of the structures could likely be supported by footings. The footings must be founded below frost depth. Some densification may be required for footing support in areas where loose sand is encountered at foundation level. The footings will likely be designed for a maximum soil pressure ranging from 1,000 to 3,000 pounds per square foot (psf). A minimum dead load pressure may be required where clays are present.

### **LATERAL EARTH PRESSURES**

Foundation walls with fill on only one side and any retaining walls will need to be designed for lateral earth pressures. For this site, lateral equivalent fluid pressures on the order of 45 to 60 pounds per cubic foot should be anticipated dependent upon the type of soil used to backfill the walls.

### **INTERIOR FLOOR CONSTRUCTION**

Where straight shaft piers are used for foundation support, the sites will be assessed with a moderate to very high slab risk performance evaluation. Where footing type foundations are constructed, it is likely that the sites will be assessed with a low or moderate slab risk performance evaluation. For structures constructed on piers, it is likely that it will be necessary to construct a structural basement floor where moderate or higher risk is present. Where structures are supported on footings, low to moderate basement slab risk assessments can be anticipated. If the risk tolerance for slab movement is zero, structural floors should be considered in all areas.

### **DRAIN SYSTEMS**

Due to the relatively impermeable nature of the soils encountered on the site, drain systems will be required where below grade spaces are planned. Either interior or exterior drains may be used. The drains must be led to a positive gravity outfall or sump.

## BACKFILL AND SURFACE DRAINAGE

Backfill should be moistened and compacted to reduce future settlement. The site grading should consider a slope of 10% away from the foundations at the completion of construction. All other drainage swales in landscaped areas should slope at a minimum of 2%.

## PRELIMINARY STREET PAVEMENT DESIGN

Pavement design procedures are based on strength properties of the subgrade and pavement materials, along with the assumed design traffic conditions. Subgrade materials, such as the clay materials encountered on this site, are potentially expansive and require additional precautions be taken to provide for adequate pavement performance. The pavement design procedures outlined address expansive subgrade materials primarily by modifying the subgrade materials in such a manner as to reduce the swell potential and then by attempting to minimize subgrade wetting after construction.

Based upon our preliminary analysis, it appears the proposed pavement subgrade materials will be the sandy clays and clayey sands. These soils are summarized below according to their AASHTO Soil Classification System and Group Index Method.

| Soil                                         | AASHTO            |             |
|----------------------------------------------|-------------------|-------------|
|                                              | Classification    | Group Index |
| Silty, gravelly sand, clayey sand, sandstone | A-1-b, A-2-4, A-4 | 0           |
| Sandy clay                                   | A-6               | 9-14        |

From these soil classifications, we have estimated R-Values in order to determine the preliminary pavement thicknesses. Based on this information and utilizing thickness as determined from the CDOT Design Nomograph, as accepted by the Town of New Castle, the alternatives presented below were calculated.

#### PAVEMENT ALTERNATIVES FOR INTERIOR STREETS

| A-1-b, A-2-4, A-4 Soils       |             |                           |
|-------------------------------|-------------|---------------------------|
| Traffic Category              | HBP         | HBP/ABC                   |
| Local                         | 5.5" - 6.5" | 3.5" - 4.5" / 7.5" - 9.0" |
| Minor Collector (Residential) | 7.0" - 8.5" | 4.0" - 5.0" / 8.0" - 9.5" |

| A-6 Soils                     |             |                           |
|-------------------------------|-------------|---------------------------|
| Traffic Category              | HBP         | HBP/ABC                   |
| Local                         | 6.0" - 7.0" | 3.5" - 4.5" / 7.5" - 9.0" |
| Minor Collector (Residential) | 8.0" - 9.5" | 4.5" - 5.5" / 8.0" - 9.5" |

HBP = Hot Bituminous Pavement      ABC = Aggregate Base Course

Note: Composite sections are only allowed in private streets and parking lots.

DTNs of 5 were used for the local streets and a DTN of 30 was used for the residential minor collector. A design life of 20 years was assumed. It should be emphasized that the design alternatives provided above are preliminary for interior local residential streets and collectors. The final design thickness could be more or less than indicated.

Proper surface and subsurface drainage is essential for adequate performance of pavements constructed on these types of subgrade materials. It has been our experience that water from landscaped areas will infiltrate pavement subgrade soils and result in loss of subgrade integrity

followed by pavement damage. Therefore, provisions should be made to maintain adequate drainage and/or contain runoff from such areas. In addition, water and irrigation lines should be thoroughly pressure tested for leaks prior to placement of pavement materials.

It must be reiterated that the information contained in this section is preliminary in nature. More detailed information will be required by the Town of New Castle prior to issuance of a paving permit. Therefore, when overlot grading is complete at the site, a final pavement evaluation must be performed.

### ***FINAL DESIGN CONSULTATION AND CONSTRUCTION OBSERVATION***

This report has been prepared for the exclusive use of Village Homes of Colorado, Inc. for the purpose of providing geotechnical criteria for the proposed project. The data gathered and the conclusions and recommendations presented herein are based upon the consideration of many factors including, but not limited to, the type of structures proposed, the configuration of the structures, the proposed usage of the site, the configuration of surrounding structures, the geologic setting, the materials encountered, and our understanding of the level of risk acceptable to the client. Therefore, the conclusions and recommendations contained in this report shall not be considered valid for use by others unless accompanied by written authorization from A. G. Wassenaar, Inc.

It is recommended that A. G. Wassenaar, Inc. be retained to provide general review of the final design and specifications in order that the recommendations presented may be properly interpreted and implemented. Our firm should also be retained to provide geotechnical engineering and material testing services during construction of the site grading, utilities, and drainage features. The purpose is to observe the construction with respect to the geotechnical

design concepts, specifications or recommendations, and to facilitate design changes in the event that subsurface conditions differ from those anticipated prior to start of construction. It is also recommended that our firm be retained to perform a final pavement design for the streets and parking lots in the development and to perform a final foundation design report for each structure in the development after site grading is complete.

### **GEOTECHNICAL RISK**

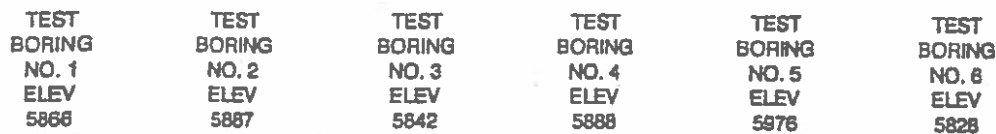
The concept of risk is an important aspect of any geotechnical evaluation. The primary reason for this is that the analytical methods used to develop geotechnical recommendations do not comprise an exact science. The analytical tools which geotechnical engineers use are generally empirical and must be tempered by engineering judgment and experience. Therefore, the solutions or recommendations presented in any geotechnical evaluation should not be considered risk-free and, more importantly, are not a guarantee that the interaction between the soils and the proposed structure will perform as desired or intended. What the engineering recommendations presented in the preceding sections do constitute is our best estimate, based on the information generated during this and previous evaluations and our experience in working with these conditions, of those measures that are necessary to help the development perform in a satisfactory manner. The Developer, Builder, and future Owners must understand this concept of risk, as it is they who must decide what is an acceptable level of risk for the proposed development of the site.

### **LIMITATIONS**

The professional judgments expressed in this report meet the standard care of our profession in this area at this time. The test borings drilled for this study were spaced to obtain a reasonably accurate picture of underground conditions for design purposes. Variations frequently occur from

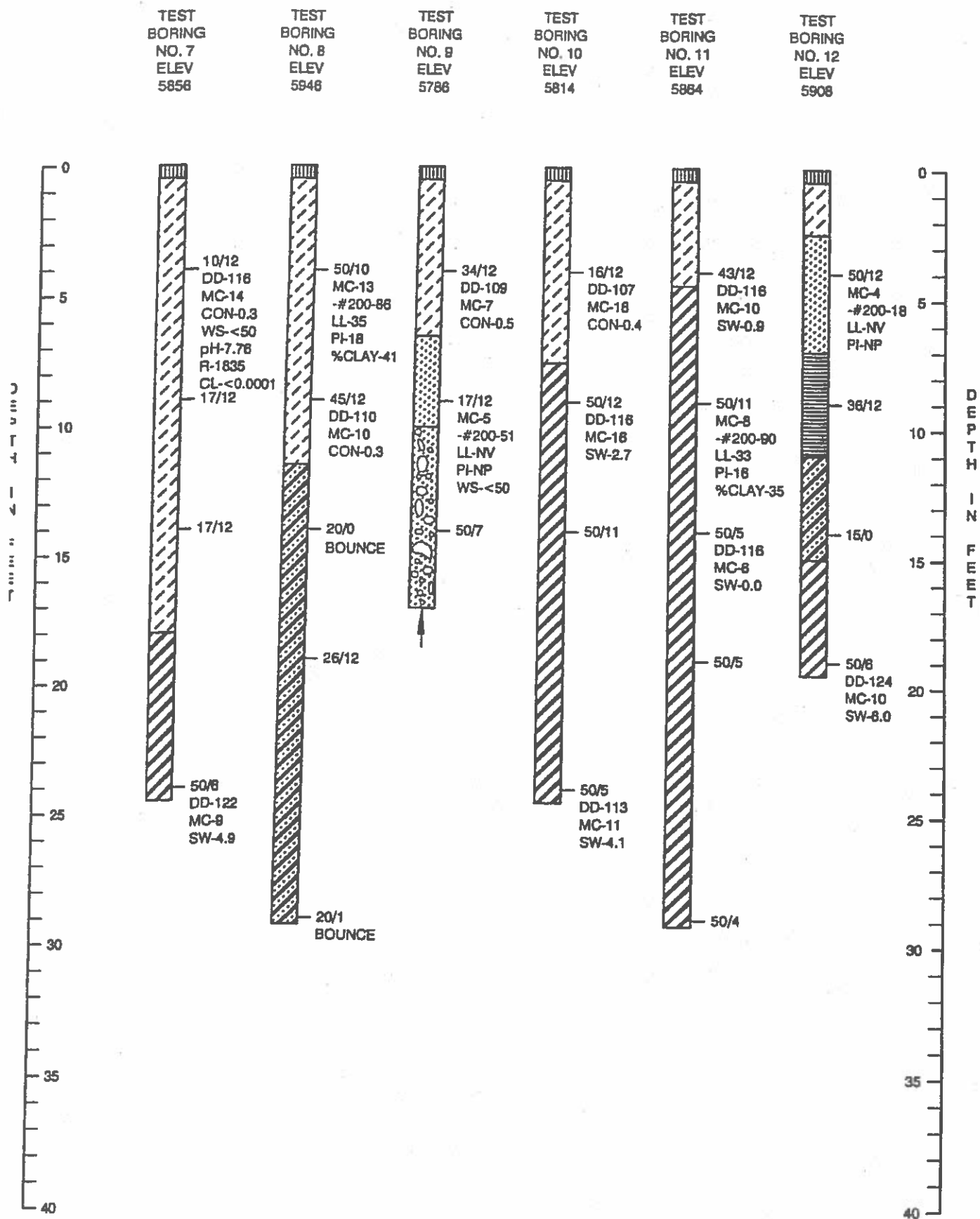
these conditions which are not indicated by the test borings. These variations are sometimes sufficient to necessitate modifications in the designs. For this reason, we should be retained to observe the site during construction.

Our scope of services for this project did not include any research, testing, or assessment relative to past or present contamination of the site by any source. If such contamination were present, it is likely that the exploration and testing conducted for this report would not reveal its existence. If the Client is concerned about the potential for such contamination, additional studies should be undertaken. We are available to discuss the scope of such studies with you.



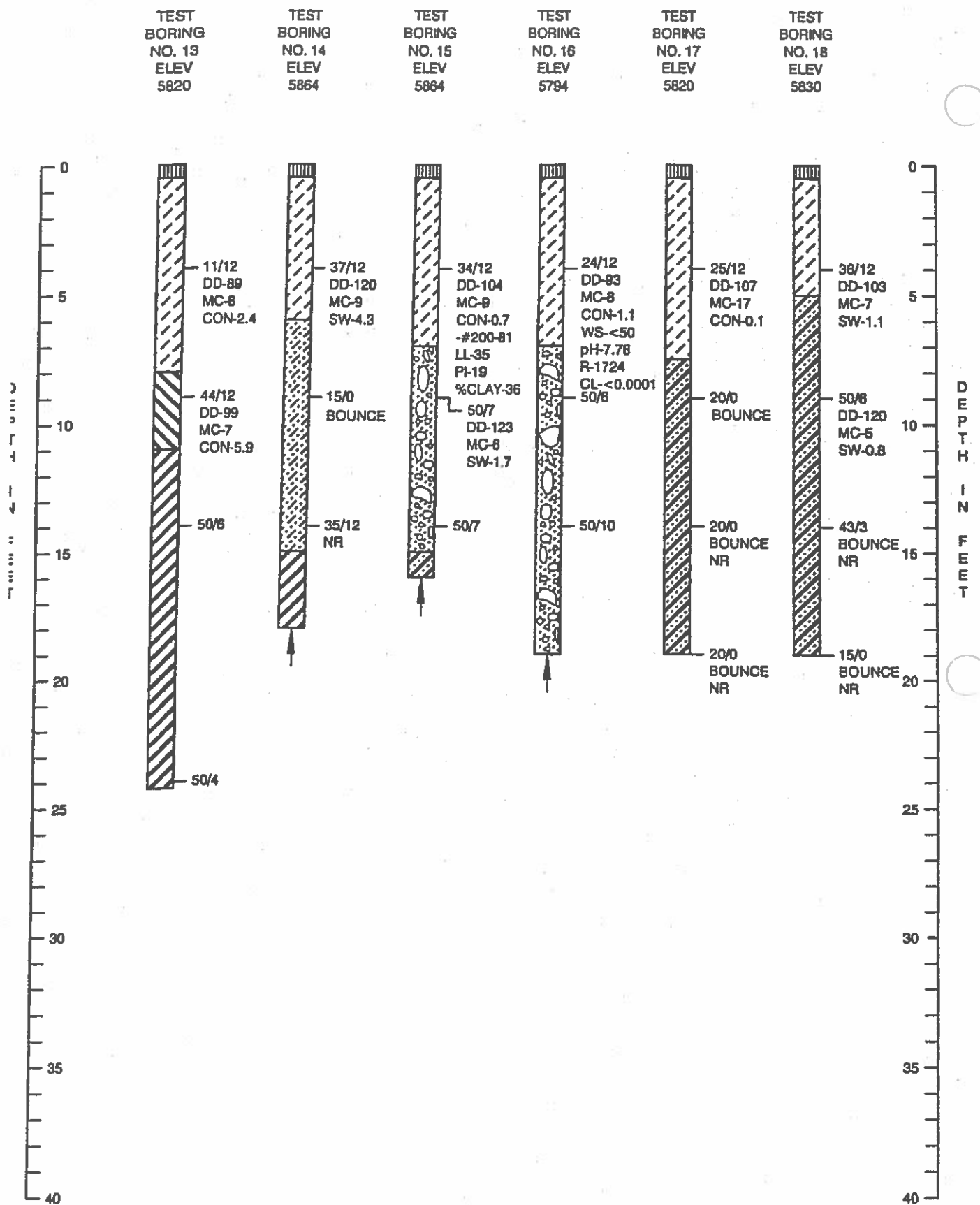
EXPLORATORY BORING LOGS  
FIGURE 2





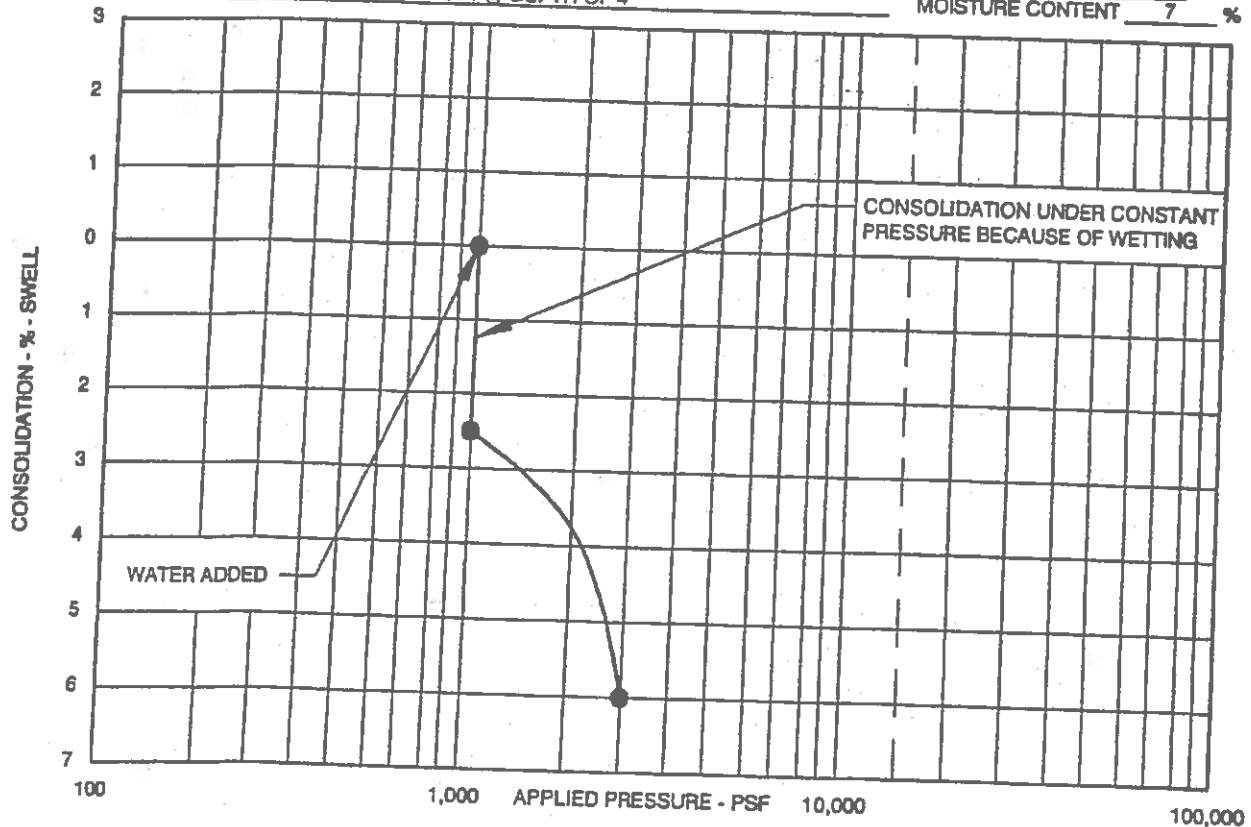
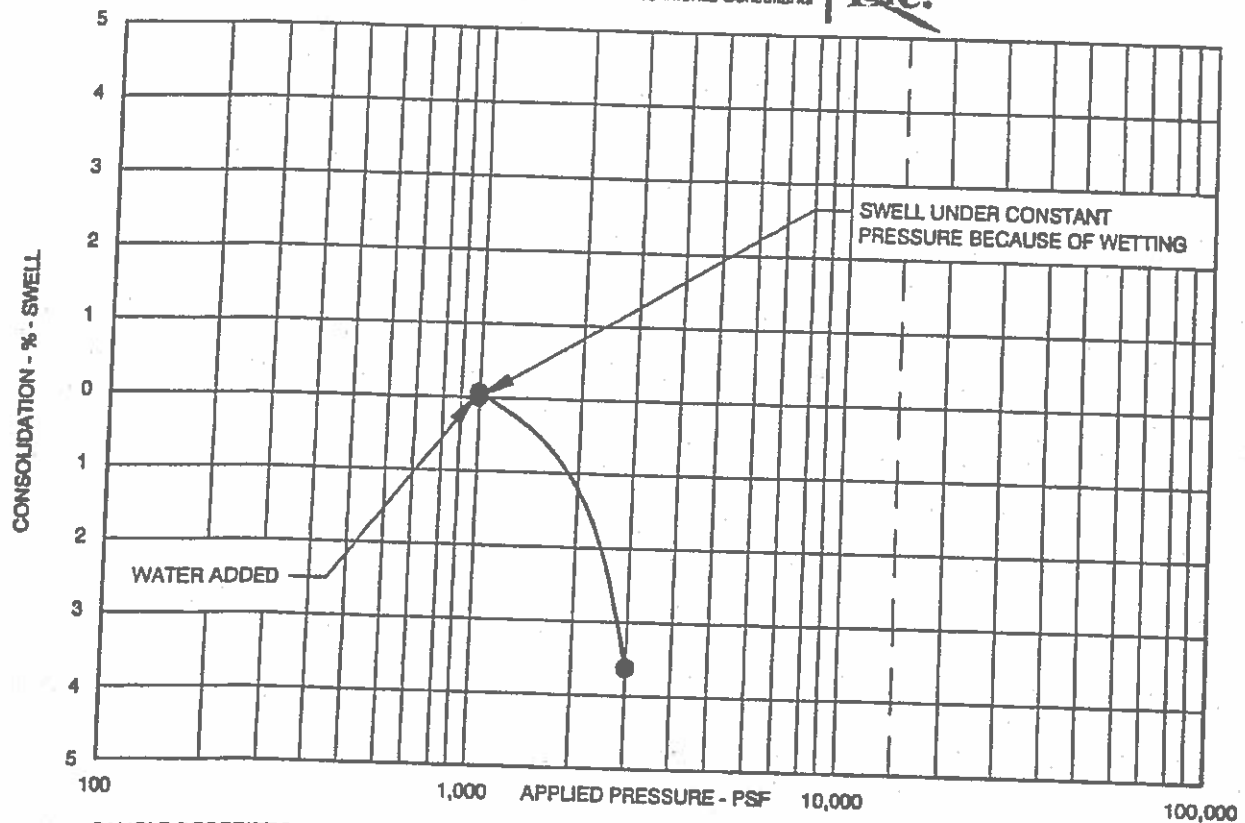
SEE FIGURE 5 FOR LEGEND AND NOTES TO EXPLORATORY BORINGS

EXPLORATORY BORING LOGS  
FIGURE 3



SEE FIGURE 5 FOR LEGEND AND NOTES TO EXPLORATORY BORINGS

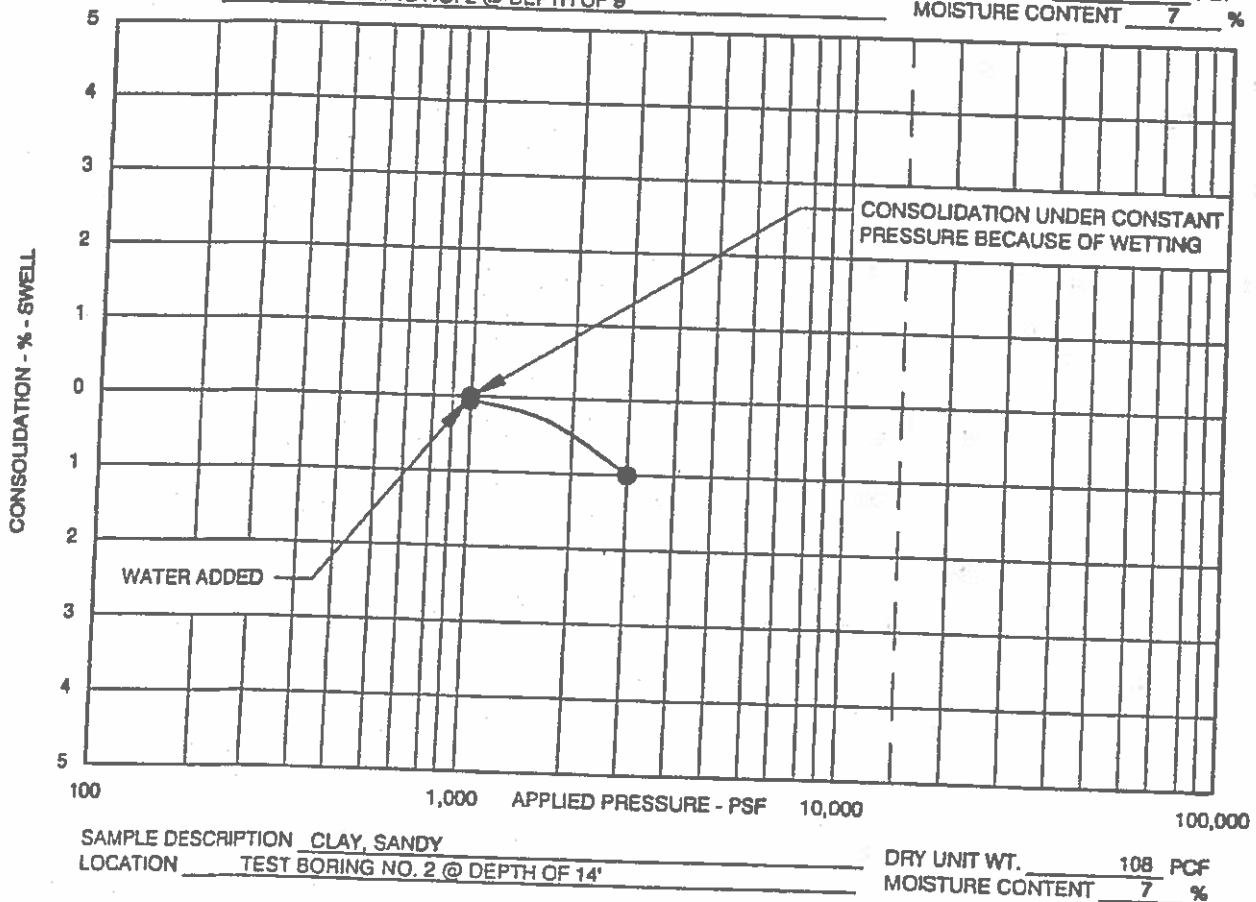
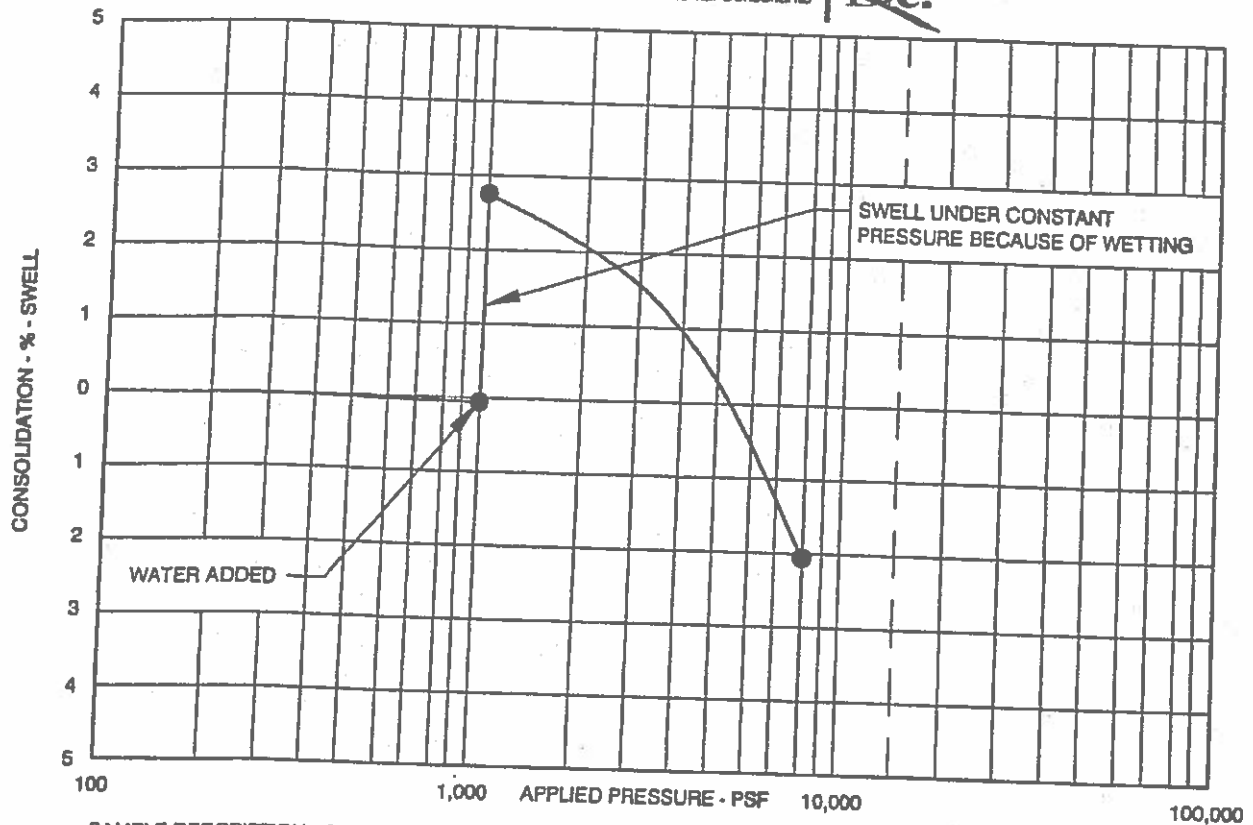
EXPLORATORY BORING LOGS  
FIGURE 4



**SWELL - CONSOLIDATION TEST RESULTS**

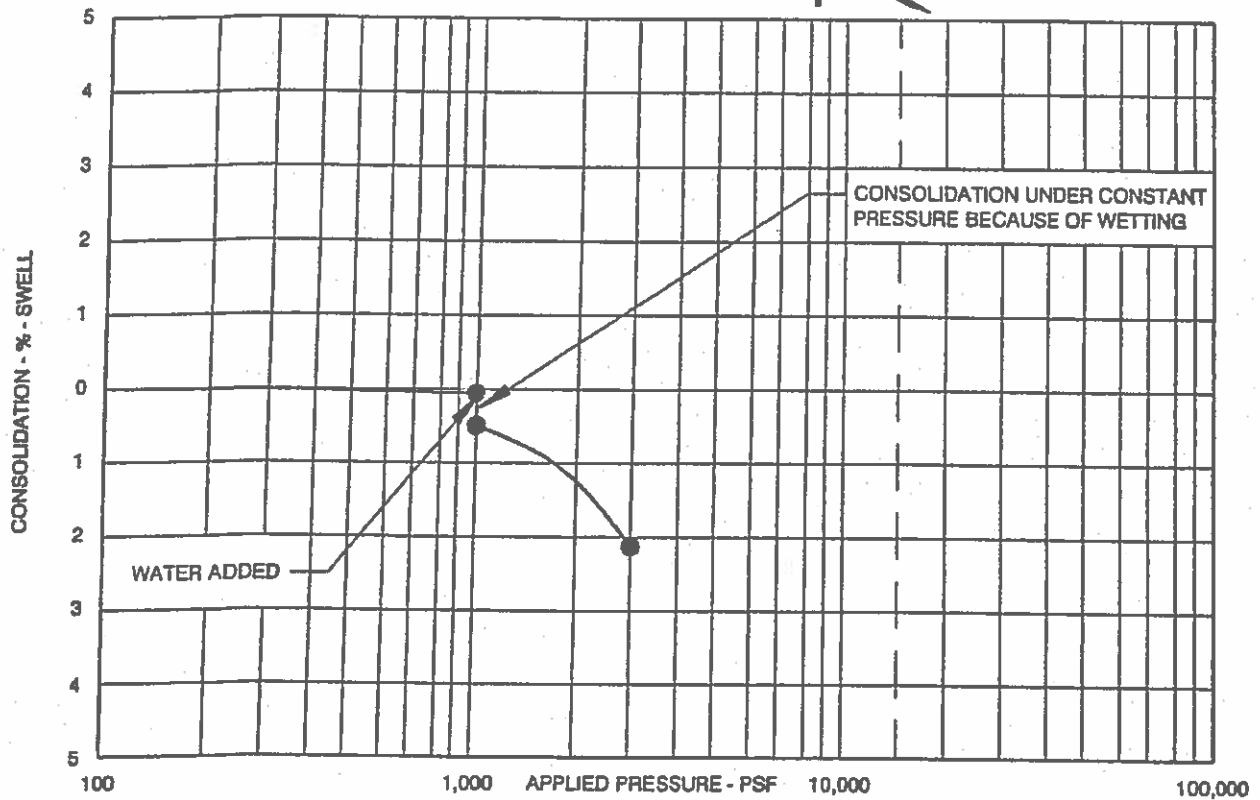
FIGURE 6





**SWELL - CONSOLIDATION TEST RESULTS**

FIGURE 7

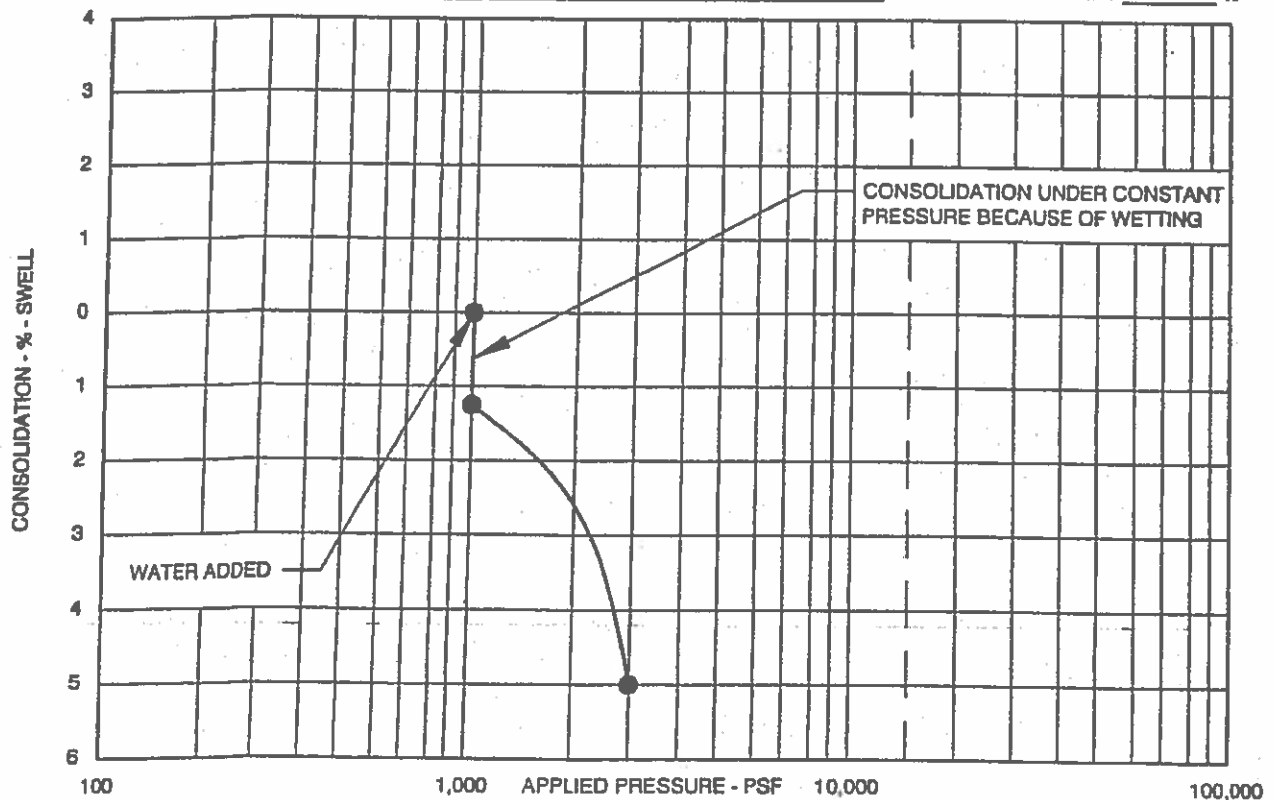


SAMPLE DESCRIPTION CLAY, SANDY

LOCATION TEST BORING NO. 3 @ DEPTH OF 4'

DRY UNIT WT. 117 PCF

MOISTURE CONTENT 12 %



SAMPLE DESCRIPTION CLAY, SANDY

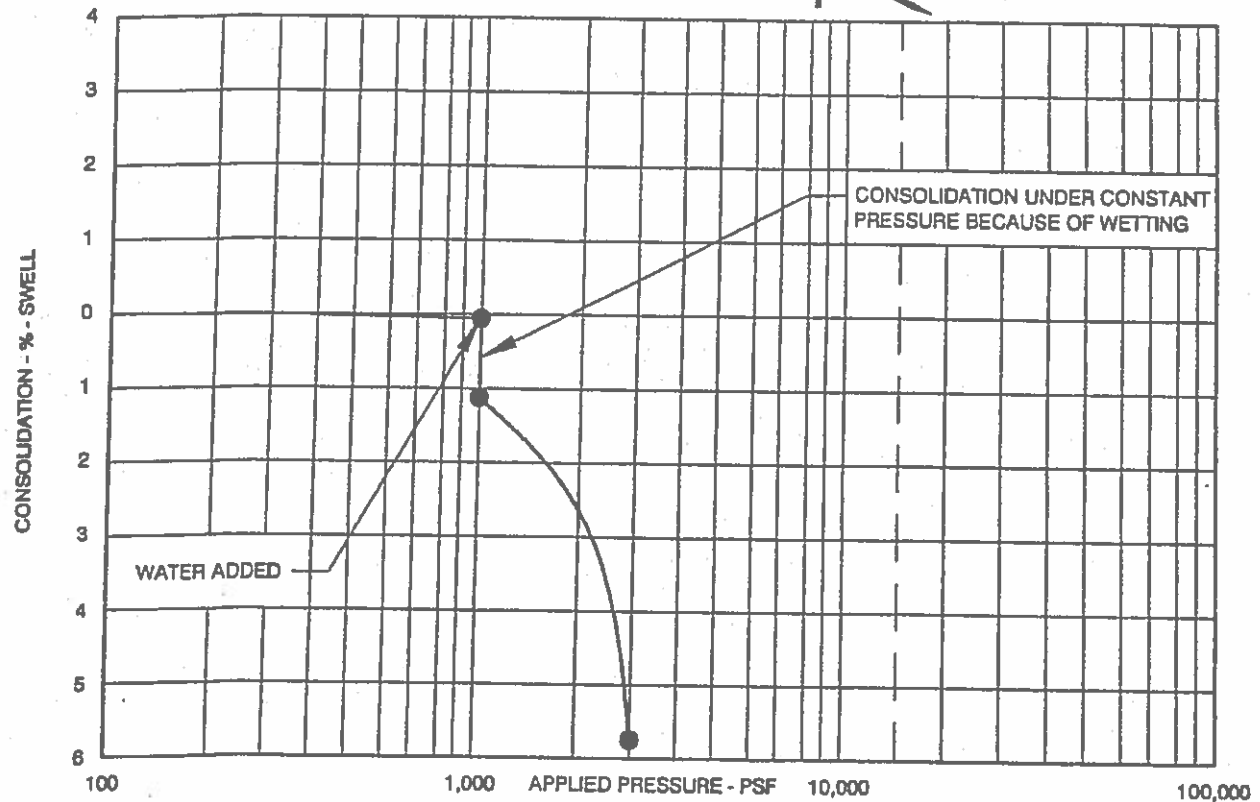
LOCATION TEST BORING NO. 3 @ DEPTH OF 19'

DRY UNIT WT. 117 PCF

MOISTURE CONTENT 3 %

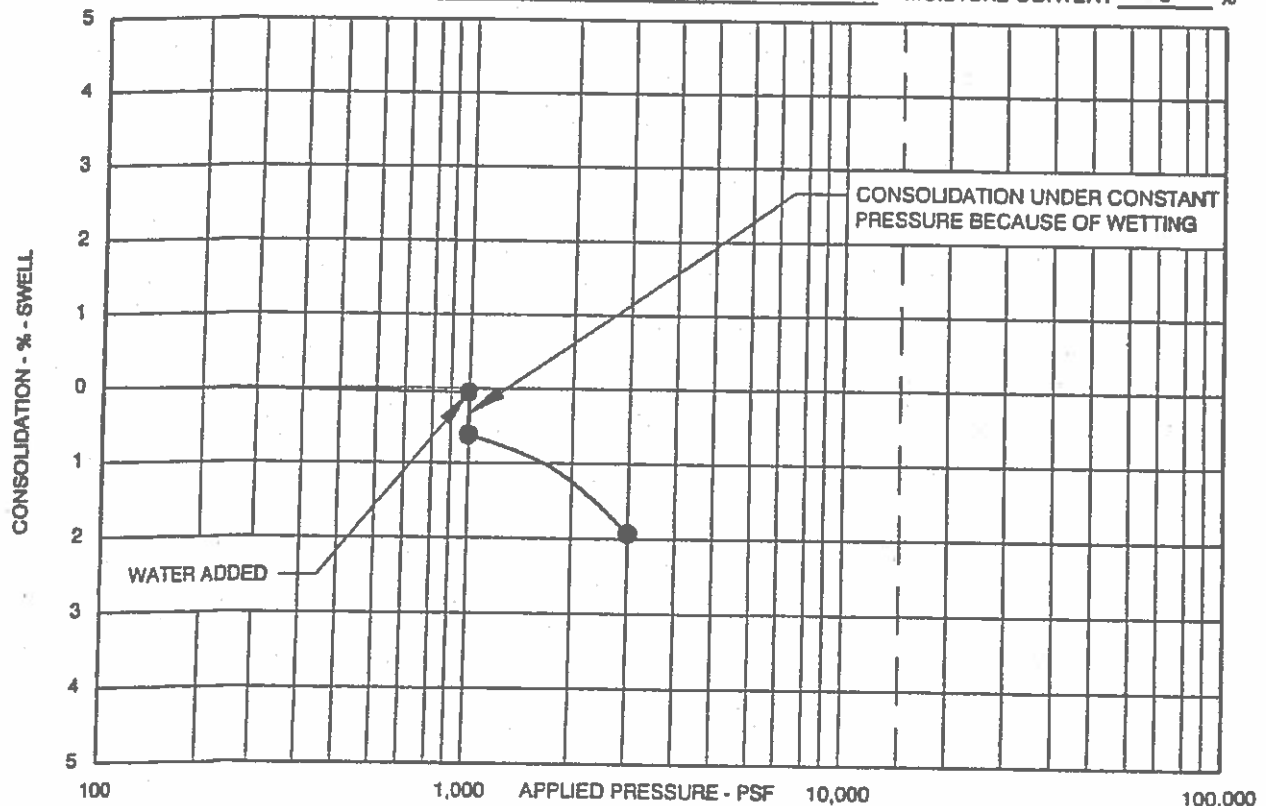
### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 8



SAMPLE DESCRIPTION CLAY, SANDY  
LOCATION TEST BORING NO. 4 @ DEPTH OF 4'

DRY UNIT WT. 97 PCF  
MOISTURE CONTENT 8 %

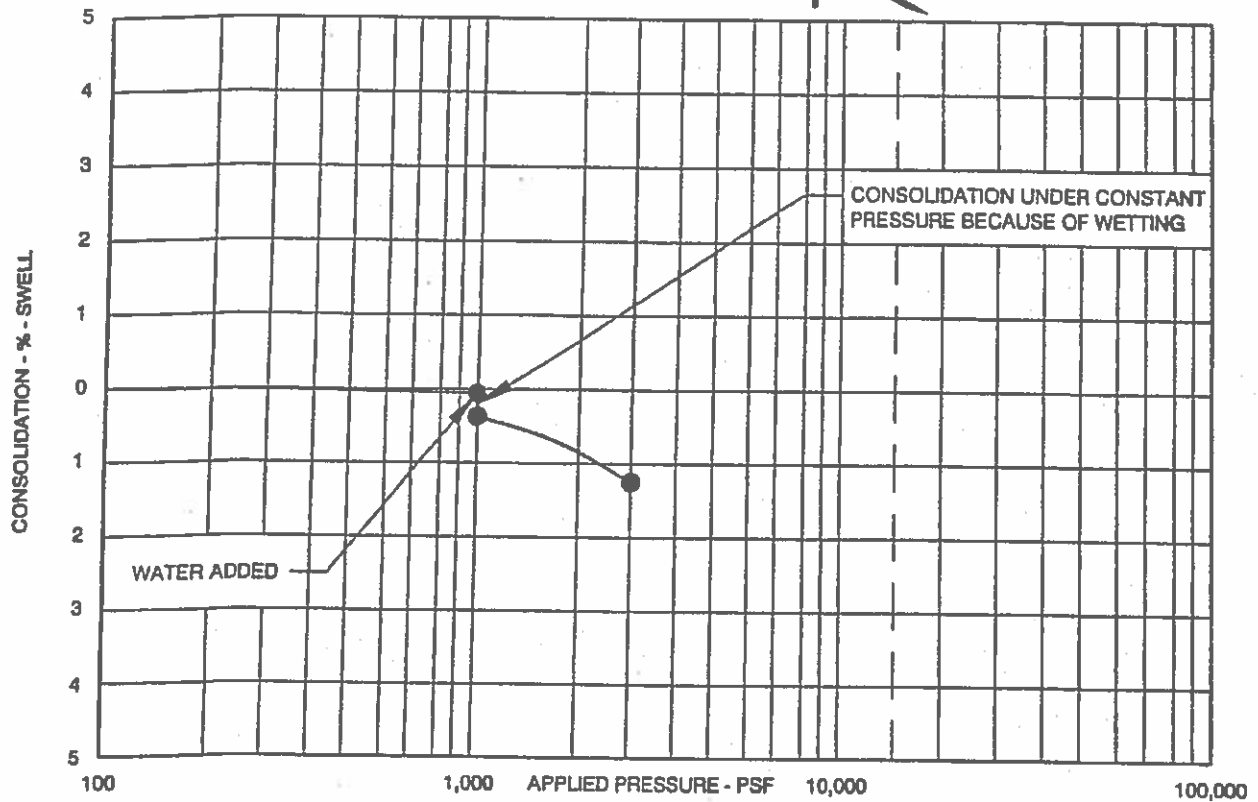


SAMPLE DESCRIPTION SAND, CLAYEY  
LOCATION TEST BORING NO. 5 @ DEPTH OF 4'

DRY UNIT WT. 87 PCF  
MOISTURE CONTENT 8 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 9

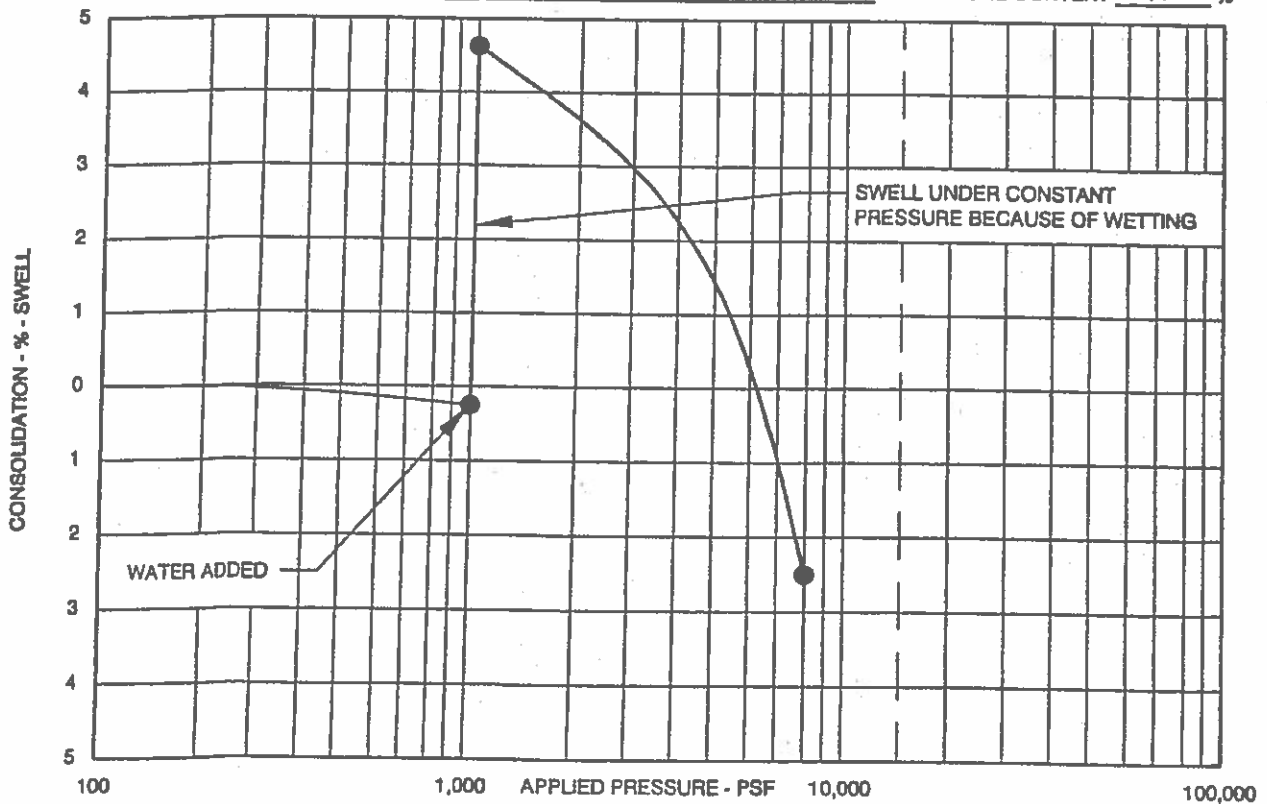


SAMPLE DESCRIPTION CLAY, SANDY

LOCATION TEST BORING NO. 7 @ DEPTH OF 4'

DRY UNIT WT. 116 PCF

MOISTURE CONTENT 14 %



SAMPLE DESCRIPTION CLAYSTONE, SILTY

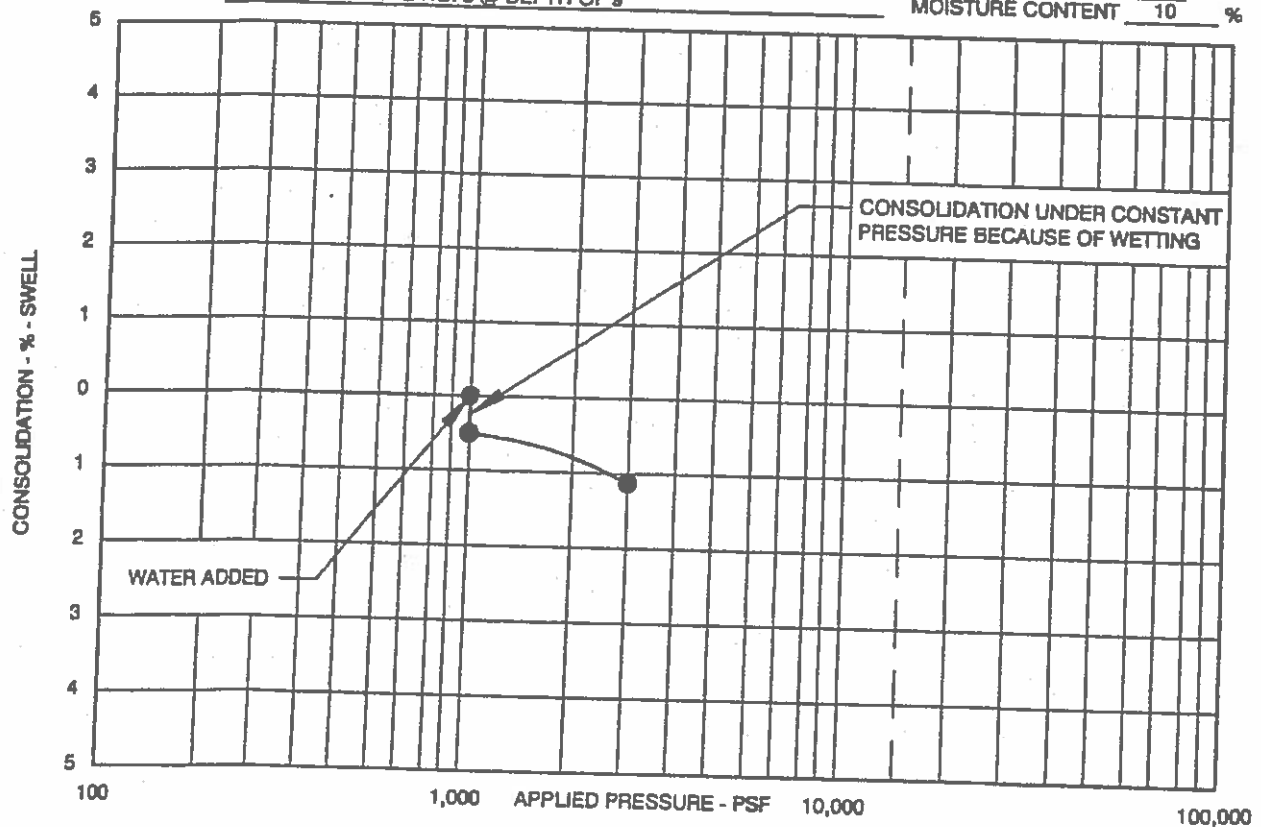
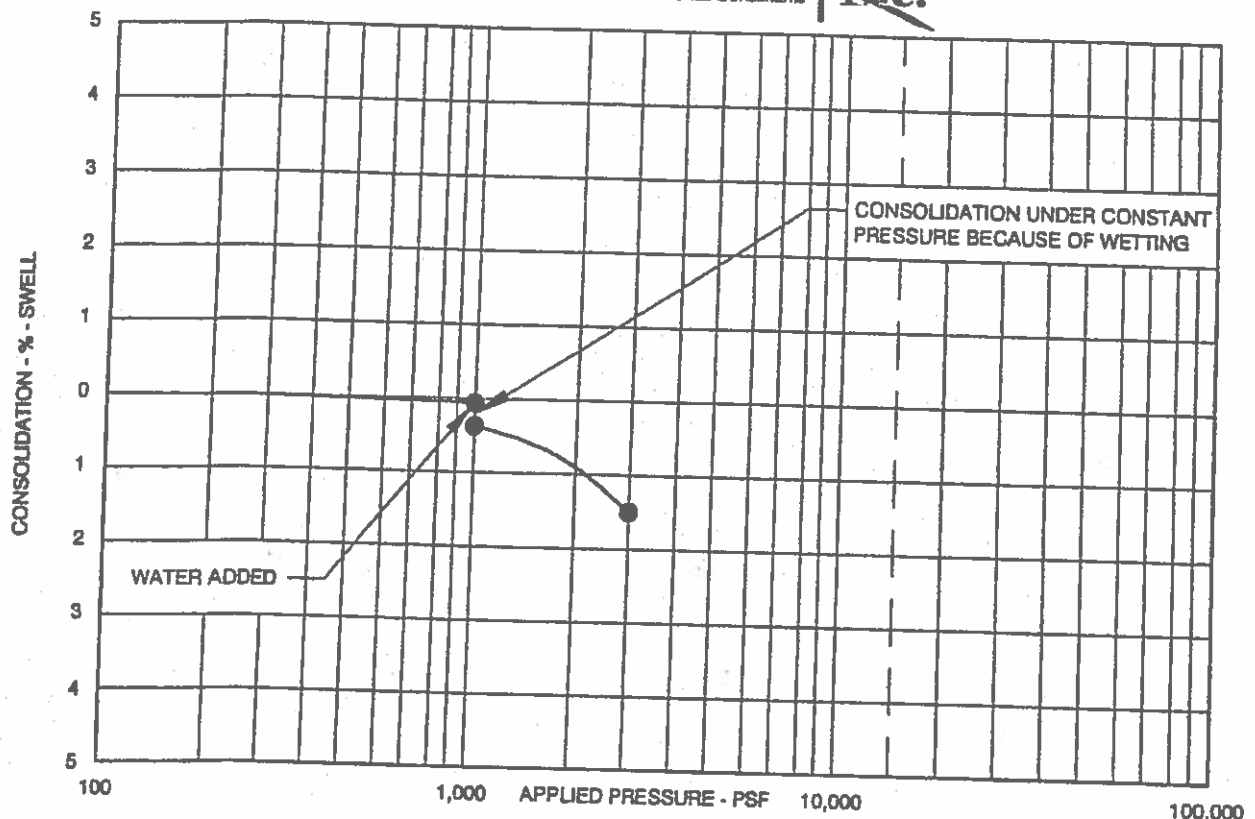
LOCATION TEST BORING NO. 7 @ DEPTH OF 24'

DRY UNIT WT. 122 PCF

MOISTURE CONTENT 9 %

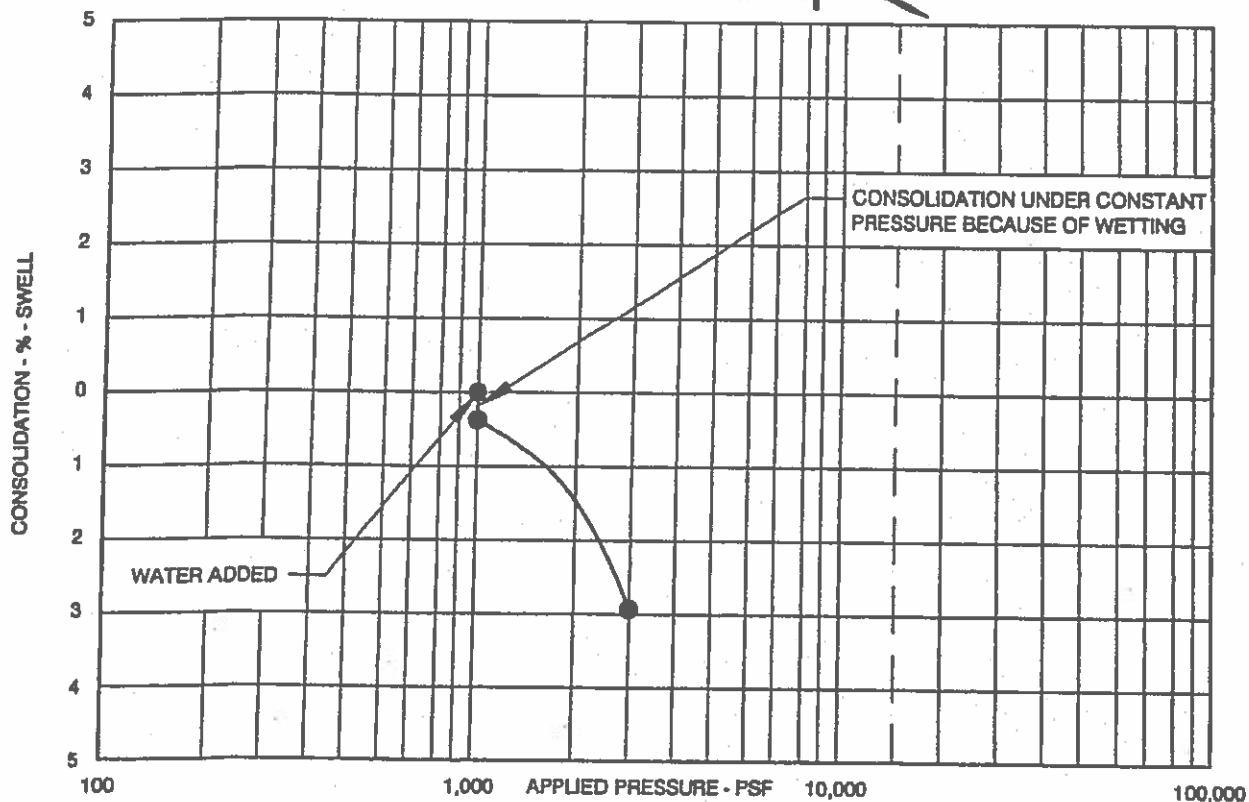
### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 10



**SWELL - CONSOLIDATION TEST RESULTS**

FIGURE 11

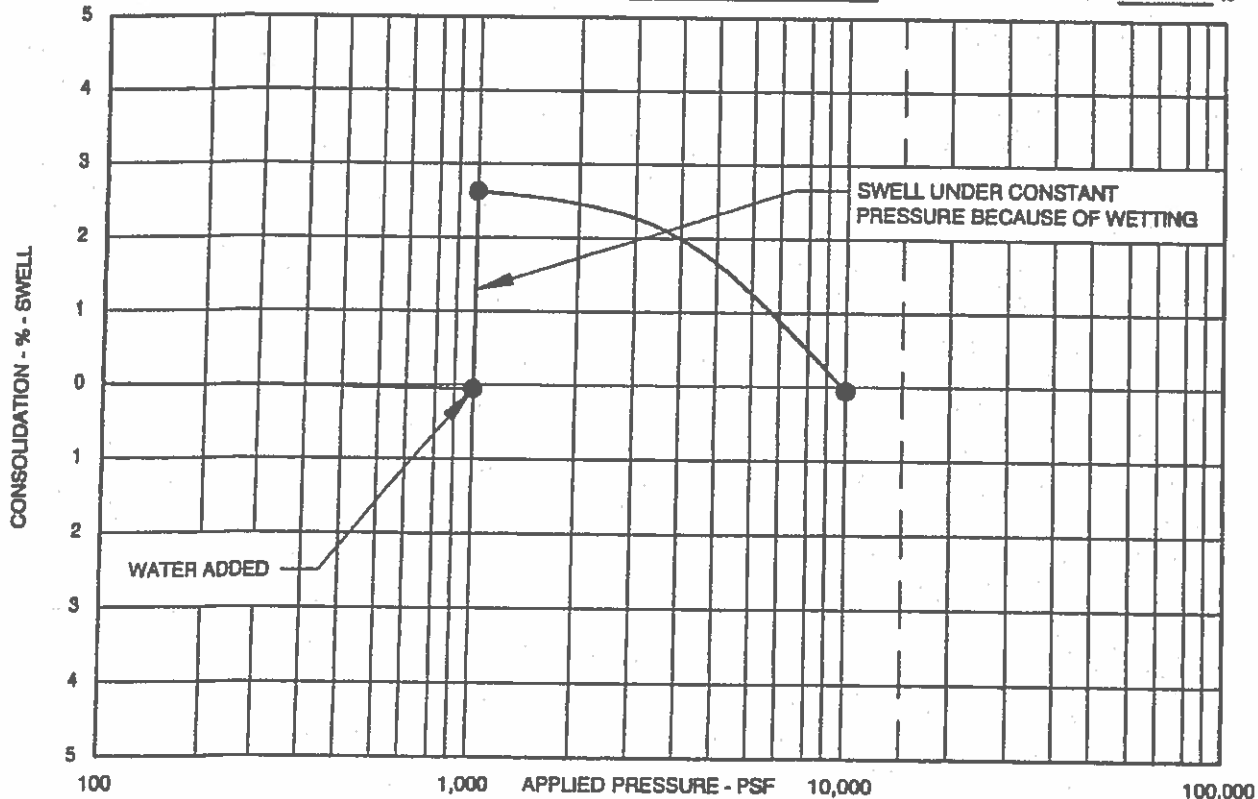


SAMPLE DESCRIPTION CLAY, SANDY

LOCATION TEST BORING NO. 10 @ DEPTH OF 4'

DRY UNIT WT. 107 PCF

MOISTURE CONTENT 18 %



SAMPLE DESCRIPTION CLAYSTONE, SILTY

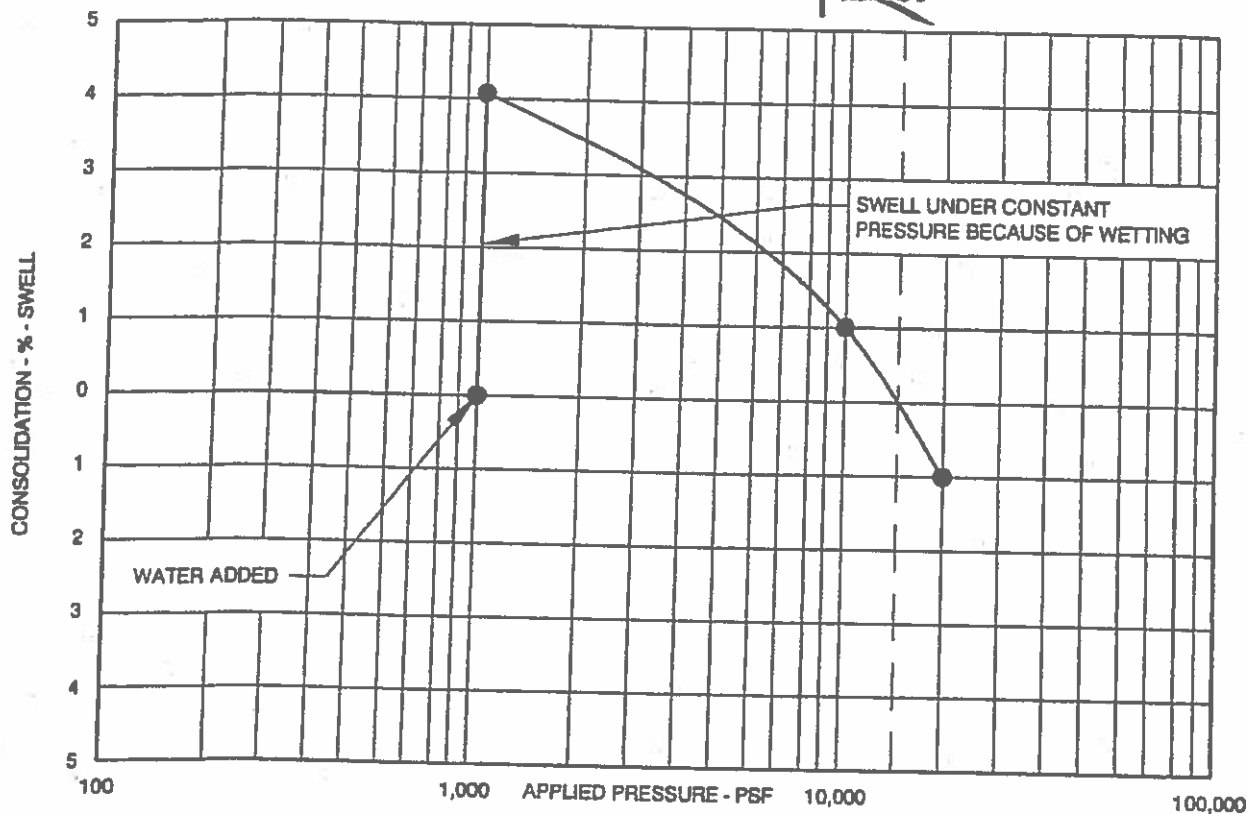
LOCATION TEST BORING NO. 10 @ DEPTH OF 8'

DRY UNIT WT. 116 PCF

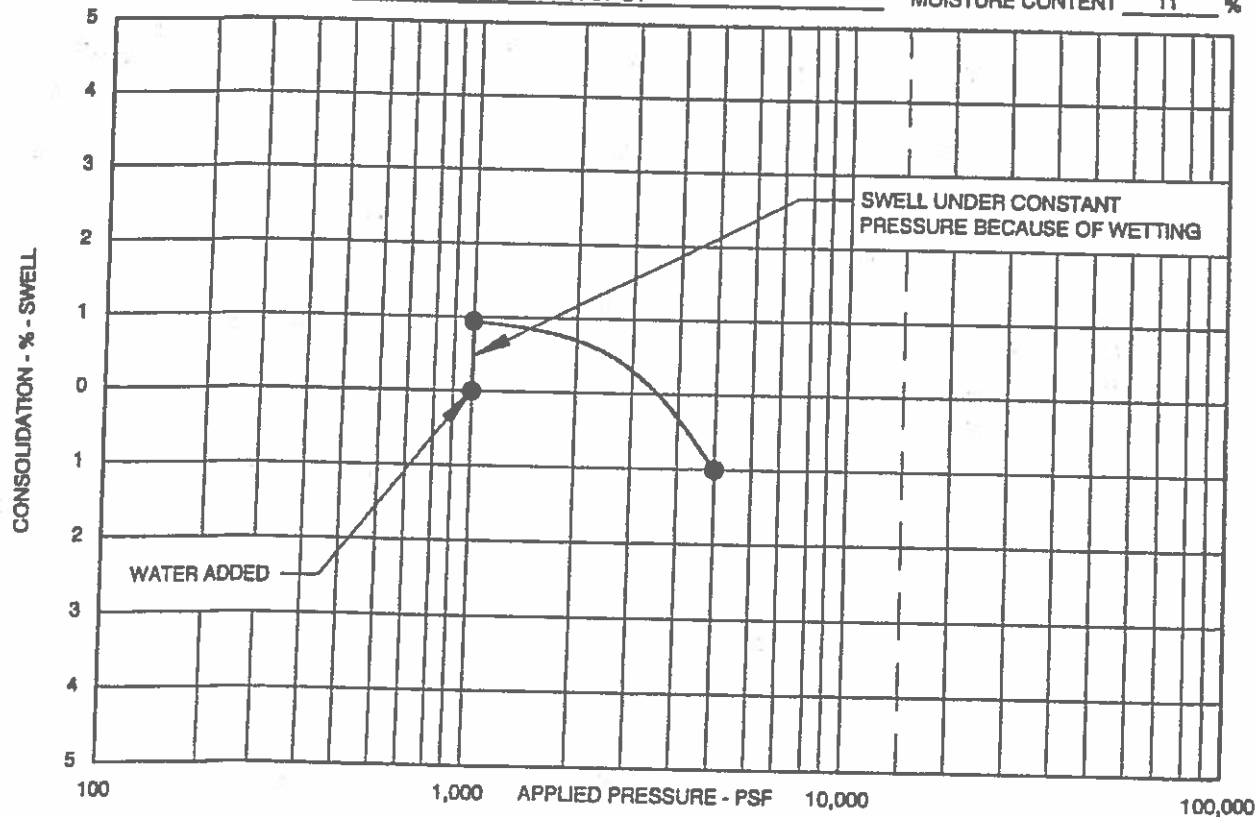
MOISTURE CONTENT 18 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 12



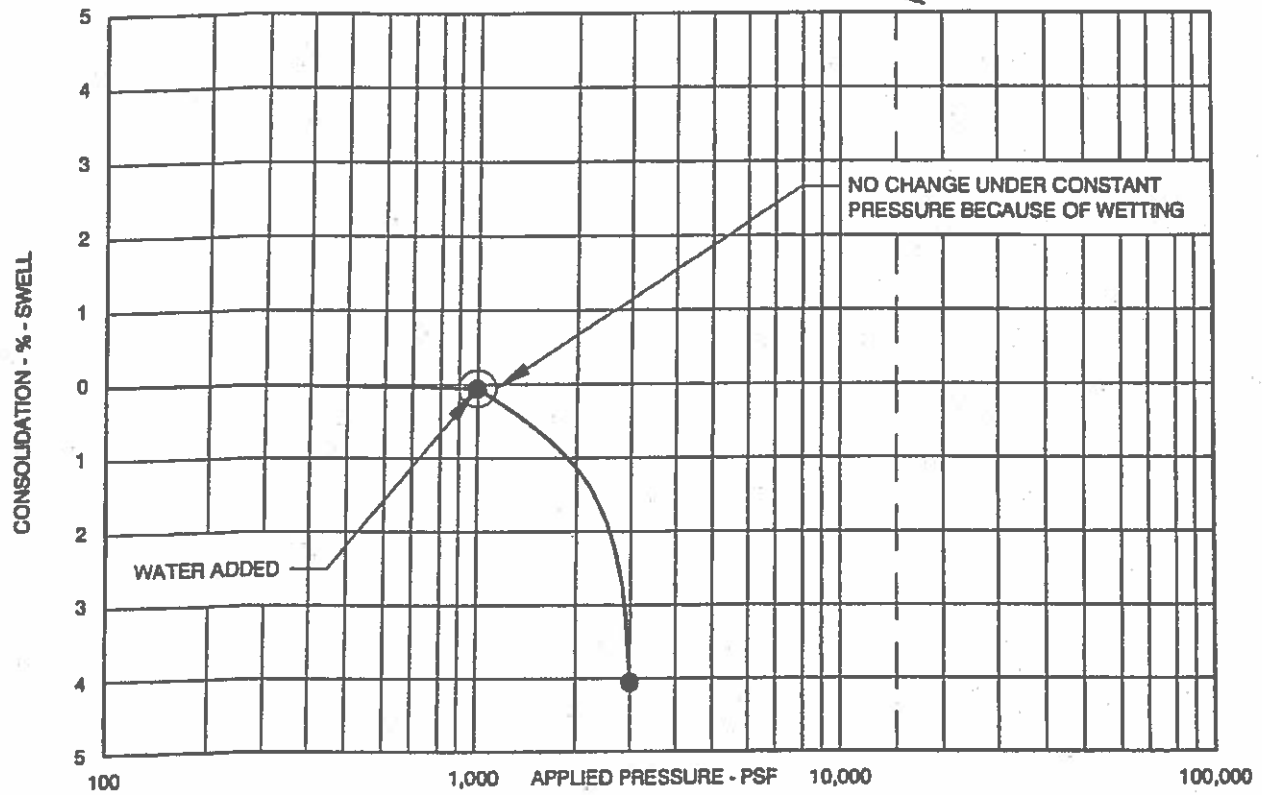
SAMPLE DESCRIPTION CLAYSTONE, SILTY DRY UNIT WT. 113 PCF  
LOCATION TEST BORING NO. 10 @ DEPTH OF 24' MOISTURE CONTENT 11 %



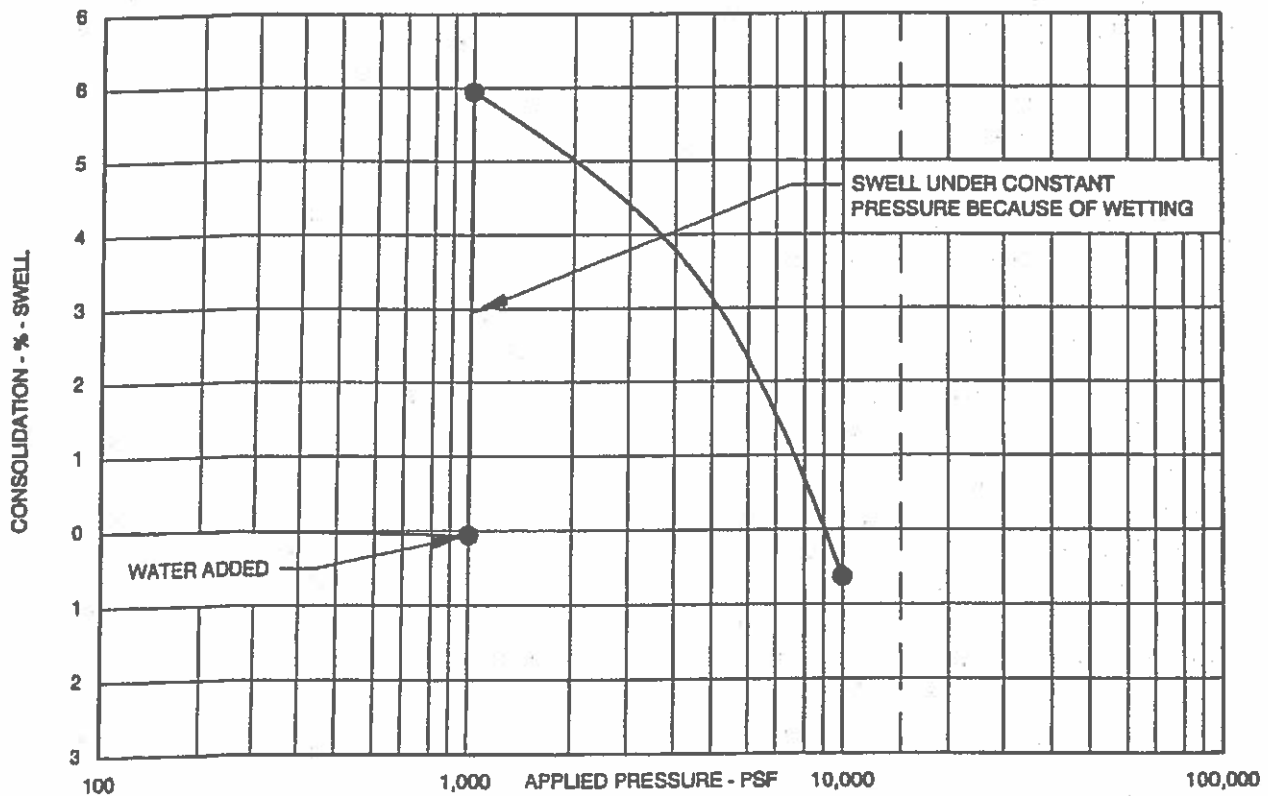
SAMPLE DESCRIPTION CLAYSTONE, SILTY DRY UNIT WT. 116 PCF  
LOCATION TEST BORING NO. 11 @ DEPTH OF 4' MOISTURE CONTENT 10 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 13



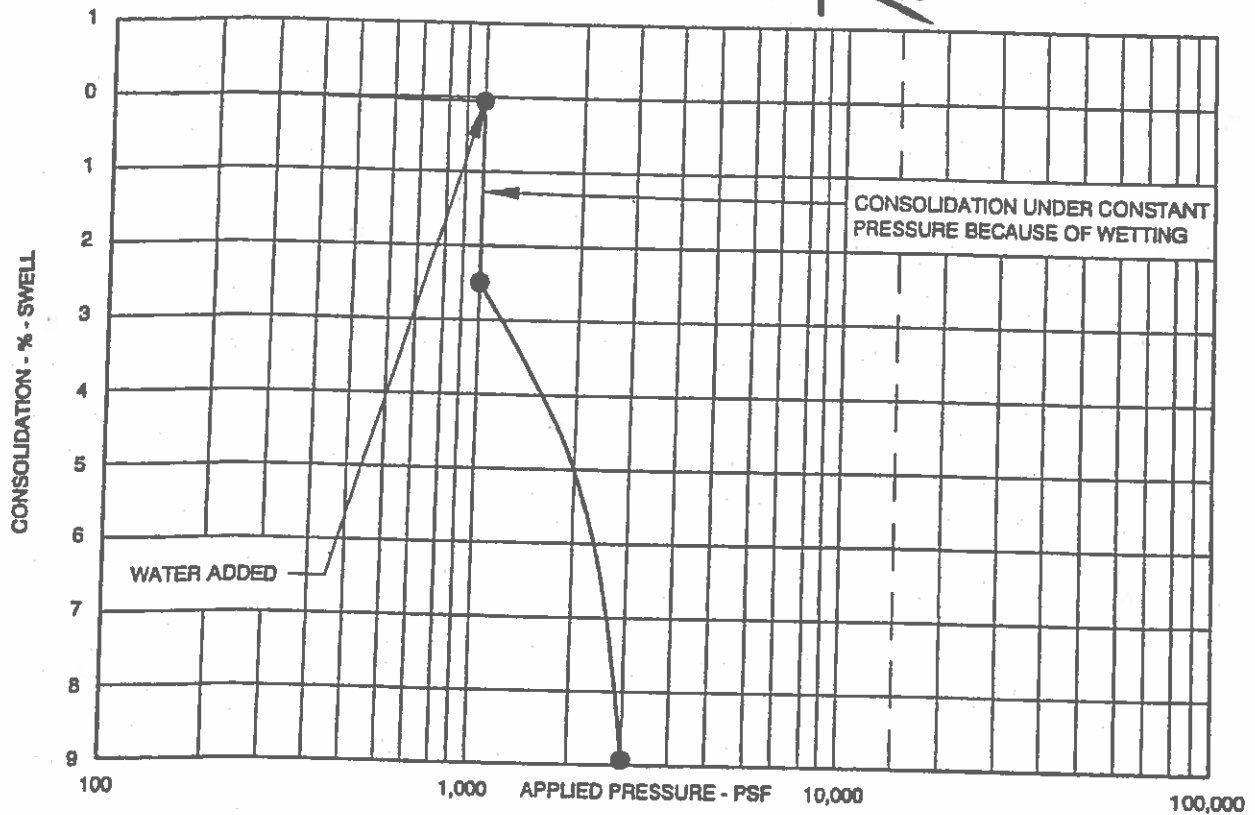
SAMPLE DESCRIPTION CLAYSTONE, SILTY DRY UNIT WT. 116 PCF  
LOCATION TEST BORING NO. 11 @ DEPTH OF 14' MOISTURE CONTENT 6 %



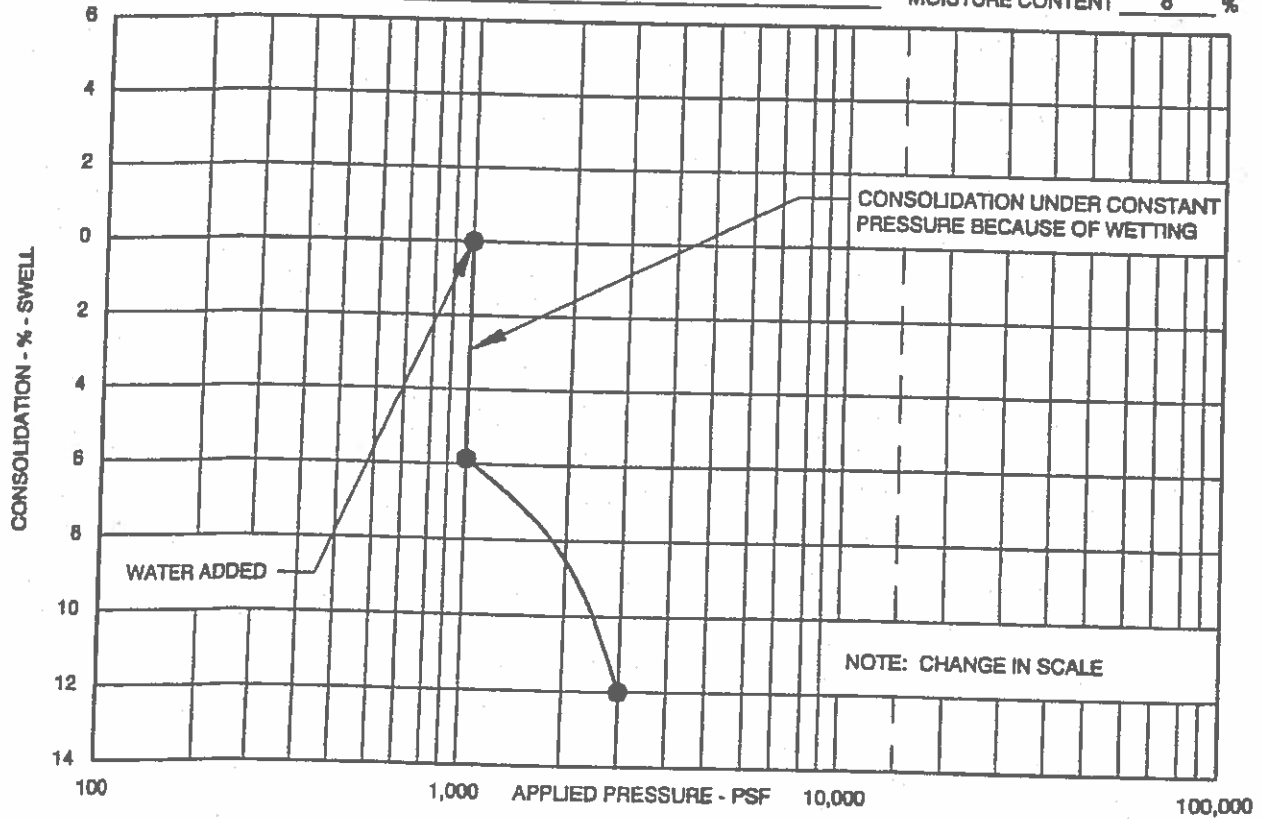
SAMPLE DESCRIPTION CLAYSTONE, SILTY DRY UNIT WT. 124 PCF  
LOCATION TEST BORING NO. 12 @ DEPTH OF 19' MOISTURE CONTENT 10 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 14



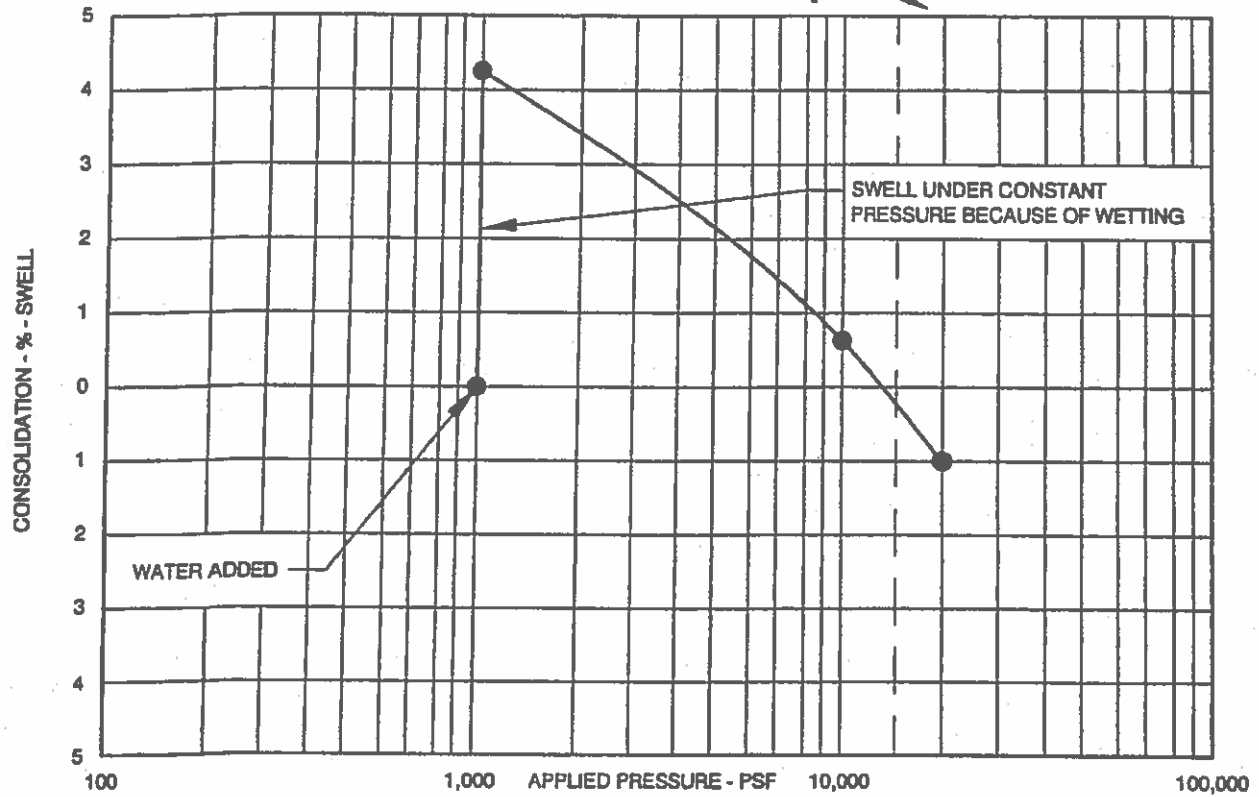
SAMPLE DESCRIPTION CLAY, SANDY DRY UNIT WT. 89 PCF  
 LOCATION TEST BORING NO. 13 @ DEPTH OF 4' MOISTURE CONTENT 8 %



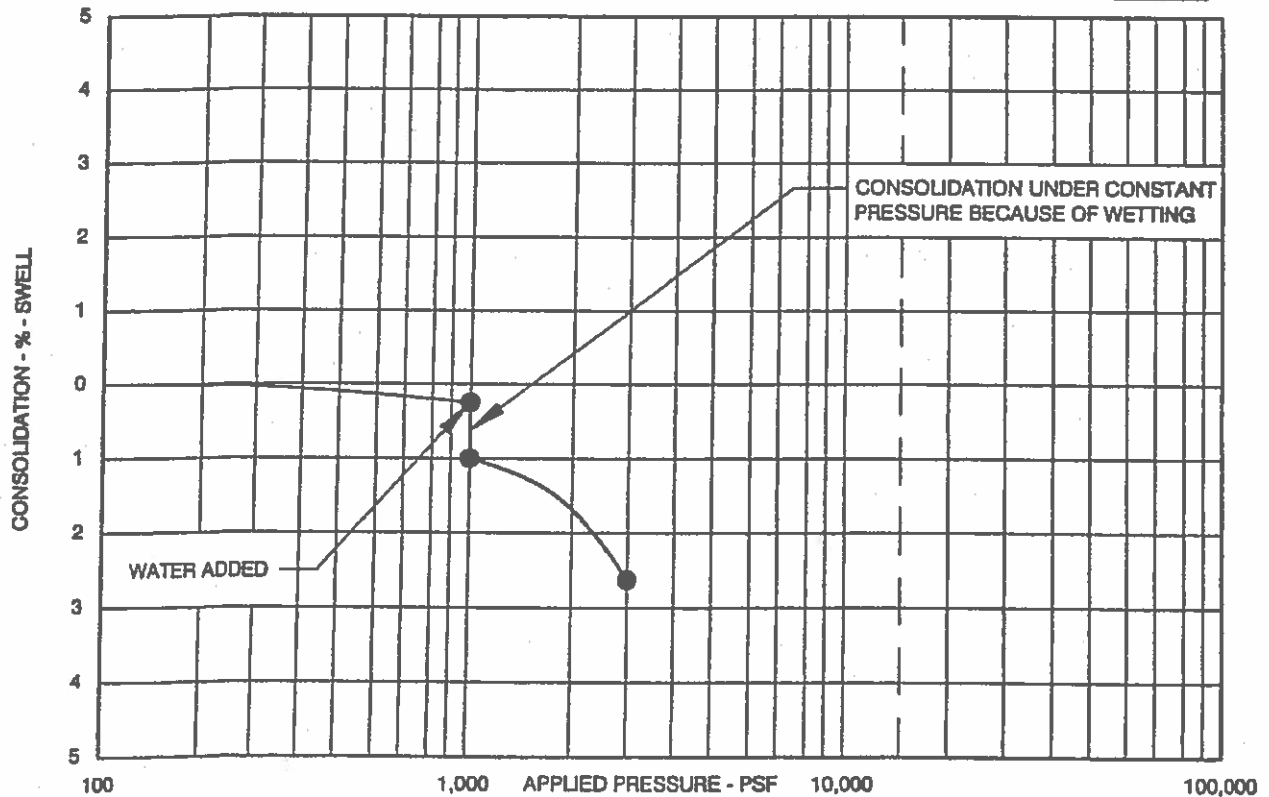
SAMPLE DESCRIPTION CLAYSTONE, SILTY (DISTURBED) DRY UNIT WT. 99 PCF  
 LOCATION TEST BORING NO. 13 @ DEPTH OF 9' MOISTURE CONTENT 7 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 15



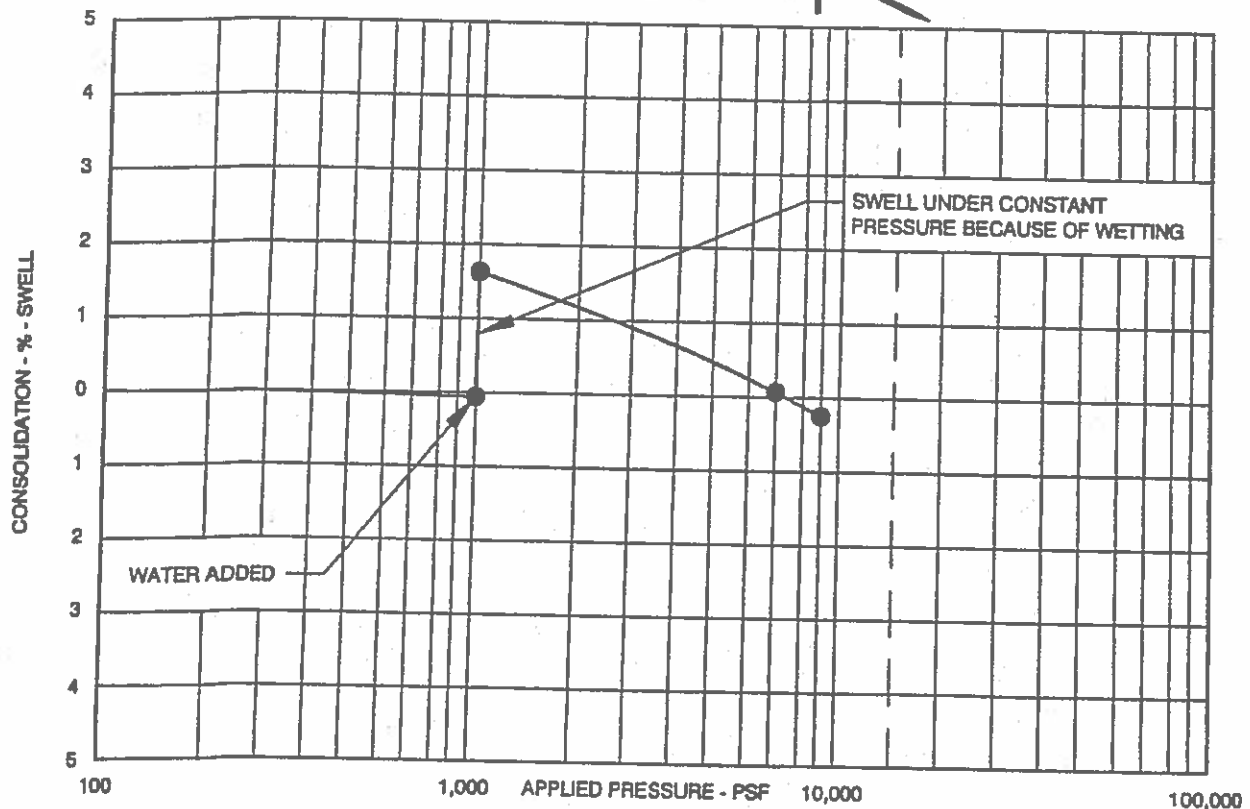
SAMPLE DESCRIPTION CLAY, SANDY DRY UNIT WT. 120 PCF  
LOCATION TEST BORING NO. 14 @ DEPTH OF 4' MOISTURE CONTENT 8 %



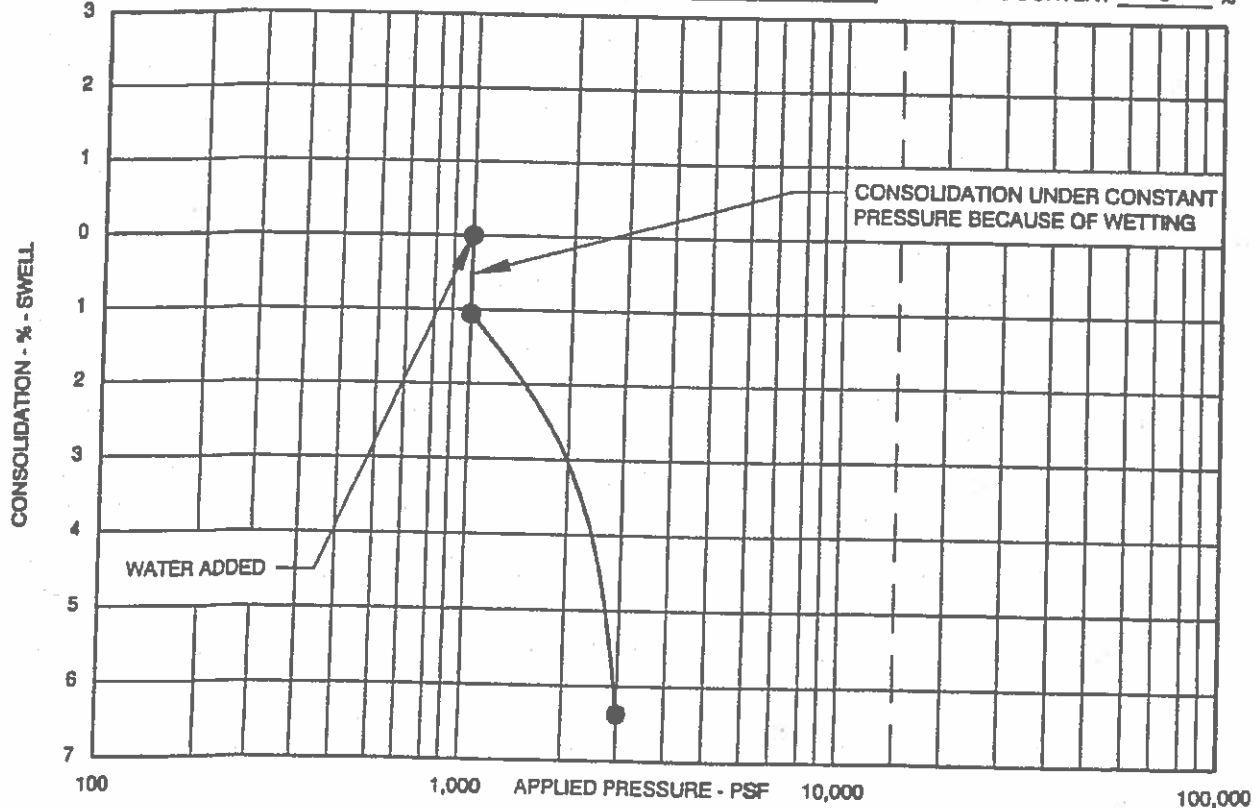
SAMPLE DESCRIPTION CLAY, SANDY DRY UNIT WT. 104 PCF  
LOCATION TEST BORING NO. 15 @ DEPTH OF 4' MOISTURE CONTENT 9 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 16



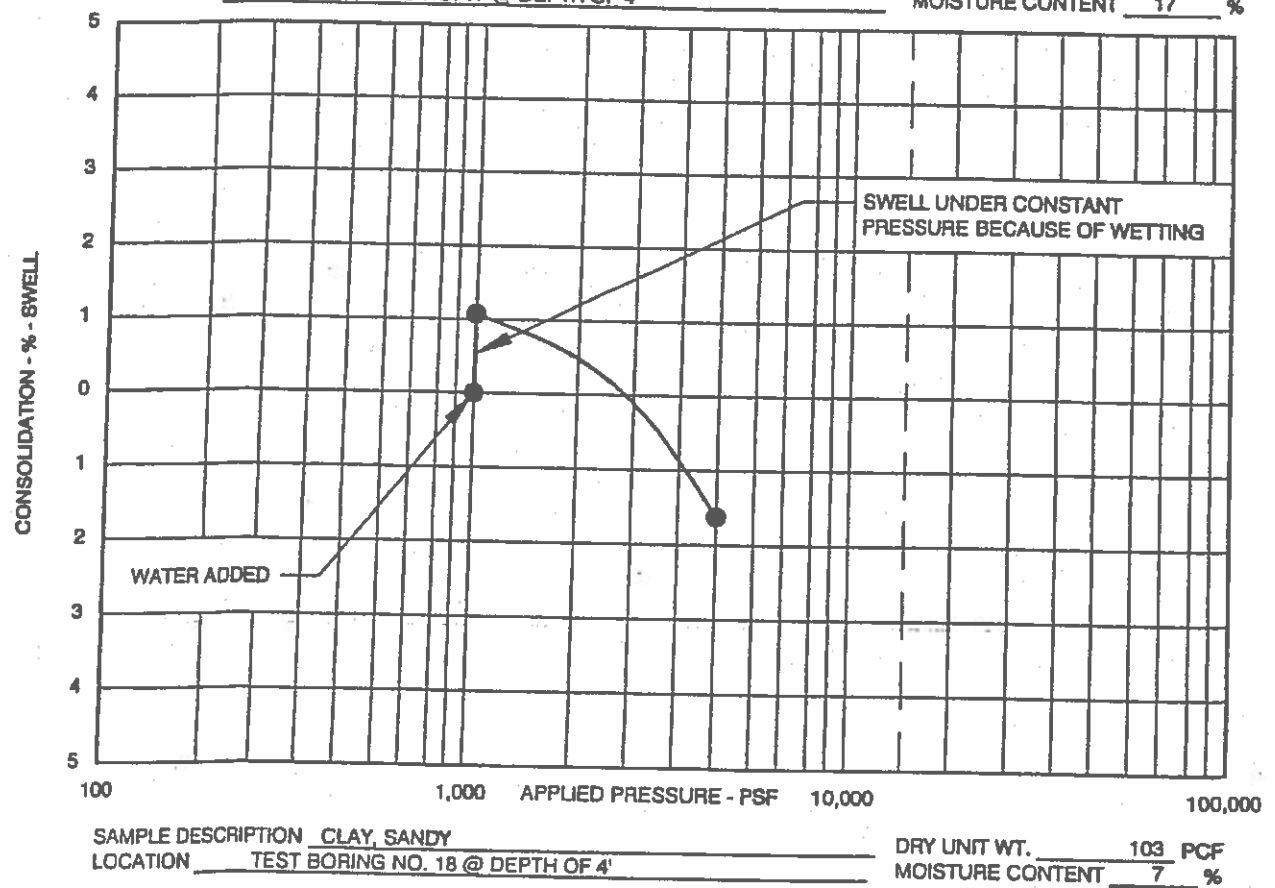
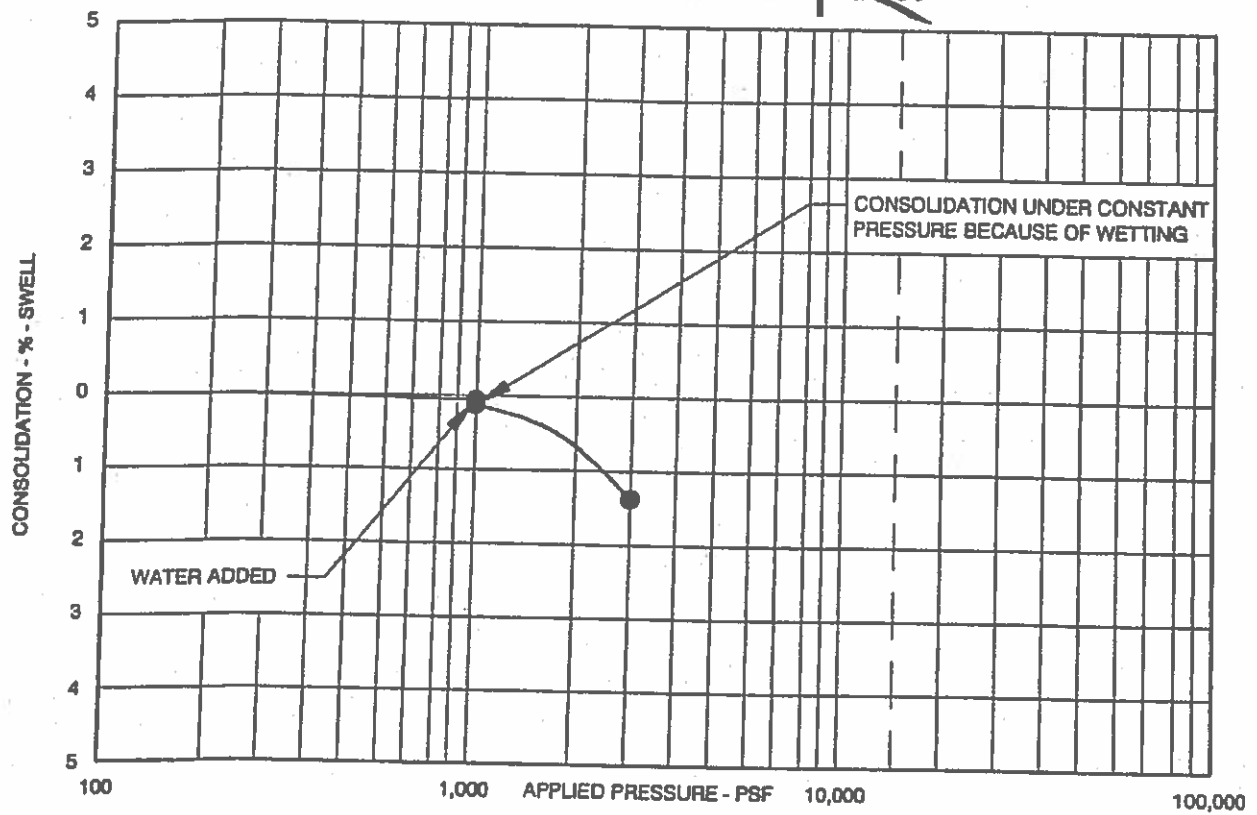
SAMPLE DESCRIPTION CLAY, VERY SANDY DRY UNIT WT. 123 PCF  
 LOCATION TEST BORING NO. 15 @ DEPTH OF 9' MOISTURE CONTENT 6 %



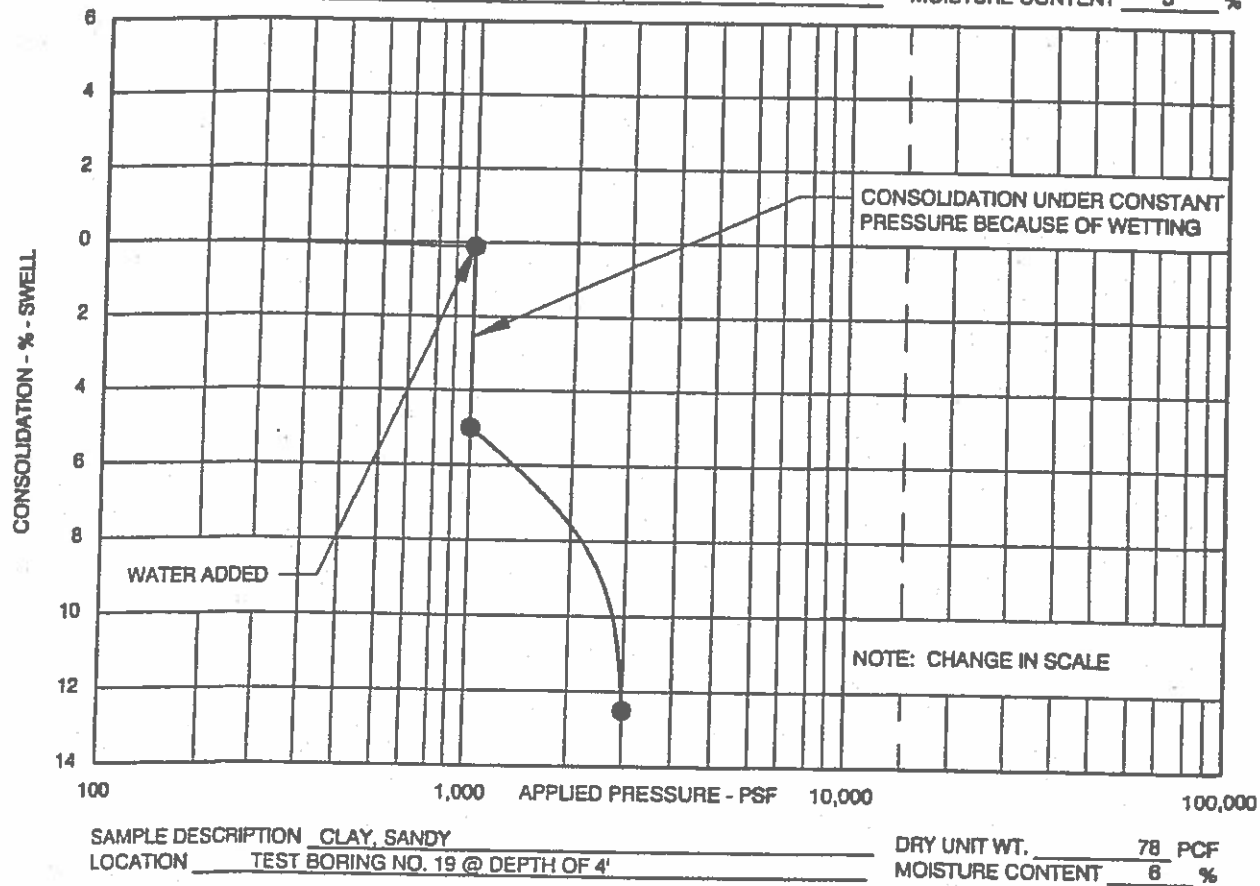
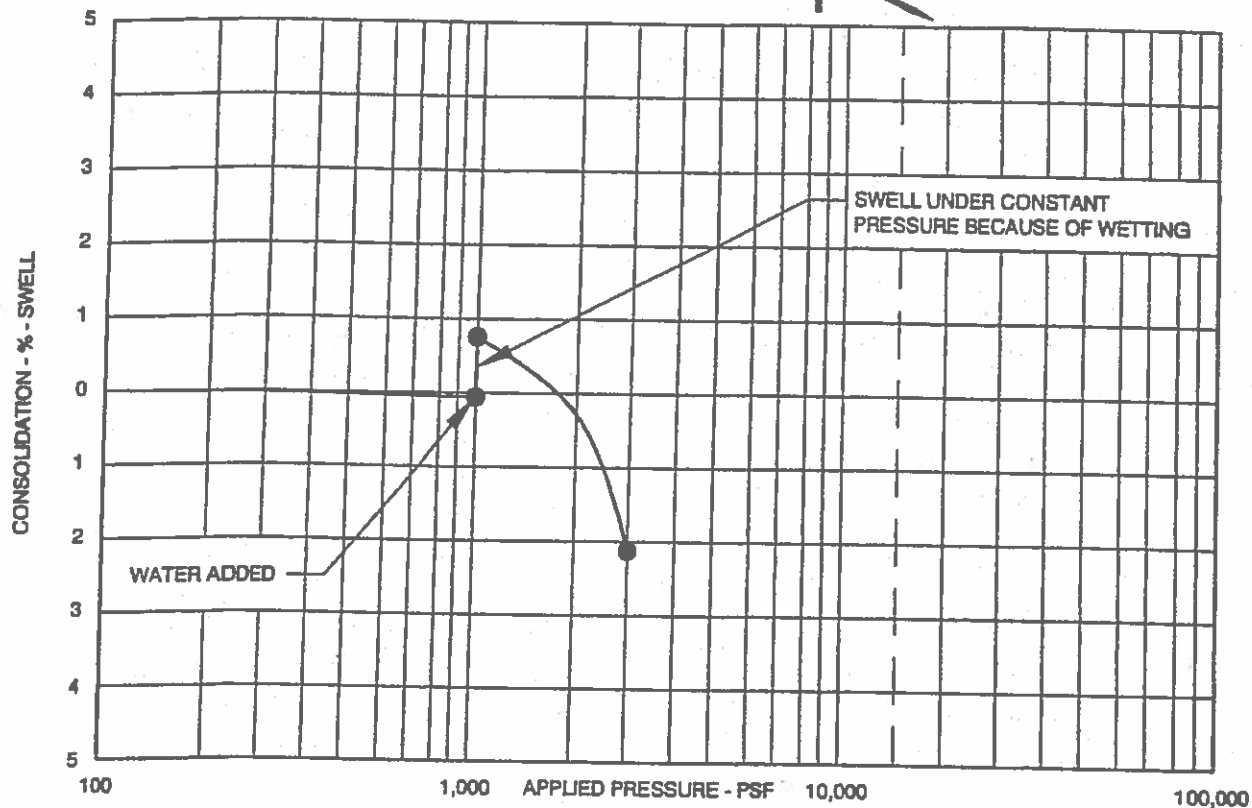
SAMPLE DESCRIPTION CLAY, SANDY DRY UNIT WT. 93 PCF  
 LOCATION TEST BORING NO. 16 @ DEPTH OF 4' MOISTURE CONTENT 8 %

**SWELL - CONSOLIDATION TEST RESULTS**

FIGURE 17

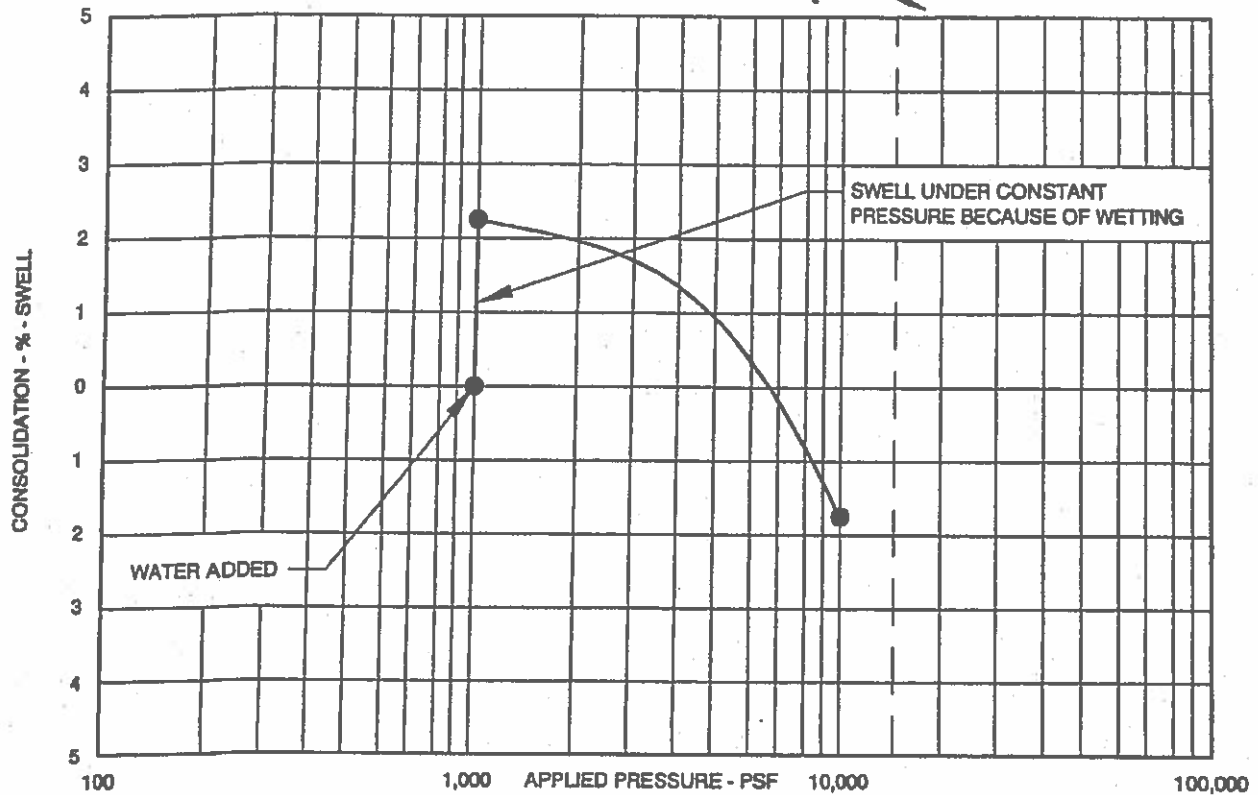


**SWELL - CONSOLIDATION TEST RESULTS**  
FIGURE 18

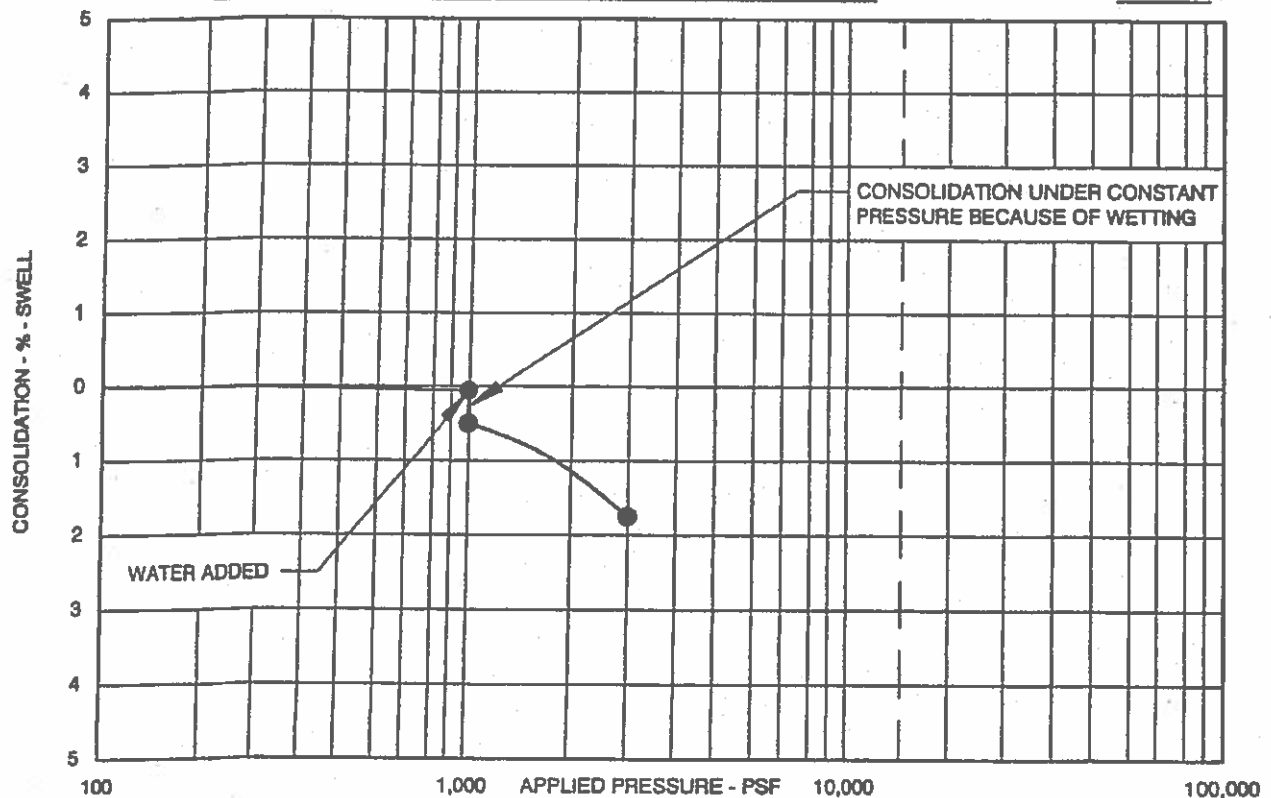


**SWELL - CONSOLIDATION TEST RESULTS**

FIGURE 10



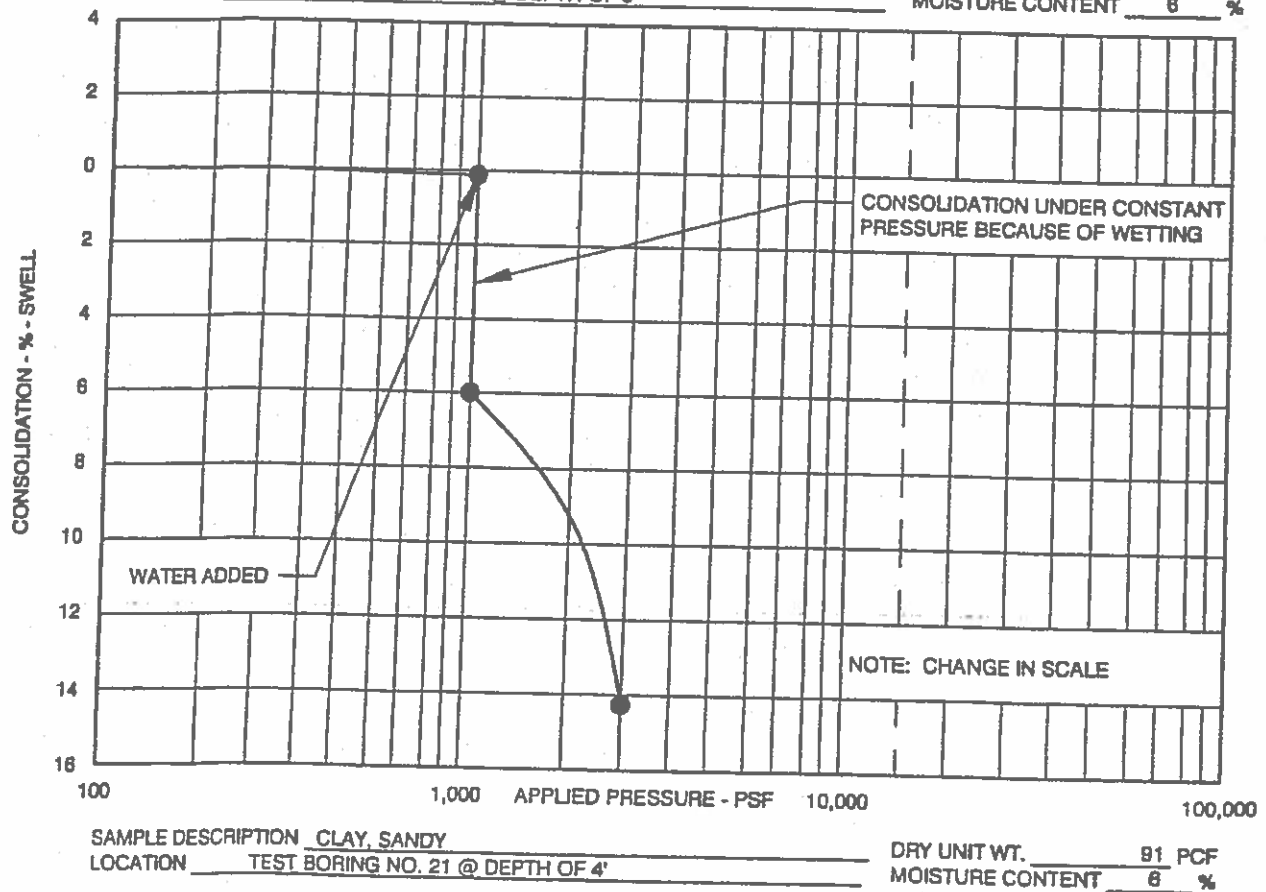
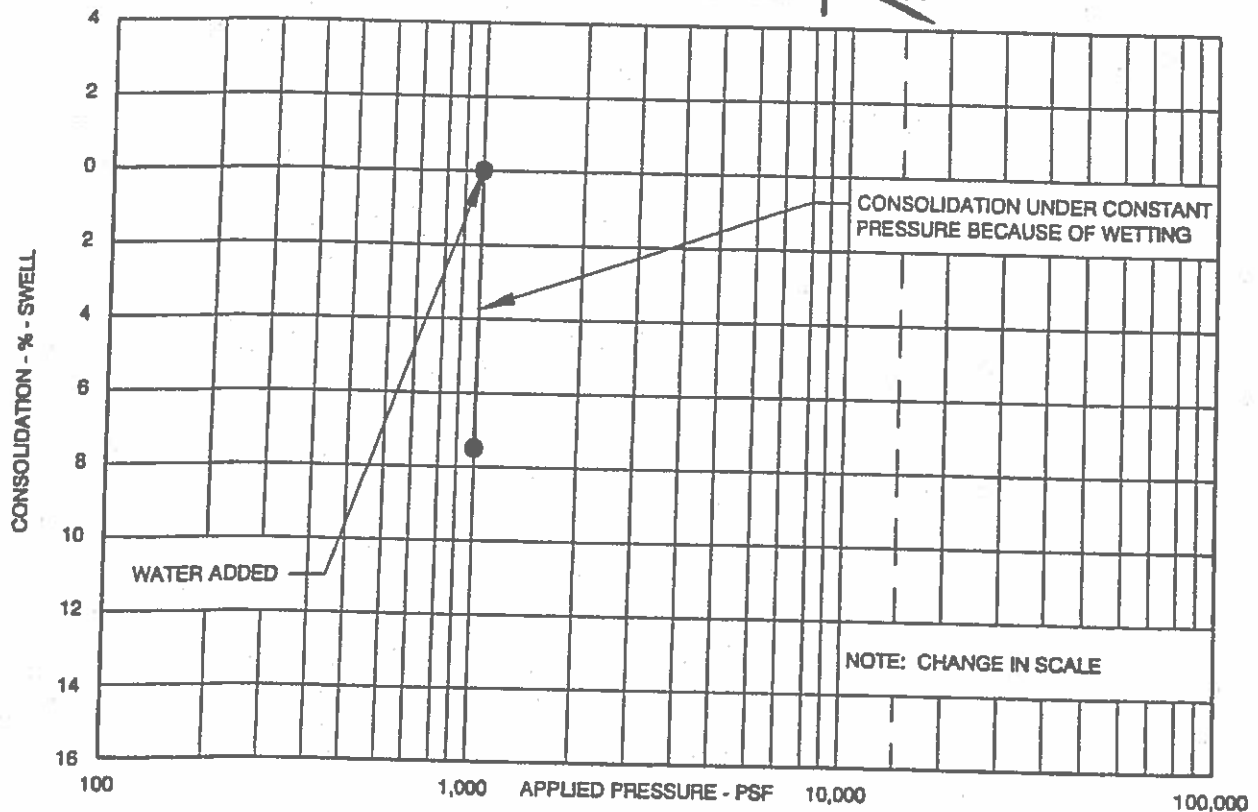
SAMPLE DESCRIPTION CLAYSTONE, SILTY DRY UNIT WT. 124 PCF  
LOCATION TEST BORING NO. 19 @ DEPTH OF 24' MOISTURE CONTENT 7 %



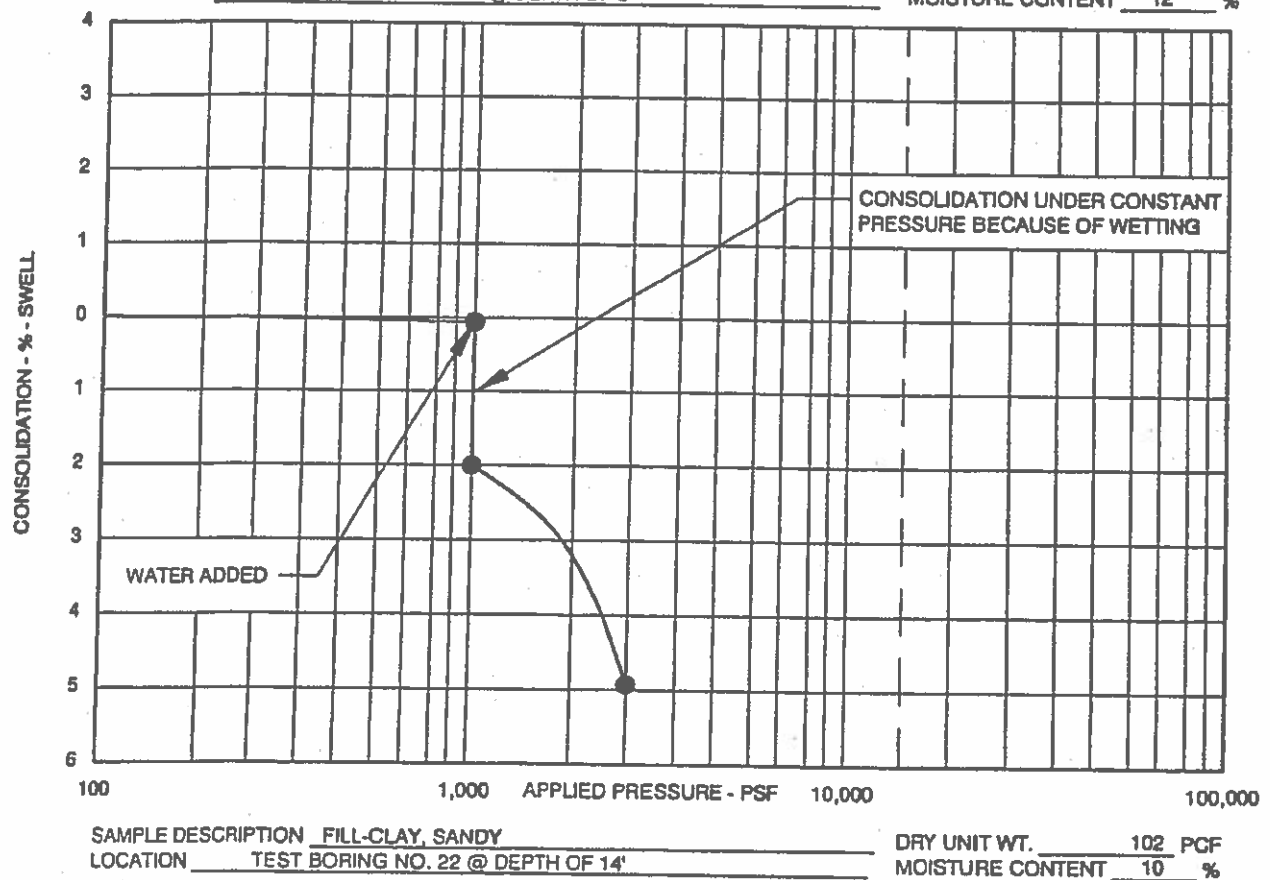
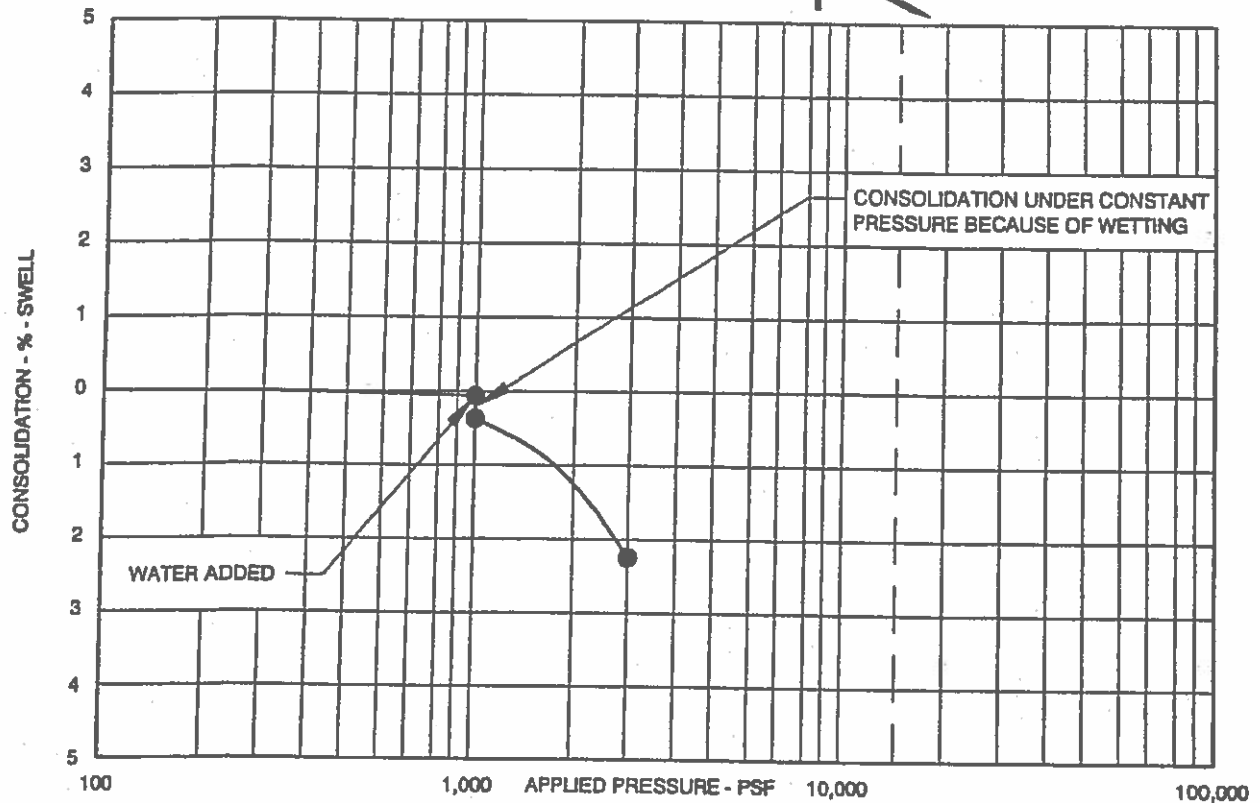
SAMPLE DESCRIPTION CLAY, SLIGHTLY SANDY DRY UNIT WT. 108 PCF  
LOCATION TEST BORING NO. 20 @ DEPTH OF 4' MOISTURE CONTENT 15 %

### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 20

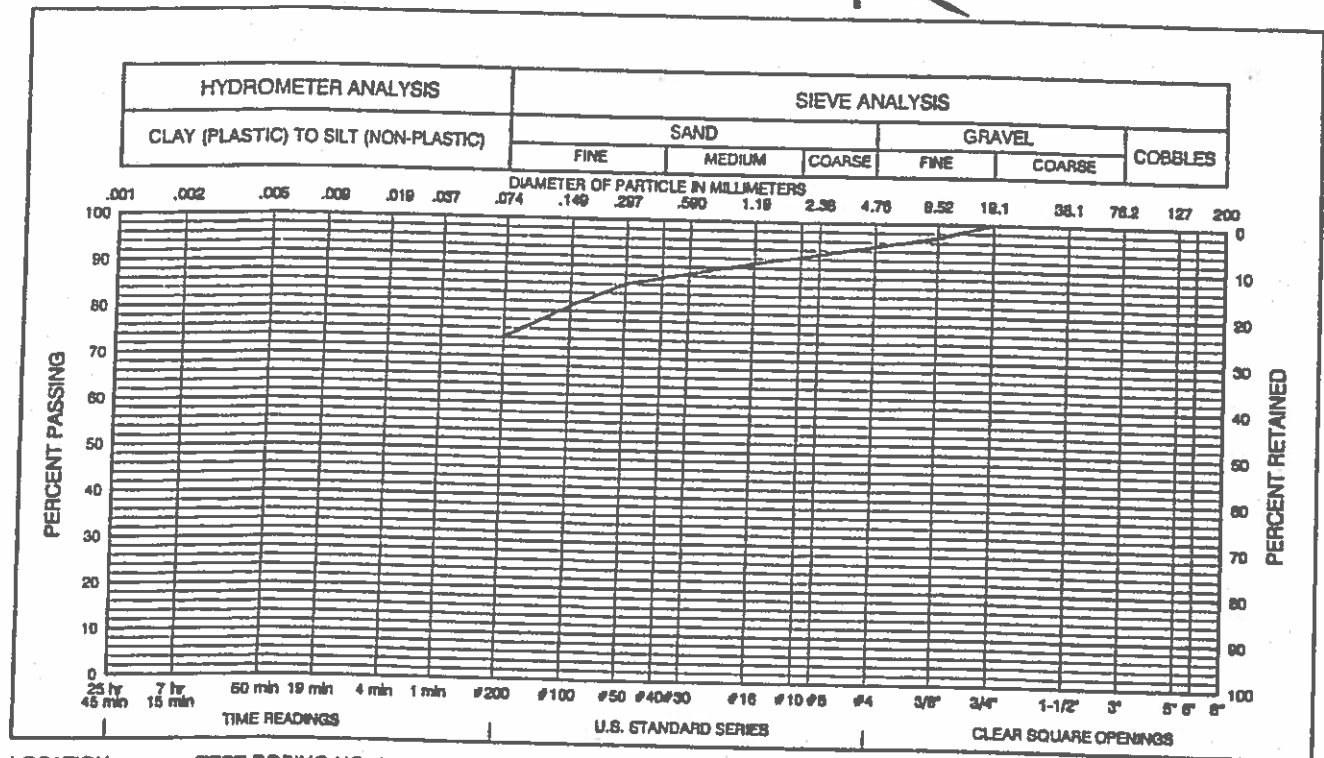


**SWELL - CONSOLIDATION TEST RESULTS**

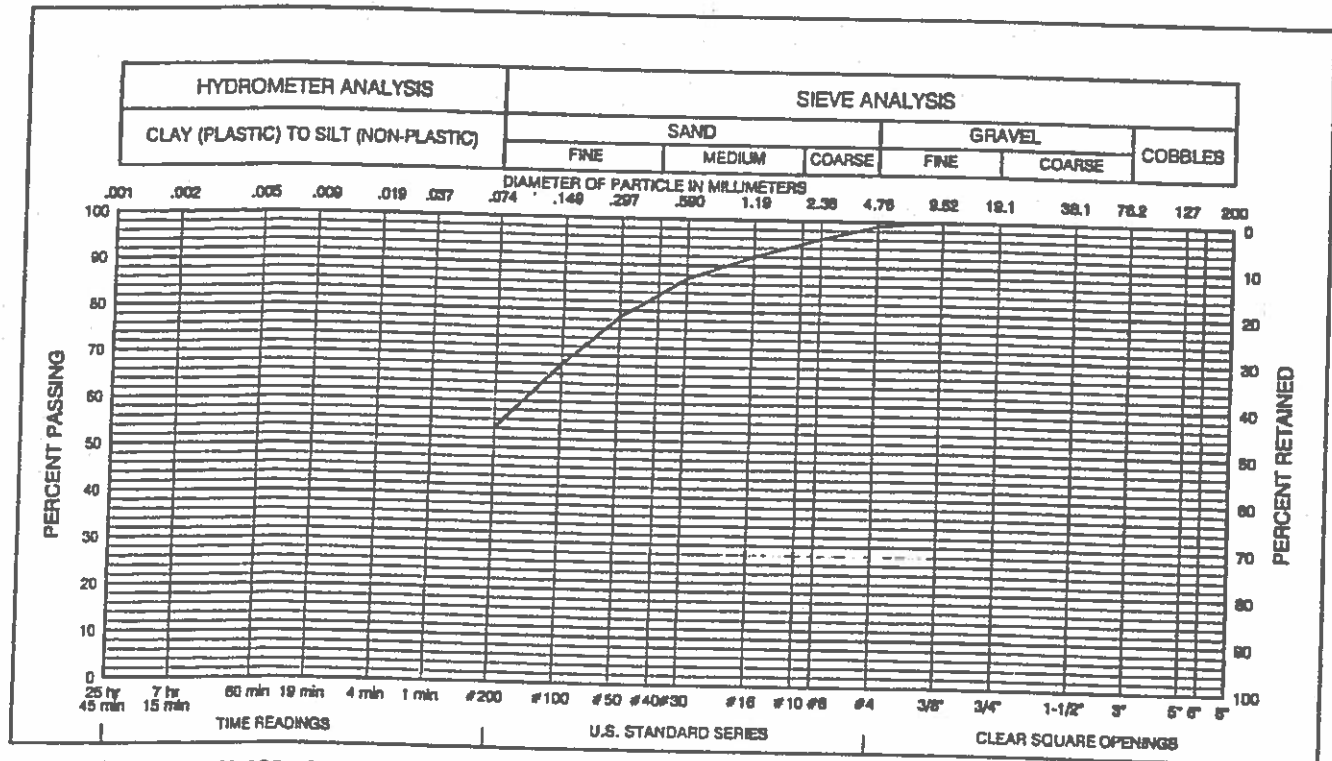


### SWELL - CONSOLIDATION TEST RESULTS

FIGURE 22



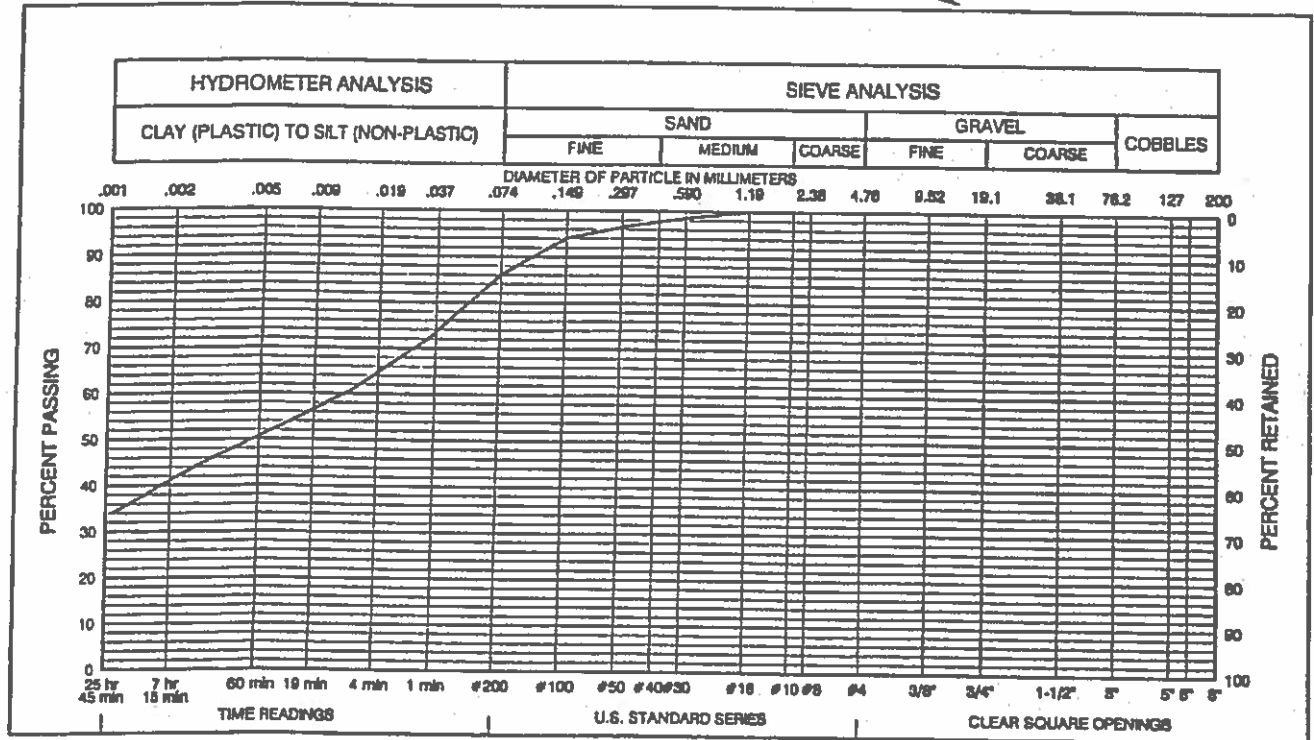
LOCATION TEST BORING NO. 1 @ DEPTH OF 8'      GRAVEL 5 %      LIQUID LIMIT 35  
SAMPLE DESCRIPTION CLAY, SANDY, SLIGHTLY GRAVELLY (CL)      SAND 21 %      PLASTICITY INDEX 17  
CLASSIFICATION AASHTO A-6 (11)      SILT & CLAY 74 %



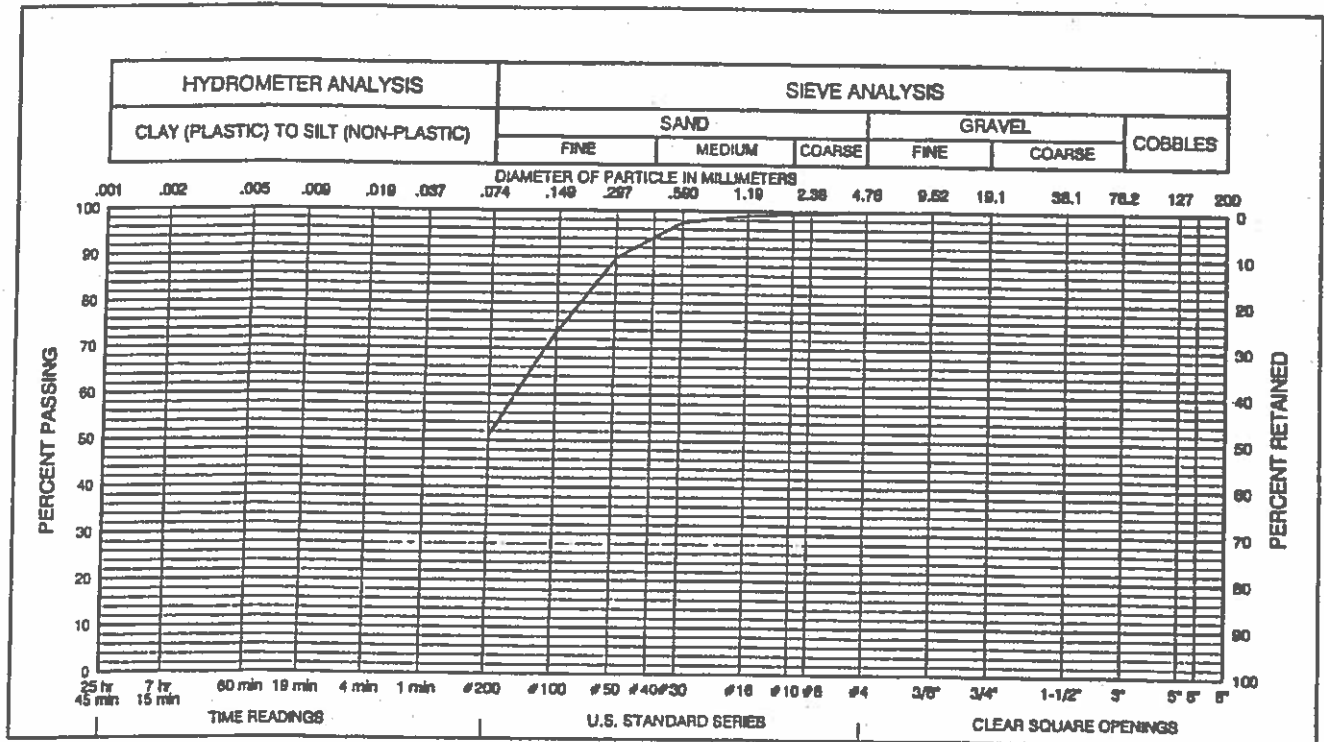
LOCATION TEST BORING NO. 4 @ DEPTH OF 8'      GRAVEL 1 %      LIQUID LIMIT NV  
SAMPLE DESCRIPTION SILT, VERY SANDY (ML)      SAND 45 %      PLASTICITY INDEX NP  
CLASSIFICATION AASHTO A-4 (0)      SILT & CLAY 54 %

### GRADATION TEST RESULTS

FIGURE 23



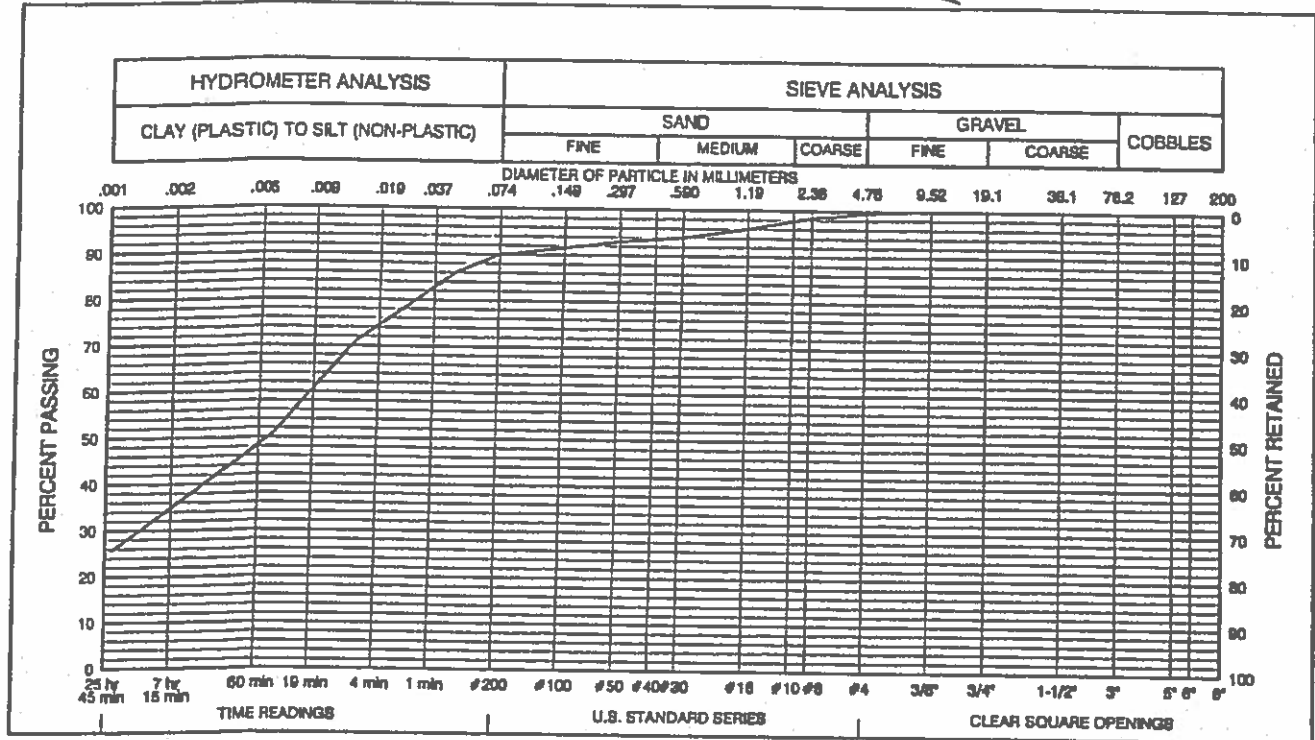
|                                                     |                         |                            |
|-----------------------------------------------------|-------------------------|----------------------------|
| LOCATION <u>TEST BORING NO. 8 @ DEPTH OF 4'</u>     | GRAVEL <u>0</u> %       | LIQUID LIMIT <u>35</u>     |
| SAMPLE DESCRIPTION <u>CLAY, SLIGHTLY SANDY (CL)</u> | SAND <u>14</u> %        | PLASTICITY INDEX <u>18</u> |
| CLASSIFICATION <u>AASHTO A-6 (13)</u>               | SILT & CLAY <u>86</u> % |                            |



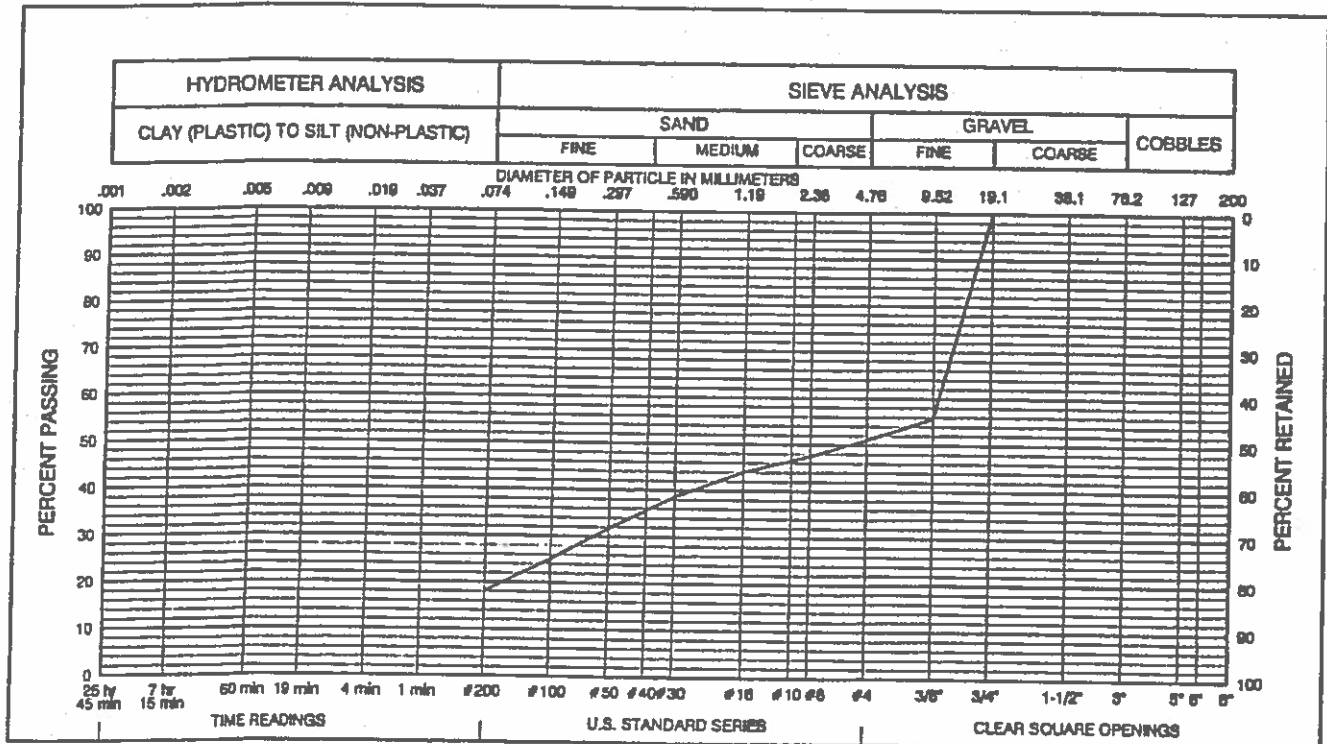
|                                                 |                         |                            |
|-------------------------------------------------|-------------------------|----------------------------|
| LOCATION <u>TEST BORING NO. 9 @ DEPTH OF 9'</u> | GRAVEL <u>0</u> %       | LIQUID LIMIT <u>NV</u>     |
| SAMPLE DESCRIPTION <u>SILT, VERY SANDY (ML)</u> | SAND <u>49</u> %        | PLASTICITY INDEX <u>NP</u> |
| CLASSIFICATION <u>AASHTO A-4 (0)</u>            | SILT & CLAY <u>51</u> % |                            |

## GRADATION TEST RESULTS

FIGURE 24



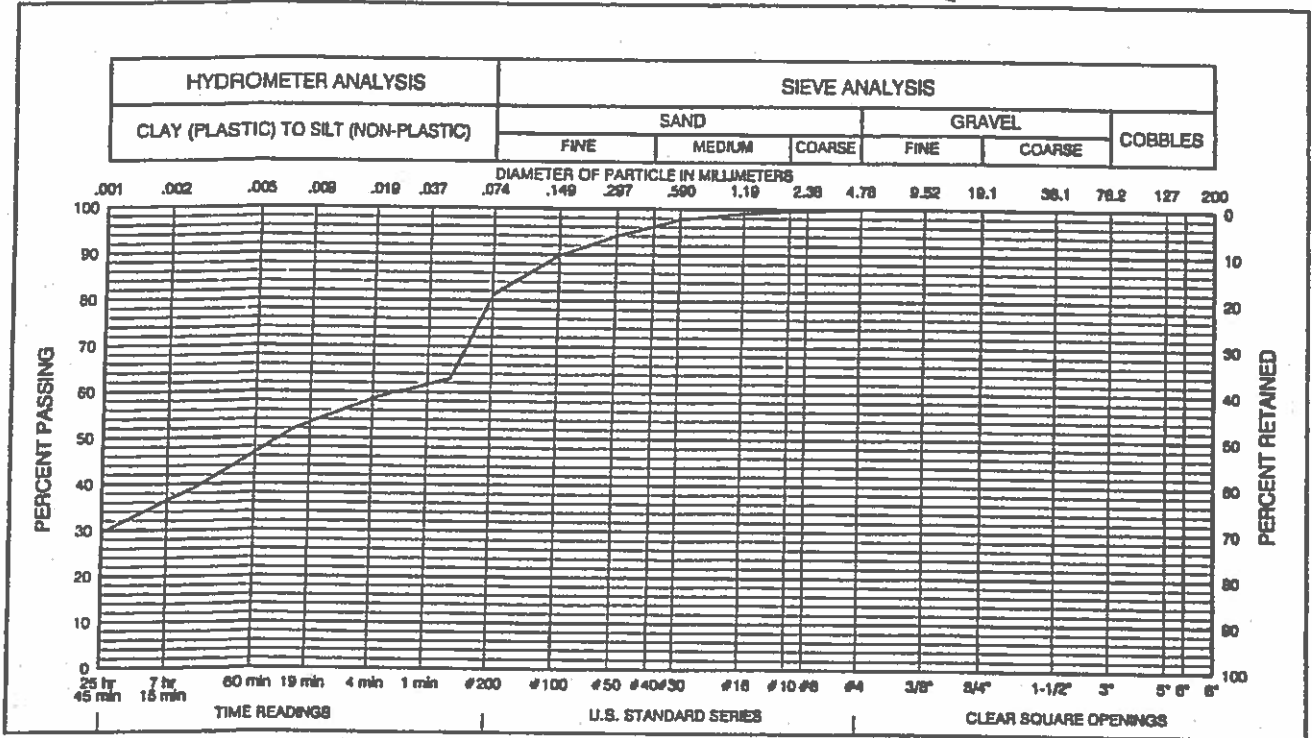
LOCATION TEST BORING NO. 11 @ DEPTH OF 9' GRAVEL 0 % LIQUID LIMIT 33  
SAMPLE DESCRIPTION CLAY, SLIGHTLY SANDY (CL) SAND 10 % PLASTICITY INDEX 16  
CLASSIFICATION AASHTO A-6 (13) SILT & CLAY 90 %



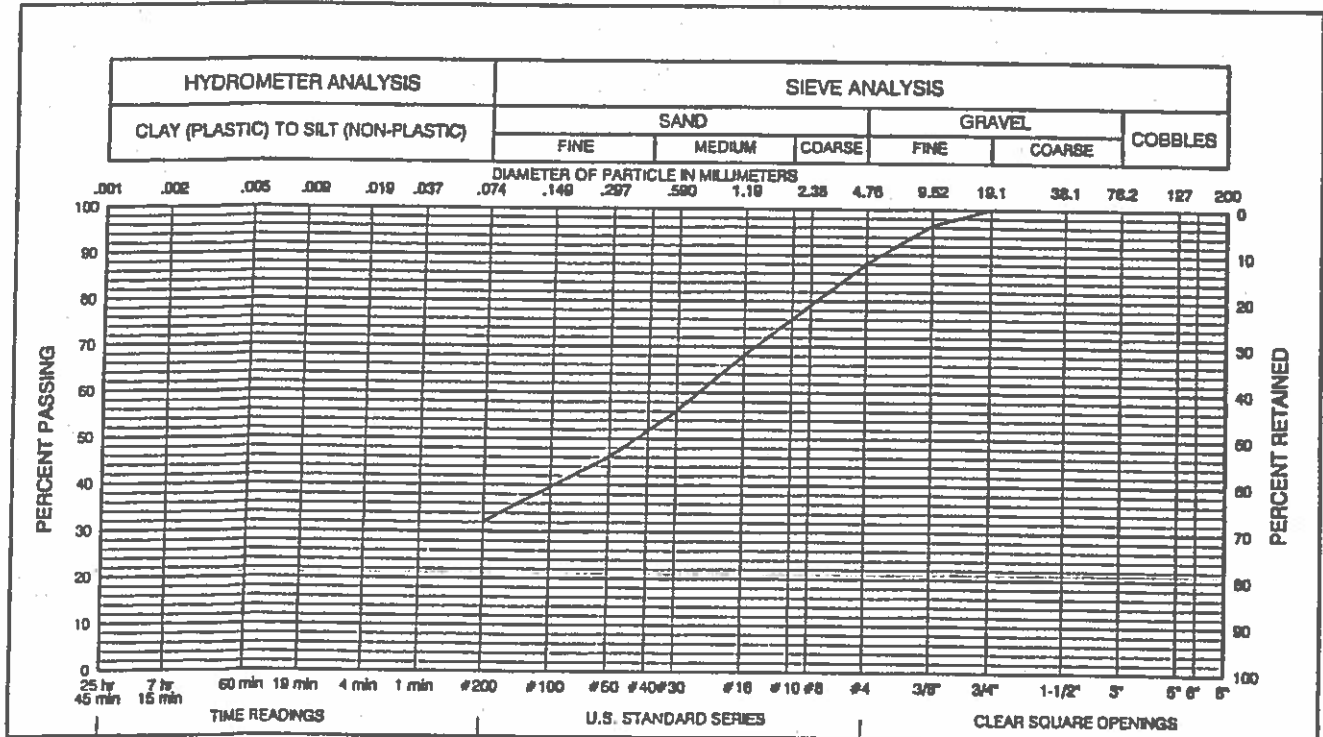
LOCATION TEST BORING NO. 12 @ DEPTH OF 4' GRAVEL 49 % LIQUID LIMIT NV  
SAMPLE DESCRIPTION GRAVEL, VERY SANDY, SILTY (GM) SAND 33 % PLASTICITY INDEX NP  
CLASSIFICATION AASHTO A-1-b SILT & CLAY 18 %

### GRADATION TEST RESULTS

FIGURE 25



LOCATION TEST BORING NO. 15 @ DEPTH OF 4' GRAVEL 0 % LIQUID LIMIT 35  
SAMPLE DESCRIPTION CLAY, SLIGHTLY SANDY (CL) SAND 19 % PLASTICITY INDEX 19  
CLASSIFICATION AASHTO A-6 (14) SILT & CLAY 81 %

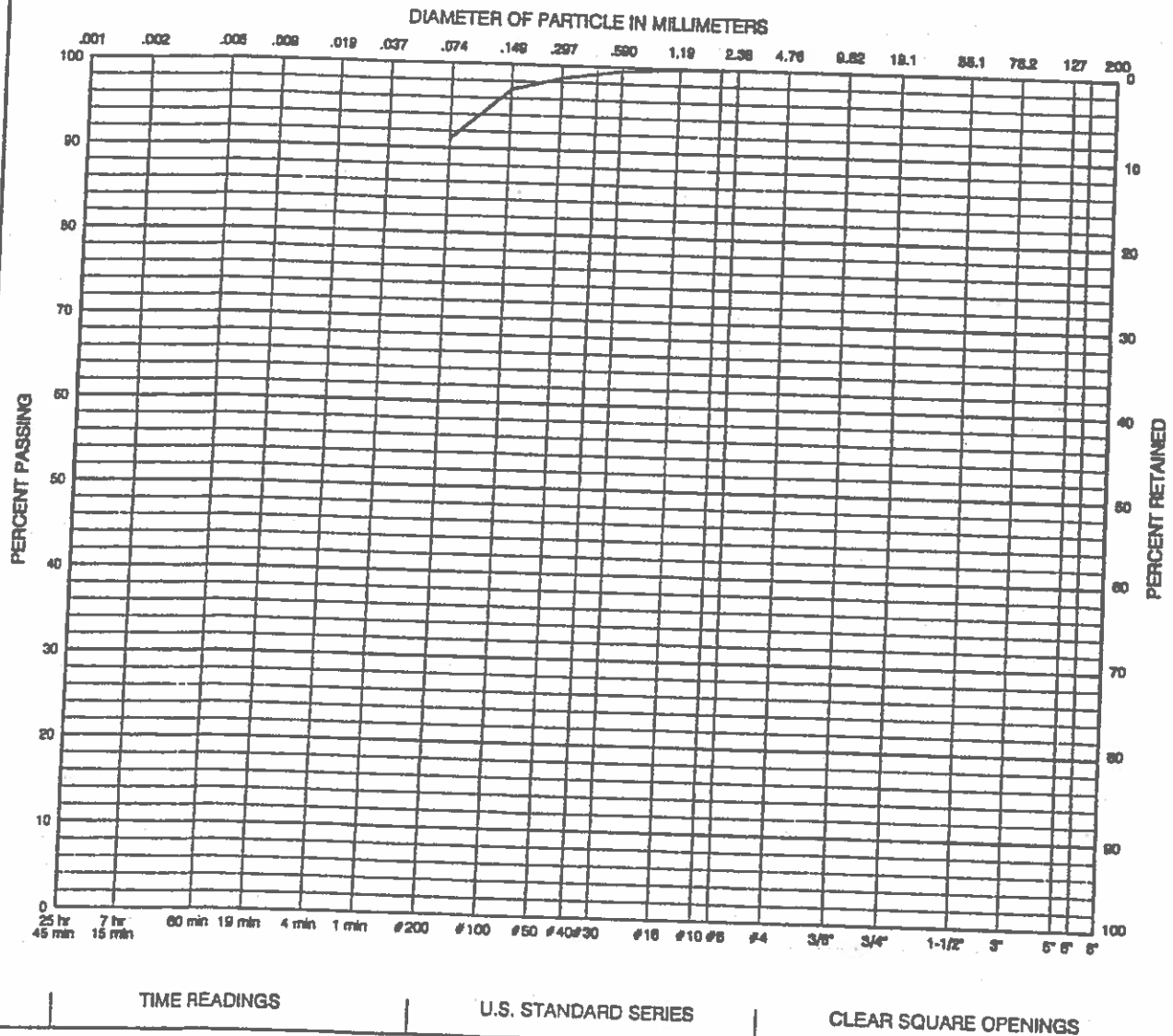


LOCATION TEST BORING NO. 19 @ DEPTH OF 9' GRAVEL 12 % LIQUID LIMIT 23  
SAMPLE DESCRIPTION SAND, VERY CLAYEY TO SILTY, SL. GRAVELLY (SC-SM) SAND 65 % PLASTICITY INDEX 8  
CLASSIFICATION AASHTO A-2-4 (0) SILT & CLAY 32 %

### GRADATION TEST RESULTS

FIGURE 28

| HYDROMETER ANALYSIS                  | SIEVE ANALYSIS |        |        |        |         |
|--------------------------------------|----------------|--------|--------|--------|---------|
| CLAY (PLASTIC) TO SILT (NON-PLASTIC) | SAND           |        |        | GRAVEL |         |
|                                      | FINE           | MEDIUM | COARSE | FINE   | COARSE  |
|                                      |                |        |        |        | COBBLES |



LOCATION TEST BORING NO. 20 @ DEPTH OF 4'

SAMPLE DESCRIPTION CLAY, SLIGHTLY SANDY (CL)

CLASSIFICATION AASHTO A-6 (9)

GRAVEL 0 % LIQUID LIMIT 27

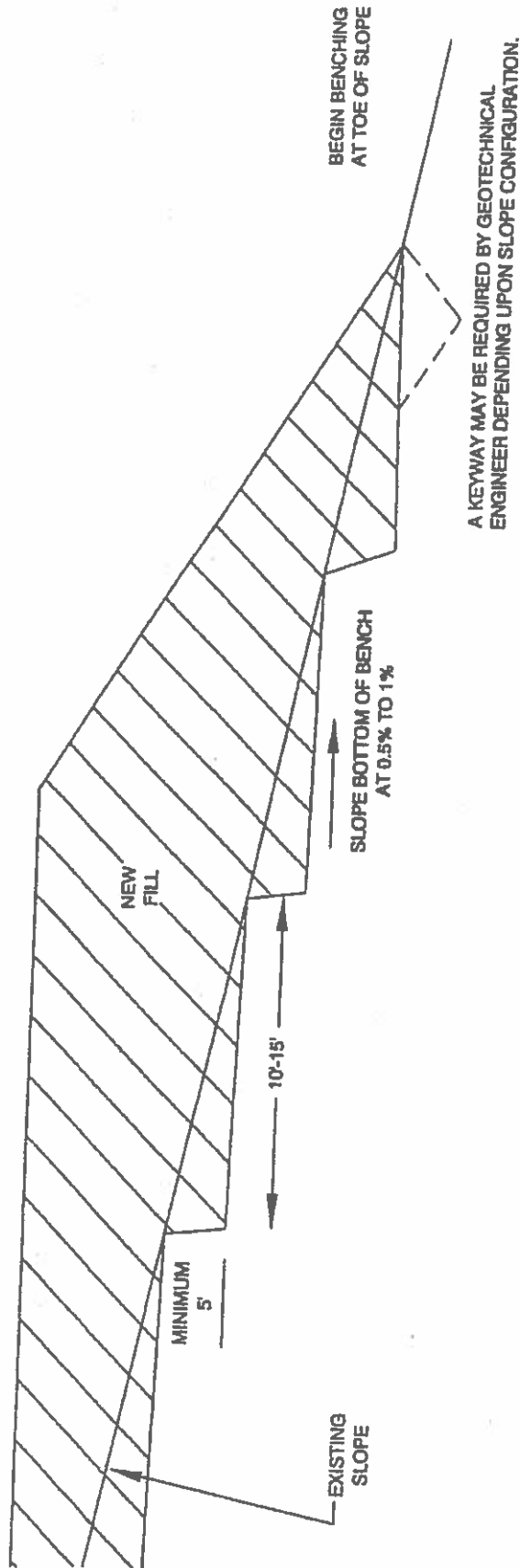
SAND 9 % PLASTICITY INDEX 12

SILT & CLAY 91 %

**GRADATION TEST RESULTS**  
FIGURE 27



CONTINUE BENCHING UNTIL NATURAL SLOPE  
FLATTENS OR SLOPE DAYLIGHTS



BENCHING REQUIRED WHEN EXISTING  
SLOPE IS 5 : 1 (HORIZONTAL : VERTICAL) OR GREATER

NOTES: DRAINS MAY BE REQUIRED IF GROUND  
WATER IS ENCOUNTERED.

ADDITIONAL CUTTING BACK OF SOME SLOPES  
MAY BE REQUIRED BY GEOTECHNICAL ENGINEER  
IF SLOPE INSTABILITY IS NOTED.

NOT TO SCALE

|                                                                                         |                                |
|-----------------------------------------------------------------------------------------|--------------------------------|
| <b>A.G. Wassenaar Inc.</b><br><small>Geotechnical and Environmental Consultants</small> |                                |
| GENERALIZED<br>BENCHING<br>DETAIL                                                       | PROJECT NO. 90114<br>FIGURE 29 |

| Test Boring No. | Depth (feet) | Soil Type                      | Natural Dry Density (pcf) | Natural Moisture (%) | Swell (+) / Consolidation (-) (%)* | Swell Pressure (psf) | % Clay | % Passing #200 Sieve | Atterberg       |                     |  | pH   | Resistivity (ohm/cm) | Water Soluble Sulfates (ppm) | Chlorides (%) |
|-----------------|--------------|--------------------------------|---------------------------|----------------------|------------------------------------|----------------------|--------|----------------------|-----------------|---------------------|--|------|----------------------|------------------------------|---------------|
|                 |              |                                |                           |                      |                                    |                      |        |                      | Liquid Limit LL | Plasticity Index PI |  |      |                      |                              |               |
| 1               | 4            | Clay, sandy                    | 100                       | 7                    | +0.1                               | 1,100                |        |                      |                 |                     |  | 7.32 | 516                  | 20,000                       | 0.0068        |
|                 | 9            | Clay, sandy, slightly gravelly |                           | 9                    |                                    |                      |        | 74                   | 35              | 17                  |  |      |                      |                              |               |
|                 | 14           | Claystone, silty (disturbed)   | 107                       | 6                    | -2.5                               | —                    |        |                      |                 |                     |  |      |                      |                              |               |
| 2               | 9            | Clay, sandy                    | 114                       | 7                    | +2.8                               | 5,400                |        |                      |                 |                     |  |      |                      |                              |               |
|                 | 14           | Clay, sandy                    | 108                       | 7                    | -0.1                               | —                    |        |                      |                 |                     |  |      |                      |                              |               |
| 3               | 4            | Clay, sandy                    | 117                       | 12                   | -0.4                               | —                    |        |                      |                 |                     |  |      |                      |                              |               |
|                 | 19           | Clay, sandy                    | 117                       | 3                    | -1.3                               | —                    |        |                      |                 |                     |  |      |                      |                              |               |
| 4               | 4            | Clay, sandy                    | 97                        | 8                    | -1.1                               | —                    |        |                      |                 |                     |  |      |                      |                              |               |
|                 | 9            | Silt, very sandy               |                           | 5                    |                                    |                      |        | 54                   | NV              | NP                  |  |      |                      |                              |               |
| 5               | 4            | Sand, clayey                   | 87                        | 8                    | -0.5                               | —                    |        |                      |                 |                     |  |      |                      |                              |               |
| 7               | 4            | Clay, sandy                    | 116                       | 14                   | -0.3                               | —                    |        |                      |                 |                     |  | 7.76 | 1,835                | <50                          | <0.0001       |
|                 | 24           | Claystone, silty               | 122                       | 9                    | +4.9                               | 6,500                |        |                      |                 |                     |  |      |                      |                              |               |
| 8               | 4            | Clay, slightly sandy           |                           | 13                   |                                    |                      | 41     | 86                   | 35              | 18                  |  |      |                      |                              |               |
|                 | 9            | Clay, slightly sandy           | 110                       | 10                   | -0.3                               | —                    |        |                      |                 |                     |  |      |                      |                              |               |
| 9               | 4            | Clay, slightly sandy           | 109                       | 7                    | -0.5                               | —                    |        |                      |                 |                     |  |      |                      |                              |               |
|                 | 9            | Silt, very sandy               |                           | 5                    |                                    |                      |        | 51                   | NV              | NP                  |  |      |                      | <50                          |               |

Notes:

\*Indicates Percent Swell (+) or Consolidation (-) when wetted under a 1,000 psf load.

**A.G. Wassenaar**  
Geotechnical and Environmental Consultants **Inc.**

**SUMMARY OF LABORATORY TEST RESULTS**

Village Homes of Colorado, Inc.  
Castle Valley Ranch  
Project Number 90114

TABLE I

Page 1 of 3

| Test Boring No. | Depth (feet) | Soil Type                    | Natural Dry Density (pcf) | Natural Moisture (%) | Swell (+) / Consolidation (-) (%)* | Swell Pressure (psf) | % Clay | % Passing #200 Sieve | Atterberg       |                     | pH   | Resistivity (ohm/cm) | Water Soluble Sulfates (ppm) | Chlorides (%) |
|-----------------|--------------|------------------------------|---------------------------|----------------------|------------------------------------|----------------------|--------|----------------------|-----------------|---------------------|------|----------------------|------------------------------|---------------|
|                 |              |                              |                           |                      |                                    |                      |        |                      | Liquid Limit LL | Plasticity Index PI |      |                      |                              |               |
| 10              | 4            | Clay, sandy                  | 107                       | 18                   | -0.4                               | —                    |        |                      |                 |                     |      |                      |                              |               |
|                 | 9            | Claystone, silty             | 116                       | 16                   | +2.7                               | 10,000               |        |                      |                 |                     | 8.31 | 1,000                | <50                          | 0.0003        |
|                 | 24           | Claystone, silty             | 113                       | 11                   | +4.1                               | 15,000               |        |                      |                 |                     |      |                      |                              |               |
| 11              | 4            | Claystone, silty             | 116                       | 10                   | +0.9                               | 3,500                |        |                      |                 |                     |      |                      |                              |               |
|                 | 9            | Clay, slightly sandy         |                           | 8                    |                                    |                      | 35     | 90                   | 33              | 16                  |      |                      |                              |               |
|                 | 14           | Clay, slightly sandy         | 116                       | 6                    | 0.0                                | —                    |        |                      |                 |                     |      |                      |                              |               |
| 12              | 4            | Gravel, very sandy, silty    |                           | 4                    |                                    |                      |        |                      |                 |                     |      |                      |                              |               |
|                 | 19           | Claystone, silty             | 124                       | 10                   | +6.0                               | 9,200                |        | 18                   | NV              | NP                  |      |                      |                              |               |
| 13              | 4            | Clay, sandy                  | 89                        | 8                    | -2.4                               | —                    |        |                      |                 |                     |      |                      |                              |               |
|                 | 9            | Claystone, silty (disturbed) | 99                        | 7                    | -5.9                               | —                    |        |                      |                 |                     |      |                      |                              |               |
| 14              | 4            | Clay, sandy                  | 120                       | 9                    | +4.3                               | 14,000               |        |                      |                 |                     |      |                      |                              |               |
| 15              | 4            | Clay, slightly sandy         | 104                       | 9                    | -0.7                               | —                    | 36     | 81                   | 35              | 19                  |      |                      |                              |               |
|                 | 9            | Clay, very sandy             | 123                       | 6                    | +1.7                               | 7,700                |        |                      |                 |                     |      |                      |                              |               |
| 16              | 4            | Clay, sandy                  | 93                        | 8                    | -1.1                               | —                    |        |                      |                 |                     | 7.76 | 1,724                | <50                          | <0.0001       |
| 17              | 4            | Clay, sandy                  | 107                       | 17                   | -0.1                               | —                    |        |                      |                 |                     |      |                      |                              |               |
| 18              | 4            | Clay, sandy                  | 103                       | 7                    | +1.1                               | 2,900                |        |                      |                 |                     |      |                      |                              |               |

Notes:

\*Indicates Percent Swell (+) or Consolidation (-) when wetted under a 1,000 psf load.

**A.G. Wassenaar** ~~Inc.~~  
Geotechnical and Environmental Consultants

**SUMMARY OF LABORATORY TEST RESULTS**

Village Homes of Colorado, Inc.  
Castle Valley Ranch  
Project Number 90114

TABLE I

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## APPENDIX

### SPECIFICATIONS FOR PLACEMENT OF FILL

#### GENERAL

The Soil Engineer, as the Owner's representative, shall conduct tests to determine if the material, method of placement, and compaction are in reasonable compliance with the specifications.

#### PREPARATION OF NATURAL GROUND

Vegetation, organic topsoil, any existing man-made fill and any other deleterious materials shall be removed from the fill area. The area to be filled shall then be scarified, moistened if necessary, and compacted in the manner specified below prior to placement of subsequent layers of fill.

#### FILL MATERIAL

Fill material shall consist of on or off-site soils which are relatively free of vegetable matter and rubble. Off-site materials shall be evaluated by the Soil Engineer prior to importation. No organic, frozen, perishable, or other unsuitable material shall be placed in the fill. For the purpose of this specification, cohesive soil shall be defined as a mixture of clay, sand, and silt with more than 35% passing a U. S. Standard #200 sieve and a Plasticity Index of at least 11. These materials will classify as an A-6 or A-7 by the AASHTO Classification system. Granular soils shall be all materials which do not classify as cohesive.

Crushed sandstone should consist of a material of which at least 90% are smaller than 4-inches in dimension and at least 60% passes a U. S. Standard No. 4 sieve.

#### PLACEMENT OF FILL MATERIAL

The materials shall be delivered to the fill in a manner which will permit a well and uniformly compacted fill. Before compacting, the fill material shall be properly mixed and spread in approximately horizontal layers not greater than 8 inches in loose thickness.

#### MOISTURE CONTROL

While being compacted, the material shall contain uniformly distributed optimum moisture for compaction. The Contractor shall be required to add moisture to the materials if, in the opinion of the Soil Engineer, proper and uniform moisture is not being obtained for compaction. If the fill materials are too wet for proper compaction, aerating and/or mixing with drier materials may be required.

Moisture content shall be controlled as a percentage deviation from optimum. Optimum moisture content is defined as the moisture content corresponding to the maximum density of a laboratory compacted sample performed according to ASTM D698 for cohesive soils or ASTM D1557 for granular soils. The moisture content specifications for the various areas are as follows:

APPENDIX  
SPECIFICATIONS FOR PLACEMENT OF FILL  
PAGE TWO

- |                                  |          |                  |
|----------------------------------|----------|------------------|
| 1. Beneath Structural Areas:     | Cohesive | -1 to +3 percent |
|                                  | Granular | -2 to +2 percent |
| 2. Beneath Non-Structural Areas: |          | -3 to +3 percent |
| 3. Moisture Treated Fill:        | Cohesive | 0 to +4 percent  |
|                                  | Granular | -2 to +2 percent |

COMPACTION

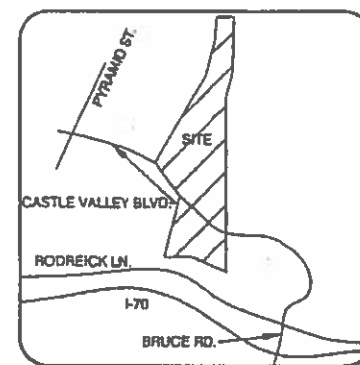
When the moisture content and conditions of each layer spread are satisfactory, it shall then be compacted by an approved method. Moisture-density tests shall be performed on typical fill materials to determine the maximum density. Field density tests must then be made to determine the adequacy of the fill compaction. The compaction standard to be utilized in determining the maximum density is ASTM D698 for cohesive soils or ASTM D1557 for granular soils. The following compaction specifications should be followed for each area:

- |                                  |                            |
|----------------------------------|----------------------------|
| 1. Beneath Structural Areas:     | 95% of Maximum Dry Density |
| 2. Beneath Non-Structural Areas: | 90% of Maximum Dry Density |

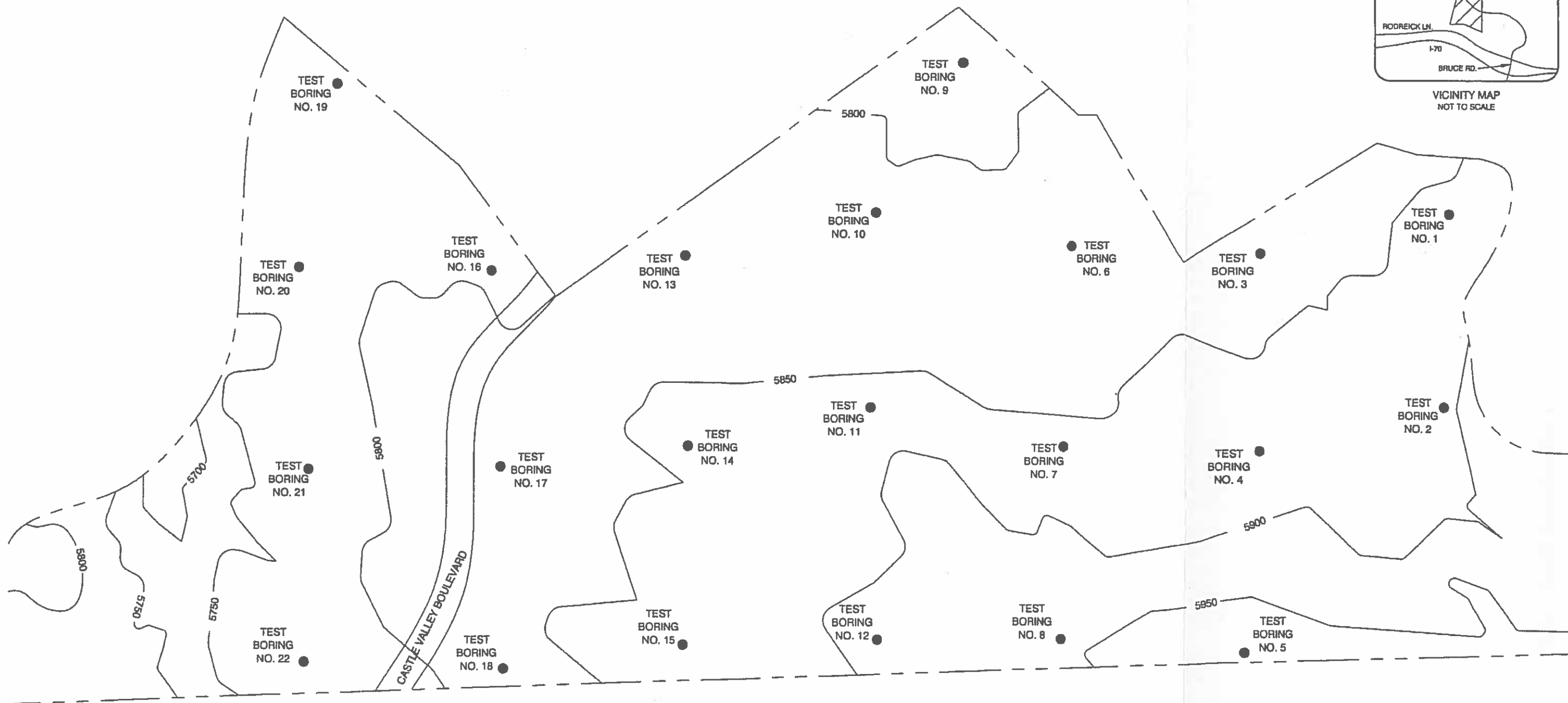
If Proctor testing is not feasible due to the percentage of + $\frac{3}{4}$  inch material, compaction of the fill should be judged by the methodology for rock fills as described in The Colorado Department of Transportation Standard Specifications.

Note: In areas where fill depths exceed 20 feet, additional compaction considerations will be required to minimize fill settlement. We recommend any fill placed within 20 feet of final subgrade elevation be compacted to a minimum of 95% of the appropriate maximum dry density, and deeper fills be compacted to 100% of the appropriate maximum dry density. The required moisture content for all fills more than 20 feet deep shall be -2 to +2% of optimum moisture content.

If the structural fill contains less than 10% passing the No. 200 sieve, it may be necessary to control compaction based on relative density (ASTM D 2049). If this is the case, then compaction around the structures and beneath slabs shall be to at least 60% relative density, and compaction beneath foundations and pavements shall be to at least 70% relative density.



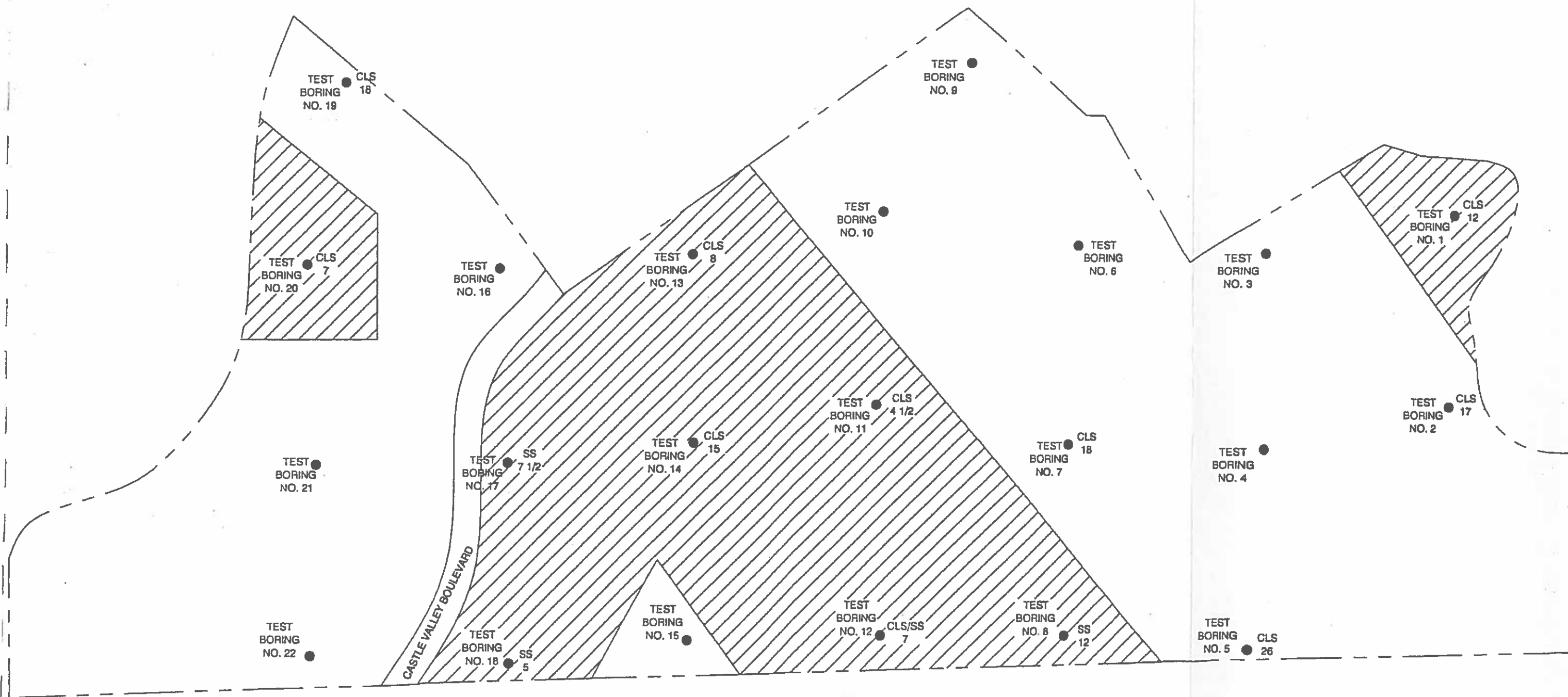
VICINITY MAP  
NOT TO SCALE



— 5850 — APPROXIMATE 5850-FOOT CONTOUR LINE

NOTE: ALL LOCATIONS ARE APPROXIMATE

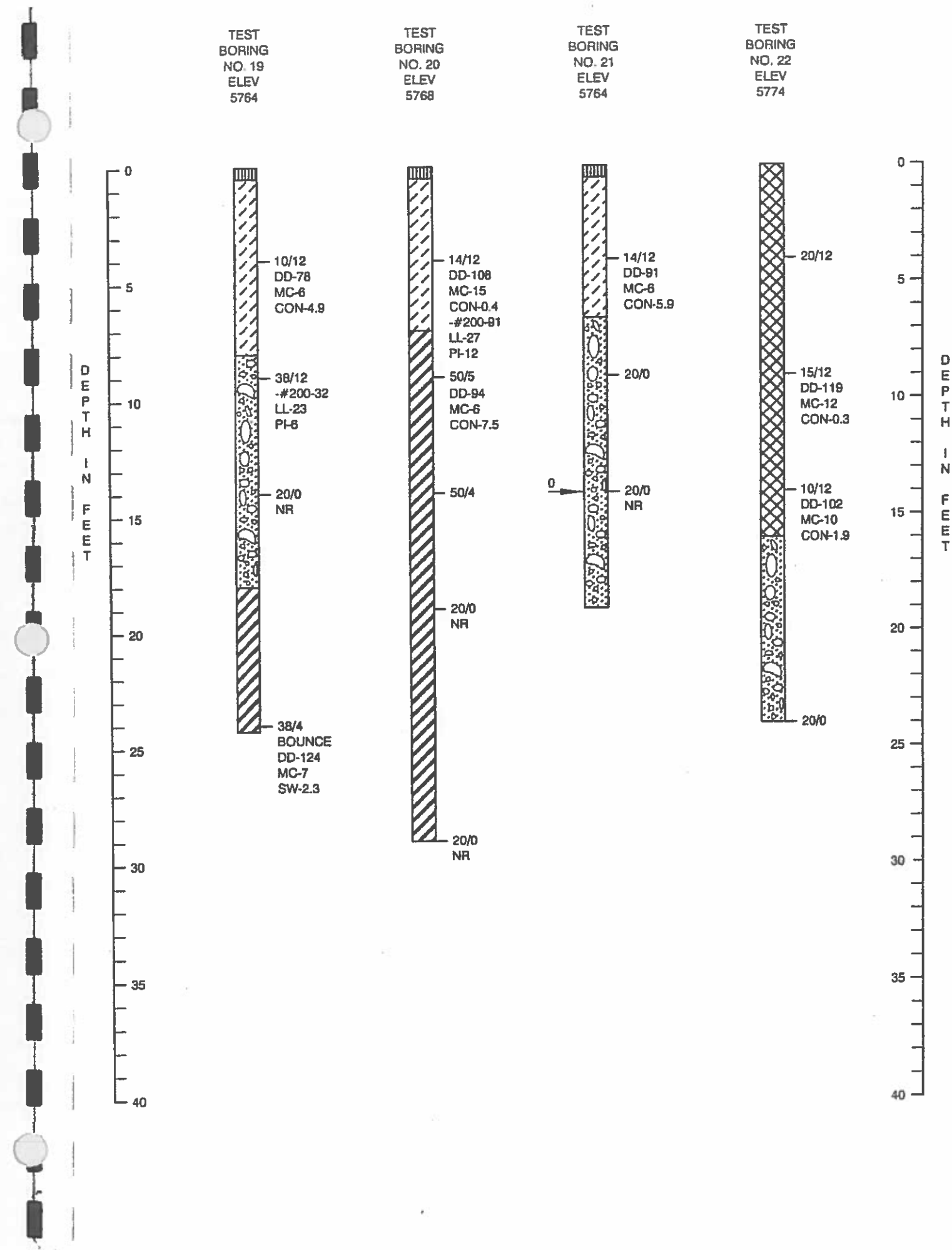
|                                                                                 |                               |
|---------------------------------------------------------------------------------|-------------------------------|
| <b>A.G. Wassenaar</b><br>Geotechnical and Environmental Consultants <b>Inc.</b> |                               |
| SITE PLAN<br>AND<br>VICINITY MAP                                                | PROJECT NO. 90114<br>FIGURE 1 |



- CLS 15 INDICATES DEPTH TO CLAYSTONE BEDROCK OF 15 FEET
- SS 5 INDICATES DEPTH TO SANDSTONE BEDROCK OF 5 FEET
- CLS/SS 7 INDICATES DEPTH TO CLAYSTONE/SANDSTONE BEDROCK OF 7 FEET
-  INDICATES ESTIMATED AREA WHERE BEDROCK IS LESS THAN 15 FEET BELOW THE EXISTING GROUND SURFACE

NOTE: ALL LOCATIONS ARE APPROXIMATE

|                                                                                 |                                |
|---------------------------------------------------------------------------------|--------------------------------|
| <b>A.G. Wassenaar</b><br>Geotechnical and Environmental Consultants <b>Inc.</b> |                                |
| ESTIMATED DEPTH<br>TO BEDROCK MAP                                               | PROJECT NO. 90114<br>FIGURE 28 |



#### LEGEND

- TOPSOIL, CLAY, SANDY, ORGANIC, MOIST, DARK BROWN
- FILL (MAN-MADE), CLAY, COMPACT, SANDY, MOIST, MOTTLED BROWN (AF)
- CLAY, STIFF TO VERY STIFF, SILTY, SANDY, WITH SCATTERED GRAVEL, CALCAREOUS, SLIGHTLY MOIST, BROWN TO RED BROWN (CL)
- CLAY, VERY STIFF TO HARD, SILTY, SANDY, WITH COBBLES, SLIGHTLY MOIST, BROWN
- SAND, MEDIUM DENSE, SILTY, WITH VERY SAND SILT AND VERY SANDY GRAVEL LENSES, SLIGHTLY MOIST, RED BROWN (SM)
- SAND, MEDIUM DENSE TO DENSE, SILTY, CLAYEY, WITH VERY SANDY SILT LENSES, SCATTERED GRAVEL, SLIGHTLY MOIST TO MOIST, RED BROWN (SC)
- SAND AND GRAVELS, DENSE, WITH COBBLES, SLIGHTLY MOIST, RED BROWN
- SAND / CLAY, INTERBEDDED, DENSE / VERY STIFF, VERY SILTY, WITH SCATTERED GRAVEL, SLIGHTLY MOIST, RED BROWN
- CLAYSTONE (BEDROCK), MEDIUM HARD, SILTY TO VERY SILTY, SLIGHTLY SANDY, WITH GYPSUM, MOIST, OLIVE
- CLAYSTONE (BEDROCK), HARD TO VERY HARD, SILTY TO VERY SILTY, IRON STAINED, WITH SULFUR CRYSTALS, SLIGHTLY MOIST, OLIVE TO RUST
- SANDSTONE (BEDROCK), VERY HARD, MODERATELY TO WELL CEMENTED, SILTY, SLIGHTLY MOIST, RED BROWN
- 18/12 INDICATES THAT 18 BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES WERE REQUIRED TO DRIVE A 2.5-INCH OUTSIDE DIAMETER SAMPLER 12 INCHES.
- 18/12\* INDICATES THAT 18 BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES WERE REQUIRED TO DRIVE A 2-INCH OUTSIDE DIAMETER SAMPLER 12 INCHES.
- NR INDICATES NO SAMPLE RECOVERED
- BOUNCE INDICATES THAT THE SAMPLER BOUNCED WHEN DRIVEN WITH A 140-POUND HAMMER FALLING 30 INCHES
- 0 INDICATES THE DEPTH TO THE FREE WATER TABLE AND THE NUMBER OF DAYS AFTER DRILLING WHEN THE MEASUREMENT WAS TAKEN.
- INDICATES DEPTH AT WHICH PRACTICAL DRILLING REFUSAL WAS ENCOUNTERED.
- 0 INDICATES THE DEPTH AT WHICH THE TEST BORING CAVED AND THE NUMBER OF DAYS AFTER DRILLING WHEN THE MEASUREMENT WAS TAKEN.
- DD INDICATES DRY WEIGHT OF SAMPLE IN POUNDS PER CUBIC FOOT.
- MC INDICATES MOISTURE CONTENT AS A PERCENTAGE OF DRY WEIGHT OF SOIL.
- SW INDICATES PERCENT SWELL UNDER A SURCHARGE OF 1000 PSF UPON WETTING.
- CON INDICATES PERCENT CONSOLIDATION UNDER A SURCHARGE OF 1000 PSF UPON WETTING.
- #200 INDICATES PERCENT PASSING THE NO. 200 SIEVE.
- % CLAY INDICATES PERCENTAGE OF CLAY SIZES (<0.002mm)
- LL INDICATES LIQUID LIMIT.
- PI INDICATES PLASTICITY INDEX.
- NP INDICATES NON-PLASTIC.
- NV INDICATES NO VALUE.
- WS INDICATES WATER SOLUBLE SULFATES IN PARTS PER MILLION.
- pH INDICATES ACIDITY OR ALKALINITY OF SAMPLE IN pH UNITS.
- CL INDICATES CHLORIDES IN PERCENT.
- R INDICATES RESISTIVITY IN OHMS-CM.

#### NOTES

1. TEST BORINGS WERE DRILLED MAY 17 & 18, 2006 WITH A 4-INCH DIAMETER, CONTINUOUS FLIGHT POWER AUGER.
2. NO FREE WATER WAS OBSERVED AT THE TIME OF DRILLING.
3. LOCATIONS OF TEST BORINGS WERE DETERMINED BY RECONNOITERING FROM FEATURES SHOWN ON THE SITE PLAN PROVIDED BY OTHERS.
4. ELEVATIONS ARE APPROXIMATE AND REFER TO THE TOPOGRAPHIC SITE PLAN PROVIDED BY OTHERS.
5. THE HORIZONTAL LINES SHOWN ON THE LOGS ARE TO DIFFERENTIATE MATERIALS AND REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIALS. THE TRANSITIONS BETWEEN MATERIALS MAY BE GRADUAL.
6. DRILL LOGS SHOWN IN THIS REPORT ARE SUBJECT TO THE LIMITATIONS, EXPLANATIONS, AND CONCLUSIONS OF THIS REPORT.

**A.G. Wassenaar**  
Geotechnical and Environmental Consultants **Inc.**

EXPLORATORY  
BORING LOGS

PROJECT NO. 90114  
FIGURE 5

# **Town of New Castle**

## **Castle Valley Ranch PA17 Drainage Calculations**

**February 6, 2020**

Prepared for:

**Town of New Castle – Public Works**  
Box 90  
New Castle, CO 81647

Prepared by:

SGM  
118 W 6<sup>th</sup> Street  
Glenwood Springs, CO 81601

## **A. INTRODUCTION**

This report is to present an overall drainage analysis for Planning Area 17 of Castle Valley Ranch, a residential subdivision with single and multi-family housing. Storm runoff will be generated for the 2,5,10, 25, 50 and 100-year events. On-site sources include open space, roads, driveways, and residential lots. This Report will also show drainage calculations for the increase in runoff to PA-19 pond. This report will size new appurtenances based on the calculated runoff hydrographs. The Historic Basin map shows the pre-developed basin 1 and offsite delineation, while the Developed Drainage Map identifies PA 17 and future development drainage. Both of these maps are provided at the end of the report.

The report was completed to provide structures to safely convey the 25-year storm event through the subdivision, and the PA17 pond was designed as a temporary measure to hold the difference in flow of the 25 yr / 24-hour storm for graded and undeveloped areas. The Town of New Castle code requires only the 25-year event be released at the historic rate. Maintenance of the pond by the town is imperative to function properly for all storm events.

## **B. ON-SITE DRAINAGE CONSIDERATIONS**

On-site basins are characterized by residential development. The existing, pre-construction conditions consist of undeveloped land with varied vegetation. Most of the area is pasture with some grass cover, shrubs and few trees. The general drainage flow is from north to south of Castle Valley Ranch road and collects in various locations into small swales and gullies. These similar swales eventually collect in a "low" in the valley which acts as the main flow path for much of Castle Valley Ranch. The general slope of the area varies from 4% to 25% grade. The existing soils are mostly Ascalon Class "B" which is predominately fine sandy loams and clays.

The proposed conditions will continue the typical pattern seen in much of Castle Valley Ranch with mostly single-family and multi-family lots of less than one acre, streets and some associated street side parking. Each lot is self contained and

drains to the rear or adjacent street frontage. Some lots will collect landscaped terrace slope runoff which will also drain towards the streets. The streets will then contain the 25-year flow and direct it toward inlets located at low points and in-line inlets in various locations.

The drainage that goes to the west will be picked up by the existing Castle Valley Ranch detention drainage system designed for PA-19, which has been sized to accommodate all proposed development. A portion of the development will drain to the east, a temporary pond will be constructed to handle this runoff.

## C. HYDROLOGIC ANALYSIS

### 1. Methodology

Hydrologic procedures outlined in the Soil Conservation Service (SCS) Technical Release 55 "*Urban Hydrology for Small Watersheds*" (TR-55) were utilized to determine peak flows and volumes of storm runoffs generated by each basin. A uniformly distributed time varying rainfall is imposed over the basin area. The rainfall is converted to runoff using a runoff curve number based on the soil parameter, plant cover, impervious areas and surface storage. The runoff is then transformed into a hydrograph, using the unit hydrograph theory and routing methods based on travel time through the basins.

### 2. Rainfall

TR-55 uses a 24-hour rainfall total and a synthetic time distribution to produce a centrally peaked design storm. The SCS Type II distribution is applicable to this region. The 24-hour rainfall amounts for specific return periods were obtained using the City of Glenwood Springs standard IDF curves and are shown in Table 2.

TABLE 2

| City of Glenwood Springs |        |        |         |         |          |
|--------------------------|--------|--------|---------|---------|----------|
|                          | 2-year | 5-year | 10-year | 25-year | 100-year |
| 24-hour storm total      | 1.2"   | 1.5"   | 1.8"    | 2.2"    | 2.6"     |

### 3. Runoff Curve Number

The Runoff Curve Number (CN) determines the amount of rainfall that becomes runoff and the amount that infiltrates or is abstracted. Major factor that determine CN are the hydrologic soil group (HSG), cover type, and hydrologic condition. The SCS soil type B was used for this area.

The mountainside is characterized as pastureland with fair vegetative cover and was given a CN = 69. Impervious areas were assigned a CN = 98. Developed areas were assigned a CN of 75 for ¼ acre lots and a CN of 85 for 1/8 acre lots.

### 4. Results

The results of the storm runoff analysis are summarized in Table 3.

| Storm            | Historic Peak (cfs) | Developed Peak (cfs) |
|------------------|---------------------|----------------------|
| 2-year/24-hour   | 0.18                | 4.26                 |
| 5-year/24-hour   | 0.90                | 9.61                 |
| 10-year/24-hour  | 1.44                | 13.9                 |
| 25-year/24-hour  | 2.85                | 4.10                 |
| 100-year/24-hour | 7.61                | 26.0                 |

## D. DRAINAGE ROUTING ANALYSIS

An analysis of the proposed drainage structures was done by calculating the event flows and sizing the proposed inlets per the capacity of the inlet obtained by using the Neenah specifications. Please see attached inlet and capacity calculations found in the appendix. This analysis used the 25-year event flow as the basis for determining appropriate culvert and ditch sizes. The table also gives peak flows at each culvert and culvert sizes for the 25-year event.

Also presented below is information for the Detention Pond structures associated with the development of PA 17. The Detention Ponds and structures are sized to safely convey the 2, 5, 10, 25- & 100-year storm events at flow rates well below pre-developed flow rates that will ensure downstream properties will not be affected by

development within CVR. Although the Town Code requires only the detention of the 25-year event, this development will also detain both smaller and larger events by installation of a concrete weir structure that will regulate outflow while the pond is sized to provide adequate storage during storm events. The ponds will rise temporarily during events to provide storage and slowly drain shortly after the event is over.

The PA 19 (West) pond is being enlarged to serve the increased development tributary to that pond. A temporary (East) pond is being constructed on PA 17 that will serve the graded areas tributary to it. The pond will be relocated upon the development on the remainder of PA 17 in a permanent location to the southeast.

1. **Proposed East Pond**

The proposed East pond was designed to accommodate runoff from a portion of the PA-17 multi-family development lots. See the Developed Basin Map in the appendix. The pond was designed to overtop and follow the historic drainage patterns thereafter. Table 5 shows the peak flows of the historic storms versus the proposed flow based on the proposed 8 lots.

| Storm Event     | Historic (cfs) | Pond Structure Release<br>(cfs) |
|-----------------|----------------|---------------------------------|
| 25-year/24-hour | 2.85           | 4.64                            |

2. **Existing PA-19 (West) Pond**

The existing PA-19 pond was designed to accommodate a portion of the proposed development of PA-17. There are some additional lots that are proposed to drain to the existing PA-19 pond, via basin G. The PA-19 pond was originally designed to take in basins C, D, E, F and the culvert crossing Castle Valley Blvd. Please refer to the drainage maps in the appendix. In order to accommodate this extra drainage, the existing PA-19 pond should be expanded by approximately 3800 cubic feet.

## E. POND ROUTING

The pond structures are similar for each pond and consist of a concrete structure with a 3" orifice near the bottom of the pond that regulates lower storm flows and a concrete weir structure that controls the higher flows. Full routing calculations are provided following the report.

### 1. PA 19 West Pond

| Storm  | Q (pre-dev)<br>cfs | Q (post-dev)<br>cfs | Q (routed)<br>cfs | Max. W.S.<br>ft |
|--------|--------------------|---------------------|-------------------|-----------------|
| 2 yr   | 0.21               | 1.81                | 0.14              | 5736.9          |
| 5 yr   | 0.79               | 6.33                | 0.28              | 5737.9          |
| 10 yr  | 1.67               | 9.86                | 0.40              | 5739.3          |
| 25 yr  | 3.24               | 15.29               | 1.54              | 5740.1          |
| 100 yr | 9.94               | 24.87               | 4.32              | 5741.6          |

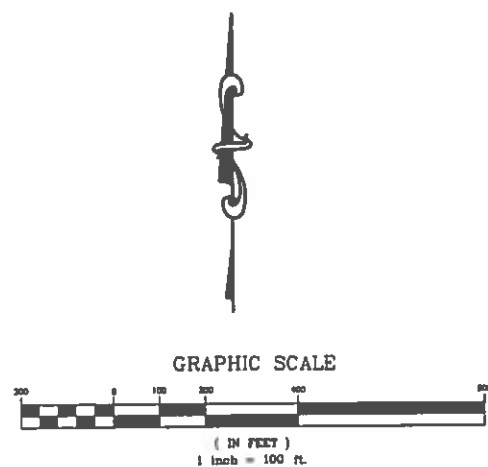
### 2. Pond Routing – PA 17 Temporary (East) Pond

| Storm  | Q (pre-dev)<br>cfs | Q (post-dev)<br>cfs | Q (routed)<br>cfs | Max. W.S.<br>ft |
|--------|--------------------|---------------------|-------------------|-----------------|
| 2 yr   | 0.17               | 1.51                | 0.09              | 5755.7          |
| 5 yr   | 0.62               | 2.82                | 0.25              | 5756.1          |
| 10 yr  | 1.31               | 4.34                | 0.37              | 5757.9          |
| 25 yr  | 2.55               | 6.64                | 1.00              | 5758.9          |
| 100 yr | 7.81               | 11.01               | 4.28              | 5759.8          |

## F. CONCLUSION

The proposed drainage system does not alter the general historic flow conditions from this valley. The temporary proposed pond was designed to release the 25 yr. / 24-hour storm at or below its historic rates. It is recommended that the pond orifice structures be maintained by the city to ensure that the pond works as designed. Also, by expanding the existing PA-19 pond by approximately 3800 cubic feet, will maintain the current function of the pond.

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LEGEND

|         |                                       |
|---------|---------------------------------------|
| DI2     | DRAINAGE AREA DESIGNATION             |
| 4.2 5.6 | 25 yr / 100 yr Storm Event Flow (cfs) |
| ---     | DRAINAGE AREA BOUNDARY                |



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CREATED BY: GD (970) 349-5355

Job No. 2000-109.022  
Drawn by: JLR  
Date: 05/29/2008  
Appr. by:  
File:

CVR  
PA-17/19

DRAINAGE MAP  
DRAIN INLET BASINS

3 / 3  
OF

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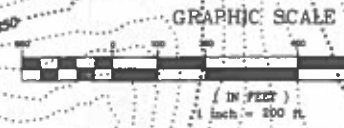
| LEGEND                              |                                            |
|-------------------------------------|--------------------------------------------|
| <div>EX-C</div> <div>10.45 69</div> | DRAINAGE AREA DESIGNATION                  |
| <div>10.45 69</div>                 | DRAINAGE AREA (ACRES) AND "CN" COEFFICIENT |
| <div></div>                         | DRAINAGE AREA BOUNDARY                     |

EX-C:  
10.45 69

EX-D:  
1.48 68

EX-E:  
17.2 69

EX-B:  
17.62 69



CVR/LAKOTA BOD. BDRY

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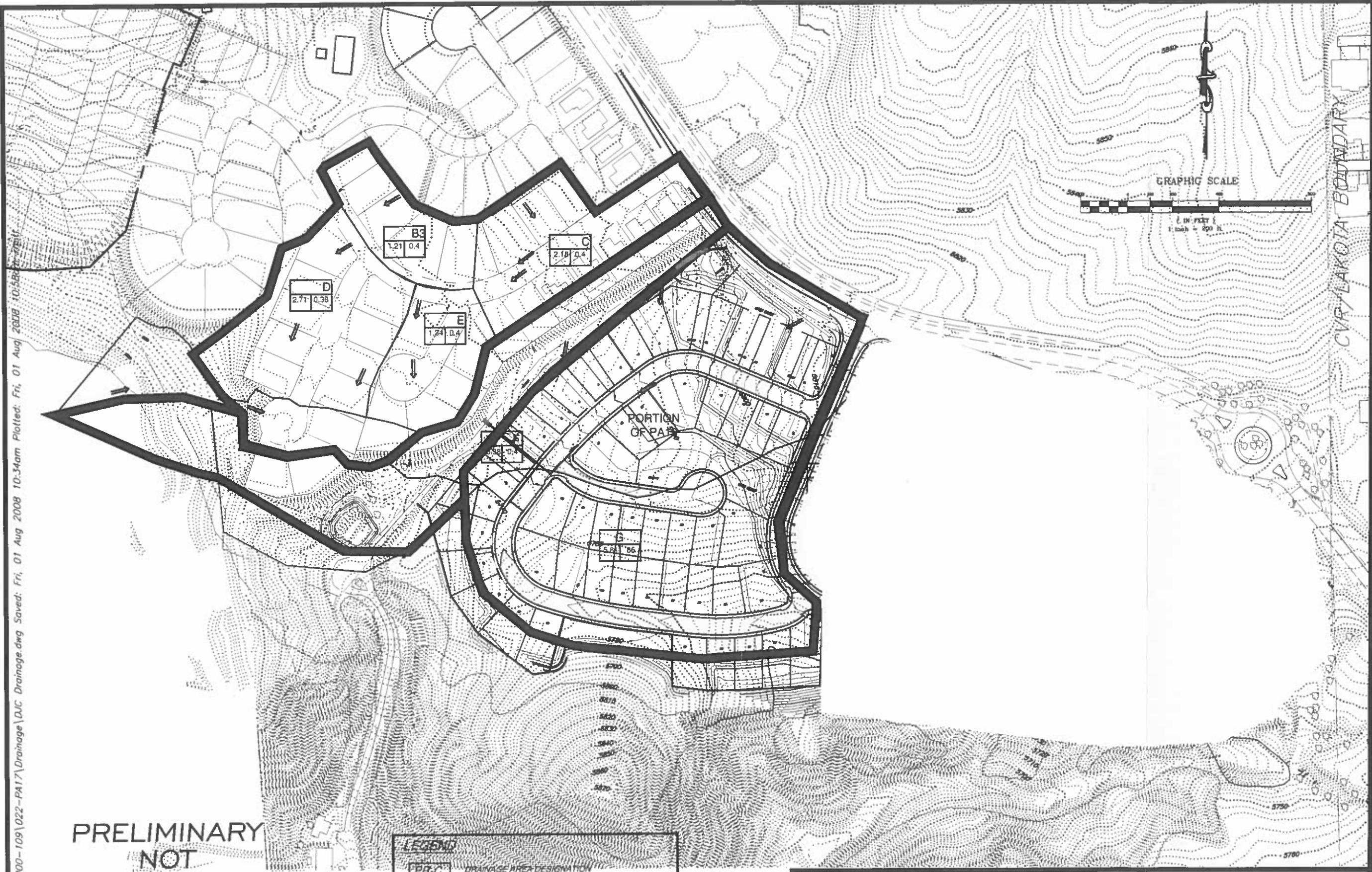
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| <b>CVR<br/>PA-17</b>                        | Job No. 2000-109.022 | 1 / 2 OF |
|                                             | Drawn by: JLR        |          |
|                                             | Date: 05/29/2008     |          |
|                                             | Appr. by:            |          |
| <b>DRAINAGE MAP<br/>EXISTING CONDITIONS</b> |                      |          |

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FOR  
CONSTRUCTION

**LEGEND**

|  |                                            |
|--|--------------------------------------------|
|  | DRAINAGE AREA DESIGNATION                  |
|  | DRAINAGE AREA (ACRES) AND "CN" COEFFICIENT |
|  | DRAINAGE AREA BOUNDARY                     |



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|                                                                      |                      |        |
|----------------------------------------------------------------------|----------------------|--------|
| <b>DRAINAGE MAP</b><br><b>PA-17/19</b><br><b>PROPOSED CONDITIONS</b> | Job No. 2000-109.022 | 2 / 2  |
|                                                                      | Drawn by: JLR        | 2 OF 2 |
|                                                                      | Date: 05/29/2008     |        |
|                                                                      | Appr. by:            |        |
|                                                                      | File:                |        |

# **Town of New Castle**

## **Castle Valley Ranch PA17 Utility Report**

**March 18, 2020**

Prepared for:

**Town of New Castle – Public Works  
Box 90  
New Castle, CO 81647**

Prepared by:

**SGM  
118 W 6<sup>th</sup> Street  
Glenwood Springs, CO 81601**



## PA 17 DEVELOPMENT PLAN

### Existing Land Use

The subject property is PA 17 in Filing 11 of Castle Valley Ranch PUD within the Town of New Castle, State of Colorado. The parcel is approximately 13.538 acres in size. The existing parcel consists of sparsely grassed undeveloped land. The site is bordered by Castle Valley Boulevard right-of-way to the north, developed single family homes to the west, open space to the south, and undeveloped PA 19 to the east. The site is depicted in the figure below.



### Proposed Land Use

Proposed development consists of the construction of 27 multi-unit residential buildings (three and four-unit townhomes) totaling 91 dwelling units. Additional improvements include asphalt parking areas, driveways, sidewalks, and asphalt pedestrian paths providing connections to Castle Valley Boulevard right-of-way and C Avenue.

### WASTEWATER SYSTEM

There is an existing sanitary sewer main located south of the site within the C Avenue right-of-way. This sanitary sewer is within the roadway and will serve the proposed development. The connection to this main will be at an existing sanitary manhole located at the west of the alley

north of Main Street and east of C Avenue. An 8-inch gravity main is proposed to serve the site and will replace segment of existing main in the Alley, then extend new main east in the alley and north in the C Avenue corridor to serve the proposed development, as well as the future development of PA 19 to the east. A 20-foot utility easement is proposed to encompass this sanitary sewer main when it is located outside of existing or proposed road right of way.

The proposed development will have minimal system flows and the proposed sanitary system will serve residential uses. The three and four townhome buildings will have individual 4" PVC services to each unit. For calculation purposes, each unit has been considered a single-family dwelling. In total the system demand has been analyzed for 91 single-family dwellings. Effluent flows are estimated to be 25,480 gallons per day, with a peak flow of 63,700 gallons per day. These flows will be conveyed by 8" mains. At a minimum slope of 0.4% at 75% full pipe, the 8" main will serve 869 units (reference Castle Valley Ranch Master Plan). There are 13 existing units on the C Avenue line, adding 91 units results in a total of 104 units. There will be a capacity of 765 units remaining in the main.

#### WATER DISTRIBUTION

The proposed development will be served by existing 8" water mains located to the north within Castle Valley Boulevard right of way, and to the west extending from Mount Harvard Court. A 20-foot utility easement is proposed to encompass this water main when it is located outside of existing or proposed road right of way. A loop will be completed by running an 8-inch C900 PVC main through the site. This loop will connect to the existing Castle Valley Boulevard main to Mount Harvard Court and located in the project roadways providing 2" PVC services to each dwelling units and fire hydrants spaced per the Burning Mountain Fire District.

PA 17 is served by Water Tank #2 (CVR Lower Zone), which sits at an elevation of 5966. The high and low lot elevations, corresponding static pressures, and pressures with Lakota pump station operating are as follows: Elev. 5804; 70 psi; 54 psi and Elev. 5770; 85 psi; 69 psi. A 2" water service results in pressures ranging from 35 to 50 psi within the units.

Assuming 3.5 people per single-family unit with a per capita demand of 100-gallons per day (EQR=350 gpd) and a 16-hour day for 91 units, the Average Daily Demand for the residential units will be 31,850 gallons per day (33 gpm).

Based upon the Uniform Building Code and the International Fire Code, the proposed multi-family residential structures (4000 to 5000 sf) will require a fire flow of 2000 gallons per minute. The developer has elected that the buildings will not have in-house sprinkler systems. The fire flow demand must be sustained for a minimum of 2 hours with a residual pressure of 20 psi.

Maximum day demand is calculated using a multiplier of 2 on the average day demand and adding the fire flow of 2000 gallons per minute during the 2-hour duration. It has been assumed that only one structure will require a fire flow at any given time. Maximum day flow rate is 2000 plus 65.6 gallons per minute, or 2066 gallons per minute. This rate will govern over the Peak hour demand. The existing tank has been previously sized accounting for the development of PA 17.

### RAW WATER IRRIGATION

A 4" main raw water irrigation is proposed for this development and will connect to the existing raw water main in the Castle Valley Boulevard right of way. The main will be extended and looped through the roadway network to serve all residences and open spaces within the development.

### DRY UTILITIES

#### Electric

Electric service is proposed for this development and will connect to the existing main in the Castle Valley Boulevard right of way. The main will be extended and looped through the roadway network to serve all residences and open spaces within the development.

Transformers will be located by Xcel. The developer will contract with Xcel energy for costs associated with extending the electric utility to the site.

#### Natural Gas

Gas service is proposed for this development and will connect to the existing main in the Castle Valley Boulevard right of way. The main will be extended and looped through the roadway network to serve all residences within the development.

The contractor will contract with Xcel energy for gas service extension.

The point of contact for electrical service is Sam Wakefield with Xcel Energy (970-244-2622).

#### Cable

Comcast Cable service is proposed for this development and will connect to the existing main in the Castle Valley Boulevard right of way. The main will be extended and looped through the roadway network to serve all residences within the development.

The contractor will contract with Comcast for cable service extension.

The point of contact for Comcast Cable service is (970-945-7292).

#### Communications

Communications service is proposed for this development and will connect to the existing main in the Castle Valley Boulevard right of way. The main will be extended and looped through the roadway network to serve all residences within the development. The contractor will contract with Century Link for communications service extension.

The point of contact for Communications service is Jason Sharpe with CenturyLink communications (970-309-2973).

# **Town of New Castle**

## **Castle Valley Ranch PA17 Traffic Impact Study**

**March 18, 2020**

Prepared for:

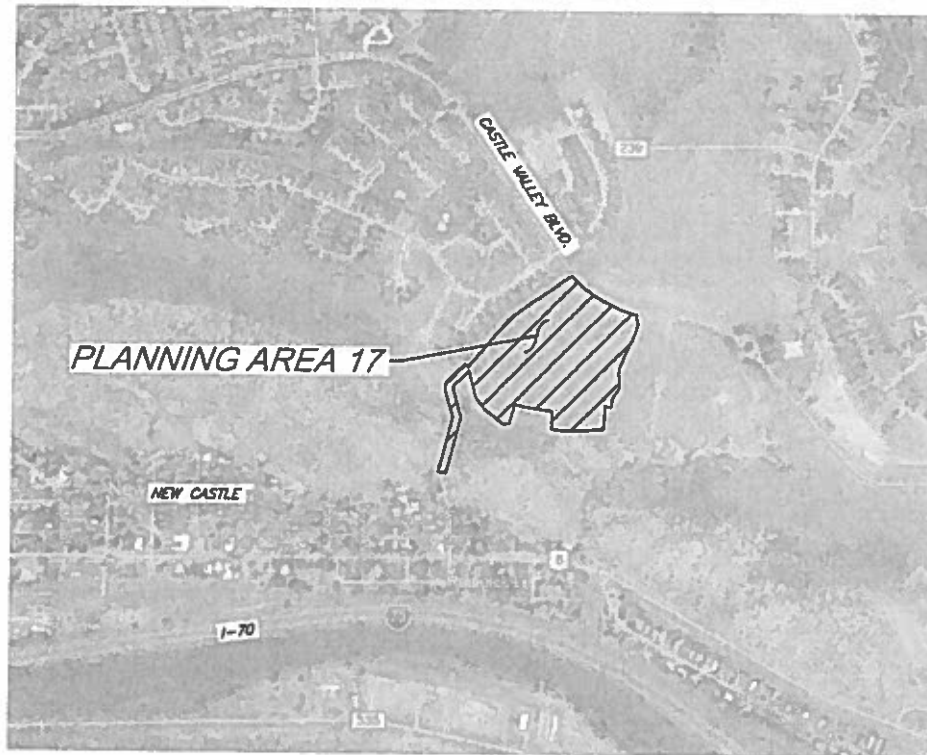
**Town of New Castle – Public Works  
Box 90  
New Castle, CO 81647**

Prepared by:

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118 W 6<sup>th</sup> Street  
Glenwood Springs, CO 81601**



This Traffic Impact Study addresses PA 17 in Filing 11 of Castle Valley Ranch PUD within the Town of New Castle, State of Colorado. The parcel is approximately 13.538 acres in size. The existing parcel consists of sparsely grassed undeveloped land. The site is bordered by Castle Valley Boulevard right-of-way to the north, developed single family homes to the west, open space to the south, and undeveloped PA 19 to the east. The site is depicted in the figure below.



#### Proposed Land Use

Proposed development consists of the construction of 27 multi-unit residential buildings (three and four-unit townhomes) totaling 91 dwelling units. Additional improvements include asphalt parking areas, driveways, sidewalks, and asphalt pedestrian paths providing connections to Castle Valley Boulevard right-of-way and C Avenue.

The Town of New Castle has requested a trip generation calculation and auxiliary turn lane assessment. The traffic study addresses the following items.

- Existing Roadway Conditions
- Sight distance analysis
- Trip Generation and anticipated vehicle sizes
- Directional Distribution/Traffic Assignment
- Internal Circulation
- Auxiliary turn lane analysis
- Summary of Findings

---

This study will provide recommendations for the development of a safe roadway access to Castle Valley Boulevard.

#### **Existing Site and Roadway Conditions**

The proposed development will provide access from Castle Valley Boulevard (CVB). CVB is a two-lane asphalt roadway serving Lakota Canyon Ranch and Castle Valley Ranch, this segment is upstream of the Lakota Canyon Ranch development and accesses.

Access to the site will be provided with a new access located approximately 500 ft east of the intersection with Wildhorse Drive and 800 ft west of the eastern CVB roundabout. No turn lanes exist along CVB at the access intersection location. Pedestrian trail (8 ft) is located on the north side of CVB.

CVB is a two-lane asphalt collector roadway, approximately 24 feet in width, with 2-3-foot gravel shoulders and a posted speed of 25 mph in the vicinity of the access. For the purposes of this study and application of the State Highway Access Code, it is classified as a non-rural arterial, NR-B using CDOT Access Category standards.

Existing traffic volumes were not collected for this study, as the volumes would have no effect on the auxiliary turn lane assessment.

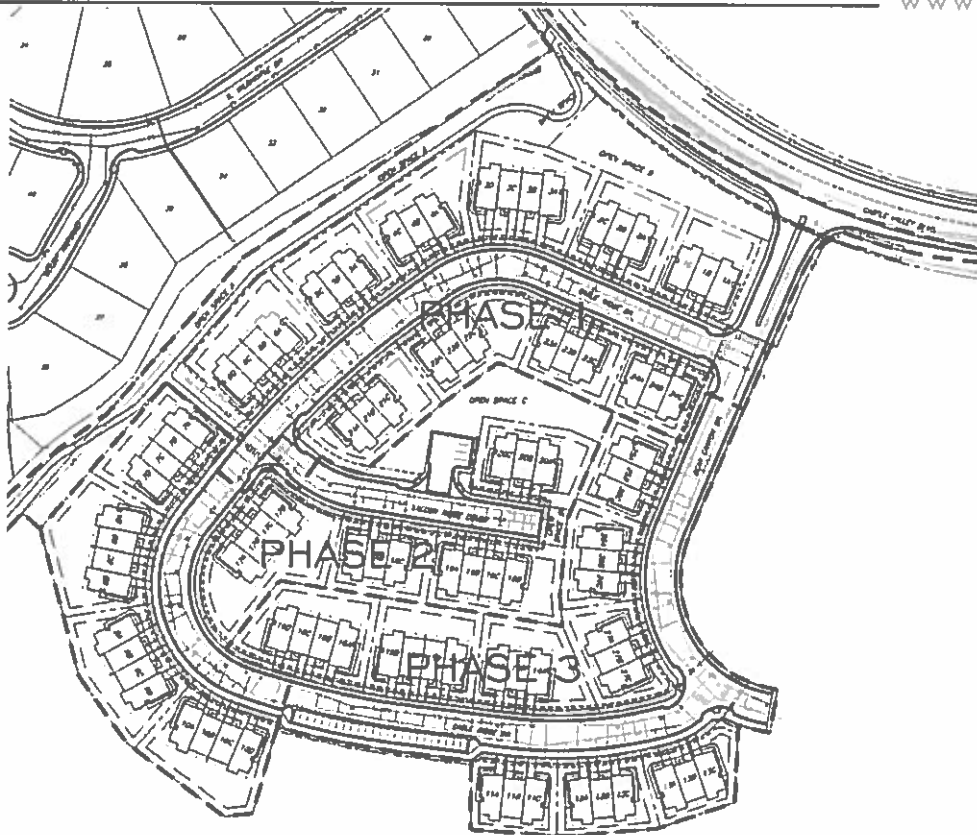
#### **Access Sight Distance**

The sight distance was analyzed for the access intersection with CVB. The analysis reviewed the access as one-way stop-controlled intersection and was based upon the guidance of AASHTO, A Policy on Geometric Design of Highways and Streets, 2018, 7<sup>th</sup> Edition, (Ch 9, Intersections). The Policy provides for guidance on decision point and construction of the sight triangle. Using Table 9-7 (Left Turn, Case B1) and Table 9-9 (Right Turn, Case B2), the sight distance requirements for the 30-mph posted speed are 335 ft and 290 ft respectively. The current sight distance is at least 400 feet in either direction.

The Policy states that the vertex of the sight triangle (decision point) should be located 14.5 ft from the edge of traveled way, the decision point typically represents the location of the driver's eye (at a height of 3.5 ft) when stopped at a major road intersection. The driver should have the ability to see a 6" high object at the center of the travel lane. The sight triangle is constructed using these parameters, and objects that could obscure the driver's vision should be located outside of this sight triangle.

#### **Trip Generation**

The proposed development consists of 91 multi-family units as shown in the conceptual site plan provided on the following page.



ITE's *Trip Generation (10<sup>th</sup> Edition)* provides trip generation rates for Multi-Family, low-rise (Code 220) housing units for weekday AM and PM peak hour. The resulting trip generation is shown in the Table below.

| Trip Generation Table - PA 17 Castle Valley Ranch |                 |              |                    |                   |       |           |         |            |        |                 |             |                  |       |        |
|---------------------------------------------------|-----------------|--------------|--------------------|-------------------|-------|-----------|---------|------------|--------|-----------------|-------------|------------------|-------|--------|
| ITE Trip Generation, 10th Edition                 |                 |              |                    |                   |       |           |         |            |        |                 |             |                  |       |        |
| Land Use                                          | Number of Units | ITE Code     | Weekday Rate       | Design Hour Rates |       |           |         |            |        | Weekday Traffic | Weekday DHV |                  |       |        |
|                                                   |                 |              |                    | AM Rate           | AM IN | AM OUT    | PM Rate | PM IN      | PM OUT |                 | AM IN       | AM OUT           | PM IN | PM OUT |
| Multi-Family (Low-rise)                           | 91              | 220          | 7.11               | 0.48              | 0.11  | 0.37      | 0.60    | 0.30       | 0.18   | 647             | 10          | 34               | 27    | 16     |
| ITE Trip Generation Basis                         |                 |              |                    |                   |       |           |         |            |        |                 |             |                  |       |        |
| Manual, 10th Edition                              | ITE Code        | Basis of     | Time Period Used   | Weekday Above     |       | Design IN |         | Design OUT |        | Distribution IN |             | Distribution OUT |       |        |
| Multi-Family (Low-rise)                           | 220             | Fitted Curve | Peak Hour adjacent | 23%               | 77%   |           | 63%     | 37%        |        |                 |             |                  |       |        |

### Trip Distribution and Assignment

The distribution and assignment of site generated trips are based upon the primary access and activities oriented toward the I-70 interchange. The distribution is assumed to be 95% oriented to/from the east and 5% oriented to/from the west. The resulting trip assignment is shown on the following page.

| Weekday AM   |     | Weekday PM   |     |
|--------------|-----|--------------|-----|
| CVB          | CVB | CVB          | CVB |
| 5%           | 95% | 5%           | 95% |
| 1            | 10  | 1            | 26  |
| 2            | 32  | 1            | 15  |
| 5%           | 95% | 5%           | 95% |
| 34           |     | 16           |     |
| PA 17 Access |     | PA 17 Access |     |

## Internal Circulation

Based upon the Trip Generation volumes, the proposed access can safely operate as a two-way, two-lane access. To safely accommodate fire access, a two-lane exit will be provided.

### Auxiliary Lane Requirements

Auxiliary turn lane requirements for local collector road access are typically analyzed using the CDOT State Highway Access Code based on the anticipated peak hour volumes, the speed limit and geometry of the highway adjacent to the access, and the classification of the highway. For analysis purposes, the CVB speed limit adjacent to the site is 30 mph along an NR-B arterial. Based on the *State Highway Access Code (SHAC)*,

**Auxiliary Lane Requirements:**

- (4) *Auxiliary turn lanes shall be installed according to the criteria below.*
- (a) A left turn lane with storage length plus taper is required for any access with a projected peak hour left ingress turning volume greater than 25 vph. If the posted speed is greater than 40 mph, a deceleration lane and taper is required for any access with a projected peak hour left ingress turning volume greater than 10 vph. The taper length will be included within the deceleration length.*
  - (b) A right turn lane with storage length plus taper is required for any access with a projected peak hour right ingress turning volume greater than 50 vph. If the posted speed is greater than 40 mph, a right turn deceleration lane and taper is required for any access with a projected peak hour right ingress turning volume greater than 25 vph. The taper length will be included within the deceleration length.*

Based upon the *SHAC* and the trip distribution table provided above, a westbound left turn auxiliary turn lane will be required.

---

**Summary of Findings**

2016 traffic volumes on CVB just east of Blackhawk Road were on the order of 400-500 vph during the AM and PM peak hours. PA 17 is estimated to generate approximately 43-44 vph during the AM and PM peak hours, an increase of 8-10% of the existing peak hour traffic volumes. The trip generation of the development is much less than 20% of the existing volumes at the US 6 CVB intersection and will not require a State Highway Access Permit.

The proposed access road has adequate sight distance for entering the roadway and will require a westbound left turn lane based upon the auxiliary lane requirements per the SHAC. The sight distance triangle discussed in this TIS should be implemented as part of the site access design.

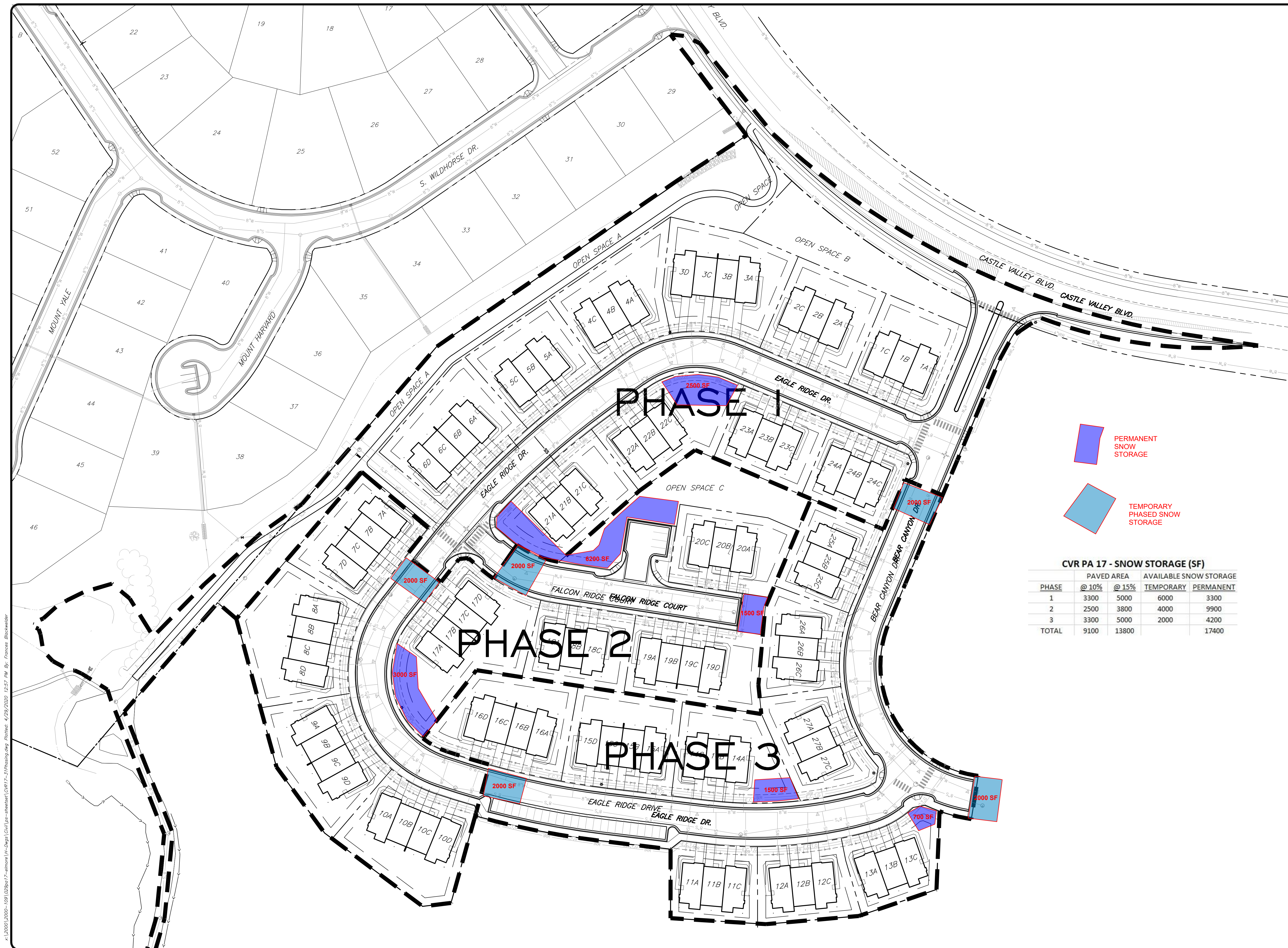
| CVR PA 17 - SNOW STORAGE (SF) |            |       |                        |           |
|-------------------------------|------------|-------|------------------------|-----------|
|                               | PAVED AREA |       | AVAILABLE SNOW STORAGE |           |
| PHASE                         | @ 10%      | @ 15% | TEMPORARY              | PERMANENT |
| 1                             | 3300       | 5000  | 6000                   | 3300      |
| 2                             | 2500       | 3800  | 4000                   | 9900      |
| 3                             | 3300       | 5000  | 2000                   | 4200      |
| TOTAL                         | 9100       | 13800 |                        | 17400     |

|                                                                              |      |  |
|------------------------------------------------------------------------------|------|--|
| Revision                                                                     | By:  |  |
|                                                                              | Date |  |
| #                                                                            | /    |  |
| Job No. 2000-109.<br>Drawn by:<br>Date: 2.25<br>QC: PE:<br>File: CVR17-31Pha |      |  |

Title: SNOW STORAGE PLAN

Dwg No. **7a**

Of : —



May 6, 2020

TO: Planning and Zoning Commissioners and Paul Smith, Planner  
FR: Residents of New Castle (53 names and addresses below)  
RE: Preliminary/Final Filing 11 application

We urge you not to approve the Filing 11 application for development of the property behind South Wildhorse Drive and Mount Harvard Court by CVR Investors, Inc. (CVR), a company located in Castle Rock, CO. Our rationale is described in more detail below, but in short, this high-density development offers very little open space, provides insufficient buffers between multiple-unit housing and single-family homes, inadequately considers the impact of the development to surrounding property values, ignores the need to maintain wildlife migration patterns, does not adequately provide for pedestrian/traffic interface on Castle Valley Boulevard, has not adequately addressed viewsheds and ridgelines, may not provide for natural drainage from the storm water pipes on both sides of Castle Valley Boulevard, increases traffic loading onto Castle Valley Boulevard, does not provide adequate additional parking for new residents during Phase 1, and may increase costs to the town as it addresses traffic, safety, fire, and other infrastructure issues. It also limits the town's ability to provide mixed-use development. Moreover, it does not reflect the goals of New Castle's Comprehensive Plan, leaving the town with a densely packed sea of rooftops that does little to make the town unique or desirable. We recognize the right of CVR to develop this property; however, that right is not absolute in much the same way as we are governed by the requirements of a homeowner's association. If this development is allowed as currently presented, we have much to lose, as described below.

### **1. Too much density**

The planned net density for the development is 10.45 dwelling units per acre (91 units on 13.5 acres). This far exceeds the average density in the town, creating many potential problems for the town, surrounding homeowners and future residents. The town will face higher costs in traffic control, snow removal, fire response, infrastructure maintenance, etc. After the coronavirus devastates the economy, we are also likely to face a recession, at least in the short term, and the town may be saddled with costs at a time where it is most difficult to meet them. This means that we will all face higher costs. The surrounding homeowners will likely suffer from greatly reduced property values, which seems very unfair, and the town has a responsibility to not damage current homeowners in permitting a new development. Moreover, future residents of the development will face inadequate parking (only four extra parking spaces are provided in the application), few amenities, noise and congestion. A recent example can be found in the newly developed triplexes on Redstone Drive and Foxwood Lane, where congestion and parking are on-going issues. Building fewer fourplexes and triplexes would go a long way in improving the development, helping preserve property values, and preserving the town's sense of community.

### **2. Insufficient buffer between single-family and multiple family homes**

Concerns about an urban buffer were identified in the town planning staff report to the Town Council in response to CVR's initial sketch plan on October 1, 2019. The staff report noted concerns about the "blunt transition" from large single-family homes to high density homes. Very little action has been taken to meet those concerns since that report. Instead, more fourplexes now border the buffer between the single-family homes on South Wildhorse/Mount Harvard than were in the sketch plan.

The preliminary/final application allows just 59 to 72 feet of buffer behind the homes on South Wildhorse/Mount Harvard, including the hill owned by the town. The developer provides very little, as the buffer includes the natural drainage down the hill, as well as the town's property. In order to protect the value of the homes along the development, this buffer needs to be much larger. This is a win-win-win for residents and the town. Increasing the buffer not only brings the development into greater compliance with the goals of the Town of New Castle Comprehensive Plan and helps protect property values, both outside and inside the development, it has the added benefit of adding much-needed open space for the pedestrian walkway and offers a corridor for wildlife. The Colorado Division of Wildlife has identified this area as an important deer habitat, and residents view deer everyday grazing and bedding in this field.

The visual impact analysis was not available for review on the town's website, so we cannot comment. If this analysis exists, we would like to review it. If not, one should be done considering the buffer concerns.

### **3. Insufficient open space**

At first glance, it appears that CVR's application has met the minimal requirements for open space (1.5 acres dedicated open space in the 13.5 acres to be built). However, a closer look at the four open spaces shown on Overall Site Plan Map (page 7 of the application) tells a different story. Municipal Code Sec.17.104.010 encourages a creative approach to the development of land and an integrated open space system throughout the Castle Valley Ranch PUD. The Town of New Castle's Comprehensive Plan calls for pedestrian networks, recognizes the importance that citizens put on open spaces and calls for preserving open space and natural beauty whenever possible. We call attention to Comprehensive Plan Goal CG-1: Ensure that new development substantially conforms to the New Castle Comprehensive Plan principles, goals and policies and includes: Policy CG-1B: Applicants will be required to clearly demonstrate substantial conformity with the comprehensive plan in all applications; and, Policy CG-1D: Non-compliant land-use applications shall be modified to conform substantially to the comprehensive plan or will be rejected. (Town of New Castle Comprehensive Plan, p.50)

The Comprehensive Plan further calls for the creation of park space so to meet the standard of an additional 14 acres of usable park land for every thousand person increase in the town's population. Data from the Comprehensive Plan showed that the town was just under the minimum in 2007 (13.6 acres to service roughly 4,000 people). The addition of Dancing Bear Park is welcomed, but does not add enough park space to meet the standard. Thus, more park space is needed as development continues.

The developer proposes that "Open Space B" be a neighborhood park maintained by the town. The idea of a park is welcomed; however, this parcel of land has issues. First, it is directly adjacent to Castle Valley Boulevard, and provides for little buffer between the street and the park. In contrast, the newest park, Dancing Bear, is separated from the main street. Second, at just one-third of an acre (14,000 square feet), this "open space" largely represents what would be needed to provide a buffer between the street and the development anyway, as is the case with the homes along Castle Valley Boulevard to the north. The staff report pointed to the need for open space recreation, and this does not meet that need. This area is also suggested for snow removal for the Town, which further hampers the appeal of Open Space B.

Open Space A is the buffer area that roughly parallels the homes on South Wildhorse. As described above, it does not meet the stated desire of the town to have natural green ways and open space

corridors, in that it is much too narrow for this purpose. By increasing this open space, the developer would retain the natural beauty of the area, as well as enhance the desirability of the multi-family units and help to offset the negative impacts of the development. One can imagine a networked pedestrian trail connecting both sides of the development along Castle Valley Boulevard.

Another issue is drainage and slope. The storm water drain for run-off from the east side of Castle Valley Boulevard creates an intermittent pond during snow melt that runs fully into the open space areas. The slope of this open space area is also significant and further limits its use. Open space should be space that is accessible to the public, not undevelopable space. A hydrological study was not available for review, but even at current flow rates, standing water is not likely to be fully solved by the proposed re-routing of the storm drain and placement of rip-rap along the hill.

Also troubling is the pedestrian walkway that currently is designed to end at Castle Valley Boulevard. There is no provision for safe crossing of the street; there are no sidewalks that join that area. The only crosswalk that exists is on the north side the South Wildhorse/Castle Valley Boulevard intersection.

Open Space C is a pocket park in the center of the 91-unit development; Open Space D is a very small area also in the center of the development, much too small to be considered viable open space. These may serve the residents of the development but are not easily accessible to other citizens. We concur with the staff report that urged that the development have more open space than currently proposed.

#### **4. Wildfires and other considerations**

As the town's population increases, we must consider a second street to allow people in Castle Valley Ranch to enter/leave. Traffic loading is already apparent on Castle Valley Boulevard, the only street out of Castle Valley Ranch. However, this inconvenience may become a very serious danger should a wildfire sweep the area, as people have no way out other than one street. In October 2019, many residents witnessed the fire on the hill that is adjacent to the land in Filing 11. We were lucky that time, due to the amazing work of our firefighters and the availability of air support. Next time we may not be so lucky. This issue is paramount in the minds of many Castle Valley Ranch residents and must be considered with any development, but especially in ones with high density that compounds traffic concerns. Connecting to C Street should be discussed as a way of potentially saving lives.

Additionally, as noted in the staff report, concerns continue regarding how the remaining lots on the other side of Castle Valley Boulevard, along North Wildhorse, and VIX Park will be developed. The town has a great opportunity to consider the prominent value residents place on open spaces, with connected trail systems in thinking about future development. It also must consider where and how multiple-use building will occur. Finally, we encourage the town to carefully consider infrastructure capacity. We saw no stormwater management study in the materials for Filing 11.

In sum, we have an opportunity to make New Castle a highly desired gem of a town through careful development, but once that opportunity is lost, we've lost it forever. The Town of New Castle has an opportunity to promote development that aligns with its comprehensive plan, Smart Growth Principles, and the stated desires of the community to protect the town's scenic quality and open space. **We urge you to not approve this application until it more closely represents these goals as stated in the Comprehensive Plan and the municipal code. We stand ready as residents to assist the town that we all love in honoring the New Castle Comprehensive Plan and vision as set forth.**

**Signatures for the letter** (Because of the stay-at-home/safer at home orders, gathering signatures was not possible. However, everyone provided their name and address, often by email, noting their interest in signing the letter.)

|                       |                        |
|-----------------------|------------------------|
| Denise Scheberle      | 507 S. Wildhorse Drive |
| Steve Scheberle       | 507 S. Wildhorse Drive |
| Wayne Shelton         | 501 S. Wildhorse Drive |
| Virginia Shelton      | 501 S. Wildhorse Drive |
| Myrna Candreia        | 26 Foxwood Ln.         |
| Jeanne Huyser         | 34 Foxwood Ln.         |
| Karen Skalsky-Schwenk | 511 S. Wildhorse Drive |
| Tom Schwenk           | 511 S. Wildhorse Drive |
| Paul Gonnerman        | 51 Mt Yale Ct          |
| Susan J Bilstad       | 51 Mt Yale Ct.         |
| Jes Dooling           | 729 S. Wildhorse Drive |
| Ines Baquero          | 73 Mount Harvard Ct.   |
| Dee Demming-Kressner  | 156 N. Wildhorse Drive |
| Robert Wang           | 655 S. Wildhorse Drive |
| Lynne Cassidy         | 655 S. Wildhorse Drive |
| Jeff Andrews          | 715 Storm King Circle  |
| Diana Andrews         | 715 Storm King Circle  |
| Sue Cooke             | 26 Buckskin Circle     |
| Gary Cooke            | 26 Buckskin Circle     |
| Khmasea Bristol       | 351 Buckthorn Rd.      |
| Bay Bristol           | 351 Buckthorn Rd.      |
| Connie Davis          | 818 Ute Circle         |
| Rick Davis            | 818 Ute Circle         |
| JR Torrez             | 882 Ute Circle         |
| Stephanie Torrez      | 882 Ute Circle         |
| Kristi Stark          | 829 Ute Circle         |
| Jeff Stark            | 829 Ute Circle         |

|                         |                            |
|-------------------------|----------------------------|
| Pat Gunther             | 695 Cheyenne               |
| John Gunther            | 695 Cheyenne               |
| Larry Dragon            | 845 Ute Circle             |
| Ruth Belda              | 845 Ute Circle             |
| Erin Courtney Quinn     | 142 W. Cathedral Ct.       |
| Jamin Heady-Smith       | 39 S. Painted Horse Cir    |
| Stephanie Dani Carballo | 309 Maroon Ct.             |
| Bert Carballo           | 309 Maroon Ct.             |
| Sally Linden            | 805 Ute Circle             |
| Janet Kinghorn          | 379 Maroon Ct.             |
| Mark Kinghorn           | 379 Maroon Ct.             |
| Joni Owens              | 235 W. Capital Ct.         |
| David Bristol           | 386 W. Main #4             |
| Lee Teran               | 386 W. Main #4             |
| Brittney Street         | 680 Cheyenne               |
| Jeff Street             | 680 Cheyenne               |
| Tom Elder               | 247 N. 7 <sup>th</sup> St. |
| Mary Johnson            | 247 N. 7th St.             |
| Shirley Williams        | 0981 County Road 245       |
| Jenna Bontempo          | 44 Foxwood Lane            |
| Toni Main               | 48 Foxwood Lane            |
| Ken Collins             | 48 Foxwood Lane            |
| Sandy Weaver            | 308 Penny Royal            |
| Andy Hawley             | 120 Deer Valley Dr.        |
| Diane Blasingame        | 382 Faas Ranch Rd.         |

Wayne and Virginia Shelton

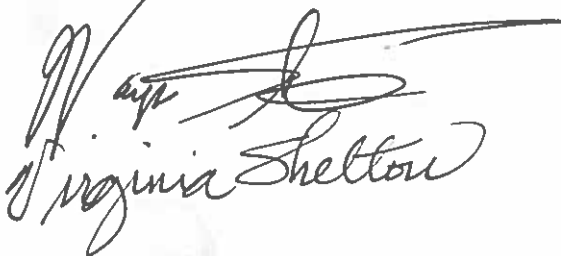
501 S. Wild Horse Dr.

New Castle, Co 81647

As 11 year residents of S. Wild Horse Drive that will be directly affected by R-11, we have several concerns.

1. This greatly increased density does not seem appropriate for a single family neighborhood. It seems that a disproportionate number, 91 of the 540, approved housing units has been proposed and concentrated in only 14 acres. I believe a wider buffer zone and lesser density would be appropriate for this area.
2. These are 3 bedroom units so I would assume the occupancy rate would most likely be between 3 and 4 people per unit. This being the case you should assume 2 to 3 cars per unit which would necessitate 1 car in the garage, 1 in the driveway, and 1 parked in the street. There is little or no provision for parking in the street, due to the number of driveways and the density of the units. This would seem to lead to a very cluttered and probably unsightly density. All this can be verified by observing the problems in the existing triplex areas and would be even more exacerbated by an even larger number of proposed 3 and 4 plexs.
3. Based on the growing number of electric vehicles, I have seen no provision for outdoor access to the power supplies, unless you run dropcords across driveways, lawns, and sidewalks.
4. It looks like snow removal would be very problematic. The city recommends shoveling snow on to each lawn, however in snowy winters we have had to shovel the excess snow in to the street's parking area. This being the case for the increased density there would be even less lawn space, due to the number of driveways, to put the snow which would necessitate putting more snow into the already inadequate street parking.
5. Also based on past observations this density would be problematic for the trash collections due to the increased number of cars and winter snow placement along the streets.
6. The proposed open space seems entirely inadequate for the ultimate number of residents. It looks like most of the "open space" was based on land that would have been difficult to build on anyway and does not seem suitable for most accepted "open space" uses.

It would seem they are proposing this area for the increased density so they can make other areas more desirable for single family homes to their benefit. It should be remembered that the developer's effort to maximize profits will produce neighborhoods that we will all have to live with long after they are gone.



Virginia Shelton



