Chapter 28:

Responses to Comments on the DGEIS

A. INTRODUCTION

This chapter has been prepared for this Final Generic Environmental Impact Statement (FGEIS) for the purposes of summarizing and responding to all substantive comments on the Fresh Kills Park Draft Generic Environmental Impact Statement (DGEIS) prepared for the proposed Fresh Kills Park project. The DGEIS public comment period began with the completion and release for public review of the DGEIS (on May 16, 2008). The comment period remained open until September 30, 2008. During this public review period a public hearing was held on Thursday, September 4, 2008, 7:00 PM, at Public School 58, 77 Marsh Avenue, Staten Island, NY. Speakers at the public hearing are listed below. In addition, written comments on the DGEIS were received between May 17 and September 30, 2008. Written comments received on the DGEIS are provided in Appendix I.

Section B, below, lists all commentators on the DGEIS. It begins with a listing of those who spoke at the public hearing and continues with those who submitted written comments. The list of commenters includes the elected officials, community board and organization members, agencies, and individuals who commented on the DGEIS.

The comments, which are summarized and responded to in Section C, are organized by EIS subject area. Where there are multiple comments on a similar subject, a single comment combines and summarizes those individual comments. The organization and/or individual that commented is identified after each comment. For comments that did not require a response, or where comments did not relate to the DGEIS, the response "comment noted" is provided. In order to specifically respond to comments from the New York State Department of Environmental Conservation, Appendix I contains all DEC comments and responses and additional information, as requested by the agency.

B. LIST OF ORGANIZATIONS AND INDIVIDUALS WHO COMMENTED ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

SPEAKERS AT FRESH KILLS PARK DGEIS PUBLIC HEARING, SEPTEMBER 4, 2008

- 1. Honorable James P. Molinaro, Staten Island Borough President
- 2. Honorable Andrew J. Lanza, New York State Senate, 24th Senate District
- 3. Honorable Diane Savino, New York State Senate, 23rd Senate District
- 4. Honorable Michael Cusick, New York State Assembly, 63rd Assembly District
- 5. Honorable Lou Tobacco, New York State Assembly, 62nd Assembly District

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- 6. Honorable James S. Oddo, New York City Council, 50th District
- 7. Honorable Vincent Ignizio, New York City Council, 51st District
- 8. Honorable Matthew J. Titone, New York State Assembly, 61st Assembly District, represented by Sylvia Ancrum
- 9. Honorable Michael E. McMahon, New York City Council, 49th District, represented by Witt Halle
- 10. Robert E. Englert, Land Use Director for Staten Island Borough President's Office
- 11. Michael Nagy, Staten Island Borough President's Office
- 12. Anthony Marra, Chair, Staten Island Community Board 1
- 13. Debbie Derrico, District Manager, Staten Island Community Board 2
- 14. Frank Morano, Staten Island Community Board 3
- 15. Catherine Morrisson Golden, New Yorkers for Parks
- 16. Ira Weiss, Staten Island Bicycle Association
- 17. Richard Sheirer, Staten Island resident
- Debbie Derrico, District Manager, Staten Island Community Board 2, representing Marie DiResta, Vice Chair Staten Island Community Board 2
- 19. Stephen Zederiko
- 20. Harold Kozak
- 21. Tom Barlotta
- 22. Ed Salek
- 23. Stu Branker, Mid Island Political Action Committee
- 24. Jim Easely, Manager of Staten Island Mall
- 25. George S. Wonica
- 26. Joe Valentin, Vice President, Staten Island Taxpayers Association
- 27. Paul Curran, Managing Director, BQ Energy
- 28. Joe Pancila, Staten Island resident
- 29. Frank Lafauci, Staten Island resident
- 30. Hillel Lofaso, President, Protectors of Pine Oak Woods
- 31. Dee Vanderburg, President, Staten Island Taxpayers Association
- 32. John Semich, Staten Island resident
- 33. Linda M. Baran, President & CEO, Staten Island Chamber of Commerce
- 34. Leticia Remauro, Second Vice Chair, Staten Island Community Board 1
- 35. John Armstrong, Hatch Mott MacDonald, Staten Island resident

- 36. Maryann H. McGowan, President, Clove Lake Civic Association
- 37. Philip Rampulla, Rampulla Architects, Staten Island resident
- 38. John Luisia, Staten Island Chapter of the Fisherman's Conservation Association
- 39. Sam Pirozzolo, Staten Island resident
- 40. Dennis Dell'Angelo, Land Use Director, Staten Island Taxpayers Association
- 41. Judy Dahl, Staten Island resident
- 42. Bill Paciello, Staten Island Chapter of the Fisherman's Conservation Association
- 43. Mary Reilly, Staten Island resident
- 44. Charlotte Byrne, Staten Island resident
- 45. Hamim Syed, Staten Island resident
- 46. Ed Burke, Staten Island Deputy Borough President

WRITTEN COMMENTS RECEIVED

- 47. Douglas P. Mackey, Historic Preservation Program Analyst, New York State Office of Parks, Recreation, and Historic Preservation, April 18, 2008
- 48. Ashley Richey, Earthtech for the New York State Department of Transportation, May 19, 2008
- 49. Amanda Sutphin, New York City Landmarks Preservation Commission, May 29, 2008
- 50. Gina Santucci, New York City Landmarks Preservation Commission, June 2, 2008
- Stephen A. Watts III, New York State Department of Environmental Conservation, June 20, 2008
- 52. Sandy Krueger, Chief Executive Officer, Staten Island Board of Realtors, Inc., July 30, 2008
- 53. Paul F. Curran, Managing Director, BQ Energy, Inc., August 4, 2008
- 54. Robert P. Sisti, Forest Financial Group, August 4, 2008
- 55. Concetta Pepenella, August 5, 2008
- 56. Cesar J. Claro, President & CEO, Staten Island Economic Development Corporation, August 5, 2008
- 57. Sally and Leonard Robusto, August 8, 2008
- 58. Henry Arlin Salmon, President, Equity Valuation Associates, August 8, 2008
- 59. Hank Edwards, Staten Island Board of Realtors, Inc., August 12, 2008
- 60. Robert Stern, August 12, 2008
- 61. Linda M. Baran, President & CEO, Staten Island Chamber of Commerce, August 22, 2008
- 62. Robert E. Englert, Land Use Director for Staten Island Borough President's Office, September 4, 2008

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- 63. Honorable Matthew J. Titone, New York State Assembly, 61st Assembly District, September 4, 2008
- 64. Catherine Morrisson Golden, New Yorkers for Parks, September 4, 2008
- 65. Richard Sheirer, September 4, 2008
- 66. Marie DiResta, First Vice Chair, Staten Island Community Board 2, September 4, 2008
- 67. Honorable Michael E. McMahon, New York City Council, 49th District, represented by Witt Halle, September 4, 2008
- 68. Hillel Lofaso, President, Protectors of Pine Oak Woods, September 4, 2008
- 69. Charles Perry, First Vice President, Protectors of Pine Oak Woods, September 4, 2008
- 70. Linda M. Baran, President & CEO, Staten Island Chamber of Commerce, September 4, 2008
- 71. Leticia Remauro, Second Vice Chair, Staten Island Community Board 1, September 4, 2008
- 72. Judy Dahl, September 4, 2008
- 73. Joseph Parascandola, September 4, 2008
- 74. Transportation Alternatives, September 4, 2008
- 75. Honorable James P. Molinaro, Staten Island Borough President, September 15, 2008 and September 30, 2008

C. RESPONSE TO COMMENTS

GENERAL COMMENTS

Comment 1: The DGEIS is obviously a review of potential environmental impacts associated with the Fresh Kills redevelopment. We find that the document is not complete in that regard pertaining to the potential use of wind energy at the site. Such an installation would have a significant positive impact on Staten Island and NYC by generating electricity from renewable resources. The use of renewable resources for electric power generation has a direct and quantifiable positive benefit to the environment, to the people who live in this environment, and to all species that live in the environment. The greater use of renewable energy is also consistent with NYC Policy (Executive Order 109), NYS Policy (Executive Order 111 and the NYS Renewable Portfolio Standard), and numerous federal energy and environmental policies. The economic benefits of renewable energy have become even more pronounced as energy prices have spiked in recent months. Indeed we submit that in 2008, the standard must be rather rigorous for any public entity to dismiss an opportunity to allow renewable energy to be pursued. We think that the negative arguments put forth in the DGEIS fail to meet any such standard. (Curran/BQ Energy)

Response 1: A proposal for commercial wind turbines at Fresh Kills Park was included in the proposed project (see DGEIS, Table 1-10). If implemented, such a proposal would be expected to have beneficial impacts with respect to energy and providing a renewable energy source. It would also be expected that a commercial proposal at this scale would require a full examination of impacts with respect to natural resources, visual character, and potential landfill impacts. For the DGEIS a generic review was provided since a site-specific proposal needs to be identified. It is expected that a site-specific proposal would then be evaluated with a site-specific proposal environmental review.

As part of the DGEIS, a review was performed of the feasibility report "Evaluation of the Feasibility of Installing a Commercial Scale Wind Energy Facility in Fresh Kills, Staten Island, New York" prepared for the New York State Energy Research and Development Authority (NYSERDA) by BQ Energy, LLC (August 3, 2007, as submitted to DPR). It is recognized that this report is a feasibility analysis and contained, as stated in the document, a preliminary assessment of environmental impacts, including a preliminary assessment of potential wildlife, noise, traffic, communications (e.g., television transmission), and visual impacts as part of a seven-turbine wind power proposal. The document also addresses the need for mitigation measures, including those related to natural resources (avian) impacts. This environmental assessment was preliminary and generic and was not site-specific. For example, the natural resources (wildlife impact assessment) did not fully address potential impacts to wildlife or birds. The proposal also presented visual images, but was not site-specific in its placement of wind turbine locations on the landfill.

The Fresh Kills Park project that was analyzed in the DGEIS included a proposal for six commercial wind turbines at Fresh Kills (that proposal has been clarified for this FGEIS to include five wind turbines). The BQ Energy feasibility study included two wind turbines in West Park; it was the conclusion of DPR that wind turbines in West Park would be incompatible with City plans for the proposed 9-11/WTC Monument at this location. This five-turbine design is consistent with Alternative 2 in the BQ Energy study. Because DPR is not a utility provider, it is expected that a proposal for a commercial wind turbine system at Fresh Kills would need to be operated as a concession or franchise, the details of which have not yet been developed. Given these factors, and that a site-specific environmental review would be necessary in order to properly examine the impacts of a proposed wind turbine proposal from the perspective of both environmental review and permitting (any wind turbines proposed on the landfill sections would require DEC approval), the DGEIS provides a generic assessment of potential impacts. A sitespecific environmental review would address the potential for both adverse and positive effects of any commercial wind turbines at Fresh Kills Park. In response to this and other comments, DPR has expanded the generic analysis of wind turbines in this FGEIS.

As required under CEQR/SEQRA/NEPA, a site-specific environmental review would examine the full range of potential adverse impacts. This environmental review can also present an expanded purpose and need/goals and objectives as well as the positive impacts of a wind turbine proposal with respect to energy, fiscal, and economic considerations.

In response to the above comments, additional information on commercial wind turbines and alternative energy systems has been added to Chapter 1, "Project Description," and Chapter 15, "Energy."

- **Comment 2:** A significant argument against the use of wind energy presented in the DGEIS is the opinion that large wind turbines installed on top of the mounds would be inconsistent with the "feel" of a park. We disagree. We reported last year that a wind turbine has operated in a downtown Toronto park for many years. The residents enjoy both its operation and the actual benefits brought to that City. They also enjoy the message it sends with respect to how Toronto wants to generate electricity. Modern wind turbines are quiet. Borough President James Molinaro of Staten Island has opined that he finds their operation to be "pleasant and soothing." These words are wholly consistent with the purposes of a park. A typical wind turbine tower uses up 15 feet of surface ground space; an insignificant amount compared to the Fresh Kills park. Furthermore, Fresh Kills is a unique location. From the top of the mounds, several commercial and industrial neighbors are plainly visible. The wind turbines on these mounds will be far more natural and consistent with the park motif than these visible neighbors. Wind turbines would be compatible with this world class park redevelopment. (Curran/BQ Energy)
- **Response 2:** The DGEIS did not argue against commercial wind turbines. Rather, it examined the potential environmental impacts with wind turbines in a generic manner and presented the range of issues that need to be addressed as part of a commercial wind turbine project in a site-specific environmental review. To that end, the above comment does not acknowledge the thousands of acres of natural areas that are also found in the viewshed of the proposed Fresh Kills Park, including William T. Davis Wildlife Refuge immediately and adjacent to the north, LaTourette Park/The Greenbelt immediately to the east, and Arden Heights Woods Park immediately to the south, or the nearby residential

neighborhoods (e.g., Travis neighborhood, immediately to the north, Arden neighborhood to the south) that would need to be considered as part of a site-specific visual analysis of wind turbines at Fresh Kills Park. Taking these factors into account, the DGEIS established a framework for potential impact issues that, as stated above, would need to be addressed as part of a site-specific environmental review and a permitting process that would accompany any commercial wind turbine proposal at Fresh Kills.

- **Comment 3:** BQ Energy's report recommends that large modern wind turbines (seven) be installed on top of the waste mounds at Fresh Kills. Large turbines would increase the positive project impact, both environmentally and economically. BQ Energy suggested that the turbines be on top of the mounds for efficiency. Thousands of residents fly kites in NYC Parks each year, and all of those individuals will agree that winds are stronger at higher elevations. Despite this, the DGEIS offers the suggestion that smaller turbines would be better and that they should be installed in valleys. We see no data supporting this preference and we conclude that it is simply that—an "aesthetic preference" of a DGEIS author. We strongly disagree with the preference and many others in the environmental movement would share our view. (Curran/BQ Energy)
- **Response 3:** The DGEIS presented an analysis of larger commercial wind turbines on the landfill sections at Fresh Kills. The smaller wind turbines presented in the DGEIS at the lower elevations at the park are proposed for the purposes of powering DPR facilities only. They were not presented for the purposes of providing a commercial energy operation in the park.

As stated above, the DGEIS presented a range of analyses that would need to be considered as part of a site-specific environmental review for any commercial wind turbine proposal presented at Fresh Kills.

Comment 4: NYC Policy dictates that NYC Government will reduce its carbon footprint in the coming 10 years. The DGEIS proposes 20 percent of the Fresh Kills park power demand to be met by installations of solar and wind power technologies, but suggests that this be done with small turbines installed at low levels. BQ Energy's report presented a wind-based renewable energy plan that not only meets all yearly internal Fresh Kills Project power needs, but allows the park to supply energy to the public grid and other consumers throughout New York City. In essence, this proposed wind turbine project enables the Fresh Kills Project to become a global leader by helping the New York

metropolitan area become a "greener" city and represents concrete steps towards meeting the PlaNYC goal of a 30 percent reduction in New York City's greenhouse gas emissions. (Curran/BQ Energy)

- **Response 4:** The Fresh Kills Park will take the necessary steps to ensure that that park is energy efficient. Some of these measures were presented in the DGEIS; additional measures are presented in this FGEIS. It is not clear from the BQ Energy Report that commercial wind turbines at Fresh Kills Park would meet the annual Fresh Kills Park power needs since those needs have not yet been fully determined. However, it is recognized in the FGEIS, as it was in the DGEIS, that wind energy can play a role in providing a renewable power source at Fresh Kills Park, and a commercially viable project that could support the grid was presented in the DGEIS as part of the 2016 park plan. As stated above, that proposal would be subject to a site-specific environmental review when it is formally put forward.
- **Comment 5:** The DGEIS states Fresh Kills is not an ideal location for wind power. The justification for this statement is largely due to the scheme that the DGEIS authors concocted with small turbines sited at low locations (effectively blocked by the mounds). However, BO Energy recommends placing commercial wind turbines on the tops of Fresh Kills mounds where the wind resource is superior. In cooperation with NYC Planning, Department of Sanitation, and NYSERDA, BQ Energy erected a meteorological tower on top of the mounds and collected a year of onsite weather data. By our measurements, it is established that the site at the indicated elevation (on top of mounds) has enough wind resource to allow a wind project to be economically feasible. As the low off-mound capacity factor expressed in the DGEIS indicates, wind resources are significantly less at ground level compared to the mounds, largely due to obstructions and turbulence, making off-mound wind turbines uneconomic. Wind energy remains the most cost effective renewable energy option, and the Fresh Kills mound-tops remain the optimal wind resource within New York City limits. (Curran/BQ Energy)
- **Response 5:** The DGEIS recognizes that any commercial wind power operation at the site would have to be developed at higher elevations, on the landfill sections, which would therefore require permitting approvals in addition to addressing other subsurface issues (i.e., support foundations for the wind turbines) and extending connections to the grid. These issues would need to be examined as part of a site-specific analysis of a commercial wind turbine operation at Fresh Kills Park. As stated above, the reference in the DGEIS to the low elevation turbines is to the DPR-operated facilities.

- **Comment 6:** The DGEIS comments on wind turbines needing to be adjacent to high energy demand centers, such as restaurants or sports field lighting in order to reduce power cable infrastructure cost. While this is clearly preferable when considering small wind turbines that supply a fraction of the on-site power, it ignores the reality that most power plants serving the five boroughs are hundreds of miles away. The Fresh Kills wind farm would be the first significant renewable resource to be within the NYC electrical load zone. This will reduce the global amount of transmission lines. With respect to power lines within the park, our report recommends all Fresh Kills wind farm power be transmitted by an underground power cable network. This will be better for the wind farm and for the kite flying park users. (Curran/BQ Energy)
- **Response 6:** As recognized in the comment, the DGEIS does make this statement in the context of DPR-operated facilities, and minimizing the power line connection distance and costs between the smaller wind turbines and DPR facilities (e.g., lighted fields, comfort stations).
- **Comment 7:** The DGEIS comments that turbine foundations are more stable in offmound locations. Our report shows several foundation models that were evaluated using geotechnical data supplied by the New York City Department of Sanitation. All foundation models were analyzed for their technical performance under the specifications required to build on a capped landfill medium, as well as their construction viability and economics. In our study, we retained Geosyntec Consultants who have worked for many years at Fresh Kills on geotechnical and landfill analysis. We concluded that some of the designs were not only feasible, but had in fact already been built both in the US and abroad in similar municipal land fill parameters. (Curran/BQ Energy)
- **Response 7:** DPR concerns regarding wind turbine foundations were reached in conjunction with input from DEC (an involved agency) relative to constructing wind turbines on the regulated landfill sections at Fresh Kills. Foundations on the landfill sections and within the Solid Waste Management Unit Areas (SWMUs) would be subject to the approval of the DEC, which would review such foundation plans (as stated in the DGEIS), which is expected to occur as part of a site-specific proposal. That engineering analysis would need to demonstrate feasibility of development without impacts to the landfill, or the implementation of remedial measures.
- **Comment 8:** The DGEIS indicates that a commercial wind farm such as was described in the BQ Energy August 2007 report could not be fully evaluated because there was not sufficient data available for a full

analysis. We are confused by that observation since our report was submitted immediately to all stakeholders in the DGEIS process and we followed up with repeated calls over the past 10 months to City Planning and Parks to ascertain if any further information, meetings, or communication would be helpful. At all times we were advised that no further information was required. We do note that as part of our stakeholder program, we worked with NYSERDA and the Staten Island Borough President's (SIBP) office to broadly publicize this concept to the Staten Island community. The SIBP office has broadly publicized this concept and sought out public comment. The response has been overwhelmingly positive from all stakeholders, including the local media. (Curran/BQ Energy)

- **Response 8:** The proposed Fresh Kills Park project as analyzed in the DGEIS, includes a commercial wind turbine project. It is also recognized that a site-specific commercial proposal would be operated potentially as a franchise and would be subject to more than community and stakeholder outreach, although that is an important component. A site-specific environmental review would examine potential impacts on the landfill, natural resources, and visual character (for example) and would involve DEC, which is the agency that would need to approve and permit such a facility. To that end, it is expected that a site-specific analysis should provide the information necessary for all decision-makers, including DEC as an involved agency, with respect to rendering a decision on a commercial wind turbine project.
- **Comment 9:** The Department of Parks intends to use the EIS to deny Staten Islanders what they want. (Lanza)
- **Response 9:** The City and DPR have prepared both the Draft Master Plan (DMP) for Fresh Kills Park and the GEIS for the purposes of implementing the park and associated roads as part of a comprehensive master planning and environmental review process. To that end, the DGEIS was prepared in accordance with the procedures of CEQR, SEQR, and NEPA and has been circulated for extensive public review and comment.
- **Comment 10:** The EIS should include more input from those that it will directly affect. (Cusick)
- **Response 10:** The Fresh Kills Park DMP and the GEIS are both the result of a multiyear process, which included significant public outreach comprised of public meetings, workshops, DGEIS scoping, hearings, public review, and other formal and informal forums and opportunities for public input. As part of the environmental review process for the proposed

park, a public scoping meeting was held in May 2006 on the Draft Scope of Work to prepare a DGEIS for Fresh Kills Park. That public meeting included both the scope of work for the DGEIS and a description of the park plan and the RWCDS for park development. In addition, a more than four-month public comment period was open on the DGEIS (May 17 through September 30) with a public hearing held on September 3, 2008. Thus, there was substantial outreach as part of the DGEIS preparation and review process. In addition, DPR continues its design outreach with the development of North and South Park, the first two phases of the project.

- **Comment 11:** Two billion dollars are being spent on the Croton Filtration Plant to build a park, and it is not expected to take 30 years or 50 years, it will be ready by 2011. (Ignizio)
- **Response 11:** The Croton Filtration Plant project is an EPA-mandated, drinking water filtration plant being constructed by NYCDEP within Van Cortlandt Park in the Bronx. Approximately two hundred fifty million dollars is being used for park improvements. It is not creating a new park on a landfill, but is replacing parkland that will be temporarily lost due to construction of the proposed water filtration plant.
- **Comment 12:** The SIBP's plan makes sense from a business perspective. (Easley)
- **Response 12:** Comment noted. Chapter 22 of this FEIS, "Alternatives," describes and analyzes the SIBP proposal for roads across the Fresh Kills property.
- **Comment 13:** The SIBP has presented two excellent ideas that should be implemented. They are supported by all and opposed by none. (Lafauci) Staten Island wants this landfill the way the Borough President has set forward. (Pirozollo)
- **Response 13:** As stated above, the proposed Fresh Kills Park project analyzed in the DGEIS included a generic proposal for commercial wind turbines, which has been recommended by the SIBP. Implementation of the commercial wind turbine project is subject to additional permitting and the related environmental review that is expected to be undertaken by a commercial operator. In this FGEIS, the SIBP proposed road alignment is presented and analyzed in Chapter 22, "Alternatives," of this FGEIS.
- **Comment 14:** Everyone keeps referring to this as Fresh Kills Park. This is not a park; it is a dump under the jurisdiction of DSNY and we'd like it be referred to as such. (Vanderberg)

Response 14:	As part of the proposed project, jurisdiction over the Fresh Kills Landfill would be transferred from DSNY to DPR. The GEIS analyzes the impacts of this transfer and the subsequent conversion of the site to parkland, recognizing that landfill post-closure monitoring and maintenance would also be ongoing for many decades, as per the post- closure care plan.
Comment 15:	We stand with the SIBP's plan for the roads and windmills, and we are also suggesting cell phone towers be placed within the landfill as well. (Parascandola)
Response 15:	The responses to comments above address commercial wind turbines and the alternative roadway alignments. No proposal has been put forth

Comment 16: An initial public comment (Appendix B, Final Scope. B-22) supports the development of commercial scale wind energy at the Fresh Kills Park. The response to this states that wind energy will be examined in the DGEIS with respect to environmental impacts. A number of potential impacts of wind energy were listed, and we assume that this level of assessment of potential impacts is thereby deemed sufficient.

operator.

(Curran/BQ Energy)

at this time for cell towers in the proposed park by a commercial

Response 16: The referenced page in the comment is to the Final Scope for the DGEIS which stated such an analysis would be provided in the DGEIS. As stated above, the level of analysis presented in the DGEIS and this FGEIS is generic, which is in keeping with the scope if the environmental analysis. As stated above, it is expected that a site-specific environmental review and permitting process would be performed as part of a site-specific proposal for commercial wind turbines at Fresh Kills Park.

EXECUTIVE SUMMARY

Comment ES-1: In the Executive Summary (pg. S-33), the DGEIS references the consideration of six wind turbines in the Fresh Kills park. In September 2007 BQ Energy provided a report titled *Evaluation of the Feasibility of Installing A Commercial Scale Wind Energy Facility in Fresh Kills, Staten Island, New York* to The New York State Energy Research and Development Authority (NYSERDA) and a number of other State of New York and City of New York agencies, including the Department of Parks and Recreation. That report discusses seven (7) wind turbines in the Fresh Kills Park. As that report is the basis of the DGEIS discussion

of commercial wind energy, the DGEIS should reflect the proposed 7 seven structures as part of its environmental review. This should be corrected on pages S-33, 1-79, 5-12, 6-1, 8-11, 10-79, 10-127. (Curran/BQ Energy)

- **Response ES-1:** As stated above, the two commercial wind turbines proposed by BQ Energy at the top of Landfill Section 1/9 in West Park have been determined by DPR to be in conflict with the 9-11/WTC Monument planned by the City for this area of the park (2036 park program). Therefore, 5 not 7, wind turbines are analyzed in the FGEIS. As stated above, a commercial wind turbine proposal at Fresh Kills is expected to be subject to a site-specific EIS. This five-turbine design is consistent with Alternative 2 in the BQ Energy study.
- **Comment ES-2:** In the Executive Summary (pg. S-33), the DGEIS states that any environmental review of a wind turbine project should meet the requirements of the DEC draft *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects*. This document was issued for public comment to determine what type of guidelines should be adopted, and we anticipate that the draft will undergo significant changes. To our knowledge, no wind project has ever utilized that draft as a basis for development. It is appropriate that a wind farm at Fresh Kills will agree with a site specific development plan, reflecting the unique characteristic of the site and environs. (Curran/BQ Energy)
- **Response ES-2:** At the time of publication of the DGEIS, the above-referenced document was the guidance recommended by DEC with respect to analyzing these potential impacts. DEC is an involved agency the environmental review and permitting process at Fresh Kills and would need to permit any wind turbines proposed on the landfill sections. To the extent that the above referenced DEC document is modified between the time of the publication of this FGEIS and the submission of a permit application for a site-specific environmental review for a proposed commercial wind turbine project, the site-specific review can reflect the appropriate current DEC guidelines.
- **Comment ES-3:** In the Executive Summary (pg. S-33, S-58), the DGEIS indicates a wind project should consider alternative locations to avoid wildlife collision risk. It is inappropriate to prejudge the impact of a project by implying that Fresh Kills would have a greater impact on avian species than another site in metropolitan New York City. The report, *Evaluation of the Feasibility of Installing a Commercial Scale Wind Energy Facility in Fresh Kills, Staten Island, New York* established that Fresh Kills is unique in its ability to be developed as a wind farm. It is

misleading to imply that other locations could be preferred for other undefined potential reasons. (Curran/BQ Energy)

Response ES-3: As stated above, the DGEIS examined a generic proposal for a commercial wind turbines system comprised of six units. The DGEIS does not prejudge the impacts of this proposal, but identifies issues to be addressed in a site-specific examination of environmental impacts. The reference sited in the comment above to the DGEIS was to other possible siting locations within Fresh Kills Park, not off-site (regional) locations. A clarification has therefore been made in this FGEIS.

- **Comment ES-4:** In the Executive Summary (pg. S-33, S-58), the DGEIS discusses reducing the overall height of a proposed wind turbine to avoid avian impacts. The DGEIS is introducing implied conclusions which are not supported by data and are in fact erroneous. Modern and taller turbines have a documented quantified data record regarding avian impacts based on several years of operation at many sites worldwide. This data was referenced in the BQ Energy Report. The impact of the wind turbines at Fresh Kills would be a very small percentage of existing impact created by the existence of the West Shore Expressway, or the Outer Bridge Crossing or the Goethals Bridge. BQ Energy is unaware of any scientific studies that show a correlation or causation between turbine height differences and avian impacts. Indeed, taller wind turbines yield an increased environmental benefit to the City of New York in the form of increased clean energy output and wind collection efficiency. Furthermore, the energy from a wind turbine comes with a stable price (as opposed to natural gas, oil, and coal) and does not release toxic pollutants into the environment. This benefit should be considered when evaluating the environmental impacts. (Curran/BQ Energy)
- **Response ES-4:** A CEQR/SEQR analysis does not traditionally examine project impacts in comparison to other impacting features in the area, such as roads and bridges, but does examine the incremental impacts of a specific proposal, such as a proposed commercial wind turbine project. As stated above, it is expected that the environmental impacts of a commercial wind turbine operation will be further evaluated based on a site-specific commercial wind turbine proposal. In addition, text has been added to this FGEIS stating the benefits of wind power as a renewable energy source and addressing how height modifications are one technique for addressing bird collision concerns.
- **Comment ES-5:** Page S-2: Park implementation in North Park and South Park is expected in the earlier phases of the project (through 2016), along with

the proposed park roads to provide access. The primary purpose of the proposed park roads is not to provide access to the park, but to first provide access through the landfill from Richmond Avenue to the West Shore Expressway for the people of Staten Island. This is not mentioned at all in this very early pages of the Executive Summary. Access, via the roads, into the park—which will not be completed as a park for almost 40 years – is of secondary concern to Staten Islanders. Therefore, if the authors of the DGEIS have as their mandate that the primary purpose of the Fresh Kills road is to provide access to the park, than the document should state this. (Molinaro)

- **Response ES-5:** As stated in the DGEIS, the proposed park roads into and across the proposed Fresh Kills Park would provide two important purposes: (1) to provide access to park facilities for private and public (transit) vehicles; and (2) to provide a new connection between Richmond Avenue on the east and the West Shore Expressway on the west. A minor edit to page S-2 in this FGEIS has been made to clarify these objectives with respect to the proposed park roads. In addition, the purpose and need section in this FEIS has been expanded to include additional discussion on the need for the proposed Fresh Kills Park roads, i.e., to improve local traffic circulation. It is noted that Page S-2 in the DGEIS also stated that the proposed project includes about seven miles of new roads, making it be one of the largest new road construction projects in the City. These roads would provide new road choices for drivers seeking to reach the West Shore Expressway from Richmond Avenue, and vice-versa. Additional responses below address the comments regarding phasing of the proposed roads.
- **Comment ES-6:** Page S-2: Site History This section does no justice to the history of the landfill, and to non-residents reading this document, it appears as if closing the landfill was a planned event instead of the will of the people of Staten Island. For example, the statement, "To enable Fresh Kills to come into compliance with the Part 360 regulations for solid waste management facilities, DEC entered into a consent order that allowed DSNY to continue to operate the Fresh Kills Landfill where the City made environmental and operational improvements at the landfill..." this is an inaccurate and incorrect statement. By 1990, Fresh Kills was on its third Consent Order in ten years from the DEC because the City had failed to comply with each preceding Consent Order - that is, providing the environmental studies needed to apply for a permit to legally operate as a landfill. It was only with the third Consent Order that the DEC finally included deadline dates/milestones for environmental studies to be completed so that a permit application

would be filed before 1996. Yet these facts are nowhere to be found in this section. (Molinaro)

As another example of the myopic view of Fresh Kills history in the DGEIS, this section states that a state law passed in 1996 required the landfill to cease accepting solid waste by December 31, 2001, thus also terminating the permit application review. This is a half truth. It is more appropriate to state that the law was a direct result of four Staten Islanders filing a federal lawsuit against the City and State because the landfill violated both the federal Clean Air Act and the City's Fair Share provisions of the City Charter. It was thus the success of this lawsuit that the City and State accepted the demise of the landfill on December 31, 2001 – as requested by the plaintiffs in the lawsuit. It was only then that a State law was introduced and passed – even though the Fresh Kills permit application stated that the landfill would continue to operate until the year 2017.

- **Response ES-6:** The statements made in the EIS with respect to the regulatory basis for the closure of Fresh Kills Landfill and procedures for the closing of the landfill are factually correct. However, in response to this comment, additional text has been added to this FGEIS describing the history of Fresh Kills Landfill.
- **Comment ES-7:** Page S-4: Planning and Design Assumptions for the DEIS Impact Analysis: The DMP (Draft Master Plan) considers diversity of cultural, athletic, and educational programming, as well as a landscaping plan that includes new landscapes that would offer wildlife habitat, as well as natural open spaces for park visitors. Page S-12, DMP Conceptual Plan: Within the Confluence is the 50-acre Point, a large waterfront area that would provide sports fields, event spaces, lawns, art works, and other cultural and commercial facilities serving park uses such as restaurants and market roofs. The Point would offer active recreational programs, multi-use sports facilities and fields with the ability to host athletic events. The DGEIS fails to consider the framework required to define the public's aspirations for the long-term use of the site. The DGEIS fails to strike a balance between the City's programmed vision for the park and the facilities, features and activities requested by Staten Islanders through many public meetings. (Molinaro)

Fresh Kills Park will be defined by five designated planning areas: the Confluence (175 acres), North Park (280 acres), South Park (415 acres), East Park (530 acres) and West Park (560 acres). These areas do not include an additional 700 acres that includes wetlands, waterways and natural areas such as the Isle of Meadows. The Point, a 50 acre parcel located within the Confluence will contain (1) multi-use sporting/event

area. The other planned area within the Confluence, to be called "Creek Landing" (20 acres), will contain no additional "athletic" facilities. There is no other "athletic" programming included in the conceptual plan for the Confluence. The remaining parks that comprise the totality of Fresh Kills Park (2,200 acres) are programmed for a total of 4.68 acres of much needed active open space facilities for the people of Staten Island. (See Chapter 5—Open Space and Recreational Facilities—Table 5-7. p.5-11).

Lastly, it should be noted that Owl Hollow Park (located northwest of Arden Heights Woods Park is situated southwest of Fresh Kills Park) and has been studied under a separate Environmental Assessment Statement. (Molinaro)

- **Response ES-7:** As stated in the comments above, Owl Hollow is a first phase of the reuse of Fresh Kills Landfill for park purposes. In order for DPR to advance this project, it has proceeded separately as Owl Hollow Park (a separate environmental review was performed) and the park has started construction. Upon completion of construction, this park will provide approximately 21 acres of athletic fields with four new lighted soccer fields. With respect to the balance of the comment, Table 5-5 ("Fresh Kills Park Elements to be Completed by 2016") and 5-7 ("Fresh Kills Park Elements to be Completed by 2036") show a total of 47 acres of active recreational space, which is in addition to the 21-acre Owl Hollow Park project and the upgrading of Schmul Park, thereby providing a total of about 68 new acres of active recreational space to be developed by DPR by 2016. The addition of 68 new acres of active recreational space makes this one of the largest new active recreation park projects being undertaken by DPR in the city. Moreover, it bears mention that the overall Fresh Kills Park project would be at completion the City's second-largest City park (see also the discussion below on active facilities). It must be noted that the amount of land that could be dedicated to active recreation is greatly constrained by the existing natural resources and landfill infrastructure on the site.
- **Comment ES-8:** Page S-10: Future Conditions at the Project Site Without the Proposed Park: The section states *No public access would be provided at the site.* Is it Parks' opinion that if there is no park then the landfill roads would never be realized? And if so, where is the justification for this statement? (Molinaro)
- **Response ES-8:** The DGEIS analyzes the entire project, which includes both the proposed park and the proposed roads. Both elements comprise the proposed project put forth by the City and analyzed in the DGEIS. The description referenced in the comment is the No Action Condition for

the DGEIS, i.e., assuming no park and no roads, which is an assumed future condition for the purposes of performing the DGEIS analysis. As stated in the DGEIS, this is the condition against which project impacts are measured.

Comment ES-9: Page S-11: Framework For Environmental Impact Analysis: It is the objective of this GEIS to provide a comprehensive and cumulative examination of the potential environmental impacts of the proposed project, with an emphasis on the short-term projects and those elements that require permits and approvals from the City, State, and Federal agencies.

The DGEIS fails to consider the establishment of adequate and realistic design guidelines to strengthen the use, and overall organization and future programming of the park. In Chapter 5, specifically, Open Space and Recreational Facilities – Table 5-5 (p5-8) and 5-7 (p.5-11), only 44.1 acres of the 197.5 programmed active acres will be part of the short term projects. This represents 22.32% of the active acres to be developed at Fresh Kills Park, through 2036. It is not the potential environmental impacts of the park elements, but instead an emphasis on moving almost 78% of the active programming to the year 2036 or beyond. (Molinaro)

Response ES-9: DPR developed the project Fresh Kills Park programming and phasing as presented in the DGEIS based on many years of community outreach and collaboration in developing the Draft Master Plan (DMP), which balanced a number of needs including needs for: programmed activities; active and passive spaces; enhanced landscapes and ecological restoration; and new public access roads. These project elements are expected to be implemented by 2016 and 2036 given reasonable and logical phasing and fiscal considerations, as well as coordination with the Fresh Kills Landfill closure program being implemented under a Consent Order by DSNY. Since the north and south landfill sections at Fresh Kills are already closed, and have been for some time, the initial phases of park construction would proceed in these two areas. However, both these park areas also have limiting factors such as the presence of the landfill sections and their side slopes (which are not conducive to recreational fields and the slopes cannot be altered without significant cost and modification of the closure design) along with tidal wetlands along the creeks and freshwater wetlands that have evolved between the mounds (see Figure 28-1). Despite these limiting factors, combined with the adjacent Owl Hollow project, DPR proposes a total 140 acres of programmed open space (not including enhanced landscape and ecological restoration) in these park areas by 2016, of which 119 acres, or about 85 percent, are programmed for active space. DPR is taking all

steps to advance the recreational aspects of the park and is being creative in designing for active types of open space. For example, in North Park Phase A (the first phase of the proposed park), the surface of the approximately 0.6 mile arc path to the waterfront will allow for jogging and biking access to the waterfront. These paths will then ultimately connect to 20-foot-wide multi-use paths that are proposed around the base of the north and south mounds which will provide about 10 miles of hard surface paths suitable for biking, jogging and walking opportunities in the park. In addition, a large new recreational field is proposed in North Park. In South Park, proposed active facilities include mountain biking, a sport barn, additional ballfields, tennis courts, equestrian and other facilities. Kayaking and canoeing opportunities would also be provided in the Confluence as part of the early phases of construction; however, these facilities would not appear in the active recreation acreage since they are proposed on-water and the acreage is therefore not counted under CEQR methodology. As stated above, DPR is also constructing 21 acres of new athletic fields at Owl Hollow Park. In terms of new active open space, the addition of 119 acres of new active open space is a significant addition to the local open space inventory and makes the proposal at Fresh Kills one of the largest new active public park projects currently underway in the City.

In the long term, the largest of the new active recreational facilities proposed in the park is in the Point. Since this is in an area that was once the staging area for DSNY operations it has the advantage of being flat and previously developed with few existing wetlands. Thus, it is optimal for the development of new active recreational facilities. However, DSNY will need this area for continued staging for landfill closure (both the east and west mounds) and then post-closure management and maintenance would also be based in this area. For these reasons, DPR anticipates not being able to proceed with construction in this area until after 2016. No specific programmed dates have been set yet for the second phase of construction (see Table 1-11 of the DGEIS); however, DPR proposes to advance development of these important active recreational facilities, subject to future available capital funding.

Comment ES-10: Page S-13: DMP Conceptual Plan: North Park is one of the early phases of implementation and is proposed for simpler recreational facilities, vast natural settings, meadows, wetlands, and creeks, and is envisioned as a lightly programmed natural area connecting with Schmul Park. South Park is also one of the early phases of implementation and is proposed to have active recreational uses, an equestrian facility, a mountain biking venue, and a neighborhood park in a large natural

setting. Here there would be tennis courts; and indoor aquatic and/or track and field facility; and an equestrian center. The DGEIS provides no explanation as to the following contradiction: if South Park is one of the early phases of implementation, then why are there no active recreational uses in South Park scheduled for completion by 2016, pursuant to Table 5-5? (Molinaro)

- **Response ES-10:** As stated above, 21 acres of public park with active recreational facilities have been advanced at the Owl Hollow Park project. Table 1-10 of the DGEIS identifies multiple other projects proposed in South Park by 2016, including linear loop trails and overlooks, the South Park Multi-use Paths and Recreation facilities (including tennis, equestrian, biking, and indoor track and field facilities), and mountain biking. The total amount of new active space proposed in South Park is 78.14 acres.
- **Comment ES-11:** Page S-26: Probable Impacts of the Proposed Project – Socioeconomic Conditions. In addition, no private employment currently on the project site would be displaced. The proposed project will not displace neighborhood businesses or special or unique manufacturing operations ... In addition, no indirect displacement impacts are expected with the proposed project. The DGEIS fails to discuss the adverse socioeconomic impacts for businesses operating on City-owned parcels surrounding the subject site. Existing businesses on City owned parcels have been indirectly displaced without examination of the characteristics of the proposed action. The businesses were located on parcels not programmed for future use. These uses were also located in an area where adjoining uses were consistent with the displaced uses. The indirect displacement of these businesses will now make it difficult for said business categories to remain in the area. Most other adjoining parcels are inconsistent with required zoning for the intended uses. These actions have directly displaced uses that directly support businesses in the area and bring people to the area that form a unique customer base for these local businesses. Lastly, the action also directly displaced workers who form the base of the existing businesses. (Molinaro)
- **Response ES-11:** Based on information gathered between the DGEIS and this FGEIS, only one business was within the proposed park mapping, a nursery (flower) business. Although the park mapping is not yet in-place, the flower business has already chosen to vacate. In addition, DPR proposes to modify the proposed park mapping to exclude a separate property containing a trailer rental business from the site. Thus there are no significant adverse socioeconomic impacts of the proposed project.

- **Comment ES-12:** Page S-55: *No advantage to the 2-lane or the 4-lane design from a park perspective.* There is no discussion to the advantages of either a 2-lane or 4-lane design from a Staten Island driving perspective. Is it the primary mandate of the Parks Department that the proposed roads serve the Fresh Kills Park first, and then the public? If this is so, the report does not state where or when this mandate was discussed, reviewed, and adopted. The agency, during several public meetings concerning the end-use of Fresh Kills, did not, at any time, state this as a Parks Department mandate. (Molinaro)
- Chapter 23, "Alternatives," provides a full discussion of the advantages **Response ES-12:** and disadvantages of the two- and four-lane road alternatives as well as a comparison of impacts. As stated above and also in the DGEIS, it is the dual objective of the proposed park roads to provide public access roads across the Fresh Kills Landfill property, and also to provide access to the proposed recreational facilities, for both private vehicles and transit vehicles. Based on the travel demand data developed for the DGEIS, either a two-lane or a four-lane road across Fresh Kills could handle the projected traffic volumes through the park with widenings to allow for additional lanes at the intersections for separate turning movements. The project analyzed in the DGEIS was a four-lane road. The comment above is referring to the two-lane road alternative, which is also analyzed in the DGEIS as an alternative to the proposed project (as a hybrid alternative comprised of two- and four-lane roadways this alternative was presented in the "Fresh Kills Park Conceptual Roads Report," see the citation in the DGEIS above). A two-lane road is narrower in width, which reduces the impact of the road on natural features (e.g., wetlands), and provides capacity for biking and pedestrian trails.
- **Comment ES-13:** Page S-55: *It states that the two-lane road proposal is more consistent with park design intention, prioritizing bike, pedestrian and boating experience.* The report does not state where or when the Parks Department made the decision that the roads are not a priority to Staten Islanders and that roads through the landfill are of secondary importance to bicycle, pedestrian, and boating experiences. (Molinaro)
- **Response ES-13:** As stated above, in the DEIS, and this FEIS, the proposed park roads across Fresh Kills Park are a priority for the project, as is the goal to provide accessible public open space, with significant active recreational space.
- **Comment ES-14:** Page S-55: It states that the Fresh Kills Park goal is to leave the northern area of Section 6/7 as pristine and natural. The report does not

document where or when the Parks Department made this decision, and whether it was a departmental decision or a result of the public meetings/discussions. If it was a result of public meetings, the report does not document at which public meeting this was discussed and finalized. (Molinaro)

- **Response ES-14:** The presentation of proposed park land uses and programming as presented in the DGEIS were based on the Fresh Kills Draft Master Plan (DMP) (March 2006), which was developed over many years with input from the community as well as political representatives, state and City agencies, including input from the Staten Island Borough President's office. The DGEIS also presented a Reasonable Worst Case Development Scenario that was developed specifically for the DGEIS and was circulated for review as part of the Draft and Final Scopes of Work (May and August 2006, respectively). The development of an open space program for the park took into account the many factors necessary to develop a park program for a nearly 2,200-acre site, including the need for construction of DSNY post-closure operations, as well as park design and programming for active recreational facilities, passive and natural areas, and the challenges presented for park development at Fresh Kills, given that large portions of the site are occupied by hundreds of acres of regulated solid waste mounds and tidal and freshwater wetlands (see Figure 28-1). Taking all these factors into consideration, the plan presented in the DGEIS (as described in detail beginning on page 1-27 under "Framework for Environmental Analysis") provided a framework for the GEIS impact analyses. Park programming will continue to evolve over many decades as the park moves through its multiple development phases. That being said, the northern area of the proposed park in both the North and East Parks is proposed to have active recreation with waterfront access and would include active recreational pursuits such as kayaking; however, given the large extent of wetlands and the proximity of this portion of the park to the William T. Davis Wildlife Refuge, the area north of Landfill Sections 3/4 and 6/7 as shown on Figure 1-12 of the DGEIS and this FGEIS is appropriately programmed largely for passive natural areas with limited and controlled public access.
- **Comment ES-15:** Page S-56: Lesser Impact Alternative. *The roadways proposed with the proposed project would also not be constructed.* The report does not cite when, where, or who made the decision that if there is no Fresh Kills Park there will be no landfill roads. In addition, such a statement ignores the fact that there are, indeed, roads that already exist within the landfill. (Molinaro)

Response ES-15: No decision has been made to not build roads and they are an integral part of the proposed design for the park. In accordance with CEQR and SEORA, this alternative is presented for the purposes of comparison to the proposed project, which includes seven miles of roads across Fresh Kills. This alternative assumes that none of the wetland impacts associated with the proposed park and roads would occur, nor would the associated traffic impacts. The roads currently across Fresh Kills are DSNY service roads and are not readily suitable for use as public roads, nor do they connect with Richmond Avenue on the east. Any such improvements would require capital expenditure and would impact wetlands and/or potentially impact landfill infrastructure in order to upgrade and connect these roads with Richmond Avenue. As stated above, an alternative road alignment is also presented in this FGEIS, as forwarded by the Staten Island Borough President. This alternative is presented in this FGEIS in Chapter 22, "Alternatives."

CHAPTER 1: PROJECT DESCRIPTION

- **Comment 1-1:** Page 1-57: Vehicular Circulation 2016: *This section describes the road construction schedule moving from west to east: first beginning with the connection from West Shore Expressway into the park by Arden Avenue, then continuing into the two bridges area, and then going to the proposed Forest Hill Road connection.* The DGEIS does not provide information as to why – and what are the benefits of – the Department choosing to start the road work at the West Shore Expressway instead of, for example, starting at the Forest Kill Road end first. (Molinaro)
- **Response 1-1:** The benefits of beginning construction from west to east are that the important work on the roads project can commence at the West Shore Expressway while landfill closure construction is being finalized at Landfill Section 6/7. These advantages to facilitating park road construction are described in this FGEIS (see page 1-79).
- **Comment 1-2:** Page 1-57: Vehicular Circulation 2016: *This section describes that at the bend of the road (in the southern section of present landfill section 6/7) there would be an overlook parking for 30 vehicles that would provide a viewing area to Richmond Creek.* The report does not provide information as to why there was no discussion at public scoping and/or park design meetings for such an overlook and parking for 30 cars. (Molinaro)
- **Response 1-2:** Incorporating a small parking area at this location evolved during the DGEIS preparation, site design, and park programming process. There are no adverse environmental consequences from providing a small 30-

vehicle parking facility at this location, with the advantages of providing a public viewing amenity.

Comment 1-3: Page 1-65: Public Transit Plan: *It is expected that with the proposed Forest Hill Road connection operational in 2016.* The report does not discuss why it will take eight years to have the Forest Hill Road operational. (Molinaro)

- **Response 1-3:** It is not proposed to take eight years to build this segment of road. The year 2016 is the near-term analysis year for the GEIS. It is expected that the connection to Forest Hill Road would be completed and operational by 2016. DPR is exploring all engineering, permitting, and funding mechanisms for accelerating the roads at Fresh Kills, and subject to available funding, would look to open this phase of the proposed roads sooner than 2016, if feasible and permitted by all State and Federal agencies.
- Comment 1-4:Page 1-65: Public Transit Plan: By the year 2036, the second park road
connection with Richmond Avenue would be completed at Richmond
Hill Road. The report does not discuss why it will take 28 years to have
the Richmond Hill Road connection operational. (Molinaro)
- **Response 1-4:** The year 2036 is the second analysis year for the GEIS. It is not the completion year for the proposed road. As stated above, DPR is continuing to explore all mechanisms for accelerating the opening of all the proposed park roads, subject to available funding and permitting by state and federal agencies.
- **Comment 1-5:** Page 1-79: Park Roads and West Shore Expressway Connections. It is anticipated that the phasing of road construction would begin with the connections to the West Shore Expressway, the southern leg of the Confluence Loop Park Road, and then the connections connecting to Forest Kill Road. The DGEIS does not provide information as to why and what are the benefits of the Department choosing to start the road work at the West Shore Expressway. (Molinaro)
- **Response 1-5:** As stated above, there are phasing benefits to starting with the connections at the West Shore Expressway.
- **Comment 1-6:** In Chapter 1, "Project Description," (pg. 1-66), the DGEIS discusses the possibility of wind energy providing 10 percent of the proposed park's energy demand. This assumes two 100-foot wind turbines placed in the vicinity of "the Point." The chapter states that park conditions are not ideal for wind power and that "the Point" has a greater potential for

wind energy. This last statement does not appear to be factual, and the Department of Parks and Recreation should reference scientific data that supports this conclusion. Data collected by BQ Energy is clear that the greatest wind energy potential in the Fresh Kills Park is at the top of each of the landfill mounds. The report to the State and City of New York titled *Evaluation of the Feasibility of Installing a Commercial Scale Wind Energy Facility in Fresh Kills, Staten Island, New York* includes a scientific study that shows the highest potential for wind energy atop the landfill mounds. (Curran/BQ Energy)

- **Response 1-6:** As described in greater detail below, under "Energy," the smaller wind turbines referenced in the DGEIS and cited in the comment above would supply energy to DPR facilities. It is acknowledged both in this response to comments and the DGEIS that a commercial wind turbine operation at Fresh Kills Park would need to be sited on the higher elevations of the site (e.g., the landfill sections) and would be subject to a site-specific environmental review and permitting.
- **Comment 1-7:** We are concerned about the stated intention of using a Generic Environmental Impact Statement to provide flexibility for detailed programmatic decisions to be made in the future. That usually means that public review is short changed. We are formally asking that there be allowed opportunities for public review and comment on each major phase of the project as it comes online as a matter of course. (Lofaso)
- **Response 1-7:** As stated above, the Fresh Kills Park DMP, released in March, 2006, was the culmination of several years of community outreach and coordination between the City, the community, City, state, and federal agencies, and elected officials. Based on the DMP, a Draft and Final Scope of Work were prepared for the Fresh Kills Park DGEIS. Both the Draft and Final Scope created an envelope of development and potential programming for the proposed park (the RWCDS) that was specifically created to allow flexibility in future design based on community input, not to diminish it. In addition to the many years of public involvement in the preparation of the DMP, a public hearing was also held on the Draft Scope of Work (May 2006). Based on that public hearing, additional potential uses and activities were added to the DGEIS and the RWCDS (see Table A-2 "DMP Representative Features by Element Category," in Appendix A, and Table 1-5 "RWCDS Park Use Element Categories" of the DGEIS and this FGEIS). The DGEIS therefore provides a comprehensive envelope for environmental impact analyses based on this Reasonable Worst Case Development Scenario, which reflects a conservative approach. In addition, for the shorter term projects presented in the GEIS such as North Park Phase A and the South Park elements scheduled for construction prior to 2016, as well as

the proposed roads (for which conceptual and design drawings have been prepared and analyzed for this GEIS) expanded analyses were provided for review in the DGEIS and are also included in this FGEIS.

Thus, for a project with a 30 year build-out, the environmental review has been based on a Master Plan process that occurred over many years and also included the use of an RWCDS. For near-term projects where design has been advanced, these details have been provided for public review and comment.

DPR will continue its public outreach policy in the design process for Fresh Kills Park, as is the policy of DPR for all park capital projects. Community Board review and City Design Commission review occur with any capital project. That outreach will include additional public review as future projects are designed. Thus, it can be concluded that comprehensive, public review has not been short changed by this process. Rather, that outreach has been, and will continue to be, extensive and comprehensive.

WIND TURBINES

Comment 1-8: The EIS fails to consider the positive impacts of wind turbines that could be built on the site. (Lanza, Halle for McMahon, Barlotta, Curran)

- **Response 1-8:** Page 15-6 of Chapter 15, "Energy," provides text describing the positive impacts that could be realized from wind turbines at Fresh Kills. Additional text has been added to this FGEIS with respect to these benefits that derive from either commercial wind turbine operations or smaller-scale DPR operated facilities at Fresh Kills Park.
- **Comment 1-9:** Fresh Kills Park should include wind turbines. (Cusick)

Response 1-9: The Fresh Kills Park project that was analyzed in the DGEIS included a proposal for six commercial wind turbines at Fresh Kills (that proposal has been clarified for this FGEIS to include five wind turbines). The BQ Energy feasibility study included two wind turbines in West Park; it was the conclusion of DPR that wind turbines in West Park would be incompatible with City plans for the proposed 9-11/WTC Monument at this location. This five-turbine design is consistent with Alternative 2 in the BQ Energy study. Because DPR is not a utility provider, it is expected that a proposal for a commercial wind turbine system at Fresh Kills would need to be operated as a concession or franchise, the details of which have not yet been developed. Given these factors, and that a site-specific environmental review would be necessary in order to properly examine the impacts of a proposed wind turbine proposal from the perspective of both environmental review and permitting (any wind

turbines proposed on the landfill sections would require DEC approval), the DGEIS provides a generic assessment of potential impacts. A sitespecific environmental review would address the potential for both adverse and positive effects of any commercial wind turbines at Fresh Kills Park. In response to this and other comments, DPR has expanded the generic analysis of wind turbines in this FGEIS.

- **Comment 1-10:** The EIS underestimates the benefits of wind turbines and overestimates the negative impact, especially as it pertains to their supposed visual intrusion. (Totone)
- **Response 1-10:** Page 15-6 of Chapter 15, "Energy," in the DGEIS provided text stating the positive impacts that could be realized from wind turbines at Fresh Kills. Additional information on the benefits of wind turbines is presented in the FGEIS. In accordance with CEQR/SEQRA/NEPA, the purpose of Chapter 8, "Urban Design and Visual Resources," is to disclose any potential significant adverse visual impacts of the proposed project as a whole, including the proposed commercial wind turbines.
- **Comment 1-11:** I was hoping that the EIS would reflect the 14-month long study on wind turbines conducted through the Borough President's office which stated that Fresh Kills was the only location in NYC suitable for a wind farm. The EIS fails to recognize the efforts made by the BP and gives no credit to the study that was conducted. (DiResta, Barlotta, Curran)
- **Response 1-11:** As stated above, the proposed project presented in the DGEIS and this FGEIS includes a commercial wind turbine proposal at Fresh Kills Park. It was based on a proposal put forth by BQ Energy (August, 2007), but does not preclude other potential proposals. DPR does not propose a commercial wind turbine on West Park due to potential conflict with a proposed 9-11/WTC Monument. Additional data has been added to this FGEIS relative to the benefits of commercial wind turbines at Fresh Kills Park.
- **Comment 1-12:** The wind turbines in Killarney, Ireland do not cause traffic accidents and they look fantastic. (Kozak)

A wind turbine is no more distracting than a roadside billboard to motorists. The EIS does not cite any studies that show that wind turbines near roadways cause accidents. (DiResta)

Response 1-12: As stated above, this text regarding driver distractions has been deleted from the GEIS.

Comment 1-13:	Wind turbines are not going to drop oil heating costs or the price of gasoline. The view of Fresh Kills should not be dominated by wind turbines. (Zederiko)
Response 1-13:	Comment noted. An analysis of the potential visual impacts associated with wind turbines is provided in Chapter 8, "Urban Design and Visual Resources."
Comment 1-14:	"Waste Age," a professional journal of the solid waste industry, endorses the feasibility of wind turbines on landfills, so it must work. (Barlotta)
Response 1-14:	The GEIS does not state that commercial wind turbines on the site are not feasible. In fact, the DGEIS examined a commercial wind turbine proposal as part of the project. These discussions are presented on pages 1-66, 1-79, 6-1 to 6-2, 8-11 to 8-13, 10-79 to 10-81 and 15-6 to 15-7. Additionally, as stated above, a commercial wind turbine project on the site would need to be evaluated based on a site-specific proposal and it is expected that such a franchise would be operated by a private entity, not DPR. Therefore, such a proposal would be put forth by the private operator and subject to its own environmental review evaluating the specifics of the plan as well as the permitting by DEC (see the discussion above).
Comment 1-15:	If the City is so committed to going green, why is it opposed to the wind turbines? (Valentin)
	Installation of the wind turbines on the mounds would still allow for the full development of the park, and the environmental integrity of the landfill would not be compromised. (Curran)
	There is enough wind on Staten Island to have a viable wind farm at Fresh Kills. Wind turbines should be more seriously considered and can exist within the park. They are a wonderful idea, and we support the plan. (Curran, Armstrong, Rampulla, Dahl, Syed, Robusto, McGowan, Savino, Pancila)
Response 1-15:	As stated above, the proposed project is not opposed to commercial wind turbines. In fact, they are included as part of the DGEIS.
Comment 1-16:	It has been said that seven wind turbines cannot be supported on a landfill. There are seven turbines on a landfill in Buffalo. (Luisia)
Response 1-16:	Comment noted. The DGEIS examined six wind turbines at Fresh Kills. No commercial wind turbines are assumed in West Park.

- **Comment 1-17:** The EIS is only focused on the negative implications of wind turbines. There is no analysis of the positive impact of wind energy. The EIS should fulfill the requirements under the law and give a balanced view on wind power at Fresh Kill. The EIS does not offer another point of view on a wind farm on Fresh Kills. The EIS had many observations on the impacts on wildlife, shadows, and motorists, but there was nothing on the symbolism of wind turbines moving us away from carbon-based pollution sources of energy to clean wind energy. There should be a calculable amount of pollution that that the wind turbines would reduce. I'm disappointed that there is not more in the EIS that shows the positives of wind energy at Fresh Kills. (Burke, Luisia)
- **Response 1-17:** Environmental review under both CEQR and SEQR requires that a GEIS disclose potential adverse impacts from a proposed project, despite the benefits that may be realized with respect to energy conservation. As it pertains to a commercial wind turbine proposal at Fresh Kills Park, these impacts have been disclosed in a generic manner. As stated above, a site-specific analysis would be necessary to support the environmental review requirements for a site-specific permit application that would be necessary for commercial wind turbines. As also stated above, page 15-6 of Chapter 15, "Energy," presents the positive impacts that could be realized from wind turbines at Fresh Kills. This FGEIS presents additional data on the benefits of commercial wind turbines.
- **Comment 1-18:** There was a windfarm that failed in Lakeville, New Jersey, after \$320 million was spent on it. I'm just bringing this to the BP's attention. (Byrne)
- **Response 1-18:** Comment noted.
- **Comment 1-19:** The article "Windmills Split Upstate NY Town and Families" by Helen O'Neill of the Associated Press was submitted for the record. The article deals with the conflicts that have arisen over wind turbines in upstate New York. (Dahl)
- **Response 1-19:** Comment noted.
- PROPOSED PARK DRIVES
- **Comment 1-20:** Staten Island needs new roads. It is clear that the Parks Department proposal to build new landfill roads through wetlands, streams and over garbage mounds would never pass the various environmental standards, and would cost at least \$360 million to build. We strongly support the BP's position that the future location of roads in Fresh Kills Park should

follow the route of the existing landfill roads. The Parks Department plan for roads will not work; Staten Islanders need a common sense plan that will use existing roads and that can be done ASAP. The plan for Fresh Kills Park needs to include the existing DSNY roads to alleviate traffic on Staten Island. The EIS fails to consider the positive effects of using the roads that are already on the site.(Savino, Cusick, Lanza, Totone, Halle for McMahon, DelAngelo, Paciello, Riley, Pepenella, Sisti, Krueger, Edwards, Claro, Salmon, Stern)

- **Response 1-20:** As stated above, as well as in the DGEIS and this FGEIS, the City is committed to building park roads across Fresh Kills. In order to get from Richmond Avenue to the West Shore Expressway, the roads must cross wetlands and open water and go over or around the landfill sections. Design of the roads, therefore, requires a balance of these considerations and an evaluation of the impacts. The DGEIS and this FGEIS propose the development of some seven miles of roads through Fresh Kills Park, which is a significant new City road system. An extensive analysis of potential roads and alternatives were included in the development of the road plan presented in the DGEIS. This analysis of alternatives (Conceptual Roads Report, Phase 3A, Task 8.3, prepared by Arup, et. al.) included an examination of the potential for reusing the existing DSNY haul roads on the site, as well as an examination of a western alignment alternative around Landfill Section 6/7 (referred to in the DGEIS as the "Alternative Richmond Hill Road Connection (West of Landfill Section 6/7). These alternatives are examined in Chapter 22, "Alternatives," of the GEIS. In response to the above comments, additional alternatives are analyzed in this FGEIS, including a modification to the western alignment alternative that describes and examines an alternative roadway alignment as presented by the Staten Island Borough President (SIBP) as part of the public review of the DGEIS and compares the impacts of that alternative (both positive and negative) to the proposed project.
- **Comment 1-21:** The preferred alternative in the FEIS should be the Borough President's plan for the roads, and DPR's plan should be removed from the FEIS and not considered. (Oddo)
- **Response 1-21:** DPR presented a proposed road project in the DGEIS and this FGEIS. As stated above, the SIBP alternative road proposal has been added to Chapter 22, "Alternatives," of this FGEIS.
- **Comment 1-22:** Staten Island needs roads because the public transit is lacking. (Oddo, Ignizio)

- **Response 1-22:** As described in the DGEIS and this FGEIS, the proposed park includes significant new roadways with seven miles of new roads that have been proposed across Fresh Kills Park. These roads have been analyzed in the GEIS. The proposed project also includes new greenway connections to link the park in to existing greenways and provide an expanded network for cyclists. The roads are also expected to be used to expand mass transit (bus) routes into the site.
- **Comment 1-23:** The roads plan designed by DPR goes over 50 feet of garbage and wetlands and was designed to fail. The EIS contains recommendations to build roads that will never be built due to all of the approvals that would have to be in place first; building roads over existing wetlands is a clear violation of DEC regulations. (Savino, Oddo, Halle for McMahon, Wonica, Nagy)
- **Response 1-23:** The proposed roads as presented in the DGEIS and this FGEIS were not designed to fail. In fact, substantial engineering design, environmental analysis, and coordination with reviewing agencies (NYSDOT, NYCDOT, NYCDOT, NYCDDC, DEC) was performed in drafting the proposed road design. It is the objective of the proposed roads to connect Richmond Avenue on the east with the West Shore Expressway on the west. Lying between that connection there is Landfill Section 6/7 (which occupies about 305 acres) as well as the adjacent stormwater basins, freshwater wetlands, and the tidal wetlands and the adjacent areas of Mill Creek and Richmond Creek, all of which must be crossed in order to provide connections to Richmond Avenue.

It is recognized in the DGEIS and this FGEIS that the proposed roads over the landfill and across wetlands would require extensive design coordination and impact avoidance techniques. Given that off the landfill section there are significant areas of wetlands, mitigation for both tidal and freshwater wetland impacts is presented in Chapter 23 of the DGEIS and this FGEIS, "Impact Avoidance Measures and Mitigation." It is believed that with the proposed avoidance measures and mitigation, the proposed roadway system can be designed and constructed to avoid, minimize, and mitigate all environmental impacts, subject to further refined design and permit requirements. To that end, DPR is continuing to coordinate with DEC in the implementation of the park road. In addition, DPR has initiated a Supplemental Environmental Impact Statement (SEIS) to fully provide additional design details on the proposed roads, provide additional impact analysis based on those design details, and examine other possible alternatives, alignments, and road connections to Richmond Avenue.

In addition, this FGEIS includes a full analysis of the SIBP alternative. That alternative also requires the crossing of the landfill and wetlands.

- **Comment 1-24:** The EIS does not compare the costs of building new roads over 50-foot mounds of garbage to using the existing landfill roads. (Halle for McMahon)
- **Response 1-24:** The costs associated with the proposed road system and the alternatives will be developed as design on the road system progresses.
- **Comment 1-25:** The BP's plan is a good plan that works, that the BP's office first proposed 10 years ago. The Mayor's Office is putting up money to look at it. (Nagy)
- **Response 1-25:** As stated above, a detailed analysis of the SIBP road proposal is presented in Chapter 22, "Alternatives," and is compared to the proposed project.
- **Comment 1-26:** The existing roads and landfill plateau held up under the weight of the WTC materials that were brought in after September 11, 2001, so there is no reason not to use the existing roads now. The current roads are probably the strongest roads built in New York City and they are the roads that the plan should include. DSNY has driven equipment on the haul roads that would crush half the roads on Staten Island; they're great roads that have already been paid for. It will save a lot of money and time to use them. (Barlotta, Marra, Morano)
- **Response 1-26:** Road foundation strength is just one factor in roadway design. In order to be retrofitted as public roads, the existing DSNY haul roads at the site would also need to meet the design requirements of the proposed public park roads (see Table 1-7 of the DGEIS and this FGEIS) and in many cases, the haul-road alignments, which were built for slow moving trucks and heavy vehicles, do not meet the standards for automobiles traveling at the 35 mph design speed. This is just one example of how haul roads are not compatible with the road design objectives of the proposed park roads. Therefore, regardless of the adequacy of the haul road foundation, other criteria must be fulfilled to meet the goals and objectives of the project for the Fresh Kills Park road network. However, as stated above, based on the comments received on the DGEIS, this FGEIS includes an alternative that examines in greater detail the potential for reuse of the haul roads and alternative alignments that are a modification of the alignment previously presented in the DGEIS.

Comment 1-27:	There is no mention of opening up the existing landfill roads, therefore, the EIS fails to consider the positive impacts that opening these roads would have on reducing traffic on Richmond Avenue, Travis Avenue, and Arthur Kill Road and on the surrounding communities of Travis, New Springville, and Heartland Village. (Derrico, Valentin)
Response 1-27:	The DGEIS presented an examination of both the positive and negative traffic impacts on the local roadway system due to the proposed opening of park roads across Fresh Kills. As stated above, this FGEIS also includes an analysis of a modified alternative roadway alignment

Comment 1-28: New Yorkers for Parks applauds the innovative proposal to reclaim the Fresh Kills landfill for reuse as public open space and supports the two-lane highway option. (Morrisson Golden)

impacts for all the roads cited in the comment above.

previously presented in the DGEIS, which includes an analysis of traffic

- Response 1-28: Comment noted.
- **Comment 1-29:** The EIS misses the opportunity to open roads in the near term. The roads would also allow emergency responders to quickly get to where they are needed; they could provide a quicker route between Richmond Avenue and the West Shore Expressway. The Borough President is correct in trying to get the roads open soon. (Zederiko, Sheirer)
- **Response 1-29:** As stated above, DPR is committed to construct proposed roads across Fresh Kills Park and is seeking to open Phase 1 of those roads as soon as possible subject to final design, funding, and permitting decisions.
- **Comment 1-30:** Why isn't there discussion of opening the roads first and then developing the park? We need the roads first in order to get people into the park to enjoy it. (Valentin)
- **Response 1-30:** The proposed roads are part of the overall plan for the redevelopment of Fresh Kills Landfill into Fresh Kills Park. A detailed description of the proposed park phasing is described in Chapter 20, "Construction," of the FGEIS. Completion of the proposed roads would allow access to the proposed recreational opportunities within the interior of the park.
- **Comment 1-31:** We do not see the need to have four-lane roads traversing the new Fresh Kills Park. The data shown in the study does not indicate much benefit from the proposed road through the park. Additions to the West Shore Expressway and the connection of the Korean War Memorial Highway to Richmond Avenue would improve traffic flow and keep it away from the park. (Lofaso)

Response 1-31:	Comment noted.
Comment 1-32:	Park roads should be under the control of the Parks Department to facilitate closing of the roads for special use or events that would warrant such closings. (Lofaso)
Response 1-32:	Comment noted.
Comment 1-33:	We favor New Park Drive Alternate B, as shown in Figure 6 of the Draft Master Plan. This drive would keep the traffic close to Richmond Avenue and the proposed parking lots. East Park and Davis Wildlife Refuge would benefit by keeping a large undisturbed area open for habitat restoration, improved wetlands and new forested areas. This area could be accessed by hiking and walking trails that would have a minimal impact on flora and fauna. (Lofaso)
Response 1-33:	Comment noted. This alignment was analyzed as the proposed project in the DGEIS and this FGEIS.
Comment 1-34:	We are supporting the BP's plan for two reasons: the timeline, since the BP's plan could potentially be constructed in four years while Parks roads would be built in 2016; and the cost. The Parks road design is underfunded by approximately \$275 million, but the BP believes these roads could be build with the \$32 million already allocated. DPR should take another look at the specific road network. (Baran)
Response 1-34:	Chapter 22, "Alternatives," provides an analysis of the SIBP's proposed roadway plan. The costs associated with the proposed road system and the alternatives will be developed as design on the road system progresses.
Comment 1-35:	We support the position of the BP in opposition to the current mapping plan submitted by the Parks Department for Fresh Kills Park, specifically the plans dealing with the proposed roadway placement and construction in the park. (Remauro)
Response 1-35:	In response to this and other comments, this FGEIS alternative road alignment and the analyses required for such a mapping action have been included in the FGEIS.
Comment 1-36:	The Borough President's roadways should be incorporated as an alterative in the EIS. (Rampulla, McGowan)
Response 1-36:	In response to public comments, the SIBP alternative roadway plan is examined in Chapter 22 of this FGEIS.

Comment 1-37: It is imperative that these roads fall under the jurisdiction of NYCDOT so that they are engineered and maintained properly. (Baran)
Response 1-37: Regardless of jurisdiction, park road and bridge construction projects as part of the Fresh Kills Park project involve close coordination with

ACTIVE RECREATION

NYCDOT.

Comment 1-38: The plan for Fresh Kills does not include the active recreation that people wanted. We need more active recreation, not passive recreation. Active recreation in Staten Island has not kept up with the growth of the Island. The kids that are growing up now will have kids before any of these parks area made into something they can use. The DGEIS fails to strike a balance between the City's vision for the park and the facilities, features and activities requested by Staten Islanders through many public meetings. Other alternatives to bringing active recreation facilities to the park quickly should be looked at. Only 257 acres will be developed for active recreation, which is less than 12 percent of the 2,200 acres of Fresh Kills. And most of these facilities will not be complete until 2036. (Rampulla, Lanza, Semich, Savino, Halle for McMahon, Derrico, Morano). The Parks Department has failed to fully and reasonably examine alternatives to passive recreation in the form of active such as baseball, soccer, hockey, skate, and bike ramps, archery, rifle ranges, tennis, horseback riding, bicycle paths-these are required in parks by the Administrative Code. (Halle for McMahon, Zederiko)

Response 1-38: As stated above in the responses to comments and also in the DGEIS, the proposed project includes extensive areas dedicated for active space that will be specifically programmed with the community through the build-out of the park, which will provide significant active recreation on the site, despite a number of site constraints. For example, much of the site is wetlands and landfill mounds, which limit development potential for active recreation. Figure 28-1 identifies which portions of the site are limited for active recreation due to site constraints. The park would provide acres of running, hiking, and biking trails. In addition, independent of the proposed project, the 21-acre Owl Hollow Park is being developed with four soccer fields for community use. There are also a number of active recreational uses that would be constructed within the next three to four years, including a kayak launch in North Park, ball fields in South Park, and several segments of biking and pedestrian trails. Total active recreational acreage at the site by 2016 is 44 acres, with 133 acres in 2036, which is a substantial active recreational development project in and of itself.

Comment 1-39:	DEC can decide to map wetlands on any portion of the site at any time.
	As time goes on, the places that are supposed to be active recreation
	will be declared to be off limits because the actual idea for that area is
	that is will be passive recreation. (Morano)

- **Response 1-39:** DPR designs for the park are in consideration of both tidal and freshwater wetlands mapped by DEC and U.S. Fish and Wildlife Service/ACOE Methodology. Any projects that fall within wetlands (or regulated buffer area/setbacks) would require permits and approvals from these agencies. DPR coordinates regularly with DEC on the park's wetland and landfill issues, and will continue to do so as the project is implemented. The areas proposed to date for active recreation (see Figure 28-1) have been laid out in consideration of these wetland limitations.
- **Comment 1-40:** I would like to see a golf course built on the site, which will take a lot more than 200 acres. (Zederiko)
- **Response 1-40:** Comment noted. A golf course proposal was considered for the mound elevations of East Park (Landfill Section 6/7). Based on the analyses conducted when preparing the RWCDS for the DGEIS, it was determined that a golf course proposal at this location would require a separate and more detailed review. Since this is a later phase of park development, if such a proposal was put forward, it would be subject to its own supplemental environmental review.
- **Comment 1-41:** Mountain bike trails were supposed to be included in the 2016 South Park plan but they are not there, which is directly related to the EIS. (Barlotta)
- **Response 1-41:** As shown on Table 1-10, page 1-73, Chapter 1, "Project Description," and described on page 1-77, mountain bike trails are proposed within the closed landfill section of South Park by 2016.
- **Comment 1-42:** The park should have an area for car enthusiasts to show off their collector cars. (Parascandola)
- **Response 1-42:** Comment noted. It is possible that auto shows and events could be part of the programming within Fresh Kills Park. These events could be held in standard or overflow parking areas, and other park areas programmed for events.

CHAPTER 2: LAND USE

- Comment 2-1: Page 2-19: Richmond Roadway Improvement Study. The fourth line refers to the Snake Hill Road portion of Richmond Hill Road. No such place exists. (Molinaro)
- **Response 2-1:** This text has been deleted from the GEIS.
- **Comment 2-2:** Page 2-26: Zoning, Project Site. *Thus the proposed mapping action would be a positive impact on the proposed project. The mapping of public place and the associated zoning actions would have no adverse zoning or land use impacts.* The DGEIS provides no basis for this statement. (Molinaro)
- **Response 2-2:** DPR has concluded that mapping the site as public parkland and creating public access to the waterfront where none has previously existed is a positive impact of the proposed project. Such a proposal is consistent with City, state, and regional goals with regard to management of public lands along the waterfront, and the proposed project is consistent with the City's local Waterfront Revitalization Program with respect to providing public access on public waterfront lands. Likewise, the mapping of a public place as an alignment across the site would not result in any adverse environmental impacts.
- **Comment 2-3:** Page 2-24: *The associated zoning actions would have no adverse zoning or land use impacts*. Refer to the general comments stated above. (Molinaro)
- **Response 2-3:** See the response above regarding previously stated comments proposed zoning actions.
- **Comment 2-4:** The DGEIS fails to consider a reasonable assessment of local land use, zoning and public policy regulations. The DGEIS proposes to vacate the NA-1 Special Natural Area District designation on the site, and remove Fresh Kills Park from the NA-1 listing of the Zoning Resolution. Page 2-1: Introduction. *A zoning map amendment to vacate the NA-1 zoning where it currently exists on the site.* The DGEIS fails to consider a reasonable assessment of local land use regulations proposed through zoning changes for the subject property. This map amendment will remove the now required discretionary approvals pursuant to Section 105-91 of the NYC Zoning Resolution by the NYC City Planning Commission. The intent of Section 105-91 ZR is to protect natural features of a public park by mandating the least alteration required to achieve the intended purpose. Removal of the Natural Area District may

have a significant adverse impact on existing low wetlands of Fresh Kills Park. (Englert, Molinaro)

- **Response 2-4:** Both the DGEIS and this FGEIS provided a complete description of the land use, zoning, and public policy conditions that relate to the site both currently and with the proposed project. As stated in the GEIS, the proposed project is consistent with local land use, would not conflict with zoning (see also the discussion below) and would implement a number of public policy initiatives at Fresh Kills.
- **Comment 2-5:** In 1975, the NYC Department of City Planning established the Special Natural Area District (SNAD) to guide development and protect areas endowed with unique natural characteristics. All of the creeks at Fresh Kills are mapped within the Special Natural Area District (Englert, Molinaro).
- **Response 2-5:** As shown in the DGEIS and in this FGEIS, only the creeks east of the Route 440 bridge are mapped in the SNAD.
- **Comment 2-6:** While mapped parkland has no zoning designation, the Special District has specific text (105-91 ZR Special District Designation on Public Parks) that protects the natural features of land designated as public parkland. In addition, any application proposed within this area today requires a City Planning Commission (CPC) approval (Englert, Molinaro).
- **Response 2-6:** The DGEIS and this FGEIS include the above citation (see page 2-5) with respect to CPC actions.
- **Comment 2-7:** The DGEIS provides no explanation as to why this application is proposing to reduce the current level of zoning protection. The DGEIS proposes to vacate the NA-1 Special Natural Area District designation on the site and remove Fresh Kills Park from the NA-1 listing in the zoning resolution. What are the potential impacts to the property and the surrounding wetlands if the NA-1 designation is haphazardly removed? (Englert, Molinaro)
- **Response 2-7:** There are no potential adverse impacts to zoning, public policy objectives, or the surrounding wetlands if the NA-1 designation is removed. After careful consideration by DPR and DCP, the NA-1 designation is proposed to be removed, thereby amending the zoning to reflect the existing conditions of the site, which, although it contains tidal and freshwater wetlands, is also a closed and highly engineered landfill.

Fresh Kills Landfill is an engineered landscape built on top of what used to be primarily wetlands prior to 1948. The 1975 zoning regulations that were put in place (the NA-1 district) did not take this into consideration, and included areas devoted to landfill operations as part of this SNAD district. As such, the ULURP application for the proposed project proposes removing the NA-1 designation because:

- Much of what look to be natural features on site are really part of the engineered landfill infrastructure (ie. the meadow plantings used as erosion control on the mounds, and the retention basins or "ponds" constructed for stormwater management). Management of these features is regulated through a Consent Order with New York State. This overrides many of the protections offered under the SNAD. For example, landfill features that have already been built in the SNAD include portions of the landfill service roads, the leachate trench and cutoff wall, the landfill gas collection system, and the landfill drainage system. Some of this infrastructure is underground and could require the disturbance of the above mentioned constructed "natural features."
- The existing natural features on the site the wetlands and creeks are regulated by the DEC. DSNY is currently required to mitigate any impact to these features if disturbance is required due to landfill maintenance or upgrades. DPR will also be required to mitigate any impact to these features if disturbed by the development of the park or associated road system.
- The DMP clearly states the goal to protect and improve natural resources with created and enhanced wetlands.
- **Comment 2-8:** What are the potential impacts to property and the surrounding wetland if this designation is removed? Is this application seeking to lower the current zoning controls on Fresh Kills Park from what currently regulates the William T. Davis Wildlife Refuge, LaTourette Park, Farm Colony, Willowbrook Park and High Rock Park? These amendments represent a complete change in the level of zoning protections afforded by the Special District. While the DGEIS claims that "the mapping of the site as a park... would complement the goals of the Natural Area District" (see Chapter 2, "Land Use, Zoning and Public Policy," Section E: The Future With The Proposed Project: 2016 And 2036 Zoning Project Site Page 2-24), it fails to demonstrate why that should require the removal of the NA-1 designation. (Englert, Molinaro)
- **Response 2-8:** As stated above, the ULURP application is seeking to change the current zoning controls at the proposed Fresh Kills Park site as it is a unique condition that was not envisioned when the SNAD was put into place. The entire footprint of the future Fresh Kills Park is regulated by the DEC through a Consent Order with New York State. This Consent

Order mandates the monitoring and maintenance of all landfill infrastructure on site, some of which is located within the SNAD. The repairs, alterations and upgrades to this infrastructure are mandated by law and as such, the SNAD requirements cannot be accommodated wholesale on this site. The William T. Davis Wildlife Refuge and LaTourette Park are not under the same regulatory requirements as Fresh Kills, and therefore will retain the SNAD designation.

While the proposed zoning actions related to the park would remove the NA-1 designation from the site, this action would facilitate the development of the park without compromising the objectives of the NA-1 district to protect and preserve natural resources in this area of Staten Island. In fact, the proposed Fresh Kills Park project would provide significant landscape and ecological enhancements that would further those objectives. For these reasons, it was concluded in the DGEIS and in this FGEIS that the removal of the special zoning district regulation from the project site is not an adverse impact of the proposed project with respect to zoning, land use, and public policy.

- **Comment 2-9:** How would these regulations affect the development of "the Confluence" if the natural features had to meet strict City Planning Commission oversight? (Englert)
- **Response 2-9:** The Confluence is a perfect example of why the SNAD is not appropriate at the proposed Fresh Kills Park. If the SNAD remains in place, the City Planning Commission would be required to determine what, if any, natural features would be affected by the development of the Confluence. However, the portion of the future Confluence within the SNAD is currently almost entirely occupied by pavement and structures used for DSNY operations, including constructed portions of the landfill gas, leachate and stormwater maintenance infrastructure systems, and the landfill service road, with limited natural resources.

The DPR proposal for the Confluence includes:

- The Loop Road the proposal is to map this road as Public Place and, because Public Places are zoned, the Public Place would either remain in the SNAD and have to go through the strict CPC oversight, or zoning would be vacated in this area in accordance with the current DPR proposal to rezone the Public Place right-ofway as M1;
- Recreational, cultural, commercial and educational facilities;
- The Terrace, Marsh and Sunken Forest (natural area restoration projects); and

• Waterfront programming focused on ecological, educational and participatory activities.

As stated above, DEC permits would still be required for all projects that affect wetland-related natural resources before construction could begin.

- **Comment 2-10:** Why was the current City Planning Commission approval required by 105-91 ZR not disclosed in the DGEIS? These amendments represent a complete change in the level of zoning protections afforded by the Special District. While the DGEIS claims that "the mapping of the site as a park ... would complement the goals of the Natural Area District ... (see Chapter 2 Land Use, Zoning and Public Policy E: The Future with the Proposed Project: 2016 and 2036 Zoning Project Site Page 2-24), if fails to demonstrate why that should require the removal of the NA-1 designation. (Englert, Molinaro)
- Response 2-10:Page 2-5 of the DGEIS (the last paragraph of the "Project Site" section)
provided a discussion of Section 105-91 of the Zoning Resolution.
Additional references and additional text have been added to this
FGEIS.
- **Comment 2-11:** The DGEIS states that "while mapping the site as parkland would remove the Special Natural Area District from the project site, the objectives would be achieved by the implementation of the plan, rendering the zoning unnecessary." This assessment is completely flawed. The mapping of the site as parkland does not arbitrarily remove the NA-1 designation and has no relationship to the zoning controls. Indeed, the Special District specifically addresses NA mappings in public parks. (Englert)
- **Response 2-11:** It is correct that mapping the site as parkland would not automatically remove the SNAD from the project site. This text modification has been made in this FGEIS. However, as discussed above, the objectives of the park plan, which include natural features preservation would be achieved through the plan and its implementation.
- **Comment 2-12:** These zoning amendments are also a clear change in public policy. While the DGEIS cites some unrelated public policies which do not apply to parks (such as Lower Density Growth Management), they seek to abandon the zoning controls of the Special District which were implemented in accordance with a well-considered plan to promote the character of the District and that character includes the NA mappings within public parks. (Englert, Molinaro)

- **Response 2-12:** As stated above, the DPR proposed actions do not amend the policies pertaining to NA mappings within public parks. Rather, it recognizes the unique aspects of the proposed Fresh Kills Park site and would remove a designation at the proposed Fresh Kills Park that would, in effect, be incompatible with the State-mandated landfill closure requirements. This is not an adverse impact of the proposed project.
- **Comment 2-13:** The existing NA-1 designation is the only connection between the Special South Richmond Development Zoning District (SRD) to the south, and the larger NA-1 designations to the northeast. From a planning standpoint, the existing NA-1 district is critical to achieving the goals of both special districts and serving the public interest. It is thus clear that the DGEIS study area was isolated from its context, existing zoning was arbitrarily dismissed, and existing public policies have been misinterpreted. (Englert, Molinaro)
- **Response 2-13:** With the proposed project, the NA-1 zoning on LaTourette Park will remain and will continue to provide a connection to the SRD. In addition, the mapping of the Fresh Kills Landfill as parkland complements the goals of both the SRD and the SNAD. There is nothing about the proposed project either from a zoning or capital project initiation perspective that would compromise local zoning or public interest goals. Rather, the proposed project strengthens the implementation of those goals.
- Comment 2-14: The Staten Island Bicycle Association supports the park, but wants it to be mapped and protected as a park before the specifics are worked out. (Weiss)
- **Response 2-14:** Comment noted.

CHAPTER 3: SOCIOECONOMIC CONDITIONS

Comment 3-1: Page 3-17: Indirect Business and Institutional Displacement, Item #4. *Therefore, the proposed project would not displace uses that would directly support existing local businesses, or displace uses that draw customers to area businesses.* The Parks Department provides no information as to why one "indirect" business has been forced to vacate and another has been served notice that their lease will not be renewed. Such actions negate this statement. (Molinaro)

> The garden center on Arden Avenue and the gas station by Huguenot Avenue are being displaced by DPR, DCP, and the City Legal Department. There is no reason for these people to lose their businesses. (Morano)

The City of New York is in financial trouble, but we are throwing lessees off of city property that pay \$2,000 a month. (Vanderberg)

- **Response 3-1:** The proposed project would not have any direct or indirect impacts on businesses. One business has already vacated the project site voluntarily and the site of the other business is proposed by DPR to be excluded from the proposed mapping. Thus, it could remain at its current location on a month-to-month lease.
- **Comment 3-2:** Page 3-17: Indirect Business and Institutional Displacement, Item #5. *Therefore the proposed project would not displace residents, workers, or visitors who form the customer base of existing businesses in the study area.* The Parks Department provides no information as to why one "indirect" business has been forced to vacate and another has been served notice that their lease will not be renewed. Such actions negate this statement. (Molinaro)
- **Response 3-2:** See the response above regarding indirect displacement.
- Comment 3-3: Page 3-20: Conclusions. For all these reason it is concluded that the proposed project would not adversely impact socioeconomic conditions. The Parks Department provides no information as to why one "indirect" business has been forced to vacate and another has been served notice that their lease will not be renewed. Such actions negated this statement. (Molinaro)
- **Response 3-3:** See the response above regarding indirect displacement.

CHAPTER 4: COMMUNITY FACILITIES

- **Comment 4-1:** It should be recognized that the NYPD districts covering the park, the 122nd and 123rd are the largest geographic precincts in the City. While the park roads would provide traffic relief to residents, they would also allow emergency responders to quickly get to wherever they need to be without having to travel around the perimeter of Fresh Kills. The landfill roads can provide emergency responders with a quick route between Richmond Avenue and the West Shore Expressway. (Sheirer)
- **Response 4-1:** Comment noted. As stated above, the park roads proposed across Fresh Kills would serve a number of purposes including more direct access from Richmond Avenue to the West Shore Expressway, and access to the proposed park. As noted in the comment, these roads would also provide access for emergency vehicles. This benefit has been added to the FGEIS.

CHAPTER 5: OPEN SPACE AND RECREATIONAL FACILITIES

- **Comment 5-1:** Page 5-4: Open Spaces and Recreational Facilities. Regarding the *Open Space Inventory*, there is no basis to include the South Shore Golf Course, a contracted facility that allows only paid access by select visitors for single use. (Molinaro)
- **Response 5-1:** South Shore Golf Course is a City Park that provides active recreation. It is customary under CEQR to include such a facility in the land use inventory.
- **Comment 5-2:** Page 5-4: Open Spaces and Recreational Facilities. There is no basis to include Sleight Cemetery, a private facility, in calculating open space. (Molinaro)
- **Response 5-2:** The Sleight Family Cemetery is a property under the jurisdiction of DPR. It is a passive open space and therefore, in accordance with the *CEQR Technical Manual*, was included in the DGEIS open space inventory (see Table 5-2).
- Comment 5-3: Page 5-12: Open Spaces and Recreational Facilities, Qualitative Analysis. While exact locations for the proposed wind turbines are yet to be determined in order to be effective, it is anticipated that they would be on the higher elevations of the landfill sections in each of the parks. The DGEIS does not explain why the 14-month long Fresh Kills wind farm meteorological study performed and reported by BQ Energy for NYSERDA and the Borough President's office is not references in this section. BQ Energy mailed their report to the Parks Department and City Planning last year (2007) for consideration, and both agencies indicated to the Borough President's office that the report's findings would be part of the DGEIS discussion. Clearly this is not the case, or else the DGEIS would have noted that the BQ Energy report concludes that a 7-turbine, 17.5 megawatt (MW) wind farm is very feasible, that the turbines can be located on the top of the mounds to take advantage of where most of the wind is available, and that in New York City Fresh Kills is the only location for realizing a wind farm physically and economically. (Molinaro)
- **Response 5-3:** As stated below under "Energy," the feasibility and locations of commercial wind turbines in the proposed park are expected to be specified during a site-specific design and permitting process. Siting of the wind turbines at Fresh Kills on top of landfill mounds would require DEC approval for new structures on the regulated landfill sections. As stated in the comment and in the DGEIS, it is expected that the wind turbines would need to be sited on the higher elevations of the park, i.e.,

the landfill sections, and would therefore be subject to review and approval by DEC. That permitting process would need to specify an exact location on the landfill. As stated in the DGEIS, it is expected that a site-specific environmental review would accompany that permit application.

- **Comment 5-4:** Pages 5-12 to 5-13: Qualitative Analysis. *If approved, the wind turbines as assumed in the DGEIS would be the largest structures in the park. Given that the higher elevations of the parks are proposed for passive or quasi-passive open space experiences (e.g. hiking, picnicking, and enjoyment of scenic vistas), the wind turbines would have the potential to compromise these experiences, particularly if sited in locations that are intended to have public access.* The DGEIS provides no documentation or study undertaken to justify these statements. For example: Are these statements based on feelings? What does it mean to "compromise" an experience? And how is this quantified? (Molinaro)
- **Response 5-4:** As acknowledged in the comments, the impacts of wind turbines on the proposed park are analyzed qualitatively. It is recognized by DPR and other agencies that have considered the potential impacts of wind turbines (e.g., DEC) that a wind turbine system can potentially affect open space under and in the immediate vicinity of a commercial-sized rotating wind turbine rotor. For example, such a structure could limit field games, kite flying, golf, picnicking, and other active recreational pursuits within the immediate area of the structure. As stated above, these and other issues would need to be addressed as part of a site-specific impact assessment of a commercial wind turbine proposal at Fresh Kills Park.
- **Comment 5-5:** Page 5-13: Qualitative Analysis. "If sited [wind turbines]in locations that are intended to provide habitat, the impact on the open space user experience would be reduced, although it is expected that the impact on visual resources would be the same in either location. The DGEIS provides no documentation or study undertaken to justify this conclusion. How did the DGEIS quantify the impact reduction of an open space user? How much of a reduction would it be? (Molinaro)
- **Response 5-5:** As recognized in the comment and stated in the DGEIS, this is a qualitative assessment impact on open space, not a quantified assessment. As also stated in the responses above, it is expected that impacts of the proposed wind turbines would be addressed as part of a site-specific environmental review for a commercial wind turbine proposal in the park. In response to the above comment, it is noted that the DGEIS goes on to state that selection of a site for a commercial

wind turbine should be a location within the park that would have the least impact on open space users, natural and visual resources, and other areas of potential environmental impact.

Comment 5-6: Page 5-13: Qualitative Analysis. *Given the large size of the proposed North, South, and East parks, selection of a location with the least impact would be a major factor in the assessment of impacts for these wind turbines.* The DGEIS does not define or quantify what an "impact" is. In addition, the DGEIS does not discuss why a location with the least impact would be a major factor in windmill assessment as opposed to: where on the landfill the best wind locations are, how much wind is available, and does this all translate into an economic benefit. (Molinaro)

- **Response 5-6:** The DGEIS presents a number of factors for determining an impact from commercial wind turbines, among them potential impacts on visual and natural resources, the landfill itself, and the proposed open space. The Fresh Kills project includes at this time a generic proposal for commercial-scale wind energy. Locations within the project site that are selected with respect to wind strength are design considerations for a wind turbine project. Limited data has been put forth with respect to the economic benefits that commercial wind turbines could provide at Fresh Kills Park. However, it is anticipated that such data could be put forward as part of a site-specific analysis of a commercial wind turbine project for Fresh Kills Park. With a site-specific environmental review, both the beneficial socioeconomic and energy impacts of a commercial wind turbine project could be analyzed comprehensively along with other potential impacts, such as natural resources, visual resources, open space, and potential landfill impacts.
- **Comment 5-7:** Page 5-13: Qualitative Analysis. *Other considerations would be* potential shadow, visual, natural resources, and noise impacts. The DGEIS does not document the source for these considerations. (Molinaro)
- **Response 5-7:** DEC provided guidance to DPR in scoping the issues to be addressed as part of the analysis of a commercial wind farm project in the DGEIS.
- **Comment 5-8:** Chapter 5, "Open Space and Recreational Facilities," (pg. 5-12) discusses the potential of wind turbines compromising passive and quasi-passive open space experiences (e.g., hiking, picnicking, enjoyment of scenic vistas). BQ Energy is unaware of any scientific studies that show wind turbines to prevent hiking, picnicking, reading, napping, or any other passive and quasi-passive open space experiences.

In fact, many of our employees and stakeholders (including the Staten Island Borough President) report that they find the rotation of wind turbines to be soothing and consistent with natural phenomena. (Curran/BQ Energy)

With specific reference to scenic vistas that the DGEIS claims could be disturbed by the presence of wind turbines, no reasonable person could consider the current view from the top of the landfill mounds to be naturally "scenic." The landfill land can and should be converted to parkland, but we are not aware of plans to change the adjacent power plant, shopping mall, or chemical storage facilities nearby. Clearly visible from the top of the landfill mounds (as evidenced in the photos on this page) are the Port of New York and New Jersey, the Goethals Bridge, Manhattan Island, a fossil-fueled electric power generating station, a housing sub-division, and a shopping mall. As the current "scenic" vista represents a view of the built-environment, it is doubtful that wind turbines (often also considered scenic) could be considered a negative impact on the view. The Chapter also indicates that wind energy is discussed in Chapter 19, "Noise." This is not a factual statement. Wind energy is not discussed in Chapter 19. If wind turbines were discussed in any chapter discussing noise, it would report that modern wind turbines are designed to operate in an unobtrusive noise mode. As they are located near the existing West Shore Expressway, the turbines would be largely inaudible throughout the park. (Curran/BQ Energy) (Molinaro)

Response 5-8: It is the conclusion of DPR as Lead Agency that the aesthetic and physical presence of commercial wind turbines has the potential to compromise open space uses and activities in the immediate vicinity of the wind turbine location (see also discussion above). It is also recognized, that these open space impacts would diminish with distance from the location of the commercial wind turbine and that the large size of the proposed Fresh Kills Park and the numerous potential siting options provides the opportunity to minimize the potential visual impacts of the proposed wind turbines. DPR found in the DGEIS, and continues to find in the FGEIS, that while these impacts may not be apparent to all future park users, they are valid issues for examination and disclosure in an FGEIS and are worthy of consideration in a sitespecific environmental review of any future commercial wind turbine proposal. The comment above also fails to recognize the natural views that are available currently from the Fresh Kills site (see the discussion above), which are clearly shown in the DGEIS (see Figures 8-9, Photograph 16 and Figure 8-21, Photograph 35) and which are valid issues for a site-specific environmental review of a commercial wind turbine project to address.

It is expected that an examination of noise impacts on the proposed park due to commercial wind turbines would be addressed as part of a sitespecific environmental review. This clarification has been added to the FGEIS. It is not clear from previously submitted documents that all commercial wind turbines would be sited at locations near the West Shore Expressway. In fact, as previously stated above, it is anticipated that commercial wind turbines would be located on the highest elevations of the park (the West Shore Expressway runs through the lower elevations of the project site).

CHAPTER 6: SHADOWS

- **Comment 6-1:** Page 6-2: Conclusions. *They [wind turbines] would be sited on the higher elevations of the three landfills in the parks, with the exception of landfill section 1/9 and West Park.* The DGEIS does not document why landfill section 1-9 and West Park are to be omitted as a wind turbine location. (Molinaro)
- **Response 6-1:** As stated above, it is the conclusion of DPR that a commercial wind turbine at this location would be incompatible with the proposed 9-11/WTC Monument, which is also proposed for the higher elevations of West Park. This position has been clarified in the FGEIS and is consistent with Alternative 2 presented in the BQ Energy study.

CHAPTER 7: HISTORIC RESOURCES

Comment 7-1:	The OPRHP has determined that Section 1/9 of Fresh Kills does not qualify as a Traditional Cultural Property and "as such cannot at this time be determined eligible for inclusion in the register." (Mackey)
Response 7-1:	In response to this comment, Chapter 7, "Historic Resources," of this FGEIS as well as Appendix B, "Phase 1A Archaeology Study," have been revised to reflect this SHPO determination.
Comment 7-2:	OPRHP concurs with the final assessment that areas of potential concerns should be addressed individually as they are proposed for development. (Mackey)
Response 7-2:	Comment noted. This is the approach to capital project implementation at the park. It is expected that these site-specific issues would be addressed on a case by case basis for those projects that are subject to future permit review (e.g., North Park).
Comment 7-3:	The report "does not address the effects of post glacial isostatic rebound

and how that might affect archaeological potential." (Mackey)

- **Response 7-3:** In response to this comment, additional information concerning these phenomena was reviewed as well as its effects in the New York area. According to a USGS web site on the topic (http://3dparks.wr.usgs.gov/ nyc/morraines/flandrian.htm), the weight of the Wisconsin glacial sheet caused the Earth's crust to sink into the mantle and the outer continental shelf to rise (isostatic forebuldge uplift) approximately 20,000 years ago. The project site was probably affected by this rise. Once the glacial sheet had receded approximately 8,000 years ago, the Earth's crust rebounded and the forebulge area subsided. The project site was probably affected by this subsidence as well. However, consideration of the effects of post glacial isostatic rebound does not warrant any changes to the archaeology sensitivity assessment as presented in the DGEIS and this FGEIS. Much of the project site had an elevation of approximately 0-5 feet above sea level before construction of the landfill. A higher elevation several thousand years ago due to the forebuldge uplift would not alter the assessment of the project site as sensitive for the presence of prehistoric resources, particularly in light of the larger areas that have already been impacted by the presence of the landfill. Thus, this condition would not alter the conclusions of the DGEIS.
- **Comment 7-4:** The Phase I document in the DGEIS identifies a sensitivity rating system for historic deposits that seems confusing and misleading. OPRHP suggests modifying the terminology utilized along the lines of Categories I-V, with each category identified as the probability that the current project would impact possible resources. (Mackey)
- **Response 7-4:** As requested by the comments, the Phase 1A Archaeology Study presented in the DGEIS has been modified for this FGEIS. As suggested by the comments, this modified assessment stratifies the conclusion relative to the potential for the project to impact areas of archaeological sensitivity based on the following categories:

Category I—Project has No Probability of impacting possible resources (DGEIS identified low sensitivity)

Category II—Project has a Low Probability of impacting possible resources (DGEIS identified low to moderate sensitivity)

Category III—Project has a Low to Moderate Probability of impacting possible resources (DGEIS identified moderate sensitivity)

Category IV—Project has a Moderate Probability of impacting possible resources (DGEIS identified moderate to high sensitivity)

Category V—Project has a High Probability of impacting possible resources (DGEIS identified high sensitivity)

Comment 7-5:	An additional map should be added which clearly identifies how these category areas [of probability to impact possible resources] are distributed across the project area. (Mackey)
Response 7-5:	As requested by OPRHP, this FGEIS contains an additional map identifying the distribution of the above-described categories across the site. This additional map is included in the revised Phase 1A Archaeology study presented in this FGEIS.
Comment 7-6:	"[The report] identifies that there is a potential to impact prehistoric resources [but] does not include a map identifying where those areas might be." "[I]t would be helpful if a map that specifically identifies areas of concern for prehistoric deposits that are likely to be impacted." (Mackey)
Response 7-6:	As requested by comments, an additional map is presented in this FGEIS, identifying areas of concern for prehistoric deposits that are likely to be impacted. This additional map is provided in the Phase 1A

CHAPTER 8: URBAN DESIGN AND VISUAL RESOURCES

provided with this FGEIS.

- Comment 8-1: Page 8-5: Study Area Streetscape. For example, Arthur Kill Road does not have shoulders or sidewalks and has few crosswalks. There are few traffic lights, and thus drivers tend to move quickly along Arthur Kill Road. The DGEIS does not document where this observation about drivers along Arthur Kill Road comes from. In addition, there is no definition what "tend to" means. Lastly, there is no clarification given as to the relevancy of this statement. (Molinaro)
- **Response 8-1:** The above description, which is taken from the DGEIS, is a qualitative description and is based on field surveys and driving experiences along Arthur Kill Road performed during preparation of the DGEIS. In response to the comment above, "tend to move quickly along Arthur Kill Road" in the DGEIS has been modified to "can move more quickly due to the absence of traffic lights" in this FGEIS.
- **Comment 8-2:** Page 8-12: Future with the Proposed Project: 2016. *Visual quality is typically an important feature for park visitors, but it is not clear whether the turbines would be considered aesthetically pleasing or displeasing.* The DGEIS does not document what is meant by "visual quality." The DGEIS also does not document where the statement about aesthetics comes from. In addition, it is unclear if a survey will determine aesthetic pleasure and who will be the ultimate arbiter. (Molinaro)

- **Response 8-2:** Aesthetic issues relative to larger commercial wind turbines are an issue with respect to potential impacts on views and visual resources that, based on examples of other wind turbine projects in New York State and DEC guidance with respect to analyzing the potential environmental impacts of wind turbines, was addressed generically in the DGEIS. The above-referenced statement in the DGEIS recognizes that visitors to the park are likely to form two different qualitative (subjective) opinions with respect to commercial wind turbines in the proposed park. In fact, two opinions have been raised as part of this DGEIS review, some in favor and some opposed. That being said, it is expected that those issues would be further examined in a site-specific environmental review of a commercial wind turbine proposal.
- **Comment 8-3:** Page 8-12: Future with the Proposed Project: 2016. *It is also possible that the turbines would be perceived as a visual intrusion upon the natural landscape.* The DGEIS does not explain how and why wind turbines would be perceived as a visual intrusion upon the natural landscape when for the most part the park itself, with average mound heights of 150 feet above sea level, was created from the dumping of billion of tons of New York City garbage for 50-plus years. The DGEIS thus does not explain why this man-made disaster is itself not the most egregious example of a visual intrusion upon the natural landscape of Staten Island. (Molinaro)
- **Response 8-3:** The comment above does not recognize the natural landscapes that still exist in the vicinity of the project, including the creeks and wetlands that are part of the Fresh Kills Park site itself, or the adjoining William T. Davis Wildlife Refuge immediately to the north, LaTourette Park/the Staten Island Greenbelt immediately to the east, Arden Heights Woods Park immediately to the south, and other natural areas in this part of Staten Island that are visible from higher elevations of Fresh Kills. Moreover, while the comment above refers to the impact of the landfill on the pre-landfill natural landscapes, the DGEIS text is referring to the natural landscapes of the proposed park and the compatibility of commercial wind turbines in that visual context and the enhanced landscapes that are proposed to be created within the park on the landfill sections as part of the proposed project. It is expected that an analysis of a site-specific proposal for commercial wind turbines would address these potential impacts.
- **Comment 8-4:** Page 8-13: Future with the Proposed Project: 2016. *Commuters and through travelers are typically moving, have a relatively narrow field of view, and are destination oriented. Drivers would generally be focused on the road and traffic conditions, but do have the opportunity to*

observe roadside scenery, and the turbines would be a potential source of distraction, possibly leading to increased likelihood of accidents. The DGEIS does not explain the origin of this statement. In addition, the DGEIS does not discuss why, if the turbines are a sources of distraction that could potentially lead to the increased likelihood of accidents for motorists, the new Signature Bridge would not also be such a potentially lethal distraction. (Molinaro)

- **Response 8-4:** The above-cited DGEIS statement regarding potential vehicle accidents due to commercial wind turbines in the park has been deleted for this FGEIS. It is not expected that either the wind turbines or the proposed Signature Bridge would result in an increase in motorist accidents.
- Comment 8-5: Chapter 8, "Urban Design and Visual Resources," (pg. 8-11) states that wind turbines are "likely" to be an attraction for some park visitors, akin to a sculpture or other art installation. This is, in fact, a certainty. The Urban Windmill Project in Toronto, Ontario, Canada is a case in point. Another project that BQ Energy developed near Buffalo, NY receives numerous requests for visitors. Numerous other case studies on wind turbines at European municipal landfill sites draw the same conclusion. The Fenner Windfarm near Syracuse, NY, and the Wethersfield Windfarm in Wyoming County, NY, are other examples from our own State. The Atlantic City Wind Farm also attracts many visitors. The chapter also discusses the possibility that wind turbines would be "perceived as a visual intrusion upon the natural landscape." This statement implies a level of naiveté among the citizens of the City of New York and other park visitors. While beauty is certainly in the eye of the beholder, the Fresh Kills Park was clearly the site of one of the world's largest landfills, and is situated in the midst of one of the largest built-environments in the United States (the New York Metropolitan area). Visitors to the park will welcome it as an oasis within the City and find the wind turbines to be compatible with that oasis. (Curran/BQ Energy)
- **Response 8-5:** As stated in the comment, commercial wind turbines are large and highly visible structures (at about 350 feet the wind turbines would be some of the tallest structures on Staten Island). Their location, size, and design are important considerations that need to be examined in a site-specific impact analysis, particularly with respect to the potential for any impacts on visual character. For the many reasons cited above, an assessment of the compatibility of commercial wind turbines in a setting that also includes large parks and natural areas in this part of Staten Island is also appropriate.

- **Comment 8-6:** Chapter 8, "Urban Design and Visual Resources," (pg. 8-13) assumes that local residents will be sensitive to the change in viewshed due to the introduction of wind turbines into the park. BO Energy, in its developing wind energy projects, has found that the introduction of wind turbines into industrial sites, brownfields, and landfills is viewed favorably by neighboring residents who have a view of the turbines. Western Staten Island residents have seen locations such as oil refineries, chemical plants, garbage trucks and other industry on this site (and adjacent land) for many decades. Wind energy as a clean energy source will be viewed as having either no impact or a beneficial impact on the area viewshed. The chapter additionally asserts that wind turbines may be a distraction to passing motorists "leading to increased likelihood of accidents." The author of such a statement may never have driven around New York City, which has an abundance of landmarks, tall structures, gorgeous parks and scenic views. Any structure, entity, or event near a roadway can serve as a distraction, including exit signs, automobile accidents, shopping malls, advertising billboards, etc...Although we think wind turbines will add to the Staten Island skyline, it would not be credible to claim that wind turbines would be a permanent driver distraction and as such a potential safety hazard. BQ Energy is unaware of any scientific studies linking wind turbines near roadways to an increased number of accidents. (Curran/BQ Energy)
- **Response 8-6:** As stated above, the project site is not within an entirely industrial landscape. It is expected that a site-specific visual assessment would assist in determining any potential visual impacts of a proposed commercial wind farm at Fresh Kills. In addition, as also stated above, the DGEIS statement regarding potential impacts on driver safety has been removed from this FGEIS.

CHAPTER 10: NATURAL RESOURCES

- Comment 10-1: Page 10-73: Fresh Kills Park Roads. An Operations Maintenance Plan developed to ensure that operation and maintenance of the Parks Roads minimizes the potential for impacting terrestrial and aquatic resources. The DGEIS does not provide a reference for such an Operations and Maintenance Plan, i.e., do any of the other New York City parks that have roads through them, such as Central Park, have such a plan? (Molinaro)
- **Response 10-1:** DPR is considering an operations/maintenance plan at Fresh Kills as a guide for avoiding impacts to wildlife and the environment at the site, a portion of which has been designated a significant coastal fish and wildlife habitat by the State of New York. Such guidance is also appropriate at Fresh Kills Park given that, unlike Central Park, it is

adjacent to extensive open spaces and natural areas, and also includes wetlands and waterways and is adjacent to a wildlife preserve.

Comment 10-2: Page 10-73: Fresh Kills Park Roads. *Operation of the park roads has the potential to result in long term adverse impact to terrestrial biota where the roadway cuts through propose landscape enhancement areas, or areas where existing plant communities would be retained.* With this statement, it appears that the DGEIS is more concerned with long term adverse impacts to terrestrial biota that to the long term impacts to Staten Islanders from traffic jams and the accompanying air pollution because the roads through the landfill are not utilized. (Molinaro)

- **Response 10-2:** The text cited in the comment above is quoted from the DGEIS natural resources analysis, Chapter 10 of the DGEIS. The comment does not recognize the additional text of the DGEIS, which states that the final cover at Fresh Kills would be landscaped as part of the Fresh Kills Park project. Positive and adverse impacts of the proposed project with respect to traffic were analyzed in Chapter 16, "Traffic and Parking" and air quality is analyzed in Chapter 18, "Air Quality," of the DGEIS. Both have been revised in responses for comments for this FGEIS.
- **Comment 10-3:** Page 10-74: Fresh Kills Park Roads. *These roadway corridors have the potential to result in long-term adverse impacts to wildlife due to direct loss of wildlife individuals dues to impacts with vehicles.* With this statement, it appears that the DGEIS is more concerned with long-term adverse impacts to wildlife than the long-term impacts to Staten Islanders from traffic jams accompanying air pollution because the roads through the landfill are not utilized. In addition, the DGEIS does not document, for comparison purposes, what are the present annual road kills on Staten Island. (Molinaro)
- **Response 10-3:** In accordance with the *CEQR Technical Manual* and the Final Scope of Work for the DGEIS, Chapter 10 of the DGEIS cited in the above comment addresses natural resources impacts and therefore focuses on all potential impacts of the proposed project including the proposed roads on natural resources. It is an objective of the proposed park and the proposed roads to minimize road kills with respect to wildlife, not to follow any current evident pattern of road kill on Staten Island.
- **Comment 10-4:** Page 10-75: Fresh Kills Park Roads. *Measures that would minimize the* potential for roadways to result in significant adverse impacts to terrestrial wildlife include monitoring wildlife/vehicle collisions to identify the need for additional measures (e.g., speed reduction) to minimize wildlife losses and adverse effects to motorist safety due to

collisions. With this statement, it appears that the DGEIS is more concerned with long-term adverse impacts to wildlife than the long-term impacts to Staten Islanders from traffic jams and the accompanying air pollution because the roads through the landfill are not utilized. In addition, the DGEIS does not document, for comparison purposes, what are the present annual road kills on Staten Island. (Molinaro)

- **Response 10-4:** See the responses above regarding the purpose of Chapter 10 in the DGEIS, "Natural Resources," and the requirements, the *CEQR Technical Manual*, and the required DGEIS analyses as per the Final Scope of Work.
- Comment 10-5: Page 10-79: Wind Turbines. Beyond the feasibility and cost of constructing such a project on landfill slopes, an important and likely effect of the proposed utility-scale wind energy project would be the increased potential for wildlife mortality, specifically for migrating and resident wildlife (e.g., birds, bats, and insects). The DGEIS does not document the origin for why the wind turbines are to be constructed on the landfill slopes since there are no wind energy studies that are referenced that stipulate such a location. The DGEIS likewise does not cite where the issue of an increase in the potential for wildlife mortality, especially insects, due to wind turbines come from. The DGEIS also does not define what is meant by "an important .. effect" when discussing the potential for wildlife mortality. Is there a number when it is not "an important .. effect"? Lastly, if a citation is presented, the DGEIS should also include references to such wildlife moralities from any and all high-rise construction and bridge projects in New York City. (Molinaro)
- **Response 10-5:** It was assumed in the DGEIS that the commercial wind turbines as presented in the DGEIS would be developed on the higher elevations of the landfill sections. Regardless of the site selection specifics, concerns with respect to potential impacts on natural resources, in particular avian resources, from the operation of commercial wind turbines are well documented and have been addressed in many environmental reviews of commercial wind turbine proposals throughout New York State. In addition, the issue was raised by DEC (an involved agency in this environmental review process) during its review of the wind turbine proposal. Since commercial wind turbines at Fresh Kills Park are likely to be cited at the highest elevations of the site (i.e., on the landfill sections), any proposed commercial-scale wind turbines are expected to require a permit and approval from DEC. As stated in the DGEIS and this FGEIS, a site-specific analysis of a commercial wind turbine proposal at Fresh Kills Park would address the issues of impacts on avian resources as well as other issues (e.g., urban design). The

determination at that time of the potential for a significant natural resources impact would be based on the potential for avian impacts due to the wind turbines, and would not be based on current mortality rates attributable to fixed (not rotating) structures, such as high-rise buildings and bridges, but the individual impacts of the site-specific proposal.

- **Comment 10-6:** Page 10-80: Wind Turbines. *The proposed wind energy project should meet the requirements of recent DEC draft "Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects." These guidelines offer a protocol for both planning pre- and postconstruction studies, including a thorough site and project description, designs of potential studies to detect and quantify bird and bat presence before, and actual impacts after a proposed wind energy project is constructed.* The DGEIS does not explain why a DEC document that remains in a draft stage and is only a guideline has the weight of a regulation. (Molinaro)
- **Response 10-6:** As stated above, the DGEIS does not refer to the DEC guidelines as a regulation; rather, it clearly states that these are guidelines from a state involved agency in this process that were used for conducting the environmental impact statement. DEC is an involved agency in this environmental review and permitting process for Fresh Kills, which may include evaluating at some time a site-specific proposal for commercial wind turbines within Fresh Kills Park. Thus, in accordance with CEQR and SEQRA, and the guidelines of DEC, where applicable, were used as a guide for impact assessment, and accordingly referenced in the DGEIS.
- Comment 10-7: Page 10-81: Wind Turbines. Potential mitigation for the proposed wind energy project would include an evaluation of alternative locations to avoid wildlife collision risk by reducing the elevation of turbines, reducing overall height of turbine structures or rotor heights, determining whether the proposed project could cease to operate at times (daily and seasonal) when birds and bats are placed at highest collision risks, and the consideration of locating fewer turbines within the Fresh Kills Park. The DGEIS provides no documentation proving the validity of these statements. For example, the DGEIS does not indicate that a wind energy study was performed at Fresh Kills supporting any of these statements. Indeed, it certainly does not reference the 2007 BQ Energy report because if it did, then the above statements would be shown to be incorrect. Parks also does not provide documentation for why a reduction in height for wind turbines translates into an economically viable energy project. The DGEIS clearly cites no literature that ceasing wind energy turbines – daily or seasonal – to

prevent the highest daily and/or seasonal collision risks to birds and bats translates into an economically viable wind energy program. Furthermore, and without referencing a wind energy investigation at Fresh Kills, there is no documentation as to what are the number of wind turbines and cannot see any positive impact from a proposed wind turbine project. (Molinaro)

- **Response 10-7:** The BQ Energy proposal (August 2007) was reviewed during the preparation of the DGEIS. The preliminary natural resources assessment presented by BQ Energy in that report, presents limited data or analysis regarding any potential impacts to avian wildlife as a result of a commercial wind turbine system at Fresh Kills Park. It does, however, state that mitigation could be implemented, if necessary. Thus, acknowledging the potential for impacts. As stated above, any sitespecific proposal for commercial wind turbines at Fresh Kills Park would need to be based on a number of factors, including economic viability coupled with a full assessment of the potential for the commercial wind turbine proposal to impact natural resources and visual resources (for example) so that the decision-makers can draw an informed conclusion on the impacts of such a proposal in accordance with CEQR/SEQR. As stated above, it is expected that this assessment would be prepared in greater detail as part of a site-specific environmental review of a commercial wind turbine proposal. As also stated above, additional text has been added to this FGEIS with respect to the potential positive impacts of a commercial wind turbine project at Fresh Kills Park.
- **Comment 10-8:** Page 10-127: Conclusions. For the proposed operation of six wind turbines ... the design of the wildlife studies, submission of monitoring reports, and mitigation measures would require approval by DEC. The DGEIS provides no documentation for why six turbines is the optimum number of units at the landfill. Additionally, there is no documentation as to why a DEC draft guideline that is not a regulation is to be used for designing wildlife studies, monitoring reports, and mitigation measures. Indeed, the DGEIS should document, at a minimum, other DEC draft guidelines that have carried the weight of a regulation. (Molinaro)
- **Response 10-8:** The DGEIS draws no conclusion as to the optimum number of wind turbines at Fresh Kills. Rather, the FGEIS evaluates the potential for impacts on the environment from five commercial wind turbines in a generic manner, in keeping with the scope of the DGEIS and Alternative 2 of the BQ Energy study. As stated above, the draft guidelines of DEC are cited in the DGEIS, and were used as guidelines. They were neither applied in the DGEIS nor referenced in the DGEIS as regulations. However, they are the current draft guidelines from DEC,

which is an involved agency in the Fresh Kills Park environmental review and permitting process, and review any potential the permitting of proposed commercial wind turbines on the landfill sections.

- **Comment 10-9:** Chapter 10, "Natural Resources," (pg. 10-79) incorrectly states that this would "represent the first attempt at constructing a wind power project on a former landfill..." This statement is not factual. A wind turbine has been constructed on a closed portion of a landfill in Hull, MA. A number of other wind turbines have been sited at closed landfills in Europe, including Karlsruhe and Munich in Germany. Evidence of these were provided in our 2007 report to the State and City of New York entitled, *Evaluation of the Feasibility of Installing a Commercial Scale Wind Energy Facility in Fresh Kills, Staten Island, New York.* (Curran/BQ Energy)
- **Response 10-9:** The statement cited in the comment above is quoted from the abovereferenced BQ Energy report (page 3 of the Executive Summary in that report), which says that this could be the first wind turbine on a landfill. However, a text modification will be made in this FGEIS to state that the wind turbine system on the landfill would be "one of the first in New York State."
- Comment 10-10: Chapter 10, "Natural Resources," (pg 10-80) references a 1992 study relating local wind disturbances from wind turbines to bird behavior. A large number of studies of wind turbines and birds have been conducted in the past 16 years and the technology of wind turbines has changed drastically in that period. Studies relating to those older wind turbines may not be relevant to modern machines. In 1992, there was a bit over 2,000 MW of wind power installed in the U.S., with virtually all of that in California. Today there is eight times that amount, with wind turbines installed in most US States. The avian impact data from the significant increase in the number of wind turbines demonstrates the fact that between two and seven birds will generally collide with each wind turbine each year. For a seven-turbine facility such as proposed at Fresh Kills, that would result in between 14 and 49 birds flying into turbines each year. While this amount is regrettable it is much smaller than the number of birds impacted by vehicles and buildings in Staten Island. We also believe it to be much smaller than the direct and indirect avian impact caused by any other form of power generation used today. (Curran/BQ Energy)
- **Response 10-10:** The DGEIS and this FGEIS recognize the potential for avian impacts due to wind turbines and establish a framework of analysis for a site-specific environmental review of these impacts. That site-specific

environmental review can address the type of commercial system proposed at that time, and the techniques that could be used to minimize or reduce potential impacts on avian resources.

Comment 10-11: Chapter 10, "Natural Resources," (pg. 10-80) further discusses the need for improved guidelines for the assessment of wind turbine impacts on wildlife. The chapter states that "significant adverse impacts to bird and bats are reasonably expected as a result of the proposed project at Fresh Kills..." This is a statement of opinion, and not based on any data or study. Many wind energy generation facilities have been located within known migratory flyways and in close proximity to breeding birds at a risk of collision. Including these sites, there is a national average of two to seven avian collisions per wind turbine per year. This is not statistically significant, given the larger impacts from roadways, buildings, direct habitat destruction (deforestation for farms and housing sub-divisions), guyed structures (radio towers, bridges, etc...), hunting, pets, etc... BQ Energy is unaware of any scientific study that shows wind energy as a contributing factor to a species being endangered or threatened. The same may not be true for the fossil-fueled electric generation that wind energy will displace in the City of New York. The chapter further states that a wind energy project should perform an empirical analysis of potential collision risks based on the DEC draft Guidelines for conducting bird and bat studies at commercial wind energy projects. BQ Energy is unaware of any methodology that can quantitatively assess avian impact risk from pre-construction studies, including the draft guidelines from DEC. The best resource for this is analysis of NEXRAD WSR-88D weather radar historical records, as it provides long-term historical data on the number of birds flying and the height of flight over the site. This type of quantitative analysis is not included in the draft DEC guidelines, although it has been recommended by DEC for wind projects and it yields a clearer and more comprehensive analysis. It also can be accomplished far more quickly since it relies on actual historical data. Furthermore, the referenced draft DEC guidelines are still in a draft condition and have not been finalized. The draft guidelines were put together with no input from stakeholders other than the DEC. While the DEC requested comments from stakeholders (by February of 2008) following the issuance of draft guidelines, it is not known whether the DEC has reviewed the stakeholder comments or begun the process of incorporating the comments into a final set of guidelines. It is not known when or if these draft guidelines might be reviewed by DEC senior staff and officially issued. As the guidelines are still in a draft state and were constructed with no outside input, it is altogether inappropriate to require an environmental review with these guidelines as the basis. Finally, the level of detail provided in the DGEIS indicates the City and State of New York have a significant body of data on the use of the Fresh Kills Park by migrating and local species. As this data already exists, it would be inappropriate and redundant to require a wind energy project to duplicate this data with extensive pre-construction monitoring. (Curran/BQ Energy)

- Response 10-11: In response to the above comment, the word "significant" has been removed from this FGEIS, since the degree of impact is yet to be determined. However, the recommendation or need for impact analyses relative to avian resources presented in the DGEIS and in this FGEIS is based on published documentation of commercial wind turbines with respect to potential avian impacts as well as the current DEC draft guidelines that address the potential impacts of wind turbines on the avian community. A site-specific environmental review may, or may not, conclude that pre- and post-construction monitoring may be warranted, depending on the site-specific designs, locations of the wind turbines, and the information that can be provided based on current investigations and literature. This conclusion would be determined by the lead agency and the involved agencies (e.g., DEC) during the course of the site-specific environmental review. In addition, to the extent that NEXRAD data is important relative to that environmental review that data can be included at that time. A review of that data for this FGEIS did not identify any statistical information to support a conclusion that a further site-specific review of potential impacts on avian resources is not necessary for a future site-specific commercial wind turbine proposal.
- **Comment 10-12:** Chapter 10, "Natural Resources," (pgs. 10-94, 10-99) indicates that wind turbines in the North Park and South Park could have an adverse impact on wildlife and habitat. Our previous comments address this in detail, though BQ Energy would agree with that statement on Page 10-99 that the overall habitat would be improved over the existing conditions. (Curran/BQ Energy)
- **Response 10-12:** For all the reasons cited above in the response to comment under "Natural Resources," the DGEIS examined the potential generic impacts of commercial wind turbines within the Fresh Kills Park project. As stated in the DGEIS, a site-specific environmental review would address the impacts of a site-specific proposal that could potentially operate as a franchise in Fresh Kills Park. The potential for these impacts and the need to address them in a separate environmental review is documented by DPR in the DGEIS, and similar analyses have been performed for other such proposals in the state and region (e.g.,

Long Island Power Authority). The need for such an analysis is also recognized in the draft DEC guidelines with respect to analyzing the impacts of commercial wind turbines. Lastly, the examination of this impact needs to be addressed in the context of the statement made in the comment above, specifically, that the proposal for Fresh Kills Park would enhance the use of the site for wildlife habitat including use of the site by avian resources.

- **Comment 10-13:** Chapter 10, "Natural Resources," (pg. 10-127) states that the proposed operation of six turbines (the actual proposed number is seven) at the highest elevations in the park has the potential for adverse impacts on wildlife. The chapter further states that mitigation measures should include wildlife studies documenting use of the project site before and after installation. Previous portions of Chapter 10 indicate a significant amount of data in this respect already exists. It would be inappropriate and redundant to require a wind energy project to duplicate this data. The best resource for evaluating potential impacts is analysis of NEXRAD WSR-88D Radar historical records. (Curran/BQ Energy)
- **Response 10-13:** See the response to comment above. NEXRAD WSR-88D is primarily weather station data and could provide additional information on wind speed and direction, but not information on avian mortality. To the extent that this information would be useful in a site-specific environmental review, it could be included at that time.
- **Comment 10-14:** DPR cares more about wildlife than people. (Brenker)
- **Response 10-14:** The proposed park would benefit both people and wildlife. It would, for example, also provide significant active recreation. The intention of the project is to preserve natural areas for wildlife habitat while balancing Staten Island's recreational needs. The role of the GEIS is to identify those impacts and providing site planning, design and mitigation measures that together can shape the balance between wildlife habitat protection, recreational, transportation, and energy needs.

CHAPTER 15: ENERGY

Comment 15-1: Page 15-6: Wind Power: *There is a potential for wind technology on the site, however, the location is not ideal.* The DGEIS provides no documentation as to why there is a potential for wind technology on the site. Additionally, the DGEIS provides no definition as to what is an ideal location for a wind turbine at the landfill or the basis for this statement. (Molinaro)

- **Response 15-1:** The statement above, taken from the DGEIS, is made with respect to DPR wind power facilities at lower elevations that could potentially power DPR facilities, not a commercial wind turbine proposal at the higher elevations of the park.
- **Comment 15-2:** Page 15-6: Wind Power: *Mid-sized turbines offer a compromise between generating a significant amount of energy without being overly imposing.* The DGEIS provides no definition for what is meant by "mid-sized turbines." The Department provides no information or studies as to how mid-sized turbines could "offer" a compromise. In fact, what does "offer" mean? The Department offers no definition of "a significant amount of energy." The Department also does not provide a definition of what is meant by "overly imposing." Is this a technical term? And lastly, there is no documentation provided where mid-sized turbines projects that have been built were able to balance an economically feasible wind farm without being overly imposing. (Molinaro)
- **Response 15-2:** The DGEIS text referenced in the comment above was made with respect to the proposed DPR wind power facilities, not the larger commercial wind turbine facilities proposed for the higher elevations of the landfill sections. As stated in the DGEIS, mid-sized turbines have a 100-foot radius; commercial wind turbines (as presented by BQ Energy) are up to 150 feet across, or significantly longer and potentially more imposing to open space users in the immediate vicinity of their location. As a result, such systems could also potentially limit open space activities and uses in their immediate vicinity (see the discussion above). That being said, the impacts of a site-specific analysis of a commercial wind turbine operation would be undertaken once a site-specific program is developed and put forth by a commercial operator such that these potential impacts could be evaluated.
- **Comment 15-3:** Page 15-6: Wind Power: *The wind turbines would be located in offmound areas with high energy demand to reduce infrastructure costs from cabling. A potential site for the turbines would be the Point area*... *there is a high energy demand in this area from restaurant uses and sports field lighting. This location is also more exposed to prevailing winds and less obstructed than other areas.* The DGEIS provides no documentation for why locating turbines off-mound would produce more energy than on the mounds. There is no documentation provided that proves that there is any wind available at the Point. Indeed, given that park amenities at the Point would not be available until the year 2036, is it the Department's mandate that wind energy at Fresh Kills cannot occur until 2036? In addition, the DGEIS provides no

information as to why the Point is more exposed to winds and has less obstructed areas. The DGEIS clearly does not examine why this location is technically and economically more favorable than a location on top of one of the mounds. The statement gives the impression that a meteorological study on the Point performed, yet no report is cited. (Molinaro)

- **Response 15-3:** Again, the DGEIS citation in the comment above is with respect to the proposed DPR wind power facilities, not a potential commercial wind power project. The analysis does not present these facilities as technically or economically more favorable. Rather it is expected that these DPR facilities would be constructed in conjunction with The Point (which is presented in the DGEIS as a 2036 Build year analysis), while the commercial wind turbine project is presented in the DGEIS as a potential project that would be operational by 2016 (see Table 1-10), and subject to a site-specific proposal and approval by DEC. As also stated above, the DPR-operated wind turbines would be operated for the purposes of providing electrical power to DPR facilities, many of which would be concentrated in The Point. Commercial wind turbines would be operated at the higher elevations of the landfill sections for the purposes of generating power that could be sold to the local power grid.
- **Comment 15-4:** Page 15-6: Wind Power: The DGEIS fails to provide a basis for the statement "10 percent of total demand would come from wind energy." There is also no documentation provided for the statement "each turbine could generate approximately 360kWh/day." And no documentation for the determination of "conservative conditions (15 percent capacity)". (Molinaro)
- **Response 15-4:** The reference cited above is also taken from the DGEIS. The statement was made with respect to DPR's proposal to provide wind energy for DPR facilities in The Point area of the proposed park, not the commercial wind turbine operation. The text is a summary of the wind energy potential at the site as determined in a preliminary assessment of potential alternative energy sources at Fresh Kills ("Fresh Kills Preferred Utility Scenario, Ove Arup & Partners Consulting Engineers, December 2007). As also stated in the DGEIS, commercial wind power is assumed to occur in the early phases of the project and is analyzed as part of the 2016 DGEIS analysis year. The text cited above is with respect to DPR objectives to have at least 10 percent of the electrical demand at the Fresh Kills Park project provided by DPR wind turbines. This is separate from the commercial wind turbine proposal.

- **Comment 15-5:** Chapter 15, "Energy," (pg. 15-6) discusses the possibility of two 100foot wind turbines generating approximately 10 percent of the total site electrical demand. The chapter states that locations for wind technology are not ideal. This is not a factual statement. In its report to the City and State of New York, entitled *Evaluation of the Feasibility of Installing a Commercial Scale Wind Energy Facility in Fresh Kills, Staten Island, New York*, BQ Energy identified seven (7) ideal locations for wind energy at Fresh Kills. The chapter further states that there is a compromise between generating a significant amount of energy without being overly imposing. This language is highly imprecise, subjective, and should be omitted. Wind energy would impose upon what? The DGEIS in this respect should refer to potential impacts discussed in the DGEIS rather than use vague language that connotes an overall negative impact from renewable energy. (Curran/BQ Energy)
- **Response 15-5:** The proposed project is considering a range of wind power alternatives, some of which are at a commercial scale (the larger wind turbines), others of which are at a smaller scale and would be used to support DPR facilities. As stated above, the commercial wind turbine proposal is for larger turbines that would potentially operate as a concession in the park. Such a commercial operation would need to be sited in the higher elevations of the park (e.g., on the landfill sections) and would need to obtain a permit from the DEC in order to operate. A commercial wind turbine operation would also be subject to a site-specific environmental review that would evaluate in greater detail, for example, the potential visual and natural resources impacts of the wind turbines as well as any impacts on proposed park uses and activities (see the discussion above regarding compatibility with park programming) as well as impacts on landfill infrastructure. The reference in the above comment is to the DPR wind power systems that would support DPR facilities. Thus, these facilities would be more proximate to DPR facilities and would need to be less imposing than the larger turbines on the higher elevations of the landfill sections. A clarification that these recommendations are related to DPR facilities has also been added to this FGEIS.
- **Comment 15-6:** Chapter 15, "Energy," (pg. 15-6) outlines the reasoning behind the use of two (2) mid-sized wind turbines instead of ten (10) smaller-sized wind turbines. BQ Energy agrees with the analysis that fewer, larger wind turbines are more effective at meeting the goal of providing renewable energy to the park, but disagrees with the conclusion that mid-sized turbines in a location with an uneconomic wind resource are the best option. To that end, the appropriate conclusion is that larger, commercial-scale wind turbines are the best solution for providing the

park's energy needs and the energy needs of the City of New York. The chapter further states that infrastructure costs would be reduced by placing turbines in off-mound areas. While this is correct, the wind resource and wholesale power price at Fresh Kills is more than sufficient to support an economic commercial-scale wind energy project at the Fresh Kills landfill mounds. The chapter incorrectly assumes that placing wind turbines at the Point area of the Confluence will increase exposure to the prevailing winds. This is not a factual statement. The way to increase exposure to prevailing winds is to place the wind turbines at a higher elevation and use taller towers. A comparison of the expected wind turbine capacity factor in the DGEIS (15 percent) and the capacity factor quoted in Evaluation of the Feasibility of Installing a Commercial Scale Wind Energy Facility in Fresh Kills, Staten Island, New York illustrates this. A commercial-scale wind turbine on a landfill mound will yield a capacity factor far in excess of what is estimated in the DGEIS. Finally, Chapter 15 states that more stable wind turbines foundations may be constructed in the off-landfill areas. This is not a factual statement. The BQ Energy report referenced above discusses a number of wind turbine foundations that have already been proven on landfill sites both domestically and abroad. These foundation designs were provided to BQ Energy by Geosyntec, a contractor that consulted with DPR on the drafting of this DGEIS. We concur that more engineering analysis is required to evaluate the preferred specific foundation design, but we have clearly documented that such foundation designs are feasible. (Curran/BQ Energy)

- **Response 15-6:** It is recognized in this FGEIS that the higher elevations of the site have greater potential for providing renewable wind power. As also stated above, foundation designs on the regulated landfill sections, though potentially technically feasible, would require the approval of DEC. These approvals would need to be in conformance with respect to Part 360-2.15 (k) which addresses post closure care and maintenance. As also stated above, an engineering and environmental review of a site-specific proposal is expected to be necessary in order to implement a commercial wind turbine proposal at Fresh Kills.
- **Comment 15-7:** Chapter 15, "Energy," (pgs. 15-5, 15-6) discusses the potential for renewable energy to provide 20 percent of the energy needs at Fresh Kills. The chapter states that any excess energy could be sold into the power grid. In light of the recently expanded net metering law in New York State, this would be an unwise course of action for the City of New York. Assuming the City only constructed two very small wind turbines in an area with an uneconomic wind resource (as suggested in the DGEIS), the City would receive a much greater benefit if it were to

net meter its renewable energy facilities. In a net metered case, excess energy will offset future energy use, thereby reducing the amount of power purchased at retail rates. Sale of energy to the power grid would be at the avoided cost rate of the utility, which is often far less than the retail rate. Furthermore, the DGEIS estimates the Fresh Kills Project electric power demand base-line to be approximately 11,000 MWh per year by 2036. In the study *Evaluation of the Feasibility of Installing a Commercial Scale Wind Energy Facility in Fresh Kills, Staten Island, New York* BQ Energy determined that a commercial-scale wind energy facility at Fresh Kills could generate electrical energy in quantities double or triple the projected power demand of the Fresh Kills park, thereby eliminating the need for the park to purchase energy at retail rates. (Curran/BQ Energy)

Response 15-7: Total energy and electrical demands for the park are yet to be determined. However, the advantages of net metering, total wind energy power generation, and total park project demands can be addressed as part of a supply/demand analysis that may be developed for a site-specific commercial wind turbine proposal at Fresh Kills. As stated above, the smaller turbines are proposed to support the DPR facilities. The reference to selling power to the grid has been removed in this FGEIS.

CHAPTER 16: TRAFFIC AND PARKING

- **Comment 16-1:** The densities for the off-ramp south of Victory Boulevard and the offramp south of Arthur Kill Road are significantly lower than the NYSDOT Draft Alternative Design (DAD) traffic data, resulting in significantly higher level of service (LOS) than the NYSDOT DAD traffic data indicated for these ramps. (Richey/Earthtech)
- **Response 16-1:** The differences in the two sets of data (the May 2008 DGEIS and the May 2004 NYSDOT data) are primarily attributable to the additional data collection performed for this DGEIS. Data developed for these ramps for the DGEIS was taken from May and July 2007 traffic counts, and is therefore different from the DAD report which was published in May 2004. In addition, speeds for the CORSIM ramp analysis were adjusted as requested by NYSDOT.
- **Comment 16-2:** The on-ramp north of Victory Boulevard and the off-ramp south of South Avenue, as well as the weaving segment on the mainline between these ramps, should be included in the CORSIM analysis for comparison once park traffic is added. Additional mainline

merge/diverge analysis related to these ramps should also be performed and the results documented. (Richey/Earthtech)

- **Response 16-2:** Based on the DGEIS Final Scope and subsequent discussions with NYSDOT, the limits of the CORSIM analysis necessary for the proposed project are Victory Boulevard to the north and the Arthur Kill Road to the south. No project-generated traffic is expected to use the South Avenue Ramps. However, in response to the above comment, the ramps to and from Victory Boulevard have been included in this FGEIS.
- **Comment 16-3:** Regarding the mainline analysis of the "North of Arthur Kill Road offramp diverge" and the "South of Arthur Kill Road on-ramp merge," it seems that this would be the same mainline analysis, as no cars would get on or off between these locations. Perhaps the "North of Arthur Kill Road off-ramp diverge" is supposed to be "South of Arthur Kill Road off-ramp diverge." Please confirm. (Richey/Earthtech)
- **Response 16-3:** The variances in the mainline traffic streams are due to vehicles shifting lanes along this stretch of the highway as part of the CORSIM model simulation.
- Comment 16-4: We recommend adding "Mainline" in front of the descriptions for the mainline segments between merge/diverge locations. For example, "Mainline South of Victory Boulevard off-ramp diverge." (Richey/Earthtech)
- **Response 16-4:** This text edit has been made in this FGEIS (see Table 16-22).
- **Comment 16-5:** We recommend renaming the "Approach" heading in the first column of Table 16-22 to "Location." It would also be helpful for the analysis locations to be numbered and shown on a location map. (Richey/Earthtech)
- **Response 16-5:** This text edit has been made in this FGEIS (see Table 16-22) and a figure has been added (see Figure 16-2).
- **Comment 16-6:** Once the additional ramp analysis locations are added as noted above, we recommend presenting them in the table so that they correspond to the direction of traffic flow from south to north. For example, starting with the mainline south of Arthur Kill Road off-ramp diverge, then the off-ramp south of Arthur Kill Road, then the mainline north of Arthur Kill Road off-ramp south of Arthur diverge, then the on-ramp south of Arden Avenue, and so on until the analysis concludes with the mainline north of South Avenue off-ramp diverge. (Richey/Earthtech)

Response 16-6:	These text edits have been made to the FGEIS. In addition, the ramps to and from Victory Boulevard have been included in this FGEIS.			
Comment 16-7:	The above comments also apply to Table 16-23. (Richey/Earthtech)			
Response 16-7:	These changes have been made in Table 16-23, "No Build Conditions on the Northbound West Shore Expressway," in this FGEIS.			
Comment 16-8:	Page 16-20 of Chapter 16 indicates that the future No Build analysis does not include NYSDOT improvements to the West Shore Expressway at or north of Victory Boulevard (VB-2B). (Richey/Earthtech)			
Response 16-8:	The above statement is correct with respect to the DGEIS/FGEIS "No Build conditions." These potential improvements are yet to be finalized or are beyond the build year of the limits of the study area, based on prior coordination with NYSDOT.			
Comment 16-9:	Page 16-20 of Chapter 16 indicates that the NYSDOT park-and-ride is included in the No Build. Please provide CORSIM input data used for the AASHTO-vehicle classifications, particularly the percentage of buses, at the on-ramp north of Arthur Kill Road. (All CORSIM input data and output analyses results should be included in an Appendix and referenced from the appropriate report sections.) (Richey/Earthtech)			
Response 16-9:	This data has been provided to NYSDOT.			
Comment 16-10:	The above comments also apply to Table 16-24. (Richey/Earthtech)			
Response 16-10:	The modifications discussed above have also been made to Table 16-24, "2016 Build Conditions in the Northbound West Shore Expressway."			
Comment 16-11:	Please provide the geometric length of weave that the analysis is based on for the weave "Between on-ramp merge at Arthur Kill Road and proposed off-ramp diverge at Northbound West Shore Expressway Service Road" and confirm the percentage of buses from the NYSDOT park-and-ride that are included in the weave analysis input. (Richey/Earthtech)			
Response 16-11:	The weave length in the analysis is 500 feet. In addition, the affects of bus vehicles has been provided to NYSDOT and in the FGEIS.			
Comment 16-12:	We recommend renaming "Between on-ramp merge at Arthur Kill Road and proposed off-ramp diverge at Northbound West Shore Expressway Service Road" to "Weave between on-ramp merge north of Arthur Kill			

Road and proposed off-ramp diverge north of Arden Avenue." We also recommend renaming "South of proposed on-ramp merge at Northbound West Shore Expressway Service Road" to "Mainline south of proposed on-ramp merge south of Fresh Kills Entrance." This naming convention will be more consistent with the ramp analysis location descriptions used in the table. (Richey/Earthtech)

- **Response 16-12:** These modifications have been made to Table 16-24 in this FGEIS.
- **Comment 16-13:** The above comments also apply to Table 16-25. (Richey/Earthtech)
- **Response 16-13:** These modifications have been made to Table 16-27, "2036 No Build Conditions on the Northbound West Shore Expressway," in this FGEIS.
- **Comment 16-14:** The above comments also apply to Table 16-26. (Richey/Earthtech)
- **Response 16-14:** These requested text modifications have been addressed in this FGEIS.
- **Comment 16-15:** The densities for all of the ramps, including the on-ramp south of Victory Boulevard, off-ramp north of Muldoon Avenue, off-ramp south of Arden Avenue, and on-ramp south of Arthur Kill Road, are significantly lower than the NYSDOT DAD traffic data, resulting in significantly higher LOS than the NYSDOT DAD traffic data indicated for these ramps. (Richey/Earthtech)
- **Response 16-15:** As stated above, the differences in the data are primarily attributable to the additional data collection that was performed for the DGEIS (May-July 2008).
- **Comment 16-16:** Comments 1d through 1f regarding naming conventions and the order in which the data are reported in the Northbound WSE Tables applies to all Southbound WSE Tables 16-27 through 16-31. (Richey/Earthtech)
- **Response 16-16:** The above comment regarding the modifications to the naming conventions have been carried through to Tables 16-27 through 16-31 of this FGEIS.

CHAPTER 17: TRANSIT AND PEDESTRIANS

Comment 17-1: Bike and pedestrian access to the park must be looked at from an islandwide and even regional aspect. DPR has a great opportunity to connect Fresh Kills Park to the Gateway Recreation Area using an already funded and planned route using Old Mill Road and the Amundsen Trailway to connect with the Great Kills Gateway area. A pathway from this area is mostly completed connecting along the waterfront down to Fort Wadsworth. Bike and pedestrian from other areas should also be looked at as a way into the park without using cars. (Lofaso)

- **Response 17-1:** Comment noted. In coordination with other City and State agencies, DPR is working on various greenway projects across Staten Island. Fresh Kills Park's bike and pedestrian paths present a significant opportunity to expand that system and to be integrated to the islandwide greenway system.
- **Comment 17-2:** To ensure the safety of cyclists, bike paths leading to and from the park should be physically protected from traffic, similar to the bike lanes of Ninth Avenue in Manhattan. By providing safe and direct bike lanes to and from the park, the accessibility to cyclists would promote cycling and help avoid the need to drive to use the paths within the park. (Transportation Alternatives)
- **Response 17-2:** Bike lanes on City streets fall under the jurisdiction of NYCDOT. As new bike lanes are planned on the streets leading to and from the proposed Fresh Kills Park, DPR will work closely with NYCDOT to analyze whether physically protected bike lanes can be constructed in these locations.
- **Comment 17-3:** Fresh Kills Park could connect the greenways all around Staten Island, allowing even more biking options for cyclists than just Fresh Kills and the immediate surrounding communities. (Transportation Alternatives)
- **Response 17-3:** Comment noted. As stated above, it is expected that Fresh Kills Park would play an important role in Staten Island's greenway/bikeway connection system.

CHAPTER 18: AIR QUALITY

- **Comment 18-1:** Why is there no discussion on long-term adverse conditions due to air pollution from idling cars stuck in traffic? Opening the Fresh Kills roads would reduce traffic congestion on Richmond Avenue and the West Shore Expressway. The EIS does not quantify the positive impact of opening the roads for traffic relief. (Halle for McMahon, Claro)
- **Response 18-1:** Chapter 18, "Air Quality" of the DGEIS and this FGEIS provides a comprehensive analysis of mobile source air quality both with and without the proposed project including the roads across Fresh Kills. Tables 18-7 and 18-8 of the DGEIS (and this FGEIS) present the results of that air quality modeling. As shown in the tables, there are concentrations of Carbon Monoxide (CO) levels for the 8-hour period for both the 2016 and 2036 analysis years. The three analyzed intersections

were Richmond Avenue at Forest Hills Road and Richmond Hill Road and the intersection Richmond Hill Road and Forest Hill Road. The reason for the CO increases is both the added traffic from the proposed park as well as the diverted traffic with the proposed park roads that would divert existing traffic to new intersections. Based on the air quality analysis presented in the GEIS, no significant air quality impacts would result from the traffic conditions with the proposed project in either 2016 or 2036. However, as shown in the analysis, there would also not be any significant benefits at these locations.

CHAPTER 22: ALTERNATIVES

- **Comment 22-1:** The DGEIS fails to consider less environmentally intrusive alternatives to the preferred roadway alignment. Specifically, dismissing the use of the existing perimeter haul road around the north side of Landfill Section 6/7 is based on the unsubstantiated conclusion that an on-landfill road alignment within this area would conflict with views from North Park and the William T. Davis Wildlife Refuge, which, according to the Parks Department, is counter to the park goal of leaving this northern section pristine and natural. Throughout the document, this conclusion is merely asserted and is based on no documentation to either define or identify why this northern section is being chosen to remain pristine and natural. In essence, this "goal" is arbitrary, unsubstantiated, and materially and negatively directs the roadway alternatives assessment to become invalid. The goal should thus be clearly substantiated or else removed. (Molinaro)
- **Response 22-1:** As described in detail in the DGEIS, the area north of Landfill Section 6/7is adjacent to tidal wetlands as well as the natural area of William T. Davis Wildlife Refuge Park. DPR investigated this alignment as part of the design phase for the proposed park roads and considered this alignment and its potential impacts, then compared this alignment with other alternatives for the purposes of developing the proposed alignment presented in the FGEIS (see Conceptual Roads Report, ARUP, et.al. September 2007 and Road Alternatives Report, ARUP et.al., December 2007). The Conceptual Roads Report examined three potential alignments around the northern part of Landfill Section 6/7. That analysis found impacts on existing parkland and tidal wetlands associated with the William T. Davis Wildlife Refuge and also impacts on the landfill infrastructure with this northern alignment as assuming a four-lane road. Thus, for the DGEIS, the eastern alignment was preferred. The northern/western alignment alternative was also presented in the DGEIS in Chapter 22, 'Alternatives," (see page 22-17 of the DGEIS, Alternative-Richmond Hill Road Connection [West of Landfill Section 6/7]). For this

FGEIS, in response to the above comment, a modification of this alternative, as developed by the office of the SIBP is presented in this FGEIS. This alignment is a two lane road which is described and analyzed in detail in Chapter 22 of this FGEIS, "Alternatives."

- **Comment 22-2:** The DGEIS's preferred roadway alignments require extensive fill within freshwater wetland and open water areas. The preferred routes also traverse the capped mound, specifically, on the southern portion of Section 6/7. Failure to adequately analyze the utilization of the existing Section 6/7 perimeter roads creates a fatal flaw in the required analysis of alternatives. Since the existing haul roads are there and legally permitted pursuant to consent decree, their utilization generates an alternative alignment with the least environmental and socio-economic impact when weighed and balanced against the preferred alternative routes. Moreover, the socio-economic impact of constructing new roads *in the future* versus the *utilization of existing roads now*, weighs overwhelmingly against the preferred routes. (Molinaro)
- **Response 22-2:** Direct reuse of DSNY haul roads as public roads is not permitted pursuant to the Fresh Kills consent order, although it is recognized that conversion of haul roads to public roads does create the opportunity for the potential reuse of lands previously disturbed by road construction. However, some of the limitations of the haul roads for reuse as public roads include alignments that do not meet design standards for proposed speeds along the public roads (e.g., DSNY haul roads for trucks have a speed limit of 5 mph, while the proposed public roads have a design speed of 35 mph) and cross-sections that in many cases, when designed for public roads at 50 feet wide, for example, could potentially interfere with DSNY landfill infrastucture as well as the post-closure care and operations at Fresh Kills Landfill. These conflicts are described in Chapter 22 of the DGEIS and the "Conceptual Roads Report, Fresh Kills Park, Phase 3A, Task 8.3," (September 2007).

However, a modification of the alternative road alignment analyzed in the DGEIS, including a modification of the Richmond Hill Road connection, has been included in this FGEIS and addresses the above-described comment with respect to reuse of the DSNY haul roads. It is recognized, however, that both the proposed project and this alternative cross Landfill Section 6/7 (e.g., the Yukon Crossing) which is required along with the necessary modification of DSNY infrastructure related to the Fresh Kills Landfill post-closure.

Comment 22-3: If the preferred routes are to be sustained in the final EIS, then an analysis must be presented justifying, among other factors: (a) the

additional cost; (b) additional pollution associated with programmed construction in the 2036 build year; (c) projected economic losses propagated by lack of efficient transportation routes through the site analyzed over three decades; and of course (d) loss of environmental resources from extensive filling. (Molinaro)

Response 22-3: In response to the four issues raised above;

- (a) Additional data is provided on road comparisons as part of this FGEIS;
- (b) The DGEIS included a full analysis of the phased construction of a four-lane road through the Fresh Kills Park and did not identify any adverse impacts with respect to construction period pollution. The DGEIS also identified a full range of construction-period impact avoidance measures (see Chapter 23 of the DGEIS and this FGEIS, 'Impact Avoidance Measures and Mitigation'') and as stated above, the proposed road development program was a phased approach to road construction minimizes construction impacts (including facilitating construction access from the West Shore Expressway as a first phase of construction).
- (c) Both the proposed project and the SIBP recommended alternative would provide new transportation and circulation benefits with a more direct connection between Richmond Avenue and the West Shore Expressway—neither would result in an economic loss. If the alternative roadway can be feasibly constructed in a shorter time frame, the potential economic benefits of this alternative may conceivably be realized sooner, but in neither scenario is there an adverse economic impact; and
- (d) The potential for impacts due to filling of wetlands and other impacts were fully analyzed in the DGEIS and mitigation is presented, as required, in Chapter 23.
- **Comment 22-4:** The assumption that all roadway segments should be 4 lanes or 60 feet in width is the fatally incorrect assumption which nullifies the development and ultimate selection of the preferred roadway routes. In absence of that assumption, the Borough President's office has developed an alternative which is far less costly, carries less environmental impact, and is far easier and faster to implement than the preferred routes. The Borough President's office is thus submitting a roadway alignment plan that meets all the roadway criteria enumerated in the DGEIS. Briefly, the synopsis of this plan is exemplified by the attachments: a site plan showing the proposed utilization of the existing Section 6/7 perimeter roads and several power point slides. In essence, the Borough President's plan utilizes the existing perimeter roads essentially as-is, in a one-way, two-lane counterclockwise pattern around the perimeter of Section 6/7, with connections to Richmond Avenue at Richmond Hill Road, Yukon

Avenue and Forest Hill Road. These attachments are representative of the ongoing discussions and analyses being conducted by and with all the affected DGEIS agencies, a process that began early this month. Indeed, over the last several weeks this plan has been presented and discussed at length with the Mayor's Office, DPR, DDC and the FK Design team. Analysis is proceeding concurrently with the processing of the DGEIS. Given this level of review, the Borough President's office is requesting that all correspondence, submissions, discussions, analysis and conclusions pertaining to this plan be incorporated as comments from the Borough President's Office in this DGEIS finalization. It may be sufficient to simply incorporate by reference as opposed to voluminous inclusion of specific technical design work. (Molinaro)

- **Response 22-4:** As stated in the "Final Scope of Work to Prepare a DGEIS (August 2006)," in order to understand the full range of impacts from constructed public roads across Fresh Kills Landfill, the DGEIS analyzed the wider four-lane road, but also considered a two-lane alternative. This is fully disclosed in the Chapter 1 "Project Description" of the DGEIS and the accompanying description of the Reasonable Worst Case Development Scenario (RWCDS) (see Section E 'Framework for Analysis" and "Vehicular Circulation Plan," page 1-43 as well as Figure 1-12 of the DGEIS). In addition, as stated above, this FGEIS includes an examination of the SIBP proposal in Chapter 22, "Alternatives." This alternative is a modification of the western alignment presented in the DGEIS in Chapter 22, "Alternatives."
- **Comment 22-5:** Finally, at the westerly end of the roadway plan are the West Shore Expressway connections. As stated in the DGEIS, plans are to construct the roadway plan from west to east, beginning with the West Shore expressway service roads and connectors into and out of the site. This office is opposed to this "starting point." To start at this westerly end will effectively consume all the funding currently earmarked for road construction. This is unacceptable. Most of that City funding is directed to NYS Rt. 440 service roads—a State responsibility. The state contribution is about 50 percent of the City's contribution. If this "starting point" is thus completed during the initial phases of the Park, then a service road to nowhere will have been constructed since a Fresh Kills Park utilization would still be decades away from realization.

Inasmuch as consumption of all currently available funding for a marginally effective portion of the roadway network gains Staten Islanders very little in the way of transportation improvement, it is requested that an analysis be performed to assess the wisdom of the current phasing of the transportation roadway overall plan. This office requests that simple low cost, low impact off-ramps be constructed on Rt. 440 northbound into the site just south of the Fresh Kills Bridge, and a simple low cost, low impact connection be made to the existing Rt. 440 southbound service road entrance just north of Muldoon Avenue. Doing so will free up scarce funding for implementation of this office's proposed roadway plan for Landfill Section 6/7, once it has been deemed the preferable alternative.

The analysis is clearly necessary to achieve the required reasoned elaboration showing environmental, economic, and socio-economic balances. This re-tuning of the phased implementation can then produce a complete working transportation network for the site decades earlier than that proposed. (Molinaro)

Response 22-5: Whether starting from the west or the east, a road connection needs to be completed in order to provide a completed circulation route between Richmond Avenue and the West Shore Expressway. Starting with the segment from the West Shore Expressway provides the necessary connections from the West Shore Expressway and would also provide vehicle access to the site to the near term open spaces that are proposed in these areas. Access from the Expressway would also provide improved regional access for construction vehicles and materials in order to construct the park roads from the west to the east. Lastly, a major advantage of starting construction at the Expressway is that it would not interfere with landfill closure at Landfill Section 6/7 and would accelerate the construction of the roads. To start at the east would put road construction on hold while final closure of Landfill Section 6/7 is being performed, and, in addition all preconstruction approvals including wetland and protection of waters permits and approval to construct on the landfill would need to be in-place in order to start that construction. There are fewer regulatory issues for the improvements along the Expressway and the proposed connections which allow this segment of road construction to move forward more expeditiously.

CHAPTER 23: MITIGATION

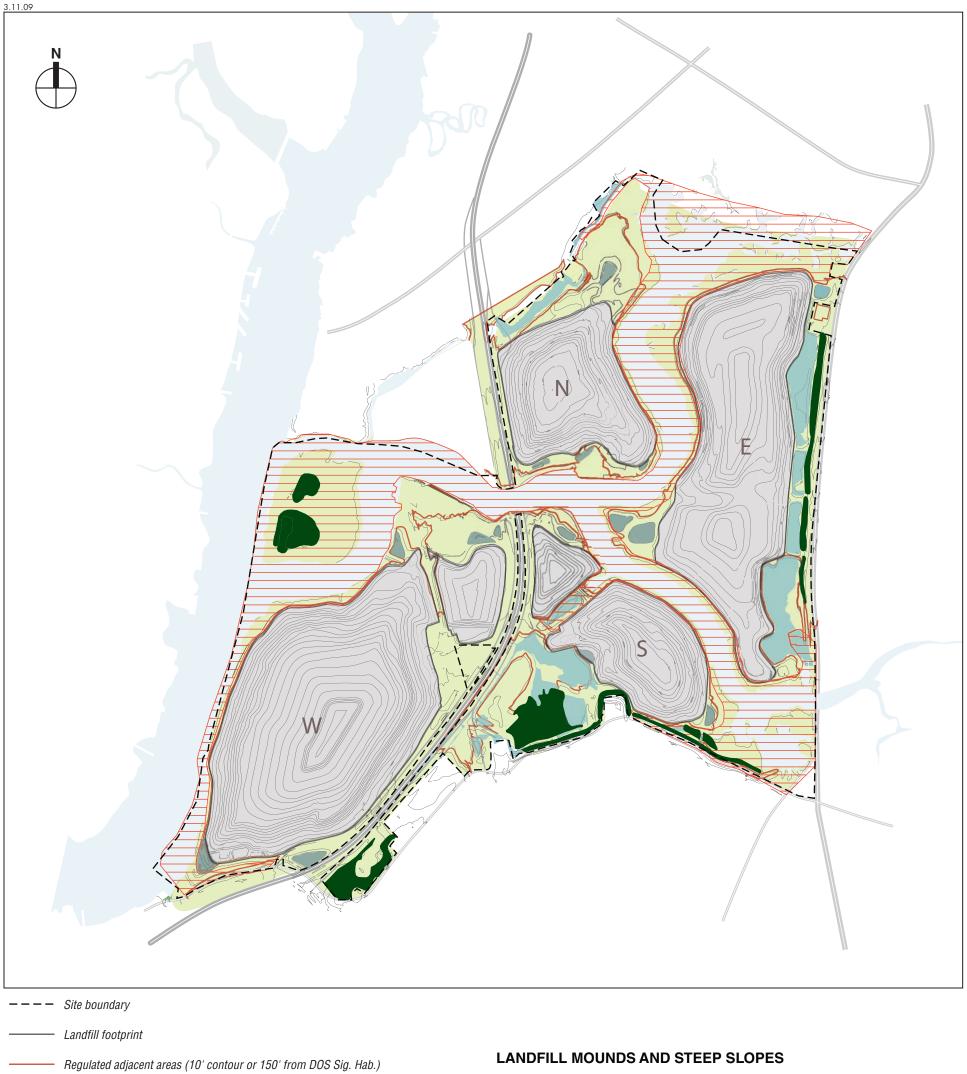
Comment 23-1: Chapter 23, "Mitigation," (pg. 23-7) discusses potential impacts of wind energy on natural resources. The chapter correctly states that a wind energy project would require an empirical analysis of potential collision risks. The chapter further states that a wind energy project should meet the requirements of the DEC draft *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects.* The guidelines do not provide an empirical method for analyzing potential collision risks. In fact, BQ Energy is unaware of any scientific method of quantitatively analyzing collision risks from pre-construction studies. The referenced pre-construction studies are to take a census of bird populations, nothing more.

The only method that comes close to quantifying collision risk is analysis of NEXRAD WSR-88D Radar historical records, which the DEC draft guidelines do not include, but which the DEC in actual practice recommends on wind projects. As these guidelines are still in a draft condition and have not been finalized, we anticipate that this and many other aspects will be made more precise as the normal drafting process progresses. The draft guidelines were drafted with no input from stakeholders other than the DEC. While the DEC requested comments six months ago from stakeholders following the issuance of the draft guidelines, it is not known whether the DEC has reviewed the stakeholder comments or begun the process of incorporating the comments into a final set of guidelines, or whether any such actual guidelines will ever be issued. As the guidelines are still in a draft state and were constructed with no outside input, it is altogether inappropriate to require an environmental review with these guidelines as the basis. (Curran/BQ Energy)

Response 23-1: As stated above (see "Natural Resources" and "Energy"), the potential for avian impacts needs to be addressed as part of a site-specific environmental review. In that regard, one element of that analysis to be considered are the published involved agency draft guidelines that provided guidance to DPR in establishing the context for examining potential natural resources and other impacts related to commercial wind turbines at the proposed Fresh Kills Park. DEC, which would also need to approve any wind turbines at the site, particularly those on the landfill sections, is an involved agency in this process. In reviewing this DGEIS, DEC did not suggest eliminating consideration of the guidelines in assessing the potential for impacts due to wind turbines. Rather, as stated above, it is expected that this avian impact analysis would be performed in greater detail as part of a site-specific environmental review and permitting process that would be performed for the proposed commercial wind turbines.

CHAPTER 26: IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

- **Comment 26-1:** The DGEIS does not discuss the irretrievable and irreversible commitment of resources when designating public space before the determination of future park projects and the accompanying potential for producing one or several supplemental impact statements. (Molinaro)
- Response 26-1:No irretrievable commitment of resources would occur relative to the
designation of public open space. This GEIS is analyzing the full range
of future park projects and all actions necessary to move the Fresh Kills
Park Project forward.



DEC tidal wetlands (Source:national inventory and state tidal wetlands map)

landfill mounds

1,029ac

53.5%

slope greater or equal to 3%

Navigable waters of the US (Anything seaward of the mean high tide)	WETLANDS AND LANDFILL BASINS		
	DEC tidal wetlands	413ac	21.4%
Other delineated wetlands	other delineated wetlands	102ac	5.0%
Landfill basins	landfill basins		2.4%
Wooded areas	regulated adjacent areas	60ac	3.1%
	TOTAL CONSTRAINED LAND	1,651ac	76.0%
Limited constraints from slope/vegetation/wetlands	FRESH KILLS TOTAL AREA	2,163ac	

NOTE: Numbers are approximate and are based on currently available information

Fresh Kills Park Site Constraints Figure 28-1

FRESH KILLS PARK • GEIS