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September 21, 2016

Mr. Sam Hubbard
Development Planner
Planning and Community Development Department
Village of Arlington Heights
33 S. Arlington Heights Road
Arlington Heights, IL 60005

Re: **Round 1 Comments: Responses**

Plan Commission 16-020

Thomas Middle School

1430 N. Belmont Avenue

STR Project #16047

Dear Mr. Hubbard:

The following are responses to comments received August 26 for the Plan Commission application for the proposed improvements located at Thomas Middle School.

Building Services Department-Plan Reviewer

1. Provide construction type of existing building and the proposed addition.

The construction type is Type 2 Unprotected (2B per 2009 International Building Code). This information has been noted on the revised proposed first floor plan sheet.

2. Indicate if the existing building has fire suppression and fire alarm systems.

The existing building has fire suppression and fire alarm system. This information has been noted on the revised proposed first floor plan sheet.

3. Provide a height and area calculation based on Table 503 of the 2009 International Building Code.

Existing and proposed heights and areas comply with 2009 International Building Code. This calculation has been noted on the revised proposed first floor plan sheet.

4. Provide details on travel distance in the new addition to the nearest exit, along with an occupant load calculation for each exit.

Travel distances and occupant load calculations have been added to the revised proposed first floor plan and proposed second floor plan sheets.

Building Services Department-Fire Safety Division

1. Section 503.1.1 of the Fire Code, Buildings and Facilities, requires Approved fire apparatus access roads to be provided for every building or portion of a building hereafter constructed and shall extend to within 150 feet of all portions of the facility and all portions of the exterior wall of the first story of the building around the exterior of the building or facility. It appears that the distance to the northwest corner of the proposed addition exceeds this dimension. Suggest that an approved fire lane to be considered to negate this problem.

A fire lane has been included in the revised Engineering Site Plans set.

Public Works Department

1. Ensure that all sidewalks are returned to satisfactory condition at the completion of construction.

A note has been added to the plans calling for all sidewalks are to be returned to satisfactory condition upon the completion of construction.

2. The wire mesh screening system on Restrictor Structure A will most likely clog unless maintained/cleaned frequently. The best way to provide screening would be a bar or grate type screening structure, not mesh.

A wire mesh has been called for in order to allow water to flow to the restrictor structure if the bottom of the wire mesh becomes clogged. We feel that the use of a grate would inhibit flow in its entirety if it became clogged. We believe that the use of the wire mesh reduces the potential of the restrictor becoming clogged and failing. This type of trash rack was also called out on the approved design plans for the improvements at Ivy Hill Elementary School and Olive-Mary Stitt School of School District 25. The detail initially submitted has not been revised.

3. Verify condition of any utility structures that are either being re-used, left in place or having new connections. Replace as necessary.

Note to verify condition of structures and replace as necessary has been added to the plans.

4. All sidewalk improvements shall meet ADA compliance.

All sidewalks shall be designed in compliance with the IAC.

5. All asphalt repairs on Village R.O.W. shall be a minimum of 3' wide to accommodate roller.

All asphalt repairs to be performed within the Village ROW have been noted and shown as having a minimum width of 3' to accommodate a roller.

6. Verify condition of any traffic signage prior to re-use to ensure compliance with MUTCD.

A note has been added to Sheet C1.1 calling for the condition of any traffic signage to be verified in compliance with MUTCD requirements prior to reuse.

7. New parking lot entrance requires two utility structures to be adjusted or rebuilt depending on condition.

Noted.

Engineering Department

11. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.

I accept this understanding.

12. Final engineering plans shall be georeferenced by using State Plan Coordinate System – Illinois East.

A northing and easting has been included with the Project Benchmarks information.

13. The proposed detention facility will be a private system and as such will not be the Village's responsibility to maintain. An Onsite Utility Maintenance Agreement (OUMA) must be executed prior to final engineering approval. Attached is a copy of the OUMA from the recent Ivy Hill Elementary School project. Use this as a template and modify for the Thomas Middle School project. A Word document template can be requested and e-mailed.

An Onsite Utility Maintenance Agreement has been filled out and signed by Arlington Heights School District 25. It is enclosed.

14. Some detention calculations provided previously under separate cover. Final approval will require detention calculations showing HWL storage required, storage provided, and restrictor sizing calculations. Clearly show the overflow route for the site. An open basin requires a 1-foot freeboard with a n overflow weir at the 6" line. Minimum restrictor size allowed, for maintenance reasons, is 2". Restrictors between 2" and 4" must be in trap in catch basin. Provide a short narrative discussing the previous detention requirements and the new requirements.

Detention calculations as well as a Stormwater Management narrative will be completed and provided directly to the Village of Arlington Height's Engineering Department under separate cover.

15. Are any on-site parking lot lighting modifications proposed? When on-site lighting is proposed, provide a site photometric lighting diagram indicating lighting intensities. Also provide the associated catalog cuts for all roadway, parking lot and building mounted luminaires. All fixtures must be flat bottom, sharp cut-off, and no wall pack style fixtures will be permitted.

Modifications to the site include parking lot lighting. A site photometric lighting diagram indicating lighting intensities is enclosed. Catalog cuts for exterior luminaires are also enclosed.

16. Fire lanes adjacent to buildings must have a minimum pavement width as directed by the Fire Department to accommodate the tower truck's outriggers. Fire lanes require a heavy duty pavement section. Asphalt pavement section to consist of 2" Surface 2-1/4" N-50 Binder, 5" N-30 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron to be 8" thick (no reinforcement in public ROW).

The Heavy-Duty (Fire Lane) Asphalt Pavement Section shown in the Paving & Surface Legend on Sheet C4.1 has been revised. Notes to omit the welded wire fabric in the public ROW have also been added to the legend.

17. Consider including bicycle racks in development plan to encourage alternate modes of transportation for employees and patrons.

Bike racks are currently provided at the school on the north side of the building. These existing racks have been added to the site plan.

18. Sheet C1.1: There is an area northwest of the building that is shown as to be removed plan, but is not addressed anywhere else in the plans. Is this included in the project?

The area noted has been added to the project scope since the previous submittal. The information in regard to the proposed work to be performed in this location has been added to the applicable sheets.

19. Sheet C3.1: There is an existing north-south 6" PVC sewer line shown per the record drawing south of the new building addition. This existence and function of this line must be verified prior to approval.

The existence of the PVC storm sewer shall be investigated. Upon an initial site visit the structures shown on the record plan were not located. Notes calling to field locate and verify the 6" storm sewer has been added to Sheet C3.1.

20. Sheet C4.1: The HWL in the east pond is shown at elev. =689.16, not at the actual HWL of 690.16. Double check detention calculations.

The locations of the proposed detention basins and stormwater calculations have been revised.

21. Sheet CX2.1: Show the extent of the front and rear overhangs for the fire vehicle. Remove the bus lines from this exhibit, since there is a separate exhibit for the bus.

Line work delineating the extents of the front and rear overhangs for the fire vehicle have been provided. The bus lines have been removed.

22. Sheet CX2.2: Show the extent of the front and rear overhangs of the bus.

Line work delineating the extents of the front and rear overhangs for the bus have been provided.

23. The traffic report indicates that the bus drop off activity occurs in the west lot but also states that there is bus activity along Belmont Avenue. It is also stated that parents use these areas at the same time. A more detailed explanation of the bus loading in relation to parent vehicles navigating these areas needs to be provided. Since the busses are supposed to be loading with their stop paddles extended, no other car traffic should be loading during loading operations.

School buses only unload students along the west side of Belmont Avenue in the morning and only pick-up students in the West Lot in the afternoon. Belmont Avenue is only used by parents in the afternoon.

During the morning arrival period, 6th Grade parents are instructed to enter the West Parking Lot from Thomas Street, drop-off their student(s) and the exit right back onto Thomas Street. 7th and 8th grade parents are instructed to drop-off students on the west side of Belmont Avenue by the school. School buses also use the west side of Belmont Avenue to drop-off students. The South Lot is only used by teachers and visitors and is not open during arrival and dismissal.

During the afternoon dismissal period, school buses are staged in the West Parking lot to pick-up students. No parent traffic is allowed in the West Lot before or during dismissal until all school buses have loaded and have left the lot. All students are picked up from the Belmont Average frontage.

A copy of the school instructions that graphically show the procedures was included in the appendix.

24. A more detailed description of the parent drop off and pick up along the west side of Belmont Avenue must be provided. Capacity of the current bump out lane, mitigating the opposite side loading, and recording if the traffic queue backs-up in the Belmont Avenue and Thomas Road intersection must be presented. Eastbound to southbound right turning vehicle volumes at this location have previously been noted to be a problem, which may be aggravated by the volume of parent vehicles coming from the west lot and turning right onto Belmont.

Please see the description of the arrival and dismissal procedures in response to Item 23.

During the observations of the arrival and dismissal periods, no major back-ups were observed in the eastbound to southbound right-turn movement. The existing right-turn lane is storage is 100 feet long so that when there is a backup, it does not interfere with eastbound Thomas traffic flows. Other than several parents using the small

parking lot on the east side of Belmont, opposite loading was not observed by the school.

25. A signage plan for both bus loading areas, the left turn prohibition signage, as well as other required signage modifications must be provided and installed with this construction.

Proposed signage was shown on the previous submittal. The signage has been clouded in the revised drawings.

Arlington Heights Fire Department

1. Addition to be sprinkled.

The addition will be sprinkled. This information has been noted on the revised proposed first floor plan sheet.

2. Provide a fire access lane connecting the proposed parking lot on the southeast to the existing parking on the northwest.

This response will be sent under separate cover.

3. Provide a continuous walkway from the new addition, in either direction to the public way.

Continuous walkways have been provided in either direction to the public way.

Disability Services Coordinator

1. In each locker room provide an accessible changing bench (24-inches by 48-inches) with the long side attached to a wall. The accessible bench shall be installed at a height of 17-19 inches. See IAC Section 400.320(c)(4).

An accessible changing bench (24-inches by 48 inches) with the long side attached to a wall has been added in each locker room. This information has been noted on the revised proposed first floor plan sheet.

2. Enlarged Replacement Parking Lot – Add one accessible space. IAC Section 400.310(c) requires 3 Accessible Parking spaces in parking lots with 51 to 75 total parking spaces.

Three accessible parking spaces have been provided in the new lot.

3. Existing Parking Lot – Accessible Parking Spaces. IAC Section 400.310(c)(3) requires each accessible parking space to be 16-feet wide, and shall not share a common access aisle with adjacent parking spaces.

The total site requires only 5 Accessible Parking stalls. The stall furthest to the west will not be restriped as an accessible parking stall after the parking lot is seal coated.

Planning & Community Development

7. The "Beneficial Owners" signature is required on page "A" of the application. An electronic copy of this page can be provided to the school district, upon request, so the signature can be added.

Page "A" of the application with the school district's signature is enclosed.

8. Section 5.1-3.2a. of Chapter 28 of the Municipal Code classifies all schools as "Special Uses" within the R-3 Zoning District. No Special Use Permit has been granted for the subject property. As an addition to the school has been proposed, a Special Use Permit to allow a middle school on the subject property is required. Staff is supportive of this request.

A Special Use Permit has been requested in the Application. It is noted that staff is supportive of the request.

9. The following variations have been identified:

- a. Section 5.1-3.6a to allow a front yard setback of 22.25' along Thomas Street where code requires a 25' setback. This setback applies to the existing building.
- b. Section 5.1-3.6 to allow an exterior side yard setback of approximately 21.25' where code requires a 40' setback. This setback applies to the existing building.
- c. Section 5.1-3.9 to allow a building height of 33'-8" for the existing building and proposed gym, where code limits the building height to 25'.
- d. Section 11.4-4 to allow 141 parking spaces where code requires 314 parking spaces.

Variations for setbacks, height and parking are requested. A revision to the "Special Use and Variations" request previously submitted August 2 is enclosed.

10. Please revise the site plan to show the setback of the existing building along Belmont Avenue, as measured from the closest point of the building to the eastern property line along Belmont Avenue.

The Proposed Site Plan is revised to show the setback of the existing building along Belmont Avenue and is enclosed.

11. The impervious surface calculations as contained on the site plan do not include the impervious surface from the building addition. Please revise this calculation on the site plan to include all impervious surfaces on the site.

The impervious surface calculation is revised. This calculation has been noted on the revised site plan sheet.

12. It does not appear that any lighting is proposed within the new parking lot. If any parking lot lighting is proposed, a photometric plan and cut sheets for the fixtures is required. Please confirm if any lights are proposed within the new parking lot.

Lighting is proposed within the new parking lot. A photometric plan and cut sheets for the fixtures is enclosed.

13. The site plan and parking study indicate that four handicap parking spaces exist on the site between the two parking lots (two in each parking lot). The proposed parking lot will remove two of the existing handicap spaces and will provide two new handicap parking spaces. However, the parking study states that five handicap parking spaces will be provided. Please clarify how five spaces will be provided. Per Section 11. 2-10.1, five handicap parking spaces are required.

The site plan has been modified to accommodate five accessible parking spaces as noted in the traffic report and village staff. A total number of 140 (135 + 5 Accessible) parking spaces are provided.

14. The traffic study indicates that school buses stage in the western parking lot in preparation for pickup operations along Belmont Avenue. The study also states that the anticipated increase in students may require one additional school bus. The traffic study should evaluate if the western parking lot has sufficient capacity to accommodate an additional school bus if needed. Additionally, the parking study should evaluate how an additional school bus may impact pick-up operations along Belmont Avenue.

The Western Lot can accommodate 12 buses. The additional bus will not impact the impact the pick-up operations along Belmont Avenue during the afternoon dismissal because the bus will be in the West Lot for loading. During the morning arrival period, school buses stop on Belmont Avenue, unload their students, and then leave the areas. One additional bus will not adversely impact the queueing on Belmont Avenue.

15. The parking requirements for the site are shown below:

SPACE	PARKING CODE USE	NUMBER OF EMPLOYEES	NUMBER OF CLASSROOMS	PARKING RATIO	PARKING REQUIRED
Thomas Middle School	Elementary School	135	44	1 space per classroom plus two spaces per	314
Total Parking Required					314
Total Parking Provided					140
Parking Surplus /(Deficit)					173 (55% reduction in required parking)
As outlined above, a parking variation is required.					

As outlined above, a parking variation is required.

The required parking variation was noted in the traffic study and the above table. The revised site plan has 140 total parking stalls (135 + 5 Accessible) which will increase the variation to 174 parking stalls.

Planning & Community Development-Landscape Drawing

1. The ends of all parking rows must include a landscape island, which contains a 4" caliper shade tree (Chapter 28, Section 6.1.6-1.2b). Where there is a double row of parking, include two trees within the island.

An updated plan will be sent under separate cover. Two shade trees have been included within the landscape islands located at the end of the parking rows.

2. It is recommended that landscaping be provided on the south elevation in order to buffer the proposed addition.

An updated plan will be sent under separate cover. Landscaping shall be provided on the south elevation of the proposed addition.

Please contact me at 312-242-4168 or don@strpartners.com with any questions.

Sincerely,



Don Hansen, AIA, LEED AP
 Senior Project Manager



Mr. Sam Hubbard
PC Project #16-020
STR Project # 16047
September 21, 2016
Page 10 of 10

cc: Stacey Mallek, Arlington Heights School District 25
Ryan Schulz, Arlington Heights School District 25
Mike Henderson, STR Partners LLC