



Taylor Wiseman & Taylor

ENGINEERS | SURVEYORS | SCIENTISTS

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July 6, 2010

#03371.1000.00

Re: Matrix Ashbourne Associates LP

1100 Ashbourne Road

Appeal No. 3336

David M. Lynch, PE, PLS
Director Engineering, Zoning & Inspections
Cheltenham Township
8230 Old York Road
Elkins Park, PA 19027

Dear Mr. Lynch,

On behalf of Matrix Ashbourne Associates, L.P.'s (MAA) application for relief before the Cheltenham Township Zoning Hearing Board, TWT requests a determination be made and exception granted from Chapter 295, Article XXII, Steep Slope Conservation District, for the proposed disturbance to manmade slopes as allowed in 295-164.B.

In support of the above request an Amended Steep Slopes Plan, dated August 17, 2009, last revised July 1, 2010 prepared by TWT has been submitted. Said Plan depicts existing 2' contour topography, existing physical features including the golf course greens, tees, fairways, and traps (shaded in green), and delineates the existing slopes between 15% and 25% (shaded tan) and slopes greater than 25% (shaded in brown). The Plan delineates the extent of manmade slopes with a dark blue line.

The manmade limit line was drawn based on:

1. Existing topography. In our opinion, after examination of the existing features and grades, the majority of the steep slopes were constructed as part of the golf course to create tee boxes, greens, fairways, sand traps and the associated cart path, clubhouse buildings, parking lot and driveways. In our opinion areas were terraced to create golf course features, thereby creating steeper slopes in an around other features. An example of terracing exists along the gradeline running northeast to southwest across the 1st, 2nd and 10th holes. In our opinion the grade was flattened across the three fairways and steepened between the fairways. Several such grade lines are shown on the plan depicting course terracing effects. Visual observation of the topography indicates areas where approximate cut and fill operations ended. An example of such an operation exists along the north – northeast side of the 12th fairway. Close inspection of the grade changes and disturbances to the tree strand indicate fill was



placed along said boundary inwards of approximately 15 – 20', thereby creating a slope steeper than the surrounding area.

2. Excavated test pits. Nine excavated test pits were observed and soil logs profiled by TWT on June 30, 2010. Observation of the soil horizons, including indications of topsoil, depth to weathered rock and depth to rock were observed. Analysis of the soil horizons provided data to opinion on the history of the soil. Several areas such as Test Pit #6 indicated the soil horizon was fill or impacted by the placement of fill and hence created a manmade slope. Other areas, such as Test Pits #3 and #8 indicate an absence of topsoil and overburden and hence indicate areas of prior construction activity.
3. Aerial Photography and Trees. Observations of the existing trees indicate areas of non-native species. Together with the 1971 aerial photograph, said observations indicate additional areas of prior construction activity. An example of such, is the area between the 2nd and 10th holes and along the west side of the 7th fairway. The trees in said areas are non representative of native strands and in the case of the 7th fairway are aligned in a linear fashion.

Utilizing all three of the above indicators, TWT positioned, in our opinion, a limit line of the manmade steep slopes.

A Steep Slopes Disturbance Plan was prepared depicting the proposed disturbances to the Steep Slopes. A variance is requested to disturb 1.1% of the steep slopes not identified as manmade. The four specific areas are cross-hatched and shown on said Plan. Said areas are in addition to disturbances requested for utility, storm, sanitary and stormwater management facilities as allowed under 295-167. B. 2 and 3. An approximate limit line to disturbances to manmade slopes is depicted in black near the 10th green and 7th fairway. Approximately 86% of manmade slopes between 15 – 25% and 68% of manmade slopes over 25% are proposed for disturbance.

A Lines and Grades Plan (two sheets) has been prepared and submitted to indicate the anticipated grading limits. The Plan has been prepared utilizing Township criteria for roadway slopes and grading.

A Stormwater Concept Plan has been prepared and submitted in support of the pending application. Said Plan indicates areas of proposed rain-gardens and detention basins and outfalls. The basins and outfalls have been positioned and sized to address the Township Stormwater Ordinances. Stormwater calculations and final design will be submitted to the Township as part of the land development process.

A Soil Erosion and Sediment Control Plan and a Post Construction Stormwater Management Plan will be prepared as part of the land development approval process. The applicant shall incorporate measures to control erosion and sedimentation and runoff during and after construction. Said Plans and supporting calculations will be reviewed, and require approval of, the Montgomery County Conservation District and Cheltenham Township prior to starting construction. The applicant will incorporate the latest in



stormwater best management practices (BMP) including utilization of super silt-fence, sediment basins, bio-degradable erosion control blankets, turf reinforcing mats, stormwater discharge level spreaders, infiltration basins, basins restored and planted as native meadows and rain-gardens.

In our opinion, the conditions of Chapter 295-164.B.2 will be met by utilizing the above stormwater BMP and soil erosion and sediment control measures. Specifically, in our opinion, the subject proposed disturbances to steep slopes can be accomplished without causing erosion of the slopes, and will not result in soil failure, stream siltation, and contamination of surface waters and/or increase in total runoff into any watercourse or an increase in the point discharge levels or velocities at any given point of collection and discharge and will not be injurious to the health, safety and welfare of Township residents.

Please notify us prior to our scheduled July 27, 2010 Zoning Hearing Board meeting as to your determination of our request for exemption under 295.164.B. Thank you.

Sincerely,

A handwritten signature in black ink, which appears to read "Mark S. Mayhew". The signature is written in a cursive style and is positioned to the right of the typed name.

Mark S. Mayhew, P.E.
Regional Manager



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SOIL BORING LOG

Soil Boring #: 1

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
0 – 22	Bt	Strong brown (7.5YR 5/8) silt loam, moderate medium subangular blocky structure, firm.
22 – 35	Bt2	Yellowish brown (10YR 5/6) fine sandy loam, moderate medium platy structure, firm.
35 – 47	--	Weathered granite and schist.
47 – 52	--	Dark yellowish brown (10YR 4/6) fine sandy loam, moderate medium platy structure, firm.
52 – 68	--	Strong brown (7.5YR 4/6) sandy loam, moderate fine subangular blocky structure, friable with 50% weathered schist fragments.



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SOIL BORING LOG

Soil Boring #: 2

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
0 – 20	Bt	Strong brown (7.5YR 5/8) silt loam, moderate medium subangular blocky structure, firm.
20 – 34	--	Dark yellowish brown (10YR 4/6) fine sandy loam, moderate fine granular structure, friable.
34 – 41	--	Strong brown (7.5YR 4/6) fine sandy loam, moderate fine granular structure, friable.
41 – 73	--	Schist fragments



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SOIL BORING LOG

Soil Boring #: 3

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
0 – 53	--	75% weathered schist with 25% dark yellowish brown (10YR 4/4) fine sandy loam, weak fine granular structure, friable.



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SOIL BORING LOG

Soil Boring #: 4

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
0 – 8	Ap	Very dark grayish brown (10YR 3/2) silt loam, weak fine granular structure, friable.
8 – 24	B	Strong brown (7.5YR 5/6) fine sandy loam, weak fine granular structure, friable.
24 – 57	C	Yellowish brown (10YR 5/6) fine sandy loam with 40% schist fragments.
57 – 68+	--	Dark yellowish brown (10YR 4/6) very fine sand, single grain, loose with 70% schist fragments.



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SOIL BORING LOG

Soil Boring #: 5

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
0 – 76	--	Fill – soil, brick, concrete rubble
76 – 86	Ab	Very dark grayish brown (10YR 3/2) fine sandy loam, weak fine granular structure, friable.
86+	B	Strong brown (7.5YR 5/8) fine sandy loam, weak fine granular structure, friable.



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SOIL BORING LOG

Soil Boring #: 6

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
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0 - 72	--	Fill -- soil, brick, concrete rubble
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SOIL BORING LOG

Soil Boring #: 7

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
0 – 22	--	Fill
22 – 34	--	Alternating bands (< one inch) of strong brown (7.5YR 5/6) and very pale brown (10YR 7/3) sand, single grain, loose.
34 – 57+	--	Weathered schist



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SOIL BORING LOG

Soil Boring #: 8

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
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0 - 44	--	Weathered schist
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SOIL BORING LOG

Soil Boring #: 9

Date:

June 30, 2010

Location: See plan.

Described by:

David C. Roth

Project: Ashbourne Country Club, Montgomery County, PA

SOIL

DEPTH (inches)	HORIZON	DESCRIPTION (USDA)
0 – 6	A	Very dark grayish brown (10YR 3/2) sandy loam, weak fine granular structure, friable.
6 – 17	Bt	Strong brown (7.5YR 5/6) fine sandy loam, moderate fine subangular blocky structure, firm.
17+	--	Weathered schist

