



August 30, 2017
Via Email & US Mail

State of Delaware
122 William Penn Street, Suite 302
Haslet Building, Third Floor
Dover, DE 19901

Attention: Constance C. Holland, AICP
Director, Office of State Planning Coordination

RE: PLUS review 2017-06-06
Proposed Grocery Store
LIDL – Gender Road
Tax Map: 1100620112
New Castle, DE
BEVA # DE160012

Dear Ms. Holland:

In regard to the above referenced project and pursuant to your comment letter dated July 26, 2017, please find the following point by point response in [blue](#) for your review.

Comment 1: Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as the New Castle County is the governing authorities over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

Response 1: [Comment acknowledged.](#)

Strategies for State Policies and Spending

Comment 1: This project is located in Investment Levels 1 according to the *Strategies for State Policies and Spending*. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy.

Response 1: [Comment acknowledged.](#)

Code Requirements/Agency Permitting Requirements

Department of Transportation- Contact Bill Brockenbrough 760-2109

Comment 1: The site access on Delaware Route 4 and Gender Road (New Castle Road 354) must be designed and built in accordance with DelDOT's Development Coordination Manual (formerly the Standards and Regulations for Subdivision Streets and State Highway Access), which is available at



<http://www.deldot.gov/information/business/subdivisions/changes/index.shtml>.

Response 1: Comment acknowledged.

Comment 2: Per Section 2.2.2.1 of the Development Coordination Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. The proposed development meets those warrants and a TIS is required by both DelDOT and New Castle County regulations. The developer's traffic engineer submitted a TIS to DelDOT on May 23, 2017. DelDOT is reviewing the TIS and expects to respond in August.

Based on the TIS, DelDOT anticipates requiring off-site improvements, including improvement of Gender Road to provide 11-foot travel lanes and 5-foot shoulders in both directions for the length of the property frontage. From aerial photography, it appears that the lanes are adequate but the shoulders will need to be widened. A milling and overlay may be needed to provide for a uniform surface across each shoulder.

Response 2: [The draft Traffic Impact Study comment letter prepared by DelDOT, dated August 11, 2017, is being reviewed. The proposed project shall comply with DelDOT requirements.](#)

Comment 3: Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at

http://www.deldot.gov/information/business/subdivisions/meeting_Request_form

DelDOT anticipates having more detailed comments to offer at that time.

Response 3: Comment acknowledged.

Comment 4: As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on both Delaware Route 4 and Gender Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the outer edge of the outside travel lane on Route 4 and from the centerline on Gender Road. The following right-of-way dedication note is required, "**An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.**"

Response 4: [Roadway dedication requirements will be met as necessary.](#)

Comment 5: In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on both Delaware Route 4 and Gender Road. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "**A 15-foot wide permanent easement is hereby established to the State of Delaware, as per this plat.**"

Response 5: [Permanent easement requirements will be met as necessary.](#)

Comment 6: In accordance with Section 3.4 of the Manual, a record plan shall be prepared prior to issuing "Letter of No Objection". The following information will be required and should be submitted through DelDOT's PDCA Plan Submittal Process for the "Letter of No Objection" review:

- Initial Stage Fee Calculation Form



- Initial Stage Fee
- Gate-Keeping Checklist – Site Plan
- Design Checklist – Record Plan
- Sight Distance Spreadsheet
- Owners and Engineer’s name and e-mail address
- Record Plan
- Conceptual Entrance Plan
- Submission of the Area-Wide Study Fee (if applicable)

Response 6: [A DelDOT Record Plan will be provided.](#)

Comment 7: Per Section 3.4.2 of the Manual, the record plan submission should also include a turning template for the largest vehicle that would use the entrance to verify that such vehicles can safely enter and exit. See also Sections 5.2.3 and 5.2.6 of the Manual.

Response 7: [Comment acknowledged, a truck turning template will be provided.](#)

Comment 8: As per the Delaware Strategies for State Policies and Spending, this development is primarily in Investment Level. Referring to Section 3.5.4.2.A of the Manual, developments in Level 1 and 2 Areas are required to install a sidewalk or Shared Use Path. If a physical impossibility exists, a fee in lieu of construction is required but DelDOT sees no such impossibility in this instance.

Response 8: [Comment acknowledged, sidewalks are currently proposed.](#)

Comment 9: Per Section 3.5.4.2.E of the Manual, DelDOT's standard requirement is a minimum 3-foot separation between the sidewalk and the back of the curb, and this minimum would clearly apply on Gender Road. The plan presented appears to meet that requirement. While the requirement is also applicable on Delaware Route 4, DelDOT is aware of the existing sidewalk directly behind the curb there. This matter should be discussed further at the Pre-Submittal Meeting mentioned above but it may be sufficient to update the curb ramps and repair the damaged portions of the existing sidewalk along Route 4.

Response 9: [Comment acknowledged, the items above will be discussed at the pre-submittal meeting.](#)

Comment 10: In accordance with Section 3.8 of the Development Coordination Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along both Delaware Route 4 and Gender Road.

Response 10: [Comment acknowledged, stormwater BMP’s will be discussed at the pre-submittal meeting.](#)

Department of Natural Resources and Environmental Control- Contact Michael Tholstrup 735-3352

Executive Summary.

Development of this parcel will result in increased impervious surface and new sources of greenhouse gas emissions. Opportunities exist to reduce the environmental impact on-site through appropriate use of pollution control strategies, considerations of the County's Level 2 source water protection area. DNREC has outlined a number of best management practices to assist in protecting these resources and the overall health of the community. Waste reduction and



resource conservation measures will also improve the long term sustainability and future needs of the community.

The State of Delaware is threatened by climate change and has a goal of reducing greenhouse gas emissions by 30 percent by 2030. Appropriate development that provides access to public transportation, opportunities to walk and bike to shopping and recreation, and that employs energy efficient building standards are among key strategies to meet these goals. DNREC encourages the use of high performance building standards and consideration of alternative energy sources to promote clean sustainable energy and reduce greenhouse gas emissions. This could mean siting the buildings to take advantage of solar and geothermal systems, and/or including infrastructure for electric vehicle charging stations (funding assistance may be found at (www.de.gov/cleantransportation)). DNREC further recommends an abundant use of native vegetation and shade trees throughout the landscape, as well as pervious pavement and green infrastructure, where practicable, to absorb carbon dioxide, protect water quality and provide relief to residents on hot days.

The following pages provide information about applicable regulations and detailed recommendations associated with this project, from various DNREC Divisions. DNREC would like to be a partner in creating appropriate development that protects and highlights the environment as a natural amenity of the landscape. The Department has resources and expertise that are available to help make this a reality, often at no expense to the landowner.

Water Quality: TMDLs.

Comment 1: This project is located in the greater Piedmont drainage area, specifically within the greater Christina River Basin. In the Christina River Basin, post-development nitrogen and phosphorus loading must be capped at the pre-development or baseline loading rate (or a 0 percent post-construction increase in Delaware's portion of the Christina River Basin) to meet the required Total Maximum Daily Loads (TMDLs) for each nutrient. Moreover, reductions in bacteria that range from 29 percent to 95 percent (High Flow) is also required (depending upon location). TMDLs for nitrogen, phosphorus, and bacteria have been promulgated through regulation in most of the State of Delaware's water bodies. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited waterbody" can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; State of Delaware Surface Water Quality Standards, as amended July 11, 2004) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. TMDLs are required by federal law (Section 303(d) of the 1972 Clean Water Act), and the states are charged with developing and implementing specific land use practices that support these goals. The specific required nutrient and bacterial requirements for the various stream segments in the Basin, and background information is outlined in the report entitled "Christina River Basin High Flow TMDL" by the EPA. This report can be retrieved here:

<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx>

Response 1: [Comment acknowledged. The project will comply with the TMDL requirements as necessary.](#)



Comment 2: A nutrient management plan is required under the Delaware Nutrient Management Law (3 Del. C. Chapter 22) for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project's open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at (302) 739-4811 for further information concerning compliance requirements, or view additional information here:

<http://dda.delaware.gov/nutrients/index.shtml>

Response 2: [Comment acknowledged. The Delaware Nutrient Management Program will be contacted prior to initiating technical design.](#)

Water Supply

Comment 1: The project information sheets state that Suez Water(?) will be used to provide public water for the proposed project. Our records indicate that the project is located within the public water service area granted to United Water Delaware under Certificate of Public Convenience and Necessity 88-CPCN-03. DNREC recommends that the developer contact United Water Delaware to determine the availability of public water. Any public water utility providing water to the site must obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission. Information on CPCN's and the application process can be obtained by contacting the Public Service Commission at (302) 736-7500.

Response 1: [Comment acknowledged. The water supplier will be contacted to confirm availability prior to initiating technical design. Suez Water is a division within United Water Delaware.](#)

Comment 2: Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

Response 2: [Comment acknowledged.](#)

Comment 3: All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take four weeks to process, which allows the necessary time for technical review and advertising.

Response 3: [Comment acknowledged.](#)

Source Water Protection.

Comment 1: DNREC has determined that the projects does not fall within any wellhead protection or excellent groundwater recharge potential areas. However, the parcel falls entirely within the Christina River Drinking Water Watershed. This area is a Level2 source water protection area for New Castle County (NCC).

Response 1: [Comment acknowledged.](#)



Comment 2: Level2 Source Water Protection Areas are the delineated watershed upstream from public drinking water supply intakes. Land Use or Land Activity within these areas has the potential to influence water quality or quantity to the public drinking water system.

Response 2: [Comment acknowledged.](#)

Comment 3: DNREC recommends referring to NCC Unified Development Code for specific regulations regarding development in these water resource protection areas.

Response 3: [Comment acknowledged.](#)

Sediment and Erosion Control/Stormwater Management.

Comment 1: A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a preapplication meeting to discuss the sediment and erosion control and stormwater management components of the plan. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the New Castle County Department of Land Use Engineering Section. Contact the Department of Land Use at (302) 395-5470 for details regarding submittal requirements and fees.

Response 1: [Comment acknowledged.](#)

Air Quality.

Comment 1: The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following regulations in Table 1 - Potential Regulatory Requirements may apply to your project:

Table 1: Potential Regulatory Requirements	
Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Use covers on trucks that transport material to and from site to prevent visible emissions.
7 DE Admin. Code 1113 – Open Burning	<ul style="list-style-type: none"> • Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibit the burning of land clearing debris. • Prohibit the burning of trash or building materials/debris.
7 DE Admin. Code 1135 – Conformity of General Federal Actions to the State Implementation Plan	<ul style="list-style-type: none"> • Require, for any “federal action,” a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the de minimus levels (See Section 3.2.1)
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial	<ul style="list-style-type: none"> • Use structural/ paint coatings that are low in Volatile Organic Compounds. • Use covers on paint containers when paint containers are not in use.



Products	
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	<ul style="list-style-type: none"> Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and carbon dioxide (CO₂) from emergency generators meet the emissions limits established. (See section 3.2). <p>Maintain recordkeeping and reporting requirements.</p>
7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

For a complete listing of all Delaware applicable regulations, please look at our website: <http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

Response 1: [Comment acknowledged.](#)

Recycling.

Comment 1: The Universal Recycling Law (7 Del. C., §6053) and Regulations (7 Del. Admin. C. §1305) specify that the 'commercial sector' shall participate in a comprehensive recycling program. As such, all those involved with the planning of this facility should give consideration to space for collection of recyclables that would be typically generated. For example, an engineer might develop a facility site plan that shows a curb cut and fencing around space for a trash dumpster. To later site an adjacent recycling dumpster could be more costly and inefficient. DNREC recommends allocated the appropriate space in the planning phase. Please take this into consideration for all new construction. The commercial sector includes all for-profit, not-for-profit, institutional, charitable, educational, health care, and government organizations. For more information or assistance related to recycling requirements, benefits, tools, and assistance, please call (302) 739-9403, or visit <http://www.de.go/recycling>.

Response 1: [Comment acknowledged.](#)

Tank Management.

Comment 1: If a release of a Regulated Substance occurs at the proposed project site, compliance of 7 Del. C., Chapter 60; 7 Del. C., Chapter 74 and DE Admin. Code 1351, State of Delaware Regulations Governing Underground Storage Tank Systems (the UST Regulations) is required.

Response 1: [Comment acknowledged.](#)

Comment 2: The following Leaking Underground Storage Tank projects are located within a quarter mile of the proposed project area:

- Holy Family Church Project: N0910072 Facility ID: 3-001069, (Inactive)
- BEAR CONCRETE Project: N9701009 Facility ID: 3-001264, (Inactive)



- GOODYEAR AUTO SERVICE Project: N950 1025 Facility ID:3-000031, (Inactive)

Response 2: [Comment acknowledged.](#)

Comment 3: No environmental impacts are anticipated; however, per the UST Regulations: Part E, §1. Reporting Requirements: Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to:

- The Department's 24-hour Release Hot Line (800) 662-8802; and
- The DNREC Tank Management Section (302) 395-2500.

Response 3: [Comment acknowledged.](#)

Comment 4: If any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMS. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the DNREC Tank Management Section.

Response 4: [Comment acknowledged.](#)

Comment 5: For more information, go to: <http://www.dnrec.delaware.gov/tanks/Pages/default.aspx> or contact Ross D. Elliott with further questions at (302) 395-2500, or Ross.Elliott@state.de.us

Response 5: [Comment acknowledged.](#)

State Historic Preservation Office- Contact Terrence Burns 736-7404

Comment 1: This parcel has no known archaeological site or a National Register listed property. If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law.

Response 1: [Comment acknowledged.](#)

Comment 2: Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, and sometimes near or within the boundary of an historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54), and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. If there is a discovery of any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also recommends that the plans be re-drawn to leave the full extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development. If you would like to see more information, please review the following websites: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.



Therefore, prior to any demolition or ground-disturbing activities, the developer should hire an archaeological consultant, to examine the parcel for archaeological resources and plan to avoid those sites or areas.

Response 2: Upon approval of the project, the developer, in accordance with Delaware Law, will investigate the possibility of any family cemeteries and potential historic/cultural resources.

Comment 3: If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. Owners and developers who may plan to apply for an Army Corps of Engineers permit or for federal funding, such as HUD or USDA grants, should be aware of the National Historic Preservation Act of 1966 (as amended). Regulations promulgated for Section 106 of this Act stipulate that no ground-disturbing or demolition activities should take place before the Corps or other involved federal agency determines the area of potential effect of the project undertaking. These stipulations are in place to allow for comment from the public, the Delaware State Historic Preservation Office, and the Advisory Council for Historic Preservation about the project's effects on historic properties. Furthermore, any preconstruction activities without adherence to these stipulations may jeopardize the issuance of any permit or funds. If you need further information or additional details pertaining to the Section 106 process and the Advisory Council's role, please review the Advisory Council's website at the following: www.achp.gov.

Response 3: Comment acknowledged.

Recommendations/ Additional Information

This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

Department of Transportation- Contact Bill Brockenbrough 760-2109

Comment 1: The site access on Delaware Route 4 was designed originally as a right turn in only and has been re-marked to allow right turns out, apparently without consulting DelDOT. While DelDOT will consider allowing right turns out of the site onto Route 4 if an entrance satisfying the Development Coordination Manual can be designed, the present design does not meet current standards in that regard and DelDOT will not allow it to remain with its current configuration.

Response 1: Comment acknowledged. The applicant will discuss this matter further with DelDOT at the pre-submittal meeting.

Comment 2: DelDOT recommends that the site entrance on Gender Road be aligned opposite the church driveway on the east side of the road to avoid conflicts between turning



movements and creating additional decision points for drivers on Gender Road. DeIDOT recognizes that this change would significantly affect the internal layout of the site and does not require it if an entrance satisfying the Development Coordination Manual can be designed for the location presently proposed.

Response 2: Comment acknowledged. The shifted entrance will impact truck circulation and will be discussed further with DeIDOT at the pre-submittal meeting.

Comment 3: The applicant should expect a requirement that a preliminary entrance plan be included in the initial stage submission to ensure that the entrance can be constructed within the available right-of-way prior to DeIDOT's no objection to recordation.

Response 3: Comment acknowledged. A Preliminary Entrance Plan will be submitted as required as part of the DeIDOT Record Plan submittal.

Comment 4: Presently, a plan is pending for Chestnut Hill Preserve, a large residential development that would access Gender Road south of the site frontage. DeIDOT has stated its intention to require the developer of Chestnut Hill Preserve to overlay Gender Road from Route 4 to the site entrance. If both projects receive plan approvals from the County, DeIDOT will need to coordinate their road improvements.

Response 4: Comment acknowledged. The applicant will coordinate with DeIDOT regarding offsite roadway improvements during the Record Plan review process.

Comment 5: The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.

Response 5: Comment acknowledged.

Comment 6: Please be advised that the Standard General Notes have been updated and posted to the DeIDOT website. Please look for the revision date of July 20, 2016, and add them to the General Notes on the entrance plan exactly as stated. The notes can be found at http://www.deldot.gov/information/business/subdivisionsISheet_Note.doc?073116

Response 6: Comment acknowledged. The most current DeIDOT notes will be utilized as required.

Department of Natural Resources and Environmental Control- Contact Michael Tholstrup 735-3352

Soils Assessment.

Comment 1: Based on the soils survey mapping update in the immediate vicinity of the proposed parcel, the primary soil mapping units of concern is Fallsington-Urban land complex (FzB). Fallsington-Urban land complex is a poorly-drained wetland associated (hydric) soil that has severe limitations for development and should be avoided.

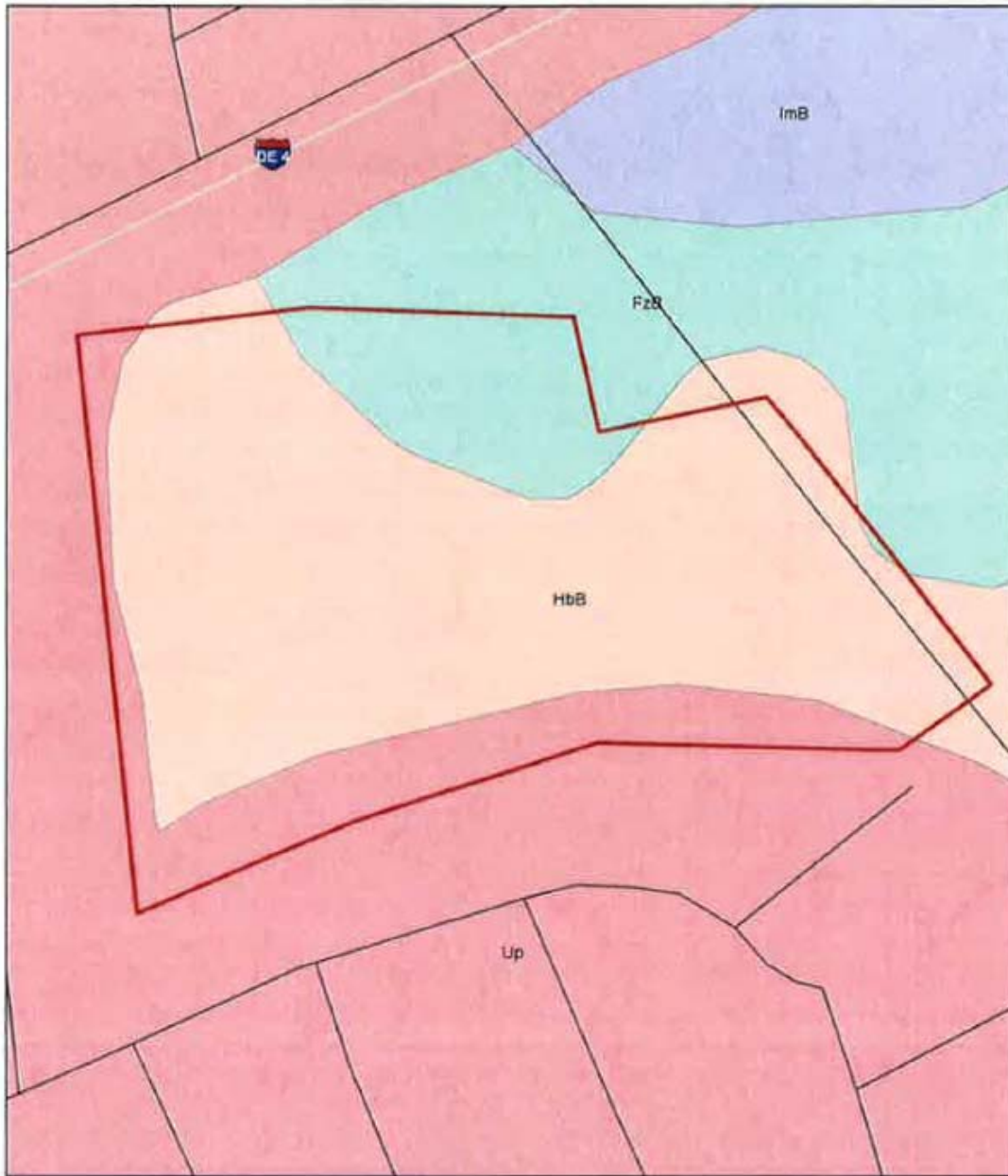
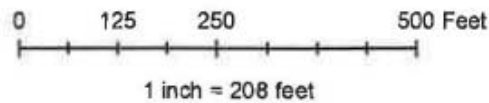


Figure 1: NRCS soil survey mapping update in the immediate vicinity of the proposed construction



Response 1: Comment acknowledged. The applicant will work with New Castle County's Department of Land Use for BMP location and type, in relation to the existing soils.



Additional information on TMDLs and water quality.

Comment 1: TMDL compliance and the PCS: A Pollution Control Strategy (PCS) to achieve the required TMDL nutrient and bacterial load reduction requirements has been established for the Christina Basin. The web link for the Christina watershed PCS strategies is as follows:

<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedManagementPlans.aspx>

Response 1: Comment acknowledged.

Comment 2: In further support of the PCS, the applicant is also strongly urged to reduce nutrient and bacterial pollutants through voluntary commitment to the implementation of the following recommended BMPs, which would:

- Provide additional native tree, shrub and/or native herbaceous vegetation plantings in areas of open space, wherever possible.
- Conduct a United States Army Corps of Engineers (USACE) approved onsite wetlands delineation before commencing any construction activities. Based on the information presented in the PLUS application, a wetland delineation was conducted but not approved by the USACE. DNREC suggests that the applicant contact a licensed Class-D soil scientist with experience in wetland delineations. A list of licensed Class-D soil scientists can be obtained here:
<http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Pages/GroundWaterDischargesLicencesandLicensees.aspx>
- Maintain a vegetated buffer of at least 100 feet from the adjoining wetlands and waterbodies. Based on a review of existing buffer research, an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width, planted in native vegetation (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements-A Review*. J. Environ. Qual. 23: 878-882.).
- Employ green-technology storm water management and a rain gardens, in lieu of open-water management structures. This is a best management practice to mitigate or reduce nutrient and bacterial pollutant runoff.
- Assess nutrient and bacterial pollutant at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the "Nutrient Load Assessment Protocol." The protocol is a tool used to assess changes in nutrient loading resulting from the conversion of individual or combined land parcels to a changed land use; thus providing applicants and governmental entities with quantitative information about the project's impact(s) on baseline water quality. DNREC strongly encourages the applicant/developer use this protocol to design and implement the most effective best management practices. Please contact John Martin of the Division of Watershed Stewardship for more information on the protocol, at (302) 739-9939.

Response 2: Comment acknowledged.



Additional information on air quality.

Comment 1: New developments may emit, or cause to be emitted, additional air contaminants into Delaware's air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:

- o Emissions that form ozone and fine particulate matter;
- o The emission of greenhouse gases which are associated with climate change, and
- o The emission of air toxics.

Response 1: [Comment acknowledged.](#)

Comment 2: Based on the information provided, vehicle emissions were quantified. Table 2 - Projected Air Quality Emissions represents the potential impact the LIDL project may have on air quality.

Response 2: [Comment acknowledged.](#)

Table 2: Projected Air Quality Emissions for the LIDL					
Emissions Attributable to LIDL (Based on Average Annual Daily Traffic (AADT) of 4,313 vehicle trips per day)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Mobile Emissions	14.33	18.89	*	*	*

(*) *Indicates data is not available.*

Note that emissions associated with the actual construction of the business, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.

Comment 3: Recommendations for this project:

- o Coordination of transit availability should be made for this flourishing development area. The developer is encouraged to work together with DTC/DART to accommodate transit service to the commercial center.
- o Use only the minimum number of parking spaces needed for this facility in order to facilitate the push from vehicle-centric travel to other modes (walking, biking, transit, etc.)
- o Planting of native shade trees in parking areas to clean the air of localized pollutants and cut down on energy/cooling costs.
- o Inclusion of bike racks in common areas and expansion of the bicycle/pedestrian network through sidewalks and bike lanes which also promote alternative forms of transportation.
- o The use of reclaimed asphalt pavement (RAP), which reduces heat island effects on paved surfaces, reduces landfill waste, is a sustainable pavement and more economically feasible than other pavement types. Sustainable pavements (or cool pavement choices with higher albedo) reflect 40 percent more sunlight than warm pavements which only reflect 10 percent.
- o Use of energy efficient products in construction to lessen the power source emissions of the project and its costs.



- Take advantage of compact building design to preserve open space. Open space protects animals and plants and conserves their habitat as well as moderates temperatures and combats air pollution.
- At least two parking spaces in common areas (for each facility) dedicated to alternative fueled vehicle (i.e. electric vehicle, hybrid electric vehicle, and low emission vehicle) use and charging.
- Beautification and landscaping to generate a context-sensitive design that would blend in well with surrounding land uses while also helping to mitigate the pollution potential of the project.

Response 3: [Comment acknowledged.](#)

Comment 4: Tree Buffer or Canopy: Some green streetscape elements that the LIDL project could incorporate area tree buffer or expansion of the City of Newark's tree canopy. According to the Delaware Forest Service, in 2014, the City of Newark's tree canopy percentage was 38%. Native trees reduce emissions by trapping dust particles and replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs. All urban trees that are selected should be native to Delaware and preferably low VOC emitting trees. As a general reminder, the best trees to plant are those that have a large leaf surface area at maturity, contain leaf characteristics that are amenable to particle collection from particulate matter (PM) such as those that have hairy or sticky leaves and have high transpiration rates which result in relatively high temperature reduction.

Response 4: [Comment acknowledged.](#)

Comment 5: Energy Efficient Options: Constructing with only energy efficient products can help your housing units immensely, not only in terms of environmental sustainability but financially. Energy Star qualified products are up to 30 percent more energy efficient. Savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment. Every percentage of energy efficiency translates into a percent reduction in pollution. The Energy Star Program is an excellent way to save on energy costs and reduce air pollution as well as third-party certifications and building materials (i.e. LEED, Greenseal, EcoLogo).

Economic benefits include:

- Reduced operating costs
- Enhanced asset value and profits
- Enhances occupant comfort and health
- Improved air, thermal, and acoustic environments

Optimize Energy Performance by implementing on-site renewable energy while taking advantage of natural lighting and LED light fixtures. Providing shade for parking areas can also be of added benefit to this facility. Some approaches may include architectural devices, vegetation, or solar panels.



For more about energy efficient options, please see: <https://www.energystar.gov/> or <https://www.epa.gov/greeningepa/energy-efficiency-epa>.

Response 5: [Comment acknowledged.](#)

Comment 6: Clean Fuel Measures: This measure helps to reduce localized air pollution by supporting the use of clean diesel powered vehicles and charging infrastructure. It would be ideal to include Electric Vehicle or Hybrid Vehicle parking (at least two parking spaces designated for alternative fueled vehicles) and at least one charging station in common areas.

For a site map of local alternative fueling sites, please visit the Alternative Fuels Data Center website here: <http://www.afdc.energy.gov/locator/stations/>. Rebates may be available here: www.de.gov/cleantransportation.

Response 6: [Comment acknowledged.](#)

Comment 7: Native Landscaping: The developer is encouraged to beautify the development site with landscaping that would not only make the commercial area more attractive but also help to clean the air of any pollutants that could be emitted or transported by sources around the development area such as pollutants from mobile sources, construction or neighboring activities. This would reduce air quality impacts on local residents while also incorporating a context-sensitive design that blends well with the surrounding development and existing land uses. Free information and advice can be found at <http://extension.udel.edu/lawngarden/plant-selection-design/> or call (302) 856-7303 in Sussex County.

Response 7: [Comment acknowledged. Landscaping, including native species, will be used to help beautify the development as well as meet code.](#)

Comment 8: Should the developer have any more questions or concerns, the DNREC Division of Air Quality (DAQ) point of contact is Lauren DeVore, and she may be reached at (302) 739-9437 or lauren.devore@state.de.us. The applicant is encouraged to contact DAQ to discuss the emission mitigation measures that will be incorporated into the LIDL project. DNREC look forward to working together with you on this project to achieve our shared air quality goals.

Response 8: [Comment acknowledged.](#)

Additional information on recycling and reducing water use.

Comment 1: Materials and resources utilized for new development should be considered, including regionally available recycled content (i.e. carpet, concrete, countertops, furniture, siding, etc.), rapidly renewable material and certified woods.

Response 1: [Comment acknowledged.](#)

Comment 2: Construction Waste Management should include policies which promote efficient material use and recycling of project debris).

Response 2: [Comment acknowledged.](#)

Comment 3: Employ systems and appliances that increase water efficiency and reduce water use.

- o Low-flow and high-efficiency items



- Waterless urinals
- Graywater recycling systems

Response 3: [Comment acknowledged.](#)

Additional information on tank management.

Comment 1: When contamination is encountered, PVC pipe materials should be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.

Response 1: [Comment acknowledged.](#)

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

[Comment acknowledged.](#)

Upon your review of the above, should you have any questions or require additional information, please do not hesitate to contact this office at (302) 644-1155. Thank you.

Sincerely,
Bohler Engineering VA, LLC

David M. Kuklish, P.E.

cc: Jamie Wonderly, Lidl US Operation, LLC (w/o enc.)
Shawn Tucker, Drinker, Biddle & Reath LLP, (w/o enc.)
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