CHALFONT BOROUGH AND
NEW BRITAIN TOWNSHIP
BUCKS COUNTY, PENNSYLVANIA

ACT 537
SEWAGE FACILITIES PLAN UPDATE

FOR
CHALFONT-NEW BRITAIN TOWNSHIP JOINT
SEWAGE AUTHORITY SERVICE AREA

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SECTION I

PLAN SUMMARY

The Chalfont Borough and New Britain Township Act 537 Sewage Facilities Plan Update (Plan Update) identifies, analyzes and selects new and/or improved sewage facility alternatives needed to serve the existing and future wastewater treatment needs of the Chalfont-New Britain Township Joint Sewage Authority (Authority). The Authority, who is preparing the Plan Update on behalf of Chalfont Borough and New Britain Township, provides public sanitary sewer service and wastewater treatment for all of Chalfont Borough and the southern portion of New Britain Township. The Plan Update has been prepared in accordance with the Sewage Facilities Planning Guidelines as most recently published by the Pennsylvania Department of Environmental Protection (PA DEP).

With regard to New Britain Township, this Plan Update encompasses the southern portion of the Township, the major extent of which is currently sewered and/or planned for public sewerage. Independent of this Plan Update, New Britain Township is also preparing a separate Act 537 Plan (On-Lot Sewage Service Area) to address the northerly portion of the Township, which is primarily unsewered.

The Plan Update is divided into numerous sections for evaluation. This section, Section I, provides a summary of the Plan Update and selected sewerage facility alternatives. Section II provides necessary background information, including the purpose and objective of the Plan Update, as well as a discussion on previous sewerage facilities planning and municipal comprehensive planning. Section III provides a physical description of Chalfont Borough and the southern portion of New Britain Township, which is defined as the Planning Area, and Section IV identifies the existing sewerage facilities of the Authority serving the Borough and the Township. Section V identifies the sewerage facility needs of the Authority. Section VI evaluates the impact of planned and future development on the Authority's existing public sewerage facilities, evaluates alternatives to provide sanitary sewer service to existing unsewered areas and determines the necessary upgrades and/or expansions needed to serve the needs of the Borough and the Township. Section VII discusses the consistency of the alternatives evaluated with various acts, programs and policies. Section VIII discusses the implementation and funding of the alternatives selected.

Based on the objectives of the Plan Update set forth in Section 2.2, the wastewater treatment needs of the planning area have been established. One of the most important objectives of the Plan Update is to plan for the Township's existing public sewer system to serve all planned and future development within the Public Sewer Service Area of the Authority. Since a primary objective of this Plan Update is to plan for public sewer service to be provided to areas with existing on-lot disposal systems, an analysis of the existing on-lot systems has not been performed by the Plan Update.

The extension of public sewer service into the currently unsewered portions of the Planning Area is the most desirable method for accommodating planned or future development in those areas. Those areas are identified as the West Area, the East Area, the Cedar Hill Road Area, the Limekiln Pike/Newville Road Area and the County Line Road/Walnut Street Area, and are more fully described in Section 5.1.3. Additionally, it is anticipated that future subdivision or further development within currently sewered portions of the Planning Area will also occur.

An analysis of the Authority's existing sewerage facilities was also performed to determine if any upgrade or expansion to the system was needed to serve the areas planned for public sewer service and also currently sewered areas where further growth is likely to occur. Those facilities include the Authority's existing wastewater treatment plant, pumping stations and the receiving collector and/or conveyance lines.

The cost to implement the selected public sewerage facilities alternative required to serve the ten-year needs of the Planning Area is estimated at $23,558,150 based upon present day costs. This estimate includes construction cost, plus contingency, engineering, surveying, inspection and legal/administrative costs for the upgrades needed to solve inadequacies anticipated in the existing sewerage facilities. Table 6-6 details the cost to implement the selected alternative.

Municipal commitments necessary to implement the Plan Update by Chalfont Borough and New Britain Township include adoption of the Plan Update, as well as the development and execution of new agreements with Chalfont Borough and New Britain Township for additional areas to be served.

Implementation of the selected alternatives is projected to be completed within the next ten years. A detailed implementation schedule describing the various activities involved in the implementation process is presented in Table 8-1.

Funding for implementation of the selected alternative is anticipated from several sources. Within planned and future development areas, funding will be provided by developer contributions and/or tapping fees. Within existing on-lot sewage disposal system areas to be served by public sewers, funding will be through an assessment to property owners.

SECTION II

BACKGROUND INFORMATION

2.1 AUTHORIZATION

The Chalfont Borough Council and the New Britain Township Board of Supervisors have authorized the Chalfont-New Britain Township Joint Sewage Authority (hereinafter, generally referred to as the "Authority), to prepare an update of the Township's Act 537 Sewage Facilities Plan. The task of preparing the Plan Update was then given to the Authority's Engineering Consultant, CKS Engineers, Inc. A "Pre-Planning" meeting was held with the PA DEP on September 10, 2003 to review the proposed plan of study required for the Plan Update. As a result of this meeting, a Proposed Plan Content Outline was prepared, along with a detailed Task-Activity Report, for submission to and approval by PA DEP. This material was sent to the PA DEP on October 27, 2003. The PA DEP approved the submittal by a letter dated January 29, 2004, and the preparation of the Plan was initiated. A copy of the PA DEP approved Plan Content Outline pertaining to the Plan Update is contained in Appendix D.

2.2 PURPOSE AND OBJECTIVES OF PLAN UPDATE

The purpose of this Plan Update is to comply with the PA DEP Act 537 requirements regarding sewage facilities planning. The Plan Update will identify, analyze and select new and/or improved sewage facility alternatives needed to serve the existing and future wastewater treatment needs of the Public Sewer Service Area of Chalfont Borough and New Britain Township (Planning Area). The selected alternative(s) will become the foundation for the Official Sewage Plan for Chalfont Borough and New Britain Township and will function as a regulatory plan for resolving wastewater management problems associated with development, and provide guidance for new procedures and ordinances by each of the Municipalities.

The specific objectives of this Plan Update include the following:

- Address the purpose of a Sewage Facilities Plan described in Section 2.3.1 herein.
- Provide sewage facilities planning consistent with the Chalfont Borough and New Britain Township Comprehensive Plans of 1998 and 1987, respectively.
- Provide sewage facilities planning consistent with Volumes I and II of the Bucks County Wastewater Facilities Plan, 1989 and 1990, respectively.

- Plan for public sewers to be provided to areas within the Planning Area currently served by on-lot disposal systems.

- Plan for public sewers to be provided to all planned and potential future developments within the Public Sewer Service Area of Chalfont Borough and New Britain Township (Planning Area).

2.3 PREVIOUS SEWAGE FACILITIES PLANNING

2.3.1 General

On January 24, 1966, Act 537 (P.L. 1535, as amended, 35 P.S. Section 750.1 et. seq.), known as the Pennsylvania Sewage Facilities Act, became law. The overall intent of the Pennsylvania Sewage Facilities Act is to eliminate existing, and prevent new, environmental health problems and pollution through comprehensive sewage facilities planning and the administration of a program establishing standards for the design and installation of on-lot sewage disposal systems.

A major provision of the Act requires that every municipality in the Commonwealth develop and maintain an up-to-date Sewage Facilities Plan. The Act establishes the requirements for the Plan and allows reimbursement of up to one-half the eligible costs incurred in preparing the Plan.

The purpose of a municipality's Sewage Facilities Plan is to:

- Protect the health, safety and welfare of the citizens living in the municipality by correcting malfunctioning on-lot septic systems, overloaded treatment plants or sewer lines, and wildcat sewers.

- Prevent future sewage disposal problems from occurring.

- Provide protection for both the groundwater and surface waters of the Commonwealth through coordinating planning for the sanitary disposal of sewage with a comprehensive program of water quality management.

2.3.2 The Master Plan for Sewerage Facilities (1960)

The Master Plan for Sewerage Facilities of 1960 delineated existing and proposed wastewater treatment facilities and service areas. Specifically, the Chalfont-New Britain Township Joint Sewage Authority wastewater treatment plant was anticipated to be constructed by 1965 to serve all of Chalfont and New Britain Boroughs and small portions of New Britain Township. Areas of

New Britain Township in the Neshaminy Creek watershed tributary to the plant would be served after the year 2010.

2.3.3 Bucks County Sewage Facilities Plan (1970)

The 1970 County Plan was an update to the Master Plan for Sewage Facilities of 1960. The plan for the Chalfont-New Britain region remained substantially the same as it was in the 1960 Master Plan. The newly constructed Chalfont-New Britain Township Joint Sewage Authority wastewater treatment plant was to serve additional areas of New Britain Township by and beyond 1980 as opposed to after 2010 proposed in the 1960 Master Plan.

The 1970 Sewerage Facilities Plan shows the following areas of New Britain Township to be served by 1980: all areas west of Chalfont and south of the Reading Railroad line, the drainage area of Pine Run from Chalfont to and along PA Route 611, the Pine Run Community, the shrine of Czestochowa and Lake Galena Park. The Chalfont-New Britain Township Joint Sewage Authority wastewater treatment plant was proposed to service these areas.

The 1970 Sewerage Facilities Plan also delineated the entire southwesterly portion of New Britain Township as being an area where isolated on-lot sewage disposal systems were failing and where further development may create problems. A future sewer interceptor, to be constructed after 1980, was proposed to serve this area.

2.3.4 Bucks County Sewage Facilities Plan Update (1977)

The primary purpose of the 1977 County Plan was to evaluate the changes in wastewater facilities planning since the completion of the County Sewage Facilities Plan of 1970. During the period of 1970 to 1977, only a few changes had been made to the sewage system within the region. Chalfont Borough had expanded its collection system since 1970 and it now covered the entire Borough. In addition, sewage from adjoining areas in New Britain Township were conveyed through the Borough. The collection system is owned and maintained by the Chalfont-New Britain Township Joint Sewage Authority.

After 1970, there were delays in the planned expansion of the treatment plant, and the reduction of proposed capacity of treatment from 7 million gallons per day (MGD) to 5 MGD, had limited the actual expansion of these service areas. At that time, New Britain Township was participating in Central Bucks County's Federal Act 201 sewage facilities study slated for completion during 1979.

Efforts to implement the proposed regional sewer system had not been totally successful within the Chalfont-New Britain Region. Although the service area of the Chalfont-New Britain treatment facility was expanded significantly, the treatment facility was not expanded as planned.

The abovementioned 201 study was in progress which encompassed most of the region. It was not expected that any additional sewage facilities planning would be necessary in the Chalfont-New Britain region in the next five to ten years after the 201 study was completed.

2.3.5 Neshaminy Basin Sub Region II, 201 Plan (1982)

In 1982, the Bucks County Planning Commission completed a Federal Act 201 Plan to update the Sewerage Facilities Plan of 1970. The 1982 201 Plan was adopted by Chalfont Borough and New Britain Township as their official wastewater facilities plan and currently remains as such.

The purpose of the 201 Plan was to develop a comprehensive facilities plan pursuant to the Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, including the expansion and upgrade of the Chalfont-New Britain Township Joint Sewage Authority's wastewater treatment plant, or to provide an alternate solution or solutions to the proposed expansion and upgrade.

2.3.6 Bucks County Wastewater Facilities Plan, Volumes I and II (1989 & 1990)

The 1989 Bucks County Wastewater Facilities Plan (Volume I) establishes wastewater facilities' policies as an element of the County's Comprehensive Plan Update. Wastewater facilities' needs are documented and recommendations are made on the general location of the future facilities and the measures that municipalities should take to address their wastewater facilities' needs. No specific recommendations were made for the Chalfont-New Britain region.

The measures recommended by the 1990 Bucks County Wastewater Facilities Plan (Volume II) included the evaluation and revision of New Britain Township's comprehensive plan and wastewater facilities plan to ensure adequate service for the projected year 2000 development and wastewater flows. No additional measures were recommended for Chalfont Borough.

2.4 COMPREHENSIVE PLANNING AND ZONING

The 1987 Comprehensive Plan for New Britain Township and the 1998 Comprehensive Plan for Chalfont Borough, serve as the Master Plans of these municipalities which guide their development policies and serve as their long-range planning tools.

The Chalfont Borough Comprehensive Plan recognizes that the entire Borough is provided with public wastewater facilities and that these facilities are adequate for the population served. Of particular interest are the recommended strategies to provide and maintain efficient public facilities and services. The Borough coordinates ongoing efforts with the Authority in upgrading and maintaining wastewater collection and treatment facilities to reduce costs and provide additional capacity.

The current New Britain Township Comprehensive Plan recognizes that new development in the Township is currently limited due to the lack of available public sewer service. At the time of the adoption of the Comprehensive Plan, the Authority was operating at its capacity of 2.0 million gallons per day (MGD) and an upgrade to 3.8 MGD was proposed, with completion to occur in 1988. Many areas of New Britain Township that did not adjoin Chalfont Borough or Route 202 were served by on-lot disposal systems (OLDS) and not public sewers. The Township's plan recognized that with limited sewer capacity, a complex drainage system, limited Federal funds for sewer line extensions, and the long distances involved meant that major extensions of sewer service into many new areas was unlikely at that time.

Since the adoption of the current New Britain Township's Comprehensive Plan, sewer service has been extended to many areas in the southern portion of New Britain Township, thereby reducing the dependence on OLDS. However, significant portions of the Planning Area remain without public sewerage facilities and are still served by OLDS.

New Britain Township is currently in the process of updating their current Comprehensive Plan. The updated plan is being coordinated with this Act 537 Plan Update for the "Sewage Facilities Planning Area," as well as the separate Act 537 Plan Update for the "On-Lot Sewage Service Area."

Zoning is the major tool used to implement Comprehensive Plans. Both the Chalfont Borough and New Britain Township Zoning Ordinances set zoning district boundaries and specify minimum lot sizes and/or densities. The development requirements set forth in these Ordinances are used in determining projected future development in Section V of this Plan Update. Exhibit 2-1 illustrates the zoning districts for the Planning Area, including Chalfont Borough and the southern portion of New Britain Township.

SECTION III

DESCRIPTION OF THE PLANNING AREA

3.1 LOCATION AND BOUNDARIES

The Planning Area consists of all of Chalfont Borough and the southern portion of New Britain Township in the west central part of Bucks County, Pennsylvania, adjacent to Montgomery County. It is bounded by County Line Road to the southwest, Upper State Road to the southeast, Bristol Road, Almshouse Road, Old Iron Hill Road and Limekiln Pike to the northeast, and Township Line Road to the northwest. The Planning Area is also surrounded by Montgomery County to the southwest, Warrington and Doylestown Townships to the southeast, New Britain Borough and the northern portion of New Britain Township to the northeast and Hilltown Township to the northwest. The Planning Area is approximately 5,800 acres, or 9.1 square miles in size.

Located within the northwestern corner of the Planning Area in New Britain Township, is an area noted as the "Transition Zone." The "Transition Zone," as delineated on all of the exhibits, reflects the possibility of public sewer service to one or more properties located west of Limekiln Pike, depending upon individual need and availability.

3.2 TOPOGRAPHY AND DRAINAGE

The entire Planning Area is located in the Neshaminy Creek drainage basin, including the North and West Branches, Pine Run and Cooks Run. Exhibit 3-1 delineates the Neshaminy Creek, including the North and West Branches, Pine Run, and Cooks Run.

With the exception of some steeply sloped ridges along the Neshaminy Creek Valley and its tributaries, the Planning Area is generally comprised of a nearly level to gently sloping terrain. The elevations range from approximately 530 at the northerly end of the Planning Area to approximately 240 at the easterly end. Exhibit 3-4 shows the topography of the Planning Area as well as steep slope areas.

3.3 SOILS

Based on the Soil Survey of Bucks County, Pennsylvania, published by the USDA Soil Conservation Service in September 2002, the Planning Area soils are broadly classified in the Abbottstown-Readington-Reaville Associations. These associations are characterized as nearly level and gently sloping, moderately deep to deep,

poorly drained to moderately well drained soils on uplands. Exhibit 3-2 illustrates and describes the soil types contained within the Planning Area.

3.4 GEOLOGIC FEATURES

The Planning Area is underlain by three different geologic formations; Brunswick, Lockatong and Stockton. The Brunswick formation is composed of red shale and sandstone, and is generally located south of Butler Avenue, and toward the southwesterly end of the Planning Area. Argillite of a gray to black color composes the Lockatong formation which underlies the center of Chalfont Borough and extends southwest as a band, and is also located in the northernmost portion of the Planning Area. A band of the Stockton formation, which is made up of red and gray shales and sandstone, lies just north of the center of Chalfont Borough and extends east and west. Exhibit 3-3 illustrates the various geologic formations contained within the Planning Area.

3.5 WETLANDS AND HYDRIC SOILS

Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas." (40 CFR Section 230.3).

The Natural Wetlands Inventory Maps for Doylestown and Telford, Pennsylvania, as prepared by the U.S. Department of the Interior, identify wetlands within the Planning Area. These wetlands are primarily located along the north and west branches of the Neshaminy Creek, Pine Run and drainage channels tributary to these creeks.

The two (2) typical wetlands types in the Planning Area include:

- Palustrine System - Inland marshes, bogs and swamps
- Riverine System - A deep water habitat system along freshwater river and stream channels.

Exhibit 3-1 reflects the wetlands locations and identification found in the Inventory Maps. Refer to the Inventory Maps to obtain a more detailed description of wetlands in the area.

In addition to the wetland areas, hydric soils are also scattered throughout the Planning Area, particularly in the northwesterly portion. The hydric soils are identified in the Soil Survey of Bucks County, Pennsylvania and consist of Doylestown, Penn Channery, Bowmansville, Mount Lucas and Croton Silt Loams.

These hydric soils areas, as well as alluvial soil areas along the streams within the Planning Area, are delineated on Exhibit 3-5.

3.6 POTABLE WATER SUPPLY

All existing residences and businesses in Chalfont Borough are served by public water facilities. Aqua Pennsylvania, Inc., a subsidiary of Aqua America, Inc. , which acquired the former Philadelphia Suburban Water Company, provides water to 2,115 customers including all Borough residents and minor portions of New Britain Borough and New Britain Township. All of the water is pumped from Chalfont Borough's five wells and stored in tanks. In emergencies, the Borough can utilize water from the North Wales Water Authority, to which it interconnects.

Groundwater resources are the only source of water for the Borough. Chalfont is underlain by three different geologic formations which bear potable water; Brunswick, Lockatong and Stockton. The Brunswick formation yields 50 to 200 GPM, the Lockatong formation yields 20 to 100 GPM, and the Stockton formation yields 70 to 300 GPM. The quality of the Borough's groundwater is very good, and the water supply is sufficient for its needs and projected growth.

New Britain Township, within the Planning Area, is served by two different water authorities to provide for the potable water needs of its developed areas. The North Wales Water Authority generally serves the southern and southeastern portions of the Township bounded generally by County Line Road, Walnut Street/Pennsylvania Avenue, Chalfont Borough, Bristol Road and Upper State Road. The North Wales Service Area is provided with water from groundwater resources located in Montgomery County.

The North Penn Water Authority serves developed areas in portions of New Britain Township, immediately west of Chalfont Borough and immediately east of the Borough. The area to the west is generally bounded by County Line Road, Trewigtown Road, New Galena Road, Limekiln Pike, Chalfont Borough and Walnut Street/Pennsylvania Avenue. The area to the east generally includes the areas in New Britain Township along Park Avenue within the Planning Area. As with the North Wales system, the North Penn Service Area is also provided with water from groundwater resources in Montgomery County.

Exhibit 3-6 reflects the service areas of Aqua Pennsylvania, Inc. and the North Wales and North Penn Water Authorities. All other areas of New Britain Township, within the Planning Area, are currently provided with water by individual private on-site wells.

SECTION IV

EXISTING SEWERAGE FACILITIES

4.1 MUNICIPAL SEWERAGE FACILITIES SERVING CHALFONT BOROUGH AND NEW BRITAIN TOWNSHIP

4.1.1 General

The existing public sanitary sewerage collection, conveyance and treatment system serving the Planning Area is owned and operated by the Chalfont-New Britain Township Joint Sewage Authority (Authority). The wastewater treatment plant is located along the easterly side of the Neshaminy Creek on Upper State Road. From the treatment plant, the Neshaminy Creek Interceptor extends upstream along the Neshaminy Creek to County Line Road. From this main interceptor, secondary interceptors extend generally along Pine Run and the North Branch of the Neshaminy Creek. From these interceptors, the sanitary sewer collection systems extend throughout Chalfont Borough and adjacent developed areas of New Britain Township. These developed areas are located primarily in the southeastern, northeastern and northwestern portions of New Britain Township. Sewer lines also extend to a developed area near Line Lexington in the southwesterly corner of the Township. Seven existing sewage pumping stations (SPS) are also located within the Planning Area, six of which are located immediately northwest of Chalfont Borough. The other is located in the southeasterly corner of New Britain Township. Exhibit 4-1 shows the existing sewage facilities and delineates the current sewer service areas.

The Authority's wastewater treatment plant also serves portions of the Bucks County Water and Sewer Authority's service area, including New Britain Borough and parts of Doylestown Township, Plumstead Township, Buckingham Township and Bedminster Township.

There are no existing or proposed small flow treatment facility systems within the Planning Area. The disposal of all sewage from the public sanitary sewerage systems within the Planning Area is via the Authority's wastewater treatment plant to the Neshaminy Creek.

4.1.2 Wastewater Treatment

The Chalfont-New Britain Township Joint Sewage Authority Wastewater Treatment Plant (WWTP) Phase I and II was originally completed in 1969 with a rated capacity of 1.4 million gallons per day (mgd) under NPDES

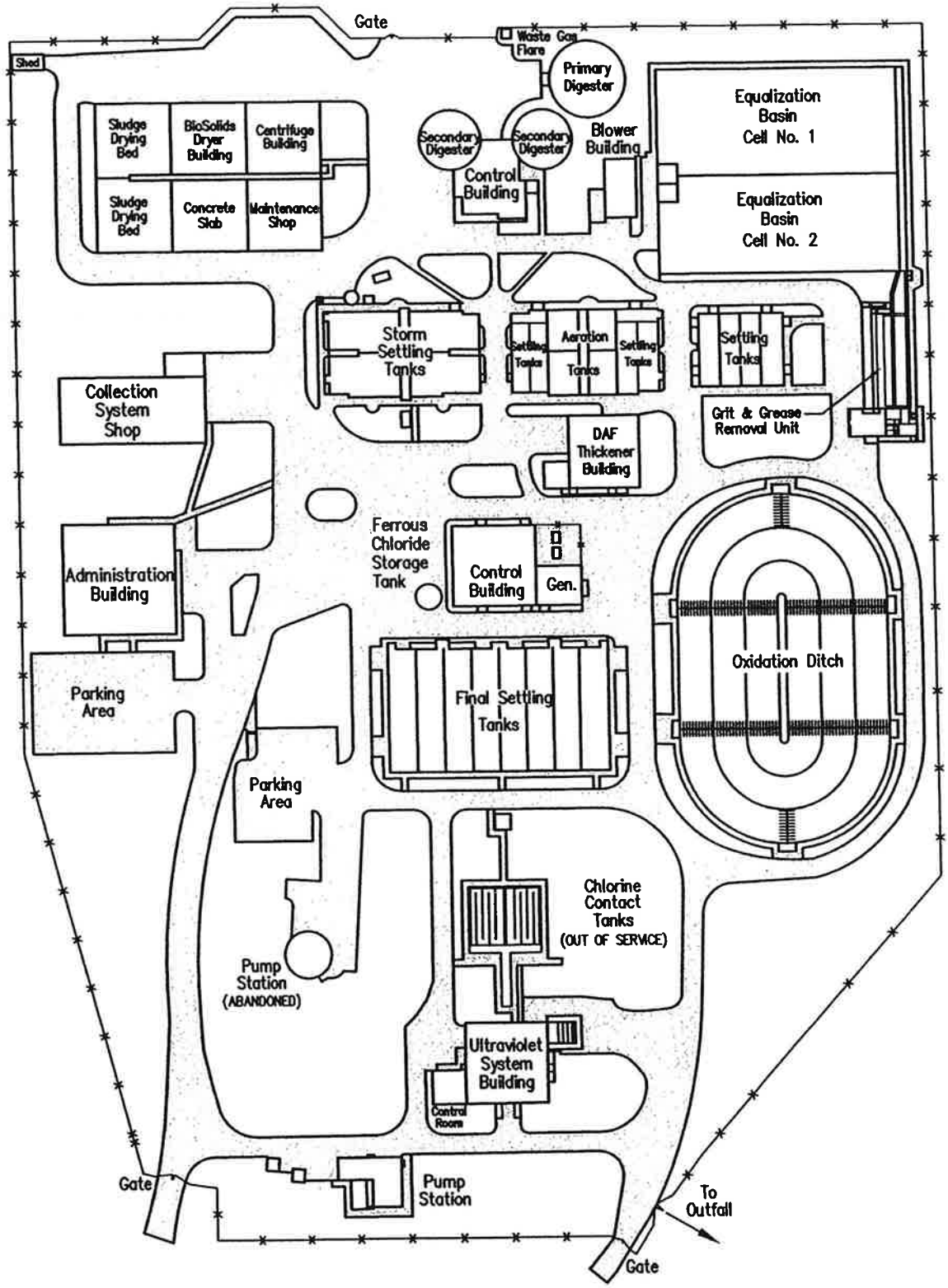
Permit No. PA 0025917. In 1973, a plant rerating of 2.0 mgd was approved, based upon a chemical addition to the plant and a treatment performance study. Phase III (CBS I) construction in 1984 added 2.0 million gallons of equalization, additional digestion and four rectangular tanks, although the rated capacity remained at 2.0 mgd. In 1988, the Phase IV (CBS II) expansion and upgrade was completed which increased the plant capacity to 3.8 mgd. This expansion included an upgrade to the treatment process to include nutrient removal, grit and grease removal facilities, an oxidation ditch, final clarifiers, aerobic/anoxic unit, chemical feed equipment, dissolved air flotation thickener, anaerobic digestion, chlorination and dechlorination and sludge thickening and dewatering. In 1989, with an approved study, the plant was rerated to 4.0 mgd, with a maximum month of 5.0 mgd. In 2000, chlorination/dechlorination was replaced with ultraviolet disinfection, and the plant maximum monthly flow was rerated to 6.0 mgd. Finally, in 2003, a new influent pumping station was completed which included influent metering flumes and a mechanical influent raw sewage screen. Also, the Authority has upgraded its sludge processing with the installation of a high solids centrifuge, followed by a biosolids dryer. A new permit was issued in early 2004 to cover the next five years of operation. Treated sewage effluent from the WWTP is discharged directly to the Neshaminy Creek.

Wastewater sludge generated by the Authority's WWTP is processed by anaerobic digestion, dewatering by a centrifuge and dried using a biosolids drier. The Authority recently received a Class "A" rating on the dried sludge. Currently, the Authority disposes the dried biosolids at a landfill, but is pursuing other disposal options in conjunction with the "A" rating. This includes land application. The Authority currently produces approximately 500 dry tons of sludge per year and uses a licensed hauler to dispose of the processed biosolids at an approved landfill site. The Authority is in the process of installing a silo to provide storage for the dried biosolids with the intention of selling the product to potential users in the future. The Authority does not receive any outside sludge or septage at the WWTP.

A Site Plan and Process Schematic, which illustrates the current facilities and flow diagram, is shown on the following pages.

4.1.3 Collection and Conveyance Systems

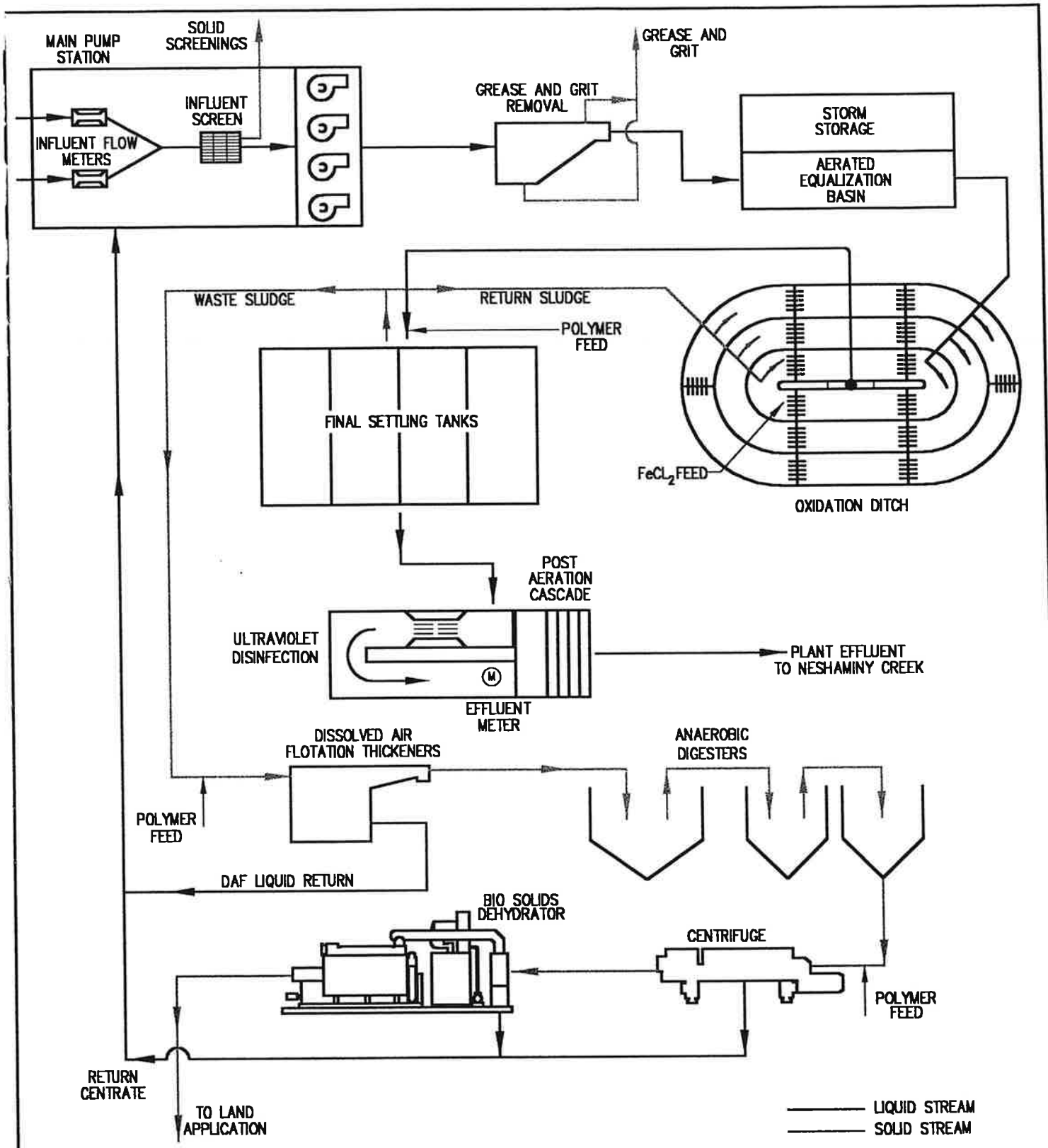
Flows to the WWTP are conveyed via the Neshaminy Creek Interceptor extending upstream along the Neshaminy Creek for a distance of approximately 20,600 feet. From the Neshaminy Creek, this interceptor extends cross-country in a southerly direction for a distance of approximately 1,200 feet to Cedar Hill Road. This interceptor ranges in size from 14" diameter to 36" diameter.



SITE PLAN

SCALE: 1" = 100'

CHALFONT – NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY



PROCESS SCHEMATIC

CHALFONT – NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY
WASTEWATER TREATMENT PLANT

The Neshaminy Creek North Branch Interceptor extends from the Neshaminy Creek Interceptor, upstream along the North Branch of the Neshaminy Creek for a distance of approximately 6,700 feet to East Hillcrest Avenue. This interceptor ranges in size from 12" diameter to 18" diameter.

The Bucks County Water and Sewer Authority's (BCWSA) Pine Run Interceptor extends from the Neshaminy Creek North Branch Interceptor, upstream along Pine Run for a distance of approximately 8,850 feet to Old Iron Hill Road, at which point, it continues beyond the Planning Area. This interceptor is 24" in diameter. Collector sewers of the Chalfont-New Britain Township Joint Sewage Authority connect to this interceptor at eight locations within the Planning Area.

The BCWSA's Cooks Run Interceptor extends upstream from the Neshaminy Creek Interceptor, along Cooks Run for a distance of approximately 1,700 feet to Almshouse Road, at which point, it continues beyond the Planning Area. This interceptor is 24 inches in diameter and serves portions of the BCWSA's service area.

It is also noted that the portion of the Neshaminy Creek Interceptor between the WWTP and the Cooks Run Interceptor are shared by the Bucks County Water and Sewer Authority and the Chalfont-New Britain Township Joint Sewage Authority.

The collection systems within the Planning Area consist primarily of 8" diameter gravity sewers extending to the various interceptors.

4.1.4 Sewage Pumping Stations

Due to the topography and the lack of available existing gravity sewers in isolated developed areas of New Britain Township, seven sewage pumping stations have been installed over the years. Six of the pumping stations are concentrated in residential developments located just northwest of Chalfont Borough. The seventh pumping station is located on Upper State Road in the southeasterly corner of New Britain Township. Several of the sewage pumping stations located within the above mentioned residential developments discharge to relatively larger downstream pumping stations en route to the interceptor sewers and the WWTP. The flow sheet following Page 15 illustrates the dependence of the sewage pumping stations on each other in the conveyance of wastewater to the WWTP. In addition, the following brief description of each of these sewage pumping stations is provided:

Sewage Pumping Station No. 1

SPS No. 1 is located off of Mallard Drive in the Tower Hill Development of New Britain Township. SPS No. 1 receives sewage from SPS No. 2, SPS No. 3 and SPS No. 5, as well as gravity flows from that development area. SPS No. 1 is discharged via a 2,650 L.F., force main to a gravity sewer in Limekiln Pike.

Sewage Pumping Station No. 2

SPS No. 2 is located near the northern terminus of Richard Drive in the Tower Hill Woods Development of New Britain Township. SPS No. 2 receives gravity flows from a portion of this development area. SPS No. 2 is discharged via a 850 L.F. force main to a gravity sewer in Richard Drive.

Sewage Pumping Station No. 3

SPS No. 3 is located off of Gertrude Drive, Between Peggy Lane and Richard Drive, also in the Tower Hill Woods Development. SPS No. 3 receives sewage from SPS No. 2, as well as gravity flows from another portion of this development area. SPS No. 3 is discharged via a 1,700 L.F. force main to a gravity sewer in Farber Drive.

Sewage Pumping Station No. 4

SPS No. 4 is located near the southern terminus of Walden Way in the Tower Hill Meadows Development of New Britain Township. SPS No. 4 receives gravity flows from this development area and also the Twin Maples development area. SPS No. 4 is discharged via a 4,600 L.F. force main to a gravity sewer near the intersection of Sellersville Road and Hillcrest Avenue.

Sewage Pumping Station No. 5

SPS No. 5 is located near the southern terminus of Oakmount Way, also in the Tower Hill Development. SPS No. 5 receives gravity flows from that development area. SPS No. 5 is discharged via a 400 L.F. force main to a gravity sewer in Farber Drive.

Sewage Pumping Station No. 6

SPS No. 6 is located near the southern terminus of Marshall Circle in the Regency Glen Development area of New Britain Township. SPS No. 6 receives gravity flows from that development area. SPS No. 6 is discharged

via a 2,700 L.F. force main to the gravity sewer near the intersection of Sellersville Road and Hillcrest Avenue.

Sewage Pumping Station No. 7

SPS No. 7 is located along Upper State Road at the intersection of Schoolhouse Road. SPS No. 7 receives gravity flows from the High Point Business Campus, the Glennbrook residential area along the southerly side of Schoolhouse Road and the southeasterly portions of Stoler Heights area along Woodside Avenue and Clearview Avenue. SPS No. 7 is discharged via a 1,550 L.F. force main to a gravity sewer in Schoolhouse Road near Glennbrook Way.

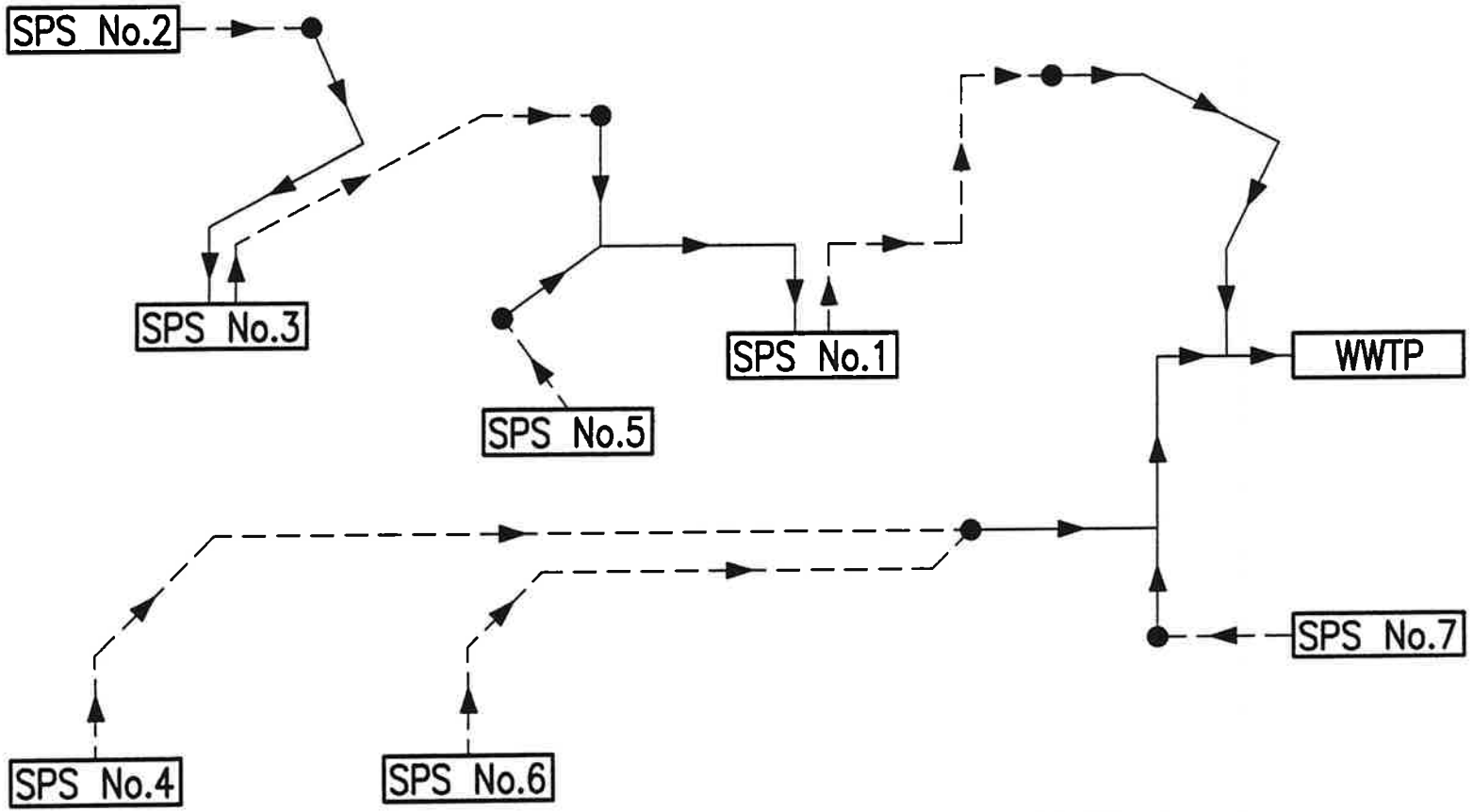
4.1.5 BCWSA Facilities and Treatment

The existing Bucks County Water and Sewer Authority (BCWSA) facilities within the Planning Area, consist of the Pine Run Interceptor and the Cooks Run Interceptor. These interceptors convey flows from the BCWSA service areas in New Britain Borough and parts of Doylestown Township, Plumstead Township, Buckingham Township and Bedminster Township, to the Chalfont-New Britain Township Joint Sewage Authority WWTP.

On September 20, 1966, the Authority entered into a written agreement (Agreement) with the BCWSA whereby the Authority agreed that BCWSA could discharge a specific maximum volume of sewage from customers located in its service area to the Authority's wastewater treatment plant for treatment. To ensure that the daily flows do not exceed the plant's rated daily treatment capacity, the maximum number of subscribers permitted to connect to BCWSA's sanitary sewer system and discharge wastewater to the Authority's WWTP was expressly limited.

Data furnished to the Authority documented that the BCWSA exceeded the maximum number of subscribers permitted by the Agreement. In addition, flow data received from BCWSA establishes that BCWSA's over-subscription and over-connection to BCWSA's system, which then directs the sewage to the Authority's WWTP, has caused the plant to have periodically exceeded its daily treatment capacity. Table 4-1 herein presents the hydraulic loadings at the WWTP for the past five years. The Authority is currently working with the BCWSA to remedy this situation.

SEWAGE PUMPING STATION FLOWSHEET FOR STATIONS PUMPING TO THE CHALFONT–NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY WWTP



ACT 537 PLAN UPDATE
CHALFONT – NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY
CHALFONT BOROUGH AND NEW BRITAIN TOWNSHIP
BUCKS COUNTY, PA.

LEGEND

SPS	SEWAGE PUMPING STATION
– – –	FORCE MAIN
●———	COLLECTION/CONVEYANCE (GRAVITY SEWER)
WWTP	WASTEWATER TREATMENT PLANT

CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0600

TABLE 4-1

**HYDRAULIC LOADING (IN MGD)
TO
CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY
WASTEWATER TREATMENT PLANT**

MONTH	1999	2000	2001	2002	2003
January	4.43	2.96	3.44	2.66	4.01
February	4.21	4.54	4.76	2.44	3.54
March	5.20	4.01	5.06	3.36	6.16
April	4.18	4.01	4.37	2.89	4.55
May	3.13	3.70	3.27	3.83	3.15
June	2.68	2.92	4.34	2.95	6.13
July	2.43	2.70	2.86	2.27	2.84
August	2.74	2.95	2.58	2.24	3.60
September	4.12	2.65	2.48	2.54	4.28
October	3.75	2.27	2.25	3.16	4.10
November	3.26	2.18	2.20	4.07	4.93
December	4.11	2.80	2.32	4.78	6.06
Annual Average	3.69	3.14	3.32	3.10	4.45
3-Month High	4.61	4.19	4.73	4.00	5.03
Ratio: 3-Month High/Annual Average	1.25	1.33	1.42	1.29	1.13

4.2 ON-SITE SEWAGE DISPOSAL SYSTEMS

4.2.1. General

The Bucks County Department of Health (BCDH) is the "local agency" responsible for administering the on-lot sewage disposal program within the Planning Area. Enforcement of the program is through permitting, inspection and complaint response.

Approximately 600 on-site sewage disposal systems are currently in use throughout the Planning Area. A majority of the systems are utilized by residences, however, several of the systems are utilized by industrial and office facilities. These industrial and office systems are generally located along County Line Road near Walnut Street and along Limekiln Pike near Newville Road. Many of the existing systems in the Planning Area were constructed prior to the current PA DEP design criteria.

4.2.2 Problem Areas

Based upon information provided by the Bucks County Department of Health, and a meeting with the Sewer Enforcement Officer for Chalfont Borough and New Britain Township, their office has no record of malfunctioning on-lot sewage disposal systems within the Planning Area. A copy of letter dated June 11, 2004 from the Bucks County Department of Health is attached at the end of this Section.

While the BCDH does not appear to have any records of malfunctioning on-lot sewage disposal systems within the Planning Area, it can reasonably be assumed, based upon existing soils conditions and the age of many of the systems, that there are a number of unreported malfunctioning systems. It can also be reasonably assumed that as time goes by, the potential for existing on-lot system failures increases. Additionally, the Bucks County Sewage Facilities Plan of 1970 specifically identifies the southwesterly portion of New Britain Township, which is also the southwesterly portion of the Planning Area, as an area with isolated on-lot sewage disposal system failures. The extent of failures can be expected to increase with further development of the area.

COUNTY OF BUCKS

DEPARTMENT OF HEALTH
Health Building, Neshaminy Manor Center, Doylestown, PA 18901 - 215 - 345 - 3318
FIELD OFFICES
Bucks County Government Services Center, 7321 New Falls Road, Levittown, PA 19055 -215- 949 - 5805
Bucks County Government Services Center. 515 S. West End Blvd., Quakertown, PA 18951 -215- 536- 6500

County Commissioners
CHARLES H. MARTIN, Chairman
MICHAEL G. FITZPATRICK, ESQ
SANDRA A. MILLER

June 11, 2004

Kenneth G. Kollmer, P.L.S.
CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901

RE: Chalfont-New Britain Township Joint Sewage Authority
Act 537 Plan Update

Dear Mr. Kollmer:

This letter is in response to your notice which was sent to Dr. Lewis D. Polk who has since retired as the Medical Director for this Department.

Your office has been in contact with Donald Meadows SEO for the New Britain Township and Chalfont Borough area. Currently the Department does not have any complaints or records of malfunction sewage systems in the mapped area which was attached to your letter. It should be noted that as public sewers are extended into areas of the township and borough connections should be made to public sewers. Department regulations prohibit the use of on-lot sewage disposal systems where public sewers are accessible, unless the official plan would allow for the use of on-site sewage disposal systems.

Sincerely,

Andrew A. Schafer, Chief
Division of Environmental Sanitation

AAS/jvs

D. Drye, Chalfont Borough Manager
C. Bigham, New Britain Township Manager
D. Meadows, ESP II SEO

SECTION V

IDENTIFICATION OF WASTEWATER TREATMENT NEEDS

5.1 DESCRIPTION OF STUDY AREAS

5.1.1 General

Section 2.2 herein details the objectives of this Plan Update. As noted therein, the Planning Area is defined as the Public Sewer Service Area of Chalfont Borough and New Britain Township. Based upon this objective, the wastewater treatment needs of the Planning Area are established. This is important because it defines the extent of public sewer service to be planned for future development, both within areas already served by public sewers and areas not currently served by public sewers. As shown on Exhibit 4-1, much of the Planning Area has already been developed and existing sanitary sewerage facilities extend through much of the Planning Area. The Planning Area has been divided into two study areas; areas currently served by public sewerage facilities and areas proposed to be served by public sewerage facilities. A description of these areas is provided in the following sections.

5.1.2 Areas Currently Served by Public Sewerage Facilities

The areas currently served by, or provided with, existing public sewerage facilities are delineated on Exhibit 4-1. Those areas consist of all of Chalfont Borough, as well as adjacent areas in New Britain Township located generally to the east, southeast, southwest and northwest of Chalfont Borough. Within the currently sewered areas are a number of properties which currently have Equivalent Dwelling Unit (EDU) allocations, but are not yet connected to the sewer system. In addition, there are many properties within these areas which are large enough for future subdivision and/or land development, but which currently do not have EDU allocations to accommodate this future development.

5.1.3 Areas to be Served by Public Sewerage Facilities

There are five primary areas within the Planning Area proposed for public sanitary sewerage facilities over the next ten years, all of which are in New Britain Township. Those areas are primarily all residential properties with several industrial and/or office properties included. The five areas are identified as the West Area, East Area, Cedar Hill Road Area, Limekiln Pike/Newville Road Area and County Line Road/Walnut Street Area. These areas are illustrated on Exhibit 5-1 and are described as follows:

West Area

The West Area is the largest of the unsewered areas (approximately 1,200 acres) and is located in the western portion of New Britain Township. The area is roughly bounded by Township Line Road, Sellersville Road, New Britain Borough, Railroad Avenue, School House Road and New Galena Road with some properties beyond those limits and some exceptions within. The large majority of the properties are residentially zoned or used. Six properties along School House Road and New Galena Road are zoned for industrial/office use. There are approximately 181 properties in the West Area, of which approximately 60 properties are large enough to be subdivided or developed. Within this area are two recently approved and/or pending land developments/subdivisions. They are identified on Exhibit 5-1 as the Loh/Hagey/DiCarlantonio Tracts - Land Development and the Barclay Road Subdivision. The Loh/Hagey/DiCarlantonio Tracts - Land Development, which consists of approximately 40.2 acres with 124 residential units, has been approved with a public sewage pumping facility. Temporarily, sewage from this land development is discharged via force main to existing sewerage facilities of the Hatfield Township Municipal Authority. It is ultimately intended for this force main to be diverted to facilities of the CNBTJSA. The Barclay Road Subdivision consists of approximately 39.5 acres with 28 residential lots. This subdivision, which is proposed for public sewerage, has not received approval from New Britain Township. It is ultimately intended for sewage flows from this subdivision to be discharged to facilities of the CNBTJSA.

East Area

The East Area is the second largest unsewered area (approximately 270 acres) and is located in the eastern portion of New Britain Township just southeast of Chalfont Borough. The area is roughly bounded by Upper State Road, Limekiln Pike and Chalfont Borough, with some properties beyond those limits and some exceptions within. All of the properties in this area are residentially zoned. There are approximately 119 properties in the East Area, of which 21 properties are large enough to be subdivided or developed.

Cedar Hill Road Area

The Cedar Hill Road Area (approximately 45 acres) is located in the southwestern portion of New Britain Township and extends along both sides of Cedar Hill Road between School House Road and Butler Avenue. All of the properties in this area are residentially zoned. There are approximately 24 properties in the Cedar Hill Road Area, of which only 2 are large enough to be subdivided or developed.

Limekiln Pike/Newville Road Area

The Limekiln Pike/Newville Road Area (approximately 18 acres) is located in the south central portion of New Britain Township, immediately north of Chalfont Borough. The area generally includes the properties in the vicinity formed by the intersections of Limekiln Pike, Newville Road and New Galena Road. There are a total of 10 properties in this area, all of which are zoned as residential. Two of the properties in this area are large enough to be subdivided or developed.

County Line Road/Walnut Street Area

The County Line Road/Walnut Street Area (approximately 15 acres) is located in the southwestern portion of New Britain Township and includes one property located at the northwesterly corner of County Line Road and Walnut Street. This property is located in the industrial/office zoning district and is large enough to be subdivided or developed.

5.1.4 Transition Zone

The "Transition Zone" is an area within New Britain Township, located generally west of Limekiln Pike at the northwestern corner of the Planning Area. This area provides a transition between the "Sewage Facilities Planning Area" of New Britain Township and the "On-Lot Sewage Service Area." The "Transition Zone," which is delineated on all of the exhibits, reflects the possibility of public sewer service to one or more properties west of Limekiln Pike, depending upon individual needs and sewer availability. In addition, one should note the presence of public sewers to a few select commercial and institutional properties along Ferry Road, bordering Doylestown Township. A total of 12 Equivalent Dwelling Units (EDU) have been allocated for potential sewer service to properties in the "Transition Zone."

It is noted that planning for existing and/or proposed on-lot sewage disposal systems within the "Transition Zone," as well as other isolated areas of New Britain Township within the Planning Area, is considered to be addressed by the separate New Britain Township Act 537 Plan Update for the "On-Lot Sewage Service Area."

5.2 POPULATION AND HOUSING GROWTH

Table 5-1 herein presents the population and housing history of Chalfont Borough and New Britain Township, respectively, as per the U.S. Census Bureau, for 1970 through 2000. The table also presents the population estimates/projections, as per the Bucks County Planning Commission, for 2005 through 2015. Housing

projections for Chalfont Borough and New Britain Township are not available, however, it is assumed that the rate of increase will level off over the next ten years, and the average household size will remain fairly consistent at approximately 2.78 persons per dwelling unit.

TABLE 5-1 (AMENDED)					
CHALFONT BOROUGH POPULATION AND HOUSING					
YEAR	POPULATION		HOUSING		AVERAGE HOUSEHOLD SIZE
	PERSONS	% CHANGE	UNITS	% CHANGE	PERSON/EDU
1970**	2,366	-	719	-	3.29
1980**	2,802	18%	903	26%	3.10
1990**	3,069	10%	1,144	27%	2.68
2000**	3,900	27%	1,404	23%	2.78
2005*	4,130	6%	-	-	2.78***
2010*	4,530	10%	-	-	2.78***
2015*	4,560	1%	-	-	2.78***
NEW BRITAIN TOWNSHIP POPULATION AND HOUSING					
YEAR	POPULATION		HOUSING		AVERAGE HOUSEHOLD SIZE
	PERSONS	% CHANGE	UNITS	% CHANGE	PERSON/EDU
1970**	5,207	-	1,369	-	3.80
1980**	7,415	42%	2,394	75%	3.10
1990**	9,099	23%	3,284	37%	2.77
2000**	10,698	18%	3,969	21%	2.70
2005*	12,660	18%	-	-	2.78***
2010*	13,620	8%	-	-	2.78***
2015*	14,620	7%	-	-	2.78***

* Estimated by Bucks County Planning Commission
** U.S. Census Bureau
*** Estimated Projected Average Household Size

The trends illustrated by the table include the following:

- Growth between 1970 and 2000 was very high.
- Growth after 2000 generally decreased, but remained strong enough through 2010 and is anticipated to occur at relatively this same pace through 2015.
- Growth after 2015 is anticipated to taper off.
- The average household size is expected to remain fairly stable through 2015.

Interpretation of the trend that growth after 2015 will taper off may mean that a majority of the undeveloped land remaining in Chalfont Borough and New Britain Township will be developed by the year 2015. Assuming this trend is correct, sewage facilities planning within this update will consider "build-out" of the planning area within the next ten years.

5.3 EXISTING AND FUTURE DEVELOPMENT WITHIN PLANNING AREA

5.3.1 General

Exhibit 5-1 illustrates the existing and future sewerage facilities areas within the Planning Area. These areas are described in the following sections.

5.3.2 Existing Sewerage Service Area

All of Chalfont Borough and a large part of the southerly portion of New Britain Township are currently provided with existing sanitary sewerage facilities. There is a total of 4,554 Equivalent Dwelling Units (EDU's) currently provided with public sanitary sewerage service by the Authority within the Planning Area. Additionally, within this area, there are a total of 55 properties (14 in Chalfont Borough and 41 in New Britain Township) having a total of 562 EDU's (72 in Chalfont Borough and 490 in New Britain Township) which are currently allocated for public sewerage service, but are not yet connected.

Also within the existing sewerage areas are many properties which are capable of being further subdivided or developed. These properties which are located in both Chalfont Borough and New Britain Township, are listed in Table 5-2 and Table 5-3, respectively. Sewer service to these properties can be accomplished by direct connection to existing gravity mains along the property frontages, or by minor sewer extensions. Included in these properties are a number of properties which are currently planned for development. Planned development consists of areas which are currently

in the construction or planning phase of development and are proposed to be served by public sewers. These properties planned for development are identified on Exhibit 4-1 and noted in Table 5-2 and Table 5-3. It is anticipated that these properties will be developed within the next ten year period.

5.3.3 Sewerage Facilities Service Area Expansion

The areas planned for future growth and proposed for future expansion of the sewer service area are as described above in Section 5.1.3. Those areas include the West Area, the East Area, the Cedar Hill Road Area, the Limekiln Pike/Newville Road Area and the County Line Road/Walnut Street Area, all within New Britain Township, as delineated on Exhibit 5-1 and listed in Table 5-4. Included in these properties are the two properties located in the West Area which are currently in the construction phase or planning phase of development, as identified in Section 5.1.3.

5.3.4 Equivalent Dwelling Unit (EDU) Allocations

Projected Equivalent Dwelling Unit (EDU) allocations presented in Tables 5-2, 5-3 and 5-4 have been developed using the following criteria.

- For planned developments, the actual number of proposed units for residential developments has been used. In the case of office, commercial or industrial developments, the EDU allocations have been based upon building size for the proposed use.

- For future potential sewerage areas, an EDU allocation of 1 EDU has been used for all properties which are unlikely for further development or subdivision. For properties in both existing sewerage service areas and proposed future sewerage service areas, EDU allocations are based upon property size, zoning provisions, environmental and topographical restrictions, etc. Generally, gross site areas have been reduced by approximately 30% to account for rights-of-way, resource protection land, open space, stormwater management, etc.

TABLE 5-2 (AMENDED) PROJECTED ADDITIONAL EDU ALLOCATIONS WITHIN EXISTING PUBLIC SEWERAGE AREAS OF CHALFONT BOROUGH			
PLANNED DEVELOPMENT			
Use	**Development**	**Gross Area (Ac.)**	**Projected EDU's**
Residential	Canon Subdivision	6.0	7
Office/Commercial	Fire House	1.9	1
Office/Commercial	Eble L.D.	1.1	2
POTENTIAL FUTURE DEVELOPMENT			
Use	**Total Properties**	**Gross Area (Ac.)**	**Projected EDU's**
Office/Commercial	1	8.2	38
Corridor Commercial	1	3.7	14
Light Industrial	4	7.7	76
-	Miscellaneous Fill-In	-	27
TOTAL PLANNED AND FUTURE ALLOCATIONS - 165 EDU's			

TABLE 5-3 (AMENDED) PROJECTED ADDITIONAL EDU ALLOCATIONS WITHIN EXISTING PUBLIC SEWERAGE AREAS OF NEW BRITAIN TOWNSHIP			
POTENTIAL FUTURE DEVELOPMENT			
Use	**Total Properties**	**Gross Area (Ac.)**	**Projected EDU's**
Industrial/Office	7	120.2	154
Residential	8	60.7	39
Industrial	1	124.2	40
Commercial	2	16.0	15
-	Miscellaneous Fill-In	-	17
TOTAL POTENTIAL ALLOCATIONS - 265 EDU's			

TABLE 5-4
PROJECTED EDU ALLOCATIONS WITHIN FUTURE SEWER SERVICE EXPANSION AREAS OF NEW BRITAIN TOWNSHIP

PLANNED DEVELOPMENT - WEST AREA

Use	Development	Gross Area (Ac.)	Projected EDU's
Residential	Loh/Hagey/DiCarlantonio Tracts - Land Development	40.2	124
Residential	Barclay Road Subdivision	39.5	28

EXISTING USES AND POTENTIAL FUTURE DEVELOPMENT - WEST AREA

Use	Total Properties	Gross Area (Ac.)	Projected EDU's
Residential	179	897.7	369
Industrial/Office	3	16.5	4

TOTAL PLANNED AND POTENTIAL ALLOCATIONS - WEST AREA - 525 EDU's

EXISTING USES AND POTENTIAL FUTURE DEVELOPMENT - EAST AREA

Use	Total Properties	Gross Area (Ac.)	Projected EDU's
Residential	119	263.1	183

TOTAL POTENTIAL ALLOCATIONS - EAST AREA - 183 EDU's

EXISTING USES AND POTENTIAL FUTURE DEVELOPMENT - CEDAR HILL ROAD AREA

Use	Total Properties	Gross Area (Ac.)	Projected EDU's
Residential	24	41.4	30

TOTAL POTENTIAL ALLOCATIONS - CEDAR HILL ROAD AREA - 30 EDU's

TABLE 5-4 (CONTINUED)
PROJECTED EDU ALLOCATIONS WITHIN FUTURE SEWER SERVICE EXPANSION AREAS OF NEW BRITAIN TOWNSHIP

EXISTING USES AND POTENTIAL FUTURE DEVELOPMENT - LIMEKILN PIKE/NEWVILLE ROAD AREA

Use	Total Properties	Gross Area (Ac.)	Projected EDU's
Residential	10	16.9	15

TOTAL POTENTIAL ALLOCATIONS - LIMEKILN PIKE/NEWVILLE ROAD AREA - 15 EDU's

EXISTING USES AND POTENTIAL FUTURE DEVELOPMENT - COUNTY LINE ROAD/WALNUT STREET AREA

Use	Total Properties	Gross Area (Ac.)	Projected EDU's
Industrial/Office	1	14.8	4

TOTAL POTENTIAL ALLOCATIONS - COUNTY LINE ROAD/WALNUT STREET AREA - 4 EDU's

EXISTING USES AND POTENTIAL FUTURE DEVELOPMENT - "TRANSITION ZONE"

Use	Total Properties	Gross Area (Ac.)	Projected EDU's
Residential	48	260.0	12

SECTION VI

SEWERAGE FACILITIES ALTERNATIVES

6.1 GENERAL

As established in Section V of this Plan Update, the future areas to be served by public sewerage facilities include the West Area, the East Area, the Cedar Hill Road Area, the Limekiln Pike/Newville Road Area and the County Line Road/Walnut Street Area, all as described in Sections 5.1.3 and 5.3.3, and illustrated on Exhibit 5-1. Since existing collection and conveyance lines of the Authority already extend to and through significant portions of the Planning Area, the further extension of these lines is the most straightforward method of serving the future areas. The extension of public sewers into these areas is consistent with the objectives of this Plan Update and with previous sewage facilities planning for Chalfont Borough and New Britain Township. However, this Section compares this alternative to other alternatives which were considered for providing sanitary sewage disposal to these areas.

6.2 IDENTIFICATION OF SEWERAGE FACILITIES ALTERNATIVES

6.2.1 Extension of Public Sewers

Section 5.1.3 of this Plan Update identified specific areas within the Planning Area which is proposed for public sewerage facilities. These areas are identified as the West Area, the East Area, the Cedar Hill Road Area, the Limekiln Pike/Newville Road Area and the County Line Road/Walnut Street Area.

The West Area is generally described in Section 5.1.3. Sewer service to this area would require seven individual extensions of gravity sewer mains. In addition to the sewage pumping station proposed for the Loh/Hagey/Dicarlantonio Tracts - Land Development, two other sewage pumping stations with appurtenant force mains would be required to minimize the extension of sewers through environmentally sensitive areas and to also avoid excessively deep cuts. These seven systems would collect and/or pump sewage from this area for conveyance to existing gravity sewers at Sunset Avenue, School House Road, County Line Road, Glen Drive, Brook Lane, Curly Mill Road and at an existing easement off of Curly Mill Road. The proposed connections at Brook Lane, Curly Mill Road and the existing easement off of Curly Mill Road would convey flow to existing Sewage Pumping Station No. 4, and the proposed connection on Glen Drive, would convey flows to existing Sewage Pumping Station No. 6.

The East Area is generally described in Section 5.1.3. Sewer service to this area would require four individual extensions of gravity sewer mains. In addition, one sewage pumping station with appurtenant force main would be required to minimize the extension of sewers through environmentally sensitive areas and to avoid excessively deep cuts. Three of these systems would collect and/or pump sewage from the major portion of the area to the existing Neshaminy Creek Interceptor. The other system would collect and convey sewage from a small portion of the area to the existing gravity sewer at Limekiln Pike within Chalfont Borough.

The Cedar Hill Road Area is generally described in Section 5.1.3. Sewer service to this area would involve a single gravity sewer main extension along Cedar Hill Road to collect and convey sewage from this area to an existing gravity sewer at Overlook Drive.

The Limekiln Pike/Newville Road Area is generally described in Section 5.1.3. Sewer service to this area would require a gravity sewer main extension as well as a sewage pumping station. This system would collect sewage from this area for conveyance to a proposed sewage pumping station to be located along Newville Road. Sewage from this pumping station would be conveyed via force main to an existing gravity sewer at Tower Hill Road. This proposed connection would convey flows to existing Sewage Pumping Station No. 1.

The County Line Road/Walnut Street Area, as described in Section 5.1.3, consists of one property. Sewer service to this property would involve a single gravity sewer main extension through an easement from a proposed connection point located along the existing gravity sewer adjacent to the Neshaminy Creek West Branch.

The "Transition Zone," as described in Section 5.1.4, consists of 52 properties, 4 of which are already connected to public sewers. Potential sewer service to any of the remaining 48 properties would be dependent upon the need and availability of existing sewers.

The proposed sewer extensions into the future sewerage service areas are reflected on Exhibit 5-1.

6.2.2 Individual Sewage Disposal Systems

The areas in question are currently served by on-lot sewage disposal systems (OLDS), some of which may already be failing and all of which are susceptible to failure at some point. Further development in these areas will certainly aggravate these problems. Repair or replacement of individual on-lot sewage disposal systems is very costly, ranging anywhere from $20,000

to $25,000 or more, depending on the type of system. In addition, these repairs or replacements may only temporarily resolve any problems, due to the existing soils, limited lot sizes and other site conditions. As a result, the continued reliance of on-lot sewage disposal systems in these areas is not considered technically feasible.

6.2.3 Small Flow Treatment Facilities

Small flow treatment facilities are typically individual or community sewerage systems designed to treat flows not greater than 2,000 gpd for final disposal using stream discharge. Installation of this type of system is estimated at approximately $25,000. Many of the properties located in the existing unsewered areas are not located in close proximity to a stream, therefore, the use of these systems may not be suited for many of the properties in these areas. In addition, assuring that these systems are properly operated and maintained by the property owner is a concern. Although the owner of each system would be responsible for the system operation and maintenance, the Municipality would be responsible for ensuring that the owner properly carried out these duties. If an owner did not properly operate or maintain his system, Municipal involvement would be required to rectify the situation. Again, this type of system is not considered technically feasible.

6.2.4 Community Treatment Facility(ies)

Constructing a new wastewater treatment plant or plants to serve the existing unsewered areas was also considered. Constructing a new treatment facility or facilities to serve these areas would require a receiving stream or enough suitable land for spray application of the effluent. This could be difficult, especially if spray application was the disposal method chosen. Spray application would require a large tract of land over which the effluent would be discharged, and there do not appear to be many areas large enough which are conveniently located in the Planning Areas. Secondly, such a treatment facility would have to be owned/operated by either a private community organization (homeowners' association) or the Municipality. However, it is unlikely that the property owners within the affected areas would accept the concept of a private community organization for maintenance purposes. Additionally, the perpetual operation and maintenance of the relatively small treatment facilities that would be required to service the affected areas would be an undue burden on the Municipalities' administrative and public works personnel. For these reasons, this alternative is not considered technically feasible.

6.2.5 Retaining Tanks

Retaining tanks are only permitted within the Planning Area on an interim basis where connection to sanitary sewers is imminent. While they may have some viability on a short term basis, any reliance on the continued use of retaining tanks is not considered technically feasible.

6.2.6 "Do Nothing"

The "Do Nothing" alternative was also considered for the Planning Area. This alternative would require that nothing be done to correct any problems with existing on-lot disposal systems or to provide for the planned and future development of these areas. This would also result in a continually increasing rate of failure of these systems and unsanitary conditions. This alternative would also not meet the objectives of the Plan Update, which include planning for public sewer service to be provided to these areas. As a result, the "Do Nothing" alternative shall not be considered any further.

6.2.7 Alternative Selected

Based on the alternatives considered in the preceding sections, the public sewer extension alternative has been determined to be the most desirable alternative for serving the existing unsewered areas within the Planning Area. The public sewer extension alternative would provide a permanent resolution to any existing or future malfunctioning OLDS and would provide for the planned and future development of these areas. The extension of public sewers will be further evaluated in the upcoming sections, which look at the capabilities of the existing sewer systems serving Chalfont Borough and New Britain Township.

6.3 WASTEWATER FLOW PROJECTIONS FOR EXISTING SEWERAGE FACILITIES

6.3.1 Method of Projecting Wastewater Flows

Wastewater flow projections utilized in evaluating the existing public sewerage facilities within the Planning Area are based on existing and future development to be served, including currently allocated, but not yet connected properties, and a flow factor for planned and future development. Section 5.3 of this Plan Update presents the planned and future development projected to be served by public sewers. Section 5.3 of this Plan Update also presents the number of equivalent dwelling units (EDU's) which are planned to be served by public sewers within the Planning Area. The flow factor to be used for the proposed service areas is 250 gpd/equivalent dwelling unit (EDU) based upon 90 gal. per capita per day.

The typical residential dwelling is considered to have 1 EDU. Industrial and office uses are equated to EDU's based upon use, square footage, etc. This flow factor is justified by the population and housing trends presented in Section 5.2 and contains a sufficient allowance for potential infiltration and inflow. Tables 5-2 and 5-3 provide the estimated EDU projections for planned and future development in existing public sewerage areas. Table 5-4 provides the estimated EDU projections for planned and future development, as well as existing uses in the future sewer service expansion areas.

Existing wastewater flows utilized in evaluating the existing agreements and sewage treatment plant capacity are based on an average of the daily flow for the existing Service Area over the past five years, unless otherwise noted. This five year average was chosen because it is representative of both typical dry and wet weather periods which influence sewage flows through infiltration and inflow.

6.3.2 Wastewater Flow Projections

Tables 6-1 through 6-5 project the planned and future 10-year wastewater flows within the existing public sewerage areas as well as the five proposed sewerage facilities areas within the Planning Area. Currently allocated, but unconnected flows are included in the projections. These areas and their respective Tables projecting their flows for each Municipality are as follows:

Chalfont Borough

Flow Projections within Existing Public Sewerage Areas - Table 6-1

Allocated/Unconnected Flows -

72 EDU's @ 250 gpd/EDU = 18,000 GPD

New Britain Township

Flow Projections within Existing Public Sewerage Areas - Table 6-2

Flow Projections within Future Sewer Service Expansion Areas - Table 6-3

Flow Projections within Sewer Service Area - Table 6-4

Allocated/Unconnected Flows -

490 EDU's @ 250 gpd/EDU = 122,500 GPD

Total Planning Area

Flow Projections for Planning Area - Table 6-5

TABLE 6-1 (AMENDED)
CHALFONT BOROUGH
10-YEAR WASTEWATER FLOW PROJECTIONS
WITHIN EXISTING PUBLIC SEWERAGE AREAS

PLANNED DEVELOPMENT

Use	Development	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Residential	Canon Subdivision	Neshaminy Creek Interceptor	7	250	1,750
Office/ Commercial	Fire House	Neshaminy Creek North Branch Interceptor	1	250	250
Office/ Commercial	Eble L.D.	Neshaminy Creek North Branch Interceptor	2	250	500

POTENTIAL FUTURE DEVELOPMENT

Use	Properties	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Office/ Commercial	1	Neshaminy Creek Interceptor	38	250	9,500
Corridor Commercial	1	Neshaminy Creek North Branch Interceptor	14	250	3,500
Light Industrial	4	Neshaminy Creek Interceptor	76	250	19,000
-	Miscellaneous Fill-In	-	27	250	6,750

TOTAL OF 10-YEAR FLOW PROJECTIONS FOR CHALFONT BOROUGH - 41,250 GPD

TABLE 6-2 (AMENDED)
NEW BRITAIN TOWNSHIP
10-YEAR WASTEWATER FLOW PROJECTIONS
WITHIN EXISTING PUBLIC SEWERAGE AREAS

POTENTIAL FUTURE DEVELOPMENT

Use	Properties	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Industrial/ Office	7	Neshaminy Creek Interceptor	154	250	38,500
Residential	7	Neshaminy Creek Interceptor	35	250	8,750
Residential	1	SPS No. 4 & Neshaminy Creek Interceptor	4	250	1,000
Industrial	1	Neshaminy Creek Interceptor	40	250	10,000
Commercial	2	Neshaminy Creek Interceptor	15	250	3,750
-	Miscellaneous Fill-In	-	17	250	4,250

SUBTOTAL OF 10-YEAR FLOW PROJECTIONS WITHIN EXISTING SEWERAGE AREAS - 66,250 GPD

TABLE 6-3 (AMENDED)
NEW BRITAIN TOWNSHIP
10-YEAR WASTEWATER FLOW PROJECTIONS
WITHIN FUTURE SEWER SERVICE EXPANSION AREAS

PLANNED DEVELOPMENT - WEST AREA

Use	Development	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Residential	Loh/Hagey/ DiCarlantonio Tracts - Land Development	Neshaminy Creek Interceptor	124	250	31,000
Residential	Barclay Road Subdivision	Neshaminy Creek Interceptor	28	250	7,000

POTENTIAL FUTURE DEVELOPMENT - WEST AREA

Use	Properties	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Residential	30	SPS No. 4 & Neshaminy Creek Interceptor	74	250	18,500
Residential	4	SPS No. 6 & Neshaminy Creek Interceptor	8	250	2,000
Residential	145	Neshaminy Creek Interceptor	287	250	71,750
Industrial/Office	3	Neshaminy Creek Interceptor	4	250	1,000

SUBTOTAL OF 10-YEAR FLOW PROJECTIONS FOR WEST AREA - 131,250 GPD

POTENTIAL FUTURE DEVELOPMENT - EAST AREA

Use	Properties	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Residential	119	Neshaminy Creek Interceptor	183	250	45,750

SUBTOTAL OF 10-YEAR FLOW PROJECTIONS FOR EAST AREA - 45,750 GPD

TABLE 6-3 (AMENDED) (CONTINUED)
NEW BRITAIN TOWNSHIP
10-YEAR WASTEWATER FLOW PROJECTIONS
WITHIN FUTURE SEWER SERVICE EXPANSION AREAS

POTENTIAL FUTURE DEVELOPMENT - CEDAR HILL ROAD AREA

Use	Properties	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Residential	24	Neshaminy Creek Interceptor	30	250	7,500
SUBTOTAL OF 10-YEAR FLOW PROJECTIONS FOR CEDAR HILL ROAD AREA - 7,500 GPD					

POTENTIAL FUTURE DEVELOPMENT - LIMEKILN PIKE/NEWVILLE ROAD AREA

Use	Properties	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Residential	10	SPS No. 1 & Neshaminy Creek North Branch Interceptor	15	250	3,750
SUBTOTAL OF 10-YEAR FLOW PROJECTIONS FOR LIMEKILN PIKE/NEWVILLE ROAD AREA - 3,750 GPD					

POTENTIAL FUTURE DEVELOPMENT - COUNTY LINE ROAD/WALNUT STREET AREA

Use	Properties	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Industrial/Office	1	Neshaminy Creek Interceptor	4	250	1,000
SUBTOTAL OF 10-YEAR FLOW PROJECTIONS FOR COUNTY LINE ROAD/WALNUT STREET AREA - 1,000 GPD					

POTENTIAL FUTURE DEVELOPMENT - "TRANSITION ZONE"

Use	Properties	Receiving Facility	Projected EDU's	Flow Factor (GPD/EDU)	Total Flow (GPD)
Residential	48	SPS No. 1 - Neshaminy Creek North Branch Interceptor	12	250	3,000

TABLE 6-4 (AMENDED) NEW BRITAIN TOWNSHIP 10-YEAR WASTEWATER FLOW PROJECTIONS WITHIN SEWER SERVICE AREA			
Area	**Projected EDU's**	**Flow Factor (GPD/EDU)**	**Total Flow (GPD)**
Existing Public Sewerage Areas	265	250	66,250
Future Sewer Service Area - "West"	525	250	131,250
Future Sewer Service Area - "East"	183	250	45,750
Future Sewer Service Area - "Cedar Hill Road"	30	250	7,500
Future Sewer Service Area - "Limekiln Pike/Newville Road"	15	250	3,750
Future Sewer Service Area - "County Line Road/Walnut Street"	4	250	1,000
Future Sewer Service Area - "Transition Zone"	12	250	3,000
TOTAL OF 10-YEAR FLOW PROJECTIONS FOR NEW BRITAIN TOWNSHIP - 258,500 GPD			

TABLE 6-5 TOTAL 10-YEAR WASTEWATER FLOW PROJECTIONS FOR PLANNING AREA	
AREA	**TOTAL FLOW (GPD)**
CHALFONT BOROUGH	
Allocated/Unconnected Flows (72 EDU's @ 250 GPD/EDU)	18,000
Flow Projections within Existing Public Sewerage Areas	41,250
TOTAL CHALFONT BOROUGH FLOWS	**59,250**
NEW BRITAIN TOWNSHIP	
Allocated/Unconnected Flows (490 EDU's @ 250 GPD/EDU)	122,500
Flow Projections within Existing Public Sewerage Areas	66,250
Flow Projections within Future Sewer Service Expansion Areas	192,250
TOTAL NEW BRITAIN TOWNSHIP FLOWS	**381,000**
TOTAL OF 10-YEAR FLOW PROJECTIONS FOR PLANNING AREA	**440,250**

6.4 ANALYSIS OF EXISTING PUBLIC SEWERAGE FACILITIES AND SELECTION OF ALTERNATIVE TO SOLVE INADEQUACIES

6.4.1 General

The Authority's existing sewerage facilities and current Capacity Agreements must be evaluated to determine their adequacy to accommodate the future projected sewage flows. If portions of the existing system prove inadequate, then these portions should be expanded, replaced or an alternative method of addressing the excess wastewater flows must be determined.

6.4.2 Capacity Agreements

The Authority has signed agreements with other municipal bodies for the transportation and treatment of sanitary wastes. Briefly, these agreements are:

A. With Montgomery Township Municipal Sewer Authority, Montgomery County, for transportation and treatment of wastewater from the drainage area in Montgomery Township that drains directly to the Authority system. The area to be served is generally along County Line Road.

B. With Warrington Township, the Authority has an agreement to serve two properties on Upper State Road.

C. With the Bucks County Water and Sewer Authority (BCWSA):

1. For the Cooks Run Interceptor and for the Neshaminy Creek Interceptor from the Cooks Run Interceptor to the wastewater treatment plant. The BCWSA makes semiannual payments to the Authority based on the ratio of capacity reserved for the BCWSA to the design capacity of the sewer.

2. To reserve 50% of capacity in the first phase construction of the wastewater treatment plant. The agreement provides for procedures in allocation capacity after future expansions. Amortization costs are shared on the basis of reserved capacity with the BCWSA making semiannual payments of their share to the Authority. Operating costs will be prorated to both Authorities on the basis of actual wastewater flows.

In the BCWSA agreement, net operating costs are defined as follows:

a. Capital costs;

b. Actual cost of treatment plant operation;

c. Plus administrative, engineering, legal costs, etc., attributable to plant operation;

d. Less Federal or State grants attributable to operation; and

e. Less surcharge payments made by industrial users due to high strength sewage.

It should be noted that division of operating costs between the two Authorities is based on actual flows through the wastewater treatment plant. Further, the flow split is based on flow metering data provided by the BCWSA.

6.4.3 Wastewater Treatment Plant Capacity

The total design annual average flow of the WWTP is 4.0 MGD. The permitted maximum month capacity of the Authority's WWTP is 6.0 MGD. As discussed in Section 4.1.5, excessive flows received from the BCWSA system causes the plant to periodically exceed its daily treatment capacity. Even with satisfactory resolution of this issue, the plant will still be at, or near, capacity.

In order to serve the sewerage facility needs of the planned and future sewerage areas identified in Section V of this Plan Update, the capacity of the WWTP may need to be increased. Based upon the flow projections estimated in Section 6.3.2 above, these planned and future sewerage areas would require wastewater treatment for approximately 0.19 MGD. In addition, further development within the existing sewered areas of the Planning Area, including properties with already allocated, but unconnected EDU's, would add another 0.25 MGD. Based upon these estimated additional flows, the WWTP capacity will need to be increased by approximately 0.44 MGD. A further study of the existing WWTP capacity, including possible upgrades, etc., will be required prior to the future extension of sewer lines.

6.4.4 Sewage Pumping Stations

As described in Section 4.1.4, the Authority owns and operates seven sewage pumping stations, all located within the existing sewerage service areas of New Britain Township. All of these pumping stations were constructed in conjunction with previous land developments and were intended to only serve those respective land developments and immediately adjacent areas. Portions of the planned and future sewer service areas identified in Section V of this Plan Update are within the drainage basins of three of these existing pumping stations and proposed sewer extensions into those areas may impact these three stations. Specifically, portions of the West Area may impact SPS No. 4 and SPS No. 6. The entire Limekiln Pike/Newville Road area may impact SPS No. 1.

Approximately 22 properties with a projected flow of 9,500 GPD will be added to SPS No. 4. Approximately 4 properties with a projected flow of 2,000 GPD will be added to SPS No. 6. Approximately 10 properties with a projected flow of 3,750 GPD will be added to SPS No. 1. Pumping station modifications/upgrades may be required for each of these existing facilities to satisfy the increased capacity requirements.

6.4.5 Receiving Gravity Collection/Conveyance Systems

Operation and maintenance of the existing collection and conveyance sewerage system is carried out by Authority personnel. Annual inspections are also performed by the Authority's Engineering Consultant. Any new connections to the existing system are inspected by Authority personnel. Sanitary sewer manholes are periodically inspected and sewer mains periodically televised through a regular maintenance program. Preventive maintenance, including flushing sewers in the vicinity of dead-end manholes, is also performed. Repairs to sewer lines and manholes are performed where needed.

Based upon historical operational data, the existing sewerage system has not been subject to surcharging conditions and, therefore, is believed to possess adequate capacity to accommodate the 10-year projected flows of the Planning Area. However, as extensions occur, further evaluation of the sewer system, based upon actual field flow conditions, is recommended to confirm this determination.

6.5 COST ESTIMATE OF SELECTED NEW SEWERAGE FACILITIES TO SERVE 10-YEAR NEEDS

The cost to implement the selected public sewer extensions required to serve the planned and future sewerage service areas of the Planning Area for the 10-year needs described in this Plan Update are provided in Table 6-6. These estimates include construction costs plus contingencies, engineering, surveying, inspection and legal/administrative costs. These estimates do not contain any cost for tapping fees, acquisition of easements, or any other costs other than those previously noted.

It should be noted that portions of the gravity sewers proposed to extend throughout the planned and future sewerage areas are anticipated to be constructed by developers in conjunction with future land development proposals. The costs for these extensions, however, are included in the cost estimates in Table 6-6.

TABLE 6-6 COST ESTIMATE OF SELECTED NEW PUBLIC SEWERAGE FACILITIES	
PUBLIC SEWER EXTENSIONS NEEDED TO SERVE THE 10-YEAR NEEDS OF THE PLANNED AND FUTURE SEWERAGE SERVICE AREAS	
Area	**Estimated Total Construction Cost**
WEST AREA (Construction of 2 new Sewage Pumping Stations with 3,500 L. F. of Force Main and 8" Gravity Collection Sewer, including 13,250 L.F. in State Highways, 21,800 L.F. in Township Roads, and 11,650 L.F. through Easements. Upgrades to 2 existing Sewage Pumping Stations)	$7,720,000
EAST AREA (Construction of 1 new Sewage Pumping Station with 800 L.F. of Force Main and 8" Gravity Collection Sewer, including 3,650 L.F. in State Highways, 5,350 L.F. in Township and Private Roads, and 7,750 L.F. through Easements)	$2,460,000
CEDAR HILL ROAD AREA (Construction of 8" Gravity Collection Sewer, including 3,150 L.F. in Township Roads)	$526,000
LIMEKILN PIKE/NEWVILLE ROAD AREA (Construction of 1 new Sewage Pumping Station with 2,050 L.F. of Force Main and 8" Gravity Collection Sewer, including 900 L.F. in State Highways, 350 L.F. in Township Roads, and 500 L.F. through Easements)	$506,000
COUNTY LINE ROAD/WALNUT STREET AREA (Construction of 8" Gravity Collection Sewer, including 350 L.F. through Easements)	$35,000
WASTEWATER TREATMENT PLANT UPGRADES	$5,000,000
CONSTRUCTION SUBTOTAL	$16,247,000
CONTINGENCY (10%)	$1,624,700
ENGINEERING (10%)	$1,624,700
SURVEYING (5%)	$812,350
INSPECTION (15%)	$2,437,050
LEGAL/ADMINISTRATION (5%)	$812,350
TOTAL CAPITAL COST	$23,558,150

SECTION VII

CONSISTENCY DETERMINATION OF SELECTED ALTERNATIVE

7.1 CONSISTENCY DETERMINATION OF SELECTED ALTERNATIVE

Consistency determinations between the selected sewage facility alternative and other programs have been performed and are outlined in Table 7-1. Consistency with other programs assures the selection of the most appropriate alternative which could be implemented. In addition, proposed sewage facilities will be constructed so as to be consistent with the existing programs. As indicated in the table, review requests had been submitted to the Pennsylvania Natural Diversity Inventory and the Pennsylvania Historical and Museum Commission during the Draft Plan Update review period.

TABLE 7-1
CONSISTENCY DETERMINATION FOR SELECTED ALTERNATIVE

POLICY	CONSISTENCY		COMMENTS
	YES	NO	
1. Comprehensive Water Quality Management Plans (COWAMP/208)	X		Plan meets the overall management plan goals of this area of the region.
2. Municipal Wasteload Management Plans (PA Code, Title 25, Chapter 94)	X		Capacity availability in sewage treatment plant, pumping stations, collection and conveyance lines proposed to handle additional wasteload as a result of this plan have been evaluated and addressed.
3. Title II Act 201 Plans	X		Plan meets the overall management study goals of this area of the region. Increases in flows to treatment facility from planning area will not affect treatment technologies.
4. Municipal Comprehensive Plans	X		This Plan Update was prepared in accordance with the Chalfont Borough and New Britain Township Comprehensive Plans and land use objectives.
5. Chapters 93, 95 and 102 Antidegradation Requirements	X		No discharge to special protection waters is proposed. Appropriate erosion and sedimentation control measures will be enforced.

TABLE 7-1 (CONTINUED) CONSISTENCY DETERMINATION FOR SELECTED ALTERNATIVE			
POLICY	CONSISTENCY		COMMENTS
	YES	NO	
7. Prime Agricultural Land	X		Exhibit 3-2 identifies important farmland soils. A number of strategies have been implemented by Chalfont Borough and New Britain Township for farmland preservation in accordance with their Open Space and Environmental Resource Protection Plans.
8. Stormwater Management Plans	X		Allowable discharge of wastewater treatment plant will not be increased.
9. Wetland Protection	X		Exhibit 3-1 identifies wetland areas throughout the planning area. Encroachment permits will be obtained, if necessary, prior to construction of any new sewerage facilities.
10. PA Natural Diversity Inventory	X		See attached Draft Plan Update review.
11. Archaeological Protection	X		See attached Draft Plan Update review.

SECTION VIII

PLAN IMPLEMENTATION

8.1 ABILITY TO IMPLEMENT PLAN

Chalfont Borough is a Bucks County Home Rule Charter Borough and New Britain Township is a Bucks County Township of the Second Class in the Commonwealth of Pennsylvania. Both the Borough and the Township have the ability to create and adopt this Plan Update.

Implementation of the public sewage facility alternative planned herein shall be by the Chalfont-New Britain Township Joint Sewage Authority (Authority). The Authority owns the existing sewage collection/conveyance/treatment system serving Chalfont Borough and New Britain Township and has the capability of expanding their sewerage system throughout the Planning Area. The Borough's and Township's existing agreements evaluated herein allow for the allocation of the additional capacity needed to convey and treat the projected wastewater to be generated by the Planning Area.

The Authority is a body corporate and public, incorporated on March 9, 1962, under the provisions of the Municipality Authorities Act of 1945, approved May 2, 1945, P.L. 382, as amended and supplemented, of the Commonwealth of Pennsylvania, pursuant to ordinances of the Council of Chalfont Borough, Bucks County, and the Supervisors of New Britain Township, Bucks County, Pennsylvania.

The Authority is empowered to exercise powers conferred by the Municipality Authorities Act, as related to those necessary or convenient to the acquiring, holding, constructing, improving, maintaining and operating, owning, leasing (either in the capacity of lessor or lessee), sewers, sewer systems or parts thereof, sewage treatment works, including works for treating and disposing of industrial wastes.

The Authority is currently in excellent financial condition, with no outstanding debt.

The Authority currently has 22 full-time employees which handle the day to day operations. Six employees are administrative and 16 are involved with the actual operation and maintenance of the wastewater treatment plant and sanitary sewer collection and conveyance system.

The Authority Board of Directors is currently composed of six members, who establish policy and oversee the business aspects of the Authority.

8.2 FUNDING

Funding for the public sewage facility extensions needed to serve the planned development and future areas in the ten-year needs of this Plan Update is anticipated to be as follows:

- Planned and Future Development Areas - Within planned development areas, funding for public sewage facilities will likely include developer financing and/or tapping fees.

  Developer financed projects would include the construction of pump stations, force mains and sewage collection lines. Implementation of this method of funding would place all capital improvement costs on the developer, with an opportunity to recapture part, or most, of the cost from future development connections to the sewer system.

  The collection of tapping fees is also a method of funding public facility projects required to extend the existing sewer system and expand the existing wastewater treatment plant. This method requires prospective users of the facilities to pay for the portion of the facilities they will utilize in the upgrade. Prior to implementing any of the upgrades/expansions to the Authority's system proposed herein, a tapping fee analysis should be performed to determine the fees (if any) that should be assessed to planned and future development for the portion of work due to new development.

- Existing Development Areas - Previous public sewerage facility projects within the Planning Area which serve existing development areas have been funded through Front-Foot Assessment. This method of funding requires the property owners being served by a project to pay for the project. Assessment of costs to each property owner is based on the amount of road frontage they own.

Other funding options to consider include Municipal Bonds and Benefit Assessment.

- General Obligation and Revenue Bonds are municipal bonds which are usually tax-exempt and are generally issued to finance construction and operation of public works projects. The General Obligation Bond carries low risks to the investor and a low interest rate. Revenue Bonds are paid from revenues collected from the use of public facilities such as publicly owned wastewater collection and treatment systems. The major advantages of these bonds are that they are tax-exempt and provide long-term fixed rate financing.

A Benefit Assessment could be used to fund the construction of facilities to serve existing development areas. This method of funding requires the property owners being served to pay for the project and assessment is equal for each property owner.

8.3 IMPLEMENTATION SCHEDULE

Table 8-1 outlines the proposed implementation schedule. Construction activities may begin once planning approval is obtained for the 537 Plan Update. All required permits will also be obtained prior to actual construction.

TABLE 8-1 IMPLEMENTATION SCHEDULE	
ACTIVITY	**(PROJECTED) COMP. DATE**
537 PLAN UPDATE	C.B. - Chalfont Borough N.B.T. - New Britain Township
Submit to Outside Reviewing Agencies	November 2004
Available for Public Comment	C.B. - December 2004 N.B.T. - May 2005
Chalfont Borough and New Britain Township Planning Commissions Review.	C.B. - November 2004 N.B.T. - June 2005
Bucks County Planning Commission Review.	November 2004
Bucks County Health Department Review.	November 2004
PA Natural Diversity Inventory Search.	September 2004
PA Historical and Museum Commission Review.	September 2004
Final Draft Completed.	March 2005
Final Draft Presentation to Chalfont Borough Council and to New Britain Township Board of Supervisors.	C.B. - February 2005 N.B.T. - June 2005
Address Final Draft Comments, Issue Revised Final Draft.	June 2005
Approval/Adoption by Chalfont Borough Council and New Britain Township Board of Supervisors.	C.B. - February 2005 N.B.T. - June 2005
PA DEP Review Approval	October 2005
CONSTRUCTION OF PUBLIC SEWERAGE FACILITIES	
Construction Completion.	October 2015
It should be noted that the time frame for the construction of sewerage facility upgrades and public sewer extensions required to serve various development or problem areas will vary. However, completion of these facilities is expected within the next 10 years.	

APPENDIX A

MUNICIPAL ADOPTING RESOLUTIONS

- CHALFONT BOROUGH
- NEW BRITAIN TOWNSHIP

RESOLUTION NO. 200501

RESOLUTION OF THE COUNCIL OF CHALFONT BOROUGH, BUCKS COUNTY, PENNSYLVANIA (hereinafter "the Municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Protection (Department) adopted there under, Chapter 71 of Title 25 of the **Pennsylvania Code**, requires the Municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the Municipality, and

WHEREAS, the Chalfont-New Britain Township Joint Sewage Authority has prepared an Act 537 Sewage Facilities Plan Update which provides for sewage facilities to all planned and potential future developments within Chalfont Borough, and

WHEREAS, Chalfont Borough finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Council of the Borough of Chalfont hereby adopt and submit to the Department of Environmental Protection for its approval as an update and revision to the "Official Plan" of the Municipality, the above referenced Sewage Facilities Plan. The Municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

The alternative of choice to be implemented for Chalfont Borough is the provision of public sanitary sewage facilities to all planned and potential future developments within the Borough, including increased wastewater treatment plant capacity, if necessary.

ADOPTED as a resolution by the Council of Chalfont Borough this 8th day of February, 2005.

(Borough Seal)

ATTEST:

David E. Drye, Borough Manager

CHALFONT BOROUGH COUNCIL

Gary K. Lucas, President

Resolution No. 2005-10

Township of New Britain
Bucks County, Pennsylvania

Update and Revision to the Official Sewage Facilities Plan as Prepared by the Chalfont-New Britain Township Joint Sewage Authority for New Britain Township (hereinafter "the Municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Protection (Department) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, requires the Municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the Municipality, and

WHEREAS, the Chalfont-New Britain Township Joint Sewage Authority has prepared an Act 537 Sewage Facilities Plan Update which provides for sewage facilities to all planned and/or previously allocated areas and potential future developments within New Britain Township, and

WHEREAS, New Britain Township finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Supervisors of the Township of New Britain hereby adopt and submit to the Department of Environmental Protection for its approval as an update and revision to the "Official Plan" of the Municipality, the above referenced Sewage Facilities Plan. The Municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

The alternative of choice to be implemented for New Britain Township is the provision of public sanitary sewage facilities to all planned and/or previously allocated areas and potential future developments within the Township, including increased wastewater treatment plant capacity, if necessary.

ADOPTED as a resolution by the Supervisors of New Britain Township this 13th day of June, 2005.

BOARD OF SUPERVISORS OF NEW BRITAIN TOWNSHIP

John A. Bodden Sr., Chairman

Helen B. Haun , Vice-Chair

(Township Seal)

Robert V. Cotton, Member

William B. Jones, Member

James Scanzillo, Member

Attest: John Cornelius, Township Manager

APPENDIX B

PROOFS OF PUBLIC NOTICE

- CHALFONT BOROUGH
- NEW BRITAIN TOWNSHIP

Bucks County, SS.

Mary Hare Being duly affirmed according to law, deposes and says that he/she is the Credit Manager

(Manager or Designated Agent)

of the CALKINS NEWSPAPER INCORPORATED, Publisher of The Intelligencer, a newspaper of general circulation, published and having its place of business at Doylestown, Bucks County, Pa. and Horsham, Montgomery County, Pa.; that said newspaper was established in 1886; that securely attached hereto is a printed notice which is exactly as printed and published in said newspaper on

December 15, 2004

and is a true copy thereof; and that this affiant is not interested in said subject matter of advertising; and that all of the allegations in this statement as to the time, place and character of publication are true.

Mary Hare

Affirmed and subscribed to me before me

This 15th day of December

A.D. 2004

Normajean Leidy

NOTARIAL SEAL
NORMAJEAN LEIDY, NOTARY PUBLIC
DOYLESTOWN TWP., COUNTY OF BUCKS
MY COMMISSION EXPIRES APRIL 26, 2007

NOTICE

Public notice is hereby given that the Borough of Chalfont, Bucks County, Pennsylvania, proposes to adopt a revised Official Sewage Facilities Plan Update, in accordance with Pennsylvania Act 537. This revised Plan Update provides the planning for new sewage facilities and the upgrade of existing sewage facilities to accommodate planned future growth and development within the Borough.

Key features of the revised Plan Update as currently proposed include increased wastewater treatment capability to provide for all planned and future development within the Borough. The revised Plan Update addresses comments received during the Public Comment Period and any comments received from planning agency and health department reviews.

A copy of the Sewage Facilities Plan Update can be reviewed at the Chalfont Borough Building, 40 North Main Street, Chalfont, Pennsylvania, 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays, from December 13, 2004 until January 25, 2005.

Written comments from the public regarding the Sewage Facilities Plan Update will be received by the Borough at the above address for 30 days following the date of publication of this notice. All comments should be sent to the attention of the Borough Council.

David Drye,
Manager/Municipal Administrator
Chalfont Borough

11 D 15

Bucks County, SS.

Susan McGurk Being duly affirmed according to law, deposes and says that he/she is the

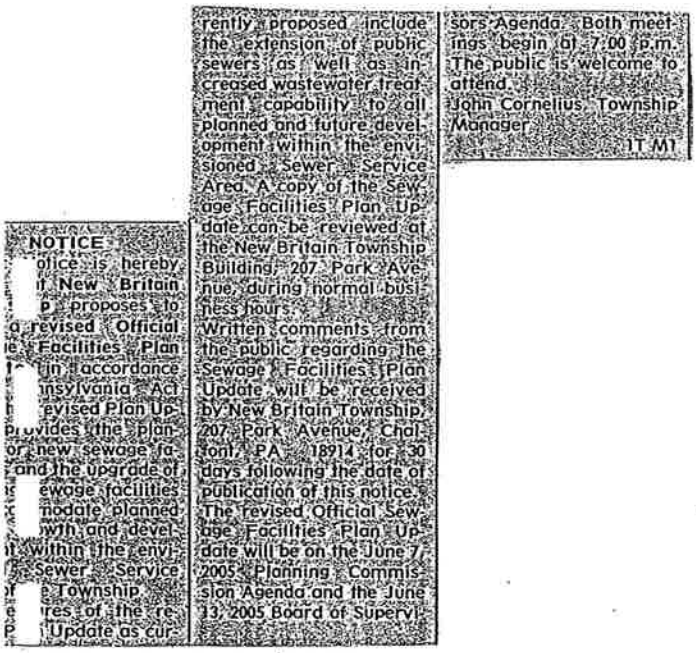
Billing Manager

(Manager or Designated Agent)

of the CALKINS NEWSPAPER INCORPORATED, Publisher of The Intelligencer, a newspaper of general circulation, published and having its place of business at Doylestown, Bucks County, Pa. and Horsham, Montgomery County, Pa.; that said newspaper was established in 1886; that securely attached hereto is a printed notice which is exactly as printed and published in said newspaper on

May 1, 2005

and is a true copy thereof; and that this affiant is not interested in said subject matter of advertising; and that all of the allegations in this statement as to the time, place and character of publication are true.



NOTICE
olice is hereby
ll New Britain
p proposes to
a revised Official
e Facilities Plan
in accordance
nsylvania Act
evised Plan Up-
ovides the plan-
or new sewage fa-
and the upgrade of
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modate planned
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within the envi-
Sewer Service
e Township
res of the re-
Update as cur-
rently proposed include the extension of public sewers as well as increased wastewater treatment capability to all planned and future development within the envisioned Sewer Service Area. A copy of the Sewage Facilities Plan Update can be reviewed at the New Britain Township Building, 207 Park Avenue, during normal business hours. Written comments from the public regarding the Sewage Facilities Plan Update will be received by New Britain Township, 207 Park Avenue, Chalfont, PA 18914 for 30 days following the date of publication of this notice. The revised Official Sewage Facilities Plan Update will be on the June 7, 2005 Planning Commission Agenda and the June 13, 2005 Board of Supervisors Agenda. Both meetings begin @ 7:00 p.m. The public is welcome to attend.
John Cornelius, Township Manager
1T M1

Susan L McGurk

Affirmed and subscribed to me before me

This 4th day of May

A.D. 2005 Normajean Leidy

NOTARIAL SEAL
NORMAJEAN LEIDY, NOTARY PUBLIC
DOYLESTOWN TWP., COUNTY OF BUCKS
MY COMMISSION EXPIRES APRIL 26, 2007

APPENDIX C - PLAN UPDATE REVIEW CORRESPONDENCE

CORRESPONDENCE REGARDING LOCAL AND COUNTY PLANNING AGENCY REVIEWS; COUNTY HEALTH DEPARTMENT REVIEW; STATE AGENCY REVIEWS; PUBLIC COMMENTS AND APPLICABLE CORRESPONDENCE

APPENDIX C INDEX

Correspondence Regarding Local and County Planning Agency Reviews; County Health Department Review; State Agency Reviews; Public Comments and Applicable Correspondence.

1. Pennsylvania Historical and Museum Commission

   Submission Letter of September 21, 2004
   Review Letter of October 13, 2004

2. Pennsylvania Department of Conservation and Natural Resources - PNDI

   Submission Letter of September 20, 2004
   Review Letter of November 4, 2004
   Submission Letters of June 17, 2005 to Agencies

3. Bucks County Planning Commission

   Submission Letter of November 17, 2004
   Review letter of January 5, 2005
   Response Letter of June 9, 2005

4. Bucks County Department of Health

   Submission Letter of November 17, 2004
   Review Letter of March 5, 2005
   Response Letter of June 9, 2005

5. Borough of Chalfont Planning Commission

   Submission Letter of November 17, 2004
   No Comments Received from Planning Commission

6. Township of New Britain Planning Commission

   Submission Letter of November 17, 2004
   No Comments Received from Planning Commission

7. Township of New Britain

   Review Letter of March 7, 2005
   Response Letter of June 9, 2005

8. Public Comments

   No Comments Received from the Public

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

David W. Connell, P.E.
Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

September 21, 2004
Ref: #9144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Pennsylvania Historical and Museum Commission
Bureau of Historic Preservation
400 North Street, Second Floor
Harrisburg, PA 17120-0093

Reference: Cultural Resource Notice
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority
for Chalfont Borough and New Britain Township
Bucks County, Pennsylvania

Dear Sir/Madam:

On behalf of our client, the Chalfont-New Britain Township Joint Sewage Authority, we are enclosing herewith two completed Cultural Resource Notices, one for Chalfont Borough and one for New Britain Township, a Narrative Description and a 7.5 minute U.S.G.S. Map for the above-referenced project. In accordance with the requirements of the PA DEP Act 537 Plan Update approval process, we request that you review the enclosed information and determine if potential sewage facilities extensions will, or will not, impact any archaeological sites or historic structures.

If you should have any questions concerning the enclosed information, or the project in general, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/mak
Enclosures
cc: John E. Schmidt, Executive Director
Joseph J. Nolan, CKS Engineers, Inc.
File

0120-PM-PY0003 Rev. 6/2002

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP USE ONLY
Date Received

CULTURAL RESOURCE NOTICE

Read the instructions before completing this form.

SECTION A. APPLICANT IDENTIFIER

Applicant Name	Chalfont-New Britain Township Joint Sewage Authority
Street Address	1645 Upper State Road
City	Doylestown State PA Zip 18901-2666
Telephone Number	215-345-1225
Project Title	Act 537 Sewage Facilities Plan Update for Chalfont Borough and New Britain Twp.

SECTION B. LOCATION OF PROJECT

Municipality: Chalfont Borough County Name: Bucks DEP County Code: 09

SECTION C. PERMITS OR APPROVALS

Name of Specific DEP Permit or Approval Requested: Act 537 Sewage Facilities Plan Update

Anticipated federal permits: N/A

- ☐ Surface Mining
- ☐ Army Corps of Engineers
- ☐ 401 Water Quality Certification
- ☐ 404 Water Quality Permit
- ☐ Federal Energy Regulatory Commission
- ☐ Other:

SECTION D. GOVERNMENT FUNDING SOURCES N/A

- ☐ State: (Name)
- ☐ Federal: (Name)
- ☐ Local: (Name)
- ☐ Other: (Name)

SECTION E. RESPONSIBLE DEP REGIONAL, CENTRAL, DISTRICT MINING or OIL & GAS MGMT OFFICE

DEP Regional Office Responsible for Review of Permit Application

- ☐ Central Office (Harrisburg)
- ☒ Southeast Regional Office (Conshohocken)
- ☐ Northeast Regional Office (Wilkes-Barre)
- ☐ Southcentral Regional Office (Harrisburg)
- ☐ Northcentral Regional Office (Williamsport)
- ☐ Southwest Regional Office (Pittsburgh)
- ☐ Northwest Regional Office (Meadville)
- ☐ District Mining Office:
- ☐ Oil & Gas Office:

SECTION F. RESPONSIBLE COUNTY CONSERVATION DISTRICT, if applicable.

County Conservation District: N/A

Telephone Number, if known:

SECTION G. CONSULTANT

Consultant, if applicable	CKS Engineers, Inc.
Street Address	88 South Main Street
City	Doylestown State PA Zip 18901
Telephone Number	215-340-0600

SECTION H. PROJECT BOUNDARIES AND DESCRIPTION (SEE ATTACHED NARRATIVE & MAP)

REQUIRED

Indicate the total acres in the property under review. Of this acreage, indicate the total acres of earth disturbance for the proposed activity.

Attach a 7.5' U.S.G.S. Map indicating the defined boundary of the proposed activity.

Attach photographs of any building over 50 years old. Indicate what is to be done to all buildings in the project area.

Attach a narrative description of the proposed activity.

Attach the return receipt of delivery of this notice to the Pennsylvania Historical and Museum Commission.

REQUESTED

Attach photographs of any building over 40 years old.

Attach site map, if available.

SECTION I. SIGNATURE BLOCK

CKS Engineers, Inc.

Applicant's Signature

9/21/04

Date of Submission of Notice to PHMC

0120-PM-PY0003 Rev. 7/2004
Checklist

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CULTURAL RESOURCE NOTICE

APPLICANT'S ✓ CHECKLIST

Please check the following list to make sure that you have included all the required information. Place a checkmark in the column provided for all items completed and/or provided.

Failure to provide all of the requested information will delay the processing of the application and may result in the application being placed on hold with no action, or will be considered withdrawn and the application file closed.

	Requirement	Check ✓ If Included
1.	**Attachments, where appropriate**	
	a) Section B - Additional municipality information.	X
	b) Section B - Additional county information.	N/A
	c) Section H - 7.5' USGS Map (with defined boundaries of proposed activity).	X
	d) Section H - Narrative description of proposed activity.	X
	e) Section H - Photographs of any buildings over 50 years old. Indicate what is to be done to all buildings in the project area.	N/A
	f) Section H - Total acres in property under review. Of this acreage, total acres of earth disturbance for the proposed activity.	X
	g) Return receipt of delivery of Cultural Resource Notice to the Pennsylvania Historical and Museum Commission.	X
2.	**Mailings**	
	a) Notice mailed to PHMC on 9/21/04.	X
	b) Received return receipt from PHMC on _____.	X
	c) Submitted application to DEP Regional, Central, District Mining or Oil and Gas Mgmt. Office on _____ with copy of return receipt from PHMC as proof of submittal. or d) Submitted application to County Conservation District Office _____ with copy of return receipt from PHMC as proof of submittal.	N/A
	Requests	**Check ✓ If Included**
3.	**Attachments requested, where appropriate**	N/A
	a) Section H - Photographs of any buildings over 40 years old.	
	b) Section H - Site maps of the proposed activity, if available.	

0120-PM-PY0003 Rev. 6/2002

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP USE ONLY
Date Received

CULTURAL RESOURCE NOTICE

Read the instructions before completing this form.

SECTION A. APPLICANT IDENTIFIER

Applicant Name	Chalfont-New Britain Township Joint Sewage Authority
Street Address	1645 Upper State Road
City	Doylestown State PA Zip 18901-2666
Telephone Number	215-345-1225
Project Title	Act 537 Sewage Facilities Plan Update for Chalfont Borough and New Britain Twp.

SECTION B. LOCATION OF PROJECT

Municipality New Britain Township County Name Bucks DEP County Code 09

SECTION C. PERMITS OR APPROVALS

Name of Specific DEP Permit or Approval Requested: Act 537 Sewage Facilities Plan Update

Anticipated federal permits: N/A

- ☐ Surface Mining
- ☐ 404 Water Quality Permit
- ☐ Army Corps of Engineers
- ☐ Federal Energy Regulatory Commission
- ☐ 401 Water Quality Certification
- ☐ Other:

SECTION D. GOVERNMENT FUNDING SOURCES N/A

- ☐ State: (Name)
- ☐ Local: (Name)
- ☐ Federal: (Name)
- ☐ Other: (Name)

SECTION E. RESPONSIBLE DEP REGIONAL, CENTRAL, DISTRICT MINING or OIL & GAS MGMT OFFICE

DEP Regional Office Responsible for Review of Permit Application

- ☐ Central Office (Harrisburg)
- ☒ Southeast Regional Office (Conshohocken)
- ☐ Northeast Regional Office (Wilkes-Barre)
- ☐ Southcentral Regional Office (Harrisburg)
- ☐ Northcentral Regional Office (Williamsport)
- ☐ Southwest Regional Office (Pittsburgh)
- ☐ Northwest Regional Office (Meadville)
- ☐ District Mining Office:
- ☐ Oil & Gas Office:

SECTION F. RESPONSIBLE COUNTY CONSERVATION DISTRICT, if applicable.

County Conservation District: N/A

Telephone Number, if known:

SECTION G. CONSULTANT

Consultant, if applicable	CKS Engineers, Inc.
Street Address	88 South Main Street
City	Doylestown State PA Zip 18901
Telephone Number	215-340-0600

SECTION H. PROJECT BOUNDARIES AND DESCRIPTION (SEE ATTACHED NARRATIVE & MAP)

EQUIRED

Indicate the total acres in the property under review. Of this acreage, indicate the total acres of earth disturbance for the proposed activity.

Attach a 7.5' U.S.G.S. Map indicating the defined boundary of the proposed activity.

Attach photographs of any building over 50 years old. Indicate what is to be done to all buildings in the project area.

Attach a narrative description of the proposed activity.

Attach the retum receipt of delivery of this notice to the Pennsylvania Historical and Museum Commission.

REQUESTED

Attach photographs of any building over 40 years old.

Attach site map, if available.

SECTION I. SIGNATURE BLOCK

CKS Engineers, Inc.

Applicant's Signature

9/21/04

Date of Submission of Notice to PHMC

0120-PM-PY0003 Rev. 7/2004
Checklist

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CULTURAL RESOURCE NOTICE

APPLICANT'S CHECKLIST

Please check the following list to make sure that you have included all the required information. Place a checkmark in the column provided for all items completed and/or provided.

Failure to provide all of the requested information will delay the processing of the application and may result in the application being placed on hold with no action, or will be considered withdrawn and the application file closed.

	Requirement	Check ✓ If Included
1.	**Attachments, where appropriate**	
	a) Section B - Additional municipality information.	X
	b) Section B - Additional county information.	N/A
	c) Section H - 7.5' USGS Map (with defined boundaries of proposed activity).	X
	d) Section H - Narrative description of proposed activity.	X
	e) Section H - Photographs of any buildings over 50 years old. Indicate what is to be done to all buildings in the project area.	N/A
	f) Section H - Total acres in property under review. Of this acreage, total acres of earth disturbance for the proposed activity.	X
	g) Return receipt of delivery of Cultural Resource Notice to the Pennsylvania Historical and Museum Commission.	X
2.	**Mailings**	
	a) Notice mailed to PHMC on 9/21/04.	X
	b) Received return receipt from PHMC on _____.	X
	c) Submitted application to DEP Regional, Central, District Mining or Oil and Gas Mgmt. Office on _____ with copy of return receipt from PHMC as proof of submittal. or d) Submitted application to County Conservation District Office _____ with copy of return receipt from PHMC as proof of submittal.	N/A
	Requests	**Check ✓ If Included**
3.	**Attachments requested, where appropriate**	N/A
	a) Section H - Photographs of any buildings over 40 years old.	
	b) Section H - Site maps of the proposed activity, if available.	

CKS Engineers, Inc.

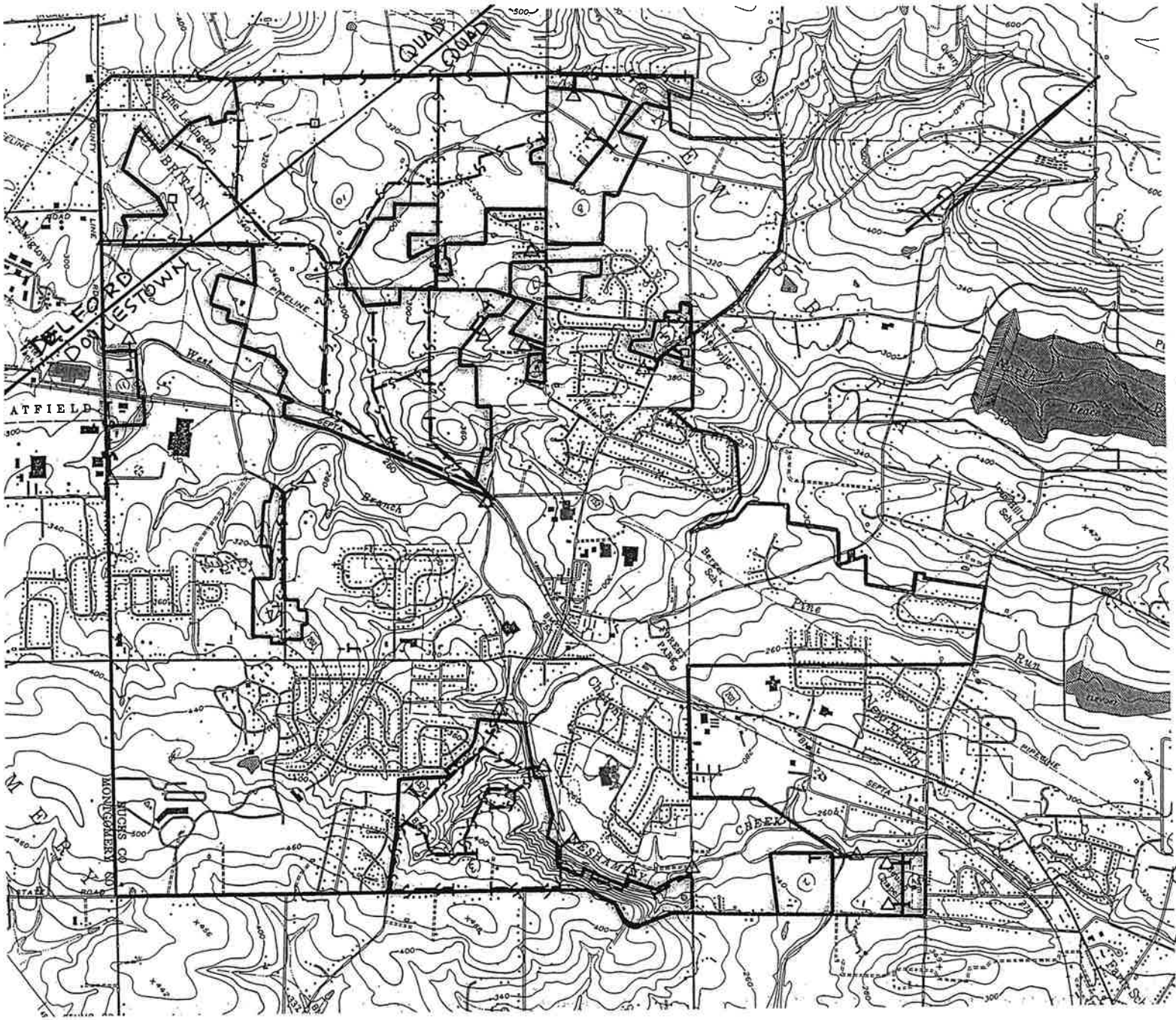
September 21, 2004
Ref: #9144

CULTURAL RESOURCE NOTICE
NARRATIVE DESCRIPTION
FOR
ACT 537 SEWAGE FACILITIES PLAN UPDATE

CHALFONT BOROUGH AND NEW BRITAIN TOWNSHIP
BUCKS COUNTY, PENNSYLVANIA

PREPARED FOR
CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

This Act 537 Sewage Facilities Plan Update is being prepared by the Chalfont-New Britain Township Joint Sewage Authority on behalf of Chalfont Borough and New Britain Township. The plan will address the sewage disposal needs of Chalfont Borough and the southern portion of New Britain Township. The major extent of the planning area is currently sewered and except for some minor extensions of, or connections to, the existing sewage facilities, no significant impacts within those existing areas are proposed. There are, however, three major areas plus several smaller areas within the southern portion of New Britain Township which are currently unsewered and which are proposed for public sanitary sewage facilities. Those areas are shown on the attached U.S.G.S. quadrangle map (composite of Doylestown and Telford quad maps). The total area planned for proposed public sewage facilities is approximately 1,650 acres of which approximately 18 total acres may be disturbed by the installation of the proposed facilities. It is currently anticipated that the extension of sewage facilities into those areas would be phased over a ten year period.



—S— PROPOSED GRAVITY SEWER
— — PROPOSED SEWER FORCE MAIN
□ PROPOSED PUMPING STATION
△ CONNECTION TO EXIST. SEWER

LOCATION MAP

PROPOSED SANITARY SEWER SERVICE AREAS

CHALFONT - NEW BRITAIN TOWNSHIP
JOINT SEWAGE AUTHORITY

CHALFONT BOROUGH & NEW BRITAIN TWP.
SCALE: 1" = 2000' SEPT. 2004

Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093

October 13, 2004

Kenneth G. Kollmer, P.L.S.
CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901

Re: File No. ER 95-2011-017-C
DEP 537 PROGRAM: Act 537 Sewage Facilities Plan Update, Chalfont-New Britain Township Joint Sewage Authority, Proposed Public Sewage Facilities Installation, Chalfont Borough, New Britain Twp. Bucks Co.

Dear Mr. Kollmer:

The Bureau for Historic Preservation has reviewed the above named project under the authority of the Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988). This review includes comments on the project's potential effect on both historic and archaeological resources.

A HIGH PROBABILITY EXISTS THAT ARCHAEOLOGICAL RESOURCES MAY OCCUR WITHIN THE PROPOSED PERMIT AREA

Based on an evaluation by our staff, there is a high probability that significant archaeological sites are located in this project area and could be adversely affected by project activities. Although there are no recorded archaeological sites within the project boundaries, the soil type, topographic setting, slope direction, and distance to water of the project area are similar to the settings of known archaeological sites in the vicinity. A Phase I archaeological survey of the project area to locate potentially significant archaeological resources is recommended but not required.

If a survey is not conducted and you encounter archaeological resources during construction, you must stop the project, notify the Pennsylvania Historical and Museum Commission's Bureau for Historic Preservation and the Department of Environmental Resources and allow the Bureau for Historic Preservation 60 days to conduct a survey to determine the significance of the archaeological resources. If the Bureau determines that the resources are significant, you must submit a mitigation plan to protect the significant resources on the site. We will review the plan within 30 days.

There may be historic buildings and/or structures eligible for the National Register of Historic Places located in the project area. However, due to the nature of the activity, it is our opinion that there will be no effect on these properties. Should the applicant become aware, from any source, that unidentified historic resources are located at the project site, or that the project activities will have an effect on these properties, the Bureau for Historic Preservation should be contacted immediately.

FOR YOUR INFORMATION

Pennsylvania Historical and Museum Commission will keep the Determination Notice and the materials you submitted in its files. Please attach this letter to your copy of the Notice and materials then submit the entire package of materials to DEP.

If this project will require any federal permits or will receive federal funding, the federal agency, under the National Historic Preservation Act of 1966, may require the appropriate surveys to be conducted. If the project will need an Army Corp of Engineers permit, this would be a **Category III** activity. We suggest that you consider conducting the survey early in the development or planning process to avoid delays in the future. Guidelines and instructions for conducting Phase I surveys are available from our office upon request.

Thank you for notifying us of your proposed activity.

If you need further information in this matter please consult Mark Shaffer at (717) 783-9900.

Sincerely,

Kurt W. Carr, Chief
Division of Archaeology &
Protection

Cc: DEP, Southeast Regional Office

KWC/tmw

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

David W. Connell, P.E.
Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

September 20, 2004
Ref: #9144

Department of Conservation and Natural Resources
Bureau of Forestry (FAS)
PNDI Program
P.O. Box 8552
Harrisburg, PA 17105-8552

Reference: Municipal Request for Pennsylvania Natural Diversity Inventory (PNDI) Data
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority
for Chalfont Borough and New Britain Township
Bucks County, Pennsylvania

Dear Sir/Madam:

On behalf of our client, the Chalfont-New Britain Township Joint Sewage Authority, we are enclosing herewith a completed Municipal Request for Pennsylvania Natural Diversity Inventory (PNDI) Data and a 7.5 minute U.S.G.S. Map for the above-referenced project. In accordance with the requirements of the PA DEP Act 537 Plan Update approval process, we request that you review the enclosed information and determine if potential sewage facilities extensions will, or will not, impact any species or habitats of special concern.

If you should have any questions concerning the enclosed information, or the project in general, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/mak

Enclosures

cc: John E. Schmidt, Executive Director
Joseph J. Nolan, CKS Engineers, Inc.
✓File

3800-FM-WSWM0001 9/2002

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

MUNICIPAL REQUEST FOR PENNSYLVANIA NATURAL DIVERSITY INVENTORY (PNDI) DATA

September 20, 2004
Date

TO: Department of Conservation and Natural Resources
Bureau of Forestry (FAS)
PNDI Program
PO Box 8552
Harrisburg, PA 17105-8552

FROM: CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
(municipal planning consultant address)

FOR: Chalfont-New Britain Township
Joint Sewage Authority
1645 Upper State Road
Doylestown, PA 18901-2666
(municipality address)
on behalf of
Chalfont Borough and New Britain Township, Bucks County

Please conduct a review of the Pennsylvania Natural Diversity Inventory (PNDI) information system for records of species of special concern reported from the above municipality. This information will be incorporated in initial planning assessments under the Pennsylvania Sewage Facilities Act and in specific alternative proposals. At this time, the planning process is addressing:

areas within Chalfont Borough and the southerly portion of New Britain Township for the potential extension of public sanitary sewage facilities to serve currently unsewered areas. Those areas are shown on the attached U.S.G.S. quadrangle map.

(current project details)

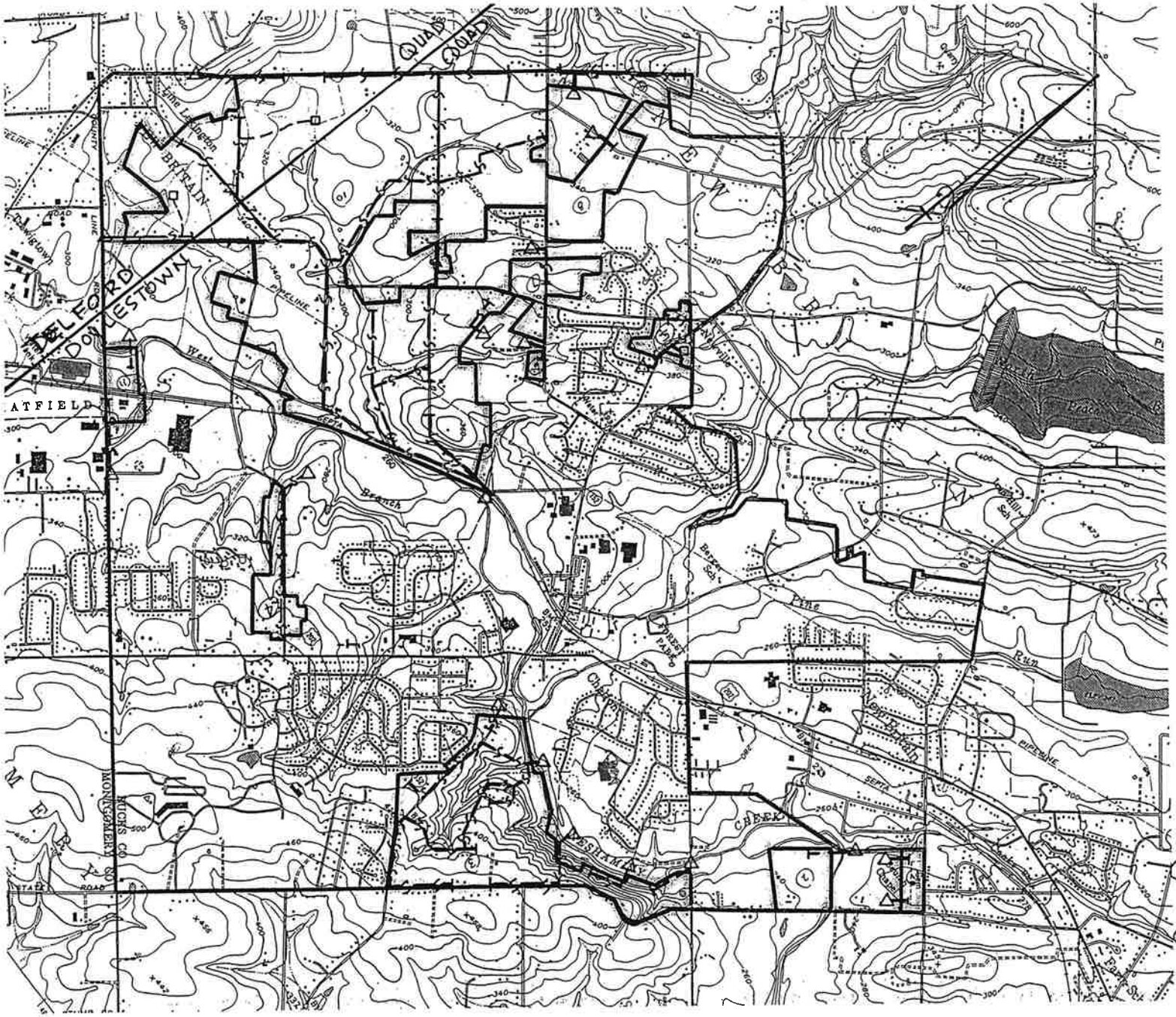
The location of the proposed project components are shown on the attached partial copy of the Doylestown and Telford 7.5 minute U.S.G.S. topographic maps.

In its reply, DCNR will notify this municipality regarding plant and animal species of special concern listed by any state agency or tracked by PNDI and reported in the project vicinity. In addition, DCNR will identify the agencies having management authority and expertise to assist with evaluation and mitigation of potential impacts on these species.

If you have questions concerning this project please contact:

Kenneth G. Kollmer, P.L.S. — Planning Consultant
CKS Engineers, Inc.
215-340-0600 — Telephone Number

John E. Schmidt, Executive Director — Municipal Official
Chalfont-New Britain Township
Joint Sewage Authority
215-345-1225 — Telephone Number



—S— PROPOSED GRAVITY SEWER
—— PROPOSED SEWER FORCE MAIN
□ PROPOSED PUMPING STATION
△ CONNECTION TO EXIST. SEWER

LOCATION MAP

PROPOSED SANITARY SEWER SERVICE AREAS

CHALFONT - NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

CHALFONT BOROUGH & NEW BRITAIN TWP.

SCALE: 1" = 2000' SEPT. 2004

Pennsylvania Natural Diversity Inventory

Scientific information and expertise for the conservation of Pennsylvania's native biological diversity

DCNR, Bureau of Forestry November 4, 2004

Kenneth Kollmer
CKS Engineers Inc.
88 South Main Street
Doylestown, PA 18901

Re: Pennsylvania Natural Diversity Inventory Review, **PER NO: 16749**
Chalfont-New Britain Twp Joint Sewage Plan
Chalfont-New Britain Twps, Bucks County

Dear Mr. Kollmer:

In response to your request September 20, 2004 to review the above mentioned project, we have reviewed the area using the Pennsylvania Natural Diversity Inventory (PNDI) information system. **PNDI records indicate that no occurrences of species of special concern are known to exist within the project area referenced above, therefore we do not anticipate any impact on endangered, threatened, or rare species at this location.** PNDI attempts to be a complete information resource on species of special concern within the Commonwealth. However, it may not contain all location information for species within the jurisdiction of other agencies. Please contact the Fish and Boat Commission, the Game Commission and US Fish and Wildlife Service for information on species within their purview.

PNDI is the environmental review function of the Pennsylvania Natural Heritage Program, and uses a site-specific information system that describes significant natural resources within the Commonwealth. This system includes data descriptive of plant and animal species of special concern, exemplary natural communities and unique geological features. PNDI is a cooperative project of the Department of Conservation and Natural Resources, The Nature Conservancy and the Western Pennsylvania Conservancy. This response represents the most up-to-date summary of the PNDI data files and is **good for one year**. An absence of recorded information does not necessarily imply actual conditions on-site. A field survey of any site may reveal previously unreported populations.

Feel free to phone our office if you have questions concerning this response or the PNDI system, and please refer to the P.E.R. Reference Number at the top of the letter in future correspondence concerning this project.

Sincerely,

Ellen M. Shultzabarger
Environmental Review Specialist

P: 717-772-0258
F: 717-772-0271

Western Pennsylvania Conservancy
209 Fourth Ave.
Pittsburgh, PA 15222
(412)288-2777
www.paconserve.org

Pennsylvania Dept. of Conservation and Natural Resources
Bureau of Forestry
P. O. Box 8552
Harrisburg, PA 17105-8552
(717)787-3444
www.dcnr.state.pa.us

The Nature Conservancy
208 Airport Drive
Middletown, PA 17057
(717)948-3962
www.tnc.org

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

David W. Connell, P.E.
Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

June 17, 2005
Ref: #9144

Certified Mail - Return Receipt Requested

Pennsylvania Game Commission
Bureau of Land Management
2001 Elmerton Avenue
Harrisburg, Pennsylvania 17110-9797

Reference: Chalfont Borough and New Britain Township, Bucks County, PA
Chalfont-New Britain Township Joint Sewage Authority
Act 537 Sewage Facilities Plan Update

Dear Sir/Madam:

On behalf of Chalfont Borough, New Britain Township and the Chalfont-New Britain Township Joint Sewage Authority, and at the request of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, we are enclosing herewith a copy of a composite U.S.G.S. Quadrangle Map and a copy of the Sewerage Facilities Service Area Expansion Map for the above referenced Act 537 Sewage Facilities Plan Update Planning Area. The Act 537 Plan Update includes the potential extension of public sanitary sewage facilities to provide service to currently unsewered areas of the Planning Area. The construction associated with these potential sewer extensions will be primarily within existing roadway areas. However, portions of the sewer extensions will also extend through unimproved easement areas.

In accordance with the Pennsylvania Natural Diversity Inventory (PNDI) Review per No. 16749, dated November 4, 2004, (copy attached), this Act 537 Plan Update is hereby submitted to your agency for review of potential impacts to species of special concern not covered by the PNDI review.

If you should have any questions concerning the enclosed information, or the Act 537 Plan Update in general, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S

KGK/kgc
Enclosures

cc: John E. Schmidt, Executive Director, CNBTJSA
David Drye, Chalfont Borough Manager
John Cornelius - New Britain Township Manager
Joseph J. Nolan, P.E., CKS Engineers, Inc.
File

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
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Ruth F. Cunnane

June 17, 2005
Ref: #9144

Certified Mail - Return Receipt Requested

Pennsylvania Fish & Boat Commission
Bureau of Fisheries and Engineering
450 Robinson Lane
Bellefonte, PA 16823

Reference: Chalfont Borough and New Britain Township, Bucks County, PA
Chalfont-New Britain Township Joint Sewage Authority
Act 537 Sewage Facilities Plan Update

Dear Sir/Madam:

On behalf of Chalfont Borough, New Britain Township and the Chalfont-New Britain Township Joint Sewage Authority, and at the request of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, we are enclosing herewith a copy of a composite U.S.G.S. Quadrangle Map and a copy of the Sewerage Facilities Service Area Expansion Map for the above referenced Act 537 Sewage Facilities Plan Update Planning Area. The Act 537 Plan Update includes the potential extension of public sanitary sewage facilities to provide service to currently unsewered areas of the Planning Area. The construction associated with these potential sewer extensions will be primarily within existing roadway areas. However, portions of the sewer extensions will also extend through unimproved easement areas.

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If you should have any questions concerning the enclosed information, or the Act 537 Plan Update in general, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S

KGK/kgc
Enclosures

cc: John E. Schmidt, Executive Director, CNBTJSA
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John Cornelius - New Britain Township Manager
Joseph J. Nolan, P.E., CKS Engineers, Inc.
File

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Ruth F. Cunnane

June 17, 2005
Ref: #9144

Certified Mail - Return Receipt Requested

Ms. Bonnie Dershem
U.S. Fish & Wildlife Service
315 South Allen Street
Suite 322
State College, PA 16801

Reference: Chalfont Borough and New Britain Township, Bucks County, PA
Chalfont-New Britain Township Joint Sewage Authority
Act 537 Sewage Facilities Plan Update

Dear Ms. Dershem:

On behalf of Chalfont Borough, New Britain Township and the Chalfont-New Britain Township Joint Sewage Authority, and at the request of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, we are enclosing herewith a copy of a composite U.S.G.S. Quadrangle Map and a copy of the Sewerage Facilities Service Area Expansion Map for the above referenced Act 537 Sewage Facilities Plan Update Planning Area. The Act 537 Plan Update includes the potential extension of public sanitary sewage facilities to provide service to currently unsewered areas of the Planning Area. The construction associated with these potential sewer extensions will be primarily within existing roadway areas. However, portions of the sewer extensions will also extend through unimproved easement areas.

In accordance with the Pennsylvania Natural Diversity Inventory (PNDI) Review per No. 16749, dated November 4, 2004, (copy attached), this Act 537 Plan Update is hereby submitted to your agency for review of potential impacts to species of special concern not covered by the PNDI review.

If you should have any questions concerning the enclosed information, or the Act 537 Plan Update in general, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S

KGK/kgc
Enclosures
cc: John E. Schmidt, Executive Director, CNBTJSA
David Drye, Chalfont Borough Manager
John Cornelius - New Britain Township Manager
Joseph J. Nolan, P.E., CKS Engineers, Inc.
File

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Ruth F. Cunnane

November 17, 2004
Ref: #9144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Bucks County Planning Commission
1260 Almshouse Road
Doylestown, Pennsylvania 18901

Reference: Chalfont Borough and New Britain Township
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority
Review Request

Ladies/Gentlemen:

On behalf of our client, the Chalfont-New Britain Township Joint Sewage Authority, we are pleased to submit the enclosed draft copy of the Act 537 Sewage Facilities Plan Update. This Act 537 Plan Update encompasses the service area of the Chalfont-New Britain Township Joint Sewage Authority, which includes all of Chalfont Borough and the southern portion of New Britain Township. The Authority has been authorized by both Chalfont Borough and New Britain Township to prepare this Act 537 Plan Update. The intent of the Plan Update is to identify, analyze and plan for the existing and future wastewater facilities and treatment needs of the Authority's service area.

In accordance with the requirements of the Pennsylvania Department of Environmental Protection, we request the Planning Commission's review of this Plan Update. Please provide your comments and/or approval, in writing, to our office. If you should have any questions during your review, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/kgc
Enclosures

cc: John E. Schmidt, Executive Director, CNBTJSA
Joseph J. Nolan, CKS Engineers, Inc.
File

BUCKS COUNTY
Planning Commission

Lynn T. Bush, AICP *Executive Director*

COUNTY COMMISSIONERS:
Chairman, CHARLES H. MARTIN
MICHAEL G. FITZPATRICK, ESQ.
SANDRA A. MILLER

PLANNING COMMISSION:
Chairman, Robert H. Grunmeier
Vice Chairman, Susanne McKeon
Secretary, James J. Stoeckhert
Kathleen M. Babb
Darrin Hoffman
H. Paul Kester
Edward Kisselback
David H. Platt
Geryl D. McMullin

January 5, 2005
BCPC #26-04-WS1

MEMORANDUM

TO: Chalfont Borough Council
New Britain Township Board of Supervisors
Chalfont Borough Planning Commission
New Britain Township Planning Commission

FROM: Bucks County Planning Commission

SUBJECT: Proposal to Update the Act 537 Sewage Facilities Plan for Chalfont-New Britain Township Joint Sewage Authority Service Area
Applicant: Chalfont-New Britain Township Joint Sewage Authority
Received: November 18, 2004
Hearing Date: Unknown

In accordance with the provisions of Act 537 of 1966, the Pennsylvania Sewage Facilities Planning Act, and Section 304(a)(4) of the Pennsylvania Municipalities Planning Code, this proposal has been sent to the Bucks County Planning Commission for review. The following review was prepared by the staff and endorsed by the Bucks County Planning Commission at a meeting held on January 5, 2005.

GENERAL INFORMATION

Proposed Actions: The stated intent of the Plan Update is to identify, analyze, and plan for the existing and future wastewater facilities and treatment needs of the service area of the Chalfont-New Britain Township Joint Sewage Authority (CNBTJSA). The service area includes all of Chalfont Borough and the southern portion of New Britain Township. The CNBTJSA has been authorized by both Chalfont Borough and New Britain Township to prepare the Plan Update.

Location and Service Areas of the CNBTJSA Wastewater Treatment Facility: The CNBTJSA wastewater treatment facility is located on Upper State Road between Bristol and Almshouse roads in Doylestown Township, just outside of the Plan Update planning area. In addition to serving Chalfont Borough and New Britain Township, the CNBTJSA facility also serves portions of the Bucks County Water and Sewer Authority's (BCWSA) service area, including New Britain Borough, and parts of Doylestown, Plumstead, Buckingham, and Bedminster Township.

OVERALL PROPOSAL

1. **Sewer Service Area**—All of Chalfont Borough is currently sewered. With regard to New Britain Township, the Plan Update encompasses the entire southern portion of the township of which approximately 60 percent is currently sewered. The remaining 40 percent is proposed by the Plan Update to be sewered within the next ten years.

2. **On-Lot Sewage Service Area**—Independent of the subject Plan Update, New Britain Township is also preparing a separate Act 537 Plan (On-Lot Sewage Service Area) to address the needs of the northerly portion of the Township, which is currently unsewered, for the most part.

3. **Extension of Public Sewer Service into Unsewered Areas**—The Plan Update states that "the extension of public sewer service into the currently unsewered portions of the Planning Area is the most desirable method for accommodating planned or future development in those areas." Those areas are identified as the West Area, the East Area, the Cedar Hill Road Area, the Limekiln Pike/Newville Road Area, and the County Line Road/Walnut Street Area.

4. **Analysis of CNBTJSA's existing sewerage facilities**—Existing sewerage facilities analyzed included the CNBTJSA's wastewater treatment plant, pumping stations, and the receiving collector and/or conveyance lines.

5. **Cost and Funding to Implement the Plan**—The projected cost to implement the selected alternatives over a ten-year period is $23,558,150.00. Based on the Plan's estimated additional 1,217 EDUs (equivalent dwelling units), the average cost per dwelling unit would be $19,357.56. Within planned and future development areas, funding will be provided by developer contributions and/or tapping fees. Within existing on-lot sewage disposal system areas to be served by public sewers, funding will be through an assessment to property owners.

6. **Commitments Needed for Implementation**—Municipal commitments necessary to implement the Plan Update include adoption of the Plan Update by Chalfont Borough and New Britain Township, as well as execution of new agreements with the borough and the township for additional areas to be served.

7. **Consistency of Selected Alternative with Other Programs and Plans**—Table 7-1 on page 43 of the Plan Update indicates that the proposed plan is consistent with pertinent plans and programs.

COMMENTS

The following items should be considered by the municipal officials concerning the subject Act 537 Plan Update.

1. **New Britain Township Future Land Use**—The New Britain Township Comprehensive Plan (1987) states a policy of directing development into development districts and that "the intent of development districts is to allow for the most efficient provision of public utilities by avoiding sprawled development." The proposed ten-year service area on Figure 5-1 of the subject Act 537 Plan Update is essentially consistent with the "Sewer

Service Areas" map in the 1987 Comprehensive Plan. Most of the proposed ten-year sewer service area is in the SR-2 Suburban Residential zoning district. The stated purpose of the SR-2 district is "to provide for the orderly expansion of low density residential development," with an emphasis on "the preservation of natural features through clustering where practical." To meet the comprehensive plan's stated intent of "avoiding sprawled development," the township will need to strongly encourage the cluster development option in preference to the basic 2-acre minimum lot area allowed in the SR-2 zoning district. Clustering will also have the added benefits of preserving open space, protecting water resources, and reducing infrastructure installation and maintenance costs.

2. **Transition Zone**—Of some concern is the future of the so-called "Transition Zone" on the west side of Limekiln Pike in the vicinity of Curley Mill Road. Section 5.1.4 states that the Transition Zone "reflects the possibility of public sewer service to one or more properties west of Limekiln Pike, depending upon individual needs and sewer availability." Because that area is in the WS Watershed Zoning District, the township may want to consider excluding that area of 48 parcels from the sewer service area, rather than hedging.

3. **Treatment Capacity at CNBTJSA Facility**—Section 6.4.3 of the subject Plan Update states that based on estimated additional flows of approximately 320,000 gallons per day from the ten-year sewer service areas, further study of the existing treatment plant capacity, including possible upgrades, "will be required prior to the future extension of sewer lines." Thus, it appears that until the CNBTJSA plant is expanded, the expansion of the proposed sewer service area will be limited.

4. **Plan Implementation**—Section 8.1 discusses in a very general way the institutional and funding aspects of implementing the public sewerage facility alternative recommended in the proposed Plan Update. However, it does not specify how or when the issues presented in Section 6.4.1 regarding the adequacy of capacity agreements between the CNBTJSA and the BCWSA will be addressed. Plan implementation will depend upon two main interrelated institutional issues: (1) capacity agreements and (2) treatment plant expansion and upgrade.

DPL:mjw

cc: Lee Gemmill, PA Department of Environmental Protection
John Schmidt, Executive Director, CNBTJSA
Benjamin Jones, Executive Director, Bucks County Water and Sewer Authority
Jean Herstine, Manager, Bedminster Township
Raymond Stepnoski, Manager, Buckingham Township
Stephanie Mason, Manager, Doylestown Township
Robin Trymbiski, Manager, New Britain Borough
Beth Sunday, Manager, Plumstead Township
Kenneth Kollmer, CKS Engineers
Greg Sturn, Solicitor, Chalfont Borough
John Rice, Solicitor, New Britain Township

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

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Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

June 9, 2005
Ref: #9144

Certified Mail - Return Receipt Requested

Bucks County Planning Commission
The Almshouse
Neshaminy Manor Center
1260 Almshouse Road
Doylestown, Pennsylvania 18901

Reference: Chalfont Borough and New Britain Township
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority

Lades/Gentlemen:

The Chalfont-New Britain Township Joint Sewage Authority is in receipt of the Bucks County Planning Commission's letter dated January 5, 2005 providing review comments on Chalfont Borough's and New Britain Township's proposed Act 537 Sewage Facilities Plan Update. CKS Engineers, Inc. prepared the plan on behalf of the Authority and the municipalities, and has reviewed the comments set forth in your letter. The following responses coincide with the numerical sequence under the "Comments" portion of your review letter:

1. The Planning Commission's comment regarding the encouragement of "cluster development" in the proposed sewerage service areas is duly noted. The extension of public sanitary sewerage facilities into those areas will be more conducive toward cluster type development options.

2. The designated "Transition Zone" has been discussed with New Britain Township. The Township wishes to keep this area as a transition area between the On-Lot Sewage Service Area and the Public Sewage Service Area, whereby public sewer service to one or more of the properties in the "Transition Zone" may be possible depending on individual needs and sewer availability. An additional 12 EDU's are being allocated for potential development in this area.

3. The Planning Commission's comment regarding expansion of the CNBTJSA Wastewater Treatment Plant is duly noted. This Act 537 Sewage Facilities Plan Update will serve as a basis for evaluating the existing wastewater treatment facilities to determine the type and extent of upgrades which may be necessary to accommodate the future additional flows. It is not anticipated that the expansion of public sanitary sewerage facilities in the Planning Area would proceed until the existing wastewater treatment facilities are evaluated, and any necessary upgrades are implemented.

   Relative to this item, we also wish to note that the flow projections for the Planning Area have been increased to 440,000 gallons per day, as presented in the amended Act 537 Sewage Facilities Plan Update.

4. The evaluation of existing capacity agreements between the CNBTJSA and other municipal bodies, including the BCW&SA will be performed upon the adoption of this Act 537 Sewage Facilities Plan Update and subsequent approval by the Department of Environmental Protection. The CNBTJSA recognizes that implementation of the plan is contingent upon the resolution of any outstanding capacity agreement issues, as well as any necessary treatment plan upgrades.

We trust this letter addresses the Planning Commission's concerns regarding the Act 537 Sewage Facilities Plan Update for the Chalfont-New Britain Township Joint Sewage Authority. Your input for this Plan Update is greatly appreciated.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/kgc

cc: John E. Schmidt, Executive Director, CNBTJSA
David Drye, Chalfont Borough Manager
John Cornelius, New Britain Township Manager
Joseph J. Nolan, CKS Engineers, Inc.
File

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bucks Co. Planning Comm.
The Almshouse
Neshaminy Manor Center
1260 Almshouse Road
Doylestown, PA 18901

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) [illegible] C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

DOYLESTOWN PA 18901 JUN 13 2005 USPS

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 0390 0003 7603 5846

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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CKS ENGINEERS, INC.
88 SOUTH MAIN STREET
DOYLESTOWN, PA 18901

ATTN: KEN KOLLMER

Ref. #9144

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

David W. Connell, P.E.
Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

November 17, 2004
Ref: #9144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Bucks County Health Department
Health Building (2nd Floor)
Neshaminy Manor Center
Doylestown, Pennsylvania 18901

Reference: Chalfont Borough and New Britain Township
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority
Review Request

Ladies/Gentlemen:

On behalf of our client, the Chalfont-New Britain Township Joint Sewage Authority, we are pleased to submit the enclosed draft copy of the Act 537 Sewage Facilities Plan Update. This Act 537 Plan Update encompasses the service area of the Chalfont-New Britain Township Joint Sewage Authority, which includes all of Chalfont Borough and the southern portion of New Britain Township. The Authority has been authorized by both Chalfont Borough and New Britain Township to prepare this Act 537 Plan Update. The intent of the Plan Update is to identify, analyze and plan for the existing and future wastewater facilities and treatment needs of the Authority's service area.

In accordance with the requirements of the Pennsylvania Department of Environmental Protection, we request the Health Department's review of this Plan Update. Please provide your comments and/or approval, in writing, to our office. If you should have any questions during your review, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/kgc
Enclosures

cc: John E. Schmidt, Executive Director, CNBTJSA
Joseph J. Nolan, CKS Engineers, Inc.
File

COUNTY OF BUCKS

DEPARTMENT OF HEALTH
Health Building, Neshaminy Manor Center, Doylestown, PA 18901 - 215 - 345 - 3318
FIELD OFFICES
Bucks County Government Services Center, 7321 New Falls Road, Levittown, PA 19055 -215- 949 - 5805
Bucks County Government Services Center. 515 S. West End Blvd., Quakertown, PA 18951 -215- 536- 6500

County Commissioners
CHARLES H. MARTIN, Chairman
JAMES F. CAWLEY, ESQ.
SANDRA A. MILLER

Mr. John E. Schmidt, Executive Director
Chalfont-New Britain Township Joint Sewage Authority
1654 Upper State Street
Doylestown, PA 18901

March 5, 2005

Reference: November 17, 2004 request for a review of the Chalfont Borough New Britain Township Act 537 Plan Revision

Dear Mr. Schmidt,

The referenced Plan was submitted to the Doylestown Office with a non-specified recipient on November 18, 2004. The need for my attention to the document was relayed to me after the Environmental Health Secretary received a phone inquiry from CKS Engineers, Inc. at the beginning of February. The document was then located and reviewed by the Engineering Division and Sanitation Division.

Mr. Don Meadows (SEO # 02527) an Environmental Protection Specialist in the Environmental Sanitation Division reviewed the referenced document for on-lot sewage systems and consistency with Department knowledge about local failing systems. He offers no additional comments on issues related to on-site sewage concerns contained in the reference report.

Mr. Everett Hogg, Engineering Division Supervisor, and I reviewed the subject Plan revision for information on the public sewer service. The Engineering Division comments are meant both to point out any technical inadequacies or omissions of the Act 537 Plan, and to suggest improvements for presentation, which would help the general public benefit from this valuable effort. Our comments generally follow the presentation as it is organized in the Policy Document, then comments on those sections of the Technical Document in the order that they are referred to in the Policy Document.

2.1 The Plan Content Outline referred to is not in Appendix D

4.1 This paragraph discusses on-site sewage conditions. The Engineering Division agrees that for areas where public sewers are extended that these systems should be made available.

4.2.1 The Engineering Division recommends that the Act 537 plan should mention that where there are on-site sewer facilities, they should be pumped every three years or less.

6.2 Also, this Division recommends that for those areas in which new on-lot systems are sought, the township consider/encourage residential spray and drip irrigation systems. Point out that the BCDH permits

such systems and drip irrigation under guidance as permitted by DEP. Where it is suitable this type system recharges the ground-water system hence preserves baseflow which has significant environmental benefit.

6.2.2 Please note the conjecture that systems are already failing is inconsistent with the report from the BCDH while supportive of the proposed Plan. As such, it is an unsupported biased justification. Also, the evidence of estimate ranges (quotes) for on-site systems is not presented.

6.2.3 Cost estimates for SFTF (small flow treatment facilities) is not justified. In some areas this method is worthy of choice. O&M procedure requires reporting to DEP and this Department requests an annual report. Direct stream discharge is not needed. Please review instructions given under Act 537 for Component 3s.

6.2.4 The discussion is not quantitative and biased. Also, community drip irrigation is not considered. Several municipalities in the region have employed spray irrigation successfully for sub-division scale development (notably Buckingham). Decentralized systems are not discussed in the context of what is going in on locally. There are decentralized systems, some municipally owned, that either exist or are currently planned for central Bucks County. Municipalities should be appraised of this and decide accordingly.

Please also note that this Department is inquisitive of the status of arrangements between your Authority and that of Bucks County Water and Sewer Authority. We are aware of this issue because of the recent history of Component 4c sewage applications which have required authorizations from both Authorities. Is this negotiation inferred in section 6.4.3 on p. 40? We appreciate it if there is information that you can share with us.

Please contact me at my office phone (215-345-3324) if I can answer any further questions for you or comment on the Plan.

Yours truly,

Amleto A. Pucci, Jr. Ph.D. P.E. CGWP
Chief, Environmental Engineering Division

Copy: Mr. Kenneth G. Kollmer, P.L.S., C.K.S. Engineering, Inc.
Mr. Clinton Cleaver, NJDEP Southeast Regional Office, 2 East Main St., Norristown, PA 19401
Bucks County Planning Commission, Neshaminy Manor
Mr. Don Meadows, EPS II, BCDH, Doylestown Office
Mr. Wm. Roth, EPS III, BCDH, Supervisor, Sanitation Division, Doylestown Office
File

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88 South Main Street
Doylestown, PA 18901
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James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

June 9, 2005
Ref: #9144

Certified Mail - Return Receipt Requested

Bucks County Department of Health
Health Building (2nd Floor)
Neshaminy Manor Center
Doylestown, Pennsylvania 18901

Attention: Amleto A. Pucci, Jr.
Chief, Environmental Engineering Division

Reference: Chalfont Borough and New Britain Township
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority

Dear Mr. Pucci:

The Chalfont-New Britain Township Joint Sewage Authority is in receipt of the Bucks County Department of Health's letter dated March 5, 2005 providing review comments on Chalfont Borough's and New Britain Township's proposed Act 537 Sewage Facilities Plan Update. CKS Engineers, Inc. prepared the plan on behalf of the Authority and the municipalities, and has reviewed the comments set forth in your letter. The following responses coincide with the comments provided for Items 2.1, 4.2.1, 6.2, 6.2.2, 6.2.3 and 6.2.4 of your review letter:

2.1 The approved Plan Content Outline, as referred to in Section 2.1 has now been included in Appendix D of the Act 537 Sewage Facilities Plan Update.

4.2.1 Section 4.2.1 generally addresses the number and locations of existing on-lot sewage disposal systems (OLDS) in the Planning Area. As public sanitary sewerage facilities are extended into those areas, the existing OLDS will be discontinued and abandoned. While we agree with the Department of Health's recommendation that existing systems be pumped out every three years or less, we also note that, per Section 5.1.4 of the Plan Update, all existing and/or proposed OLDS within New Britain Township are being addressed by a separate New Britain Township Act 537 Plan Update for the "On-Lot Sewage Service Area."

6.2 Section 6.2 provides information on various types of sewerage facilities alternatives and recommends (Section 6.2.7) that the extension of public sewers into the existing unsewered areas within the Planning Area is the most desirable alternative for servicing these areas. As such, new on-lot disposal systems of any type are not being recommended for the Planning. However, as noted above, all

existing and/or proposed on-lot systems within New Britain Township are being addressed by the separate Act 537 Plan Update for the "On-Lot Sewage Service Area."

6.2.2 We believe that the statement in Section 6.2.2 pertaining to existing on-lot sewage disposal systems (OLDS) as "some of which may already be failing and all of which are susceptible to failure at some point" is a reasonable statement for an area in which existing OLDS have been in place for many years. We also believe that the repair/replacement cost range of $20,000 to $25,000 is also reasonable based upon estimates we have seen for this type of work. Certainly, it is possible for some systems to be repaired for less than $20,000, and for some systems to be replaced for more than $25,000.

6.2.3 We believe that an estimated cost of $25,000 is reasonable for a small flow treatment facility. Depending on the size of the facility, the cost would be higher or lower. For the reasons discussed in Section 6.2.3, we do not believe that small flow treatment facilities are technically feasible for the service area of the Chalfont-New Britain Township Joint Sewage Authority.

6.2.4 For the reasons discussed in Section 6.2.4, we do not believe that community treatment facilities, including drip irrigation, spray irrigation, etc. are technically feasible for the service area of the Chalfont-New Britain Township Joint Sewage Authority.

With regard to the final paragraph of your March 5, 2005 letter inquiring as to the status of arrangements between the CNBTJSA and the BCW&SA, we can only report that negotiations between the parties are ongoing.

We trust that this letter adequately addresses the Health Department's concerns regarding the Act 537 Sewage Facilities Plan Update for the Chalfont-New Britain Township Joint Sewage Authority. Your input for this Plan Update is greatly appreciated.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/kgc

cc: John E. Schmidt - Executive Director, CNBTJSA
David Dryè, Chalfont Borough Manager
John Cornelius, New Britain Township Manager
Joseph J. Nolan, CKS Engineers, Inc.
File

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bucks Co. Dept. of Health
Health Building (2nd Floor)
Neshaminy Manor Center
Doylestown, PA 18901

Attn: Amleto A. Pucci, Jr.

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Steve Jr Paglia ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
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☐ Registered ☑ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

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CKS ENGINEERS, INC.
88 SOUTH MAIN STREET
DOYLESTOWN, PA 18901

ATTN: KEN KOLLMER

REF. #9144

04

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

David W. Connell, P.E.
Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

November 17, 2004
Ref: #9144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Borough of Chalfont
40 North Main Street
Chalfont, Pennsylvania 18914

Attention: David Drye, Borough Manager

Reference: Chalfont Borough and New Britain Township
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority
Review Request

Dear Mr. Drye:

As you know, the Chalfont-New Britain Township Joint Sewage Authority has been authorized by both Chalfont Borough and New Britain Township to prepare an Act 537 Sewage Facilities Plan Update. This Act 537 Plan Update encompasses the service area of the Authority, which includes all of Chalfont Borough and the southern portion of New Britain Township. The intent of the Plan Update is to identify, analyze and plan for the existing and future wastewater facilities and treatment needs of the Authority's service area.

In accordance with the requirements of the Pennsylvania Department of Environmental Protection, the Chalfont Borough Planning Commission must review/comment on the Plan Update. Accordingly, we have enclosed herein six copies of the Plan Update for distribution to the Borough Planning Commission for review/comment. The Planning Commission has a 60-day review/comment period in accordance with PA DEP Chapter 71 regulations. When distributing the Plan Update to the Planning Commission, we request that you provide a copy of the distribution memorandum which would initiate the 60-day review/comment period, to our office so that we can incorporate same into the final draft of the Plan Update.

In addition to the Planning Commission review/comments, the Borough must advertise a Public Notice pertaining to the Plan Update within a local newspaper and establish a 30-day Public Comment Period. Accordingly, we have enclosed herein a suggested Public Notice for your use. The dates for which the Plan Update will be available for review must be inserted. You, of course, may wish to revise the format of the Notice. We have enclosed herein three additional copies of the Plan Update which should be maintained at the Borough Building for use during the Public Comment Period. A copy of the Proof of Publication should be submitted to our office for inclusion in the final draft of the Plan Update.

Any comments received from the Planning Commission or from the public will be addressed and will be included in the final draft of the Plan Update.

If you should have any questions regarding this matter, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/kgc
Enclosures

cc: John E. Schmidt, Executive Director, CNBTJSA
Joseph J. Nolan, CKS Engineers, Inc.
File

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

David W. Connell, P.E.
Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

November 17, 2004
Ref: #9144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Township of New Britain
207 Park Avenue
Chalfont, Pennsylvania 18914

Attention: John Cornelius, Township Manager

Reference: Chalfont Borough and New Britain Township
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority
Review Request

Dear Mr. Cornelius:

As you know, the Chalfont-New Britain Township Joint Sewage Authority has been authorized by both Chalfont Borough and New Britain Township to prepare an Act 537 Sewage Facilities Plan Update. This Act 537 Plan Update encompasses the service area of the Authority, which includes all of Chalfont Borough and the southern portion of New Britain Township. The intent of the Plan Update is to identify, analyze and plan for the existing and future wastewater facilities and treatment needs of the Authority's service area.

In accordance with the requirements of the Pennsylvania Department of Environmental Protection, the New Britain Township Planning Commission must review/comment on the Plan Update. Accordingly, we have enclosed herein six copies of the Plan Update for distribution to the Township Planning Commission for review/comment. The Planning Commission has a 60-day review/comment period in accordance with PA DEP Chapter 71 regulations. When distributing the Plan Update to the Planning Commission, we request that you provide a copy of the distribution memorandum which would initiate the 60-day review/comment period, to our office so that we can incorporate same into the final draft of the Plan Update.

In addition to the Planning Commission review/comments, the Township must advertise a Public Notice pertaining to the Plan Update within a local newspaper and establish a 30-day Public Comment Period. Accordingly, we have enclosed herein a suggested Public Notice for your use. The dates for which the Plan Update will be available for review must be inserted. You, of course, may wish to revise the format of the Notice. We have enclosed herein three additional copies of the Plan Update which should be maintained at the Township Building for use during the Public Comment Period. A copy of the Proof of Publication should be submitted to our office for inclusion in the final draft of the Plan Update.

Any comments received from the Planning Commission or from the public will be addressed and will be included in the final draft of the Plan Update.

If you should have any questions regarding this matter, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/kgc
Enclosures

cc: Carol Bigham, Assistant Township Manager
John E. Schmidt, Executive Director, CNBTJSA
Joseph J. Nolan, CKS Engineers, Inc.
File

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

David W. Connell, P.E.
Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

March 15, 2005
Ref: #9144

Township of New Britain
207 Park Avenue
Chalfont, Pennsylvania 18914

Attention: John Cornelius, Township Manager

Reference: Chalfont Borough and New Britain Township
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority

Dear Mr. Cornelius:

We have received your March 7, 2005 letter regarding the above referenced Act 537 Sewage Facilities Plan Update. All of the comments noted in your letter, together with any comments received from the Bucks County Planning Commission, the Bucks County Health Department, the Municipal Planning Commissions and the public, will be addressed as responses, in accordance with the Pennsylvania Department of Environmental Protection's Act 537 plan update process. However, to complete the response phase of the process, we will need to have the draft plan distributed to the New Britain Township Planning Commission for review/comment, and to have the draft plan advertised for public comment.

As noted in my November 17, 2004 submission letter (copy attached), we request that the draft plan be distributed to the Township Planning Commission for the required 60-day review/comment period and that a Public Notice be placed in a local newspaper for the required 30-day public comment period. I believe that we have provided the Township with sufficient copies of the draft Plan Update for this purpose, however, should you require additional copies, please let me know.

The Chalfont-New Britain Township Joint Sewage Authority is anxious to conclude the review/comment phase of the Act 537 Plan Update process, so that we can proceed with the response phase. Your assistance in this matter would be greatly appreciated.

If you should have any questions regarding this matter, please do not hesitate to contact our office.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/kgc
Enclosures

cc: Carol Bigham, Assistant Township Manager
John E. Schmidt, Executive Director, CNBTJSA
Joseph J. Nolan, CKS Engineers, Inc.
File

TOWNSHIP OF NEW BRITAIN

Bucks County, Pennsylvania
Founded: 1723

March 7, 2005

Kenneth G. Kollmer, P.L.S.
CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901

Re: Draft Act 537 Sewage Facilities Plan Update; November 2004

Dear Mr. Kollmer:

Outlined below are summary comments from New Britain Township Supervisors, staff and consultants in response to the referenced document prepared by CKS Engineers, Inc.

1. The draft plan does not provide any EDUs for future development of the 48 properties in the "transition area" in New Britain Township. During your presentation to the Board of Supervisors, you said any required EDUs for that area could be accommodated by the proposed .32 MGD expansion of the treatment plant. Given that at least some residential development is certain to occur in this transition area over the next 10-15 years, it may be prudent to assume a dozen or so future EDUs for the area.

2. The Plan Implementation Schedule (Table 8-1) indicates completion of the construction of the sewage facility upgrades will vary; however, it is expected to be completed within the next ten years. We suggest this construction timetable be detailed further for the benefit of municipal officials. Specifically, what upgrades would be completed in the near future too address current needs?

3. Approximately 490 EDUs have been approved for future development within New Britain Township. Does the Plan Update assume all of these EDUs in the proposed .32 MGD plant expansion?

4. Please clarify what sections of the existing Act 537 Plan (201 Facilities Plan) are still applicable after adoption of the updated Act 537 Plan.

5. The reference to New Britain Borough on the third line on page 19 should be changed to Chalfont Borough.

Should you wish to discuss any of these comments, please give me a call.

Sincerely,

John Cornelius

John Cornelius
Township Manager

c: Board of Supervisors
Craig Kennard, P.E., Township Engineer
John B. Rice, Esq., Township Solicitor
Carol Bigham, Assistant Township Manager

CKS Engineers, Inc.
88 South Main Street
Doylestown, PA 18901
215/340-0600 • FAX 215/340-1655

David W. Connell, P.E.
Joseph J. Nolan, P.E.
Thomas F. Zarko, P.E.
James F. Weiss
Patrick P. DiGangi, P.E.
Ruth F. Cunnane

June 9, 2005
Ref: #9144

Certified Mail - Return Receipt Requested

Township of New Britain
207 Park Avenue
Chalfont, Pennsylvania 18914

Attention: John Cornelius, Township Manager

Reference: Chalfont Borough and New Britain Township
Act 537 Sewage Facilities Plan Update
Chalfont-New Britain Township Joint Sewage Authority

Dear Mr. Cornelius:

The Chalfont-New Britain Township Joint Sewage Authority is in receipt of New Britain Township's letter dated March 7, 2005 providing review comments on Chalfont Borough's and New Britain Township's proposed Act 537 Sewage Facilities Plan Update. CKS Engineers, Inc. prepared the plan on behalf of the Authority and the municipalities, and has reviewed the comments set forth in your letter. The following responses coincide with the numerical sequence of your review letter:

1. New Britain Township's comment regarding the allocation of EDU's for the "Transition Area" is duly noted. An additional 12 EDU's will be added to the flow projections for the Planning Area to account for potential development in the "Transition Area."

2. The extension of public sanitary sewer facilities into the proposed sewage facilities service areas will be dictated by potential future development and the needs of existing properties within those areas. Fixing a detailed time schedule for these extensions at this time would be purely conjecture. However, with regard to the wastewater treatment plant, it is the Authority's intent to initiate the necessary upgrades to accommodate all of the present and projected future flows to the plant, within the next two (2) years. The Authority is currently evaluating the improvements which will be required at the plant and will move forward with the design/permitting phase upon adoption and approval of this Act 537 Sewage Facilities Plan Update.

3. All of the allocated, but unconnected EDU's within the Planning Area (including the 490 EDU's in New Britain Township) have been included in the flow projections. Please note that these projections have now been increased to 0.44 MGD, as noted in the recently submitted Amended Act 537 Sewage Facilities Plan Update.

4. Generally, all sections of New Britain Township's current Act 537 Plan which pertain to the service area(s) of the Chalfont-New Britain Township Joint Sewage Authority would be replaced with the current Act 537 Sewage Facilities Plan Update following its adoption and approval. Under separate cover, we will provide the Township with a detailed listing of the sections which would need to be amended or replaced.

5. New Britain Township's comment regarding the reference to New Britain Borough is duly noted and will be revised to Chalfont Borough.

We trust this letter addresses New Britain Township's concerns regarding the Act 537 Sewage Facilities Plan Update for the Chalfont-New Britain Township Joint Sewage Authority. Your input for this Plan Update is greatly appreciated.

Very truly yours,
CKS ENGINEERS, INC.
Authority Engineers

Kenneth G. Kollmer, P.L.S.

KGK/kgc

cc: John E. Schmidt, Executive Director, CNBTJSA
Joseph J. Nolan, CKS Engineers, Inc.
File

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Township of New Britain
207 Park Avenue
Chalfont, PA 18914

Attn: John Cornelius
Township Manager

COMPLETE THIS SECTION ON DELIVERY

A. Signature ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery 6-10-03

D. Is delivery address different from item 1? ☐ Yes
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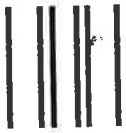
4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 0390 0003 7603 5839

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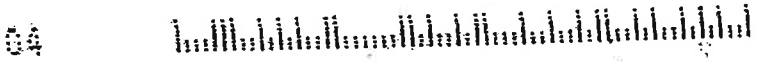
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CKS ENGINEERS, INC.
88 SOUTH MAIN STREET
DOYLESTOWN, PA 18901

ATTN: KEN KOLLMER

REF. #9144



APPENDIX D

ACT 537 PLAN CONTENT AND ENVIRONMENTAL ASSESSMENT CHECKLIST

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

Act 537 Plan Content and Environmental Assessment Checklist

PART 1 GENERAL INFORMATION

A. Project Information

1. Project Name Chalfont Borough and New Britain Township Act 537 Plan Update

2. Brief Project Description Update Act 537 Plan for Chalfont Borough and the sewered area of New Britain Township. The Plan Update is prepared by the Chalfont-New Britain Township Joint Sewage Authority (CNBTJSA) on behalf of Chalfont Borough and New Britain Township.

B. Client (Municipality) Information

Municipality Name	County	City	Boro	Twp
Chalfont-New Britain Township Joint Sewage Authority	Bucks	☐	☐	☐

Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Schmidt	John	E		Executive Director
Additional Individual Last Name	First Name	MI	Suffix	Title

Municipality Mailing Address Line 1	Mailing Address Line 2
1645 Upper State Road	

Address Last Line -- City	State	ZIP+4
Doylestown	PA	18901

Phone + Ext.	FAX (optional)	Email (optional)
215-345-1225		

C. Site Information

Site (or Project) Name	(Municipal Name) Act 537 Plan
Chalfont Borough and New Britain Township	

Site Location Line 1	Site Location Line 2
Chalfont Borough (Entire)	New Britain Township (Sewered Area)

D. Project Consultant Information

Last Name	First Name	MI	Suffix
Nolan	Joseph	J	P.E.

Title	Consulting Firm Name
Authority Consultant	CKS Engineers, Inc.

Mailing Address Line 1	Mailing Address Line 2
88 South Main Street	

Address Last Line – City	State	ZIP+4	Country
Doylestown	PA	18901	USA

Email	Phone + Ext.	FAX
jnolan@cksengineers.com	215-340-0600	215-340-1655

NOTE: Act 537 Plan Update is prepared by Chalfont-New Britain Township Joint Sewage Authority on behalf of the following two (2) municipalities:

1. Chalfont Borough
   40 N. Main Street
   Chalfont, PA 18914
   (215) 822-7295

   (See 10/14/03 Letter Attached)

2. New Britain Township
   207 Park Avenue
   Chalfont, PA 18914
   (215) 822-1391

   (See 10/21/03 Letter Attached)

Borough of Chalfont

David E. Drye
Borough Manager

Elected Officials

Marilyn J. Becker
Mayor

John Rigg
Council President

Gary K. Lucas
Council Vice-President

Council Members
Gordon L. Bell
Marilyn H. Jacobson
Linda Liberatore
Maria Loecker
Ron Ridolfo

OCT 2[illegible] 2003

October 14, 2003

Chalfont-New Britain Township Joint Sewage Authority
1645 Upper State Road
Doylestown, PA 18901-2666

Attention: John E. Schmidt, Executive Director

Reference: Act 537 Plan

Dear John:

This letter will confirm that the Chalfont Borough Council approves of the Chalfont-New Britain Township Joint Sewage Authority to take the lead to update the Township's Act 537 Plan for the "Public Sewer Area" of the Township. Please consider this letter as your approval and your authorization to proceed with the application for a Planning Grant to assist in the cost of plan preparation. Please contact me if you have any further questions.

Very truly yours,

CHALFONT BOROUGH

David Drye
Borough Manager

DD/dl

40 North Main Street
Chalfont, PA 18914
Tel: (215) 822-7295
Fax: (215) 822-5528

TOWNSHIP OF NEW BRITAIN

Bucks County, Pennsylvania
Founded: 1723

ACTING MANAGER
Carol Bigham

BOARD OF SUPERVISORS

Robert V. Cotton, Chair
Dr. Robert J. Piccone, Vice Chair
John A. Bodden, Sr.
Helen B. Haun
William B. Jones

October 21, 2003

John Schmidt, Executive Director
Chalfont-New Britain Township
Joint Sewage Authority
1645 Upper State Road
Doylestown, PA 18914

OCT 2[illegible] 2003

Dear John:

This week, Township Engineer Craig Kennard met with Ken Kolmer of CKS Engineers to discuss the Act 537 Plan Update and to give Mr. Kolmer GIS Data for New Britain Township. A question came up at the meeting regarding possible Township assistance with zoning, well and sewage information.

As per our discussion at the October 13, 2003 meeting, it was our understanding that the Township would provide GIS mapping data, and any additional billable Carroll Engineering time would be reimbursed to the Township by the Authority. This time was to be included in the Task Activity Report to be eligible for the 50% PaDEP reimbursement. Please let me know if this is also your understanding.

Thank you.

Very truly yours,

Carol Bigham, Acting Manager

c: Craig Kennard, Township Engineer

PART 2 ADMINISTRATIVE COMPLETENESS CHECKLIST

DEP Use Only	Indicate Page #(s) in Plan	In addition to the main body of the plan, the plan must include items one through eight listed below to be accepted for formal review by the department. Incomplete Plans will be returned unless the municipality is clearly requesting an advisory review.
_____	i-iv	1. **Table of Contents**
		2. **Plan Summary**
_____	1-2	A. Identify the proposed service areas and major problems evaluated in the plan. (Reference - Title 25, §71.21.a.7.i).
_____	2	B. Identify the alternative(s) chosen to solve the problems and serve the areas of need identified in the plan. Also, include any institutional arrangements necessary to implement the chosen alternative(s). (Reference Title 25 §71.21.a.7.ii).
_____	2	C. Present the estimated cost of implementing the proposed alternative (including the user fees) and the proposed funding method to be used. (Reference Title 25, §71.21.a.7.ii).
_____	2	D. Identify the municipal commitments necessary to implement the Plan. (Reference Title 25, §71.21.a.7.iii).
_____	2	E. Provide a schedule of implementation for the project that identifies the MAJOR milestones with dates necessary to accomplish the project to the point of operational status. (Reference Title 25, §71.21.a.7.iv).
_____	Appendix A	3. **Municipal Adoption: Original,** signed and sealed Resolution of Adoption by the municipality which contains, at a minimum, alternatives chosen and a commitment to implement the Plan in accordance with the implementation schedule. (Reference Title 25, §71.31.f) Section V.F. of the Planning Guide.
_____	Appendix C	4. **Planning Commission / County Health Department Comments**: Evidence that the municipality has requested, reviewed and considered comments by appropriate official planning agencies of the municipality, planning agencies of the county, planning agencies with area wide jurisdiction (where applicable), and any existing county or joint county departments of health. (Reference-Title 25, §71.31.b) Section V.E.1 of the Planning Guide.
_____	Appendix B	5. **Publication:** Proof of Public Notice which documents the proposed plan adoption, plan summary, and the establishment and conduct of a 30 day comment period. (Reference-Title 25, §71.31.c) Section V.E.2 of the Planning Guide.
_____	Appendix C	6. **Comments and Responses:** Copies of ALL written comments received and municipal response to EACH comment in relation to the proposed plan. (Reference-Title 25, §71.31.c) Section V.E.2 of the Planning Guide.
_____	2,49-50	7. **Implementation Schedule:** A complete project implementation schedule with milestone dates specific for each existing and future area of need. Other activities in the project implementation schedule should be indicated as occurring a finite number of days from a major milestone. (Reference-Title 25, §71.31.d) Section V.F. of the Planning Guide. Include dates for the future initiation of feasibility evaluations in the project's implementation schedule for areas proposing completion of sewage facilities for planning periods in excess of five years. (Reference Title 25, §71.21.c).
_____	Appendix C	8. **Consistency Documentation:** Documentation indicating that the appropriate agencies have received, reviewed and concurred with the method proposed to resolve identified inconsistencies within the proposed alternative and consistency requirements in 71.21.(a)(5)(i-iii). (Reference-Title 25, §71.31.e). Appendix B of the Planning Guide.

PART 3 GENERAL PLAN CONTENT CHECKLIST

DEP Use Only	Indicate Page #(s) in Plan		Item Required
____	4-7	I.	**Previous Wastewater Planning**
			A. Identify, describe and briefly analyze all past wastewater planning for its impact on the current planning effort:
____	4-7		1. Previously undertaken under the Sewage Facilities Act (Act 537). (Reference-Act 537, Section 5 §d.1).
____	4-6		2. Has not been carried out according to an approved implementation schedule contained in the plans. (Reference-Title 25, §71.21.a.5.i.A-D). Section V.F of the Planning Guide.
____	4-7		3. Is anticipated or planned by applicable sewer authorities or approved under a Chapter 94 Corrective Action Plan. (Reference-Title 25, §71.21.a.5.i.A&B). Section V.D. of the Planning Guide.
____	4-7		4. Through planning modules for new land development, planning "exemptions" and addenda. (Reference-Title 25, §71.21.a.5.i.A).
____	8-10 Exhibits	II.	**Physical and Demographic Analysis utilizing written description and mapping** (All items listed below require maps, and all maps should show all current lots and structures and be of appropriate scale to clearly show significant information).
____	8,11,Exhibit 2-1		A. Identification of planning area(s), municipal boundaries, Sewer Authority/Management Agency service area boundaries. (Reference-Title 25, §71.21.a.1.i).
____	8-9, Exhibit 3-4		B. Identification of physical characteristics (streams, lakes, impoundments, natural conveyance, channels, drainage basins in the planning area). (Reference-Title 25, §71.21.a.1.ii).
____	8, Exhibit 3-2		C. Soils - Analysis with description by soil type and soils mapping for areas not presently served by sanitary sewer service. Show areas suitable for in-ground onlot systems, elevated sand mounds, individual residential spray irrigation systems, and areas unsuitable for soil dependent systems. (Reference-Title 25, §71.21.a.1.iii). Show Prime Agricultural Soils and any locally protected agricultural soils. (Reference-Title 25, §71.21.a.1.iii).
____	9, Exhibit 3-3		D. Geologic Features - (1) Identification through analysis, (2) mapping and (3) their relation to existing or potential nitrate-nitrogen pollution and drinking water sources. Include areas where existing nitrate-nitrogen levels are in excess of 5 mg/L. (Reference-Title 25, §71.21.a.1.iii).
____	8, Exhibit 3-4		E. Topography - Depict areas with slopes that are suitable for conventional systems; slopes that are suitable for elevated sand mounds and slopes that are unsuitable for onlot systems. (Reference-Title 25, §71.21.a.1.ii).
____	10, Exhibit 3-6		F. Potable Water Supplies - Identification through mapping, description and analysis. Include public water supply service areas and available public water supply capacity and aquifer yield for groundwater supplies. (Reference-Title 25 §71.21.a.1.vi). Section V.C. of the Planning Guide.

____	9-10, Exhibit 3-1, Exhibit 3-5		G. Wetlands-Identify wetlands as defined in Title 25, Chapter 105 by description, analysis and mapping. Include National Wetland Inventory mapping and potential wetland areas per USDA, SCS mapped hydric soils. Proposed collection, conveyance and treatment facilities and lines must be located and labeled, along with the identified wetlands, on the map. (Reference-Title 25, §71.21.a.1.v). Appendix B, Section II.I of the Planning Guide.
____	11-17	III.	**Existing Sewage Facilities in the Planning Area - Identifying the Existing Needs**
			A. Identify, map and describe municipal and non-municipal, individual and community sewerage systems in the planning area including:
____	11-16		1. Location, size and ownership of treatment facilities, main intercepting lines, pumping stations and force mains including their size, capacity, point of discharge. Also include the name of the receiving stream, drainage basin, and the facility's effluent discharge requirements. (Reference-Title 25, §71.21a.2.i.A).
____	11-12		2. A narrative and schematic diagram of the facility's basic treatment processes including the facility's NPDES permitted capacity, and the Clean Streams Law permit number. (Reference-Title 25, §71.21.a.2.i.A).
____	15-16		3. A description of problems with existing facilities (collection, conveyance and/or treatment), including existing or projected overload under Title 25, Chapter 94 (relating to municipal wasteload management) or violations of the NPDES permit, Clean Streams Law permit, or other permit, rule or regulation of DEP. (Reference-Title 25, §71.21.a.2.i.B).
____	11-16		4. Details of scheduled or in-progress upgrading or expansion of treatment facilities and the anticipated completion date of the improvements. Discuss any remaining reserve capacity and the policy concerning the allocation of reserve capacity. Also discuss the compatibility of the rate of growth to existing and proposed wastewater treatment facilities. (Reference-Title 25, §71.21.a.4.i & ii).
____	11		5. A detailed description of the municipality's operation and maintenance requirements for small flow treatment facility systems, including the status of past and present compliance with these requirements and any other requirements relating to sewage management programs. (Reference-Title 25, §71.21.a.2.i.C).
____	11		6. Disposal areas, if other than stream discharge, and any applicable groundwater limitations. (Reference-Title 25, §71.21.a.4.i & ii).
____	17		B. Using DEP's publication titled *Sewage Disposal Needs Identification*, identify, map and describe areas that utilize individual and community onlot sewage disposal and, unpermitted collection and disposal systems ("wildcat" sewers, borehole disposal, etc.) and retaining tank systems in the planning area including:
____	17*		1. The types of onlot systems in use. (Reference-Title 25, §71.21.a.2.ii.A).
____	17*		2. A sanitary survey complete with description, map and tabulation of documented and potential public health, pollution, and operational problems (including malfunctioning systems) with the systems, including violations of local ordinances, the Sewage Facilities Act, the Clean Stream Law or regulations promulgated thereunder. (Reference-Title 25, §71.21.a.2.ii.B).
____	17*		3. A comparison of the types of onlot sewage systems installed in an area with the types of systems which are appropriate for the area according to soil, geologic conditions, topographic limitations sewage flows, and Title 25 Chapter 73 (relating to standards for sewage disposal facilities). (Reference-Title 25, §71.21.a.2.ii.C).

* Based upon records of Bucks County Health Department, Chalfont Borough and New Britain Township.

_____	17*	4. An individual water supply survey to identify possible contamination by malfunctioning onlot sewage disposal systems consistent with DEP's *Sewage Disposal Needs Identification* publication. (Reference-Title 25 §71.21.a.2.ii.B).
_____	17*	5. Detailed description of operation and maintenance requirements of the municipality for individual and small volume community onlot systems, including the status of past and present compliance with these requirements and any other requirements relating to sewage management programs. (Reference-Title 25, §71.21.a.2.i.C).
_____	12	C. Identify wastewater sludge and septage generation, transport and disposal methods. Include this information in the sewage facilities alternative analysis including:
_____	12	1. Location of sources of wastewater sludge or septage (Septic tanks, holding tanks, wastewater treatment facilities). (Reference-Title 25 §71.71).
_____	12	2. Quantities of the types of sludges or septage generated. (Reference-Title 25 §71.71).
_____	12	3. Present disposal methods, locations, capacities and transportation methods. (Reference-Title 25 §71.71).
_____	7, 18-28	**IV. Future Growth and Land Development**
		A. Identify and briefly summarize all municipal and county planning documents adopted pursuant to the Pennsylvania Municipalities Planning Code (Act 247) including:
_____	7, Exhibit 2-1	1. All land use plans and zoning maps that identify residential, commercial, industrial, agricultural, recreational and open space areas. (Reference-Title 25, §71.21.a.3.iv).
_____	7, Exhibit 2-1	2. Zoning or subdivision regulations that establish lot sizes predicated on sewage disposal methods. (Reference – Title 25§71.21.a.3.iv).
_____	8, Exhibit 3-1	3. All limitations and plans related to floodplain and stormwater management and special protection (Ch. 93) areas. (Reference-Title 25 §71.21.a.3.iv) Appendix B, Section II.F of the Planning Guide.
		B. Delineate and describe the following through map, text and analysis.
_____	23-24 Exhibit 4-1	1. Areas with existing development or plotted subdivisions. Include the name, location, description, total number of EDU's in development, total number of EDU's currently developed and total number of EDU's remaining to be developed (include time schedule for EDU's remaining to be developed). (Reference-Title 25, §71.21.a.3.i).
_____	23-24 Exhibit 2-1	2. Land use designations established under the Pennsylvania Municipalities Planning Code (35 P.S. 10101-11202), including residential, commercial and industrial areas. (Reference-Title 25,§71.21.a.3.ii). Include a comparison of proposed land use as allowed by zoning and existing sewage facility planning. (Reference-Title 25, §71.21.a.3.iv).
_____	23-24 Exhibit 5-1	3. Future growth areas with population and EDU projections for these areas using historical, current and future population figures and projections of the municipality. Discuss and evaluate discrepancies between local, county, state and federal projections as they relate to sewage facilities. (Reference-Title 25, §71.21.a.1.iv). (Reference-Title 25, §71.21.a.3.iii).

*Based upon records of Bucks County Health Department, Chalfont Borough and New Britain Township.

7, 18-28 Exhibit 2-1

4. Zoning, and/or subdivision regulations; local, county or regional comprehensive plans; and existing plans of any other agency relating to the development, use and protection of land and water resources with special attention to: (Reference-Title 25, §71.21.a.3.iv).
   --public ground/surface water supplies
   --recreational water use areas
   --groundwater recharge areas
   --industrial water use
   --wetlands

24, Exhibit 5-1

5. Sewage planning necessary to provide adequate wastewater treatment for five and ten year future planning periods based on projected growth of existing and proposed wastewater collection and treatment facilities. (Reference-Title 25, §71.21.a.3.v).

29-42

V. Identify Alternatives to Provide New or Improved Wastewater Disposal Facilities

A. Conventional collection, conveyance, treatment and discharge alternatives including:

29-30

1. The potential for regional wastewater treatment. (Reference-Title 25, §71.21.a.4).

29-30

2. The potential for extension of existing municipal or non-municipal sewage facilities to areas in need of new or improved sewage facilities. (Reference-Title 25, §71.21.a.4.i).

29-30

3. The potential for the continued use of existing municipal or non-municipal sewage facilities through one or more of the following: (Reference-Title 25, §71.21.a.4.ii).

29-30

   a. Repair. (Reference-Title 25, §71.21.a.4.ii.A).

29-30

   b. Upgrading. (Reference-Title 25, §71.21.a.4.ii.B).

29-30

   c. Reduction of hydraulic or organic loading to existing facilities. (Reference-Title 25, §71.71).

29-30

   d. Improved operation and maintenance. Reference-Title 25, §71.21.a.4.ii.C).

29-30

   e. Other applicable actions that will resolve or abate the identified problems. (Reference-Title 25, §71.21.a.4.ii.D).

29-30

4. Repair or replacement of existing collection and conveyance system components. (Reference-Title 25, §71.21.a.4.ii.A).

29-30

5. The need for construction of new community sewage systems including sewer systems and/or treatment facilities. (Reference-Title 25, §71.21.a.4.iii).

29-30

6. Use of innovative/alternative methods of collection/conveyance to serve needs areas using existing wastewater treatment facilities. (Reference-Title 25, §71.21.a.4.ii.B).

30-31

B. The use of individual sewage disposal systems including individual residential spray irrigation systems based on:

30-31

1. Soil and slope suitability. (Reference-Title 25, §71.21.a.2.ii.C).

30-31

2. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.21.a.2.ii.C).

30-31

3. The establishment of a sewage management program. (Reference-Title 25, §71.21.a.4.iv). See also Part "F" below.

30-31

4. The repair, replacement or upgrading of existing malfunctioning systems in

areas suitable for onlot disposal considering: (Reference-Title 25, §71.21.a.4).

30-31 a. Existing technology and sizing requirements of Title 25 Chapter 73. (Reference-Title 25, §73.31-73.72).

30-31 b. Use of expanded absorption areas or alternating absorption areas. (Reference-Title 25, §73.16).

30-31 c. Use of water conservation devices. (Reference-Title 25, §71.73.b.2.iii).

31 C. The use of small flow sewage treatment facilities or package treatment facilities to serve individual homes or clusters of homes with consideration of: (Reference-Title 25, §71.64.d).

31 1. Treatment and discharge requirements. (Reference-Title 25, §71.64.d).

31 2. Soil suitability. (Reference-Title 25, §71.64.c.I).

31 3. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.64.c.2).

31 4. Municipal, Local, Agency or other controls over operation and maintenance requirements through a Sewage Management Program. (Reference-Title 25, §71.64.d). See Part "F" below.

31 D. The use of community land disposal alternatives including:

31 1. Soil and site suitability. (Reference-Title 25, §71.21.a.2.ii.C).

31 2. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.21.a.2.ii.C).

31 3. Municipality, Local Agency or Other Controls over operation and maintenance requirements through a Sewage Management Program (Reference-Title25, §71.21.a.2.ii.C). See Part "F" below.

31 4. The rehabilitation or replacement of existing malfunctioning community land disposal systems. (See Part "V", B, 4, a, b, c above). See also Part "F" below.

32 E. The use of retaining tank alternatives on a temporary or permanent basis including: (Reference- Title 25, §71.21.a.4).

32 1. Commercial, residential and industrial use. (Reference-Title 25, §71.63.e).

32 2 Designated conveyance facilities (pumper trucks). (Reference-Title 25, §71.63.b.2).

32 3. Designated treatment facilities or disposal site. (Reference-Title 25, §71.63.b.2).

32 4. Implementation of a retaining tank ordinance by the municipality. (Reference-Title 25, §71.63.c.3). See Part "F" below.

32 5. Financial guarantees when retaining tanks are used as an interim sewage disposal measure. (Reference-Title 25, §71.63.c.2).

30-31 F. Sewage Management Programs to assure the future operation and maintenance of existing and proposed sewage facilities through:

30-32 1. Municipal ownership or control over the operation and maintenance of individual onlot sewage disposal systems, small flow treatment facilities, or other traditionally non-municipal treatment facilities. (Reference-Title 25, §71.21.a.4.iv).

30-32 2. Required inspection of sewage disposal systems on a schedule established by the municipality. (Reference-Title 25, §71.73.b.1.).

30-32 3. Required maintenance of sewage disposal systems including septic and aerobic treatment tanks and other system components on a schedule

established by the municipality. (Reference-Title 25, §71.73.b.2).

____ 30-32 4. Repair, replacement or upgrading of malfunctioning onlot sewage systems. (Reference-Title 25, §71.21.a.4.iv) and §71.73.b.5 through:

____ 30-32 a. Aggressive pro-active enforcement of ordinances that require operation and maintenance and prohibit malfunctioning systems. (Reference-Title 25, §71.73.b.5).

____ 30-32 b. Public education programs to encourage proper operation and maintenance and repair of sewage disposal systems.

____ 30-32 5. Establishment of joint municipal sewage management programs. (Reference-Title 25, §71.73.b.8).

____ 30-32 6. Requirements for bonding, escrow accounts, management agencies or associations to assure operation and maintenance for non-municipal facilities. (Reference-Title 25, §71.71).

____ **7** G. Non-structural comprehensive planning alternatives that can be undertaken to assist in meeting existing and future sewage disposal needs including: (Reference-Title 25, §71.21.a.4).

1. Modification of existing comprehensive plans involving:

____ 7 a. Land use designations. (Reference-Title 25, §71.21.a.4).

____ 7 b. Densities. (Reference-Title 25, §71.21.a.4).

____ 7 c. Municipal ordinances and regulations. (Reference-Title 25, §71.21.a.4).

____ 7 d. Improved enforcement. (Reference-Title 25, §71.21.a.4).

____ 7 e. Protection of drinking water sources. (Reference-Title 25, §71.21.a.4).

____ 7 2. Consideration of a local comprehensive plan to assist in producing sound economic and consistent land development. (Reference-Title 25, §71.21.a.4).

____ 7 3. Alternatives for creating or changing municipal subdivision regulations to assure long-term use of on-site sewage disposal that consider lot sizes and protection of replacement areas. (Reference-Title 25, §71.21.a.4).

____ 7 4. Evaluation of existing local agency programs and the need for technical or administrative training. (Reference-Title 25, §71.21.a.4).

____ 32 H. A no-action alternative which includes discussion of both short-term and long-term impacts on: (Reference-Title 25, §71.21.a.4).

____ 32 1. Water Quality/Public Health. (Reference-Title 25, §71.21.a.4).

____ 32 2. Growth potential (residential, commercial, industrial). (Reference-Title 25, §71.21.a.4).

____ 32 3. Community economic conditions. (Reference-Title 25, §71.21.a.4).

____ 32 4. Recreational opportunities. (Reference-Title 25, §71.21.a.4).

____ 32 5. Drinking water sources. (Reference-Title 25, §71.21.a.4).

____ 32 6. Other environmental concerns. (Reference-Title 25, §71.21.a.4).

____ **45-46** **VI. Evaluation of Alternatives**

A. Technically feasible alternatives identified in Section V of this check-list must be evaluated for consistency with respect to the following: (Reference-Title 25, §71.21.a.5.i.).

____ 45-46 1. Applicable plans developed and approved under **Sections 4 and 5 of the Clean Streams Law or Section 208 of the Clean Water Act** (33 U.S.C.A. 1288). (Reference-Title 25, §71.21.a.5.i.A). Appendix B, Section II.A of the

Planning Guide.

____ 45-46 2. Municipal wasteload management **Corrective Action Plans or Annual Reports** developed under PA Code, Title 25, Chapter 94. (Reference-Title 25, §71.21.a.5.i.B). The municipality's recent Wasteload Management (Chapter 94) Reports should be examined to determine if the proposed alternative is consistent with the recommendations and findings of the report. Appendix B, Section II.B of the Planning Guide.

____ 45-46 3. Plans developed under **Title II of the Clean Water Act** (33 U.S.C.A. 1281-1299) or **Titles II and VI of the Water Quality Act of 1987** (33 U.S.C.A 1251-1376). (Reference-Title 25, §71.21.a.5.i.C). Appendix B, Section II.E of the Planning Guide.

____ 45-46 4. **Comprehensive plans** developed under the Pennsylvania Municipalities Planning Code. (Reference-Title 25, §71.21.a.5.i.D). The municipality's comprehensive plan must be examined to assure that the proposed wastewater disposal alternative is consistent with land use and all other requirements stated in the comprehensive plan. Appendix B, Section II.D of the Planning Guide.

____ 45-46 5. **Antidegradation requirements** as contained in PA Code, Title 25, Chapters 93, 95 and 102 (relating to water quality standards, wastewater treatment requirements and erosion control) and the Clean Water Act. (Reference-Title 25, §71.21.a.5.i.E). Appendix B, Section II.F of the Planning Guide.

____ 45-46 6. **State Water Plans** developed under the Water Resources Planning Act (42 U.S.C.A. 1962-1962 d-18). (Reference-Title 25, §71.21.a.5.i.F). Appendix B, Section II.C of the Planning Guide.

____ 45-46 7. **Pennsylvania Prime Agricultural Land Policy** contained in Title 4 of the Pennsylvania Code, Chapter 7, Subchapter W. Provide narrative on local municipal policy and an overlay map on prime agricultural soils. (Reference-Title 25, §71.21.a.5.i.G). Appendix B, Section II.G of the Planning Guide.

____ 45-46 8. **County Stormwater Management Plans** approved by DEP under the Storm Water Management Act (32 P.S. 680.1-680.17). (Reference-Title 25, §71.21.a.5.i.H). Conflicts created by the implementation of the proposed wastewater alternative and the existing recommendations for the management of stormwater in the county Stormwater Management Plan must be evaluated and mitigated. If no plan exists, no conflict exists. Appendix B, Section II.H of the Planning Guide.

____ 45-46 9. **Wetland Protection.** Using wetland mapping developed under Checklist Section II.G, identify and discuss mitigative measures including the need to obtain permits for any encroachments on wetlands from the construction or operation of any proposed wastewater facilities. (Reference-Title 25, §71.21.a.5.i.I) Appendix B, Section II.I of the Planning Guide.

____ 45-46 10. **Protection of rare, endangered or threatened plant and animal species** as identified by the Pennsylvania Natural Diversity Inventory (PNDI). (Reference-Title 25, §71.21.a.5.i.J). Provide DEP with a copy of the completed Request For PNDI Search document. Also provide a copy of the response letter from the Department of Conservation and Natural Resources' Bureau of Forestry regarding the findings of the PNDI search. Appendix B, Section II.J of the Planning Guide.

____ 45-46 11. **Historical and archaeological resource protection** under P.C.S. Title 37, Section 507 relating to cooperation by public officials with the Pennsylvania Historical and Museum Commission. (Reference-Title 25, §71.21.a.5.i.K). Provide the department with a completed copy of a Cultural Resource Notice

request of the Bureau of Historic Preservation (BHP) to provide a listing of known historical sites and potential impacts on known archaeological and historical sites. Also provide a copy of the response letter from the BHP. Appendix B, Section II.K of the Planning Guide.

____ 45-46 Exhibit C B. Provide for the resolution of any inconsistencies in any of the points identified in Section VI.A. of this checklist by submitting a letter from the appropriate agency stating that the agency has received, reviewed and concurred with the resolution of identified inconsistencies. (Reference-Title 25, §71.21.a.5.ii). Appendix B of the Planning Guide.

____ 45-46 C. Evaluate alternatives identified in Section V of this checklist with respect to applicable water quality standards, effluent limitations or other technical, legislative or legal requirements. (Reference-Title 25, §71.21.a.5.iii).

____ 44 D. Provide cost estimates using present worth analysis for construction, financing, on going administration, operation and maintenance and user fees for alternatives identified in Section V of this checklist. Estimates shall be limited to areas identified in the plan as needing improved sewage facilities within five years from the date of plan submission. (Reference-Title 25, §71.21.a.5.iv).

____ 48-49 E. Provide an analysis of the funding methods available to finance the proposed alternatives evaluated in Section V of this checklist. Also provide documentation to demonstrate which alternative and financing scheme combination is the most cost-effective; and a contingency financial plan to be used if the preferred method of financing cannot be implemented. The funding analysis shall be limited to areas identified in the plan as needing improved sewage facilities within five years from the date of the plan submission. (Reference-Title 25, §71.21.a.5.v).

____ **48-49** F. Analyze the need for immediate or phased implementation of each alternative proposed in Section V of this checklist including: (Reference-Title 25, §71.21.a.5.vi).

____ 48-49 1. A description of any activities necessary to abate critical public health hazards pending completion of sewage facilities or implementation of sewage management programs. (Reference-Title 25, §71.21.a.5.vi.A).

____ 48-49 2. A description of the advantages, if any, in phasing construction of the facilities or implementation of a sewage management program justifying time schedules for each phase. (Reference-Title 25, §71.21.a.5.vi.B).

____ 47 G. Evaluate administrative organizations and legal authority necessary for plan implementation. (Reference - Title 25, §71.21.a.5.vi.D.).

____ **47** **VII. Institutional Evaluation**

A. Provide an analysis of all existing wastewater treatment authorities, their past actions and present performance including:

____ 47 1. Financial and debt status. (Reference-Title 25, §71.61.d.2).

____ 47 2. Available staff and administrative resources. (Reference-Title 25, §71.61.d.2)

____ 47 3. Existing legal authority to:

____ 47 a. Implement wastewater planning recommendations. (Reference-Title 25, §71.61.d.2).

____ 47 b. Implement system-wide operation and maintenance activities. (Reference-Title 25, §71.61.d.2).

____ 47 c. Set user fees and take purchasing actions. (Reference-Title 25, §71.61.d.2).

____ 47 d. Take enforcement actions against ordinance violators. (Reference-Title 25,

§71.61.d.2).

47 e. Negotiate agreements with other parties. (Reference-Title 25, §71.61.d.2).

47 f. Raise capital for construction and operation and maintenance of facilities. (Reference-Title 25,§71.61.d.2).

47 B. Provide an analysis and description of the various institutional alternatives necessary to implement the proposed technical alternatives including:

47 1. Need for new municipal departments or municipal authorities. (Reference-Title 25, §71.61.d.2).

47 2. Functions of existing and proposed organizations (sewer authorities, onlot maintenance agencies, etc.). (Reference-Title 25, §71.61.d.2).

47 3. Cost of administration, implementability, and the capability of the authority/agency to react to future needs. (Reference-Title 25, §71.61.d.2).

47 C. Describe all necessary administrative and legal activities to be completed and adopted to ensure the implementation of the recommended alternative including:

47 1. Incorporation of authorities or agencies. (Reference-Title 25, §71.61.d.2).

47 2. Development of all required ordinances, regulations, standards and inter-municipal agreements. (Reference-Title 25, §71.61.d.2).

47 3. Description of activities to provide rights-of-way, easements and land transfers. (Reference-Title 25, §71.61.d.2).

47 4. Adoption of other municipal sewage facilities plans. (Reference-Title 25, §71.61.d.2).

47 5. Any other legal documents. (Reference-Title 25, §71.61.d.2).

47 6. Dates or timeframes for items 1-5 above on the project's implementation schedule.

47 D. Identify the proposed institutional alternative for implementing the chosen technical wastewater disposal alternative. Provide justification for choosing the specific institutional alternative considering administrative issues, organizational needs and enabling legal authority. (Reference-Title 25, §71.61.d.2).

49-50 **VIII. Implementation Schedule and Justification for Selected Technical & Institutional Alternatives**

A. Identify the technical wastewater disposal alternative which best meets the wastewater treatment needs of each study area of the municipality. Justify the choice by providing documentation which shows that it is the best alternative based on:

49-50 1. Existing wastewater disposal needs. (Reference-Title 25, §71.21.a.6).

49-50 2. Future wastewater disposal needs. (five and ten years growth areas). (Reference-Title 25, §71.21.a.6).

49-50 3. Operation and maintenance considerations. (Reference-Title 25, §71.21.a.6).

49-50 4. Cost-effectiveness. (Reference-Title 25, §71.21.a.6).

49-50 5. Available management and administrative systems. (Reference-Title 25, §71.21.a.6).

49-50 6. Available financing methods. (Reference-Title 25, §71.21.a.6).

_____ 49-50 7. Environmental soundness and compliance with natural resource planning and preservation programs. (Reference-Title 25, §71.21.a.6)

_____ 49-50 B. Designate and describe the capital financing plan chosen to implement the selected alternative(s). Designate and describe the chosen back-up financing plan. (Reference-Title 25, §71.21.a.6)

_____ 49-50 C. Designate and describe the implementation schedule for the recommended alternative, including justification for any proposed phasing of construction or implementation of a Sewage Management Program. (Reference – Title 25 §71.31d)

IX. Environmental Report (ER) generated from the Uniform Environmental Review Process (UER)

_____ N/A* A. Complete an ER as required by the UER process and as described in the DEP Technical Guidance 381-5511-111. Include this document as "Appendix A" to the Act 537 Plan Update Revision. Note: *An ER is required only for Wastewater projects proposing funding through any of the funding sources identified in the UER.*

* Not Applicable as determined at pre-planning meeting of 9/10/03.

PENNVEST I.D. No. _____

ADDITIONAL REQUIREMENTS FOR PENNVEST PROJECTS

Municipalities that propose to implement their official sewage facilities plan updates with PENNVEST funds must meet six additional requirements to be eligible for such funds. See A Guide for Preparing Act 537 Update Revisions (362-0300-003), Appendix N for greater detail or contact the DEP regional office serving your county listed in Appendix J of the same publication.

DEP Use Only	Indicate Page #(s) in Plan	Item Required
_____	N/A	1. Environmental Impact Assessment. (Planning Phase) The Uniform Environment Review (UER) replaces the Environmental Impact Assessment that was a previous requirement for PENNVEST projects.
_____	N/A	2. Cost Effectiveness (Planning Phase) The cost-effectiveness analysis should be a present-worth (or equivalent uniform annual) cost evaluation of the principle alternatives using the interest rate that is published annually by the Water Resources Council. Normally, for PENNVEST projects the applicant should select the most cost-effective alternative based upon the above analysis. Once the alternative has been selected the user fee estimates should be developed based upon interest rates and loan terms of the selected funding method.
_____		3. Second Opinion Project Review. (Design Phase)
_____		4. Minority Business Enterprise/Women's Business Enterprise (Construction Phase)
_____		5. Civil Rights. (Construction Phase)
_____		6. Initiation of Operation/Performance Certification. (Post-construction Phase)

APPENDIX E

PA DEP APPROVAL CORRESPONDENCE

Pennsylvania Department of Environmental Protection

2 East Main Street
Norristown, PA 19401

DEC 15 2006

Southeast Regional Office

484-250-5970
Fax: 484-250-5971

David Drye, Manager
Chalfont Borough
40 N Main St.
Chalfont, PA 18914

John Cornelius, Manager
New Britain Township
207 Park Avenue
Chalfont, PA 18914

Stephanie J. Mason, Manager
Doylestown Township
425 Wells Road
Doylestown, PA 18901

Re: Act 537 Plan Update
Chalfont-New Britain Township Joint
Sewage Authority Service Area
Status: ISSUED
APS Id. 572794 AUTH Id. 618207
New Britain Township, Bucks County

Dear Messers. Drye & Cornelius and Ms. Mason:

We have completed our review of your municipality's updated official sewage facilities plan titled "Act 537 Sewage Facilities Plan Update for Chalfont-New Britain Township Joint Sewage Authority (CNBTJSA) Service Area", as prepared by CKS Engineers, Inc., dated February 8, 2005. The review was conducted in accordance with the provisions of the Pennsylvania Sewage Facilities Act.

Approval of the plan is hereby granted. This approval provides for the following:

1. The CNBTJSA Wastewater Treatment Facility will be expanded from its current capacity of 4.0 MGD annual average flow to a capacity of 4.44 MGD annual average flow. Construction of the improvements associated with the wastewater treatment facility expansion will occur at the CNBTJSA facility site, which is located in Doylestown Township.

2. The expanded CNBTJSA Wastewater Treatment Facility will provide adequate sewage treatment capacity to serve Chalfont Borough's current unconnected flows and its 10-year needs, as listed in Table 6-5 of the plan. These additional flows total 59,250 gallons per day.

3. The expanded CNBTJSA Wastewater Treatment Facility will also provide adequate sewage treatment capacity to serve New Britain Township's current unconnected flows, its projected flows within the existing sewer service area and the projected flows within the expanded sewer service area, as listed in Table 6-5 of the plan. These additional flows total 381,000 gallons per day.

4. New Britain Township's public sewer service area will be expanded to include the areas shown on Figure 5-1 of the plan.

We note that this Act 537 plan update provides only for the expansion of the CNBTJSA Wastewater Treatment Facility and the conceptual expansion of public sewer service areas within New Britain Township. No construction is proposed within the expanded New Britain Township sewer service areas at this time. New Britain Township must complete additional sewage facilities planning prior to the construction of any new sewerage facilities within the expanded sewer service areas and for the expansion of any of the Authority's pump stations within its borders.

The Chalfont-New Britain Township Joint Sewage Authority must secure a Clean Streams Law permit from the Department for the construction of the proposed wastewater treatment facility expansion and an amended NPDES permit for the facility's increased discharge.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE; HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

If you have any questions, please contact Elizabeth Mahoney of this office.

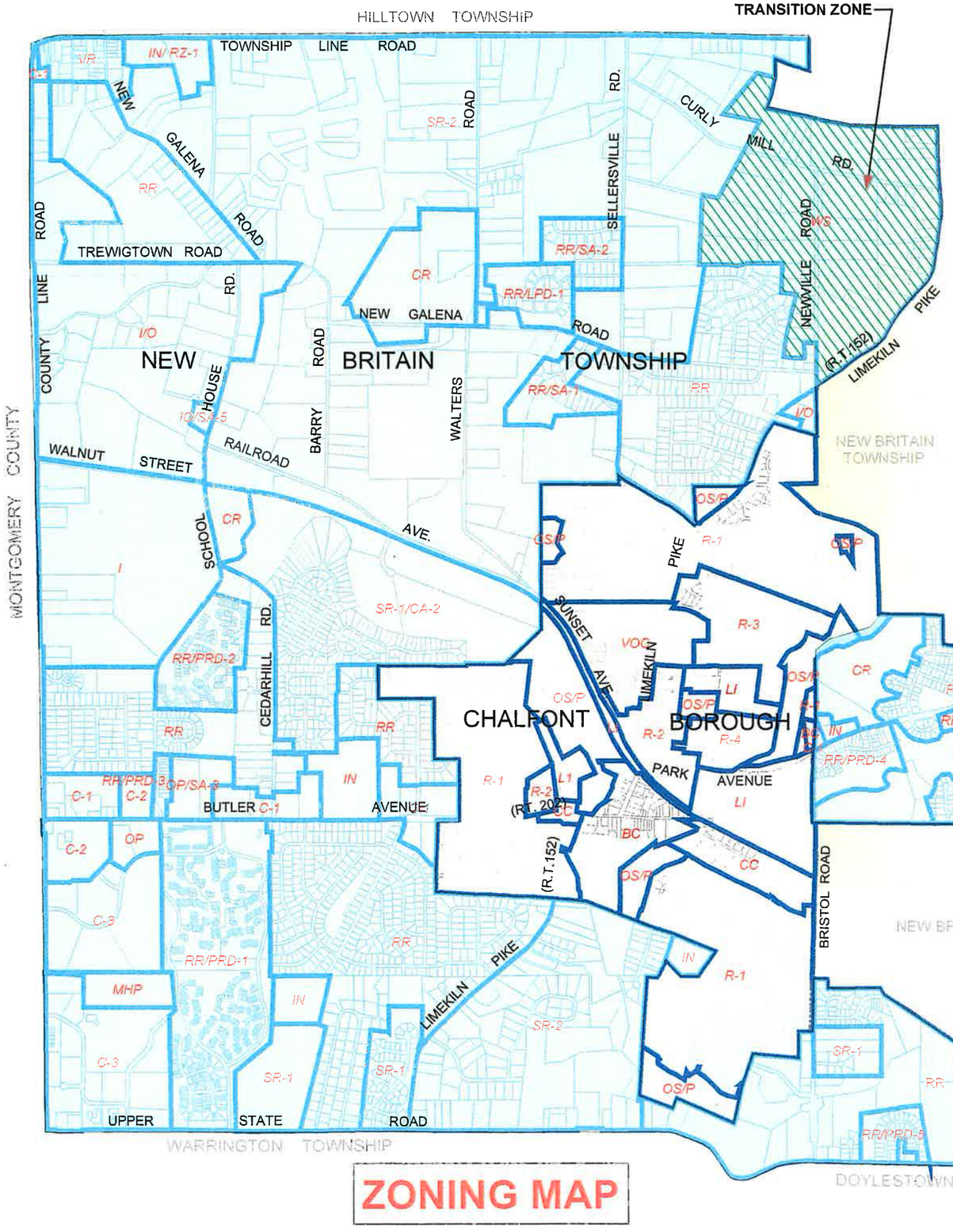
Sincerely,

Jenifer Fields, P.E.
Regional Manager
Water Management

cc: Bucks County Planning Commission
Bucks County Health Department
Mr. Kollmer - CKS Engineers, Inc.
Mr. Schmidt - Chalfont-New Britain Township Joint Sewage Authority
Mr. Argue - Bucks County water and sewer Authority
Ms. Mahoney
Mr. Gelburd, Esquire
Ms. Moore
Ms. Grant
RCSOB, 11th Floor, Sewage Facilities, Attn.: John McHale
Planning Section
Re

EXHIBITS

EXHIBIT	TITLE
2-1	ZONING MAP
3-1	WETLAND AND FLOODPLAIN MAP
3-2	SOILS MAP
3-3	GEOLOGIC MAP
3-4	TOPOGRAPHIC MAP/STEEP SLOPES
3-5	ALLUVIAL AND HYDRIC SOILS MAP
3-6	PUBLIC WATER SERVICE AREAS
4-1	EXISTING SEWERAGE FACILITIES AND SERVICE AREAS
5-1	SEWERAGE FACILITIES SERVICE AREA EXPANSION MAP



ZONING MAP

Legend

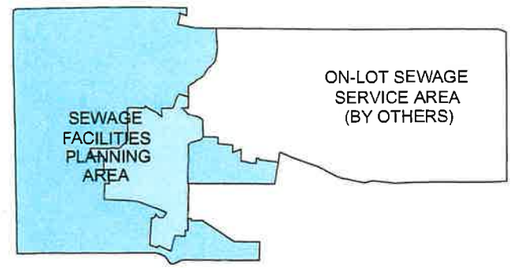
Zoning

CHALFONT BOROUGH

R-1	Suburban Residential Disrict
R-2	Village Residential District
R-3	Planned Residential Development
R-4	Small Lot Single Family Residential District
BC	Borough Commercial District
CC	Corridor Commercial District
VOC	Village Office Commercial District
LI	Light Industrial District
OS/P	Open Space/Parkland District

NEW BRITAIN TOWNSHIP

CR	Conservation and Recreation District
WS	Watershed District
SR-1	Single Family Residential 1 District
SR-2	Single Family Residential 2 District
RR	Residential District
VR	Village Residential District
MHP	Manufactured Home Park District
C-1	Commercial District
C-2	Commercial District
C-3	Commercial District
OP	Office Park District
IN	Institutional District
I	Industrial District
IO	Industrial Office District
CA-1	Fairwoods Subdivision
CA-2	Cedar Hill Road Subdivision
SA-1	Tower Hill Subdivision
SA-2	Tower Hill Meadows Subdivison
SA-3	Commerce Bank/Kindercare Land Development
SA-5	M&N Homes Lot #3 Land Development
PRD-1	Highlands Subdivision
PRD-2	Rocky Meadow Subdivision
PRD-3	Hunter Way Subdivion
PRD-4	Forest Park Subdivision
PRD-5	Cassel/Bank Subdivision
LPD-1	Twin Maples Subdivision
RZ-1	Line Lexington Mennonite Church



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH

N.T.S.



0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

DATA SOURCE

MAPPING FOR NEW BRITAIN TOWNSHIP
SUPPLIED BY CARROLL ENGINEERING CORP.

MAPPING FOR CHALFONT BOROUGH
TAKEN FROM THE CHALFONT BOROUGH ZONING ORDINANCE
UPDATE 2000

Rev. No.	Date	Description

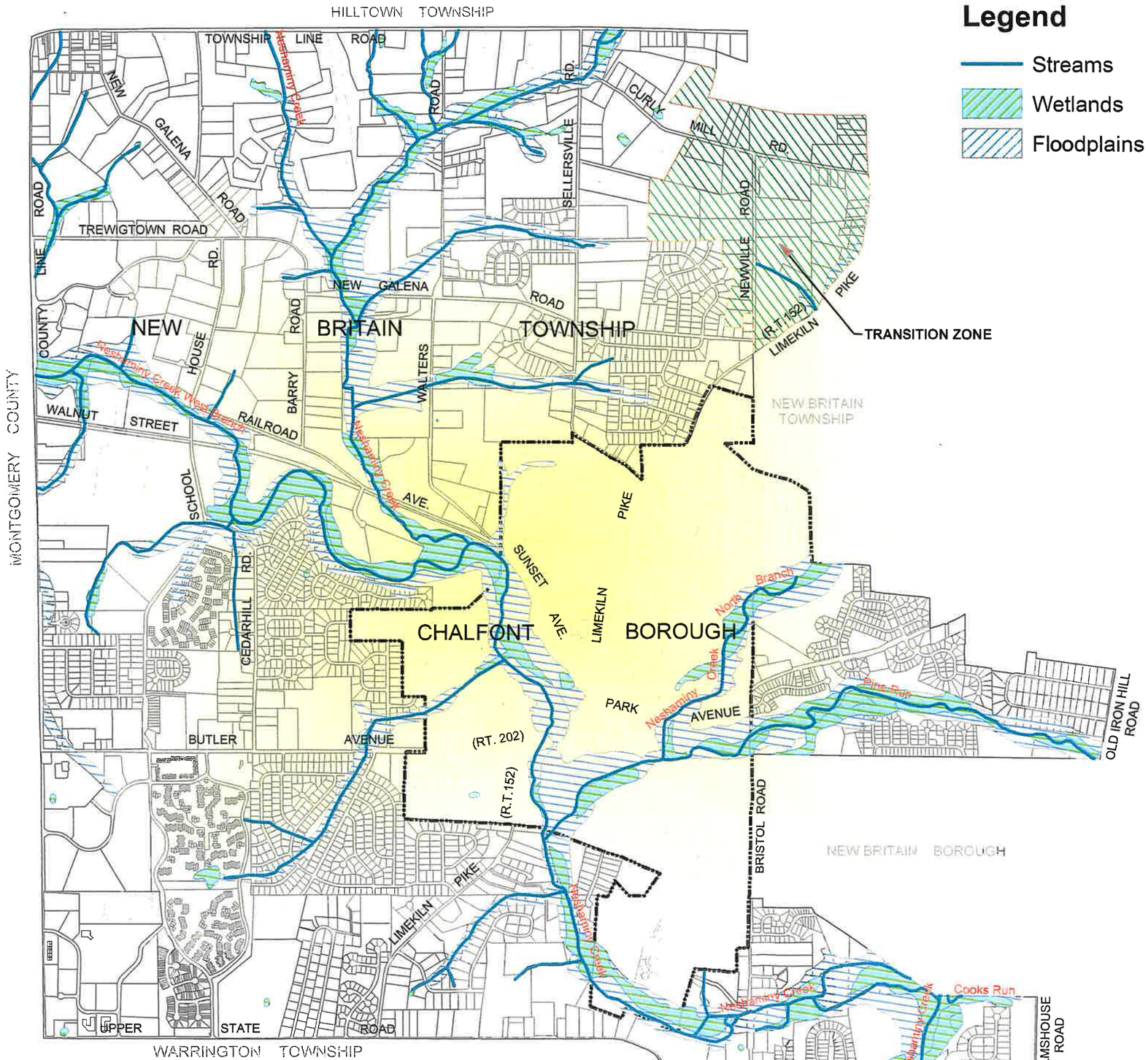
ZONING MAP

ACT 537 SEWAGE FACILITIES PLANNING AREA
PREPARED FOR
CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

Chalfont Borough & New Britain Township Bucks County, Pennsylvania

CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0500

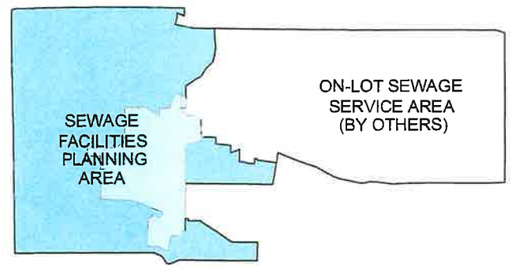
Date:	Scale:	Drawn By:	Plan No.	Exhibit No.
NOV. 2004	AS NOTED	CJ	9144	2-1
		Checked By: KGK		



WETLAND AND FLOODPLAIN MAP

Legend

- Streams
- Wetlands
- Floodplains



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH

N.T.S.



0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

DATA SOURCE

MAPPING FOR NEW BRITAIN TOWNSHIP SUPPLIED BY CARROLL ENGINEERING CORP.

FLOODPLAIN MAPPING FOR CHALFONT BOROUGH SUPPLIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

WETLAND MAPPING FOR CHALFONT BOROUGH TAKEN FROM THE NATIONAL WETLANDS INVENTORY (NWI) MAPS

Rev. No.	Date	Description

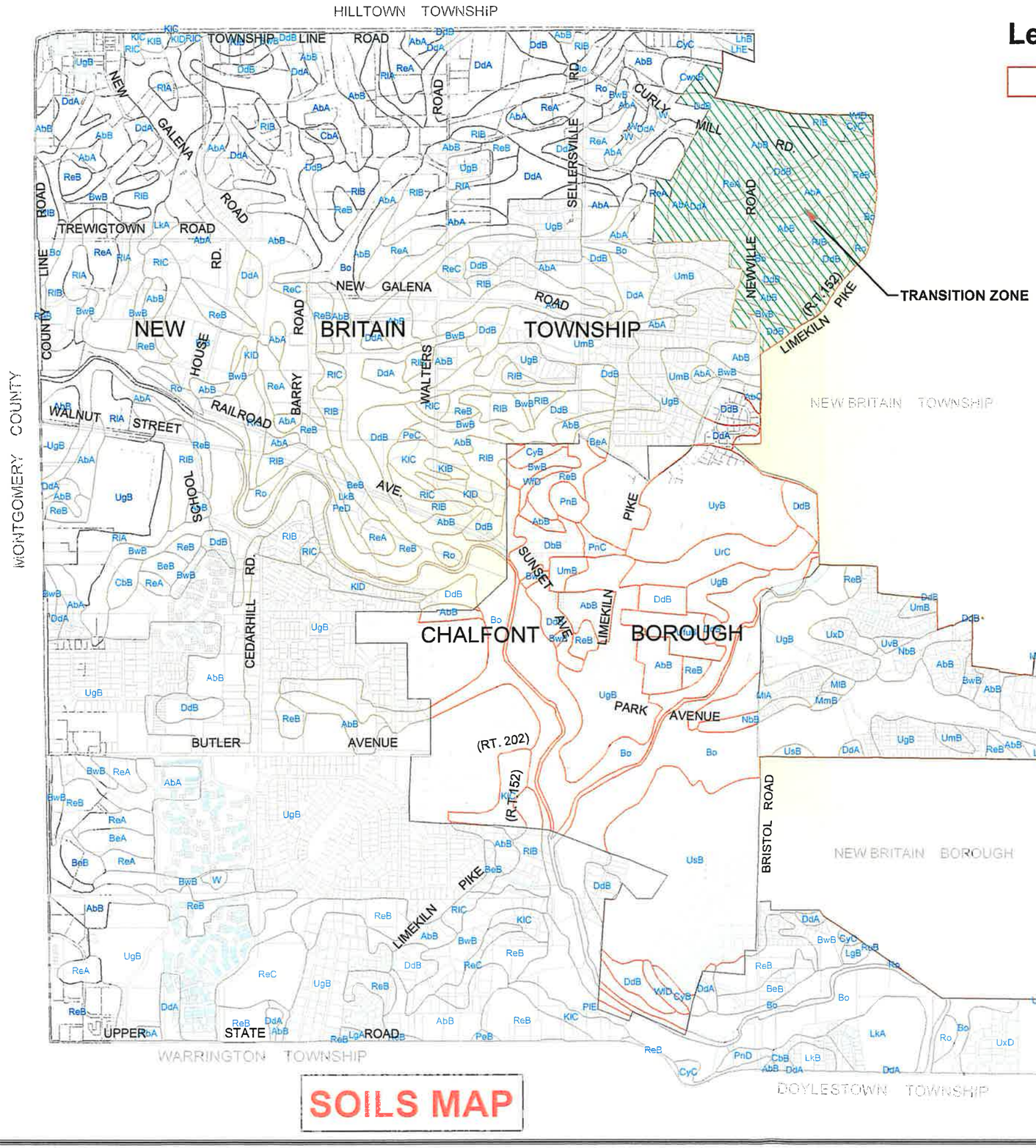
WETLAND AND FLOODPLAIN MAP

ACT 537 SEWAGE FACILITIES PLANNING AREA PREPARED FOR CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

Chalfont Borough & New Britain Township, Bucks County, Pennsylvania

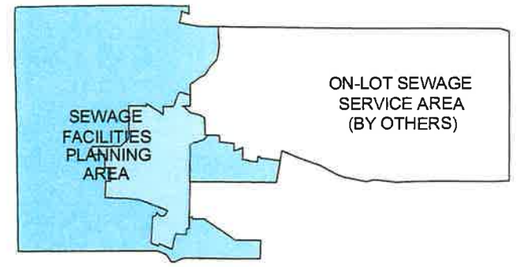
CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0600

Date:	Scale:	Drawn By:	Plan No.	Exhibit No.
NOV. 2004	AS NOTED	CJ	9144	3-1
		Checked By: KGK		



Legend

Soils



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH

N.T.S.

0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

DATA SOURCE

MAPPING FOR NEW BRITAIN TOWNSHIP
SUPPLIED BY CARROLL ENGINEERING CORP.

MAPPING FOR CHALFONT BOROUGH
TAKEN FROM THE SOIL SURVEY OF BUCKS COUNTY, PENNSYLVANIA
SEPTEMBER - 2002

Rev. No.	Date	Description

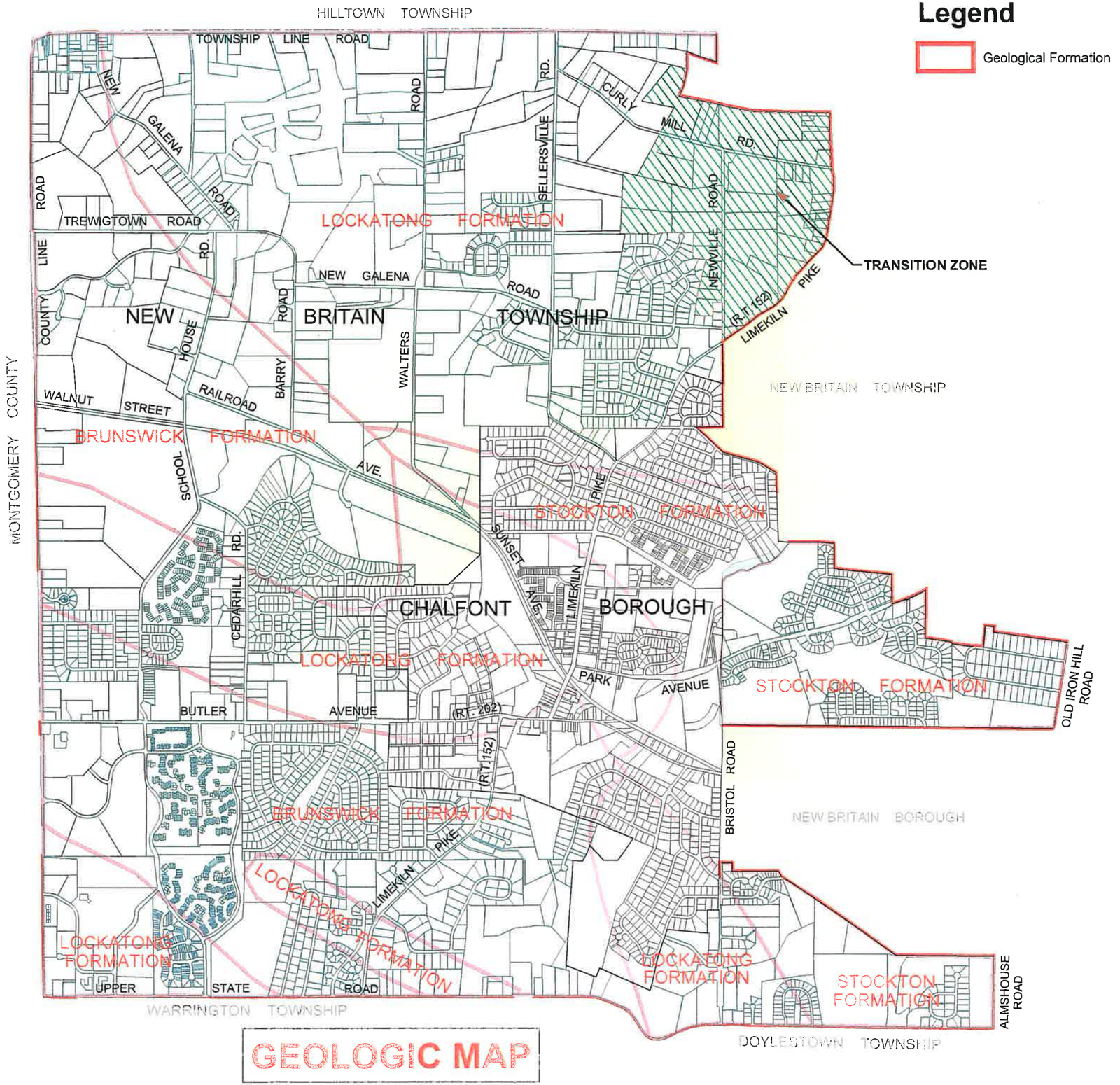
SOILS MAP

ACT 537 SEWAGE FACILITIES PLANNING AREA PREPARED FOR CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

Chalfont Borough & New Britain Township, Bucks County, Pennsylvania

CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0600

Date:	Scale:	Drawn By:	Plan No.	Exhibit No.
NOV. 2004	AS NOTED	CJ	9144	3-2
		Checked By: KGK		



GEOLOGIC MAP

Legend

Geological Formation



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH

N.T.S.



0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

DATA SOURCE

MAPPING FOR NEW BRITAIN TOWNSHIP
SUPPLIED BY CARROLL ENGINEERING CORP.

MAPPING FOR CHALFONT BOROUGH
TAKEN FROM THE U.S. GEOLOGIC SURVEY (USGS) MAPS

Rev. No.	Date	Description

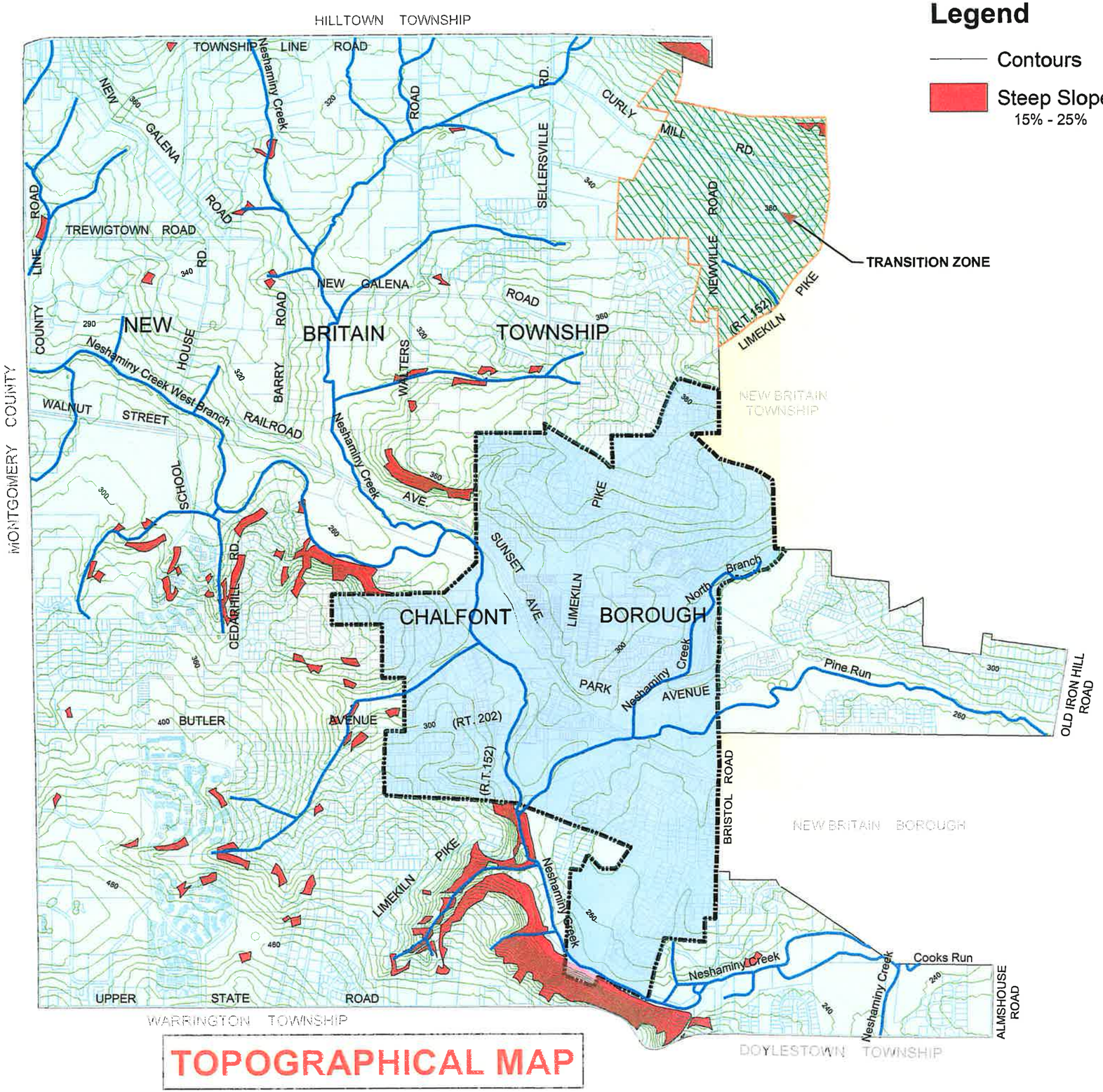
GEOLOGIC MAP

ACT 537 SEWAGE FACILITIES PLANNING AREA PREPARED FOR CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

Chalfont Borough & New Britain Township, Bucks County, Pennsylvania

CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0600

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NOV. 2004	AS NOTED	CJ	9144	3-3
		Checked By: KGK		

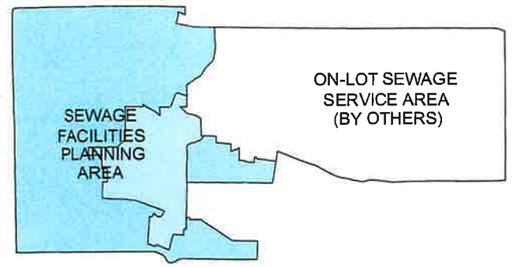


TOPOGRAPHICAL MAP

Legend

Contours

Steep Slope
15% - 25%



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH
N.T.S.

N

0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

DATA SOURCE

STEEP SLOPES BASED UPON SOIL SURVEY OF BUCKS COUNTY, PENNSYLVANIA - SEPTEMBER 2002

MAPPING FOR NEW BRITAIN TOWNSHIP SUPPLIED BY CARROLL ENGINEERING CORP.

TOPOGRAPHIC INFORMATION FOR CHALFONT BOROUGH TAKEN FROM USGS QUADRANGLE MAPS

Rev. No.	Date	Description

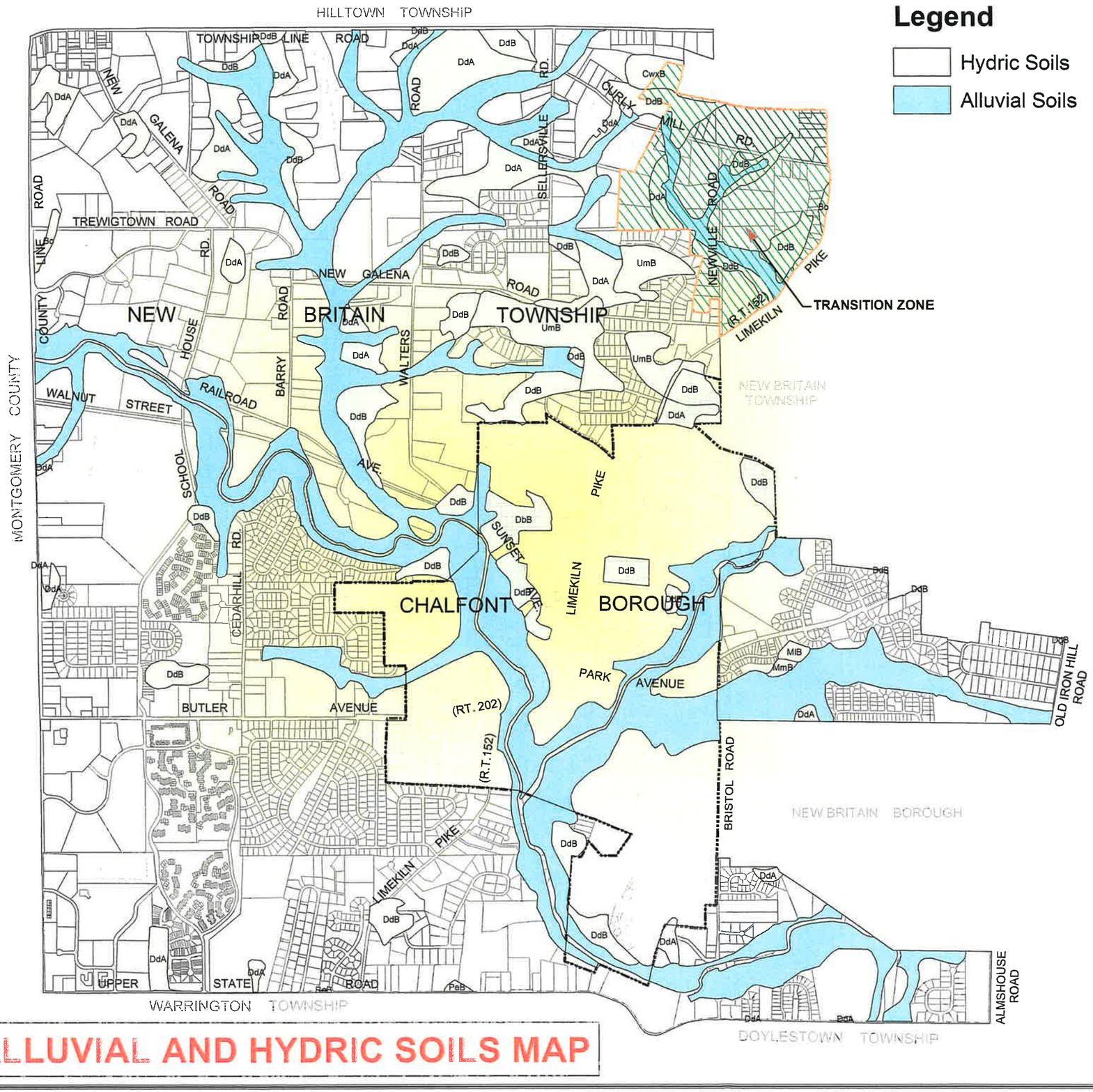
TOPOGRAPHIC MAP / STEEP SLOPES

ACT 537 SEWAGE FACILITIES PLANNING AREA PREPARED FOR CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

Chalfont Borough & New Britain Township, Bucks County, Pennsylvania

CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0600

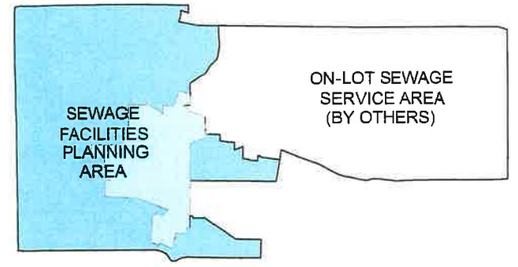
Date:	Scale:	Drawn By:	Plan No.	Exhibit No.
NOV. 2004	AS NOTED	CJ	9144	3-4
		Checked By: KGK		



ALLUVIAL AND HYDRIC SOILS MAP

Legend

- Hydric Soils
- Alluvial Soils



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH

N.T.S.

N

W E

S

0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

DATA SOURCE

MAPPING FOR NEW BRITAIN TOWNSHIP
SUPPLIED BY CARROLL ENGINEERING CORP.

MAPPING FOR CHALFONT BOROUGH
SUPPLIED BY THE SOIL SURVEY OF BUCKS COUNTY,
PENNSYLVANIA - SEPTEMBER 2002

Rev. No.	Date	Description

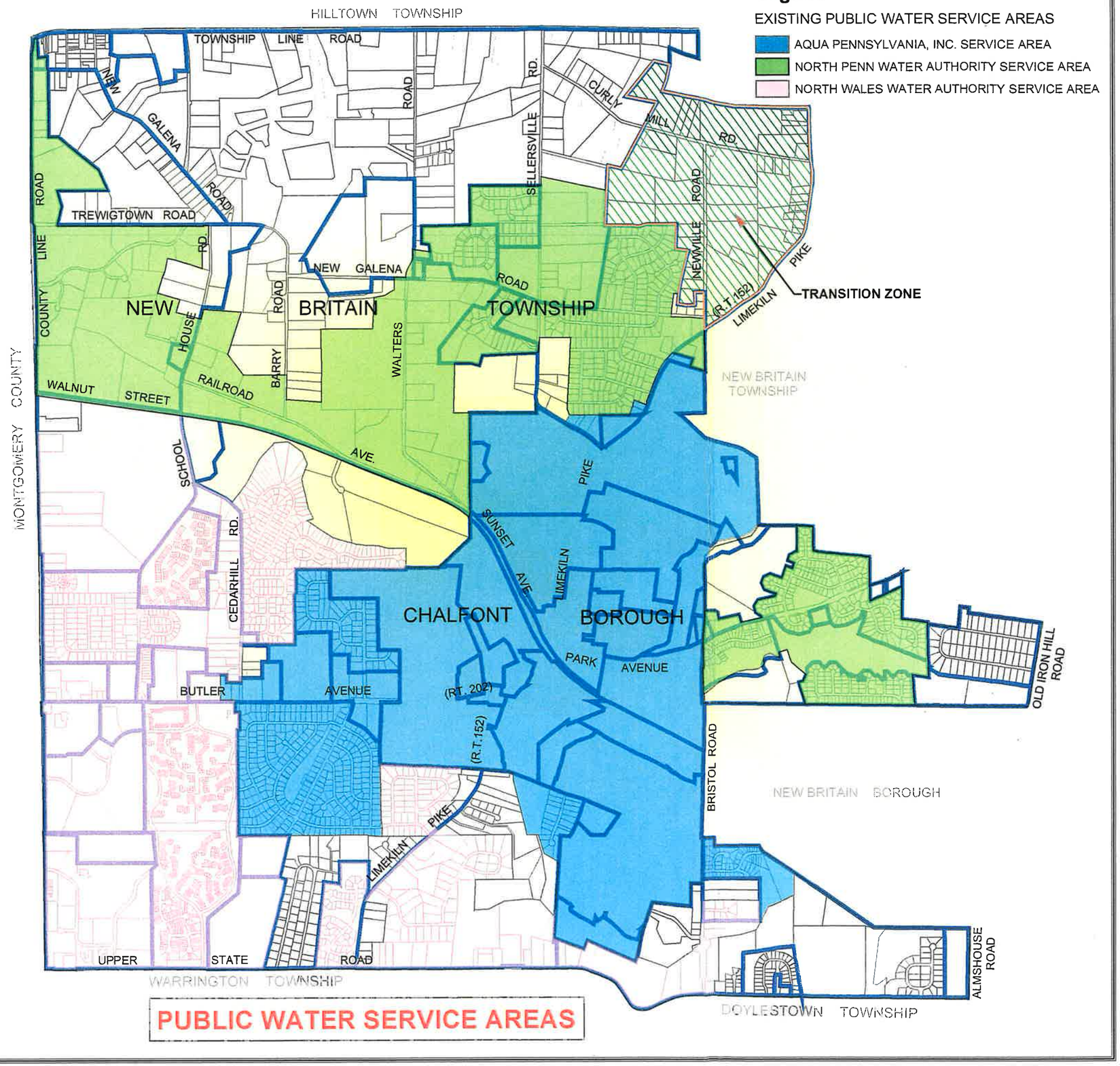
ALLUVIAL AND HYDRIC SOILS MAP

ACT 537 SEWAGE FACILITIES PLANNING AREA PREPARED FOR CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

Chalfont Borough & New Britain Township, Bucks County, Pennsylvania

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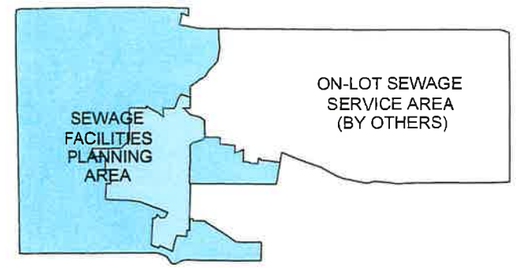
Date:	Scale:	Drawn By:	Plan No.	Exhibit No.
NOV. 2004	AS NOTED	CJ	9144	3-5
		Checked By: KGK		



Legend

EXISTING PUBLIC WATER SERVICE AREAS

- AQUA PENNSYLVANIA, INC. SERVICE AREA
- NORTH PENN WATER AUTHORITY SERVICE AREA
- NORTH WALES WATER AUTHORITY SERVICE AREA



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH

N.T.S.



0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

PUBLIC WATER SERVICE AREAS

DATA SOURCE

MAPPING FOR NEW BRITAIN TOWNSHIP
SUPPLIED BY CARROLL ENGINEERING CORP.

MAPPING FOR CHALFONT BOROUGH
TAKEN FROM THE CHALFONT BOROUGH ZONING ORDINANCE
UPDATE 2000

Rev. No.	Date	Description

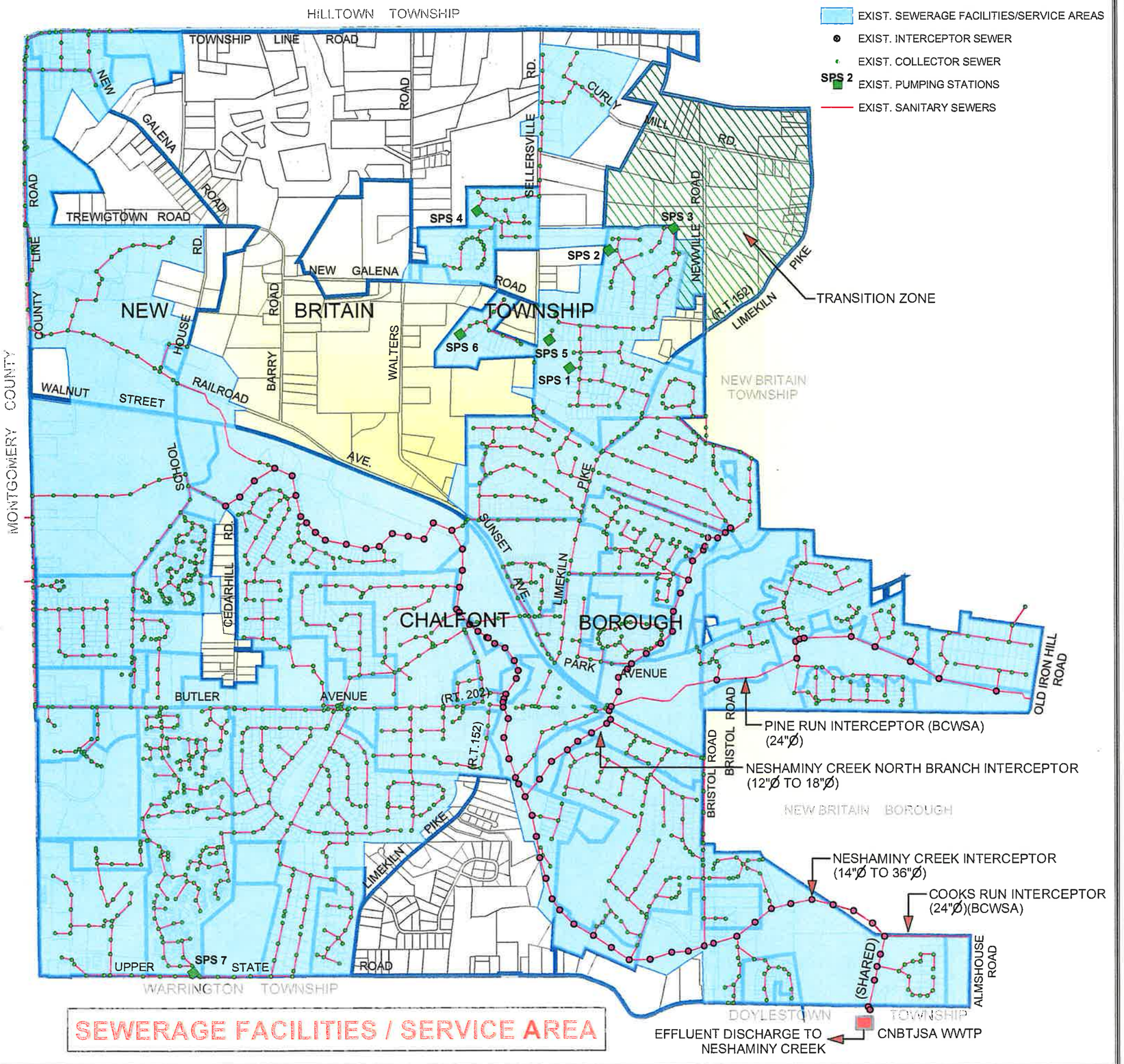
PUBLIC WATER SERVICE AREAS

ACT 537 SEWAGE FACILITIES PLANNING AREA PREPARED FOR CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

Chalfont Borough & New Britain Township Bucks County, Pennsylvania

CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0600

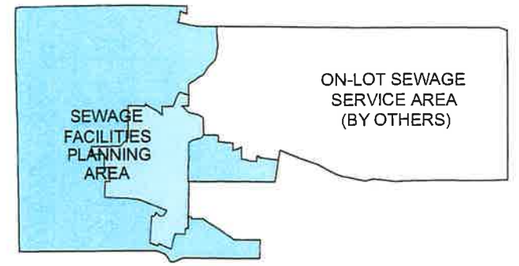
Date:	Scale:	Drawn By:	Plan No.	Exhibit No.
NOV. 2004	AS NOTED	CJ	9144	3-6
		Checked By: KCK		



SEWERAGE FACILITIES / SERVICE AREA

Legend

- EXIST. SEWERAGE FACILITIES/SERVICE AREAS
- EXIST. INTERCEPTOR SEWER
- EXIST. COLLECTOR SEWER
- SPS 2 EXIST. PUMPING STATIONS
- EXIST. SANITARY SEWERS



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH
N.T.S.



0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

DATA SOURCE

MAPPING FOR NEW BRITAIN TOWNSHIP
SUPPLIED BY CARROLL ENGINEERING CORP.

MAPPING FOR CHALFONT BOROUGH
TAKEN FROM THE CHALFONT BOROUGH ZONING ORDINANCE UPDATE 2000

Rev. No.	Date	Description

EXISTING SEWERAGE FACILITIES AND SERVICE AREAS

ACT 537 SEWAGE FACILITIES PLANNING AREA PREPARED FOR CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

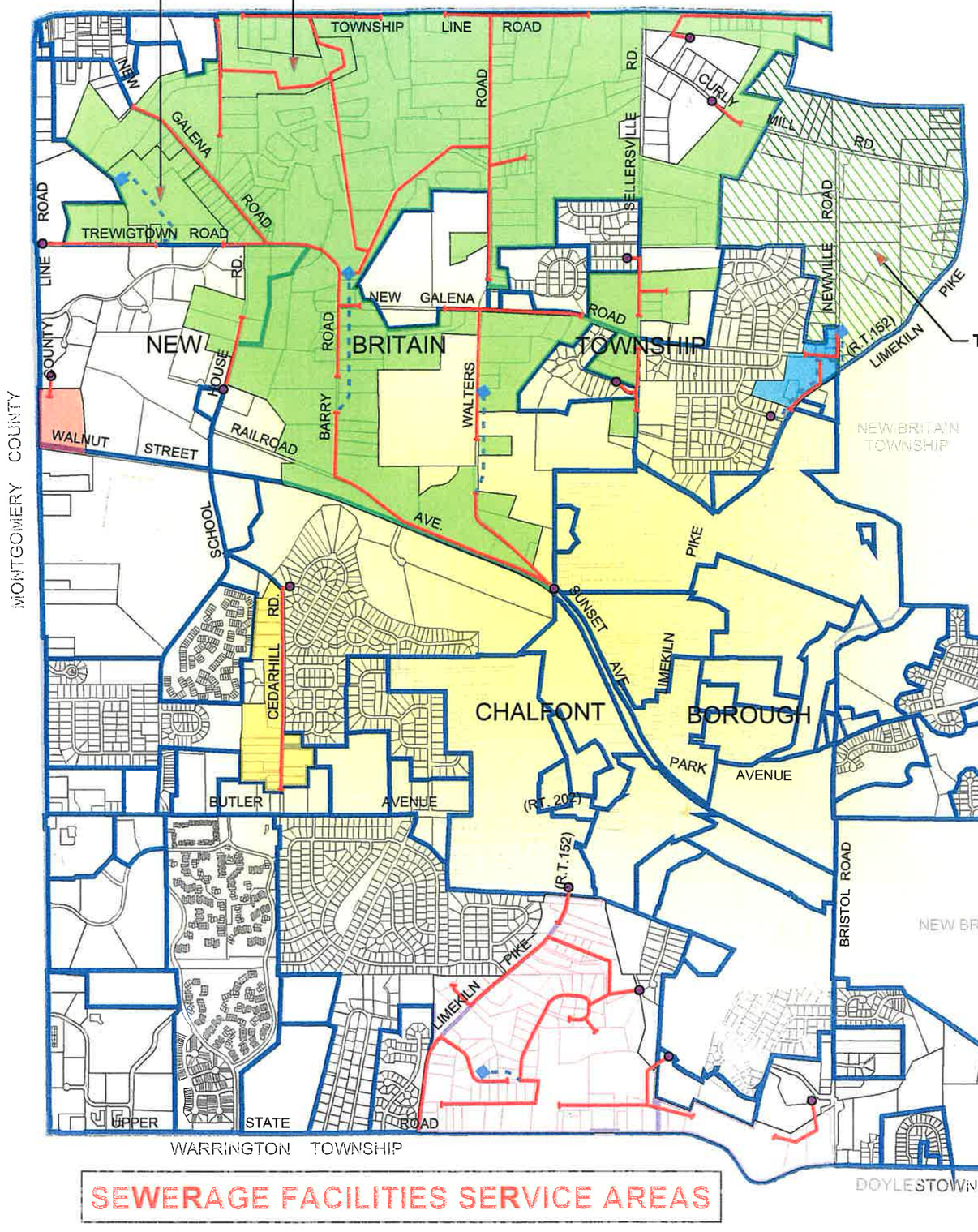
Chalfont Borough & New Britain Township Bucks County, Pennsylvania

CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0600

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NOV. 2004	AS NOTED	CJ	9144	4-1
		Checked By: KGK		

LOH/HAGEY/DICARLANTONIO TRACTS - LAND DEVELOPMENT

"BARCLAY ROAD SUBDIVISION"



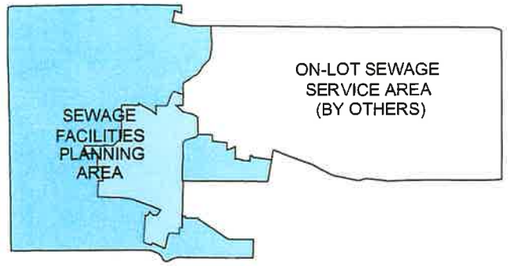
TRANSITION ZONE

SEWERAGE FACILITIES SERVICE AREAS

LEGEND

PROPOSED 10-YEAR SEWERAGE FACILITIES SERVICE AREAS

- CEDAR HILL ROAD AREA
- COUNTY LINE ROAD/WALNUT STREET AREA
- EAST AREA
- LIMEKILN PIKE/NEWVILLE ROAD AREA
- WEST AREA
- SEWER MAIN EXTENSION
- CONNECTION TO EXISTING SEWER MAIN
- SEWAGE PUMPING STATION
- FORCE MAIN



NEW BRITAIN TOWNSHIP & CHALFONT BOROUGH

N.T.S.



0 1,000 2,000 4,000 6,000 feet

SCALE: 1"=2000'

DATA SOURCE

MAPPING FOR NEW BRITAIN TOWNSHIP
SUPPLIED BY CARROLL ENGINEERING CORP.

MAPPING FOR CHALFONT BOROUGH
TAKEN FROM THE CHALFONT BOROUGH ZONING ORDINANCE
UPDATE 2000

Rev. No.	Date	Description

SEWERAGE FACILITIES SERVICE AREA EXPANSION MAP

ACT 537 SEWAGE FACILITIES PLANNING AREA PREPARED FOR CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY

Chalfont Borough & New Britain Township Bucks County, Pennsylvania

CKS Engineers, Inc.
88 South Main Street, Doylestown, PA 18901
(215) 340-0600

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NOV. 2004	AS NOTED	CJ	9144	5-1
		Checked By: KGK		