



Addendum #3

New Jersey Schools Development Authority
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Date: August 22, 2013
PROJECT #: ET-0061-B01
New Joseph C. Caruso ES
DESCRIPTION: Addendum #3

This addendum shall be considered part of the Bid Documents issued in connection with the referenced project. Should information conflict with the Bid Documents, this Addendum shall supercede the relevant information in the Bid Documents.

A. CHANGES TO THE PROCUREMENT PROCESS:

1. Modifications to Request for Proposals:

a. REVISE: The bulleted list included in Section 1.3 B of the RFP (“Components of Response”) shall be revised as follows, to modify the number and format of responses to the RFP (additions in **bold and underlined** text; deletions in *strikethrough and Italics*):

A responsive Proposal consists of the following **four components**:

- Project Rating Proposal (NJSDA Form PRP)
- Technical Proposal (unbound original, three (3) bound copies, and two (2) CDs containing full cover-to-cover PDF copy required) (FORMS PROVIDED)
- Lump Sum Price Proposal (NJSDA Form PP)
- **Disclosure of Investment Activities in Iran (NJSDA Form DIAI)**

b. ADD the following to the end of section 1.3.B.3. “Technical Proposal”:

In addition, the Design-Builder must submit a Disclosure of Investment Activities in Iran Form on the form provided by the NJSDA. “Pursuant to Public Law 2012, c. 23 (codified at N.J.S.A. 52:32-55 et. seq.) (the “Act”), any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the New Jersey Schools Development Authority (“NJSDA”) must complete a Certification which states

that the person or entity, or one of the persons or entity's parents, subsidiaries, or affiliates, is not identified on a list created and maintained by the New Jersey Department of the Treasury ("Treasury") as a person or entity engaging in investment activities in Iran. Such a Certification must be in the form attached hereto, and included with the completed Technical Proposal. Failure to submit such Certification will result in the disqualification of the bid and rejection of the Technical and Price Proposals.

c. **ADD** the following **NEW** section 3.10 "Disclosure of Investment Activities in Iran Form"

3.10 Disclosure of Investment Activities in Iran Form

Using the form provided by the NJSDA, the Design-Builder must submit a Disclosure of Investment Activities in Iran Form, pursuant to Public Law 2012, c. 23 (codified at N.J.S.A. 52:32-55 et. seq.) (the "Act"). Pursuant to the Act, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the New Jersey Schools Development Authority ("NJSDA") must complete a Certification which states that the person or entity, or one of the persons or entity's parents, subsidiaries, or affiliates, is not identified on a list created and maintained by the New Jersey Department of the Treasury ("Treasury") as a person or entity engaging in investment activities in Iran. Such a Certification must be in the form attached hereto, and included with the completed Technical Proposal. Failure to submit such Certification will result in the disqualification of the bid and rejection of the Technical and Price Proposals.

d. **REVISE:** List of RFP Forms to include Item #13:

1. Design-Builder's Experience on Projects of Similar Size, Cost and/or Complexity
2. Identification and Qualification of Design-Builder's Key Team Members
3. Identification of Required Subcontractors
4. Design-Builder's Design Consultant's Experience on Project of Similar Size, Cost and/or Complexity
5. Identification and Qualification of Design Consultant's Key Team Members
6. Design-Builder's Demonstrated Prior Affirmative Action Experience
7. Design-Builder's Overall Approach to the Project
8. Design-Builder's Approach to Schedule
9. Approach to LEED Requirements
10. LEED for Schools 2009 Project Checklist
11. Small Business Enterprise Forms "B" and "C"
12. Technical Proposal Certification
13. Disclosure of Investment Activities in Iran Form

B. CHANGES TO THE PROJECT MANUAL:

1. Volume 2: Modifications to Performance Specifications:

a. **ADD:** In Section C2000.00 Interior Finish Schedule, B., add the following:

**2. Basis of Design for projection wall in Immersive Learning Area:
High-contrast screen coating by Goo Systems.**

a. Provide high-contrast reflective coat and high-contrast finish coat in accordance with the manufacturer's instructions.

- b. **ADD:** In Section D6000.00 Communications, Performance, D.3., add the following and renumber subsequent items accordingly:

d. Media Center Immersive Learning Area

(1) The Design-Build Information Package indicates the Basis of Design for this space. The Design-Builder shall retain the services of a subconsultant with CTS-D and CTS-I certifications for design, installation, set-up and training.

(2) Immersive Learning Area Systems—Basis of Design

(a) Surround Sound 7.1 sound enhancement speaker and audio amplification system with 100 watts continuous RMS power output per channel and HDMI inputs sufficient to support complete installation.

(b) Multiple ceiling-mounted LCOS projectors, 1080p and 3D ready, with sound output integrated to item (a) above. Provide minimum four projectors or as required to cover proposed width of curved wall (240 degrees) in Immersive Learning Area.

(c) Multi-projector display software driver: "ImmersaView Warp" providing geometry correction and edge blending for curved screens. Specific software features to include:

i. Keystone correction

ii. Edge blending

iii. Overlap

iv. Curved screens

(d) System control: Computer, operating system and software to provide full control of all system functions and features. Suggested configuration (versions current as of date of issuance):

i. Operating system: Microsoft Windows 8/7 and up.

ii. Processor: Intel Pentium i7, 3.4GHz.

iii. Memory/storage: 16GB dual channel DDR3 SDRAM @133Mhz; 2000GB SATA hard drive (7200RPM).

iv. Graphics card: Compatible with "ImmersaView Warp" software; 1080p resolution and capable of supporting multiple outputs (projectors) as required for curved wall coverage.

v. Features: Media card reader; Blu-Ray Disc combo with burner; AMD Radeon series video card compatible with "ImmersaView Warp" software; HDMI interface; minimum six USB 2.0 ports; integrated sound card; digital SPDIF (optical); standard 7.1 audio jacks.

vi. 3D subsystems: DirectX 7 and up; Open GL 1.4 and up.

vii. Desktop support: Microsoft Windows 7 Aero and up.

(3) Provide wiring and devices for power, input and output, control, and all functions necessary to accommodate complete installation.

(4) Hardware and software shall utilize the most current technology and versions available at the time of installation.

c. **MODIFY:** In Section E1070.00, Entertainment and Recreational Equipment, modify Performance item A.2.a. as follows:

a. Stage curtain **and room divider curtain in Immersive Learning Area.**

Modify Products item A. as follows:

A. Stage Curtains **and Room Divider Curtain**

d. **ADD:** Add new Sections G2030.00 Pedestrian Plazas and Walkways, G2050.00 Athletic, Recreational and Playfield Areas, G2060.00 Site Development, and G2080.00 Landscaping, all dated August 20, 2013 and provided herewith as Attachment(s) 3.8, 3.9, 3.10 and 3.11.

C. CHANGES TO THE DRAWINGS:

1. **REPLACE:** Drawing C-101 Grading Plan, dated June 27, 2013 with Revised Drawing C-101 Grading Plan, dated August 20, 2013, issued herewith as Attachment 3.3. All other plans, sections and elevations are modified accordingly by implication.
2. **REPLACE:** Drawing C-102 Drainage Plan, dated June 27, 2013 with Revised Drawing C-102 Drainage Plan, dated August 20, 2013, issued herewith as Attachment 3.4. All other plans, sections and elevations are modified accordingly by implication.
3. **REPLACE:** Drawing C-103, Utility Plan, dated June 27, 2013, with Revised Drawing C-103 Utility Plan, dated August 20, 2013, issued herewith as Attachment 3.5. All other plans, sections and elevations are modified accordingly by implication.
4. **REPLACE:** Drawing S-1 Site Plan, dated June 27, 2013, with Revised Drawing S-1 Site Plan, dated August 20, 2013, issued herewith as Attachment 3.6. All other plans, sections and elevations are modified accordingly by implication.

5. **REPLACE:** Drawing A-1 First Floor Plan, dated June 27, 2013, with Revised Drawing A-1 First Floor Plan, dated August 20, 2013, issued herewith as Attachment 3.7. All other plans, sections and elevations are modified accordingly by implication.

REPLACE: Drawing L-1 Landscape Plan, dated June 27, 2013, with Revised Drawing L-1 Landscape Plan, dated August 20, 2013, issued herewith as Attachment 3.16. All other plans, sections and elevations are modified accordingly by implication.

D. BIDDER'S QUESTIONS, REQUESTS FOR INFORMATION AND RESPONSES:

1. **Question:** We are requesting that the bid date be extended by at least two weeks due to Labor Day (Monday, September 2) and Rosh Hashanah on Thursday & Friday, September 5 & 6.

Answer: The bid date has been revised in Addendum #1, dated August 6, 2013

2. **Question:** RE: Spec Section E2010.00 – Educational & Scientific Equipment Specification calls for fume hoods & kilns. They are not shown on the drawings and not listed on the Room Area Calculation .Schedule. Where are they located? Please advise if this section is part of this project.

Answer: Fume hoods and Kilns are not included in this project.

3. **Question:** RE: Finished Floor Elevation. What is the proposed finished floor elevation above sea level for the building? The elevations on Drawings A-5.1 thru A-5.3 indicate the first floor elevation at 0.0 which appears to be five to six feet above the existing site grades at the pavement, curbs & sidewalks. This would place the finished floor elevation around 6' – 8' above sea level and therefore require structural fill within the building perimeter.

What Flood Plan zone is the new school located in and what is the minimum finished floor elevation required for this zone?

Answer: The school is located in an AE Flood Zone; the first floor (finished floor) elevation for the building shall be 13 ft. North American Vertical Datum 1988 (NAVD88).

4. **Question:** In general, specifications are proprietary in that they do not list minimum three (3) manufacturers and an "or approved equal" designation, please advise.

Answer: The Design-Build Agreement, Section 5.5.1 states that the naming of materials or equipment in the Design-Build Contract Documents is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that "no substitution is permitted", material and equipment of other suppliers may be accepted following written submission of products and approval by the Authority.

5. **Question:** Spec 01010: Spec Section identifies proprietary items, including security cameras, boilers, door closers, etc.; some of these items do not appear to be proprietary in nature and may not yield the best pricing if maintained as proprietary, please advise.

Please identify school district's existing systems for compatibility requirements

Answer: Proprietary items are limited to those listed in Section 01010, Item 2.1.

6. **Question:** Spec 01020: Is there a tax ID # to avoid taxes? If so, please provide.

Answer: Yes, a tax ID number will be provided to the successful bidder.

7. **Question:** Spec 01850: Are the extended warranties manufacturer product warranties, contractor labor warranties, or both?

Answer: Pursuant to the Design-Build Agreement, Section 01850 Warranties and Bonds, the extended warranties applies to both product warranties and contractor labor warranties. In addition, Table 01850.1 Additional And Extended Warranties further identifies warranty items, and by clarification, items listed in this table are generally for products except for Metal Roofing - weather tightness and Membrane Roofing - installer.

8. **Question:** Spec 01900: Is the building being certified as LEED? If so, what level?

Answer: Yes. LEED Certification requirements are listed in the Design-Builders Agreement, Section 3.18 LEED Certification.

9. **Question:** Spec 01900: Is there building envelope commissioning or just systems commissioning?

Answer: Commissioning requirements are identified in Division 1, General Requirements, Section 01900 - Commissioning.

10. **Question:** Spec B2010: Are alternate colors/finishes/manufacturers for CMU and/or brick acceptable? Have the colors/materials indicated been approved by the district? Is anti-graffiti coating required on the exterior masonry? Metal colors M2 thru M5 are not identified but are shown on the elevations. Please provide.

Answer: Yes, alternative colors, finishes and manufacturers may be submitted in accordance with Section 01600. Yes, all colors and materials have been approved by the District. Provide graffiti resistant coating on exterior masonry products up to 10'-0" high in all applicable areas (Refer to Design Manual and Performance Specifications Volume 2, Section B2010.00 Performance and Products for additional information). M1 thru M3 are identified on the Elevations, M4 is the window color and M5 is the exterior guardrail color.

11. Question: Spec B2020: Are projecting out windows acceptable? Is there shatter resistant requirements for the exterior glazing? Are you positive that window guards are not required?

Answer: Yes, refer to Performance Specifications, Section B2020.00 for acceptable design options. The successful Design-Builder must comply with all applicable and presiding codes including but not limited to NJ DCA's "Best Practices Standards for Schools Under Construction or Being Planned For Construction" current version. Window guards are not required.

12. Question: Spec B2050: Exterior hardware set numbers conflict with interior hardware set numbers; please coordinate. Where are the exterior overhead coiling doors located? What is the hardware set for this door type?

Answer: 1. Exterior and Interior hardware sets are identified in their respective specification sections.
2. Exterior overhead coiling doors are located at the Receiving Area C114 and the Exterior Maintenance Storage C125, and the hardware shall be coordinated with the District's requirements.

13. Question: Spec B2080: Spec is not listed in SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities.

Answer: Specification Section B2080 is attached in this Addendum.

For clarification purposes, where project-specific Performance Specifications or other requirements identified within the Design Build Information Package vary from the NJSDA Materials and Systems Standards, the Performance Specification and information contained with the Design Build Information Package supercede the requirements listed in the NJSDA's Materials and Systems Standards. NJSDA approval of project-specific Performance Specifications and the Design Build Information Package is implicit and no Variance Request is required and for these items.

14. Question: RE: Spec C1010: What are STC requirements of partitions?

Answer: The posted (<http://www.njsda.gov/Design/MSS.html>) NJSDA Model Schools Program "Materials and Systems Standards Manual" applies to this project. Refer to the Introduction and General Requirements Section F.4 General Requirements for required compliance with ANSI/ASA Standard S12.60 "Acoustical Performance Criteria, Design Requirements and Guidelines for Schools". Also refer to other sections of this document and particularly Sections B20 Exterior Vertical Enclosures and C10 Interior Construction for additional requirements.

15. Question: C1030: Where are interior coiling doors located? Please provide door glazing Requirements

Answer: 1. Interior coiling doors are not included in this project. 2. Refer to Performance Specifications, Section C1030.00 for additional information.

16. Question: C1090: Are smartboards being provided by SDA? Is wiring/infrastructure being provided by DB? Why is building directory being specified for the school? This seems to be an unnecessary expense. Are any toilet accessories being provided by the owner for contractor installation? If so, which ones? Is steel shelving provided and installed by SDA or DB? At all locations throughout school?

Answer: See Performance Specifications, Section D6000, Communications for SDA supplied equipment, Educational Specifications and Room Area Calculations and Fit Out List for additional information.

17. Question: Spec C2000: ERF flooring is not an SDA approved floor finish for lobbies or hallways; only VCT is acceptable at these locations. Please revise. Stonhard Stonshield is not an SDA approved floor finish for custodial closets; only Sealed Concrete is acceptable at these locations. Please revise. Confirm that Stonehard Stoneshield product for rest rooms is resinous floor epoxy system. Confirm that Stonehard Stoneclad product for kitchen and support spaces is resinous floor urethane system. Confirm that support spaces for this flooring system are only kitchen support areas. Why is VCT-5 not used?

Answer: Per Room Finish Schedule, provide REF Flooring in Lobbies and Vestibules, Sealed Concrete in Custodial Closets, VCT in Custodial Areas, REF in Student and Staff Toilets, troweled Urethane and Broadcast Epoxy in Kitchen Areas, and VCT-5 is not being used.

18. Question: Spec D2010: Are there provisions for low flow toilet fixtures? Waterless urinals?

Answer: See Performance Specification Section D2010.60 for low flow toilet fixtures and urinals.

19. Question: Spec D3000: Are there provisions for use of geothermal heating systems? Spec is not listed in SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities. Identifies use of a dedicated DX split system for elevator machine room but the elevator is a machine room-less unit and no elevator machine room is shown in the plans. Please advise. Spec lists multiple manufacturers for boilers but boiler is listed as proprietary as Aerco unit per spec 01010. Please clarify.

Answer: 1 - The Design-Build Information Package describes the basic types of HVAC components and systems that the Design-Build Contractor shall use in the project. Note specifically the HVAC Systems Descriptions in Section D3000.00 of the Performance Specifications. Selection of particular components within the basic system types described may be made in the interest of greater efficiency and additional LEED credits.

2 - The Performance Specification for this project is part of the Design-Build Information Package and Bridging Documents.

3 - Provide independent cooling system for all areas with heat producing equipment required to maintain 24 hour/365 day a year conditioning.

4 - Provide proprietary equipment as noted.

20. Question: Spec D3010: Spec is listed as under development per SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities. If gas-fired generator is provided, please verify that the utility requirements for the generator are provided and that the gas company has guaranteed the minimum sizing requirements for generator.

Answer: 1 – This Specification Section is included in the Design-Build Information Package and the Design-Builder shall comply with these requirements. 2 - The Local Utility Company has been contacted but it is the Design Builders responsibility to coordinate all utility requirements.

21. Question: Spec D3020: Spec is listed as under development per SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities.

Answer: The Design-Build Performance Specifications for this project are part of the Design-Build Information Package and the Design-Builder shall comply with those requirements. See Response to Item #13 above.

22. Question: Spec D3030: Spec is listed as under development per SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities.

Answer: The Design-Build Performance Specifications for this project are part of the Design-Build Information Package and the Design-Builder shall comply with those requirements. See response to Item #13 above.

23. Question: Spec is listed as under development per SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities

Answer: The Design-Build Performance Specifications for this project are part of the Design-Build Information Package and the Design-Builder shall comply with those requirements. See response to Item #13 above.

24. Question: Spec D4010: Spec is listed as under development per SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities

Answer: The Design-Build Performance Specifications for this project are part of the Design-Build Information Package and the Design-Builder shall comply with those requirements. See response to Item #13 above.

25. Question: Spec D4030: Spec is listed as under development per SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities.

Answer: The Design-Build Performance Specifications for this project are part of the Design-Build Information Package and the Design-Builder shall comply with those requirements. See response to Item #13 above.

26. Question: Spec D5010: If gas-fired generator is provided, please verify that the utility requirements for the generator are provided and that the gas company has guaranteed the minimum sizing requirements for generator.

Answer: The Design-Build Performance Specifications for this project are part of the Design-Build Information Package and the Design-Builder shall comply with those requirements. See response to Item #13 above.

27. Question: Spec D5040: Is the owner or DB providing any required computers for lighting control?

Answer: Yes, the computers are to be supplied by the Design Builder. Refer to Performance Specifications, Section D5040.10 for additional information.

28. Question: Spec D6000: Does this include the emergency radio responder system?

Answer: Yes, an emergency radio responder system must be included in the project.

29. Question: Spec D8010: Spec is listed as under development per SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities.

Answer: The Design-Build Performance Specifications for this project are part of the Design-Build Information Package and the Design-Builder shall comply with those requirements. See response to Item #13 above.

30. Question: Spec D8010: Is the owner or DB providing any required computers for the BMS?

Answer: The Design-Builder shall provide the complete BMS specified in Section D8010.50, including the central host computer called for in Performance B.2.a.(3).

31. Question: Spec E1010: Are dock lifts required?

Answer: No. Dock lifts are not required. The loading dock is elevated 42" above the service area.

32. Question: Spec E1070: Please provide a color selection for stage curtains. Are volleyball nets required with gym equipment? If so, are provisions in gym floor for volleyball stanchions required?

Answer: 1. Color options are to be provided by the successful Design-Builder for SDA review and selection during the design phase.
2. Volleyball nets and floor mounted provisions are to be provided.

33. Question: Spec E2010: What is the seating capacity of the bleachers? Are bleachers required in both the gymnasium and cafetorium?

Answer: Seating capacity is noted on Sheet A-1. Bleacher seating is required in both the gymnasium and cafetorium.

34. Question: Spec F1020: Spec is listed as under development per SDA's Material System Standards; please verify content has been approved by SDA Design Studio and/or all required authorities.

Answer: The Design-Build Performance Specifications for this project are part of the Design-Build Information Package and the Design-Builder shall comply with those requirements. See response to Item #13 above.

35. Question: Spec G2020: What are the parking striping requirements?

Answer: Parking striping should be 4" wide, permanent, and highly visible. Refer to Section G20 Site Improvements.

36. Question: Spec G2030,G2050,G2060 and G2080: These specification sections are listed in the Table of Contents but not provided in the specifications. Please provide.

Answer: These specification sections are included as attachments in this Addendum.

37. Question: 12'-0" high doors at art room and stage are to be fire rated per code and wood per SDA Material System Standards; 12'-0" high wood doors do not meet fire rating. Please advise on whether door material can be changed or if height of door can be reduced to meet code requirements.

Answer: The Art Room and Stage doors are to be 12'-0" high and must be fire rated per code. Door materials can be changed to meet the required fire rating requirements.

38. Question: Has the project received DOE approval?

Answer: Yes. This project has received DOE Schematic Design approval, however, in accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

39. Question: Ornamental steel fence does not meet SDA Material System Standards; only chain link fence is approved fencing material. Please advise.

Answer: Ornamental Steel Picket Fencing has been approved for this project.

40. Question: SDA drawings do not meet SDA standards; floor plans must be shown at 1/8" scale.

Answer: Drawings provided by the successful Design-Builder and its Consultants must comply with the NJSDA Design Manual for Design-Build Projects and NJSDA Material and Systems Standards. The drawings provided as part of the Design-Build Information Package are the Basis of Design and not considered Final Design Documents.

41. Question: Specifications do not meet SDA standards; specs must use current CSI/Masterformat, which is Masterformat 2004. Specs are shown in Masterformat 1995.

Answer: Specifications provided by the successful Design-Builder and its Consultants must comply with the NJSDA Material and Systems Standards. Specifications provided as part of the Design-Build Information Package are the Basis of Design and not considered Final Specifications.

42. Question: Are printing costs to be borne by DB or can they be direct billed to SDA for each submission and for construction?

Answer: The project is considered lump sum in accordance with the NJSDA's Request or Proposal. All costs, including printing are to be incurred by the successful Design-Builder.

43. Question: Will the SDA provide CAD files of the project?

Answer: CAD files may be made available to the successful bidder subject to written acknowledgement by the bidder that the CAD files are provided as a convenience and without warranty as to their completeness, accuracy or fitness for use on this or any project.

44. Question: Will the temporary trailers be removed from the site before construction?

Answer: TCU's will be removed from site under separate contract before construction.

45. Question: Will there be any other site demolition completed by the SDA (such as play area)?

Answer: No other site demolition will be completed by the SDA.

46. Question: Will the new school be used as an emergency shelter? If so, this will revise the flood category from Category III to Category IV.

Answer: No. The project is not design as a designated Emergency Shelter.

47. Question: What is an SCSC classroom, as identified on the 2nd and 3rd floor plans?

Answer: The classrooms are mislabeled; designation should be SCSE.

48. Question: Cluster of Self Contained Special Education (SCSE) Classrooms on 1st floor does not meet Educational Specification Requirements, which indicate that SCSE classrooms are to be dispersed among general classrooms. The Educational Specifications identify a total of six (6) SCSE classrooms but only four (4) are shown on the floor plans, all of which are on the first floor. Please clarify.

Answer: Self-Contained Special Education Classrooms are dispersed among general classrooms as required. See also Question #47.

49. Question: Does the exterior hard surface play area meet the SDA Material System Standards?

Answer: Yes, exterior sports surfacing material is to be applied over asphalt.

50. Question: What are the emergency access provisions of the security gates?

Answer: All gates are to be installed with emergency egress hardware. All gates are to be installed with tamper resistant locking mechanisms.

51. Question: There does not appear to be enough room for the security gates to operate properly as currently shown. Please advise.

Answer: All gates are pivot gates with necessary clearances.

52. Question: Why is an analog clock system being provided as opposed to a digital clock system?

Answer: The clock system operates digitally, however, the clock faces are "analog" with hour, minute and second hands.

53. Question: The generator shown on Site Plan S-1 does not meet Best Practices Standards, which requires a separate fuel storage tank be physically separated from generators. Please revise.

Answer: The emergency generator shown on Site Plan S-1 is intended to be a natural gas generator and therefore, no fuel storage tank is required. Also refer to Materials and Systems Standards, Section D5010.10, Packaged Generator Assemblies.

54. Question: The Standard Room Finish Schedule listed in the Educational Specifications lists a footnote #9 in the chart, but does not identify what this footnote indicates. Please identify.

Answer: Provide suspended acoustical ceiling tile and sound absorbing/reflecting wall and or ceiling panels with appropriate finish/acoustical rating for the use and acoustics of the space.

55. Question: Carpet finish identified at Student Service Offices and Parent Community Room does not meet SDA Material System Standards; only VCT flooring is approved flooring material. Please revise.

Answer: The Room Finish Schedule takes precedence over the Materials and Systems Standards.

56. Question: Resinous urethane flooring identified for vestibules in Educational Specifications Standard Room Finish Schedule does not match the resinous epoxy flooring shown on First Floor Floor Patterns Drawing A-8. Regardless, per the SDA Material System Standards only rubber matt is an approved floor finish in vestibules. Please revise.

Answer: The Room Finish Schedule takes precedence over the Materials and Systems Standards.

57. Question: Resinous epoxy flooring identified for stairwells in Educational Specifications Standard Room Finish Schedule does not meet SDA Material System Standards; only painted concrete is identified as an approved floor finish. Please revise.

Answer: The Room Finish Schedule takes precedence over the Materials and Systems Standards.

58. Question: Drawing A-8 First Floor Floor Patterns lists proprietary products. Please revise to indicate a Basis of Design and approved equal products.

Answer: See Room Finish Schedule. See response to Question No. 4.

59. Question: Interior door elevations for corridor doors on Drawing A-7 Door and Window Elevations indicates doors with triangular and round windows. These odd shaped windows within the doors are not standard shapes and will add significant cost to provide. Please revise.

Answer: Provide doors per Sheet A-7.

60. Question: The single story student service component of the building and single loaded corridors are inefficient. Consider redesigning for better functional solution.

Answer: The current design has been approved by the Keansburg School District and the Department of Education. The successful Design-Builder may submit any requested design changes to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

61. Question: The circular design feature at the entry lobby appears to be superfluous and against SDA standard concepts which prohibit design features at entries. Please revise.

Answer: The current design has been approved by the Keansburg School District and the Department of Education. The successful Design-Builder may submit any requested design changes to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

62. Question: The circular design feature in the 2nd floor media center is shown on the furniture plans to be an “Immersive Learning Area” and the furniture layout indicates this area to be a teaching environment. Teaching in a circular space is inefficient, expensive to construct, and does not yield any teaching wall surfacing. Please revise.

Answer: The current design has been approved by the Keansburg School District and the Department of Education. The successful Design-Builder may submit any requested design changes to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

63. Question: Are student cubbies considered FFE by the SDA or built-in casework to be provided by DB?

Answer: Student cubbies are identified in Section E of the Educational Specifications as FF&E and are provided by the SDA.

64. Question: Define ‘open shelving’ as shown in select storage rooms on the furniture plans.

Answer: Refer to NJ SDA's Materials and Systems Standards, Performance Specifications Section C1090.70 and Educational Specifications for additional information.

65. Question: Some storage rooms on the furniture plans do not indicate any furniture or furnishings within the room. Are there any shelving requirements?

Answer: Yes. Refer to NJ SDA's Materials and Systems Standards, Performance Specifications Section C1090.70 and Educational Specifications for additional information.

66. Question: The SGI classrooms shown do not meet code requirements. Doors to these classrooms must swing out into the corridor. Please revise.

Answer: The door swings have been updated. See revised sheets contained within this Addendum (#3) for additional information.

67. Question: Was the 8,000 gallon abandoned UST removed as part of the demolition of the school or does it still remain in the site, to be removed by the DB?

Answer: During the demolition of the school, the 8,000 gallon UST was removed and is not considered part of the DB's responsibility.

68. Question: In the HMM regulatory review report, it identifies minimum first floor elevations per FEMA requirements. Are these dimensions the actual floor elevations (i.e. floor elevation of 12 plus 1 foot = 13 foot first floor elevation) or a minimum dimension clear to maintain over existing grade (i.e., if highest grade right now is an elevation of 10 feet, should the first floor be set at 23 feet?)

Answer: The school is located in an AE Flood zone; the final FEMA ABFE maps as of July 2013 show that the first floor elevations for the project location are to be 11 ft plus 1 ft NAVD88. However, the first floor elevation for the building shall remain at 13 ft NAVD88.

69. Question: If FEMA strongly recommends elevations of 16' and 18', why is the project designed for 13' elevation? Shouldn't the floor elevation be set for 16' or 18'? Given the frequency of 100 year storms in New Jersey of late, and the likely effects of global warming, is it being short sighted on the part of the SDA to simply use the lower elevation?

Answer: The school is located in an AE Flood zone; the final FEMA ABFE maps as of July 2013 show that the first floor elevations for the project location are to be 11 ft plus 1 ft NAVD88. However, the first floor elevation for the building shall remain at 13 ft NAVD88.

70. Question: Are Keansburg regulations applicable for this project? Keansburg limits building height to 35' but the building will be greater than that. Are any variances required? Does the project need to meet any Keansburg setback requirements?

Answer: No. By virtue of N.J.S.D.A. 52:18A-242, NJSDA projects are exempt from municipal, zoning, planning and construction ordinances/codes, including but not limited to building heights/setback requirements.

71. Question: Geophysical Survey maps indicate a Northern Area and Southern Area of the site. Please identify what the Southern Area is. The Northern Area appears to be where the new school will be located, but the survey information was not completed for the full Northern Area site. Please provide all information (EM Survey, GPR Survey, test pits, logs, etc.) for the entire Northern Area site.

Answer: Southern area is under a separate contract and is to be disregarded. The Northern area is part of the proposed school site and approximately 60% of the site was included in the GPR survey. The remaining portion of the site contained TCUs which are scheduled to be removed soon under separate contract. A GPR survey of this portion shall be completed and results will be made available. All data was included in the current report.

72. Question: The site plan does not appear to meet the Best Practices Standards for securable perimeter. There are no barriers to prevent vehicles from being driven directly into entrances. Please advise.

Answer: Per Design Build Agreement: Section 4.3.2 (5) Other Agency Approvals. Before commencing any phase of Construction Work, the Design Builder must receive the Authority's acceptance of the final Design Documents, and must secure all necessary approvals from the DCA, DEP, and any other entity, agency or Authority having jurisdiction over the project. Refer also to the NJSDA Model Schools Program "Materials and Systems Standards Manual" for additional requirements. NJ DCA's Best Practices Standards for Schools Under Construction or Being Planned For Construction" current version applies to all new school construction in the state and compliance is enforced by the NJDCA Division of Codes and Standards.

73. Question: Please verify that telescoping bleachers are required in both the gymnasium and cafetorium.

Answer: Yes, bleacher seating in both the gymnasium and cafetorium.

74. Question: Provide telescoping bleacher layout for gymnasium.

Answer: The extent of the bleacher layout is shown in both the gymnasium and cafetorium for reference only. The successful Design-Builder is responsible for providing the code-compliant layout in each case.

75. Question: Are any SDA variances included in the project?

Answer: District requested items are included within the proprietary specifications sections, therefore, no variances are included. See Item #13 above.

76. Question: Has Keansburg Borough reviewed the plans? Approved the sidewalk curb cut locations? Approved yellow striping for dropoff along Ramsey Avenue?

Answer: No. By virtue of N.J.S.D.A. 52:18A-242, NJSDA projects are exempt from municipal, zoning, planning and construction ordinances/codes. The Borough of Keansburg was sent a copy of the DOE Schematic Submission as a courtesy.

77. Question: Is there a reason that the floor to floor height is 16'-0"? As all program spaces that require 12'-0" ceiling heights or greater are located separate from the 3-story classroom wing, there is no reason to set the building steel elevations at 16'-0" intervals. Please advise.

Answer: The floor to floor heights identified within the Design-Build Information Package may be changed by the successful Design-Builder upon verification that all designed systems can be accommodated within the revised floor to floor heights.

78. Question: Drawing A-5 Building Elevations does indicate an overall building height. Please provide.

Answer: Overall building height shall be determined and noted during the design phase by the selected Design-Builder.

79. Question: The Principal's Office is not screened from public view per Best Practices Standards. Please advise.

Answer: The successful Design-Builder must comply with Best Practices Standards as set forth by the NJ DCA.

80. Question: RE: Proprietary Specifications: Please provide the vendors for the proprietary items in the listed specification:

- o Fire Alarm System
- o Intrusion Alarm System
- o Entry Control System
- o Security Cameras
- o Projectors

Answer: Selection of vendors for proprietary items is at the discretion of the Design-Builder so long as the products or manufacturers provided are consistent with the requirements for proprietary specifications. Please note that The Basis of Design for projectors is not a proprietary specification.

81. Question: We request consideration be given to extending the revised bid submission date from September 4 to the following Tuesday September 10, 2013.

The Labor Day Weekend and the week preceding it represent one of the biggest vacation periods of the year. While this may not seem all that relevant, and while appreciating the need to move forward with this important project, the NJSDA would seem to ultimately be the beneficiary of improved trade contractor input and bidder responsiveness by taking into account the reality that a significant number of people are not available /around for days leading up to the current bid due date.

While we acknowledge that the projects has been ""on the street"" for some time, the reality of our business is that most attention is paid to a bid - design build or otherwise - in the days immediately preceding its' due date; that's just how the industry works.

We hope you will consider this request as to the overall benefit of the NJSDA.

Answer: The bid date has been revised in Addendum #1, dated 8/6/13.

82. Question: What is the interior side back-up required for the exterior walls?

Answer: The interior side back up for the exterior walls is Concrete Masonry Units (CMU): Refer to NJSDA's Materials and Systems Standards Sections B20 Exterior Vertical Enclosures, C10 Interior Construction and the Design-Build Performance Specification Volume II C1010.00 Interior Partitions for additional requirements.

83. Question: Are the exterior walls to be cavity walls?

Answer: Refer to NJ SDA's Materials and Systems Standards B20 Exterior Vertical Enclosures and the Model Schools "Construction Details Manual" posted on the NJSDA website for additional requirements.

84. Question: Is the backup on the interior side of the exterior walls to be CMU?

Answer: Refer to comment number 83 above.

85. Question: Is the backup of the exterior walls to be gypsum board over interior side CMU?

Answer: Refer to comment number 83 above.

86. Question: Is the backup of the exterior walls to be metal studs with gypsum board?

Answer: Refer to comment number 83 above.

87. Question: What is the profile of the exterior walls ?

Answer: Refer to comment number 83 above.

88. Question: Please advise on the following resinous flooring items relative to the NJSDA Contract No. ET-0061-B01 (as presented from a resinous flooring sub expert):

ONLY the first floor lobby actually states the basis of design for resinous flooring on A-8. That leaves 5 other floor types per the finish schedule with very brief descriptions, but they do not say what these products are - such as the description on A-8. We need actual product names for all the floor types, not just the lobbies on A8.

Please clarify as to what is specified for each different type of resinous floor required for the project.

Answer: See Performance Specification for Manufacturers and Colors. Additional Areas: Nurse's Office, Exam Room, Stairways to be StonShield Medium Texture - Color to be determined. Custodial Closets to be Sealed Concrete per Room Finish Schedule.

89. Question: Ed Specs Room Area Calculations identify 830 square feet for Classrooms Grades 1-3; Floor plans indicate approx. 839-843 square feet per classroom; DOE FES standards indicate 850 square feet required. Classrooms provided do not meet requirements. Please advise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

90. Question: Ed Specs Room Area Calculations identify 830 square feet for Classrooms Grades 4; Floor plans indicate approx. 839-843 square feet per classroom; DOE FES standards indicate 800 square feet required. Classrooms provided exceed requirements. Please advise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

91. Question: Ed Specs Room Area Calculations identify 800 square feet for Self Contained Special Education Classrooms; Floor plans indicate approx. 843 square feet per SE classroom; DOE FES standards indicate 600 square feet required. Classrooms provided exceed requirements. Please advise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

92. Question: Ed Specs Room Area Calculations identify 600 square feet for Science Kit Prep/Storage; Floor plans indicate 624 square feet; Plans do not match Ed Specs. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

93. Question: Ed Specs Room Area Calculations identify 600 square feet for Technology Prep/Storage; Floor plans indicate 756 square feet for Tech Prep plus 189 square feet for Storage room for 945 total square feet. Plans are exceeding Ed Spec requirements by nearly 60%. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

94. Question: Technology Storage room doors should swing into the room, not the hallway. Please revise.

Answer: Door swing has been revised.

95. Question: Ed Specs model indicates seven (7) SGI rooms at 300 sf and two (2) SGI rooms at 450 sf for 3,000 sf allowance; DOE FES standards state 1,600 square foot allowance allowed. Plans are 1,400 sf over allotment. Floor plans indicate three (3) SGI rooms at 324 sf, three (3) SGI rooms at 358 sf, and three (3) SGI rooms at 485 sf. Please clarify.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

96. Question: Ed specs model indicates allowance of 1,500 sf for teacher workrooms and support staff office/conference rooms. Ed Specs Room Area calculations indicate 120 sf for Teacher Workroom and 200 sf for Office/Conference Room but plans indicate 383 sf for Teacher Workrooms and 433 sf for Support Staff Office/Conference Room. DOE FES standards allow 360 sf total for Faculty Support Allowance. These rooms are nearly 7 times the DOE FES standards for allowable square footage. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

97. Question: Ed Spec Room Area Calculation for the Support Staff Conference Room uses 40 sf per person for the first occupant and 8 sf per person for the remaining 8 occupants, for a total of 104 sf for 9 occupants. Per the Schoolhouse Code, occupancy for conference rooms shall be 15 sf per person; based on the occupants, the total occupancy for the 9 occupancy should be 135 sf total. When you add the additional 31 st into the program, the 200 sf model square footage for the room is exceeded by 29.25 sf, thus the ed spec model does not work for this space. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

98. Question: Floor plans show 3,054 sf for food service areas, 7,830 sf for cafetorium, 2,051 sf for stage, plus 693 sf for storage spaces in the cafetorium and stage, for a grand total of 13,698 sf. DOE FES standards allow for 6,250 sf for eating and assembly area, stage and kitchen. Spaces shown are more than double the allotted areas. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

99. Question: Ed Specs Room Area Calculations identify 600 sf for faculty dining but plans indicate 728 sf plus 45 sf for a toilet for a total of 773 sf. Please advise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

100. Question: Define industrial shelving to be provided in Gymnasium storage room by DB.

Answer: Refer to NJSDA's Materials and Systems Standards, Performance Specifications Section C1090.70 and Educational Specifications for additional information.

101. Question: Are toilets with showers shown in gymnasium supposed to be private toilet rooms for PE teachers? Or are they supposed to be open for public view and use? As currently shown they appear to be for public use and not private toilets for PE staff. Please advise.

Answer: Toilets shown in the gymnasium are for public use.

102. Question: Ed Specs Room Area Calculations indicate 6,000 sf for gymnasium, plus 250 sf for PE offices, 200 sf for PE toilets, and 500 sf for storage rooms, for a total of 6,950 sf. DOE FES standards only allow for 4,250 sf for gymnasium and storage rooms. Spaces shown are 63% greater than allowed. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

103. Question: Ed Specs Room Area Calculations indicate 1800 sf for Art Room/Scene Shop. Floor plans indicate 1,667 sf, which are less than the ed specs indicate. Plans also show 920 sf Vocal Music Room and 150 sf Music Storage Room for a total of 2,737 sf for visual and performing arts. DOE FES standards only allow for 1,250 sf for visual and performing arts. Spaces shown are more than double the allotted areas. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

104. Question: Ed Specs Room Room Area calculations indicate 675 sf for Nurse's Office plus 25 sf for Lockable Storage Room. Plans indicate 667 sf for Nurse's Office, 69 sf for toilet room, 186 sf for exam room and 20 sf for Lockable Storage for a total of 942 sf. Ed Spec model indicates 750 sf total allowance for these areas, including only 525 sf for Reception/Office area and 175 sf for Exam Room. Spaces shown on plan exceed Ed Spec model. Furthermore, DOE FES Standards indicate allowance of 400 sf for Nurse's exam room and toilet room. Spaces shown exceed allotted areas. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

105. Question: Ed Specs Room Area calculations indicate 800 sf for Main Office Reception, 150 sf for Workroom, 250 sf for Principal's Office, 33.75 sf for Records & Test Storage Room, and 200 sf for Vice Principal's Office. Plans indicate 1,094 sf for Reception, 182 sf for Workroom, 300 sf for Principal's Office, 48 sf for Records & Test Storage Room, and 250 sf for Vice Principal's Office, for a total of 1,874 sf. In addition, plans indicate 300 sf conference room, 48 sf storage room, and two 44 sf toilet rooms, for a grand total of 2,310 sf for the Main Office. Ed Spec model indicates 1,950 sf allowance for this space. Furthermore, Ed Spec model indicates an additional 1,950 sf allowance for Student Services. The DOE FES standards allow for 2,125 sf total for Administrative and Student services areas, including main office, principal's office, conference room, student services offices. Plans are providing 4,853 sf total for these spaces, which is more than double the allotted square footage. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

106. Question: Ed Specs Room area calculations for Child Study Team Office are based upon 50 sf for the first occupant and 15 sf for the additional 2 occupants. Per the Schoolhouse Code, the first occupant must be 60 sf. When the additional 10 sf is added, the space exceeds the model sf by 7.75 sf. Please revise layout to accommodate code requirements.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

107. Question: Ed Specs Room area calculations Community Liaison Office are based upon 50 sf for the first occupant and 15 sf for the additional 2 occupants. Per the Schoolhouse Code, the first occupant must be 60 sf. When the additional 10 sf is added, the space exceeds the model sf by 3.94 sf. Please revise layout to accommodate code requirements.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

108. Question: Ed Specs Room area calculations for Conference/Testing Room are based upon 11 sf for each occupant, for a total of 110 sf. Per the Schoolhouse Code, the square footage for conference room occupants must be 15 sf. This will revise the occupancy to 165 sf. When the additional 55 sf is added, the space exceeds the model sf by 22 sf. Please revise layout to accommodate code requirements.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

109. Question: Ed Specs Room Area calculations indicate 300 sf for Student Services Reception, two guidances offices at 175 sf each, four CST offices at 125 sf each, 125 sf for Community Liaison Office, 400 sf for Parent Community Room, 250 sf for Conference/Testing Room, and 75 sf for Record Storage Room. Plans indicate 640 sf for Student Services Reception, two guidances offices at 135 sf each, four CST offices at 186 sf each, 160 sf for Community Liaison Office, 388 sf for Parent Community Room, 256 sf for Conference/Testing Room, 53 sf for Record Storage Room, and 32 sf for storage, for a total of 2,543 sf. Plans do not match Ed Specs. Also, Ed Spec model indicates 1,950 sf allowance for this space. Furthermore, Ed Spec model indicates an additional 1,950 sf allowance for Main Offices. The DOE FES standards allow for 2,125 sf total for Administrative and Student services areas, including main office, principal's office, conference room, student services offices. Plans are providing 4,853 sf total for these spaces, which is more than double the allotted square footage. Please revise.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

110. Question: Verify that refrigerators for Parent Community Room and Faculty Dining Room are provided by DB. If so, please provide specs.

Answer: Confirmed. Refer to Educational Specifications, Section E for additional information. The selected Design-Builder shall submit product/equipment specifications as required in the Design-Build Agreement.

111. Question: In general, spaces provide in plans are much greater than allowed per DOE FES standards. The overall building is sized much larger than it should be and will have a significant impact on proper pricing. Please clarify and revise accordingly.

Answer: This project has received DOE Schematic Design approval as designed. In accordance with the Design-Builder's Agreement, DOE Final Education Adequacy Approval must be submitted and procured by the selected Design-Builder.

112. Question: Exterior door elevations indicate aluminum storefront systems at multiple locations. SDA Materials and Systems Standards B2020.30.2 only allows for exterior aluminum framed entrances and storefront systems at main entrance to the school facilities project. Please clarify the door finishes at remaining exterior door locations.

Answer: Refer to the Design-Build Performance Specification Section B2050.00 Exterior Doors and Grilles and Elevation Drawings A-5.0 - 5.3 for additional requirements.

113. Question: Gymnasium as shown is not code compliant and requires a third means of egress direct to the building exterior. This will also require a stair and/or ramp to meet grade.

Answer: See revised sheet 'A-1' for additional information.

114. Question: The cafetorium exterior egress doors are shown with staircases to the exterior. Shouldn't at least one of these stairs be an exterior ramp to allow for barrier free egress from the cafetorium?

Answer: The Cafetorium exterior egress doors shown are additional required egress points. There are (4) paths of egress from the Cafetorium. Barrier-free egress from the cafetorium is provided at two of the four as required and as allowed by presiding codes.

115. Question: The plan as designed will require the main entrance doors to be fire rated for 10' adjacent to the egress stair from the 2nd floor media center. Consider revising the layout to avoid the use of fire rated doors and glazing at main entrance.

Answer: This project has received DOE Schematic Design approval as designed. The successful Design-Builder must comply with all applicable and presiding codes.

116. Question: Will tapered insulation across most of the roof be required, or may it be designed to limit use at edges and drain inlet areas?

Answer: Tapered insulation is to be provided where necessary. Refer to Performance Specifications, Section B3010.50, Products A.2.d. for additional information.

117. Question: May the height between the floors be reduced to 14 vertical feet from the 16 vertical feet show on the schematic architectural elevation drawings?

Answer: See response to question Number 78.

118. Question: Please consider extending the bid date to September 19.

Answer: The bid date has been revised in Addendum #1, dated 8/6/13.

119. Question: Please advise as to the seismic restraints requirements for plumbing and hydronic piping.

Answer: The Design-Builder and its Consultants are responsible for determining all seismic requirements during the design period.

120. Question: Based on the best available flood hazard data, the property lies entirely within zone 'AE', with a minimum elevation of 11'. Can the finished floor elevation be designed and constructed to 11'? Please advise on correct finished floor elevation.

Answer: No. Elevation 13 ft shall remain the first floor elevation.

121. Question: Please advise if the 8,000 gallon underground storage tank reported has been removed and remediated.

Answer: During the demolition of the school, the 8,000 gallon UST was removed and is not part of the DB's responsibility.

122. Question: Please advise if groundwater is contaminated. If so, what are the requirements for treatment and discharge?

Answer: As indicated in the report, there have been exceedances to the NJ DEP GWQS. If the water is to be pumped, the Contractor shall take this information into account when the DB applies for a NJPDES discharge permit and complying with the requirements of the permit (which may include treatment).

123. Question: Does the 'no future action letter' dated May 26, 2011 mean that all environmental issues have been taken care of and that the Design-Build Contractor be given a clean slate with no remediation work required?

Answer: See response to Question No. 122. Also, the site may be subject to any environmental issues discussed in the "No Further Action Letter" referenced above.

124. Question: There are overhead power, cable and phone lines on utility poles on the length of the project site on Myrtle Avenue and Ramsey Avenue. Are these poles to remain in place or is the SDA contracting with utility companies to have them relocated. Please advise.

Answer: Utility poles are to remain in place.

125. Question: Contract Documents include a Preliminary Geotechnical Investigation and Recommendation Report dated May 2013 by Hatch Mott MacDonald; is there a final report?

Answer: The bidder shall consider the all reports final; the title of the report denotes that the geotechnical investigation is to serve as a baseline for the DB. The DB is to conduct their own geotechnical investigation as necessary to complete the design.

126. Question: Please confirm that the NJ Department of Community Affairs, "Best Practices Standards For Schools Under Construction or Being Planned for Construction", is to be followed and adhered to as part of the design-build process.

Answer: Yes, the NJ DCA "Best Practices Standards For Schools Under Construction or Being Planned for Construction", is to be followed and adhered to as part of the design-build process.

127. Question: Material and Systems Standards Section B2020 Exterior Windows Paragraph AA. Notes exterior glazing shall be comprised of 1" sealed insulating units, laminated, tempered, etc., and where required comply with presiding codes and other requirements including but not limited to: NJ Division of Community Affairs, Department of Codes and Standards: "Best Practices Standards for Schools Under Construction or Being Planned for Construction". We have reviewed the Best Practices Standards Document which requires different types and levels of glazing based on the proximity to the securable perimeter (82 feet and 148 feet). Please clarify the securable perimeter and the type/level of glazing to be provided.

Answer: The successful Design-Builder and its Consultants are responsible for identifying the securable perimeter and the type/level of glazing to be provided.

128. Question: Section C 1 0 10.00 Interior Partitions A.2b states "Concrete masonry units shall be used at all other locations, including interior surfaces of exterior walls". We interpret this to mean that all exterior back up wall systems are to be concrete masonry units and cold formed metal framing is not allowed. Please confirm.

Answer: Cold formed metal framing is allowed. Refer to NJ SDA's Materials and Systems Standards, C1010.00, A. 3 for additional information.

129. Question: Has the Keansburg Planning Board performed a courtesy review of the project?

Answer: No. However in accordance with DOE regulations, the Schematic Design documents were submitted to the Keansburg Planning Board pursuant to N.J.A.C. 6A:26, and no further action is required.

130. Question: Will CAD drawings be provided for the Schematic Design to the Design/Build Team?

Answer: CAD files may be made available to the successful bidder subject to written acknowledgement by the bidder that the CAD files are provided as a convenience and without warranty as to their completeness, accuracy or fitness for use on this or any project.

131. Question: For scheduling purposes, please provide the anticipated award date.

Answer: The anticipated time of award for this contract is early November 2013.

132. Question: Please confirm exterior graffiti coating is required to 8'-0" high per section B2010.80 Exterior Wall Supplementary Components.

Answer: Provide graffiti resistant coating on exterior masonry products up to 10'-0" high in all applicable areas. Refer to Design Manual and Performance Specifications Volume 2, Section B2010.00 Performance and Products for additional information.

133. Question: Please advise the status of any pre-design reviews and approvals by City, County and State Agencies.

Answer: Pursuant to the Department of Education regulations, schematic design documents have been submitted to and approved by the Department of Education and Keansburg Public Schools. Submissions were also made to the Keansburg Planning Board and the Keansburg Superintendent of Schools.

134. Question: Design-Build Agreement Paragraph 6.11.2 Security states "One (1) security guard to be present at the project site at all times when the Design/Builder is not on site." Please confirm full time off-work hours security is required.

Answer: Confirmed. A security guard must be present at the jobsite during all off-work hours.

135. Question: Is the Design-Builder responsible for any Connection Fees (sewer, water, etc.), Permit Fees and user Fees?

Answer: Refer to Design-Build Agreement, Section 3.6.1 regarding the Design Builder's obligations with regard to permit fees and connection fees. By way of clarification, the NJSDA will pay all fees payable to DCA for permits and inspections, but will not pay for other permits.

Furthermore, school projects constructed by SDA are statutorily exempt from all connection, tapping, maintenance or capital improvement fees or charges with respect to connection of a school facility to a state or municipal water or sewerage system, pursuant to N.J.S.A. 52:18A-242 (c), which states: "Notwithstanding the provisions of any law, rule or regulation to the contrary and except as otherwise provided by any federal law, the development authority shall be exempt from all connection, tapping, maintenance or capital improvement fees or charges in respect to each connection of any school project with a water or sewerage system operated by a political subdivision or agency of the State."

Accordingly, the Project shall be exempt from such water and sewer connection fees, as broadly defined in the statute. If any difficulties are encountered in the application of the statutory exemption, the Authority will assist the Design Builder in asserting the exemption against any state or municipal water or sewerage system that attempts to charge such fees. The Design-Builder is responsible for all other costs for any utility connections that are not subject to the above exemption.

136. Question: Section 01010 - Summary of Work - Notes the Construction Management firm is to be determined; please provide the name of the CM firm as soon as possible.

Answer: The Construction Management Firm will be procured and engaged subsequent to the Design-Builder award.

137. Question: Drawing EX-I shows existing one-story frame trailers on site; please confirm these are to be removed under this contract.

Answer: Trailers shall be moved off-site by others prior to start of work and are not the DB's responsibility.

138. Question: Are rooftop concrete acoustical equipment slabs required to meet the acoustical performance criteria?

Answer: Refer to the response to question Question Number 14 above.

139. Question: Please advise if a fully ducted return system for the fan coil units in the classrooms is required.

Answer: Yes. Refer to HVAC Systems Descriptions in Section D3000.00 A.8.d.2.e of the Performance Specifications.

140. Question: Drawing A-I Emergency Generator Room C-124 notes the room is 354 SF and is located only 25'-0" from the curb line; this does not appear to meet the acoustical performance criteria for the generator, please advise.

Answer: The generator noise level shall not exceed 70dB(A) at the property line.

141. Question: Specification sections G2030.00, G2050.00, G2060.000 and G2080.00 are listed in the Table of Contents but are missing from our documents, please provide.

Answer: These specification sections are included as attachments in this Addendum.

142. Question: Preliminary Geotechnical report paragraph 6.0 Summary notes "Under foundations, floor slabs, roadways or other structures, the top 1.0 foot of soil shall be removed and replaced with structural fill". Please confirm this recommendation is to be followed.

Answer: This is a minimum recommended geotechnical requirement. If the DB design requires a greater thickness, the DB should adhere to the more stringent requirement.

143. Question: Should the glazing at the gymnasium (and cafetorium) be vision glazing as shown, or should (or could) translucent panels be utilized to prevent students from being blinded by the glare during recreational activities?

Answer: Glazing is to remain as shown. The successful Design-Builder may submit any requested design changes to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

144. Question: There are two (2) rooms identified as B-103: Kindergarten Classroom and Custodial Closet. Please advise/clarify.

Answer: The correct number for the Custodial Closet is 'A-100F'.

145. Question: Why is the Faculty Dining Room #C-104 shown with 12" walls?

Answer: This project has received NJSDA approval as designed, however, the successful Design-Builder may submit any requested design changes to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

146. Question: Elevation D, Sheet A-5 and Elevation F, Sheet A-5.2 show man doors for generator and transformer rooms at grade but the larger doors above grade. Please clarify.

Answer: Doors at grade are for individual service access to these areas and the larger doors are intended for vehicle height access.

147. Question: What are the construction requirements for the Maintenance Storage Building? Can this be a prefab building?

Answer: The Exterior Maintenance Storage building will be an accessory structure intended to store miscellaneous items necessary to maintain the school property. Construction requirements are consistent with overall project construction requirements. The successful Design-Builder may submit any design alternatives to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

148. Question: SDA Material System Standards indicate 12" solid CMU walls to meet STC requirements but plans only show 8" walls. Please clarify.

Answer: The selected Design-Builder must meet minimum requirements as set forth in NJSDA's Materials and Systems Standards and deliver a code compliant, structurally sound, complete school facility as defined by the Design Builder's Information Package. Refer to Section C1010 and C1010.10.5, Table of Assemblies and Materials, for additional requirements regarding STC requirements. Refer also to comment number 15 above.

149. Question: Plumbing chases are not shown at Vocal Music Room C-108; Toilet Room C-110B, Teacher Workroom B-110; Teacher Workroom B-210; Teacher Workroom B-310. Please clarify.

Answer: The successful Design-Builder may submit any requested design changes to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

150. Question: Typical plumbing in classroom casework is not located at plumbing chases. Please clarify.

Answer: The successful Design-Builder may submit any requested design changes to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

151. Question: Can sinks simply be relocated within casework to be located at plumbing chases?

Answer: The successful Design-Builder may submit any requested design changes to the NJSDA, Keansburg Public Schools and Department of Education for review and approval.

152. Question: Addendum #1 states the new bid date as Wednesday, September 4; this is a one day extension from the original date. We are requesting an additional extension of the bid date by at least one week.

Answer: The bid date remains as identified in Addendum #1, dated 8/6/13.

153. Question: Please confirm specification section regarding RTU's. Should they be constant volume RTU's with energy wheels, gas-fired furnaces, HW heating and CW cooling coils?

Answer: Refer to HVAC Systems Descriptions in Section D3000.00 A.8 of the Performance Specifications. DOAS units shall contain HW heating and CHW cooling coils. RTUs shall contain DX cooling coil and gas fired heating section.

154. Question: These sections are listed on the TOC Page 5 of PDF file or (page TC-4) and were not included Volume 2 of the spec's. Please provide.
G2020.00, G2030.00, G2050.00, G2060.00, G2080.00

Answer: These specification sections are included as attachments in this Addendum.

E. CHANGES TO PREVIOUS ADDENDA:

1. Not applicable.

F. ATTACHMENTS

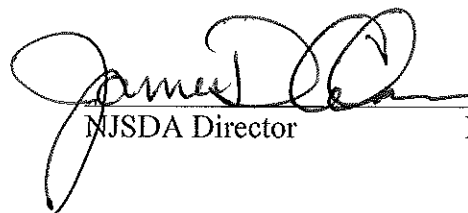
1. Attachment 3.1 Disclosure of Investment Activities in Iran Form.
2. Attachment 3.2 This Attachment Intentionally Omitted.
3. Attachment 3.3 Revised Drawing C-101 Grading Plan, dated August 20, 2013.
4. Attachment 3.4 Revised Drawing C-102 Drainage Plan, dated August 20, 2013.
5. Attachment 3.5 Revised Drawing C-103 Utility Plan, dated August 20, 2013.
6. Attachment 3.6 Revised Drawing S-1 Site Plan, dated August 20, 2013.
7. Attachment 3.7 Revised Drawing A-1 First Floor Plan, dated August 20, 2013.
8. Attachment 3.8 Revised Section G2030.00 "Pedestrian Plazas and Walkways" dated August 20, 2013.
9. Attachment 3.9 Revised G2050.00 "Athletic, Recreational and Playfield" dated August 20, 2013.
10. Attachment 3.10 Revised G2060.00 "Site Development" dated August 20, 2013.
11. Attachment 3.11 Revised G2080.00 "Landscaping" dated August 20, 2013.
12. Attachment 3.12 Sheet Sk-1, Floor Plan at SGI, dated August 20, 2013.
13. Attachment 3.13 Sheet Sk-2, Immersive Learning Floor Plan, dated August 20, 2013.
14. Attachment 3.14 Sheet Sk-3, Partial Roof Plan, dated August 20, 2013.
15. Attachment 3.15 Sheet Sk-4, Revised Elevation "F", dated August 20, 2013.
16. Attachment 3.16 Revised Drawing L-1 Landscape Plan, dated August 20, 2013.

G. SUPPLEMENTAL INFORMATION

1. Site Plan Sheet S-1, dated June 27, 2013: The note in the driveway which reads "Utility Pole Bollard (Typ.)" shall be revised to "Utility Pipe Bollard (Typ.)".
2. Site Plan Sheet S-1, dated June 27, 2013: The Service Yard (3900 sf) shall be paved with reinforced concrete pavement instead of asphalt, from the South wall of the Maintenance Storage Shed to the North side sidewalk.

Any bidder attempting to contact government officials (elected or appointed), including NJSDA Board members, NJSDA Staff, and Selection Committee members in an effort to influence the selection process may be immediately disqualified.

End of Addendum No. 3


NJSDA Director Date 8/22/13



Addendum #3

NJSDA
1 West State Street
Trenton, NJ 08625
Phone: 609-984-8041
Fax: 609-656-4609

Date: August 22, 2013

PROJECT #: ET-0061-B01
New Joseph C. Caruso ES

DESCRIPTION: Addendum No. 3

Acknowledgement of Receipt of Addendum

Contractor must acknowledge the receipt of the Addendum by signing in the space provided below and returning via fax to (609-656-4609). Signed acknowledgement must be received prior to the Bid Due Date. Acknowledgement of the Addendum must be made in Section E.6 of the Price Proposal Submission.

Signature

Print Name

Company Name

Date

NEW JERSEY SCHOOLS DEVELOPMENT AUTHORITY

DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN

NJSDA Contract No: _____ Project Description: _____

Vendor Name and Address: _____

Pursuant to Public Law 2012, c. 25 (codified at N.J.S.A. 52:32-55 et. seq.) (the "Act"), any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the New Jersey Schools Development Authority ("NJSDA") must complete the certification below to attest, under penalty of perjury, that the person or entity, or one of the person or entity's parents, subsidiaries, or affiliates, is not identified on a list created and maintained by the New Jersey Department of the Treasury ("Treasury") as a person or entity engaging in investment activities in Iran. If the NJSDA finds a person or entity to be in violation of the Act or of the principles which are the subject of the Act, the NJSDA shall take action as may be appropriate and permitted by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the person or entity.

CERTIFICATION

County of _____)
) :ss
)
State of New Jersey)

I _____ certify, pursuant the Act, that the person or entity listed above as "Vendor" for which I am authorized to submit a proposal:

- a) is not identified on the list created and maintained by Treasury pursuant to N.J.S.A. 52:32-57(b); and
- b) has not engaged in investment activities in Iran, as defined by N.J.S.A. 52:32-56(f).

I, _____ being duly sworn upon my oath, hereby represent and state under the pains and penalties of perjury, that the foregoing information is true and complete. I attest that I am authorized to execute this certification on behalf of the above-referenced person or entity. I acknowledge that the State of New Jersey is relying on the information contained herein. I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I recognize that I and/or my firm am subject to criminal prosecution, and further penalties as described in N.J.S.A. 52:32-59.

Full Name (Print): _____ Signature: _____

Title: _____ Date: _____

Sworn and subscribed to before me this _____ day of _____, 20__.

Notary Public of _____

My commission expires: _____, 20__.

In the event that the Vendor referenced above is unable to make the above certification because it or one of its parents, subsidiaries, or affiliates has engaged in the above-referenced activities, a **separate detailed, accurate and precise description** of the activities must be provided to the NJSDA under penalty of perjury. Failure to provide such description will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

ATTACHMENT 3.8

SECTION G2030.00

PEDESTRIAN PLAZAS AND WALKWAYS

PERFORMANCE

A. Basic Function

1. Provide pedestrian plazas and walkways as required by the project program and by code, and that are adequate in extent and sufficiently durable to accommodate without damage the types of traffic that can be reasonably anticipated for the facility type and intended user population.
2. Pedestrian plazas and walkways comprise the following elements:
 - a. Exterior plazas and walkways, including surfaces beneath playground surfacing.
 - b. Exterior steps and ramps not connected to buildings, including handrails and stair nosings.
 - c. Pedestrian pavement curbs and gutters.
 - d. Appurtenances for plazas and walkways, including pavement markings and tactile warning strips.
3. Pedestrian plazas and walkways include the following:
 - a. Uncolored concrete pavement.
 - b. Heavy-duty concrete pavement, uncolored.
 - c. Concrete street curbs.
 - d. Mountable concrete curbs.
 - e. Depressed (drop) curbs (ramps) for vehicles and pedestrians.
 - f. Stone (granite) pavers and contrasting pavement bands.
4. Walkways, pedestrian ramps and exterior stairs: Provide paved surfaces as required for pedestrian movement on the site without injury to users or damage to building, landscaping, site furnishings, fencing and appurtenances.
 - a. Minimum widths: As required by code and sized to allow comfortable two-way traffic.
 - (1) Main entrance: 144 in.
 - (2) Secondary entrances and emergency exits: 60 in.
 - (3) Major routes: 60 in.
 - (4) Secondary routes: 48 in.
 - b. Handrails, railings or protective walls: As required by code and when pedestrian surfaces are more than 16 in above adjacent grade.
5. Where pavements and surfacing are integral with elements defined within another element group, meet requirements of both element groups.

6. Brand Names: Where brand names are listed, they represent the Basis of Design unless those items are identified as approved proprietary items in project requirements.
 7. See Section G0000.00, Sitework, for environmental requirements and restrictions.
- B. Amenity and Comfort
1. Accessibility
 - a. Comply with all codes requiring barrier-free access.
 - b. Sloped pedestrian walkways and ramps: To the maximum extent possible, avoid pedestrian walkways with slopes greater than 1:20. Where greater slopes are necessary, provide code-compliant pedestrian ramps with handrails and guards where required.
 - c. Avoid exterior steps to the maximum extent possible. Do not use individual risers.
 2. Stair Comfort
 - a. Steepness: Provide code-compliant exterior stairs with risers of not more than 6 inches in height.
 - b. Landings: Provide exterior stairs with maximum rise of not more than 8 ft between landings.
 3. Appearance
 - a. Pedestrian stairs, ramps and walkways: Provide pedestrian walking surfaces that contrast with vehicular paving and achieve a smooth, consistent appearance.
 - b. Railings, handrails, guardrails and protective walls: Provide materials and finishes that are consistent with building exterior in appearance.
- C. Health and Safety
1. Safety of Pedestrian Surfaces
 - a. Slip resistance: Provide walking surfaces of exterior stairs, ramps, and walkways with a minimum static coefficient of friction of 0.80, measured in accordance with ASTM D2047-2004.
 - b. Stairs
 - (1) Risers: Closed.
 - (2) Treads: Maximum bevel or radius on leading edge of 1/2 inch in, slope to drain.
 - c. Guards, Guardrails or Protective Walls
 - (1) Openings: No openings large enough for a sphere with a diameter of 4 in. to pass through.
 - (2) Minimum height: In accordance with code.
 - d. Pedestrian Ramps at Drop Curbs—All Locations
 - (1) Provide ADA-compliant detectable warning surface tiles with high levels of luminance contrast and conspicuity for pedestrians with visual impairment.
 - (2) Provide detectable warning surface tiles that will sustain dynamic vehicle loading based on AASHTO HS20-44 wheel load test.

(3) Basis of Design: Armor-Tile cast-in-place vitrified polymer composite (VPC) detectable/tactile warning surface tile, with inline tactile truncated dome surface, and integral embedment flange anchoring system as manufactured by Engineered Plastics Inc., Williamsville, NY.

(a) Size: Minimum 2'-0" x 3'-0".

(b) Depth: 1-3/8".

(c) Face thickness: 3/16".

(d) Color: Federal Yellow (No. 33538).

D. Structural

1. Exterior stairs, ramps and elevated walkways: Capable of supporting loads in excess of those required by code.
2. Exterior handrails, guards and guardrails: Capable of resisting forces in excess of those required by code.

E. Durability

1. Service life span of paved surfaces: 25 years, under normally anticipatable usage.

PRODUCTS

A. Pedestrian Areas

1. Use any of the following:
 - a. Uncolored concrete pavement.
 - b. Heavy-duty concrete pavement, uncolored.
 - c. Stone (granite) pavers and contrasting pavement bands.
 - d. Concrete street curbs.
 - e. Mountable concrete curbs.
 - f. Depressed (drop) curbs (ramps) for vehicles and pedestrians.
2. Do not use the following:
 - a. Concrete pavers.
 - b. Asphalt pavers.
 - c. Brick pavers.
 - d. Stamped asphalt.
 - e. Stamped concrete.

B. Exterior Handrails and Guardrails

1. Provide ASTM A53/A53M, Type F or Type S, Grade A, Standard Weight (Schedule 40) steel pipe, unless another grade and weight are required by structural loads.
2. Weld and grind all joints smooth.
3. Provide galvanized tamper-proof inserts, sleeves and other anchorage devices for connecting railings to concrete or masonry work.

4. For railings set in concrete, provide sleeves at least 6" in depth and ½" greater in diameter than railing. Set with nonshrink, nonmetallic grout designed for exterior applications.
 5. Install in a manner that will prevent accumulation of standing water at the base of posts.
 6. Provide factory galvanizing and high-performance finishing in custom colors.
- C. Areas Beneath Exterior Sport and Resilient Surfacing
1. Use any of the following:
 - a. Asphalt paving reinforced with geotextile.
- D. Pedestrian Pavement
- a. Contrasting pavement bands: Provide granite pavers as follows:
 - (1) Basis of Design: Marled Peach or Florid Pink, flamed, by Dunis Stone Inc., Blanco TX.
 - (2) Thermal finish.
 - (3) 12" x 12" x 2" thick.
 - (4) Tight fit with standard edges.
 - b. Set in sand bed retained by steel edging.
 - c. Sweep joints with polymeric sand.
- E. Pavement Markings for Roadways and Pedestrian Pavements
1. Use thermoplastic paint and local standards for crosswalk markings, stop bars and all striping within public right-of-way.
 - a. Basis of Design: Sherwin-Williams Smart Mark Alkyd Thermoplastic Pavement Marking.
 - (1) Comply with AASHTO M249.
 - (2) Extrude at 120-mil thickness and heat fuse.
 - (3) Provide glass traffic beads complying with AASHTO M247 Type 1.
 - (4) Color: White, unless otherwise indicated.
 2. On-Site Striping
 - a. Basis of Design for on-site striping not otherwise indicated: Zoneline Traffic and Zone Marking Paint as manufactured by PPG Architectural Finishes, Inc., Pittsburgh, PA.
 - b. Apply two coats of undiluted Traffic and Zone Marking Paint in accordance with manufacturer's recommendations.

END OF SECTION G2030.00

ATTACHMENT 3.9

SECTION G2050.00

ATHLETIC, RECREATIONAL AND PLAYFIELD AREAS

PERFORMANCE

A. Basic Function

1. Provide athletic, recreational and playfield areas as required by the project program and by code, and that are adequate in extent and sufficiently durable to accommodate without injury to users or damage the types of activities that can be reasonably anticipated for the facility type and intended user population.
2. Athletic, recreational and playfield areas comprise the following elements:
 - a. Exterior playground area sports (court) surfaces.
 - b. Outdoor Play Space rubberized safety playground surface.
 - c. Miscellaneous painted ground games and graphics.
3. Sports surfacing: Provide smooth, seamless, and/or resilient surfacing for athletic activities that have positive surface drainage throughout, and are attractive, non-toxic and low maintenance.
4. Outdoor play space including resilient safety surfacing: Provide smooth and resilient surfacing complying with CPSC Pub. No. 325 under and around all playground equipment including climbing equipment, slides, merry-go-rounds, swings, etc.
5. Brand Names: Where brand names are listed, they represent the Basis of Design unless those items are identified as approved proprietary items in project requirements.

B. Amenity and Comfort

1. Thermal comfort: Provide pavements and surfacing at parking lots with minimum initial reflectivity of 0.3 to reduce solar heat gain.
2. Accessibility
 - a. Comply with all codes with respect to requirements for barrier-free access.
3. Appearance
 - a. Exterior sports surfacing at outdoor play space including basketball court, running track, volleyball court, four square and other miscellaneous ground games and graphics: Provide surfaces that are smooth and colorful, and contrast with adjacent asphalt surfaces and modular concrete walls.
4. Resilience: Provide exterior sports surfacing with inherent flexibility and resilience appropriate for the intended uses and at playground equipment as follows:
 - a. The greater of:
 - (1) Critical height of not less than 4 ft., when measured in accordance with ASTM F 1292 in the Use Zones defined by ASTM F 1487; or
 - (2) Critical fall height as specified by equipment manufacturer.

C. Health and Safety

1. Safety of Surfaces
 - a. Slip resistance: Provide walking surfaces with a minimum static coefficient of friction of 0.80, measured in accordance with ASTM D 2047-2004.
2. Comply with the following:
 - a. ASTM D412 Standard Test Method for Vulcanized Rubber.
 - b. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber.
 - c. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
 - d. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
 - e. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

PRODUCTS

A. Exterior Sports Surfacing

1. Basis of Design: SportMaster ColorPlus four-coat acrylic emulsion court surface system manufactured by ThorWorks Industries, Inc., Sandusky OH.
 - a. Apply to new asphalt surface that has cured for a twenty-eight day period after installation and that is entirely free of dirt, dust and debris.
 - b. Do not apply when surface temperature is below 50 degrees F.
 - c. Apply surface system in strict accordance with the manufacturer's instructions and requirements.
 - d. First coat: Acrylic Resurfacer with Sand (CMT-33).
 - e. Second coat: Neutral Concentrate with Sand (CMT-40) mixed with ColorPlus Concentrate (CMT-39).
 - f. Third coat: Neutral Concentrate with Sand (CMT-40) mixed with ColorPlus Concentrate (CMT-39).
 - g. Fourth coat: Sport Wax Sealer (CMT-18).
 - (1) Note: All line striping and other painted graphics and games are to be completed prior to the application of the Sport Wax sealer.
 - h. The second and third coats shall be the following colors at the following locations:
 - (1) Running Track, color: ORANGE with 2" wide WHITE stripes included within the 4'-0" lane widths.
 - (2) Basketball Courts, color: BLUE with painted regulation striping color: WHITE.
 - (3) Four Square colors: Two opposing squares shall be ORANGE and RED. The second pair of opposing squares shall be YELLOW and LIGHT GREEN.

Squares shall be defined by 2” wide painted WHITE stripes, and identified by minimum 1 ft. tall stenciled capital letters A, B, C and D also painted WHITE.

- (a) The letters A and D must oppose each other.
- (b) The Four Square game court is located within a field of BLUE to match the adjoining half-court basketball courts.
- (4) Volleyball court: BLUE with YELLOW lines.
- (5) Funnel ball: 10-foot diameter circle of contrasting color; coordinate with equipment.
- (6) Tetherball: 20-foot radius circle and markings of contrasting colors; coordinate with equipment. Basis of Design: Tetherball court layout by Northern Arizona University.
- (7) All areas not otherwise specified: LIGHT GREEN.
- i. All courts, shapes and lines shall be accurately laid out, drawn and masked, and in conformance with the requirements of each court or activity.

B. Rubberized Safety Playground Surface

- 1. Basis of Design: PlayBound Poured-in-Place system as manufactured by Surface America, Williamsville, NY.
 - a. Apply to new asphalt surface that has cured for a twenty-eight day period after installation and that is entirely free of dirt, dust and debris.
 - b. Do not apply when surface temperature is below 50 degrees F.
 - c. Apply surface system in strict accordance with the manufacturer’s instructions.
 - d. Color of the EPDM top surface shall be a 50/50 blend of two standard colors as follows: SKY BLUE and TEAL.
 - (1) Play cluster: SKY BLUE AND ROYAL BLUE.
 - (2) Elephant swing: SKY BLUE AND TEAL.
 - e. Install seamless poured-in-place resilient playground top (wear) course to cover all storm drainage inlets within the limits of the resilient surface. Cover all storm drainage inlets with a single layer of approved permeable geo-textile fabric prior to installation of the resilient playground surface.

C. Miscellaneous Painted Ground Games and Graphics

- 1. Basis of Design: 100% acrylic, VOC Compliant, lead free traffic and zone marking paint as manufactured by PPG Architectural Finishes, Inc., Pittsburgh, PA.
 - a. Apply two coats of Zoneline Traffic and Zone Marking Paint to the asphalt surface that has already received one coat of BLACK Acrylic Resurfacer with Sand, and one coat of Stripe-Rite primer.
 - b. For the three variations of hopscotch, all four standard colors of traffic and zone paint shall be used: WHITE, YELLOW, Handicap BLUE and RED. In addition to the four standard colors, RED and a smaller amount of WHITE shall be field mixed to make Pink. Handicap BLUE and a smaller amount of WHITE shall be field mixed to

make Light Blue. RED and YELLOW shall be field mixed to make Orange. RED shall be field mixed with a smaller amount of Handicap BLUE to make Purple.

- c. For the 8 ft. x 8 ft. outdoor chessboard to be painted on the asphalt surface within the playground area, standard colors of traffic and zone paint shall be used: WHITE and YELLOW. The BLACK Acrylic Resurfacer with Sand shall be the finish of the black squares, and the WHITE traffic and zone paint shall be applied to create the white squares. The outside perimeter of the outdoor chessboard is to be outlined by a 2" wide stripe of YELLOW traffic and zone marking paint to further define the chessboard from the surrounding asphalt surface.
- D. Do not use the following within the playground area:
1. Rubber interlocking tile system.

END OF SECTION G2050.00

ATTACHMENT 3.10
SECTION G2060.00
SITE DEVELOPMENT

PERFORMANCE

A. Basic Function

1. Provide all fixtures, equipment (other than that associated with services), and miscellaneous structures located out-of-doors that are required by the project program and that are required as a result of these and other requirements.
2. Site fixtures and equipment that shall be provided include:
 - a. Fences and Gates
 - (1) Ornamental steel picket fence
 - (2) Welded wire security fence.
 - b. Site Furnishings
 - (1) Play equipment.
 - (2) Basketball backstops.
 - (3) Volleyball system.
 - (4) Bicycle racks.
 - (5) Exterior shelter structures.
 - (6) Exterior table and bench units.
 - (7) Exterior benches.
 - (8) Pole pads.
 - c. Flagpole and American Flag
 - d. Modular Concrete Walls
 - (1) Modular concrete seat and planter walls with cap stones.
 - e. Site Specialties
 - (1) Utility pipe bollards.
 - (2) Tree grates.
3. Where site fixtures and equipment elements also must function as elements defined within another element group, meet the requirements of both element groups.
4. Brand Names: Where brand names are listed, they represent the Basis of Design unless those items are identified as approved proprietary items in project requirements.

B. Health and Safety

1. Safety
 - a. All site fixtures and equipment shall comply with applicable codes and standards for safety.

2. Accessibility
 - a. All site fixtures and equipment shall comply with applicable codes and standards for barrier-free access.
- C. Structure
 1. All site fixtures and equipment shall be constructed of materials strong enough to resist forces generated by normal wear and tear and attempted forcible removal.
- D. Durability
 1. Service Life
 - a. Minor site structures: Same as for equivalent building elements.
 - b. Other fixed site improvements: Fifteen years under normal use and weather.
 - c. Athletic nets: Five years under continuous weather exposure.
 2. Provide tamper-proof anchorage to concrete foundation for all fixtures, equipment and structures unless otherwise noted.

PRODUCTS

- A. Fences and Gates
 1. Provide the following:
 - a. Ornamental Steel Picket Fence
 - (1) Basis of Design: Montage II, (ATF) Welded Steel Ornamental Fence, manufactured by Ameristar Fence Products, Tulsa OK.
 - (2) Steel material for fence panels shall conform to the requirements of ASTM A653/A653M with minimum yield strength of 45,000 PSI.
 - (3) All steel shall be hot-dip galvanized, with a minimum hot-dip zinc coating weight of 0.90 oz./sq. ft. (coating designation of G-90).
 - (a) All interior surfaces of tubes formed from uncoated steel sheet shall be hot-dip galvanized to meet the same standard.
 - (4) The fence system shall be capable of meeting the vertical load, horizontal load, and infill performance for industrial weight fences under ASTM F2408.
 - (a) Fence panels shall be capable of supporting a 400 lb. load applied at mid-span without permanent deformation.
 - (5) Style: Genesis (G), three rail standard, 4" nominal picket spacing.
 - (6) Panel Height
 - (a) 8'-0" at generator and trash enclosures.
 - (b) 6'-0" at all other locations.
 - (7) Panel length: 8' (nominal).
 - (8) Fence rails: 1-3/4" x 1 3/4" x 12 ga. tubing, with pre-punched picket holes spaced no more than 4.1715" o.c.

- (9) Fence pickets: 1" square x 14 ga. tubing. Pre-punched picket holes in the rails shall be spaced no more than 4.1715" o.c. in all
 - (10) Posts
 - (a) Line posts: minimum 2-1/2" high tensile galvanized steel square tube.
 - (b) End, corner, and gate posts: minimum 3" x 3" high tensile galvanized steel square tube.
 - (c) Post spacing shall not exceed manufacturer's recommended spacing.
 - (11) Hardware: Tamper-resistant hardware supplied by the fence manufacturer.
 - (12) Finish: Manufacturer's inline electro-deposition epoxy/acrylic coating process complying with the coating performance criteria of ASTM F2408.
 - (a) Minimum cumulative coating thickness: 2 mils.
 - (b) Color: Bronze (N).
 - (c) Touch-up paint: Provide two aerosol cans of matching touch up paint.
 - (13) Field touch-up painting process: Remove all metal shavings and burrs. Apply an approved zinc-rich metal primer to all cut edge or drilled holes. Apply two coats of matching touch-up paint supplied by the manufacturer..
 - (14) Installation: All posts are to be set in 10" dia. x 3'-6" deep concrete footings. Concrete is to be a minimum of 3,500 PSI. The tops of the concrete footings are to be recessed a minimum of 6" below adjacent concrete sidewalks or adjacent asphalt surfaces. In asphalt areas, the tops of the concrete footings are to be finished so as to pitch slightly, to direct water away from the base of the posts. Fence panels are to be installed level and stepped as required to follow grade.
 - (15) Gates: Matching all welded construction and finish to match adjacent fencing except with flush bottoms. Gates are to be fabricated using 1-3/4" x 1 3/4" x 12 ga. double channel rail, 2" sq. x 11 ga. gate ends and 1" sq. x 14 ga. pickets. Gates 6 ft. wide or wider will have an additional 1-3/4"sq. x 14 ga. intermediate upright. Gusset plates are to be welded to all upright to rail intersections. Cable trussing is to be provided for all gates leaves 6 ft. or wider.
- b. Welded Wire Fence
- (1) Basis of Design: Omega II Fence Systems, as manufactured by Metaltech-Omega Inc., Laval, Quebec, Canada.
 - (2) Style: Elite Double Wire Fence.
 - (3) Fence panels: Panels to consist of one vertical cold-rolled steel wire between two horizontal cold-rolled steel wires. All cold-rolled steel wire is to be 6mm (0.236") in diameter. As per ASTM-A185, the wires are welded by resistance at each crossing point to form rectangles 1-15/16' x 7-7/8". The cold-rolled wire shall have break strength of 3,150 lb.
 - (4) Fence panel orientation: Panels will be fabricated (and installed) with the ends of the vertical wires extending 1" from the first horizontal wire, thereby creating a spiked top. The bottom ends of the vertical wires are to be cut flush.

- (5) Posts: All posts, including corner, end and gate posts, to be 3" sq., 11 ga., cold-rolled from 1008 grade steel and meet ASTM 513-00 and ASTM A787-01, G90 zinc coating. Post spacing not to exceed manufacturer's recommended spacing.
 - (6) Line post installation: In-ground, which requires a minimum of a 2'-0" post embedment. Maximum horizontal load of 3"x3" posts with 6' panels is 922 lbs.
 - (7) Gate post installation: In-ground, which requires a minimum of a 3'-0" embedment. 3" x 3" posts are required for openings up to 6 ft. wide. For larger openings, follow manufacturer's recommendations for larger sized posts.
 - (8) Universal bracket kits: Six (6) required per 6 ft. ht. panel.
 - (9) Special panel fitting (SPF) kit: Required where fence is attached to building or other enclosure rather than to an end post.
 - (10) Hardware: Tamper-resistant hardware supplied by the fence manufacturer.
 - (11) Finish: The manufactured fence panels shall be coated with 1.6 oz. /sq. ft. hot-dipped galvanized (zinc GAW) in conformance with ASTM A123/A123M. Posts, caps, hinges, bracket kits, gate members etc., shall be zinc coated (galvalume process) (0.9 oz. /sq. ft.) as per ASTM A787-01. The polyester top coating is to be a minimum of 4 mils thick, applied by an electrostatic method. The coating performance shall meet or exceed the performance criteria of ASTM D 3359 – Method B; ASTM D 2794; ASTM B 117; and ASTM D 2247.
 - (12) Color: Taupe Brown (optional/textured).
 - (13) Field touch-up process: Follow manufacturer's recommendations to avoid negating the manufacturer's warranty.
 - (14) Swing gates: Matching all welded construction and finish. Swing gates to be fabricated in accordance with ASTM F900 using fully welded galvanized 2" x 2" square steel tube. Gate hardware is to conform to ASTM F900. Hinges, latch, drop rods, to be hot-dipped galvanized steel, and sized to assure proper operation. All non-moving parts to be matching polyester top coated.
- c. Gate Hardware
- (1) Provide minimum two heavy-duty non-removable hinges per leaf.
 - (2) Exit gates: Provide emergency egress UL-listed exit devices on each leaf. Provide heavy-gauge matching mounting plates, strike plate receiver mounting points, and tamper-proof shield to prevent the emergency egress hardware from being manipulated from the exterior.
 - (3) Non-exit vehicular gates: Provide non-removable hinges at each rail; fork-style gravity latch and integrated padlock hasp and eye.
- d. Pivot Gates
- (4) Basis of Design: Continental Gate Co. Evolution Series, with panels to match fence.

B. Site Furnishings

1. Play equipment

- a. Basis of Design: Pipeline Series play equipment, manufactured by Columbia Cascade Company, Portland, OR.
 - (1) Model No. 9891, complete.
 - (2) KidSpinner, Model No. 1630-5-22-PL; color yellow.
 - (3) Whirl Around, Model No. 1630-6-12-PL; color orange.
 - (4) Net Climber, Model No. 7839-W1; color blue.
- b. Double Elephant Swing
 - (1) Basis of Design: Double Arch Swing #ES2000 by Elephant Play; color blue.
- c. Funnel Ball
 - (1) Basis of Design: Provide one each:
 - (a) One Triple Shoot-Out by Playworld Systems.
 - (b) One Burke Basics Model 590-0062.
- d. Tether Ball
 - (1) Basis of Design: Burke Basics Model 590-0003. Provide two.

2. Basketball backstops

- a. Basis of Design: Heavy-duty adjustable-height basketball backstop with aluminum-trimmed, steel-framed and angle-braced glass backboard manufactured by Escalade Sports, Evansville, IN.
 - (1) Model No. B3101, Goalrilla CV-72 Basketball System – adjustable from 7 ½ ft. to 10 ft. goal height.
- b. Provide anchoring system consisting of manufacturer's mounting plates and anchor bolts set in reinforced 3,500 PSI concrete footings of a minimum diameter of 16" by 48" in depth, as specifically recommended by the manufacturer.
- c. Assemble and install basketball backstops using factory supplied hardware only, in accordance with manufacturer's instructions.
- d. Provide manufacturer's fitted pads for backboard bottom edges and goal posts.

3. Volleyball System

- a. Basis of Design: Spectrum Complete Recreational Volleyball System by First Team Sports, Inc., adjustable from 42" to 96".
- b. Provide anchoring system consisting of manufacturer's floor sockets set in reinforced 3,500 PSI concrete footings of a minimum diameter of 16" by 48" in depth, as specifically recommended by the manufacturer.
- c. Assemble and install complete volleyball system using factory supplied hardware only, in accordance with manufacturer's instructions.
- d. Provide manufacturer's fitted post pads and robe covers.

4. Bicycle racks
 - a. Basis of Design: Bike racks manufactured by Belson Outdoors, North Aurora, IL.
 - (1) Model No. G8-G-IG, Genesis Bike Rack, four hoops, in-ground mounted.
 - (a) Finish: Manufacturer's standard hot dipped galvanized.
 - (b) Quantity: Two.
 - (2) Provide optional two-piece Grout Covers, Model No. GC-238, spun aluminum.
 - (a) Quantity: Two grout covers per bike rack.
5. Exterior shelter structure
 - a. Basis of Design: Exterior shelter structure manufactured by PorterCorp, Holland, MI.
 - (1) Scorpio shade structure, 16' size.
 - (2) Quantity: Two.
 - (3) Provide alternating stripes of fabric in school colors.
 - (4) Provide cut-out and recessed weatherproof receptacle in post.
6. Exterior table and bench units
 - a. Basis of Design: Exterior table and bench units manufactured by Dumor, Inc., Mifflintown, PA.
 - (1) All aluminum frame picnic tables with welded table top and seat braces, 8 Ft. Model No. 156-80PL, and 8 ft. accessible Model No. 156-68-1PL.
 - (a) Standard mill finish frame.
 - (b) Frames: 1-7/8" O.D. aluminum pipe and 3" x 2" x 3/16" aluminum angle.
 - (c) Table top braces: 1-5/16" O.D. aluminum pipe and 3" x 2" x 3/16" aluminum angle.
 - (d) Seat braces: 3" x 2" x 3/16" aluminum angle.
 - (e) Table tops and seats: High-density polyethylene recycled plastic lumber, Color: Cedar.
 - (2) Quantity: Four of Model No. 156-80PL; two of Model No. 156-68-1PL.
7. Exterior benches
 - a. Basis of Design—Backless Benches: DuMor Model No. 425-34, color Argento, with S-1 anchorage.
 - (1) Quantity: As indicated.
 - b. Basis of Design—Wall-Mounted Benches: 6-foot Victory Bench, Model No D1102 with perforated metal seat, as manufactured by Anova, St. Louis, MO.
 - (1) Quantity: As indicated.
8. Pole Pads
 - a. Basis of Design: Safety pole pads by ASI; 6' length.

(1) Provide pole pads for tetherball, funnel ball and shelter structures.

C. Flagpole and American Flag

1. Basis of Design: Ground mounted tapered aluminum flagpole manufactured by American Flag and Flagpole Company, Lake Elmo, MN.
 - a. Independence Series – internal halyard aluminum flagpole; 35 ft. exposed height, overall length 38.5 ft., 6 inch base diameter, 3 inch top diameter, 0.156 inch wall thickness.
 - b. Features/Accessories:
 - (1) Pole: All new seamless 6063 aluminum tubing with uniform conical taper. Includes reinforced flush mounted door with cylinder lock.
 - (2) Finial: Gold anodized ball/truck with dual sealed stainless steel bearings.
 - (3) Truck: Revolving cast aluminum ball/truck assembly with internal pulley and dual sealed bearings.
 - (4) Halyard: Stainless steel aircraft grade cable, with two stainless steel snap hooks and quick link.
 - (5) Retainer ring: Beaded nylon over stainless steel cable.
 - (6) Counterweight: 7-lb. neoprene-coated.
 - (7) Winch: Direct drive stainless steel with automatic brake feature and removable handle.
 - (8) Collar: To match flagpole, sized 1 inch larger than foundation sleeve.
 - (9) Foundation sleeve: 16-ga. hot dipped galvanized corrugated steel tubing welded to a square steel base plate. A $\frac{3}{4}$ inch diameter grounding rod is welded to the base plate. Centering wedges to be welded to the inside of the assembly to aid in flagpole alignment.
 - (10) Finish: Standard satin brushed aluminum.
 - (11) Quantity: One.
 - c. American flag: Size 6 ft. x 10 ft. Highest quality sewn polyester, with fully embroidered stars, canvas heading and brass grommets. Basis of Design: Valley Forge or Super Tough Brand.
 - d. Flagpole lighting: Commercial grade 20-watt double LED flagpole downlight/truck combo, for use with rope-based internal halyard flagpoles up to 40 ft. ht. ETL Listed, cast aluminum lights with aircraft grade aluminum lens rings. Provide complete kit with elbows, truck-mounted junction with ornament adapter, 40 ft. lead, dual enclosure and driver. Control with central digital light control system.

D. Modular concrete walls

1. Basis of Design: Modular concrete seat and planter walls, with pre-fabricated corner unit blocks and cap stone blocks, manufactured by Techo-Bloc, Pen Argyl, PA.
3. The face of the seat wall block is to be installed vertically by placing the supplied high-density polyethylene connectors in the back grooves of the Semma block. All corner block

and cap stones are to be glued in place by using exterior grade concrete adhesive approved by the block manufacturer.

4. Provide Geogrid reinforcement in accordance with manufacturer's engineering criteria.
 2. Cap planter walls with bullnose cap and coping, aged texture block code 3070.
 3. Install bullnose face of cap block facing toward the play area on the seat walls.
 4. Color
 - a. Seat wall block: Sandlewood #01.
 - b. All bullnose cap and coping block: Shale Grey #08.
 5. Installation height: Step walls to maintain an exposure of uniform between 14" – 16" above finish grade, including thickness of the cap block.
- E. Site Specialties
1. Utility pipe bollards
 - a. Provide custom-fabricated utility pipe bollards consisting of lengths of 8" dia. schedule 40 steel pipe; provide at parking lot and service court only.
 - (1) Provide steel pipes 6'-0" long overall, with two ½" dia. holes drilled 6" up from the bottom to accept a 12" long steel dowel pin welded to pipe walls.
 - (2) Exposed portion of bollard shall be 3'-6" above adjacent finish grade.
 - (3) Fill pipes completely with concrete after installation.
 - (4) Dome concrete surface above the top of the pipe; finish neatly to prevent water infiltration.
 - b. Provide 18" dia. x 3'-6" deep concrete footing at each utility bollard location. Recess footing top a minimum of 6" below adjacent concrete sidewalk or asphalt surfaces.
 - c. Finish
 - (1) Apply G90 galvanizing and two full wet shop-applied coats of metal primer to inside and outside surfaces and all edges of pipes after fabrication.
 - (a) Primer Basis of Design: Krylon K00024000 galvanized metal primer.
 - (2) Apply two coats of oil-based exterior gloss enamel after installation and concrete filling.
 - (3) Top coat color: Federal (safety) yellow.
 2. Tree Grates
 - a. Basis of Design: Neenah Enterprises, Inc., Neenah, WI. Model #R-8717, 60" x 60" cast iron grate, with 36" tree opening and #R-8500 Type U frame.

END OF SECTION G2060.00

ATTACHMENT 3.11
SECTION G2080.00
LANDSCAPING

PERFORMANCE

A. Basic Function

1. Provide landscaping as indicated over all areas of the site not finished with paving, surfacing, or buildings.
2. Design-Builder shall prepare the planting areas, install the plant medium, plant material and maintain the landscape installation through acceptance and during the subsequent two (2) calendar year maintenance period.
3. Plant material as described, shall be nursery grown. All plant material shall conform to the American Standard of Nursery Stock, Standard ASA Z 60.1, American Association of Nurserymen, Washington DC.
 - a. Sizes of plant material: Measurements of trees and shrubs shall be taken when their branches are in a normal position. Height and spread dimensions specified in the Plant Schedule refer to the main body of the plant, not from branch tip to tip. Caliper of trees shall be taken twelve inches above ground level.
 - (1) Trees and shrubs larger than specified in the Plant Schedule are acceptable.
 - b. The following types of plantings are required:
 - (1) Street tree plantings.
 - (2) Ornamental tree plantings.
 - (3) Shrub plantings.
 - (4) Groundcover plantings.
 - (5) Ornamental grasses.
 - c. Substitutions may be permitted only if proof is submitted to the owner that specific plants or sizes are unobtainable.
 - d. Balled and burlapped plants that have cracked or broken balls prior to or during planting operations are not to be planted and must be replaced.
 - e. Permanent erosion control plantings are not required.
4. A permanently installed irrigation system shall not be required or provided. Provide conveniently located and appropriately sized tamper-proof water connections for standard hoses. Hoses shall be provided by the school district.
5. Provide non-permanent irrigation equipment and appurtenances as required to accomplish maintenance activities during the two-year maintenance period.
6. Where landscaping elements also must function as elements defined within another element group, meet the requirements of both element groups.
7. Brand Names: Where brand names are listed, they represent the Basis of Design unless those items are identified as approved proprietary items in project requirements.

B. Amenity and Comfort

1. Convenience

- a. Hose connections: At intervals as required so that hoses can reach all areas to be watered, using hoses of not more than 100 feet in length.

2. Appearance

- a. Plants: Arranged and planted for acclimation to local micro-climate, and pleasant, healthy and upright appearance throughout the year.
 - (1) Provide the landscape design using the specified trees, shrubs, and ground covers, as shown in the Basis of Design.
 - (2) Provide a neat and tidy urban landscape.
 - (3) Provide a landscape that will look complete within two years after planting, and that will remain of basically the same appearance indefinitely without significant pruning.
- b. Plants in Beds: Mulched for a tidy appearance.
- c. Mulch: Use double-shredded hardwood mulch, installed at a minimum consistent depth of 3", installed after all plant material has been installed.

C. Health and Safety

1. Accidental Injury

- a. The ground cover plant material used must be non-toxic if accidentally ingested.

2. Potable Water Contamination

- a. Prevent contamination of the potable water supply during landscape watering activities prior to acceptance, and during the subsequent two-year maintenance period.

D. Quality and Durability

1. Service Life: It is understood that survival of plant material is dependent on original condition and weather conditions as well as routine maintenance. The Design-Builder is responsible for supplying, and properly installing, healthy vigorous plants, and subsequently maintaining those plants during the two-year maintenance period.

- a. Topsoil for backfill: Suitable for growing the plants provided, with adequate organic content and nutrients for the first two years of growth, based on recommendations of established authorities, meeting the minimum standards set forth in the NJDOT specifications.
- b. Provide professional comprehensive regularly scheduled landscape maintenance services of all plants and mulched beds (including weeding of planting beds and tree pits) during the first two years after completion and acceptance.
- c. At the end of the first year of the two-year maintenance period after completion and acceptance, if any plants are dead or dying in the opinion of the owner's representative, replace them with new matching plants. Replacement plants shall be maintained for the duration of the two-year maintenance period.

2. Insects, Disease and Damage: All plants are to be free of damage, injury, insect infestation or the presence of disease at the time of delivery to the project. Any and all plants that are damaged, or appear to be infested or diseased are to be immediately removed from the project and not returned. All plant material shall have well-developed root systems.
- E. Operation and Maintenance
1. Irrigation Water Source: Same as building supply.
 2. Water Conservation
 - a. Despite the fact that a permanent irrigation system is not required, conserve water wherever possible through the use of hand watering and soaker hoses during the maintenance period.

PRODUCTS

- A. Plant materials: See Plant Schedules.
- B. Mulch
1. Double-shredded hardwood mulch, natural dark brown in color, which includes no construction debris or other deleterious material or litter.
 - a. Install a 3” thick (minimum) continuous layer in all tree pits and planting beds after installation of plant material.
- C. Root Barrier
1. Basis of Design: Century Root Barrier as manufactured by Century Products.
 - a. CR-PE Series, 2’-0” tall x 0.060” thick black polyethylene with ultraviolet inhibitors, molded with root-deflecting ribs, supplied in rolls.
 - b. Install the root barrier using the “surround application” installation method, completely surrounding the root ball with the extent of barrier overlap at the seam as recommended by the manufacturer.
 - c. Root barrier shall be installed with the top of the barrier positioned ½” below the elevation of the surrounding pavement (sidewalk or asphalt) surface, not at the tops of adjacent curbs or walls where present.
 - d. Root barrier to be installed vertically, with the root deflecting ribs facing the plants. Care shall be taken to not allow topsoil backfill to become lodged between the surrounding hardscape edges and the outer face of the root barrier. Do not distort the root barrier during installation.
 - e. Follow all manufacturers’ recommendations for splicing rolls and securing the cut ends of the root barrier with the approved sealant and mechanical fasteners.
- D. Fertilizer
1. Basis of Design: Agriform 20-10-5 Planting Tablets Plus Minors, as manufactured by The Scots Company LLC.
 - a. Provide 21-gram size slow-release Agriform Tablets for all shrubs and trees (Stock No. 90026).

- b. Provide 5-gram size slow-release Agriform Tablets for all groundcover plants (Stock No. 90915).
- c. Install tablets as follows: Position plant in hole and backfill halfway up the root ball. Place tablet(s) beside the root ball, approximately 1 inch from the root tips. Do not place tablets in the bottom of the hole. Complete topsoil backfill, tamp, water-in and mulch.
- d. Fertilizer tablet application rates:
 - (1) Perennials and ground cover in 1 gal. size containers – place one 5-gram fertilizer tablet per plant.
 - (2) Shrubs in 1-gal. size containers – place one 21-gram fertilizer tablet per plant.
 - (3) Shrubs in 3-gal. size containers – place two 21-gram fertilizer tablets per plant.
 - (4) Trees of varying sizes – place one 21-gram fertilizer tablet for every ½” of caliper size.

E. Topsoil Amendments

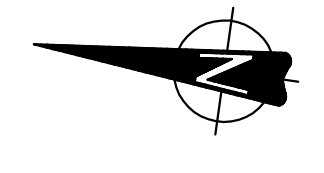
- 1. Topsoil for planters, planting beds and tree pits shall be NJDOT approved, and supplemented with well-rotted manure or finished, screened leaf compost at a ratio of 2/3 topsoil to 1/3 manure or compost by volume.
- 2. Amended topsoil backfill shall be placed in all planters, planting beds and tree pits to a minimum depth of 2’-0”, or to the full depth of the root balls whichever is greater.
- 3. Hydrophilic polymer crystals shall be added to the amended topsoil, to increase moisture retention as follows:
 - a. Basis of design: TeraGel (T-200) as manufactured by Terawet Ventures, San Diego, CA.
 - (1) Incorporate and thoroughly mix in, as an additional bulk amendment into the amended topsoil backfill, 2-1/2 lbs. (dry weight) of hydrophilic polymer crystals per cubic yard of amended topsoil.
 - (2) In addition to the bulk application described above, add the following quantities of hydrophilic polymer crystals directly into the tree/plant pits when they have been backfilled to the half-way point:
 - (a) Ground cover in 6” size pots – no additional hydrophilic polymer crystals required.
 - (b) Shrubs in 1-gal. size containers – place and evenly distribute an additional 3 tsp. of hydrophilic polymer crystals.
 - (c) Shrubs in 3-gal. size containers – place and evenly distribute an additional 5 tsp. of hydrophilic polymer crystals.
 - (d) Trees 2” to 2-1/2” cal. size – place and evenly distribute an additional 3 tsp. of hydrophilic polymer crystals.
 - (e) Trees 2-1/2” to 3” cal. size – place and evenly distribute an additional 5 tsp. of hydrophilic polymer crystals.

- (f) Trees 3-1/2" to 4" cal. size – place and evenly distribute an additional 7 tsp. of hydrophilic polymer crystals.

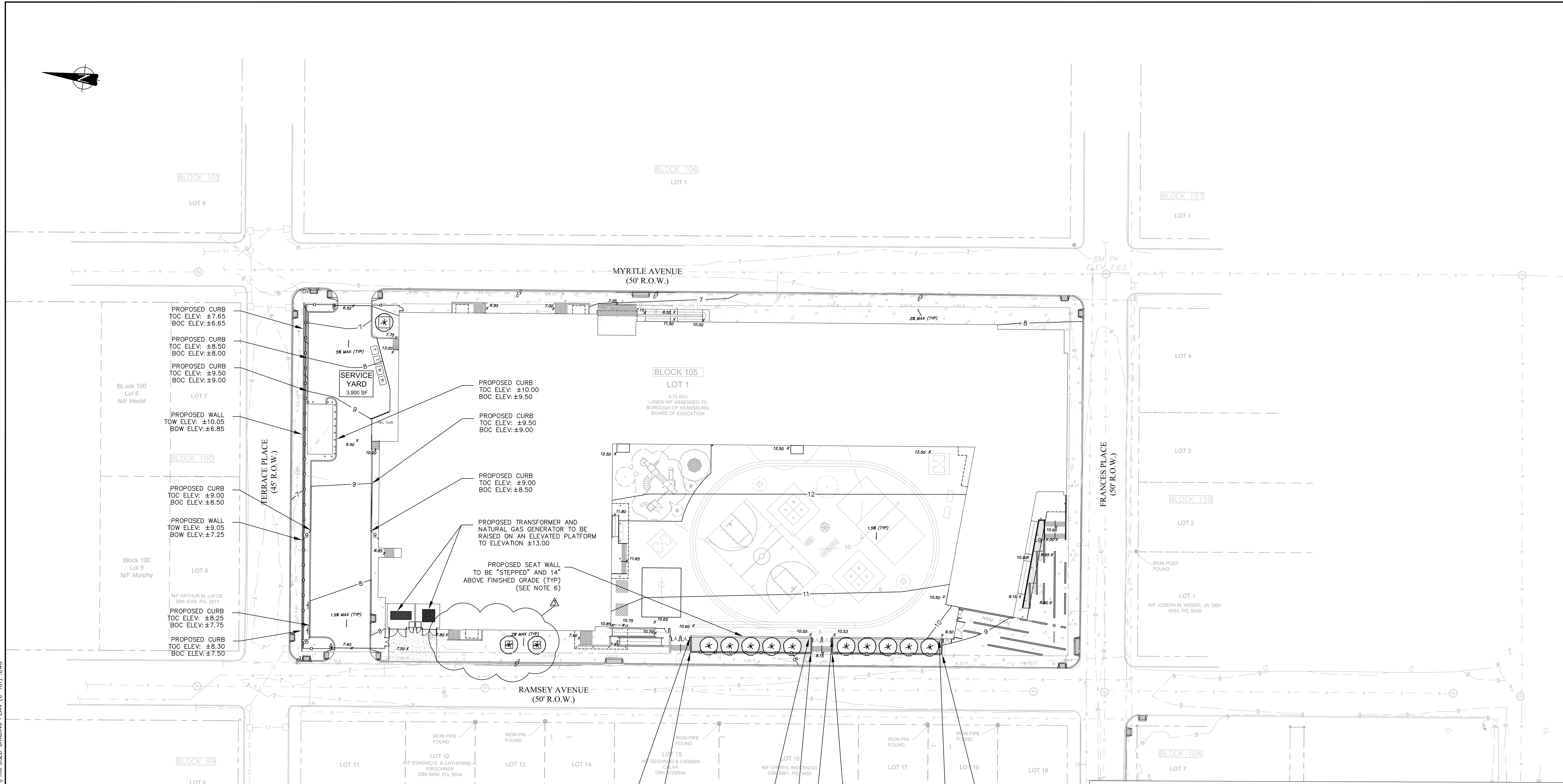
METHODS OF CONSTRUCTION

- A. Perennials and groundcover: Groundcover shall be supplied in pots, and be at least one year old, with sufficient root growth to hold soil in place when removed from the pot.
- B. Trees and shrubs
1. Trees and shrubs shall be planted immediately upon delivery to the job site. Trees and shrubs that cannot be planted the day of delivery shall be set on the ground and be well protected with a layer of wet saw dust or mulch and watered daily.
 2. Trees and shrubs shall be planted so that their original root crown is flush with, or slightly above, finish grade when in final vertical position. When tree and shrub pits/beds are backfilled approximately 2/3 full, water thoroughly, saturating the root ball, and eliminating all air pockets, before completing the backfilling process.
 3. All plants shall be mulched within two days after planting.
 4. All deciduous trees are to be staked and guyed using high quality commercial grade materials and techniques. Routine maintenance shall include the periodic tightening, adjusting and replacement of staking and guying materials. All stakes and guying materials are to be removed and properly disposed of by the Design-Builder upon completion of the two-year maintenance period.
 5. Pruning shall be done in accordance with standard horticultural practice, to preserve the health, natural character, form and symmetry of the plant material.
 6. Upon completion of the landscape installation, the Design-Builder shall dispose of all refuse and surplus materials, equipment and appurtenances from the job site, and leave the entire area and public thoroughfares broom clean.
- C. Seeding to Restore Areas Disturbed by Construction.
1. Follow seed bed preparation techniques and procedures identical to other non-wildflower seed bed areas.
 2. Utilize industry-standard one-step hydroseeding practices to re-establish areas of existing turf disturbed or damaged during construction
 3. Remove any hydroseeding slurry overspray immediately.

END OF SECTION G2080.00



F:\323335 - NJSDA CARUSO SCHOOL - DESIGN SUPPORT SERVICES\ - DRAWINGS\INTERNALLY PRODUCED\MAP DELIVERABLES TO SDA_081313\PROPOSED GRADING PLAN (C-101).DWG



PROPOSED CURB
TOC ELEV: ±7.65
BOC ELEV: ±6.65

PROPOSED CURB
TOC ELEV: ±8.50
BOC ELEV: ±8.00

PROPOSED CURB
TOC ELEV: ±9.50
BOC ELEV: ±9.00

PROPOSED WALL
TOW ELEV: ±10.05
BOW ELEV: ±6.85

PROPOSED CURB
TOC ELEV: ±9.00
BOC ELEV: ±8.50

PROPOSED WALL
TOW ELEV: ±9.05
BOW ELEV: ±7.25

PROPOSED CURB
TOC ELEV: ±8.25
BOC ELEV: ±7.75

PROPOSED CURB
TOC ELEV: ±8.30
BOC ELEV: ±7.50

PROPOSED CURB
TOC ELEV: ±10.00
BOC ELEV: ±9.50

PROPOSED CURB
TOC ELEV: ±9.50
BOC ELEV: ±9.00

PROPOSED CURB
TOC ELEV: ±9.00
BOC ELEV: ±8.50

PROPOSED SEAT WALL
TO BE "STEPPED" AND 14"
ABOVE FINISHED GRADE (TYP)
(SEE NOTE 6)

PROPOSED SEAT WALL
TOW ELEVATION: ±11.70
BOW ELEVATION: ±10.50

PROPOSED SEAT WALL
TOW ELEVATION: ±11.72
BOW ELEVATION: ±10.55

PROPOSED WALL
TOW ELEVATION: ±9.65
BOW ELEVATION: ±8.13

PROPOSED SEAT WALL
TOW ELEVATION: ±11.70
BOW ELEVATION: ±10.54

PROPOSED WALL
TOW ELEVATION: ±9.65
BOW ELEVATION: ±8.15

PROPOSED WALL
TOW ELEVATION: ±9.65
BOW ELEVATION: ±8.45
(SEE NOTE 7, TYP)

- NOTES:**
- EXISTING AS-BUILT SURVEY CONDUCTED BY GEOD CORPORATION ON FEBRUARY 15, 2013 FOR THE NEW JERSEY SCHOOLS DEVELOPMENT AUTHORITY (NJSDA). BASEMAP USED WITH PERMISSION FROM THE NJSDA.
 - HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83) AND THE VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).
 - GRADING SHOWN IS PRELIMINARY AND FINAL GRADING SHALL BE UP TO THE DESIGN-BUILD CONTRACTOR.
 - BOTTOM OF STAIR AND RAMP ELEVATIONS SHOWN ARE PRELIMINARY. FINAL STAIR AND RAMP ELEVATIONS SHALL BE ACCORDING TO THE DESIGN-BUILD CONTRACTOR AND SHALL CONFORM TO LOCAL AND STATE BUILDING CODE.
 - NEW CURBING TO BE 6" ABOVE ROADWAY.
 - TOP OF SEAT WALL SHALL BE "STEPPED" AND SHALL BE 14" ABOVE FINISHED GRADE.
 - TOP OF PROPOSED WALL SHALL BE "STEPPED" AND THE REVEAL SHALL RANGED BETWEEN 12"-18". THE HEIGHT BETWEEN THE PROPOSED SEAT WALL AND THE PROPOSED WALL SHALL NOT EXCEED 28".



Legend	
GAS VALVE	●
WATER METER	⊕
FIRE HYDRANT	⊕
WATER VALVE	⊕
SANITARY MANHOLE	⊕
UTILITY POLE	⊕
SPOT ELEVATION	7.60 x
BOUNDARY CORNER	●
SIGN	⊕
PROPERTY CORNER	○
TELEPHONE LINE	— T —
SEWER LINE	— S —
GAS LINE	— G —
OVERHEAD ELECTRIC LINE	— OH —
WATER LINE	— W —
RIGHT-OF-WAY LINE	— — — —
CURB LINE	— — — —
PROPOSED CURB LINE	— — — —
STORM SEWER LINE	— ST — ST —
PROPOSED CONTOUR	— 9 —
EXISTING CONTOUR	— 8 —
PROPOSED CURB/WALL	— — — —
PROPOSED FENCE	— □ —
PROPOSED FLAGPOLE	⊕
PROPOSED PAVEMENT BANDS	— — — —
PROPOSED SPOT ELEVATION	7.60 x

NEW JERSEY SCHOOLS DEVELOPMENT AUTHORITY
KEANSBURG, NJ
JOSEPH C. CARUSO E.S.
PROPOSED GRADING PLAN

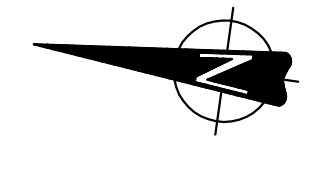
Hatch Mott MacDonald
Certificate No. 240A28075000
27 Bleeker Street
Milburn, New Jersey 07041

JOSEPH J. KOEHLER
Professional Engineer - N.J. Lic. No. 38976

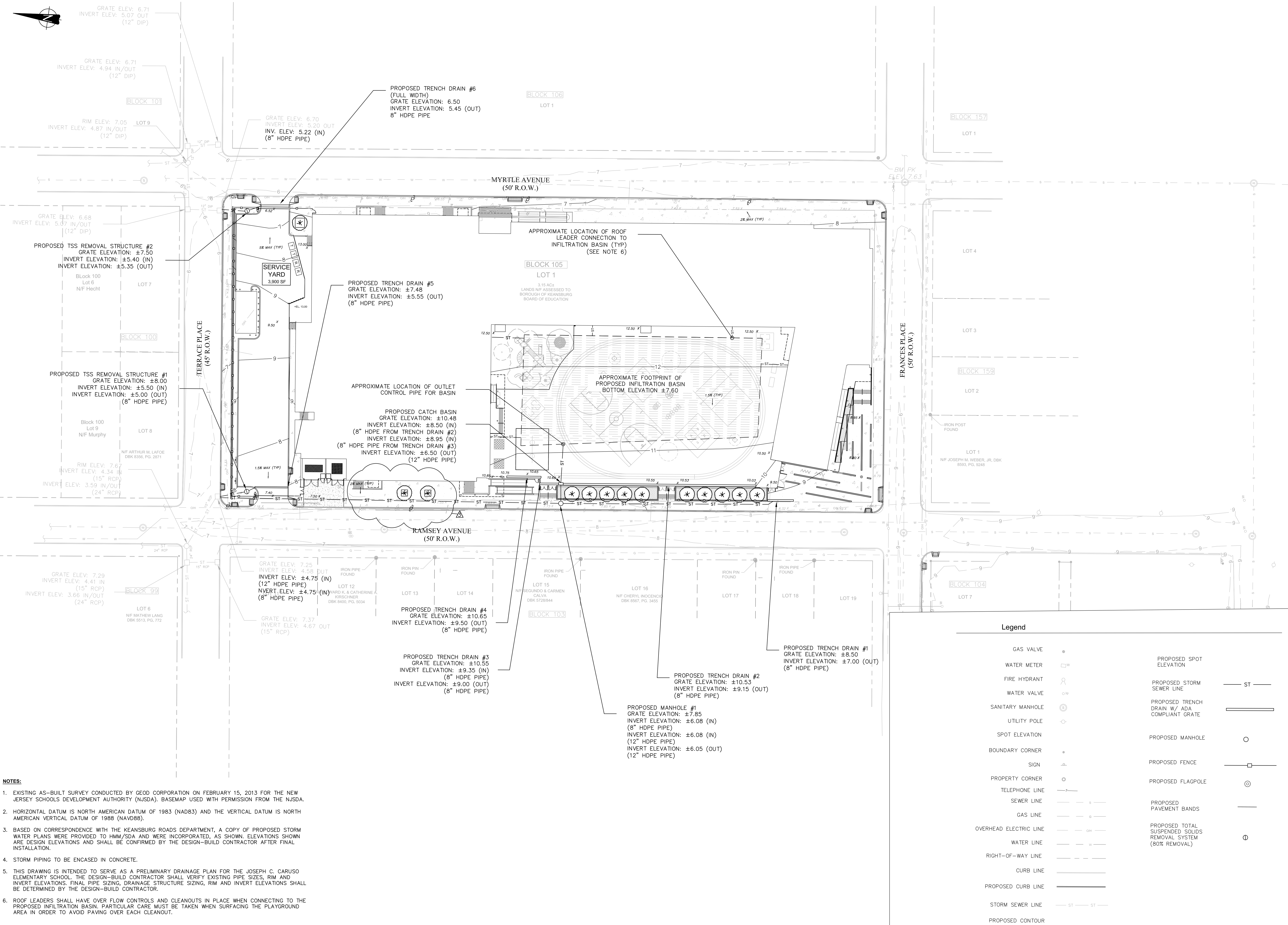
Job	No.
323335	C-101
B/O	Total

Designed	Drawn	Checked	Approved	Date
RW	RW	LJK		

ADDENDUM	Date	Revision
8/20/13		



F:\323335 - NJSDA CARUSO SCHOOL - DRAWINGS\INTERIALLY PRODUCED\MAP DELIVERABLES TO SDA_081313\PROPOSED DRAINAGE PLAN (C-102).DWG



- NOTES:**
- EXISTING AS-BUILT SURVEY CONDUCTED BY GEOD CORPORATION ON FEBRUARY 15, 2013 FOR THE NEW JERSEY SCHOOLS DEVELOPMENT AUTHORITY (NJSDA). BASEMAP USED WITH PERMISSION FROM THE NJSDA.
 - HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83) AND THE VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).
 - BASED ON CORRESPONDENCE WITH THE KEANSBURG ROADS DEPARTMENT, A COPY OF PROPOSED STORM WATER PLANS WERE PROVIDED TO HMM/SDA AND WERE INCORPORATED, AS SHOWN. ELEVATIONS SHOWN ARE DESIGN ELEVATIONS AND SHALL BE CONFIRMED BY THE DESIGN-BUILD CONTRACTOR AFTER FINAL INSTALLATION.
 - STORM PIPING TO BE ENCASED IN CONCRETE.
 - THIS DRAWING IS INTENDED TO SERVE AS A PRELIMINARY DRAINAGE PLAN FOR THE JOSEPH C. CARUSO ELEMENTARY SCHOOL. THE DESIGN-BUILD CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, RIM AND INVERT ELEVATIONS. FINAL PIPE SIZING, DRAINAGE STRUCTURE SIZING, RIM AND INVERT ELEVATIONS SHALL BE DETERMINED BY THE DESIGN-BUILD CONTRACTOR.
 - ROOF LEADERS SHALL HAVE OVER FLOW CONTROLS AND CLEANOUTS IN PLACE WHEN CONNECTING TO THE PROPOSED INFILTRATION BASIN. PARTICULAR CARE MUST BE TAKEN WHEN SURFACING THE PLAYGROUND AREA IN ORDER TO AVOID PAVING OVER EACH CLEANOUT.



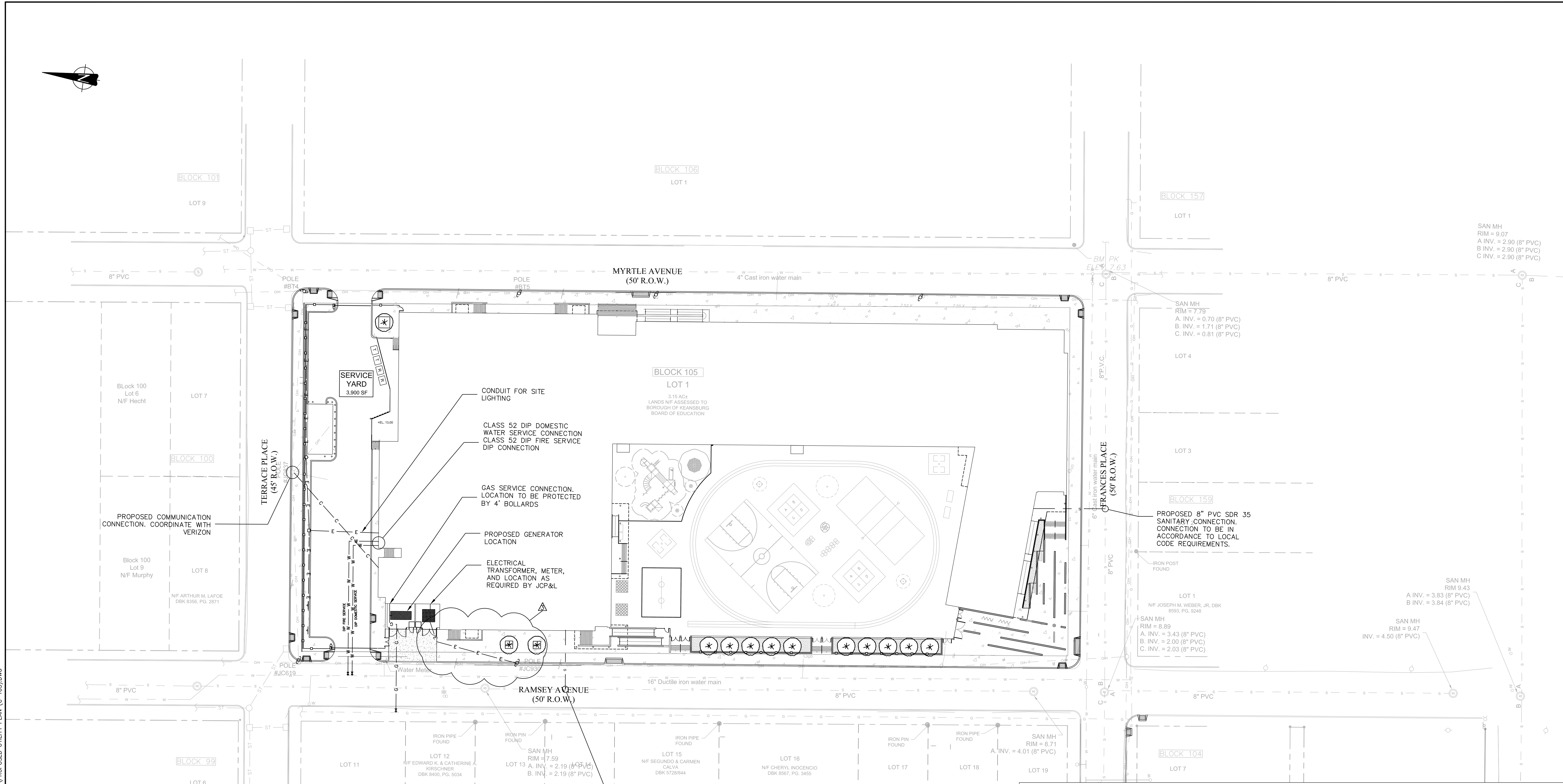
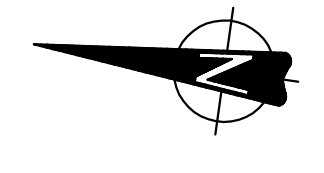
Legend

GAS VALVE	●	PROPOSED SPOT ELEVATION	○
WATER METER	◻	PROPOSED STORM SEWER LINE	— ST —
FIRE HYDRANT	⊕	PROPOSED TRENCH DRAIN W/ ADA COMPLIANT GRATE	▬
WATER VALVE	○	PROPOSED MANHOLE	○
SANITARY MANHOLE	⊙	PROPOSED FENCE	▬
UTILITY POLE	○	PROPOSED FLAGPOLE	⊙
SPOT ELEVATION	○	PROPOSED PAVEMENT BANDS	▬
BOUNDARY CORNER	●	PROPOSED TOTAL SUSPENDED SOLIDS REMOVAL SYSTEM (80% REMOVAL)	⊙
SIGN	⊕		
PROPERTY CORNER	○		
TELEPHONE LINE	—		
SEWER LINE	—		
GAS LINE	—		
OVERHEAD ELECTRIC LINE	—		
WATER LINE	—		
RIGHT-OF-WAY LINE	—		
CURB LINE	—		
PROPOSED CURB LINE	—		
STORM SEWER LINE	— ST —		
PROPOSED CONTOUR	—		
EXISTING CONTOUR	—		
PROPOSED CURB/WALL	—		

**NEW JERSEY SCHOOLS DEVELOPMENT AUTHORITY
KEANSBURG, NJ
JOSEPH C. CARUSO E.S.
PROPOSED DRAINAGE PLAN**

Hatch Mott MacDonald Certificate No. 240A28075000 27 Bleeker Street Milburn, New Jersey 07041	JOSEPH J. KOEHLER Professional Engineer - N.J. Lic. No. 38976
Drawn: RW Checked: LJK Approved: [Signature]	Date: 8/20/13 Revision: [Table with 2 columns: Revision, Date]
Job No. 323335 No. C-102 B/O Total	

Contract No. TP-0171-102-T0-4.0



Block 100 Lot 6 N/F Hecht
 Block 100 Lot 7 N/F Murphy
 Block 100 Lot 8 N/F Arthur M. Lafoe DBK 8356, PG. 2871
 Block 100 Lot 9 N/F Mathew Lang DBK 6513, PG. 772
 Block 103 Lot 11 N/F Edward K. & Catherine Kirschner DBK 8400, PG. 5034
 Block 103 Lot 12 SAN MH RIM = 7.59, A INV. = 2.19 (8\"/>

Block 104 Lot 1 N/F Joseph M. Weber, Jr. DBK 8593, PG. 9248
 Block 104 Lot 2 SAN MH RIM = 8.89, A INV. = 3.43 (8\"/>

Block 104 Lot 3 SAN MH RIM = 9.47, INV. = 4.50 (8\"/>

Block 104 Lot 4 SAN MH RIM = 7.79, A INV. = 0.70 (8\"/>

Block 104 Lot 5 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 6 SAN MH RIM = 8.43, A INV. = 3.83 (8\"/>

Block 104 Lot 7 SAN MH RIM = 8.71, A INV. = 4.01 (8\"/>

Block 104 Lot 8 SAN MH RIM = 9.47, INV. = 4.50 (8\"/>

Block 104 Lot 9 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 10 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 11 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 12 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 13 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 14 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 15 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 16 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 17 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

Block 104 Lot 18 SAN MH RIM = 9.07, A INV. = 2.90 (8\"/>

- NOTES:**
- EXISTING AS-BUILT SURVEY CONDUCTED BY GEOD CORPORATION ON FEBRUARY 15, 2013 FOR THE NEW JERSEY SCHOOLS DEVELOPMENT AUTHORITY (NJSDA). BASEMAP USED WITH PERMISSION FROM THE NJSDA.
 - HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83) AND THE VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).
 - SANITARY SEWER INVERT ELEVATIONS UPDATED BASED ON MANHOLE INSPECTIONS CONDUCTED BY HMM ON APRIL 4, 2013.
 - BASED ON EXISTING WATER MAPS PROVIDED BY THE KEANSBURG MUNICIPAL AUTHORITY WATER AND SEWER DEPARTMENT, 2\"/>



Legend	
GAS VALVE	○
WATER METER	⊞
FIRE HYDRANT	⊞
WATER VALVE	⊞
SANITARY MANHOLE	⊙
UTILITY POLE	○
SIGN	⊞
SEWER LINE	— s —
GAS LINE	— G —
OVERHEAD ELECTRIC LINE	— OH —
WATER LINE	— W —
RIGHT-OF-WAY LINE	— R —
CURB LINE	— C —
TELEPHONE LINE	— T —
PROPOSED CURB LINE	— C —
PROPOSED UNDERGROUND COMMUNICATIONS LINE	— C —
PROPOSED VALVE	⊞
PROPOSED ELECTRICAL PULLBOX	⊞
PROPOSED SANITARY SEWER LINE	— s —
PROPOSED NATURAL GAS LINE	— G —
PROPOSED WATER LINE	— W —
PROPOSED UNDERGROUND ELECTRIC LINE	— E —
PROPOSED FENCE	— □ —
PROPOSED FLAGPOLE	⊙
PROPOSED PAVEMENT BANDS	— —

NEW JERSEY SCHOOLS DEVELOPMENT AUTHORITY
 KEANSBURG, NJ

JOSEPH C. CARUSO E.S.
 PROPOSED UTILITY PLAN

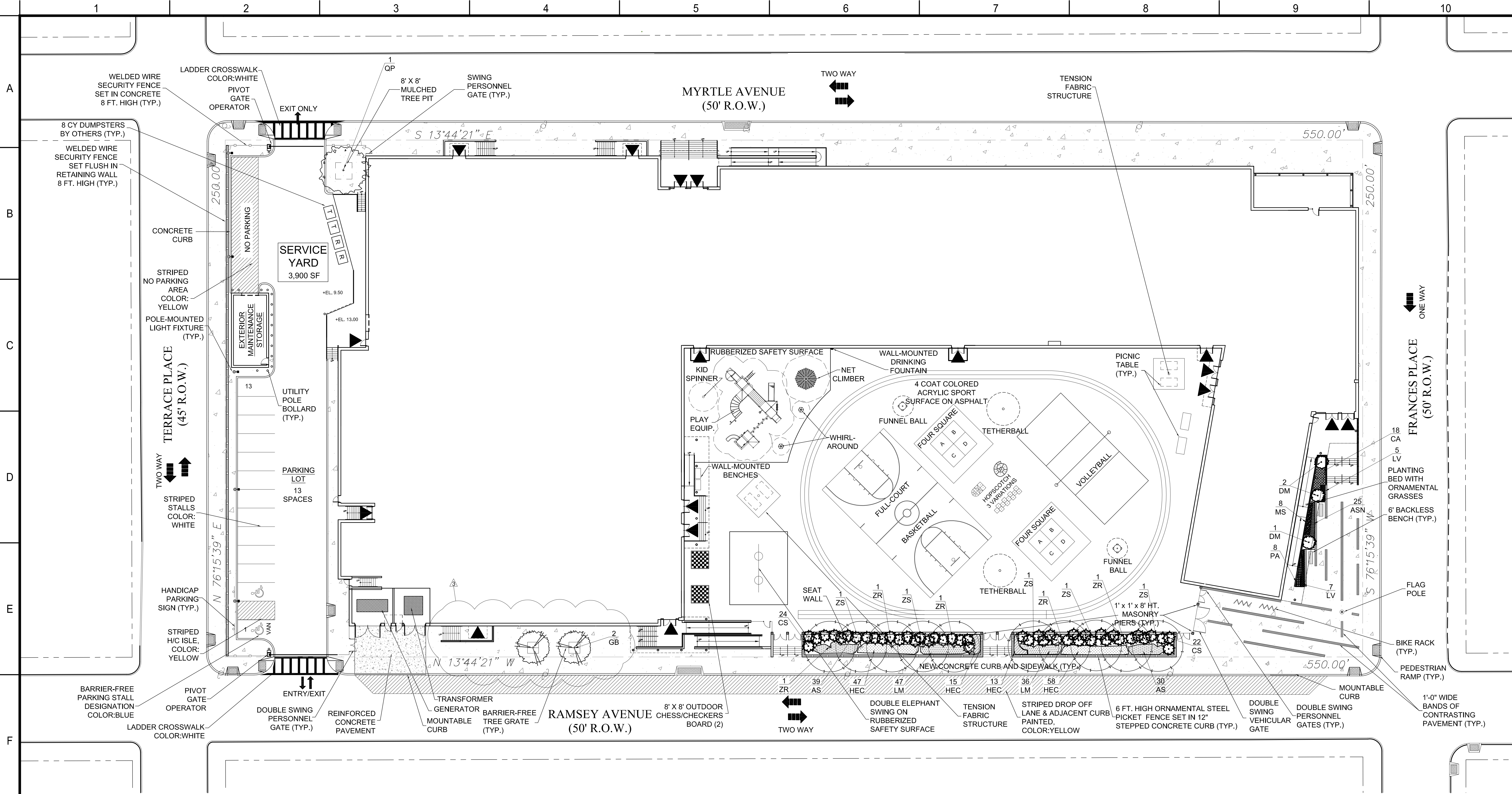
JOSEPH J. KOEHLER
 Professional Engineer - N.J. Lic. No. 38976

Hatch Mott MacDonald
 Certificate No. 240A28075000
 27 Bleeker Street
 Milburn, New Jersey 07041

Job	No.
323335	C-103
B/O	Total

DATE: 8/20/13
 APPROVED: [Signature]
 CHECKED: [Signature]
 DRAWN: [Signature]
 DESIGNED: [Signature]

Contract No. TP-0171-102-T0-4.0



LANDSCAPE PLAN
1" = 20'

Sym	Qty	Botanical Name	Common Name	Size	Root	Spacing	Remarks
Deciduous Trees							
ZS	5	<i>Zelkova serrata</i> 'Halka'	Halka Zelkova	5 1/2" - 6" CAL.	B&B	As Shown	Alternate red and green varieties. Prune to 6' Ht. Min. Stds.
ZR	5	<i>Zelkova serrata</i> 'Halka Red'	Halka Red Zelkova	5 1/2" - 6" CAL.	B&B	As Shown	
GB	2	<i>Gingko biloba</i> 'Autumn Gold'	Autumn Gold Ginko	4 1/2" - 5" CAL.	B&B	As Shown	Male matched specimens. Prune to 6' Ht. Min. Stds.
QR	1	<i>Quercus phellos</i>	Willow Oak	4 1/2" - 5" CAL.	B&B	As Shown	Prune to 6' Ht. Min. Stds.
Shrubs							
CS	46	<i>Cytisus x 'lena'</i> (Dallimorei hybrid)	Lena Scotch Broom	2' - 2 1/2' HT.	3 gal. container	As Shown	
DM	3	<i>Deutzia x 'Monzia'</i>	Pink-A-Boo Deutzia	—	5 gal. container	As Shown	
Perennials							
AS	69	<i>Achillea 'strawberry seduction'</i>	Strawberry Seduction Yarrow	—	1 gal. container	1' - 6" O.C.	
HEC	133	<i>Hemerocallis 'earlybird cardinal'</i>	Earlybird Cardinal Daylily	—	6" pots	1' - 6" O.C.	
LM	83	<i>Lavandula 'munstead'</i>	Munstead Lavender	—	1 gal. container	1' O.C.	
ASN	25	<i>Artemisia schmidtiana</i> 'Nana Attraction'	Nana Attraction Silver Mound	—	4" pots	Random	Infill front of bed between benches at main entrance.
LV	12	<i>Liriope muscari</i> 'Variegata'	Variegated Lily-turf	—	1 gal. container	As shown.	Front row of bed at main entrance.
Ornamental Grass							
PA	7	<i>Pennisetum alopecuroides</i> 'Little Bunny'	Little Bunny Dwarf Fountain Grass	—	2 gal. container	As Shown	
CA	18	<i>Calamagrostis x acutiflora</i> 'Avalanche'	Avalanche Feather Reed Grass	—	3 gal. container	2' - 6" O.C.	
MS	8	<i>Miscanthus sinensis</i> 'Morning Light'	Morning Light Maiden Grass	—	3 gal. container	5' - 0" O.C.	

STATE OF NEW JERSEY
SCHOOLS DEVELOPMENT AUTHORITY
1 WEST STATE STREET, TRENTON, NEW JERSEY 08625

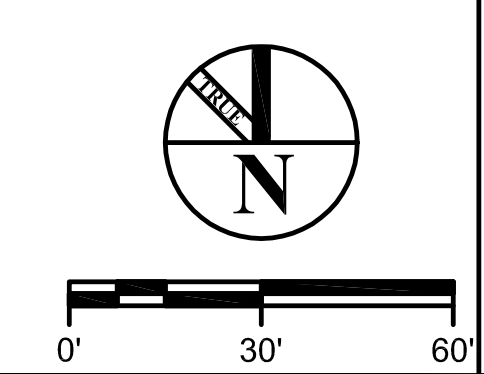
PROJECT TITLE
NEW JOSEPH C. CARUSO
ELEMENTARY SCHOOL
FOR
KEANSBURG SCHOOL DISTRICT
KEANSBURG, NEW JERSEY

SCALE: 1/20" = 1'-0"
DRAWN BY: PMN/RW
CHECKED BY: LSM
APPROVED BY: LSM
DATE: 6/27/13

REVISIONS	SYMBOL	DATE	DESCRIPTION
1	A	8/20/13	ADDENDUM #3

DRAWING TITLE
LANDSCAPE PLAN

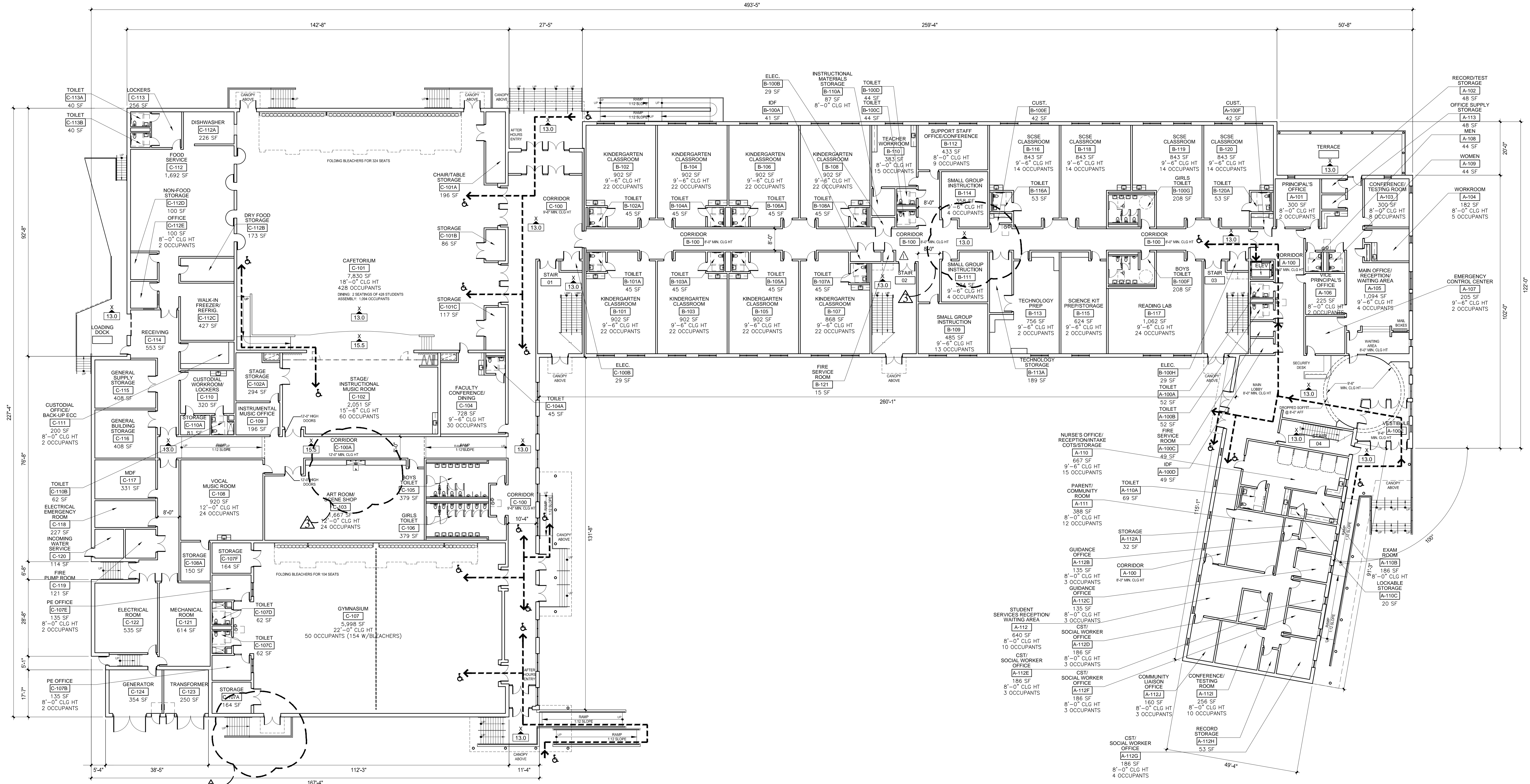
SDA PROJECT # 2400-E01-02-0116
DRAWING #



L-1

B1 EXTERIOR MAINTENANCE STORAGE
1/16" = 1'-0"

J1 FIRST FLOOR PLAN
1/16" = 1'-0"



STATE OF NEW JERSEY
SCHOOLS DEVELOPMENT AUTHORITY
1 WEST STATE STREET, TRENTON, NEW JERSEY 08625



PROJECT TITLE
**NEW JOSEPH C. CARUSO
ELEMENTARY SCHOOL
FOR
KEANSBURG SCHOOL DISTRICT
KEANSBURG, NEW JERSEY**

SCALE: 1/16" = 1'-0"

DRAWN BY: _____

CHECKED BY: _____

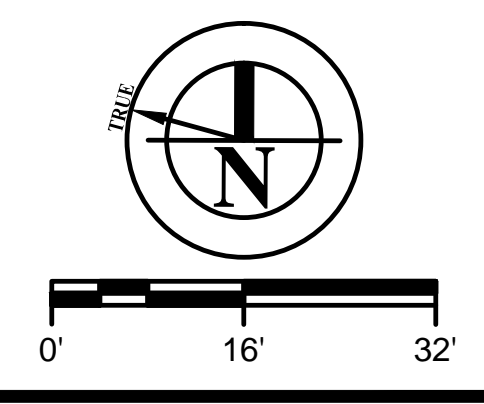
APPROVED BY: _____

DATE: 06-27-2013

REVISIONS	SYMBOL	DATE	DESCRIPTION
		08-08-13	FINAL DOE SCHEM SUBMISSION
		08-20-13	ADDENDUM #3

DRAWING TITLE
FIRST FLOOR PLAN

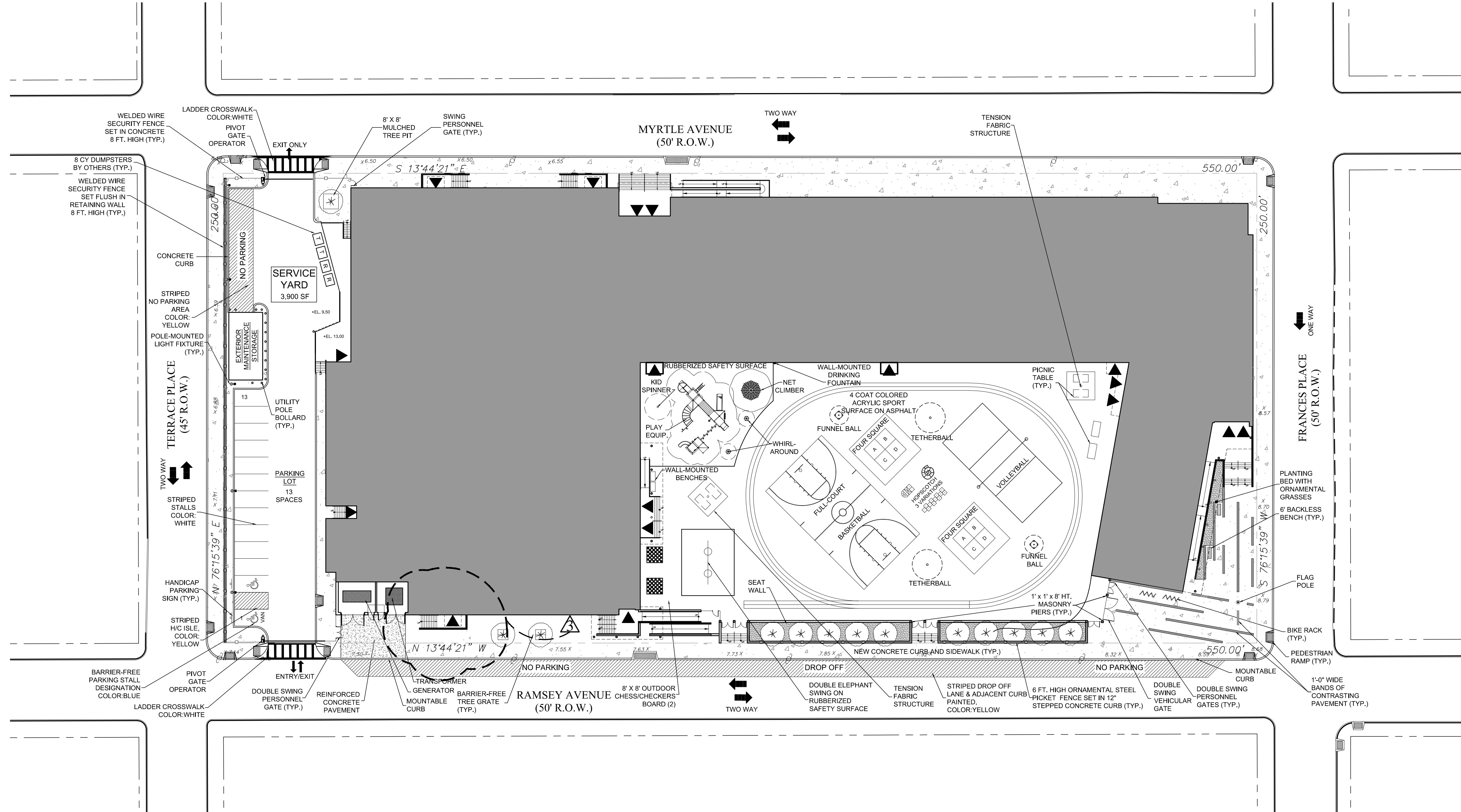
S.D.A. PROJECT # 2400-E01-02-0116
DRAWING #



A-1

1 2 3 4 5 6 7 8 9 10

A
B
C
D
E
F
G
H
J



G2 SITE PLAN
1" = 30'

STATE OF NEW JERSEY
SCHOOLS DEVELOPMENT AUTHORITY
1 WEST STATE STREET, TRENTON, NEW JERSEY 08625



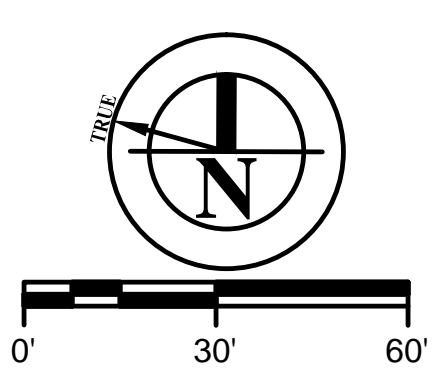
PROJECT TITLE
**NEW JOSEPH C. CARUSO
ELEMENTARY SCHOOL
FOR
KEANSBURG SCHOOL DISTRICT**
KEANSBURG, NEW JERSEY

SCALE AS SHOWN
DRAWN BY DB / PN
CHECKED BY
APPROVED BY
DATE 06-27-2013

SYMBOL	DATE	DESCRIPTION
	08-08-13	FINAL DOE SCHEM SUBMISSION
	08-20-13	ADDENDUM #3

DRAWING TITLE
SITE PLAN

SDA PROJECT # 2400-E01-02-0116
DRAWING #



S-1



PROJECT TITLE

NEW CARUSO
ELEMENTARY SCHOOL
KEANSBURG SCHOOL DISTRICT
KEANSBURG, NEW JERSEY

DRAWING TITLE

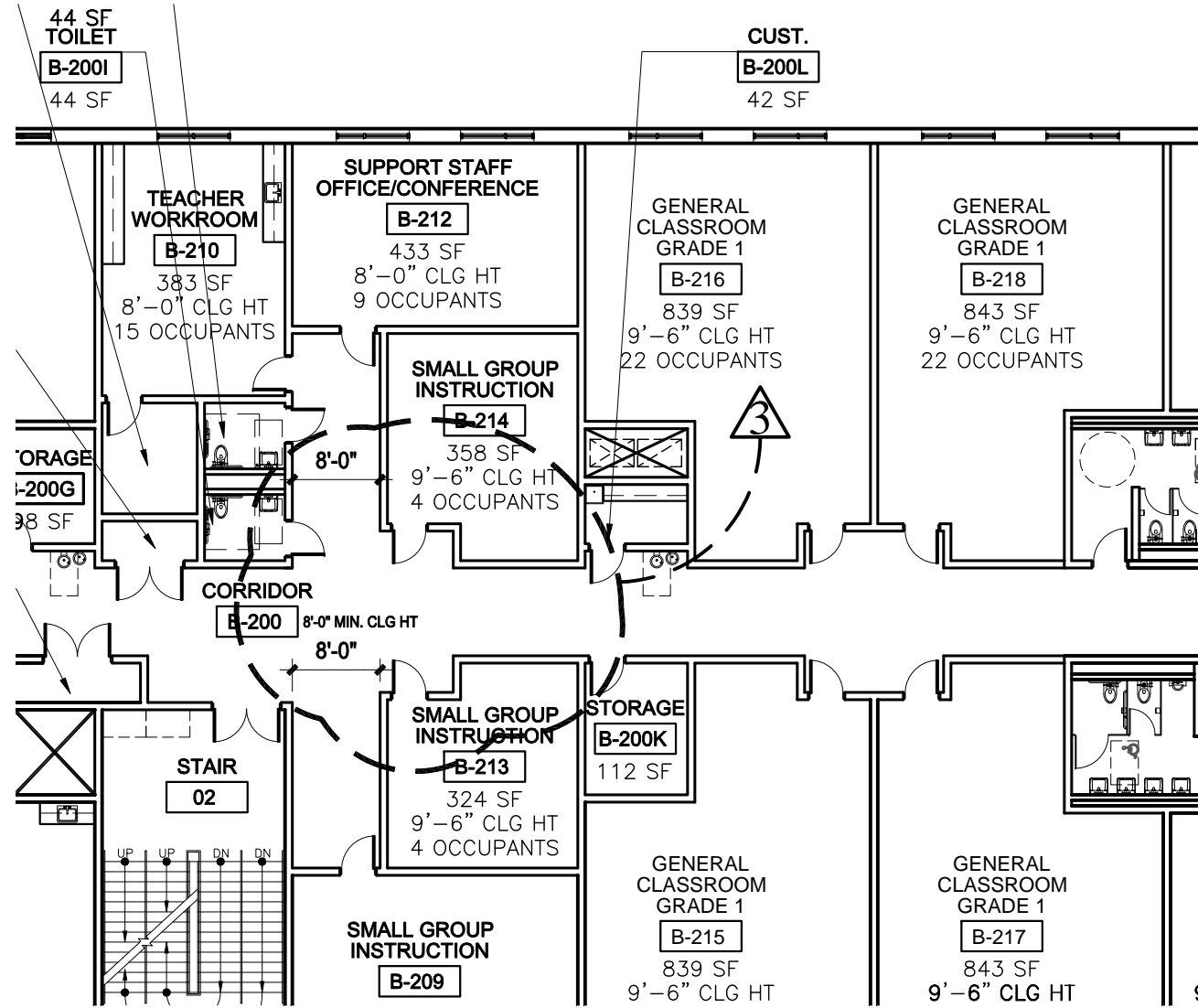
FLOOR PLAN
@ SGI
CLASSROOMS

PROJECT #
2400-E01-02-0116

DATE
08/20/13

DRAWING #

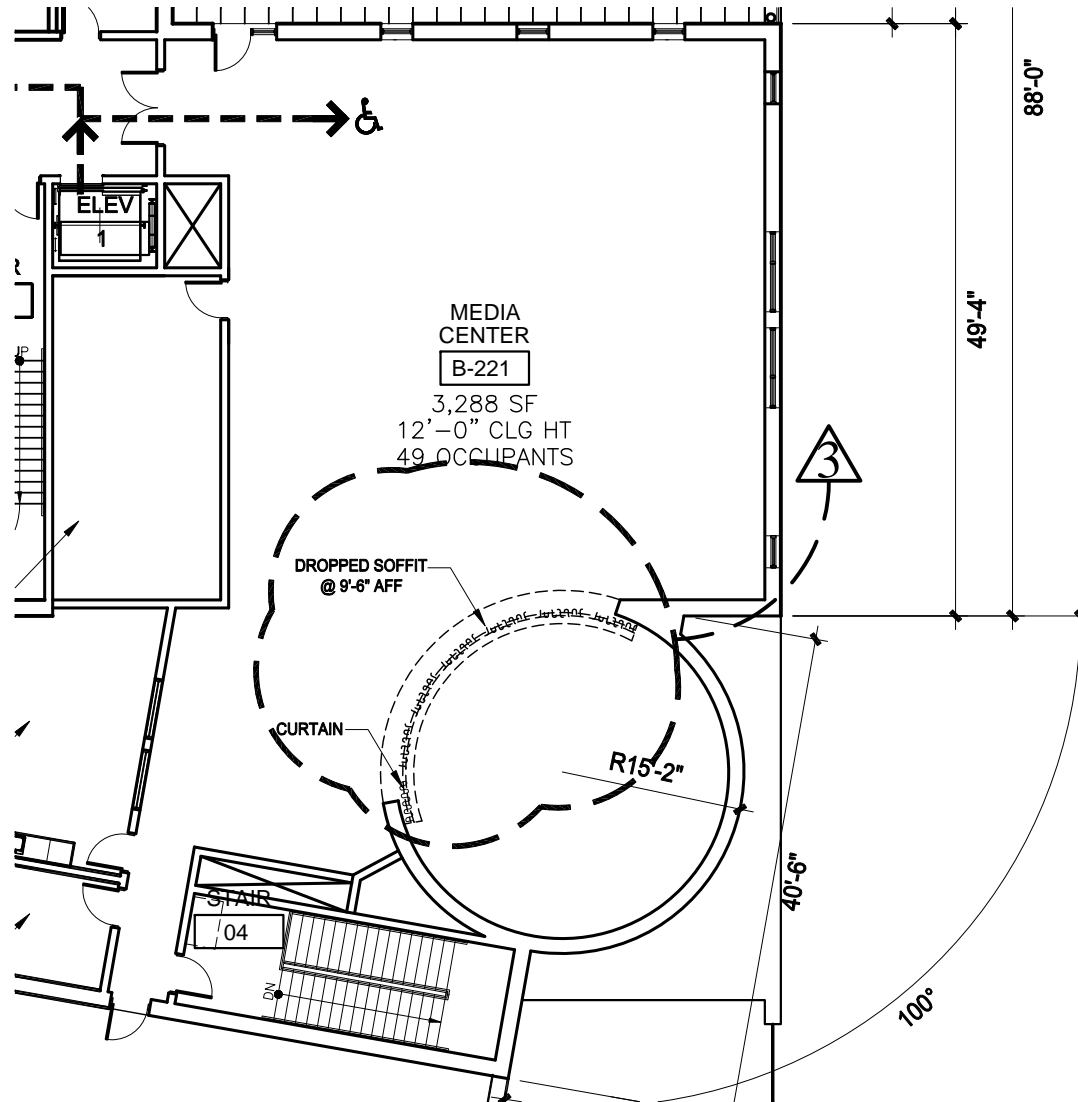
SK-1



NOTE: TYPICAL PLAN CHANGE AT ROOM NUMBERS B-111, B-114, B-213, B-214, B-311, AND B-314.

PARTIAL SECOND FLOOR PLAN

1/16" = 1'-0"



PARTIAL SECOND FLOOR PLAN

1/16" = 1'-0"



STATE OF NEW JERSEY
SCHOOLS DEVELOPMENT AUTHORITY
1 WEST STATE STREET, TRENTON, NEW JERSEY 08625

PROJECT TITLE

NEW CARUSO
ELEMENTARY SCHOOL
KEANSBURG SCHOOL DISTRICT
KEANSBURG, NEW JERSEY

DRAWING TITLE

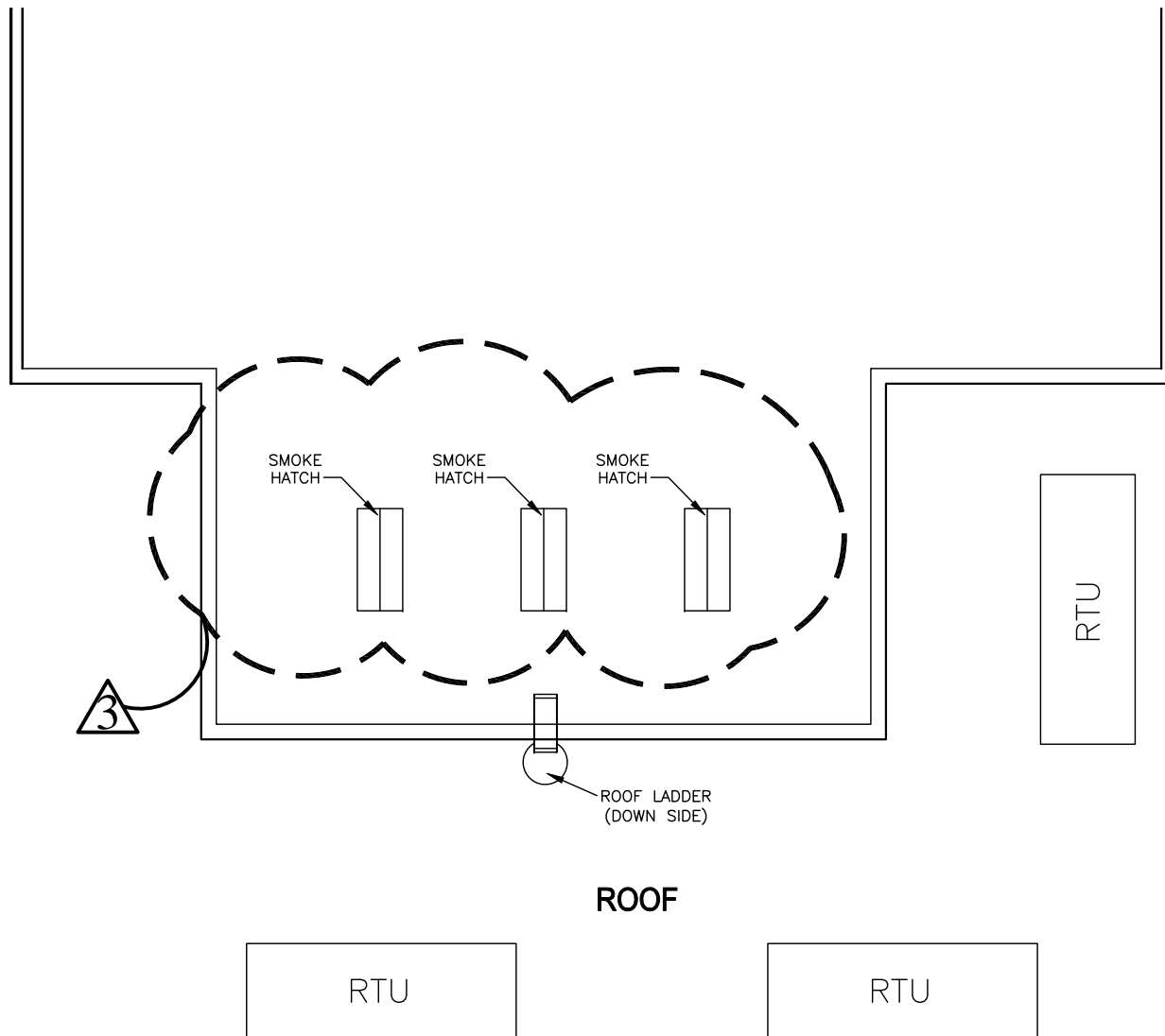
IMMERSIVE
LEARNING
FLOOR PLAN

PROJECT #
2400-E01-02-0116

DATE
08/20/13

DRAWING #

SK-2



PARTIAL ROOF PLAN @ STAGE

1/16" = 1'-0"



STATE OF NEW JERSEY
SCHOOLS DEVELOPMENT AUTHORITY
1 WEST STATE STREET, TRENTON, NEW JERSEY 08625

PROJECT TITLE

NEW CARUSO
ELEMENTARY SCHOOL
KEANSBURG SCHOOL DISTRICT
KEANSBURG, NEW JERSEY

DRAWING TITLE

PARTIAL
ROOF PLAN

PROJECT #
2400-E01-02-0116

DATE
08/20/13

DRAWING #

SK-3



PROJECT TITLE

NEW CARUSO
ELEMENTARY SCHOOL
KEANSBURG SCHOOL DISTRICT
KEANSBURG, NEW JERSEY

DRAWING TITLE

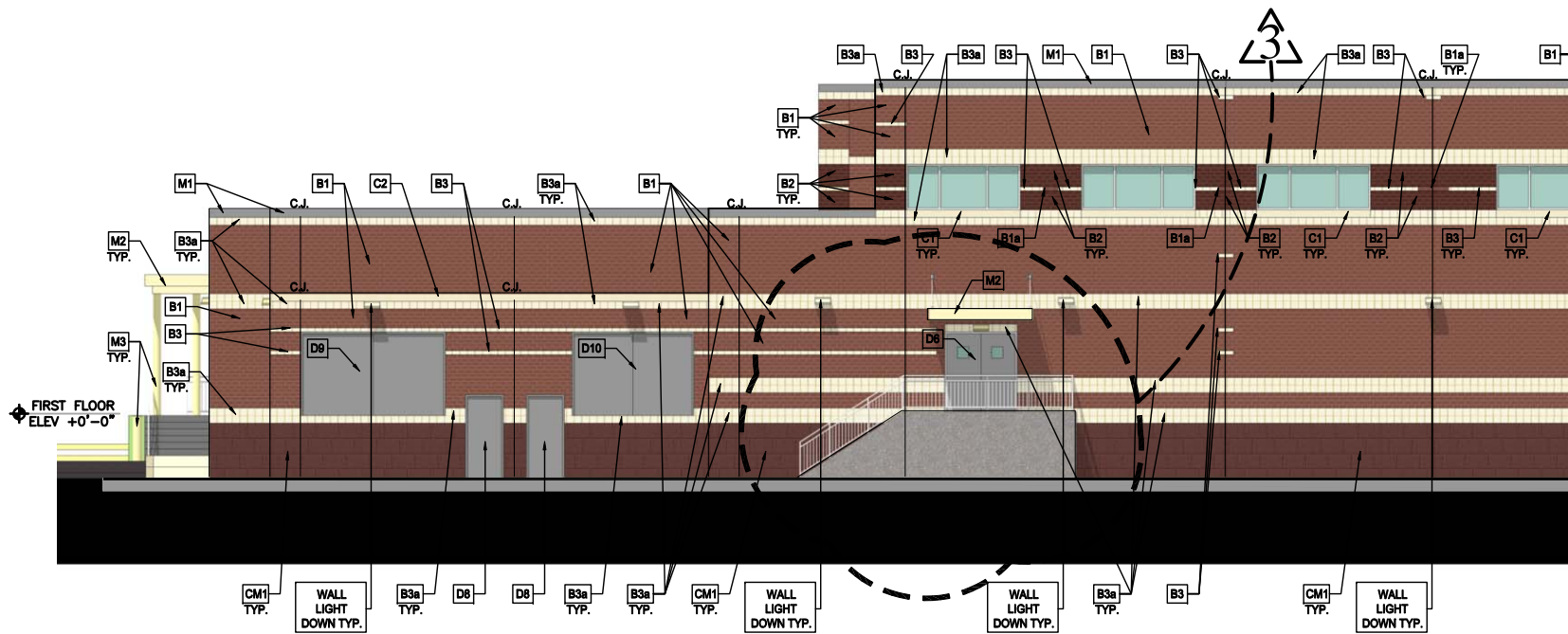
REVISED
ELEVATION "F"

PROJECT #
2400-E01-02-0116

DATE
08/20/13

DRAWING #

SK-4



NOTE: REFER TO ELEVATION SHEET 'A-5.2' FOR MATERIAL LEGEND AND ADDITIONAL INFORMATION.

ELEVATION - F

1/16"=1'-0"