CITY MANAGER'S OFFICE
CITY OF NEWARK

220 South Main Street · Newark, Delaware 19711
302.366.7000 · Fax 302.366.7035 · www.newarkde.gov

CITY OF NEWARK
NEWARK WAREHOUSE #2 EXPANSION
ITB NO. 24-03

ADDENDUM 1
AUGUST 20, 2024

1. Notice to Bidders

A. This Addendum is issued to all registered plan holders pursuant to the Conditions of the Contract. This Addendum serves to clarify, revise, and supersede information in the Project Specifications, Drawings, and previously issued Addenda. Portions of the Addendum affecting the Contract Documents will be incorporated into the Contract by enumeration of the Addendum in the Owner/Contractor Agreement.

B. The Bidder shall acknowledge receipt of this Addendum with their submitted proposal.

C. **The date for receipt of bids is unchanged by this Addendum.**

D. **The cutoff date and time for questions is Friday August 23, 2024 at 5:00 p.m. Questions submitted after this date and time will not answered.**

E. **Attachments with this Addendum include:**

1. Prevailing Wage Rates
2. Geotechnical Report
3. Specification Section 095113
4. Pre-Bid Meeting Agenda and Sign In Sheet

2. Responses to Questions Submitted Via Email

Question 1:	Please confirm there is no fire suppression system for the project. Comments at the pre-bid meeting made reference to a fire suppression system and during the walk through the existing warehouse was observed with a fire suppression system.
Response 1:	A fire suppression system will provided with the next addendum.
Question 2:	Please confirm there is no fire alarm system for the project as there is no reference on the drawings or specifications. A fire alarm system was observed in the existing warehouse.
Response 2:	A fire alarm system will provided with the next addendum.
Question 3:	Please confirm whether the City of Newark will provide power pole and cable protection at the existing power poles and cable lines in the project vicinity or whether this is the responsibility of the electrician.
Response 3:	The Contractor must provide the temporary power pole per City of Newark standards. The City of Newark will cover the existing aerial lines in the vicinity of the project.
Question 4:	Please confirm who is responsible for protecting the existing solar panel array located on the roof of the existing building and who would be responsible for disconnecting/removing/re-installing the solar array if necessary for the building tie-in.
Response 4:	It is the Contractors responsibility to protect the existing solar panel array during construction. If necessary, the City will disconnect, remove and reinstall the solar array for the building tie-in
Question 5:	Please clarify gauge of roof panels and wall panels.
Response 5:	Refer to specification 133419-2.4 and 133419-2.5
Question 6:	Please confirm collateral load.
Response 6:	The structural drawing notes indicate all the known loading conditions for the PEMB manufacturer to design their typical building system to suit the project. Specifically, see “PROJECT LOADS” in the top left of S-001, in conjunction with notes 1 and 9 of the “PRE-ENGINEERED METAIL BUILDING” notes on the same page. There are no further “collateral” loads.
Question 7:	Drawing S-502 shows details for bollard installation but no bollards are shown on the site plan or architectural drawings nor referenced in the specifications. Please confirm there are no bollards on the project.
Response 7:	Bollards are not required for this project. A conformed set will be issued with the bollards removed to the awarded contractor.
Question 8:	Please confirm how the ACT ceiling and light fixtures are to be supported in office 102. From Details shown on A601 it appears to only be supported by

	the wall angle.
Response 8:	Refer to specification section 095113 for suspended ceiling, which is included with this addendum.
Question 9:	No E&S plan was provided or referenced, please confirm there are no erosion and sediment controls required for the project.
Response 9:	Erosion and sedimentation control measures are the responsibility of the Contractor. The Contractor is required to install erosion and sedimentation control measures as needed based upon their means and methods. This includes but is not limited to any silt fence, concrete washouts, and seeding and straw stabilization. DNREC standard erosions and sedimentation details are permitted to be used for this project.
Question 10:	Please provide a sample contract for the project.
Response 10:	The contract shall be generated specifically for the selected vendor, inclusive of the ITB document and all addenda, after selection. Each contract is specifically tailored to the project in question so there is no sample available at this time.
Question 11:	Please provide the Prevailing Wage Rates for the project.
Response 11:	Wage rates are included with this addendum.
Question 12:	Please provide a Geotechnical Report for the project.
Response 12:	The projects geotechnical report is included with this addendum.
Question 13:	Please confirm that Rock is considered to be Classified for this project.
Response 13:	Rock will be considered classified and the Contractor will be paid additional for rock excavation if it is encountered. However, rock excavation is not anticipated on this project based on the provided geotechnical report.
Question 14:	Please provide details for ceiling framing above office?
Response 14:	Refer to the new specification 095113 included with this addendum.
Question 15:	Drawing A501, details 1& 4 state O.H. coiling door while spec say sectional door. Verify coiling or sectional door.
Response 15:	The overhead door is a sectional door per specification 083613.
Question 16:	Verify the PEMB gets a ridge cap and not a ridge vent.
Response 16:	Metal roof on the PEMB will receive a ridge cap to match the existing building, per Drawing A102.
Question 17:	Need ceiling tile spec for office.
Response 17:	Refer to the new specification 095113 included with this addendum.
Question 18:	Can the subcontractor usage list be changed to post bid for the apparent low bidder?
Response 18:	No, the Bidder is to provide a list of major sub-contractors for this project.
Question 19:	Will a hard trowel finish be used or a dry-shake hardener or penetrating

	treatment?
Response 19:	A hard trowel finish with a penetrating treatment per the specifications is required.
Question 20:	What gage should the wall and ceiling liner panels be?
Response 20:	Refer to Specification Section 133419-2.5B.
Question 21:	Will the manufacturer of the existing building (Nucor) be an acceptable " or equal " for the addition?
Response 21:	Per Specification Section 133419-2.1 Nucor is the basis of design.
Question 22:	What are the contract requirements for temporary utilities and heating? This is not mentioned in the specifications.
Response 22:	Temporary heating and utilities are the responsibility of the Contractor.
Question 23:	I have not received any addenda or pre bid minutes for this project and none are on the website. Please advise.
Response 23:	Pre-Bid Meeting agenda and sign in sheet are included with this addendum.
Question 24:	Please provide wage rate chart for this project
Response 24:	Wage rates are included with this Addendum.
Question 25:	The Notice of Letting, first paragraph, last sentence, states that Prevailing Wages apply to the project. No prevailing wages are provided in the front end specifications. Please clarify.
Response 25:	Wage rates are included with this Addendum.
Question 26:	The Bid documents contain conflicting language in that they state the contractor must be registered with SAM.gov before contract execution and at the time of bid. Please clarify it is acceptable to not be registered at the time of bid as long as registration occurs before contract execution.
Response 26:	Contractor does not need to be registered with SAM.gov at the time of bid submission. However, SAM.gov registration information should be provided with the proposal if obtained.
Question 27:	Please confirm the building is to be sprinkled and what hazard class the building will be. No Fire Protection plans are enclosed in the bid set
Response 27:	A fire suppression system will provided with the next addendum.
Question 28:	Please provide specifications for the ceiling tile in Office 102. Are we to assume this ceiling will be suspended for the PEMB structure above this area or is a secondary framing system to be provided?
Response 28:	Refer to the new specification 095113 included with this addendum.
Question 29:	Is the City providing third party quality control testing for the project for items such as soils, concrete, rebar, and steel etc
Response 29:	This will be clarified in the next addendum.
Question 30:	Is the City providing CCR services for the project?

Response 30:	Yes.
Question 31:	Please provide specifications for the downspout boots
Response 31:	Provide Model 1786 by Smith Manufacturing, or equal. Model shall accommodate a 4" x 5" downspout to match existing per contract drawings.
Question 32:	Specifications appear to say testing is by the owner. Please verify this item.
Response 32:	This will be clarified in the next addendum.
Question 33:	Knowing that the size of the hairpins may change, please suggest a bar size so that all GC's are pricing the same thing.
Response 33:	Hairpins can be assumed to be #5 bar until building reactions are received.
Question 34:	S-502 shows 4 different options for bollards, but I do not see any locations for bollards called out on Arch or Structural drawings. Please clarify where and how many bollards are required.
Response 34:	Bollards are not required for this project. A conformed set will be issued with the bollards removed to the awarded contractor.
Question 35:	Please clarify who will be relocating all equipment and material stockpiled in LOD prior to mobilization.
Response 35:	The City of Newark will be relocating all equipment and material stockpiled in the limits of disturbance prior to mobilization.
Question 36:	Is any erosion control required do not see and E & S plan?
Response 36:	Erosion and sedimentation control measures are the responsibility of the Contractor. The Contractor is required to install erosion and sedimentation control measures as needed based upon their means and methods. This includes but is not limited to any silt fence, concrete washouts, and seeding and straw stabilization. DNREC standard erosions and sedimentation details are permitted to be used for this project.

END OF ADDENDUM #1

STATE OF DELAWARE
DEPARTMENT OF LABOR
DIVISION OF INDUSTRIAL AFFAIRS
OFFICE OF LABOR LAW ENFORCEMENT
PHONE: (302) 318-2769

Mailing Address:
252 Chapman Road
Suite 210
Newark, DE 19702

Located at:
252 Chapman Road
Suite 210
Newark, DE 19702

PREVAILING WAGES FOR BUILDING CONSTRUCTION
EFFECTIVE MARCH 15,2024 - AMENDED JUNE 14,2024

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
ASBESTOS WORKERS	29.03	35.74	52.03
BOILERMAKERS	86.90	44.09	64.81
BRICKLAYERS	65.24	65.24	65.24
CARPENTERS	61.06	61.06	49.30
CEMENT FINISHERS	91.66	65.19	50.55
ELECTRICAL LINE WORKERS	57.72	49.50	37.74
ELECTRICIANS	81.62	81.62	81.62
ELEVATOR CONSTRUCTORS	113.66	81.88	103.45
GLAZIERS	83.30	83.30	71.92
INSULATORS	67.20	67.20	67.20
IRON WORKERS	75.32	75.32	75.32
LABORERS	55.65	55.65	55.65
MILLWRIGHTS	85.36	85.36	68.57
PAINTERS	57.60	57.60	57.60
PILEDRIVERS	88.62	49.97	40.41
PLASTERERS	37.89	37.89	28.08
PLUMBERS/PIPEFITTERS/STEAMFITTERS	77.30	80.57	71.11
POWER EQUIPMENT OPERATORS	81.29	81.29	81.29
ROOFERS-COMPOSITION	29.45	29.41	31.82
ROOFERS-SHINGLE/SLATE/TILE	23.34	27.77	21.83
SHEET METAL WORKERS	84.53	84.53	84.53
SOFT FLOOR LAYERS	60.12	60.12	60.12
SPRINKLER FITTERS	70.52	70.52	70.52
TERRAZZO/MARBLE/TILE FNRS	70.79	70.79	79.54
TERRAZZO/MARBLE/TILE STRS	78.73	78.73	88.22
TRUCK DRIVERS	55.25	34.83	27.11

CERTIFIED: June 14, 2024

BY _____
ADMINISTRATOR, OFFICE OF LABOR LAW ENFORCEMENT

NOTE: THESE RATES ARE PROMULGATED AND ENFORCED PURSUANT TO THE PREVAILING WAGE REGULATIONS ADOPTED BY THE DEPARTMENT OF LABOR ON APRIL 3, 1992.

CLASSIFICATIONS OF WORKERS ARE DETERMINED BY THE DEPARTMENT OF LABOR. FOR ASSISTANCE IN CLASSIFYING WORKERS, OR FOR A COPY OF THE REGULATIONS OR CLASSIFICATIONS, PHONE (302) 318-2769.

NON-REGISTERED APPRENTICES MUST BE PAID THE MECHANIC'S RATE.

THESE RATES ARE BEING PROVIDED IN ACCORDANCE WITH DELAWARE'S FREEDOM OF INFORMATION ACT.

THEY ARE NOT INTENDED TO APPLY TO ANY SPECIFIC PROJECT.

STATE OF DELAWARE
DEPARTMENT OF LABOR
DIVISION OF INDUSTRIAL AFFAIRS
OFFICE OF LABOR LAW ENFORCEMENT
PHONE: (302) 318-2769

Mailing Address:
252 Chapman Road
Suite 210
Newark, DE 19702

Located at:
252 Chapman Road
Suite 210
Newark, DE 19702

PREVAILING WAGES FOR **HEAVY CONSTRUCTION** EFFECTIVE MARCH 15, 2024

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
ASBESTOS WORKERS	28.06	24.68	53.66
BOILERMAKERS	87.82	40.77	74.79
BRICKLAYERS	87.54	75.17	31.62
CARPENTERS	61.06	61.06	49.30
CEMENT FINISHERS	55.35	30.91	23.03
DIVER	100.30	CONTACT DDOL -	CONTACT DDOL -
DIVER TENDER	113.27	CONTACT DDOL -	CONTACT DDOL -
ELECTRICAL LINE WORKERS	92.48	92.48	92.48
ELECTRICIANS	81.62	81.62	81.62
GLAZIERS	25.91	22.51	15.25
INSULATORS	67.20	67.20	67.20
IRON WORKERS	75.32	77.39	76.33
LABORERS	55.65	55.65	55.65
MILLWRIGHTS	85.36	85.36	68.57
PAINTERS	93.91	93.91	93.91
PILEDRIVERS	88.62	49.97	38.88
PLASTERERS	24.40	21.22	14.33
PLUMBERS/PIPEFITTERS/STEAMFITTERS	97.88	98.82	24.74
POWER EQUIPMENT OPERATORS	81.29	87.35	81.29
SHEET METAL WORKERS	39.01	24.21	22.74
SPRINKLER FITTERS	42.05	15.92	13.19
TRUCK DRIVERS	43.45	26.11	28.27

CERTIFIED: 3-15-2024 BY: Sabrina Chandler for Frances Chelzik
ADMINISTRATOR, OFFICE OF LABOR LAW ENFORCEMENT

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PHONE: (302) 318-2769

Mailing Address:
252 Chapman Road
Suite 210
Newark, DE 19702

Located at:
252 Chapman Road
Suite 210
Newark, DE 19702

PREVAILING WAGES FOR **HIGHWAY CONSTRUCTION** EFFECTIVE MARCH 15, 2024

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
BRICKLAYERS	65.24	65.24	69.05
CARPENTERS	65.85	61.06	49.30
CEMENT FINISHERS	70.64	43.32	44.16
ELECTRICAL LINE WORKERS	35.67	57.63	28.21
ELECTRICIANS	81.62	81.62	81.62
IRON WORKERS	86.81	31.66	33.63
LABORERS	54.96	50.59	49.65
MILLWRIGHTS	21.38	20.75	17.93
PAINTERS	81.29	81.29	81.29
PILEDRIVERS	95.51	31.53	88.62
POWER EQUIPMENT OPERATORS	82.31	52.56	48.15
SHEET METAL WORKERS	30.20	26.96	24.40
TRUCK DRIVERS	51.73	37.48	45.64

CERTIFIED: 3-15-2024 BY: Sabrina Chrosland /for Francis Audzik
ADMINISTRATOR, OFFICE OF LABOR LAW ENFORCEMENT

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October 10, 2023

Christopher R. Brendza, P.E.
Associate Vice President
Johnson, Mirmiran & Thompson, Inc.
121 Continental Drive, Suite 300
Newark, DE 19713

RE: Project No. CG.3749GA
Geotechnical Evaluation
City of Newark Maintenance Building Addition
Phillips Avenue
Newark, Delaware

Dear Mr. Brendza:

CGC Geoservices, LLC (CGCG) has completed our geotechnical investigation for the proposed expansion of the existing warehouse building at the City of Newark Maintenance Yard in Newark, Delaware. The purpose of these services was to evaluate the subsurface conditions within the area of the proposed building addition and to provide recommendations regarding the design and construction of the foundations and slab. This work has been performed in accordance with the agreement between Johnson Mirmiran & Thompson, Inc, (JMT) and CGCG dated June 23, 2023.

To assist with the preparation of this report, CGCG was provided with a drawing entitled "Topographic Survey Plan for part of City of Newark Warehouse Facility," as prepared by Karins and Associates and dated July 11, 2023.

The project site is located at the existing City of Newark Maintenance Yard on Phillips Avenue in Newark, Delaware. We understand that the proposed site improvements consist of the construction of a single-story building addition on the west end of the existing maintenance building. A building footprint of approximately 10,000 square feet is proposed within an existing bituminous concrete parking lot and laydown area. The finished floor of the proposed building will be at-grade and will approximately match that of the existing structure (el 109.4).

No structural loading information was provided at the time of this report. For the purposes of this analysis, we assume maximum column loads of on the order of 200 kips. We assume that the structure will be a steel-framed warehouse building of similar construction to the existing structure at the site.

The existing site conditions consist of a relatively flat bituminous concrete pavement area. The site slope gently downwards toward the northwest, with ground surface elevations in the footprint of the new addition varying from approximately elevation 108.25 to 105.75, site datum. Based on the proposed finished floor elevation of 109.4 to match the existing structure, bulk fills of up to on the order of 3 feet will be required.

An existing shed building is located in the southwest portion of the proposed building footprint. It is understood that this shed will be demolished prior to the new building construction.

The only existing underground utility identified within the building footprint was stormsewer pipe along the northern edge of the building.

FIELD AND LABORTORY TESTING PROGRAM

On July 5, 2023, the geotechnical fieldwork was performed. Miss Utility was contacted prior to the start of work, and the Miss Utility markout as well as the available private utility information as provided by the City of Newark was reviewed prior to the final selection of the boring locations by representatives of CGCG and JMT.

A total of five (5) test borings, designated B-1 to B-5, were performed within the approximate footprint of the proposed building addition. A test boring location plan is enclosed with this report.

The Standard Penetration Test (SPT) borings were performed by CGCG utilizing a truck mounted CME 55 drill rig with hollow stem augers. The performance of the borings was reviewed by a representative of CGCG. Test boring logs describing the conditions encountered are enclosed with this report.

Upon completion of testing, the borings were backfilled with the drill cuttings mixed with bentonite grout. No additional compactive effort or site restoration was performed. Additional settlement and softening of the soil replaced in the test boring may occur, resulting in a depression or hole in the ground surface. Consequently, future maintenance and restoration of the site may be required.

Soil samples were returned to the soils laboratory for further review and testing of selected samples. Index testing was performed on selected samples to assist in classification and estimating of engineering properties of the soil. Laboratory testing was performed by Verdantas, LLC as a subconsultant to CGCG. These test results are included on the enclosed boring logs. No environmental sampling or testing was performed.

SUBSURFACE CONDITIONS

A. REGIONAL GEOLOGY

Regional mapping by the Delaware Geological Survey identifies the project area within the Coastal Plain Physiographic Province. The Delaware Geological Survey mapping indicates that the project site is underlain by the Old College Formation (Qoc), which consists of clayey silt, silty sand and medium to coarse quartz sand with pebbles.

B. SITE SUBSURFACE STRATIGRAPHY

The ground surface conditions encountered in the test borings generally consisted of bituminous concrete surface cover over a thin surficial layer of variable, apparent miscellaneous fill. The miscellaneous fill typically consisted of variable soils (silty sand or sandy silt) mixed with varying amounts of debris such as brick, concrete and wood fibers or bituminous concrete millings. The fill was observed to extend to depths of approximately 2 below grade in borings B-1, B-3, B-4 and B-5. In test boring B-2, located in the southwest corner of the site, the apparent fill was observed to depths of up to 4 (and possibly 6 feet) below grade. The density of the fill was generally medium to stiff consistency or loose to medium density. A slight apparent petroleum odor was noted in or just below the fill stratum in borings B-1 and B-5. However, no staining of the soils was observed.

Beneath the miscellaneous fill material, apparent undisturbed natural soils were encountered. The natural soils typically consisted of medium to very stiff consistency silt soils overlying loose to medium density silty sand to the termination depth of the borings at 21 to 36 feet below grade. In some borings, thin layers of silt or clay were observed within the silty sand stratum. Refusal on rock was not encountered within the depth of sampling for this project.

Groundwater was observed in all of the test borings at depths varying from approximately 15 to 19 feet below grade (corresponding to an approximate elevation range of 86 to 91, site datum. The borings were not kept open for a period of time for the groundwater level to stabilize.

For discussion purposes, the subsurface conditions encountered can be further described as follows.

STRATUM	APPROXIMATE THICKNESS (FT.)	GENERALIZED DESCRIPTION
A	0.25 - 0.3	Bituminous concrete pavement
B	2 – 6 [1]	MISCELLANEOUS FILL: Silty SAND or sandy SILT mixed with debris (bituminous concrete, millings, concrete, wood) (medium to very stiff consistency, medium density)
C	2 - 10	Brown, gray SILT, trace to and sand, trace gravel (medium to very stiff consistency) USCS: ML
D	2 [2]	Brown CLAY, some fine to medium sand, trace gravel (very stiff), USCS: CL
E	---- [3]	Brown/ gray/ black/ orange fine to med SAND, little to trace silt, trace gravel (Loose to medium density), USCS: SM, SW
NOTES:	1. Stratum B not observed in boring B-2. 2. Stratum D only encountered in boring B-3, interlayered in Stratum E. 3. Stratum E not fully penetrated.	

CONCLUSIONS AND RECOMMENDATIONS

A. DESIGN

1. **Foundation Bearing and Settlement**. Based on the subsurface conditions observed, a building constructed with a finished floor at elevation 109.4 would have a slab and shallow foundations that would bear within or above the miscellaneous fill soils at the site. This layer of fill was generally observed to be of fairly limited thickness (typically 2 feet, with the exception of boring B-5 where fill was observed up to 4 to 6 feet below grade).

Due to the inherent variability of fill soils and the possibility for debris and organics, it is generally not recommended to support shallow foundations on miscellaneous fill, as this may result in differential building settlement. Therefore, the fill material should be removed from beneath foundations. It may be feasible to support the building slab-on-grade on fill soils, with careful review of the slab subgrade during construction and depending upon the proposed slab finishes and how much risk of settlement can be tolerated.

Two alternatives that may be considered for slab support, depending upon risk tolerance to possible differential settlement include the following:

- **Option 1: Undercut entire building pad**. Removal of the miscellaneous fill and replacement with compacted structural fil over the full footprint of the building, followed by construction of conventional spread footings and slab-on-grade. This option would require excavation and offsite disposal of material containing debris, and import of structural fill to replace the volume of material removed.

  If this option is utilized, spread footings constructed on compacted structural fill placed over the natural site soil, or on the natural site soils, can be designed for a maximum net allowable bearing pressure of 3,000 psf. Total settlement of 1 inch or less is anticipated.

- **Option 2 : Undercut foundations only**. Undercutting beneath the footing areas only, and either backfilling with structural fill or lowering of the foundations to bear on natural soils beneath the fill stratum. This option would require excavation and offsite disposal of material, but in much less quantity than in Option 1. With this approach, the slab would still be supported above the miscellaneous fill materials, which may exhibit some settlement under slab loading. With this option, subgrade improvements such as proofrolling and densification of the subgrade, should be considered to reduce the settlement risk in the slab area.

  If this option is utilized, spread footings constructed on the natural site soils or on a locally undercut footing line backfilled with compacted structural fill can be designed for a maximum net allowable bearing capacity of 3,000 psf. Total foundation settlement of 1 inch or less is anticipated with this approach.

The base of all spread footings in areas exposed to frost should be placed at least 3 feet below final exterior grades, in accordance with the local building code requirements. If a winter construction schedule is proposed for the foundations, provisions for the protection of shallow foundations from frost heave during construction should be

included in the contract documents. Subgrade should be reviewed and prepared as recommended herein.

2. **Soil Parameters.** The following soil parameters are recommended for lateral earth loads and braced excavation design:

	Stratum B Miscellaneous Fill	Stratum C Sandy Silt	Imported Granular Structural Fill
Moist Unit Weight (pcf)	125	120	130
Cohesion (psf)	0	0	0
Angle of Internal Friction	26	26	34
At Rest Earth Coefficient, K_O	0.56	0.56	0.44
Active Earth Pressure Coefficient, K_A	0.39	0.39	0.28
Passive Earth Pressure Coefficient, K_P	2.56	2.56	3.53
Coefficient of Sliding Friction	0.32	0.32	0.42

3. **Bulk Excavation Safety.** Excavation may be required on site for undercutting and for utility construction. Such excavations will requiring benching, sloping or bracing to remain stable during construction. Based on the site soils, a Type C soil profile should be considered for excavations, with excavations sloped at a maximum of 1.5:1 (horizontal to vertical). All excavation bracing, if required, should be designed by a qualified Professional Engineer registered in the State of Delaware

   Excavated materials should not be stockpiled along the top of braced or sloped excavations. Sloped or braced excavations should be routinely reviewed during construction to assure that surface water runoff or groundwater seepage into the excavation is not weakening the sidewall area.

4. **Seismic Design Parameters.** Based on subsurface conditions encountered during the field exploration at the site and review of regional geologic maps, Site Class “D” is recommended for the analysis of seismic conditions, as defined by Table 1613.2.5(1) and 1613.2.5(2) of the 2018 International Building Code.

B. CONSTRUCTION

1. **Proofrolling and Subgrade Preparation.** At the start of construction, the existing pavement section, as well as existing utilities, existing foundations or building slabs, or other obstructions in the building footprint should be removed in their entirety. Following rough grading and prior to footing excavation or placement of fill, it is recommended that the exposed subgrade be proofrolled with a minimum 10-ton vibratory roller of fully loaded tandem-wheel dump truck in the presence of a qualified soils technician working under the supervision of a geotechnical engineer. **This is particularly important if it is decided to leave the Stratum B miscellaneous fill layer in place beneath the building footprint (Option 2 in Section A.1 above).**

   The purpose of the proofrolling is to densify the existing subgrade and to identify localized soft surficial conditions in the exposed subgrade. **This is particularly important due to the presence of miscellaneous fill materials to varying depths across the site.** Yielding subgrade conditions encountered with the proposed building area which cannot be densified in place should be undercut to firm subgrade conditions and be backfilled in accordance with the recommendations of this report. In addition, if any areas of significant quantities of debris or organic material are observed within the fill soils, they should be removed from the slab area.

2. **Foundation Subgrade Review.** All foundations should be placed on firm, dry, non-frozen subgrade. Shallow foundations should be constructed on natural site soils beneath the surficial layer of fill or on compacted structural fill placed on the natural site soils after undercut of miscellaneous fill soils. Foundation excavations should be reviewed by a qualified technician working under the supervision of a geotechnical engineer who is familiar with the recommendations of this report.

3. **Protection of Subgrade Soils.** If foundation excavations are left open, precipitation may result in the collection of water within the excavation. Provisions for removal of water by drainage or sumping are recommended. Subgrade soils disturbed by precipitation should be either scarified and re-compacted, or undercut and replaced with structural fill as previously discussed. The silty site soils will become softened and unsuitable for subgrade support if they become saturated without confinement. It is recommended that foundation and slab subgrade areas be overexcavated by up to 4 inches and covered with clean stone, such as AASHTO 57 stone, to provide protection and to allow for sumping of water that may enter the excavation.

4. **Compaction Requirements.** Structural fill utilized within the proposed structural areas should be placed in loose lifts with a maximum thickness of 8 inches. Each lift placed

within the proposed structure areas (defined as the area extending 1 horizontal to 1 vertical beyond the perimeter) should be compacted to at least 95% of the maximum dry density as determined by the Modified Proctor (ASTM D 1557) test. Structural fill for pavement areas and utility trenches located outside of the proposed structural area, should be compacted to at least 90% of the maximum dry density. The placement and compaction of structural fill should be monitored on a full-time basis by a qualified technician under the supervision of a geotechnical engineer.

5. **Re-Use of On-Site Soils as Structural Fill.** The shallow site soils will consist primarily of fine grained, sandy silt or silty sand soils of Stratum B and C, with some miscellaneous fill soils potentially containing debris. Soils containing debris are not considered suitable for reuse as structural fill and should be disposed of off site. Sandy silt or silty sand soils that are free of debris may be suitable for use as fill if they are maintained at a moisture content that will allow for the specified degree of compaction.

6. **Imported Structural Fill.** Imported structural fill, if needed, should consist of predominately granular soils conforming to the following requirements:

Sieve Size	% Passing
1 ½"	100
No. 4	50 – 100
No. 10	25 –75
No. 200	≤ 25

AASHTO SP-57 stone or graded aggregate can also be utilized as structural fill, and should be considered where localized, relatively deep fills are required. AASHTO SP-57 stone should also be utilized as fill where drainage is required.

7. **Groundwater Control.** Groundwater was encountered during the performance of the test borings at depths of 15 to 19 feet below grade. Actual static groundwater levels at the site are likely to be affected by seasonal and annual variations in precipitation.

It is assumed that bulk excavations for foundation construction will not encounter groundwater conditions. If "perched" groundwater conditions are encountered during construction, water should be removed prior to foundation construction. Additionally, localized sumping may be required if perched groundwater conditions are observed. Foundation area may need to be overexcavated by a minimum of 4 inches and backfilled with AASHTO SP 57 stone to facilitate sumping and protect the exposed subgrade during construction.

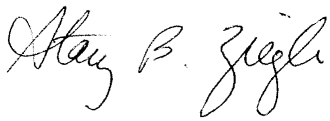
8. **Subsurface Data.** All contractors interested in bidding on phases of this work which involve subsurface conditions should be given full access to this report, so that they can develop their own interpretations of the available data.

These recommendations have been prepared according to generally accepted soil and foundation engineering standards and are based on the conditions encountered at the sampled locations. It is noted that, although soil quality has been inferred from the interpolation of the data, subsurface conditions between the sampled locations are, in fact, unknown. As a result, these recommendations may require modifications based on the conditions encountered and exposed during construction excavation. Should any conditions encountered during construction differ from those described in this report, this office should be notified immediately in order to review and possibly modify these recommendations. The cost for this construction review is not part of our existing agreement. This report applies solely to the size, type, and location of the structures described herein. In the event that changes are proposed, this report will not be considered valid unless the changes have been reviewed and the recommendations of this report modified and reapproved in writing by CGC Geoservices, LLC.

We have appreciated the opportunity to assist you on this project. If there are any questions regarding the enclosed, please do not hesitate to contact us.

Very truly yours,

CGC GEOSERVICES, LLC

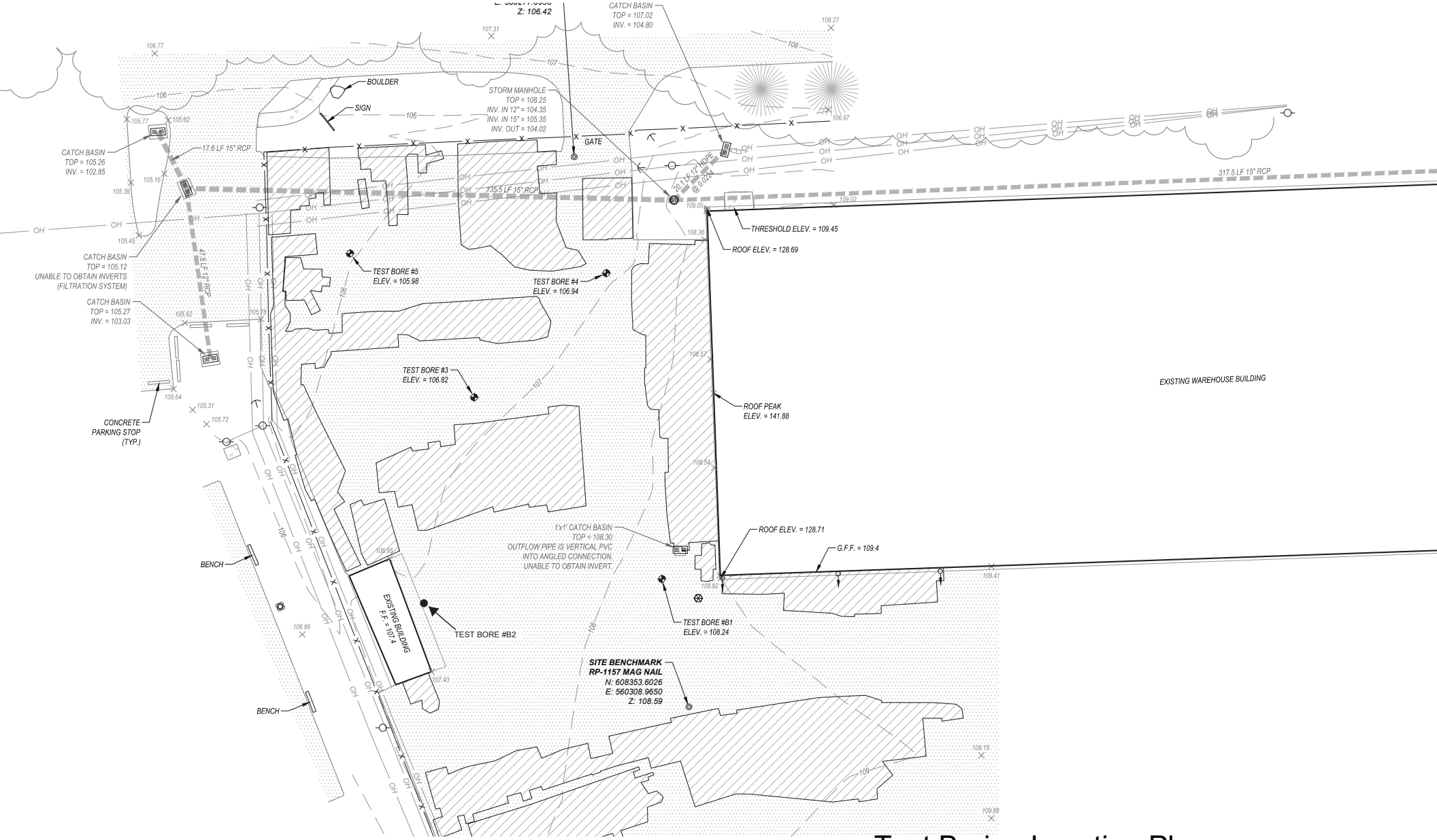


Stacy B. Ziegler, P.E., LEED AP BD+C
Senior Geotechnical Engineer
Delaware Professional Engineer License No. 11688

SBZ
WORD\CG749GA.1023.Newark Maintenance Building Geotech.RPT

Enclosures: Test Boring Location Plan
Test Boring Logs (5)
General Notes

Test Boring Location Plan



Test Boring Location Plan
City of Newark Maintenance Building Addition

Test Boring Logs
(5)

TEST BORING B-1

Geotechnical Evaluation
Proposed Warehouse #3 Expansion
City of Newark Public Works Yard
Newark, Delaware

Date Started : July 5, 2023
Date Completed : July 5, 2023
Logged by : M. Natrin
Weather : Sunny, 90s
Driller/Agency : G. Blemings/CGC Geoservices

Drilling Equipment : CME 55 Truck Mount
Drilling Methods : SPT, HSA
Surface Elevation : 108.24 feet

Sample Condition: Remolded
Water Levels: During Drilling; At completion

Depth in feet	Surf. Elev. 108.24 ft	USCS	DESCRIPTION	Sample Number	Blows per 6 inches	Recovery (ft)	Moisture Content (%)	Percent Passing 200 Sieve
0	107.9		Bituminous Concrete Pavement (4 inches)					
		ML	POSSIBLE FILL: Moist, dark brown SILT, little fine to medium sand	S-1	5-4-7	1.0		
	106.2		Moist, brown/ dark brown SILT, trace fine to medium sand (petroleum odor noted)	S-2	7-7-5-4	1.5		
		ML						
5			Moist brown/ gray SILT, trace fine sand	S-3	2-3-3-4	2.0	25.6	98.8
	102.2		Moist, brown fine SAND, some silt, trace subangular fine gravel	S-4	6-6-12-10	2.0		
			Moist, brown, fine to coarse SAND, little angular to subangular fine gravel, little silt	S-5	15-12-16-10	1.5	7.9	14.3
10								
		SM						
15			Moist, brown/ black fine SAND, little silt	S-6	4-4-5-4	1.8		
20			Moist, brown/ black/ orange fine SAND, trace silt	S-7	4-5-5-5	1.8		
	87.2							
25								
30								
35								
40								

NOTES:
1. Boring terminated at 21 feet below grade.
2. Wet on spoon observed at 15 feet. Groundwater observed at 17.3 feet during drilling.
3. Upon auger removal, borehole caved and dry at 12.4 feet.
4. Borehole backfilled with cuttings and patched wtih bituminous concrete cold patch.

TEST BORING B-2

Geotechnical Evaluation
Proposed Warehouse #3 Expansion
City of Newark Public Works Yard
Newark, Delaware

Date Started : July 5, 2023
Date Completed : July 5, 2023
Logged by : M. Natrin
Weather : Sunny, 90s
Driller/Agency : G. Blemings/CGC Geoservices

Drilling Equipment : CME 55 Truck Mount
Drilling Methods : SPT, HSA
Surface Elevation : 107.4 feet

Sample Condition: ⊠ Remolded
Water Levels: ▽ At completion

Depth in feet	Surf. Elev. 107.4 ft	GRAPHIC	USCS	DESCRIPTION	SAMPLES	Sample Number	Blows per 6 inches	Recovery (ft)	Moisture Content (%)	Percent Passing 200 Sieve	WATER LEVEL
0	107.1			Bituminous concrete pavement (4 inches)							
			ML	FILL: Moist, black/ brown/ red fine to medium SAND, some silt, little debris (brick), trace coarse sand	⊠	S-1	8-5-7	1.0			
				FILL: Moist, brown/ gray/ black SILT, with wood fibers, little fine sand	⊠	S-2	4-3-4-3	2.0	20.6	87.1	
	103.4		SM	Possible FILL: Moist, dark brown fine SAND and silt, trace angular fine gravel (poor recovery)	⊠	S-3	2-2-2-4	0.2			
5	101.4			Moist, brown fine SAND, little medium to coarse sand, little angular to subangular fine gravel, little silt	⊠	S-4	14-13-11-11	1.5	12.9	20.9	
				Moist, brown, fine to medium SAND, little coarse sand, little subrounded fine gravel, trace silt	⊠	S-5	6-7-7-9	1.5			
10											
			SM								
15				Moist, brown/ black fine SAND, some silt	⊠	S-6	3-4-4-5	1.8	24.0	20.1	
											▽
				Moist, brown/ black fine SAND, trace silt	⊠	S-7	3-4-5-6	2.0			
20	86.4										
25											
30											
35											
40											

NOTES:
1. Boring terminated at 21 feet below grade.
2. Groundwater observed at 18.2 feet during drilling.
3. Upon auger removal, borehole caved and dry at 9.0 feet.
4. Borehole backfilled with cuttings and patched wtih bituminous concrete cold patch.

TEST BORING B-3

Geotechnical Evaluation
Proposed Warehouse #3 Expansion
City of Newark Public Works Yard
Newark, Delaware

Date Started : July 5, 2023
Date Completed : July 5, 2023
Logged by : M. Natrin
Weather : Sunny, 90s
Driller/Agency : G. Blemings/CGC Geoservices

Drilling Equipment : CME 55 Truck Mount
Drilling Methods : SPT, HSA
Surface Elevation : 106.82 feet

Sample Condition: ⊠ Remolded
Water Levels: ▽ At completion

Depth in feet	Surf. Elev. 106.82 ft	USCS	DESCRIPTION	SAMPLES	Sample Number	Blows per 6 inches	Recovery (ft)	Moisture Content (%)	Percent Passing 200 Sieve	WATER LEVEL
0	106.6		Bituminous concrete pavement (3 inches)							
		ML	FILL: Dry brown SILT, some fine to medium sand, trace coarse sand, trace fine gravel	⊠	S-1	14-12-10	1.0			
	104.8		Moist, dark brown SILT and fine sand	⊠	S-2	7-9-7-6	1.5	15.8	50.8	
		ML	Moist, gray brown SILT, some fine sand, trace rounded fine gravel, trace coarse sand	⊠	S-3	5-3-4-6	1.5			
5	100.8	SM	Moist, brown/ gray/ orange fine to med SAND, little silt, little coarse sand, trace fine gravel	⊠	S-4	12-15-11-14	1.5			
	98.8	CL	Moist, brown/ dark brown CLAY, some fine to medium sand, little coarse sand, trace fine gravel	⊠	S-5	7-10-12-8	1.3	15.1	49.5	
10	96.8									
		SM	Moist, brown fine SAND, little silt, trace medium sand	⊠	S-6	7-8-8-8	1.0			▽
15										
			Moist, brown fine SAND, little to some silt, trace med to coarse sand, trace medium gravel	⊠	S-7	4-6-5-6	1.0	20.8	21.9	
20	85.8									
		ML	Moist, brown SILT, little clay, little fine sand	⊠	S-8	2-2-2-3	1.3			
25	80.8									
		SW	Saturated brown fine to medium SAND, some coarse sand, little fine gravel	⊠	S-9	8-7-6-5	1.0			
30										
			Wet, light brown fine SAND, trace coarse sand	⊠	S-10	9-12-17-27	2.0			
35	70.8									
40										

NOTES:
1. Boring terminated at 36 feet below grade.
2. Groundwater observed at 15.4 feet during drilling.
3. Upon auger removal, borehole caved and dry at 4.5 feet.
4. Borehole backfilled with cuttings and patched wtih bituminous concrete cold patch.

TEST BORING B-4

Geotechnical Evaluation
Proposed Warehouse #3 Expansion
City of Newark Public Works Yard
Newark, Delaware

Date Started : July 5, 2023
Date Completed : July 5, 2023
Logged by : M. Natrin
Weather : Sunny, 90s
Driller/Agency : G. Blemings/CGC Geoservices

Drilling Equipment : CME 55 Truck Mount
Drilling Methods : SPT, HSA
Surface Elevation : 106.94 feet

Sample Condition: Remolded
Water Levels: At completion

Depth in feet	Surf. Elev. 106.94 ft	USCS	DESCRIPTION	Sample Number	Blows per 6 inches	Recovery (ft)	Moisture Content (%)	Percent Passing 200 Sieve
0	106.7		Bituminous Concrete Pavement (3 inches)					
			FILL: Moist, brown fine SAND, some silt, some fine and medium gravel, little debris (concrete)	S-1	12-15-12	0.5		
	104.9		Moist, brown / gray SILT, little fine sand	S-2	8-5-4-4	1.8		
5			Moist, brown/ gray SILT, little fine sand (Atterberg Limits: LL = 31, PI = 9)	S-3	8-8-10-10	1.8	21.1	92.6
		ML	Moist, brown SILT, some fine sand, trace medium sand, trace coarse sand	S-4	10-8-7-9	2.0		
			Moist, brown / gray SILT, little fine to coarse sand	S-5	6-4-5-8	2.0		
10								
	94.9							
15		SM	Moist, brown/ black fine SAND, little silt	S-6	3-2-3-3	1.8	27.4	16.6
20			Wet, brown fine SAND, and silt	S-7	6-6-7-8	1.5		
	85.9							
25								
30								
35								
40								

NOTES:
1. Boring terminated at 21 feet below grade.
2. Wet on spoon observed at 19.0 feet. Groundwater observed at 18.6 feet during drilling.
3. Upon auger removal, borehole caved and dry at 2.8 feet.
4. Borehole backfilled with cuttings and patched wtih bituminous concrete cold patch.

TEST BORING B-5

Geotechnical Evaluation
Proposed Warehouse #3 Expansion
City of Newark Public Works Yard
Newark, Delaware

Date Started : July 5, 2023
Date Completed : July 5, 2023
Logged by : M. Natrin
Weather : Sunny, 90s
Driller/Agency : G. Blemings/CGC Geoservices

Drilling Equipment : CME 55 Truck Mount
Drilling Methods : SPT, HSA
Surface Elevation : 105.98 feet

Sample Condition: Remolded
Water Levels: At completion

Depth in feet	Surf. Elev. 105.98 ft	GRAPHIC	USCS	DESCRIPTION	SAMPLES	Sample Number	Blows per 6 inches	Recovery (ft)	Moisture Content (%)	Percent Passing 200 Sieve	WATER LEVEL
0	105.7			Bituminous Concrete Pavement (3 inches)							
				FILL: Moist, black debris (bituminous concrete millings), little fine sand, little silt, trace medium gravel (Petroleum odor)		S-1	12-11-6	1.0			
	104.0		ML	Moist, brown/ gray SILT, trace fine sand		S-2	3-2-2-8	2.0	226.0	91.2	
	102.0			Moist, brown/gray fine SAND, little medium sand, little silt, trace coarse sand		S-3	3-5-11-11	1.5			
5				Moist, brown/ gray fine SAND, little medium sand, trace medium gravel, trace silt		S-4	3-5-8-9	1.5			
				Moist, brown fine SAND, little silt, trace medium sand		S-5	10-11-16-14	2.0			
10			SM								
15				Moist, brown/ black fine SAND, little silt		S-6	4-4-4-4	2.0			
											▽
20				Moist, brown/ black fine SAND, little silt		S-7	3-3-5-5	2.0	25.9	17.7	
	85.0										
25											
30											
35											
40											

NOTES:
1. Boring terminated at 21 feet below grade.
2. Groundwater observed at 18.4 feet during drilling.
3. Upon auger removal, borehole caved and dry at 9.5 feet.
4. Borehole backfilled with cuttings and patched wtih bituminous concrete cold patch.

General Notes

GENERAL NOTES

VISUAL UNIFIED CLASSIFICATIONS: The soil samples are described by color, major constituent, modifiers (by percentage), and density (or consistency). Coarse Grained or Granular Soils have more than 50% of their dry weight retained on a No. 200 sieve; they are described as: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a No. 200 sieve; they are described as: clays or clayey silts if they are cohesive and silts if they are noncohesive. In addition to gradation, granular soils are defined on the basis of their relative in-place density and fine grained soils on the basis of their strength or consistency and their plasticity.

The Unified Soil Classification symbols are:

COARSE GRAINED SOILS

GW - Well graded gravels
GP - Poorly graded gravels
GM - Silty gravels
GC - Clayey gravels
SW - Well graded sands
SP - Poorly graded sands
SM - Silty sands
SC - Clayey sands

FINE GRAINED SOILS

ML - Silts of low plasticity
CL - Clays of low to medium plasticity
OL - Organic silt clays of low plasticity
MH - Silts of high plasticity
CH - Clays of high plasticity
OH - Organic silt clays of high plasticity
PT - Peat and highly organic soils

SIZE DESCRIPTION

F - Fine
M - Medium
C - Coarse
G - Gravel

MODIFIERS (PERCENTAGE)

Tr -	Trace	1 - 10%
Ltl -	Little	11 - 20%
Some		21 - 35%
& -	And	36 - 50%

COLOR

Or - Orange
Yel - Yellow
Br - Brown
Blk - Black
Gr - Gray
R - Red
Vc - Varicolored
Dk - Dark
Lt - Light

DENSITY: COARSE GRAINED SOILS

Very loose	4 blows/ft or less
Loose	5 to 10 blows/ft
Medium	11 to 30 blows/ft
Dense	31 to 50 blows/ft
Very Dense	51 blows/ft or more

CONSISTENCY: FINE GRAINED SOILS

Very soft	2 blows/ft or less
Soft	3 to 4 blows/ft
Medium	5 to 8 blows/ft
Stiff	9 to 15 blows/ft
Very stiff	16 to 30 blows/ft
Hard	31 blows/ft or more

NOTE: The Standard Penetration Test "N" value is the number of blows per foot of a 140 pound hammer falling 30 inches on a 2 inch O.D. split spoon sampler, except where otherwise noted.

SECTION 095113

ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes acoustical panels and exposed suspension systems for interior ceilings.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For each exposed product and for each color and texture specified, 6 inches in size.

1.3 CLOSEOUT SUBMITTALS

A. Maintenance Data: For finishes to include in maintenance manuals.

1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Acoustical Ceiling Units: Full-size panels equal to 2 percent of quantity installed.
2. Suspension-System Components: Quantity of each exposed component equal to 2 percent of quantity installed.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver acoustical panels, suspension-system components, and accessories to Project site and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.

B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.

1.6 FIELD CONDITIONS

A. Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weathertight, wet-work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

1. Pressurized Plenums: Operate ventilation system for not less than 48 hours before beginning acoustical panel ceiling installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain each type of acoustical ceiling panel and its supporting suspension system from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Flame-Spread Index: Class A according to ASTM E1264.
2. Smoke-Developed Index: 50 or less.

2.3 ACOUSTICAL PANELS

A. Basis-of-Design Product: Subject to compliance with requirements, provide Armstrong World Industries; Ultima High NRC 1943 or comparable product by one of the following:

1. Armstrong World Industries, Inc.
2. CertainTeed Corporation.
3. Rockfon (Rockwool International).

B. Acoustical Panel Standard: Provide manufacturer's standard panels according to ASTM E1264 and designated by type, form, pattern, acoustical rating, and light reflectance unless otherwise indicated.

C. Classification: Provide panels as follows:

1. Type and Form: Type IV, mineral base with painted finish; Form 2, nodular.
2. Pattern: E (lightly textured).

D. Color: White.

E. Light Reflectance (LR): Not less than 0.85.

F. Ceiling Attenuation Class (CAC): Not less than 35.

G. Noise Reduction Coefficient (NRC): Not less than 0.80.

H. Articulation Class (AC): Not less than 170.

I. Edge/Joint Detail: Reveal sized to fit flange of exposed suspension-system members.

J. Thickness: 7/8 inch.

K. Modular Size: 24 by 48 inches.

L. Antimicrobial Treatment: Manufacturer's standard broad spectrum, antimicrobial formulation that inhibits fungus, mold, mildew, and gram-positive and gram-negative bacteria and showing no mold, mildew, or bacterial growth when tested according to ASTM D3273, ASTM D3274, or ASTM G21 and evaluated according to ASTM D3274 or ASTM G21.

2.4 METAL SUSPENSION SYSTEM

A. Basis-of-Design Product: Subject to compliance with requirements, provide Armstrong World Industries; Prelude 15/16” or comparable product by one of the following:

1. Armstrong World Industries, Inc.
2. CertainTeed Corporation.
3. Rockfon (Rockwool International).

B. Metal Suspension-System Standard: Provide manufacturer's standard, direct-hung, metal suspension system and accessories according to ASTM C635/C635M and designated by type, structural classification, and finish indicated.

C. Wide-Face, Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet; prepainted, electrolytically zinc coated, or hot-dip galvanized, G30 coating designation; with prefinished 15/16-inch-wide metal caps on flanges.

1. Structural Classification: Heavy-duty system.
2. Face Design: Flat, flush.
3. Cap Finish: Painted white.

2.5 ACCESSORIES

A. Attachment Devices: Size for five times the design load indicated in ASTM C635/C635M, Table 1, "Direct Hung," unless otherwise indicated. Comply with seismic design requirements.

B. Wire Hangers, Braces, and Ties: Provide wires as follows:

1. Zinc-Coated, Carbon-Steel Wire: ASTM A641/A641M, Class 1 zinc coating, soft temper.
2. Size: Wire diameter sufficient for its stress at three times hanger design load (ASTM C635/C635M, Table 1, "Direct Hung") will be less than yield stress of wire, but not less than #12-gauge diameter wire.

C. Hanger Rods: Mild steel, zinc coated or protected with rust-inhibitive paint.

D. Hold-Down Clips: Manufacturer's standard hold-down.

2.6 METAL EDGE MOLDINGS AND TRIM

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Armstrong World Industries, Inc.
2. CertainTeed Corporation.
3. Rockfon (Rockwool International).

B. Roll-Formed, Sheet-Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension-system runners.

1. Edge moldings shall fit acoustical panel edge details and suspension systems indicated and match width and configuration of exposed runners unless otherwise indicated.
2. For circular penetrations of ceiling, provide edge moldings fabricated to diameter required to fit penetration exactly.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, including structural framing to which acoustical panel ceilings attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of acoustical panel ceilings.

B. Examine acoustical panels before installation. Reject acoustical panels that are wet, moisture damaged, or mold damaged.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders unless otherwise indicated and comply with layout shown on reflected ceiling plans.

B. Layout openings for penetrations centered on the penetrating items.

3.3 INSTALLATION

A. Install acoustical panel ceilings according to ASTM C636/C636M and manufacturer's written instructions.

B. Suspend ceiling hangers from building's structural members and as follows:

1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
2. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
3. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacings required to support standard suspension-system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices.
4. Secure wire hangers to ceiling-suspension members and to supports above with a minimum of three tight turns. Connect hangers directly to structure or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
5. Secure flat, angle, channel, and rod hangers to structure, including intermediate framing members, by attaching to inserts, eye screws, or other devices that are secure and appropriate for both the structure to which hangers are attached and the type of hanger involved. Install hangers in a manner that will not cause them to deteriorate or fail due to age, corrosion, or elevated temperatures.
6. Do not support ceilings directly from permanent metal forms or floor deck. Fasten hangers to cast-in-place hanger inserts, post-installed mechanical or adhesive anchors, or power-actuated fasteners that extend through forms into concrete.
7. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.
8. Do not attach hangers to steel deck tabs.
9. Do not attach hangers to steel roof deck. Attach hangers to structural members.
10. Space hangers not more than 48 inches o.c. along each member supported directly from hangers unless otherwise indicated; provide hangers not more than 8 inches from ends of each member.
11. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards.

C. Secure bracing wires to ceiling suspension members and to supports with a minimum of four tight turns. Suspend bracing from building's structural members as required for hangers, without attaching to permanent metal forms, steel deck, or steel deck tabs.

D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.

1. Apply acoustical sealant in a continuous ribbon concealed on back of vertical legs of moldings before they are installed.
2. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends. Miter corners accurately and connect securely.
3. Do not use exposed fasteners, including pop rivets, on moldings and trim.

E. Install suspension-system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

F. Install acoustical panels with undamaged edges and fit accurately into suspension-system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide precise fit.

1. For square-edged panels, install panels with edges fully hidden from view by flanges of suspension-system runners and moldings.
2. For reveal-edged panels on suspension-system runners, install panels with bottom of reveal in firm contact with top surface of runner flanges.
3. Paint cut edges of panel remaining exposed after installation; match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.
4. Install hold-down clips in areas indicated; space according to panel manufacturer's written instructions unless otherwise indicated.

a. Hold-Down Clips: Space 24 inches o.c. on all cross runners.

5. Protect lighting fixtures and air ducts according to requirements indicated for fire-resistance-rated assembly.

3.4 ERECTION TOLERANCES

A. Suspended Ceilings: Install main and cross runners level to a tolerance of 1/8 inch in 12 feet, non-cumulative.

B. Moldings and Trim: Install moldings and trim to substrate and level with ceiling suspension system to a tolerance of 1/8 inch in 12 feet, non-cumulative.

3.5 CLEANING

A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension-system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage.

B. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION

CITY OF NEWARK
ITB 24-03: NEWARK WAREHOUSE #2 EXPANSION

Pre-Bid Meeting Agenda – Newark Warehouse #2 – 406 Phillipos Avenue, Newark DE 19711
9:00 am, Thursday August 8, 2024

1. KEY PERSONNEL & INTRODUCTIONS

- Jeff Martindale, Chief Procurement & Projects Officer, City of Newark
- Phil Sawyer, City of Newark
- Chris Brendza, JMT, Project Manager

2. BIDDING ADMINISTRATION INFORMATION

A. Sign In Sheet: The pre-bid meeting is non-mandatory. Please sign in.

B. Bid Opening: Tuesday September 3, 2024 at 2:00 pm.

C. Addenda: An addendum will be issued to address questions and clarify issues discussed at the pre-bid meeting. The addendum will be emailed to all attendees listed on the sign-in sheet AND uploaded to the City of Newark's website.

D. Questions: Submit questions regarding the bidding process via email to contracts@newark.de.us no later than 5:00 p.m. on Friday August 23, 2024 at 5:00 p.m.

3. SCOPE OF WORK

A. Work includes installation of:

- Warehouse expansion
- Site paving and restoration
- Utility fit out in new warehouse

B. Anticipated Notice to Proceed is October 1, 2024. Contract duration is 180 calendar days. Liquidated damages are set to $200 per day.

C. Unit pricing shall include all incidental costs necessary to complete the scope of work item. This includes, but is not limited to, equipment, manpower, profit, overhead, materials, maintenance of traffic, restoration, etc.

4. QUESTIONS AND ANSWER SESSION

Pre-Bid Meeting Sign In Sheet

Name	Organization	Phone Number	E-mail Address
ANDREA DiFABIO	BSS CONTRACTORS	610-633-6932	ANDREA@BSSCONTRACTOR.COM
Maggie Kelley	Kinsley Construction	443 674 6723	mkelley@kinsleyconstruction.com
Jake Gies	Nowland Associates	302-540-6534	jake.gies@nowlandassociates.com
Jim Nowland	" "	302-218-6169	jim@nowlandassociates.com
Al Heinz	Wickersham Const.	717-397-8282	heinas@wickcon.com
Dan Hanna	A-del Construction	302 453 8286	Dhanna@a-del.com
Tommy Ogden	Ventresca Bros Inc	302-658-6436	TONY@ventrescabros.com
Ryan Jackson	Amako Inc	302-834-8664	AMAKO@AOL.COM
Jeff Martindale	Newark	302-366-7000	jmartindale@newarkde.us
Phil Sawyer	"	"	psawyer@newarkde.us
Tim Campbell	Padi Services	302 559-1084	TCampbell@poolservicesinc.com
Chris Brendza	EJMT	302-533-3572	CBrendza@ejmt.com