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Old Bridge

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Planning Report for O&Y (2 copies)

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PLANNING REPORT
FOR
THE OLYMPIA & YORK PLANNED DEVELOPMENT
OLD BRIDGE TOWNSHIP, NEW JERSEY

Prepared For: O&Y Old Bridge Development Corp.

Prepared By: Sullivan Associates

Date: May 26, 1987

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A. INTRODUCTION

In the early part of 1986, in accordance with the Court Order and Settlement Agreement of January 24, 1986, the Old Bridge Township Planning Board was in the process of conducting public hearings on Plates A and A-1, which represented O&Y's intended development plans.

During the public hearings, O&Y became aware that potentially larger areas of the project than originally anticipated might be classified as wetlands, thus falling under the jurisdiction of the US Army Corps of Engineers (The Corps). Because of uncertainty as to the extent and usability of the wetland areas, O&Y asked the Planning Board to adjourn the public hearing until such time as the unresolved questions could be clarified.

At that time, O&Y began a detailed mapping of their property. This process took almost one year, ending in February 1987. The survey did verify that a larger portion of the site was affected by wetlands than originally anticipated, and that additional planning studies would be necessary to address its implications.

The purpose of this report is to summarize the results of the wetlands survey and to outline our proposals for a Planned Unit Development on the O&Y property, which is fully responsive to the delineated wetlands on the site and the relevant wetland regulatory authority of the Corps. These proposals include the provision of a wide variety of housing types, including a set-aside for low and moderate income housing; the development of commercial and employment generating SD uses; a circulation plan and proposed strategies for the development of the Trans Old Bridge connector; and the provision of lands for public purpose, recreation and open space uses.

B. WETLANDS DELINEATION

The Army Corps of Engineers, as the agency charged with regulating the wetlands, determines the limits of its jurisdiction on the basis of detailed field investigations of soils, vegetation and hydrologic site conditions. Lands found to be within the Corps' jurisdiction are subject to 404 permit requirements for any development activities requiring the placement of fill in the wetlands. All lands outside the Corps' jurisdiction are available for development according to local development regulations. This delineation process has been completed for the O&Y site by Amy S. Green, Environmental Consultants. The criteria and methodology employed in this delineation, along with the results of the study, are detailed in the Wetlands Delineation Report, dated February 1987.

The limit of the wetlands, which was marked in the field by Amy S. Green, Environmental Consultants, has been surveyed and mapped by Taylor Wiseman Taylor, Consulting Engineers. Because of the size of the O&Y site (approximately 4 square miles) and the detail of the mapping, which included approximately 1,300 survey points, this mapping took nearly a year to complete.

Representatives of the Corps accompanied by the Federal Environmental Protection Agency and the United States Fish and Wildlife Services, have visited the O&Y property during the wetlands delineation process to inspect the wetlands delineation made by Amy S. Green, Environmental Consultants. The Corps has verbally confirmed the location, the extent and the limits of the wetlands as delineated. O&Y has recently submitted the final wetlands report, along with final maps prepared by Taylor Wiseman Taylor, surveyors to the US Army Corps of Engineers for acceptance of the wetlands delineation as the official limit of Corps jurisdiction.

Of a total of approximately 2,600 acres, the final wetlands mapping, as submitted to the Corps, identifies approximately 1,459 acres of wetlands. Any development requiring fill on these lands would be subject to an Army Corps of Engineers 404 permit. The remaining lands, totalling approximately 1,141 acres, are not subject to regulation by the Corps. About 581 acres (39%) of these uplands are located in large contiguous tracts of land, ranging from 25 to 132 acres in size. Another 200 acres of these lands are located in tracts ranging from 10 to 19 acres in size. Most of these upland parcels are adjacent to existing roads and are accessible.

C. LAND USE PLANS

O&Y has developed two land use plan alternatives, which address the concerns of the Township of Old Bridge. In each, the residential, special development, and commercial components are treated essentially the same. The principal difference between these two plans is the omission or inclusion of the Trans-Old Bridge Connector, which is a proposed cross-town freeway, long desired by the Township and incorporated into the Township Master Plan.

In both of these plans, no filling of wetlands is proposed for the residential component. The areas designated for commercial uses, that are located adjacent to Route 18, require fill which is permitted upon the issuance of a 404 permit by the Army Corps of Engineers. Because the T.O.B. is a Township Master Plan Road, it has been included on Alternative Plan B. However, its alignment does cross numerous wetland areas, and the Corps has advised O&Y that it is unlikely a permit would be issued to a developer to construct such a road. Consequently, it has been eliminated on Alternative Plan A to illustrate the independence of the development from this road improvement.

A description of the plan components follows:

1. Residential

The residential uses in each plan are located on upland areas only, with no requirement for a 404 permit because there will be no filling of wetlands. Much of this upland area is adjacent to and accessible from existing roads. Those uplands which are not adjacent to a road, but are relatively close to accessible uplands, will be reached with simple bridge structures not requiring fill.

Conceptually, the residential areas in both plan alternatives will be developed in a manner similar to that proposed in Plate A of the Settlement Agreement. Using Plate A as a base line, the overall residential density, including the land devoted to public purpose and non-designated open space, was calculated to be approximately 5.96 units per acre on 1,771 acres. This, of course, assumes the 10,560 units proposed on Plate A. Extracting the public purpose lands and the non-designated open space yielded a residential density of approximately 6.5 units per acres. With these densities, Plate A as proposed with the Settlement Agreement, provided the opportunity for a wide variety of housing types, including single-family detached, single-family attached, patio homes, maisonettes, and multi-family homes. The residential component also included a ten percent (10%) set-aside for lower income units.

The residential components of both land use plans are proposed to be developed at the same densities and range of housing types, as contemplated in the court settlement. The amount of residential land between the two being 835 for one and 845 acres for the other. Applying a residential density of 5.96 units per acre would yield approximately 4,977 to 5,036 units. This would comfortably allow an adequate amount of residential upland area to be devoted to public purpose and recreational uses.

Because of the configuration of the various upland parcels, some being long and wide others being short and narrow, O&Y prepared a test site plan of a substantial portion of the project to demonstrate that the residential lands can be developed at the intensity and range of housing types as described in the site planning standards contained in the Settlement Agreement.

The area selected for the test plan is in the central portion of the project and contains a total of approximately 480 acres. It is bounded on the north by Pleasant Valley Road, on the south by E. Graystone Road, on the east by Marlboro Road, and on the west by Englishtown Road. It was selected because it contains the least favorable representative sample of the various uplands configurations.

The site plan, which was drawn at a scale of 1"=200', illustrates a wide range of housing types from multi-family to single-family detached with a ten percent (10%) component for lower income housing. All of the housing units are located on upland areas. The plan conforms to the site planning standards contained in the Settlement Agreement. The only wetlands intrusion would be for road crossings and these would be bridged. In certain instances, there are single-family lot lines which extend into the wetlands, however, these portions of the lots are outside the building envelopes and, under the Corps regulation, this is permitted provided the wetlands are not filled.

The following summarizes the test site plan.

TEST SITE DEVELOPMENT

| | | |
|--------------------|-----------|---------|
| Total Area & Units | 1,275 du | 480 ac. |
| Wetlands | | 243 ac. |
| Uplands | | 237 ac. |
| Multi-Family | 848 du* | 43 ac. |
| Townhomes | 509 du | 74 ac. |
| Patio Homes | 188 du | 35 ac. |
| Single-Family | | |
| 1/3 acre lots | 94 du | 63 ac. |
| Commercial | 75,000 sf | 9 ac. |

* Note: of these, 128 du are lower income.

The test site plan demonstrates that the configuration of upland areas does not materially affect the yield of residential units per acre as related to the acres of upland. As previously mentioned, wetlands can form a portion of the yard area and, as the test plan substantiates, the upland areas that are too small to develop are offset by these yards. Thus, there is no net loss in the acreage of developable land. The plan also, consistent with good planning principles, incorporates the concept of mini clusters of housing located off country roads surrounded by substantial open space. There is a broad range and balance of housing types.

Depending upon how much land is ultimately devoted to residential uses, the O&Y Planned Development can provide approximately 5,000 units with about 500 lower income units. The test site plan demonstrates that this is realistic, viable, and in accordance with the principles of the Settlement Agreement, and totally outside the jurisdiction of the Corps of Engineers.

2. Special Development and Commercial

Both Land Use Alternatives A and B show parcels for Special Development ranging in size from 17 to 54 acres and totalling 149 acres which are generally located along Route 18 and Texas Road. SD-1 is 54 acres and is linear in configuration. It is bounded by Route 18 and the 100 year flood plain for the Deep Run watershed system. SD-1 is accessible from Route 18. SD-2 is 17 acres and located at the intersection of Route 18 and Texas Road. Access is via Texas Road.

Parcels SD-3 and SD-4 are respectively south and north of Texas Road, between its intersection with Marlboro Road and Route 18. SD-4 is 40 acres, SD-3 is 38 acres. Access to both of these parcels is from Texas Road. Using the fifty percent (50%) F.A.R. allowance contained in the Settlement Agreement, the theoretical development capability of these parcels is 3,245,220 s.f. Of the total land, approximately 91 acres of development area will be on filled wetlands requiring a permit from the Corps, while the remaining 58 acres are uplands not requiring a Corps permit.

Plan A does not include the Trans Old Bridge Connector, whereas Plan B does include it. The significant difference between Plans A and B, insofar as the location and extent of lands designated for commercial use, is a direct response to the commercial potential obviously inherent in lands with frontage exposure on this major traffic artery. Plan A identifies eight (8) commercial parcels, C-1 through C-8, with the majority of the land area located adjacent to Route 18. On these parcels (C-5, C-6, C-7, and C-8 totalling 112 acres), filling of wetlands and the related 404 permit would be required. The remaining parcels located along Englishtown Road and at the intersection of Marlboro and Texas Roads would not require fill, since they are located only on uplands. The total Commercial Land on Plan A is 128 acres.

Plan B differs from Plan A only in the vicinity where the T.O.B. intersects Route 18. At this location, there is an additional 27 acres of commercially designated land along the T.O.B. giving Plan B a total of 155 acres of commercial.

3. Circulation

Both of the Land Use Alternatives rely primarily on the existing road network with necessary improvements and the addition of some minor arterial roads. While neither of the alternatives is dependent upon the Trans-Old Bridge Connector, Alternative B includes the T.O.B. alignment, because this was a requirement of the Settlement Agreement. The particulars concerning the T.O.B. and its impact upon wetlands will be discussed later in this report.

In terms of the existing road network within the project area, Land Use Alternative A provides for the upgrading of East Graystone Road between Englishtown Road and the realigned Marlboro Road. Pleasant Valley Road would also be upgraded from its intersection with Marlboro Road west to its intersection with a proposed minor arterial. Marlboro Road would be improved between Route 18 and Pleasant Valley Road and re-aligned south of Pleasant Valley Road to Texas Road.

In addition to improving these existing roads, Plan A contains three new minor arterials. On the eastern portion of the project, there is a new road connecting Marlboro Road directly with Route 18. This serves a commercial parcel (C-8) on the north and a residential parcel (R-8) to the south. The second roadway goes in a northwestern alignment and connects Pleasant Valley Road and Englishtown Road. This road serves a substantial residential area north of Pleasant Valley Road. The remaining proposed road runs from Englishtown Road to Texas Road in a generally north-south direction and serves the residential parcels in the area west of Englishtown Road. Preliminary traffic studies confirm that Land Use Plan A will function adequately without the T.O.B.

The circulation system generally has minimal effect on the wetlands. Where existing roads are adjacent to wetlands, they will be upgraded using the limits of the present fill section, no additional fill will be put within the wetlands. The proposed roads are located primarily on uplands areas. Where they do cross wetlands, the wetlands will be bridged so that no fill will be required for the wetlands crossing. O&Y has submitted the design methodology for wetland crossings to the Corps and is currently waiting for an official concurrence from the Army Corps of Engineers as to the acceptability of the designs for these crossings.

Land Use Plan Alternative B proposes essentially the same circulation system, except that it includes the T.O.B. During the planning process, many different alignments for the T.O.B. were explored, the objective being to minimize the crossing of wetland areas. All of the alignments, including the one selected, have substantial stretches of road located in wetlands, approximately 5,280 feet of the total 10,800 feet. Because of the size of the T.O.B. and the extent of the wetlands crossings, it would be completely economically unfeasible to attempt to bridge the wetlands areas. Recognizing that O&Y is committed to constructing the T.O.B., Plan B has incorporated it. However, construction of the T.O.B. will require a permit from the Corps because those sections of the road traversing wetlands will have to be constructed on fill.

Based on extensive inquiry, O&Y does not believe that, as a developer, they will be able to obtain the 404 permit from the Corps that will be required for its construction. O&Y believes that in order for the Corps of Engineers to approve the T.O.B., it will be necessary for Old Bridge Township to apply for the 404 permit and demonstrate how the T.O.B. would serve the overall public interest of the municipality beyond the potential benefits that may accrue to the O&Y Planned Development. If the Township is willing to apply for and is successful in obtaining the requisite Corps approval, O&Y recognizes that it is committed to construction of its fair share of the T.O.B.

4. Public Purpose, Recreation and Open Space

During the hearing process for Plate A, the Planning Board expressed particular interest in the Public Purpose and recreation components of the plan. The Settlement Agreement provides that two percent (2%) of the residential lands be devoted to Public Purpose uses and that an area equal to twenty percent (20%) of the residential lands be dedicated open space. The Planning Board was concerned that there be enough Public Purpose lands and areas for active recreation, particularly field areas. In this regard, during the hearing process, meetings were held between O&Y, the School Board and the Fire Department, in order to assess needs. Given these concerns, the two Land Use Plan Alternatives respond by providing more Public Purpose land than called for in the Settlement Agreement, and also by allocating more upland area for active recreational purposes than required. Of necessity, these uses have been allocated to the uplands portions of the project, because they would require fill permits if allocated to wetland areas.

In the case of the Public Purpose lands, the area allocated is based upon two acres for a fire station, fifteen acres for a school site, and five acres for other uses which the Township would deem desirable. Both alternative plans provide for these 27 acres. Their locations have not been designated and would be subject to the expressed preferences of the Township.

During the public hearing on Plate A of the Settlement Agreement, it was suggested by the Township Planning Consultant that the recreation areas be calculated on the basis of a publication by the National Recreation and Park Associates called Recreation, Park and Open Space Standards and Guidelines. The standards specify land areas as a multiple of population for mini, neighborhood, and community parks. These standards are acceptable to O&Y and have been used in developing the two plans.

Assuming an average population of 2.5 persons per unit, sizes were calculated for the three alternate land use plans. The standards recommend that the mini and neighborhood parks be of an active nature, while the community park may be used for passive recreation, or a combination of active and passive recreation, including areas of diverse environmental quality. The land allocated, approximately 31 acres, is that which would be used for active purposes and thus is part of the upland area. The passive portion of the community park, approximately half of the total area, would be allocated on wetland areas. In addition, Land Use Plans A and B will dedicate a minimum of 138 and 136 acres respectively, of the wetlands areas for open space purposes. Thus, together with the recreation set-aside, the 20% open space requirement shall be met.

5. Land Use Plan Summaries

The following are summary tabulations for the three Land Use Plan Alternatives.

| <u>ALTERNATIVE A</u> | | |
|---------------------------|-------|-----------------|
| (5,036 DU) | | |
| Development Area | | 1,122 ac |
| Residential Area | | 845 ac |
| Public Purpose Area | 22 ac | |
| Recreation Area | 31 ac | |
| Commercial Area | | 128 ac |
| Special Development Area | | 149 ac |
| Reserved/Open Space Area* | | 1,338 ac |
| Additional Upland Area | | 112 ac |
| New Roads | | 28 ac |
| TOTAL TRACT AREA | | 2,600 ac |

| <u>ALTERNATIVE B</u> | | |
|---------------------------|-------|-----------------|
| (4,977 DU) | | |
| Development Area | | 1,139 ac |
| Residential Area | | 835 ac |
| Public Purpose Area | 22 ac | |
| Recreation Area | 31 ac | |
| Commercial Area | | 155 ac |
| Special Development Area | | 149 ac |
| Reserved/Open Space Area* | | 1,308 ac |
| Additional Upland Area | | 103 ac |
| New Roads | | 50 ac |
| TOTAL TRACT AREA | | 2,600 ac |

* Open space area allocated within reserved lands and the recreation land shall equal 20% of the residential area.

D. SUMMARY AND CONCLUSIONS

The following is a summary of the facts and conclusions discussed in this report.

1. The O&Y Planned Development is approximately 2,600 acres.
2. Extensive field investigation and surveying have determined that there are 1,141 acres of upland and 1,459 acres of wetland on the property.
3. Construction activity involving fill material in designated wetlands areas is regulated by the US Army Corps of Engineers. Similar activity occurring on upland areas is not regulated by the Corps.
4. O&Y has proposed two (2) alternative development plans. In each case, residential construction is confined to upland areas. Minor road crossings avoid wetlands by short-span bridging. Currently, a determination is being sought from the Corps as to their acceptance for the design of these road crossings.
5. The two development proposals vary as to the inclusion of or deletion of the Trans-Old Bridge Connector (T.O.B.).
6. The plans are designed to accommodate 149 acres of Special Development area and between 128 and 155 acres of commercial uses, thus, between 277 acres and 304 acres of ratables.
7. Using as a basis the net residential densities of Plate A, these alternatives provide between 4,970 and 5,036_± dwelling units, of which 10% would be devoted to lower income households. These can be accommodated in conformance with the site planning standards contained in the Settlement Agreement.
8. The additional wetlands, while having an affect on the proposal depicted in Plate A of the Settlement Agreement do not, however, preclude a viable development, including lower income housing, a variety of market housing types, commercial and SD uses, community and recreational facilities and open space, on the O&Y lands, all consistent with the Settlement Agreement.

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FOR

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- A. Wetlands Location Map
- B. Land Use Alternative Plan A
- C. Land Use Alternative Plan B
- D. Site Development Plan

A. INTRODUCTION

In the early part of 1986, in accordance with the Court Order and Settlement Agreement of January 24, 1986, the Old Bridge Township Planning Board was in the process of conducting public hearings on Plates A and A-1, which represented O&Y's intended development plans.

During the public hearings, O&Y became aware that potentially larger areas of the project than originally anticipated might be classified as wetlands, thus falling under the jurisdiction of the US Army Corps of Engineers (The Corps). Because of uncertainty as to the extent and usability of the wetland areas, O&Y asked the Planning Board to adjourn the public hearing until such time as the unresolved questions could be clarified.

At that time, O&Y began a detailed mapping of their property. This process took almost one year, ending in February 1987. The survey did verify that a larger portion of the site was affected by wetlands than originally anticipated, and that additional planning studies would be necessary to address its implications.

The purpose of this report is to summarize the results of the wetlands survey and to outline our proposals for a Planned Unit Development on the O&Y property, which is fully responsive to the delineated wetlands on the site and the relevant wetland regulatory authority of the Corps. These proposals include the provision of a wide variety of housing types, including a set-aside for low and moderate income housing; the development of commercial and employment generating SD uses; a circulation plan and proposed strategies for the development of the Trans Old Bridge connector; and the provision of lands for public purpose, recreation and open space uses.

B. WETLANDS DELINEATION

The Army Corps of Engineers, as the agency charged with regulating the wetlands, determines the limits of its jurisdiction on the basis of detailed field investigations of soils, vegetation and hydrologic site conditions. Lands found to be within the Corps' jurisdiction are subject to 404 permit requirements for any development activities requiring the placement of fill in the wetlands. All lands outside the Corps' jurisdiction are available for development according to local development regulations. This delineation process has been completed for the O&Y site by Amy S. Green, Environmental Consultants. The criteria and methodology employed in this delineation, along with the results of the study, are detailed in the Wetlands Delineation Report, dated February 1987.

The limit of the wetlands, which was marked in the field by Amy S. Green, Environmental Consultants, has been surveyed and mapped by Taylor Wiseman Taylor, Consulting Engineers. Because of the size of the O&Y site (approximately 4 square miles) and the detail of the mapping, which included approximately 1,300 survey points, this mapping took nearly a year to complete.

Representatives of the Corps accompanied by the Federal Environmental Protection Agency and the United States Fish and Wildlife Services, have visited the O&Y property during the wetlands delineation process to inspect the wetlands delineation made by Amy S. Green, Environmental Consultants. The Corps has verbally confirmed the location, the extent and the limits of the wetlands as delineated. O&Y has recently submitted the final wetlands report, along with final maps prepared by Taylor Wiseman Taylor, surveyors to the US Army Corps of Engineers for acceptance of the wetlands delineation as the official limit of Corps jurisdiction.

Of a total of approximately 2,600 acres, the final wetlands mapping, as submitted to the Corps, identifies approximately 1,459 acres of wetlands. Any development requiring fill on these lands would be subject to an Army Corps of Engineers 404 permit. The remaining lands, totalling approximately 1,141 acres, are not subject to regulation by the Corps. About 581 acres (39%) of these uplands are located in large contiguous tracts of land, ranging from 25 to 132 acres in size. Another 200 acres of these lands are located in tracts ranging from 10 to 19 acres in size. Most of these upland parcels are adjacent to existing roads and are accessible.

C. LAND USE PLANS

O&Y has developed two land use plan alternatives, which address the concerns of the Township of Old Bridge. In each, the residential, special development, and commercial components are treated essentially the same. The principal difference between these two plans is the omission or inclusion of the Trans-Old Bridge Connector, which is a proposed cross-town freeway, long desired by the Township and incorporated into the Township Master Plan.

In both of these plans, no filling of wetlands is proposed for the residential component. The areas designated for commercial uses, that are located adjacent to Route 18, require fill which is permitted upon the issuance of a 404 permit by the Army Corps of Engineers. Because the T.O.B. is a Township Master Plan Road, it has been included on Alternative Plan B. However, its alignment does cross numerous wetland areas, and the Corps has advised O&Y that it is unlikely a permit would be issued to a developer to construct such a road. Consequently, it has been eliminated on Alternative Plan A to illustrate the independence of the development from this road improvement.

A description of the plan components follows:

1. Residential

The residential uses in each plan are located on upland areas only, with no requirement for a 404 permit because there will be no filling of wetlands. Much of this upland area is adjacent to and accessible from existing roads. Those uplands which are not adjacent to a road, but are relatively close to accessible uplands, will be reached with simple bridge structures not requiring fill.

Conceptually, the residential areas in both plan alternatives will be developed in a manner similar to that proposed in Plate A of the Settlement Agreement. Using Plate A as a base line, the overall residential density, including the land devoted to public purpose and non-designated open space, was calculated to be approximately 5.96 units per acre on 1,771 acres. This, of course, assumes the 10,560 units proposed on Plate A. Extracting the public purpose lands and the non-designated open space yielded a residential density of approximately 6.5 units per acres. With these densities, Plate A as proposed with the Settlement Agreement, provided the opportunity for a wide variety of housing types, including single-family detached, single-family attached, patio homes, maisonettes, and multi-family homes. The residential component also included a ten percent (10%) set-aside for lower income units.

The residential components of both land use plans are proposed to be developed at the same densities and range of housing types, as contemplated in the court settlement. The amount of residential land between the two being 835 for one and 845 acres for the other. Applying a residential density of 5.96 units per acre would yield approximately 4,977 to 5,036 units. This would comfortably allow an adequate amount of residential upland area to be devoted to public purpose and recreational uses.

Because of the configuration of the various upland parcels, some being long and wide others being short and narrow, O&Y prepared a test site plan of a substantial portion of the project to demonstrate that the residential lands can be developed at the intensity and range of housing types as described in the site planning standards contained in the Settlement Agreement.

The area selected for the test plan is in the central portion of the project and contains a total of approximately 480 acres. It is bounded on the north by Pleasant Valley Road, on the south by E. Graystone Road, on the east by Marlboro Road, and on the west by Englishtown Road. It was selected because it contains the least favorable representative sample of the various uplands configurations.

The site plan, which was drawn at a scale of 1"=200', illustrates a wide range of housing types from multi-family to single-family detached with a ten percent (10%) component for lower income housing. All of the housing units are located on upland areas. The plan conforms to the site planning standards contained in the Settlement Agreement. The only wetlands intrusion would be for road crossings and these would be bridged. In certain instances, there are single-family lot lines which extend into the wetlands, however, these portions of the lots are outside the building envelopes and, under the Corps regulation, this is permitted provided the wetlands are not filled.

The following summarizes the test site plan.

TEST SITE DEVELOPMENT

| | | |
|--------------------|-----------|---------|
| Total Area & Units | 1,275 du | 480 ac. |
| Wetlands | | 243 ac. |
| Uplands | | 237 ac. |
| Multi-Family | 848 du* | 43 ac. |
| Townhomes | 509 du | 74 ac. |
| Patio Homes | 188 du | 35 ac. |
| Single-Family | | |
| 1/3 acre lots | 94 du | 63 ac. |
| Commercial | 75,000 sf | 9 ac. |

* Note: of these, 128 du are lower income.

The test site plan demonstrates that the configuration of upland areas does not materially affect the yield of residential units per acre as related to the acres of upland. As previously mentioned, wetlands can form a portion of the yard area and, as the test plan substantiates, the upland areas that are too small to develop are offset by these yards. Thus, there is no net loss in the acreage of developable land. The plan also, consistent with good planning principles, incorporates the concept of mini clusters of housing located off country roads surrounded by substantial open space. There is a broad range and balance of housing types.

Depending upon how much land is ultimately devoted to residential uses, the O&Y Planned Development can provide approximately 5,000 units with about 500 lower income units. The test site plan demonstrates that this is realistic, viable, and in accordance with the principles of the Settlement Agreement, and totally outside the jurisdiction of the Corps of Engineers.

2. Special Development and Commercial

Both Land Use Alternatives A and B show parcels for Special Development ranging in size from 17 to 54 acres and totalling 149 acres which are generally located along Route 18 and Texas Road. SD-1 is 54 acres and is linear in configuration. It is bounded by Route 18 and the 100 year flood plain for the Deep Run watershed system. SD-1 is accessible from Route 18. SD-2 is 17 acres and located at the intersection of Route 18 and Texas Road. Access is via Texas Road.

Parcels SD-3 and SD-4 are respectively south and north of Texas Road, between its intersection with Marlboro Road and Route 18. SD-4 is 40 acres, SD-3 is 38 acres. Access to both of these parcels is from Texas Road. Using the fifty percent (50%) F.A.R. allowance contained in the Settlement Agreement, the theoretical development capability of these parcels is 3,245,220 s.f. Of the total land, approximately 91 acres of development area will be on filled wetlands requiring a permit from the Corps, while the remaining 58 acres are uplands not requiring a Corps permit.

Plan A does not include the Trans Old Bridge Connector, whereas Plan B does include it. The significant difference between Plans A and B, insofar as the location and extent of lands designated for commercial use, is a direct response to the commercial potential obviously inherent in lands with frontage exposure on this major traffic artery. Plan A identifies eight (8) commercial parcels, C-1 through C-8, with the majority of the land area located adjacent to Route 18. On these parcels (C-5, C-6, C-7, and C-8 totalling 112 acres), filling of wetlands and the related 404 permit would be required. The remaining parcels located along Englishtown Road and at the intersection of Marlboro and Texas Roads would not require fill, since they are located only on uplands. The total Commercial Land on Plan A is 128 acres.

Plan B differs from Plan A only in the vicinity where the T.O.B. intersects Route 18. At this location, there is an additional 27 acres of commercially designated land along the T.O.B. giving Plan B a total of 155 acres of commercial.

3. Circulation

Both of the Land Use Alternatives rely primarily on the existing road network with necessary improvements and the addition of some minor arterial roads. While neither of the alternatives is dependent upon the Trans-Old Bridge Connector, Alternative B includes the T.O.B. alignment, because this was a requirement of the Settlement Agreement. The particulars concerning the T.O.B. and its impact upon wetlands will be discussed later in this report.

In terms of the existing road network within the project area, Land Use Alternative A provides for the upgrading of East Graystone Road between Englishtown Road and the realigned Marlboro Road. Pleasant Valley Road would also be upgraded from its intersection with Marlboro Road west to its intersection with a proposed minor arterial. Marlboro Road would be improved between Route 18 and Pleasant Valley Road and re-aligned south of Pleasant Valley Road to Texas Road.

In addition to improving these existing roads, Plan A contains three new minor arterials. On the eastern portion of the project, there is a new road connecting Marlboro Road directly with Route 18. This serves a commercial parcel (C-8) on the north and a residential parcel (R-8) to the south. The second roadway goes in a northwestern alignment and connects Pleasant Valley Road and Englishtown Road. This road serves a substantial residential area north of Pleasant Valley Road. The remaining proposed road runs from Englishtown Road to Texas Road in a generally north-south direction and serves the residential parcels in the area west of Englishtown Road. Preliminary traffic studies confirm that Land Use Plan A will function adequately without the T.O.B.

The circulation system generally has minimal effect on the wetlands. Where existing roads are adjacent to wetlands, they will be upgraded using the limits of the present fill section, no additional fill will be put within the wetlands. The proposed roads are located primarily on uplands areas. Where they do cross wetlands, the wetlands will be bridged so that no fill will be required for the wetlands crossing. O&Y has submitted the design methodology for wetland crossings to the Corps and is currently waiting for an official concurrence from the Army Corps of Engineers as to the acceptability of the designs for these crossings.

Land Use Plan Alternative B proposes essentially the same circulation system, except that it includes the T.O.B. During the planning process, many different alignments for the T.O.B. were explored, the objective being to minimize the crossing of wetland areas. All of the alignments, including the one selected, have substantial stretches of road located in wetlands, approximately 5,280 feet of the total 10,800 feet. Because of the size of the T.O.B. and the extent of the wetlands crossings, it would be completely economically unfeasible to attempt to bridge the wetlands areas. Recognizing that O&Y is committed to constructing the T.O.B., Plan B has incorporated it. However, construction of the T.O.B. will require a permit from the Corps because those sections of the road traversing wetlands will have to be constructed on fill.

Based on extensive inquiry, O&Y does not believe that, as a developer, they will be able to obtain the 404 permit from the Corps that will be required for its construction. O&Y believes that in order for the Corps of Engineers to approve the T.O.B., it will be necessary for Old Bridge Township to apply for the 404 permit and demonstrate how the T.O.B. would serve the overall public interest of the municipality beyond the potential benefits that may accrue to the O&Y Planned Development. If the Township is willing to apply for and is successful in obtaining the requisite Corps approval, O&Y recognizes that it is committed to construction of its fair share of the T.O.B.

4. Public Purpose, Recreation and Open Space

During the hearing process for Plate A, the Planning Board expressed particular interest in the Public Purpose and recreation components of the plan. The Settlement Agreement provides that two percent (2%) of the residential lands be devoted to Public Purpose uses and that an area equal to twenty percent (20%) of the residential lands be dedicated open space. The Planning Board was concerned that there be enough Public Purpose lands and areas for active recreation, particularly field areas. In this regard, during the hearing process, meetings were held between O&Y, the School Board and the Fire Department, in order to assess needs. Given these concerns, the two Land Use Plan Alternatives respond by providing more Public Purpose land than called for in the Settlement Agreement, and also by allocating more upland area for active recreational purposes than required. Of necessity, these uses have been allocated to the uplands portions of the project, because they would require fill permits if allocated to wetland areas.

In the case of the Public Purpose lands, the area allocated is based upon two acres for a fire station, fifteen acres for a school site, and five acres for other uses which the Township would deem desirable. Both alternative plans provide for these 27 acres. Their locations have not been designated and would be subject to the expressed preferences of the Township.

During the public hearing on Plate A of the Settlement Agreement, it was suggested by the Township Planning Consultant that the recreation areas be calculated on the basis of a publication by the National Recreation and Park Associates called Recreation, Park and Open Space Standards and Guidelines. The standards specify land areas as a multiple of population for mini, neighborhood, and community parks. These standards are acceptable to O&Y and have been used in developing the two plans.

Assuming an average population of 2.5 persons per unit, sizes were calculated for the three alternate land use plans. The standards recommend that the mini and neighborhood parks be of an active nature, while the community park may be used for passive recreation, or a combination of active and passive recreation, including areas of diverse environmental quality. The land allocated, approximately 31 acres, is that which would be used for active purposes and thus is part of the upland area. The passive portion of the community park, approximately half of the total area, would be allocated on wetland areas. In addition, Land Use Plans A and B will dedicate a minimum of 138 and 136 acres respectively, of the wetlands areas for open space purposes. Thus, together with the recreation set-aside, the 20% open space requirement shall be met.

5. Land Use Plan Summaries

The following are summary tabulations for the three Land Use Plan Alternatives.

| <u>ALTERNATIVE A</u> | | | |
|---------------------------|-------|--------|-----------------|
| <u>(5,036 DU)</u> | | | |
| Development Area | | | 1,122 ac |
| Residential Area | | 845 ac | |
| Public Purpose Area | 22 ac | | |
| Recreation Area | 31 ac | | |
| Commercial Area | | 128 ac | |
| Special Development Area | | 149 ac | |
| Reserved/Open Space Area* | | | 1,338 ac |
| Additional Upland Area | | | 112 ac |
| New Roads | | | 28 ac |
| TOTAL TRACT AREA | | | 2,600 ac |

| <u>ALTERNATIVE B</u> | | | |
|---------------------------|-------|--------|-----------------|
| <u>(4,977 DU)</u> | | | |
| Development Area | | | 1,139 ac |
| Residential Area | | 835 ac | |
| Public Purpose Area | 22 ac | | |
| Recreation Area | 31 ac | | |
| Commercial Area | | 155 ac | |
| Special Development Area | | 149 ac | |
| Reserved/Open Space Area* | | | 1,308 ac |
| Additional Upland Area | | | 103 ac |
| New Roads | | | 50 ac |
| TOTAL TRACT AREA | | | 2,600 ac |

* Open space area allocated within reserved lands and the recreation land shall equal 20% of the residential area.

D. SUMMARY AND CONCLUSIONS

The following is a summary of the facts and conclusions discussed in this report.

1. The O&Y Planned Development is approximately 2,600 acres.
2. Extensive field investigation and surveying have determined that there are 1,141 acres of upland and 1,459 acres of wetland on the property.
3. Construction activity involving fill material in designated wetlands areas is regulated by the US Army Corps of Engineers. Similar activity occurring on upland areas is not regulated by the Corps.
4. O&Y has proposed two (2) alternative development plans. In each case, residential construction is confined to upland areas. Minor road crossings avoid wetlands by short-span bridging. Currently, a determination is being sought from the Corps as to their acceptance for the design of these road crossings.
5. The two development proposals vary as to the inclusion of or deletion of the Trans-Old Bridge Connector (T.O.B.).
6. The plans are designed to accommodate 149 acres of Special Development area and between 128 and 155 acres of commercial uses, thus, between 277 acres and 304 acres of ratables.
7. Using as a basis the net residential densities of Plate A, these alternatives provide between 4,970 and 5,036_± dwelling units, of which 10% would be devoted to lower income households. These can be accommodated in conformance with the site planning standards contained in the Settlement Agreement.
8. The additional wetlands, while having an affect on the proposal depicted in Plate A of the Settlement Agreement do not, however, preclude a viable development, including lower income housing, a variety of market housing types, commercial and SD uses, community and recreational facilities and open space, on the O&Y lands, all consistent with the Settlement Agreement.