ENTECH
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PRELIMINARY SUBSURFACE SOIL INVESTIGATION
WATERVIEW NORTH
PARCEL NOS. 55000-00-332 & 55000-00-414
SOUTH POWERS BOULEVARD AND BRADLEY ROAD
EL PASO COUNTY, COLORADO

Prepared for:

CPR Entitlements, LLC
31 North Tejon Street, Suite 500
Colorado Springs, Colorado 80903

Attn: PA Koscielski

May 15, 2020

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Logan L. Langford, P.G.
Geologist

Reviewed by:

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

COLORADO LICENSED
JOSEPH COLLIN GOODE JR
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5/20/2020
PROFESSIONAL ENGINEER

LLL

Encl.

Entech Job No. 200599
AAprojects/2020/200599 SSI

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1.0 INTRODUCTION

The proposed site development consists of a combination of commercial and residential single and multifamily development and associated site improvements. Development is expected to include site grading, installation of subsurface utilities, roadways, and site stormwater improvements. The site is located northeast of Bradley Road and South Powers Boulevard in El Paso County, Colorado just south of Colorado Springs city limits. The approximate location of the project site is shown on the Vicinity Map, Figure 1. The test boring locations are shown on Figure 2, the Test Boring Location Plan. A concept development plan is shown on Figure 3.

This report describes the subsurface investigation conducted for the site and provides preliminary recommendations for development design and construction. The Preliminary Subsurface Soil Investigation included the drilling of twenty-five test borings across the site, collecting samples of soil, and conducting a geotechnical evaluation of the investigation findings. All drilling and subsurface investigation activities were performed by Entech Engineering, Inc. (Entech). The contents of this report, including the geotechnical evaluation and recommendations, are subject to the limitations and assumptions presented in Section 16.0.

2.0 PROJECT AND SITE DESCRIPTION

The proposed site development consists of a combination of commercial and residential single and multifamily development and associated site improvements. The commercial lots will be located in the southern portion of the site adjacent to Bradley Road, and the single family and multifamily lots will be located in the northern and eastern portion of the site. Preliminary site grading plans were provided to us with proposed cuts up to 28 feet and fills up to 27 feet. The site has a gradual slope towards the southeast. Vegetation consisted of field grasses, cacti, yucca and weeds. Adjacent properties consist of undeveloped land to the east and south, South Powers Boulevard to the west, and Bradley Road to the north. Other smaller piles of manmade materials and straw bales were noted south and west of the natural drainage.

3.0 SUBSURFACE EXPLORATIONS AND LABORATORY TESTING

Subsurface conditions on the site were explored by drilling ten test borings at the approximate locations shown on Figure 2. The boring locations were determined and staked by others. The borings were drilled within the proposed roadway alignments. The borings were drilled to depths of 20 feet below the existing ground surface (bgs). The drilling was performed using a truck-mounted, continuous flight auger-drilling rig supplied and operated by Entech. Boring logs descriptive of the subsurface conditions encountered during drilling are presented in Appendix A. At the conclusion and subsequent to drilling, observations for groundwater levels were made in each of the open boreholes.

Soil and bedrock samples were obtained from the borings utilizing the Standard Penetration Test (ASTM D-1586) using 2-inch O.D. split-barrel and California samplers. Results of the Standard Penetration Test (SPT) are included on the boring logs in terms of N-values expressed in blows per foot (bpf). Soil and bedrock samples recovered from the borings were visually classified and recorded on the boring logs. The soil and bedrock classifications were later verified utilizing laboratory testing and grouped by soil type. The soil and bedrock type numbers are included on the boring logs. It should be understood that the soil and bedrock descriptions shown on the boring logs may vary between boring location and sample depth. It should also be noted that the lines of stratigraphic separation shown on the boring logs

represent approximate boundaries between soil and bedrock types and the actual stratigraphic transitions may be more gradual or variable with location.

Water content testing (ASTM D-2216) was performed on the samples recovered from the borings, and the results are shown on the boring logs. Grain-Size Analysis (ASTM D-422) and Atterberg Limits testing (ASTM D-4318) were performed on selected samples to assist in classifying the materials encountered in the borings. Volume change testing was performed on selected samples using the Swell/Consolidation Test (ASTM D-4546) and the FHA Swell Test in order to evaluate potential expansion/compression characteristics of the soil and bedrock. Soluble sulfate testing was performed on select soil samples to evaluate the potential for below grade degradation of concrete due to sulfate attack. The Laboratory Testing Results are summarized on Table 1 and are presented in Appendix B.

4.0 SUBSURFACE CONDITIONS

Three soil types were encountered in the test borings drilled for the subsurface investigation: Type 1: silty, clayey sand to very silty, clayey sand, silty to very silty sand, and very clayey, silty sand (SM-SC, SM, SC-SM), Type 2: sandy to very sandy clay (CL), and Type 3: sandy claystone (CL, CH). The soil and bedrock were classified in accordance with the Unified Soil Classification System (USCS) and using the laboratory testing results and the observations made during drilling.

4.1 Soil and Bedrock

Soil Type 1 classified as a silty, clayey sand to very silty, clayey sand, silty to very silty sand, and very clayey, silty sand (SM-SC, SM, SC-SM), was encountered in eleven of the test borings at depths ranging from the existing surface to 18 feet and extending to depths ranging from 4 to the termination of the test borings (20 feet). Standard penetration testing on the sands resulted in N-values of 5 to 31 blows per foot (bpf), indicating loose to dense states. c Atterberg Limits Testing resulted in liquid limits of 22 to 25 and plastic indexes of 3 to 7. FHA Swell testing resulted in expansion pressure of 150 psf. These results indicate the sand soils have a low expansion potential.

Soil Type 2 classified as a sandy to very sandy clay (CL), encountered in twenty-three of test borings at depths ranging from the existing ground surface to 19 feet and extending to depths ranging from 4 to the termination of the test borings (20 feet). Standard penetration testing on the clay resulted in N-values of 4 to 38 bpf, indicating soft to very stiff consistencies. Water content and grain size testing resulted in water contents of 4 to 25 percent with approximately 58 to 98 percent of the soil size particles passing the No. 200 sieve. Atterberg Limits Testing resulted in liquid limits of 29 to 38 and plastic indexes of 11 to 22. FHA Swell testing resulted in expansion pressures ranging from 670 psf. Swell/Consolidation Testing on select samples resulted in a consolidation of 0.6 percent, and swells of 0.4 to 5.6 percent. These results indicate the clay soils have a low consolidation potential and a moderate to very high expansion potential. Sulfate testing resulted in 0.00 to less than 0.01 percent sulfate by weight indicating the clay exhibits negligible potential for below grade concrete degradation.

Soil Type 3 classified as a sandy claystone (CL, CH), encountered in sixteen of the test borings at depths ranging from 4 to 19 feet and extending to the termination of the test borings (20 feet). Standard penetration testing on the claystone resulted in N-values of 37 to greater than 50 bpf, indicating very stiff to hard consistencies. Water content and grain size testing resulted in water contents of 10 to 40 percent with approximately 85 to 97 percent of the soil size particles passing the No. 200 sieve. Atterberg Limits Testing resulted in liquid limits of 40 to 54 and plastic indexes of 15 to 36. Swell/Consolidation Testing resulted in swells of 0.7 to 6.1 percent. These results indicate that the claystone have a moderate to very high expansion potential. Sulfate testing resulted in less than 0.01 to 0.03 percent sulfate by weight indicating the clay exhibits negligible potential for below grade concrete degradation.

4.2 Groundwater

Groundwater was not encountered in the test borings which were drilled to depths of 20 feet. These areas are discussed in the following section. Fluctuation in groundwater conditions may occur due to variations in rainfall and other factors not readily apparent at this time. It should be noted that in the sandy materials on site, some groundwater conditions might be encountered due to the variability in the soil profile. Isolated sand and gravel layers within the soils, sometimes only a few feet in thickness and width, can carry water in the subsurface. Groundwater may also flow on top of the underlying bedrock. Builders and planners should be cognizant of the potential for the occurrence of such subsurface water features during

construction on-site and deal with each individual problem as necessary at the time of construction. Table 2 presents the estimated depths to bedrock and groundwater.

5.0 PRELIMINARY DEVELOPMENT CONSIDERATIONS

The following discussion is based on the subsurface conditions encountered in the test borings drilled at the site. This preliminary investigation is for the site discussed in 2.0 Project and Site Description. If subsurface conditions different from those described herein are encountered during construction or if the project elements change from those described, Entech Engineering, Inc. should be notified so that the evaluation and recommendations presented can be reviewed and revised if necessary.

Subsurface soil conditions encountered in the test borings drilled on the site generally consisted of native silty, clayey sand to very silty, clayey sand, silty to very silty sand, and very clayey, silty sand, and sandy to very sandy clay overlying sandy claystone. Bedrock was encountered at depths ranging from 4 to 19 feet bgs. Bedrock was not encountered in all of the Test Borings. Depths to bedrock are indicated on Table 2. Consideration should be given to site conditions in planning and excavating the development, which include, expansive soils and claystone materials. Groundwater was not encountered in the test borings during or subsequent to drilling.

5.1 Expansive Soils

Expansive soils are present on the site exhibiting expansion potential from low to very high. Expansive soils where encountered will require mitigation for construction on the site. Damage to structures can occur due to expansive soils; occurrence and severity of distress can be reduced by moisture treatments and overexcavation mitigation approaches.

5.2 Bedrock

Bedrock was encountered at shallow depths across portions of the site. Excavation of claystone, bedrock should be expected to be moderate to difficult. Track type equipment likely will be needed to accomplish excavations particularly where harder materials or lenses are present. Upon completion of site grading per the plan provided to us, claystone and shale are expected to be exposed across the majority of the areas tested.

6.0 SITE GRADING

Shallow bedrock was encountered in approximately half of the test borings. Depth to bedrock in each boring is indicated on the Test Boring Logs, Appendix A. Excavation of dense and hard materials on site is expected to be moderate to difficult with heavy duty earthmoving equipment. Claystone materials may require track equipment and ripping teeth. For conditions with no groundwater seepage, cut and fill slopes no steeper than 3 to 1 (horizontal to vertical) should be considered. If seepage occurs, then flatter slopes or a drain system should be considered. Recommendations may be subject to change depending upon particular field conditions.

6.1 Stripping

Debris, topsoil and organic materials should be stripped from the ground surface of areas to be filled. Any uncontrolled fill materials should be completely removed. The materials may be used as fill pending approval if they are free of organic material and debris. Although soft areas are not expected any soft or loose soils should be stabilized or removed to expose suitable material prior to placement of fill. Topsoil may be stored in stock piles and placed at the surface in landscape areas.

6.2 Fill Preparation

Surfaces which will receive fill should be scarified to depths of 6 inches, moisture conditioned to within 0 to 3 percent of optimum moisture, and compacted to minimum of 95 percent of Standard Proctor Dry Density (ASTM D-698) for cohesive materials and within 2 percent of optimum moisture, and compacted to minimum of 95 percent of Modified Proctor Dry Density (ASTM D-1557) for cohesionless soils. On-site natural soils and bedrock are anticipated to be used as site grading fill. Bedrock must be processed and broken down to small gravel-sized materials where placed in the fill. Expansive materials used for fill should be placed at sufficient moisture content to mitigate potential swell. The fill quality will influence the performance of foundations, slabs-on-grade, and pavements. Fill settlement can be minimized by placing thin lifts at suitable moisture content and by verification of compaction with frequent density tests.

6.3 Compaction

Overlot grading fill consisting of granular soils should be placed in lifts to exceed 6 inches following compaction and compacted to at least 95 percent of the maximum dry density determined by Modified Proctor (ASTM D-1557). Clay materials should be placed in compacted

lifts less than 6 inches thick compacted to at least 95 percent of maximum Standard Proctor (ASTM D 698) dry density. Fills below 10 feet in depth should be moisture conditioned as above and compacted to 98 percent of Standard Proctor dry density (ASTM D 698) for cohesive materials or 98 percent of maximum modified Proctor Dry Density (ASTM D 1557) for granular materials. The soil materials should be placed at a moisture content conducive to adequate compaction, usually within ±2 percent of optimum moisture content. Fill placement and compaction should be observed and tested by Entech during construction to verify that adequate moisture and density has been achieved.

7.0 UNDERGROUND UTILITY CONSTRUCTION

Generally, excavation is expected to be moderate to difficult utilizing heavy-duty track hoes. Rock buckets and rock teeth will likely be required where excavations extend into very hard claystone, siltstone, shale or cemented materials. Special procedures or equipment may be required to remove water and/or achieve stability in utility trenches where excavations approach or intercept groundwater.

Utilities including water and sewer lines are usually constructed beneath paved roads. Placement of fill and degree of compaction applied to trench backfill will influence performance of overlying structures including pavements. Fill placed into utility trenches should be compacted according to requirements of the local jurisdiction. Fill should be placed in horizontal lifts having compacted thickness of six inches or less and at a water content conducive adequate compaction, usually within ±2 percent of optimum water content. Typical compaction specifications would be similar to specifications in the Site Grading section. Mechanical methods should be used for fill placement; however, heavy equipment should be kept at a distance away from structures to avoid damage. No water flooding techniques of any type should be used for compaction or placement of utility trench backfill.

Trench backfill should be performed in accordance with El Paso County specifications and requirements. Excavations and excavation shoring/bracing should be performed in accordance with OSHA guidelines.

8.0 PAVEMENT CONSIDERATIONS

Materials exposed at pavement subgrade elevations will be dependent upon native materials exposed at final overlot grading and the specific materials placed as fill at and near finish grade elevations. The predominate materials are generally expected to be clay or claystone. Materials anticipated at subgrade elevation generally would be rated as poor. Based on depth to claystone and estimated cut, claystone with AASHTO classification of A-6 and associated poor rating is likely to be encountered. The claystone classifies as A-6 which has poor asphalt support characteristics. Thickness of asphalt pavements to be anticipated generally range between 4 to 5 inches of asphalt overlying 6 to 10 inches of basecourse depending on specific subgrade materials and Roadway Classification of each particular street. Cement treated subgrade thickness of 10 to 12 inches are common. Actual thickness may exceed anticipated thickness at some areas. For specific thickness determinations, a subsurface investigation and pavement design should be completed after completion of overlot grading.

9.0 ANTICIPATED RESIDENTIAL FOUNDATION SYSTEMS

Subsurface soil conditions consisted of both granular soils and areas of expansive clay soils and claystone materials. We anticipate conventional spread footing foundation systems will be appropriate for residences constructed on the site. Where expansive materials are encountered at or near foundation grades, use of spread footings with overexcavation and replacement with non-expansive fill should be expected. Drilled pier foundations may be a suitable alternative where expansive soils are encountered. A Subsurface Soils Investigation report should be prepared after completion of overlot grading to address appropriate foundation systems. Perimeter below grade drain systems should be anticipated for all structures with basements. Overexcavation drains may also be recommended. Figures 4 and 5 present typical details. Shallow groundwater was encountered in numerous test borings. Temporary and permanent dewatering systems may be necessary at various foundation excavations. Shotrock and geotextiles may be appropriate for stabilizing excavations. An area wide subdrain may be considered for discharge of collected water.

10.0 RESIDENCE ON-GRADE FLOOR SLABS

On-grade floor slabs for the planned structures could be supported by granular soils or compacted, non-expansive, structural fill. Loose or expansive soils encountered at or near floor slab grade should be penetrated or overexcavated a distance below slab subgrade and replaced with a non-expansive structural fill to improve floor slab performance. If slab movement and cracks cannot be tolerated a structural floor system should be used. Evaluation of subgrade materials should be included within a Subsurface Soils Investigation for each specific lot.

11.0 CONCRETE DEGRADATION DUE TO SULFATE ATTACK

Sulfate solubility testing was conducted on eight samples recovered from the test borings to evaluate the potential for sulfate attack on concrete placed below surface grade. The test results indicated 0.00 to 0.03 percent soluble sulfate (by weight). The test results indicate the sulfate component of the in-place soils presents a negligible exposure threat to concrete placed below the site grade. Type II cement is recommended for the on-site soils. The clay soils in this area can have high sulfate levels. Additional testing should be conducted following completion of overlot grading.

12.0 EXCAVATION STABILITY

Excavation walls must be properly sloped/benched or otherwise supported in order to maintain stable conditions. All excavation openings and work execution shall conform to OSHA standards as in CFR 29, Part 1926.650-652 (Subport D).

13.0 SURFACE AND SUBSURFACE DRAINAGE

Surface drainage will influence performance of structures at the site including streets and residences. Drainage is recommended around each building perimeter at a minimum slope of 5 percent in the first 10 feet adjacent to exterior foundation walls and for unpaved areas, where possible. For paved areas and other impervious surfaces, a minimum slope of 2 percent is

recommended. Drainage should be planned to avoid ponding of water. Collected water and irrigation should discharge well beyond foundation backfill zones. Surface runoff should be designed to avoid sheet flow and erosion. Slopes should be protected from erosion by materials such as mulch or appropriate plants or other methods. All fills and backfills should be properly compacted. Unprotected surfaces may be subject to undesirable, heavy erosion.

14.0 WINTER CONSTRUCTION

In the event construction occurs during winter, concrete and soil materials should be protected from freezing conditions. Concrete should not be placed on frozen soil and once concrete has been placed, it should not be allowed to freeze. Similarly, once exposed, the soil subgrades should not be allowed to freeze. During grading operations and subgrade preparation, care should be taken to avoid burial of snow, ice or frozen material within the planned construction area.

15.0 CONSTRUCTION OBSERVATIONS

It is recommended that Entech observe and document the following activities during construction of the building foundations.

- Excavated subgrades and subgrade preparation.
- Placement of foundation perimeter drains (if installed).
- Placement/compaction of fill materials.
- Placement/compaction of utility bedding and trench backfill.

16.0 CLOSURE

The subsurface investigation, geotechnical evaluation and preliminary recommendations presented in this report are intended for use by CPR Entitlements, LLC with application to the planned development of the Waterview North Subdivision located in El Paso County, Colorado just south of Colorado Springs city limits. In conducting the preliminary subsurface soil investigation, laboratory testing, engineering evaluation and reporting, Entech Engineering, Inc. endeavored to work in accordance with generally accepted professional geotechnical and geologic practices and principles consistent with the level of care and skill ordinarily exercised by members of the geotechnical profession currently practicing in same locality and under similar conditions. No other warranty, expressed or implied is made. Additional subsurface investigations and testing are recommended to further evaluate the individual sites and roadways after final development plans are prepared and after the site has been graded. During final design and/or construction, if conditions are encountered which appear different from those described in this report, Entech Engineering, Inc. requests that it be notified so that the evaluation and recommendations presented herein can be reviewed and modified as appropriate.

If there are any questions regarding the information provided herein or if Entech Engineering, Inc. can be of further assistance, please do not hesitate to contact us.

TABLE

TABLE 1

SUMMARY OF LABORATORY TEST RESULTS

CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH
JOB NO. 200599

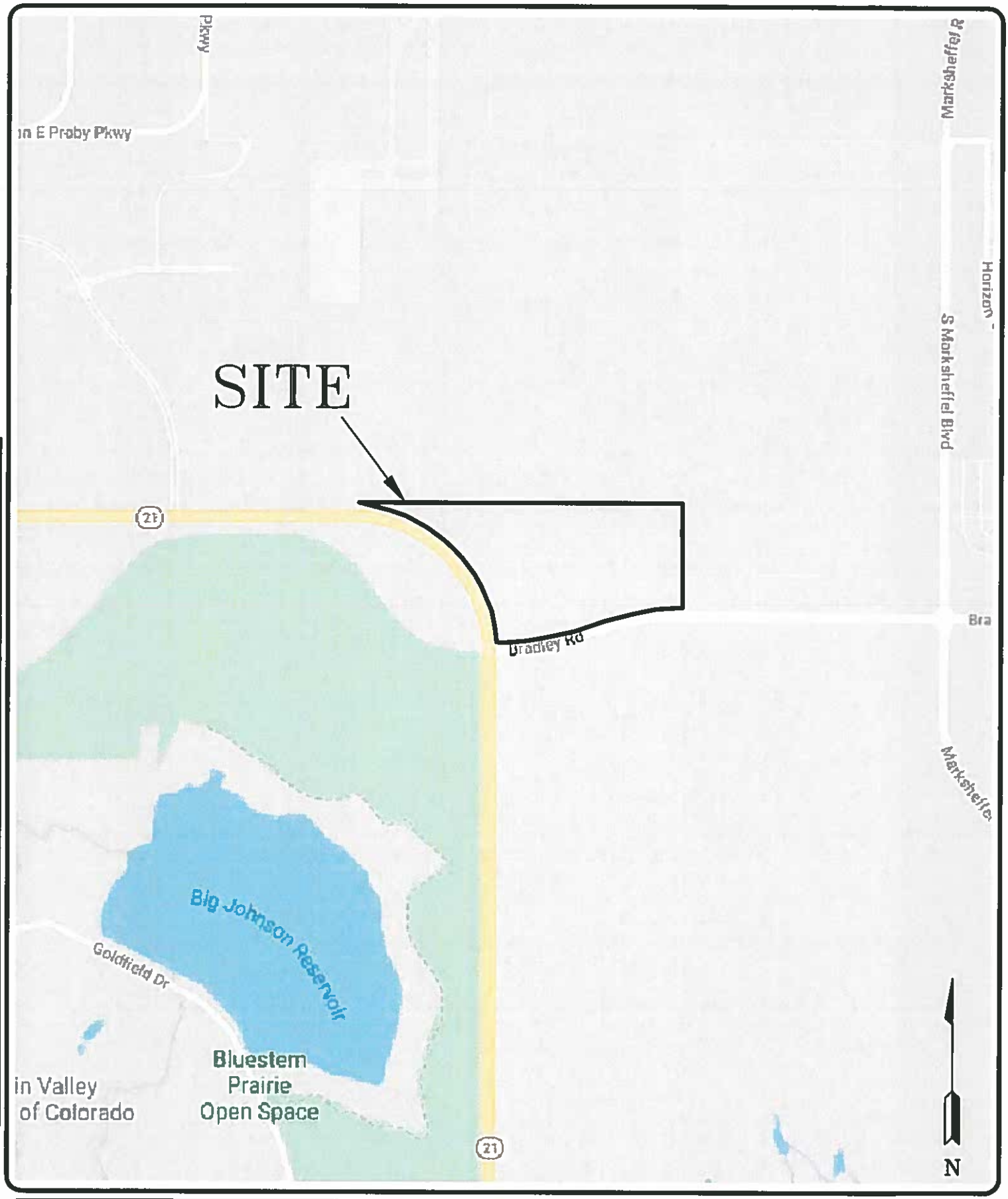
SOIL TYPE	TEST BORING NO.	DEPTH (FT)	WATER (%)	DRY DENSITY (PCF)	PASSING NO. 200 SIEVE (%)	LIQUID LIMIT (%)	PLASTIC INDEX (%)	SULFATE (WT %)	FHA SWELL (PSF)	SWELL/ CONSOL (%)	UNIFIED CLASSIFICATION	SOIL DESCRIPTION
1	5	2-3			29.0	25	7				SM-SC	SAND, SILTY, CLAYEY
1	6	5			40.2	24	7				SM-SC	SAND, VERY SILTY, CLAYEY
1	9	2-3			30.6				150		SM	SAND, SILTY
1	16	5			31.9	22	3				SM	SAND, SILTY
1	17	2-3			42.4	25	5				SC-SM	SAND, VERY CLAYEY, SILTY
1	18	2-3			47.1						SM	SAND, VERY SILTY
2	1	5			72.8	29	11				CL	CLAY, SANDY
2	2	2-3	7.9	82.2	88.4	31	13			2.5	CL	CLAY, SANDY
2	3	10	9.1	99.6	63.2			0.00		-0.6	CL	CLAY, SANDY
2	8	10	11.3	111.7	95.9					4.2	CL	CLAY, SANDY
2	10	10			56.9						CL	CLAY, VERY SANDY
2	11	5	15.2	99.0	94.3	38	22	<0.01		4.4	CL	CLAY, SANDY
2	12	5			78.9				670		CL	CLAY, SANDY
2	14	5			68.8	33	18	<0.01			CL	CLAY, SANDY
2	20	5	13.2	110.0	96.1					5.6	CL	CLAY, SANDY
2	22	10			78.9	32	17				CL	CLAY, SANDY
2	25	2-3			70.5						CL	CLAY, SANDY
2	25	10	12.7	95.4	83.8					0.4	CL	CLAY, SANDY
2	7	20			57.9						CL	CLAY, VERY SANDY
2	18	15	16.2	113.9	97.7					1.9	CL	CLAY, SANDY
2	23	15			80.6						CL	CLAY, SANDY
3	15	5	14.5	117.8	96.4					6.1	CL	CLAYSTONE, SANDY
3	19	10	10.5	116.3	90.2					0.7	CL	CLAYSTONE, SANDY
3	21	5	13.0	119.9	85.3					1.5	CL	CLAYSTONE, SANDY
3	24	10	19.2	112.3	96.5	54	36			4.6	CH	CLAYSTONE, SANDY
3	4	20	18.7	108.0	91.4	50	26	0.03		2.9	CH	CLAYSTONE, SANDY
3	13	15	13.4	112.4	94.2	40	15			3.5	CL	CLAYSTONE, SANDY
3	14	15	19.8	105.8	97.0	52	31	<0.01		0.9	CH	CLAYSTONE, SANDY

Table 2: Summary of Depth to Bedrock and Groundwater

Test Boring No.	Depth to Bedrock (ft.)	Depth to Groundwater (ft.)
1	14	>20
2	>20	>20
3	14*	>20
4	17*	>20
5	>20	>20
6	>20	>20
7	>20	>20
8	19	>20
9	>20	>20
10	>20	>20
11	>20	>20
12	>20	>20
13	14*	>20
14	14	>20
15	4*	>20
16	19	>20
17	14	>20
18	19	>20
19	4	>20
20	9	>20
21	4	>20
22	19	>20
23	>20	>20
24	4	>20
25	15	>20

* Weathered bedrock

FIGURES



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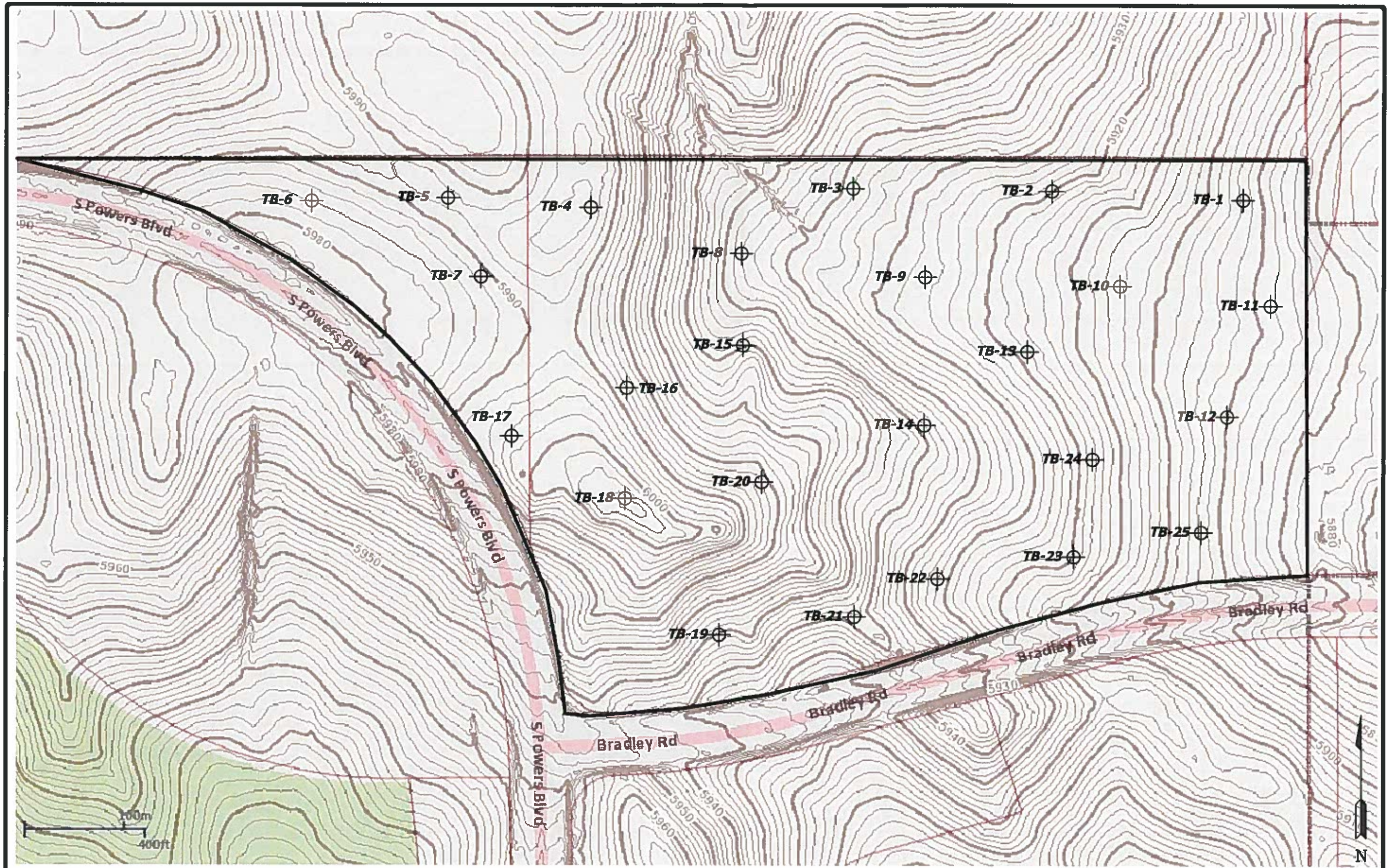
VICINITY MAP
WATERVIEW NORTH
POWERS BOULEVARD AND BRADLEY ROAD
EL PASO COUNTY, CO.
FOR: CPR ENTITLEMENTS, LLC

DRAWN:	DATE:	CHECKED:	DATE:
LLL	5/5/20		

JOB NO.: 200599

FIG NO.: 1



TB - APPROXIMATE TEST BORING LOCATION AND NUMBER

REVISION	BY

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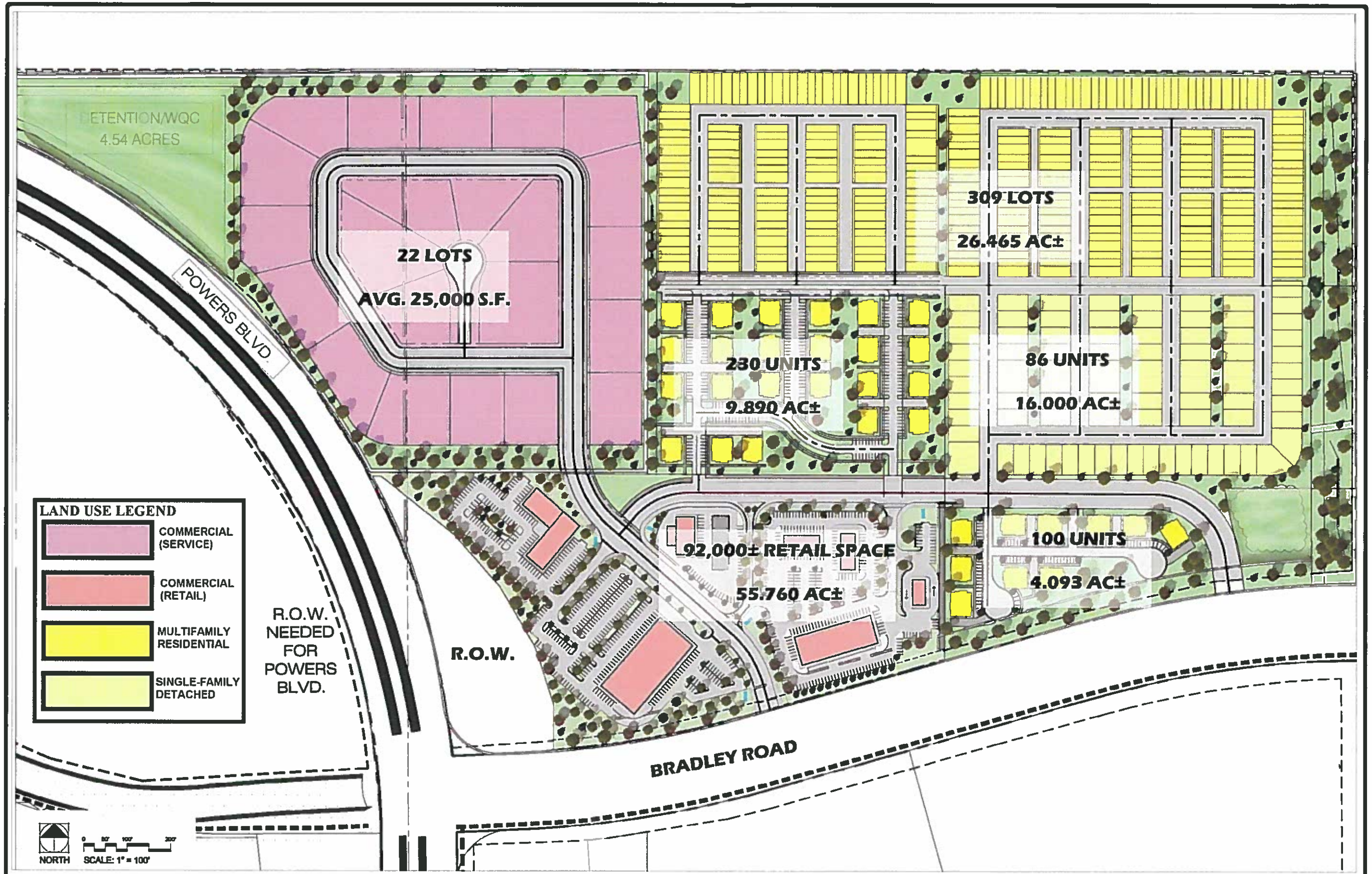
505 ELKTON DRIVE (719) 531-5599
COLORADO SPRINGS, CO. 80907

SITE MAP/TEST BORING LOCATION MAP
WATERVIEW NORTH
POWERS BOULEVARD AND BRADLEY ROAD
EL PASO COUNTY, CO.
FOR: CPR ENTITLEMENTS, LLC

DRAWN	I.I.I.
CHECKED	
DATE	5/5/20
SCALE	AS SHOWN
JOB NO.	200599
FIGURE No.	2



REVISION	BY

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COLORADO SPRINGS, CO. 80907
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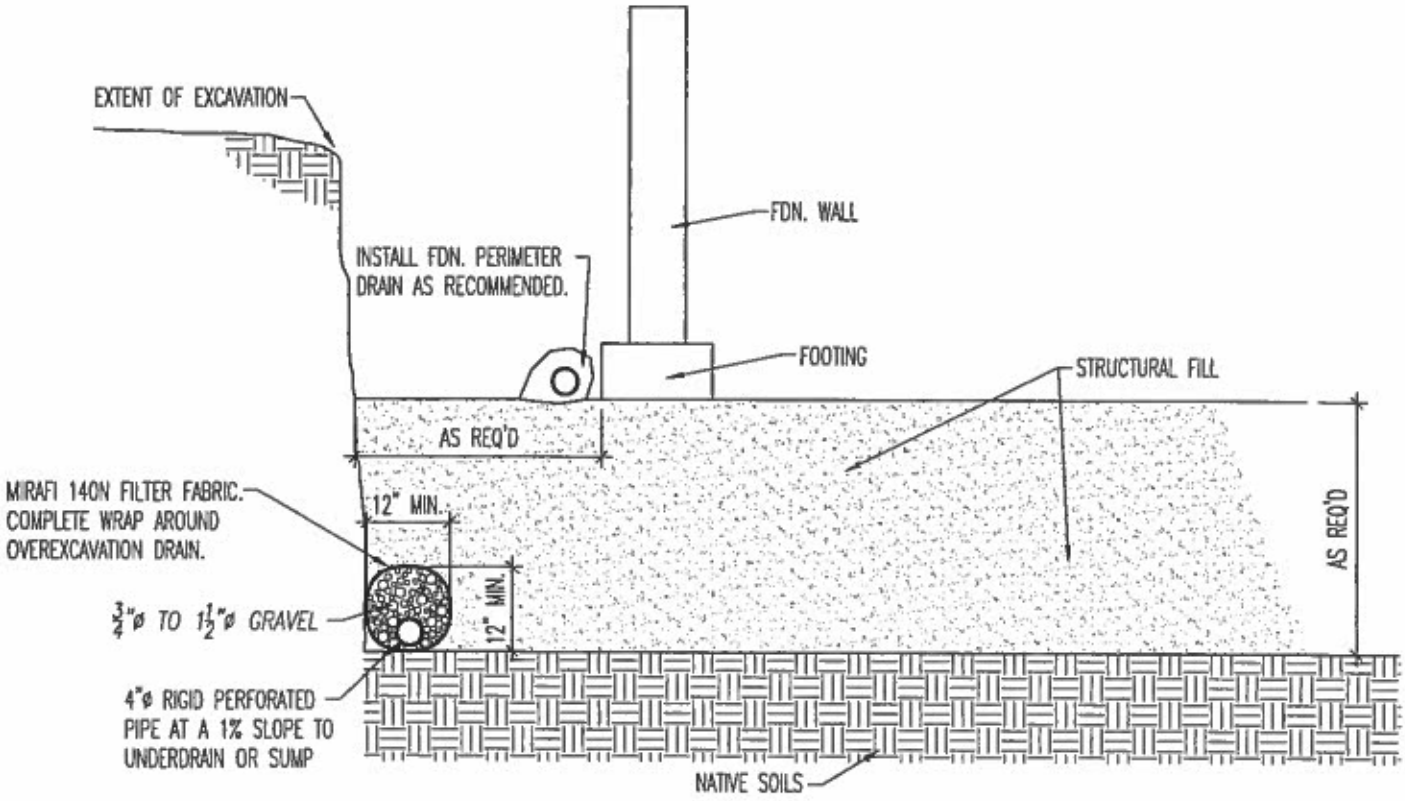
CONCEPT DEVELOPMENT PLAN
WATERVIEW NORTH
POWERS BOULEVARD AND BRADLEY ROAD
EL PASO COUNTY, CO.
FOR: CPR ENTITLEMENTS, LLC

DRAWN	LLL
CHECKED	
DATE	5/5/20
SCALE	AS SHOWN
JOB NO.	200599
FIGURE No.	3



OVEREXCAVATION DRAIN DETAIL

N.T.S.

NOTE:

EXTEND DRAIN TO SUMP AS REQ'D.

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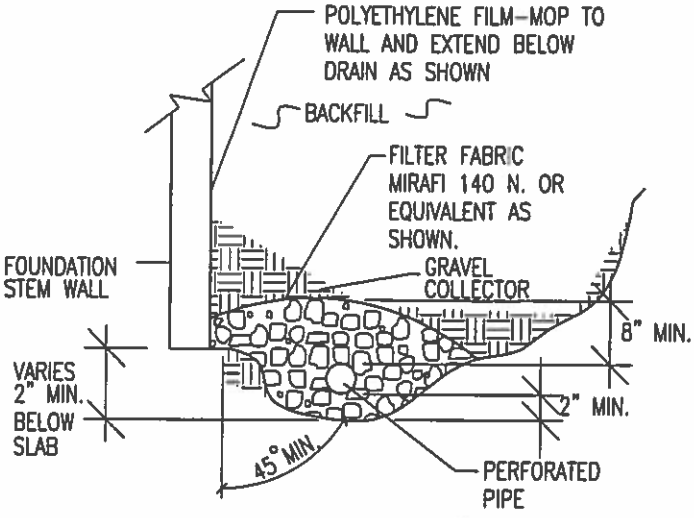
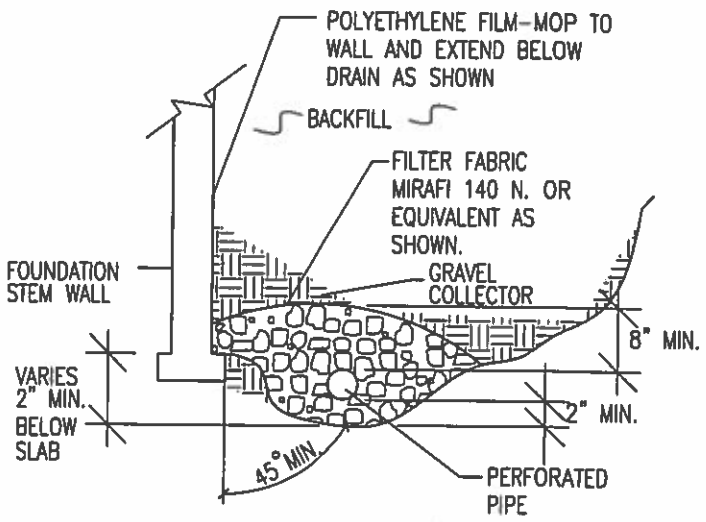
COLORADO SPRINGS, CO. 80907 (719) 531-5599

OVEREXCAVATION DRAIN DETAIL			
DRAWN:	DATE:	DESIGNED BY: D. STEGMAN	CHECKED: LLL

JOB NO.: 200599

FIG. NO.: 4





NOTES:

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

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

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

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

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

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

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PERIMETER DRAIN DETAIL

DRAWN:	DATE:	DESIGNED:	CHECKED:
		DS	LLL

JOB NO.: 200599

FIG NO.: 5

APPENDIX A: Test Boring Logs

TEST BORING NO. 1
DATE DRILLED 3/20/2020
Job # 200599

REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
DRY TO 20', 3/30/20						
CLAY, SANDY, TAN, STIFF TO FIRM, DRY				16	6.0	2
	5			11	6.6	2
	10			21	6.2	2
CLAYSTONE, SANDY, TAN, HARD, MOIST	15			50/10"	13.9	3
	20			50/7"	14.3	3

TEST BORING NO. 2
DATE DRILLED 3/25/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
DRY TO 20', 3/30/20						
CLAY, SANDY, LIGHT BROWN, FIRM TO VERY STIFF, DRY				14	6.2	2
	5			18	6.5	2
	10			18	7.4	2
	15			24	7.8	2
	20			35	6.6	2

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: A- 1

TEST BORING NO. 3
DATE DRILLED 3/25/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
						CLAY, SANDY, BROWN, VERY STIFF TO FIRM, MOIST TO DRY
			19	9.9	2	
5			37	10.9	2	
10			14	3.5	2	
15			17	12.7	2	
						CLAYSTONE, SANDY, GRAY BROWN, HARD, MOIST
20			50/9"	14.4	3	

TEST BORING NO. 4
DATE DRILLED 3/25/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
						SAND, SILTY TO CLAYEY, FINE GRAINED, LIGHT BROWN, LOOSE, DRY TO MOIST
			6	6.0	1	
5			9	2.3	1	
10			6	5.7	1	
15			5	6.2	1	
						WEATHERED CLAYSTONE, SANDY, GRAY BROWN, VERY STIFF, MOIST
20			37	18.0	3	

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: A- 2

TEST BORING NO. 5
DATE DRILLED 3/25/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
			9	3.2	1
5			9	3.2	1
10			4	12.7	2
15			11	16.2	2
20			15	17.3	2

SAND, SILTY, CLAYEY, FINE GRAINED, BROWN, LOOSE, MOIST

CLAY, SANDY, DARK BROWN TO BROWN, SOFT TO FIRM, MOIST

TEST BORING NO. 6
DATE DRILLED 3/25/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
			16	2.8	1
5			31	3.6	1
10			12	2.6	1
15			8	3.7	1
20			9	5.0	1

SAND, VERY SILTY, CLAYEY, FINE TO MEDIUM GRAINED, BROWN TO TAN, MEDIUM DENSE TO DENSE, DRY TO MOIST

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: A- 3

TEST BORING NO. 7
DATE DRILLED 3/25/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
						SAND, CLAYEY, FINE GRAINED, DARK BROWN TO BROWN, MEDIUM DENSE, DRY TO MOIST
			17	1.9	1	
5			27	1.7	1	
10			14	3.8	1	
15			19	5.7	1	
20			34	25.1	2	CLAY, SANDY, VERY STIFF, BROWN, MOIST

TEST BORING NO. 8
DATE DRILLED 3/25/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
						CLAY, SANDY, DARK BROWN TO BROWN, STIFF, DRY TO MOIST
			22	5.6	2	
5			17	6.0	2	
10			23	9.0	2	
15			24	17.0	2	
20			50/11"	18.9	3	CLAYSTONE, SANDY, DARK BROWN, HARD, MOIST

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: A- 4

TEST BORING NO. 9
DATE DRILLED 3/25/2020
Job # 200599

REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
DRY TO 20', 3/30/20						
SAND, SILTY, FINE GRAINED, BROWN, MEDIUM DENSE, MOIST				14	3.1	1
	5			15	5.7	1
CLAY, SANDY, BROWN, STIFF, MOIST	10			14	9.0	2
	15			16	15.9	2
	20			18	17.9	2

TEST BORING NO. 10
DATE DRILLED 3/25/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
DRY TO 20', 3/30/20						
SAND, VERY CLAYEY TO CLAYEY, FINE GRAINED, BROWN, MEDIUM DENSE, MOIST				25	9.4	1
	5			24	3.6	1
CLAY, VERY SANDY, BROWN TO TAN, STIFF TO FIRM, DRY TO MOIST	10			16	7.3	2
	15			13	12.2	2
SAND, SILTY, FINE TO MEDIUM GRAINED, TAN, MEDIUM DENSE, MOIST	20			22	5.6	1

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: A- 5

TEST BORING NO. 11
DATE DRILLED 3/27/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			26	1.2	1	SAND, SILTY, FINE TO MEDIUM GRAINED, TAN, MEDIUM DENSE, DRY
5			36	13.0	2	CLAY, SANDY, LIGHT BROWN, VERY STIFF TO FIRM, MOIST
10			9	9.3	2	
15			27	6.9	2	
20			18	4.7	1	SAND, SILTY, FINE TO COARSE GRAINED, TAN, MEDIUM DENSE, MOIST

TEST BORING NO. 12
DATE DRILLED 3/27/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			4	11.4	2	CLAY, SANDY, DARK BROWN TO BROWN, SOFT TO STIFF, MOIST
5			4	12.8	2	
10			26	18.3	2	
15			13	17.4	2	
20			16	14.1	2	

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: A- 6

TEST BORING NO. 13
DATE DRILLED 3/25/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			14	14.2	2	CLAY, SANDY, TAN, FIRM TO STIFF, MOIST
5			11	7.8	2	
10			17	10.3	2	
15			40	39.7	3	WEATHERED TO FORMATIONAL CLAYSTONE, SANDY, BROWN, VERY STIFF TO HARD, MOIST
20			50/7"	9.8	3	

TEST BORING NO. 14
DATE DRILLED 3/27/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			14	6.1	2	CLAY, SANDY, LIGHT BROWN, FIRM TO STIFF, MOIST
5			13	7.4	2	
10			15	15.3	2	
15			50/9"	16.6	3	CLAYSTONE, SANDY, BROWN, HARD, MOIST
20			50/8"	16.9	3	

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: A-7

TEST BORING NO. 15
DATE DRILLED 3/25/2020
Job # 200599

REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
DRY TO 20', 3/30/20						
CLAY, SANDY, BROWN, STIFF, MOIST				22	11.1	2
WEATHERED TO FORMATIONAL CLAYSTONE, SANDY, BROWN TO DARK BROWN, VERY STIFF TO HARD, MOIST	5			47	12.5	3
	10			50/11"	12.0	3
	15			50/7"	14.0	3
	20			50/9"	15.8	3

TEST BORING NO. 16
DATE DRILLED 3/27/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
DRY TO 20', 3/30/20						
SAND, SILTY, FINE GRAINED, DARK BROWN, MEDIUM DENSE, DRY TO MOIST				14	3.1	1
	5			14	4.2	1
SAND, SILTY, FINE TO MEDIUM GRAINED, TAN, MEDIUM DENSE, MOIST	10			11	6.9	1
	15			13	7.1	1
CLAYSTONE, SANDY, DARK BROWN, HARD, MOIST	20			50/10"	17.9	3

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: A- 8

TEST BORING NO. 17
DATE DRILLED 3/25/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			21	4.5	1	SAND, VERY CLAYEY, SILTY, FINE GRAINED, TAN, MEDIUM DENSE, MOIST
5			20	5.1	1	
10			22	8.5	2	CLAY, SANDY, TAN, STIFF, MOIST
15			50	15.6	3	CLAYSTONE, SANDY, BROWN, HARD, MOIST
20			50/9"	16.0	3	

TEST BORING NO. 18
DATE DRILLED 3/27/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			15	5.3	1	SAND, VERY SILTY TO SILTY, FINE TO MEDIUM GRAINED, TAN, MEDIUM DENSE, MOIST
5			10	3.1	1	
10			20	5.8	1	
15			21	14.5	2	CLAY, SANDY, BROWN, STIFF, MOIST
20			50/9"	14.0	3	CLAYSTONE, SANDY, BROWN, HARD, MOIST

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: A- 10

TEST BORING NO. 19
DATE DRILLED 3/27/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
CLAY, SANDY, TAN, VERY STIFF, MOIST					
			38	8.5	2
CLAYSTONE, SANDY, BROWN, HARD, MOIST					
5			50/8"	9.5	3
10			50/4"	9.9	3
15			50/4"	10.4	3
20			50/4"	11.7	3

TEST BORING NO. 20
DATE DRILLED 3/25/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
CLAY, SANDY, LIGHT BROWN, STIFF, MOIST					
			22	9.4	2
5			23	11.2	2
CLAYSTONE, SANDY, BROWN, HARD, MOIST					
10			50	14.6	3
15			50/9"	15.3	3
20			50/5"	13.7	3

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: A- 11

TEST BORING NO. 21
DATE DRILLED 3/27/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			29	9.9	2	CLAY, SANDY, DARK BROWN, STIFF, MOIST
5			50/11"	11.7	3	CLAYSTONE, SANDY, DARK BROWN, HARD, MOIST
10			50/6"	11.7	3	
15			50/5"	11.3	3	
20			50/5"	11.1	3	

TEST BORING NO. 22
DATE DRILLED 3/27/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			22	10.0	2	CLAY, SANDY, BROWN, STIFF, MOIST
5			28	4.6	1	SAND, SILTY, FINE TO MEDIUM GRAINED, BROWN, MEDIUM DENSE, MOIST
10			18	7.0	2	CLAY, SANDY, LIGHT BROWN, STIFF, MOIST
15			22	7.3	2	
20			50/6"	13.3	3	CLAYSTONE, SANDY, DARK BROWN, HARD, MOIST

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: A-12

TEST BORING NO. 23
DATE DRILLED 3/25/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
						CLAY, SANDY, BROWN TO LIGHT BROWN, STIFF, MOIST
			18	10.4	2	
5			22	11.1	2	
10			19	9.1	2	
15			15	12.8	2	
20			28	14.6	2	

TEST BORING NO. 24
DATE DRILLED 3/27/2020
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
						CLAY, SANDY, GRAY BROWN, STIFF, MOIST
			27	10.8	2	
5			47	14.7	3	WEATHERED TO FORMATIONAL CLAYSTONE, SANDY, BROWN, VERY STIFF TO HARD, MOIST
10			50/11"	17.6	3	
15			50/3"	11.4	3	
20			50/5"	10.5	3	

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TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO: 200599
FIG NO: A- 13

TEST BORING NO. 25
DATE DRILLED 3/27/2020
Job # 200599

REMARKS

DRY TO 20', 3/30/20

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			15	6.8	2	CLAY, SANDY, TAN TO DARK BROWN, STIFF, MOIST
5			23	7.9	2	
10			28	10.4	2	
15			50/7"	9.6	3	CLAYSTONE, SANDY, DARK BROWN, HARD, MOIST
20			50/4"	9.6	3	

TEST BORING NO.
DATE DRILLED
CLIENT CPR ENTITLEMENTS
LOCATION WATERVIEW NORTH

REMARKS

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
5					
10					
15					
20					

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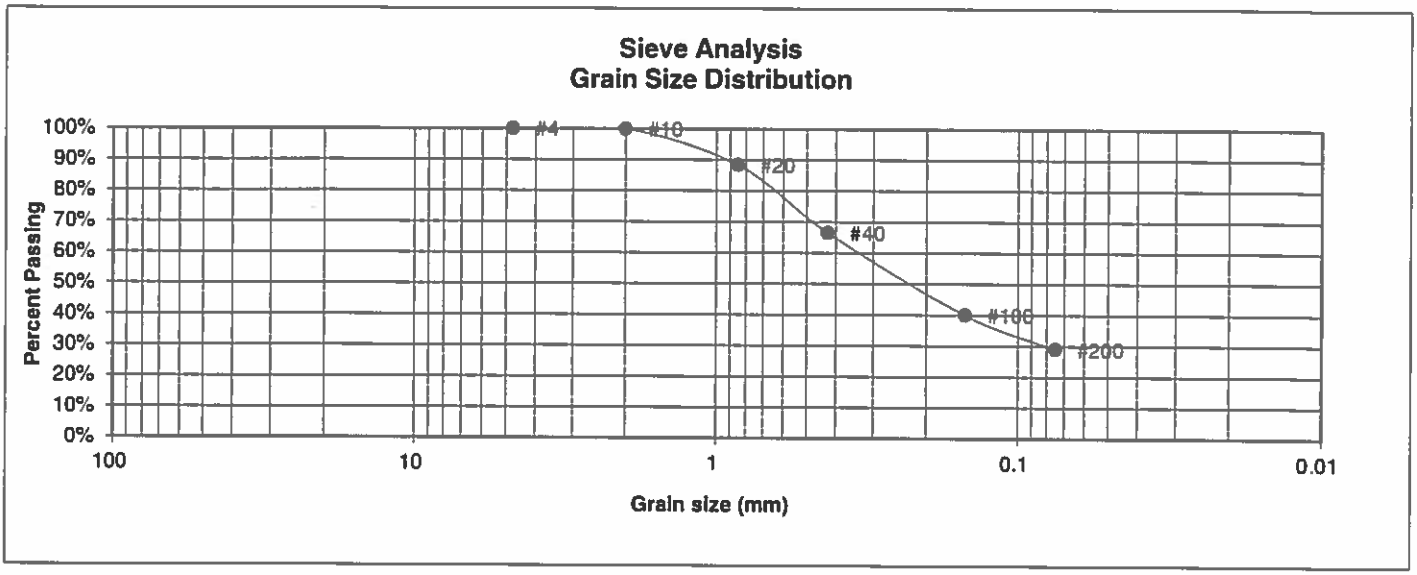
TEST BORING LOG

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: A- 15

APPENDIX B: Laboratory Testing Results

UNIFIED CLASSIFICATION	SM-SC	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	1	PROJECT	WATERVIEW NORTH
TEST BORING #	5	JOB NO.	200599
DEPTH (FT)	2-3	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.9%
20	88.4%
40	66.5%
100	40.0%
200	29.0%

Atterberg Limits	
Plastic Limit	18
Liquid Limit	25
Plastic Index	7

Swell	
Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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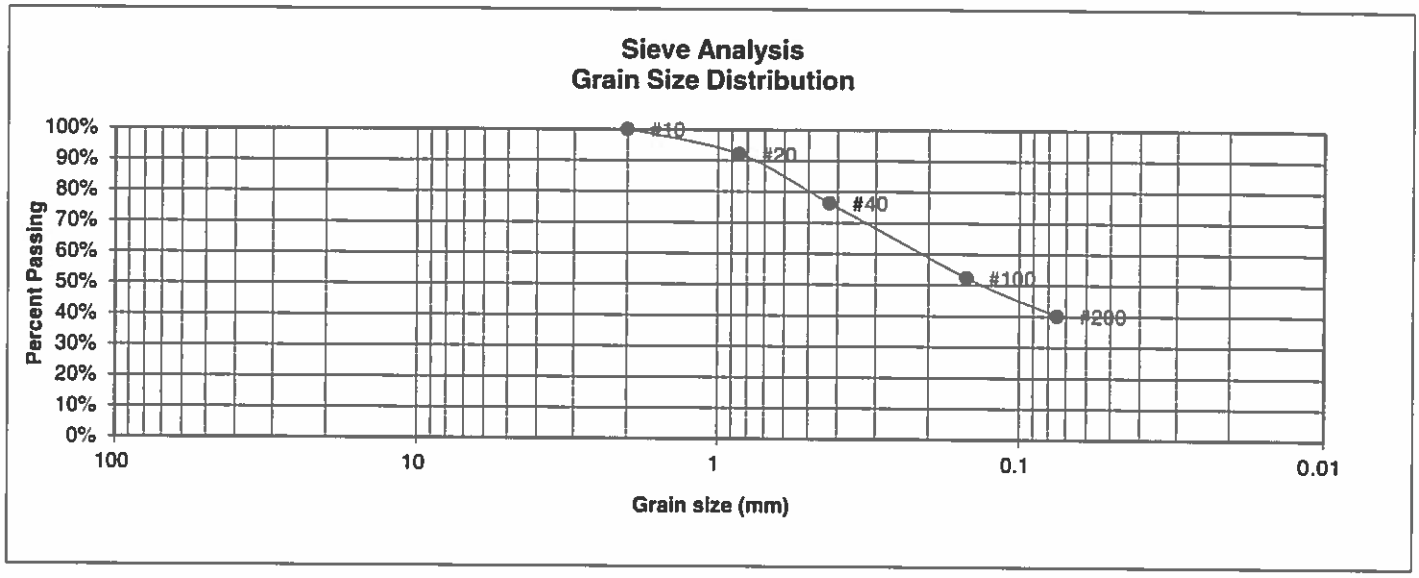
LABORATORY TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599

FIG NO.: B-1

UNIFIED CLASSIFICATION	SM-SC	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	1	PROJECT	WATERVIEW NORTH
TEST BORING #	6	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	92.1%
40	76.3%
100	52.4%
200	40.2%

Atterberg Limits

Plastic Limit	17
Liquid Limit	24
Plastic Index	7

Swell

Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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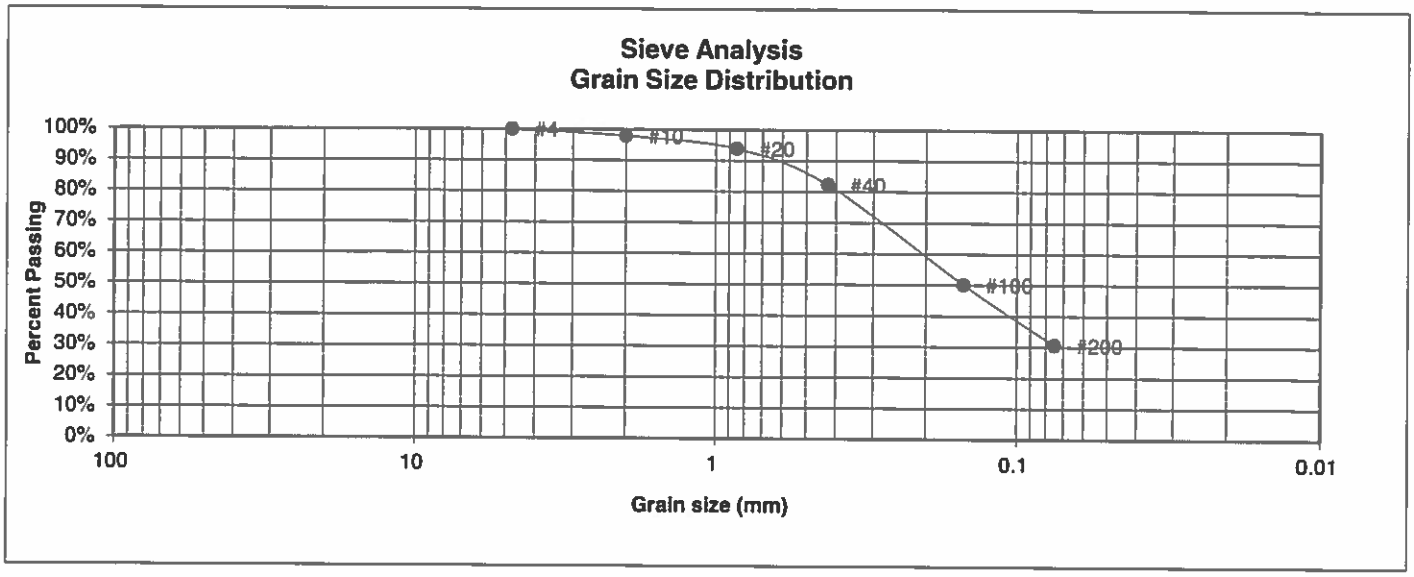
LABORATORY TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE:
			9/16/20

JOB NO.: 200599

FIG NO.: B-2

UNIFIED CLASSIFICATION	SM	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	1	PROJECT	WATERVIEW NORTH
TEST BORING #	9	JOB NO.	200599
DEPTH (FT)	2-3	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	97.9%
20	93.9%
40	82.3%
100	50.1%
200	30.6%

Atterberg Limits

Plastic Limit

Liquid Limit

Plastic Index

Swell

Moisture at start	13.0%
Moisture at finish	17.7%
Moisture increase	4.7%
Initial dry density (pcf)	102
Swell (psf)	150

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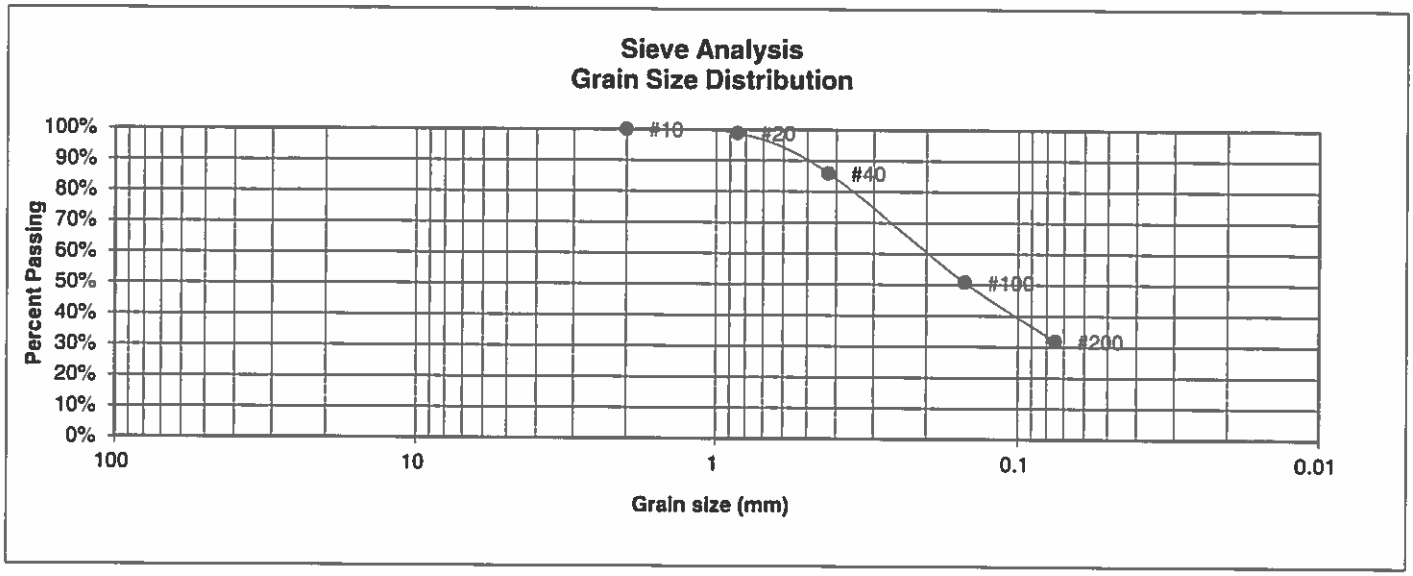
LABORATORY TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE: 4/14/20

JOB NO.: 200599

FIG NO.: B-3

UNIFIED CLASSIFICATION	SM	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	1	PROJECT	WATERVIEW NORTH
TEST BORING #	16	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	98.9%
40	85.9%
100	50.8%
200	31.9%

Atterberg Limits	
Plastic Limit	19
Liquid Limit	22
Plastic Index	3

Swell	
Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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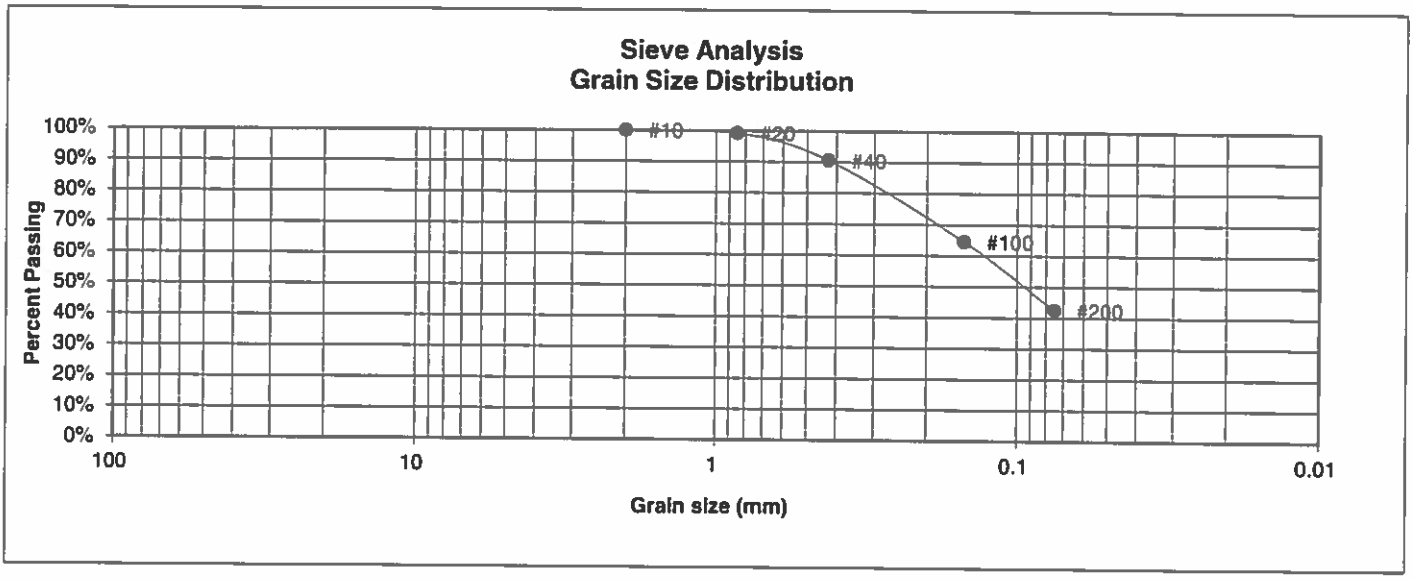
LABORATORY TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599

FIG NO.: B-4

UNIFIED CLASSIFICATION	SC-SM	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	1	PROJECT	WATERVIEW NORTH
TEST BORING #	17	JOB NO.	200599
DEPTH (FT)	2-3	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	99.2%
40	90.5%
100	64.6%
200	42.4%

Atterberg Limits

Plastic Limit	20
Liquid Limit	25
Plastic Index	5

Swell

Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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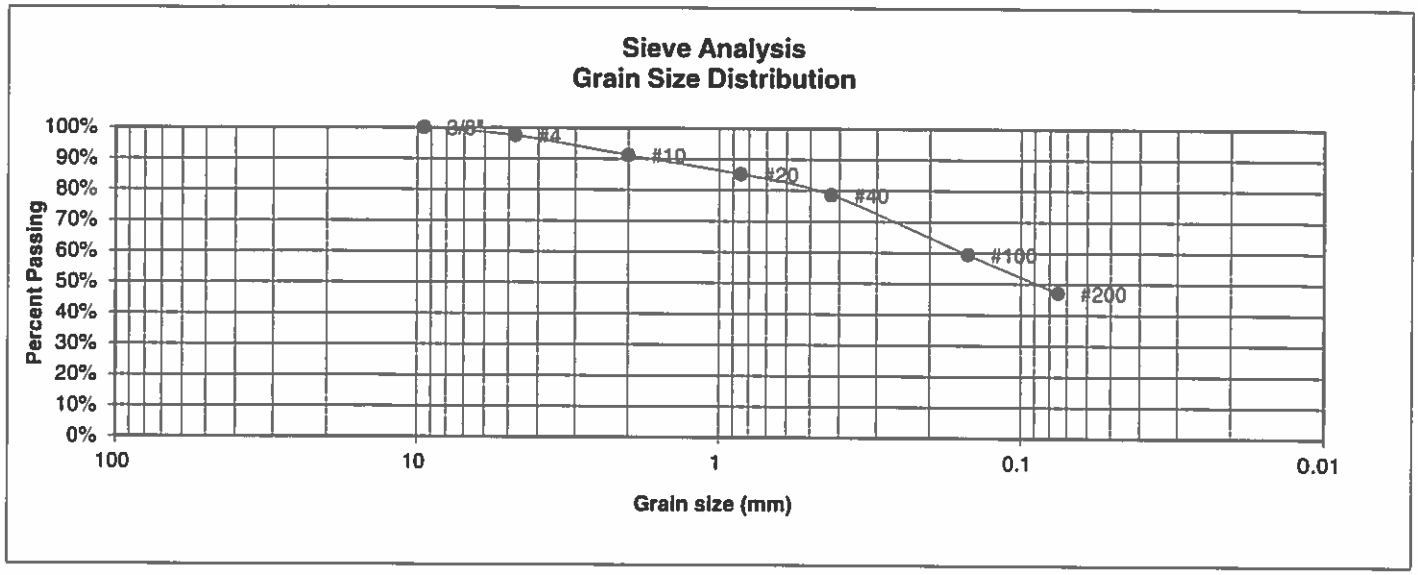
LABORATORY TEST RESULTS

DRAWN	DATE	CHECKED	DATE
			4/16/20

JOB NO.: 200599

FIG NO.: B-5

UNIFIED CLASSIFICATION	SM	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	1	PROJECT	WATERVIEW NORTH
TEST BORING #	18	JOB NO.	200599
DEPTH (FT)	2-3	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	97.5%
10	91.2%
20	85.2%
40	78.6%
100	59.4%
200	47.1%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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LABORATORY TEST RESULTS

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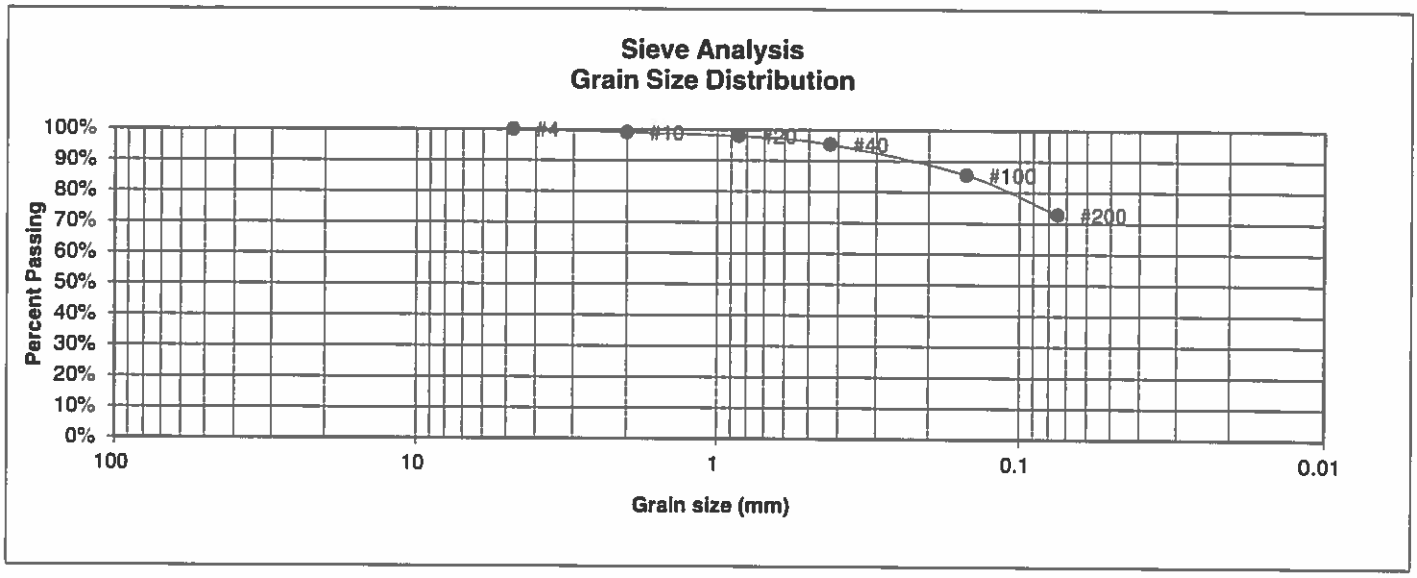
FIG NO.: B-6

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	1	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.0%
20	97.9%
40	95.3%
100	85.6%
200	72.8%

Atterberg Limits

Plastic Limit	18
Liquid Limit	29
Plastic Index	11

Swell

Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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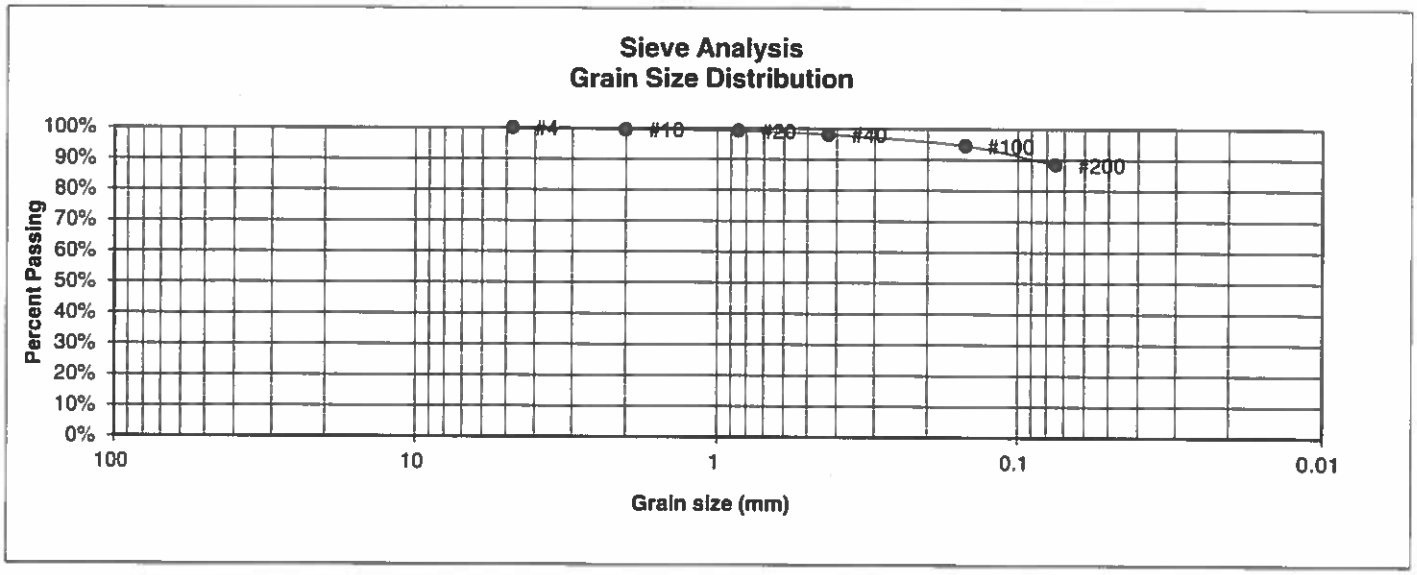
FIG NO: B-7

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	2	JOB NO.	200599
DEPTH (FT)	2-3	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.5%
20	99.1%
40	98.1%
100	94.5%
200	88.4%

Atterberg Limits	
Plastic Limit	18
Liquid Limit	31
Plastic Index	13

Swell	
Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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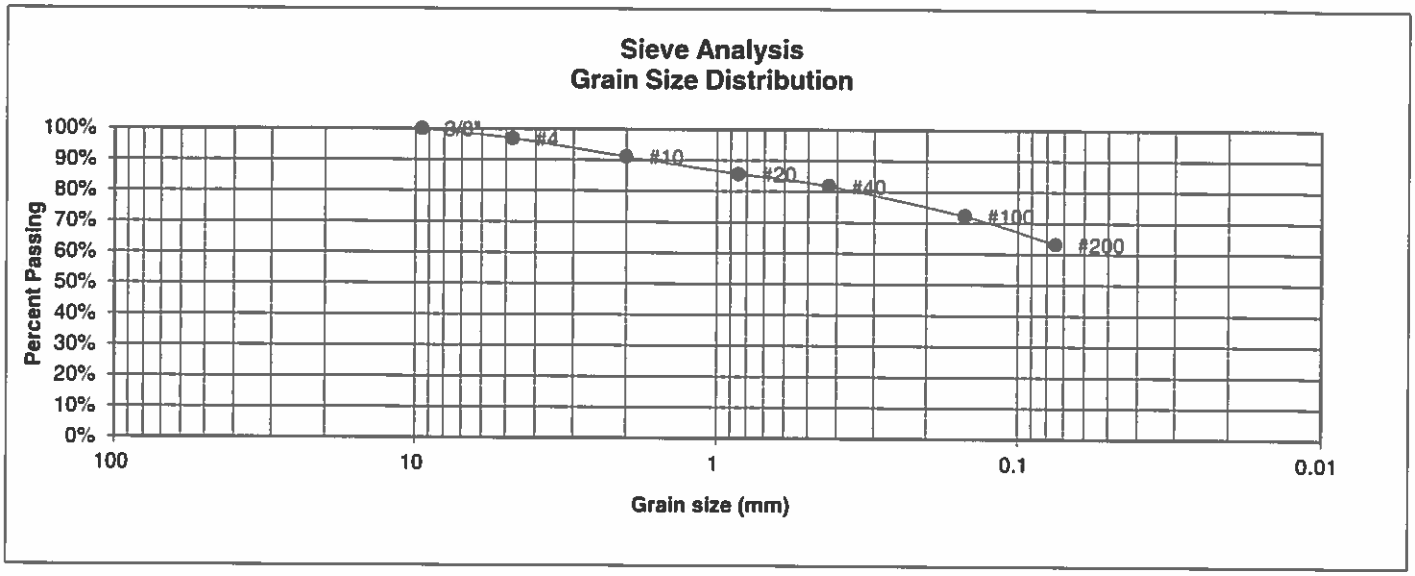
JOB NO.: 200599

FIG NO.: B-8

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	3	JOB NO.	200599
DEPTH (FT)	10	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	96.9%
10	91.1%
20	85.6%
40	81.7%
100	72.3%
200	63.2%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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LABORATORY TEST RESULTS

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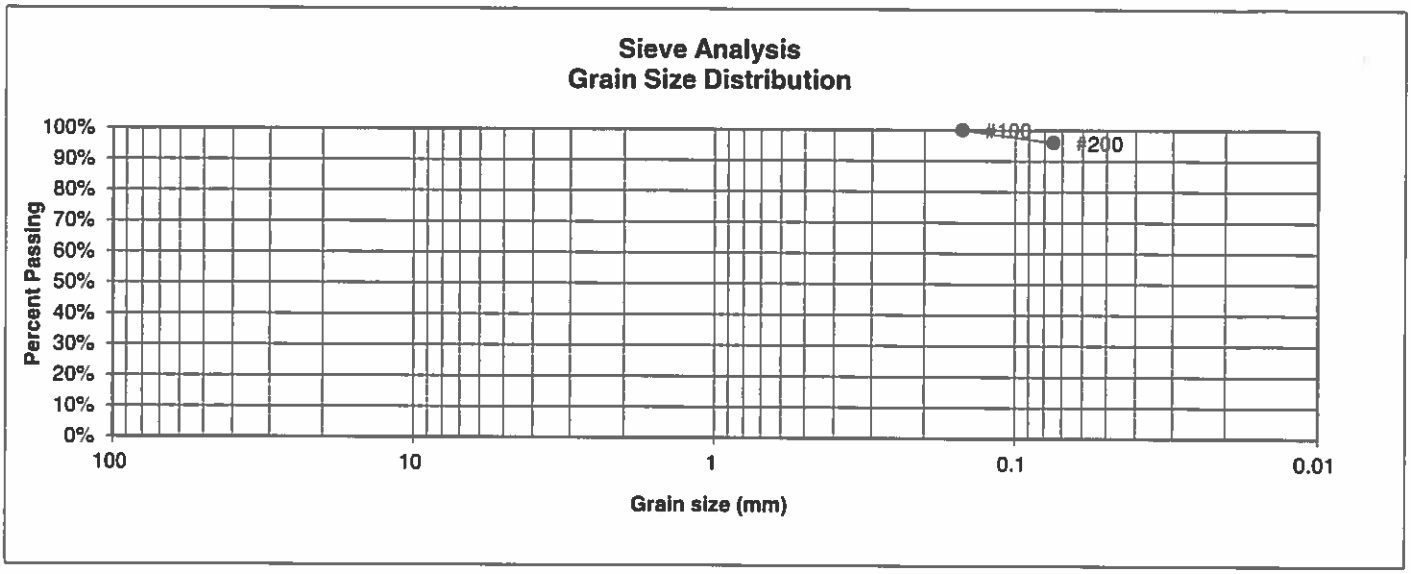
JOB NO.: 200599

FIG NO.: B-9

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	8	JOB NO.	200599
DEPTH (FT)	10	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	
100	100.0%
200	95.9%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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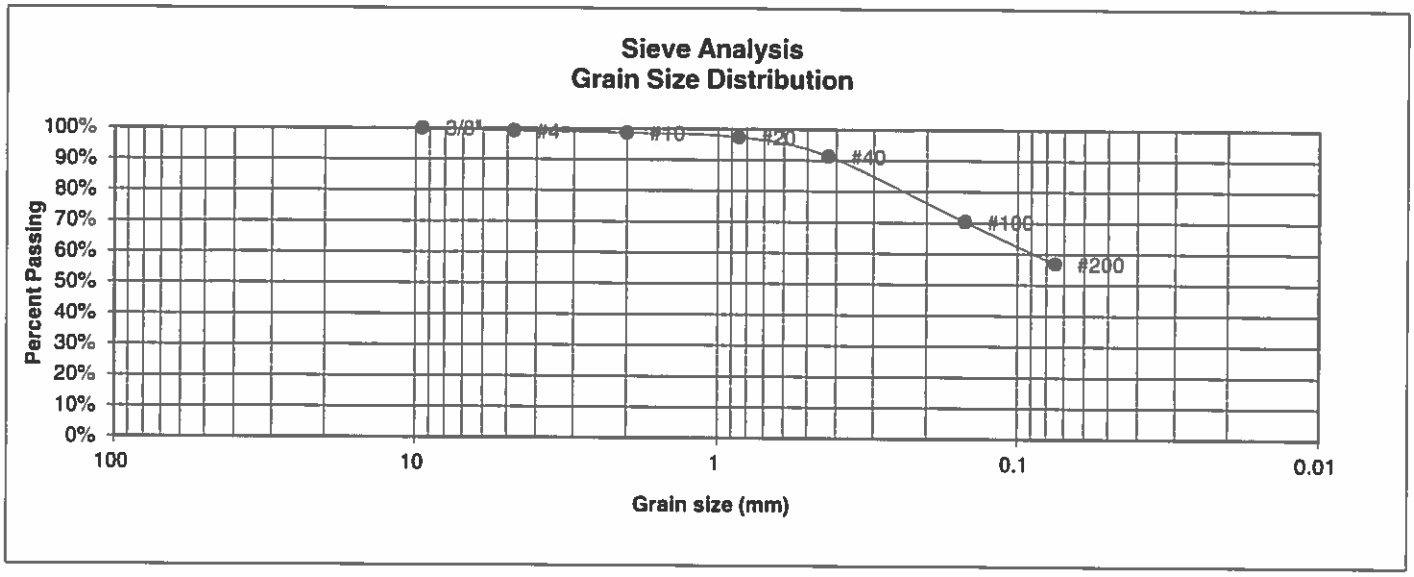
JOB NO.: 200599

FIG NO.: B-10

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	10	JOB NO.	200599
DEPTH (FT)	10	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	99.1%
10	98.7%
20	97.4%
40	91.3%
100	70.3%
200	56.9%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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LABORATORY TEST RESULTS

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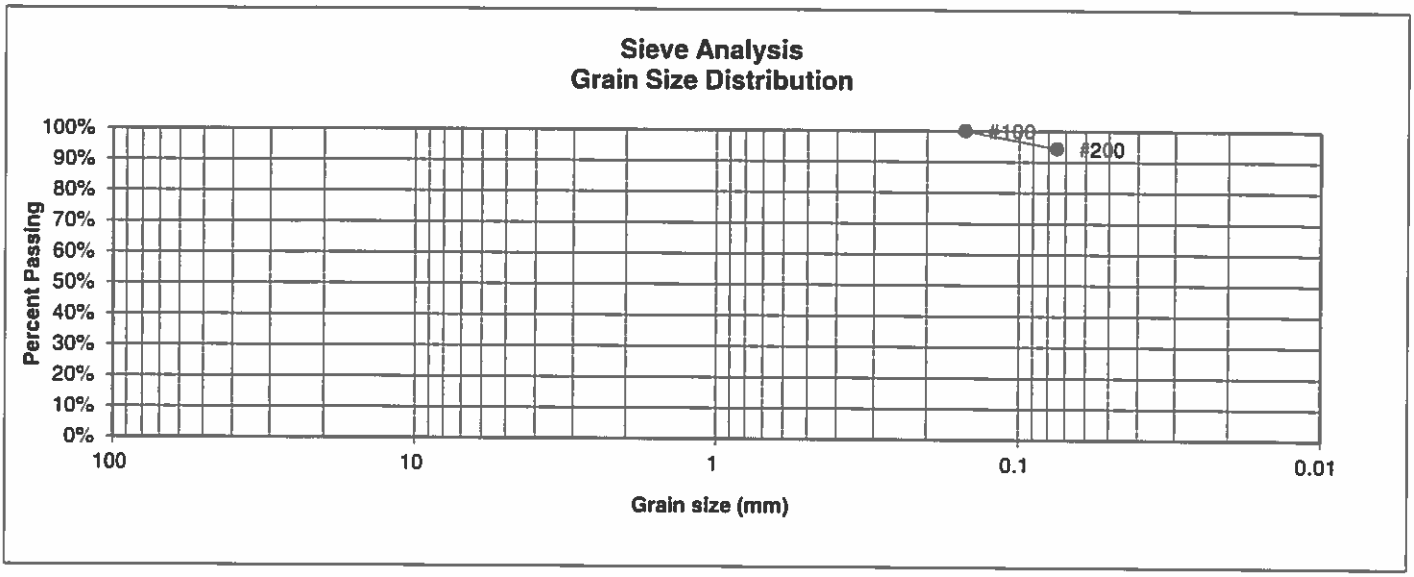
FIG NO: B-11

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	11	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	
100	100.0%
200	94.3%

Atterberg Limits

Plastic Limit	16
Liquid Limit	38
Plastic Index	22

Swell

Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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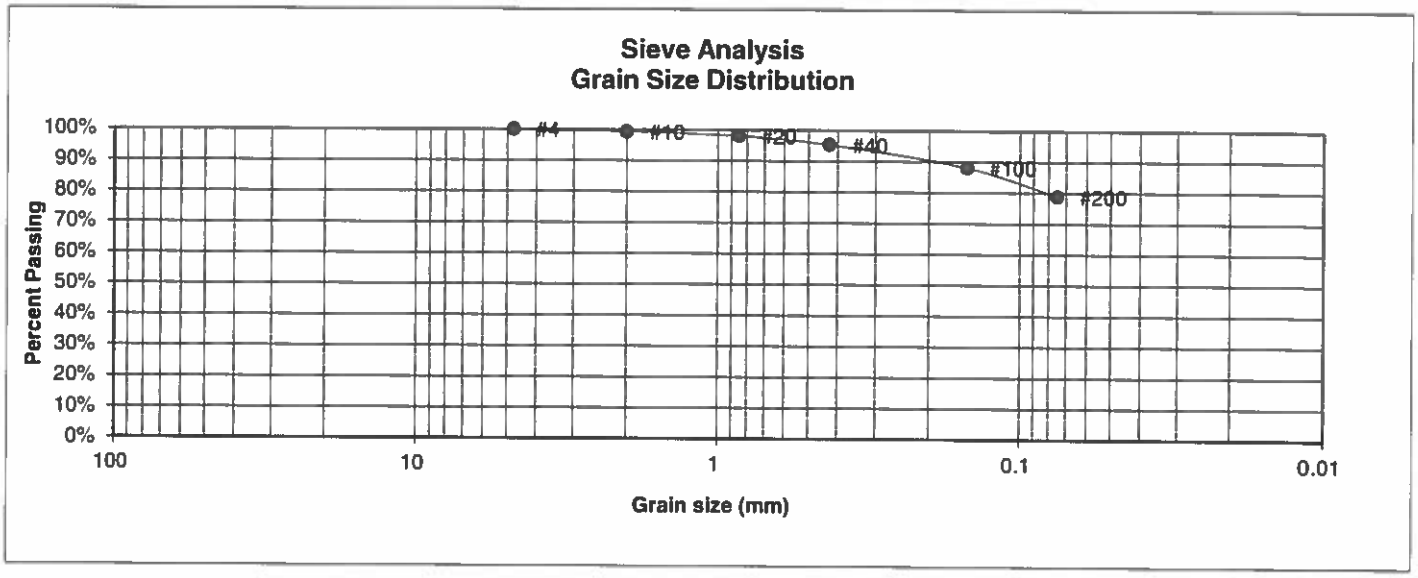
FIG NO.: B-12

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	12	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.3%
20	98.1%
40	95.3%
100	88.1%
200	78.9%

Atterberg Limits

Plastic Limit

Liquid Limit

Plastic Index

Swell

Moisture at start	12.7%
Moisture at finish	20.1%
Moisture increase	7.4%
Initial dry density (pcf)	104
Swell (psf)	670

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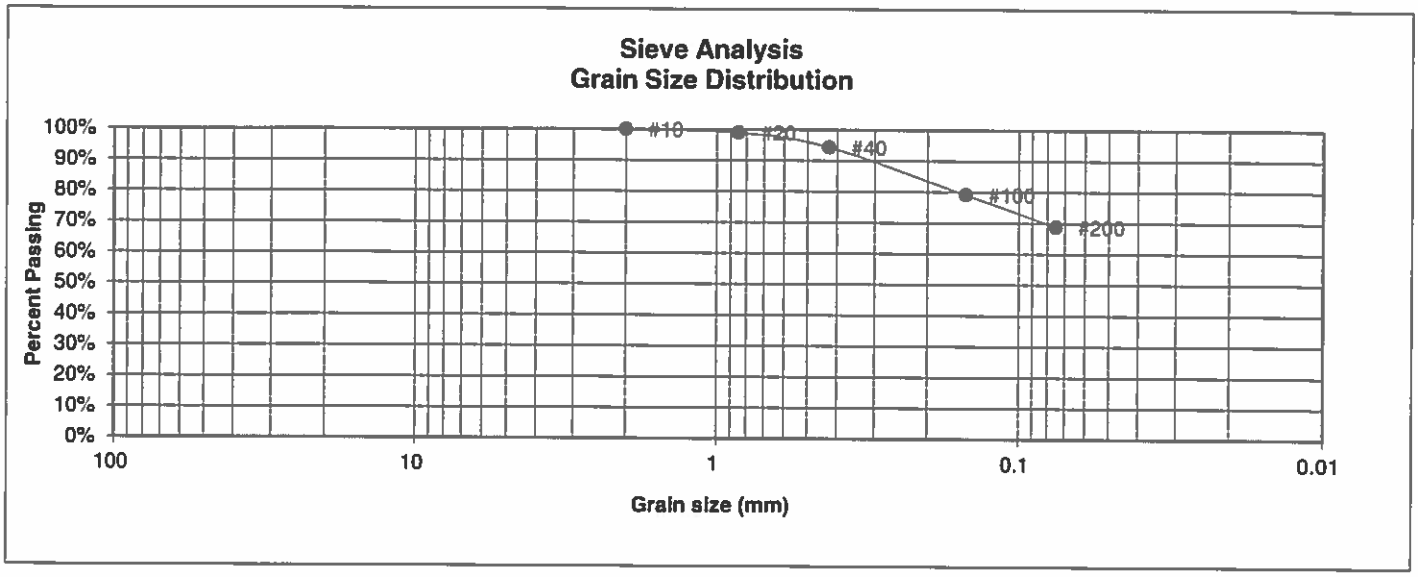
FIG NO.: B-13

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	14	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	99.0%
40	94.3%
100	79.1%
200	68.8%

Atterberg Limits	
Plastic Limit	15
Liquid Limit	33
Plastic Index	18

Swell	
Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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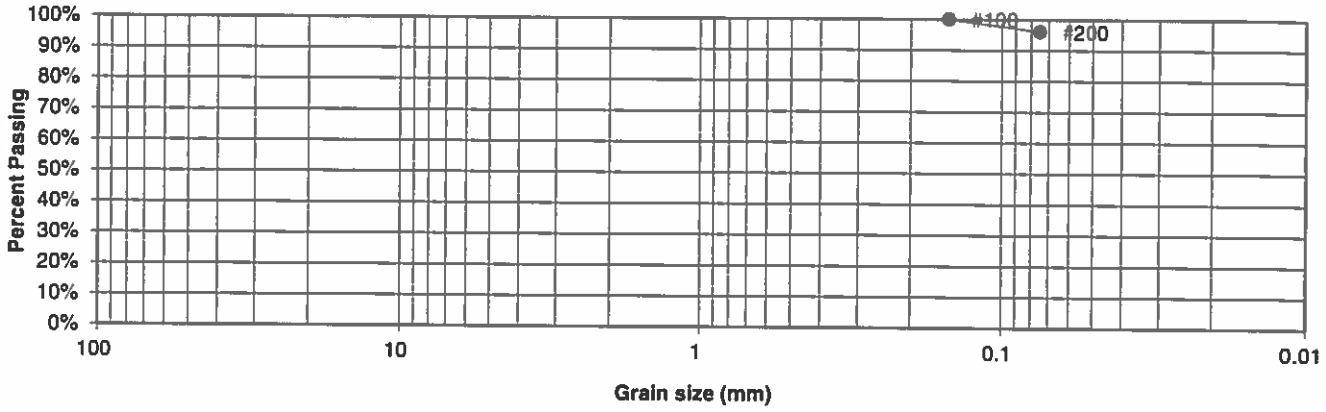
FIG NO.: B-14

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	20	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	
100	100.0%
200	96.1%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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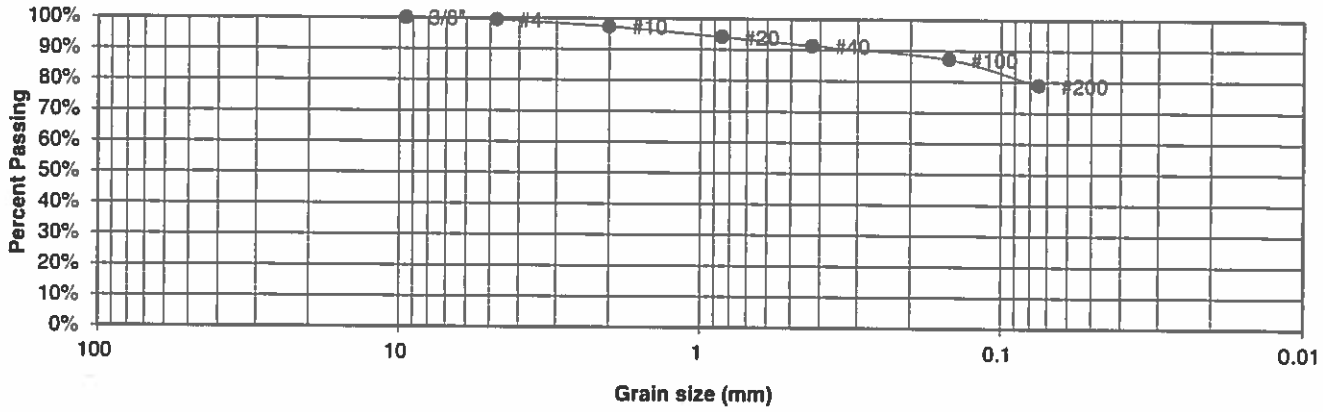
FIG NO.: B-15

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	22	JOB NO.	200599
DEPTH (FT)	10	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	99.4%
10	97.3%
20	94.1%
40	91.3%
100	87.2%
200	78.9%

Atterberg Limits	
Plastic Limit	15
Liquid Limit	32
Plastic Index	17

Swell	
Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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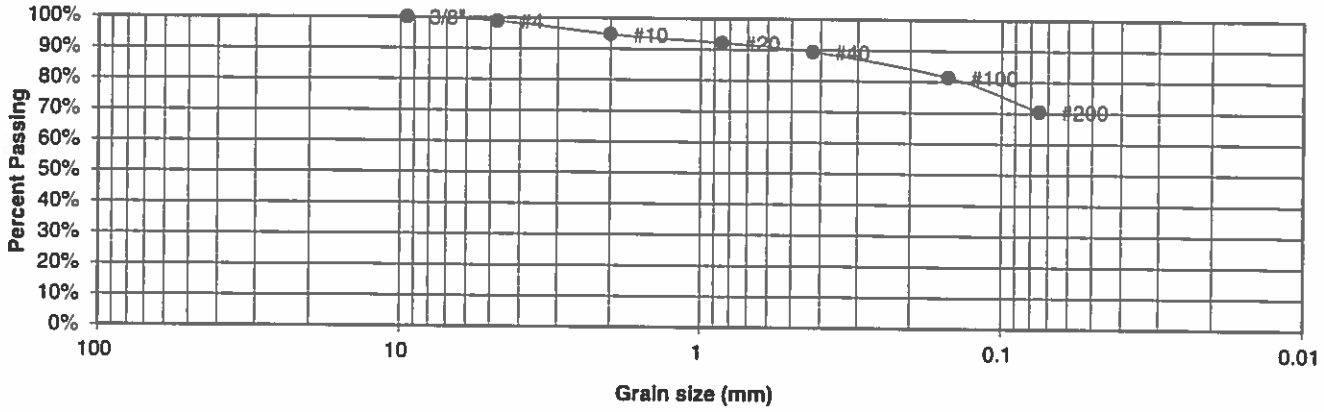
FIG NO: B-16

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	25	JOB NO.	200599
DEPTH (FT)	2-3	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	98.9%
10	94.7%
20	92.2%
40	89.4%
100	81.5%
200	70.5%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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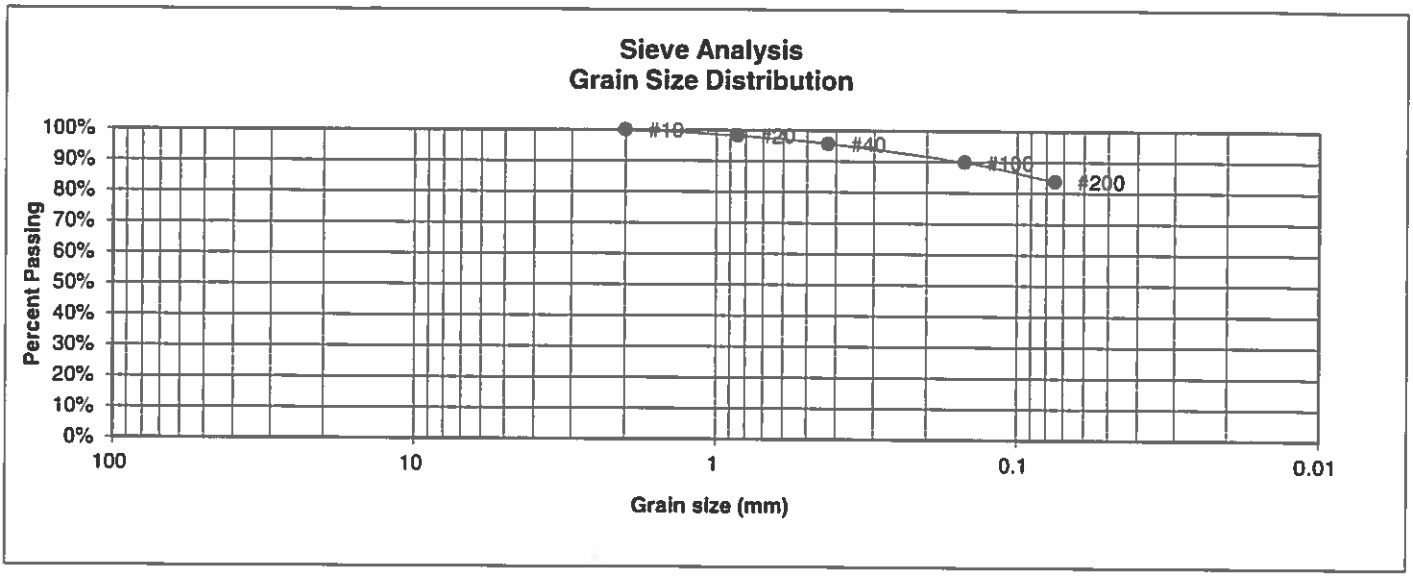
			4/16/20

JOB NO.: 200599

FIG NO.: B-17

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	25	JOB NO.	200599
DEPTH (FT)	10	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	98.2%
40	95.7%
100	89.9%
200	83.8%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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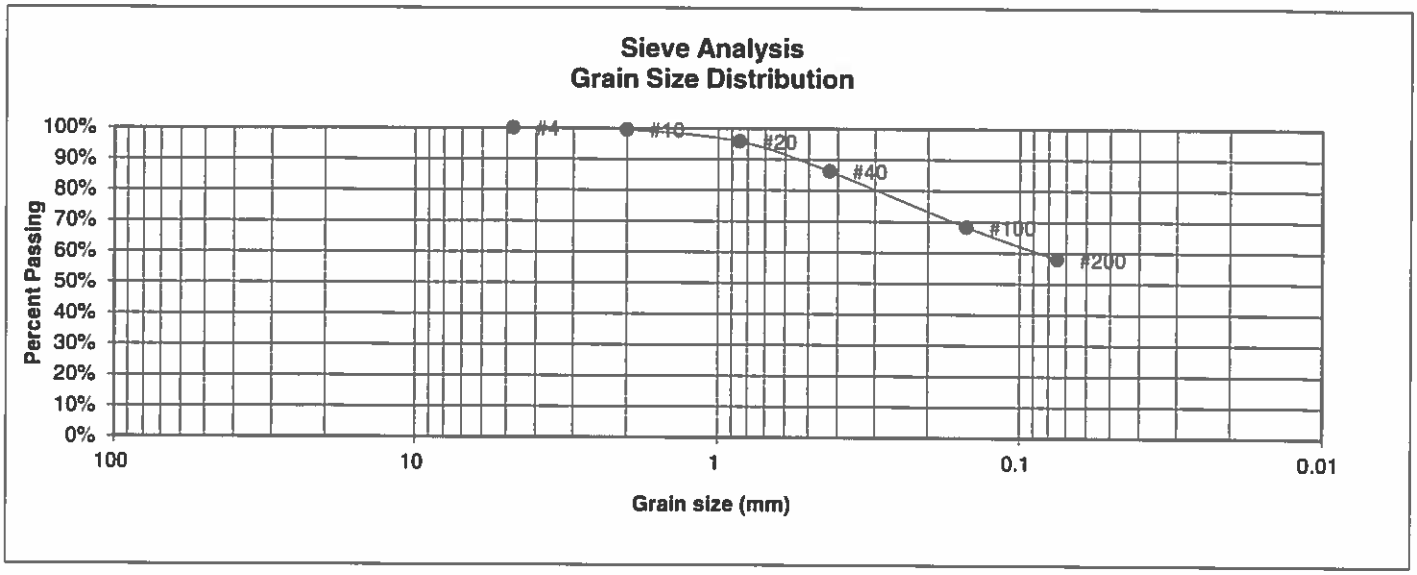
FIG NO.: B-18

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	7	JOB NO.	200599
DEPTH (FT)	20	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.5%
20	95.8%
40	86.2%
100	68.3%
200	57.9%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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LABORATORY TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE: 4/10/12

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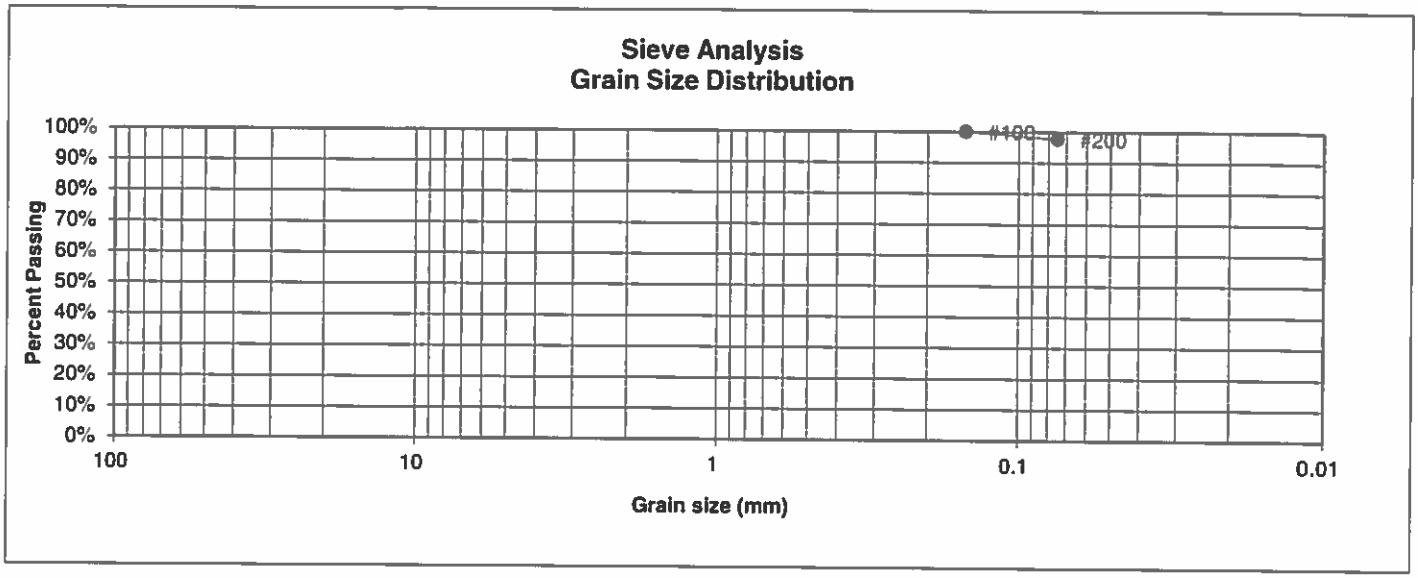
FIG NO. B-19

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	18	JOB NO.	200599
DEPTH (FT)	15	TEST BY	BL



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

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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LABORATORY TEST RESULTS

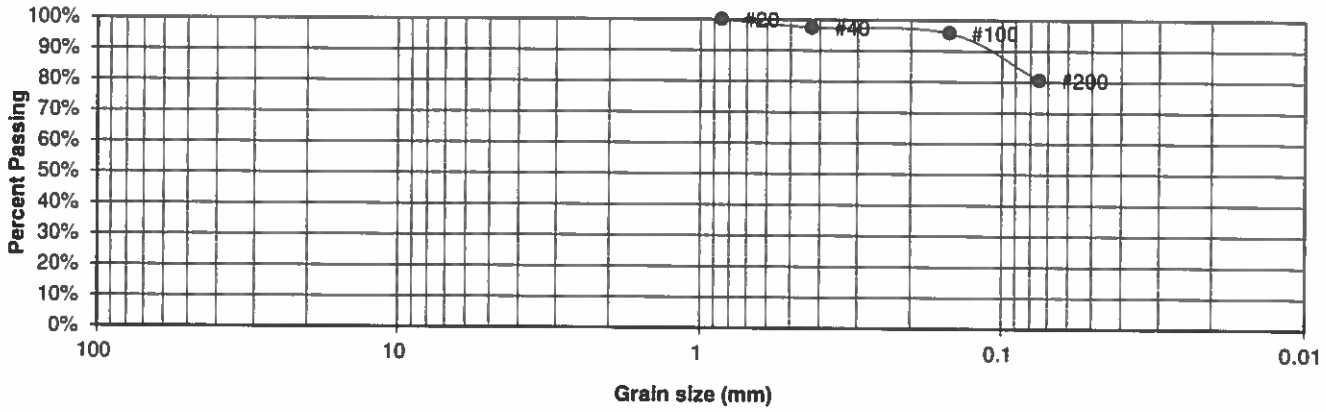
DRAWN:	DATE:	CHECKED:	DATE:
			9/14/20

JOB NO.: 200599

FIG NO.: B-26

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	2	PROJECT	WATERVIEW NORTH
TEST BORING #	23	JOB NO.	200599
DEPTH (FT)	15	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	100.0%
40	97.4%
100	95.8%
200	80.6%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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LABORATORY TEST RESULTS

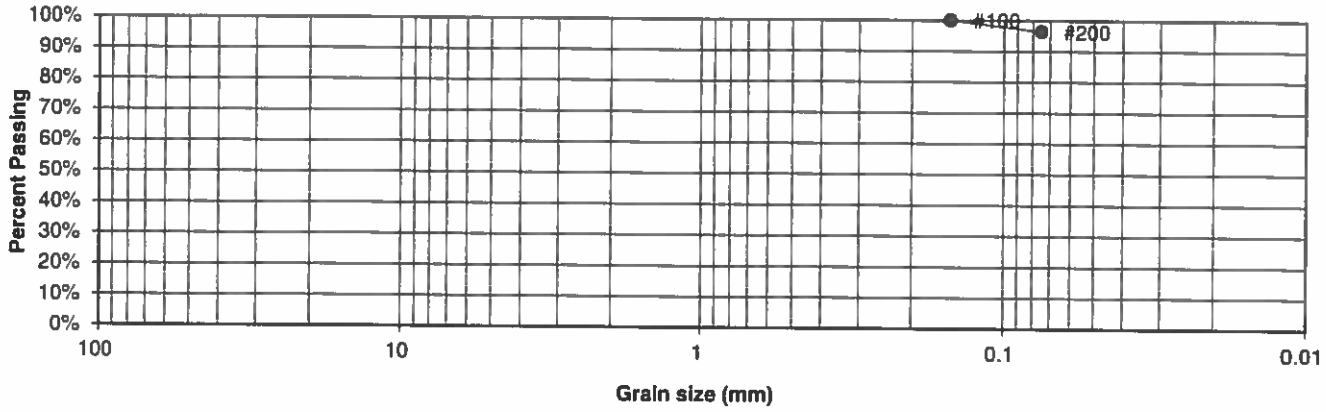
DRAWN:	DATE:	CHECKED:	DATE:
		AL	4/16/20

JOB NO.: 200599

FIG NO.: B-21

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	3	PROJECT	WATERVIEW NORTH
TEST BORING #	15	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	
100	100.0%
200	96.4%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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LABORATORY TEST RESULTS

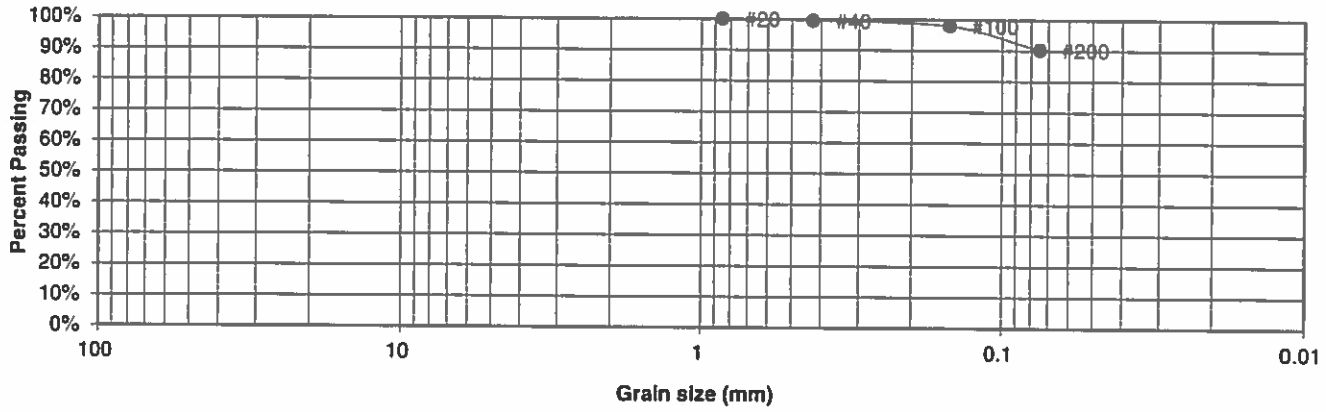
DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599

FIG NO.: B-22

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	3	PROJECT	WATERVIEW NORTH
TEST BORING #	19	JOB NO.	200599
DEPTH (FT)	10	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	100.0%
40	99.5%
100	97.9%
200	90.2%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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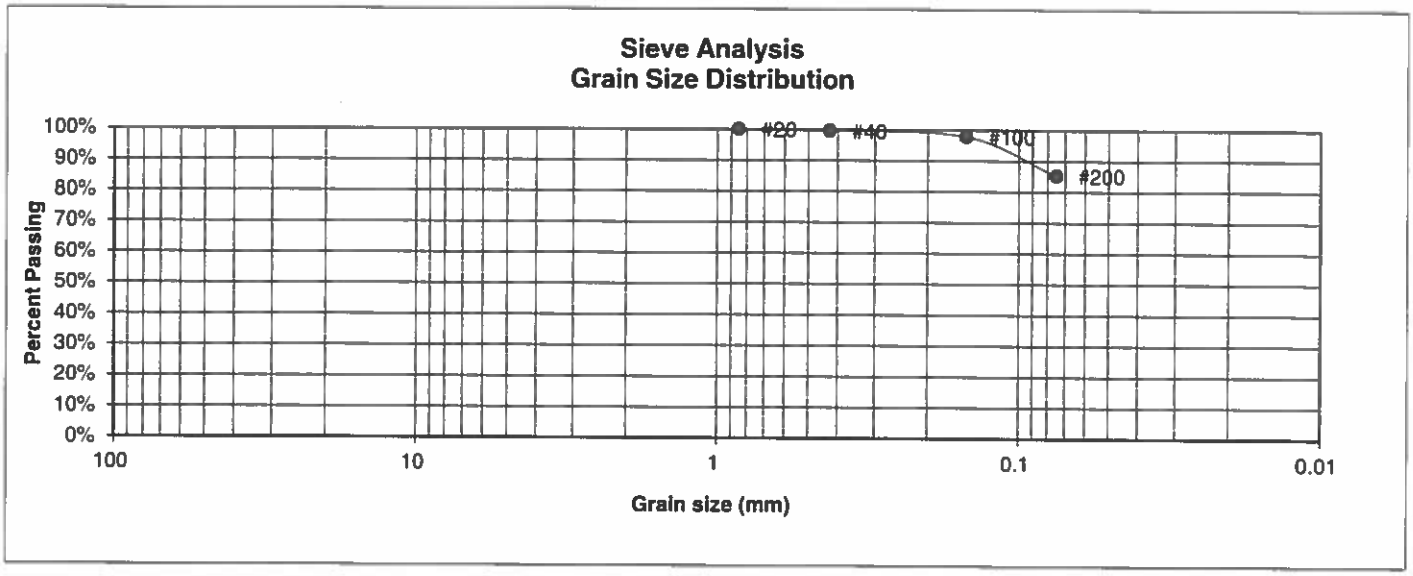
LABORATORY TEST RESULTS

DRAWN	DATE	CHECKED	DATE
			4/16/20

JOB NO.: 200599
FIG NO.: B-23

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	3	PROJECT	WATERVIEW NORTH
TEST BORING #	21	JOB NO.	200599
DEPTH (FT)	5	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	100.0%
40	99.6%
100	97.9%
200	85.3%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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LABORATORY TEST RESULTS

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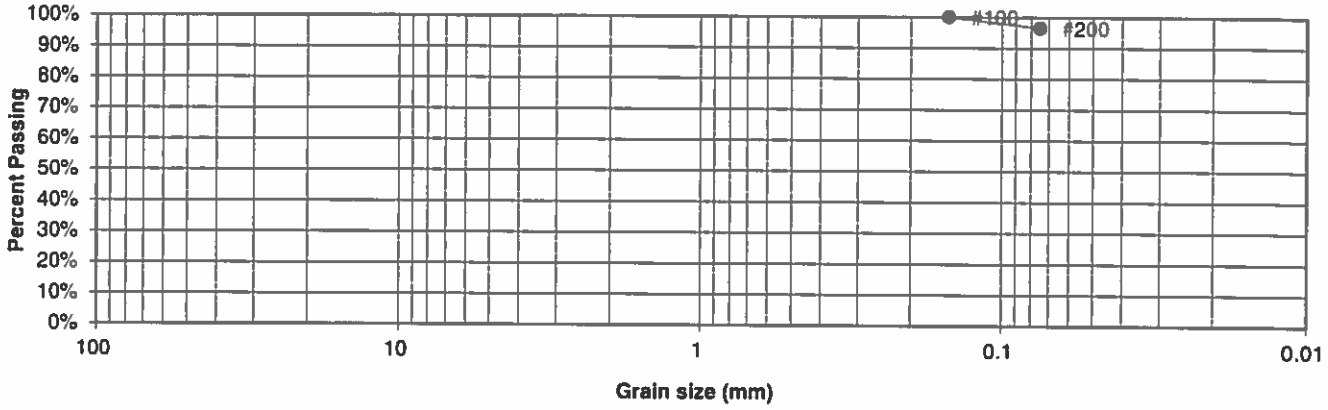
JOB NO.: 200599

FIG NO.: B-24

UNIFIED CLASSIFICATION	CH	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	3	PROJECT	WATERVIEW NORTH
TEST BORING #	24	JOB NO.	200599
DEPTH (FT)	10	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	
100	100.0%
200	96.5%

Atterberg Limits	
Plastic Limit	18
Liquid Limit	54
Plastic Index	36

Swell	
Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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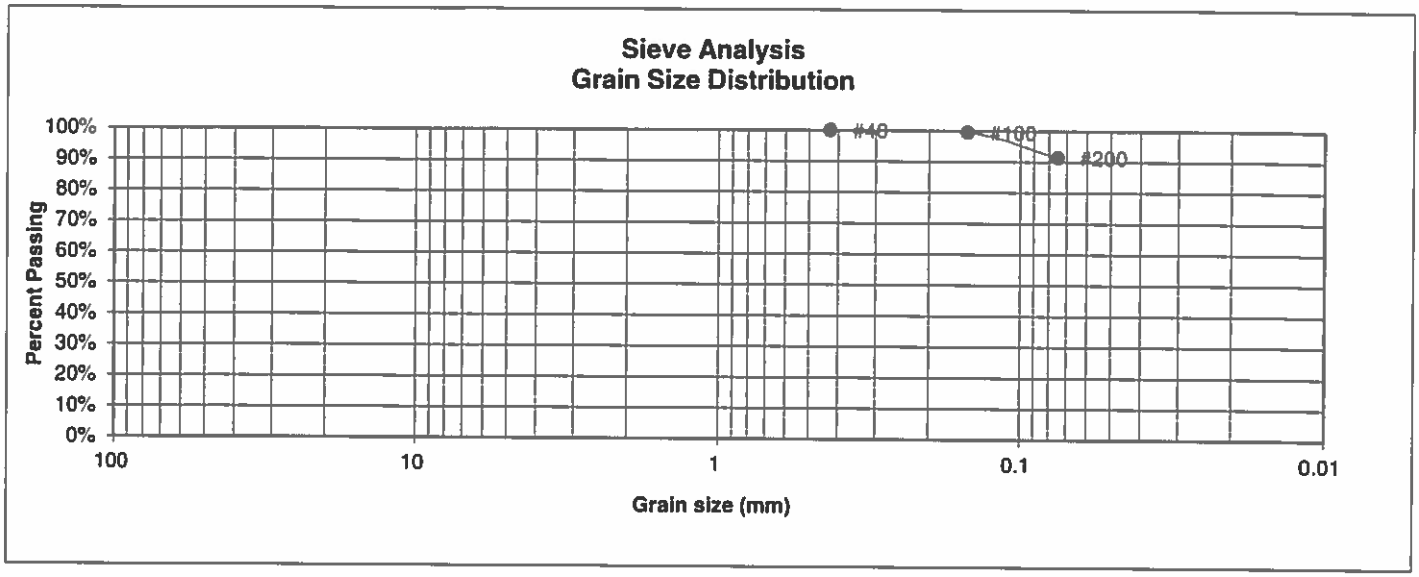
JOB NO.: 200599

FIG NO.: B-25

UNIFIED CLASSIFICATION	CH	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	3	PROJECT	WATERVIEW NORTH
TEST BORING #	4	JOB NO.	200599
DEPTH (FT)	20	TEST BY	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	100.0%
100	99.5%
200	91.4%

Atterberg Limits

Plastic Limit	24
Liquid Limit	50
Plastic Index	26

Swell

Moisture at start

Moisture at finish

Moisture increase

Initial dry density (pcf)

Swell (psf)

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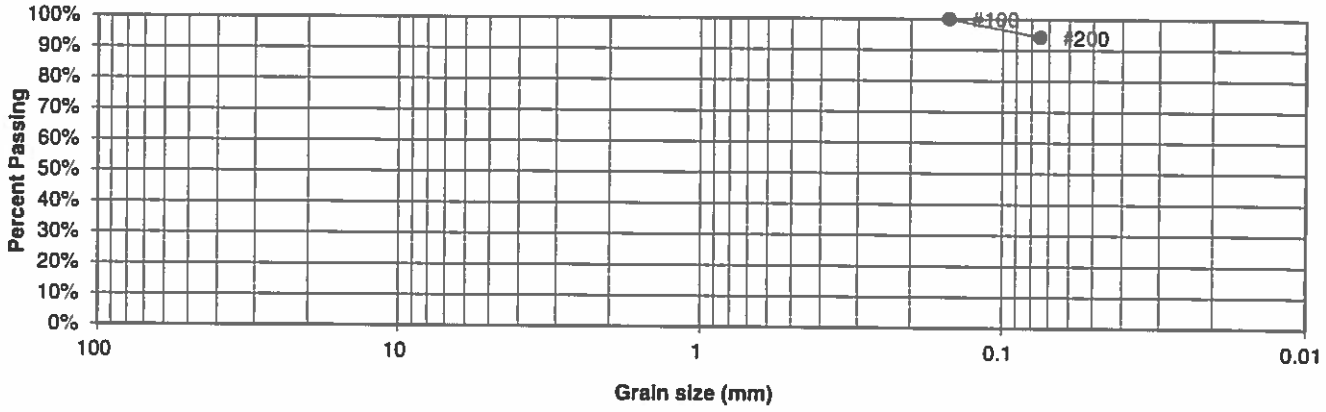
JOB NO.: 200599

FIG NO.: B-26

UNIFIED CLASSIFICATION	CL	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	3	PROJECT	WATERVIEW NORTH
TEST BORING #	13	JOB NO.	200599
DEPTH (FT)	15	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	
100	100.0%
200	94.2%

Atterberg Limits	
Plastic Limit	25
Liquid Limit	40
Plastic Index	15

Swell	
Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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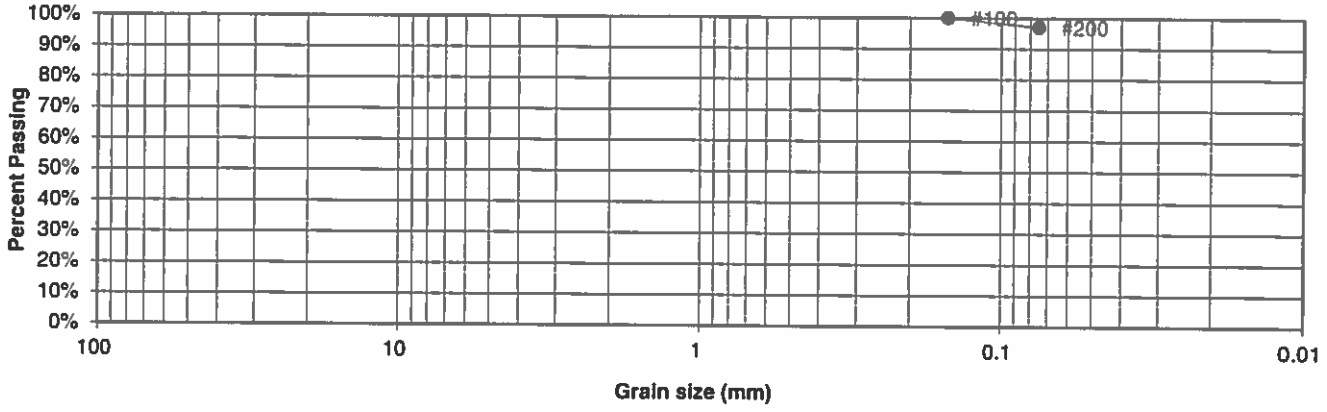
JOB NO.: 200599

FIG NO.: B-27

UNIFIED CLASSIFICATION	CH	CLIENT	CPR ENTITLEMENTS
SOIL TYPE #	3	PROJECT	WATERVIEW NORTH
TEST BORING #	14	JOB NO.	200599
DEPTH (FT)	15	TEST BY	BL

Sieve Analysis
Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	
100	100.0%
200	97.0%

Atterberg Limits

Plastic Limit	21
Liquid Limit	52
Plastic Index	31

Swell

Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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LABORATORY TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE:
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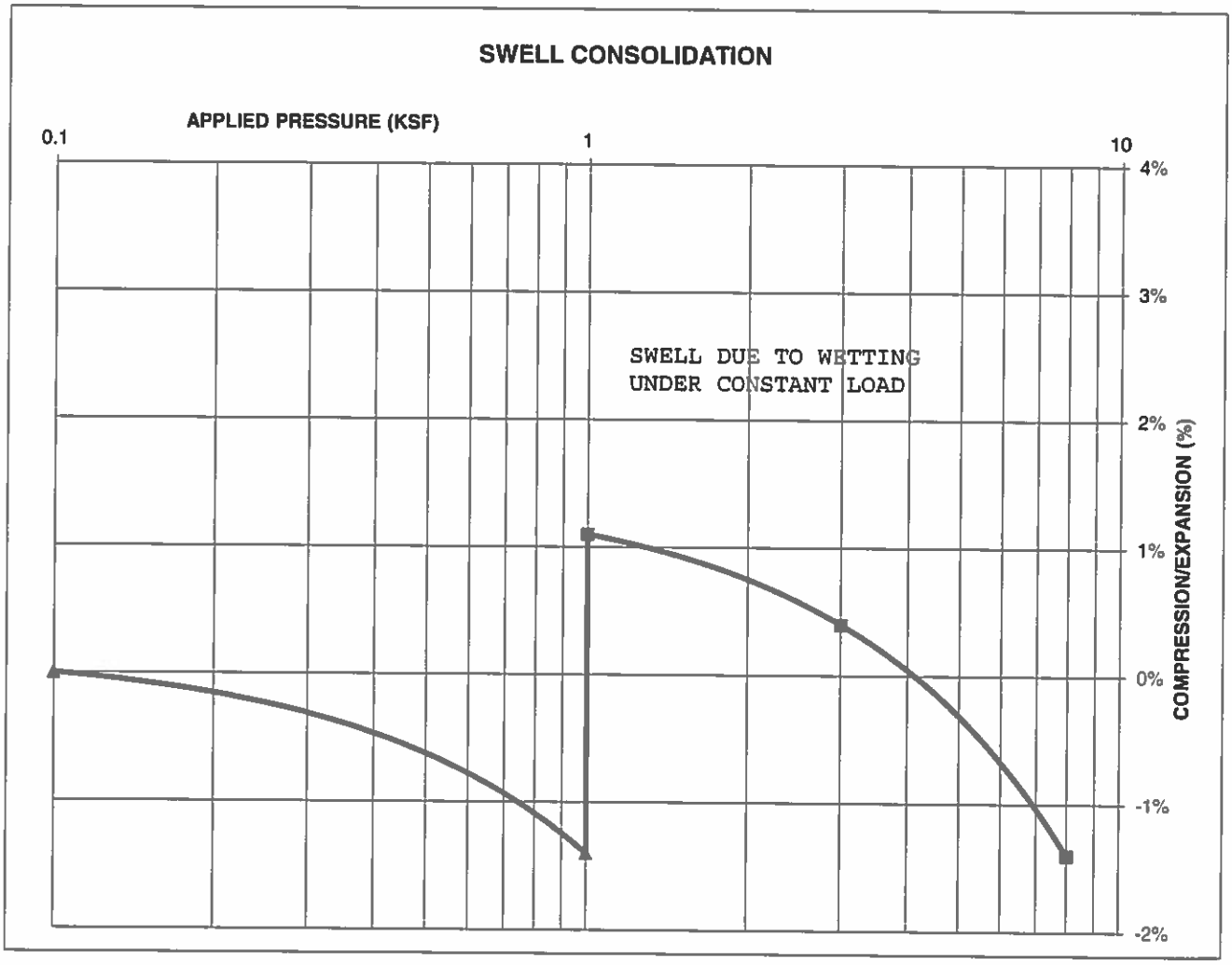
JOB NO.: 200599

FIG NO.: B-28

CONSOLIDATION TEST RESULTS

TEST BORING #	2	DEPTH(ft)	2-3
DESCRIPTION	CL	SOIL TYPE	2
NATURAL UNIT DRY WEIGHT (PCF)			82
NATURAL MOISTURE CONTENT			7.9%
SWELL/CONSOLIDATION (%)			2.5%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

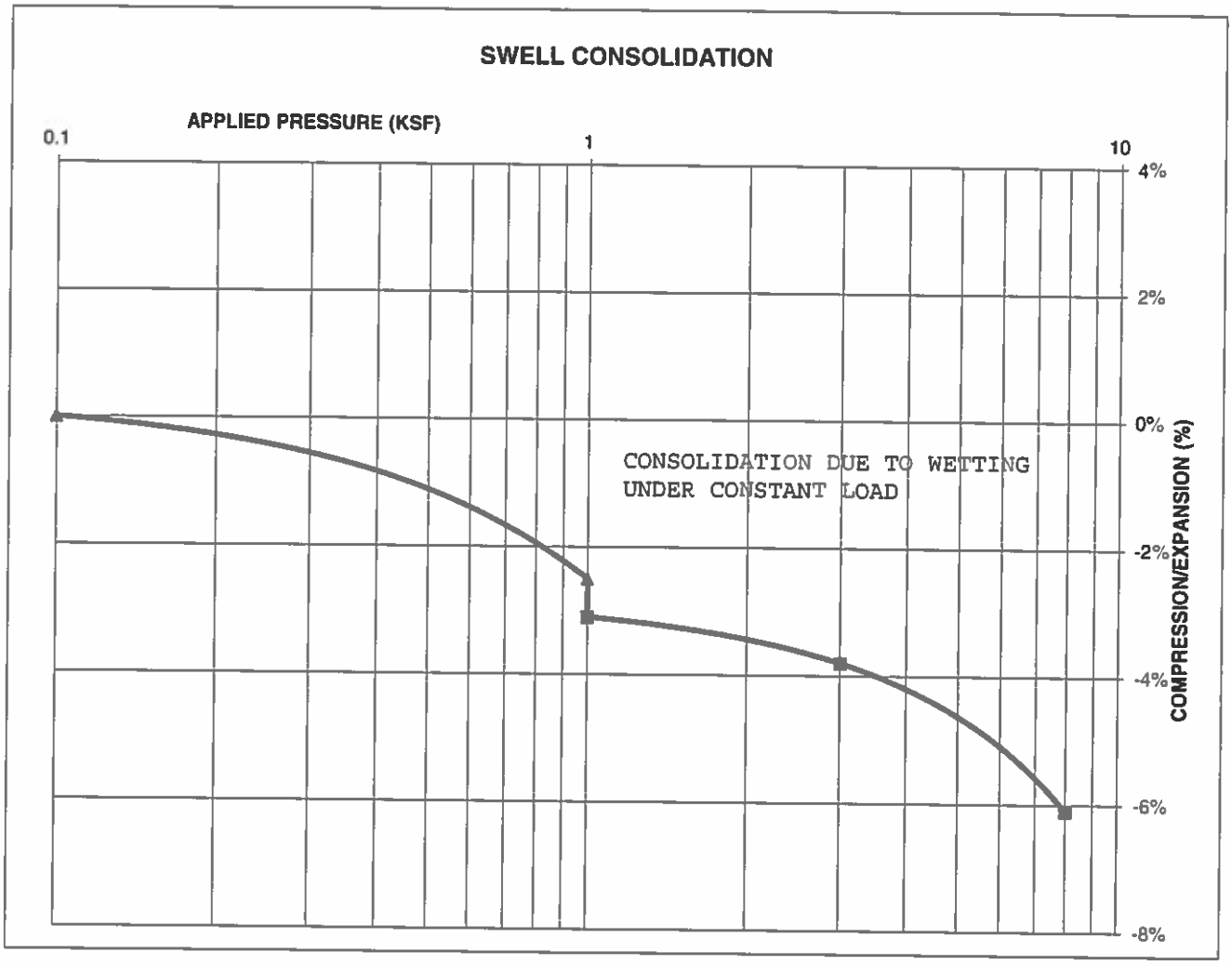
DRAWN:	DATE:	CHECKED:	DATE:
			4/24/20

JOB NO.: 200599
FIG NO.: B-29

CONSOLIDATION TEST RESULTS

TEST BORING #	3	DEPTH(ft)	10
DESCRIPTION	CL	SOIL TYPE	2
NATURAL UNIT DRY WEIGHT (PCF)			100
NATURAL MOISTURE CONTENT			9.1%
SWELL/CONSOLIDATION (%)			-0.6%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

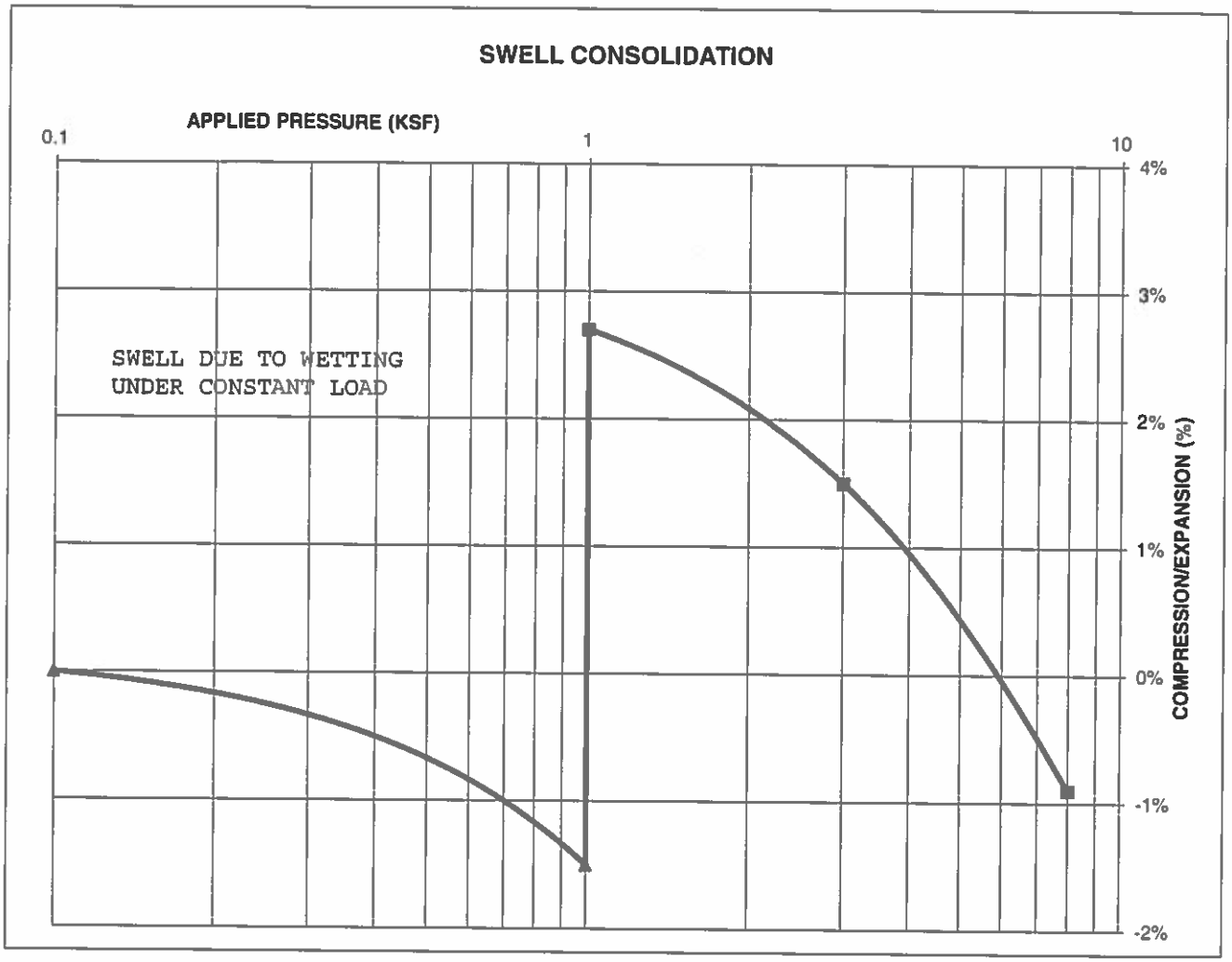
DRAWN:	DATE:	CHECKED:	DATE: 9/16/20

JOB NO.: 200599
FIG NO.: B-30

CONSOLIDATION TEST RESULTS

TEST BORING #	8	DEPTH(ft)	10
DESCRIPTION	CL	SOIL TYPE	2
NATURAL UNIT DRY WEIGHT (PCF)			112
NATURAL MOISTURE CONTENT			11.3%
SWELL/CONSOLIDATION (%)			4.2%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

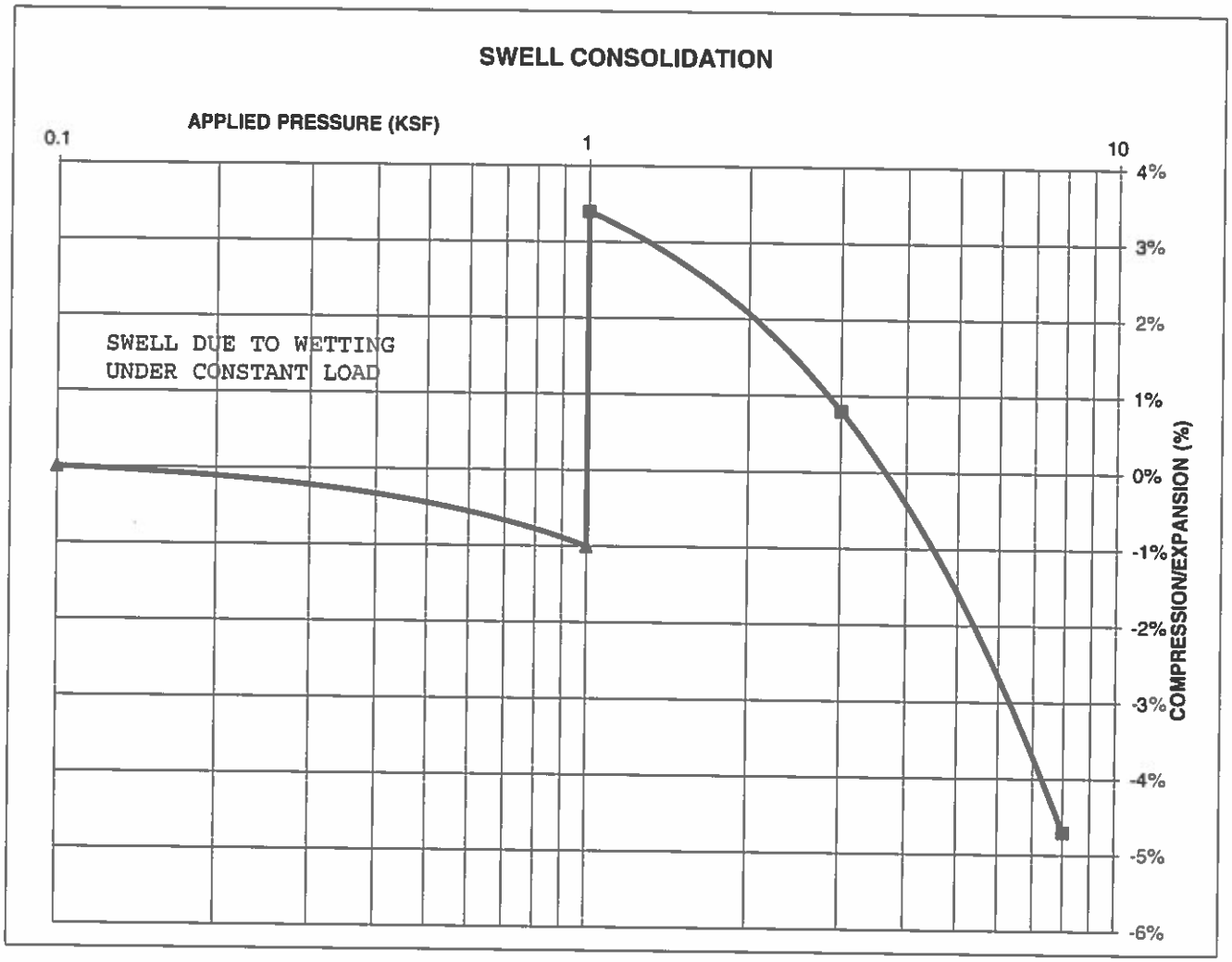
DRAWN:	DATE:	CHECKED:	DATE: 4/11/20

JOB NO.: 200599
FIG NO.: B-31

CONSOLIDATION TEST RESULTS

TEST BORING #	11	DEPTH(ft)	5
DESCRIPTION	CL	SOIL TYPE	2
NATURAL UNIT DRY WEIGHT (PCF)			99
NATURAL MOISTURE CONTENT			15.2%
SWELL/CONSOLIDATION (%)			4.4%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

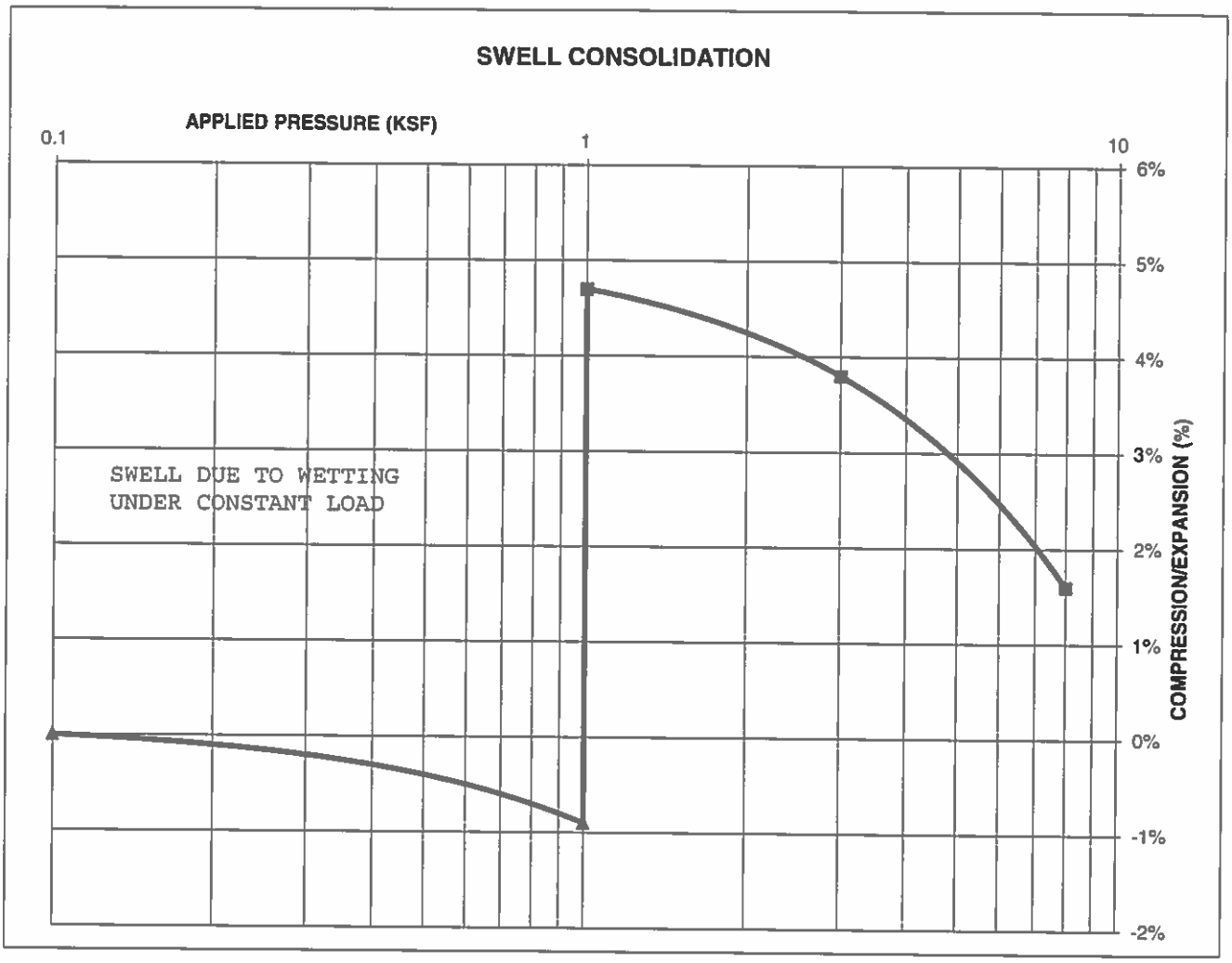
DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: B-32

CONSOLIDATION TEST RESULTS

TEST BORING #	20	DEPTH(ft)	5
DESCRIPTION	CL	SOIL TYPE	2
NATURAL UNIT DRY WEIGHT (PCF)			110
NATURAL MOISTURE CONTENT			13.2%
SWELL/CONSOLIDATION (%)			5.6%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

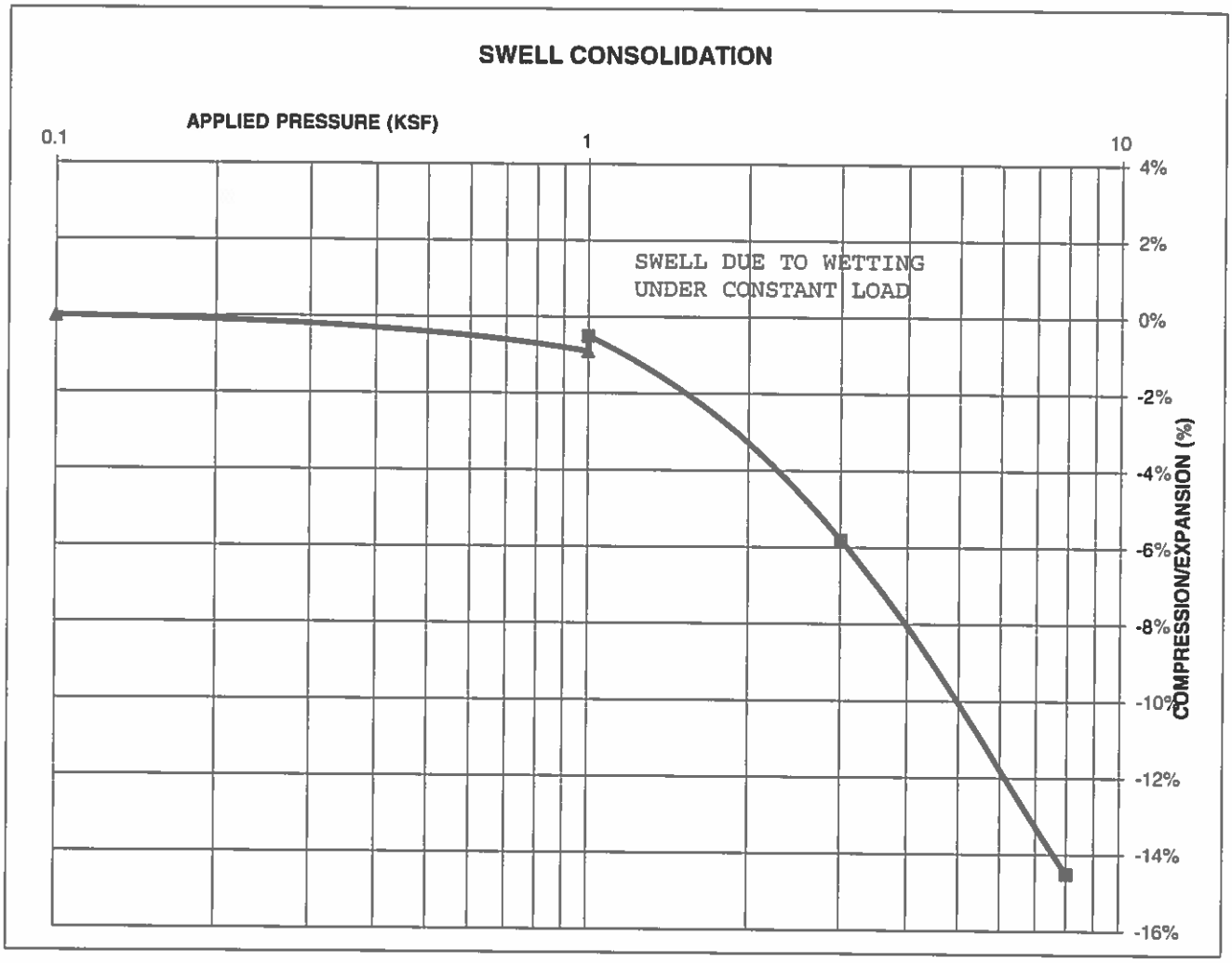
DRAWN:	DATE:	CHECKED:	DATE: 9/14/12

JOB NO.: 200599
FIG NO.: B-33

CONSOLIDATION TEST RESULTS

TEST BORING #	25	DEPTH(ft)	10
DESCRIPTION	CL	SOIL TYPE	2
NATURAL UNIT DRY WEIGHT (PCF)			95
NATURAL MOISTURE CONTENT			12.7%
SWELL/CONSOLIDATION (%)			0.4%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

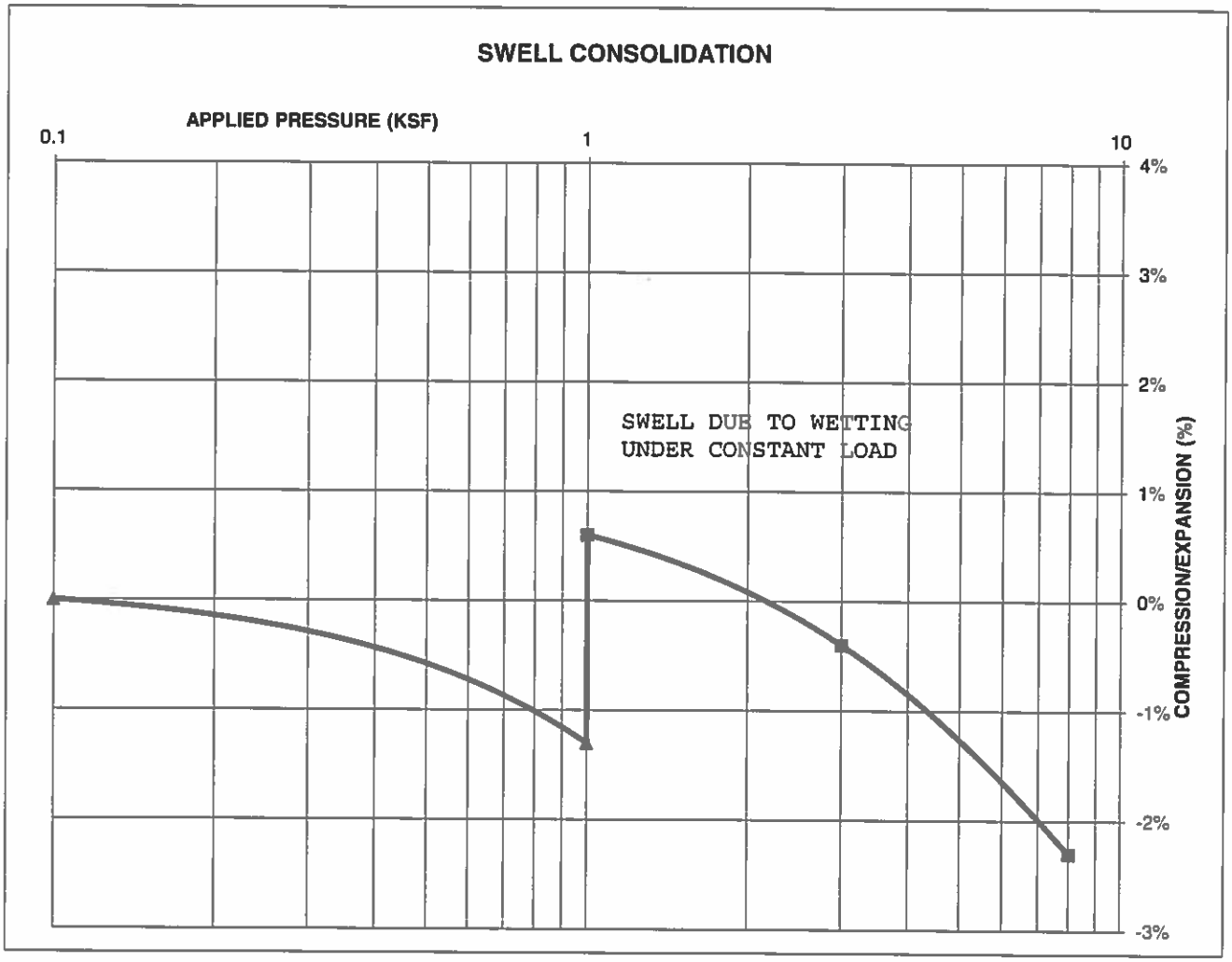
DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: B-34

CONSOLIDATION TEST RESULTS

TEST BORING #	18	DEPTH(ft)	15
DESCRIPTION	CL	SOIL TYPE	2
NATURAL UNIT DRY WEIGHT (PCF)			114
NATURAL MOISTURE CONTENT			16.2%
SWELL/CONSOLIDATION (%)			1.9%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

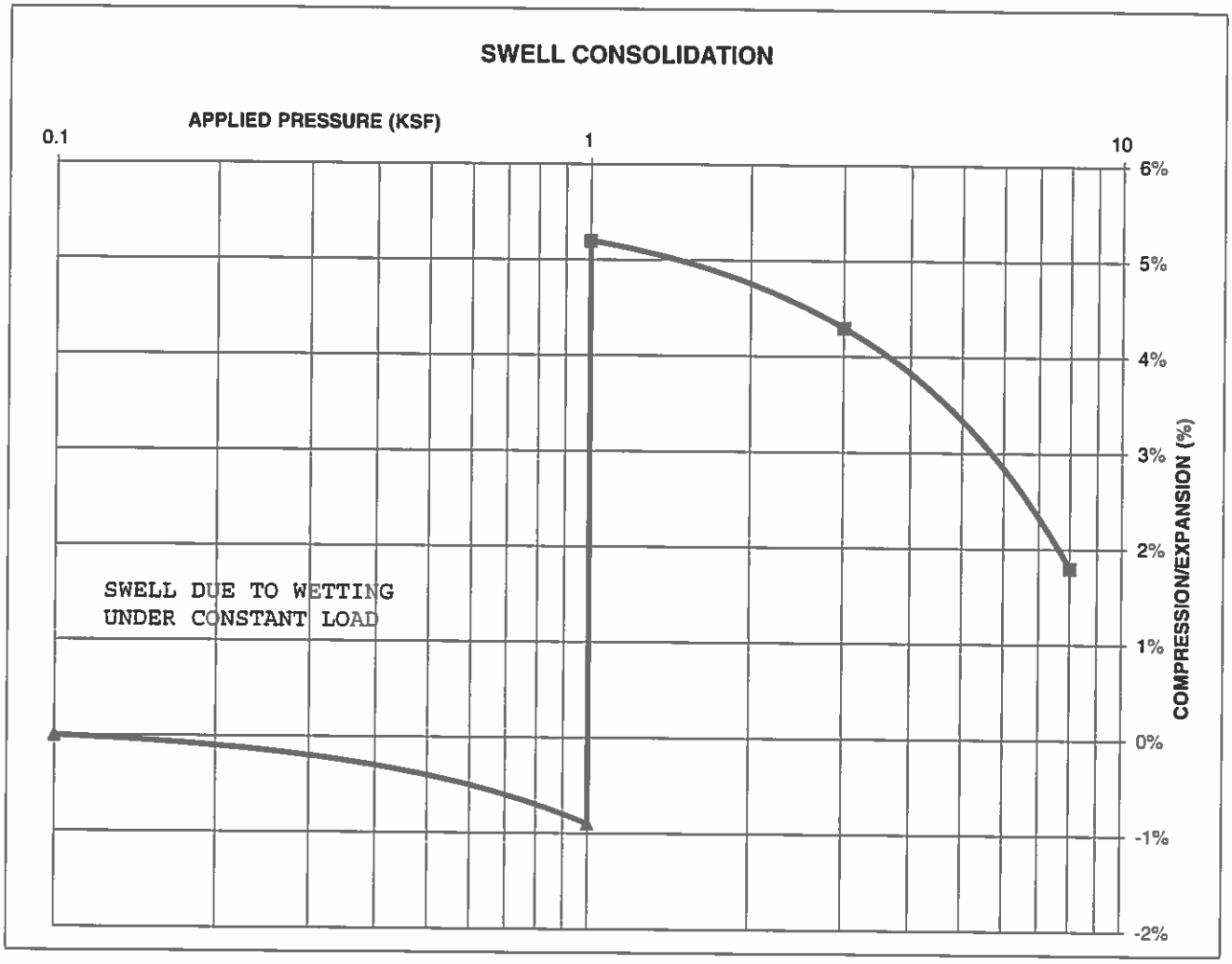
DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: B-35

CONSOLIDATION TEST RESULTS

TEST BORING #	15	DEPTH(ft)	5
DESCRIPTION	CL	SOIL TYPE	3
NATURAL UNIT DRY WEIGHT (PCF)			118
NATURAL MOISTURE CONTENT			14.5%
SWELL/CONSOLIDATION (%)			6.1%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

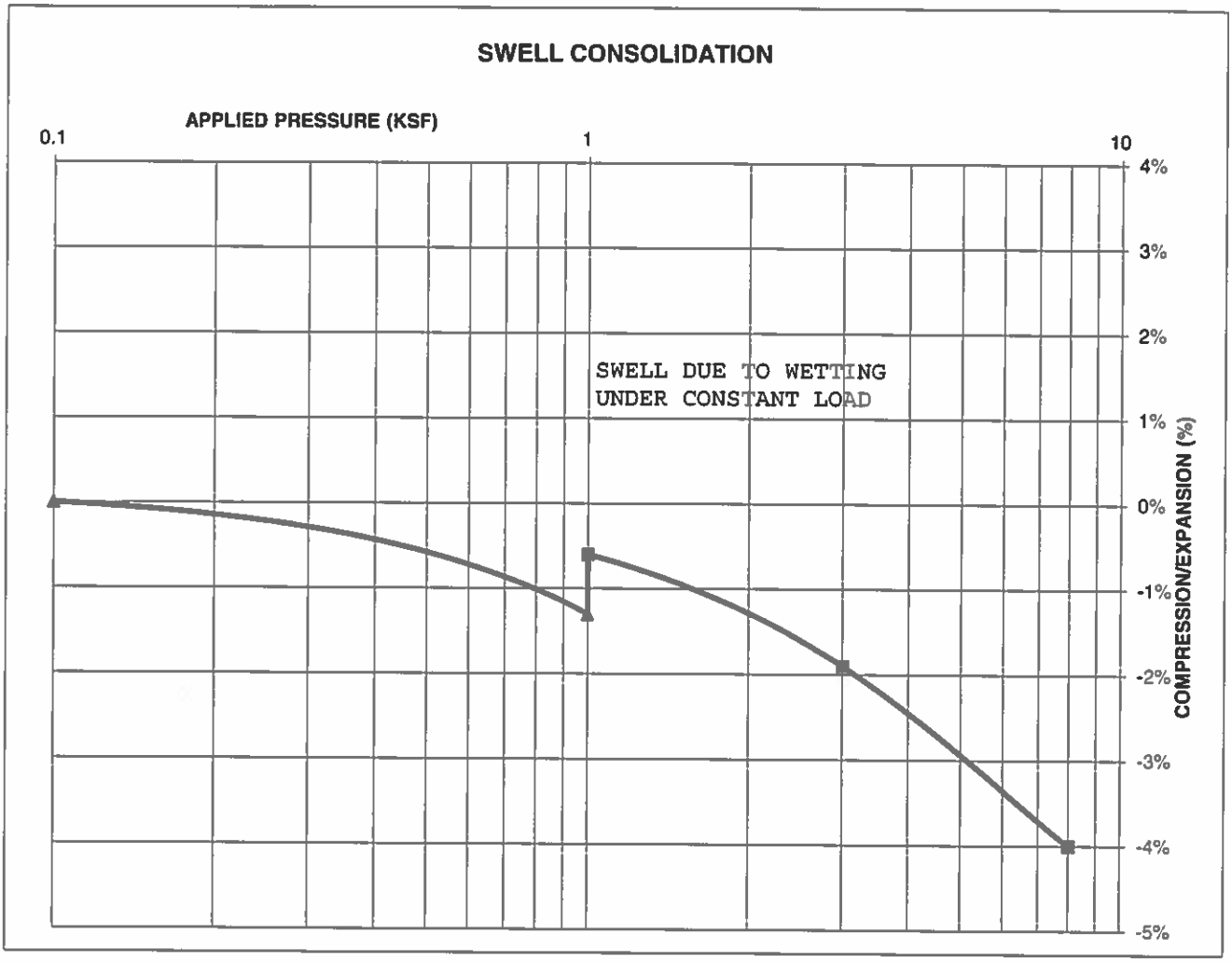
DRAWN:	DATE:	CHECKED:	DATE: 9/16/20

JOB NO.: 200599
FIG NO.: B-36

CONSOLIDATION TEST RESULTS

TEST BORING #	19	DEPTH(ft)	10
DESCRIPTION	CL	SOIL TYPE	3
NATURAL UNIT DRY WEIGHT (PCF)			116
NATURAL MOISTURE CONTENT			10.5%
SWELL/CONSOLIDATION (%)			0.7%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

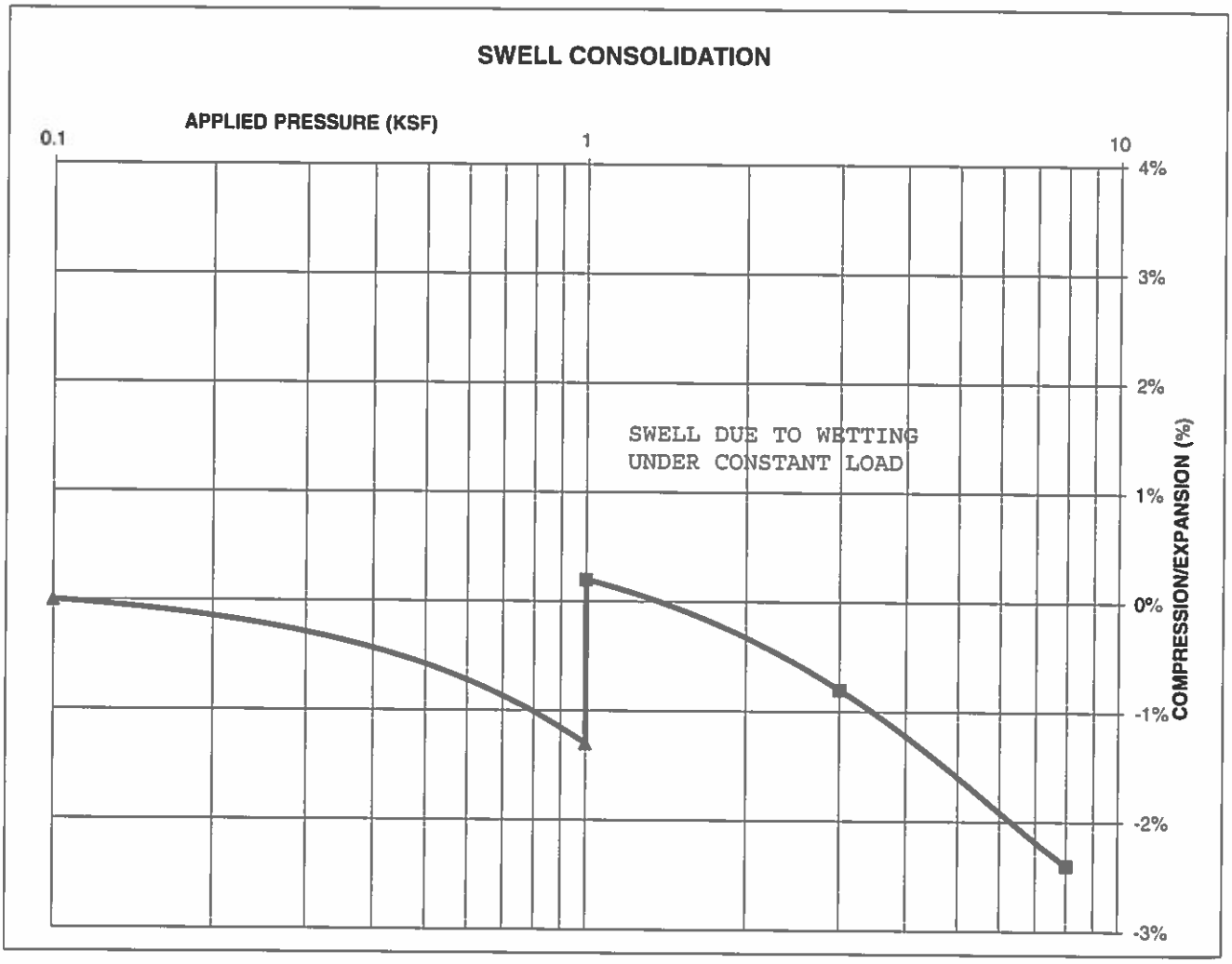
DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: B-37

CONSOLIDATION TEST RESULTS

TEST BORING #	21	DEPTH(ft)	5
DESCRIPTION	CL	SOIL TYPE	3
NATURAL UNIT DRY WEIGHT (PCF)			120
NATURAL MOISTURE CONTENT			13.0%
SWELL/CONSOLIDATION (%)			1.5%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

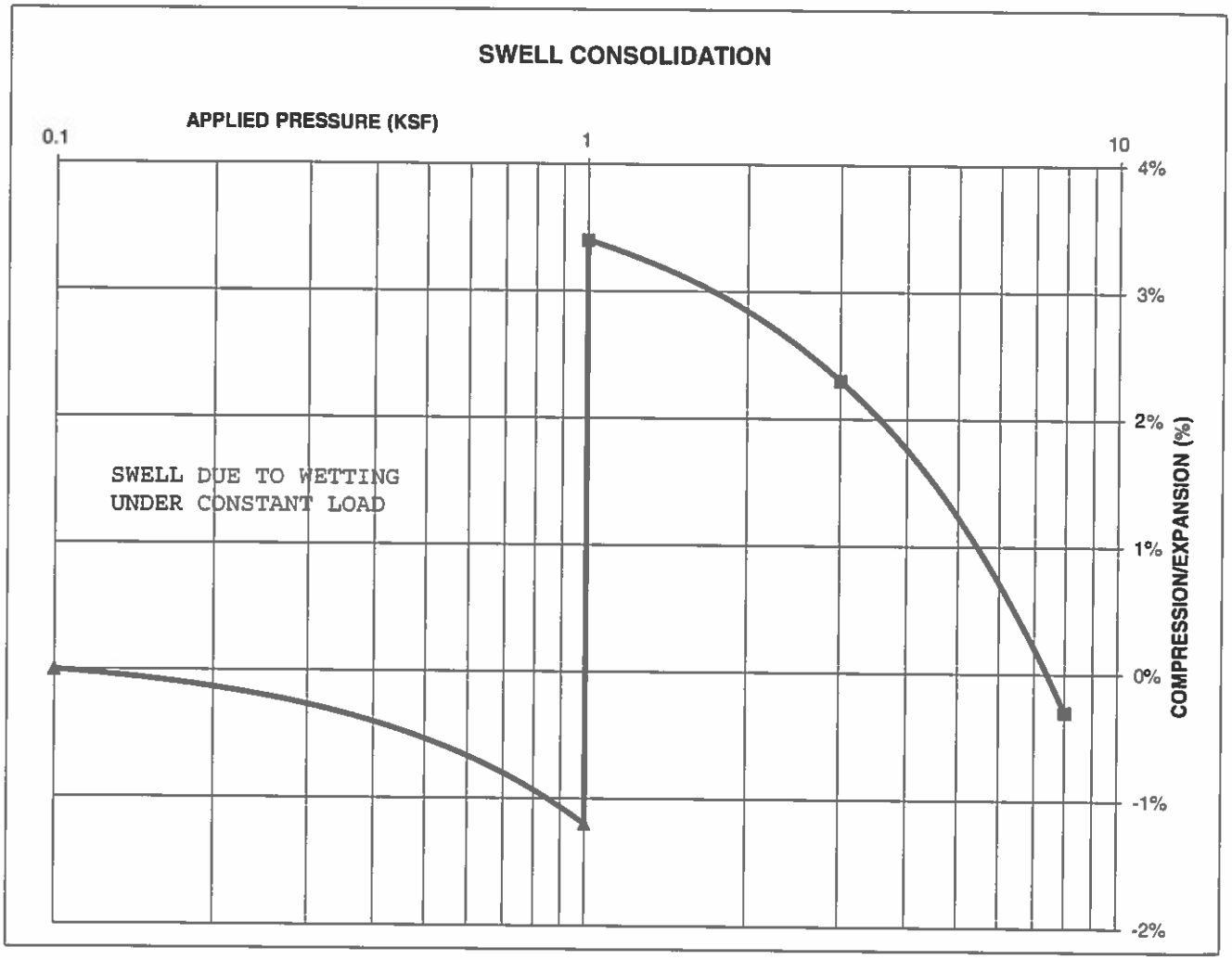
DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: B-38

CONSOLIDATION TEST RESULTS

TEST BORING #	24	DEPTH(ft)	10
DESCRIPTION	CH	SOIL TYPE	3
NATURAL UNIT DRY WEIGHT (PCF)			112
NATURAL MOISTURE CONTENT			19.2%
SWELL/CONSOLIDATION (%)			4.6%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

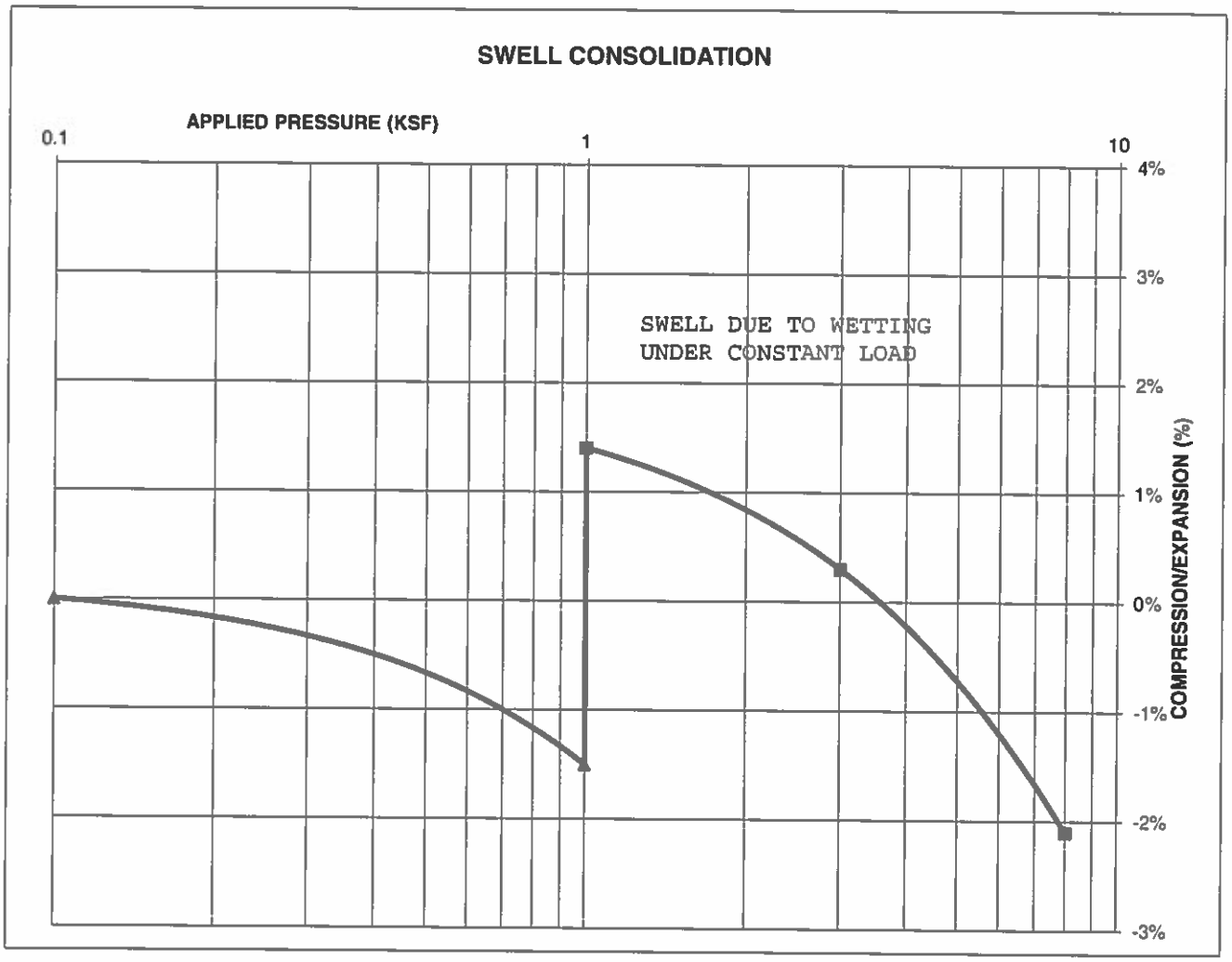
DRAWN:	DATE:	CHECKED:	DATE: 4/16/20

JOB NO.: 200599
FIG NO.: B-39

CONSOLIDATION TEST RESULTS

TEST BORING #	4	DEPTH(ft)	20
DESCRIPTION	CH	SOIL TYPE	3
NATURAL UNIT DRY WEIGHT (PCF)			108
NATURAL MOISTURE CONTENT			18.7%
SWELL/CONSOLIDATION (%)			2.9%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

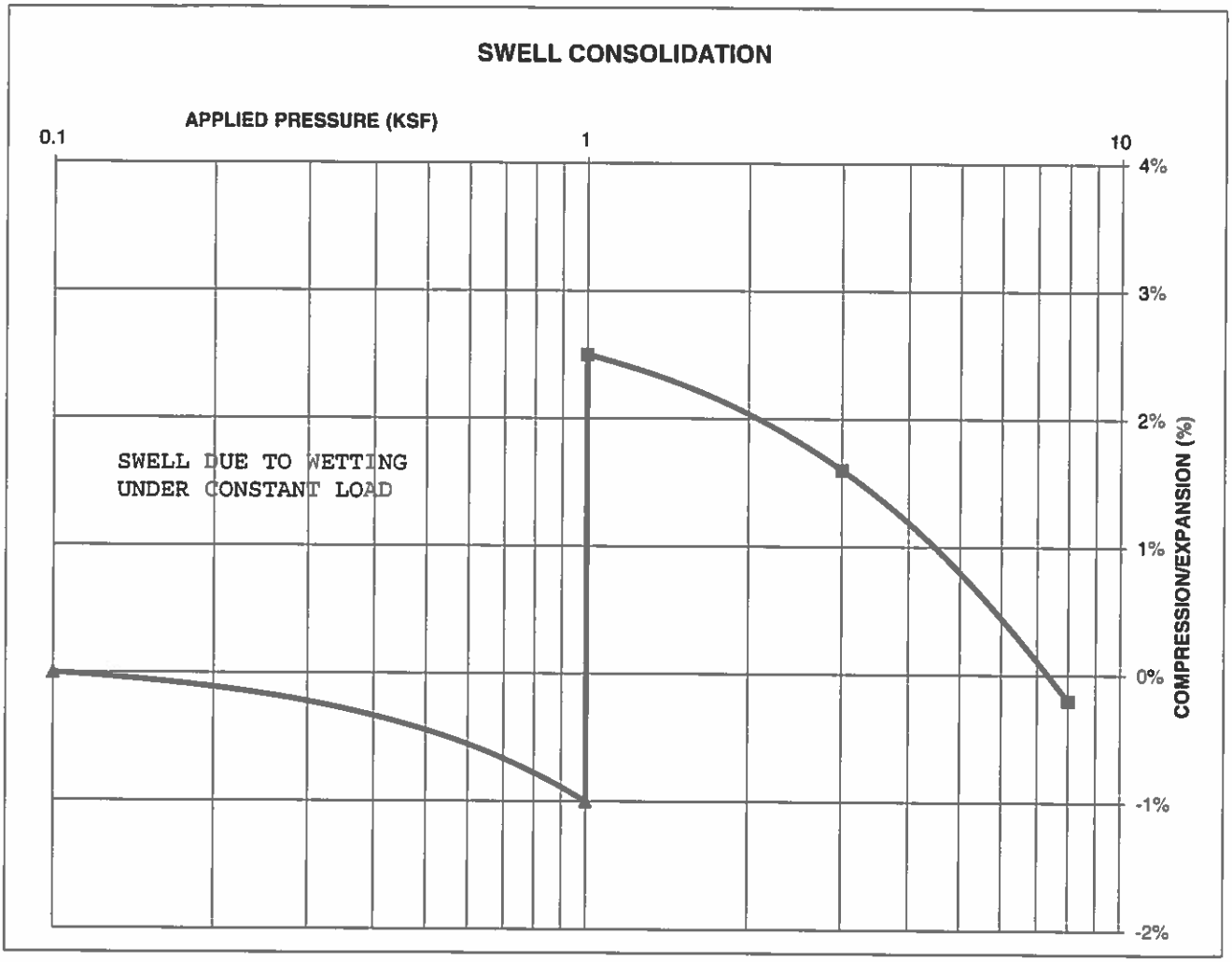
DRAWN:	DATE:	CHECKED:	DATE:
			4/10/20

JOB NO.: 200599
FIG NO.: B-40

CONSOLIDATION TEST RESULTS

TEST BORING #	13	DEPTH(ft)	15
DESCRIPTION	CL	SOIL TYPE	3
NATURAL UNIT DRY WEIGHT (PCF)			112
NATURAL MOISTURE CONTENT			13.4%
SWELL/CONSOLIDATION (%)			3.5%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

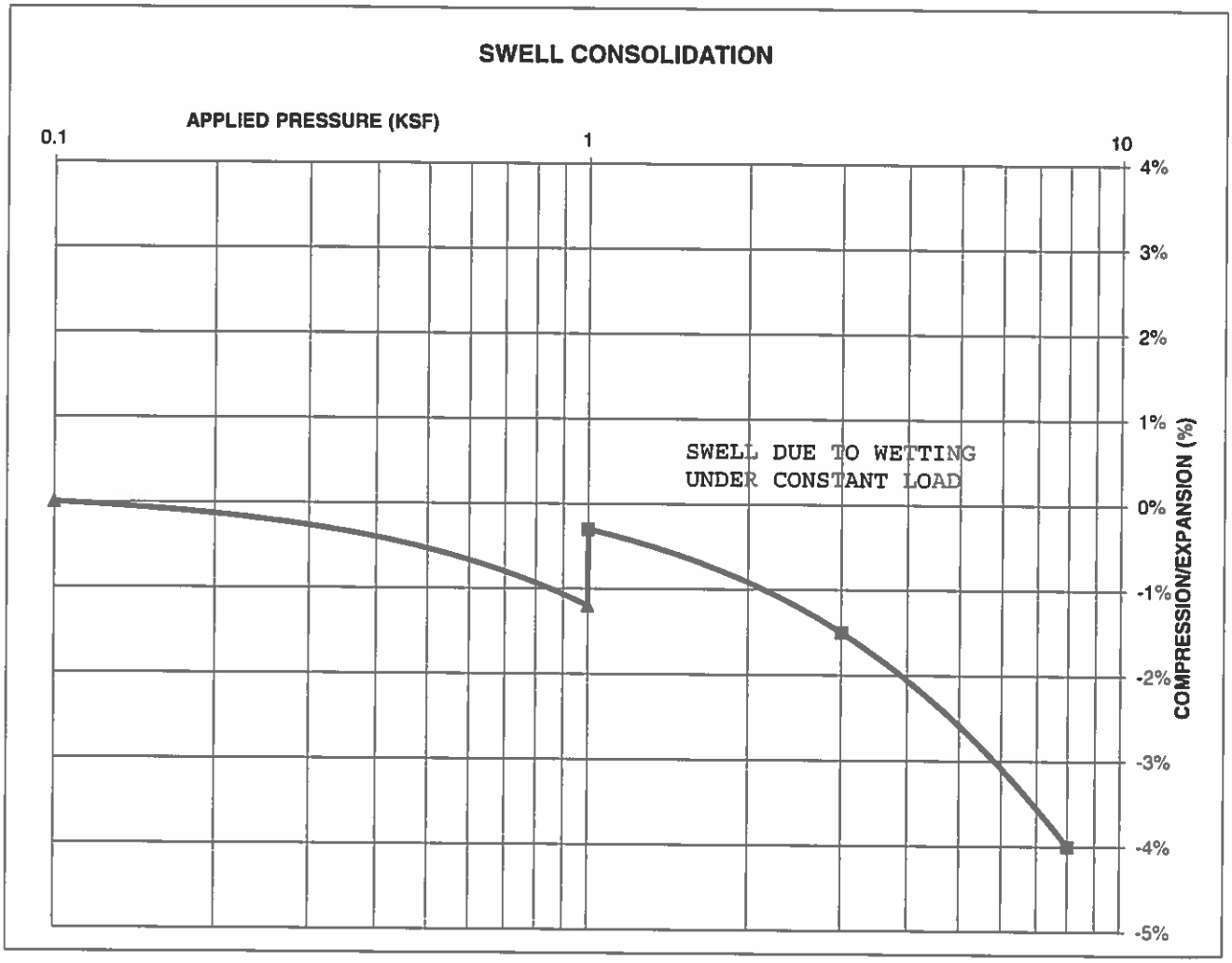
DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: B-41

CONSOLIDATION TEST RESULTS

TEST BORING #	14	DEPTH(ft)	15
DESCRIPTION	CH	SOIL TYPE	3
NATURAL UNIT DRY WEIGHT (PCF)			106
NATURAL MOISTURE CONTENT			19.8%
SWELL/CONSOLIDATION (%)			0.9%

JOB NO. 200599
CLIENT CPR ENTITLEMENTS
PROJECT WATERVIEW NORTH



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SWELL CONSOLIDATION
TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599
FIG NO.: B-42

CLIENT	CPR ENTITLEMENTS	JOB NO.	200599
PROJECT	WATERVIEW NORTH	DATE	4/13/2020
LOCATION	WATERVIEW NORTH	TEST BY	BL

BORING NUMBER	DEPTH, (ft)	SOIL TYPE NUMBER	UNIFIED CLASSIFICATION	WATER SOLUBLE SULFATE, (wt%)
TB-3	10	2	CL	0.00
TB-4	20	3	CH	0.03
TB-11	5	2	CL	<0.01
TB-14	5	2	CL	<0.01
TB-14	15	3	CH	<0.01

QC BLANK PASS

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LABORATORY TEST
SULFATE RESULTS

DRAWN:	DATE:	CHECKED:	DATE:
			4/16/20

JOB NO.: 200599

FIG NO.: B-43