

**Henry Roybal**  
Commissioner, District 1

**Anna Hansen**  
Commissioner, District 2

**Rudy N. Garcia**  
Commissioner, District 3



**Anna T. Hamilton**  
Commissioner, District 4

**Hank Hughes**  
Commissioner, District 5

**Katherine Miller**  
County Manager

April 28, 2022

**SANTA FE COUNTY**  
**RFP No. 2022-0068-PW/BT**  
**DESIGN/BUILD PROJECT SANTA FE COUNTY PUBLIC**  
**SAFETY COMPLEX IMPROVEMENT PROJECT**

**PHASE II ADDENDUM NO. 1**

Dear Proponents,

This addendum is issued to reflect the following immediately. It shall be the responsibility of interested Offerors to adhere to any changes or revisions to the Phase II of the RFP as identified in this Phase II Addendum No. 1. This documentation shall become permanent and made part of the departmental files.

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***Attachment A: Address Options***

***Attachment B: Geo-Test***

***Attachment C: RECC Layout***

***Attachment D: Sheriff, Fire and RECC Programming***

***Attachment E: Sheriff Programming Handwritten notes***

***Attachment F: Sheriff IAPE Standards***

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**Clarification No. 1: Alternative Technical Concept (ATC) meeting will be held in person at the Public Works Facility located at 424 NM 599 Frontage Road or via WebEx for those individuals that cannot attend in person.**

Please add this Phase II Addendum No. 1 to the original proposal documents and refer to proposal documents, hereto as such. This and all subsequent addenda will become part of any resulting contract documents and have effects as if original issued. All other unaffected sections will have their original interpretation and remain in full force and effect. Responders are reminded that any questions or need for clarification must be addressed to Bill Taylor, Procurement Manager at [wtaylor@santafecountynm.gov](mailto:wtaylor@santafecountynm.gov) and Amanda Patterson-Sanchez, Procurement Specialist Senior at [apatterson-sanchez@santafecountynm.gov](mailto:apatterson-sanchez@santafecountynm.gov).









**GEOTECHNICAL  
ENGINEERING SERVICES  
JOB NO. 1-00303  
PUBLIC SAFETY UPGRADES & RENOVATIONS  
SANTA FE, NEW MEXICO**

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PREPARED FOR:  
  
**SANTA FE COUNTY  
PUBLIC WORKS DEPARTMENT**

April 24, 2020  
**Job No.1-00303**

**Santa Fe County  
Public Works Department  
901 West Alameda, Suite 20-C  
Santa Fe, New Mexico 87501**

**ATTN: Barbara Herrera**

**RE: Geotechnical Engineering Services  
Public Safety Upgrades & Renovations  
Santa Fe, New Mexico**

Dear Ms. Herrera:

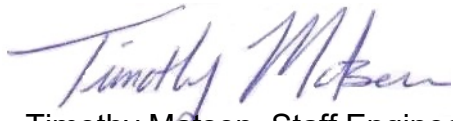
Submitted herein is the Geotechnical Engineering Services Report for the above referenced project. The report contains the results of our field investigation, laboratory testing, and recommended criteria for foundation design, slab support, pavement section, as well as criteria for site grading.

It has been a pleasure to serve you on this project. If you should have any questions, please contact this office.

Respectfully submitted:

Reviewed by:

**GEO-TEST, INC.**



Timothy Matson, Staff Engineer



Robert D Booth, P.E.

cc: Addressee

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**INTRODUCTION**

This report presents the results of the geotechnical engineering services investigation performed for the proposed new structure to be located at 23 Camino Justicia in Santa Fe, New Mexico.

The objectives of this investigation were to:

- 1) Evaluate the nature and engineering properties of the subsurface soils underlying the site.
- 2) Provide recommendations for foundation design, slab support, pavement section, as well as criteria for site grading.

The investigation includes subsurface exploration, selected soil sampling, laboratory testing of the samples, performing an engineering analysis and preparation of this report.

**PROPOSED CONSTRUCTION**

It is understood that the project will include the construction of a new 11,000 to 12,000 square foot single story metal framed building and associated parking areas. No basements are planned and slab on grade construction is anticipated. Foundation loads are unknown at this time but are anticipated not to exceed 50 kips on columns and 2.0 kips per lineal foot on walls.

It is further understood that the report generated by this investigation will be provided to a Design/Build contractor yet to be selected for the project. As such, the exact placement of the new building is unknown; however, it is anticipated that the building will be located at the approximate center of the site with parking areas to the north and south of the building.

Should structural or other project details vary significantly from those outlined above, this firm should be notified for review and possible revision of the recommendations contained herein.

**FIELD EXPLORATION**

Twelve exploratory borings were drilled at the site to depths ranging from approximately 5 to 20½ feet below existing site grade. The locations of the borings are shown on the Boring Location Map, Figure 1. The soils encountered in the borings were continuously examined, visually classified and logged during the drilling operation. The boring logs are presented in a

following section of this report. Drilling was accomplished using a truck mounted drill rig equipped with 6.5-inch diameter continuous flight hollow stem auger. Subsurface materials were sampled at five-foot intervals or less in the deeper borings utilizing an open tube split barrel sampler and a brass ring-lined sampler driven by a standard penetration test hammer. Auger cuttings were also collected from some of the borings.

### **LABORATORY TESTING**

Selected soil samples were tested in the laboratory to determine certain engineering properties of the soils. Moisture contents were determined to evaluate the various soil deposits with depth. The results of these tests are shown on the boring logs.

Sieve analysis and Atterberg limits tests were performed to aid in soil classification. In addition, consolidation/expansion tests were performed on selected samples to evaluate the volume change characteristics upon moisture increases. Results of these tests are presented in the Summary of Laboratory Results and on the individual test reports presented in a following section of this report.

### **SITE CONDITIONS**

A brief site reconnaissance was performed during our site exploration. The site for the proposed addition is located on a relatively flat, 50-acre parcel of land located to the west of the Santa Fe County Public Safety Building located at 35 Camino Justicia.

### **SUBSURFACE SOIL CONDITIONS**

As indicated by the exploratory borings, the soils underlying the site consist of a surficial layer of low to medium plasticity sandy clay. These soils ranged from moderately firm to firm and extend to depths of about 2 to 2½ existing site grades. Below the surficial sandy clay, weakly to strongly cemented soils were encountered. These soils consist of clayey sands, sandy clays and silty sands and extend to depths ranging from about 7½ to 8 feet below existing site grades. These soils ranged from moderately firm to hard and low to medium in plasticity. Below the cemented horizon, interbedded silty sands and clayey sands with lesser amounts of relatively clean sands were encountered and extended to full depth explored. These soils were non-plastic to low in plasticity and ranged from loose and soft to dense and very firm.

No free groundwater was encountered in the borings and soil moisture

contents were generally low throughout the borings, being well below the plastic limit of the clayey soils.

### **SITE SEISMICITY**

Based on the standard penetration resistance encountered in the borings to a depth of about 20½ feet, along with our knowledge of the geology in the area, it is recommended that a seismic Site Class D be used for structural design in accordance with IBC 2018.

Based on the seismic site class and regional factors, seismic coefficients were determined in accordance with IBC 2018 and are presented in the following table:

Mapped Spectral Acceleration, $S_s$	0.449 g
Mapped Spectral Acceleration, $S_1$	0.135 g
Maximum Spectral Acceleration, $S_{MS}$	0.647 g
Maximum Spectral Acceleration, $S_{M1}$	0.305 g
Design Spectral Acceleration, $S_{DS}$	0.431 g
Design Spectral Acceleration, $S_{D1}$	0.203 g
Site Coefficient, $F_A$	1.441
Site Coefficient, $F_v$	2.261
Seismic Design Category	<b>D</b>

### **CONCLUSIONS AND RECOMMENDATIONS**

As indicated by the standard penetration test data and laboratory work, the near surface soils are moderately firm to firm; however, these soils are of medium to high plasticity and possess a low to moderate expansive potential in their existing dry condition. These soils could create excessive upward movements (heave) of shallow spread-type footings and slabs on-grade, particularly upon significant moisture increases. Accordingly, the existing, near surface native soils are not considered suitable in their present condition to provide reliable support of shallow footings and slabs on-grade.

However, with special site preparation, and to provide a uniform bearing condition, the proposed structure can be supported on shallow spread type footings bearing directly on properly compacted structural fill. The special site preparation would involve overexcavation of a portion of the existing soils throughout the entire building area. These soils should be overexcavated to such an extent as to provide for at least 2.0 feet of properly compacted structural fill below all foundations and floor slabs. The limits of the overexcavation should also extend laterally from the footing



perimeters a distance equal to the depth of fill beneath their bases. The exposed native soils at the base of the excavation should be densified prior to placement of structural fill. Detailed recommendations for foundation design and the required site grading are presented in the following sections of this report.

Post-construction moisture increases in the supporting soils would cause some differential foundation movements. Therefore, moisture protection is considered an important design consideration and should be reflected in overall site grading and drainage details as recommended in the Moisture Protection section of this report.

## **FOUNDATIONS**

Shallow spread-type footings bearing directly on properly compacted structural fill are recommended for the support of the proposed structure. An allowable bearing pressure of 2,500 pounds per square foot is recommended for footing design. This bearing pressure applies to full dead load plus realistic live loads and can be safely increased by one-third for totals loads including wind and seismic forces.

Exterior footings should be established a minimum of 2.0 feet below lowest adjacent finished grade, while interior footings should be at least 12 inches below finished floor grade. The minimum recommended width of square and continuous footings is 2.0 feet and 1.33 feet, respectively.

All bearing surfaces should be cleaned of all loose, disturbed materials prior to placement of structural fill or concrete. All foundation systems should be adequately reinforced to aid in redistributing loads and to minimize the effects of differential settlement.

Maximum settlements (or heave) of foundations designed and constructed as recommended herein are estimated not to exceed  $\frac{3}{4}$  inch for the soil moisture contents encountered during this investigation or moisture contents introduced during construction. Differential movements should be less than 75 percent of total movements. Significant moisture increases in the supporting soils after construction would cause additional movements and could cause excessive movements, at least in some areas of the site. Accordingly, the moisture protection procedures recommended in a following section of this report are considered critical for the satisfactory performance of the structure.

**LATERAL LOADS**

Resistance to lateral forces will be provided by friction between the base of floor slabs and footings and the soil and by passive earth resistance against the sides of footings and stem walls. A coefficient of friction of 0.40 should be used for computing the lateral resistance between bases of footings and slabs and the soil. With backfill placed as recommended in the site grading section of this report, a passive soil resistance equivalent to a fluid weighing 325 pounds per cubic foot should be used for analysis.

Any retaining walls on the project should be founded on shallow spread-type footings designed and constructed as recommended above for the proposed structure. Lateral pressure against retaining walls will depend upon their degree of restraint. Walls which are restrained so as to limit movement at the top to less than 0.001 times the height of the wall should be designed for an "at rest" earth pressure of 55 pounds per square foot per foot of depth. Walls free to move at the top should be designed of an "active" earth pressure equal to 35 pounds per square foot per foot of depth. These pressures assume horizontal backfill and no buildup of hydrostatic pressures behind the walls. Recommendations for sloping backfill conditions can be provided by this firm upon request.

During backfilling, the contractor should be limited to the use of hand operated compaction equipment within a zone of about 3 feet horizontally from the back of the wall. The use of heavier equipment could apply lateral pressures well in excess of the recommended design earth pressure, particularly over the upper portions of the wall.

**SLABS ON GRADE**

Concrete slabs on grade should be founded on a minimum of 2.0 feet of properly compacted, non-expansive structural fill and constructed in conformance with the methods outlined in ACI 302.1R-04.

Adequate support for lightly loaded slab-on-grade floors will be provided by the structural fill when compacted as recommended in the Site Grading section of this report. Thus, the use of granular base for structural support of lightly loaded slabs is not considered necessary. However, should it be desired as a working surface, a course of granular base can be placed beneath concrete floor slabs.

Where granular base is used beneath the slabs, it should have a plasticity index of no greater than 3 and meet the following grading requirements:

Sieve Size (Square Openings)	Percent Passing by Dry Weight
1 Inch	100
¾ Inch	85-100
No. 4	45-95
No. 200	0-10

The granular base should be compacted to a minimum of 95 percent of maximum dry density as determined in accordance with ASTM D1557.

The granular base may act as a capillary barrier but will not totally eliminate the rise of moisture to the slabs. If floor coverings are proposed which are highly sensitive to moisture, or highly moisture sensitive equipment will be installed within the buildings, a synthetic vapor barrier should be installed to prevent moisture intrusion through the slab. A minimum of 4 inches of granular base as recommended above should be placed between the vapor barrier and the slab. Barriers should be overlapped a minimum of 6 inches at joints, should be carefully fitted around service openings and should conform with ACI 302.1R-04 specifications.

## **PAVEMENTS**

Based on the results of the laboratory testing, a minimum asphaltic pavement section of 3.0 inches of hot mix asphalt (HMA) over 6.0 inches of aggregate base course over 12 inches of compacted subgrade is recommended for areas subject to light automobile traffic and parking areas. Where traffic lanes are subject to heavy automobile or heavy truck traffic, the above section should be thickened by an additional one inch of asphalt pavement.

Pavement materials should conform to materials as specified in the New Mexico Department of Transportation (NMDOT) Standard Specifications for Highway and Bridge Construction. All native subgrade soils should be compacted to a minimum of 95 percent of the maximum dry density determined by ASTM D-1557 density. The HMA should be SPIII or SPIV, compacted to a target density of 94.5 percent, with a minimum compaction of 92 and a maximum compaction of 97 percent of the theoretical maximum density. The Performance Grade (PG) asphalt binder used should be based on the NMDOT's Pavement Type Selection and Design Guideline.

Areas subjected to truck traffic including trash collection trucks (dumpster access) or any areas to be paved with Portland cement concrete should be paved with a minimum of 6 inches of Portland cement concrete placed over 8 inches of compacted subgrade. The pavement recommendations are in



general conformance with ACI 330R-01 *Guide for Design and Construction of Concrete Parking Lots*.

The PCC should have a minimum compressive strength of 4000 psi, be air entrained to between 4.5 and 7.0 percent, and have a maximum aggregate size of 2 inches. The concrete should be placed at a maximum slump of 4 inches. Admixtures may be used to increase the slump and workability provided that the compressive strength is not compromised.

The use of reinforcement within the PCC should be left to the discretion of the structural engineer; however, it is recommended that the pavement be constructed with load transfer joints designed for heavy traffic.

Increases in the subgrade moisture content can create weakening of the soils, thereby, shortening pavement life and causing localized failure. Therefore, all paved areas should be designed to drain completely and allow no ponding.

### **SITE GRADING**

The following guidelines should be included in the project construction specifications to provide a basis for quality control during site grading. It is recommended that all structural fill and backfill be placed and compacted under engineering observation and in accordance with the following:

- 1) After clearing grubbing of the site, the existing site soils throughout the building area should be overexcavated to such an extent as to provide for at least 2.0 feet of properly compacted structural fill beneath all footings and floor slabs. The limits of the overexcavation should also extend laterally from the footing perimeters a distance equal to the depth of fill beneath their bases. The soils exposed at the base of the overexcavation should be densified prior to placement of structural fill.
- 2) Densification of the exposed native soils should consist of scarifying, moisture conditioning, and compacting the area to a minimum of 95 percent of maximum dry density as determined in accordance with ASTM D-698. The moisture content of the native soils during compaction should be at or 2 percent above the optimum moisture content.
- 3) The results of this investigation indicate that most of the overexcavated native clays will not be suitable for use as structural fill. However, these soils may be blended with an imported material

to meet the specification below. If this cannot be achieved, imported material should be used and should also meet the specification for structural fill presented below. It should be noted that blending with the native high plasticity clays may be difficult to meet the specifications below. All structural fill or backfill material should be free of vegetation and debris and contain no rocks larger than 3 inches. Gradation of the structural fill or backfill material, as determined in accordance with ASTM D-422, should be as follows:

Size	Percent Passing
3-inch	100
No. 4	60 - 100
No. 200	20 - 50

- 4) The plasticity index should be between 5 and 15 when tested in accordance with ASTM D-4318.
- 5) All exterior backfill around the perimeter of the structure should consist of the native clay soils except in areas where concrete slabs or paving immediately adjoin the structure.
- 6) Fill or backfill, shall be placed in 8-inch loose lifts and compacted with approved compaction equipment. Loose lifts should be reduced to 4 inches if hand-held compaction equipment is used. Each lift should be firm and non-yielding. All compaction of fill or backfill shall be accomplished to a minimum of 95 percent of the maximum dry density as determined in accordance with ASTM D-1557. The moisture content of the structural fill during compaction should be at or 2 percent above the optimum moisture content.
- 7) Tests for degree of compaction should be determined by the ASTM D-1556 method or ASTM D-6938. Observation and field tests should be carried on during fill and backfill placement by the geotechnical engineer to assist the contractor in obtaining the required degree of compaction. If less than 95 percent is indicated, additional compaction effort should be made with adjustment of the moisture content as necessary until 95 percent compaction is obtained.

## **EXCAVATIONS**

Excavation of the surficial soils can be readily accomplished using normal earthmoving equipment. Excavated slopes for foundation and utility

construction should be designed and constructed in accordance with 29 CFR 1926, Subpart P, and any applicable state or local regulations. Excavated temporary and permanent slopes should not exceed 1.5 to 1 (horizontal to vertical). Spoil piles and heavy equipment should not be allowed within 5 feet of the top of the slopes.

### **MOISTURE PROTECTION**

As stated above, precautions should be taken during and after construction to minimize moisture increases of foundation soils. Positive drainage should be established away from the exterior walls of the structure. If necessary, to provide positive drainage, the building area should be raised above adjacent site grades with structural fill. Where possible, concrete sidewalks or pavement should immediately adjoin the structure and extend a distance of at least 5 feet away from the structure. Where sidewalks or pavement do not adjoin the structure, the exterior backfill should consist of the overexcavated surficial soils as outlined in the Site Grading section of this report. Backfill should be well compacted and should meet the specifications outlined in the site grading section of this report. Irrigation within 10 feet of foundations should be carefully controlled. All utility trenches leading into the structure should be backfilled with compacted fill. Special care should be taken during installation of the subfloor sewers and water lines to reduce the possibility of post-construction soil moisture increases beneath the structure.

Proper landscaping and drainage maintenance are required to preclude the accumulation of excessive moisture in the soils beneath the structure. Accumulations of excessive moisture could be harmful to some types of interior flooring, to HVAC ductwork beneath the slabs, and can weaken or cause other changes in the soils supporting the foundations. This can cause additional differential movement of foundations and can result in cosmetic or structural damage to structure.

If any water line leaks or if irrigation system leaks are detected, they should be promptly repaired. In addition, if any depressions develop from the settlement of soils in utility trenches or other areas, they should be promptly backfilled to maintain the grade so that surface water drains rapidly away from the structure.

The foregoing recommendations should only be considered minimum requirements for overall site development. It is recommended that a civil/drainage engineer be consulted more detailed grading and drainage recommendations.

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**FOUNDATION REVIEW AND INSPECTION**

This report has been prepared to aid in the evaluation of this site and to assist in the design of this project. It is recommended that the geotechnical engineer be provided the opportunity to review the final design drawings and specifications in order to determine whether the recommendations in this report are applicable to the final design. Review of the final design drawings and specifications should be noted in writing by the geotechnical engineer.

In order to permit correlation between the conditions encountered during construction and to confirm recommendations presented herein, it is recommended that the geotechnical engineer be retained to perform continuous observations and testing during the earthwork portion of this project. Observation and testing should be performed during construction to confirm that suitable fill soils are placed upon competent materials and properly compacted, and foundation elements penetrate the recommended soils.

**CLOSURE**

Our conclusions, recommendations and opinions presented herein are:

- 1) Based upon our evaluation and interpretation of the findings of the field and laboratory program.
- 2) Based upon an interpolation of soil conditions between and beyond the explorations.
- 3) Subject to confirmation of the conditions encountered during construction.
- 4) Based upon the assumption that sufficient observation will be provided during construction.
- 5) Prepared in accordance with generally accepted professional geotechnical engineering principles and practice.

This report has been prepared for the sole use of Santa Fe County Public Works Department, specifically to aid in the design of the proposed public safety upgrades and renovations to be located at 23 Camino Justicia in Santa Fe, New Mexico and is not for the use by any third parties.

We make no other warranty, either express or implied. Any person using

this report for bidding or construction purposes should perform such independent investigation as he deems necessary to satisfy himself as to the surface and subsurface conditions to be encountered and the procedures to be used in the performance of work on this project. If conditions encountered during construction appear to be different than indicated by this report, this office should be notified.

All soil samples will be discarded 60 days after the date of this report unless we receive a specific request to retain the samples for a longer period.

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## BORING LOCATION MAP



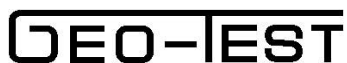
Public Safety Upgrades & Renovations  
Santa Fe, New Mexico  
Job No. 1-00303

Figure 1



**GEO-TEST**  
GEOTECHNICAL ENGINEERING  
AND MATERIAL TESTING





Project: Public Safety Upgrades & Renovations  
 Date: 04/08/2020 Project No: 1-00303  
 Elevation: Type: 6.5" O.D. HSA

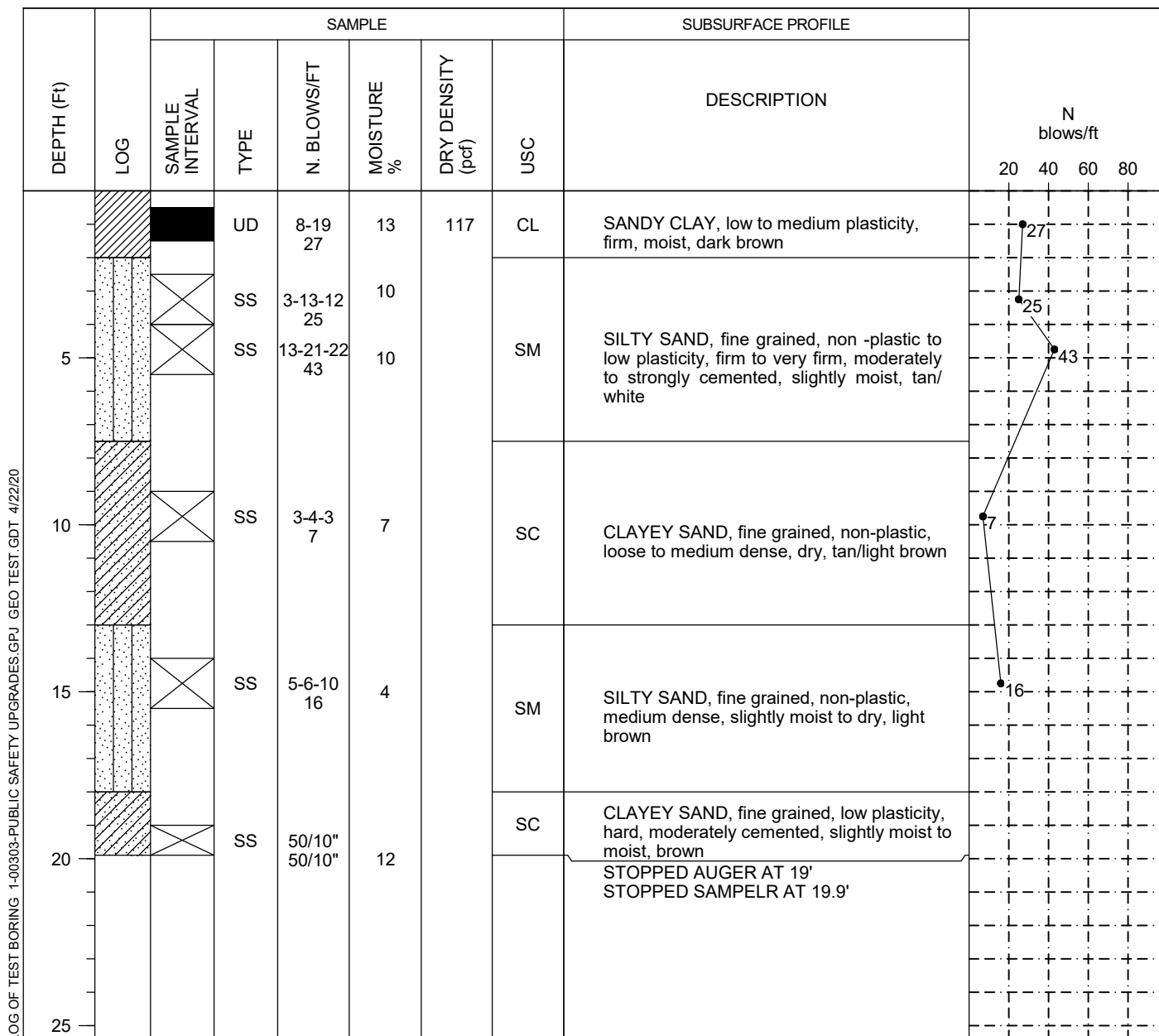
## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 1

During Drilling: NONE

After 24 Hours:



### LEGEND

SS - Split Spoon  
 AC - Auger Cuttings  
 UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
 CS - Continuous Sampler  
 UD - Undisturbed  
 ST - Shelby Tube

Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.



Project: Public Safety Upgrades & Renovations  
 Date: 04/08/2020 Project No: 1-00303  
 Elevation: Type: 6.5" O.D. HSA

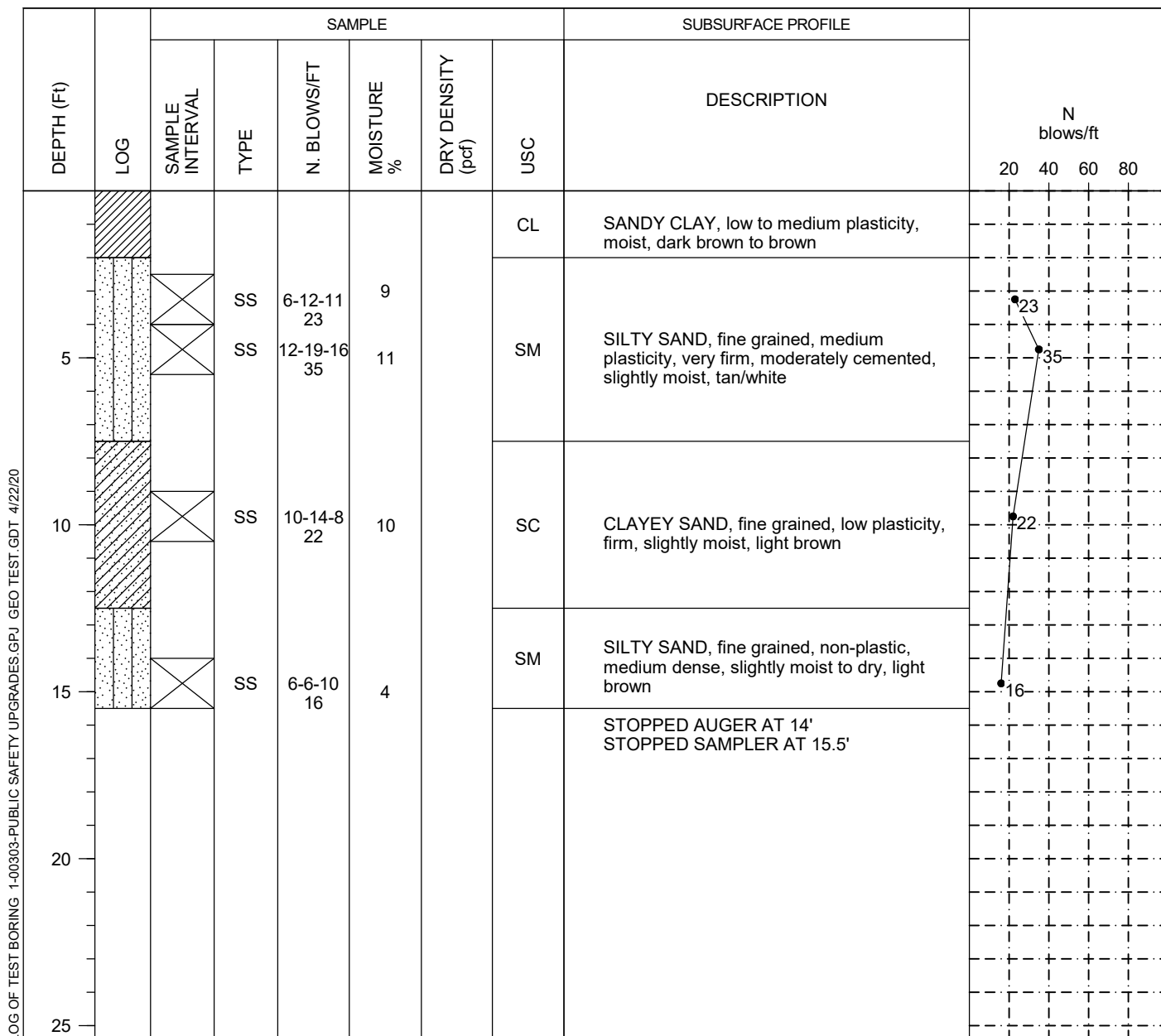
## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 2

During Drilling: NONE

After 24 Hours:

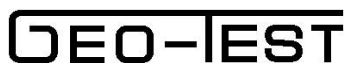


### LEGEND

SS - Split Spoon  
 AC - Auger Cuttings  
 UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
 CS - Continuous Sampler  
 UD - Undisturbed  
 ST - Shelby Tube

Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.



Project: Public Safety Upgrades & Renovations  
 Date: 04/08/2020 Project No: 1-00303  
 Elevation: Type: 6.5" O.D. HSA

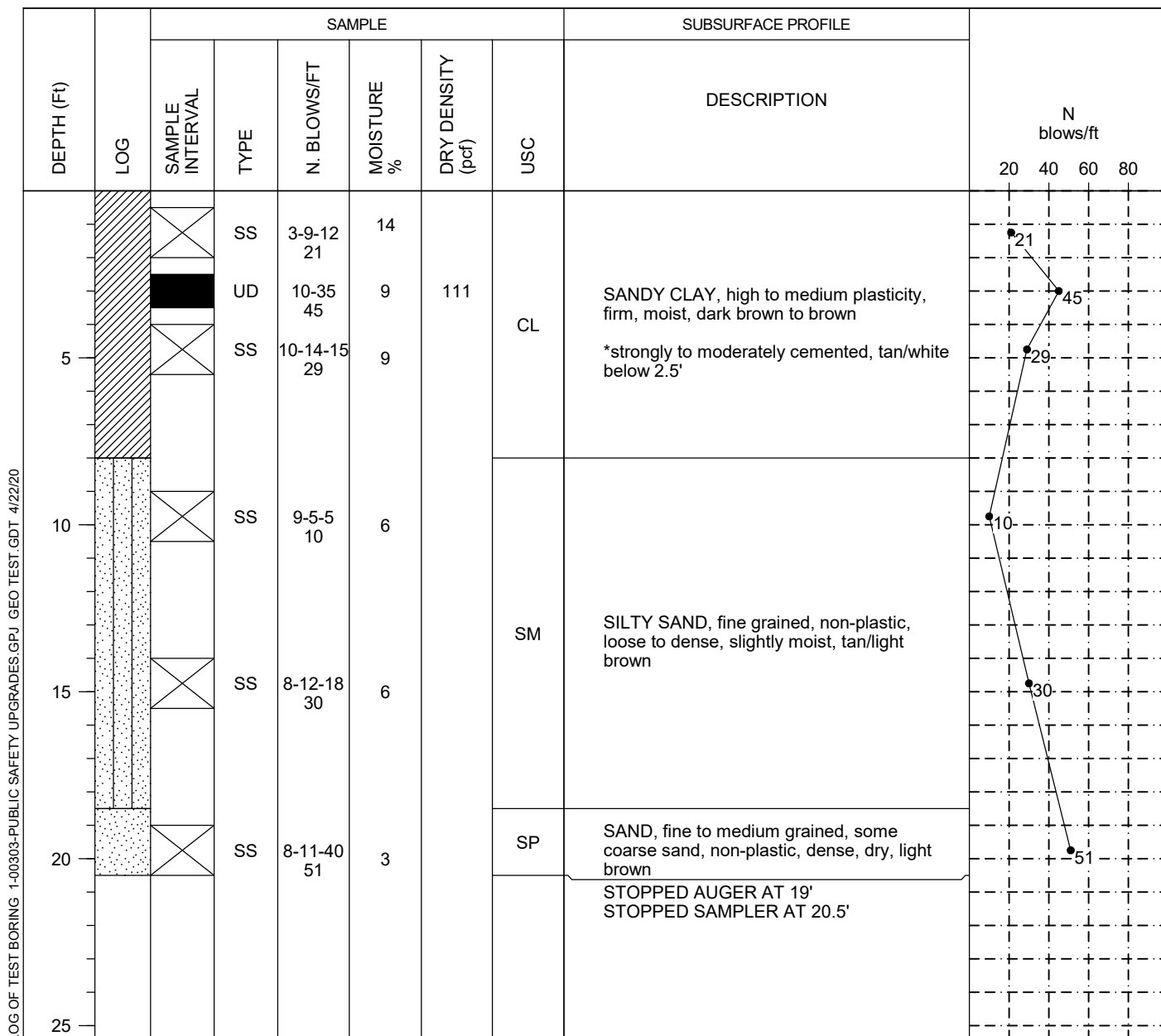
## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 3

During Drilling: NONE

After 24 Hours:



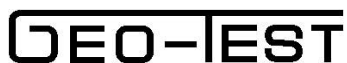
### LEGEND

SS - Split Spoon  
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Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.





Project: Public Safety Upgrades & Renovations  
 Date: 04/08/2020 Project No: 1-00303  
 Elevation: Type: 6.5" O.D. HSA

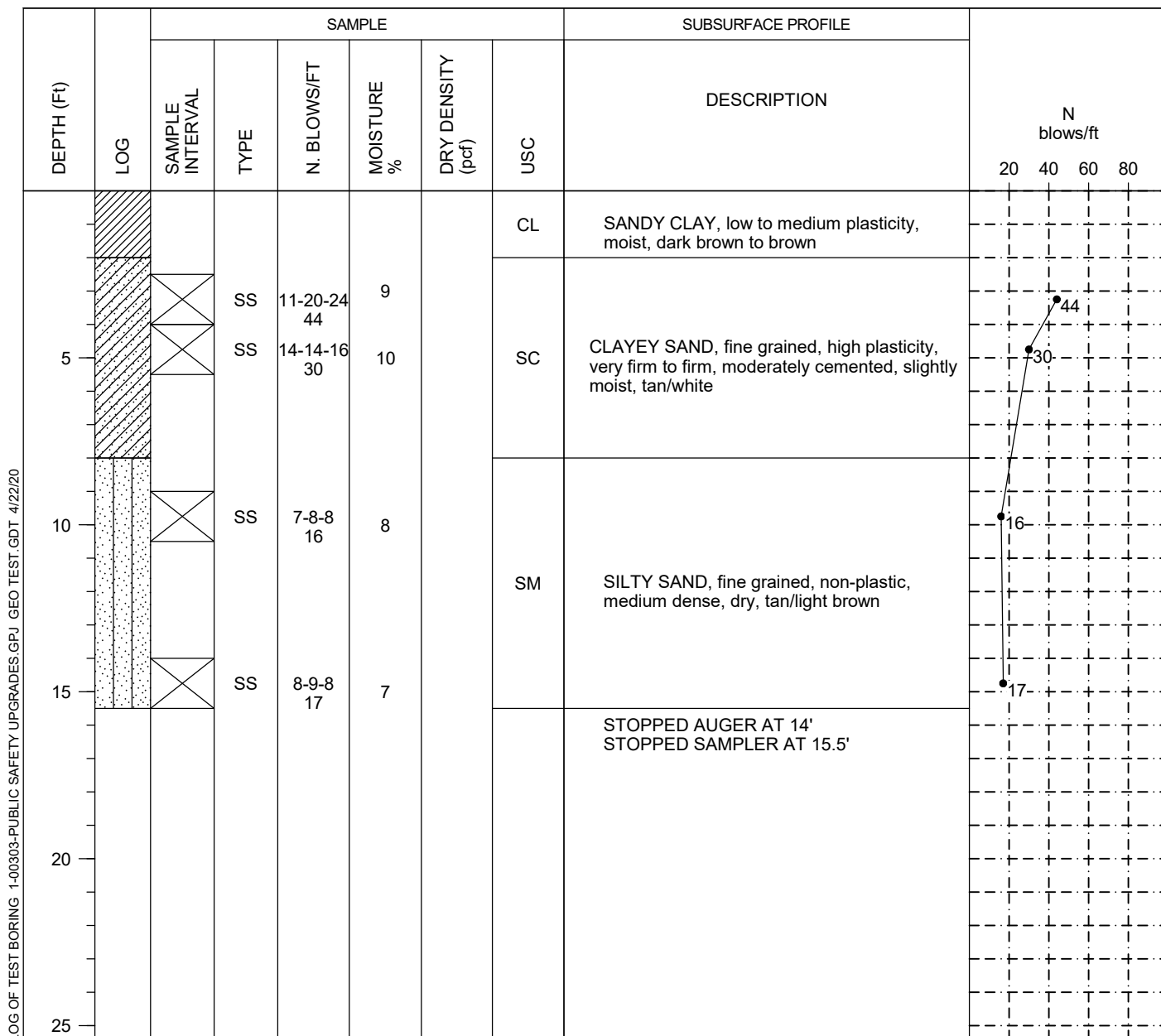
## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 4

During Drilling: NONE

After 24 Hours:



### LEGEND

SS - Split Spoon  
 AC - Auger Cuttings  
 UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
 CS - Continuous Sampler  
 UD - Undisturbed  
 ST - Shelby Tube

Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.



Project: Public Safety Upgrades & Renovations

Date: 04/08/2020

Project No: 1-00303

Elevation:

Type: 6.5" O.D. HSA

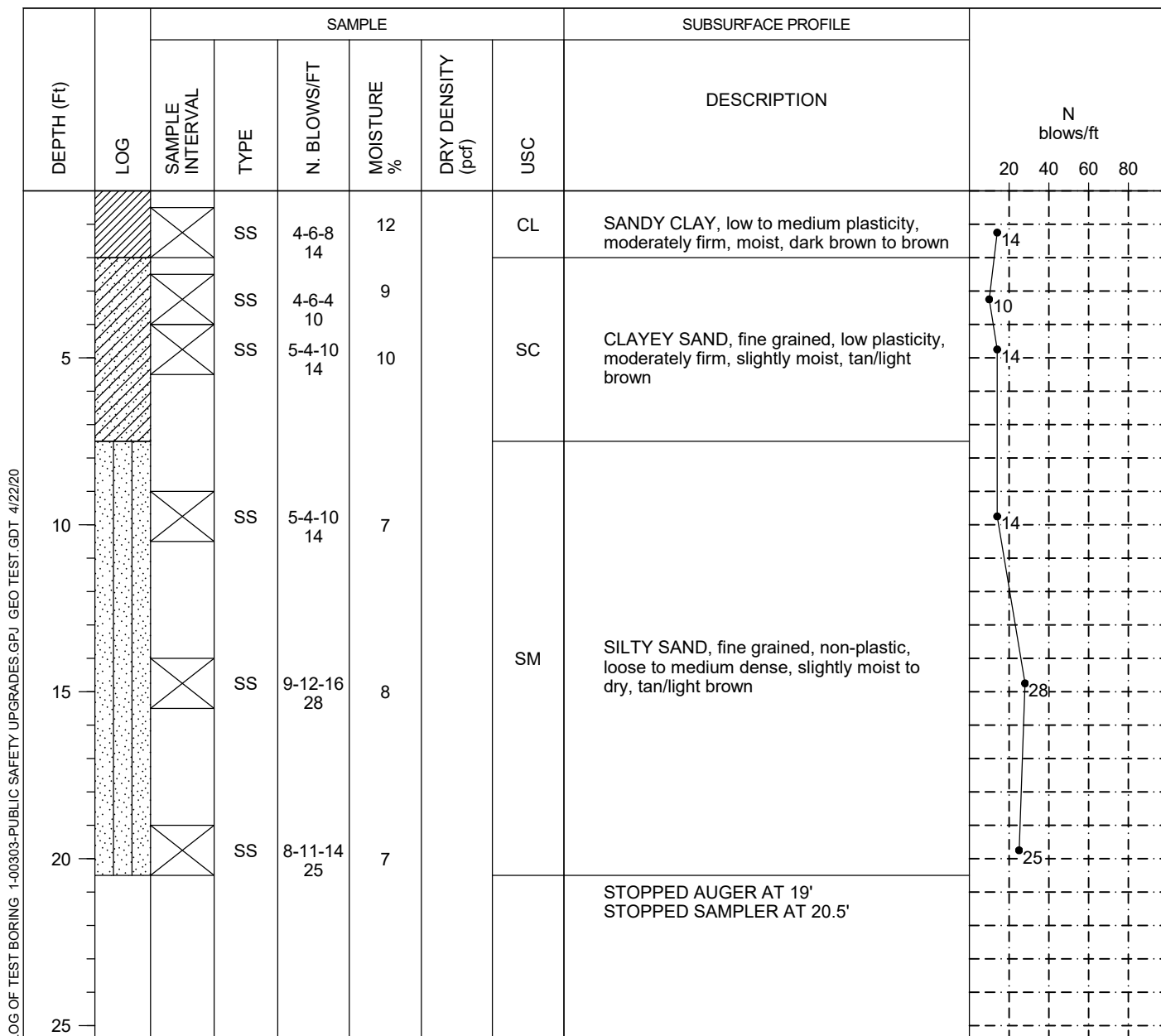
## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 5

During Drilling: NONE

After 24 Hours:



### LEGEND

SS - Split Spoon

AC - Auger Cuttings

UD/SL - Undisturbed Sleeve

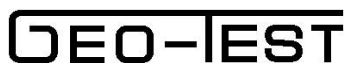
AMSL - Above Mean Sea Level

CS - Continuous Sampler

UD - Undisturbed

ST - Shelby Tube

Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.



Project: Public Safety Upgrades & Renovations  
 Date: 04/08/2020 Project No: 1-00303  
 Elevation: Type: 6.5" O.D. HSA

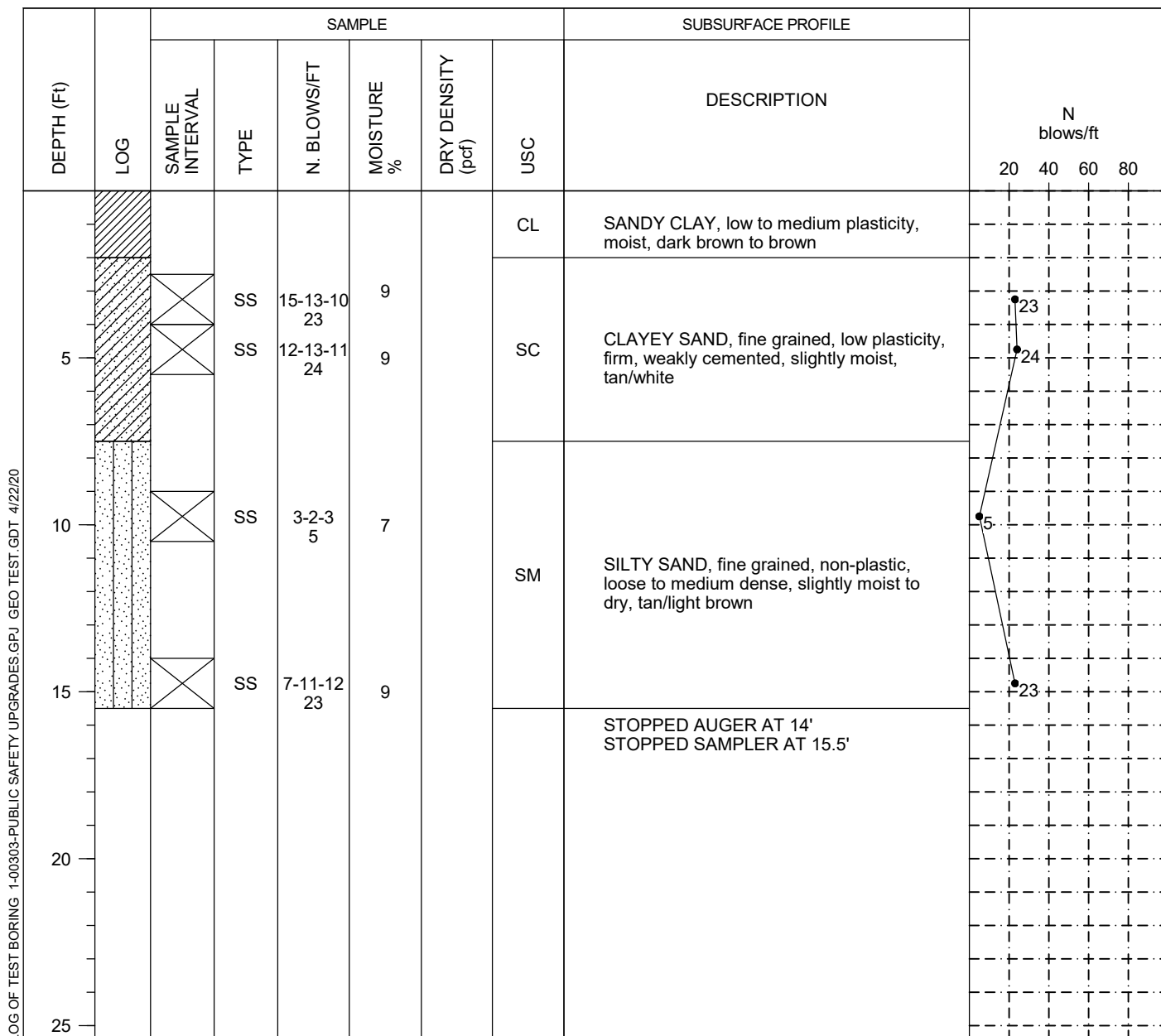
## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 6

During Drilling: NONE

After 24 Hours:



### LEGEND

SS - Split Spoon  
 AC - Auger Cuttings  
 UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
 CS - Continuous Sampler  
 UD - Undisturbed  
 ST - Shelby Tube

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Project: Public Safety Upgrades &amp; Renovations

Date: 04/08/2020

Project No: 1-00303

Elevation:

Type: 6.5" O.D. HSA



## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 7

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft 20 40 60 80			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
5			AC		10		CL	SANDY CLAY, low to medium plasticity, moist, dark brown to brown				
							SC	CLAYEY SAND, fine grained, low plasticity, moderately cemented, slightly moist, tan/white				
								STOPPED AUGER AT 5'				
10												
15												
20												
25												

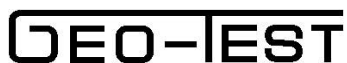
## LEGEND

SS - Split Spoon  
AC - Auger Cuttings  
UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
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Project: Public Safety Upgrades &amp; Renovations

Date: 04/08/2020

Project No: 1-00303

Elevation:

Type: 6.5" O.D. HSA

## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 8

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
			AC		15		CL	SANDY CLAY, low to medium plasticity, moist, dark brown to brown				
			AC		11		SC	CLAYEY SAND, fine grained, low plasticity, moderately cemented, slightly moist, tan/white				
5								STOPPED AUGER AT 5'				
10												
15												
20												
25												

## LEGEND

SS - Split Spoon

AC - Auger Cuttings

UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level

CS - Continuous Sampler

UD - Undisturbed

ST - Shelby Tube

Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.



Project: Public Safety Upgrades &amp; Renovations

Date: 04/08/2020

Project No: 1-00303

Elevation:

Type: 6.5" O.D. HSA

## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 9

During Drilling: NONE

After 24 Hours:

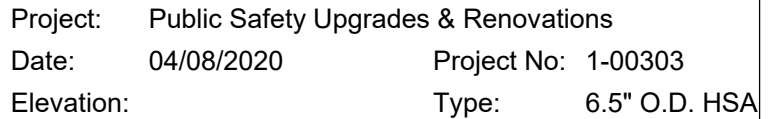
DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
									20	40	60	80
							CL	SANDY CLAY, low to medium plasticity, moist, dark brown to brown				
			AC		9		SC	CLAYEY SAND, fine grained, low plasticity, moderately cemented, slightly moist, tan/white				
5								STOPPED AUGER AT 5'				
10												
15												
20												
25												

## LEGEND

SS - Split Spoon  
AC - Auger Cuttings  
UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
CS - Continuous Sampler  
UD - Undisturbed  
ST - Shelby Tube

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# LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 10

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE INTERVAL	TYPE	SAMPLE				SUBSURFACE PROFILE	N blows/ft			
				N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION	20	40	60	80
			AC		11		CL	SANDY CLAY, low to medium plasticity, moist, dark brown to brown				
5								*moderately cemented, slightly moist, tan/white below 2'				
								STOPPED AUGER AT 5'				
10												
15												
20												
25												

## LEGEND

SS - Split Spoon  
AC - Auger Cuttings  
UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
 CS - Continuous Sampler  
 UD - Undisturbed  
 ST - Shelby Tube

ST - Shelby Tube  
Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.



Project: Public Safety Upgrades &amp; Renovations

Date: 04/08/2020

Project No: 1-00303

Elevation:

Type: 6.5" O.D. HSA



## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 11

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft 20 40 60 80				
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION					
5			AC		12		CL	SANDY CLAY, low to medium plasticity, moist, dark brown to brown					
							SC	CLAYEY SAND, fine grained, low plasticity, moderately cemented, slightly moist, tan/white					
								STOPPED AUGER AT 5'					
10													
15													
20													
25													

LOG OF TEST BORING 1-00303-PUBLIC SAFETY UPGRADES.GPJ GEO TEST.GDT 4/22/20

## LEGEND

SS - Split Spoon

AC - Auger Cuttings

UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level

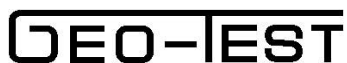
CS - Continuous Sampler

UD - Undisturbed

ST - Shelby Tube

Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.





Project: Public Safety Upgrades &amp; Renovations

Date: 04/08/2020

Project No: 1-00303

Elevation:

Type: 6.5" O.D. HSA



## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 12

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
5			AC		7		CL	SANDY CLAY, low to medium plasticity, moist, dark brown to brown  *moderately cemented, slightly moist, tan/white below 2'				
								STOPPED AUGER AT 5'				
10												
15												
20												
25												

## LEGEND

SS - Split Spoon

AC - Auger Cuttings

UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level

CS - Continuous Sampler


UD - Undisturbed

ST - Shelby Tube

Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

SUMMARY OF LABORATORY RESULTS

SUMMARY OF LABORATORY RESULTS 1-00303-PUBLIC SAFETY UPGRADES.GPJ GEO TEST.GDT 4/15/20

						SIEVE ANALYSIS PERCENT PASSING											
TEST HOLE	DEPTH (FEET)	UNIFIED CLASS	(%) MOIST	LL	PI	NO 200	NO 100	NO 40	NO 10	NO 4	3/8"	1/2"	3/4"	1"	1 1/2"	2"	4"
1	1.0	CL	13.0	41	26	68	91	96	99	100							
1	3.0		10.4														
1	5.0		10.2														
1	10.0	SC	7.0	31	16	43	77	84	94	98	99	100					
1	15.0		4.1														
1	20.0		12.1														
2	3.0	SM	8.7	52	22	49	71	82	97	100							
2	5.0		10.5														
2	10.0		10.1														
2	15.0		3.8														
3	1.0	CL	13.5	41	30	63	87	96	100								
3	3.0	CL	9.3	41	18	56	71	82	94	99	100						
3	5.0		9.0														
3	10.0		6.3														
3	15.0		5.7														
3	20.0		2.7														
4	3.0		8.7														
4	5.0	SC	9.5	61	40	37	70	81	95	99	100						
4	10.0		7.9														
						LL = LIQUID LIMIT PI = PLASTICITY INDEX NP = NON PLASTIC or NO VALUE						Project: Public Safety Upgrades & Renovations					
												Location: Santa Fe, New Mexico					
												Number: 1-00303					

# SUMMARY OF LABORATORY RESULTS

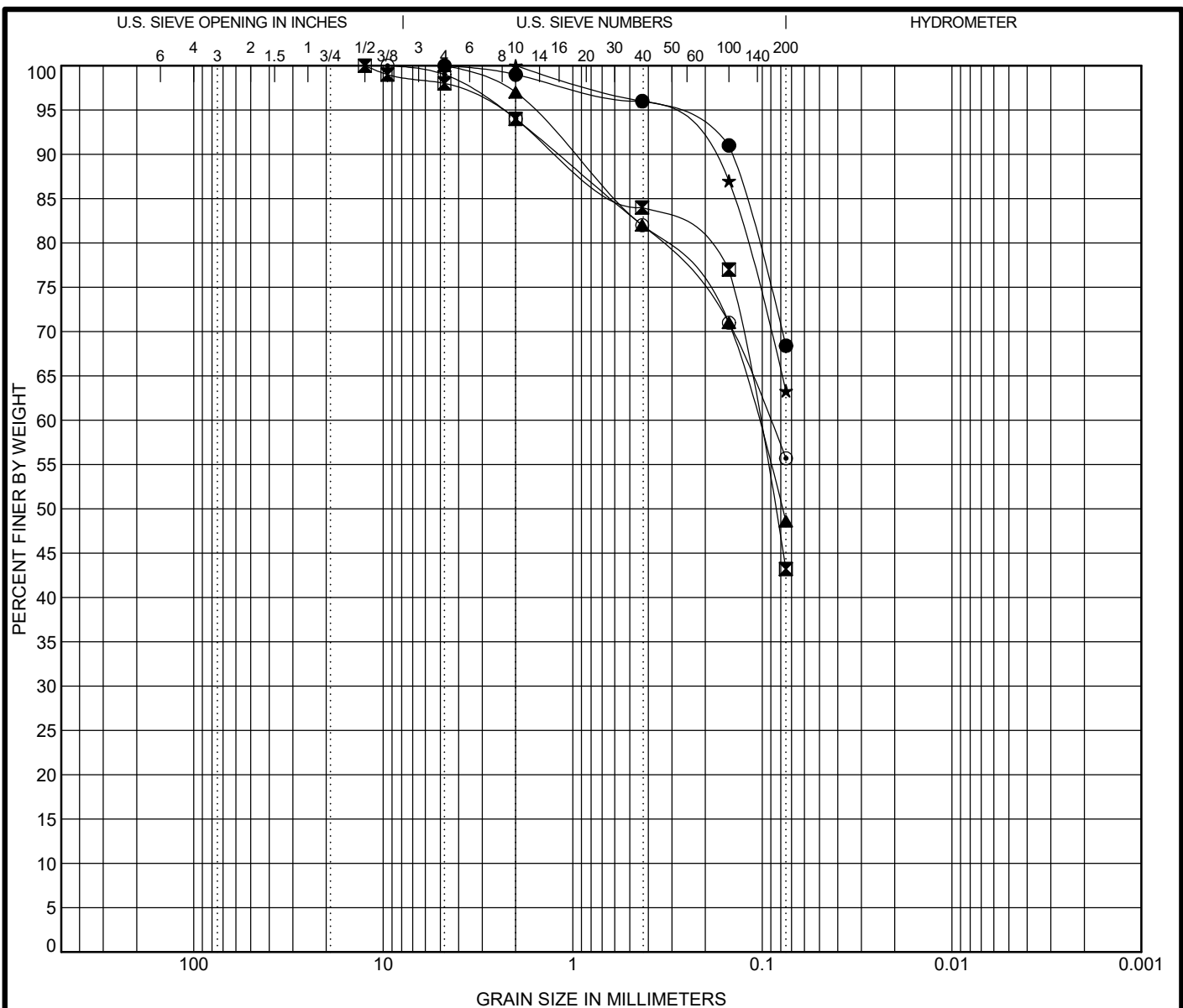
SUMMARY OF LABORATORY RESULTS 1-00303-PUBLIC SAFETY UPGRADES.GPJ GEO TEST.GDT 4/15/20

						SIEVE ANALYSIS PERCENT PASSING											
TEST HOLE	DEPTH (FEET)	UNIFIED CLASS	(%) MOIST	LL	PI	NO 200	NO 100	NO 40	NO 10	NO 4	3/8"	1/2"	3/4"	1"	1 1/2"	2"	4"
4	15.0		7.4														
5	1.0	CL	12.4	39	23	50	79	89	97	99	100						
5	3.0		8.5														
5	5.0		10.1														
5	10.0		6.5														
5	15.0		8.1														
5	20.0		7.2														
6	3.0	SC	9.2	46	26	33	62	72	89	97	100						
6	5.0		8.8														
6	10.0		6.9														
6	15.0		8.9														
7	2.5		9.8														
8	0.0 - 2.0	CL	15.0	36	21	78	90	95	99	100							
8	2.0 - 5.0		10.6														
9	0.0 - 5.0		9.1														
10	0.0 - 5.0	CL	11.4	35	18	64	79	86	94	98	99	100					
11	0.0 - 5.0		11.8														
12	0.0 - 5.0	CL	7.4	28	13	58	72	80	93	99	100						

**GEO-TEST**

LL = LIQUID LIMIT  
PI = PLASTICITY INDEX  
NP = NON PLASTIC or NO VALUE

Project: Public Safety Upgrades & Renovations  
Location: Santa Fe, New Mexico  
Number: 1-00303



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification			Classification					LL	PL	PI	Cc	Cu
●	1	1.0	SANDY LEAN CLAY(CL)					41	15	26		
⊠	1	10.0	CLAYEY SAND(SC)					31	15	16		
▲	2	3.0	SILTY SAND(SM)					52	30	22		
★	3	1.0	SANDY LEAN CLAY(CL)					41	11	30		
⊙	3	3.0	SANDY LEAN CLAY(CL)					41	23	18		
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
●	1	1.0	4.75				0.0	31.6	68.4			
⊠	1	10.0	12.5	0.106			2.0	54.8	43.2			
▲	2	3.0	4.75	0.107			0.0	51.4	48.6			
★	3	1.0	2				0.0	36.7	63.3			
⊙	3	3.0	9.5	0.091			1.0	43.3	55.7			

**GEO-TEST**

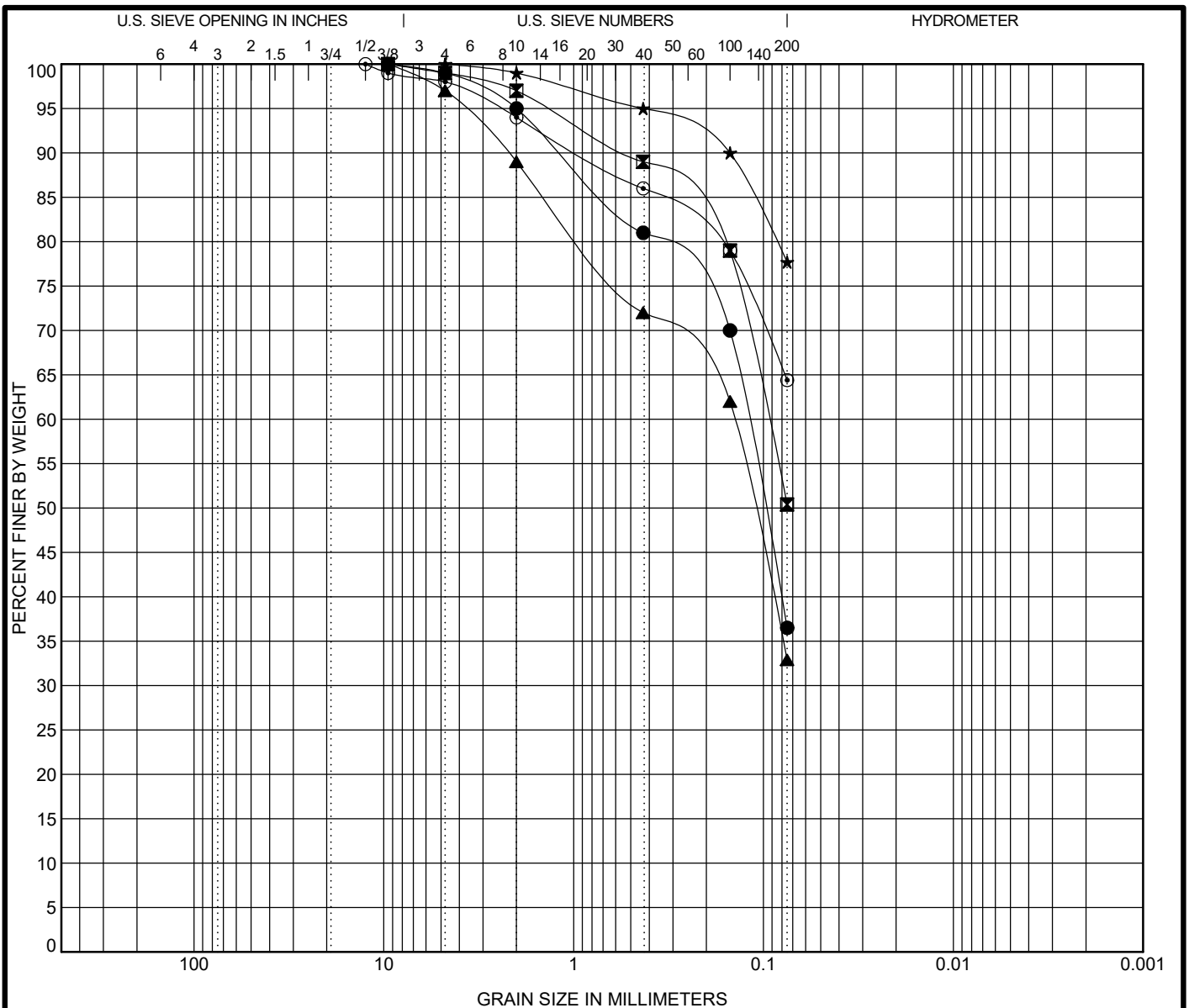
### GRAIN SIZE DISTRIBUTION

Project: Public Safety Upgrades & Renovations

Location: Santa Fe, New Mexico

Number: 1-00303





COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification			Classification			LL	PL	PI	Cc	Cu
●	4	5.0	CLAYEY SAND(SC)			61	21	40		
⊠	5	1.0	SANDY LEAN CLAY(CL)			39	16	23		
▲	6	3.0	CLAYEY SAND(SC)			46	20	26		
★	8	0.0 - 2.0	LEAN CLAY with SAND(CL)			36	15	21		
⊙	10	0.0 - 5.0	SANDY LEAN CLAY(CL)			35	17	18		
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	4	5.0	9.5	0.122			1.0	62.5	36.5	
⊠	5	1.0	9.5	0.095			1.0	48.6	50.4	
▲	6	3.0	9.5	0.143			3.0	64.1	32.9	
★	8	0.0 - 2.0	4.75				0.0	22.3	77.7	
⊙	10	0.0 - 5.0	12.5				2.0	33.6	64.4	

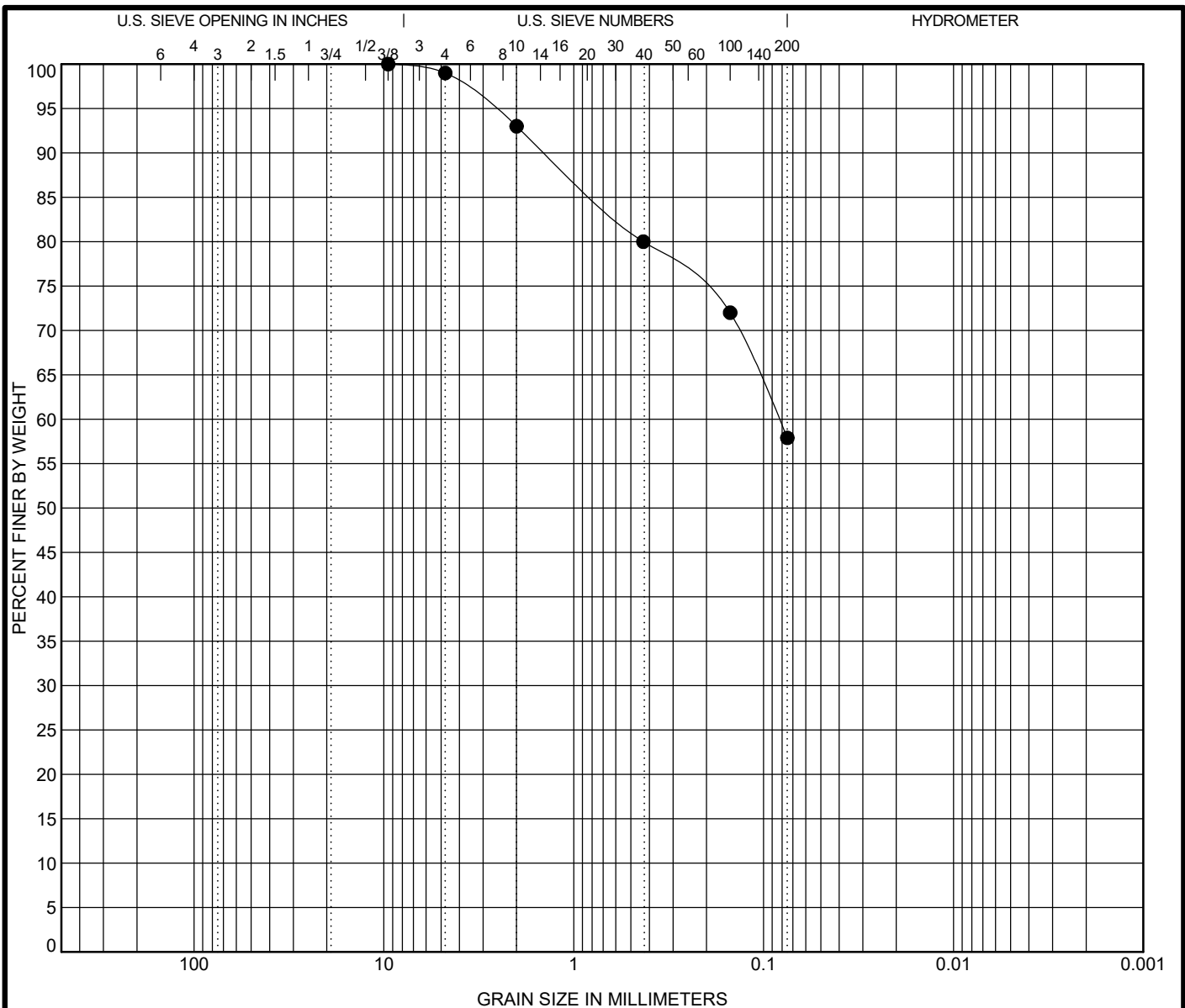
**GEO-TEST**

## GRAIN SIZE DISTRIBUTION

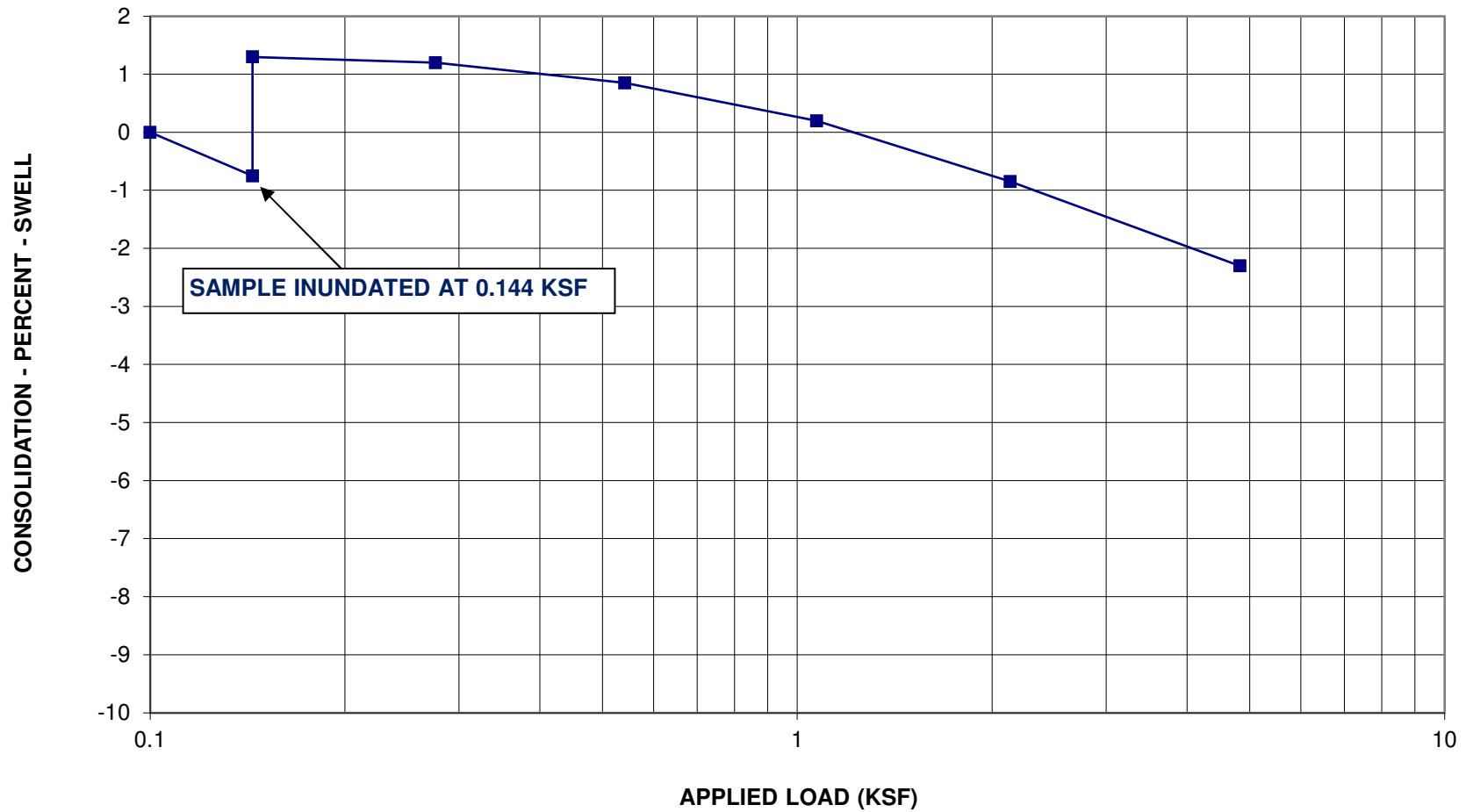
Project: Public Safety Upgrades & Renovations

Location: Santa Fe, New Mexico

Number: 1-00303

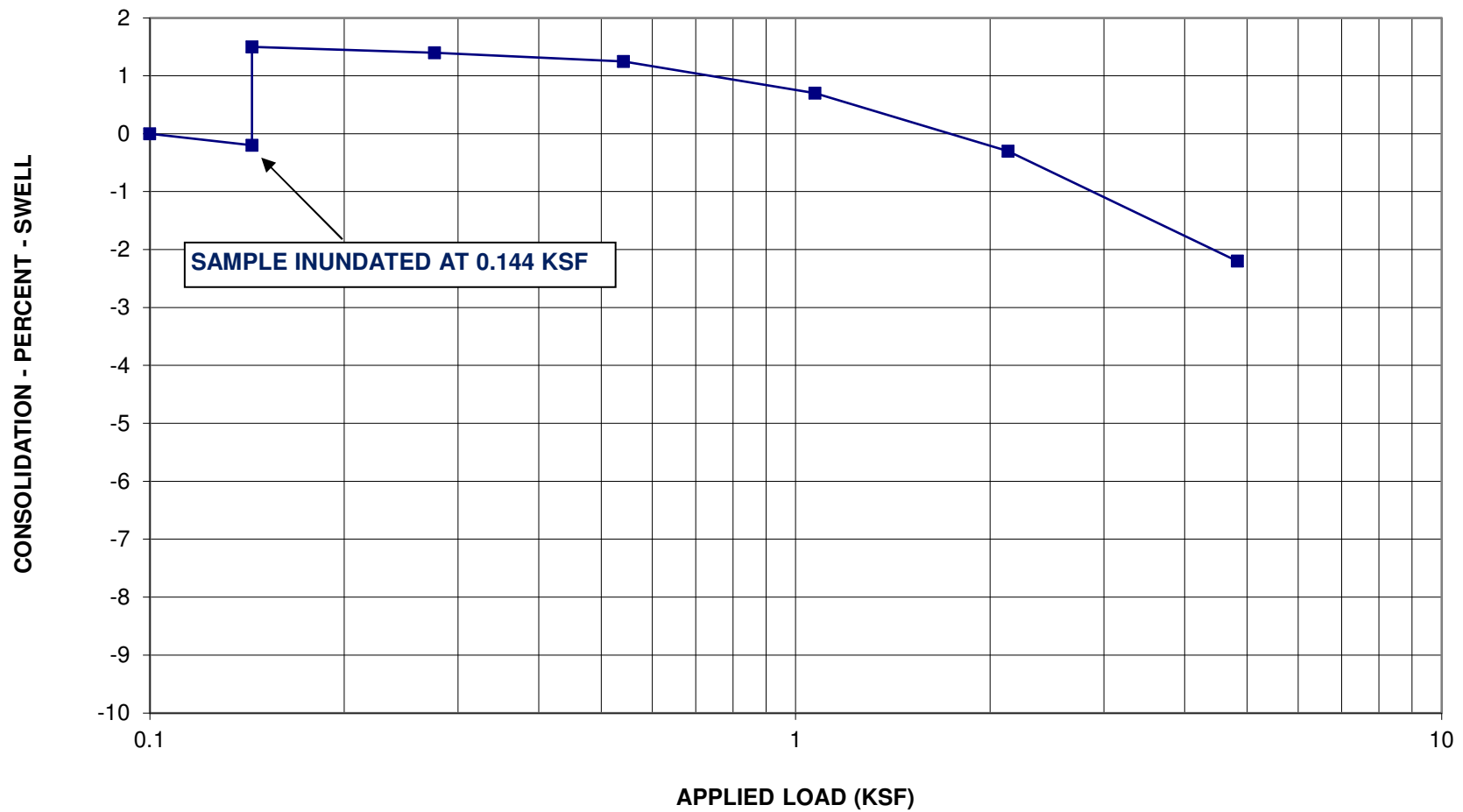


**CONSOLIDATION TEST RESULTS  
PUBLIC SAFETY UPGRADES & RENOVATIONS  
SANTA FE, NEW MEXICO  
BORING NO.1 AT 1'**



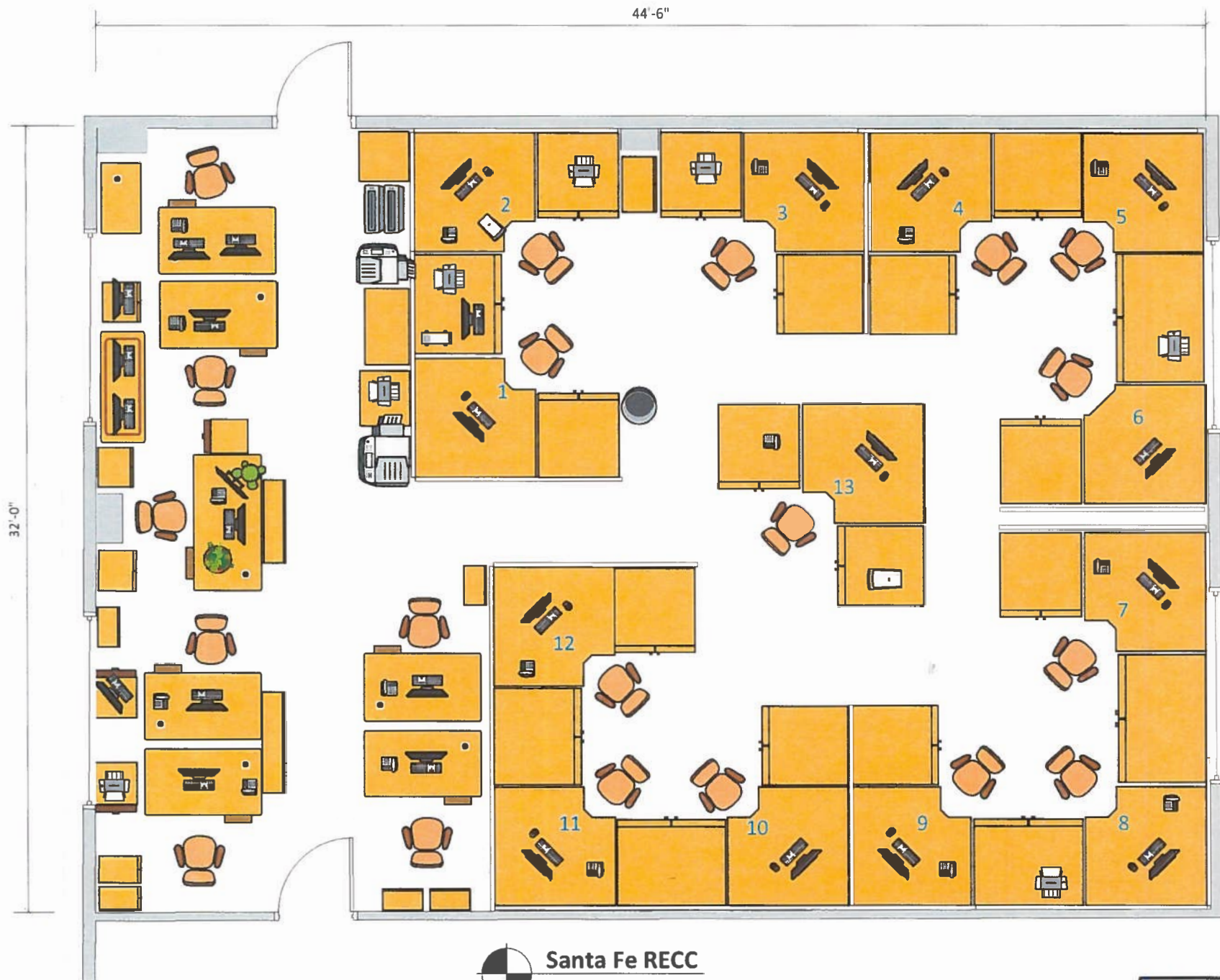
**INITIAL MOISTURE CONTENT = 10.4%  
INITIAL DRY DENSITY = 116.9 PCF**

**CONSOLIDATION TEST RESULTS  
PUBLIC SAFETY UPGRADES & RENOVATIONS  
SANTA FE, NEW MEXICO  
BORING NO.3 AT 2.5'**



**INITIAL MOISTURE CONTENT = 9.0%  
INITIAL DRY DENSITY = 110.7 PCF**





**Santa Fe RECC**  
Scale 3/16" = 1'-0"

DRAWN BY

J V (4/10/2019)

# Attachment D

## Public Safety Complex Upgrade Sheriff's Programming Needs

Date: 3/8/2021

Departments proposed to stay on east end of existing building  
"Sheriff" side

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
Evidence (*Critical need for expansion in current location -- Sheriff's side of building)					
Total Department Staffing	3				Office/work areas for both employees
Office Space					
# of Private Offices (floor to ceiling walls)		2			
Private Office Storage				Yes	
# of Cubicle Offices (walls typically 56")		1			Future for evidence tech?
Cubicle Office Storage				Yes	
IT ports				Yes	
Access Controlled				Yes	
Data				Yes	
IAPE Standards				Yes	
Storage					
Homicide room temp controlled and vented					need to expand -- up?, north?
Large narcotics room temp controlled					need to expand -- up?, north?
Patrol narcotics room temp controlled					need to expand -- up?, north?
Gunroom					hand and rifles...need to get off of floor and expand -- up?
Non-evidence gun room					hand guns and rifles
Safe room					needs to be large enough for existing safe and a filing cabinet
Tools/Bats Room					large space to store items that can't be boxed

Case review room					??? Need # of occupants
Release area					need a window to "release" firearms"
Patrol/Sheri evidence processing area					need a location to store packaging items such as boxes, tape, bags, etc.
Large evidence intake room					
Additional large (size of 4 existing lockers)					8-10?
Evidence car bay					Exists but is small - expand north?, east?
Mezzanine area extension					Need more mezzanine space with a possible lift to get large items to 2nd level (IAPE Standards)

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
Investigations (prefer to stay on Sheriff's side) -- ALL AREAS NEED TO HAVE SECURED ACCESS (Keyed or Card					
Total Department Staffing	19				Need to confirm 19, does this allow for growth?
Office Space					
Private Offices (floor to ceiling walls)		3			
Liuutenant					
Seargant					
Sex Offender Resource (SOR)					Needs to be located by a "back door" entrance
Sex Offender entrance lobby??					At back door entrance -- max occupancy = 3
Access Control for all private offices				Yes	
Private Office Storage				Yes	
# of Cubicle Offices (walls typically 56")					

Admin staff		2			Need to be far enough from detectives so they don't hear detective conversations but close enough to provide support
Detectives		12			
Warrant Officers		2			
Cubicle Office Storage				Yes	
IT ports				Yes	
Data				Yes	
Storage				Yes?	Document storage?
Interview rooms		2			max occupancy =3 (2 detectives and suspect), room needs to be sound proof
Conference room		1			Need their own separate room to brief/detail a crime; smart board, dry erase board. Max occupancy = 15
Equipment storage room		1			secured access to store lights, cameras, etc.
Holding cell		1			room for premanufactured "cage" holding cell is sufficient

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
Records:					
Total Department Staffing	11				Need to confirm total headcount -->

Office Space					
# of Private Offices (floor to ceiling walls)		2			
Private Office Storage				Yes	
# of Cubicle Offices (walls typically 56")					
Office space		10			
Window clerk intake (exists)		1			
Cubicle Office Storage					
IT ports					
Access Controlled					
Data					
IAPE Standards					
Storage Room					
Filing room					Need to store large "medical" like cabinets that move

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Patrol: Traffic / DWI / Fatal Team</b>					
Total Department Staffing					
Office Space					
# of Private Offices (floor to ceiling walls)		7			All in close proximity to briefing room
Team A Lieutenant		1			
Team B Lieutenant		1			
Team C Lieutenant		1			
Patrol offices (3 desks in each)		3			
Fatal/Traffic Team Office		1			Max occupancy = 5
Private Office Storage					
# of Cubicle Offices (walls typically 56")		0			
Cubicle Office Storage				N/A	
IT ports				Yes	
Access Controlled				Yes	Private offices (key or swipe?)
Data				Yes	
IAPE Standards				No	
Storage Room					??
IR 8000 Room (DWI detection)					Max occupancy = 2 ; needs to be located near briefing room

Holding cells		2			Need room to insert cage (same as investigations cell), access controlled
Briefing Room					Max occupancy = 20
Bathrooms					More stalls needed (M & W)
5-7 Workstations					Just like what exists

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Breakroom</b>					
Total Department Staffing					Maximum occupancy = 10 (at one time)
Kitchen area					
Stove (not commercial)		1			
Microwave		1-2			
Refrigerator		1			
Sink					
Tables and chairs					
Need space for two (2) "shred" containers					

Departments proposed to move to west end of existing building "Fire"



	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Administration</b>					
Total Department Staffing					Allow for growth
Office Space					
Private Offices (floor to ceiling walls)		11			
Sheriff					with private bathroom and room for four (4) person conference table
Undersheriff					room for four (4) person conference table
Major					room for four (4) person conference table
Captain					room for four (4) person conference table
Executive Administrative Assistant					
PIO					
Accountant					
Cpl. Recruiting					
Cpt. Training					
Background Investigator					
Fleet Manager					
Property					
IT Office					one person -- IT office need flat space to work on equipment that is tem & humidity controlled
IT Office storage					
IT Server room					
Front desk area					
Semi-private Offices (walls ~ 81" tall)					
Administrative Assistant	1				
Account Tech	1				

Training Area/Multi-purpose/Conference Room					Maximum occupancy = 50 (similar to existing multi-purpose room)
Gym					need men's and women's locker rooms (20 lockers each, 2 showers per)
Vitra 3D simulation					Need area specifications to determine size of room needed (requested near gym)
Break room (duplicate of other room)					
Stove (not commercial)		1			
Microwave		1-2			
Refrigerator		1			
Sink					
Tables and chairs					
Need space for two (2) "shred" containers					
Supply Room					Need a location to store office supplies

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
Fleet: Area needs to be located near property office and IT office					
Total Department Staffing					
Office Space					
# of Private Offices (floor to ceiling walls)					
Private Office Storage					
# of Cubicle Offices (walls typically 56")					
Cubicle Office Storage					
IT ports					
Access Controlled					
Data					
IAPE Standards					
Storage Room					

Work Bay		1			Minimum of 1 used to inspect vehicles

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Property: Ammo, Weapons, Supplies</b>					
Total Department Staffing					
Office Space					
# of Private Offices (floor to ceiling walls)					
Private Office Storage					
# of Cubicle Offices (walls typically 56")					
Cubicle Office Storage					
IT ports					
Access Controlled					
Data					
IAPE Standards					
Storage Room					

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Admin: Accounting, IT, Public Relations</b>					
Total Department Staffing	9				
Office Space					
# of Private Offices (floor to ceiling walls)					
Private Office Storage					
# of Cubicle Offices (walls typically 56")					
Cubicle Office Storage					
IT ports					
Access Controlled					
Data					
IAPE Standards					
Storage Room					

# Public Safety Complex Upgrade

## Fire Admin Programming Needs

Date: 4/8/2021

### Building needs

Min Sq Ft.

Emergency Generator  
 Exterior "Carport" for EOC vehicles (see below)  
 Bathrooms (2 @ 500 sq ft)  
 Bathrooms (2 @ 50 sq ft)  
 Break Room (20' x 20')  
 Front Lobby (12' x 12')

1000  
 100  
 400  
 144

Management offices (24'x12')  
 Cubicles (8' x 8')

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
Chief - Fire Admin					
Total Department Staffing	5				
Office Space					
# of Private Offices (floor to ceiling walls)		1	288		Chief's Litzenberg
Private Office Storage				Yes	Coat Closet, filing cabinet?
Access Controlled				Yes	
# of Cubicle Offices (walls typically 56")		4	256		Exec Asst, Comm, RTR, IT
Cubicle Office Storage				Yes	
IT ports				Yes	
Data				Yes	
Reception / Copy Center				Yes	

544

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
Asst Chief - Office of Emergency					
Total Department Staffing	4				
Office Space					
# of Private Offices (floor to ceiling walls)		1	288		Asst Chief Vigil
Private Office Storage				Yes	Coat Closet, filing cabinet?
Access Controlled					??
# of Cubicle Offices (walls typically 56")		3	192		2 EMS, 1 Open
Cubicle Office Storage				Yes	
IT ports				Yes	
Data				Yes	
Bunk rooms x 2				Yes	Size of Martin's office

Small commercial kitchen				Yes	Will need to be "warming" kitchen
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480

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Asst Chief - Operations</b>					
Total Department Staffing	6				
Office Space					Quartermaster office needs to be close to uniform, PPE, cleaning supply storage (possible loading dock)
# of Private Offices (floor to ceiling walls)		2	576		Asst Chief Quartermaster, Medical
Private Office Storage					Filing cabinet?
Access Controlled				Yes?	
# of Cubicle Offices (walls typically 56")		4	256		2-LDs, MD, QA
Cubicle Office Storage				Yes	
IT ports				Yes	
Data				Yes	

832

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Asst Chief - Support Services</b>					
<b>Billing</b>					
Total Department Staffing	5				
Office Space					
# of Private Offices (floor to ceiling walls)		2	576		Asst Chief Black and Accounting Manager
Private Office Storage				??	Filing cabinet?
Access Controlled				??	
# of Cubicle Offices (walls typically 56")		4	256		2 - Accts Pay, 1 - Accts Billable, 1 - Training?
Cubicle Office Storage				Yes	
IT ports				Yes	
Data				Yes	
<b>Fleet (Supervisor and Mechanics)</b>					
Total Department Staffing	6				4 mechanics share one cubicle
Office Space					
# of Private Offices (floor to ceiling walls)		1	576		
Private Office Storage				??	Filing cabinet?
Access Controlled				??	
# of Cubicle Offices (walls typically 56")		2	128		1- Admin, 1 - Technicians share (in office space)

Cubicle Office Storage				Yes	
IT ports					
Data					
Asst Chief - Support Services					
Fleet (Supervisor and Mechanics)					
Work Bays			2160		Recommend shop facility be isolated from fire admin due to fumes and noise (Changed from 80' x 36' to 60' x 36')
2 restrooms near bays and 6 lockers			200		
Workstation(s) in shop		2			one on each side
120v and 208v outlets in convenient locations plus power cords on reels					
exhaust reels					
1" and 3/4" air plumbed throughout bays					believe no to oil, anti-freeze, etc. reels. "compressor relocate???"
location needed for existing drill press					
Two (2) 16' wide drive through bays with space to move (doors at both ends)					Drive through bays (36' w x 80' l total dim). 30' (too high) 18' max ceiling height and can perform cab work outside ceiling to allow for aerial ladder out of cradle and high enough for cab tilt. Doors 12' w x 14' h
<del>Need plumbing for pump-tester (12,000-gallon-underground tank) next to building</del>					not feasible at this time
<del>Four (4) 16' wide bays with one door 3,200</del>					16' x 50' each. Bay ceiling min 18' high not feasible at this time
2-level mezzanine storage			1920		64' w x 30' l x with mezzanine (1920 sq ft per level). 1st floor offices, bathrooms, pant/supply storage (part of cubicle count in fleet). Storage needs: pants, supplies, specialty equipment with forklift access??? (Add an additional 1920 sq ft without increasing building footprint)
Request to use shipping/receiving loading dock (see Quartermaster needs)					Need to see if this is feasible



Equipment not in scope but will need to make room for:					waste oil system, 2 post lift relocate?, 4 post lifts, HD wheel lift ???
Exterior - covered area to park and protect backup ambulance and apparatus (requires power)					

5816

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Asst Chief - Fire Prevention</b>					
Total Department Staffing	6				
Office Space					
# of Private Offices (floor to ceiling walls)		1	288		Need to have enough space within office for 4 person conference table or an attached meeting room off of office to meet this need. Need TV in private office for training purposes (power, data)
Private Office Storage				?	
Access Controlled				No	
# of Cubicle Offices (walls typically 56")		5	320		
Cubicle Office Storage				Yes	
IT ports				Yes	
Data				Yes	
<b>Asst Chief - M&amp;HO/Co-op</b>					
Total Department Staffing	4				
Office Space					
# of Private Offices (floor to ceiling walls)		1	288		Need to have enough space within
Private Office Storage				?	
Access Controlled				No	
# of Cubicle Offices (walls typically 56")		3	192		Admin, P, SW
Cubicle Office Storage				Yes	
IT ports				Yes	
Data				Yes	

1088

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Public Safety Director</b>					
Total Department Staffing	3				Offices need to be separate from fire for confidentiality purposes
Office Space					
# of Private Offices (floor to ceiling walls)		1	288		Director's office: needs room for 6 person conference room table, coat closet and room for lock box, existing hutch (24' x 12')
# of Private Offices (floor to ceiling walls)		2	200		Christen - needs filing cabinet; Lela (sp?) filing cabinet
Private Office Storage				?	File cabinets
Access Controlled				No	
# of Cubicle Offices (walls typically 56")		0			
<b>Public Safety Director Continued</b>					
Cubicle Office Storage				Yes	
IT ports				Yes	
Data				Yes	
Copy Center					include fax connection

Total
 39
 35
 488
 Ok because 3 mechanics aren't accounted for in "36"

Conference Rooms	Max Occ	Qty	Sq Ft		
Conference Room #1					Computers stay set up
Maximum occupancy	52		792		Conf room / EOC / Training Classroom
IT ports					
Access Controlled					
Data					
Large TVs		6			Used to monitor news, show maps, area cameras, etc
Direct TV service					
Communication tower (~50' tall) or smaller units similar to existing that are lower profile					Need to relocate existing EOC communication equipment to new building
Conference Room #2					Possibly with divider
Maximum occupancy	30		300		
IT ports					
Access Controlled					
Data					
Conference Room #3					Shared across all Fire Depts
Maximum occupancy	6		90		

IT ports					
Access Controlled					
Data					
Conference Room #4					Shared across all Fire Depts
Maximum occupancy	6		90		
IT ports					
Access Controlled					
Data					
Conference Room #7 - EOC			75		Radio room / GIS Plotter - needs to be located next to EOC CR
Maximum occupancy	5				
IT ports					
Access Controlled					
Data					
Conference Room #9 - Public Safety Director			150		For confidential meetings and next to Director and staff offices
Maximum occupancy	10				
IT ports					
Access Controlled					
Data					
TV					

Total sq ft

1497

#### Storage Rooms

Sq Ft

Storage Room #1			400		Large and centrally located for Fire Admin, Fire Prevention
Access Controlled				Yes	Need controlled access room with individual internal storage space with controlled access at each room
Storage Room #2			100		EOC
Access Controlled					
Storage Room #3			100		
Access Controlled					
Storage Room #4			144		Supplies - all depts
Access Controlled					??

Total sq ft

744

Estimated Subtotal Sq. Ft

13133

Estimated hallway space

1970

Total Estimated Sq. Ft.

15103

@ \$300/sq ft

\$ 4,530,885

@\$275/sq ft

\$ 4,153,311

# Public Safety Complex Upgrade

## RECC Programming

Date: 3/8/2021

	Staffing	Office Count	Min. Sq. Ft. (if known)	Yes / No	Comments
<b>Regional Emergency Communications Center</b>					
Total Department Staffing	51				
Office Space					~ 2,372 Sq. Ft. currently
Dispatch Floor / Floor Storage		13	1568		Keep in same location: 12 dispatchers, 1 floor supervisor (two shifts). Twelve (12) filing cabinets are currently stored in the hallway and need to relocate to the dispatch floor, west wall preferred.
# of Private Offices (floor to ceiling walls)		4			Director (ok to relo to exist off space), Manager (office must be located near dispatch and cubicle offices), Dept Admin (ok to relo to exist off space), and IT Tech
Director's Office			180		
Manager			150		
Dept Administrator			48		
IT Tech			180		
# of Cubicle Offices (walls typically 56")		5	500		100 sq. ft. each and need to be located close to dispatch floor (3/11/2020 changed cube count back to 5 as it includes room for a new hire per Vanessa).
Cubicle Office Storage				Yes	
IT ports				Yes	
Access Controlled				Yes	Yes. And, if current gym location is converted to office space the exterior door will need access control
Data				Yes	
IAPE Standards				??	
IT Server Room			1750		
Conference Room			1750		Need data and power for training computers
Scanning / Storage Room (Files and Supplies)			900		This is a room separate from the file storage on the dispatch floor and might contain office equipment and supplies

Kitchen / Break / Decompression Room			444		See program document detailing specifics
Restrooms					Prefer to use two (2) next to gym
Staff lockers					60 lockers (30 x 2 stacked -- 1' W x 16" D x 3' H)



need  
mez to  
go west  
+ evidence

- has unoperable HVAC system  
& filters get changed??

## Investigations (Sheriff Side)

15 current employees

Lt. Office

Sgt. Office

Warrant Office for 2 agents

SOR Office

Secretary Office x 2

Interview Room x 2

Conference Room- Smart Board, dry erase

Cubbie/Office for 10-12 detectives

Equipment Room

Holding Cell

need separate entrance  
for entry & exit  
from outside  
appt needed 1 on 1 or  
max 3 offenders

Semi-private or cubicle

Six offender similar private office

- always from detectives but close enough to interact  
(not privy to info)

2 detectives + suspect sound

Briefings/conf room 15 people max

currently in storage cubicle

lights, cameras, needs to be secured

already manufactured "cage"

## Evidence

Critical in

2 Employees (Add Evidence tech later date)

Office Valerie

Office Shari

Homicide Room Temperature Controlled

Large Narcotics Room Temperature Controlled

Patrol Narcotics Room Temperature Controlled

Gunroom

Non Evidence Gun Room?

Safe Room

Tools/Bats Room

Case Review Room

Release area

Patrol/Shari evidence processing area.

Large evidence intake Room

More and larger evidence lockers

Evidence car bay.

\* Important - Stainless  
steel table  
for processing  
Secure  
Growth for next evidence  
10-15 years

Lockers space "2'x2'  
and need larger space

for confiscated money + 4 drawers

for odd shaped unstackable items

need a "window" to release firearms

packaging for evidence - need storage for  
packaging items  
tape, boxes, bags

## Records

8 current employees

Growth for IPRA plus 2 clerks

Office Jessica large enough for meetings

Office IPRA clerk

Window Clerk area

Filing Room

Cubby/Office for 10

private office

private + meeting  
space

intake exists

large "med" like storage

2 private offices

more, larger,

need to secure "mesh" &  
mezzanine w/ concrete  
on W  
side of existing  
for storage (now  
briefing area)

total count?

total count?

total count?

total count?

total count?

total count?

total count?

total count?



## Patrol

Team A Office

Team B Office

Team C Office

Fatal Team office/Traffic Office

IR 8000 Room

2 Holding Cell

Briefing Area

More bathrooms

5-7 workstations

## Misc.

Kitchen Area

- break room 10 people
- stove
- micro
- 1 refrig
- sink
- tables

next  
close to briefing room  
all private

4 people per office

5 people max

1 large office

DWI detection

2 people

like investigations

20-30 people max

men's & women's

6 offices

3 ea lieutenants  
private

3 more w/

3 officers  
private  
patrol

Pelo - download

Need space for shredded  
containers 2x

## Admin Area (Fire Side)

Sheriff's Office/ Conference Area/Meeting room

Undersheriff Office

Major Office

Captain Office

Executive Assistant Office

PIO Office - private

Administrative Assistance Office - semi

Front desk area

Accountant Office - private

Account Tech Office - semi private

Cpl. Recruiting Office

Cpl. Training Office

Background Investigator Office

IT Office Temperature Controlled

Fleet Office

Property Office

Training Area/Multi-Purpose/ Conference Room

Gym

Kitchen Area

Supply Room

private - large w/ bathroom

Private w/ 4 person conf table

private

private

semi

private

semi private

private

private

private

private

one person - large area needed

Storage, IT server room is separate

secured - private weapons, ammo storage

50 people max (similar to multipurpose room)

locker room men/women

break room like east side

20 lockers

2 showers per bathroom

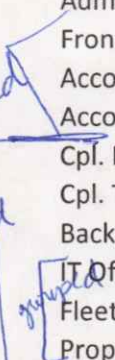
office supplies

include Vtra system 3D simulation  
separate area

need specs

one area grouped

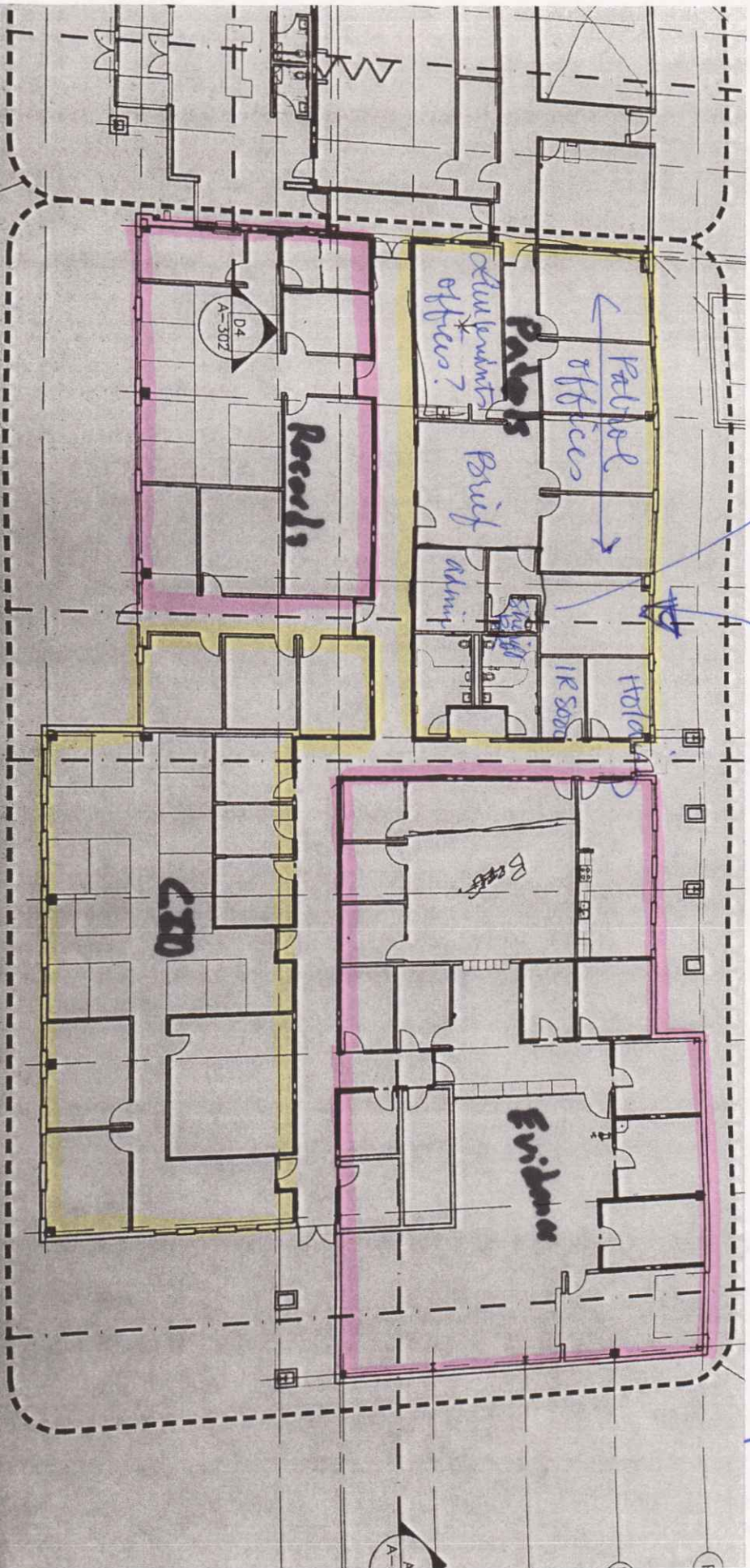
grouped



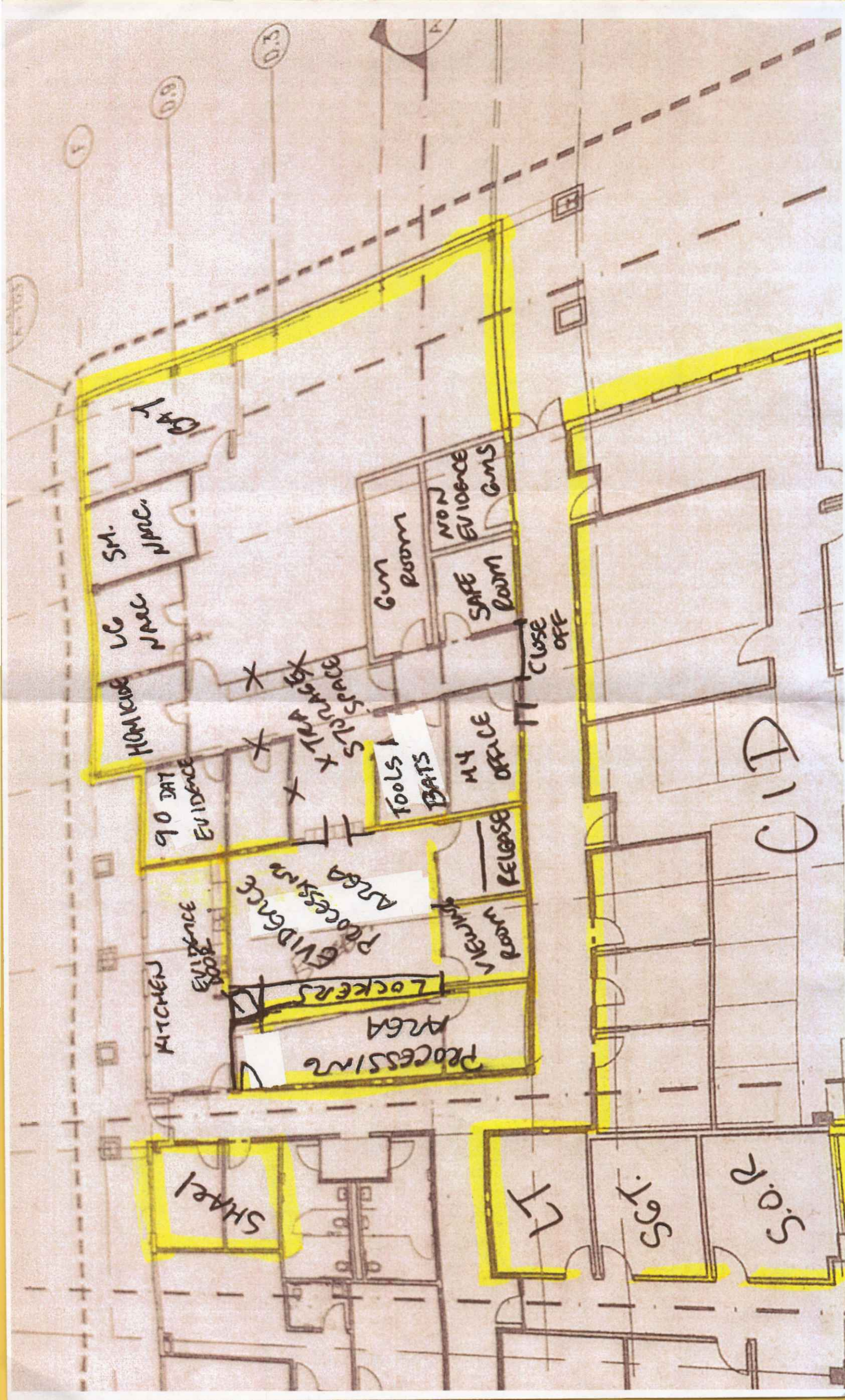


# Sheriff Side

proposed  
workstation  
sidewalk  
station (4)  
entrance  
going to watch  
guard clinic  
stations in future









9/10/2020  
Thurs

- Worked on Behavioral Health project

In office

- Coord LP time with Sheriff Mendoza

- Sent PIP write-up to Gary? PJ

- Sent email to White Sands regarding proposal comments/concerns

LP Sheriff

- 130 people regular basis
- largest tenant

Current bldg wasn't built w/ expansion in mind

Concerns  
~~Budget~~

- Size of building
- Keep Sheriff in existing bldg
- build smaller for fore.

- Expansion ability
- Evidence security
- Storage
- Garage space

Best idea is  
to stay? rely fore  
for patrol  
vehicles

- Solar canopies

January 2022 end of office

## IAPE STANDARDS SECTION 5 – FACILITIES

### Standard 5.1: Facilities – Construction

**Standard:** Property facilities should be constructed to provide levels of security that will deny unauthorized entry, and provide a safe work environment.

**Definition:** Facilities construction refers to how evidence storage areas are constructed, what materials are used, and what special considerations are necessary.

**Reasoning:** The following criteria should be considered when constructing an evidence storage facility:

#### 1. Exterior Walls

The building materials should ideally consist of concrete blocks with concrete filled cells, poured concrete walls, tilt-up concrete walls, or other similar material. Other types of prefab or modular construction *may* be suitable under some conditions, such as metal or brick buildings.

#### 2. Interior Walls

It is best to avoid sheetrock or drywall, as it can easily be penetrated. In the event drywall is used, it should be backed with plywood, wire mesh, a double layer of drywall, or laminated gypsum board. All interior walls should extend from the floor to the roof, or the floor pan of the next level. This prevents access into a controlled area by climbing over a wall through a suspended ceiling.

#### 3. Windows

The room(s), if possible, should be designed without windows. In the event windows are present in an existing structure, they should be fitted with bars or mesh to enhance security and discourage entry.

#### 4. Roof

The exterior roof should be constructed of materials that are resistant to entry and meets current disaster resistant building codes for the risks associated with the location, i.e.: tornado, hurricane, earthquake, or wild fire.

#### 5. Doors

Exterior doors should be metal clad with metal frames. The hinges to these doors should always be located on the inside unless they are special security hinges.

Interior doors should be solid-core or metal clad. Half-doors or Dutch doors, where permitted by code, should be dead-bolted on both halves.

## 6. Ventilation

The property room should be ventilated in a manner that controls heat, cold, humidity, and odors. Special consideration should be given to DNA related storage areas to control heat and humidity that tends to degrade biological evidence. Maintaining the room temperature in a controlled environment (60 to 75 degrees, with relative humidity that does not exceed 60% is recommended).

Any area that is used for storing drugs should be independently ventilated in a manner that noxious fumes are removed from the building, and not re-circulated into the building's heating, ventilation, and air conditioning (HVAC) system. The proper design of a drug storage area should include a "negative pressure" ventilation system that changes the air in the storage room approximately 10-12 CPH (changes per hour).

Heating, air conditioning, and ventilation system duct or registers should be constructed to prevent unauthorized entry into the secure storage area.

### **Standard 5.2: Storage Facilities – Layout**

**Standard:** The property room layout should take into consideration adjacencies between work areas, workflow, temporary storage, long-term storage, high profile items, bulk or oversize items, biohazards, hazardous materials, cold storage, destruction area, administrative area, and release areas.

**Definition:** The floor plan used to make the workflow systems merge efficiently together within the property unit.

**Reasoning:** The property room should be located in a convenient place within the department for submittal and release. A basement area is an acceptable location for a property room if loading dock or access to the parking lot for loading/unloading is available.

Vertical movement between floors may create logistical, efficiency, and safety issues and should be avoided.

Many agencies have found that placing the property room adjacent to an area set aside for report writing and packaging is most efficient. In this configuration, pass-through lockers may be used by employees to submit property and evidence into the property room after packaging the item.

The design of a public release counter should be as close to the department's front lobby as practical to limit public access to secure areas within the building. In larger departments where numerous transactions routinely occur between officers and the property officer, consider having a separate service counter that is out of view of the public. This is important to protect the identity of undercover officers.



A well-designed property room will provide office space for the property officer located outside the actual evidence storage area. Having the office adjacent to the storage area provides a workstation that is not within the confines of the secure storage area.

The layout of the long-term storage areas should include enhanced security areas for firearms, drugs, and money. Storage areas for general evidence should include specifically designated storage areas for envelopes, paper bags, boxes, long items, bulky items, biohazards, flammables, hazardous materials, items pending destruction, items pending auction, Found Property, and Property for Safekeeping.

### **Standard 5.3: Storage Facilities – Storage Schemes**

**Standard:** A systematic plan for numbering and storing property/evidence being retained by the property room should be designated.

**Definition:** A systematic plan of numbering or labeling the building(s), room(s) and shelves/bins that store property/evidence should permit finding an item based solely upon logic.

**Reasoning:** By developing a packaging standard around the shelving and bin configuration, or vice-versa, an agency can maximize the efficiency and space of its property/evidence storage, and minimize the effort it takes to store and retrieve it. A suggested scenario for developing an overall organization pattern would be:

1. Review the historical record of the types and quantities of property/evidence that are regularly booked into the property rooms.
2. Designate particular areas of the storage facility for particular categories of property/evidence. For instance, Property for Safekeeping should be nearest the public counter, and homicide evidence in the farthest away location due to the frequency that these locations are accessed.
3. Design standardized packaging containers based on the size of the most commonly found items.
4. If shelving is fixed, design your containers around the shelving sizes. If shelving is adjustable, use containers that are standard sizes to minimize costs. If several standard size envelopes were designated, then the appropriate containers, drawers, and bins could be designed to store selected envelopes in specific shelving locations.
5. The use of high-density (mobile) storage shelves is the most effective method to significantly increase storage space.
6. All rooms, bays, bins, shelves, racks, and containers need to have a clearly readable address. Being able to specifically identify and document each storage location used by the agency is a critical step in efficient storage and retrieval.

## **Standard 5.4: Storage Facilities – Safety / Environment**

**Standard:** The property unit should provide a safe and environmentally friendly work environment that addresses such concerns as:

- fire, flood, earthquake, tornado, and hurricane hazard mitigation
- fire-life safety equipment
- ventilation
- lighting

**Definition:** Safety/Environment refers to the necessity to provide a work place free of uncontrolled physical hazards and a plan for storing potentially dangerous items.

**Reasoning:** The property unit should provide the necessary equipment and tools to ensure a safe working environment in all property and evidence storage and work areas. The property office and storage areas should be equipped with all currently required safety equipment, including a fire alarms, fire sprinklers, smoke detectors, fire extinguishers, emergency lighting, and close access to an eyewash location.

Older existing structures should be upgraded to current regulations any time improvements that require a building permit are made. All existing structures should all be equipped with smoke detectors and fire extinguishers regardless of whether or not they are legally mandated.

Consider providing larger evidence rooms with a communication device to permit summoning assistance, if needed, from deep within the storage areas. The property officer's efficiency is also enhanced because he/she would not need to walk to the office area to communicate.

Other protective supplies and equipment such as gloves, goggles, paper masks, and disposable aprons/jumpsuits/hats should be provided and be available for use when needed by individual employees.

The storage of departmental supplies and equipment, such as uniforms, vests, holsters, tactical gear, flashlights, batteries, etc. are often included with evidence storage duties. While the Quartermaster or Supply Sergeant duties have many similarities with evidence retention, and are compatible as a related duty, the two functions are separate and should not be grouped together in one area. Supplies are not evidence and should not be commingled.

Ventilation of noxious fumes is extremely important and is addressed in Section 5.1 Facilities - Construction.

Adequate lighting is very important in helping to prevent avoidable injuries. The lighting should be sufficient for an average person to easily read the labels and numbers on packages located on the lower shelves. This is often a problem when shelves are retrofitted to a room where they were not originally intended. This is a special problem with high-density mobile shelving. Heavy shadows are created any time lights are covered by a moving shelf. This may be easily mitigated by running a florescent tube light perpendicular to the moving shelves, instead of parallel.