



April 21, 2014

Ms. Jean Fraser, Planner  
Planning and Development Department  
City of Portland  
389 Congress Street  
Portland, Maine 04101-3509

**Subject: 421 Warren Avenue  
Preliminary Level III Site Plan Application  
Response to Peer Review Comments**

Dear Ms. Fraser:

We have received and reviewed Woodard & Curran's peer review comments dated March 3, 2014 and Tom Errico's comments dated March 12, 2014 regarding the Preliminary Level III Site Plan Application for the 421 Warren Avenue Commercial Complex project. We offer our responses to these comments. For ease of reference we have repeated each comment in *italics* followed by our response.

**WOODARD & CURRAN COMMENTS DATED MARCH 3, 2014**

**Comment 1:**

*In accordance with the City of Portland Preliminary Level III Site Plan Submissions Checklist, the Applicant is required to provide evidence of state approvals. The Applicant should forward the following approvals to the City upon receipt:*

- a) *The Applicant has noted that the project requires a MaineDEP NRPA Tier III permit for approximately 25,093 SF of wetland impacts, which is being submitted concurrently with the City Site Plan Application. Evidence of receipt of this permit shall be required prior to the start of construction.*

**Response:**

The site has been re-designed to impact 14,323 SF of wetlands which will require a MaineDEP NRPA TIER I permit. The NRPA Tier I has been filed with the MaineDEP and its review will run concurrent with the Site Plan Review. See updated site plan sheet C-3.0 for proposed wetland impacts.

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*b) The Applicant is proposing to disturb more than one acre (approximately 110,207 SF); therefore a Maine Construction General Permit (MCGP) from the MaineDEP is required prior to the start of construction.*

Response:

The Final Site Plan results in a disturbed area of (approximately 98,078 SF) therefore a Maine Construction General Permit (MCGP) has been filed with the MaineDEP.

Comment 2:

*The application is preliminary. As such, we anticipate that additional documents will be submitted with the final application, including missing or incomplete gravel wetland details, confirmation of capacity to serve the development from utility companies, and a Construction Management Plan. Additionally, the Site Layout and Utility Plan, Sheet C-3.0, indicates several utility details that are TBD, such as outlet control structure elevations, sewer service invert elevations, natural gas pipe size, and electrical duct bank size; these details should be coordinated with the appropriate utilities prior to approval. Woodard & Curran will perform a review of the Final Application submittal upon receipt of those documents.*

Response:

The Applicant has included more extensive gravel wetland details, confirmation of capacity to serve from development utility companies, a construction management plan and related supporting information as part of the Final Site Plan application.

Comment 3:

*In accordance with Section 5 of the City of Portland Technical Manual, a Level III development project is required to submit a stormwater management plan pursuant to the regulations of MaineDEP Chapter 500 Stormwater Management Rules, including conformance with the Basic, General, and Flooding Standards. In addition, the project is being reviewed under the City's delegated review authority for Chapter 500 Stormwater Management Law. We offer the following comments:*

*a) Basic Standards: The Applicant has provided a plan, notes and details to address erosion and sediment control requirements, inspection and maintenance requirements, and good housekeeping practices in general accordance with Appendix A, B, & C of MaineDEP Chapter 500. Erosion Control Note 3 on Sheet C-1.1 states that silt barriers shall be inspected, repaired, and cleaned as noted in the erosion control notes shown on the erosion control detail sheet; however, it does not appear that these notes have been provide at this time. The Applicant should clarify. Additionally, details should be provided for proposed erosion control blanket installations and rip-rap slope and spillway protection.*

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Response:

No response required.

*b) General Standards: The project will result in an increase in impervious area of approximately 82,764 square feet. As such, the project is required to include specific stormwater management features for stormwater quality control. The Applicant has proposed gravel wetlands near the front and rear of the development area in addition to a gravel drip strip. The Applicant has provided sufficient documentation demonstrating compliance with this standard; however, it should be noted that the design plans, calculations, and the HydroCAD model may be subject to change based on the comments contained herein, and shall be reviewed for compliance again upon receipt of the final submission package.*

Response:

No response required.

*c) Flooding Standard: The project will result in an increase in impervious area of approximately 82,764 square feet. As such, the project is required to include specific stormwater management features to control the rate of stormwater runoff from the site. The Applicant has provided sufficient documentation demonstrating compliance with this standard; however, it should be noted that the design plans, calculations, and the HydroCAD model may be subject to change based on the comments contained herein, and shall be reviewed for compliance again upon receipt of the final submission package.*

Response:

No response required.

Comment 4:

*Urban Impaired Stream Standard: The project is located within the Capisic Brook Watershed, which is identified as an Urban Impaired Stream by the Maine DEP. Section 5 of the City of Portland Technical Manual requires that all development within the Capisic Brook watershed, except single and two family homes, comply with the Urban Impaired Stream Standard pursuant to MaineDEP Chapter 500 Rules. To meet the Urban Impaired Stream standard, the Applicant must either pay a compensation fee or mitigate project impacts by treating, reducing, or eliminating an off-site or on-site pre-development impervious stormwater source. The Applicant has not provided information on how they plan to meet the Urban Impaired Stream standard with the preliminary submittal; the final submittal should present either a fee calculation or a design approach / plans on how the project will meet this standard.*

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Response:

The Applicant has reviewed the Urban Impaired Stream Standard and decided to pay the compensation fee based on the schedule in the MaineDEP Chapter 500 Rules. The schedule can be found in section 19.0 of the storm water management report. The calculated fee amount is \$6,950.

Comment 5 – HydroCAD Model Review Comments:

*a) The pre- and post-development areas used in the HydroCAD model and provided in the summary tables on the watershed maps are not equal, specifically subcatchments 1 & 2 on the Post- Development plan. The Applicant should revise accordingly.*

Response:

The Pre and Post Development areas used in HydroCAD were revised and are now equal to the summary tables on the Watershed Maps C-7.0 & C-7.1

*b) Subcatchment 1 is a very large area that remains largely unchanged from the pre- to post-development conditions; relocating POI 1 closer to the outfall of gravel wetland #2 will provide a better indication of the change in flow rates from the proposed development. The Applicant should consider revising the model accordingly.*

Response:

The Engineer agrees with the comment that Sub-catchment 1 considered too much area. Sub-catchment 1 has been reduced in size and a new POA has been chosen to analyze flow closer to the Gravel Wetland #2 discharge point. See Post/Pre Development Maps C-7.0 and C-7.1 and HydroCAD Computations found in Appendices B and C of the Stormwater Report for changes to the analysis of sub-catchment 1.

*c) It is unclear why the Applicant has chosen to model subcatchments 3A, 3B, and 3C, as they are not part of the proposed development and remain largely unchanged from the pre- to post- development condition. The Applicant should remove these subcatchments from the model.*

Response:

The Engineer has chosen to model Sub-catchments 3A, 3B and 3C because in the predevelopment condition, Sub-catchment 2 drains across to the detention pond located on adjacent property (Harbour Auto-Body). The water from this detention pond is then routed through a 12” pipe into POA # 2, which is a City catch basin. In post development conditions this flow is cutoff and diverted through an onsite pipe system; however, in order to accurately compare pre/post conditions, the Harbour Auto-Body watershed (contributing to POA 2) needed to be analyzed. Refer to Sheet C-7.0 to see that sub-catchment two drains offsite.

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*d) The model includes storage within a 40% void space of the gravel wetlands between elevation 68.17 and 68.50; please clarify where this storage volume exists in the gravel wetland section.*

Response:

The storage with a 40% void space for Gravel Wetlands 1 and 2 were determined to be incorrect and were thus removed from the HydroCAD model. See Appendix C of the Stormwater Report for updated HydroCAD computations.

*e) As noted on the plans, the Applicant intends to add outlet elevation information to the outlet control structure details for both gravel wetlands as part of the final submittal. Without this information we cannot verify the routing or model inputs for Pond 4P (GW2) or Pond 5P (GW1). When the outlet control structure elevations are incorporated into the final submittal, please revisit or provide explanation on the routing methodology for GW1 & GW2 in the HydroCAD model; we are unable to follow the routing as currently presented.*

Response:

The Applicant has added outlet control structure to the plans and details. Refer to Sheet C-4.3, Detail E for an updated elevation schedule.

Comment 6 – Gravel Wetland Design Comments:

*a) On Sheet C-4.2, the titles for the plan view and section view incorrectly note Gravel Wetland #1; these should state Gravel Wetland #2.*

Response:

Sheet C-4.2 has been corrected to state Gravel Wetland # 2.

*b) The Applicant has submitted drawdown calculations for sizing the gravel wetlands' outlet control structure orifice control devices; however, the orifices do not appear to be specified on the design plans/details. The Applicant should clarify with the final design package.*

Response:

Orifice sizes and locations have been added to outlet control structure details on Sheet C-4.3. Orifice details correspond to drawdown computations submitted in Appendix E.

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*c) The Applicant should include outlet protection measures for the Gravel Wetland #2 outfall.*

Response:

Outlet protection for Gravel Wetland #2 has been included. See Grading & Drainage plan sheet C-4.0, and stormwater details sheets.

*d) The Applicant should specify appropriate plantings for the proposed gravel wetlands, per the UNH Stormwater Center Subsurface Gravel Wetland Design Specifications.*

Response:

The design currently contemplates the reuse of wetland sod that will be salvaged from the impacted wetland areas. We believe there is an opportunity to salvage these soils for this use. We have discussed this idea with Jim Logan of Albert Frick Associates, Inc. and he concurs with our proposal.

*e) The pervious and impervious area treated numbers contained in Table 11 of the Stormwater Management Report do not appear to agree with those utilized in the HydroCAD model or noted on the Post Development Watershed Map (C-7.1); the Applicant should clarify.*

Response:

Revisions to the water quality treatment numbers have been made to match numbers in the HydroCAD model. Please refer to Appendix D of the Stormwater Report and Sheet C-7.1 to see these updates.

Comment 7:

*The Stormwater Management Report refers to Appendix H for a Separate Stormwater Inspection & Maintenance Manual, and notes that it has not been included with this submission. The stormwater inspection and maintenance plan should be developed in accordance with and in reference to the UNH Stormwater Center Subsurface Gravel Wetland Design Specifications, Section 7.6 of Volume III of the MaineDEP Stormwater BMP Manual, MaineDEP Chapter 500 guidelines and Chapter 32 of the City of Portland Code of Ordinances.*

Response:

A Stormwater Inspection & Maintenance Manual has been developed using UNH Stormwater Center Subsurface Gravel Wetland Design Specifications, and Section 7.6 of Volume III of the MaineDEP Stormwater BMP Manual, MaineDEP Chapter 500 guidelines and Chapter 32 of the City of Portland Code of Ordinances. Please refer to Appendix H of the Stormwater Management Report.

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**TOM ERRICO’S COMMENTS DATED MARCH 12, 2014**

Comment 1:

*The applicant shall provide a traffic generation estimate for the proposed project as well as for the two existing buildings serviced by the shared driveway. Following a review of the requested information, I will make a determination on the need for a Traffic Movement Permit.*

Response:

The following trip generation is estimated for the existing buildings and proposed building using ITE-LUC 130 Industrial Park (7<sup>th</sup> edition)

	<b>AM Peak (adjacent)</b>	<b>PM Peak (Adjacent)</b>	<b>AM Peak (Generator)</b>	<b>PM Peak (Generator)</b>
Existing Building (37,500 SF)	32	32	31	32
Proposed Building (25,040 SF)	21	22	21	22
<b>TOTAL</b>	<b>53</b>	<b>54</b>	<b>52</b>	<b>54</b>

Comment 2:

*The proposed driveway entrance exceeds City standards and a waiver will be required. The applicant shall provide an Auto-Turn analysis documenting the need for the wide driveway.*

Response:

The latest site plans indicate a proposed driveway width of 45’ to allow turning of semi-tractor trucks into the new lot area. This is a reduction of 15’ from the preliminary plan. The Applicant is seeking a waiver to provide an entrance slightly larger than the 30 ft. industrial driveway width outlined in Section 1.7.2.4 of the Technical Manual.

Comment 3:

*The aisle widths in the internal parking/circulation area do not meet City standards and a waiver will be required. The applicant shall provide an Auto-Turn analysis documenting the need for the expanded pavement areas.*

Response:

See the accompanying Auto-Turn figure depicting the movement of a WB-67 vehicle into/out of the proposed yard area. The applicant is requesting a waiver of the parking area dimensional standards.

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Comment 4:

*A sidewalk connection from the proposed building to Warren Avenue shall be provided.*

Response:

A sidewalk connection has been added to the plans.

Comment 5:

*An area along the building frontage on the parking area shall be marked such that pedestrians have a direct routing to Warren Avenue.*

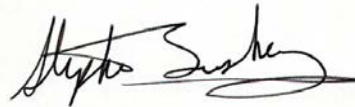
Response:

The Site Layout Plan includes a 6' wide space between the parking spaces and building face, thus providing ample pedestrian area.

At this time we are not aware of any further staff comments. If you have any questions regarding these materials please contact this office.

Sincerely,

FAY, SPOFFORD & THORNDIKE



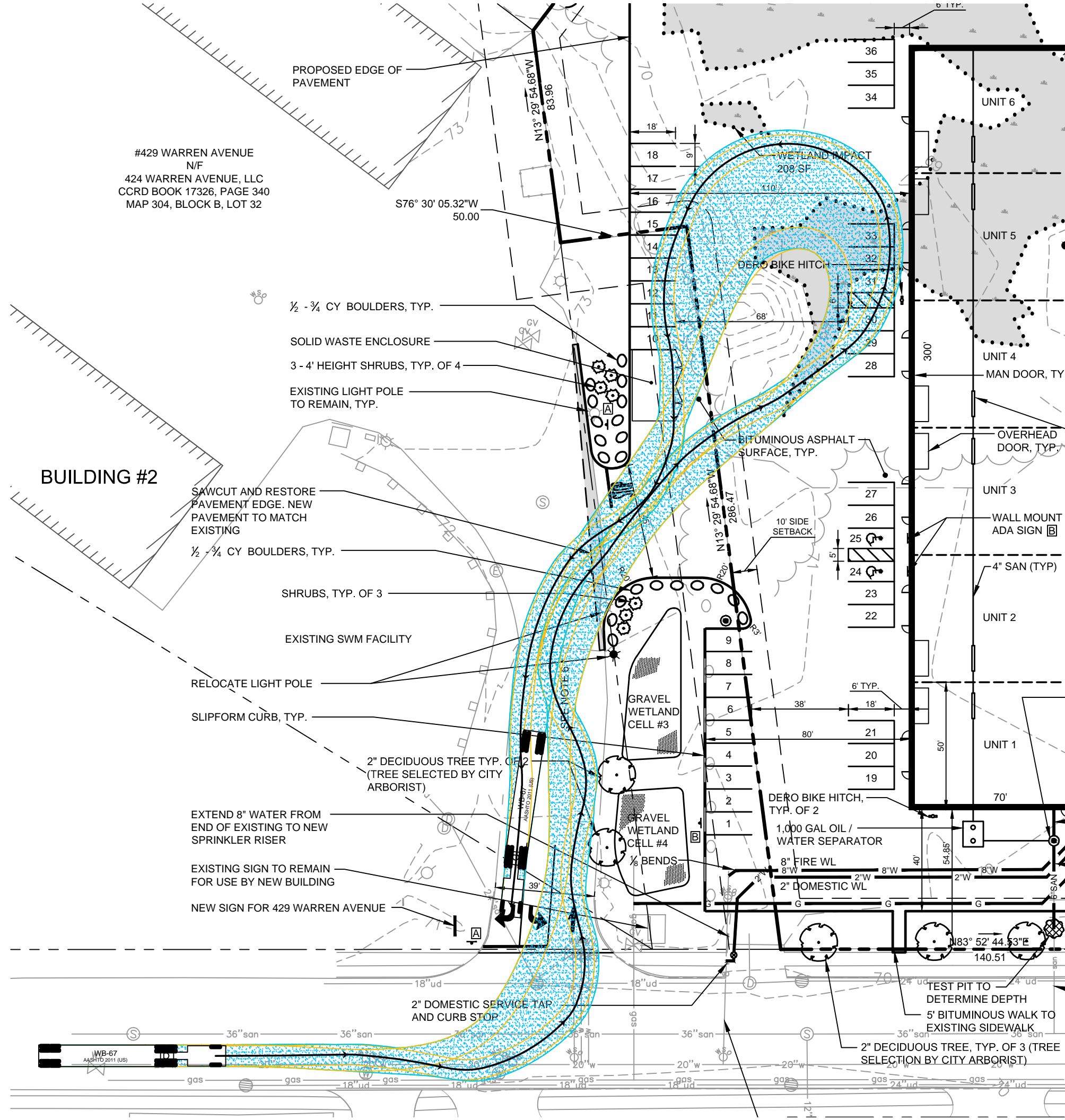
Stephen R. Bushey, P.E.  
Senior Engineer

Attachment – AutoTurn Figure

SRB/smk



#429 WARREN AVENUE  
N/F  
424 WARREN AVENUE, LLC  
CCRD BOOK 17326, PAGE 340  
MAP 304, BLOCK B, LOT 32



PROPOSED EDGE OF PAVEMENT

1/2 - 3/4 CY BOULDERS, TYP.

SOLID WASTE ENCLOSURE

3 - 4' HEIGHT SHRUBS, TYP. OF 4

EXISTING LIGHT POLE TO REMAIN, TYP.

BUILDING #2

SAWCUT AND RESTORE PAVEMENT EDGE. NEW PAVEMENT TO MATCH EXISTING

1/2 - 3/4 CY BOULDERS, TYP.

SHRUBS, TYP. OF 3

EXISTING SWM FACILITY

RELOCATE LIGHT POLE

SLIPFORM CURB, TYP.

2" DECIDUOUS TREE TYP. OF 2 (TREE SELECTED BY CITY ARBORIST)

EXTEND 8" WATER FROM END OF EXISTING TO NEW SPRINKLER RISER

EXISTING SIGN TO REMAIN FOR USE BY NEW BUILDING

NEW SIGN FOR 429 WARREN AVENUE

2" DOMESTIC SERVICE TAP AND CURB STOP

WETLAND IMPACT 208 SF

DEMO BIKE HITCH

BITUMINOUS ASPHALT SURFACE, TYP.

10' SIDE SETBACK

GRAVEL WETLAND CELL #3

GRAVEL WETLAND CELL #4

DEMO BIKE HITCH, TYP. OF 2

1,000 GAL OIL / WATER SEPARATOR

8" FIRE WL

2" DOMESTIC WL

TEST PIT TO DETERMINE DEPTH 5' BITUMINOUS WALK TO EXISTING SIDEWALK

2" DECIDUOUS TREE, TYP. OF 3 (TREE SELECTION BY CITY ARBORIST)

WB-67 AASHTO 2011 (US)