ENGINEERING, engineers • Planners • Surveyors

840 NORTH MAIN STREET • PLEASANIVILLE, NJ 08232 (609) 646-3111 FAX (609) 641-0593

PATRICK J. DORAN, P.E., P.P. (1927-1993) MATTHEW F. DORAN, P.E., P.P., P.L.S., C.M.E., C.P.W.M. PATRICK J. DORAN, JR., B.S. ACCOUNTING

EDWARD P. STINSON, P.E., C.M.E. DEBORAH L. WAHL, P.E., P.P.

MEMBER NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS AMERICAN SOCIETY OF CIVIL PRGINEERS AMERICAN SOCIETY OF MILITARY ENGINEERS N.J. SOCIETY OF MUNICIPAL ENGINEERS CHRITIFIED MUNICIPAL ENGINEERS

MEMO TO:

City of Brigantine Planning Board

FROM:

Edward P. Stinson, Board Engineer

DATE:

October 25, 2005

RE:

GC Realty, LLC

Doran #8430

LOCATION:

BLOCK: 8201 LOT: 1

Golf Course Drive

STATUS:

Final Major Subdivision

BASIS FOR REVIEW: Plans Prepared By Arthur Ponzio Co. & Associates, Inc.

Sheet 1 of 7 dated 9/26/04 revised 08/01/05 Sheet 2 of 7 dated 9/26/04 revised 08/01/05 Sheet 3 of 7 dated 9/26/04 revised 08/01/05 Sheet 4 of 7 dated 9/26/04 revised 08/01/05 Sheet 5 of 7 dated 9/26/04 revised 08/01/05 Sheet 6 of 7 dated 9/26/04 revised 12/30/04 Sheet 7 of 7 dated 9/26/04 revised 08/01/05

USE: Single Family

PROJECT DESCRIPTION:

This is an application for a major subdivision creating 13 lots of which 12 lots are to be used for single-family dwellings; one lot is to be deeded to the City of Brigantine.

Sewer will be provided to the site by the use of a gravity line extended across the front of the properties and connecting to the existing sanitary sewer system located on the southwest side of Roosevelt Boulevard.

Domestic water is supplied by extending the existing water main across the front of the property.

ZONING REQUIREMENTS: This property is located in the R-2 zone, which allows primarily for

residential uses. The following is a review of the bulk requirements for the proposed project:

ITEM	REQUIRED	MIN. PROPOSED	LOT#	CONFORMITY
LOT AREA	4,500 SF	7,993 SF	1,11	С
LOT FRONTAGE	55 (1)'	55.007	1,03	Č
LOT DEPTH	90,	120' (Scaled)	1.12	Č
SETBACKS;		120 (24004)	1.12	C
FRONT	20'	20,		C
ONE SIDE	7'	7'		C
SECOND SIDE	3*	3,		Ċ
REAR	20°	20°		č
MAX. HEIGHT	357	M/C		Ç
BLDG, COVERAGE	35%	M/C		
TOTAL COVERAGE	60%	M/C		

M/C - Must comply at time of building permit request.

REVIEW COMMENTS:

- 1. It should be noted that the project will be reviewed using the State of New Jersey Residential Site Improvement Standards as required by law.
- The site contains a designated wetlands line and buffer line. A Letter of Verification from the NJDEP as to the accuracy of the line and buffer should be supplied to the Board prior to final approval.

The applicant has received the Cafra Permit, Comment Satisfied

 The property falls under CAFRA Jurisdiction. A Letter of Approval should be supplied to the Board, prior to final approval.

The applicant has received the Cafra Permit. Comment Satisfied

4. The plan shows Lot 1.13 as proposed buffer and open space area. The Applicant should supply an improvement plan for the lot showing any grading, landscaping, etc.

A note has been added to the plan stating that the lot will be seeded and left natural. Comment Satisfied

- As shown in the State Code, the development intensity of the project is "low intensity" which proposes a density less than or equal to 4 dwelling units per acre. The average daily motor vehicle traffic demand for single-family dwellings is 10.2. This can be seen in Table 4.1 of the code.
- 6. A profile and cross section of the proposed street should be supplied from Right-of-Way line to Right-of-Way line, showing all dimensions and pavement design, cross slopes, etc. The limits of the proposed paving should extend from the westerly side of lot 1.01 to the easterly side of lot 1.13. The profile should include top of curb elevations, flow line elevations and longitudinal slopes.

This must be submitted prior to signing of the Final Plan.

⁽¹⁾ Established as a minimum lot frontage by the settlement agreement

- 7. From scaling the plan, the street as proposed shows a 50' right-of-way, 30' cartway, curbs, and sidewalks on both sides of the street. This design meets the minimum requirements of Table 4.3.
- 8. The intersection of Roosevelt Boulevard with Golf Course Drive shall be redesigned to be as nearly at right angles as possible in accordance with section 5:21-4.19b of the standards.

The intersection has been redesigned. Comment Satisfied

9. The plan should be revised in order to show a parking requirement that is consistent with Table 4.4 of the ordinance.

Add Table to the Final Plat

10. The plan should be revised in order to show all street grading consistent with Section 5:21-4.19 of the code.

See comment #6 above. A plan for the paving of Golf Course Drive from Lot 1.01 through lot 1.13 must be submitted.

11. The curb radii, consistent with Table 4.6, should be shown for the intersection with Roosevelt Boulevard.

The curb radii have been revised. Comment Satisfied

- 12. The plan should be revised in order to show sight triangles as required by Section 5:21 4:19 of the code.
- 13. A pavement design and detail, consistent with Figure 4.2 of the code, should be shown on the plan.

The plans should be revised accordingly.

14. The plan should be submitted to the Fire Dept. for review of the fire hydrant location. I recommend that a fire hydrant be added to the center island across from lot 1.03 and that the existing fire hydrant located at the entrance to the Country Club be abandoned and a new fire hydrant be installed adjacent to the new roadway alignment near the intersection.

Applicant will meet with Fire Department prior to signing of the final plat.

15. Calculations for water demand and pipe sizing should be supplied for the water system. The calculations should be consistent with Tables 5.1 and 5.2 of the code.

Plans have been revised. Comment Satisfied

16. The plans should be submitted to the Water and Sewer Departments in order to maintain material consistency for all materials used. A detail of the water main showing the design criteria outlined in Section 5:21-5.3j should be shown on the plan.

Applicant will meet with Water and Sewer Department prior to signing of the Final Plat.

17. Details and locations of the thrust blocks and rodded joints should be supplied on the plans.

Plans have been revised. Comment Satisfied

18. Additional water valves should be shown at the intersection of the proposed water main with the existing water main.

Plans have been revised. Comment Satisfied

19. A detail of the fire hydrant, consistent with the hydrants used by the City, should be shown on the plan.

Comment Satisfied

 The Applicant must supply a sewer extension permit and treatment works approval prior to final approval.

These permits should be made a condition of final approval.

21. All water and sewer lines should be installed in a clean soil or stone trench. All bedding and backfill should be clean material.

Plans have been revised. Comment Satisfied

22. The proposed subdivision will increase the sewer flow to the North Shore Drive Sanitary Sewer Pump Station by approximately 35%. The Design Engineer should provide a capacity analysis of the existing pump station and force main to determine if the system has sufficient capacity to handle the increase in flow. The cost of any improvements required should be the responsibility of the applicant.

The applicant has agreed to pay a proportionate share of the improvement costs.

23. I recommend that the proposed terminal manhole (San Manhole #4) in the sewer main be extended approximately 55 feet eastwardly onto lot 1.13 (proposed City Owned lot) to allow for future connection (if any) for the City lot.

Comment Satisfied

I recommend that water service also be provided to lot 1.13. The water service should consist of a one (1) inch service and a two (2) inch service. The location will be determined by the City.

Comment Satisfied

25. The existing street lights at the intersection of Roosevelt Boulevard and Golf Course Drive should be shown on the plans to determine if sufficient light will exist at the newly designed intersection.

Additional street lights have been added to the plan. Comments Satisfied

26. The design engineer has provided a recharge system for each individual lot consisting of perforated pipe within a stone bed connected to each downspout. The system should be designed to accommodate the 100-year design storm. The design engineer should provide soil borings to ensure that the recharge system will function as designed.

Comment Satisfied

27. The sewer manhole detail shall be revised to show waterproofing in accordance with section 5:21-6,2c11 of the standards.

Plans should be revised.

28. The proposed bulkhead detail should be revised to include dimensions of the materials as well as the exposed height of the bulkhead. A permit from the City Engineer's Office will be required for the new bulkhead.

The applicant proposes to construct a Gabion System in lieu of a bulkhead. A detail of the gabion system should be added to the plans.

29. The driveway detail on sheet 6 of 7 includes an 8" x 24" concrete gutter; however, the plan view does not include a gutter. A profile of the roadway will be required and if the grades are less than 0.5% slope, a concrete gutter will be required.

See Comment at 6 & 10

The applicant is proposing to install curb and sidewalk along each of the twelve residential lots. The plan should be revised to include curb and sidewalk along the frontage of lot 1.13.

Comment Satisfied.

31. The applicant has proposed a landscaping plan for the center island at the intersection of Roosevelt Boulevard and Golf Course Drive. I recommend that the plan be submitted to the Golf Course and Public Works Department for their input. I further recommend that the plan include irrigation.

The landscape plan has been submitted to P.W. & the Golf Course as requested. Comment Satisfied

32. The existing utilities to the old Country Club should be removed and terminated at the main. All abandoned septic system (if any) must be removed from the site. A note should be added to the plan.

Comment Satisfied

The existing structure must be demolished prior to signing of the plans. The applicant should discuss his schedule for the demolition of this structure. I recommend that as a condition of any approval the applicant be required to secure the structure including the installation of a security fence (if permitted by police department).

The applicant should discuss the schedule for the demolition of the Old Country Club building. I recommend that the Board require the applicant as a condition of final approval to complete the demolition of the building within 30 days from the date of the adaption of the Resolution for Conditional Final Major Subdivision approval (November 25, 2005).

- 34. The final plat must comply with the Map Filing Law
- A detail showing the connection of the proposed bulkhead to the existing bulkhead adjacent to lot 1,01 shall be added to the plans.

No longer applicable

36. A detail showing the connection of the downspout to the proposed recharge system should be added to the plan.

Comment Satisfied

- 37. I will defer a review of the site landscaping to the Board Planner.
- 38. The proposed boat docks will be subject to NJDEP review and approval. The applicant should provide testimony as to the number of boat slips proposed.

No longer applicable

- 39. Prior to final approval, the Applicant should provide approval or waiver letters from the following agencies:
 - A. State of New Jersey Department of Environmental Protection Wetlands Satisfied
 - B. State of New Jersey Department of Environmental Protection CAFRA Satisfied
 - C. State of New Jersey Department of Environmental Protection Sewer Extension Condition to Final
 - D. State of New Jersey Department of Environmental Protection Waterfront Development. N/A
 - E. State of New Jersey Department of Environmental Protection Bureau of Tidelands N/A
 - F. City of Brigantine Sewer and Water Department Condition of Final
 - G. City of Brigantine Fire Department Condition of Final
 - H. County of Atlantic Condition of Final
 - I. Cape Atlantic Soil Conservation Condition of Final

FINAL APPROVAL COMMENTS:

- 40. All conditions of Preliminary Approval must be satisfied.
- 41. All other approvals must be obtained prior to signing of the plans
- 42. A Performance Guaratee and inspection escrow must be submitted in accordance with section 198-14 of the Land Use Ordinance prior to signing of the final plat.
- 43. The applicant should provide a copy of the plan referenced in the Cafra Permit for our sites.

This concludes our review of the current submission. We reserve the right to provide further comment on this application upon submission of new and/or revised information,

840 NORTH MAIN STREET • PLEASANTVILLE, NJ 08232 (609) 646-3111 FAX (609) 641-0592

PATRICK J. DORAN, P.E., P.P. (1927-1993) MATTHEW F. DORAN, P.E., P.P., P.L.S., C.M.E., C.P.W.M. PATRICK J. DORAN, JR., B.S. ACCOUNTING

edward P Stinson, Pe., C.M.E. Deborah L. Wahl, Pe., P.P. MEMB
NATIONAL SOCIETY OF PROFESSIONAL ENGINEE
AMERICAN SOCIETY OF CIVIL ENGINEE
AMERICAN SOCIETY OF MILITARY ENGINEE
N.J. SOCIETY OF MUNICIPAL ENGINEE
CERTIFIED MUNICIPAL ENGINEE

MEMO TO:

City of Brigantine Planning Board

FROM:

Matthew F. Doran, Board Engineer

DATE:

January 24, 2005

RE:

GC Realty, LLC

Doran #8430

LOCATION:

BLOCK: 8201 LOT: 1

Golf Course Drive

STATUS:

Preliminary Major Subdivision

BASIS FOR REVIEW: Plans Prepared By Arthur Ponzio Co. & Associates, Inc.

Sheet 1 of 7 dated 9/26/04 revised 12/30/04 Sheet 2 of 7 dated 9/26/04 revised 12/30/04 Sheet 3 of 7 dated 9/26/04 revised 12/30/04 Sheet 4 of 7 dated 9/26/04 revised 12/30/04 Sheet 5 of 7 dated 9/26/04 revised 12/30/04 Sheet 6 of 7 dated 9/26/04 revised 12/30/04 Sheet 7 of 7 dated 9/26/04 revised 12/30/04

USE: Single Family

COMPLETENESS:

The applicant has requested the following waivers from the Major Subdivision Checklist:

Item #3 - Metes and Bounds Description Item #4 - Natural resource inventory.

The Review Committee recommends that the Board grant the requested waivers and deem the application complete.

4:38bW

PROJECT DESCRIPTION:

This is an application for a major subdivision creating 13 lots of which 12 lots are to be used for single-family dwellings; one lot is to be deeded to the City of Brigantine.

Sewer will be provided to the site by the use of a gravity line extended across the front of the properties and connecting to the existing sanitary sewer system located on the southwest side of Roosevelt Boulevard.

Domestic water is supplied by extending the existing water main across the front of the property.

ZONING REQUIREMENTS: This property is located in the R-2 zone, which allows primarily for

residential uses. The following is a review of the bulk requirements for the proposed project:

ITEM	REQUIRED	MIN. PROPOSED	LQT#	CONFORMITY
LOT AREA	4,500 SF	7,993 SF	1.11	Ċ
LOT FRONTAGE	55 (1)'	<i>55.</i> 007'	1.03	¢
LOT DEPTH	901	120 (Scaled)	1.12	Ċ
SETBACKS:				
FRONT	ŽĊ³	20'		Ċ
ONE SIDE	7'	. 7'		C
SECOND SIDE	3'	33		C
REAR	20°	20,		C
MAX. HEIGHT	35'	M/C		
BLDG. COVERAGE	35%	M/C		
TOTAL COVERAGE	60%	M/C		

M/C - Must comply at time of building permit request.

REVIEW COMMENTS:

- 1. It should be noted that the project will be reviewed using the State of New Jersey Residential Site Improvement Standards as required by law.
- 2. The site contains a designated wetlands line and buffer line. A Letter of Verification from the NJDEP as to the accuracy of the line and buffer should be supplied to the Board prior to final approval.
- 3. The property falls under CAFRA Jurisdiction. A Letter of Approval should be supplied to the Board, prior to final approval.
- 4. The plan shows Lot 1.13 as proposed buffer and open space area. The Applicant should supply an improvement plan for the lot showing any grading, landscaping, etc.
- 5. As shown in the State Code, the development intensity of the project is "low intensity" which proposes a density less than or equal to 4 dwelling units per acre. The average daily motor vehicle traffic demand for single-family dwellings is 10.2. This can be seen in Table 4.1 of the code.

194'S2'S002 4:38bW DOKHU EUCINEEKINC 0'684 6:3\a

⁽¹⁾ Established as a minimum lot frontage by the settlement agreement

- 6. A profile and cross section of the proposed street should be supplied from Right-of-Way line to Right-of-Way line, showing all dimensions and pavement design, cross slopes, etc. The limits of the proposed paving should extend from the westerly side of lot 1.01 to the easterly side of lot 1.13. The profile should include top of curb elevations, flow line elevations and longitudinal slopes.
- 7. From scaling the plan, the street as proposed shows a 50' right-of-way, 30' cartway, curbs, and sidewalks on both sides of the street. This design meets the minimum requirements of Table 4.3.
- 8. The intersection of Roosevelt Boulevard with Golf Course Drive shall be redesigned to be as nearly at right angles as possible in accordance with section 5:21-4.19b of the standards.
- 9. The plan should be revised in order to show a parking requirement that is consistent with Table 4.4 of the ordinance.
- 10. The plan should be revised in order to show all street grading consistent with Section 5:21-4.19 of the code.
- 11. The curb radii, consistent with Table 4.6, should be shown for the intersection with Roosevelt Boulevard.
- 12. The plan should be revised in order to show sight triangles as required by Section 5:21 4:19 of the code.
- 13. A pavement design and detail, consistent with Figure 4.2 of the code, should be shown on the plan.
- 14. The plan should be submitted to the Fire Dept. for review of the fire hydrant location. I recommend that a fire hydrant be added to the center island across from lot 1.03 and that the existing fire hydrant located at the entrance to the Country Club be abandoned and a new—fire hydrant be installed adjacent to the new roadway alignment near the intersection.
- 15. Calculations for water demand and pipe sizing should be supplied for the water system. The calculations should be consistent with Tables 5.1 and 5.2 of the code.
- 16. The plans should be submitted to the Water and Sewer Departments in order to maintain material consistency for all materials used. A detail of the water main showing the design criteria outlined in Section 5:21-5.3j should be shown on the plan.
- 17. Details and locations of the thrust blocks and rodded joints should be supplied on the plans.
- 18. Additional water valves should be shown at the intersection of the proposed water main with the existing water main.
- 19. A detail of the fire hydrant, consistent with the hydrants used by the City, should be shown on the plan.
- 20. The Applicant must supply a sewer extension permit and treatment works approval prior to final approval.

- All water and sewer lines should be installed in a clean soil or stone trench. All bedding and backfill should be clean material.
- The proposed subdivision will increase the sewer flow to the North Shore Drive Sanitary Sewer Pump Station by approximately 35%. The Design Engineer should provide a capacity analysis of the existing pump station and force main to determine if the system has sufficient capacity to handle the increase in flow. The cost of any improvements required should be the responsibility of the applicant.
- 23. I recommend that the proposed terminal manhole (San Manhole #4) in the sewer main be extended approximately 55 feet eastwardly onto lot 1.13 (proposed City Owned lot) to allow for future connection (if any) for the City lot.
- 24. I recommend that water service also be provided to lot 1.13. The water service should consist of a one (1) inch service and a two (2) inch service. The location will be determined by the City.
- 25. The existing street lights at the intersection of Roosevelt Boulevard and Golf Course Drive should be shown on the plans to determine if sufficient light will exist at the newly designed intersection.
- 26. The design engineer has provided a recharge system for each individual lot consisting of perforated pipe within a stone bed connected to each downspout. The system should be designed to accommodate the 100-year design storm. The design engineer should provide soil borings to ensure that the recharge system will function as designed
- 27. The sewer manhole detail shall be revised to show waterproofing in accordance with section 5:21-6.2e11 of the standards.
- 28. The proposed bulkhead detail should be revised to include dimensions of the materials as well as the exposed height of the bulkhead. A permit from the City Engineer's Office will be required for the new bulkhead.
- 29. The driveway detail on sheet 6 of 7 includes an 8" x 24" concrete gutter; however, the plan view does not include a gutter. A profile of the roadway will be required and if the grades are less than 0.5% slope, a concrete gutter will be required.
- The applicant is proposing to install curb and sidewalk along each of the twelve residential lots. The plan should be revised to include curb and sidewalk along the frontage of lot 1.13.
- The applicant has proposed a landscaping plan for the center island at the intersection of Roosevelt Boulevard and Golf Course Drive. I recommend that the plan be submitted to the Golf Course and Public Works Department for their input. I further recommend that the plan include irrigation.
- 32. The existing utilities to the old Country Club should be removed and terminated at the main. All abandoned septic system (if any) must be removed from the site. A note should be added to the plan.

6/2.9 \$88.0N

- 33. The existing structure must be demolished prior to signing of the plans. The applicant should discuss his schedule for the demolition of this structure. I recommend that as a condition of any approval the applicant be required to secure the structure including the installation of a security fence (if permitted by police department).
- The final plat must comply with the Map Filing Law
- A detail showing the connection of the proposed bulkhead to the existing bulkhead adjacent to lot 1.01 shall be added to the plans.
- 36. A detail showing the connection of the downspout to the proposed recharge system should be added to the plan.
- .37. I will defer a review of the site landscaping to the Board Planner.
- 38. The proposed boat docks will be subject to NJDEP review and approval. The applicant should provide testimony as to the number of boat slips proposed.
- 39. Prior to final approval, the Applicant should provide approval or waiver letters from the following agencies:
 - A. State of New Jersey Department of Environmental Protection -- Wetlands
 - B. State of New Jersey Department of Environmental Protection CAFRA
 - C. State of New Jersey Department of Environmental Protection Sewer Extension
 - D. State of New Jersey Department of Environmental Protection Waterfront Development.
 - E. State of New Jorsey Department of Environmental Protection Bureau of Tidelands
 - F. City of Brigantine Sewer and Water Department
 - G. City of Brigantine Fire Department
 - H. County of Atlantic
 - I. Cape Atlantic Soil Conservation

I recommend that all applications and correspondence to and from NJDEP be provided to the Board Secretary and the Boards Professionals.

This concludes our review of the current submission. We reserve the right to provide further comment on this application upon submission of new and/or revised information.