



Village of Arlington Heights

33 South Arlington Heights Road
Arlington Heights, Illinois 60005-1499
(847) 368-5000
Website: www.vah.com

Re: Police Station – Response to Department Comments PC 16-024

Dear Sam:

Attached please find the following:

1. Revised plans distributed earlier this week.
2. Justification for known zoning variations.
3. Written response to Department comments reflecting the discussion that occurred at our meeting with Departments on January 19, 2017.
4. Updated Traffic Study.
5. Construction staging plan.

Please let me know if you have any further questions.

Charles Witherington-Perkins
Director of Planning & Community Development

C: Marc Rohde, Legat Architects

Plan Commission Hearing Review Comments- Building Services

200 E. Sigwalt St.

Amendment to PUD Ordinance #78-026

PC#16-024

Round 1

1. Elevator machine rooms are not indicated for either elevator.

We are specifying Machine-room less elevators for the project so there will not be a need for machine rooms.

2. If the electrical service is 800 amps, a separate electrical room/closet is required. The room would be required to have a one hour fire rating or shall be rated equal to the designed structure, but not less than one hour. If the electrical service is 1,200 amps or more, it would require two exits on opposite ends of the room, and panic hardware.

We are aware of this and proper electrical rooms will be provided.

3. Proper working clearances shall be provided in all electrical rooms/closets.

We are aware of this and proper working clearances in all electrical rooms will be provided.

4. Rooms with an occupant load of more than 49 require two exits. Multi-purpose Room/Back-up EOC currently shows one when the partition is closed.

We are aware of this and this will be taken into account as design progresses and we complete a thorough code review.

5. The permit submittal should include the following:

The Construction Manager will be handling all permit submissions.

- a. Statement of Special Inspections, along with a chart of the required special inspections and the frequency of the inspections, as well as the name of the person, firm or agency responsible for performing the inspections. Copies to be provided to the Building Department on a weekly basis.
- b. Structural calculations for all structural components of the building for review by the Structural consultant.

Structural calculations will be provided at the end of design.

- c. Truss drawings, calculations and layout and instructions.

There will be no trusses in the project.

6. Submitted plans shall provide the following:

We will add spaces on the cover sheet for all members of the design team to stamp and sign the drawings.

- a. Design Firm registration numbers for all design firms involved.

We will include space for the Firm's registration number as well.

7. The following items require separate permits:

The Construction Manager will be procuring all permits.

- a. Elevators
- b. Fire suppression
- c. Fire Alarm

8. Areas of refuge shall be provided and have two-way communication. (2000 NFPA 101)

All stairs will have areas of refuge and two-way communication.

9. Where common supply and return ducts are shared with multiple air-handling systems with a designed capacity greater than 2,000 CFM, the return air system shall be provided with smoke detectors (IMC 606.2.2).

Our Mechanical Engineering Consultant, 20/10 Engineering, will design the project to all applicable codes and standards.

10. Enclosed parking garage shall have CO detectors, mechanical ventilation and infrared sensors to detect vehicles or occupants (IMC 404.1)

Our Mechanical Engineering Consultant, 20/10 Engineering, will design the project to all applicable codes and standards.

11. Fire separation between the S-2 parking garage and the main building (B use) shall be a minimum of 1-hour floor and wall assemblies. (IBC Table 508.4)

We will address this as we develop the drawings and code review.

12. Garage bridge shall match the construction of the new building.

We will match the construction of the new building. We have not yet fully determined if a bridge is being added, or if the Police Department will access the building from the existing stair.

13. The Application is asking the Building Dept. if the existing building conforms to the Village Building Code. Does this mean the code under which it was built? To what degree of code compliance is this

application concerned with- fire separation distances? Working fire systems? Receptacle polarity? Do we really care about this at all since the building will be demolished completely?

We do not have any concerns with the existing building as it is being completely demolished.

14. The east stair tower appears to be being shown as being removed. Has exiting from the parking structure been recalculated to determine if this will be compliant? Exiting may not enter into the Police Station.

The stair tower at the southeast corner of the parking garage is going to remain in place and serve the public as it has. There will be no exiting into the Police Station.

15. Has the fire separation distance been considered between the new Police Station and the Parking Structure? The Fire Station?

We have not yet undertaken a code review but this will be reviewed.

16. Has the State Energy Code been considered in the design?

The project will be designed to the current Illinois Energy Conservation Code.

17. Has adequate space and exiting been considered for electrical, mechanical, and fire rooms?

We are in Design Development but we are confident there are enough spaces for the above reference rooms.

All comments in red were responded to by Marc Rohde, AIA, LEED AP on January 24, 2017.

A handwritten signature in blue ink, appearing to read 'Marc Rohde', with a long horizontal flourish extending to the right.

Plan Commission Hearing Review Comments- Building Services Fire Safety

200 E. Sigwalt St.

Amendment to PUD Ordinance #78-026

PC#16-024

Round 1

From: D. Lay, Fire Safety Supervisor

Subject: Preliminary Review of New Police Station

On January 6, 2017 Deputy Fire Chiefs B. Lyons, P. Ahlman, Fire Lt. M. Aleckson and I met with Deputy Police Chief N. Pecora to discuss a preliminary review of the proposed Arlington Heights Police Station.

The following is a synopsis of the results of that meeting and the concerns that were noted.

Several concerns were raised about ambulance access into and out of the sally port. We are requesting a drawing showing the ambulance exiting and entering the sally port. A concern was raised about the potential for vision obstruction the ambulance driver may incur when pulling out of the sally port. In addition to exiting the sally port there is a concern about the ambulance having to back into the sally port to service a patient. The ambulance should not be required to turn without additional backing or the need for a three-point-turn.

Mackie Consultants has provided Auto Turn exhibits for all variety of vehicles that would have access to the site. All vehicles are able to circulate with proper turning clearances.

Negotiation of the sally port is one of the most vital concerns raised. It is important the ambulance is able to safely and efficiently back into and pull out of the sally port in order to provide timely EMS service to those in need at this location.

Ambulance can pull in and out of the sally port safely.

There are concerns about the fire ladder truck negotiating the turn from Sigwalt on to the access drive and traveling on the access drive through the parking lot and continuing west from the access drive through the lot where the parking lane intersects or reaches the access road from the west side of the PD building. It is requested that Engineering be aware of this concern so they can verify the travel paths for the FD truck.

Fire ladder truck can navigate the site properly.

It is requested that clarification be provided to indicate exactly where the fire sprinkler pump room will be located and the access that will be provided to the room. The code (NFPA 20, Sec. 4.12.2.1.1)

requires fire pump rooms not directly accessible from the outside to be accessible through an enclosed passageway from an enclosed stairway or exterior exit. The enclosed passageway must be minimum 2-hour fire-resistance rating. Access must be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment. Rooms where fire pumps are located shall be separated from all other areas of the building in accordance with Section 913.2.1 of the International Building Code.

The Water Service Room is anticipated to be located in the basement at the southwest corner. The requirements noted above will be met.

A Knox box (key safe) containing keys to access all areas of the building shall be mounted on the front of the building.

A Knox Box will be mounted to the front of the building.

The Fire Department Connection shall be located on the front of the building, be fully visible and at the main entrance within a maximum travel distance of 100 feet to the nearest fire hydrant.

The Fire Department Connection will be located on the front of the building as noted above.

A fire alarm zoning indicator panel and associated controls or fire alarm control panel (full functioning auxiliary panel) shall be located within the closest proximity to the front main entrance of the building.

A fire alarm panel will be located as noted above.

D.C. Pecora indicated several concerns were addressed during the development of the plans as indicated below. We appreciate the fact that the concerns regarding access of the ambulance and the fire truck were addressed during the development stage; however we would request that our Engineering Dept. confirm access as previously noted.

Comments from D.C. Pecora:

Re: Access to Sally Port. This issue has been addressed through turning radius scenarios in AutoCAD by Mackie Engineering and the proposal to install a warning light ballard activated when a vehicle exits the sally port. The addition of a convex mirror mounted in the area for added visibility is something to consider.

Re: Ladder Truck Access. Mackie Engineering has also conducted AutoCAD exercises with ladder/tower sized trucks. I suggest we supply Mackie with wheelbase and overall dimensions of T1 and reserve T1 so they can more accurately determine if the allocated space is adequate.

Re: Location of Fire Pump Room/ Fire Alarm Panel: Legat Architects and 20/10 Engineering have not produced fine detail drawings of MEP systems. IBC shall provide direction as required features are designed and notated on Construction Drawings.

Re: Knox Box. A Knox Box will be placed.

Re: Location of FDC and Fire Hydrant. A fire hydrant is currently located at the S/E corner of the building adjacent to the Police/Fire driveway.



January 30, 2017

Mr. James Massarelli, PE
Director of Engineering
Village of Arlington Heights
33 South Arlington Heights Road
Arlington Heights, Illinois 60005

**Re: Police Station Redevelopment
Arlington Heights, Illinois
Plan Commission PC #16-024
PUD Amendment to Ord #78-026**

Dear Mr. Massarelli,

Enclosed please find for your review and approval the following revised documents associated with the Police Station Redevelopment in Arlington Heights, Illinois:

1. Three (3) copies of revised Preliminary Engineering Plans, dated January 27, 2017, prepared by Mackie Consultants, LLC;
2. Three (3) copies of revised Preliminary Stormwater Management Calculations, dated January 27, 2017, prepared by Mackie Consultants, LLC.

The enclosed documents have been revised based on your comment letter, received January 12, 2017. We offer the following responses to the civil engineering related comments:

COMMENT 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.

RESPONSE 11: Comment noted.

COMMENT 12: The Plan Commission application shows the wrong PIN numbers. The top row of numbers should start with 03-29, not 03-08. The bottom row of numbers should start with 03-32, not 03-08.

RESPONSE 12: The Plan Commission Application has been revised to indicate the correct PIN numbers.

COMMENT 13: As has been commented upon previously when the Municipal building was presented, Sigwalt Avenue has not been formally dedicated or recorded as a public road. The Plat of Dedication should include applicable portions of Pine Avenue, Belmont Avenue, Burton Place, and Arlington Heights Road.

RESPONSE 13: It is understood that portions of Sigwalt Avenue, Davis Street, Pine Avenue, Belmont Avenue, Burton Place, and Arlington Heights Road have not been formally dedicated or recorded as public roads. The scope of the proposed redevelopment currently does not include the

preparation of a Plat of Dedication for the applicable portions of these right-of-ways.

COMMENT 14: Final engineering plans shall be georeferenced by using State Plane Coordinate System – Illinois East. Below are details about projection:

Projected Coordinate System:	NAD_1983_StatePlane_Illinois_East_FIPS_1201_Feet
Projection:	Transverse_Mercator
False_Easting:	984250.00000000
False_Northing:	0.00000000
Central_Meridian:	-88.33333333
Scale_Factor:	0.99997500
Latitude_Of_Origin:	36.66666667
Linear Unit:	Foot_US
Geographic Coordinate System:	GCS_North_American_1983
Datum:	D_North_American_1983
Prime Meridian:	Greenwich
Angular Unit:	Degree

RESPONSE 14: The topographic survey for the subject property has been prepared on the State Plane Coordinate System and shall be georeferenced with the Final Engineering Plans.

COMMENT 15: Final approval will require final engineering plans including detention calculations showing HWL, storage required, storage provided, and restrictor sizing calculations. Any detention storage system located under pavement must be designed to AASHTO HS-25 loading standard. The Village's allowable release rate is 0.18 cfs/Ac. Use C=0.50 for pervious areas, C=0.95 for impervious areas. Use Bulletin 70 rainfall data. Clearly show the overflow route for the site. Minimum restrictor size allowed, for maintenance reasons, is 2". Restrictors between 2" and 4" must be in a trap in a catch basin. Show the location and size of the restrictor. Provide a detail showing the restrictor catch basin.

RESPONSE 15: The Preliminary Stormwater Management Calculations have been revised based on Village criteria. It is understood that Final Engineering documents shall include the HWL, storage required, storage provided, restrictor sizing calculations and details. A release rate of 0.18 cfs/ac, C=0.50 for pervious, C=0.95 for impervious, Bulletin 70 rainfall data, and minimum restrictor size of 2" shall be used in the stormwater management design.

COMMENT 16: According to the preliminary calculations provided, the required volume is 0.48 ac-ft and the restrictor is 3" diameter. However, this differs from the results when the Village's method is applied. Using the given information of impervious area = 1.90 ac and pervious area = 0.10 ac from the preliminary calculations and applying them via the Village's method, the allowable release rate is 0.36 cfs and the required detention volume is 0.70 ac-ft. At the given HWL=676.06 and the orifice invert of 671.30, the restrictor calculates to a 2.5" diameter restrictor. Provide a design and calculations that meet the Village's requirements.

RESPONSE 16: The Preliminary Stormwater Management Calculations have been revised based on Village criteria. Please refer to the revised Preliminary Stormwater Management Calculations, revised Stormwater Detention Summary on the Preliminary Utility Plan (Sheet C-103), and revised Stormwater Detention Vault Cross-Section on the Preliminary Grading Plan (Sheet C-102).

COMMENT 17: Sheet C-102: The detail for Section A-A Stormwater Detention Vault shows a vault interior roof elevation of 678.46, almost 2.5' higher than the proposed HWL. Understanding this is a preliminary design, final design will require detailed volume calculations for a cast-in-place vault design or manufacturer's cut sheets with provided volumes for a pre-cast vault design. Vault plans to be stamped by a Registered Professional Structural Engineer. Loadings from the nearby railroad tracks should be taken into consideration, as determined by the structural engineer.

- RESPONSE 17:** The Preliminary Stormwater Management Calculations have been revised based on Village criteria. Please refer to the revised Stormwater Detention Vault Cross-Section on the Preliminary Grading Plan (Sheet C-102). It is understood that the Final Engineering Plans will require detailed manufacturer's cut sheets with provided volumes for a pre-cast vault design. The vault plans will be stamped by a Registered Professional Structural Engineer and loadings from the nearby railroad tracks will be taken into consideration, as determined by the structural engineer.
- COMMENT 18:** 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.
- RESPONSE 18:** A site photometric lighting diagram will be provided with Final Engineering Plan submittal. The design will include catalog cut sheets for all roadway, parking lot, and building mounted luminaires. All fixtures will be flat bottom, sharp cut-off, and no wall pack style fixtures will be permitted.
- COMMENT 19:** The exhibits showing the turning paths of the various vehicles, including the tower truck, are acceptable.
- RESPONSE 19:** Comment noted.
- COMMENT 20:** Plan sheets to be 24"x36" for engineering submittals to the Village and the MWRD.
- RESPONSE 20:** The engineering plan sheets have been revised to 24"x36" for submittals to the Village and MWRD. As discussed with the Village, the 24"x36" plan sheets can be submitted as a separate set or included with the 36" x 48" sheets.
- COMMENT 21:** Sheet C-101: The west driveway shows a through-left lane and a dedicated right turn lane. The traffic report indicates that a single right-thru-left outbound lane will be sufficient, allowing the loading zone to remain. Please show the proper striping/lane usage.
- RESPONSE 21:** Lane symbols and striping have been revised for the west driveway per conversation with the Village and recommendations of the traffic report. The outbound traffic movements have been revised to a single right-left outbound lane. Please refer to the Preliminary Paving Plan (Sheet C-104).
- COMMENT 22:** Sheet C-102: Can the interior floor of the Sally Port be lowered or sloped to reduce or eliminate the proposed exterior driveway modifications at the door? The building's finished floor elevation is shown at 684.20 and the garage floor elevation at the Sally Port door is the same.
- RESPONSE 22:** At the request of the Arlington Heights Police Department, the sally port finish floor elevation has been proposed at the same finish floor elevation of the building interior. This is in an effort to ease the transfer of perpetrator from the sally port into the police station. Per discussion with the Village, the sally port garage floor has been revised to pitch toward the alley to reduce the cross slope of the proposed alley. Alley thru traffic will benefit from the reduced cross slope. Refer to the Preliminary Grading Plan (Sheet C-102).
- COMMENT 23:** Sheet C-102: Clearly show the overflow route for surface water. Ensure via weir calculations that the proposed modifications to the driveway in front of the Sally Port do not impede any overflow.
- RESPONSE 23:** The proposed overflow route for surface water has been added to the Preliminary Engineering Plans with critical cross-section and weir calculations. Please refer to the Preliminary Grading Plan (Sheet C-102) and Preliminary Stormwater Calculations.

- COMMENT 24:** Sheet C-102: Include any PROWAG required sidewalk ramp modifications to locations along the south side of Sigwalt Street.
- RESPONSE 24:** Per discussions with the Village, accessible ramp improvements have been included for the south side of Sigwalt Street with removal & replacement of sidewalk in order to meeting Illinois Accessible Code standards. Please refer to the Proposed Grading Plan (Sheet C-102).
- COMMENT 25:** Sheet C-103: Clearly label every storm sewer run to be abandoned as removal or abandon in place with 2' plugs of non-shrink grout, as required by the MWRD. Show all existing building service lines to be re-used or retired at the main. Incorporate access points to the vault for maintenance activities.
- RESPONSE 25:** The Final Engineering Plans will include an Existing Conditions and Demolition Plan. This plan will identify all existing structures, hardscape and utilities (including storm sewers) to be removed or abandoned with specifications and details as necessary.
- COMMENT 26:** Sheet C-103: Due to the proposed utilities through the west driveway, provide a detour route for Village Hall traffic while this driveway area is under construction. If the driveway is to remain open during construction, provide a plan and schedule.
- RESPONSE 26:** A Construction Staging Plan will be provided for the proposed development. This will include any necessary detour plans due to construction activity including work within the west driveway.
- COMMENT 27:** Sheet C-104: Heavy duty asphalt pavement section to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-30 Binder, and 4" CA-6 Stone Subbase.
- RESPONSE 27:** The Heavy Duty asphalt pavement section has been revised to match the above specifications. Please refer to the Preliminary Paving Plan (Sheet C-104).
- COMMENT 28:** Sheet C-104: Based on the pavement widths and the arrows, it appears the drive aisles at the northwest corner of the new building are one-way away from the building. Please confirm this and include the appropriate signage and pavement striping on the final design.
- RESPONSE 28:** The proposed traffic circulation for the development is such that vehicle movements will be one-way from the proposed parking garage to the north and west. Proposed signage and pavement striping has been included on the plan. Please refer to the Preliminary Paving Plan (Sheet C-104).
- COMMENT 29:** Sheet C-104: Show any additional pavement cuts on Sigwalt Street as a result of retiring any existing service lines.
- RESPONSE 29:** The Final Engineering Plans will include an Existing Conditions and Demolition Plan. This plan will identify all pavement cuts necessary for utility demolition.
- COMMENT 30:** Is the sidewalk along the west side of the new building to be concrete or is the paver walk to match the rest of the construction in the right-of-way an option?
- RESPONSE 30:** The sidewalk along the west side of the new building is to be concrete with a paver walk along the south side of the building and adjacent to the front entrance at the SW corner of the building. Refer to the Preliminary Paving Plan (Sheet C-104) of the Preliminary Landscape Plan for additional detail.
- COMMENT 31:** For the rear Parking lot the dimensions for the drive aisle width shows only a 22 ft dimension, but it is with 9.5 ft wide parking stalls which geometrically works. Is a variation for this required?
- RESPONSE 31:** The rear parking lot of the existing police station has a drive aisle width of approximately 22-23' and an overall dimension of approximately 58' from back-of-curb to back-of-curb. The proposed rear parking lot will have a 22' drive aisle with an overall dimension of 55' from back-of-curb to

back-of-curb. The parking stalls will provide the required 16' depth from face-of-curb to end-of-stall with a 2' overhang of the curb. It appears the 22' drive aisle is an existing condition for the site.

COMMENT 32: Interior garage dimensions are difficult to discern on the plan provided. Provide clear dimensioning, should be 18' stall depth and 24' drive aisle for 90-degree parking. It is understood 9.5' ft wide parking stalls are being provided at the request of the Village. Provide turning template exhibit showing the proposed design if different than standard design.

RESPONSE 32: The interior dimensions of the proposed parking garage are included with the Architectural Plans. Per discussions with the Village, the 18' stall depth, 9.5' stall width and 24' drive aisle as shown on the architecture meets the Village standards.

COMMENT 33: The reconfiguration of the service road between the municipal building and new police building removes one driving lane. Provide the proposed dimensions between the two buildings. Shifting the outbound shared left/alterd through lane makes the jog to Pine Avenue even more severe, which should be evaluated.

RESPONSE 33: Based on the proposed geometry reconfigurations at the west driveway, the dimension between the existing Municipal Building and the proposed Police Station will be approximately 57-feet. As discussed with the Village, since the reconfigured geometry further misaligns the outbound thru land to Pine Avenue, the outbound lane has been striped with a right-turn only and left-turn only arrow to assist in identifying the traffic movements to exit the west drive aisle to Pine Avenue. Refer to the Preliminary Overall Site Plan (Sheet C-101).

COMMENT 34: The position of the southwest corner of the new police building in relationship to the stopping point for traffic exiting the relocated driveway seems to have sight distance issues. Position of the stop bar and public sidewalk crossing to allow exiting traffic to get as close to Sigwalt as possible.

RESPONSE 34: The public crosswalk and stop bar for the west drive aisle have been moved south to allow outbound traffic to stop closer to the apparent Sigwalt right-of-way. This relocation was reviewed with a 12'x12' sight triangle as suggested by the Village. Refer to the Preliminary Paving Plan (Sheet C-104).

COMMENT 35: There are no depressed ADA truncated dome sidewalks shown for either side of the sidewalk crossing from the municipal building to the east curb to the new sidewalk. This sidewalk used to go past and around the southeast corner of the garage structure and access the door to the staircase on the east face of the stairwell. Is this doorway to be abandoned? How will the existing east side passage door of the parking garage stairwell at the southeast corner of the garage structure be accessed?

RESPONSE 35: Depressed curb ramps and ADA truncated dome sidewalks have been incorporated into the design to maintain a sidewalk crossing between the municipal building and the proposed walk adjacent to the Police Station. Access to the west side of the existing parking garage stair tower will be maintained and has been connected to the proposed sidewalk adjacent to the Police Station. Refer to the Preliminary Paving Plan (Sheet C-104).

COMMENT 36: There are no ADA curb depressions at the crossing of the service drive at the northwest corner of the new police building towards the north surface parking lot.

RESPONSE 36: Depressed ADA curb ramps have been added for the sidewalk at the northwest corner of the proposed building for access from the rear parking lot to the Police Station. Refer to the Preliminary Paving Plan (Sheet C-104).

COMMENT 37: What are the areas between the west face of the new police building and the large sidewalk area underneath the parking garage being developed as, and what is the fenced indications for?

- RESPONSE 37:** The sidewalk geometry at the northwest corner of the building (underneath the existing parking garage) has been revised to limit pavement, avoid conflicts with existing structures and provide direction to access the building. Refer to the Preliminary Paving Plan (Sheet C-104). The fence and/or wall have been shown to delineation a separation between the public and employee entrance to the building. This geometry will be refined as the design develops toward Final Engineering Plans.
- COMMENT 38:** Since the drive aisle between the two utility pads storing the generators and chillers is only 19.5 ft B-B and marked one way northbound, this north parking lot only has its main access coming from and going towards the northeast corner of the new building. The note allowing a reduction of this pavement to 20 ft. E-E around this curve that will have sight distance blocked by the building is a concern, and should not be reduced.
- RESPONSE 38:** The note indicating the drive aisle pavement width at the northeast corner of the building can be reduced to 20-foot E-E has been removed from the plans. It is understood that this is the only ingress and main egress to the rear parking lot and should remain at the wider pavement width.
- COMMENT 39:** There are no provisions for pedestrian access along the driveway between the new Police and existing Fire buildings.
- RESPONSE 39:** Correct. There are no provisions for pedestrian access along the driveway between the proposed Police Station and existing Fire Station.
- COMMENT 40:** New 8 inch watermain location is shown right next to or under a parking garage structural column.
- RESPONSE 40:** The proposed water service within the west driveway has been relocated to eliminate conflicts with the existing parking garage columns. This water service location will be refined and may be relocated further as the design develops toward Final Engineering Plans.
- COMMENT 41:** The concrete sidewalk pad west of the west face of the new police building is back pitching water back into the building. There are 3 different proposals for the design of this area between the Architectural/Engineering and the sketches in the traffic report about this sidewalk area layout. Please coordinate a single plan.
- RESPONSE 41:** The proposed hardscape geometrics at the northwest corner of the building have been coordinated between the engineering, landscaping and architectural plans. In order to assist with stormwater drainage from this area, a yard drain inlet has been added in the green space between the building and the proposed sidewalk. Refer to the Preliminary Paving Plan (Sheet C-104).
- COMMENT 42:** The commentary in the traffic report related to pedestrian and customer movements from level one of the parking garage towards the municipal and police buildings and between these two buildings is not clearly understood. Is the current marked mid-block crosswalk from the door exiting the N.E. corner of the municipal building being abandoned? It is disagreed that focus of pedestrian activities is consolidated by providing a sidewalk on the east side of the service driveway. Providing this sidewalk along the entire length of this curb invites random access by pedestrians, instead of focused direction to an identified point of crossing that can be striped and signed for pedestrian safety, and notification to drivers. This issue is especially relevant for seeing pedestrians moving under the parking garage on particularly sunny days, when the lighting contrast results in temporary glare and sun blindness entering under the structure. It is suggested that pedestrian crossing across the pavement before entering the garage to remain, and to better define pedestrian access on the first level of the garage, to the N.E. corner of the municipal building, & over to the police station.
- RESPONSE 42:** The mid-block crosswalk between the municipal building and the sidewalk adjacent to the Police Station will remain with the proposed development. Depressed curb ramps and ADA truncated dome sidewalks have been incorporated into the design to maintain the existing crossing

location. Refer to the Preliminary Paving Plan (Sheet C-104).

- COMMENT 43:** There are several confusing representations in the diagrams in the traffic report. Attachment #2, shows all lanes as outbound, inbound lane shown as outbound left, with stop bar across this lane, sidewalk pattern different from traffic report sketches and Architect/Engineering plans; Attachment #3 Proposed Driveway Alignment shows the sidewalk alignment consistent with the traffic report sketch, but there is a 2ftX2ft garage structure column in the center of this walk, and again the striping for the two lanes at Sigwalt show stop bars across the inbound lane.
- RESPONSE 43:** The traffic study has been revised for coordination with the latest site plan and removal of confusing representations. Please refer to the revised Traffic Study.
- COMMENT 44:** As a normal matter of discourse traffic reports usually contain the calculated trip generation values for the properties based upon the ITE land use classification for the building uses. While actual traffic count data has been supplied, identification of peak hours was based upon the site peak, rather than the traffic generated at the roadway peak hour. The proposed site, based upon the upgraded square footage of the new building, (which didn't identify the old verses new building square footage additions), should be calculated and projected.
- RESPONSE 44:** Per conversations with the Village, the existing onsite operations and employees staffed will not change with the renovated Police Station. Therefore the calculated trip generations would not be affected by the proposed ITE land use or additional building square footage.
- COMMENT 45:** For reference in the traffic reports, shouldn't the Code required site parking, based upon the three building's square footages be calculated and provided for reference to verify if any variations for code required parking are necessary?
- RESPONSE 45:** Site parking requirements will be analyzed with the final building square footages and parking stalls provided at the time of Final Engineering. It is understood that code variations may be necessary.
- COMMENT 46:** In the absence of floor plans there is some confusion and inability to evaluate the operation and movement of vehicles out of the first couple of parking stalls in the indoor parking areas, and how the activity in the area of the three garage doors into the evidence garage, and fleet parking garage will operate. Vehicles backing out of the evidence garages are going to be confronted with backing out blind to see traffic exiting the north surface parking lot. Turning templates for access into and exiting the evidence garage needs to be provided.
- RESPONSE 46:** Per discussions with the Village, it has been suggested that a bollard with a flashing light be incorporated into the design at the northeast corner of the building to alert incoming and outgoing traffic that vehicular movement is occurring at the evidence garage or parking garage. This will assist in preventing accidents from vehicles backing out of the evidence garage and/or parking garage into the path of traffic.
- COMMENT 47:** Is the Sally Port only for prisoner transfers only, or are emergency vehicles being stored or being discharged from here? The ability to turn right out of this garage for the south most stall is impeded by the building wall, and curb placement which will result in this vehicle swinging way wide into the driveway into oncoming traffic to turn right towards Sigwalt Street. Views for vehicles exiting this garage are blind for seeing traffic coming in off of Sigwalt as well. I'm assuming vehicles will be backing into the parking garage, so all the traffic trying to get to the north surface lot will be encumbered by this operation occasionally.
- RESPONSE 47:** Per the Police Department, the sally port could be used with police vehicles and/or emergency vehicles depending on the situation. Based on this information and a better understanding of how the sally port will function, we have revised the vehicle turning movement exhibits to accommodate entrance and exit from the sally port. It should be noted that the sally port garage door is 24-feet wide and can allow for additional flexibility in vehicular movements.

Mr. James Massarelli
January 30, 2017
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We request your review and subsequent approval of the enclosed documents. Should you have any questions, please do not hesitate to contact me at 847-696-1400 or kmatray@mackieconsult.com.

Sincerely,



Kevin J. Matray, P.E.
Senior Project Manager

cc: Charles Witherington-Perkins, Village of Arlington Heights
Marc Rohde, Legat Architects

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Plan Commission Hearing Police Station Round 1
Police Department Comment Responses
Charles Witherington-Perkins

The following are responses to the Police Station Round 1 comments:

1. All site lighting will meet current Village code regulations
2. The driveway at the rear of the Police Station has been designed with significant input from the Police Chief, Deputy Chief and other Police department Staff as well as project engineers. The site plan is being designed to allow only Police Department personnel to circulate the rear of the building. With respect to the sally port, the sally port has been designed to allow adequate vehicle movements.



DATE: January 27, 2017

501

TO: Cris Papierniak, Assistant Director of Public Works

FR: Michelle Kelly, Upland Design Ltd.

RE: Police Department Plan Commission

Below are the responses to the landscape review comments from the Village Public Works Department for the AHPD Plan Commission Plans project dated January 19, 2017.

LANDSCAPING

1. The shared police/fire driveway will possibly be exposed to salt from salt trucks clearing the drive lanes and parking stalls from snow and ice. Ex. Boxwoods adjacent to the fire station may not thrive there.

Response: The noted boxwoods above have been updated to yews.

2. Please consider shade tolerance for plants being planted on the north side of the building.

Response: More shade tolerant plants have been added to the north side of the building.

3. Public Works is recommending planting trees that are 2.5"-3" in diameter. They will thrive better in these tight locations.

Response: The recommended shade trees have been updated from 2.5" to 3.0" in diameter as requested.

4. The following sections give recommended alternative species selections for each planting location:

Response: All shade trees on site have been revised per the recommended alternative species. The selected trees are identified in red below.

5 Tree Grate Pits located on Davis St.- I think it would look best if all 5 trees were the same or possible alternating using 2 different types of trees that have similar growth patterns.

- Elm- 'Frontier'
- Ginkgo- 'Autumn Gold'
- Japanese lilac- 'Ivory silk'
- Kentucky Coffee tree- 'Espresso'
- Pear- 'Chanticleer'
- Honey locust- 'Impcole'

Tree located along fence by the railroad tracks- I think we need to use all narrow, upright, fruitless if possible trees here. Linden trees drop a lot of “honey dew” which makes them a poor choice to use around cars.

- **Oak-** either **Regal Prince** or **Crimson Spire**. (Regal Prince is a more hardy than the **Crimson Spire**)
- Elm- ‘Emerald Sunshine’
- **Elm- ‘Frontier’**
- **Ginkgo-**either ‘Autumn Gold’ or ‘**Princeton Sentry**’
- Maple- (Hedge maple) ‘Campestre’
- Hornbeam- (Carpinus betulus)
- Cornelian cherry
- **Japanese lilac- ‘Ivory silk’**

Parking lot islands west end-Hackberry trees are too large for that site

- **Kentucky Coffee**
- American hornbeam
- Maple- (Rugged Charm) ‘tataricum’
- Ginkgo- ‘Magyar’
- Linden- ‘Sentry’

Parking lot islands by building-Swamp White Oak trees are too large for those sites

- Service berry- (single stem and if the building is not too tall causing too much shade)
- **Japanese lilac- ‘Ivory silk’**
- Cornelian cherry
- Maple- (Rugged Charm) ‘tataricum’
- American hornbeam

Southside of parking lot up against the new building-way too small for swamp white oak trees

*Can use any of the trees from the above railroad track sites.

*Height of building will most likely shade this area causing poor growth.

- **Japanese lilac- ‘Ivory silk’**

GENERAL COMMENTS

Questions 5-9, by others.

UTILITY

Questions 10-14, by others.

Memorandum

To: Sam Hubbard, Planning and Community Development
From: Cris Papierniak, Assistant Director of Public Works
Date: January 19, 2017
Subject: Police Department Plan Commission

Regarding the AHPD Plan Commission plans, we have the following comments:

LANDSCAPING

1. The shared police/fire driveway will possibly be exposed to salt from salt trucks clearing the drive lanes and parking stalls from snow and ice. Ex. Boxwoods adjacent to the fire station may not thrive there.
2. Please consider shade tolerance for plants being planted on the north side of the building.
3. Public Works is recommending planting trees that are 2.5"-3" in diameter. They will thrive better in these tight locations.
4. The following sections give recommended alternative specie selections for each planting location:

5 Tree Grate Pits located on Davis St.- I think it would look best if all 5 trees were the same or possible alternating using 2 different types of trees that have similar growth patterns.

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Tree located along fence by the railroad tracks- I think we need to use all narrow, upright, fruitless if possible trees here. Linden trees drop a lot of "honey dew" which makes them a poor choice to use around cars.

- Oak- either Regal Prince or Crimson Spire. (Regal Prince is a more hardy than the Crimson Spire)
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- American hornbeam

Southside of parking lot up against the new building-way too small for swamp white oak trees

*Can use any of the trees from the above railroad track sites.

*Height of building will most likely shade this area causing poor growth.

GENERAL COMMENTS

5. Dumpster is currently used for the Fire Department. The plans show that it will be relocated due to new Police lot configuration. Show the proposed relocation.

The proposed relocation will be shown on the Final Engineering drawings.

6. Existing Street Light system along Sigwalt must remain operational during the construction project.

The Construction Manager will make sure these lights remain operational.

7. Provide truncated domes for sidewalk on existing east side of proposed driveway.

These will be provided and shown on the Final Engineering drawings.

8. Brick paver design shall match Village Hall with appropriate concrete border.

The civil drawings will show the matching design on the Final Engineering drawings.

9. Remove building plan detail from the vehicle turning movement plans.

The civil drawings will remove the building plan interior details.

UTILITY

10. Utility plans do not show existing Chiller lines, Fiber lines and water main correctly on campus.

The civil drawings will be coordinated and updated on the Final Engineering drawings.

11. Install isolation valves (2) on either side of proposed 8" water connection. If this is done after hours, a pressure connection will not be required. The isolation valve on AHFD side will have to be done quickly after hours, then the 8" connection and west 10" isolation valve could be installed.

The civil drawings will be coordinated and updated on the Final Engineering drawings

12. If the existing 8" will not be re-used inside the new building, the 8x6x8 tee will need to be replaced with a 8" x 90 degree bend with a 6" reducer to the existing hydrant.

The civil drawings will be coordinated and updated on the Final Engineering drawings

13. All water main will be zinc coated and poly-wrapped with "V-Bio" wrap supplied by pipe manufacturer.

The civil drawings will be coordinated and updated on the Final Engineering drawings

14. Abandon the existing sanitary service at the main with a clamp.

The civil drawings will be coordinated and updated on the Final Engineering drawings

Plan Review

Address: Village of Arlington Heights Police Station
200 E. Sigwalt Street
Amendments to PUD Ordinance #78-026

P.C. #16-024
Round 1

Submitted to: Sam Hubbard, Planning & Community Development or

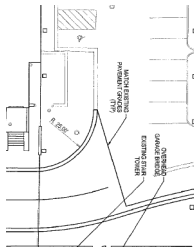
Submitted by: David Robb, Disability Services Coordinator
(847) 368-5793

Date: January 9, 2017

Re: 2010 ADA Standards for Accessible Design and Illinois
Accessibility Code (IAC), Effective April 24, 1997

Sheet L-101

1. Identify the public Accessible Reserved Parking Spaces to serve the New Police Station. IAC Section 400.310(c)(2, 3, and 7) and 2010 ADA Standards Section 208.3.1.



This will be shown on future plans as we progress through the design phases.

2. Identify the accessible pedestrian route(s) with new curb ramp from public Accessible Reserved Parking space(s) to the public entrance(s) of the new Police Station. 2010 ADA Standards Section 206.2.1

This will be shown on future plans as we progress through the design phases.

Sheet C-106

3. All interior-hinged Door Closers shall be adjusted in accordance with ADA Section 404.2.8, 404.2.9, and 404.2.10 to include a maximum opening force of "5 pounds of force" with adjusted "minimum closing speeds per door closing cycle"

This is standard and will be in the hardware specifications.

4. The two doors in series that swing into the kitchenette next to the Conference Room shall have a minimum distance of 48-inches between them, plus the width of each door swinging into the space. See ADA 2010 Standards Section 404.2.6 and Figure 404.2.6(c).

This is already that way on the drawings.



Planning & Community Development Dept. Review

January 12, 2017

REVIEW ROUND 1

Project: 200 E. Sigwalt Street
Police Station Redevelopment

Case Number: PC 16-024

General:

7. For all Variations requested, written responses to the following criteria shall be provided:
 - That the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that zone.
 - The plight of the owner is due to unique circumstances.
 - The variation, if granted, will not alter the essential character of the locality.

Please refer to the attached written justification for variations prepared by the Village of Arlington Heights.
8. A Demolition Plan should be provided within the Engineering plan set.

A Demolition Plan will be provided with the Final Engineering set.
9. Please provide a Photometric Plan showing proposed illumination levels. Additionally, cut sheets for all proposed lighting is required.

A Photometric Plan will be provided with the Final Engineering set.
10. Please provide a Development Phasing Plan/Schedule. This schedule shall include the anticipated construction start and completion times for each phase, the anticipated construction sequencing (material delivery schedule, the general construction methodology, construction parking, lane closures including plans illustrating such closures if necessary, etc.).

This will be prepared by the Construction Manager.

Site Plan:

11. Please revise sheet C-101 to indicate the setback distance from the northeast corner of the proposed building to the northern property line.

The distance from the northeast corner of the proposed Police Station building to the northern property line is 30-feet. This dimension has been added to the Preliminary Overall Site Plan (Sheet C-101).
12. The Engineering plans have a note by the utility area that says "Refer to Architectural Plans for Transformer, Chiller, and Generator Details", however, no such details are provided in the Architectural plans. Please provide these details. Additionally, details are needed on the utility enclosure walls (height, materials, gate). Will they be tall enough to screen the utility equipment?

As the project is only partway through the Design Development phase, this work is not yet completed on the Architectural work. All equipment will be completely screened. This will be included on the Construction Documents.

13. The utility area is shown as slightly different shapes on the Engineering Plans and Architectural Plans/Landscape Plans. Please revise plans so that they are consistent.

As the project is only partway through the Design Development phase, this work is not yet completed or coordinated between all A/E disciplines. This area is consistent on all plans. This will be included on the Construction Documents.

14. The paving area on the western side of the building is not consistent among the various plans. The Engineering plans show this area as all concrete, the Architectural Plans show this area as only partially concrete, and the Landscape plans show this area as part concrete, part pavers (a note should be added to indicate that they are in fact pavers), and partly an unknown surface (a note should be added to indicate what this surface is). Please review all plans to ensure consistency among each plan.

Final design is still be worked on. Everything consistent on all plans will be coordinated prior to Final Design documents.

15. The Engineering plans indicate the removal of the existing dumpster enclosure in-between the Police Station and Fire Station. Will a new dumpster enclosure be provided? Where will it be located, what material will the enclosure walls and gates be constructed of, and how tall will the walls be? Please provide these details on the plans.

The dumpster will be relocated east of the Police Station or rear of the Fire Station and will be either a masonry enclosure or a cedar fence type enclosure. Design of the site is still ongoing so location is not established at this time.

16. Please provide details on the proposed fence at the end of the parking area in the northeast corner of the site (height, materials, style of fence).

The proposed fence at the northwest end of the rear parking lot will match the current existing fence. Details of the proposed fence will be provided with the final landscape design.

17. Please provide details on the proposed fence and gate on the western side of the building (height, materials, style of fence). Additionally, it is unclear why a fence is needed in this location. Please clarify.

Alternative designs are currently being considered for the fence/wall/gate at the western side of the proposed Police Station. The purpose of the fence is to create a separation between the public entrance and police entrance to the building. The fence/wall will provide screening/barrier to notify the public that the entrance at the northwest corner of the building is not available to them. Details of the proposed fence will be provided with the final landscape design.

Building:

18. Please revise the elevations to show proposed building heights, including height to peak of roof, height to eaves, and height to midpoint between roof and eaves.

Exterior elevations will have this information included.

Site Circulation:

19. Section 11.2-8 of the Zoning Code requires that all one way drive aisles for parking lots that provide 90° parking must maintain a minimum width of 18'. The exit drive aisle from the Police Station garage appears to be

19.5', however, there are two bollards proposed within the drive aisle, which reduces the width of the drive aisle to approx. 16' in width. Please clarify if a Variation is requested. Similarly, the same is true for the entrance to the garage, which appears to be only approx. 15' in width when factoring in the proposed bollards.

Per discussions with the Village, the required width of the garage door is being reviewed. It is understood that a minimum pavement width is required but the width of the garage door itself does not seem to match this width based on examples within the Village. The geometry will continue to be refined for pavement and bollards with the final design based on guidance from the Village.

20. Section 11.2-8 of the Zoning Code requires that all two way drive aisles for parking lots that provide 90° parking must maintain a minimum width of 24'. The drive aisles in the rear parking lot are proposed at 22' in width. Please clarify if a Variation is being requested.

A variation request is being made for the reduce drive aisle of 22-feet for the rear parking lot. Please refer to the attached written justification for variations prepared by the Village of Arlington Heights.

21. The Engineering plans show that the loading space at the western driveway entrance into the Municipal Campus will be converted to a "right turn only" drive aisle. The plans should be revised to show this loading space will remain unchanged. Additionally, the architectural plans and landscape plans show that the western driveway will be an exit only driveway. All plans should be revised to be consistent and should reflect that the loading space will remain and that western driveway entrance will contain one inbound lane and one outbound lane.

The Preliminary Engineering Plans have been revised based on Village comments to remove the "right turn only" drive aisle and maintain the existing loading space. The proposed striping for the driveway has been revised to indicate the loading space, a single outbound right/left turn lane, and an inbound lane.

22. Ordinance 05-041 granted a Variation to allow only one loading space and for this loading space to be 10' x 22'. Please confirm that the dimensions of this loading space will remain unchanged.

The existing loading space located at the southeast corner of the Municipal building has been maintained at its current geometric configuration. Any proposed pavement improvements for this location will maintain the loading space and its existing dimensions.

23. Ordinance 05-041 granted a Variation to allow the western driveway entrance to the Municipal Campus to be 40' in width. It appears that the new driveway entrance in this location will be 41.14', and therefore an amendment to the Variation is needed. Similarly, Ordinance 05-041 granted a Variation to allow the shared Police/Fire driveway entrance to be 68' in width, and it appears that this driveway entrance will be 107' in width and therefore an amendment to this Variation is needed.

The shared Police/Municipal drive aisle along the west side of the proposed building varies but is 41.14-feet from back-of-curb to back-of-curb at its widest and 27-feet from back-of-curb to back-of-curb at its narrowest.

The shared Police/Fire drive aisle along the east side of the proposed building is 25-feet from back-of-curb to back-of-curb. (The driveway opening is +/- 107')

If necessary, a variation revision will be requested for the proposed driveway adjustments.

24. "Do Not Enter" signage should be added to all one-way drive aisles.

Signage for one-way aisles (including "Do Not Enter" signs) have been added to the Preliminary Paving Plan (Sheet C-104).

Parking and Traffic:








25. Parking requirements could not be calculated as the sizes of the spaces within the proposed Police Station building have not been provided. Please revise the Architectural floor plans to show the square footage of **all** spaces on

each floor as shown in the example below:

The total square footage of the building is consistent and is no greater than 70,000 s.f. As the interiors of the plans are being worked on, as we are in Design Development, there will be some slight modifications so final square footages cannot be provided at this time. We will have this complete by the end of Design Development.

The parking sizes are dimensioned on the floor plans.

LEGEND

	CONCOURSE	(Square Footage)
	CIRCULATION	(Square Footage)
	SUPPORT	(Square Footage)
	FORENSICS	(Square Footage)
	EVIDENCE	(Square Footage)
	MULTI PURPOSE	(Square Footage)
	FIREARMS	(Square Footage)

26. The Traffic Study appears to contain an error in the 2014 Municipal Campus Parking Summary Chart and associated text below. Specifically, the chart shows that during peak usage, 133 of the 150 employee parking spaces were occupied. However, the text below states that during peak usage only 114 employee parking spaces were occupied. Please clarify.

Coordination will occur to revise the Traffic Study to correct the peak parking stall usage information.

Prepared by: 

Plan Commission Hearing Police Station Round 1
Planning & Community Development Landscape Comment Responses
Charles Witherington-Perkins

1. The sidewalk has been widened
2. All trees planted within the Police Station private property will meet Village Code 4 inch caliper requirement.
3. Details of the proposed garden wall will be provided.
4. Foundation plantings on the north elevation have been provided.

AHPD CONSTRUCTION STAGING PLAN

CONSTRUCTION STAGING GENERAL NOTES

1. All construction work hours are to be from 7am - 6pm (Monday through Friday)
2. All construction traffic access from Arlington Heights Road only.
3. All construction contractor material staging in North parking lot within the Temporary Construction Fence.

CONSTRUCTION STAGING SYMBOL LIST

SYMBOL	DESCRIPTION
	TEMPORARY CONSTRUCTION FENCE
	TEMPORARY CONSTRUCTION GATE
	SILT FENCE
	CONSTRUCTION TRAFFIC
	"NO CONSTRUCTION ACCESS" SIGN
	CONSTRUCTION PARKING / MATERIAL STORAGE
	CONSTRUCTION OFFICE TRAILER
	CONSTRUCTION CRANE
	INTERMITTANT LANE CLOSURES

