MEMORANDUM

FORMAL ACTION & RECOMMENDATION #2 MEETING OF 01-14-21

To: Conservation Commission/Inland Wetlands and Watercourses Agency

From: Tom Mocko, Environmental Planner

Re: Application of the Saints Isidore and Maria Parish Corporation (aka Saint Paul's Church) for: an inland wetlands and watercourses permit; and a recommendation to the Town Plan & Zoning Commission for a Section 12 Special Permit with Design Review concerning an expansion of its parking lot (119 additional spaces) at 2755 and Assessor's Lot W-38A Main Street – Town Center Zone – Megson, Heagle & Friend, C.E. & L.S., LLC – Davison Environmental, consultants – Alter & Pearson, LLC

PROPOSAL: To expand the church's parking lot to the west in order to create an additional 118 or 119 parking spaces. Key elements of the project to consider are:

- a. The project site consists of two land parcels totaling 7.25 acres. There are 55,000 square feet or 1.26 acres of wetlands at the project site. 5,500 square feet or 0.13 acre or 10 percent of the site's wetlands will be disturbed and lost due to constructing the parking lot. The wetlands area to be impacted is: considerably disturbed from past activities; primarily vegetated with non-native invasive plants (Japanese Knotweed); and considered to be of low wetland function and value.
- b. Compensation is being offered as part of the proposal in order to offset the loss of wetlands. The following environmental mitigation measures are planned and designed as compensation:
 - > Providing stormwater treatment (quality and quantity) of a good portion of the site's runoff prior to its discharge into the remaining wetlands;
 - > The creation of wetlands by excavating (interception of seasonal high groundwater) and ponding of stormwater within the proposed stormwater management basin located easterly and northerly of the site's wetland area (wetlands plantings within said basin);
 - > Enhancement of the remaining one acre of wetlands by a multi-year removal program of the non-native invasive plants followed by the replanting with native wetland plant species; and
 - > Encumbering most of the remaining wetlands and some of the non-essential upland review area with a private conservation easement.

DRAFT RECOMMENDATION FOR A WETLANDS PERMIT FOR ST. PAUL'S CHURCH

MOVED, that the Inland Wetlands and Watercourses Agency issues an inland wetlands and watercourses permit to the Saints Isidore and Maria Parish Corporation (aka Saint Paul's Church) for the construction of an expanded parking lot within 5,500 square feet of wetlands and the upland review area, and its related infrastructure within the upland review area at 2755 Main and Assessor's Lot W-38A Main Street, in accordance with plans on file in the Office of Community Development, and in compliance with the following conditions:

- 1. Adherence to the Town Engineer's memorandum dated January 7, 2021.
- 2. A private conservation easement shall be established as generally depicted on the site plans. The precise delineation shall be recorded by bearings and distances. The easement shall be recorded on the land records. The conservation easement shall be marked with oak stakes labeled "Conservation Easement" with waterproof ink and tied with red flags. These stakes are to be located at each change of boundary direction and at every 100 foot interval on straightaways. All conservation easement corners shall be permanently marked with iron pins. In addition, numbered "Glastonbury Conservation Easement" signs, available from the Town's Office of Community Development, shall be nailed to trees that are within two feet of the easement area's boundary line, at approximately 100 feet intervals. The sign shall be installed facing outwards at about 7 feet above grade, using two 3 inch or greater aluminum or galvanized nails, with the nails left protruding from tree trunks about 1-1/2". Where no trees are suitable 7 foot metal or long-lived wood posts with easement signs attached shall be used. Such placement of signs shall be performed under the supervision of a Licensed Land Surveyor prior to land-clearing or earth-moving activities and notice shall be provided to the Town's Office of Community Development upon its completion.
- 3. Healthy mature trees shall be preserved and saved when possible. Said trees shall be protected with the use of high visibility construction fence during construction or otherwise protected as required by staff.
- 4. Material shall not be stockpiled in wetland areas.
- 5. Installation of soil erosion and sedimentation control and stabilization measures shall be the Permittee's responsibility. Once installed these measures shall then be inspected by the Environmental Planner prior to land disturbance activities. Afterwards it then shall be the Permittee's responsibility to inspect these control measures during, and immediately following, substantial storm events and maintain and/or replace the control measures, when needed, on a regular basis until the site is vegetatively stabilized. Hay bales shall be replaced every 60 days. The Environmental Planner is hereby authorized to require additional soil erosion and sediment controls and stabilization measures to address situations that arise on the site.

- 6. Tree stumps shall not be buried at the site.
- 7. A qualified person or firm shall be kept on retainer by the applicant to supervise the construction and habitat restoration of the proposed stormwater management basin and rain garden. Such person or firm shall certify that performance has met all designed aspects upon completion.
- 8. A qualified person or firm shall be kept on retainer by the applicant to supervise the implementation of the multi-year, non-native invasive plant removal plan; and the implementation of the replanting plan within the conservation easement areas. Such person or firm shall certify that performance has met all designed aspects upon completion.
- 9. The Permittee shall be fully responsible for damages caused by all activities undertaken pursuant to this permit that may have a detrimental effect on wetlands and/or watercourses, and all such activities that cause erosion and sedimentation problems.

DRAFT MOTION FOR A RECOMMENDATION TO THE TOWN PLAN & ZONING COMMISSION FOR ST. PAUL'S CHURCH

MOVED, that the Conservation Commission recommends to the Town Plan & Zoning Commission approval of a Section 12 Special Permit with Design Review concerning the Saints Isidore and Maria Parish Corporation's proposed parking lot expansion at 2755 and Assessor's Lot W-38A Main Street, in accordance with plans on file in the Office of Community Development, and in compliance with the following conditions:

- 1. Adherence to the Town Engineer's memorandum dated January 7, 2021.
- 2. A private conservation easement shall be established as generally depicted on the site plans. The precise delineation shall be recorded by bearings and distances. The easement shall be recorded on the land records. The conservation easement shall be marked with oak stakes labeled "Conservation Easement" with waterproof ink and tied with red flags. These stakes are to be located at each change of boundary direction and at every 100 foot interval on straightaways. All conservation easement corners shall be permanently marked with iron pins. In addition, numbered "Glastonbury Conservation Easement" signs, available from the Town's Office of Community Development, shall be nailed to trees that are within two feet of the easement area's boundary line, at approximately 100 feet intervals. The sign shall be installed facing outwards at about 7 feet above grade, using two 3 inch or greater aluminum or galvanized nails, with the nails left protruding from tree trunks about 1-1/2". Where no trees are suitable 7 foot metal or long-lived wood posts with easement signs attached shall be used. Such placement of signs shall be performed under the supervision of a Licensed Land Surveyor prior to land-clearing or earth-moving activities and notice shall be provided to the Town's Office of Community Development upon its completion.
- 3. Healthy mature trees shall be preserved and saved when possible. Said trees shall be protected with the use of high visibility construction fence during construction or otherwise protected as required by staff.
- 4. Installation of soil erosion and sedimentation control and stabilization measures shall be the Permittee's responsibility. Once installed these measures shall then be inspected by the Environmental Planner prior to land disturbance activities. Afterwards it then shall be the Permittee's responsibility to inspect these control measures during, and immediately following, substantial storm events and maintain and/or replace the control measures, when needed, on a regular basis until the site is vegetatively stabilized. Hay bales shall be replaced every 60 days. The Environmental Planner is hereby authorized to require additional soil erosion and sediment controls and stabilization measures to address situations that arise on the site.
- 5. Tree stumps shall not be buried at the site.

- 6. A qualified person or firm shall be kept on retainer by the applicant to supervise the construction and habitat restoration of the proposed stormwater management basin and rain garden. Such person or firm shall certify that performance has met all designed aspects upon completion.
- 7. A qualified person or firm shall be kept on retainer by the applicant to supervise the implementation of the multi-year, non-native invasive plant removal plan; and the implementation of the replanting plan within the conservation easement areas. Such person or firm shall certify that performance has met all designed aspects upon completion.

TM:gfm

MEMORANDUM

To:

Thomas Mocko, Environmental Planner

Conservation Commission

From: Daniel A. Pennington, Town Engineer / Manager of Physical Services

Re:

Proposed Parking Lot Expansion

#2577 and Lot W-38A Main Street

Saints Isidore and Maria Parish (Formerly St. Paul's Church)

The Engineering Division has reviewed the construction plans for the proposed parking lot expansion on property located at 2577 and Lot W-83A Main Street for Saints Isidore and Maria Parish prepared by Megson Heagle and Friend, Civil Engineers and Land Surveyors LLC revised December 23, 2020 and the related Hydrology and Hydraulics report revised December 2020 and offers the following comments:

- 1. The stormwater management report indicates that the proposed drainage system will reduce peak flow rates from the project area for all storm events analyzed and is consistent with Town standards for stormwater management. proposed drainage system and stormwater basin provides treatment for the majority of the existing parking lot and will provide a significant water quality benefit to the run-off from this area.
- 2. The low-flow weir on the stormwater basin outlet structure should be adjusted as required to ensure that the water quality volume is retained within the stormwater basin. Revise weir details and computations as required and submit for review and approval by the Town Engineer.
- 3. The Stormwater Maintenance Program and related facility specific maintenance plans on Sheet 7 should be moved to the Site Plan on Sheet 5 for ease of reference.
- 4. Provide a table describing pre and post development impervious area and directly connected impervious area for MS4 Permit tracking on Sheet 5.
- 5. Provide a note on Sheet 5 regarding protection of the town's sanitary sewer force main during construction. Limitations on vibratory compaction directly above these pipes may be required by the Town based upon the amount of cover and condition of force main as determined during test pit operations.

Addendum to most-recently revised (Dec. 2020)

MEGSON, HEAGLE & FRIEND

CIVIL ENGINEERS & LAND SURVEYORS, LLC 81 RANKIN ROAD

GLASTONBURY, CONNECTICUT 06033 PHONE (860) 659-0587 FAX (860) 657-4429 Hydrology & Hydraulics Report

January 8, 2021

Mr. Steve Braun, PE
Assistant Town Engineer
Glastonbury Town Hall
2155 Main Street
PO Box 6523
Glastonbury, CT 06033

Re: Supplemental Drainage information

Saints Isidore and Maria Parish Corporation

2577 Main St

Glastonbury, CT 06033

Dear Steve:

Pursuant to our phone conversation this morning I am sending this supplemental information related to my Hydrology and Hydraulics Engineering Report dated December, 2020. This report summarized my calculations related to mitigating the effects of peak runoff increases and water quality impacts from a proposed parking lot addition on this site. This will be accomplished by directing runoff from the parking lot as sheet flow to a stormwater management basin (SWMB) west of the parking lot.

X

Based on that discussion, we agreed the design of the Stormwater Management Basin (SWMB) outlet weir should be adjusted to provide adequate storage volume for the Water Quality Volume (WQV) below the first opening which is 6 inches wide. In addition, we agreed the wet portion of the SWMB is allowed to be used for storage volume in accordance with 2004 Connecticut Stormwater Quality Manual.

Consequently, I have revised the drainage calculations to reflect these changes.

By utilizing the wet portion of the SWMB the required WQV is achieved at elevation 28.5. Therefore, I propose to adjust the flow line of the 6 inch outlet weir opening from 28.0 to 28.5. As the revised drainage calculations demonstrate, adequate detention will be provided for all storm events.

If you agree with the proposed revisions and calculations, I suggest we reflect the changes on the final plans for filing. If you have any questions or comments please do not hesitate to call.

Sincerely,

Mark W. Friend, Principal P.E., Soil Scientist, LEED AP

Attach.

SUMMARY

- The entire proposed parking lot as well as the runoff from 93% of the existing parking lot is directed to the Treatment Train.
- The SWMB is designed to prevent any increases in peak runoffs for all storm frequency events from 2 to 100 years. The actual peak flows are as follows:

	Storm Frequency Events				
	2 yr	10 yr	25 yr	50 yr	100уг
Pre-Developed	5.12 cfs	12.97 cfs	18.37 cfs	22.72 cfs	27.14 cfs
Post-Developed	5.29 cfs	12.97 cfs	18.24 cfs	22.45 cfs	26.77 cfs
* SWMB Outflow	5.07 4.90 cfs	12.87 cfs	18.12 cfs	22.33 cfs	26. 63 -cfs
Reduction	0.22 cfs	0.10 cfs	0. 25 cfs	0.39 cfs	0.51-cfs

• The SWMB will retain 50% of the Stormwater Quality Volume for the site as required for a Redevelopment site per the MS4 Permit.

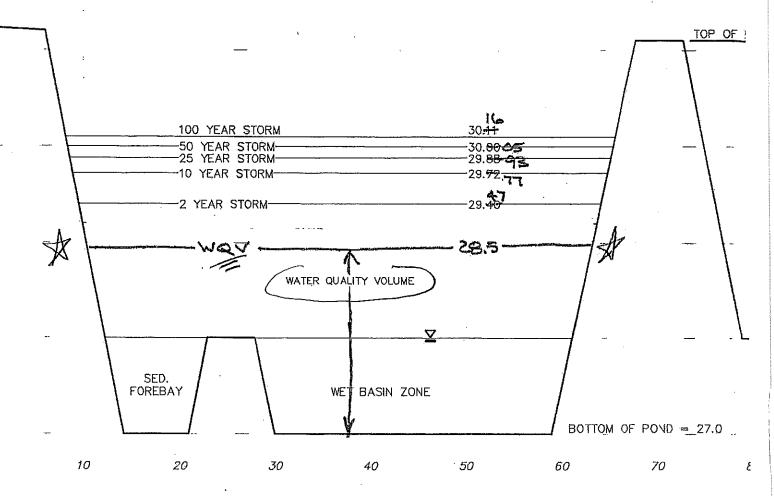
Volume of Pond

MEGSON, HEAGLE & FRIEND

Civil Engineers & Land Surveyors, LLC 81 Rankin Road Glastonbury, Connecticut 06033 Phone (860) 659-0587 Fax (860) 657-4429

Job: 86-16 - St Par	ul Church
Sheet No: 4 of	6
Calculated By: MWF	Date: 08/12/20
Checked By:	Date:
Scolar	

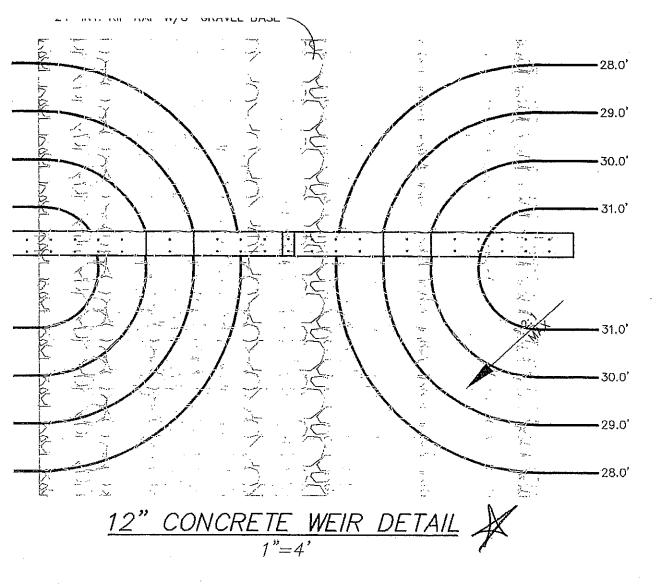
Elevation Stage	Area (ft²)	Area Last Section (ft²)	Average Area (ft²)	Section Volume (CF)	Total Volume (CF)
27.0	2500	0	0	0	0
28.0	3825	2500	3163	3163	3163
28. 5 29.0	4775	3825	4300	WQV 4300	ちとら - 7463
30.0	`5640	4775	5208	5208	. 12,670
31.0	6500	5640	6070	6070	18,740
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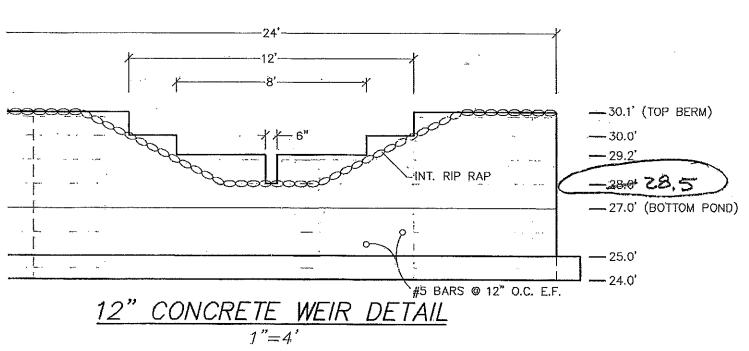


STORMWATER MANAGEMENT BASIN CROSS SECTION "A-A"

SCALE: HORIZ. = 1"=10'

VERT. = 1"=1"





MEGSON, HEAGLE & FRIEND

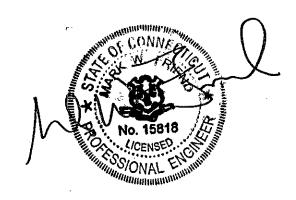
CIVIL ENGINEERS & LAND SURVEYORS, LLC 81 RANKIN ROAD GLASTONBURY, CONNECTICUT 06033 PHONE (860) 659-0587 FAX (860) 657-4429

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HYDROLOGY AND HYDRAULICS ENGINEERING REPORT

The Community of Saints Isodore and Maria at St. Paul Church #2557 & Lot W-38A Main Street Glastonbury, CT

December, 2020



Prepared By:

Mark W. Friend, PE Soil Scientist, LEED AP

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PROJECT DESCRIPTION

The project that is the subject of this report is located on a parcel of land with an address of 2577 Main Street in Glastonbury, CT. The property has 363.44 feet of frontage on the west side of Main Street and 154.44 feet on the north side of Welles Street. It is 7.246 acres in size. Four existing buildings are located on the property which consist of a church, rectory, garage for the rectory, and residential style building used as the Knights of Columbus Hall. Several paved access drives and parking lots are located on the site. The main parking lot is west of the church in the middle portion of the site. A large cell phone tower exists on the westerly most portion of the property on a 100 x 100 foot leased area.

The proposal involves construction of approximately 30,880 s.f. of paved parking lot to gain an additional 118 parking spaces in the existing parking lot at the rear of the existing church building. A future building addition is considered in the design.

STORMWATER MANAGEMENT DESIGN GOALS AND PRACTICES

The design goals of the stormwater management system are as follow:

General

- Design to be consistent with the Town of Glastonbury Standards for Public Improvements Section 4.0 Stormwater Management Design Standards.
- Design to be consistent with National Pollutant Discharge Elimination System (NPDES).
- Design to be consistent with the 2004 Connecticut Stormwater
 Ouality Manual
- Design to be consistent with the 2002 Connecticut Guidelines
 For Soil Erosion and Sediment Control
 - Design to be consistent with the Town's MS4 Permit.
- Design to be functional, environmentally sensitive & aesthetically compatible with the surrounding development.
- Incorporate Low Impact Development (LID) practices.
- Incorporate Best Management Practices (BMP's).
- Remove at least 80% of the total suspended solids & floatable pollutants before discharge to a surface water or wetland.
 - Minimize loss of long term recharge during low flow periods.

/• :

Retain 50% of the Water Quality Volume for the site in conformance with the Town of Glastonbury MS4 Permit.

√ ·

Mitigate peak runoffs to prevent any increases for storm frequency events from 2 to 100 years.

Treatment Controls

Filtering Practices

- Utilize sheet flow to parking lot islands (micro-scale control)
- Utilize stormwater management areas <u>utilizing created wetlands</u>
 & wet basins
- Utilize linear bio-swales

Infiltration/Recharge Practices

- Utilize sheet flow to parking islands (micro-scale control)
- Utilize sheet flow to road shoulders (micro-scale control)
- Utilize stormwater management areas utilizing created wetlands
 & wet basins
- Utilize linear bio-swales
- Utilize Stormwater Management Basin to retain 50% Water Quality Volume for the site consistent with the Town's MS4 Permit.

Settling Practices

- Design lot grading to create ponding areas in islands & shoulders (micro-scale control)
- Utilize stormwater management basins

Detention Practices for Mitigation of Peak Runoff Increase

Design a Stormwater Management Basin (SWMB) with an Outlet Control
 Weir to provide detention of peak flow increases.

/End of Pipe Controls

- Incorporate a Sediment Forebay
- Utilize 2' sumps in catchbasins
- Design outlet protection @ discharge points

To achieve the above enumerated goals a stormwater treatment train is incorporated into the design, including a linear raingarden to treat the runoff prior to collection in traditional catchbasins with 2' sumps. The discharge from this system is then directed to a SWMB with a wet bottom. This feature is specified to be planted with both wetland and upland plants to provide a bio-retention environment. A sediment forebay is proposed in the SWMB to isolate and contain any incoming sediments not filtered out in the linear raingarden or settled out in the catchbasin sumps.

A critical element of the stormwater management plan is the ability to capture 93% of the existing pavement and direct it into the treatment train. This provides the advantage of managing the existing runoff currently being discharged directly into the adjacent wetland system and achieve the above enumerated goals. This is a substantial improvement in stormwater quality treatment for runoff from the site.

METHODOLOGY

Peak rates of runoff and runoff volumes, for the purpose of determining the detention required for mitigating increases, are computed utilizing the TR-55 method according to the Town requirements. HydroCAD Stormwater Modeling software was used for these calculations.

Peak rates of surface runoffs, for the purpose of culvert sizing, are computed utilizing the Rational Method. The pipes were designed to convey flows from up to a 10 yr frequency storm event.

Hydraflow Storm Sewers by inteliSOLVE was used to compute the hydraulic grade lines for the system using the runoffs computed. The Water Quality Volume is computed per the 2004 Connecticut Stormwater Quality Manual. The results are included in the appendices.



SUMMARY

- The entire proposed parking lot as well as the runoff from 93% of the existing parking lot is directed to the Treatment Train.
- The SWMB is designed to prevent any increases in peak runoffs for all storm frequency events from 2 to 100 years. The actual peak flows are as follows:

Storm Frequency Events

	<u>2 yr</u>	10 yr	25 yr	50 yr	100yr
Pre-Developed	5.12 cfs	12.97 cfs	18.37 cfs	22.72 cfs	27.14 cfs
Post-Developed	5.29 cfs	12.97 cfs	18.24 cfs	22.45 cfs	26.77 cfs
SWMB Outflow	4.90 cfs	12.87 cfs	18.12 cfs	22.33 cfs	26.63 cfs
Reduction	0.22 cfs	0.10 cfs	0.25 cfs	0.39 cfs	0.51 cfs

• The SWMB will retain 50% of the Stormwater Quality Volume for the site as required for a Redevelopment site per the MS4 Permit.



STANDPIPE READINGS

<u>Depth Below Surface to Static Water Table</u>
(Positive number = Standing water)

	(1.021)	IVE HUMBUCE	Dianamie wate	<u>. 7</u>		
Date	<u>SP-1</u>	<u>SP-2</u>	<u>SP-3</u>	<u>SP-4</u>	<u>SP-5</u>	
5-6-19	-2"	5"	1"	-5"	-4"	
5-13-19	-2"	3"	1"	0	0	
5-20-19	-3"	1"	-2"	-6"	-6"	
5-28-19	-2"	0"	-16"	-14" est*	-17"	
6-3-19	-2"	1"	-11"	filled	-16"	
6-10-19	-8"	-10"	filled	filled	-20"	
6-10-19	Reinsta	all SP's 3,4 &	5 which filled	l with silt du	iring high G	W
6-17-19	-4"	2"	-20"	-24"	-23.5"	
6-24-19	-4"	0"	-15"	-20"	-19"	
7-1-19	-5"	-11"	-27" dry	-28" dry	-28"	
The weather of the standards and dings indicate notantial hydric conditions in SD-						

The results of the standpipe readings indicate potential hydric conditions in SP-1 & SP-2. Both of these are within a sanitary sewer easement and bank of communications lines and were found to contain disturbed soils.

GLASTONBURY CONSERVATION COMMISSION (INLAND WETLANDS & WATERCOURSES AGENCY) Portion of REGULAR MEETING MINUTES OF THURSDAY, JANUARY 16, 2020

The Glastonbury Conservation Commission (Inland Wetlands & Watercourses Agency), along with Mr. Tom Mocko, Environmental Planner, in attendance held a Regular Meeting in Town Council Chambers, second floor of Town Hall located at 2155 Main Street, Glastonbury, Connecticut at 7:00 P.M.

ROLL CALL

Commission Members - Present

Judy Harper, Chairman Kim McClain, Secretary William Shea Frank Kaputa Brian Davis (arrived 7:20 P.M.)

Commission Members – Excused Dennis McInerney, Vice Chairman

Mark Temple

Chairman Harper called the meeting to order at 7:00 P.M.

I. INFORMAL DISCUSSION

1. Proposed parking lot expansion at St. Paul Church – 2577 Main Street and Assessor's Lot W-38A Main Street properties – either 111 or 115 new parking spaces in two areas that encroach upon inland wetlands and upland review areas – Town Center Zone – Megson, Heagle & Friend, C.E. & L.S., LLC – Davison Environmental, consultants – Alter & Pearson, LLC – The Community of Saints Isidore and Maria at St. Paul Church, applicant

Mr. Peter Alter of Alter & Pearson, LLC presented on behalf of his client, St. Paul Church. He explained the history of the application and Phase One of their plans, which includes an expansion of the parking lot to 270 parking spaces. Attorney Alter noted that they altered their plans to incorporate the Commission's original comments, and while they do not have to build all of the parking at this moment, it would make sense to do so before engaging with the expansion plan for the rest of the church campus. The applicant also previously included a report which concludes that the ponded area is not a vernal pool.

Mr. Mark Friend, soil scientist from Megson, Heagle, & Friend explained his redesign plan, which included monitoring the groundwater for wetlands. They relocated the previously proposed parking (around the cell tower) representing about 6,000 square feet of wetlands disturbance in an area that was already disturbed and currently inundated with invasive species. Mr. Friend stated that they also added several landscape islands with shade trees within the parking lots, and a conservation easement, which will encumber the remaining wetlands area on



the site, and a wetland enhancement area to tackle the invasive species (knotweed) problem. The goals of the stormwater management system are twofold: to treat the water quality for the runoff that is coming off the proposed parking lot, and to improve the water quality of the existing runoff that goes untreated into the wetlands area. He concluded that the proposed mitigation is the conservation easement, a permanent dedication of the resources, an enhancement of the disturbed wetlands, treatment of the existing runoff, and shading of both the proposed and existing parking areas.

Mr. Eric Davison, soil scientist and wetlands scientist, went over their approach for managing the stormwater basin and the wetlands enhancement area. He proposed planting the following: 1,000 plugs, 200 shrubs, and 20 trees. He explained that they will continue to mow the area once or twice a year, in order to help control the knotweed. Commissioner Kaputa asked if there is a long-term plan to control the knotweed. Mr. Davison replied that they would like to get to a point where there is some kind of passive control, but unfortunately, they will never completely get rid of it.

Commissioner Kaputa inquired about the rain garden's size. Mr. Friend stated that it is roughly 7 feet wide and 18 inches deep. Commissioner Kaputa disagreed with the applicant's assessment that the disturbance in this proposal is similar to the previous one because that concerned paving over a dirt road, while in this case, they propose paving over natural wetlands. Mr. Friend explained that while it is a gravel driveway, it is submerged most of the time, so as far as the function it provides as a wetland, it is very similar.

Commissioner Kaputa stated that while he wants the Church to be successful and build what they want to build, he has great trouble with it being done at the expense of the wetlands. He does not support paving over the wetlands. Attorney Alter stated that this is not a pristine wetland. It has already been excavated and disturbed a number of times, so the tradeoff of 6,000 square feet, including an area that has a sanitary sewer going through it, is not that big because it gives the opportunity to reclaim a wetland. Commissioner Davis inquired about the difference in impervious between the previous plan and this one. Mr. Alter replied that this is 3,000 square feet less of total pavement, at 113,000 square feet.

Secretary McClain noted that, a while back, they had discussed including a bike rack. She inquired whether that is still part of the applicant's plans and if that area will no longer be a bus stop. Mr. Friend stated that the Church is fine with the bike rack, but they have not gotten to that level of planning yet. Attorney Alter stated that the bus stop is part of an ongoing dispute between the Town of Glastonbury and the state of Connecticut over the snow plowing and maintenance. Mr. Alter explained that since there is no resolution yet, they do not have permission for a bus to go through there.

Secretary McClain also asked about the lighting plan. Mr. Alter stated that the lighting will be dark-sky compliant and appropriate for the parking lot. He noted that while he cannot promise what the heights of the poles will be, he will relay the Commission's concerns to make them no taller than 14 feet. Secretary McClain also suggested requiring an automatic shutoff (so that the lights are motion-sensitive) or timers (so that the lights are not on all night).



Chairman Harper inquired about the condition of the runoff and what it is doing to the existing wetlands. Mr. Friend explained that the existing parking lot has the typical contaminants that are in a parking lot. While parking lot runoff impacts the wetlands area, he could not say exactly how much in this case. Mr. Davison added that there is no insect life in the water, and the other section is just as disturbed. Since this is a completely degraded piece of wetland that is being filled in, he believes that this is a reasonable approach to accomplish what the landowner wants without affecting the wetland in a negative way. The intention of this project is to take the gunk out of the runoff before it gets into the ground. Chairman Harper asked about the long-term maintenance of the wetland. Mr. Davison stated that the Commission can include that in the conservation easement restrictions.

Attorney Alter explained that while they need 262 parking spaces, they propose 270 spaces. Secretary McClain asked if they removed the extra 8 parking spaces, would that impact the wetlands less. Mr. Alter said probably not, but Mr. Friend agreed to look into it.

Chairman Harper summarized the Commission's requests for the applicant to provide the following:

- a multi-year plan for the control/elimination of knotweed and maintenance. Mr. Alter noted that they had proposed a three-year plan, but if that is not enough, they could continue it. He suggested leaving that up to the Environmental Planner to decide.

- a plan for the rain garden maintenance

- a lighting plan
- bicycle rack accommodation
- a draft conservation easement



MEMORANDUM

INFORMAL DISCUSSION #1 MEETING OF 01-16-20

To: Conservation Commission/Inland Wetlands and Watercourses Agency

From: Tom Mocko, Environmental Planner

Re: Proposed parking lot expansion at St. Paul Church – 2577 Main Street and Assessor's Lot W-38A Main Street properties — either 111 or 115 new parking spaces in two areas that encroach upon inland wetlands and upland review areas — Town Center Zone — Megson, Heagle & Friend, C.E. & L.S., LLC — Davison Environmental, consultants — Alter & Pearson, LLC — The Community of Saints Isidore and Maria at St. Paul Church, applicant

LOCATION: Please refer to the location map provided on the cover sheet of the site plans within your packet

PROPOSAL: To expand the church's parking lot to the west in order to provide 115 more parking spaces; such expansion was revised to now be within a single, generally 125-feet by 265-feet rectangular area. The proposal also includes two stormwater treatment structures, a wetlands enhancement area, an area to be encumbered with a conservation easement, and 16 shade trees to be planted to provide shade in the parking lot.

UPDATE: The revised proposal eliminated the previous ideas of: putting parking near/around the cell tower; and crossing the wetlands along the north side with a paved access drive. In order to compensate for the lost parking, additional encroachment into the wetlands is now proposed for the southern portion of the rectangular proposed parking area; the total area of wetlands' encroachment is some 6,000 square feet (0.13-acre).

Runoff from all of the newly proposed paved area and a portion of the existing pavement will be directed to the two proposed mitigation structures, namely a 200-feet by 4-foot rain garden within the north-to-south oriented landscape island in the proposed rectangular parking lot, and a 5,600 square foot somewhat triangular stormwater management basin (with an isolating forebay component). Additional design information (related to their sizing, flow lines, invert elevations, substrate stabilization, plantings, maintenance plans, compliance with State's water quality volume expectations, etc.) yet need to be designed and submitted for Town review; this will likely be finalized once there is final feedback and general acceptance by the Commission/Agency on the newly proposed concepts.

Please note that a proposed conservation easement area is now shown on the revised plan within your packet; such easement area almost includes all of the remaining wetlands on the church property and a small area of upland review area west of the proposed stormwater management basin and east of the cell tower's lease line.

Also, note that the plan indicates a shaded "wetland enhancement area" within the proposed conservation easement area. This area can be characterized as being tree-less and populated with non-native invasive plants. The idea here is to create a management plan for eliminating the invasives and replanting with wetland/floodplain tree species (? and shrub species?); Eric Davison of Davison Environmental is expected to elaborate on his ideas for such enhancement at the meeting.

Overall, there is considerable wetland compensation and/or enhancement activities which serve to offset the proposed, direct impacts upon the site's disturbed and somewhat degraded wetlands; if such activities are successful, then the remaining wetlands, and a portion of their upland review areas, will serve to be more functional and valuable.

If the revised plan is palatable to the Agency, then the project consultants will likely need to evaluate the proposal relative to any Federal wetlands and any jurisdiction with the U.S. Army Corps of Engineers.

Furthermore, note that there are an existing sanitary sewer line and existing cell tower utility lines that lie beneath the land surface within the project area that need to be protected during any approved expansion.

The proposal now indicates within the existing parking lot at least seven landscape islands and ten shade trees within them; this is an improvement.

Colored survey tapes should have been placed with the wetlands that demarcate the southerly encroachment of the new parking.

Following this memorandum are:

- · Copies of selected materials that were previously submitted; and
- The meeting minutes from the December 8, 2018 and July 25, 2019 Conservation Commission minutes when the project was previously reviewed.

GLASTONBURY CONSERVATION COMMISSION (INLAND WETLANDS & WATERCOURSES AGENCY) Portion of REGULAR MEETING MINUTES OF THURSDAY, JULY 25, 2019

The Glastonbury Conservation Commission (Inland Wetlands & Watercourses Agency), along with Mr. Tom Mocko, Town Environmental Planner, in attendance held a Regular Meeting in Town Council Chambers, second floor of Town Hall located at 2155 Main Street, Glastonbury, Connecticut.

ROLL CALL

Commission Members - Present

Mrs. Judy Harper, Chairperson
Dennis McInerney, Vice-Chairman
Ms. Kim McClain, Secretary
Mr. Mark Temple
Mr. Brian Davis
Vacancy

Commission Members - Excused

Mr. Frank Kaputa

Chairperson Harper called the meeting to order at 7:30 P.M.

I. INFORMAL DISCUSSIONS

1. Proposed parking lot expansion at St. Paul Church - 2577 Main Street and Assessor's Lot W-38A Main Street properties - either 111 or 115 new parking spaces in two areas that encroach upon inland wetlands and upland review areas - Town Center Zone - Megson, Heagle & Friend, C.E. & L.S., LLC - Davidson Environmental, consultants - Attorney Meghan Hope - The Community of Saints Isidore and Maria at St. Paul Church, applicant

Attorney Meghan Hope, representing the client, noted that the applicant is reviewing their application for the second time informally. She explained that the site is currently 7.4 acres and most of the existing improvements are on the easterly portion of the site. The applicant is looking to expand their parking to accommodate 269 spaces. Attorney Hope explained that wildlife specialist Eric Davidson is not present tonight, but he did email Mr. Mocko his vernal report for the pool, which concluded that it is definitely not a vernal pool. Mr. Mocko agreed, stating that this concern has been alleviated.

Attorney Hope printed out a series of old aerial photos, to elucidate the history of the site, pointing out the wetland activity on the site over time. Vice Chairman McInerney noted that the whole area was more active in previous times. Attorney Hope agreed, stating that the site has become less active over time.

Mr. Jon Sczurek from Megson, Heagle & Friend, C.E. & L.S., LLC discussed the two main wetlands impact areas. He explained Mark Friend's delineation for the wetlands soil, explaining

that they put in various standpipes to monitor the groundwater throughout the wet season, which ended in June. The soil scientist report showed that two of the pipes did meet the definition of hydric soil. The entire, newly-designed, wetland area is about 1500 square feet, and the proposed disturbed area is about half that, at 700 square feet. He explained the stormwater flow, with water going in a westerly direction, off the parking lot into the wetlands area. He noted that Mr. Friend feels comfortable that the parking lot island catch basin would be able to capture that section of the parking lot. There will be shade trees for those parking areas in the new islands.

Secretary McClain asked how many islands the applicant is creating in the new parking lot. Mr. Sczurek stated 10 in total. Commissioner Temple appreciated that the applicant took the opportunity to move runoff as much as possible into the detention basin but expressed that there is a potential future opportunity to do infiltration there. He explained that shading those invasive plants will not allow it to thrive, and if for some reason, some vernal pool species discovered the re-landscaped area, they may use it. Attorney Hope explained that she called the maintenance person at St. Paul's Church about the grass dumped there. He apologized, saying that a part-timer had done it and it was removed it today, and assured that it will not happen again.

Secretary McClain asked why the applicant does not consider having a shared parking agreement with the TD Bank located across the street. Attorney Hope stated that they already are sharing parking and it is still not enough. The closing of St. Augustine Church and the consolidation will only add numbers. Secretary McClain expressed concern at the applicant asking for 269 parking spaces, when they only need 262 spaces. She also stated that having accessible, visible bike racks would be a very important amenity to include. Commissioner Davis asked where that will be relocated. Attorney Hope explained that they have not decided yet, but they can put it adjacent to the bus stop.

Commissioner Temple asked when they are going to repave the parking lot. Mr. Sezurek stated that he is not sure if it will happen in this phase or in the building additions phase. Attorney Hope stated that she can follow up on that. Commissioner Davis asked if any consideration had been made to build a two-deck parking lot by the future building. He explained that it would be more efficient, since people would get closer to where they want to be, and the applicant would avoid encroaching upon this newly-discovered wetlands. He noted that the consolidation would be better for the environment overall. Vice Chairman McInerney stated that is an interesting idea and also asked if the applicant would entertain the notion of building a deck to reduce their imprint. Attorney Hope stated that she will ask the applicant.

Chairman Harper asked if the driveway is wide enough. Attorney Hope said yes, it is 24 feet, and there is already a pedestrian sidewalk, just off the property. Chairman Harper noted that that takes them farther away from that parking lot, meaning that pedestrians would likely create a new footpath. Chairman Harper also noted that roundup is getting really bad press right now. She asked at which point it will be deemed illegal, and by whom. Mr. Mocko stated that would be the federal government's decision.

Attorney Hope asked the Commission what they think of the applicant's mitigation techniques, like making this water quality basin a created wetland. She asked if the Commission believes that

the direct impacts that they are proposing will have a significant impact on the wetlands or not, so that they can know which way to file their application.

Secretary McClain asked for clarification, if the applicant will be disturbing a wetland. Attorney Hope said yes, in two places. Secretary McClain stated that to err on the side of safety, she would consider it to be a significant impact. Commissioner Temple agreed. Vice Chairman McInerney asked for the definition of a significant impact. Attorney Hope noted that the common theme is whether the activity will have a substantial impact on the wetland or watercourse, whether it will substantially change the dynamic of the watercourse system, and/or whether it will substantially diminish the wetlands that are there now. Vice Chairman McInerney remarked that they are reconstructing an area that was previously disturbed. Mr. Mocko stated that, overall, they are ending up with a higher quality wetland, if all the mitigation activities go as planned. He stated that he does not see any compelling reason to determine that this is a significant impact activity. Direct impacts on a wetland does not constitute a significant impact by itself. Secretary McClain stated that she always looks to precedent. Attorney Hope stated that they could work out a draft conservation easement, as Mr. Mocko suggested.

After some deliberation, the Commission agreed that the applicant's proposal is not a significant impact.

MEMORANDUM

INFORMAL DISCUSSION #1 MEETING OF 7-25-19

To: Conservation Commission/Inland Wetlands and Watercourses Agency

From: Tom Mocko, Environmental Planner

Re: Proposed parking lot expansion at St. Paul Church – 2577 Main Street and Assessor's Lot W-38A Main Street properties – either 111 or 115 new parking spaces in two areas that encroach upon inland wetlands and upland review areas – Town Center Zone – Megson, Heagle & Friend, C.E. & L.S., LLC – Davison Environmental, Consultants – Attorney Meghan Hope – The Community of Saints Isidore and Maria at St. Paul Church, applicant

UPDATE:

This proposal is returning for another informal review because:

- 1. An additional wetland area (some 1,500 square foot, hatched, triangular area labeled "area of hydric groundwater and obligate wetland vegetation" on plan) was detected by further investigation, in which a portion of said area would be lost by placing fill upon it;
- 2. The applicant's consultants would benefit from the Commission's feedback on their concepts for providing wetlands' compensation and other environmental mitigation measures before they invest time on developing the details for such compensation and mitigation;
- 3. Updates are available relative to the investigations made concerning the potential vernal pool within the topographic depression located in the portion of wetlands adjacent to Welles Street; and
- 4. The Project Engineer has devised a way to expand and provide water quality treatment for the Church's existing parking lot (58.6% of lot) and has ideas of expanding it further, but Commission feedback would be helpful.

To briefly follow up on that last point, the remaining 35,500 square feet (41.4%) of proposed non-treated portion of the existing parking lot is earmarked to have a future 23,800 square foot new

building added within that portion of the lot. A single sheet plan with red-lining aspects visually represents these concepts.

The Soil Scientist & Wetlands/Watercourses Report (July 2019) follows this memo. Please review it; staff noted the important aspects to consider before this proposal's discussion at the meeting.

The initial mitigation approach considered involved removing invasive plants and selective replanting to improve the biodiversity and habitat values that currently exist. This approach is stated and detailed in the attached report: Wetland Impact Evaluation & Mitigation Plan by Davison Environmental dated November 5, 2018. This document was anticipated to be updated/revised before the upcoming meeting. A major element of such an update is expected to include the most recent (2019) investigations relative to there being a viable vernal pool at the site; verbal updates relayed to me indicate there is not.

The other mitigation/compensation strategy being contemplated is providing wetlands creation by excavating deeper the bottom of the proposed stormwater management basin to (nearly) intercept the high groundwater and planting it with wetlands plants. I have much confidence with the consultants involved that will lead to a very successful wetlands creation project.

TM:ce

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JOYCE P. MASCENA
TOWN CLERK
GLASTONBURY CT

GLASTONBURY CONSERVATION COMMISSION
GLASTONBURY COMMISSION
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The Glastonbury Conservation Commission (Inland Wetlands & Watercourses Agency), along with Mr. Tom Mocko, Environmental Planner, in attendance held a Regular Meeting in Council Chambers, second floor of Town Hall located at 2155 Main Street, Glastonbury, Connecticut.

ROLL CALL

Commission Members

Mrs. Judy Harper, Chairman

Mr. Dennis McInerney, Vice Chairman {excused}

Mrs. Kim McClain, Secretary {excused}

Mr. Brian Davis

Mr. Frank Kaputa

Mrs. Helen Stern

Mr. Mark Temple

Chairman Harper called the meeting to order at 7:50pm because of a conflict with Council Chambers.

I. INFORMAL DISCUSSION

Proposed parking lot expansion at St. Paul Church – 2577 Main Street and Assessor's Lot W-38A Main Street properties – either 111 or 115 new parking spaces in two areas that encroach upon inland wetlands and upland review areas – Town Center Zone – Megson, Heagle & Friend, C.E. & L.S., LLC – Davison Environmental, consultants – Attorney Meghan Hope – The Community of Saints Isidore and Maria at St. Paul Church, applicant

Attorney Peter Alter represented the applicant and reviewed the need for additional parking, the plans and application. He said that they will require 260 spaces and propose 269. He submitted a letter from St. James across the street in support to help alleviate the congestion. Mr. Mark Friend, engineer for the applicant, reviewed the plans, noting the wetland area determined by soil auguring and observation, saying that the area drains toward the Connecticut River. He said that there is flood zone but no activity within the 100-year flood zone. He pointed out the utilities, sewer line and tree line noting that there are invasive species. He said that the sanitary sewer easement is mowed once per year and pointed out the upland review area. He noted the newly proposed landscaped islands. Regarding stormwater management, he proposed a depressed rain garden, island and bio-retention basin, both with conservation plantings, and a subsurface detention system to help mitigate the impact of peak runoffs and stormwater quality, adding that they will develop a maintenance plan.

Mr. Eric Davison, wildlife biologist, explained that he was asked to determine if the area of seasonal standing water was a vernal pool. He said that they normally go out in March looking

for larval masses and in May looking for the hatched young, but they were only able to go out in May. He continued saying that he was more thorough in May with his dip-netting for young, but still found no activity and felt that was due to the impaired surface runoff, debris, lack of forest cover and proximity of a roadway. He said that he would classify this as an urban wetland but not a vernal pool and even if there were any animals found, he felt there was no long-term viability for this area as a vernal pool. He reviewed his planting plan of the edge of the wetlands including native species, 1150 plugs, 198 shrubs and 18 trees. He stated while technically it was a wetland, functionally, it was of low value. He noted the proposal to implement an invasive control plan.

Commissioner Kaputa asked Mr. Davison to evaluate the vernal pools to the south and how the conditions are different for them to be viable. Commissioner Davis commented on the unnatural act of crossing the wetlands to the loop road and that it seems so forced that people may still park on Main Street rather than use this parking so removed from the church. Attorney Alter noted that they wouldn't be making application if it weren't for the cell tower and roadway already existing. Mr. Mocko questioned the function and value of the stated "urban wetland" for migratory birds in light of its proximity to the Connecticut River; Mr. Davison said that while birds may be more likely to use spaces closer, the last value of this wetland is for migratory birds. The review of the plans continued.

Mr. John Ruggiero of St. Paul Church spoke to the parking need and the increased need due to the reduction of masses for the yoked churches in town. Commissioner Kaputa asked if they could increase the number of masses.

Mr. Donald Kray of St. Paul Church said that priests are limited to the number of masses they can do, and they already have an exception to do extra in Glastonbury.

Commissioner Temple noted the space between the classrooms and garage that he thought did not drain toward the proposed stormwater structures and suggested they evaluate it further. He also asked for larger tree species to help cool the pavement and do as much as they can to mitigate the runoff from all areas of existing pavement toward the wetland. Commissioner Kaputa asked about the peer review and Mr. Mocko indicated it would be prudent. Commissioners Davis and Temple said they would consider a proposal for more contiguous parking over a portion of the wetland in exchange for significant improvements to the remaining wetland. Mr. Mocko indicated that the wetland may have limited functions and values, but it was still a functional and valuable wetland that would be expensive to replicate elsewhere.

Commissioner Kaputa and Chairman Harper indicated they would have trouble with the tradeoff suggested by Commissioners Davis and Temple. Chairman Harper listed the following: conduct a peer review of the submitted limits of wetlands, clean-up debris and junk from the wetlands, evaluate wetlands to the south and determine if they work together, plant larger trees to cool the pavement, proposed percentages for impervious surfaces and open space, more information about the runoff, added mitigation for the runoff, look into pervious pavement options around the cell tower, overall mitigation to enhance or improve the wetland area, lighting plan, and a

detailed maintenance plan for the proposed stormwater structures. Commissioner Kaputa added p. 3 that he was not convinced it was not a vernal pool and a consensus was reached that he, Mr. Mocko and the applicant's consultants would go out, evaluate and discuss it further. Regarding the peer review, Mr. Mocko suggested, and it was acceptable to the applicant, to contact Soil Scientist Richard Snarski.

Minutes-Regular Meeting held December 6, 2018
Recording Clerk-MAM
Recording Clerk-MAM

MEMORANDUM

INFORMAL DISCUSSION MEETING OF 12-06-18

To: Conservation Commission/Inland Wetlands and Watercourses Agency

From: Tom Mocko, Environmental Planner

Re: Proposed parking lot expansion at St. Paul Church – 2577 Main Street and Assessor's Lot W-38A Main Street properties — either 111 or 115 new parking spaces in two areas that encroach upon inland wetlands and upland review areas — Town Center Zone — Megson, Heagle & Friend, C.E. & L.S., LLC — Davison Environmental, consultants — Attorney Meghan Hope — The Community of Saints Isidore and Maria at St. Paul Church, applicant

LOCATION: Please refer to the location map provided on the preliminary site plan in your packet.

PROPOSAL: To generally prepare and fill idle, low-lying land west of the church's existing parking lot in order to provide additional parking spaces. An area (2,337 square feet) of disturbed wetlands would be used to construct a 22-foot wide paved access to the proposed parking that is planned around the existing cell tower within the westernmost portion of the church's land. A treatment train approach is proposed to address the project's stormwater management.

REVIEW: Much good information was submitted relevant to the proposal, which staff does not intend to re-state. Please consider the following suggested review approach:

- 1. Start with Alter & Pearson's 2-page Project Narrative dated November 12, 2018; page 2 is their parking analysis chart indicating a total of 262 new parking spaces to supplement the existing 151 spaces.
- 2. Next, peruse the Wetland Impact Evaluation & Mitigation Plan prepared by Davison Environmental; sections 2, 3 4, 6 and 7 along with the aerial photo, Figure 3 planting plan, and site photos, all explain the site's wetlands and the project's approach for its overall mitigation efforts.
- 3. Now review the submitted site plan. The proposed expansion lies west of the existing parking lot north of the existing commuter bus shelter, which mostly is just outside the flagged wetlands indicated on the plan. Note the proposed direct wetlands impact activity in the northern lobe of the indicated wetlands; here a gravel access path to the cell tower

exists, which will be further impacted by a 22-foot wide, paved access drive. An existing west-east sidewalk lies within the lobe of wetlands just off the property to the north. The plan states 154 parking spaces exist, 115 spaces are proposed, and 269 total spaces will result; this differs slightly from the attorney's narrative.

The project engineer's preliminary concept of addressing stormwater management is essentially:

a. Create a "depressed (landscape) island rain garden" on the western edge of the existing parking lot;

b. Install a "subsurface detention structure" (providing limited seasonal infiltration?) within the proposed fill area 25 feet west of the existing parking lot; and

c. Construct a "stormwater management basin" west of the proposed easternmost parking area and east of the flagged wetlands.

Drainage and water quality calculations still need to be generated and submitted for Town review. The Engineering Department also still needs to review and comment upon the preliminary plans.

Mitigation measures beyond the proposed stormwater management concepts are discussed within Section 7 of Davison Environmental's submitted report.

Moving forward, staff suggests that the Commission/Agency consider the following:

1. Further evaluation (re-check by Mark Friend's established wetlands limits or a peer review) of the indicated non-wetlands beyond the flagged limits where surface water currently exists;

2. Specifying the characteristics of the proposed fill to be used;

- 3. Completing the drainage analysis and soliciting the Engineering Department's review comments; and
- 4. Further evaluating the project's proposed mitigation efforts.

A stake-out plan is also within your packet for those Commissioners visiting the site as part of their review.

TM:gfm

TO:

Inland Wetlands and Watercourses Agency/ Conservation Commission

FROM:

Alter & Pearson, LLC

DATE:

November 12, 2018

RE:

Project Narrative for Parking Lot Expansion at The Community of Saints Isidore and Maria at St. Paul Church - 2577 and Lot W-38A Main Street (Town Center

Zone)

The Community of Saints Isidore and Maria at St. Paul Church (the "Applicant") requires a parking lot expansion to accommodate its growing community. The property is located at 2577 and Lot W-38A Main Street (the "Site"), consists of approximately 7.47± acres, improved by a church, rectory and Knights of Columbus Hall along Main Street, a parking lot to the rear of the buildings, and a cell tower in the western portion of the Site. The parking lot also serves as a commuter parking lot in accordance with a long-standing agreement with the Town of Glastonbury. Wetlands are located westerly of the existing parking lot and easterly of the cell tower. Access to the cell tower is provided by an existing unpaved road that crosses the wetlands along the northern boundary of the Site.

In recent years the congregation utilizing the Church's Main Street campus has grown due to local Church consolidation and general growth within the community. The Site is underparked with 191 parking spaces required per the Building-Zone Regulations, and 151 parking spaces existing on Site (see attached Parking Chart). A recent count performed by the Church found that between 19 to 35 cars park off-site during mass times. Within the next five (5) years, the Applicant anticipates a need to construct an addition to the southwest corner of the Church to accommodate its growing community. While funding is available, the Applicant would like to expand its parking lot to address the need it currently has while still planning for the future addition. The Applicant's goal is to have a Site that can accommodate its parishioners and allow them to all park on the Church's campus.

To: Mark W. Friend, P.E., Megson, Heagle & Friend

From: Greg Mahoney, Senior Engineering Technician

Stephen M. Braun P.E., Assistant Town Engineer

Date:

November 13, 2020

Subject:

Conservation Commission Review Comments

Re:

The Community of Saints Isidore and Maria Parish Corporation

Parking Lot Expansion

2577 Main Street and Lot W-38A Main Street

Glastonbury, Connecticut 06033

Plan Date:

08/15-20

Revised To:

Designer:

Megson, Heagle & Friend

61 Rankin Road

Glastonbury, Connecticut 06033

Mark W. Friend, P.E.- Project Engineer

mwf@megsonandheagle.com

1-860-659-0587

1. Final plans and stormwater report are to be signed and stamped by the Professional Engineer, Land Surveyor, or Architect, as appropriate to the plan sheet.

2. Provide a pre/post analysis of the downstream impacts to the Interfaith Housing Property and the existing Town stormwater system in Welles Street.

3. Provide calculations or estimate for the stormwater management basin drain down time.

4. The existing property is greater than 40% impervious and therefore qualifies as a redevelopment parcel under the Town's MS4 Permit. As such, the storm drainage system can be designed to retain onsite 50% of the Water Quality Volume for the entire site.

5. Provide additional storm drainage inlets along the southerly parking lot to capture additional untreated impervious runoff flowing to Welles Street to the extent possible.

√ 6. Provide a note on the plans that test pits are required at all proposed storm drainage crossings with the existing force mains. 18" minimum clear distance is required horizontally and vertically. Notes regarding protection of the sewer force main including limitations on vibratory compaction directly above the force main should be added to the plans.

7. Provide an 18" minimum clear distance for all proposed storm drainage crossings with the existing force mains. Force main as-built plans depict the top of the 12" and 16" DI force mains at approximately elevation 26 to 27. Revise plans accordingly.

8. Label existing 12" DI force main (Abandoned) with approximate depth to top of main. Label 16" DI Force Main (Active) with approximate depth to top of main.

9. Provide test pit and standpipe data within the plan set and stormwater report.

- 10. Investigate the necessity of installation of a timber guardrail or precast concrete curb stops along the westerly parking lot/stormwater management basin within the limits of embankment.
- 11. Clarify leaky berm elevation depicted on the site plan vs elevations on the detail. Revise accordingly.
- 12. Provide additional spot grades/contours in the vicinity of the proposed rain garden island to demonstrate constructability. Pavement hatching limits in this area should be removed from all applicable plans
- 13. Provide a construction sequence on sheet 7 of 12.
- / 14. Provide a cross section detail for the proposed stormwater management basin. Label all water surface elevations for all storm frequencies.
 - 15. Provide a table depicting Pre and Post Directly/Indirectly Connected Impervious Cover onsite for MS4 Tracking purposes on sheet 5 of 12.
 - 16. Provide soil scientist signature block on all applicable plans.
 - / 17. Label flood zone line designation on all application plans. AE?
 - 18. Submit final approval stamped and signed PDF copies of the Stormwater Management Report and Final plans to greg.mahoney@glastonbury-ct.gov in the Engineering Division.

Note: Revised plans may generate more comments based on plan changes reflected from this review.

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PROJECT DESCRIPTION

The project that is the subject of this report is located on a parcel of land with an address of 2577

Main Street in Glastonbury, CT. The property has 363.44 feet of frontage on the west side of Main

Street and 154.44 feet on the north side of Welles Street. It is 7.246 acres in size. Four existing buildings are located on the property which consist of a church, rectory, garage for the rectory, and residential style building used as the Knights of Columbus Hall. Several paved access drives and parking lots are located on the site. The main parking lot is west of the church in the middle portion of the site. A large cell phone tower exists on the westerly most portion of the property on a 100 x 100 foot leased area.

The proposal involves construction of approximately 30,880 s.f. of paved parking lot to gain an additional 119 parking spaces in the existing parking lot at the rear of the existing church building. A future building addition is considered in the design.

STORMWATER MANAGEMENT DESIGN GOALS AND PRACTICES

The design goals of the stormwater management system are as follow:



- Design to be consistent with Town of Glastonbury Public Improvement specifications.
- Design to be consistent with National Pollutant Discharge Elimination System (NPDES).
- Design to be consistent with the 2004 Connecticut Stormwater Quality Manual
- Design to be consistent with the 2002 Connecticut Guidelines For Soil Erosion and Sediment Control
- Design to be functional, environmentally sensitive & aesthetically compatible with the surrounding development.
- Incorporate Low Impact Development (LID) practices.
- Incorporate Best Management Practices (BMP's).
- Remove at least 80% of the total suspended solids & floatable pollutants before discharge to a surface water or wetland.
- Minimize loss of long term recharge during low flow periods.
- Treat first flush.

Treatment Controls



Filtering Practices

- Utilize sheet flow to parking lot islands (micro-scale control)
- Utilize stormwater management areas utilizing created wetlands & wet basins
- Utilize linear bio-swales



Infiltration/Recharge Practices

- Utilize sheet flow to parking islands (micro-scale control)
- Utilize sheet flow to road shoulders (micro-scale control)
- Utilize stormwater management areas utilizing created wetlands & wet basins
- Utilize subsurface retention/detention recharge systems
- Utilize linear bio-swales



Settling Practices

- Design lot grading to create ponding areas in islands & shoulders (micro-scale control)
- Utilize stormwater management basins



X End of Pipe Controls

- Incorporate Sediment Forebay
- Utilize 2' sumps in catchbasins
- Design outlet protection (a) discharge points

To achieve the above enumerated goals a stormwater treatment train is incorporated into the design, including a linear raingarden to treat the runoff prior to collection in traditional catchbasins with 2' sumps. The discharge from this system is then directed to a stormwater management basin with a wet bottom. This feature is specified to be planted with both wetland and upland plants to provide a bioretention environment. A sediment forebay is proposed in the stormwater management basin to isolate and contain any incoming sediments not filtered out in the linear raingarden or settled out in the catchbasin sumps.

A critical element of the stormwater management plan is the ability to capture a majority of the existing pavement and direct it into the treatment train. This provides the advantage of managing the existing runoff currently being discharged directly into the adjacent wetland system and achieve the

above enumerated goals. This is a substantial improvement in stormwater quality treatment for runoff from the site.

METHODOLOGY

Peak rates of surface runoffs for the proposed project are computed utilizing the Rational Method. The pipes were designed to convey flows from up to a 10 yr frequency storm event consistent with the Town of Glastonbury Standards for Public Improvements Section 4.0 Stormwater Management Design Standards. Hydraflow Storm Sewers by inteliSOLVE was used to compute the hydraulic grade lines for the system using the runoffs computed. The Water Quality Volume is computed per the 2004 Connecticut Stormwater Quality Manual. The results are included in the appendices.

SUMMARY

The treatment train designed for this system will treat the 226% of the Stormwater Quality

Volume for the runoff directed to it. The entire proposed parking lot as well as the runoff from 70.5% of
the existing parking lot is directed to this system. This will result in significant improvement to the
stormwater quality of the runoff leaving the site. Additional benefits to treatment of stormwater quality

will be achieved in the form of long term groundwater recharge.

Return to: Alter & Pearson P.O. Box 1530 Glastonbury, CT 06033

PRIVATE CONSERVATION EASEMENT AGREEMENT

The purpose of a Private Conservation Easement is to protect in perpetuity significant natural features and to minimize the environmental impact of activities associated with land development within the Town of Glastonbury.

It is the responsibility of the property owner to be fully aware of all of the conditions contained in the Private Conservation Easement Agreement as expressed below. The Town of Glastonbury will vigorously enforce the conditions established herein.

THIS INDENTURE made this	day of <u></u>	, 2021, by and	between SAINTS	
ISIDORE AND MARIA PARISH C	ORPORAION, a	Connecticut religious	corporation acting	
herein by	, its	, duly authorized,	hereinafter called	
"Grantor," and the TOWN OF GLASTONBURY, a municipal corporation having its territorial				
limits within the County of Hartford ar	nd State of Connec	cticut, hereinafter calle	d "Grantee."	

WITNESSETH:

WHEREAS, the Grantor is the owner of real property hereinafter described, situated in the Town of Glastonbury, County of Hartford and State of Connecticut, which Grantee, acting through its Conservation Commission, has determined it would be in the public interest to retain, maintain and conserve in its natural state; and

WHEREAS, the Grantee, acting through its Conservation Commission, has determined that the maintenance and conservation of the said property of the Grantor can best be accomplished by the securing by Grantee of a conservation easement over, across and upon the said property of the Grantor; and

WHEREAS, the Grantor is willing, in consideration of **ONE DOLLAR** (\$1.00), receipt of which is hereby acknowledged, and of possible reduction by Grantee of real property taxes on said property, to grant to said Grantee the easement and covenants as hereinafter expressed concerning said property, thereby providing for its maintenance and conservation.

NOW, THEREFORE, said Grantor does hereby give, grant, bargain, sell and confirm unto said Grantee, its successors and assigns forever, the right, privilege and authority as a Private Conservation Easement Agreement to perpetually preserve, protect, limit, conserve and maintain the land hereinafter described in its present natural condition. All covenants contained herein are deemed to run with the land.

Said Grantor further covenants and agrees to provide notice by Certified Mail to the last known address of any person or entity who hereafter shall have any possessory interest in the subject property, including but not limited to any tenant, heir, successor or assign, of a Certified Copy of the Private Conservation Easement Agreement. Failure of said Grantor to provide such notice shall not constitute any waiver of Grantee's rights herein.

Said premises subject to this Private Conservation Easement Agreement hereinafter called "Proposed Conservation Easement" and shown as "PROPOSED CONSERVATION EASEMENT" and more particularly described on a map or plan filed as Map # _____ on the Glastonbury Land Records titled:

"BOUNDARY MAP #2577 & LOT W-38A MAIN STREET PREPARED FOR SAINTS ISODORE AND MARIA PARISH CORPORATION GLASTONBURY, CONN. MEGSON, HEAGLE & FRIEND CIVIL ENGINEERS & LAND SURVEYORS, LEC 81 RANKIN ROAD GLASTONBURY, CONN. 06033 PHONE (860)-659-0587 CK. BY: MWF DRW. BY: ZTA DATE: 8-15-20 SCALE: 1"=40' SHEET 3 OF 13 MAP NO. 86-16-1BDY REV. 12-23-20".

Said "Proposed Conservation Easement" is more particularly bounded and described on **SCHEDULE A** attached hereto.

I. PROHIBITIONS

GRANTOR FURTHER COVENANTS AND AGREES TO PROHIBIT AND REFRAIN FROM THE FOLLOWING ACTIVITIES UNDER, OVER OR UPON THE PRIVATE CONSERVATION EASEMENT AREA:

- 1. The construction or placing of buildings, roads, signs, billboards or other advertising, or other structures on or above-ground;
- 2. The dumping or placing of soil or other substance or material as landfill, or dumping of trash, ashes, waste, rubbish, garbage, junk, or unsightly or offensive materials;
- 3. The excavation, dredging or removal of loam, peat, gravel, soil, rock or other substances in such a manner as to affect the land surface or the quantity or quality of ground or surface waters, except as noted in Section II.1 below;
- 4. The removal or destruction of trees, shrubs or other vegetation, the destruction of wildlife or its habitat, the application of pesticides or herbicides, or any other activity or use which is or has the potential for being detrimental to drainage, flood control, water quality, erosion control, soil conservation, wildlife or the land and water areas in their natural condition, except as noted in Section II.1 below;
- 5. The conduct of any of the foregoing activities in such proximity to the Proposed Conservation Easement area that their result could be detrimental to drainage, flood control, water quality, erosion control, soil conservation or wildlife in the Proposed Conservation Easement area; and

6. The removal or disturbance of the Proposed Conservation Easement area temporary stakes prior to permanent marking, permanent iron pins or boundary markers, or any other field identifications of the Private Conservation Easement Area boundaries.

II. EXCEPTIONS

NOTWITHSTANDING ANY OF THE FOREGOING PROVISIONS:

- 1. The Grantor is permitted to plant and maintain a wetland enhancement area in accordance with the approved planting plan and planting notes and details. The wetland enhancement area lies partially within the Proposed Conservation Easement area, and is shown as "WETLAND ENHANCMENET AREA (W.E.A.)" on a map or plan filed as Map # on the Glastonbury Land Records titled, "SITE PLANTING PLAN #2577 & LOT W-38A MAIN STREET PREPARED FOR SAINTS ISODORE AND MARIA AT PARISH CORPORATION GLASTONBURY, CONN. MEGSON, HEAGLE & FRIEND CIVIL ENGINEERS & LAND SURVEYORS, LLC 81 RANKIN ROAD GLASTONBURY, CONN. 06033 PHONE (860)-659-0587 CK. BY: MWF DRW. BY: PEJ DATE; 8-15-20 SCALE: 1"=20" SHEET 10 OF 13 MAP NO. 86-16-1PLP REV. 86-16-1PLP", which planting notes and details are on a map or plan filed as Map # the Glastonbury Land Records titled, "SITE PLANTING NOTES & DETAILS #2577 & LOT W-38A MAIN STREET PREPARED FOR SAINTS ISODORE AND MARIA PARISH CORPORATION GLASTONBURY, CONN. MEGSON, HEAGLE & FRIEND CIVIL ENGINEERS & LAND SURVEYORS, LLC 81 RANKIN ROAD GLASTONBURY, CONN. 06033 PHONE (860)-659-0587 CK. BY: MWF DRW. BY: PEJ DATE: 8-15-20 SCALE: 1"=20' SHEET 11 OF 13 MAP NO. 86-16-1SPN REV. 12-23-20".
- 2. The Grantee, acting through its Conservation Commission, or its successor, may, upon written application of the Grantor, permit the construction, reconstruction, maintenance and repair within said premises of above-ground and below-ground public or private utilities, including sanitary sewer and/or water lines, subject to (a) demonstration of the need for the proposed activity within said premises; and (b) environmental review of the siting and proposed methods of installation and maintenance of such utilities.
- 3. The Grantee, acting through its Conservation Commission, or its successor, shall, upon written application of the Grantor, permit the removal of dead trees and dead brush from said premises in a manner acceptable to the Conservation Commission.
- 4. The Grantee, acting through its Conservation Commission, or its successor, may, upon written application of the Grantor, permit the pruning and thinning of live trees and brush on said premises.

Application by the Grantor for any approval provided for hereunder shall be made to the Conservation Commission, or its successor, and shall be in accord with the procedures established by the Conservation Commission, or its successor, in effect at that time.

The Grantee agrees, by acceptance hereof, to release automatically such Private Conservation Easement Agreement as though this instrument had never been executed by Grantor, should, at any time, said premises be condemned by some dominant government authority.

The Grantor herein reserves for itself, its successors and assigns the right to make use of the above-described premises for any and all purposes which are in keeping with the stated intent of this Private Conservation Easement Agreement and which shall in no way endanger the maintenance and conservation of the above-described premises in their natural state.

III. IDENTIFICATION AND INSPECTION OF PRIVATE CONSERVATION EASEMENT

GRANTOR FURTHER COVENANTS AND AGREES AS FOLLOWS:

- 1. Before commencement of site work on any property of the Grantor, which contains or is adjacent to a Private Conservation Easement Area, Private Conservation Easement boundaries are to be marked with oak stakes labeled "Private Conservation Easement" with waterproof ink and tied with red flags. These stakes are to be located at each change of boundary direction and at every 100-foot interval on straight-aways. Stakes are to remain in place until the Town's Easement Boundary Markers are installed. All Private Conservation Easement corners shall be permanently marked with iron pins which protrude from ground surface not more than one inch and such pins shall not contain sharp edges.
- 2. The Grantor hereby grants the Grantee the right to access the property for the purpose of installing and maintaining markers identifying the boundaries of the Private Conservation Easement Area.
- 3. The Grantor hereby grants the Grantee the right to have a qualified representative of the Town inspect the Private Conservation Easement Area following reasonable notice to current Grantor or occupant.

IV. FINDING OF VIOLATION

- 1. If it is determined by the Conservation Commission, or its successor, that a violation of this Private Conservation Easement Agreement exists, the Grantor shall be ordered to cease and desist from and prevent any activity which, in the opinion of the Conservation Commission, or its successor, is in violation of this Private Conservation Easement Agreement.
- 2. Within sixty (60) days of such Order and after appropriate Notice, the Conservation Commission shall hold a Hearing for the purpose of determining if the Cease and Desist Order shall continue.
- 3. If the Grantor is found to have violated the terms of this Private Conservation Easement Agreement, the Grantor agrees, among other things, to restore the Private Conservation

Easement Area as closely as possible to its natural state. Such restoration shall include but need not be limited to:

- a. replanting with trees, shrubs or other appropriate vegetation acceptable to the Conservation Commission;
- b. removal of any debris, trash, garbage, ashes, waste, rubbish, silt, or unsightly or offensive material;
- c. removal of any unauthorized buildings, signs, billboards, or other advertising, or other structures on or above-ground;
- d. emplacement and maintenance of soil erosion and sediment controls; and
- e. replacement by a land surveyor of any Private Conservation Easement markers which have been removed or disturbed.

Restoration shall be at the expense of Grantor and in accordance with plans developed by a qualified professional such as a landscape architect, land surveyor or a professional engineer, and approved by the Conservation Commission, or its successor.

4. If either the Grantor or any other person acting on behalf of the Grantor on the Grantor's property is found to have violated this Private Conservation Easement Agreement, the Conservation Commission, or its successor, can exercise its discretion, in accordance with applicable Town of Glastonbury Ordinances, and following notification to the Grantor and the Grantor's opportunity to be heard concerning a Finding of Violation, and to levy a daily fine until full restoration has been achieved and certified by the Conservation Commission or a duly appointed agency.

The foregoing Private Conservation Easement Agreement shall be permanent and binding upon the Grantor and its successors and assigns, except as hereinbefore set forth, and inure to the benefit of the Grantee, its successors and assigns.

TO HAVE AND TO HOLD the above-granted rights, privilege or authority unto said Grantee, its successors and assigns forever, to its and their own proper use and behoof.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the day and year first aforementioned.

Signed, Sealed and Delivered in the presence of:	GRANTOR: SAINTS ISIDORE AND MARIA PARISH CORPORATION
	By:
	GRANTEE: TOWN OF GLASTONBURY By:
	Richard J. Johnson, its Town Manager Duly Authorized
STATE OF CONNECTICUT :	. 2021
COUNTY OF HARTFORD :	
	, the of SAINTS CORPORATION, as aforesaid, signer of the foregoing the to be his free act and deed as said, and the
nec act and decord corporations octor	Commissioner of the Superior Court
STATE OF CONNECTICUT COUNTY OF HARTFORD	: ss. Glastonbury, 2021
Town Manager of the TOWN OF G such Town Manager, being duly auth	RD J. JOHNSON, who acknowledged himself to be the LASTONBURY, a municipal corporation, and that he, as norized so to do, executed the foregoing instrument for the g the name of the corporation by himself as Town Manager.
	Notary Public My Commission Expires:

SCHEDULE A

All that certain piece or parcel of land with the appurtenances thereto situated in the Town of Glastonbury, County of Hartford and State of Connecticut, and being shown and designated on a certain map or plan entitled, "BOUNDARY MAP #2577 & LOT W-38A MAIN STREET PREPARED FOR SAINTS ISODORE AND MARIA PARISH CORPORATION GLASTONBURY, CONN. MEGSON, HEAGLE & FRIEND CIVIL ENGINEERS & LAND SURVEYORS, LLC 81 RANKIN ROAD GLASTONBURY, CONN. 06033 PHONE (860)-659-0587 CK. BY: MWF DRW. BY: ZTA DATE: 8-15-20 SCALE: 1"-40" SHEET 3 OF 13 MAP NO. 86-16-1BDY REV. 12-23-20", which map or plan is filed as Map # ______ on the Glastonbury Land Records, and to which reference may be had.

The Private Conservation Easement lies on Lot W-38A Main Street (Tax Assessors ID D5/4140/W0038), and is shown and designated on said map as "PROPOSED CONSERVATION EASEMENT" and is more particularly bounded and described as follows:

Beginning at a proposed iron pin in the northerly street line of Welles Street;

Thence running S 79°29'42" W a distance of 86.82 feet along the northerly street line of Welles Street to a proposed iron pin;

Thence running N 26°04'50" W a distance of 338.23 feet to a proposed iron pin;

Thence running S 79°28'53" W a distance of 59.37 feet to a proposed iron pin;

Thence running N 10°31'04" Wa distance of 151.15 feet to a proposed iron pin;

Thence running N 59°59'09" E a distance of 49.94 feet to a proposed iron pin;

Thence running N 73°43'53" E a distance of 92.19 feet to a proposed iron pin;

Thence running S 09°42'04" E a distance of 14.13 feet to a proposed iron pin;

Thence running S 18°37'56" W a distance of 55.81 feet to a proposed iron pin;

Thence running S 23°30'42" W a distance of 37.66 feet to a proposed iron pin;

Thence running S 02°23'41" W a distance of 57.85 feet to a proposed iron pin;

Thence running S 43°18'16" E a distance of 30.26 feet to a proposed iron pin;

Thence running N 81°44'34" E a distance of 56.72 feet to a proposed iron pin;

Thence running S 12°38'55" E a distance of 49.92 feet to a proposed iron pin;

Thence running S 57°05'49" E a distance of 47.99 feet to a proposed iron pin;

Thence running N 80°42'14" E a distance of 52.77 feet to a proposed iron pin;

Thence running S 09°48'00" E a distance of 240.77 feet to a proposed iron pin lying in the northerly street line of Welles Street, being the point or place of beginning.

