REEXAMINATION REPORT
FLORENCE TOWNSHIP
BURLINGTON COUNTY

INTRODUCTION

Every six years, a general reexamination of its Master Plan and development regulations is required by the Planning Board. A Reexamination Report is a review of previously adopted master plans and ordinances, as well as their amendments to determine if the ideas and policy guidelines in them are still applicable to today’s situation. It is not a Master Plan, nor a new zoning ordinance. Instead, it is an opportunity to identify issues, problems with the currently adopted Master Plan and zoning, and to review development trends in the municipality. This Reexamination Report is the second interim report completed since the last general reexamination in 1999.

Under N.J.S.A. 40:55D-89, five topics must be considered in the Reexamination Report as follows:

1. **The major problems and objectives relating to land development in the municipality at the time of the adoption of the last reexamination report.**

2. **The extent to which such problems and objectives have been reduced or have increased subsequent to such date.**

3. **The extent to which there have been significant changes in the assumptions, policies and objectives forming the basis for the master plan or development regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition and recycling of designated recyclable materials, and changes in State, county and municipal policies and objectives.**

4. **The specific changes recommended for the master plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.**

5. **The recommendations of the planning board concerning the incorporation of redevelopment plans adopted pursuant to the “Local Redevelopment and Housing Law,” P.L.1992, C. 79 (C.40A:12A-1 et al.) into the land use plan element of the municipal master plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.**
REEXAMINATION TOPICS

1. The major problems and objectives relating to land development in the municipality at the time of the adoption of the last reexamination report.

The following principles, assumptions and objectives were adopted in August 1999 as part of the Land Use Plan Element.

- In recent years, housing development has greatly outstripped commercial development further extending an imbalance that resulted from the closing of the Roebling Steel Mill, increasing the pressure on an already strained local tax base.
- It is an important objective of this plan to restore the imbalance in land uses that is outlined above by promoting commercial development in the Township.
- Commercial development should be promoted in appropriate areas of the Township through zoning and the upgrading of municipal services.
- The Township has undertaken an ambitious and costly program to meet its constitutional fair share obligation which must be completed.
- The Township's remaining agricultural land and uses should be protected from the effects of development, especially residential, to the extent possible.
- The unique character and historic heritage of Florence Township should be promoted and protected through the use of appropriate development controls.
- Wetland areas should be protected because of their environmental importance.
- The character of established residential areas and neighborhoods should be protected and promoted.
- Future residential development should be limited to the portion of the Township north of the New Jersey Turnpike, except for very low density residential development. Public sewerage is not and should not be available in the traditionally agricultural, southern potion of the Township.
- The older portion of the Township closer to the Delaware River which has existing infrastructure should be reserved as the location for the highest densities of housing development.
In addition to the above land use objectives, the 2003 reexamination report identified the following emergent issues relating to land development in the municipality:

- New commercial development has occurred with the opening of the new Pennsylvania Extension of the NJ Turnpike. This has included facilities related to travel services, and uses for distribution, warehousing and trucking.
- There has been increasing pressure to develop land zoned for residential uses.
- As a result of questions on residential bulk standards, they should be reviewed and revised as necessary.
- The New Jersey Council on Affordable Housing (COAH) has certified the township’s fair share plan. COAH has now approved the plan until the year 2004.
- A redevelopment plan is in progress for the Roebling property.
- There is interest in developing age-restricted housing.
- There is a need to develop a new high school with improved facilities and better technological capabilities.
- Highway commercial zoning along Route 130 has divided lots of common ownership, limiting the development potential of the zone.

2. **The extent to which such problems and objectives have been reduced or have increased subsequent to such date.**

*Increased New Commercial Development.* There has been an increase in commercial development, including warehouse and distribution uses along the Route 130 corridor in response to the opening of the Pennsylvania Extension of the New Jersey Turnpike. Specifically, Haines Industrial Center, developed by Whitesell Industries, has completed two warehouse/distribution facilities and has preliminary approval for a third warehouse which includes rail extension for incoming freight. The overall projected floor area for warehouse facilities at Haines Center is approximately 4,470,000 square feet. The Southern New Jersey Light Rail Transit System has a station in the Haines Center which may provide new opportunities for economic development through the transit hub. The WaWa convenience facility adjacent to the Turnpike entrances has completed an expansion to include a gas station and convenience store. Further expansion is contemplated. A new banking facility is located along the Route 130 corridor. Several of the older, under utilized “strip” commercial businesses have received approval for renovation, expansion and redevelopment. These generally include restaurant, service, and retail uses. A new mixed use residential, commercial building is under review near the Roebling section of Florence. The apartments and businesses proposed will be within walking/cycling distance of the new Roebling Light Rail passenger station which extends between Camden and Trenton.
Increased Residential Development Pressure. Pressure to develop lands zoned for residential uses has intensified both in the areas serviced by sewer and water infrastructure north of the turnpike and in the large, unimproved agricultural areas to the south. Seven (7) major residential subdivisions have been approved since the date of the last reexamination which will result in approximately 270 new single family residential units and 112 age restricted residential units being constructed.

Farmland Preservation Efforts. The New Jersey Farmland Preservation Program has permanently protected 290.43 acres of farmland in Florence Township. There is one current application for acquisition totaling approximately 35 acres.

Imbalance Between Residential Development and Commercial Development. Commercial and industrial development even though increased, has failed to keep pace with new residential development. The result is continued strain on the tax base to provide municipal and safety services, education, and recreation to the residents of Florence. Creating incentives and developing strategies to promote commercial development in appropriate areas continues to be a priority objective for the Township.

The New Jersey Council on Affordable Housing Third Round Rules. Florence Township previously received both First and Second Round substantive certification from the Council on Affordable Housing, COAH, and received an extension of its Second Round substantive certification with the condition that the Township petition COAH with a Third Round Plan to address its affordable housing obligation by the December 20, 2005 deadline. The Township petitioned COAH for Third Round substantive certification on December 16, 2005 and adopted Ordinance 2005-02 on January 26, 2006 requiring all developers to meet the fair share obligation for affordable housing in accordance with the new Third Round Growth Share Standards adopted by the Council on Affordable Housing.

A Redevelopment Plan is in Progress for the Former Roebling Steel property. The former Roebling Steel plant was under contract for redevelopment for commercial/industrial or recreational uses compatible with the Superfund remediation completed by the USEPA. The site contains 12 historic buildings which are contemplated to be renovated and reused. Soil contamination will require capping with 2” of soil or paving and significant dredging to remove sediment contamination from 7 historic outfalls may be negotiated by the developer. No further remediation will be required by USEPA for the commercial/industrial or recreational development of the site. During the project development phase of the proposed redevelopment plan, the developer substantially revised the plan to concentrate residential development on the site. The Township and the USEPA joined in the opinion that the site is unsuitable for large scale residential development without further, extensive site remediation. The Governing Body is in the process of reviewing new partners and opportunities for redevelopment on the site.

Age-Restricted Housing Development. The 2003 reexamination report outlined an interest in developing age restricted housing. The Legacy at Meadowcroft age restricted development currently under construction will provide 112 senior citizen residential units. The former Duffy School will be donated to Florence Township for municipally sponsored redevelopment including possible Senior Citizen affordable housing complex.
New High School.
The Township has addressed the need for expansion and modernizing of educational facilities. The new Florence Township High School opened in September of 2006. The middle school aged students moved into the former high school facility.

Truncated Highway Commercial Zoning.
The zoning along Route 130 which had divided lots of common ownership, limiting the development potential of the zone has been rezoned.

3.

The extent to which there have been significant changes in the assumptions, policies and objectives forming the basis for the master plan or development regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition and recycling of designated recyclable materials, and changes in State, county and municipal policies and objectives

Need for Increased Commercial/Industrial Development. Residential development continues to outpace non residential development creating a continued strain on the tax base to provide municipal and safety services, education, and recreation to the residents of Florence. Innovative solutions to develop or redevelop portions of the Township suitable for commercial development continue to be a high policy priority.

SM Special Manufacturing and GM General Manufacturing are land use designations for categories of land uses which have long played an important part of the Township’s history. While the relative importance of these land uses has declined in recent decades, they are still central to the character and economic well being of the township and the region. In general SM and GM designations have been assigned where there exists an established pattern of such uses. This is because both categories pose special concern for neighboring land uses, especially residential areas. The GM district which permits manufacture of products from raw or partially processed materials poses the most concern due to significant off site impacts of noise, dust, odors, and visual; whereas less intensive uses permitted in the SM district such as fabrication, food processing, and laboratories are less likely to generate off site impacts.

Recognizing the significant residential growth which has occurred in Florence Township, and the less intense manufacturing and warehousing uses which have been developed, there may be justification for expanding the SM district and reducing the GM district based upon current land use patterns.

Light Rail Mass Transportation System. The Southern New Jersey Light Rail Transit System connects 16,000 passengers per day to the larger mass transit network including NJ Transit, PATCO, Amtrak and SEPTA. The line runs parallel to Route 130, connecting from Camden to Trenton, and has two (2) stations in Florence Township. The Florence Park and Ride station is located in the Haines Industrial Center and the Roebling Station is located at Hornberger Avenue. The new passenger rail service should provide opportunity for increased economic development and redevelopment in Florence Township possibly by incorporating a transit village concept.

Nearby Downzoning. Pressure to develop the agricultural portions of Florence Township may be intensified by the recent zoning changes which will reduce the land available for development in neighboring communities. Springfield Township currently
has zoning in the residential zones permitting one unit on ten acres, and, Mansfield Township is studying a possible TDR zoning alternative and Burlington Township has revised the Zoning Ordinance to delete any clustering options.

**Pressure to Develop Agricultural Areas.** The 1999 Land Use Plan Element of the Master Plan directs that development should be limited to the northern portion of the township where sewer and water infrastructure currently exists; and, the remaining agricultural land and uses should be protected from the effects of development, especially residential, to the extent possible.

There are agricultural parcels under contract for development adjacent to the Route 295 interchange near the border with Mansfield Township. In addition, the Bustleton Estates residential subdivisions received final approval for development near the border with Burlington. The new Florence Township High School, which opened in September of 2007, is also located in the agricultural area. Due to increased pressure for residential development coupled with restrictive zoning in neighboring municipalities and increasing regulatory restrictions from the NJDEP, there may be increased pressure to extend sewer and water service into the agricultural areas of the township.

**Court Ordered Revisions to COAH’s Third Round Rules.**

Florence Township petitioned COAH for Third Round substantive certification on December 16, 2005. The new third round rules were challenged by the NJ Builders Association, the Fair Share Housing Center, ISP Management Company, and the Coalition for Affordable Housing and the Environment. The January 25, 2007 Appellate Court decision addressed a broad array of challenges and invalidated some of COAH’s key third round rules which govern the size of each municipality’s fair share obligation and the manner in which the obligation can be satisfied. This Court decision, coming two years after the adoption of COAH’s rules and three years after the start of COAH’s “growth share” methodology, is generating much concern and confusion among municipal officials. The Court ordered COAH to prepare and adopt amendments to its rules by late July 2007. However, COAH has requested an extension until February 2008.

Given the uncertainty about COAH’s rules which the Appellate Court decision and the subsequent appeals and cross-appeals create, the Court also instructed COAH not to act on any of the approximately 260 municipal fair share plan petitions presently pending before it, including Florence Township’s Plan. The decision also stays the filing of builder remedy claims for “any municipality whose application for substantive certification is affected by this opinion.” One of the most significant implications may well be to increase the number of affordable housing units for which municipalities must plan.

The Appellate Court issued a subsequent ruling on April 2, 2007 which granted a stay to any growth share ordinance in effect at the time of the Court’s January 25th decision. Thus, the Township’s Growth Share Ordinance shall continue in full force and effect until the revised rules are ultimately adopted by COAH. Any COAH required amendments to the ordinance will be undertaken at that time.

The level of affordable housing obligation required may be subject to further revision, thus, any in-lieu contributions approved by the Township Council and submitted by an applicant shall be placed in a separate affordable housing trust account and shall not be expended until COAH approves the Township’s third round spending plan.
Under no circumstances shall the affordable housing obligation be less than that required by virtue of an affordable housing development fee imposition governed by *NJAC* 5:94-6 et seq.

4. **The specific changes recommended for the master plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.**

   **A. Proposed Office Research Zoning (ROP).**

   An evaluation of the zoning in the northwestern portion of Florence Township adjacent to the Griffin Pipe industrial facility, the Florence Township MUA and the NJ Turnpike Bridge for existing and surrounding conditions has analyzed for office development.

   1. **Existing Conditions.** The area originally consisted of 156 +/- acres and was recently subdivided to permit the construction of the Estates at Oak Mill, consisting of approximately 86 single family residential units, open space and drainage areas. The Oak Mill subdivision is located to the southeastern portion of the study area. The site also includes a 24 acre landfill used by the Griffin Pipe foundry which has been capped in accordance with New Jersey Department of Environmental Protection standards. Monitoring wells are still active at the landfill location. A summary of the surrounding land uses follows:

      a. Griffin Landfill
      b. Griffin Pipe Plant to the west
      c. Tractor trailer parking for Griffin Pipe to the west
      d. Medium to low density residential lots, parkland, and recreational areas to the northeast,
      e. Florence Township MUA to the southwest,
      f. US Facilities to the south west.
      g. The NJ Turnpike traverses overhead to the south west of the site.

   2. **Current Zoning SM/RA.** The residual site after the Oak Mill subdivision and subtracting the 24 acre landfill area is approximately 53 acres. Roughly half the site is zoned RA, low density residential, and half SM special manufacturing; however, the SM zone is not contiguous. It is divided by the residally zoned area.

   3. **Appropriateness of Current Zoning.** The current zoning may no longer be appropriate for the following reasons:

      a. Small area of SM zone is “trapped” between the turnpike and residential zones which includes no direct access to zone.
b. SM zone, special manufacturing, adjacent to the park and existing medium density residential areas presents potential land use conflicts.

c. RA zone, low density residential area, adjacent to landfill site represents incompatible land use.

4. Proposed Zoning Standards. In order to minimize conflicts with residential neighbors and to minimize the negative effects of the existing landfill and industrial traffic in the area, it is recommended that the site be rezoning for Research/Office use. The new ROP Zoning District is an adaptation of the Office Park District currently zoned south of Rt. 130 along Jacksonville-Burlington Road. The proposed district expands the OP district to include research and analytical laboratories, and permits buildings of increased height which would be visible from the NJ Turnpike Bridge. The following pages outline the proposed zoning standards and the attached map indicates the location of the proposed new zoning district.
§ 91-__. Purpose.

The purpose of this district is to provide for attractive, research/office park development.

§ 91-__. Permitted principal uses.

Permitted principal uses in the Research Office Park District shall be as follows:

A. General office building.
B. Offices of doctors, dentists and veterinarians or other medical professionals.
C. Research and analytical laboratories engineering offices.
D. Municipal, State and Federal government offices.
E. Public parks and recreation.
F. Club or lodge organized for fraternal or social purposes, provided that the chief activity shall not be one which is customarily carried on as a business.
G. Convalescent home or medical center.
H. Child-care center for on site employees

§ 91-__. Design and Area Requirements.

A. Overall Plan. Any proposed research office park development shall be constructed in accordance with an overall integrated plan. Multiple structures may be built at one time or phased, provided that each site plan adheres to an overall site or tract design concept that coordinates traffic and pedestrian circulation, parking, loading, road access, buffers, screening, site engineering, architectural design and building locations.

B. Site Area. The total site area shall not be less than five (5) acres and shall have a frontage of at least two hundred (200) feet on an approved road. In order to minimize traffic hazards, development plans on sub minimum frontage must provide shared parking or access driveways with adjacent parcels.

C. Maximum Building Height. No building shall exceed fifty (50) feet or four stories.

D. Setback Requirements. Research office park development with building height of 35 feet or less shall be set back a minimum of one hundred (100) feet from the
proposed right-of-way, building heights of 45 feet shall be set back one hundred twenty-five (125) feet.

E. **Building Coverage.** The maximum building coverage shall not exceed twenty percent (20%) of the total site area.

F. **Impervious Coverage.** The maximum impervious surface coverage shall be sixty-five percent (65%), and the open space area of the site shall not be less than thirty-five percent (35%).

G. **Side and Yard Requirements.** Each research office park building shall have a minimum side yard of forty feet (40) feet, except where said property adjoins a residential zone, when a minimum seventy-five foot, (75) foot, side yard is required. For fifty foot, (50) foot, buildings a minimum one hundred foot, (100) foot, side yard is required where said property adjoins a residential zone. Rear yard requirements are the same as side yard, except where said property adjoins a residential zone, when a minimum one hundred twenty-five foot, (125) foot, rear yard is required.

H. **Access and Egress.** On all limited commercial lots, access, ingress and egress shall be onto a nonresidential, arterial or collector street.

I. **Minimum Buffer Requirements:**

   (1) A minimum buffer area of 100 feet in width shall be provided along any common property line with a residential district, (including AGR District). No structure, activity, storage of materials, or parking of vehicles shall be permitted within the buffer area. Buffer areas shall be designed in an aesthetic manner for the primary purpose of screening views, shielding light, and reducing noise perception beyond the lot. Location and design of buffer areas shall comply with § 91-91 of the Florence Township Code.

   (2) Front property line buffer, except for a permitted driveway: One hundred feet, (100) feet.

   (3) Side property lines: Twenty-five feet, (25) feet.

   (4) Rear property lines; Thirty feet, (30) feet.

J. **Roof mounted mechanical equipment.** Roof mounted mechanical equipment shall be screened from view and may extend beyond the permitted maximum height by no more than ten feet, (10) feet.
B. **Investigation of Vacant Developable Land in the AGR Zoning District**

At the request of the Planning Board, a study of the vacant land in the AGR zoning district which could be developed for residential uses was conducted.

1. **Zoning.** The purpose of the Agricultural District (AGR) is to provide for farming and agricultural uses and compatible single family uses. The minimum lot size is three acres and maximum gross density is one dwelling for three acres. There is no water or sewer service to AGR zone south of the turnpike and there exists considerable available developable land.

2. **Limitation of Residential Development to Northern Portion of Township.** The 1999 Land Use Plan Element of the Master Plan directs that development should be limited to the northern portion of the township where sewer and water infrastructure currently exists; and, the remaining agricultural land and uses should be protected from the effects of development, especially residential, to the extent possible.

3. **Protection of Agricultural Uses.** There is increasing pressure to develop the remaining agricultural areas of the township for residential uses. Scarcity of developable land exists in the area due to rapid residential development and zoning restrictions in the neighboring municipalities of Burlington Township, Springfield Township, and Mansfield Township. In addition, Burlington County has aggressively protected farmland adjacent to the County Resource Recovery Facility to avoid conflicts between the landfill operation and nearby residences.

4. **Surrounding Zoning.** The municipalities which border Florence Township have recently “downzoned”. Springfield Township to the south has increased minimum lot size to ten (10) acres from three (3) acre minimum lot size. Mansfield Township has a three (3) acre minimum lot size in the R1 residential zones bordering Florence. The Mansfield R1 zone includes a cluster provision requiring a lot yield determination which relies upon no waivers or variances and requires deletion of critical lands from developable acreage. The resulting cluster provision ranges from 40,000 square foot lots where no sewer service exists to 20,000-30,000 square feet for lots on sewers. Burlington Township has rescinded all cluster or mixed lot size zoning options from their residential zones. The residential zone bordering Florence is built out.

5. **Conclusion.** The maps below indicate environmental constraints and existing land uses within the AGR zone. Environmental constraints including wetlands, wetlands buffers, flood hazard zones, preserved lands, and depth to seasonal high water table were examined. Since no sewer service is available in the AGR zone, depth to seasonal high water table, or the distance between the surface and the highest groundwater level reached in recent years, becomes critical. A conventional septic system requires that a leachate field be located at least 4 feet above the seasonal high water table. If seasonal high water table is high, within eighteen inches of the surface, it can be considered a severe constraint to development. When environmentally constrained land and all developed or preserved lands are deleted, approximately 369.97 acres of vacant developable land remains in the AGR zone. It should be noted that environmentally
constrained lands were calculated from New Jersey Department of Environmental Protection and New Jersey Soils Mapping and have not been field verified for accuracy. No recommendation to amend the zoning at this time appears to be warranted; however, the question may be revisited as part of the Burlington County and Statewide State Plan Cross Acceptance Process.

C. Public Lands & Buildings Zoning Designation (PUB)

1. Public Uses Not Identified. Currently, public buildings are noted on the Zoning Map using only an institutional use key; however, these public facilities are not included as a distinct Zoning District and are consequently omitted from any data search of current zoning. Often the underlying zoning designation is inappropriate for publicly owned lands and buildings. As a case in point, several municipally owned parcels are included in the General Manufacturing Zone.

Specific Parcels to be rezoned as Public Zoning District (PUB). The following list of Blocks and Lots represent public uses for which the zoning designation will change to Public Zoning District (PUB). Bl 49 L 10, 15, Bl 99 L 1,2,2.01, 2.02, Bl 125 L 23, Bl 126.02 L1, Bl 131 L 39, Bl 134 L 23,24, Bl 143.01 L 1,10, Bl 143.08 L1, Bl 153.47 L 10,01, 16, 21, Bl 156.01 L 3, Bl 156.02 L 13,14,17,01, 17.02, 10.01, 20.02, Bl 164.01 L 1,2.02, Bl 164.02 L 5,03, Bl 165.01 L 1, Bl 170 L 5.

2. Proposed Public Zoning District. It is recommended that a Public Zoning District, (PUB), be created with an overlaying existing institutional use key to clarify the sites in the township with public uses. The attached map indicates the parcels which would be rezoned as a Public Zoning District.

D. Park Zoning for Municipal Recreational Land

1. Block 155.49 Lot 54.02 is a parcel of land approximately 40 acres in size which was deeded to Florence Township several years ago. Most of the property is used for recreational purposes and a small portion for a new public works facility. The current zoning is for Agriculture (AGR) which is an inappropriate zoning designation for recreational fields and public works uses.

2. Park District. In order to accurately zone municipally owned lands for the use which is existing and anticipated to be ongoing, it is recommended to change the zoning designation of Block 155.49 Lot 54.02 from (AGR) Agriculture to Park (P). The attached map indicates the areas which would be rezoned as a Park district.
E. **Rezone Portion of Cedar Lane Area for Less Intensive Manufacturing Uses**

![](image)

Aerial Photograph of Cedar Lane Area Under Consideration for Zoning Change

1. **Current GM Zoning Designation.** The areas outlined in black and labeled Proposed SM in the aerial photograph above, Block 155.47 Lots 12.01 & 12.02 and Block 148.06 Lot 6.01 and Block 148.02 lot 6.02 are currently zoned for General Manufacturing, GM. Permitted uses in the GM zoning district include wholesale warehousing and distribution, and manufacturing of products from raw or partially processed materials. Such uses have significant potential for negative off site impacts of noise, dust, odors, and visual due to their large scale and intensity.

2. **Surrounding Land Uses.** In general, SM and GM designations have been assigned where there exists an established pattern of such uses in the township. This is because both categories pose special concern for neighboring land uses, especially residential areas. The existing surrounding land uses along Cedar Lane, small scale warehousing, food processing, and residential areas, are more representative of uses permitted in the SM zone than the GM zone.
3. **Turnpike Boundary.** The New Jersey Turnpike borders the sites in question to the southwest. South of the Turnpike, a large GM zone exists in which the Haines Industrial Center, a large warehouse and distribution center servicing south and central New Jersey, is currently being developed. The center when complete is anticipated to locate approximately 4 million square feet of warehouse space and be connected to freight and passenger rail lines. The size and intensity of such a regional distribution center is appropriate for the GM zoning designation. Currently, the GM zoning designation traverses the Turnpike and includes the parcels in question. The New Jersey Turnpike provides a logical boundary for the GM zone.

4. **SM Zoning Transition.** If the properties under review, parts of Block 155.47 and 148.06 in the Cedar Lane area, were rezoned as SM, the new zoning district would provide a transition between the intense distribution and manufacturing of the GM zone, the noise and dust from the New Jersey Turnpike, and the RC, AA, RA zoning districts to the north which permit less intensive uses including residential.

5. **SM Zone Change.** In order to provide zoning which is representative of the surrounding land uses and to provide an intermediate transition of manufacturing uses between the GM zone and residential and commercial zones in the area north of the New Jersey Turnpike in the Cedar lane area, it is recommended to change the zoning designation of Block 155.47 Lots 12.01 & 12.02 and Block 148.06 Lot 6.01 and Block 148.02 lot 6.02 from the GM, General Manufacturing District, to the SM, Special Manufacturing District. The attached map indicates the areas which would be rezones as SM.

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**F. Siting Regulations for Alternative Energy Generation Facilities: Solar and Wind**

1. **Regulatory Gap.** Alternative energy is not a new idea, but has historically been cost prohibitive for residential and small commercial applications. However, the accelerating rise in energy costs has spurred increased demand for small scale renewable energy generation devices especially solar and wind. Technological advances have reduced the prohibitive cost of photovoltaic cells for small scale solar electric generation; and state and federal financial incentives for renewable energy projects have decreased the return time on investment to manageable levels for the average home or small business owner. The newness of the trend toward small scale application of renewable energy generation has left a regulatory gap in permitting such uses. A self defeating cycle is created when the applicant’s cost savings on energy facilities are negated by the requirement to proceed through the often costly and time consuming use variance approval process.

2. **New Objective Promoting Renewable Energy.** In order to streamline the development of small scale alternative energy generating facilities, the following objective should be added the Principles, Assumptions and Objectives section of The Land Use Plan Element of the Master Plan:
Wind and solar energy are an abundant, renewable, and nonpolluting energy resources. When converted to electricity, wind and solar energy reduce our dependence on nonrenewable energy resources and reduce air and water pollution that results from conventional sources. The aggressive rise in energy costs has spurred increased demand for small scale renewable energy generation devices especially solar and wind. These uses should be encouraged and permitted, subject to bulk and conditional use regulations, in the appropriate zoning districts within Florence Township.

3. **Wind Turbines.** A wind turbine is a machine for converting the energy in wind into mechanical energy. If the mechanical energy is used directly by machinery, such as a pump, the machine is called a windmill. If the mechanical energy is then converted to electricity, the machine is called a wind generator. Small wind turbines are defined as having a generating capacity up to 100 kilowatts and contain up to a 60 foot rotor diameter. To make effective use of the wind, small turbine towers must be at least 60 feet high and well above obstacles, such as trees, in their vicinity. For many residential applications, systems of 5 to 15 kW, turbines need to be on towers from 80 to 120 feet tall. Small wind turbines are designed to operate effectively in the lower wind speed areas where most people live and work.

4. **Wind Turbines Siting Issues.** Wind turbines have specific siting issues which should be addressed in the Land Use Ordinance. Therefore, it is recommended that wind turbines be permitted as conditional uses in certain zones in order for site plan review to assess public health and safety issues and to resolve potential conflicts with neighbors. The siting issues which should be addressed include but are not limited to following:

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**Height.** In order to be effective, wind turbines must exceed the normal height restrictions commonly found in residential and neighborhood commercial zones, approximately 35 feet.

**Noise.** In addition, small turbines which operate at high RPM tend to spin continuously in wind speeds over 7 miles per hour and may generate turbine noise. 60 decibels is a maximum standard promulgated by industry associations as acceptable in most residential areas. 60 decibels is approximately equal to the ambient noise levels inside a home or office. In addition, ambient outdoor background noise may completely mask or be no more obtrusive to neighbors the noise generated by a small wind turbine.2

**Bird kill.** Reports of residential-scale wind turbines killing birds are very rare. Statistically, a sliding glass door is a greater threat to birds than a small, unlighted wind turbine. (The Federal Aviation Administration does not require lighting on towers less than 200 feet tall.)

**Public Safety.**

**Power outages.** In the event of a power outage, small wind systems connected to the utility grid are designed to detect the outage and automatically shut down, so that there is no danger to anyone trying to repair utility lines. Stand-alone systems are connected only to the home’s electrical service, posing no risk to anyone trying to repair utility lines in the event of a power outage.

**Icing.** An ice-covered rotor will turn so slowly (at only several revolutions per minute) that there is no danger of ice being “thrown” off. Typically, the ice melts and falls straight down to the base of the tower.

**Lighting.** It is unlikely that a residential-scale turbine will need to be lighted. For sites closer than two miles to an airport or runway, tower height may be restricted by FAA regulations. The FAA doesn’t require lights on structures less than 200 feet tall, and prohibits both commercial and small private aircraft pilots from flying lower than 1,000 feet.

**Set backs.** Wind turbines must generally be located 30 feet above any structures or natural features (buildings, trees, bluffs) within 300 feet of the installation.

**Visual Character.** Rotor size of residential wind turbines are about 23 feet in diameter. Recommended tower height is typically between 50 and 100 feet and tower designs are varied including monopole and lattice type structures. Small wind turbines are consistent with agricultural land use, and probably would be considered to have less visual impact than a water tower, a common feature of the rural landscape. Utility poles, cellular phone towers, and satellite dishes may also be considered as comparable features of the existing landscape. Chances are, while a small turbine may be new to the community, it will not dramatically alter its character.3

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2 Mick Sagrillo, Windletter Feb/Mar 1997
• **Property Values.** The fear of diminished property values is sometimes raised by concerned neighbors that for whatever reason do not want the small wind turbine installed in their neighborhood. A survey of 300 California homeowners, conducted for the California Energy Commission by a market research firm, found that 50% of homeowners surveyed "would be willing to pay more for a home equipped with solar and wind technology," according to an article in the March 15, 2002 issue of Realty Times, a publication dedicated to real estate news and advice. The study also found that 60% of homeowners surveyed "would be more interested in a home that has a renewable energy system already installed versus a home that does not."4

5. **Ordinance Changes to Permit Wind Turbines.** Model Ordinances have been initially reviewed and it is anticipated that the Land Development Ordinance will have to be amended in order to permit wind turbines as a conditional use in certain zones.

6. **Solar Energy Structures.** Solar energy structures which generate electricity or store heat for use on site should be a permitted use subject to the following bulk restrictions in all zoning districts within Florence Township.

**Definition.** Solar Panel: A solar photovoltaic panel, or solar hot air or water panel collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.

**Roof Mounted.** Photovoltaic panels which are mounted on the roof of a residential, commercial, or industrial structure and that generate power for only that structure should be a permitted use in all of the zoning districts in Florence Township subject to the following restrictions:

- **Roebling Historic District.** Building permits shall not be issued without a review for consistency from the Florence Township Historic Commission.

- **Solar panels which are not visible from a public right of way are permitted regardless of the particulars of installation.**

- **Solar panels which are visible from a public right of way shall be installed parallel to the roof and project no more than 12 inches from the roof surface.**

**Building Mounted.** Solar panels which are mounted on a face of a building or structure shall be integrated into the ordinary construction of the building.

**Ground Mounted.**

- **Ground mounted solar panels shall be located in the side or rear yard only and shall not be constructed within the required setback distances.**

- **Ground mounted solar panels shall not exceed eight feet in height above the ground.**

- **Ground mounted solar panels shall, to the extent possible, be screened from adjacent properties by fencing or plantings.**

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4 Realty Times, March 15, 2002
7. **Solar access.** Solar access means the right of a particular parcel of real property to receive solar radiation without hindrance from structures or vegetation on an adjacent or nearby property. In residential or neighborhood commercial zones, where lot sizes are relatively small, conflict may arise between adjacent property owners regarding solar access.

8. **Solar Fence.** The concept of a solar fence is an envelope of space surrounding a solar collection device which guarantees access to sunlight for home and business owners by setting limits on the amount of permitted shading by adjacent new construction. “Solar Fence” or shadow setbacks can vary by zone and are keyed to permitted height and building setback requirements. A solar fence, or shadow setback could be added to the existing bulk requirements for each zone and would eliminate most of the shading conflicts between neighbors.

9. **Ordinance and Building Permit Changes Required to Permit Solar Access Protection.** To implement the protection of solar access, the building permitting process would need to be amended to require applicants for new construction, including additions, to identify any adjacent property upon which a solar energy collection devise exists. The applicant would then be required to create a simple shadow diagram depicting the shadow cast by the proposed new construction on December 21 between 10am and 2 pm. If the shadow thrown by the proposed structure falls within the solar fence envelope, the project would be in compliance. If the shadow pattern falls outside the solar envelope, the applicant would be required to pursue a bulk variance, including notice provisions to adjacent property owners.

10. **Solar Siting and Orientation of New Construction.** In order to facilitate future solar energy generation, all new development could be required to install roofs with minimum physical and structural components capable of supporting at least 75 square feet of solar collectors per dwelling unit. In addition, buildings should be oriented to the maximum amount feasible with their long axis within 30 degrees of east-west. Dwellings and other structures should be sited to allow unimpeded solar access through setbacks or private easements or covenants.

5. **The recommendations of the planning board concerning the incorporation of redevelopment plans adopted pursuant to the “Local Redevelopment and Housing Law,” P.L.1992, C. 79 (C.40A:12A-1 et al.) into the land use plan element of the municipal master plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.**

The Florence Township Council is in the process of reviewing new partners and plans for appropriate redevelopment of the former Roebling steel plant in conjunction with the USEPA remediation. At such time the plan is prepared, it will need to be reviewed and recommended by the Planning Board.
CONCLUSION

The proposed Research Office zoning of a section of the northwest portion of Florence Township arises from the need for innovative strategies for commercial development. Increased pressure for residential development and the continued imbalance of residential uses to commercial continues to place financial strain upon the tax base in town. In addition, current residential zoning is incompatible with adjacent industrial, landfill, and MUA sites. The recommended new research office zoning will allow buildings of increased height which are not permitted outside of the industrial zones in the Township, and will be visible from the NJ Turnpike Bridge.

A study of the vacant land in the AGR zoning district which could be developed for residential uses revealed 369.97 acres of vacant developable land. No recommendation appears to be warranted at this time; however, the question may be revisited as part of the State Plan cross acceptance Process conducted through Burlington County and the Office of Smart Growth.

Currently, public buildings are noted on the Zoning Map using only an institutional use key; however, these public facilities are not included as a distinct Zoning District and are consequently omitted from any data search of current zoning. A recommendation to create a PUB public Zone has been made.

In order to accurately zone municipally owned lands for the use which exists and anticipated to be ongoing, it is recommended to change the zoning designation of Block 155.49 Lot 54.02 from (AGR) Agriculture to Park (P).

In order to provide zoning which is representative of the surrounding land uses and to provide an intermediate transition of manufacturing uses between the GM zone and residential and commercial zones in the area north of the New Jersey Turnpike in the Cedar lane area, it is recommended to change the zoning designation of Block 155.47 Lots 12.01 & 12.02 and Block 148.06 Lots 6.01 & 6.02 from the GM, General Manufacturing District, to the SM, Special Manufacturing District.

Wind and solar energy are an abundant, renewable, and nonpolluting energy resources. When converted to electricity, wind and solar energy reduce our dependence on nonrenewable energy resources and reduce air and water pollution that results from conventional sources. Escalating energy costs has spurred increased demand for small scale renewable energy generation devices especially solar and wind. These uses should be encouraged and permitted, subject to bulk and conditional use regulations, in the appropriate zoning districts within Florence Township.