Rochester Schools Modernization Program – Phase 2A.1 (School #16) John Walton Spencer School SED # 26-16-00-01-0-016-020 SWBR Project #16158.00 05/14/2020

Include this Addendum as part of the Contract Documents. It supplements portions of the original Drawings and Specifications, the intent of which shall remain, except as revised herein:

TO THE PROJECT MANUAL:

SECTION 00 01 10 - TABLE OF CONTENTS

1-1 Add the following sections to the Table of Contents:

"32 92 00 - TURF AND GRASSES"

SECTION 00 41 16.01 - BID FORM - GENERAL TRADES WORK CONTRACT #7

1-2 Replace Section in its entirety with revised section, attached.

SECTION 00 43 23 - ALTERNATES

1-3 Add the following to Part 3.1

"4. Alternate Bid 4 – SOD Placement

The base bid does not include the construction cost to install SOD in place of hydroseed as detailed on drawing L-101.1.

This alternate provides all work associated to cover the playfield and distributed areas with SOD instead of Seed. Refer to specifications 32 92 00 FL – Turf and Grasses for detailed specifications. Alternate requires contractor to follow grading notes found on L-101.1 and only replaces Hydroseed for SOD. All subgrade work is not part of this alternate."

SECTION 00 43 83 - MILESTONE SCHEDULE AND CRITICAL SUBMITTALS

1-4 Replace Section in its entirety with revised section, attached.

SECTION 01 10 00 – SUMMARY OF WORK

1-5 Replace Section in its entirety with revised section, attached.

SECTION 13 34 10 - ACOUSTIC BARRIER PANEL SYSTEM

1-6 Revise Part 2.1 A1. to read:

"Industrial Acoustics Company, Phone (630) 270-1790."

SECTION 32 92 00 - TURF AND GRASSES

1-7 Add SECTION 32 92 00 TURF AND GRASSES, attached.

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TO THE DRAWINGS:

DRAWING C-101.1 – CIVIL UTLITY PLAN

1-8 Replace drawing in its entirety with revised drawing.

DRAWING S-101.1 – ACOUSTICAL SOUND BARRIER

1-9 Replace drawing in its entirety with revised drawing.

DRAWING A-120.1 – ROOF DETAILS

1-10 Replace drawing in its entirety with revised drawing.

ATTACHMENTS:

Pre-Bid Walk-Thru Sign-in Sheet, dated 05/12/2020.

CLARIFICATIONS:

Pre-Bid RFI #1

- Q1. Each Prime contractor shall provide full time, non-working, on-site supervision from commencement of their work and their subcontractors work activities until such time all work activities have been completed or as determined by the construction manager. Is it intended that the GC contract is complete at substantial completion on 8/16/20 or final completion on 11/30/20?
- A1. The GC will need to have to be on-site full-time until the non-Chiller milestone date, as shown in the Addendum of 14 August 2020. After this time, they will be required to be on-site as needed, until 15 October 2020, as directed by the CM. Following 15 October, site supervision by the GC will be as directed by the CM.
- Q2. Temporary Sanitary Facilities. States the GC is to provide Chemical Portable toilets for the duration of their contract, cleaned three times per week. Standard contract for portable toilet cleaning is once a week, is there a need for three? Based on the milestone schedule the general trades package substantial completion date is 8/16/20, who covers the cost until final completion on 11/30/20?
- A2. The GC carries the cost of temporary sanitary facilities through the end of the project (30 November 2020). Due to the COVID-19 virus, it is planned for the facilities to be cleaned three-times-per-week, minimum.
- Q3. Temporary Heating/Cooling.

 Is this section applicable to the project? If so, the GC contract substantial competition date is 8/16/20, who covers the cost until final completion on

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11/30/20?

- A3. It is the Contractors option if they wish to maintain a trailer on-site. If so, it is their option whether to provide their own heating / cooling. into the late fall. Electric and water service will be supplied using the District utilities. The Contractor is responsible for hook-up to a trailer if this option is exercised. Note: The CM will use an office in the school. There is no CM trailer.
- Q4. Temporary Construction.
 - A) GC shall provide, maintain and remove all temporary enclosures necessary to close in sections of the building. Is this applicable? Where are they required?
- A4. The only expected enclosure will be for the GC to provide a lockable, secure, temporary wall opening into the Crawl Space off Post Avenue. There are no other temporary enclosures envisioned at this time.
- Q5. GC shall be responsible throughout the duration of the project to ensure at the end of each work shift that all exterior windows, doors & gates are closed, locked and secure. GC substantial completion is 8/16/20. Is it truly the intent for the GC to maintain this task until 11/30/20?
- A5. The GC will be responsible for inspecting and securing the site following the shifts they are working, and be accountable to secure their materials and the school building at those times.
- Q6. GC shall provide, maintain and remove temporary weather tight, secure construction entrances/doors, locations as directed by construction manager. Where, how many?
- A6. The only expected enclosure will be for the GC to provide a lockable, secure, temporary wall opening into the Crawl Space off Post Avenue. There are no other temporary enclosures envisioned at this time.
- Q7. Temporary Support Facilities.
 - A) GC shall relocate the CM office furniture, equipment and supplies to a location in the city of Rochester. When will this take place? 8/16/20 or 11/30/20? How much and to what address?
 - B) GC has cleaning, supplies, water service, and disposables obligation for the CM trailer until substantial completion date of 8/16/20 or 11/30/20.
- A7. There is a modest amount of furniture to be delivered from RSMP storage and/or purchased and then placed back in storage on or about 30 November 2020, to a location provided by the CM, within the City of Rochester. Furniture is outlined under Specification 01 10 00.A, Construction Manager Office Requirements. Review the furniture quantity and type with the CM, per the specification.

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- Q8. Section 015500 Access Roads, Parking and staging,
 - A) Snow and Ice Removal Is the GC expected to provide this service between 8/16/20 11/30/20?
- A8. No, this will be provided by the District, if needed. Any trailer or work equipment in the parking lot needs to be removed by 14 August.
- Q9. Section 015690 Construction Cleaning
 - A) GC shall maintain all work areas in a broom clean condition on a daily basis for the duration of the project. Is it the intention to have the GC complete this task after 8/16/20?
- A9. The GC will be required to clean up the site after their shift, and as directed by the CM.
- Q10. GC shall remove all debris from the concealed space before spaces are enclosed. This includes the crawlspace. It is our understanding that this is limited to debris created during the construction of this contract and not debris left previously?
- A10. Per the Addendum, the Specification requires that debris in the Crawl Space, even if not the result of contracted work, be removed at the end of the project; estimated at 300 pounds.
- Q11. Section 017423 Final Cleaning
 - A) Punchlist Cleaning & Item 3 Final Cleaning Is this to be completed at the 8/16/20 substantial completion?
- A11. Interior, non-Chiller Punchlist items will be completed after 14 August per this Addendum. Some cleaning may be required post-Punchlist completion, as directed by the CM. Final cleaning after the Chiller installation (planned for 15 October 2020) will be on the exterior and as directed by the CM.
- Q12. Transparent materials cleaning Please provide limits of what's intended?
- A12. This applies to the Servery and Cafeteria areas following installation of the split-system unit and closure of the ceiling, as directed by the CM.

Scope of Work – General Trades Contact 7:

- Q13. GC shall provide, maintain and remove Masonite board with taped seams as floor protection in all areas including corridors to protect new floors. Is this applicable, if so please outline where you would like it?
- A13. Floor protection will have limited use, as directed by the CM: Two areas for consideration are the Post Avenue building entrance to gain access to the hatch for the Crawl Space, until temporary wall opening is constructed.

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Also, in the Cafeteria and Servery, as needed. It will be expected for use in thoroughly traveled areas by contractors that must be protected.

- Q14. GC shall provide and remove crane pad. Is a crane pad required by the mechanical contractors? If so where is it intended to be?
- A14. This requirement applies to <u>all contractors in support of their own scope</u>, and only if needed. The GC is not required to provide a crane pad for other contractors. See Drawing A101.1, S101.1, M42.1 for locations of equipment on roof to determine possible pick equipment locations.

END OF ADDENDUM

SECTION 00 41 16.01 - BID FORM - GENERAL TRADES WORK CONTRACT #7

To the Rochester Joint Schools Construction Board ("RJSCB" or "Owner"):

The undersigned proposes to do all the work and furnish all material necessary for RCSD-John Walton Spencer School No.16 – Phase 2A.1 of the RSMP (herein, "Project"). (Use only one bid form per contract being bid):

Company N	lame	
1.1.1 In accordance with drawing Contract Documents, for		ecifications therefore and addenda comprising the sum of:
Bid (not including Allowances)	\$	
Allowance C-07-01	\$	\$35,000.00
Allowance C-07-02	\$	\$10,000.00
FOTAL BASE BID (Including Alle	owances	All inclusive)
	\$	Amount in Figures
		· ·
		Dollars ount in Writing

1.2 ALLOWANCES

1.1

Refer to section 00 43 21 "Allowances" for description of Allowances, where used. Allowances are to be included in base bid amount and are to be used for items not identified in the contract documents. Unit Price Costs will be used to add or delete scope from allowances when directed by the Owner or Construction Manager.

1.3 ALTERNATES

Refer to section 00 43 23 "Alternates", for description of Alternate Bids.

The Bidder is responsible for determining the Alternates that influence its Work; the Bidder will enter the cost to be added to or deducted from its Base Bid per the Alternate Bid descriptions.

Any or no entry in the space provided for each Alternate Bid, which does not reflect a change in cost, shall be interpreted as a \$0.00 change to the Bidder's Base Bid. An Alternate bid may be an Add or

SWBR Project #16158.00 Bid Set 05/06/2020

Deduct to the Contract. Failure to recognize change in cost, when Work of an Alternate Bid relates to the Base Bid provided under paragraph one could affect the apparent low bid.

ALTERNATE BIDS

1.	Alternate Bid 1 – Additional Foundation Drain:	
	Add	Dollars
	(\$)	
2.	Alternate Bid 2 – Raised Crosswalk Work on Post Ave.:	
	Add	Dollars
	(\$)	
3.	Alternate Bid 3 – Playfield Site Drainage:	
	Add	Dollars
	(\$)	
4.	Alternate Bid 4 – SOD Placement:	
	Add	Dollars
	(\$)	

The total Base Bid, together with any approved Alternates, once accepted and awarded by the Owner, shall be referred to as the "Contract Sum." The Contract Sum may be modified in accordance with the General Conditions (Section 00 72 16).

1.4 UNIT PRICES

Refer to Section 00 43 22 "Unit Prices", for description of Unit Prices. For Owner's information and for changing quantities of work items from those indicated by the Contract Drawings, upon written instruction from the Architect or Construction Manager, the Contractor shall submit unit prices (which must include all accessories, hangers, labor, materials, fire stopping, terminations, etc.). Unit prices include mark up, profit and overhead. Changes to the work shall be in accordance with the General Conditions (00 72 16).

Unit	ITEM NAME	Value	Unit
Cost #			
C-01-	Excavate and remove unsuitable soil	\$	CY
UC-01a			
C-01-	Remove masonry, wood and other miscellaneous non-	\$	CY
UC-02a	ACM debris located throughout crawl space		

1.5 PROJECT PHASING AND MILESTONES

If awarded the Contract, the undersigned bidder agrees to complete the entire work on or before the milestones and dates as denoted in Section 00 43 83 "MILESTONE SCHEDULE & CRITICAL SUBMITTALS." This includes working multiple shifts, or overtime, as directed by the Construction Manager to meet milestones.

1.6 ADDENDA

Receipt of the following addenda to the Contract Documents are acknowledged:

	Adde	endum No	Date	
	Adde	endum No	Date	
	Adde	endum No	Date	
	Adde	endum No	Date	
1.7 unders		the name of each person, firm or corp	poration interested in the above b	oid. If the
	1.	An individual, give full name		
	2.	A partnership under an assumed nan	ne, give name of each principal:	
	3.	A corporation, give full legal name		
	4.	Give the name of each person, firm o bidder having an interest in bids of the		

2.1 CERTIFICATION OF NON-COLLUSION IN BIDDING

- By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury that to the best knowledge and belief:
 - 1. The prices of this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
 - 2. Unless otherwise required by law, the prices which have been

quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and

3. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

	BY
FULL LEGAL NAME OF FIRM OR CORPORATION	AUTHORIZED SIGNATURE
ADDRESS	TYPED NAME OF AUTHORIZED SIGNATURE/TITLE
CITY, STATE, ZIP CODE	TELEPHONE NUMBER
DATE	E-MAIL ADDRESS

NOTICE TO BIDDERS

- 3.1 All bid forms shall be signed by the name of the person, firm or corporation submitting the bid, indicating by long-hand signature the person duly authorized to sign in behalf of such person, firm, or corporation and shall contain the business address of the bidder.
- 3.2 Bidders are required to submit unit prices only if required by the specifications.
- 3.3 Owner reserves the right to award contract to include any of the Alternates. Accordingly, bidders are required to bid on all Alternates called for in the specifications. However, Owner reserves the right to waive this requirement.
- 3.4 No bids on different kinds of work may be combined, grouped or added together except to make the lump sum total of work called for under any one contract.
- 3.5 All items on the bid form shall be filled in as called for, and the completed bid form shall be without interlineation, alteration or erasure; and shall not contain a bid or bids, or form of bid or bids, other than called for.

END OF SECTION 00 41 16.01

SECTION 00 43 83 - MILESTONE SCHEDULE AND CRITICAL SUBMITTALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Related Work Described Elsewhere:
 - Agreement, Section CA, General Conditions

1.2 SUMMARY

A. The work specified in this section includes the requirement to prepare, maintain, and update all detailed schedules as described in this section using the Critical Path Method (CPM). The CPM Schedules shall be prepared in such a manner as to permit the orderly planning, organization, and execution of the Work and be sufficiently detailed to accurately depict all the Work required by the Contract, including all Milestones as described in other sections of the Specifications, or elsewhere in the Contract Documents.

1.3 DEFINITIONS

- A. Contract Float: The number of working days between Contractor's anticipated completion date for early completion of the Work and the corresponding Contract Time.
- B. Expanded Project Schedule Update: expanded detail of a Project Schedule Update in order to further explain the construction sequence or other details.
- C. Look-Ahead Schedule: A schedule that shows planned Work over the next six weeks.
- D. Original Baseline Schedule: The first approved revision 0, Project Schedule.
- E. Guideline Schedule: The schedule included with the contract documents is intended as a guide for bidding purposes. Schedule durations may change from this schedule to depict the actual work flow, but the start, finish and milestone dates will remain the same.
- F. Preliminary Schedule: The Contractor's construction schedule showing the planned Work over the first 120 days following Notice to Proceed.
- G. Project Schedule: The Project Schedule shall represent the Contractor's best judgment and intended plan for the completion of the Work in compliance with the Contract Documents. It represents the Contractor's first schedule covering the complete duration of Contract Time submitted for review and approval of the CM. Upon approval by the CM, the Project Schedule shall

become the Original Baseline Schedule. Subsequent revisions of the Project Schedule shall be Revised Baseline Schedules.

- H. Total Float: The number of working days by which a part of the Work in the Baseline Schedule may be delayed from its early finish dates without extending the Contract Time.
- Project Schedule Update: The latest Baseline Schedule updated monthly to reflect actual Work performed, but not logic changes in the Baseline Schedule.
- J. Revised Baseline Schedule: The latest approved Baseline Schedule that reflects logic changes and all approved change orders.

1.4 SUBMITTALS

- A. Project Schedule: Discuss with and obtain the Construction Managers acceptance of the proposed coding, activity-numbering system, screen layout, graphics used to generate the networks and bar charts, and exceptions to the size of the network printed sheets, all prior to submitting the Project Schedule.
 - Submit to the Construction Manager a detailed Project Schedule within 10 calendar days after receipt of the Notice to Proceed using the CPM format, and in both hard copy and electronic format.
 - 2. The Project Schedule shall supersede the Preliminary Schedule upon the Construction Manager acceptance of the Project Schedule.
 - 3. The Project Schedule shall include a written narrative that explains all Work activity durations and describes the plan and approach for meeting interim and final completion milestones. Include as a minimum all: bases and assumptions used in preparing submittals, crew sizes, equipment requirements, anticipated delivery dates, restraints, critical path activities, production rates, production and maintenance shifts, time contingencies to account for weather conditions, permits, long-lead time items, and coordination issues with Construction Manager, Owner, utilities, other contractors or other third-parties. The narrative shall discuss the Contractor's plan for management of the site (e.g., laydown, staging, traffic, etc), and buildup of trade labor.
 - 4. A meeting will be held with all prime contractors upon receipt of the individual Project schedules to coordinate each schedule into one combined Project Schedule. All prime contractors will sign off agreeing to combined Project Schedule.
 - 5. Contractors are required to include on their Schedule of Values costs allocated for second shift, and this will align in detail with the milestone schedule which must be approved by the Construction Manager and Program Manager prior to first billing.

- 6. A separate superintendent must be assigned for all 2nd shift work, and each prime contractor is required to provide a resume to be reviewed and approved by the Construction Manager and Program Manager prior to that person starting work.
- 7. All prospective winning prime contractors will be required to bring to the de-scope meeting the labor hours they have estimated in their bid.
- 8. Work force plan must be provided as a submittal and as a part of each prime contractor's first application for payment.
- B. Project Schedule Update and Progress Report: Submit the following on the first working day of each month, updated as of the 25th calendar day of the previous month:
 - 1. Project Schedule Update
 - 2. Monthly-to-date Progress Report Comprising:
 - a. A narrative of all Work performed that includes the following.
 - b. Work completed since the last update.
 - c. Description of the current critical path, including any changes to the critical path since the last update and an identification of the reasons for the changes.
 - d. Description of problem areas.
 - e. Current and anticipated delays. Include causes thereof and impacts to other activities, milestones, and completion dates. Identify all activities where progress has slipped more than 5 working days since the last schedule update and discuss the cause of the delay or interruption.
 - f. Pending items, such as permits, change orders, and time adjustments, and status.
 - 3. Contract completion date status. Include the number of days ahead of, or behind all milestone dates and the contract completion date, and the reason(s) for any change(s).
- C. Submit a Project Schedule Update and month-to-date Progress Report in accordance with the foregoing requirements upon submitting any proposed Revised Baseline Schedule. Use a cut-off date for the Project Schedule Update that corresponds to the effective date for the proposed Revised Baseline Schedule.
- D. Look-Ahead Schedule: Submit the two-week look-ahead schedule at least 24 hours prior to the progress meetings, with number of copies submitted, layout, and format acceptable to the Construction Manager.
- E. Time Impact Analysis: Submit in accordance with, and when required by the General Conditions of the Agreement.

F. All submittals, within the time provided herein and in a form acceptable to the Construction Manager, of schedules, monthly progress reports, schedule updates, and revisions of the Project Schedule are conditions precedent for the Contractor to receive the full amount of each progress payment, less retention and other adjustments. Should the Contractor fail to submit timely, acceptable reports, schedules, updates, or revisions, the Construction Manager may withhold the amount designated in the Schedule of Values from each monthly partial payment estimate. Should the Contractor continue to fail to submit the above mentioned submittals the Construction Manager may, in addition to other retentions or remedies provided by the Contract or by applicable law, withhold 25 percent of each monthly partial payment estimate until acceptable submittals have been received.

1.5 QUALIFICATIONS

A. The Contractor shall perform the work covered in this section with personnel having at least three (3) years experience in using computer based scheduling on construction projects of the magnitude and complexity of this project.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION

3.1 SUMMARY

A. The Schedule shall be constructed, and the work performed in accordance with the milestone dates set forth and the coordinated project schedule. Any additional costs for overtime, shift work and/or additional manpower, required to maintain these milestones, will be at each Contractor's expense.

3.2 PROJECT SCHEDULE

- A. Furnish a Project Schedule and participate with the Construction Manager in its review, evaluation and coordination. Such joint review and coordination shall not relieve the Contractor of the sole responsibility for scheduling the Work. Furnish a Project Schedule demonstrating adequate planning and execution of all phases of the Work and which enables the Construction Manager to evaluate progress of the Work. Maintain such Project Schedule so that it shall, at all times, represent the Contractor's planned means, methods, and sequences for performing the Work required under this Contract within the Contract Time specified. Show the following schedule elements in detail:
 - 1. The start and completion of all items of the Work, their major components and milestone completion dates, including Contract milestones.

- Mobilization
- Submittals and approval of submittals including shop drawings, permits and steps required to obtain permits, safety plans, temporary facilities and utilities, record documents, and operators and maintenance manuals.
 - a. Critical submittals shall be tracked independently and include but are not limited to the following:

02 41 19	Selective Demolition – Shoring Design
13 34 10	Acoustic Barrier Panel System
23 21 23	Pumps
23 64 26.20	Air Cooled Scroll Compressor Packaged Chiller
23 81 26.11	Ductless Split System Air Conditioner

All construction activities, including the fabrication and delivery of materials or equipment incorporated into the Work, adjacent Work done by others and Work area changes.

As time is of the essence, all packages listed above need to be submitted to the Engineer for approval 10 days of prior NTP.

- 4. The number of working days required for completion of each activity and all the Work.
- 5. Commissioning, punch list and close out.
- B. The Contractor's key personnel involved in preparing the Project Schedule shall initiate and attend one or more meetings upon direction of the Construction Manager to present to, and coordinate with the other prime contractors. Personnel shall be competent and prepared to discuss:
 - 1. The planned logic, content, form, and layout of the activity table (spreadsheet).
 - 2. The bar chart format.
 - 3. Activity identification and coding. Number the initial activity identifications (IDs) by 10s or 100s to allow for the insertion of any future required activities that enhance detail.
 - 4. Presentation and printouts of the Project Schedule.

The Construction Manager will review the proposed Project Schedule and meet with the Contractor's key personnel performing the scheduling to

discuss the proposed construction schedule within 21 calendar days of its submission.

- C. The Construction Manager acceptance of the Project Schedule shall not:
 - 1. Imply that the Construction Manager has conducted an exhaustive review or evaluation of the sequencing, logic, or duration of all activities contained therein.
 - 2. Constitute a warranty of its feasibility, suitability, reasonableness, or completeness.
 - 3. Provide a basis for claims occasioned by any future revisions required in the schedule to conform to the Contract requirements.
 - 4. Relieve the Contractor of the sole responsibility for scheduling and performing the work.
 - 5. Relieve the Contractor of sole responsibility for means, methods, and techniques of construction employed.
- D. The Project Schedule initially accepted by the Construction Manager shall be designated as the Original Baseline Schedule. The accepted Original Baseline Schedule shall not be updated, revised, or changed over the Project duration, but shall be used for comparison with the current updated schedule, until a Revised Baseline Schedule is accepted by the Construction Manager.
- E. An activity shall be defined as an element of Work that is measurable and definable and that is necessary to accomplish in order to incrementally achieve progress of the Work as a whole. At any time, the Construction Manager may require additional detail to that previously provided. Float shall not be an activity.
 - 1. Carefully analyze activities comprising the Project Schedule to determine activity durations in units of project working days. Base durations on the labor crews, crafts, equipment, and materials required to perform each activity. Unless supplemented with a detailed linear schedule to indicate production progress, split activities with durations greater than 30 working days into activities no longer than 20 working days, except for summary activities and non-construction activities such as submittal preparation and review, material procurement, and equipment delivery, or as allowed by the Construction Manager.
 - 2. Clearly identify the critical path on the Project Schedule.
 - 3. Identify the following as lag activities and include full lag time associated therewith in the duration of the activity. Do not schedule negative lag time.
 - Start-to-start and finish-to-finish lag times greater than 1 working day.

- b. Finish-to-start lag times greater than 1 day.
- c. Start-to- finish lag times of any kind.

3.3 LIQUIDATED DAMAGES

A. Critical submittals shall carry liquidated damages of the value listed in 00 72 16 General Conditions.

3.4 DEFINITIONS OF CONTRACT MILESTONES

A. SUBSTANTIAL COMPLETION:

As determined by the Construction Manager, all work and systems are complete, operational, tested and ready for facility operations and certificate of occupancy. All closeout documentation required by the "Closeout Procedures," including warranties, certifications, record or 'as-built' documents, and operation and maintenance manuals, etc., must be submitted and satisfactory. Substantial Completion will not be recognized by Owner until all Closeout Documents and Submittals are received in full and are satisfactory to Owner's Representatives.

B. FINAL COMPLETION:

As determined by the Construction Manager, all punch list work is complete; and closeout documentation, warranties, certifications, record documents, and operation and maintenance manuals are approved.

3.5 MILESTONE SCHEDULE

- A. In order to meet the Substantial Completion dates, all overtime costs for extended work hours, Saturdays (and Sundays when required) must be included in the contractor's bid; no special consideration will be given to any contractor that fails to include said costs in his/her bid. Extended workdays and/or hours will be required to make up lost time due to weather and other unforeseen occurrences.
- B. A guideline schedule is included in herein as an illustration setting forth goals for milestone activities for the Project and anticipated completion dates. The annexed guideline is for bidding purposes only and may be modified during the course of the Contract. Contractors must complete all Work in a coordinated manner to achieve timely completion. Failure to act in accordance with coordination requirements of the Contract shall subject the responsible Contractor to liquidated damages as specified in the General Conditions and sustained failure to perform as required may be grounds for termination of its Contract.

The following schedule reflects anticipated milestones for the Bid Period:

Contract Award: 06/08/20

The following schedule reflects anticipated milestones before Mobilization:

List of Subcontractors (inc. Sub Tier) Submitted by: 06/15/2020

Bid Breakdown Leveling Sheets: 06/15/2020

Acquire Approved Prime Contractor Bonds, Insurances & Signed Contracts by: 06/15/2020

The following schedule reflects anticipated milestones for Critical Submittals:

Critical Submittals as Identified: 06/09/2020

Critical Submittals submitted by: 06/12/2020

The following schedule reflects anticipated milestone dates (date task to be completed by) for the construction period. All primes should anticipate that double shift, premium, and second shift work will be required for coordination with the other trades to meet the project milestone dates. All Primes need to understand that this is a fast track project and Time is of the Essence for any and all aspects of this project.

Mobilize to Site: 06/25/2020

Substantial Completion Date for all Work except air conditioning: 08/14/2020

Substantial Completion Date for air conditioning Work: 10/15/2020

Final Completion Date: 11/30/2020

Warranty Period: 2 years

END OF SECTION 00 43 83

SECTION 01 10 00 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General Conditions of the Contract for Construction, Division 00 and Division 01 Specifications sections, apply to Work of this section.
- B. Section 00 73 46 Wage Rates. Davis Bacon Wage Determination updated at the time of award. Post-award changes to published New York State Prevailing Wage Rate or Davis Bacon Wage Rate shall not constitute basis for Contract Sum increase.
- C. Milestone Schedule and Critical Submittals Section 00 43 83.

1.2 DESCRIPTION OF WORK

- A. The Contractor shall submit lump sum information prices attached to Bid Form Section 00 41 16. The Work of this Project is described more completely elsewhere in the Contract Documents and compliments the following list. Contractors shall attend all meetings and comply fully with the detailed specifications and drawings that are part of this Contract. See Unit Price Section 00 43 22 for Unit Price items.
- B. The Work includes all labor, materials, equipment and transportation necessary to complete the project as specified and as indicated in the Contract Documents.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Information

- 1. **Project Location**: 321 Post Avenue, Rochester, NY 14619
- 2. **Project Description**: The project consists of Additions and Alterations work at the John Walton Spencer School 16 Additions and Alterations work
- 3. **Owner Identification:** Rochester Joint Schools Construction Board (RJSCB) (herein, "Owner") as represented by its Executive Director. Owner is agent for; Rochester City School District (RCSD); and City of Rochester for purposes of the Rochester School Modernization Program (RSMP).
- 4. **Program Manager Identification:** The Owner has engaged Gilbane/Savin Engineers P.C. as Program Manager for this Project to serve as an advisor to

Owner and to provide assistance in administering the Contracts for Design and Construction between Owner and each Consultant/Contractor, according to a separate contract between Owner and Program Manager.

- Construction Manager Identification: The Owner has engaged Buffalo Construction Consultants, as Construction Managers. The particular Construction Manager designated by contract with the Owner for that particular Project site shall serve as the Contractor's primary contact for, and Owner's authorized agent of, the Project with regard to that site to serve as an advisor to Owner and the Program Manager to provide assistance in administering the Contract for Construction between Owner and each Contractor, according to its separate contract with Owner.
- 6. Architect/Engineer Identification: Owner has engaged SWBR Architects as the Architect of record. SWBR has engaged various professional engineers and/or consultants as part of their design team. SWBR is retained under separate agreement with Owner, and shall be identified as the Architect/Engineer for the Project.
- B. Contract Documents dated January 30, 2020, prepared by SWBR Architects, 387 East Main Street, Rochester, NY 14604.
- C. Protection of existing utilities under the existing structures and site is considered part of this Work scope.
- D. Work will be constructed under a Multiple Prime Contracts.
- E. Prime Contracts are separate contracts between the Owner and separate contractors, representing significant construction activities. This Prime contract is performed concurrently with and closely related to construction activities performed on the project and closely coordinated with construction activities performed on the project under prime contracts Prime Contracts for this project include:
 - 1. Prime Contract: General Trades Contract #7
 - 2. Prime Contract: Mechanical Work Contract #8
 - 3. Prime Contract: Electrical Work Contract #9
 - 4. Prime Contract: Plumbing Work Contract #10

1.4 CONTRACT METHOD

- A. Construct the Work under a Lump Sum fixed price Contract for each Prime Contract.
- B. Construction Work is being accomplished by utilizing a sequentially phased, multiple Prime Contract procedure.

PART 2 -

2.1 PRIME CONTRACT SUMMARY OF WORK

- A. The following documents are hereby defined as Contract Documents and are specifically included and defined as integral to Each Prime Contract.
 - 1. The Contract Documents consist of: Drawings and Specifications
 - a. List of Specifications: See Project Manual Specification Index in Table of Contents
 - b. List of Drawings: See Project Manual Drawing Index in Table of Contents All Drawings included in the Project Drawing Index is integral to each Prime Contract.

2.2 SECURITY REQUIREMENTS

- A. Work zones and material / equipment staging zones shall remain locked at all times, except when a Worker is present to prevent unauthorized entry.
- B. All construction Workers shall be required to wear photo identification badges at all times. The Construction Manager/District will issue security badges to each Worker prior to the Worker entering the project site.
- C. Contractors are reminded that all Workers will be required to act in a manner consistent with a school environment. Each Contractor will be responsible to ensure that all Workers act appropriately. Any individual acting in a manner not acceptable to any school representative, the Owner or Construction Manager, will be directed to surrender his/her badge and to leave the premises immediately. The offending individual will be prohibited from future Work on this Project.
- D. The City of Rochester Police Department reserves the right to inspect any packages or deliveries throughout the course of the Project.
- E. The City of Rochester Police Department, at their discretion, reserves the right to inspect the Work areas.

2.3 PROTECTION OF NEW AND EXISTING WORK

A. Each Contractor shall be wholly responsible for the protection of their finish Work as well as that of others.

- B. All finished surfaces shall be protected if there is any possibility of damage resulting from the Work of other trades. This includes protection of the jambs and soffits of all openings used as passageways, or through which materials will be handled.
- C. All finished surfaces, including factory finished surfaces, shall be cleaned and not marked upon delivery to the project. The Contractor shall, without extra compensation, refinish and/or replace all damaged surfaces to the satisfaction of the Architect/Engineer.
- D. The finishes sequence of all areas will be as follows:
 - Prime coat and first finish coat on walls.
 - 2. Install ceiling grid, ceiling tile border (i.e., cuts and specials), and ceiling tiles required for the installation of items listed in Item "c" below.
 - 3. Install ceiling mounted electrical devices, light fixtures, diffusers, grilles, registers, and specialties.
 - 4. Install casework, millwork, and ceramic tile.
 - 5. Install resilient flooring, carpet, toilet fixtures and accessories.
 - 6. Paint second finish coat on walls.
 - 7. Install wall base, ceiling tile, and wall-mounted electrical devices and cover plates.
 - 8. Apply final finish coat of paint to door frames after installation of FF&E.
 - 9. Contractors will use this sequence to reduce minor damages to finishes at the end of each completed phase.
- E. Each Contractor shall be responsible for the protection of all existing finished surfaces, i.e., walls, doors, window and door frames, casework, jambs, soffits, etc., called out to remain. Contractors shall, without extra compensation, refinish and /or replace all existing surfaces damaged, during construction, to the satisfaction of the Architect/Engineer.
- F. Prior to any materials being stored on finished floor surfaces, the Contractor shall obtain approval from the Construction Manager. If required, each Contractor shall install a protective barrier deemed acceptable by the CM over these finished surfaces at no cost to owner or project. Wheelbarrow, carts, dollies, etc., if used in such areas, shall be non-marking rubber tires.
- G. Roof surfaces and plaster ceilings shall not be subjected to construction traffic, nor shall they be used for the storage of materials. Where activity must take place in order to carry out the Work of the Contract, the Contractor shall provide the Construction Manager with a protection plan, including but not limited to the following:
 - 1. The type of Work to be performed.
 - 2. The area where the Work will be performed.
 - 3. Traffic patterns to be used for access/egress to/from the Work area.
 - 4. Material and methods to be used as protection.
- H. The plan shall be submitted to the Construction Manager no less than two (2) weeks prior to performing the Work to allow time for review of the plan.

I. Under no condition shall any Work take place in these areas without the Construction Manager's prior authorization. Damage to the aforementioned surfaces shall be repaired at the expense of the Contractor who is deemed responsible for such damage, in the sole judgment of the Construction Manager.

2.4 SCOPE OF WORK – ALL CONTRACTS

Each Contractor shall provide all labor, material, plant, tools, equipment, and supervision, including safety supervision, related to or necessarily involved with the performance of the Work, as defined in this section, as indicated on any drawing in the Enumeration of Contract Documents, and as described in the following sections from the Project Manual:

A. DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

Each Contractor shall include all Work and comply with all provisions of each of the following Specification Sections, complete:

- 1. 00 01 10 Table of Contents Project Manual
- 2. 00 01 15 List of Drawings
- 3. 00 11 13 Advertisement for Bids
- 4. 00 21 13 Instructions to Bidders
- 5. 00 25 00 Hazardous Material Information
 - a. School 16 has been undergone decontamination/removal of known hazardous material and as such, none are expected to interfere with scoped work. Summary reports are available from RSMP at 70 Carlson Road, Rochester, NY, 141610, 585-512-3820.
 - b. Each Contractor shall assess the data provided in this Section and shall be responsible for performing the Work of their Contract according to the data provided in Section 00 25 00A and the requirements of Section 02 83 00 Working with Lead Containing Materials. Each Contractor that disturbs existing building materials that contain lead paint shall take the necessary measures specified in Section 02 83 00 Working with Lead Containing Materials.
 - c. EPA has issued a rule requiring the use of lead safe practices and other actions aimed at preventing lead poisoning. Under the rule, beginning in April 2010, contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, childcare facilities and schools built before 1978 must be certified and must follow specific Work practices to prevent lead contamination. Information from EPA 40 CFR Part 745.8 Subpart E has been incorporated into Section 02 83 00. All Contractors are responsible for understanding and following all the requirements set forth in this regulation as it relates to their Work.
 - d. Any suspected material uncovered during construction shall be immediately reported to the Construction Manager. Removal of any material found to contain

asbestos shall be only be performed by a NYSDOL licensed firm with certified Workers.

- e. Any suspect mold uncovered during construction shall be immediately reported to the Construction Manager. Removal of any mold shall only be performed by a Contractor licensed to remediate mold.
- 6. 00 41 16.01 Bid Form- General Trades Work Contract #7
- 7. 00 41 16.02 Bid Form- Mechanical Work Contract #8
- 8. 00 41 16.03 Bid Form- Electrical Work Contract #9
- 9. 00 41 16.04 Bid Form- Plumbing Work Contract #10
- 10. 00 43 00 Supplements to Bid Form
- 11. 00 43 21 Allowances
- 12. 00 43 22 Unit Prices
- 13. 00 43 23 Alternates
- 14. 00 43 31 MWBE/DBE/SBE Utilization and Workforce Diversity
- 15. 00 43 31A Diversity Programs "DP" Forms
- 16. 00 43 83 Milestone Schedule and Critical Submittals
 - 1) Each Prime Contractor and respected subcontractors are to manage their scope of work to meet expected milestones detailed herein:
 - 1) The following scopes are to be completed in accordance of the Non-Chiller Milestone dated August 14th, 2020:
 - A) Playfield/Site Work
 - B) Post Ave Crosswalk
 - C) Crawl Space
 - D) Ductless Split System Air Conditioner
 - 2) The following scopes are to be completed in accordance of Chiller Milestone dated October 15th, 2020:
 - A) Physical Air-Cooled Scroll Compressor Chiller Installation
 - B) Acoustic Barrier Panel System including associated electrical work
 - All interior work is to be completed prior to the Non-Chiller Milestone date of August 14th, 2020. The intent is to complete all interior, playfield and site work during the summer prior student and teacher body returning to the school. No work inside the building will be entertained during school hours after August 14th, 2020.
 - 3) After August 14th, 2020, any work required in interior public areas requires coordination with the CM, District and RSMP prior to initiating all work and shall be organized with the School's Academic and Afterschool Schedule. This work will happen second shift and off hours.

- 4) Work plans detailing the dates, durations, and procedures for setting the Chiller and Sound barrier on the roof should also be coordinated around the Schools Academic and After School Calendar.
- 17. 00 43 83A Schedule Attachment
- 18. 00 43 93 Bid Submittal Checklist
- 19. 00 45 13 Statement of Bidder Qualifications
- 20. 00 52 12 Form of Contract
- 21. 00 61 13 Bonds and Certificates
- 22. 00 62 11 Submittal Cover Sheet
- 23. 00 62 11A Submittal Cover Attachment
- 24. 00 63 19 Request for Equivalent Review Form
- 25. 00 72 16 Index to General Conditions
- 26. 00 73 16 Insurance Requirements
- 27. 00 73 20 Health and Safety Requirements
- 28. 00 73 46 Prevailing Wage Rates
- 29. 00 95 00 Tax Exempt Letter from New York State Coversheet
- 30. 00 95 00A Tax Exempt Letter from New York State Attachment
- 31. DIVISION 01 GENERAL REQUIREMENTS

Each Contractor shall include all Work and comply with all provisions of each of the following Specification Sections, complete:

- 32. 01 00 20 Abbreviations and Acronyms
- 33. 01 00 30 Definitions
- 34. 01 10 00 Summary of Work
- 35. 01 14 19 Use of Site
- 36. 01 25 00 Substitution Procedures
- 37. 01 25 10 RFI Form
- 38. 01 26 39 Field Orders
- 39. 01 26 43 Change Order Requests
 - a. Each Prime Contractor and their Sub-contractors are required to submit labor rate breakdown sheets for each trade within 10 days of contract award. Labor rates are to be broken out as outlined in specification section 01 26 53A. Refer to specification section 01 26 43A for cost proposal breakdown sheets to be used as backup breakdown on all cost proposals for this project. No cost proposals will be reviewed unless submitted on these forms.
- 40. 01 26 43A Change Order Form with formulas
- 41. 01 26 53 Labor Rate Worksheet Coversheet
- 42. 01 26 53A Labor Rate Worksheet

- 43. 01 29 75 Revolving Loan Program and Procedures
- 44. 01 29 75A Application for RSMP Revolving Loan Fund
- 45. 01 29 75B Revolving Loan Program Procedure
- 46. 01 29 76 Progress Payment Procedures
- 47. 01 29 76B Payment Application Checklist
- 48. 01 29 76C Interim Waiver of Lien and Claim
- 49. 01 29 76D Final Waiver of Lien and Claim
- 50. 01 30 00 Construction Procedures and Controls and as further clarified:
 - a. Owner will retain the services of an independent testing laboratory for asbestos, concrete testing, compaction and gradation for the use of backfill/site fill, asphalt, fireproofing, steel and masonry testing. All other required testing associated with their scope of Work shall be the responsibility of each Prime Contractor.
 - b. The Construction Manager will receive copies of all Prime Contractors daily reports no later than noon the following Workday, listing daily activities and listing daily manpower by trade, failure to do so will result in payment applications being withheld until compliance is fulfilled.
 - c. **Each Prime Contractor** shall provide full time, non-Working, on-site supervision from commencement of their Work and their Subcontractors Work activities until such time all Work activities have been completed or as determined by the Construction Manager. Furnishing items for job site does not constitute the commencement of Work activities. If supervision is reduced or terminated without consent of the Construction Manager, the Construction Manager will appoint an individual to manage Work under this a Prime Contract with all associated cost borne by the Prime Contractor. The Prime Contractor shall assume all responsibilities for the individuals and Work of this Contract.
- 51. 01 31 13 Contract Coordination
- 52. 01 32 16 Contractor's Construction Schedule and as further clarified:
 - a. All Contractors shall have a project manager and foreman participate in weekly work planning sessions starting the week before their Work commences and continuing through to substantial completion of their Contract. These meetings are intended to give each participating Contractor a voice in the project sequencing. Following these weekly sessions, the Construction Manager will issue a Weekly Work Plan (WWP) that documents the meeting.
 - b. All Contractors shall submit a constraint identification sheet prior to or during the Pull Planning session. The constraint identification sheet shall list any item that will prevent work from advancing as originally planned, who is responsible for resolving these items, and when the responsible party has committed to resolution of each item. Contractors shall come prepared to all planning meetings with a full understanding of their work plan and details of their manpower, equipment and material requirements.
 - c. All Contractors shall have a foreman participate in "daily huddles", which will be held from 7:00 am 7:30 am each work day (or another time as agreed). These

meetings are intended to quickly recap the Weekly Work Plan (WWP) schedules, adjust to circumstances, review the day ahead, and discuss opportunities to help each other as needed.

- 53. 01 32 19 Submittal Procedures and as further clarified:
 - a. A submittal schedule will be created by the Construction Manager. The required submittal dates established by the Construction Manager shall be reviewed by the Contractor and confirmed within 1 week after award of bid. It will be required by each Prime Contractor to incorporate the submittal dates into the project schedule relating to delivery of materials in relationship to the scheduling of Work. All submittals shall be provided for review based on the approved submittal schedule. All submittals will be uploaded to Newforma Website by the Prime Contractor to the Construction Manager, and returned through Newforma. Refer to specification section 00 43 83, for critical submittals schedule.
- 54. 01 32 26 Construction Progress Reports
- 55. 01 35 00 Electronic Document Transfer
- 56. 01 35 00A Electronic File Transfer Agreement
- 57. 01 35 23 Project Safety Standards, and as further clarified:
 - a. Each contractor should note that it is a requirement that <u>ALL employees of a contractor who are Working on a public project MUST have taken at least the OSHA ten (10) hour course</u>, prior to being accepted onto the Work site. A copy of each contractor's employee's OSHA ten (10) hour course card will be requested and will be kept on file with the construction manager.
 - b. Proof of OSHA 10/30-hour training within five (5) years of signing Contract. Ensure employees have completed OSHA required training, including but not limited to OSHA 10/30 Construction Industry Training. Proof of additional training may be required by OSHA relative to the Contractors scope of Work.
 - c. Contractor/Subcontractor tools, PPE, etc. involved in an accident/incident / near miss shall become the property of BCC. Written notice of replacement is required from the respective Contractor/Subcontractor. Heavy equipment, motor vehicles, ATV's etc. involved in an accident /incident /near miss may be required, at the sole discretion of BCC, to be inspected by a qualified 3rd party provided by the affected Contractor/Subcontractor. 3rd party inspector must be approved by BCC and the Contractor/Subcontractor shall bear all costs associated with any/all third-party inspections and repairs.
 - d. One hundred (100) percent Ground Fault Circuit Interrupter (GFCI) use is mandatory throughout the Project. Assured grounding program cannot be used in the lieu of GFCI protection. Contractors/Subcontractors are to provide portable GFCI "pigtails" for use with extension cords plugged into permanent/existing outlets.
 - e. Contractors/Subcontractors that are working off a ladder at a height of ten feet or greater shall be required to utilize a self-retracting lanyard.
 - f. No wooden, metal or "job built" ladders are permitted on this project. Fiberglass ladders will be the only type of ladder allowed to be used on site. Fiberglass ladders will be inspected daily and discarded immediately if deemed unsafe.

- g. A 3rd party (non-hydraulic crane) inspection is required to be performed by the Contractors/Subcontractors and/or Owner/Operator after crane assembly at the cost of the Contractors/Subcontractors and/or Owner/Operator. 3rd party inspectors are required on any/all cranes involved in an accident, incident or near miss caused by human error or mechanical failure at the cost of the Contractor/Subcontractor owning, operating, renting or leasing the crane at the time of the aforementioned incident.
- h. All contractors must obey by NYSED Uniform Safety Standards.
- 58. 01 35 23A Project Safety Forms
- 59. 01 35 46 Indoor Air Quality Requirements
- 60. 01 43 39 Mock-Up Requirements
- 61. 01 45 00 Quality Control
- 62. 01 50 00 Temporary Facilities & Controls, and as further clarified:
 - a. Temporary Utilities:
 - Electrical Work Contract #9 shall provide all work in section 3.2 B. Temporary Electrical Service.
 - Electrical Work Contract #9 shall provide, maintain and remove the temporary power system and construction lighting per NEC and OSHA regulations in all construction areas.
 - 3) Electrical Work Contract #9 shall provide all permits and inspections as required by the local authority having jurisdiction prior to energizing the systems. Submit a copy of the inspection certificate to the Construction Manager.
 - 4) Electrical Work Contract #9 shall provide all earthwork as required for the installation of the temporary power systems. No Work shall be performed without direction / approval of the Construction Manager. Depth of trenches shall be as required by the NEC and as further described by these specifications.
 - 5) Temporary underground feeders shall be installed direct buried in schedule 80 PVC conduits with detection tape. Conductors can be aluminum with sizes adjusted for the required ampacities.
 - 6) **Electrical Work Contract #9** shall provide all grounding as required.
 - 7) **Electrical Work Contract #9** shall provide, maintain and remove the temporary power and lighting as required for the duration of the project.
 - 8) **Electrical Work Contract #9** shall rework and/or relocate temporary lighting and power system as required for the progress of the Work.
 - 9) **Electrical Work Contract #9** shall maintain temporary fire alarm system as required for the duration of the project. This may require notifying fire department at beginning and end of workday, putting system in bypass, temporarily covering or disconnecting and reconnecting devices as necessary to perform their scope of Work.

- 10) **Electrical Work Contract #9 9** shall rework and/or relocate temporary fire alarm system as required for the progress of the Work.
- 11) Electrical Work Contract #9 shall remove all temporary power, lighting, fire alarm and security system in their entirety only after the building wiring system has been tested and energized. Repair damage caused by the installation or from the removal of the temporary systems, and restore to specified or original condition, including but not limited to the patching of all walls and ceilings to match adjacent surface/finish.
- 12) All Contractors will not be permitted to use the phone, fax and data lines of the Owner, or Construction Manager. Each Contractor shall be responsible for providing and maintaining their own phone and data services.
- b. All Contractors shall include provisions in their bids for temporary electric power system as follows:
 - Contractors requiring power for their office trailers shall arrange for a separate electrical service. All costs associated with their temporary electric connection shall be included in their bid.
 - 2) Each Contractor shall provide their own extension cords required for the performance of their Work. Extension cords shall be OSHA compliant.
 - 3) Connection of electric resistive heating to the temporary electrical system will not be permitted.
 - 4) Any Contractor, who requires power or lighting more than what is specified under Section "a" above, shall bear all costs associated with same.
 - 5) Any Contractor requiring temporary power and lights to be energized outside of the normal Work hours shall bear all costs associated with same.
 - 6) Each Contractor shall provide the necessary generators to complete their Work prior to completion of temporary power.
 - 7) Temporary power and light standby requirements, before and after hours described above will be at expense of the respective Contractor who requires same.
- c. Temporary Water and as further clarified:
 - 1) Each Contractor that requires water for the Work of their Contract shall provide and maintain sufficient back flow devices, hoses, with shut-off nozzles as required by local code and as required for conveying water to the Work sites. All hoses shall be maintained daily to prevent leakage and wasteful usage. Each Contractor shall be responsible to ensure that the water service to their hoses is turned off at the end of each Workday. Contractors shall be responsible for all damage and/or additional water usage costs resulting from not maintaining hoses and/or leaving the water service on after hours. Each Contractor shall provide drinking water for their Workforce.

- 2) **Plumbing Work Contract #10** shall install, maintain and remove temporary water lines and hose bibs as needed.
- 3) **Plumbing Work Contract #10** shall rework and/or relocate temporary water system as required for the progress of the Work.
- 4) Plumbing Work Contract #10 shall provide all required back flow prevention devices on the temporary water piping to protect the public water supply.
- 5) Plumbing Work Contract #10 shall provide the temporary water service, all required water meters and all measures required to prevent freezing of the temporary water service including by not limited to a hot box, heat tracing ect.
- d. Temporary Sanitary Facilities and as further clarified:
 - General Trades Work Contract #7 shall provide portable chemical toilets for the duration of all Work of their Contract. Contractors shall not use toilet rooms in the existing School facilities at any time.
 - 2) General Trades Work Contract #7 shall provide a minimum of one (1) portable chemical toilet for every ten (10) Workers or more as directed by the Construction Manager or as required for women Workers. The portable toilets shall be cleaned a minimum of three (3) times a week.
- e. Temporary Heating/Ventilation/Cooling and as further clarified:
 - 1) **General Trades Work Contract #7** shall provide, maintain, and remove temporary heat and climate control to all work areas.
 - 2) General Trades Work Contract #7 shall provide, maintain, and remove a complete temporary heating system including but not limited to all required temporary power and natural gas piping or terminations. When directed by the Construction Manager General Trades Work Contract #7 shall remove the temporary heat systems complete.
 - General Trades Work Contract #7 shall maintain temperatures of no less than 60 degrees Fahrenheit and a constant humidity of no more than 60%.
 - 4) General Trades Work Contract #7 shall provide daily written reports with the temperature and humidity levels to the Construction Manager. Locations that will require recording of temperature will be identified by the Construction Manager. The system shall include proper air circulation to ensure that the required temperatures are maintained throughout all areas of the building.
 - 5) General Trades Work Contract #7 shall submit their temporary heating and ventilation plan for review by the Construction Manager prior to the start of Work. The plan shall include the following information: temporary equipment and systems will be utilized for the temporary heating; how the systems will be maintained and how the systems will be controlled. Use of the new systems and/or equipment for the temporary heat will not be allowed.

- 6) **General Trades Work Contract #7** shall provide supplemental heating measures to facilitate their Work according to the project schedule, including the thawing of subgrades, the heating of isolated pour areas, the protection of cast-in-place concrete, etc.
- 7) Any Subcontractor, who requires temporary heat in excess of what is specified above, shall bear all costs associated with same.
- f. Temporary Fire Protection and as further clarified:
 - Each Contractor shall provide and maintain fire extinguishers as required by OSHA for the Work of their Contract. Contractors shall be aware that all "spark-producing" activities require a Hot Work permit (reference Project Safety Plan for permit requirements) as well as fully charged fire extinguishers within ten (10) feet of the "spark-producing" activity. A fire watch must continue for a minimum of thirty (30) minutes after the Hot Work operation is complete.
 - 2) All Contractors shall maintain and provide clear unobstructed access routes for emergency vehicles to access the site and Work areas.
- g. Temporary Construction:

Each Contractor shall provide, maintain and remove barricades and excavation protection, including OSHA compliant access and egress, warning signs and lights, etc. as required for the Work of their Contract and as directed by the Construction Manager.

Each Contractor who creates a fall hazard by the installation of the Work of their Contract shall install OSHA-compliant fall protection for the safety of all construction employees. Each Contractor who removes fall protection for the installation of Work of their Contract shall immediately re-install OSHA-compliant fall protection for the safety of all construction employees. Note: Prior to removing fall protection each Contractor shall ensure alternate fall measures are available and used by their employees.

- General Trades Work Contract #7 shall provide all temporary floor protection at all new and existing floor openings. The temporary floor protection shall be secured to both sides of the opening and painted orange.
- General Trades Work Contract #7 shall provide, maintain and remove all temporary enclosures necessary to close in sections of the buildings.
- 3) Any Prime Contractor who requires removal of the temporary enclosure for access to their work shall be responsible to remove and reinstall the enclosure at their own expense.
- 4) General Trades Work Contract #7 shall provide, maintain and remove temporary watertight roof enclosures where new roof openings have been established and the equipment has not yet been installed. New roof openings by all all contractors shall be coordinated with the Contract #7 prior to making openings.

- 5) **General Trades Work Contract #7** shall provide, maintain and remove temporary weather tight, secure construction entrances/doors, locations as directed by construction manager.
- 6) In addition to the temporary perimeter protection and / or barricades indicated to be provided above, each Contractor shall provide additional temporary perimeter protection, tie off points, rails, toe boards etc., as required for the Work of their Contract.
- 7) If the Work of a Contractor requires the removal of temporary barricades as defined above the Contractor shall provide all Work as required to maintain an OSHA compliant Work area and provide all Work as required to restore the temporary barricades to its original condition.
- 8) Contractors shall reference Section 01 35 23 Project Safety Standards for additional project safety guidelines.
- 9) General Trades Work Contract #7 shall be responsible throughout the duration of the project to insure at the end of each work shift that all exterior windows and door permanent and/or temporary are closed, locked, secured and weathertight. General Trades Work Contract #7 shall designate an individual responsible for this for each work shift.
- 10) General Trades Work Contract #7 shall be responsible throughout the duration of the project to insure at the end of each work shift that all temporary and/or permanent fence gate is closed at locked. General Trades Work Contract #7 shall designate an individual responsible for this for each work shift.
- h. Temporary Support Facilities:
 - Each Prime Contractor shall provide his or her own temporary offices and storage sheds, as approved by CM. Each trailer must be properly secured to the ground. Quantity and location of the Contractors' field offices shall be subject to approval of the Construction Manager. Each Contractor who requires power, water, sanitary, gas, phone, data etc., shall provide and remove at their own for their temporary offices at their sole expense.
 - Each Contractor shall be responsible for providing adequate protection of 2) their material and/or equipment furnished for this project. All deliveries of material and/or equipment will be scheduled with the Construction Manager, and specific locations with time restrictions are allocated for staging, storage trailers, materials, equipment, etc. Each Contractor shall obtain the necessary approval, permits and fees for temporary offices, if required by the authority having jurisdiction. Contractors are advised that there is minimum on-site storage space and all cost of off-site material storage, if required, shall be included in the Contractor's price. Contractors are advised that at various times during the project, storage trailers or stored materials within the building or on site may require relocation or removal as directed by the Construction Manager. If any material and/or equipment stored at the project, with or without consent of the Construction Manager at any time obstruct the performance of any portion of this project, these materials shall be removed and relocated by the Contractor at no additional cost. In the event a Contractor fails or

refuses to comply with this Article within a reasonable time, but not more than twenty-four (24) hours, the Construction Manager will reserve the right to have those materials and/or equipment removed, and all costs will be charged against the Contractor involved. **Trailers and storage containers are to be removed from the Contractors Storage area prior to Non-Chiller AC Milestone of August 14th, 2020.**

- 3) General Trades Work Contract #7 shall include relocating Construction Manager Office furniture, Xerox WorkCenter WC 7835 copier, all furnishing and supplies for turn over to district. This shall include loading, delivery and unloading to another Rochester City School property; location will be within the City of Rochester.
- 4) **Electrical Work Contract #9** shall include internet and phone services from NTP to November 30st, 2020 unless directed by Construction Manager to remove prior to this date.
- 5) **Electrical Work Contract #9** shall include the monthly charges for these services in their base bid.
- 6) **Electrical Work Contract #9** shall include removal of internet and phone service
- 7) **General Trades Work Contract #7** shall include cleaning of Construction Manager Office on a weekly basis from Notice to Proceed through August 14st, 2020. Cleaning shall include but not limited to general broom, clean prior to washing of floors; wet mopping of all floors; cleaning and vacuuming of all walk-off mats; comprehensive cleaning of toilet facilities; emptying of trash cans and removal of same to dumpster, and replacing trash can bags.
- 8) **General Trades Work Contract #7** shall provide all necessary supplies required for cleaning the office and to keep paper towels, liquid soap, and hand sanitizer and toilet paper stocked.
- 9) General Trades Work Contract #7 shall provide bottled water for water cooler and monthly coffee on a weekly basis from Notice to Proceed to November 30st, 2020. Two reserve bottles shall be on hand at all times. Disposable cups and a sanitary dispenser shall be provided and maintained.
- 10) **General Trades Work Contract #7** shall supply all washroom disposables for the duration of the project.
- 63. 01 55 00 Access Roads, Parking, and Staging
 - a. Refer to Section 01 50 00A, Site Logistics Plan for site logistics plan.
 - General Trades Work Contract #7 shall provide all Work to install and remove temporary construction entrance and staging areas as detailed by project documents.
 - 2) General Trades Work Contract #7 shall provide all site restoration in accordance to new site drawings, including providing 18" minimum of new topsoil, hydroseeding or sod as necessary to meet landscape specifications and new grades on civil drawings. Topsoil to be per specifications.

- 3) Where work occurs along or within the public roads or sidewalks, responsible Contractor shall provide a NYSDOT Maintenance and Protection Plan indicating temporary fencing, barricades, lighting, signage, shoring, road plates, flagmen, and related protection in accordance with local, state and federal regulations.
- 4) General Trades Work Contract #7 shall install, maintain, relocate and remove all temporary chain link fence, gates and driven posts to complete work. Installation shall follow specifications and drawings on project documents.
- 5) **General Trades Work Contract #7** shall maintain a secured site at all times.
- 6) **General Trades Work Contract #7** shall provide ten (5) locks, (5) 2' steel chains and 5 keys for temporary locks to construction manager. All locks to be keyed alike.
- b. First-Aid Equipment:
 - 1) Each Contractor shall provide OSHA-compliant first-aid kits for use by their employees and their lower tier Contractor's employees.
- c. Protection of Adjacent Property:
 - Each Contractor shall prevent any damage to surrounding property and if any damage occurs the Contractor that caused the damage shall provide all necessary repairs immediately upon notification by the Construction Manager.
- d. Temporary Material and Hoisting and as further clarified:
 - Ladders: Each Contractor shall provide adequate ladders as required to allow their employees to access the Work. The Contractor providing the ladders shall be fully responsible for OSHA compliance of the ladders.
 - 2) Hoisting Contractors shall be responsible for all hoisting as required for the Work of their Contract.
- e. Project Identification and Temporary Sign and as further clarified:
 - General Trades Work Contract #7 shall provide (8) and remove eight temporary signs as per 01 50 00 requirements, locations as directed by CM.
- f. Collection of Disposal of Waste and as further clarified:
 - Dumpsters shall be provided by the General Trades Work Contract #7 for use by all contractors.
 - Each Prime Contractor is responsible for the removal and disposal of any hazardous or toxic wastes, removal must comply with any regulation governing the disposal of that waste.
 - 3) Each Prime Contractor shall be responsible for the proper disposal of their excavation spoils and excess concrete and mortar resulting from the Work of their Subcontract. No excavation spoils, excess mortar or concrete shall be placed in the dumpsters provided **General Trades Work Contract #7.**

- 4) Each Prime Contractor is responsible for the removal of any item of debris exceeding one cubic yard in overall dimensions. Such large pieces of waste products are not to be placed in the dumpster but must be removed from the site by the Prime Contractor responsible for the debris.
- g. Rodents and Pest Control and as further clarified:
 - General Trades Work Contract #7 shall provide rodent and pest control for the duration of the project.

- h. Access Roads, Parking, and Staging Areas and as further clarified:
 - 1) General Trades Work Contract #7 shall provide and maintain ramps, curb cuts and temporary site-work at all site entrances to allow access from the street. If a public sidewalk crosses the temporary entrance General Trades Work Contract #7 shall provide all Work as required to maintain the walk in a level and safe condition.
 - 2) General Trades Work Contract #7 shall provide snow and ice removal seven (7) days a week, Monday through Sunday, as required (after a fresh snowfall that exceed 3" or as directed by the Construction Manager) and shall be completed no later than 6:30 am and maintained through the working day and through 2nd shift work for the following areas: staging areas, all paved areas including temporary parking lot and service entrance from Post Ave, all gated entrances to site, all sidewalks (including sidewalk outside the temporary fence at Post Ave),and pathways to all exterior doors.
 - 3) Snow and ice removal is defined by removal through chemical and physical means including appropriate application of Magnesium Chloride Hexahydate to provide safe and secure passage for all employees and equipment. General Trades Work Contract #7 shall provide an owner approved ice melt product at staging areas, entrances and pathways as required to maintain safe roads and walkways for construction workers and visitors access to and from the project site. General Trades Work Contract #7 shall use Magnesium Chloride or equal as approved by the Owner representative for removal of ice.
- i. Cleaning of Trucks and as further clarified:
 - 1) Each Contractor shall provide all Work as required to clean all trucks related to the work of their contract prior to them leaving the site to prevent the tracking of mud, stones etc. on to the public roads and sidewalks. Contractors who fail to clean their trucks shall be responsible for all costs associated with, but not limited to, cleaning the public roads, DEC fines, etc.
- j. Protection of Installed Construction and as further clarified:
 - 1) Each Contractor shall be responsible to protect the work of their contract through substantial completion/turnover to the Owner.
- k. Erosion and Sediment Control and as further clarified:
 - General Trades Work Contract #7 shall provide, maintain and remove erosion control measure as identified in the contract documents and as required for the Scope of their Work.

64. 01 55 00A Site Logistics Plan and as further clarified:

- Reference Site Logistic Plan, General Trades Work Contract #7 shall install, maintain and remove all required material for contractor staging area as indicated in project documents. General Trades Work Contract #7 shall restore site with approved materials to final grade as detailed by project documents.
- 2) All Prime Contractors to reference for staging area. Parking is limited to Prime Contractor foremen on site and all other workers and visitors will need to utilize off street parking.
- 3) All contractors shall maintain site contractors staging yard and shall return the area to owner as existing conditions prior to start of contract. Pre-construction photos by **General Trades Work Contract #7** and approved by the CM will document the staging area prior to contractors mobilizing. Any and all repairs will be covered by responsible contractors with no cost to the owner.

65. 01 56 10 Noise Control

- 1) All contractors are responsible to maintain a safe work environment as required by all applicable local, state and federal regulations.
- 2) Noise shall always be mitigated to limit disturbance to surrounding community and public, all required methods to mitigate noise to acceptable levels, deemed by the CM, shall be included in each primes cost. No additional changes will be awarded to implement mitigation.

66. 01 56 90 Construction Cleaning and as further clarified:

- Each day, each Contractor shall remove associated debris resulting from the work of their Contract from the work area and deposit it in the dumpster provided by General Trades Work Contract #7.
- 2) General Trades Work Contract #7 SHALL MAINTAIN <u>ALL</u> WORK AREAS IN A BROOM-CLEAN CONDITION ON A DAILY BASIS FOR THE DURATION OF THE PROJECT. In the event that a Contractor fails to remove debris on a daily basis or upon direction of the Construction Manager, the Construction Manager shall designate another Contractor who shall remove the debris and the cost thereof shall be deducted from any amounts payable to the offending Contractor. Such determination of responsibility shall be at the sole discretion of the Construction Manager.
- End of the project, General Trades Work Contract #7 will provide a broom and mop final clean of interior spaces associated with the scope of work as directed and reviewed by the CM.
- 4) Every Friday for the duration of the project, All Prime Contractors shall provide one worker from 2 pm to 3 pm to clean the project site this includes removal of debris and/or cleaning as directed by Construction Manager.
- 5) All Contractors shall utilize sweeping compound when sweeping indoors.

- 6) **General Trades Work Contract #7** shall maintain the dumpster area in a clean and orderly fashion on a daily basis and shall provide dust control as directed by the Construction Manager.
- 7) **General Trades Work Contract #7** shall consolidate all masonry debris on a daily basis and remove same from the project site on a weekly basis. <u>All</u> masonry debris shall be removed from the project site.
- 8) **Concealed** Spaces: **General Trades Work Contract #7** shall remove and dispose of <u>all</u> debris from concealed spaces before spaces are enclosed. This includes the crawl space.
- 9) Waste Disposal: Burying or burning of waste materials on site is prohibited. Washing waste materials into sewers or into waterways is prohibited.
- 10) Any Contractor performing work in an occupied section of a facility during the unoccupied hours shall provide all clean up as necessary to leave the work areas as clean as it was before work started. This clean up shall include vacuuming, dusting, sweeping, mopping and any other clean-up procedures as required.
- 11) **General Trades Work Contract #7** shall provide cleaning of fenced area, streets, sidewalks, school roads, parking areas, etc. of all mud, dust, stone, debris, etc. resulting from the work of this project on a daily basis or as directed by the Construction Manager..
- 12) **General Trades Work Contract #7** shall provide a final site cleaning prior to Substantial Completion and/or as directed by the Program Provider. All trash and debris shall be deposited in project dumpster.
- 13) General Trades Work Contract #7 shall sweep and power wash all sidewalks, curbs and paved areas as directed by the Construction Manager
- 14) **General Trades Work Contract #7** shall from the Notice to Proceed to substantial completion provide a general cleanup, every friday or as directed by the Construction Manager, of the site located within the project limit lines and along the outside of the temporary construction fence. Cleanup shall include the removal of all trash and debris.
- 15) General Trades Work Contract #7 shall provide 30-40 gallon trash receptacles with wheels, within the work areas and shall empty same into dumpster on a weekly basis or more often as required. Each Contractor shall deposit minor trash items into trash receptacles (no material scrap or demo debris).
- 16) Each Contractor is responsible for removing their own material scraps, debris, packaging materials, trash, etc., from the building and placing them in the proper dumpsters.
- 17) Each Contractor shall crush all boxes and consolidate all trash prior to placing it in the dumpster.
- 67. 01 60 00 Product Requirements
 - 1) Not required on this contract.

- 68. 01 71 16 Acceptance of Existing Conditions
 - 1) As documented in photographs and video provide to CM prior to mobilization. Documents to be timed stamped and approved by CM.
- 69. 01 72 00 Execution and as further clarified:
 - 1) All Prime Contractors performing sub grade Work shall request public utility underground location stakeout immediately upon award of Contract. A private Underground Utility Locating Contractor shall be hired by the Prime Contractor performing sub grade Work to locate private underground utilities within the Work area. Contractors shall be responsible for maintaining these stakeout location marks throughout construction and submitting as-built drawings locating all underground utilities, whether public or private, at the end of construction.
 - 2) Backfilling and compaction of excavations required to perform subgrade work shall be the responsibility of the Contractor requiring the excavation. Coordinate backfilling and compaction with testing agent to assure proper scheduling of required testing.
 - 3) Construction Layout and as further clarified:
 - Each Contractor, working from the established control points, shall provide all survey and layout required for the Work of their Contract.
- 70. 01 73 29 Cutting and Patching and as further clarified:
 - Each Contractor shall include all Work complete, and comply with all provisions specified in this Specification Section, as further clarified and assigned below:
 - Each Contractor shall provide cutting, repair and patching of existing materials and finishes as required by the work of their Contracts unless otherwise indicated in the Scope of Work.
- 71. 01 74 19 Construction Waste Manager and Disposal
 - 1) Not applicable; refer to previous sections.
- 72. 01 74 23 Final Cleaning and as further clarified:
 - 1) Each Contract shall be responsible for final cleaning specified in the respective Specification Sections assigned to each Contractor.
 - 2) General Trades Work Contract #7 shall provide "punchlist cleaning" at the completion of work and prior to punchlist. Punchlist cleaning shall include removal of dust and debris from hard surfaces. VCT and hard surface floors are to be brush swept, carpet and similar soft surfaces are to be vacuumed to remove dust and debris. Punchlist cleaning shall be assumed to be in multiple phases as areas are completed.

- General Trades Work Contract #7 will provide (1) final cleaning of the interior of the Building after punchlist work is complete and the building is ready for occupancy.
- 4) **General Trades Work Contract #7** shall provide all final cleaning as indicated in Specification Section 01 74 23, and as further clarified:
 - 1) All contractors shall remove labels that are not permanent, touch up and otherwise repair marred exposed finishes and replace parts subject to unusual operating conditions.
 - 2) General Trades Work Contract #7 shall clean all new and existing transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable vision obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch.
 - 3) Mechanical Work Contract #8 shall replace disposable air filters, clean permanent air filters, exposed surfaces of diffusers, registers and grilles. Mechanical Work Contract #8 shall clean ducts, blowers and coils if units were operated without filters during construction.
 - 4) **Electrical Work Contract #9** shall clean light fixtures, lamps, globes and reflectors. Replace burned out bulbs and those noticeable dimmed by hours of use and defective noisy starters.
 - 5) At the time of substantial completion or when directed by the Program Provider, **General Trades Work Contract #7** shall provide all work required to clean the glass, both inside and out, at all new and existing exterior windows; including all storm windows, aluminum entrances, storefronts, curtain walls, skylights, etc.
 - 6) **General Trades Work Contract #7** shall provide one (1) final cleaning and power washing of all site roads, sidewalks, and site improvements at Substantial Completion of their contract or as directed by the Construction Manager.
- 73. 01 77 00 Closeout Procedures and as further clarified:
 - 1) Contractors are required to turn in O&M, warranties, guarantees, as built drawings, training sign-in sheets and test reports (as per Contract) within fifteen (15) Working days of substantial completion or the Construction Manager reserves the right to refuse to review pencil copies and withhold payment. In addition to the 3 Ring Binders, these closeout documents are to be submitted electronically as required by Owner/CM.
 - 2) Any original deficiency list or punch list distributed by the Construction Manager or the Architect must be returned showing completion of each item within 15 Working days of receipt of such list. Any deficiency or punch list re-distributed due to incompletion or not done to owner's

satisfaction must be corrected and returned with 10 Working days or the Construction Manager reserves the right to refuse to review pencil copies and withhold payment.

74. 01 78 39 Project Record Documentation

- 1) Record Drawings
 - Each Contractor shall submit Project Record Documents to the Construction Manager for review at 75% and 90% completion for interim approval. Contractors who's Project Record Documents are not maintained in accordance with Specification Section 01 78 39 may have their monthly progress payments withheld until such time as the record documents are brought into conformance.
- 75. 01 79 00 Demonstration and Training
- 76. 01 83 16 Air Barrier System
- 77. 01 84 00 Maintenance Products
- 78. 01 91 13 General Commissioning Requirements

END OF SCOPE OF WORK – ALL CONTRACTS

B. Scope of Work – General Trades Work Contract #7

General Trades Work Contract #7 shall provide labor, material, plant, tools, equipment and supervision related to and/or necessarily involved with the performance of the Work, as indicated on all the Drawings, Specifications and/or Project Manual, and as set forth below. Work for **Contract #7** is generally described as **General Trades** and more specifically described in this Scope of Work.

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

This Contractor shall include all Work in Division 00 as assigned in the SCOPE OF WORK – ALL CONTRACTS in this Summary of Work.

2. DIVISION 01 – GENERAL REQUIREMENTS

This Contractor shall include all Work in Division 01 as assigned in the SCOPE OF WORK – ALL CONTRACTS in this Summary of Work.

- 3. 02 41 19 Selective Demolition
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section, as required for the Work of this Contract.
- 4. 04 20 00 Unit Masonry
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section
- 5. 05 12 00.03 Structural Steel Framing
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section
- 6. 05 50 00 Metal Fabrications
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section
- 7. 07 13 26 Self-Adhering Sheet Waterproofing
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section
- 8. 09 91 23 Interior Painting
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section.
- 9. 09 96 00 High Performance Coatings
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section.
- 10. 13 34 10 Acoustic Barrier Panel System
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section.

- 11. 31 10 00 Site Clearing
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section.
- 12. 31 20 00 Earth Moving
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section
- 13. 32 12 16 Asphalt Paving
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section.
- 14. 32 13 13 Concrete Paving
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section.
- 15. 32 13 14 Granite Curbs

General Trades Work Contract #7 shall provide all Work, complete, as specified in this Specification Section.

- 16. 32 91 13 Soil Preparation
 - a. **General Trades Work Contract #7** shall provide all Work, complete, as specified in this Specification Section.
- 17. 33 41 00 Storm Utility Drainage Piping
 - a. **General Trades Work Contract #7** shall provide all Work as specified in this Specification Section.
- 18. 33 46 00 Subdrainage
 - a. **General Trades Work Contract #7** shall provide all Work as specified in this Specification Section.

19. OTHER WORK OF GENERAL TRADES WORK CONTRACT #7

- Reference all Contract Drawings:
 - General Trades Work Contract #7 shall provide all Work complete as indicated and as further clarified:
 - General Trades Work Contract #7 shall provide all Work required to re-support any temporary lighting, fire alarm or power that is left unsupported as a result of the removals provided by this Contract.
 - 2) **General Trades Work Contract #7** is to provide all supplementary lighting required to perform the required finish Work under this section.
 - 3) **General Trades Work Contract #7** shall visit the site to verify and review existing conditions before estimating the cost of the project.
- b. **General Trades Work Contract #7** shall provide dewatering and erosion control as required for the Work of this Contract.

- c. General Trades Work Contract #7 shall commit to providing sequenced submittals and shop drawings for critical submittals listed under specification 00 43 83 related to the scope of Work within ten (10) days of Notice to Proceed.
- d. **General Trades Work Contract #7** shall commit to providing sequenced submittals and shop drawings for all products and materials related to the scope of Work with **three (3) weeks** from receipt of Notice to Proceed.
- e. General Trades Work Contract #7 shall protect existing gas and electric services throughout the duration of their subcontract. General Trades Work Contract #7 shall locate and protect gas and electric service as required for the Work of this contract. General Trades Work Contract #7 shall assume electric and gas service shall remain for duration of work associated with this contract.
- f. **General Trades Work Contract #7** shall provide clean backfill as required for the Work of this Subcontract. For purposes of this Subcontract "Clean" fill is defined as material that when buried has no adverse effects on human health or the environment health or environment.
- g. **General Trades Work Contract #7** shall provide proof of material source generation and may be required to provide analytical data which documents that proposed material meets criteria set forth in NYSDEC part 375 Residential SCOs.
- h. **General Trades Work Contract #7** shall remove all excess excavated material, spoils, etc. from the site as necessary for the Scope of their Work
- General Trades Work Contract #7 shall provide, maintain and remove all temporary erosion control measures as indicated on contract documents from Notice to Proceed through completion of project.
- 20. Any original Architects/Engineers field reports, deficiency list or punch listed distributed by the Construction Manager or the Architect must be returned showing completions within 15 working days of receipt of such list or Construction Manager reserves the right to refuse review of pencil copies and withhold payment.
- 21. Upon substantial completion of the work, the Construction Manager in conjunction with the Owner and Architect, shall review the areas of Work for excessive damage and/or removals. All other areas where it is determined that excessive damage have occurred and/or removals for new openings are in excess of that required for the new Work, the Construction Manager will have the patching or infill completed by others with all costs back charged against **General Trades Work Contract #7.**
- 22. Associated work required for the installation of roof-top equipment furnished by **Mechanical Work Contract #8** shall be clarified as follows:
 - Mechanical Work Contract #8 shall provide all prefabricated curbs and equipment supports, as required for the work of Mechanical Work Contract #8.
 - 2) **General Trades Work Contract #7** shall provide all support framing as indicated on the Structural and Architectural Drawings;

all other required support framing shall be provided by **Mechanical Work Contract** #8.

- 3) Mechanical Work Contract #8 shall layout the curb and equipment support locations. General Trades Work Contract #7 shall cut and remove the roof deck and provide all required rough carpentry. Prior to making penetrations into roof, all work shall be coordinated with General Trades Work Contract #7 for water tightness.
- 4) General Trades Work Contract #7 shall provide all flashing where units are indicated on the roof plan of the project documents. General Trades Work Contract #7 shall provide and maintain temporary weather tight enclosures at all roof openings either where existing equipment has been removed or where new roof openings have been established and the equipment has not yet been installed. General Trades Work Contract #7 shall provide "pitch pockets" within roof as necessary.
- 5) Refer to Drawings A-101.1, A-120, S-101.1 General Trades Work Contract #7 shall provide All Work, complete for Sound Barrier walls (and framing), and door around roof top located Chiller. General Trades Work Contract #1 shall coordinate with Mechanical Work Contract #8 for dimension and door location.
- b. Penetrations at New and Existing Roof Areas: General Trades Work Contract #7 shall maintain roof warranty at all times during execution of this contract. At the completion of awarded contract, General Trades Work Contract #7 shall present the Owner with a Warranty on the roof. All coordination required to maintain and provide warranty is the responsibility of the General Trades Work Contract #7.
- c. General Trades Work #7 shall provide all cutting, removals, rough carpentry, steel support angles, etc., required for the roof openings that are required for the work of this Contract, not indicated on the structural or architectural drawings. Layout to be completed and coordinated by trade/contract installing unit requiring penetrations.
- d. General Trades Work Contract #7 shall provide flashing work for this Contract as indicated on the roofing plans. Mechanical Work Contract #8 shall review the roofing plans and compensate General Trades Work Contract #7 for roofing work required for the work of this Contract, but not indicated on the roofing plans.
- e. **General Trades Work Contract #7** shall provide and maintain temporary weather tight enclosure at all roof openings either where the existing equipment has been removed or where new roof openings have been established and the equipment has not yet been installed. All temporary weather tightness shall maintain integrity of the roof and associated warranty.
- f. **General Trades Work Contract #7** shall provide painting of all exposed piping and ductwork. Exposed piping and ductwork located in mechanical areas, attic and/or crawl spaces will not be required to be painting unless required per MEP specifications.

- g. **General Trades Work Contract #7** shall provide painting of all exposed electrical equipment and conduit. Exposed electrical equipment and conduit located in mechanical areas, attic and/or crawl spaces will not be required to be painting unless required per MEP specifications.
- h. **General Trades Work Contract #7** shall provide, maintain and remove Masonite board with taped seams (or equal) as flooring protection in all areas including corridors to protect new flooring.
- General Trades Work Contract #7 shall provide replacement of 5% of total installed ceiling tiles due to possible damages prior to final turn over of building to district. This shall include labor and material to replace installed ceiling tiles.
- 23. **General Trades Work Contract #7** shall visit the site to verify and review existing conditions before estimating the cost of the project.
- 24. **General Trades Work Contract #7** shall provide and remove crane pad as required per OSHA regulations and as necessary for Scope of their Work.

END OF SCOPE OF WORK GENERAL TRADES WORK CONTRACT #7

C. Scope of Work – Mechanical Work Contract #8

Mechanical Work Contract #8 shall provide labor, material, plant, tools, equipment and supervision related to and/or necessarily involved with the performance of the Work, as indicated on all the Drawings, Specifications and/or Project Manual, and as set forth below. Work for **Contract #8** is generally described as Mechanical and more specifically described in this Scope of Work.

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

This Contractor shall include all Work in Division 00 as assigned in the SCOPE OF WORK – ALL CONTRACTS in this Summary of Work.

2. DIVISION 01 - GENERAL REQUIREMENTS

This Contractor shall include all Work in Division 01 as assigned in the SCOPE OF WORK – ALL CONTRACTS in this Summary of Work.

- 3. 02 41 19 Selective Demolition
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section, as required for the Work of this Contract
- 4. 21 13 13 Wet-Pipe Sprinkler System
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 5. 23 05 00 Basic Mechanical Requirements
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 6. 23 05 04 Electric Wiring
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 7. 23 05 13 Motors
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 8. 23 05 19 Gauges and Thermometers
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 9. 23 05 23 Valves
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 10. 23 05 30 Roof Curbs
- a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.

- 11. 23 05 50 Wind Restraint for HVAC Systems
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 12. 23 05 53 Mechanical Identification
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 13. 23 05 93 Testing, Adjusting and Balancing
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 14. 23 07 10 Insulation
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 15. 23 09 23 Building Management System Electronic DDC Logic
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 16. 23 20 10 Piping Systems and Accessories
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 17. 23 21 10 Water Systems Specialties
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 18. 23 21 23 Pumps
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 19. 23 64 26.20 Air Cooled Scroll Compressor Packaged Chiller
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 20. 23 81 26.11 Ductless Split System Air Conditioner
 - a. **Mechanical Work Contract #8** shall provide all Work, complete, as specified in this Specification Section.
- 21. OTHER WORK OF Mechanical Work Contract #8:
 - a. Reference all Contract Drawings:
 - Mechanical Work Contract #8 shall provide all Work complete as indicated and as further clarified:
 - 2) **Mechanical Work Contract #8** shall provide all Work required to resupport any temporary lighting, fire alarm or power that is left unsupported as a result of the removals provided by this Contract.
 - 3) **Mechanical Work Contract #8** is to provide all supplementary lighting required to perform the required finish Work under this section.

- 4) **Mechanical Work Contract #8** shall visit the site to verify and review existing conditions before estimating the cost of the project.
- Mechanical Work Contract #8 shall provide all cutting and patching required and/or resulting from the work of this Contract unless otherwise indicated in the Scope of Work. All patching shall be completed prior to final finishes.
- b. The work required for the installation of roof-top equipment furnished by **Mechanical Work Contract #8** shall be clarified as follows:
 - Mechanical Work Contract #8 shall provide all prefabricated curbs and equipment supports, as required for the work of Mechanical Work Contract #8.
 - General Trades Work Contract #7 shall provide all support framing as indicated on the Structural and Architectural Drawings; all other required support framing shall be provided by Mechanical Work Contract #8.
 - 3) **Mechanical Work Contract #8** shall layout the curb and equipment support locations, cut and remove the roof deck and provide all required rough carpentry, curbs and equipment supports.
 - 4) General Trades Work Contract #7 shall provide all flashing where units are indicated on the roof plan of the Architectural Drawings. General Trades Work Contract #7 shall provide and maintain temporary weather tight enclosures at all roof openings either where existing equipment has been removed or where new roof openings have been established and the equipment has not yet been installed. All work shall maintain the warranty of roof.
 - 5) Refer to Drawings A-101.1, A-120, S-101.1, General Trades Work Contract #7 shall provide All Work, complete for Sound Barrier walls (and framing), and door around roof top located Chiller. Mechanical Work Contract #8 shall coordinate with Mechanical Work Contract #8 for dimension and door location.
- c. <u>Penetrations at New and Existing Roof Areas:</u>
 - General Trades Work Contract #7 shall provide all cutting, removals, rough carpentry, steel support angles, etc., required for the roof openings that are required for the work of this Contract, not indicated on the structural or architectural drawings.
 - 2) General Trades Work Contract #7 shall provide all cutting, removals, rough carpentry, steel support angles, etc., required for the roof openings that are required for the work of this Contract, not indicated on the structural or architectural drawings. Layout to be completed and coordinated by trade/contract requiring penetrations.
 - 3) General Trades Work Contract #7 shall provide and maintain temporary weather tight enclosure at all roof openings either where the existing equipment has been removed or where new roof openings have been established and the equipment has not yet been installed.

- 4) **Mechanical Work Contract #8** shall provide all cost and required resources for new mechanical components and equipment
- d. Mechanical Work Contract #8 shall provide, maintain and remove, as required and as directed by the Construction Manager, temporary enclosures at all air inlets and outlets that are located in construction areas. The enclosures shall be constructed so as to prevent the infiltration of dust, dirt, debris, etc., into the new ductwork and shall be installed so as to allow for the completion of the work of other Contracts. Mechanical Work Contract #8 shall provide patching as required of all finishes damaged as a result of the installation and removal of the temporary enclosures.
- e. **Mechanical Work Contract #8** shall commit to providing sequenced submittals and shop drawings for all products and materials related to the scope of Work with **three (3) weeks** from receipt of Notice to Proceed. **This includes but not limited to all long lead mechanical equipment.**
- 22. **Mechanical Work Contract #8** shall visit the site to verify and review existing conditions before estimating the cost of the project
- 23. **Mechanical Work Contract #8** shall provide and remove crane pad as required per OSHA regulations and as necessary for Scope of their Work.

END OF SCOPE OF WORK MECHANICAL WORK CONTRACT #8

D. Scope of Work – Electrical Work Contract #9

Electrical Work Contract #9 shall provide labor, material, plant, tools, equipment and supervision related to and/or necessarily involved with the performance of the Work, as indicated on all the Drawings, Specifications and/or Project Manual, and as set forth below. Work for **Contract #9** is generally described as Electrical and more specifically described in this Scope of Work.

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

This Contractor shall include all Work in Division 00 as assigned in the SCOPE OF WORK – ALL CONTRACTS in this Summary of Work.

2. DIVISION 01 - GENERAL REQUIREMENTS

This Contractor shall include all Work in Division 01 as assigned in the SCOPE OF WORK – ALL CONTRACTS in this Summary of Work.

- 3. 02 41 19 Selective Demolition
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section, as required for the Work of this Contract
- 4. 26 05 00 Basic Electrical Requirements
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 5. 26 05 01 Basic Materials and Methods
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 6. 26 05 26 Grounding
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 7. 26 09 36 Lighting Control
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 8. 26 20 00 Electric Distribution
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 9. 26 50 00 Lighting
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 10. 27 05 10 Communications, General
- a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.

- 11. 27 10 00 Local Area Network Wiring System
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 12. 27 21 00 Local Area Network System
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 13. 27 32 00 Paging and Intercom System
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 14. 28 31 02 Analog Addressable Fire Alarm System
 - a. **Electrical Work Contract #9** shall provide all Work, complete, as specified in this Specification Section.
- 15. OTHER WORK OF ELECTRICAL WORK CONTRACT #9
 - a. Reference all Contract Drawings:
 - Electrical Work Contract #9 shall provide all Work complete as indicated and as further clarified:
 - Electrical Work Contract #9 shall provide all Work required to resupport any temporary lighting, fire alarm or power that is left unsupported as a result of the removals provided by this Contract.
 - 2) **Electrical Work Contract #9** is to provide all supplementary lighting required to perform the required finish Work under this section.
 - 3) **Electrical Work Contract #9** shall visit the site to verify and review existing conditions before estimating the cost of the project.
 - b. **Electrical Work Contract #9** shall provide and remove crane pad as required per OSHA regulations and as necessary for Scope of their Work.
 - c. Electrical Work Contract #9 shall not shut down any existing utilities, services, systems, etc., without the written approval of the Construction Manager. Electrical Work Contract #9 shall provide a minimum of seventy-two (72) hours' notice of any shut down and shall indicate in writing what services is intended to be shut down, the duration of the shut down, and the area of the building that will be affected by the shutdown. All shutdowns shall be continuously manned until such service is fully restored.
- 16. **Electrical Work Contract #9** shall visit the site to verify and review existing conditions before estimating the cost of the project

END OF SCOPE OF WORK ELECTRICAL WORK CONTRACT #9

E. Scope of Work – Plumbing Work Contract #10

Plumbing Work Contract #10 shall provide labor, material, plant, tools, equipment and supervision related to and/or necessarily involved with the performance of the Work, as indicated on all the Drawings, Specifications and/or Project Manual, and as set forth below. Work for **Contract #10** is generally described as Plumbing and Fire Protection and more specifically described in this Scope of Work.

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS
 This Contractor shall include all Work in Division 00 as assigned in the SCOPE OF WORK – ALL CONTRACTS in this Summary of Work.

2. DIVISION 01 – GENERAL REQUIREMENTS

This Contractor shall include all Work in Division 01 as assigned in the SCOPE OF WORK – ALL CONTRACTS in this Summary of Work.

- 3. 02 41 19 Selective Demolition
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section, as required for the Work of this Contract
- 4. 22 05 00 Common Work Results for Plumbing
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section.
- 5. 22 05 13 Common Motor Requirements for Plumbing Equipment
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section.
- 6. 22 05 23 General-Duty Valves for Plumbing Piping
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section.
- 7. 22 05 29 Hangers and Supports for Plumbing Piping and Equipment
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section.
- 8. 22 05 53 Identification for Plumbing Piping and Equipment
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section.
- 9. 22 14 13 Facility Storm Drainage Piping
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section.
- 10. 22 14 23 Storm Drainage Piping Specialties
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section.

- 11. 22 14 29 Sump Pumps
 - a. **Plumbing Work Contract #10** shall provide all Work, complete, as specified in this Specification Section.
- 12. OTHER WORK OF **PLUMBING WORK CONTRACT #10**
 - a. Reference all Contract Drawings:
 - Plumbing Work Contract #10 shall provide all Work complete as indicated and as further clarified:
 - Plumbing Work Contract #10 shall provide all Work required to re-support any temporary lighting, fire alarm or power that is left unsupported as a result of the removals provided by this Contract.
 - 2) **Plumbing Work Contract #10** is to provide all supplementary lighting required to perform the required finish Work under this section.
 - 3) **Plumbing Work Contract #10** shall visit the site to verify and review existing conditions before estimating the cost of the project.
 - b. Plumbing Work Contract #10 shall provide all cutting and patching required and/or resulting from the work of this Contract unless otherwise indicated in the Scope of Work. All patching shall be completed prior to final finishes.
- 13. **Electrical Work Contract #9** shall visit the site to verify and review existing conditions before estimating the cost of the project
- 14. **Plumbing Work Contract #10** shall provide and remove crane pad as required per OSHA regulations and as necessary for Scope of their Work.

END OF SCOPE OF WORK PLUMBING WORK CONTRACT #10

2.5 WORK SEQUENCE

A. The Work will be conducted in accordance with the approved and coordinated project schedule prepared by the Construction Manager from the Schedules submitted to the Construction Manager by each Prime Contractor involved in the process. The initial schedules are required from each 10 Working Days after award of the contract. The following phasing will be considered the milestones for this project and must be maintained. Any additional costs for overtime, shift Work and/or additional manpower, required to maintain these milestones, will be at each Contractor's expense.

Refer to the construction schedule specifically outlining second shift and required Saturday work. Each Prime Contractor is required to work second shift and Saturdays must have at a minimum of half the size crew of the 1st shift or more as directed by the CM. Any variations must be directed by the Construction Manager. Proper allocation of manpower will be a prerequisite to proper payment. Productivity loss, extra cost associated with having a General Foreman, Foreman, etc. on site for the 2nd shift must be incorporated within bid price. Each subcontractor is responsible for providing all shift work as required at no additional cost to Owner / CM. Below are specific milestone dates that must be met:

Construct Work in strict accordance with the project schedule as indicated in specification section 00 43 83 and the coordinated overall project schedule.

2.6 CONTRACTOR'S USE OF PREMISES

- A. Coordinate use of the premises under the direction of the Construction Manager.
 - Use of the site: Limit the use of the premises to Work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which Work is indicated. Each Contractor's use of premises is limited only by Owner's right to perform Work or to retain other contractors on portions of Project.
 - 2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the other contractors and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment insite.

2.7 OWNER OCCUPANCY

A. The Owner will occupy the building during construction.

2.8 WORK UNDER OTHER CONTRACTS

- A. Separate Contract: Owner will award separate contracts for performance of certain construction operations at Project site. Those operations will be conducted simultaneously with Work under this Contract.
- B. Cooperate fully with separate contractors so Work on those contracts may be carried out smoothly, without interfering with or delaying Work under this Contract.

2.9 PRODUCTS ORDERED IN ADVANCE

A. Not Applicable

2.10 OWNER FURNISHED PRODUCTS

A. Not Applicable

2.11 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the CSI/CSC's "Master Format" numbering system.
 - Section Identification: The Specifications use section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of sections in the Contract Documents.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meanings of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred, as the sense

requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.

- Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

END OF SECTION 01 10 00

SECTION 32 92 00 - TURF AND GRASSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes the following:
 - 1. Hydroseeding (Base Bid).
 - 2. Sodding (Alternate No. 4).

1.3 DEFINITIONS

- A. Finish Grade: Elevation of finished surface of planting soil.
- B. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- C. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- D. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 32 91 13 "Soil Preparation" and drawing designations for planting soils.
- E. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For landscape Installer.

- B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture, stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
 - 1. Certification of each seed mixture for turfgrass sod. Include identification of source and name and telephone number of supplier.
- C. Product Certificates: For fertilizers, from manufacturer.
- D. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: Recommended procedures to be established by Owner for maintenance of turf during a calendar year. Submit before expiration of required maintenance periods.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful turf establishment.
 - 1. Experience: Five years' experience in turf installation in addition to requirements in Section 01 45 00 "Quality Requirements."
 - 2. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - 3. Pesticide Applicator: State licensed, commercial.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.
- B. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.

C. Bulk Materials:

- 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
- 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
- 3. Accompany each delivery of bulk materials with appropriate certificates.

1.9 FIELD CONDITIONS

- A. Planting Restrictions: Coordinate planting periods with initial maintenance periods to provide required maintenance from date of planting completion. Coordinate installation of planting materials during normal planting seasons for each type of planting material required.
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 SEED

- A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Rules for Testing Seeds" for purity and germination tolerances.
- B. Grass species as follows, with not less than 85 percent germination, not less than 95 percent pure seed, and not more than 0.5 percent weed seed:
- C. Grass-Seed Mix: Proprietary seed mix as follows:
 - 1. Products: Subject to compliance with requirements, provide the following or approved equivalent:
 - a. ERNMX-136 'Three-Way Tall Fescue Mix' by Ernst Seeds

2.2 TURFGRASS SOD

- A. Turfgrass Sod: Certified, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.
- B. Turfgrass Species: As noted above in Grass Seed Mix.

2.3 FERTILIZERS

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition:
 - a. 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
 - b. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

2.4 PESTICIDES

- A. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
- B. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.
- C. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to be planted for compliance with requirements and other conditions affecting installation and performance of the Work.
 - 1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
 - 2. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 - 3. Uniformly moisten excessively dry soil that is not workable or which is dusty.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Architect and replace with new planting soil.

3.2 PREPARATION

- A. Protect structures; utilities; sidewalks; pavements; and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 - 1. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.
 - 2. Protect grade stakes set by others until directed to remove them.
- B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 TURF AREA PREPARATION

A. General: Prepare planting area for soil placement and mix planting soil according to Section 32 91 13 "Soil Preparation."

- B. Placing Planting Soil: Place and mix planting soil in place over exposed subgrade.
 - 1. Reduce elevation of planting soil to allow for soil thickness of sod.
- C. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- D. Before planting, obtain Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.4 HYDROSEEDING

- A. Hydroseeding: Mix specified seed, commercial fertilizer, and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.
 - 1. Mix slurry with fiber-mulch manufacturer's recommended tackifier.
 - 2. Spray-apply slurry uniformly to all areas to be seeded in a one-step process. Apply slurry at a rate so that mulch component is deposited at not less than 1500-lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate.

3.5 SODDING

- A. Lay sod within 24 hours of harvesting unless a suitable preservation method is accepted by Landscape Architect prior to delivery time. Do not lay sod if dormant or if ground is frozen or muddy.
- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
 - 1. Lay sod across slopes exceeding 1:3.
 - 2. Anchor sod on slopes exceeding 1:6 with wood pegs or steel staples spaced as recommended by sod manufacturer but not less than two anchors per sod strip to prevent slippage.
- C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

3.6 SATISFACTORY TURE

- A. Turf installations shall meet the following criteria as determined by Architect:
 - 1. Satisfactory Seeded Turf: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches.
 - 2. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.

B. Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.

3.7 PESTICIDE APPLICATION

- A. Apply pesticides and other chemical products and biological control agents according to requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- B. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

3.8 CLEANUP AND PROTECTION

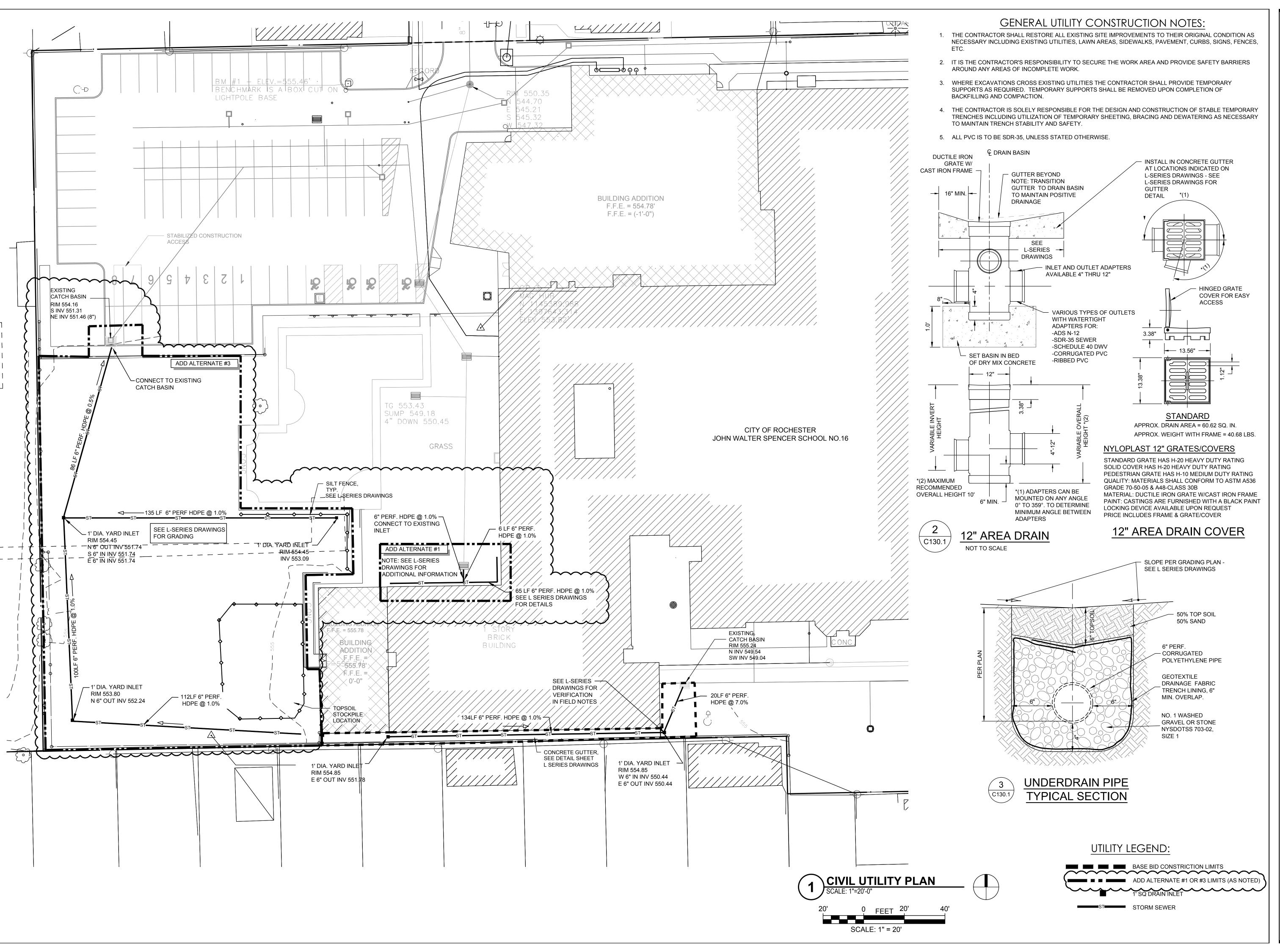
- A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.
- C. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.
- D. Remove nondegradable erosion-control measures after grass establishment period.

3.9 TURF MAINTENANCE AND MAINTENANCE SERVICE

- A. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
 - 1. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
 - 2. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.
 - 3. Apply treatments as required to keep turf and soil free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.
- B. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.
 - Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 - 2. Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.

- C. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 1/3 of grass height. Remove no more than 1/3 of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the grass height of 1-1/2 to 2 inches.
- D. Turf Postfertilization: Apply commercial fertilizer after initial mowing and when grass is dry.
 - 1. Use fertilizer as specified.
- E. Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in "Turf Maintenance" Article. Begin maintenance immediately after each area is planted and continue until acceptable turf is established, but for not less than the following periods:
 - 1. Seeded Turf: 60 days from date of planting completion.
 - a. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.
 - 2. Sodded Turf: 30 days from date of planting completion.

END OF SECTION 32 92 00



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S.E.D. CONTROL NUMBERS

26-16-00-01-0-016-020

RJF Drawn By: Checked By: KJW Project Manager: KJW

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Revisions

1 05/14/2020 BID ADDENDUM#1

John Walton Spencer

School 16 321 Post Avenue Rochester, NY 14619

SWBR Project Number 16158.00

Rochester Joint Schools Construction Board 70 Carlson Street, Suite 200 Rochester, NY 14610

C-130.1

CIVIL UTILITY PLAN

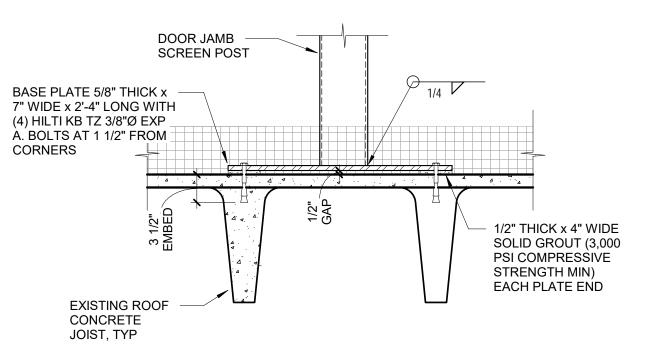
May 6, 2020

Bid Set

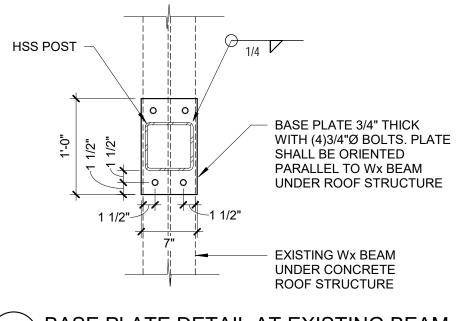
SECTION AT SCREEN POST BASE CONNECTION

CAP PLATE TO MATCH Wx BEAM FLANGE THICKNESS TOP AND \ C5x6.7 TOP AND BOTTOM FLANGE / BOTTOM OF SCREEN, TYP, UON ON PLAN HSS BEAM - HSS POST AT CORNER Wx BEAM BEYOND SCREEN PANEL CONTINUITY PLATE TO MATCH HSS BEAM FLANGE THICKNESS CONTINUITY PLATE TO HSS POST MATCH Wx BEAM FLANGE THICKNESS ANGLE, SEE ARCH DWGS, SCREEN **PANEL**

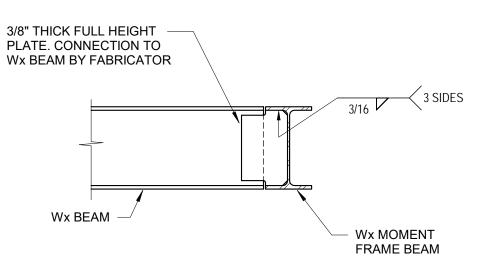
7 SECTION AT TOP CORNER OF SCREEN WALL



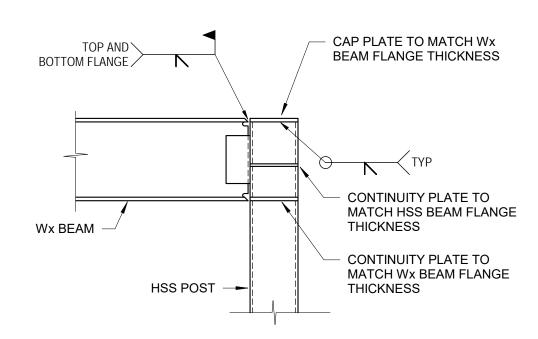
6 SECTION AT SCREEN DOOR JAMB POST BASE CONNECTION



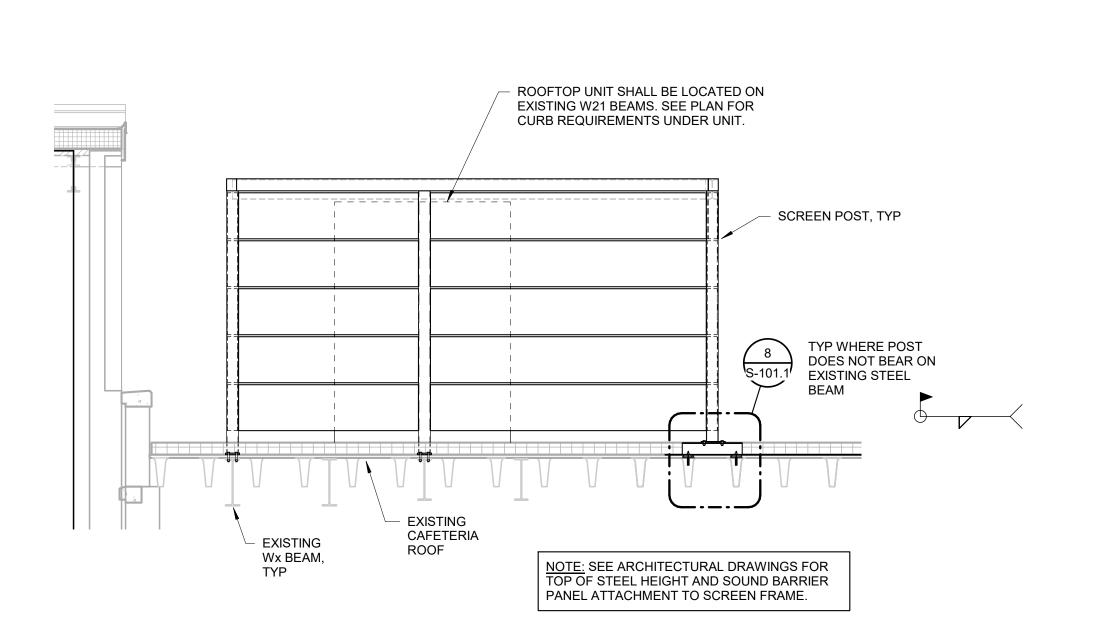
5 BASE PLATE DETAIL AT EXISTING BEAM



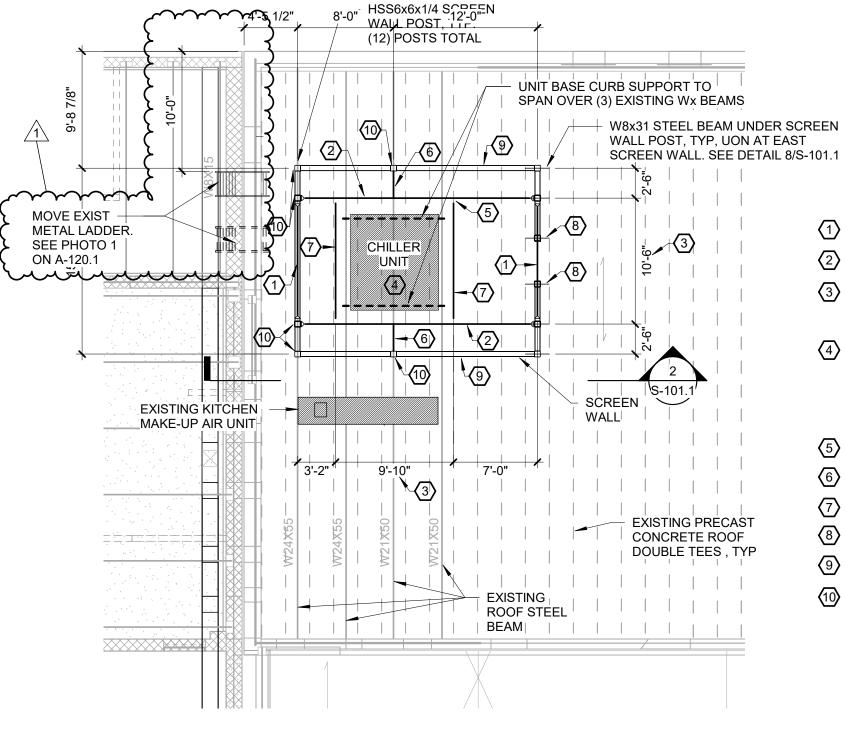
4 Wx BEAM TO Wx MOMENT FRAME BEAM CONNECTION



3 Wx BEAM TO HSS COL MOMENT CONNECTION



SECTION AT ACOUSTICAL SCREEN/CHILLER



STRUCTURAL KEYNOTES

- HSS6x6x1/4 BEAM AT TOP OF SCREEN WALL. SEE DETAIL 7/S-101.1 FOR BEAM/POST CONNECTION.
- W10x26 BEAM AT TOP OF SCREEN. PROVIDE MOMENT CONNECTION AT EACH END PER DETAIL 3/S-101.1.
- DIMENSION SHALL BE COORDINATED WITH PURCHASED ROOFTOP MECHANICAL UNIT PRIOR TO STEEL FABRICATION. MOMENT FRAMES SHALL CLEAR MECHANICAL UNIT FOR FUTURE REPLACEMENT OVERHEAD.
- THE HATCHED AREA INDICATES A 3,200 Ib OPERATING WEIGHT DAIKIN CHILLER MODEL AGZ050E USED AS BASIS OF DESIGN. THE UNIT OVERALL DIMENSIONS ARE 7'-4" x 7'-10" x 8'-4" (WIDTH x LENGTH x HEIGHT). THE SCREEN FRAME AND EXISTING ROOF STRENGTHENING WERE DESIGNED TO ACCOMMODATE FOR THIS UNIT, WHICH MAY OR MAY NOT BE THE ACTUAL UNIT USED FOR THE PROJECT. THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER IF THE UNIT PURCHASED DOES NOT CORRESPOND TO THIS UNIT. POSSIBLE REDESIGN MAY BE REQUIRED.
- (5) SEE DETAIL 4/S-101.1 FOR TYPICAL CONNECTION OF WX BEAM TO WX MOMENT FRAME BEAM.
- 6 C4x4.5 HORIZONTAL BRACE FROM TOP OF HSS POST TO Wx BEAM.
- (7) W10x12 HORIZONTAL BRACE BETWEEN WX MOMENT FRAME BEAMS.
- 8 SEE DETAIL 6/S-101.1 FOR DOOR JAMB POST BASE CONNECTION.
- (9) PROVIDE HORIZONTAL HSS5x2x3/16 AT BOTTOM OF SCREEN ONLY AT 12'-0" SPAN PORTION.
- SEE DETAIL 5/S-101.1 FOR SCREEN POST CONNECTION TO EXISTING Wx BEAM UNDER ROOF STRUCTURE.



1 PARTIAL ROOF FRAMING PLAN AT CHILLER AT CAFETERIA/SERVERY

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E D C C B

Drawn By: GG
Checked By: MEK

S.E.D. CONTROL NUMBERS

26-16-00-01-0-016-020

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Project Manager: AMS

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Revisions

1 05/14/2020 Bid Addendum 1

John Walton Spencer School 16 321 Post Avenue Rochester, NY 14619

Rochester, NY 14619

SWBR Project Number 16158.00

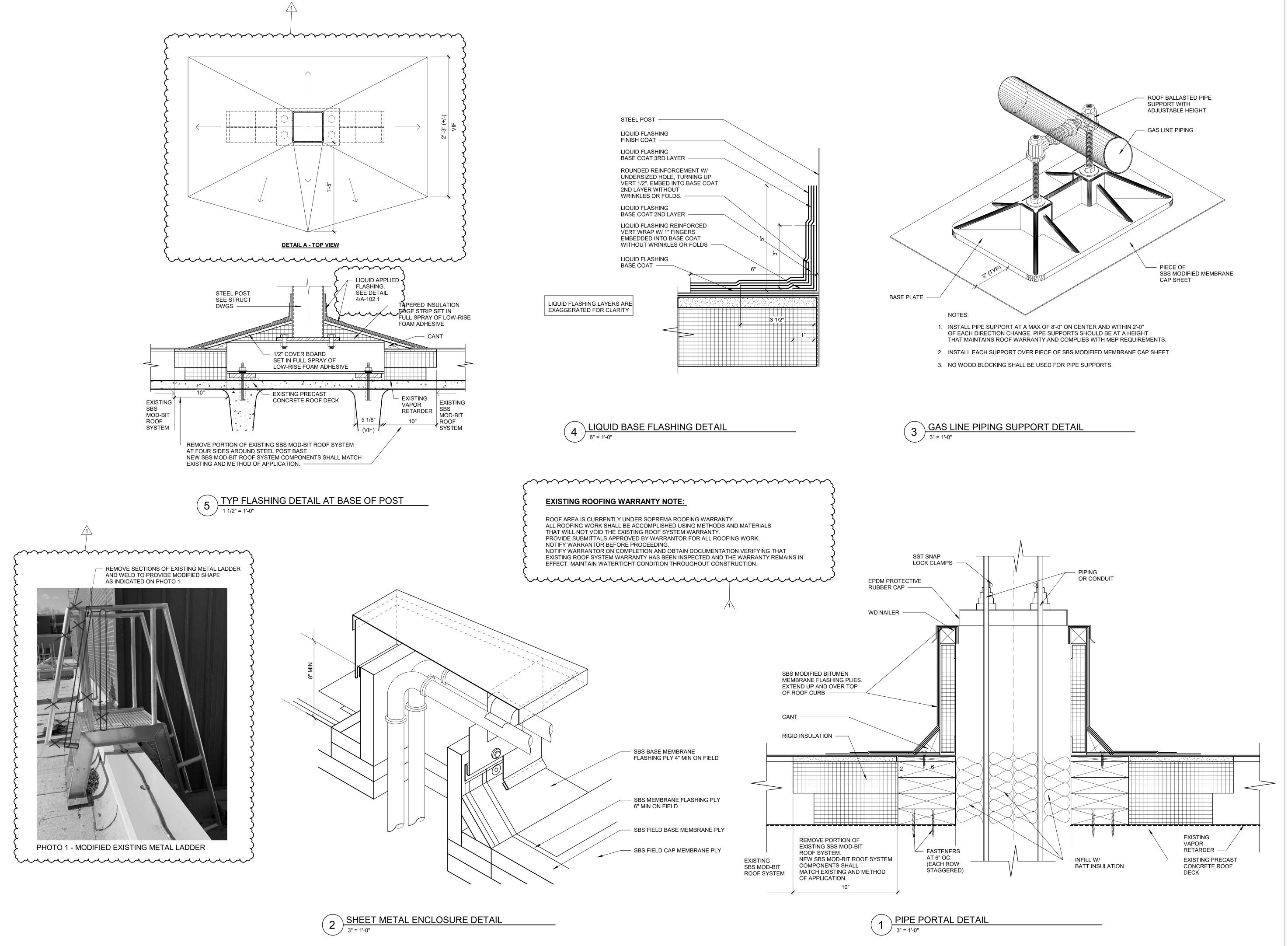
Rochester Joint Schools Construction Board 70 Carlson Street, Suite 200 Rochester, NY 14610

S-101.1

ACOUSTICAL SOUND BARRIER DETAILS

May 6, 2020 Bid Set

E PATH: C:\1-Local Revit Models 2019\16155.00 School 16 Central 2019 walkup67



SWBR

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S.E.D. CONTROL NUMBERS 26-16-00-01-0-016-020

Drawn By: EK
Checked By: FOI
Project Manager: AMS

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Revisions

1 05/14/2020 Bid Addendum 1

John Walton Spencer School 16 321 Post Avenue

Rochester, NY 14619
SWBR Project Number 16158.00

Rochester Joint Schools Construction Board 70 Carlson Street, Suite 200 Rochester, NY 14610

A-120.1
ROOF DETAILS

May 6, 2020Bid Set



OCHARAL ENERTH CONTact #: CONCOND COMPANY: CORPORTY MOSSING Contact #: 585-409-4590 Company: Alpwwyd Sources Contact #: 315-35 9-7815 COMPANY: MIB CREATING Company: UN Danfath Company: SCHOOL 16 PRE-BID SITE WALK VISITOR LOG Contact #: 595-645-5552 Contact #: [W/| Salv ieromen 115m Name: Name: Name: Name:

Date: 5/12/2020

Date: 5/12/2020

Date: 5/12/2020

Date: 5/12/2020

Company: CITYS& Elector C.

Contact #585-737-3790

Company: 1/6

Contact #: 585-416-896

Name:

Date: 5/12/2020

Date: 5/12/2020

Name:

Date: 5/12/2020

Company: CITYGATE ELECTRIC

Contact #: 285-690-5795

Name:

Date: 5/12/2020



SCHOOL 16 PRE-BID SITE WALK VISITOR LOG

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Date: 5/12/2020	Name: JAKE HART	Contact #:	Company: HALL UNG. SL	2
Date: 5/12/2020	Name: RICK STUFFEL	585-576 · Contact #:579)	Company: RSMP	
Date: 5/12/2020	Name: Dan De Chieft	Contact #: 716-861-0890	Company: Rosers	
Date: 5/12/2020	Name: JEFF MUNCU	Contact #: 516-712-8437	Company:	
Date: 5/12/2020	Name:	Contact #:	Company:	,
Date: 5/12/2020	Name:	Contact #:	Company:	
Date: 5/12/2020	Name:	Contact #:	Company:	
Date: 5/12/2020	Name:	Contact #:	Company:	