

## April 13, 2017 Network Infrastructure Upgrade Q&A

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1. Is it possible to come back to Proviso East and Proviso West to see exactly how the cabling runs throughout the building?

Yes, please contact Michelle Caron at [hcaron@pths209.org](mailto:hcaron@pths209.org) or 708-338-5920 to coordinate a time with the staff.

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2. What should be included in the synopsis of work?

Network infrastructure upgrades, including, but not limited to core switching, access switching, wireless controllers, access points, copper and fiber cabling and design and implementation services. Design recommendations should include considerations for future proofing the networks.

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3. What documentation/information should be included in the RFP submission?

The RFP must include the following information:

### **Contractor's Disclosure Forms – Attachment A**

- Proposer's Summary of Proposed Modules
- Certificate of Eligibility to Contract
- Certificate of Compliance with A Drug-Free Work Place Act
- Certificate Regarding Sexual Harassment Policy
- Certificate of Non-Discrimination
- Certification Regarding Criminal Background Investigations
- Authorization for Criminal Background Investigations

### **Contractor's Proposal Submission – Attachment B**

- Cover Letter
- Vendor Profile and Demographics
- References
- Copy of License to do Business in Illinois
- Compliance with E-Rate Program
- Financial Statements
- Insurance Requirements
- Understanding the Scope of Services
- Workplan/Project Approach
- Vendor Cost Proposal (Excel Spreadsheet Attached Separately)
- Joint Venture Agreement (If Applicable)
- Work History with the School District

A reorganized version of the RFP will be sent along with this Q&A. Please note that the material information for the RFP has not changed.

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4. What is the expected award date?

May 4<sup>th</sup>, 2017

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5. Are you expecting a bid bond along with the proposal?

No, the bid bond is only required after a contract has been awarded.

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6. What is the total capacity of West and East?

For network capacity purposes only, Proviso East has a capacity of approximately 3500 people and Proviso West has a capacity of 3000 people.

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7. Will the Personalized Learning Centers be included in the proposal? What is the capacity of the Personalized Learning Center?

The location of the Personalized Learning Centers has not been identified to date. There is an expectation that what is proposed will provide the district with coverage to support current and future capacities.

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8. What is the average class size for West? East?

Each classroom should be networked to accommodate, on average, a group of 40 people.

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9. When was the last time the network was upgraded?

The core infrastructure was last upgraded at East in 2008 and West in 2009.

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10. Was structure cabling a part of the upgrade?

At the time of the last upgrades, existing multi-mode and single mode fiber cabling was used. There is an expectation that with the new infrastructure new cabling will be needed especially in the areas where new access points are being installed.

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11. Are you expecting a VOIP initiative in the near future?

Yes, we are currently exploring VOIP options but do not have a date when we will go live with such a project.

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12. What is the current construction environment of West? East?

Proviso East is the oldest school building. It was built in 1911 and expanded in 1929, 1938, and the late 1980s. Proviso West was built in 1958 and had renovations in 1962. The buildings are primarily constructed of brick, stone, and metal and not conducive to modern day technological environments.

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13. What is the total capacity of the cafeteria at West? East?

The cafeteria at East has a capacity of 800 students. Proviso West has a capacity of 850.

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14. Are the patches in the cafeteria temporary or permanent?

Yes, the patch panels are permanent.

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15. Are you expecting cabinet upgrades as a part of the proposal?

Cabinet upgrades are not expected unless the addition of equipment will require larger cabinets.

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16. Will common areas at West be utilized by the teachers as an extension of their classroom?

Yes.

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17. Will learning also take place outside in the courtyards?

Yes. There is an expectation that while access points do not need to be mounted outside, the wireless network will provide enough coverage that teachers and students can use their devices in the courtyard or other common areas.

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18. What is the current cable configuration?

Multi-mode fiber that has a maximum speed of 1 Gbps is currently being utilized within the building and single-mode fiber is used for the WAN. Each fiber cable is run from the MDF to the IDF closets on each floor.

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19. Are you expecting an upgrade to the wireless cabling?

Yes, if existing cabling needs to be replaced to fulfill the specifications.

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20. Are you expecting fiber pairs to be pulled?

Yes, in order to connect at 10 Gbps to the fiber uplinks that connect to the access switches.

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21. Will the fiber need to be upgraded?

Yes, if existing cabling needs to be replaced to fulfill the specifications.

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22. Will you be expecting the old fiber to be repurposed?

Recommendations should include considerations for repurposing the fiber.

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23. Can we assume that you are expecting a new fiber box to be a part of the proposal?

Hardware that will be required to install a new 10 Gbps fiber backbone should be included.

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24. How long will the longest fiber run be expected to be?

The exact distance was not available at the time this document was written.

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25. Is the fiber entrenched?

At Proviso East there are four areas that are remote to the main building. These are the field house, the DREAM school, the auto shop, and the football stadium press box. There is a possibility that some of these areas may not have fiber running through the tunnel to the main building. At Proviso West there is a belief that tunnel access is available with the exception of the football stadium press box. The vendor will need to conduct a surveys to understand the specifics.

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26. Will wire molding be needed?

Yes, we will need molding to be installed in any area that there is surface cabling. The colors of the molding should blend into the color scheme of the location.

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27. What is the capacity of the Little Theater at West?

The capacity is 400 people.

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28. Will there be risers available at both schools for us to utilize in the theater, auditoriums, gyms and cafeterias?

We can coordinate with the vendor and our maintenance department to secure the use of a riser.

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29. What is the access switch configuration in closet A21?

Switch configurations will change with the network redesign.

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30. Where are you expecting access points to be located in the field house?

There is an expectation that the vendor will make these recommendations.

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31. Should enclosures for access points be used in the physical education areas?

Yes. Protective enclosures are required in those areas.

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32. Are you expecting 1 48 port switch in room D210 at Proviso West?

All access switches should be 48 ports to allow for future expansion.

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33. Please verify the number of switches in closet B221?

There are 5 switches.

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34. Please verify the number of switches at Proviso West in closet C117?

There is one switch in the closet with one fiber pair.

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35. Is there fiber pulled at Proviso West to B318?

Yes.

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36. Please verify the switches in the closets listed (Proviso West):

B324 – 3-48 access switches ( D324 ) 3 switches

C122 – Single switch 2 switches

D311 – Single Switch 2 switches

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37. Is the central courtyard used as classroom at Proviso East?

Not at this time. However, there is an expectation that while access points do not need to be mounted outside, the wireless network will provide enough coverage that teachers and students could potentially use their devices in the courtyard or other common areas.

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38. What is the capacity of the library at West? East?

The capacity at the Proviso East library is 200. The capacity at the Proviso West library is 275.

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39. What is the construction of the library at West? East?

The libraries are primarily constructed of brick, stone, and metal and not conducive to modern day technological environments.

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40. What is the configuration of the core switches in the MDF closet at West?

The core switches at East and West consist of a single Cisco 6509 at each school.

The East switch has 2 – 48 port Ethernet blades and 4 – 16 port fiber blades.

The West switch has 1 – 48 port Ethernet blade and 4 – 16 port fiber blades.

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41. Do you want redundancy in the switches?

Yes. Redundancy should occur at the core switches and the connections to the cores at the access switches.

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42. What kind of piping do you currently have?

AT&T provides switched Ethernet (ASE) with 1 Gbps WAN connections between each school and 1 Gbps ISP connections from each campus to the internet.

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43. Are you looking to upgrade your wireless capacity?

Yes. Proposals should include recommendations that will improve capacity and performance of the overall network.

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44. What is the distance from the MDF to the furthest closet for West? East?

The exact distance was not available at the time this document was written.

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45. Are all the connections 1G?

Yes, the current uplinks from the MDF to the access switches are 1 Gbps.

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46. Will you be sending out soft copies of the maps?

Yes, maps will be sent with this Q&A.

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47. Are you expecting a quote for both cores and switches? What should be included?

Network infrastructure upgrades, including, but not limited to core switching, access switching, wireless controllers, access points, copper and fiber cabling and design and implementation services should be proposed. Design recommendations should include considerations for future proofing the networks.

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48. Should material removal be included in the quote?

Yes. Eco-friendly options should be given.

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49. With the new wireless LAN controllers, did the district migrate to the new access points?

At Proviso East we installed a new wireless LAN controller and new access points. Proviso West does not have a new controller.

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50. What is the current fiber for each cabinet?

Multi-mode fiber that has a maximum speed of 1 Gbps is currently being utilized within the building and single-mode fiber is used for the WAN. Each fiber cable is run from the MDF to the IDF closets on each floor.

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51. Are you looking to upgrade the MDF closet?

Yes.

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52. Do you have a design configuration for the closets?

There is an expectation that the vendor will make these recommendations.

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53. Are you expecting every attendee to have wireless access in the auditorium at East?

If an event takes place in the auditorium the expectation is that every person in that space can have access to the wireless network.

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54. Will you need new fiber run in the auditorium?

Yes, a new 10 Gbps fiber run is needed.

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55. What part of the building at East suffered fire damage?

The south end of the building on the corner of Madison & 1st Avenue.

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56. What is the current phone cable construction?

The current phone system is a PBX, the cabling is CAT 2.

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57. What are the 3850 switches used for?

The new 3850 switches are for the new IP camera system that was installed in 2015 and 2016. These cameras are on a completely separate network.

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58. How much ceiling access space in the hallway do you have at West? East?

An actual measurement is not available at this time. However, it has been confirmed that there is sufficient space for pulling cable. The vendor will need to conduct a survey to understand the specifics.

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59. How much ceiling access space in the classrooms do you have at West? East?

Most classrooms do not have space above the ceiling tiles except in the areas of the school that underwent reconstruction. The vendor will need to conduct a survey to understand specifics.

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60. What other common areas need access beside the auditorium at West? East?

At both school campuses these are the courtyards, lunchrooms, libraries, gymnasiums, and field houses.

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61. What part of the building at West has been the largest difficulty with wireless access? East?

Overall, both buildings experience significant issues with wireless access due to a need for upgraded network infrastructure.

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62. What is the seating capacity of the gym at Proviso East?

The capacity is 2700.

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63. Will a lift be provided by the district?

This can be coordinated with the vendor and Proviso maintenance department to secure the use of a lift.

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64. Was there new fiber run in the Dream/Peace building at East?

No.

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65. What is the maximum capacity in the Dream/Peace building at East?

The exact capacity was not available at the time this document was written. However, there are primarily three rooms used in that building. The larger two rooms can accommodate 60 people each and the smaller room can accommodate 30.

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66. Where does the fiber run in the Dream/Peace building?

They are run through the tunnels underneath the field house to the "C" closet.

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67. Are you expecting real connections at the stadium at West? East?

Yes. Design recommendations should include connections to the football stadium press box on each campus.

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68. Will students be using the stadium during the school day?

Gym classes are conducted in the stadium.

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69. Is there fiber currently installed in the stadium?

No.

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70. Are you expecting a point to point at the auto shop at East?

Fiber and wireless access is required in the auto shop.

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71. What is the closet name at Memorial Hall?

The closet is IDF- J.

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72. What is the student capacity for each classroom at West? East?

Each classroom should be networked to accommodate, on average, a group of 40 people.

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73. What is the installation timeframe for each building?

Since a portion of this project will be paid with reimbursement from E-rate, the project will officially commence in July of 2017 and conclude by December 2017.

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74. How many AP licenses exist on each of the wireless LAN controllers at each school?

PMSA – WLC 5508 – 110 AP Licenses

East – WLC 5508 – 50 AP Licenses