



August 27, 2012

Mr. Jason Bobst
West Norriton Township
1630 W. Marshall Street
Jeffersonville, PA 19403

Re: **WESTOVER SPORTING COMPLEX**
West Norriton Township, Montgomery County, Pa.
Job No. 11026

Dear Mr. Bobst:

In accordance with your request, I have reviewed the preliminary land development plans for the subject project. This submission consists of a plan set containing fifty-two sheets and a Hydrologic Study, both dated March 29, 2012.

This is a Preliminary Plan review only. My comments are as follows:

ZONING ORDINANCE

1. The Zoning classification of all adjoining properties, including those properties across adjacent streets, must be indicated on the plans. This information is required to determine various zoning setback requirements. §203.
2. The proposed uses within the Clubhouse must be identified. I caution that recreational uses are not permitted in-doors. §1201.
3. I defer to the zoning officer's opinion as to whether or not the skate park and batting cages are permitted uses. §1201.
4. I defer to the traffic engineer's opinion as to whether or not the on-site parking is adequate. Either bus parking must be provided or the lack thereof must be justified. §1202; §1410.
5. No plans, nor specifications, nor dimensions of the existing and proposed buildings and structures were submitted for review. §1203.B.
6. No renderings, for appearance, of the buildings and signs have been submitted for review. §1203.C.
7. I defer to the Township Planner review of the landscaping. Sheets 37 and 38 must be numbered. §1203.D.

8. I defer to the zoning officer's opinion as to whether or not the proposed uses are noxious or offensive. §1408.
9. The plans do not indicate why the gross floor area (GFA) is 10% less than the building area. Usually the GFA is the maximum floor area. §1410.
10. The Clubhouse is noted as being 50,000 sf; however, being two floors, it is actually 100,000 sf. Based upon the applicant's parking calculations, the required parking would have to be increased by an additional 900 parking spaces. §1410.
11. The Special Events Building is noted as being 30,000 sf; however, being two floors, it is actually 60,000 sf. Based upon the applicant's parking calculations, the required parking would have to be increased by an additional 540 parking spaces. §1410.
12. It must be determined if the parking requirements given include employee parking or if employee parking is an additional parking requirement. §1410.
13. Only those parking areas that are immediately adjacent to residential property lines were landscape screened. All residential property lines must be screened from the parking facilities, regardless of the parking facilities proximity. The need for screening must be based upon the view. §1410.J(5).
14. No loading facilities are provided. §1410.L.
15. It appears that floodplains exist on the property but have not been delineated on the plans. Part 22.

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

1. Provide an Erosion and Sediment Control Narrative & Report. §106.
2. The applicant must provide a written list of requested waivers. This waiver must also be listed on the Record Plan. §502.2.
3. The Planning Commission must provide advisory comments to the requested waivers. §502.3.
4. South Schuylkill Avenue and Port Indian Road are secondary feeder streets with an ultimate right of way width of 60 feet. This requirement is neither shown, nor described, nor offered for dedication. §503.1.C(1)(b)
5. South Schuylkill Avenue and Port Indian Road are secondary feeder streets with a required cartway width of 36 feet. This required width is not provided. §503.1.C(1)(b)

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6. Curb is required, but not provided, along Port Indian Road. §503.1.C(1)(b); §505.2.A
7. Separate detailed design plans for the frontage improvements must be provided. This must include typical sections and construction detailing. §503.1.
8. Centerline geometry is not provided for the main road. §503.1.B.
9. The main road must conform to the standards of a public street. §504.3.B.
10. The paving section does not conform to public street standards. §503.1.D.
11. The maximum approach grade to an intersection is 3%; however, this is exceeded at both intersections. §503.1.E(6).
12. The seventeen perpendicular parking stalls along the main boulevard road are prohibited. §504.4.B.
13. Hairpin pavement markings are required between parking stalls. Provide a detail. §504.4.G.
14. Provide parking lot buffer plantings. §504.4.H.
15. Being 10 feet wide, all proposed parking stalls are compliant; however, nine foot wide stalls are permitted. §504.4.K.
16. The sidewalks along the frontage streets must be interconnected with the site pedestrian paths. At numerous locations, the on-site pedestrian paths lack continuity and interconnections. Other facilities, such as the skate park, provide no paths connecting the balance of the site. §505.1.
17. The soccer fields are graded in a manner that will trap runoff along the sidelines. The championship field discharges runoff onto the residential properties. The grading must be revised to direct the runoff into drainage facilities. §507.2.
18. The location, size and species of all trees six inches or more in caliper must be shown on the plan. §507.3.C.
19. No topsoil may be removed from the site. §507.3.D.
20. The required ground covers indicated in the ordinance must be shown on the plan. §507.3.D.
21. The level and intensity of the landscaping provided is not commensurate with the intensity of this development. Provide the landscaping and buffering as outlined in the

- ordinance. §507.3.E & F.
22. The plan needs to address both the minimization of the removal of existing perimeter landscaping. Much grading is proposed at the location of existing trees. §507.3.G.
 23. Will any facilities be open for the use of township residents? If so, they should be listed on the plan. §508
 24. A large sanitary force main crosses this site but has not been shown on the plan. This may impact the improvements adjacent to the Brandon Road properties. This force main and easement must be added to the plans. §509.
 25. The metes and bounds of the Transco easement must be added to the plans. §509.
 26. The perimeter of the tract must be concrete monumented. Encase existing iron pins in concrete, too. §510.1.
 27. Storm drainage must be provided along Port Indian Road and at the uphill curb PC of both intersections. §511.1.
 28. I defer the review of the sanitary sewers to the Township Sewer Engineer. §513.
 29. Indicate the number, size, depth and location of the Transco pipelines on the plan. §514.
 30. The location of the existing water main must be indicated. The proposed main extension must be sized to provide the required flow, pressure and duration for fire protection. §517.
 31. I defer to the fire marshal the review and approval of the fire hydrant layout. §517.7.
 32. It appears that wetlands exist on the property but have not been delineated in the field nor identified on the site plans. §519.
 33. Supplement the Existing Features Aerial Plan with those items required to be shown but not provided; such as but limited to, widths, radii and surface condition of existing streets, sanitary sewers, storm drains, utilities, etc. §601.3.A.
 34. Supplement the Existing Features Plan with those items required to be shown but not provided; such as but limited to, widths and dimensions of existing streets, tie-ins, sanitary sewers, storm drains, utilities, etc. §601.3.B.
 35. Supplement the Existing Features Plan with a steep slope analysis. §601.3.C.

36. Supplement the Existing Features Plan with location size and species of trees over 6 inches in caliper. §601.3.D.
37. Supplement the Existing Features Plan with the measured location of buildings and large trees. §601.3.E.
38. The plan must indicate whether or not a reverse subdivision is being proposed as part of this application. §601.4.B.
39. Provide a statement containing the require information outlined in this section of the ordinance. §601.4.I.
40. Provide plan views immediately above all profile views. Provide stationing on the profiles. §601.5.
41. I will provide to you the standard certifications for the record plan. §601.7.
42. Provide a copy of the title report for this property with the Final Plan submission. §602.2.B(8).
43. The slope of the handicap parking stalls must be limited to 2%. ADA.

STORMWATER MANAGEMENT ORDINANCE

The detention facilities have not been fully detailed and this is only a preliminary plan submission; therefore, a complete review was not performed. However, a cursory review was performed in accordance with Chapter 26, Part 1 “Stormwater Management” of the West Norriton Township Code to assist the design engineer in preparation of the proper revisions to the plan.

1. It appears that the grading encroaches upon the swale behind the Michael Bieloski property. Furthermore, this ditch appears to be eroded. This condition must be corrected. §103.I.
2. The Erosion and Sediment Control Plan must be supplemented with those items listed in §121.15.c.
3. The soils shown do not correspond to the current NRCS Web Soil Survey information. This must be corrected. §121.15.c.6.
4. The capacity of all receiving drainage systems must be analyzed to be sure that they can safely receive the anticipated flow. §122.6.L.
5. The PCSM Plan must be supplemented with those items listed in §131.2.

6. Provide to-scale details of each basin's outlet structure, anti-seep collars, berm and spillway. §131.2.O.
7. The plan must indicate the requirement for as-built drawings. §131.5.
8. An easement must be provided around all the stormwater facilities. §135.
9. The Operation and Maintenance Plan, the Operation and Maintenance Agreement and the Easements must be prepared and recorded. §136.
10. Indicate the disposition of all roof drainage. §163.
11. Provide extended detention calculations. Appendix. "A" §B(5).
12. I am concerned that the emergency spillways of SWM basins 1, 3 and 5 are directed toward adjacent residential buildings and properties. Additionally, the outfall from plunge #1 must be piped directly to the drainage system. Appendix. "A" §B(9).
13. Provide detention basin landscaping. Appendix. "A" §B(20).
14. Provide infiltration drain time calculations. Appendix. "A" §D(3)(d)(6).
15. The porous paving systems must provide both an alternate path for stormwater to enter the stone recharge bed in the event that the pavement surface becomes plugged or experiences extreme storm events and an overflow system to prevent water in the stone bed from rising into the pavement surface during extreme storm events. Porous Paving Area #5 exceeds the generally accepted maximum slope of 5%. Appendix. "A" §D (3) (d).
16. Indicate where the water quality inlets are being used. Appendix. "A" §C (2) (d).

ADDITIONAL COMMENTS.

1. Provide details of all retaining walls. All retaining walls must have guards.
2. Both Port Indian Road and that portion of South Schuylkill Avenue adjacent to the bike path are in condition warrant of repair and upgrade. Furthermore, the turning movements at the intersection of Port Indian Road and Egypt Road do not function well. These "global" highway conditions are of particular concern as they relate to the increased traffic that this project will generate.
3. The center boulevard along the main road prohibits eastbound traffic from entering the northern parking lot. It is unclear as to why this is prohibited. Furthermore, I recommend that all driveways entering this roadway be provided with a minimum 15 foot

curb radius.

4. Some of the roadway widening improvements along South Schuylkill Avenue are along the eastern side of the road and out of the right of way. I recommend that all of the widening be performed along the western side of the road.
5. Is the Hemlock Road an emergency only access or permanently opened to traffic?
6. Consideration should be given to lighting the main boulevard road.
7. I am concerned about the proximity of the golf holes adjacent to the northern parking lot. How are these vehicles going to be protected?
8. It would be helpful if each and every site feature (i.e. building, field, court, parking lot, road and driveway) was named and numbered.
9. I recommend that the concrete barriers extend into the virgin soil surface at each end. Pour concrete directly against the undisturbed soil surface.
10. Will the parking planter islands above the stone recharge area support landscaping?

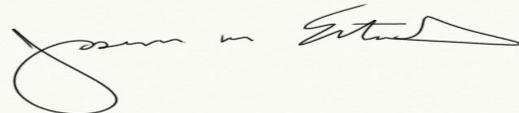
REQUIRED PERMITS AND APPROVALS.

The following permits and approvals are required.

1. Approval by the West Norriton Township Sewer Department.
2. Approval by Transcontinental Gas Pipeline Co.
3. Sewage facilities planning approval from the PaDEP.
4. An NPDES permit for stormwater discharge must be obtained.
5. Approval by the Township Fire Marshal.
6. Both Land Development and Escrow Agreements must be prepared and recorded.

Should you have any further questions, please do not hesitate to contact me.

Very truly yours,



JOSEPH M. ESTOCK, P.E., P.L.S
Township Engineer