

VILLAGE OF ORLAND PARK

14700 Ravinia Avenue
Orland Park, IL 60462
www.orlandpark.org



Meeting Minutes

Monday, November 19, 2018

6:00 PM

Village Hall

Development Services, Planning and Engineering Committee

*Chairman Carole Griffin Ruzich
Trustees Kathleen M. Fenton and James V. Dodge
Village Clerk John C. Mehalek*

CALL TO ORDER/ROLL CALL

The meeting was called to order at 6:35 P.M.

Present: 3 - Chairman Griffin Ruzich; Trustee Fenton and Trustee Dodge

APPROVAL OF MINUTES

2018-0790 Approval of the October 15, 2018 Development Services, Planning and Engineering Committee Minutes

I move to approve the Minutes of the Regular Meeting of the Development Services, Planning and Engineering Committee of October 15, 2018.

A motion was made by Trustee Fenton, seconded by Trustee Dodge, that this matter be APPROVED. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

ITEMS FOR SEPARATE ACTION

2018-0700 Solar Panel Installation - 17606 Karli Lane - Rao Residence

Assistant Village Manager and Director of Development Services Karie Friling reported that Section 6-314.C of the Land Development Code requires that the petitioner seeking a renewable energy or environmental clean technology system first obtain an Environmental Clean Technology (ECT) review from the Plan Commission. Subsequent to such a review, this project will follow the standard development review process. A review will next take place at the Development Services and Planning Committee and then a final review and decision from the Village Board of Trustees.

PROJECT DESCRIPTION & CONTEXT

The petitioner is proposing to install and maintain 21.24 kW grid interactive solar arrays, comprised of twenty (59) photovoltaic (PV) solar panels at a single family home located in the Orland Woods III. The solar panels will be located on the east, south and west facing gabled rooftops of a single-family residence located at 17606 Karli Lane. Energy captured by the proposed solar panels will be used for general household purposes, providing an overall general reduction in electricity costs for the homeowner. The solar panel system also includes a "SunPower Invisimount" racking system, inverters and other electrical service components.

The petitioner does not request any variances for this project.

The recommendation motion includes the following conditions:

1. That all building code related items shall be met;
2. That all building permits shall be obtained prior to construction;
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties;
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

Overall, the project conforms to the Village's Comprehensive Plan, Land Development Code and policies for this area.

DETAILED PLAN COMMISSION DISCUSSION

This project was presented and reviewed at the November 13, 2018 Plan Commission meeting. After a presentation by Village Staff; Commissioner Shalabi asked if we had ever approved a solar panel system with panels on the front elevation facing a row. Staff indicated that yes, this type of installation has been approved in the past and that the code does not regulate whether panels can go on a front elevation or not. Staff further explained that the only code requirement related to adjacent properties and right of ways was that the petitioner must provide assurances that no glare from the panels be directed onto to properties and roadways; and that the petitioner has provided those assurances.

All commissioners concurred they were in favor of the Environmental Clean Technology Project.

PLAN COMMISSION MOTION

On November 13, 2018, the Plan Commission voted (7-0) to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 17606 Karli Lane as depicted on the plan set "Plan and Construction Set" prepared by Ailey Solar Electric, dated September 28, 2018 and last revised October 22, 2018, subject to the following conditions:

1. That all building code related items shall be met;
2. That all building permits shall be obtained prior to construction;
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties;
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

This case is now before the Development Services, Planning and Engineering Committee for recommendation prior to final consideration by the Board of Trustees.

Chairman Ruzich had a question about the code being change. (refer to audio file)

Director Friling responded to Chairman Ruzich. (refer to audio file.)

I move to recommend to the Village Board of Trustees approval of the Environmental Clean Technology Review for 17606 Karli Lane, as recommended at the November 13, 2018 Plan Commission meeting and as fully referenced below:

THIS SECTION FOR REFERENCE ONLY (NOT NECESSARY TO BE READ)

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 17606 Karli Lane as depicted on the plan set "Plan and Construction Set" prepared by Ailey Solar Electric, dated September 28, 2018 and last revised October 22, 2018, subject to the following conditions:

1. That all building code related items shall be met;
2. That all building permits shall be obtained prior to construction;
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties;
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

A motion was made by Trustee Fenton, seconded by Trustee Dodge, that this matter be RECOMMENDED FOR APPROVAL to the Board of Trustees. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0249 Orland Park Prayer Center South Parking - Development Petition for Rezoning, Subdivision, Site Plan, Landscape Plan, Special Use Permit Amendment with Modifications

Director of Development Services Karie Friling reported that the Orland Park Prayer Center, located near the northwest corner of 167th Street and 104th Avenue, proposes to construct a 147 parking space pervious paver parking lot with underground detention on a 3.6 acre site, just south of and adjacent to their existing parking lot. Improvements include extensive landscaping and new sidewalks along 167th Street and 104th Avenue. The hard corner remains as an open grassy area for a future building, however that is not included within this current petition. The site is currently undeveloped and includes trees and a small stream traversing the site. Currently, informal overflow parking occurs on the subject site during peak events, and the site sometimes utilizes temporary portable lighting.

The development parcel is currently zoned ORI Mixed Use. Under this proposal the land will be rezoned to E-1 Estate Residential so it can be consolidated with the existing E-1 Prayer Center parcel. Places of worship are typically located in the E-1 Estate Residential Zoning District.

The existing Prayer Center facility totals 42,317 square foot and includes a main building, a Community Center building, a detention pond, and 338 parking spaces on 6.5 acres. When combined with the proposed parking lot expansion site, the total site will encompass approximately 9.7 acres.

History & Context

The Prayer Center took ownership of subject site in 2014. The site has not been developed, but has informally been utilized for overflow parking. Major milestones include:

- 2004: A 22,700 square foot mosque with 123 parking spaces on an approximately 5 acre site was approved by the Village Board through a special use permit for a place of worship.
- 2006: The facility opened, and parking soon spilled over onto an adjacent 2.2 acre lot.
- 2007: The 2.2 acre lot was annexed and approved for an expanded 215 parking space parking lot, for a total of 338 spaces.
- 2008: The 9,617 square foot Community Center was approved and constructed.
- 2018: The current petition requests approvals to expand the parking area southward, adding 147 parking spaces on an adjacent 3.6 acre site, for a grand total of 485 parking spaces to serve the Prayer Center.

Project Analysis

The Orland Park Prayer Center currently operates under a Special Use Permit that was granted by the Board in 2004 that has been updated through the years with facility expansions. Current parking patterns show that parking shortages occur on a regular basis, particularly during Friday prayer services and during the month of Ramadan. The Land Development Code only allows parking only on paved and improved parking lots. According to the petitioner, there are currently no other adjacent properties that are available to accommodate and/or share further parking expansions. Adequate parking is a common concern of growing congregations, including nearby Calvary Church and Parkview Christian Church, both who recently expanded their parking fields. In the case of the Prayer Center, the site must be rezoned and consolidated with the existing Prayer Center property in order to construct the proposed parking lot. The plans require two Land Development Code modifications. The project will help reduce parking overflow and will add additional access points to and from the site to help alleviate traffic congestion.

Comprehensive Plan

The subject site is located in the Centennial Planning District of the Village's Comprehensive Plan, which designates this site as a 'Development Opportunity' for manufacturing employment emphasis, reflecting the focus of the current ORI Mixed Use Zoning District. Additionally, the Comprehensive Plan's 'Community and Culture' Chapter recognizes that leveraging the services, facilities and social networks of faith based institutions for community engagement activities, projects and events can improve the quality of life of their congregants.

Rezoning (Map Amendment)

The subject site is in the ORI Mixed Use Zoning District, which encourages a mix of "employment-generating office, institutional, research, and light manufacturing uses", similar to the adjacent Panduit facility. Places of worship are a type of institutional use. The project site was incorporated into the Village and rezoned to ORI Mixed Use in the early 2000's, but has never developed. Prior to its current undeveloped state, the site was utilized for large lot residential. The petitioner proposes a rezoning to the E-1 Estate Residential Zoning District to match the existing Prayer Center zoning. Most of the Village's places of worship are located in the E-1 Estate Residential District. The subject site must be zoned the same as the Prayer Center parcel in order to be consolidated with it, which must occur before a parking lot can be constructed, because parking lots must be accessory to a primary use and are not permitted on separate parcels.

Although places of worship are not the primary targeted land use of either the existing ORI District or the proposed E-1 District, they are accommodated in both on a limited basis via a Special Use Permit.

LaSalle Factors

Per Section 5-108.E.3.a. of the Land Development Code, the Plan Commission shall consider the following factors when reviewing an application for rezoning. Responses to these factors have been provided by the petitioner as an attachment. Additionally, each factor below is followed by staff observations.

1. The existing uses and zoning of nearby property.

-North: The existing Prayer Center abuts to the north and is located in the E-1 Estate Residential Zoning District. The Prayer Center's members will benefit from the additional parking.

-South: 167th Street abuts to the south; across the street is Mallard Landings Subdivision Town Homes in the R-4 Residential Zoning District. Places of worship are commonly located near residential uses and the proposed parking lot will be screened with landscape.

-West: Panduit, an office and light manufacturing facility, abuts to the west and is located in the MFG Manufacturing Zoning District. It is buffered from the proposed parking expansion with an existing detention pond and landscape buffer.

-East: The property across 104th Avenue is undeveloped property zoned OS

Open Space Zoning District owned by the Archdiocese, and includes a cemetery further north.

2. The extent to which property values are diminished by a particular zoning classification or restriction.

-Staff does not have an expert opinion on this standard.

3. The extent to which the destruction of property value of a petitioning property owner promotes the health, safety, morals, or general welfare of the public.

-Staff does not have an expert opinion on this standard.

4. The relative gain to the public as opposed to the hardship imposed on a petitioning property owner.

-Residents in the community and surrounding area, both Prayer Center members and neighbors, will benefit from the new parking lots that will comply with Village Code requirements for lighting, pavement, and landscaping. New water and sewer lines will be extended along the parking lot's frontage. Sidewalks and pedestrian crosswalks will be added to abutting streets.

5. The suitability of the subject property for its zoned purposes.

-The property has remained undeveloped in the ORI Zoning District for many years. All other property that abuts the Prayer Center is already developed or is unavailable, and the Prayer Center has no other reasonable options for the needed parking expansion.

6. The length of time the property has been vacant as zoned, considered in the context of land development in the area.

-The property has been zoned ORI Mixed Use for over 15 years, however has never been developed. The Prayer Center purchased the land in 2014, presumably in anticipation of future expansion.

7. The Comprehensive Plan designation and the current applicability of that designation.

-The development site is located in the Centennial Planning District in the Village's Comprehensive Plan, which designates the development area as a 'Development Opportunity' for manufacturing employment emphasis, reflecting the primary purpose of the current ORI Zoning District. However, places of worship are allowed in either the ORI or E-1 Districts on an occasional basis with Special Use Permits. Additionally, the Comprehensive Plan's Community and Culture Chapter recognizes that leveraging the services, facilities, and social networks of faith based institutions for community engagement activities, projects, and events can improve the quality of life of their congregants.

8. The evidence or lack of evidence, of community need for the use proposed.

-Observation by the petitioner, staff, and neighbors supports the contention that

parking routinely overflows the existing mosque parking lot during peak hours onto the dirt lot that is proposed for improvements. The improved parking lot will improve traffic circulation, cut down on mud and dust, replace temporary trailer lights with permanent lighting fixtures, and improve the overall aesthetics of the unimproved parking lot.

Subdivision

The Land Development Code does not allow parking lots on stand-alone lots, so the subject site must be consolidated with the existing Prayer Center lot to form one lot that contains all Prayer Center facilities.

Site Plan

The new parking lot is centered on the site, constrained by the existing stream to the west, 167th Street to the south, 104th Avenue to the east, and the existing parking lot to the north. Two of the proposed parking lot's new drive aisles connect to two existing drive aisles to the north. All drive aisles are interconnected with no dead end parking, allowing for a smoother traffic flow. The lot will be constructed of decorative pervious pavers, and storm water detention will be accommodated underground. An open area has been reserved on the southeast corner of the lot for a future building, however that is not addressed by this petition and must return for future consideration and approvals. New public sidewalks meeting Village standards are proposed along both public streets.

Mobility

Streets

Currently the Orland Park Prayer Center fronts on 104th Avenue. (a County Collector road) There are currently three curb cuts from 104th Avenue to the existing Center, plus a connection on the north side of the site to a neighboring parking lot to the north. Under this proposal, the new parking lot will also be accessed from two new curb cuts, one on 104th Avenue and one on 167th Street (a County Arterial road). Both roads are three lanes in this location, with center left turn lanes. Currently, the property line of the subject parcels extends to the center line of 104th Avenue. The petitioner will dedicate approximately one acre of land to Cook County to conform to current right of way requirements, aligning with the right of way line to the north

Traffic Plan

Like many places of worship, the Prayer Center produces large volumes of traffic, particularly during peak times related to prayer services and on holidays. This demand spurred the previously approved parking lot expansion. Note that no additional traffic volume will be generated by the current improvement, rather the expanded parking lot will help better to accommodate the existing traffic volume. A center turning lane on 104th Avenue was installed when the Prayer Center was originally constructed to accommodate mosque traffic. The petitioner has submitted a "Friday Prayer Service Traffic Plan" that shows how the five entry

ways will be managed during peak events. Two traffic control officers will help facilitate left turns onto 104th Avenue. The two new curb cuts to the new parking lot will be limited to right in, right out at peak times. The petitioner contends that the addition of the right out onto 167th Street, along with the help from the traffic control officers, will help alleviate problems and help traffic flow smoothly.

Parking

The new lot will create 147 new spaces in addition to 338 existing spaces, for a grand total of 485 parking spaces. Currently 338 parking spaces are provided. The Code, based on a detailed breakdown of building uses, requires 332 total parking spaces. The proposed 485 parking spaces exceed Code requirements by 46%, whereas the Land Development Code limits the excess to 20% beyond Code requirements. Additionally, a driveway connection and shared parking and cross access agreement with the property to the north allows access to an additional 40 spaces.

The Code requires 9 handicapped parking spaces for a 485 space lot, with the handicapped spaces to be located in the most convenient place for the disabled to access the buildings. The Site Plan includes a note stating that the handicapped parking requirements will meet Village Code and that the newly required handicapped spaces will be located by the existing building. The State of Illinois and Village Code requires that handicapped spaces be located at the shortest possible distance between the parking spaces and building entrance.

The Prayer Center has approached neighboring businesses for potential shared parking and currently has a shared parking arrangement with the business to the north of the mosque. According to the petitioner, attempts were also made, without success, to purchase land or share parking to the west of the development site.

Pedestrian and Bicycle

New public sidewalks are proposed along both 167th Street and 104th Avenue, where none currently exist. Another sidewalk extends along the west side of the new parking lot adjacent to the creek, with a handrail due to an abutting retaining wall that ranges from 1' to 3' in height, which is the Code limit. This new sidewalk includes an area for bicycle parking. Bicycle parking was also required as a part of the previous Prayer Center approvals. An existing bike path runs along the south side of 167th Street. Recent intersection improvements connect that path to the Orland Grasslands Trail system. As a part of this proposal, new intersection improvements will include crosswalks and ramps on the west and north legs of the intersection.

Engineering

Wetland and Stream

The on-site stream that transverses the western portion of the site has been

determined by the U.S. Army Corp to be jurisdictional, and the proposal avoids encroaching on that wetland. However the plan encroaches on the Village required 50' setback from the stream and from the wetland, and a modification has been requested.

Water and Sewer

Stormwater detention for the proposed parking lot will be provided by an underground detention system with underdrains that overflow into the creek. Per Village policy, water and sewer lines will be extended southward along 104th Avenue to the 167th Street intersection.

Lighting

The new parking lot will be lit by 10 fixtures mounted on 20' poles. Eight of those poles are centered in the parking lot and two are located in the southeast corner of the lot. The Land Development Code sets limits for lighting levels that must be met by the petitioner and cannot exceed .5 candles on the property line. There are a couple of locations that slightly exceed that limit and must be adjusted. According to the petitioner, the lighting will only be used for occasional night time events, particularly during Ramadan. These new lights will replace the temporary trailer lighting occasionally used on the site.

Landscape Plan

The Final Landscape Plan must meet all Code requirements for landscape buffers and parking lot screening and must be submitted to the Development Services Department in conjunction with final engineering submittals. The landscape design professional and project engineer must coordinate their work to provide grading required for landscape compliance.

The approved Preliminary Landscape Plan shows a full landscape buffer extending around the entire development site, including the corner grass lot, to help screen the lot from the streets and from nearby homes, meeting and exceeding Code requirements. Additionally, an ornamental iron fence with brick piers will help screen the parking lot. The new parking lot also meets Code for required internal parking lot tree islands. The stream and the land west of the stream will be maintained in its natural state, and the area between the stream and the parking lot that will be disturbed by grading will be planted with trees and seeded with low prairie grasses.

Although some tree mitigation is shown on the Landscape Plan, in order to meet the total required tree mitigation, additional measures are needed. Options include the addition of shade trees to the site, the upsizing of proposed trees, or cash in lieu fee amount per Land Development Code requirements.

Signage

Review and approval of signage is not part of this petition. All new signage must

comply with Section 6-307 of the Land Development Code and may require a sign permit from the Development Services Department.

Special Use Permit

The proposed land use expansion is classified as a 'place of worship' which is defined in Section 2-102 of the Land Development Code as "a church, synagogue, temple, mosque, or other place of religious worship, including any accessory use or structure, such as a school, day care center, or dwelling that is located on the same lot." A Special Use Permit is required for a place of worship in the proposed rezoning to the E-1 Estate Residential Zoning District according to Section 6-201 of the Land Development Code. The Prayer Center currently operates under Special Use Permit Ordinance 3903, as subsequently amended.

Per Section 5-105.E. of the Land Development Code, the Plan Commission shall consider the extent to which the proposed project will meet the following special use standards. Responses to these factors have been provided by the petitioner as an attachment. Additionally, each factor listed below is followed by staff observations.

1. The Special Use will be consistent with the purposes, goals, objectives, and standards of the Comprehensive Plan, any adopted overlay plan, and these regulations.

-Although the Comprehensive Plan primarily supports manufacturing uses in this location, both the existing ORI District and the proposed E-1 Zoning Districts allow places of worship as a special use permit. Additionally, the Comprehensive Plan recognizes the community value of places of worship.

2. The Special Use will be consistent with the community character of the immediate vicinity of the parcel proposed for development.

-The proposed parking lot expansion is a continuation of the Prayer Center facility that abuts to the north.

3. The design of the proposed use will minimize adverse effects, including visual impacts, on adjacent properties.

-North: The existing mosque use abuts to the north, and is located in the E-1 Estate Residential Zoning District. The new development will integrate with the Prayer Center site and the members will benefit from the additional parking.

-South: 167th Street abuts to the south; across the street is Mallard Landings Subdivision Town Homes, which are spaced over 100' from the parking lot and will be screened with a heavy landscape buffer including an ornamental iron fence with brick piers. The parking lot surface will be constructed of Eco-Stone decorative permeable pavers and will include Code-required tree islands. Pedestrian intersection improvements will benefit adjacent properties.

-West: Panduit, an office and light manufacturing facility abuts to the west and is buffered from the expanded parking area with an existing detention pond and

landscape buffer. Additionally, with the exception of Friday noon services, peak hours of operation do not overlap and are complimentary.

-East: The property across 104th Avenue is undeveloped property owned by the Archdiocese that includes a cemetery further north.

4. The proposed use will not have an adverse effect on the value of the adjacent property.

- Staff does not have an expert opinion on this standard.

5. The applicant has demonstrated that public facilities and services, including but not limited to roadways, park facilities, police and fire protection, hospital and medical services, drainage systems, refuse disposal, water and sewers, and schools will be capable of serving the special use at an adequate level of service.

-Village services are available and currently utilized by the prayer center.

6. The applicant has made adequate legal provision to guarantee the provision and development of any open space and other improvements associated with the proposed development.

-The Code does not require park land dedication for places of worship.

7. The development will not adversely affect a known archaeological, historical, or cultural resource.

- Staff does not have an expert opinion on this standard.

8. The proposed use will comply with all additional standards imposed on it by the particular provision of these regulations authorizing such use and by all other requirements of the ordinances of the Village.

-The proposal must comply with all Village Codes and must meet all conditions of approval as stated in Agreements and Ordinances.

Modifications

The Petitioner requests two modifications from the Land Development Code in conjunction with the Special Use Permit as noted below.

1. A stream and wetland setback modification from Section 6-412 D.1. in order to allow a 10' setback where 50' is required.

-The stream traversing the site places a physical hardship on the land. Adherence to the required 50' setback would unreasonably limit the number of parking spaces the site can accommodate and could result in a parking lot with stubbed aisles that would not flow well during peak operations.

-The western side of the stream will be conserved in its current state, and the eastern side of the stream disturbed by grading will be restored to a native state.

2. A parking modification from Section 6-306 B.3. to allow parking requirements

to exceed the Code required parking numbers by more than 20%.
-Current parking patterns show that The Prayer Center parking facility routinely exceeds available parking supply during peak times.

Trustee Dodge had comments and questions regarding the matter. (refer to audio file)

Director Friling responded to Trustee Dodge's comments and questions. (refer to audio file)

I move to recommend to the Village Board of Trustees approval of a Rezone, Special Use Permit Amendment with modifications, Site Plan, Subdivision and Plat, and Landscape Plan, for the Orland Park Prayer Center South Parking as recommended at the November 13, 2018 Plan Commission meeting and as fully referenced below.

THIS SECTION FOR REFERENCE ONLY (NOT NECESSARY TO BE READ)

I move to recommend to the Village Board of Trustees approval of a Rezoning for Orland Park Prayer Center South Parking from the ORI Mixed Use District to the E-1 Estate Residential District.

And

I move to recommend to the Village Board of Trustees approval to amend the Special Use Permit for Orland Park Prayer Center South Parking for a place of worship with multiple buildings, including approval of the following modifications from the Village of Orland Park Land Development Code:

1. A wetland and stream setback modification from Code Section 6-412 D.1. and Section 6-413 F.2.f. allowing as little as 10' where 50' is required.
2. A parking modification from Section 6-306 B.3. allowing parking requirements to exceed Code requirements by more than 20%.

And

I move to recommend to the Village Board of Trustees approval of the Preliminary Site Plan and Preliminary Plat of Subdivision (consolidation) in accordance with the plans for Orland Park Prayer Center South Parking as shown on documents listed below and subject to the following conditions:

-“Site Plan, Proposed Parking Lot Expansion, Orland Park Prayer Center Site Plan”, by Damas Consulting Group, page C-2.0, revised 8.10.18 and received 11.2.18.

-“Proposed Parking Lot Expansion, Orland Park Prayer Center Construction

Details”, by Damas Consulting Group, page C-5.0, revised 7.17.18.

-“Photometric Analysis”, by KSA Lighting and Controls, page 3 of 3, dated 7.3.18.

-“Final Plat of Subdivision Orland Park Prayer Center Subdivision No. 2” (draft), by Compass Surveying Ltd, dated 8.17.18.

1. Revise the Photometric Plans to conform to Land Development Code limits including parking lot lighting intensity.
2. Include a matching construction detail of the ornamental fence screen and brick piers, including materials and colors on the Construction Detail sheet C-5.0 by Damas Consulting Group that coordinates with the Final Landscape Plan.
3. Provide color and material details for the proposed eco-stone pervious paver.
4. Submit Sign Plans for any proposed signs for review and permit.
5. All final engineering and Building Division requirements must be met.

And

I move to recommend to the Village Board of Trustees approval and authorization to execute the Final Plat of Subdivision (consolidation) for Orland Park Prayer Center South Parking subject to the condition to submit a Record Plat of Subdivision to the Village for review, approval, and recording.

And

I move to recommend to the Village Board of Trustees approval of the Preliminary Landscape Plan, in accordance with the plans for Orland Park Prayer Center South Parking as shown on the plan titled “Orland Park Prayer Center Landscape Plan” by David McCallum Associates, page L1.0, revised 10.17.18, with the following conditions:

1. A Final Landscape Plan must be submitted to the Development Services Department in conjunction with final engineering submittals.
2. Revise the Final Landscape Plan to comply with additional tree mitigation identified in the Hey Associates 10.31.18 comment letter.
3. Include a matching construction detail of the ornamental fence screen and brick piers, including materials and colors, on both the Final Landscape Plan and Construction Detail sheet C-5.0 by Damas Consulting Group.

A motion was made by Trustee Dodge, seconded by Trustee Fenton, that this matter be RECOMMENDED FOR APPROVAL to the Board of Trustees. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0728 Solar Panel Installation - 8917 Wheeler Drive - Guzinski Residence

The petitioner is proposing to install and maintain 11.34 kW grid interactive solar arrays, comprised of twenty (36) photovoltaic (PV) solar panels at a single family home located in the Village Square of Orland Subdivision. The solar panels will be located on the east and south facing gabled rooftops of a single-family residence located at 8917 Wheeler Drive. Energy captured by the proposed solar panels will be used for general household purposes, providing an overall general reduction in electricity costs for the homeowner. The solar panel system also includes the "Next-Level PV Mounting Technology", racking system, inverters and other electrical service components.

The petitioner does not request any variances for this project.

The recommendation motion includes the following conditions:

1. That all building code related items shall be met;
2. That all building permits shall be obtained prior to construction;
3. That all utility conduits and systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties;
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

Overall, the project conforms to the Village's Comprehensive Plan, Land Development Code and policies for this area.

DETAILED PLAN COMMISSION DISCUSSION

This project was presented and reviewed at the November 13, 2018 Plan Commission meeting. After a presentation by Village Staff; all commissioners concurred they were in favor of the Environmental Clean Technology Project.

PLAN COMMISSION MOTION

On November 13, 2018, the Plan Commission voted (7-0) to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 8917 Wheeler Drive as depicted on the plan set prepared by TESLA, Inc., dated November 2, 2018 and the specification sheets subject to the following conditions:

1. That all building code related items shall be met;
2. That all building permits shall be obtained prior to construction;
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties;
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

This case is now before the Development Services, Planning and Engineering Committee for recommendation prior to final consideration by the Board of Trustees.

I move to recommend to the Village Board of Trustees approval of the Environmental Clean Technology Review for 8917 Wheeler Drive, as recommended at the November 13, 2018 Plan Commission meeting and as fully referenced below:

THIS SECTION FOR REFERENCE ONLY (NOT NECESSARY TO BE READ)

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 8917 Wheeler Drive as depicted on the plan set prepared by TESLA, Inc., dated November 2, 2018 and the specification sheets subject to the following conditions:

1. That all building code related items shall be met;
2. That all building permits shall be obtained prior to construction;
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties;
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

A motion was made by Trustee Fenton, seconded by Trustee Dodge, that this matter be RECOMMENDED FOR APPROVAL to the Board of Trustees. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0330 Waterfall Plaza (Existing Development) - Special Use for a Planned Development with Modifications and Subdivision

Director of Development Services Karie Friling reported that the petitioner is proposing to establish a Planned Development (PD) for an existing two lot, two building commercial development known as Waterfall Plaza located at 8750 and 8752 W. 159th Street. The proposed PD includes Lot 1 which has two buildings; a small building with direct frontage on 159th Street and a multi-tenant building that is positioned behind the outlot with visible frontage on 159th Street. The proposed PD also includes a second lot, Parcel 3, that has frontage along 159th Street and Orlan Brook Drive that was part of the originally approved site plan, Board Approved July 19, 1993, that includes a parking lot and open green space. This green space was originally counted in the lot coverage for the entire Waterfall Plaza Subdivision. The original intent was to subdivide the site into three (3) lots, but for reasons not clear from the historical files, the original developer resisted the three lot subdivision and instead pursued a two (2) lot subdivision. The

petitioner is proposing to subdivide the Lot 1 (also known as Parcel 1 & Parcel 2 on the survey) into two lots, so that each building will be subdivided on its own lot. The proposed subdivision lot line mirrors the lot line that was originally proposed in 1993.

SPECIAL USE PERMIT FOR A PLANNED DEVELOPMENT

Modifications

This petitioner requests the following modifications for the Planned Development:

1. Section 6-210.F.4 of the Land Development Code: a modification to allow parking and drive aisles in the setback between the building and the street within the south setback and within the east setback; however, this modification does not apply to future redevelopment.

Conditions of the Special Use

The granting of Special Uses and the granting of Modifications allows staff/the Village to request incremental improvements to the site. The following incremental improvements are required:

The recommendation motion includes the following conditions:

1. General site maintenance of parking lot/site lighting and landscape improvements will be required by the end of the first construction season following Board Approval.
2. The parking lot will be required to be milled and resurfaced within 3 years of Board Approval.
3. The pylon signs, the dumpster enclosures and all site/building lighting will be required to be brought into conformance of the Land Development Code within 5 years of the Board Approval;

SUBDIVISION

The petitioner proposes to subdivide the currently single Lot 1 (also known as parcel 1 & parcel 2 on the survey provided) into two lots. The proposed Plat of Subdivision shows Lot 1 will be at the rear of the property and will be 59,549 SF/1.367 Acres and Lot 2 will be 26,860 SF/.617 Acres and will be located at the front of the lot along 159th Street. The minimum lot size in the BIZ District is 10,000 SF, the proposed lot meet the minimum requirement.

DETAILED PLAN COMMISSION DISCUSSION

This project was presented and reviewed at the November 13, 2018 Plan Commission meeting. After a presentation by Village Staff, the petitioner, Marut Shah, spoke and talked about his support for the PD and willingness to provide incremental upgrades to the site. He stated that the owners/investors understand that the development needs improvement and that will need to happen in order to find tenants for the vacant spots. He further discussed how it is the intention of the

property owners to have options with regard to selling the property, such as being able to sell to their Lover's Lane tenant.

Commissioner Zomparelli described how he remembered when this development was built and always thought the landscaping was limited; he asked staff if there was any discussion on adding more landscaping improvements. Staff responded that it was trying to work with the petitioner to require a reasonable amount of upgrades to the site considering that the petitioner is not bringing forward development plans at this time.

Commissioner Schussler asked the petitioner what their "real" intentions were for the property. The petitioner responded that the owners/investors are just looking for options, subdividing the property may give them an option to sell one or more of the lots.

Commissioner Paul wanted to reiterate that he wants to see all these requested improvements to the site and more maintenance/investment in the site by the owners/investors, as the site is in need of upgrades.

The remainder of the commissioners were in favor of the Special Use Permit and the Subdivision and were in support of incremental improvements.

PLAN COMMISSION MOTION

On November 13, 2018, the Plan Commission voted (7-0) to recommend to the Village Board of Trustees approval of a Special Use Permit for a Planned Development for Waterfall Plaza, for the following PINs 27-14-300-066-0000 and 27-14-300-065-0000, the limits of which are shown on "Exhibit A", prepared by staff, and dated November 13, 2018, with the following modification:

1. Section 6-210.F.4 of the Land Development Code: a modification to allow parking and drive aisles in the setback between the building and the street within the south setback and within the east setback; however, this modification does not apply to future redevelopment.

And subject to the following conditions:

1. General site maintenance of parking lot/site lighting and landscape improvements will be required by the end of the first construction season following Board Approval;
2. The parking lot will be required to be milled and resurfaced within 3 years of Board Approval;
3. The pylon signs, the dumpster enclosures and all site/building lighting will be required to be brought into conformance of the Land Development Code within 5 years of the Board Approval;
4. Signs are subject to additional review and approval via the sign permitting

process and additional restrictions may apply; and

5. That all building permits shall be obtained prior to any construction.

And

Voted (7-0) to recommend to the Village Board of Trustees approval of the Preliminary Plat of Subdivision titled "Waterfall Plaza Subdivision", prepared by Vanderstappen Land Surveying, Inc., dated March, 20, 2018, and approval and authorization to execute the Final Plat of Subdivision for Waterfall Plaza subject to the following conditions:

1. Submit a Record Plat of Subdivision to the Village for review, approval, and recording.

This case is now before the Development Services, Planning and Engineering Committee for recommendation prior to final consideration by the Board of Trustees.

Trustee Fenton has comments regarding the 3 year and 5 year conditions pertaining to paving of the lot and landscape improvements. (refer to audio file)

Trustee Fenton had comments regarding the 3 year and 5 year conditions pertaining to paving of the lot and landscape improvements. (refer to audio file)

Director Friling responded to Trustee Fenton regarding the time frame. (refer to audio file)

Trustee Dodge made additional comments regarding the matter. (refer to audio file)

Director Friling responded to Trustee Dodge. (refer to audio file)

Chairman Ruzich asked if the Lover's Lane parcel was in need of upgrades. (refer to audio file)

Director Friling stated that it was the multi-tenant building that was in need of upgrades. (refer to audio file)

Chairman Ruzich had additional questions. (refer to audio file)

Director Friling responded to Chairman Ruzich's questions. (refer to audio file)

Trustee Fenton had additional comments and questions. (refer to audio file)

Director Friling responded to Trustee Fenton's comments and questions. (refer to

audio file)

Chairman Ruzich, Trustee Fenton, and Trustee Dodge agreed to send this item to the Board without any conditions. (refer to audio file)

I move to forward this item to the Board of Trustees.

A motion was made by Trustee Dodge, seconded by Trustee Fenton, that this matter be REFERRED WITHOUT RECOMMENDATION to the Board of Trustees. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0772 Macy's LED Lighting Upgrade - Appearance Improvement Grant

Director of Development Services Karie Friling reported that per the requirements of the Appearance Improvement Grant, the proposed improvements meet the guidelines for eligible projects because it is a commercial property and the light poles are seen from the public right-of-way.

The Petitioner provided two (2) bids for the retrofitting and installation work and one (1) bid for the new LED luminaries and nodes. Each bid is described below and attached.

Retrofitting/Installation Work

Kavanaugh Electric (\$8,950.00)

Scope: Supply and install all materials, labor, and equipment. Work done during regular time hours. Supply 140' boom. Install owner-provided LED heads on two 120' poles on Macy's property.

Sievert Electric (\$11,638.00)

Scope: Provide manlift. Change out existing heads to LED heads on two 120' light poles. Install new nodes. Provide disposal of existing heads. Work during normal hours. Assuming reusing existing wiring. New LED heads and nodes furnished by others.

LED Luminaries and Nodes

Facility Solutions Group (\$33,307.63)

Scope: Provide 20 GE Evolve LED Roadway Lighting High Mast Luminaries (GE-ERHM-01-H-60-F1-7) and 20 GE LightGrid Nodes (ELWN5A5UG5).

Per the Petitioner, the mall owner, Simon Property Group, held a corporate bid process and all Simon properties nationwide are required to use Facility Solutions Group. An alternate bid was not provided for the LED luminaries and nodes.

Village permit fees are waived for this project as per the stipulations of the Appearance Improvement Grant.

Bid Selection

The Appearance Improvement Grant notes that the best or lowest bid is selected to fund the project. In this case, Kavanaugh Electric is the lowest bid for the retrofitting and installation portion of the project. It appears that the scope of work is very similar between the two bidders, thus the selected bid for this part of the project is Kavanaugh Electric.

Facility Solutions Group provided the only bid for the LED luminaries and nodes and Simon is not allowed to use other contractors for this type of product.

Bid Conclusion

Kavanaugh Electric's \$8,950 bid and Facility Solution Group's \$33,307.63 bid total a project cost of \$42,257.63. The Appearance Improvement Grant allows a 50% match up to \$50,000, so the requested funding for the Macy's LED Lighting Upgrade project is \$21,128.82.

FINANCIAL IMPACT

The financial impact to the Village of Orland Park will be \$21,128.82 from the following account number:

010-0000-484930

Additionally, the project will benefit from the program's permit fee waiver.

This case is now before the Development Services, Planning, and Engineering Committee for review prior to being sent to the Board of Trustees for final review/approval. Note that this request will appear before the Board of Trustees on November 19, 2018 following this Committee meeting.

Chairman Ruzich had questions regarding the process. (refer to audio file)

Director Friling responded to Chairman Ruzich's questions. (refer to audio file)

Trustee Dodge had questions regarding the Macy's store. (refer to audio file)

Director Friling responded to Trustee Dodge. (refer to audio file)

I move to recommend to the Village Board the approval of the Appearance Improvement Grant application for Macy's LED Lighting Upgrade in the amount of \$21,128.82 to replace twenty (20) luminaires on two (2) existing light poles and

add twenty (20) nodes to improve lighting in the parking lots to the north and northwest of the Macy's tenant space at 1 Orland Square Drive, as fully indicated in the referenced motion.

THIS SECTION IS FOR REFERENCE ONLY (NOT NECESSARY TO READ)

I move to recommend to the Village Board the approval of the Appearance Improvement Grant application for Macy's LED Lighting Upgrade (case number 2018-0772) at 1 Orland Square Drive in the amount of \$21,128.82 from account 010-0000-484930.

And

I move to recommend to the Village Board the approval of the Kavanaugh Electric bid for \$8,950.00 and the Facility Solutions Group bid for \$33,307.63, subject to the following conditions:

- 1) Must abide by the plans per the approved Appearance Review (case number 2018-0774); and
- 2) Provide confirmation that the footcandles and lumens per square foot do not exceed the specified maximum limitations within Section 6-315.A.2.a.1.; and
- 3) Meet all Building and Land Development Code requirements; and
- 4) Obtain the necessary permits from the Village's Building Division prior to initiating work; and
- 5) Enter into an Appearance Improvement Grant Agreement with the Village of Orland Park.

A motion was made by Trustee Dodge, seconded by Trustee Fenton, that this matter be RECOMMENDED FOR APPROVAL to the Board of Trustees. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0682 Solar Panel Installation - 16400 88th Avenue - Paravich Residence

The petitioner is proposing to install a 17.85 kW solar array, comprised of fifty-one (51) photovoltaic (PV) solar panels at a single family home located at 16400 88th Avenue in the Fernway subdivision. The solar panels will be located on the north, south, east, and west facing gabled rooftops. Energy captured by the proposed solar panels will be used for general household purposes, providing an overall general reduction in electricity costs for the homeowner. The solar panel system

also includes a “SnapNRack RL” roof mount system, inverters, and other electrical service components.

The petitioner does not request any variances for this project.

The recommendation motion includes the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

Overall, the project conforms to the Village’s Comprehensive Plan, Land Development Code and policies for this area.

SITE PLAN

The petitioner submitted a plan set, titled “Customer Residence: David Paravich”, prepared by Sunrun, project number 711R-400PARA, dated 8/16/2018, received 10/02/2018, and specification sheets that detail the location, dimensions and materials to be used for the installation of the proposed solar panels.

The solar panels (collectively referred to as an array) will be located on the north, south, east, and west facing roof tops of the existing single family house. The proposed 17.85 kW, grid-tied photovoltaic system will be comprised of fifty-one (51) LG Neon R “LG350Q1C-A5” (350W) modules (panels) manufactured by LG Electronics. The array will be supported by a flush mounted racking system, “SnapNRack RL” which is a low-profile system that connects to roof rafters with structural screws.

One (1) “SolarEdge Power Optimizer” will be connected to each solar module to monitor performance data, increase the energy output from the photovoltaic system by constantly tracking the maximum power point of each module individually, and control safe voltage levels. One (1) “SolarEdge Single Phase Inverter” will be used to convert incoming Direct Current (DC) to Alternating Current (AC) before entering the building. A DC disconnect will be installed on the outside of the home near the electric meter. All ground-level utilities will be screened from view from neighboring properties and from the street. Additional screening may be required after installation is complete to ensure adequate screening has been provided.

DETAILED PLANNING DISCUSSION

Section 6-314.E.1 of the Land Development Code permits the installation of solar panels on residential rooftops via an Environmental Clean Technology review

provided that:

1. Solar panels do not increase the visual height of the building.
2. Solar panels do not extend beyond the edge of the parapet or roof.
3. Solar panels are in line with the plane of the roof and shall not be attached to chimneys.
4. That no more than seventy-five percent (75%) of a residential rooftop may be covered by PV collectors or arrays.
5. Solar panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties, roadways or public right-of-ways.

ITEMS 1 - 4

The arrays are located on the north, south, east, and west facing rooftops. The arrays are inset from the roof eaves, in line with the plane of the roof, are not attached to any chimneys, and will not increase the visual height of the building. Each solar panel has a height of 1.5 inches and measures 18.5 square feet in size. In total, the proposed array measures approximately 947.75 square feet in area while the rooftop is approximately 3,396 square feet, equaling 27.9% of the overall rooftop coverage.

ITEM 5

The array on the west facing roof will be approximately 45 feet from the adjacent single-family home to the west. The array on the east facing roof will be approximately 200 feet from the adjacent single-family home to the east, which is located across 88th Avenue. The array on the south will be located approximately 70 feet from the adjacent single-family home to the south. The array on the north facing roof will be approximately 230 feet from the adjacent single-family home to the north, which is located across 164th Street.

As there are neighboring properties in line with the solar panels on the north, south, east, and west elevations, the petitioner and contractor were asked to provide assurance that "concentrated solar radiation or glare shall not be directed onto nearby properties." Sunrun Installation Services, the contractor for the project, has provided the Village with a letter and documentation stating that none of the solar arrays should pose a solar reflection or glare risk to any of the neighbors. The following documents have been submitted for review:

- Photos of the building elevations and rooftop views from the Paravich residence
- An information packet by LG, the manufacturer of the proposed solar panels, which briefly discusses the anti-reflective coating on the glass and solar cells used to absorb light rather than reflect it
- Two articles on solar glare from PV arrays

Overall, the project conforms to the Village's Comprehensive Plan, Land Development Code and policies for this area.

Land Use/Compatibility

The proposed land use is compatible with the R-2A Residential District and the Comprehensive Plan vision for this property.

As a component of sustainability and stewardship, one of the goals of the Village's Comprehensive Plan is to reduce the dependence on non-renewable resources by "support(ing) private and public infrastructure upgrades that meet local energy demand using renewable sources (wind, solar, biomass/fuel, geothermal, fuel cells etc.)." The proposed project supports this and other sustainability goals of the Comprehensive Plan.

Lot Coverage

No change to lot coverage has been proposed.

Screening

All utility systems related to the solar energy system shall not be visible from the street and from neighboring residential properties. Additional screening may be required, as determined by the Development Services Department.

PLAN COMMISSION DISCUSSION

On November 13, 2018, a public hearing was held before the Plan Commission. A representative for SunRun, the petitioner and solar contractor for the project, was present at the meeting to answer any questions from the Commissioners or neighboring residents. Certified letters were sent out to all property owners within 330 feet of the subject property, but the petitioner did not submit a notarized affidavit to staff prior to the Plan Commission meeting. As a result, the Plan Commission included an additional condition to the motion requiring the petitioner to submit an affidavit to staff confirming that proper notices were sent to the surrounding properties.

PLAN COMMISSION MOTION

On November 13, 2018, the Plan Commission, by a vote of 7-0 moved to recommend to the Village Board of Trustees approval of the Environmental Clean Technology Review for a roof-mounted solar energy system at 16400 88th Avenue as fully referenced below:

I move to accept as findings of fact of this Plan Commission the findings of fact set forth in this staff report, dated November 7, 2018.

And

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 16400 88th Avenue, as depicted on the plan set "Customer Residence: David Paravich" prepared by Sunrun, project number 711R-400PARA, dated 8/16/2018 and received 10/02/2018, and the specification sheets, subject to the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.
5. That the petitioner submit a notarized affidavit to staff confirming that the proper notices were sent to the surrounding properties.

This case is now before the Development Services, Planning and Engineering Committee for review prior to being sent to the Board of Trustees for final review/approval.

I move to recommend to the Village Board of Trustees to approve the Environmental Clean Technology Review for a roof-mounted solar energy system at 16400 88th Avenue as recommended at the November 13, 2018 Plan Commission meeting and as indicated in the below fully referenced motion.

THIS SECTION FOR REFERENCE ONLY (NOT NECESSARY TO BE READ)

I move to accept as findings of fact of this Plan Commission the findings of fact set forth in this staff report, dated November 7, 2018.

And

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 16400 88th Avenue, as depicted on the plan set "Customer Residence: David Paravich" prepared by Sunrun, project number 711R-400PARA, dated 8/16/2018 and received 10/02/2018, and the specification sheets, subject to the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.
5. That the petitioner submit a notarized affidavit to staff confirming that the proper notices were sent to the surrounding properties.

A motion was made by Trustee Fenton, seconded by Trustee Dodge, that this matter be RECOMMENDED FOR APPROVAL to the Board of Trustees. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0680 Solar Panel Installation - 11353 Longwood Circle - Halper Residence

The petitioner is proposing to install a 10.56 kW solar array, comprised of thirty-two (32) photovoltaic (PV) solar panels at a single family home located at 11353 Longwood Circle in the Crossings at Brook Hills subdivision. The solar panels will be located on the northwest, southeast, and southwest facing gabled rooftops. Energy captured by the proposed solar panels will be used for general household purposes, providing an overall general reduction in electricity costs for the homeowner. The solar panel system also includes a "SnapNRack RL" roof mount system, inverters, and other electrical service components.

The petitioner does not request any variances for this project.

The recommendation motion includes the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

Overall, the project conforms to the Village's Comprehensive Plan, Land Development Code and policies for this area.

SITE PLAN

The petitioner submitted a plan set, titled "Customer Residence: Barbara Halper", prepared by Sunrun, project number 711R-353HALP, dated 7/13/2018, received 10/02/2018, and specification sheets that detail the location, dimensions and materials to be used for the installation of the proposed solar panels.

The solar panels (collectively referred to as an array) will be located on the northwest, southeast, and southwest facing rooftops of the existing single family house. The proposed 10.56 kW, grid-tied photovoltaic system will be comprised of thirty-two (32) LG Neon R "LG330N1C-A5" (330W) modules (panels) manufactured by LG Electronics. The array will be supported by a flush mounted system, "SnapNRack RL," which is a low-profile system that connects to roof rafters with structural screws.

One (1) "SolarEdge Power Optimizer" will be connected to each solar module to monitor performance data, increase the energy output from the photovoltaic system by constantly tracking the maximum power point of each module individually, and control safe voltage levels. One (1) "SolarEdge Single Phase

Inverter" will be used to convert incoming Direct Current (DC) to Alternating Current (AC) before entering the building. A DC disconnect will be installed on the outside of the home near the electric meter. All ground-level utilities will be screened from view from neighboring properties and from the street. Additional screening may be required after installation is complete to ensure adequate screening has been provided.

DETAILED PLANNING DISCUSSION

Section 6-314.E.1 of the Land Development Code permits the installation of solar panels on residential rooftops via an Environmental Clean Technology review provided that:

1. Solar panels do not increase the visual height of the building.
2. Solar panels do not extend beyond the edge of the parapet or roof.
3. Solar panels are in line with the plane of the roof and shall not be attached to chimneys.
4. That no more than seventy-five percent (75%) of a residential rooftop may be covered by PV collectors or arrays.
5. Solar panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties, roadways or public right-of-ways.

ITEMS 1 - 4

The arrays are located on the northwest, southeast, and southwest facing rooftops and will be inset from the roof eaves. The arrays will be in line with the plane of the roof, are not attached to any chimneys, and will not increase the visual height of the building. Each solar panel has a height of 1.57 inches and measures 18.4 square feet in size. In total, the proposed array measures approximately 590 square feet in area while the rooftop is approximately 2,823 square feet, equaling 20.9% of the overall rooftop coverage.

ITEM 5

The array on the southeast facing roof will be located approximately 20 feet from the adjacent single-family home to the east, as measured from the closest panel to the house. The array located on the northwest roof will be located approximately 18 feet to the adjacent single-family home to the northwest, as measured from the closest panel to the house. The closest adjacent house to the east is located approximately 215 feet away, across the ComEd easement that includes overhead power lines.

As there are neighboring properties in line with the solar panels on the northwest and southeast facing roofs, the petitioner and contractor were asked to provide assurance that "concentrated solar radiation or glare shall not be directed onto nearby properties." Sunrun Installation Services, the contractor for the project, has provided the Village with a letter and documentation stating that none of the solar arrays should pose a solar reflection or glare risk to any of the neighbors. The following documents have been submitted for review:

- Photos of the building elevations and rooftop views from the Halper residence
- An information packet by LG, the manufacturer of the proposed solar panels, which briefly discusses the anti-reflective coating on the glass and solar cells used to absorb light rather than reflect it
- Two articles on solar glare from PV arrays

Overall, the project conforms to the Village's Comprehensive Plan, Land Development Code and policies for this area.

Land Use/Compatibility

The proposed land use is compatible with the R-4 Residential District and the Comprehensive Plan vision for this property. As a component of sustainability and stewardship, one of the goals of the Village's Comprehensive Plan is to reduce the dependence on non-renewable resources by "support(ing) private and public infrastructure upgrades that meet local energy demand using renewable sources (wind, solar, biomass/fuel, geothermal, fuel cells etc.)." The proposed project supports this and other sustainability goals of the Comprehensive Plan.

Lot Coverage

No change to lot coverage has been proposed.

Screening

All utility systems related to the solar energy system shall not be visible from the street and from neighboring residential properties. Additional screening may be required, as determined by the Development Services Department.

PLAN COMMISSION DISCUSSION

On November 13, 2018, a public hearing was held before the Plan Commission. A representative for SunRun, the petitioner and solar contractor for the project, was present at the meeting to answer any questions from the Commissioners or neighboring residents. The petitioner noted that certified letters were sent out to all property owners within 330 feet of the subject property, but did not submit a notarized affidavit to staff prior to the Plan Commission meeting. As a result, the Plan Commission included an additional condition to the motion requiring the petitioner to submit an affidavit to staff confirming that proper notices were sent to the surrounding properties.

PLAN COMMISSION MOTION

On November 13, 2018, the Plan Commission, by a vote of 7-0 moved to recommend to the Village Board of Trustees approval of the Environmental Clean Technology Review for a roof-mounted solar energy system at 11353 Longwood Circle as fully referenced below:

I move to accept as findings of fact of this Plan Commission the findings of fact set forth in this staff report, dated November 7, 2018.

And

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 11353 Longwood Circle, as depicted on the plan set "Customer Residence: Barbara Halper" prepared by Sunrun, project number 711R-353HALP, dated 7/13/2018 and received 10/02/2018, and the specification sheets, subject to the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.
5. That the petitioner submit a notarized affidavit to staff confirming that the proper notices were sent to the surrounding properties.

This case is now before the Development Services, Planning and Engineering Committee for review prior to being sent to the Board of Trustees for final review/approval.

I move to recommend to the Village Board of Trustees to approve the Environmental Clean Technology Review for a roof-mounted solar energy system at 11353 Longwood Circle as recommended at the November 13, 2018 Plan Commission meeting and as indicated in the below fully referenced motion.

THIS SECTION FOR REFERENCE ONLY (NOT NECESSARY TO BE READ)

I move to accept as findings of fact of this Plan Commission the findings of fact set forth in this staff report, dated November 7, 2018.

And

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 11353 Longwood Circle, as depicted on the plan set "Customer Residence: Barbara Halper" prepared by Sunrun, project number 711R-353HALP, dated 7/13/2018 and received 10/02/2018, and the specification sheets, subject to the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as

determined by the Development Services Department.

5. That the petitioner submit a notarized affidavit to staff confirming that the proper notices were sent to the surrounding properties.

A motion was made by Trustee Fenton, seconded by Trustee Dodge, that this matter be RECOMMENDED FOR APPROVAL to the Board of Trustees. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0685 Solar Panel Installation - 7420 157th Street - Ulevicius Residence

The petitioner is proposing to install a 9.28 kW solar array, comprised of thirty-two (32) photovoltaic (PV) solar panels at a single family home located at 7420 157th Street in the Colonades subdivision. The solar panels will be located on the south, east, and west facing gabled rooftops. Energy captured by the proposed solar panels will be used for general household purposes, providing an overall general reduction in electricity costs for the homeowner. The solar panel system also includes a "SnapNrack Series 100 UL" roof mount system, inverters and other electrical service components.

The petitioner does not request any variances for this project.

The recommendation motion includes the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

Overall, the project conforms to the Village's Comprehensive Plan, Land Development Code and policies for this area.

SITE PLAN

The petitioner submitted a plan set, titled "Customer Residence: Jonas Ulevicius", prepared by Sunrun, project number 711R-420ULEV, dated 9/17/2018, received 10/02/2018, and specification sheets that detail the location, dimensions and materials to be used for the installation of the proposed solar panels.

The solar panels (collectively referred to as an array) will be located on the south, east, and west facing rooftops of the existing single family house. The proposed 9.28 kW, grid-tied photovoltaic system will be comprised of thirty-two (32) REC TwinPeak 2 Series "REC290TP2" (290W) modules (panels) manufactured by

REC. The array will be supported by a flush mounted racking system, "SnapNRack Series 100 UL" which is a low-profile system that connects to roof rafters with structural screws.

One (1) "SolarEdge Power Optimizer" will be connected to each solar module to monitor performance data, increase the energy output from the photovoltaic system by constantly tracking the maximum power point of each module individually, and control safe voltage levels. One (1) "SolarEdge Single Phase Inverter" will be used to convert incoming Direct Current (DC) to Alternating Current (AC) before entering the building. A DC disconnect will be installed on the outside of the home near the electric meter. All ground-level utilities will be screened from view from neighboring properties and from the street. Additional screening may be required after installation is complete to ensure adequate screening has been provided.

DETAILED PLANNING DISCUSSION

Section 6-314.E.1 of the Land Development Code permits the installation of solar panels on residential rooftops via an Environmental Clean Technology review provided that:

1. Solar panels do not increase the visual height of the building.
2. Solar panels do not extend beyond the edge of the parapet or roof.
3. Solar panels are in line with the plane of the roof and shall not be attached to chimneys.
4. That no more than seventy-five percent (75%) of a residential rooftop may be covered by PV collectors or arrays.
5. Solar panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties, roadways or public right-of-ways.

ITEMS 1 - 4

The arrays are located on the south, west, and east facing rooftops and will be inset from the roof eaves. The arrays will be in line with the plane of the roof, are not attached to any chimneys, and will not increase the visual height of the building. Each solar panel has a height of 1.5 inches and measures 17.9 square feet in size. In total, the proposed array measures approximately 575.14 square feet in area while the rooftop is approximately 3,085 square feet, equaling 18.6% of the overall rooftop coverage.

ITEM 5

The array on the west facing roof will be located approximately 50 feet from the adjacent single-family home to the west. The array located on the east facing roof will be located approximately 25 feet to the adjacent single-family home to the east. The array on the south facing roof will be located approximately 150 feet from the single-family home to the south across 157th Street.

As there are neighboring properties in line with the solar panels on the south, east,

and west facing rooftops, the petitioner and contractor were asked to provide assurance that “concentrated solar radiation or glare shall not be directed onto nearby properties.”

Sunrun Installation Services, the contractor for the project, has provided the Village with a letter and documentation stating that none of the solar arrays should pose a solar reflection or glare risk to any of the neighbors. The following documents have been submitted for review:

- Photos of the building elevations and rooftop views from the Ulevicius residence
- A summary of a study completed by the Solar Energy Research Institute of Singapore on the reflectivity of panels with anti-reflective glass produced by REC, the manufacturer of the proposed solar panels, compared to solar panels without anti-reflective glass treatment
- Two articles on solar glare from PV arrays

Overall, the project conforms to the Village’s Comprehensive Plan, Land Development Code and policies for this area.

Land Use/Compatibility

The proposed land use is compatible with the R-3 Residential District and the Comprehensive Plan vision for this property.

As a component of sustainability and stewardship, one of the goals of the Village’s Comprehensive Plan is to reduce the dependence on non-renewable resources by “support(ing) private and public infrastructure upgrades that meet local energy demand using renewable sources (wind, solar, biomass/fuel, geothermal, fuel cells etc.)” The proposed project supports this and other sustainability goals of the Comprehensive Plan.

Lot Coverage

No change to lot coverage has been proposed.

Screening

All utility systems related to the solar energy system shall not be visible from the street and from neighboring residential properties. Additional screening may be required, as determined by the Development Services Department.

PLAN COMMISSION DISCUSSION

On November 13, 2018, a public hearing was held before the Plan Commission. A representative for SunRun, the petitioner and solar contractor for the project, was present at the meeting to answer any questions from the Commissioners or neighboring residents. Certified letters were sent out to all property owners within 330 feet of the subject property, but the petitioner did not submit a notarized affidavit to staff prior to the Plan Commission meeting. As a result, the Plan Commission included an additional condition to the motion requiring the petitioner

to submit an affidavit to staff confirming that proper notices were sent to the surrounding properties.

PLAN COMMISSION MOTION

On November 13, 2018, the Plan Commission, by a vote of 7-0 moved to recommend to the Village Board of Trustees approval of the Environmental Clean Technology Review for a roof-mounted solar energy system at 7420 157th Street as fully referenced below:

I move to accept as findings of fact of this Plan Commission the findings of fact set forth in this staff report, dated November 7, 2018.

And

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 7420 157th Street, as depicted on the plan set "Customer Residence: Jonas Ulevicius" prepared by Sunrun, project number 711R-420ULEV, dated 9/17/2018 and received 10/02/2018, and the specification sheets, subject to the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.
5. That the petitioner submits a notarized affidavit to staff confirming that the proper notices were sent to the surrounding properties.

This case is now before the Development Services, Planning and Engineering Committee for review prior to being sent to the Board of Trustees for final review/approval.

Trustee Dodge had questions regarding the amount of kW's people are installing. (refer to audio file)

Director of Development Services Karie Friling and Building Division Manager Mike Coleman responded to Trustee Dodge. (refer to audio file)

I move to recommend to the Village Board of Trustees to approve the Environmental Clean Technology Review for a roof-mounted solar energy system at 7420 157th Street as recommended at the November 13, 2018 Plan Commission meeting and as indicated in the below fully referenced motion.

THIS SECTION FOR REFERENCE ONLY (NOT NECESSARY TO BE READ)

I move to accept as findings of fact of this Plan Commission the findings of fact set forth in this staff report, dated November 7, 2018.

And

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 7420 157th Street, as depicted on the plan set "Customer Residence: Jonas Ulevicius" prepared by Sunrun, project number 711R-420ULEV, dated 9/17/2018 and received 10/02/2018, and the specification sheets, subject to the following conditions:

1. That all building code related items shall be met.
2. That all building permits shall be obtained prior to construction.
3. That all utility systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties.
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.
5. That the petitioner submit a notarized affidavit to staff confirming that the proper notices were sent to the surrounding properties.

A motion was made by Trustee Dodge, seconded by Trustee Fenton, that this matter be RECOMMENDED FOR APPROVAL to the Board of Trustees. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0799 Construction Type 3B for R-2 Multi Family Buildings - Discussion Only

Director of Development Services Karie Friling reported that the Village of Orland Park has been requested to investigate the possibility of an amendment to the code for R-2 Multi-family dwelling unit buildings using the Type 3 construction types.

The construction classification of Type 3 by model definition is “the type of construction in which the exterior walls are of non-combustible materials and the interior elements are of any materials permitted by this code” IBC 602.3. The Village definition is “The type of construction in which the exterior walls are of non-combustible and masonry materials and the interior elements are of any materials permitted by this code”

The discussion was based on the construction cost of steel non-combustible building going up after tariffs imposed on steel imports and raw materials. According to Mr. Joe Casucci, Chief executive officer of steel fabricator and erector FJM Ferro Inc, the tariffs announced in March have already caused American mills to increase mill pricing by almost 30%. These costs are passed along to steel erectors that construct not only to major steel building but also buildings utilizing a light gauge steel stud partitions.

Cost comparisons:

R-2 building 4 floors total area = 100,000 sq.ft. building for a Type 2A building = \$14,723,000

R-2 building 4 floors total area = 100,000 sq.ft. building for a Type 3A building = \$12,705,000

Cost savings for change in construction = \$2,018,000 = 13.7% cost savings

These cost savings do not include the increase in steel cost for U.S. Government tariffs.

The fire safety of the building would not be decreased and would still require fire rated construction for separation's, exits, building elements but would allow combustible materials to be encapsulated within the membrane of fire resistive materials. A full NFPA 13 system would be required and with properly designed sprinklers and quick detection via fire alarm systems, the sprinklers would engage any fire occurrence and extinguish quickly before any major structural damage would be incurred.

Code History:

The Village has had a building code section Title 5 Chapter 1 section 501.3.3. established July 19, 2005 that requires the following:

Precast or engineered reinforced concrete separating tenants (i.e. dwelling units)

Exceptions allow with an NFPA 13 full sprinkler system a reduction to an open

web steel joist floor system with a 1 non-penetrated fire rated system / assembly.

Interior walls separating tenant dwelling units are required to be solid masonry or a min. 2 wall system & a min.

1 hour fire rating with a full sprinkler system per NFPA 13

All vertical shaft for stairs, hvac and elevators are required to be min. 2 hour rated if connecting three levels (including basements) or 1 hour rated connecting 2 levels (including basement). This requirement exceeds the min. model code requirement.

Proposed Code amendment:

Amended Hybrid Type 3 construction type is to allow combustible products for floor construction and to limit combustible wood studs for interior non-load bearing partitions contained entirely within the dwelling unit perimeter walls or envelope. The exterior walls and the demising walls separating other dwelling units, exit corridors and/or shafts will still be non-combustible materials and fire rated according to the Village code for elements of construction. The introduction of this hybrid version of type 3 construction would introduce an increased rating for floor construction to 1 ½ hours (See exhibit 3) while still maintaining the required demising wall fire rating with non-combustible materials.

In summary, the dwelling unit will be encapsulated with rated non-combustible construction while allowing combustible pre-engineered wood trusses with an increased floor fire rating of 1 ½ hours in lieu of the 1 hour rated per present code.

Building Division Manager Mike Coleman present information regarding this matter. (refer to audio file)

Director Friling had additional comments. (refer to audio file)

Chairman Ruzich asked how this compares as to what is already allowed for hotels in Orland Park along with additional questions. (refer to audio file)

Building Division Manager Coleman and Director Friling responded to Trustee Ruzich's questions. (refer to audio file)

Chairman Ruzich, Trustee Fenton, and Trustee Dodge had additional comments regarding the matter. (refer to audio file)

Building Division Manager Coleman responded to their comments. (refer to audio file)

Trustee Fenton had an additional comment. (refer to audio file)

Director Friling stated that conversations will be had with the appropriate people and an update will be brought back to the committee. (refer to audio file)

This item is for discussion only

This item was discussion only. NO ACTION was required.

ADJOURNMENT: 7:01 P.M.

A motion was made by Trustee Fenton, seconded by Chairman Griffin Ruzich, that this matter be ADJOURNED. The motion carried by the following vote:

Aye: 3 - Chairman Griffin Ruzich, Trustee Fenton, and Trustee Dodge

Nay: 0

2018-0828 Audio Recording for the November 19, 2017 Committee Meetings - Public Works, and Technology, Innovation, Performance Improvement and Development Services, Planning and Engineering.

NO ACTION

/AS

Respectfully Submitted,

John C. Mehalek, Village Clerk