



TOGETHER
**NORTH
JERSEY.**

Final Implementation Plan



ESSEX COUNTY Complete Streets Implementation Action Plan



Submitted
by:

RBA



Disclaimer

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- Municipalities, including engineers, planners and Transportation Advisory Boards
- Essex County:
 - o Planning Board
 - o Division of Engineering and Planning
 - o Department of Public Works
 - o Division of Senior Services
 - o Environmental Commission
 - o Office of Emergency Management
 - o Transportation Advisory Board
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- TransOptions and Meadowlink Transportation Management Associations
- Local and Regional Bicycle and Pedestrian Advocacy Groups
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- Members of the Essex County Comprehensive Transportation Plan Steering Committee

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Staff from Bergen County and Passaic County also provided feedback and examples of ongoing Complete Streets implementation efforts, helping to ensure that the Essex County plan could gain from the benefits of lessons learned by other area County staff.

Project Team

- ❖ Department of Public Works
- ❖ North Jersey Transportation Planning Authority

Consultant Team

- ❖ The RBA Group
- ❖ Fitzgerald, Halliday, Inc.
- ❖ Project For Public Spaces

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INTRODUCTION

What Are Complete Streets?

Complete Streets are streets designed for all users, all modes, and all ability levels. They balance the needs of drivers, pedestrians, bicyclists, transit vehicles, emergency responders, and goods movement based on the roadway context. Complete Streets provide “access to opportunities.” Individuals without a car are able to access employment, education, healthy foods, and affordable housing by bicycle, on foot, or by transit comfortably and safely.

Benefits of Complete Streets

- Mobility for all users
- Safety
- Equity for non-drivers
- Health
- Quality of life
- Economic vitality
- Environmental benefits

BACKGROUND/PURPOSE

The purpose of this Complete Streets Implementation Action Plan is to analyze existing Essex County plans, policies, guidelines, and procedures, and update these documents as needed to incorporate the County's Complete Streets Policy into the project development, construction, and maintenance processes; integrate Complete Streets into the subdivision and site plan review process; develop a pilot Complete Streets demonstration project; and train County staff on the incorporation of Complete Streets in the planning, design, operation, and maintenance of County roadways. Essex County has had a Complete Streets policy since April 2012. This Implementation Action Plan presents a variety of tools to help Essex County accomplish this implementation at all levels and through all stages of its projects.

COMPLETE STREETS IMPLEMENTATION ACTION PLAN OVERVIEW

Vision

The Steering Advisory Committee collaborated to develop a Vision for Essex County's Complete Streets Implementation Action Plan. The Vision Statement is as follows:

Vision Statement:

Through the implementation of its Complete Streets Policy and Implementation Action Plan, Essex County will employ a process that will routinely:

- Plan, fund, design, construct, maintain and operate complete streets that support all travel modes and choices, and respect context and community values.
- Exercise flexibility and use the best available standards and practices in the design of streets to accommodate increasing multi-modal mobility needs, technological advances and provisions for creating a sense of place to meet the changing needs of our population.
- Design streets that allow for safe and independent travel for all users (pedestrians, bicyclists, children, older citizens, non-drivers, and the mobility challenged, as well as those that cannot afford a car or choose to live car free) regardless of age or ability, and design for travel connectivity among Essex County's community land uses, parks, transportation hubs, retail centers, downtowns, educational institutions, and medical facilities.
- Create a sustainable, multi-modal transportation network that will stimulate economic growth and serve as a catalyst for promoting diversity in our population, workforce, and commercial investments.

Methodology

Initial efforts involved the identification of the plans, policies, guidelines, and procedures that Essex County currently uses in implementing its transportation improvements.

Technical Memorandum 1 (**Appendix A**) presents the results of the data collection efforts. This was followed by an analysis of this data to detect and develop opportunities to revise these resources so that the County's recently adopted Complete Streets policy is fully considered throughout all project phases – planning, design, funding, construction, maintenance, and operations.

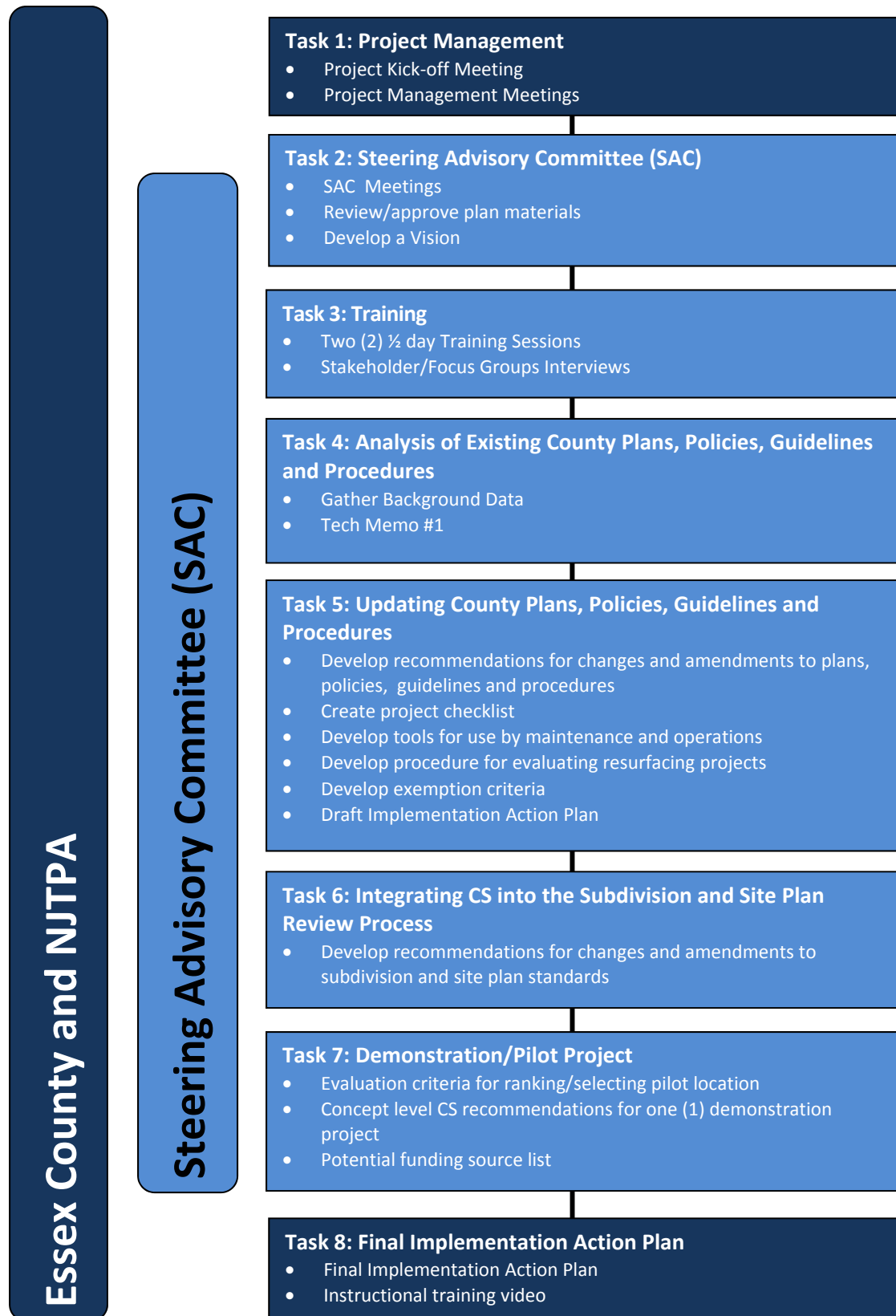
A variety of revisions and additions to plans, procedures, and policies were developed. This included incorporation of the Complete Streets Policy into the Subdivision and Site Plan Review Process.

Once these were completed, a pilot demonstration project at the intersection of Bloomfield Avenue and Grove Street in the Township of Bloomfield was selected, for which Concept Level Complete Streets recommendations were developed. This site was picked because it had been identified as a "high crash" location in the Essex County Master Plan and ranked high in the County's evaluation criteria, as noted on Page 4 of the Demonstration Project report in **Appendix I**.

The main goal of this demonstration project was to show the process of applying the Essex County Complete Streets Policy and implementation of project proposals from a Complete Streets perspective. The process considered several different project approaches with varying levels of effort for the Bloomfield Avenue intersection. Three approaches were developed: (1) a maintenance project; (2) a resurfacing project; and (3) a reconstruction concept development. Examples of design recommendations for the "reconstruction concept development" included curb extensions, bicycle shared lane markings, crosswalk reconfiguration, highlighting bus stop areas with pavement markings, and resurfacing the intersection with a skid resistant pavement surface treatment. Cost estimates and potential funding sources were provided as well. The Demonstration Project report is provided as **Appendix I** to this Plan.

This overall process is illustrated in **Figure 1**:

Figure 1 - PROJECT FLOW CHART



Laws, Policies and Committees

Statutory Considerations

Several New Jersey Statutes affect the approach New Jersey Counties may take in implementing a Complete Streets Policy.

Title 40: 65-13

This statute defines the role of counties and municipalities with respect to improving county roads by the addition of sidewalks.

Title 27: 16-6

This statute defines the role of counties and municipalities with respect for the maintenance of certain county roads.

Title 27: 16-8

This statute requires counties to maintain county roads between the curb lines.

If Essex County is to truly accomplish the full implementation of its Complete Streets Policy and meet the needs of pedestrians, bicyclists and transit users, it must exceed the minimum New Jersey statutory requirements.

RECOMMENDED COMPLETE STREETS POLICY REVISIONS

The Essex County Complete Streets Policy (**Appendix C**) was adopted in April of 2012. This Plan proposes minor revisions to the Complete Streets Policy to maintain consistency between the policy and recommended implementation tools.

COMPLETE STREETS IMPLEMENTATION COMMITTEE – CREATION AND RESPONSIBILITIES

This plan also proposes the creation of a committee to be comprised of Essex County DPW staff representing Planning, Engineering and Maintenance. Its function would be to review and sign off on Complete Streets checklists. This will ensure that no one staff person has complete authority over implementing the Complete Streets Policy, and that there are checks and balances built into the processes. Specific roles and responsibilities are detailed on the Project

Development Checklists, which are included in the Complete Streets Implementation Tools chapter below.

COMPLETE STREETS IMPLEMENTATION TOOLS

The Essex County Complete Streets Policy promotes a “comprehensive, integrated, connected multi-modal network of transportation options” by providing connections to bicycling and walking trip generators such as employment centers, schools, residential areas, recreational and public facilities, as well as retail and transit centers. The policy calls for the establishment of a checklist to address pedestrian, bicyclist and transit accommodations for all users. In order to ensure the implementation of Essex County’s Complete Streets Policy, a variety of tools are proposed. These include the following:

- 1) A defined project delivery process, which establishes the type of documentation that is required to document compliance with Complete Streets requirements as articulated in the policy; and the timing of its preparation;
- 2) Recommended modifications to the Essex County Complete Streets Policy;
- 3) A proposed Project Purpose and Needs Statement to be used at the inception of the project delivery process to justify the initiation of work and its assignment to the appropriate project delivery pipeline;
- 4) A series of checklists to be completed for different types of projects and at different stages in the project delivery process;
 - a. Resurfacing
 - b. Concept Development
 - c. Design
 - d. Construction
 - e. Maintenance
- 5) A set of Complete Streets Principles which are to be taken into account by County staff and consultants involved in the project delivery process;
- 6) A procedure for evaluating resurfacing projects;
- 7) A Complete Streets Implementation Matrix;
- 8) A series of Exemption Forms for documenting that a project complies with an approved exemption type;
- 9) Proposed revisions/additions to various Essex County Roadway policies;
- 10) Proposed changes to Essex County DPW Online Service Request Form;
- 11) Suggested additions and modifications to the subdivision and site plan applications and requirements, including a checklist to be prepared by applicants to document compliance with the County’s Complete Streets policy.

Each of these Implementation Tools are further described and defined below.

1) Project Delivery Pipeline Process

For the implementation of the Essex County Complete Streets Policy to be successful, consideration of Complete Streets elements must begin at the earliest possible stage of project development; and must continue through each stage of the project development process. This includes everything from planning through construction and throughout long term maintenance and operations, in order to insure that the Complete Streets' features are an integral part of ("built into") the project, not tacked on at one stage, only to be eliminated at a later stage in the interest of expedience (or cost). Implementation of the Complete Streets policy needs to be merged into the project development process.

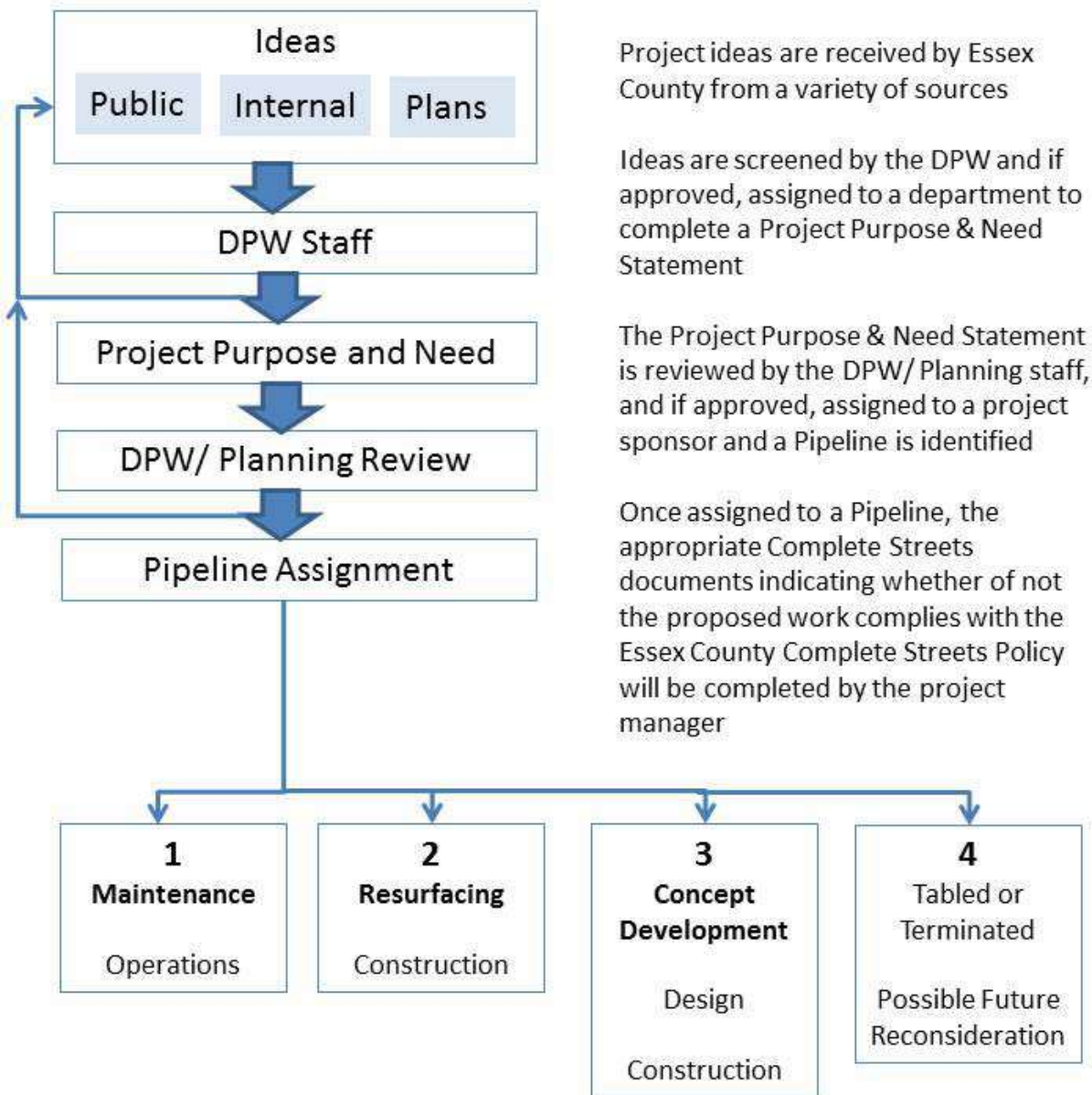
The project development process must be transparent, consistent, routine, and understood for that merger to occur. If the project development process is ad hoc, idiosyncratic or inconsistent, then Complete Streets implementation will likewise be inconsistent and ultimately unsuccessful.

The means by which various sorts of projects are initiated and evolve to completion (planned, scoped, designed, prioritized, placed on a capital program, funded and ultimately constructed) needs to be documented, and a mechanism for complying with the Complete Streets policy needs to be linked to strategic stages of the process.

Different sorts of projects may begin and proceed in different ways through the project pipeline process. For example, a resurfacing project may come into existence through the workings of a pavement management system that the County has implemented; a reconstruction project may be initiated by incessant drainage problems that have reached the attention of a County Freeholder; a widening project may arise from worsening traffic problems along a key County roadway. Complete Streets policy implementation needs to accommodate these project development and delivery differences.

Figure 2 presents a sample project delivery pipeline process which can be used by Essex County as a framework for implementing their Complete Streets Policy:

Figure 2 - Essex County – Sample Capital Project Delivery Pipeline Process



2) **Recommended Essex County Complete Streets Policy Modifications**

Several modifications to the Essex County Complete Streets Policy are recommended to expand the design guidance available for use in addressing Complete Streets needs and in institutionalizing the Complete Streets review and concurrence process. **Appendix C** highlights recommended changes/additions to the Complete Streets Policy.

3) **Project Purpose and Needs Statement**

The Project Purpose and Needs (PPN) Form (**Appendix D**) is to be prepared by an initiator of the proposed project (either internal to Essex County or an external party with a vested interest). The Project Purpose and Need Statement will be reviewed and assigned to the appropriate track of the project delivery process.

4) **Complete Streets Checklists**

The Essex County Complete Streets Policy calls for establishment of a checklist of pedestrian, bicycle and transit accommodations. Complete Streets Policy checklists will assist project managers and designers (including consultants) in planning, designing and constructing street and sidewalk projects that comply with the Essex County Complete Streets policy. Use of the checklists will ensure that appropriate accommodation is provided in accordance with the policy as projects advance through the Capital Project Delivery (CPD) Process. The checklists apply to all projects within Essex County rights-of-way, including roadways and bridges, and are intended for use on projects starting at the earliest stages of the CPD process to ensure that the Complete Streets policy is routinely incorporated into each project and remains a part of the project as it proceeds through the CPD process. Checklists are provided for each of the following pipelines, and are to be completed at the designated stage of the project development process.

- Concept Development
- Design Engineering
- Construction
- Resurfacing
- Maintenance and Operations

The manager of the project is responsible for completing the checklist and must work with the designer to ensure that the checklist has been completed prior to advancement of the project through the Capital Project Delivery (CPD) Process.



Using the Complete Streets Checklists

The Complete Streets Checklists are tools to be used by managers and designers to ensure that all alternatives considered, including and especially the selected alternative, reflect compliance with the Essex County Complete Streets Policy. Each **“Item to be Addressed” in the checklist** - should be completed, including a brief description documenting how the item is to be considered. Supporting documentation can be appended.

CONCEPT DEVELOPMENT CHECKLIST

This checklist is to be completed by the project manager once the Project Purpose and Needs Statement have been completed and the project has been assigned to Concept Development.

Instructions:

For each Item to be Addressed, please identify whether the Complete Streets consideration is currently addressed, not addressed or not applicable and/or provide a description of how the item will be addressed for this proposed project. Attach any necessary documentation to support your answer.

Item to be Addressed	Concept Development Checklist Consideration	YES	NO	N/A	Comments/ Explanation of How Item is being Addressed
<i>Context</i>	What is the typical existing roadway section?				
	What is the speed limit in the project area?				
	Are vehicle, truck, pedestrian and/or bicyclist volumes available?	☐	☐	☐	
	What is the street type (arterial, collector, main street, mixed use, residential, industrial access)?				
	What is the predominant land use (residential, commercial, industrial, mixed) within the study area?				
	What trip generators are in the vicinity of the project area?				
	Is the project in a school zone?	☐	☐	☐	
	Is the project along a truck route?	☐	☐	☐	
	Is the project in a historic district?	☐	☐	☐	
	Is the project in a special zoning district?	☐	☐	☐	
<i>Existing Bicycle and Pedestrian Operations</i>	Is there a higher than normal incidence of bicyclist/pedestrian crashes within the study area?	☐	☐	☐	
	Have you observed or been informed of any particular challenges or needs (pedestrian,	☐	☐	☐	

Item to be Addressed	Concept Development Checklist Consideration	YES	NO	N/A	Comments/ Explanation of How Item is being Addressed
	children, elderly, bicyclists, motorist, transit, or truck) in the project area?				
	What existing challenges could the proposed project address for bicycle and pedestrian travel?				
<i>Existing Plans</i>	Are there any county or municipal planning documents that call for or address bicyclist, pedestrian or transit user facilities within or proximate to the study area?	☐	☐	☐	
<i>Existing Bicycle, Pedestrian and Transit Accommodations</i>	Are there safe and accessible accommodations for bicyclists to travel on, along and across the current facility?	☐	☐	☐	
	Are there safe and accessible accommodations for pedestrians (including ADA compliance) to travel on, along and across the current facility?	☐	☐	☐	
	Is there transit service (bus and/or rail) within the study area?	☐	☐	☐	
	Are there safe and accessible accommodations for transit users on, along or crossing the current facility?	☐	☐	☐	
	Are there street trees, planters, buffer strips, or other environmental enhancements such as drainage swales within the study area?	☐	☐	☐	
<i>Proposed Complete Streets Accommodations</i>	Will bicycle, pedestrian, and transit users be accommodated along the facility? If yes, then select which of the following facilities will be included:	☐	☐	☐	
	Accessible sidewalk curb ramps	☐	☐	☐	



Item to be Addressed	Concept Development Checklist Consideration	YES	NO	N/A	Comments/ Explanation of How Item is being Addressed
	Crosswalks	☐	☐	☐	
	Countdown pedestrian signals	☐	☐	☐	
	Signs	☐	☐	☐	
	Curb extensions	☐	☐	☐	
	Pedestrian scale lighting	☐	☐	☐	
	Bike Lanes	☐	☐	☐	
	Shoulders	☐	☐	☐	
	Others	☐	☐	☐	



Problem Statement

Was a formal Problem Statement prepared? ☐ Yes ☐ No

Date of Problem Statement:

Attached ☐ Yes ☐ No ☐ Not Available.

ESSEX COUNTY COMPLETE STREETS IMPLEMENTATION COMMITTEE SIGN-OFF

Concept Development Checklist Statement of Compliance	YES	NO	If YES, forward to Complete Streets Implementation (CS I) Committee for concurrence. If NO, Fill out the appropriate Exemption form(s) and forward checklist, and exemption forms to CSI Committee for review/concurrence.
The Preliminary Preferred Alternative (PPA) accommodates all users as defined and set forth in the Essex County Complete Streets Policy and Implementation Action Plan. Note: There should be a "sign off by whomever filled out the concept development checklist or that persons supervisor Signature Line: _____	☐	☐	



CSI Committee Concurrence and Disposition:

Note: The CSI Committee must concur with the Statement of Compliance or, if an exemption is being sought, concur with the exemption before the project can advance to Engineering/Design, or the CSI Committee must determine what additions or changes to the project must be incorporated before the project can advance to Engineering/Design.

Signature:_____

Date: _____

Print Name:_____

Signature:_____

Date: _____

Print Name:_____

Signature:_____

Date: _____

Print Name:_____

DESIGN ENGINEERING CHECKLIST

This checklist is to be completed by the project manager during the project design phase of the Project Delivery process.

Instructions:

For each Item to be Addressed, please identify whether the Complete Streets consideration is currently addressed, not addressed or not applicable and/or provide a description of how the item is being addressed. Attach any necessary documentation to support your answer.

Item to be Addressed	Design Engineering Checklist Consideration	YES	NO	N/A	Comments/Explanation of How the Item will be Addressed
Context	Is the proposed design compatible with the land use and density within the project area, including any historic districts or special zoning districts?	☐	☐	☐	
	Does the proposed design support the travel demands of all street users to the major sites, destinations, and trip generators within or proximate to the project area, including as applicable prominent landmarks, commercial and residential areas, cultural and civic institutions, and public spaces?	☐	☐	☐	
Existing Plans	Does the proposed design address recommendations from other planning documents (neighborhood or station area plans, Safe Routes to School (SRTS) plans, redevelopment plans) completed within or proximate to the project area?	☐	☐	☐	



Item to be Addressed	Design Engineering Checklist Consideration	YES	NO	N/A	Comments/Explanation of How the Item will be Addressed
<i>Proposed Bicyclist, Pedestrian, and Transit Accommodations</i>	What is the proposed typical cross section?				
	Does the proposed project design include accommodations for bicyclists?	☐	☐	☐	
	Does the proposed project design include accommodations for pedestrians to safely travel along and across the facility at appropriate intervals, including ADA compliance?	☐	☐	☐	
	Has there been coordination with the relevant transit agency and have transit users been accommodated in the project design?	☐	☐	☐	
	Does the proposed design include landscaping, street trees, planters, buffer strips, or other environmental enhancements such as drainage swales?	☐	☐	☐	
	Does the proposed project design remove, reduce or relocate an existing bicycle or pedestrian accommodation? If yes, list reasons why the design is as proposed.	☐	☐	☐	
	Are any of the following pedestrian, bicycle and transit facilities included? If yes, then select which ones will be included:	☐	☐	☐	
	Accessible sidewalk curb ramps	☐	☐	☐	
	Crosswalks	☐	☐	☐	



Item to be Addressed	Design Engineering Checklist Consideration	YES	NO	N/A	Comments/Explanation of How the Item will be Addressed
	Countdown pedestrian signals	☐	☐	☐	
	Signs	☐	☐	☐	
	Curb extensions	☐	☐	☐	
	Pedestrian scale lighting	☐	☐	☐	
	Bike Lanes	☐	☐	☐	
	Shoulders	☐	☐	☐	
	Others	☐	☐	☐	
<i>Design Standards or Guidelines</i>	Does the proposed design follow all applicable and current design standards or guidelines, and best practices for bicycle and pedestrian facilities?	☐	☐	☐	

ESSEX COUNTY ENGINEER SIGN-OFF

Design Engineering Checklist Statement of Compliance	YES	NO	If YES, forward to Complete Streets Implementation (CSI) Committee for concurrence. If NO, Fill out the appropriate Exemption form(s) and forward checklist, and exemption forms to CSI Committee for review/concurrence.
The Project satisfies the requirements set forth in the Essex County Complete Streets Policy and Implementation Action Plan. Signature Line: _____	☐	☐	

CSI Committee Concurrence and Disposition:

Note: The CSI Committee must concur with the Statement of Compliance before the project advances to construction or must agree on what additions or changes need to be incorporated into the project before it can advance to construction.

Signature: _____

Date: _____

Print Name: _____

Signature: _____

Date: _____

Print Name: _____

Signature: _____

Date: _____

Print Name: _____



CONSTRUCTION CHECKLIST

The purpose of this section is to ensure that project officials maintain adequate access for all users during the construction of each project, which may be done by keeping some facilities open for traffic or by providing clear detour routes.

Instructions:

For each Item to be Addressed, please identify whether the Complete Streets consideration is currently addressed, not addressed or not applicable and provide a description of how the item will be addressed. Attach any necessary documentation to support your answer.

Item to be addressed	Construction Checklist Consideration	YES	NO	N/A	Comments/Explanation of How the Item will be Addressed
Maintenance of access	During construction, will safe access be maintained for all users, including pedestrians, bicyclists, transit users, and delivery vehicles?	☐	☐		
Detour Routes	Will detour routes for all users on site or nearby be provided and clearly marked, including advanced warning signs?	☐	☐		



CONSTRUCTION PROJECT MANAGER SIGN-OFF

Construction Checklist Statement of Compliance	YES	NO	If YES, forward to Complete Streets Implementation (CSI) Committee for concurrence. If NO, Fill out the appropriate Exemption form(s) and forward checklist, and exemption forms to CSI Committee for review/concurrence.
The Construction Traffic Plan accommodates all users as defined and set forth in the Essex County Complete Streets Policy and Implementation Action Plan. Signature Line: _____	☐	☐	

CSI Committee Concurrence and Disposition:

Note: The CSI Committee must concur with the Statement of Compliance or, if an exemption is being sought, concur with the exemption before the project can advance to Engineering/Design, or the CSI Committee must determine what additions or changes to the project must be included in the "Maintenance of Traffic" plan before construction can proceed.

Signature: _____

Date: _____

Print Name: _____

Signature: _____

Date: _____

Print Name: _____

Signature: _____

Date: _____

Print Name: _____

RESURFACING CHECKLIST

The purpose of this section is to ensure that all resurfacing projects incorporate the intent of the Complete Streets Policy.

To be filled out by Essex County DPW.

Item to be addressed	Resurfacing Checklist Consideration	YES	NO	N/A	Comments/ Explanation of How Item is being Addressed
<i>Context</i>					
<i>Access and Mobility</i>	Are there any access or mobility considerations including ADA compliance?	☐	☐	☐	
	Are there any schools, hospitals, senior care facilities, community centers, residences or seniors or persons with disabilities residing in or proximate to the study area?	☐	☐	☐	
<i>Land Use</i>	Is the proposed resurfacing project in a rural area?	☐	☐	☐	
	Is the proposed resurfacing project in a suburban or urban area that has pedestrian, bicycle, transit and automobile traffic?	☐	☐	☐	
<i>Major Sites</i>	Have the major sites, destinations and trip generators within or proximate to the resurfacing been identified (Landmarks, employment and population centers, recreation, commercial, civic centers, etc.)?	☐	☐	☐	
<i>Existing Plans</i>	Are there planning documents that address bicycle, pedestrian or transit user conditions or needs proximate to the proposed resurfacing area: • Safe Routes to School (SRTS) Travel Plans • Municipal or County Redevelopment or Master Plans • Local, County or State Bicycle and Pedestrians Plans • North Jersey Transportation Planning Authority Planning Studies • Designated Transit Village • Sidewalk Inventories	☐	☐	☐	

Item to be addressed	Resurfacing Checklist Consideration	YES	NO	N/A	Comments/ Explanation of How Item is being Addressed
<i>Existing Bicycle, Pedestrian and Transit Accommodations</i>	Are there existing accommodations for bicyclists, pedestrians (including ADA) and transit users traveling on, along or across the existing facility?	☐	☐	☐	
	Are there continuous shoulders on both sides of the existing facility?	☐	☐	☐	
	Does the current facility comply with ADA requirements for non-motorized travel?	☐	☐	☐	
<i>Existing Bicycle and Pedestrian Operations</i>	Do pedestrians regularly use the transportation facility?	☐	☐	☐	
	Do bicyclists regularly use the facility?	☐	☐	☐	
	Do pedestrians regularly cross the facility?	☐	☐	☐	
	Do bicyclists regularly cross the facility?	☐	☐	☐	
	Are there perceived impediments to bicycle, pedestrian or transit use of the roadway?	☐	☐	☐	
	Have general bicycle and pedestrian considerations within the project limits been identified?	☐	☐	☐	
<i>Existing Transit operations</i>	Is there a higher than normal incidence of bicycle or pedestrian crashes within the project limits?	☐	☐	☐	
	Is the roadway on or included within a transit route?	☐	☐	☐	
	Are there bicycle racks, shelter, or bike lockers available along the route or at these facilities?	☐	☐	☐	
<i>Motor Vehicle Operations</i>	Are there existing transit facilities within project limits, such as bus stops, rail stations, park and rides, etc.?	☐	☐	☐	
	Are there existing concerns regarding motor vehicle safety, volume/congestion or access?	☐	☐	☐	
<i>Existing Truck/Freight Operations</i>	Are there existing concerns regarding truck/freight safety volume or access?	☐	☐	☐	

Item to be addressed	Resurfacing Checklist Consideration	YES	NO	N/A	Comments/ Explanation of How Item is being Addressed
<i>Existing Streetscape</i>	Are there street trees, planters, buffer strips or other environmental or aesthetic enhancements along or proximate to the proposed resurfacing?	☐	☐	☐	
<i>Proposed Bicyclist, Pedestrian and Transit Accommodations</i>	Does the proposed project design address accommodations for bicyclists to travel on, along and across the facility?	☐	☐	☐	
	Does the proposed project design address accommodations for pedestrians to travel along and across the facility, including ADA compliance?	☐	☐	☐	
	Have you coordinated with the relevant transit authority and accommodated transit users in the project design?	☐	☐	☐	
	Does the proposed design include landscaping, street trees, planters, buffer strips, or other environmental enhancements such as drainage swales?	☐	☐	☐	
	Does the proposed project design remove an existing bicycle or pedestrian facility or worsen the accommodation? If yes, list reasons why the design is as proposed.	☐	☐	☐	
	Are any of the following pedestrian, bicycle and transit facilities included? If yes, then select which ones will be included:	☐	☐	☐	
	Accessible sidewalk curb ramps	☐	☐	☐	
	Crosswalks	☐	☐	☐	
	Countdown pedestrian signals	☐	☐	☐	
	Signs	☐	☐	☐	
	Curb extensions	☐	☐	☐	
	Pedestrian scale lighting	☐	☐	☐	
	Bike Lanes	☐	☐	☐	



Item to be addressed	Resurfacing Checklist Consideration	YES	NO	N/A	Comments/ Explanation of How Item is being Addressed
	Shoulders	☐	☐	☐	
	Others	☐	☐	☐	

COMPLETE STREETS IMPLEMENTATION COMMITTEE CONCURRENCE

Resurfacing Checklist Statement of Compliance	YES	NO	If YES, forward to Complete Streets Implementation (CSI) Committee for concurrence. If NO, Fill out the appropriate Exemption form(s) and forward checklist, and exemption forms to CSI Committee for review/concurrence.
This resurfacing project accommodates all appropriate users consistent with its context as set forth in the Essex County Complete Streets Policy and Implementation Action Plan. Signature Line: _____	☐	☐	



CSI Committee Concurrence and Disposition:

Note: The CSI Committee must concur with the Statement of Compliance before the project advances to construction or must agree on what additions or changes need to be incorporated into the project before it can advance to construction.

Signature: _____

Date: _____

Print Name: _____

Signature: _____

Date: _____

Print Name: _____

Signature: _____

Date: _____

Print Name: _____

MAINTENANCE AND OPERATIONS CHECKLIST

Instructions:

To be completed, and processed at the time of completion of the Maintenance Work Order and prior to the commencement of the work.

Item to be Addressed	Maintenance and Operations Checklist Consideration	YES	NO	N/A	Description of How the Item will be Addressed (Required)
<i>Pedestrian Accommodations</i>	Are there existing pedestrian accommodations in the vicinity of the work?	☐	☐	☐	
	Will pedestrian features be adversely affected during the course of maintenance work?	☐	☐	☐	
	Will pedestrian access be maintained or otherwise provided for during the course of the maintenance work?	☐	☐	☐	
<i>Bicycle Accommodations</i>	Are there existing bicycle accommodations in the vicinity of the work?	☐	☐	☐	
	Will bicycle features be adversely affected during the course of maintenance work?	☐	☐	☐	
	Will bicycle access be maintained or otherwise provided for during the course of the maintenance work?	☐	☐	☐	
<i>Transit Access Accommodations</i>	Are there existing transit access accommodations in the vicinity of the work?	☐	☐	☐	
	Will transit access features be adversely affected during the course of maintenance work?	☐	☐	☐	
	Will transit access be maintained or otherwise provided for during the course of the maintenance work?	☐	☐	☐	



DPW SIGN-OFF

Maintenance and Operations Checklist Statement of Compliance	YES	NO	If YES, forward to Complete Streets Implementation (CSI) Committee for concurrence. If NO, Fill out the appropriate Exemption form(s) and forward checklist, and exemption forms to CSI Committee for review/concurrence.
The proposed maintenance work, including providing for maintenance of the traffic (as needed) accommodates all users as defined and set forth in the Essex County Complete Streets Policy. Signature Line: _____	☐	☐	

CSI Committee Concurrence and Disposition:

Note: The CSI Committee must concur with the Statement of Compliance before the project is implemented or must agree on what additions or changes to the work must be made before the maintenance work can proceed.

Signature: _____

Date: _____

Print Name: _____

Signature: _____

Date: _____

Print Name: _____

Signature: _____

Date: _____

Print Name: _____

5) Complete Streets Principles

In implementing Essex County's policies, procedures, and guidelines, Essex County staff and consultants should take into account the following principles and practices when planning, designing, operating and maintaining its roadways:

Global Issues

1. All users (motorists, bicyclists, pedestrians, and transit riders of all ages and abilities) should be considered during the entire life cycle of a project, including planning, design, construction, operations, and maintenance. This is the essence of Complete Streets.

Intersection Treatments

2. Design intersections to be self-evident and accessible to all users.
3. Manage driver turning speed by keeping intersection curb radii as small as possible.
4. Minimize crossing distances by squaring off skewed intersections, providing curb extensions, median refuges and limiting curb radii.
5. Locate mid-block crossings along pedestrian desire lines.
6. Develop bike facility intersection treatments on a case by case basis.

Traffic Signals

7. Prioritize signals for pedestrians, bicyclists and transit operations (where applicable).
8. Traffic detectors which sense bicycles should be provided for all arterial/arterial, arterial/collector, and collector/collector intersections. If used, the location of induction loop detectors should be identified by a stencil of a bicycle and the words 'Bicycle Detector' painted on the road surface.
9. When loop detectors or other passive traffic detectors are installed, traffic signalization should be set to accommodate bicycle speeds.
10. Provided that they are set to detect bicycle traffic, for safety reasons, bicycle-sensitive loop detectors or other passive traffic detectors are preferred over a push-button signal actuator for detecting bicyclists and activating the signal.

Corridor Segments

11. Align lanes so that the number of approach and departure lanes are equal and appropriately opposed to one another; limit the number of approach lanes to as few as necessary.

12. Locate pedestrian crossings and waiting areas within motor vehicle operator's sight triangles. Provide a reasonable proximity between pedestrian crossings.
13. Merge cyclists with slow speed and low volume motor vehicle traffic, separate cyclists from fast speeds and high volume motor vehicle traffic.
14. Prioritize cyclists traveling straight through an intersection over turning drivers.
15. In urban or suburbanized areas, bike lanes are desirable.
16. In rural areas a paved shoulder can suffice, however, it would be desirable if motorists can be made aware that bicycle traffic may be present. Bike lanes do this.
17. In areas with parking, bicycle traffic should be accommodated outside the "door zone" by proper placement of shared lane markings (sharrows), or bike lanes and buffers.
18. Where traffic speeds are 35 mph or less shared lane type treatments are permissible.
19. When traffic speeds are 35 mph or less, sufficient pavement space for side by side sharing by motor vehicle and bicycle traffic is desirable. The configuration of this space can vary, depending on various factors including the posted speed limit, presence of parking, traffic volumes, and the number of lanes. The additional space (beyond the "normal" 11-foot or 12-foot lane) can be in the form of a wide outside lane, designated bike lane, or paved shoulder.
20. On low volume roads with moderate travel speeds, a partial paved shoulder (4-foot) in addition to the 11-foot or 12-foot lanes may suffice to accommodate bicycle travel; higher speeds or significant volumes of trucks call for wider shoulders.
21. On curbed sections, 5-foot wide bike lanes are recommended and on non-curbed sections, 4-feet will suffice.
22. Installation of bike lanes may require establishing and enforcing parking restrictions.
23. Roadways with speed limits of 35mph or less are considered acceptable for sharing between motor vehicles and bicycles, preferably accompanied by placement of sharrows and/or signing that bicycle traffic may use the full lane.
24. To the extent practicable, adjacent roadway links should have similar bicycle accommodations

Maintenance

25. Bike lanes and/or shoulders will be included in snow/ice clearing, debris removal and any other relevant maintenance and operations activities.

26. Installation of shared lane markings can be enhanced by the addition of supplemental signs ("[bicycle] may use full lane"; "share the road [with bicycle]").

Transit Access

27. When designing a facility that includes or crosses an existing or future transit route, ensure that the appropriate pedestrian and wheelchair access is provided to and from the transit stops.

General Considerations

28. Street furniture, such as bike racks or benches, should be considered as part of all projects as long as they do not impede any user.
29. Traffic-calming elements including, but not limited to, landscaping, street trees, and narrowing of lanes or other vertical/horizontal devices, should be considered where safe and appropriate.
30. Project sponsors should consider including street trees and landscape components, with careful analysis of tree, site, and design considerations.
31. Consideration should be given to future planned facilities or services.
32. Lowering speed limits may require implementation of active (such as speed humps) or passive (such as signs and striping) traffic calming devices.
33. Each project design should be coordinated with appropriate access management strategies. Access management strategies should consider the placement of sidewalks and ramps to eliminate sight distance issues.
34. The following projects provide opportunities for Complete Streets: pavement resurfacing, restriping, accessing above and underground utilities, signalization operations or modifications, and maintenance of landscaping/related features.

6) Evaluating Resurfacing Projects

The Essex County CS Policy states:

"[Create a] procedure to evaluate resurfacing projects for CS inclusion according to the length of the project, local support, environmental constraints, ROW limitations, funding resources and bicycle and/or pedestrian compatibility."

Creation of a County Resurfacing Program is recommended. This program can be used as a condition-based pavement assessment system to equitably allocate resurfacing among different geographic areas and municipalities. Below are descriptions of measures to be used to assess candidate resurfacing projects for possible inclusion on a forthcoming resurfacing program:

I. Deficits

1. Prioritize streets with crash records in the top 25th percentile. Require 25% of resources to projects selected as such.
2. Prioritize streets that lack basic non-motorized and/or transit facilities such as:
 - a) Sidewalks
 - b) Crossing opportunities
 - c) Bicycle routes identified in the Essex County Transportation Plan or the NJ Bike Map
 - d) Transit shelters and crossings at every bus stop

II. Opportunities

1. Prioritize streets identified in the Essex County Transportation Plan or any municipal master plan circulation element as a bicycle, pedestrian or transit priority or part of a transit village
2. Prioritize streets with four or more lanes and less than 30,000 vehicles per day average daily traffic for their potential for lane narrowing and road diets.
3. Prioritize streets with vehicle lanes that exceed 10 feet in width. They will be targeted for lane narrowing, additional bicycle facilities and/or sidewalk expansions.
4. Capitalize on opportunities to improve the existing conditions by including high visibility crosswalks, bike lanes, narrower lanes, curb extensions, or other traffic calming features. These can be approached as 'pilot projects' to be monitored for applicability in other similar situations. In other words, do not simply restripe what was there previously. This will likely require programming funds and allowing time in the project schedule for more extensive design engineering services, possibly including efforts to secure Categorical Exclusion – Group 2 (CE-2) environmental processing for federally-funded arterial resurfacing.

III. Resurfacing Program – Decision Matrix/Algorithm

1. Identify all roadway system segments to be included in the resurfacing system, i.e., all roadways under Essex County jurisdiction.
2. Break down each roadway into manageable segments. System segments based on logical termini and attributes such as similarities in width, traffic volumes, number of travel lanes, functional classification, or existing Congestion Mitigation System segmentation.
3. Determine when the segment was last resurfaced, and what was included in that work (curb ramps, sidewalks, bicycle compatible drainage grates)
4. Evaluate roadway conditions, and assign a resurfacing needs score based on pavement surface and sub-surface condition, complaints and engineering judgment.
5. Establish a resurfacing priority list (by segment) based on needs and opportunities.
6. Identify a set of preliminary resurfacing programs for succeeding years based on segment resurfacing need priority, “opportunities” and anticipated funding availability.
7. Develop preliminary cost estimates for individual resurfacing projects on the upcoming preliminary resurfacing programs.
8. Conduct a Complete Streets review and make any necessary revisions to the proposed resurfacing projects to take advantage of CS opportunities. Revise cost estimates if necessary.
9. Revise upcoming resurfacing program(s) based on revised cost estimates and funding availability.
10. Publish the resurfacing schedule.

This draft decision matrix/algorithm should be coordinated with the Essex County Complete Streets Implementation Committee (including Planning, Engineering and Public Works).

7) Implementation Matrix

The following list is a summary of the Actions various divisions within Essex County will need to undertake and the Complete Streets Implementation Committee will monitor in order to fully implement Complete Streets throughout the County. Responsibilities and timeframes are indicated for each Action.

Action Item	Action Required	Responsibility	Timeframe
Action Plan Implementation	Create and support a Complete Streets Implementation Committee who will be charged with implementing, updating and enforcing the Essex County Complete Streets Implementation Action Plan and continued operation of Complete Streets Implementation.	Essex County	Short Term
Action Plan Implementation	Identify staff (assign responsibility) for advancing the implementation of the Essex County Complete Streets Implementation Action Plan and continued operation of Complete Streets Implementation.	Essex County	Short Term
Action Plan Implementation	Amend existing policies and ordinances as per the recommendations noted in the Essex County Complete Streets Implementation Action Plan.	Essex County/ Municipalities	Short Term
Transportation Planning and Budgeting Process	Modify internal transportation planning and budgeting process.	Essex County	Long Term
Municipal Coordination	Encourage all municipalities within the County to adopt a Complete Streets Policy consistent with Essex County's Complete Streets Policy consistent with Essex County's Complete Streets policy to support bicycling and pedestrian accommodations through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities, enabling safe access and mobility of pedestrians, bicyclists, and transit users of all ages and abilities.	Essex County/ Municipalities	Short Term

Action Item	Action Required	Responsibility	Timeframe
Municipal Coordination	Review municipal plans and codes to develop and adopt changes that incorporate language that supports and promotes bicycling and walking, especially local master plans, zoning ordinances, and bicycle riding ordinances.	Municipalities	Short Term
Municipal Coordination	Encourage all municipalities within the County to amend existing policies and ordinances as per the recommendations noted in the Essex County Complete Streets Implementation Action Plan.	Essex County	Short Term
Transparency	Create a webpage, on the Essex County website, dedicated to the Complete Streets Program	Essex County	Long Term
Exemptions Process	Provide a link or description of the decision-making process for each exemption made under the CS policy	Essex County	Long Term
Complete Streets Marketing/Outreach	Host a logo contest for residents to create a Complete Streets logo unique to Essex County	Essex County	Long Term
Action Plan Implementation	Adopt a policy to install bicycle racks or other bicycle storage at all existing and future community facilities and appropriate funding to assist with retrofitting existing facilities with bicycle racks or other bicycle storage.	Essex County/ Municipalities	Short Term
Action Plan Implementation	Establish targets for increasing the number, mileage or percentage of roads in the County that are bicycle friendly and the number and mileage of designated bicycle facilities in the County by a pre-determined forecast year.	Essex County/ Municipalities	Short Term
Action Plan Implementation	Establish a target goal to decrease the number of bicycling and pedestrian injuries and fatalities within the County by a pre-determined forecast year.	Essex County	Short Term



Action Item	Action Required	Responsibility	Timeframe
Action Plan Implementation	Create a funding source that provides dedicated funding for bicycle lanes, multi-use trails, and other safety improvements such as local bond measures or levies.	Essex County	Long Term
Action Plan Implementation	Create a Bicycle Spot Improvement and Maintenance program for bicycle facilities (shared use paths, bike lanes and signed shared roadways (wide curb lanes and shoulders)) to be periodically swept of debris, sand and gravel throughout the County. Start with a prioritization list of improvements that focuses on links integral to a county-wide bicycling network.	Essex County/ Municipalities	Long Term
Action Plan Implementation	Provide transportation of bicycles on all public transit & shuttle facilities operated by the County, TransOptions, or Meadowlink TMA.	Essex County/ TransOptions, Meadowlink TMAs	Long Term
Action Plan Implementation	Create an Adopt-a-Rack program.	Essex County	Long Term
Action Plan Implementation	Adopt a County-wide bicycle and pedestrian safety curriculum that can be used by local boards of education in elementary and secondary schools.	Essex County/ NJDOT/School Districts	Long Term
Action Plan Implementation	Offer bicycle education classes at the County's Community College for adults and mature teens to improve their cycling skills.	Essex County/ Essex County Community College	Long Term
Action Plan Implementation	Produce a bi-annual report of accomplishments.	Proposed CS Committee	Long Term

8) Exemption Forms

Revision of Exemption Criteria

The following text from the Essex County Complete Streets Policy should be revised as indicated (in red) to reflect exemption criteria and the proposed mechanism for identifying when a Complete Streets treatment is deemed inappropriate to the project:

Exemptions to the Complete Streets Policy shall be presented for final decision to ***the Complete Streets Implementation Committee (consisting of the County Engineer and Directors of the Divisions of Planning and Roads & Bridges)*** in writing and documented with supporting data that indicates the reason for the ***request. The role of the Exemptions Committee is to review and sign off on any exemption requests. Exemptions*** are limited to the following:

- a) Non-motorized users are prohibited on the roadway.
- b) Scarcity of population, travel and attractors, both existing and future, indicate an absence of need for such accommodations.
- c) Constrained Environment: Detrimental environmental or social impacts outweigh the need for these accommodations.
- d) Cost of ***fully providing Complete Streets*** accommodations is excessively disproportionate to cost of project, ***considering the cost as part of the entire Capital Program, not just the isolated project cost.***
- e) The safety or timing of a project is compromised by the inclusion of Complete Streets.
- f) A shared use path is being provided in lieu of on-road bicycle accommodations.
- g) ***Any*** exemption other than those listed above must be documented with supporting data and must be approved by the Complete Streets Implementation Committee.

Appendix E includes a series of Exemption Criteria forms which are to be utilized to document that the proposed work is exempt from Complete Street Implementation requirements as a result of the existence of one of the acceptable exemption conditions.



9) Proposed Revision to Essex County Roadway Policies

In order to ensure that Essex County's Complete Streets Policy is implemented to the fullest extent practicable, all policies and procedures pertaining to work carried out within the right-of-way of all roadways under County jurisdiction should be consistent with and support the Complete Streets Policy.

Appendix F includes 19 Essex County roadway policies with recommended additions and changes highlighted. As noted on the title page, the County's Complete Streets Policy should be included as part of the set of roadway policies.

10) Essex County DPW Online Service Request Form

The **highlighted changes** should be made to the Online Service Request Form found on the Essex County DPW webpage: http://ecdpw.org/online_service_request.php

Online Service Request Form

I Want to Request
Please select service.

Public Works Services *

☐ Pothole / Sidewalk Repair	☐ Carcass Removal
☐ Roadway Debris / Litter Removal	☐ Snow / Ice Removal
☐ Damaged and/or dead limbs	☐ Interference with a traffic sign or signals
☐ Clogged Storm Drain Inlet	☐ Interference with signal push button
☐ Street or sidewalk blocked	☐ Traffic Signal Repair
☒ Mosquito Inspection	☐ Missing / Damaged Sign Repair
☐ Wheelchair Ramp Request	☐ Broken Curb
☐ Wheelchair Ramp Repair	

Incident Location *

Street Address

City

Postal / Zip Code

11) Subdivision and Site Plan Review Documents

The Subdivision and Site Plan Review Documents will require revisions to ensure they comply with the Complete Streets Policy. These include:

- Site Plan Review Regulations – includes recommended text revisions to help ensure proposed developments are in compliance with Essex County Complete Streets Policy.
- Site Plan Application Form – includes recommended text revisions to help ensure proposed developments are in compliance with Essex County Complete Streets Policy.
- Site Plan Complete Streets Checklist – to be completed by developer and submitted with the Site Plan Application Form.
- Subdivision Review Regulations – includes recommended text revisions to ensure that proposed subdivisions are in compliance with Essex County's Complete Streets Policy.
- Subdivision Application Form – includes recommended text revisions to ensure that proposed subdivisions are in compliance with Essex County's Complete Streets Policy.
- Subdivision Complete Streets Checklist – to be completed by developer and submitted with Subdivision Application Form.

Recommended revisions to the Application Forms and Regulations, and the proposed Checklists are included in **Appendix G** (under separate cover).

REGIONAL CONNECTIONS, IMPLEMENTATION AND NEXT STEPS

Together North Jersey, (formerly the North Jersey Sustainable Communities Consortium) established the **Local Government Capacity Grant Program** (LGCGP) to provide financial and technical assistance to County and municipal members to conduct planning activities in northern New Jersey. The program is intended to foster planning activities that are consistent with the goals of **Together North Jersey's Regional Plan for Sustainable Development** (RPSD) project. The funding source for the LGCG program is a combination of funds from the United States Department of Housing and Urban Development (US HUD) and from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) passed through the North Jersey Transportation Planning Authority (NJTPA). In order to facilitate the interagency review process, guidance has been provided regarding key elements that must be addressed in the final report, in this case, the **Final Essex County Complete Streets Implementation Plan**. This section of the Plan summarizes the key elements that are required to be addressed by the funding agencies.

Key Elements

- **General Requirements**

- o Types of Recommendations and their Implications
 - Revisions were recommended to the Essex County Complete Streets Policy to facilitate the Plan's recommended implementation processes. Responsible agencies would include the Essex County Division of Public Works (DPW) and the Essex County Board of Chosen Freeholders. Practically speaking, no additional funding beyond limited County staff time would be required. These activities could be supported by County operating funds. This would require a cooperative effort between DPW staff and the Essex County Board of Chosen Freeholders. Full implementation of this and other recommended implementation actions would be facilitated by cooperation between the County and constituent municipalities.
 - Minor revisions were recommended for nineteen (19) existing Essex County Roadway policies to make them consistent with the new County Complete Streets Policy. Responsible agencies would include the Essex County Division of Public Works and the Essex County Board of Chosen Freeholders. Practically speaking, no additional funding beyond limited County staff time would be required. These activities could be supported by County operating funds. This would require a cooperative effort between DPW staff and Essex County Board of Chosen Freeholders.
 - No specific additional Planning Studies were recommended. It is implied that projects should evolve from a rational planning process and that project planning activities be developed to insure that each project is consistent with

the County Master Plan and Complete Streets Policy, and assigned to the appropriate project pipeline.

- Revisions were recommended to the Site Plan and Subdivision Review documents to make them consistent with the new County Complete Streets Policy. Responsible agencies would include the Essex County Division of Public Works and the Essex County Planning Board and Essex County Board of Chosen Freeholders. Practically speaking, no additional funding beyond limited County staff time would be required.
- Also recommended, as means of implementing the Complete Streets Policy are: a formalized project delivery process, checklists and exemption forms for use by the units that are part of the project development process to document compliance with the county's Complete Streets policy, a revised DPW online service request form and a formalized process for evaluating resurfacing projects (needs and priorities). Responsible agencies would include the Essex County Division of Public Works. Practically speaking, no additional funding beyond limited County staff time would be required. These activities could be supported by County operating funds.
- To strengthen the linkage between policy and implementation, a demonstration project was developed to show the process of applying the Essex County Complete Streets Policy towards implementable results. The demonstration project was an accelerated concept level planning effort that included an evaluation of County transportation projects proposed for future implementation and prioritized the projects according to the County's Complete Streets philosophy. Based on the evaluation criteria, the intersection of Bloomfield Avenue (CR506) and Grove Street (CR509) in Bloomfield, NJ was selected as the demonstration site. Needs, deficiencies and opportunities associated with the demonstration project in terms of their impact on existing and potential uses of the County right-of-way were identified. A set of recommendations was prepared to address the needs and deficiencies associated with all users of the public right-of-way in accordance with the principles espoused in the Essex County Complete Streets Policy. Funding for this or other County projects that successfully comply with the County's Complete Streets Policy and implementation processes could come from several sources including State Transportation Trust Funds (County Aid, Centers of Place, Local Aid Infrastructure, Bikeways, Safe Routes to Transit, Transit Villages, Local Bridges Future Needs) administered by NJDOT's Division of Local Aid and Federal funds (Transportation Alternatives and Local Capital Project Delivery) administered by the Division of Local aid and the MPO in this case, NJTPA.

- **Specific Requirements**

- o Inclusion and Engagement

- Complete Streets Implementation, the subject of this plan, is the ultimate expression of inclusion, engagement and meeting the needs of the transportation disadvantaged and other traditionally underserved communities. The purpose of this effort is to develop the means of insuring that all potential users of public rights of way are appropriately accommodated.
- Representatives of local municipalities and especially underserved communities were sought out and encouraged to participate in the training workshop. This expanded the reach of the Complete Streets education offered to the community. Participants at the municipal training workshop included:
 - ✓ **Lackawanna Coalition** (rail advocacy) is an independent non-profit organization that advocates for better service on the Morris & Essex (M&E) and Montclair-Boonton rail lines.
 - ✓ **Essex County Transportation Advisory Board** provides a public forum for discussion and resolution of County and Municipal transportation problems and issues. The goal of the Essex County Transportation Advisory Board is to contribute to the improved effectiveness and efficiency of the Essex County transportation system through a participatory public forum which discusses and resolves transportation problems in Essex County.
 - ✓ **Newark Bike Exchange** provides donated bikes, safety test and bike repair for a small fee. 100% of the proceeds raised directly benefit the youth members of the Boys & Girls Clubs of Newark.
 - ✓ **Rutgers New Jersey Agricultural Experiment Station (NJAES) Cooperative Extension** helps the diverse population of New Jersey adapt to a rapidly changing society and improve their lives and communities through an educational process that uses science-based knowledge.
 - ✓ **Brookdale Park Conservancy** (Montclair & Bloomfield) is an all-volunteer non-profit advocacy group that focuses on the improvement and landscape restoration of Brookdale Park in Essex County.
 - ✓ **La Casa de Don Pedro** (Newark) is a community-based development corporation that has provided services to the residents of greater Newark, New Jersey for over 40 years.
- Many Essex County municipalities sent representatives to the training workshop. Their participation enhanced the interactive elements of the

workshop and let peers learn from each other about successes and struggles with implementing Complete Streets in their areas. The following municipalities that attended the workshop have a greater proportion of traditionally disadvantaged populations than the North Jersey region in one or more population variables noted by the Together North Jersey consortium. Municipalities that are “Communities of Concern”¹ are noted with an asterisk below. A detail of each municipality’s comparative profile can be found in **Appendix H**. Bloomfield, Newark and Orange have higher than North Jersey regional percentages for households in poverty, minority, female head of household with children, and carless households, with Newark and Orange having the highest percentages of Limited English Proficiency (LEP) populations and persons with disabilities above the North Jersey regional percentages. In addition, Maplewood and South Orange have higher than regional percentages in minority populations. Maplewood and Montclair are similar to Bloomfield and Newark in regards to higher than regional average for percentage of female head of household with children. Lastly, Caldwell, Livingston, and Nutley have a higher percentage of elderly populations in comparison to the region.

- ✓ Bloomfield*
- ✓ Caldwell
- ✓ Livingston
- ✓ Maplewood*
- ✓ Montclair
- ✓ Newark*
- ✓ Nutley
- ✓ Orange*
- ✓ South Orange*

- Stakeholders in the Steering Advisory Committee included representatives from the following organizations:

¹ The Regional Fair Housing and Equity Assessment (FHEA) includes an identification of “Communities of Concern”—places in the Together North Jersey (TNJ) region that are home to high concentrations of minority, low-income and other disadvantaged populations. Communities of Concern are identified using neighborhood-level data (i.e., Census block groups or tracts). For each indicator, the neighborhood-level composition is compared to a TNJ regional threshold and places that equal or exceed that threshold are flagged for further review. Ultimately, places with the following characteristics are classified as a Community of Concern: Minority concentration equal to or exceeding the regional threshold; or Low-Income concentration equal to or exceeding the regional threshold; or Two or more of the following Other Indicators of Disadvantage equal to or exceed the regional threshold: Female Head of Household with Children; or Persons with Limited English Proficiency; or Carless Households; or Elderly Populations (75 years and over). The municipalities recognized as a “community of concern” in the Together North Jersey’s Consortium are Bloomfield, Caldwell, Livingston, Maplewood, Montclair, Newark, Nutley, Orange and South Orange.



- ✓ Essex County Planning
 - ✓ Essex County Engineering
 - ✓ Essex County Environmental Commission
 - ✓ New Jersey Department of State
 - ✓ New Jersey Department of Transportation
 - ✓ NJ TRANSIT
 - ✓ Together North Jersey
 - ✓ Department of Environmental Protection
- Recommended implementation processes provide opportunities for community engagement, enhancing the likelihood that community outreach will take place in the policy development and design of transportation initiatives.
 - Consider inclusion of the Together North Jersey's "communities of concern" data during the prioritization of projects to provide transportation solutions for locations with higher than average concentrations of underrepresented populations. Transportation improvements should be context sensitive to location and account for underrepresented populations such as seniors, youth, individuals without a car, and residents with limited English proficiency, to name a few.
 - Promote "access to opportunities" in the public input component of the transportation planning process. "Access to opportunities" implies that individuals without a car are able to access employment, education, healthy foods, and affordable housing by bicycle, on foot, or by transit comfortably and safely.
- o Regional Context
 - The Essex County Complete Streets Implementation Plan recommends the adoption or formalization of a series of internal policies and practices to ensure that all transportation project development and maintenance activities undertaken by the County are consistent with Complete Streets (CS) principles and philosophy and comply specifically with the County's CS Policy. This reflects a multi-modal approach which is consistent with and supports RSPD goals.
 - The recommendations apply to virtually every place type within the county that contains transportation facilities including City, Suburban and Rural areas.
 - Lessons learned during the process of developing the recommendations that could influence the RPSD or be incorporated into future programs, policies and planning efforts include:
 - ✓ The processes, procedures and accomplishments need to be documented. This is important for achieving consistency of

effort over time and the successful achievement of desired outcomes.

- ✓ Ideally, staff and other stakeholders that are to be affected by or involved in the implementation of the policy and recommendations need to be a part of the development process.
- ✓ Staff involved in implementation should be familiarized with the issues and requirements and how their day to day activities will be affected.
- This effort, and its recommended approach and products, can serve as a model for similar efforts by other counties and municipalities throughout the region which may or may not have adopted or implemented CS policies.
- The recommendations, which collectively will result in the implementation of the County's CS Policy are related to or associated with many RPSD Topics, as indicated in Figure 3.

Livability and the Environment		Economic Competitiveness and Workforce Development		Society and Community	
Land Use & Urban Design	★	Asset-Based Infrastructure Development	★	Health & Safety	★
Transportation	●	Workforce Preparedness & Training	○	Arts & Culture	○
Housing		Industry Sector Development		Education	
Energy & Climate	★	Business Environment & Entrepreneurial Support	○		
Natural Lands					
Air Quality	★				
Water Resources					

● Significantly associated with topic

★ Associated with topic

○ Minor association with topic

APPENDICES

- Appendix A. Technical Memorandum #1 – Data Collection
 - Appendix B. New Jersey Permanent Statutes, Titles 27 and 40
 - Appendix C. Essex County Complete Streets Policy (original April 2012) and Recommended Revisions
 - Appendix D. Recommended Revisions to the Project Purpose and Needs Form
 - Appendix E. Exemption Criteria Forms
 - Appendix F. Essex County Roadway Policies
 - Appendix G. Site Plan Subdivision Review Documents and Proposed Checklists (under separate cover)
 - Appendix H. Comparative Profile of Traditionally Disadvantaged Populations in Essex County
 - Appendix I. Demonstration Project - Essex County Complete Streets Implementation Action Plan
-



APPENDIX A

Technical Memorandum #1 Data Summary and Initial Analysis



TOGETHER
**NORTH
JERSEY.**

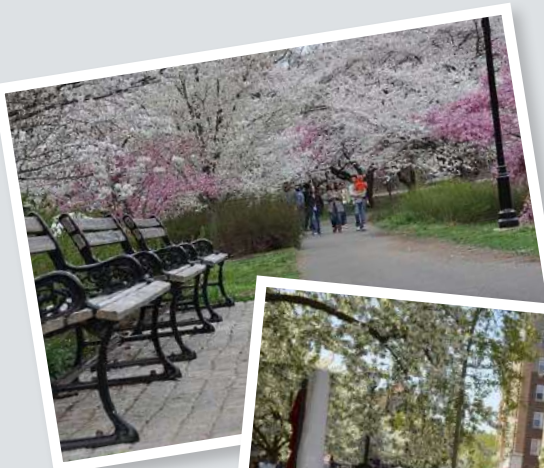
TECHNICAL MEMO

-Existing Obstacles & Needs



ESSEX COUNTY

Complete Streets
Implementation
Action Plan



Submitted
by:
RBA

November 2013



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Appendices

APPENDIX A – Essex County Book of Policies (2000) index

APPENDIX B – Essex County Planning Board Site Plan Application

APPENDIX C – Essex County Planning Board Subdivision Application

APPENDIX D – Interview invitee List and Questions



INTRODUCTION

This Technical Memorandum identifies the data collection efforts undertaken as part of Task 4 of the Essex County Complete Streets Implementation Action Plan. The primary purpose of this task is to:

1. Identify the plans, policies, guidelines, and procedures that Essex County currently uses as its standard for transportation improvements and,
2. Conduct initial analysis for opportunities to revise these resources so that the County's recently adopted Complete Streets policy is fully considered throughout all project phases – planning, design, funding, construction, maintenance, and operations.

The information gathered to date includes Plans, Policies, Guidelines, Specifications and Regulations, Forms, Maps and Procedures. The project team will continue to collect and review these types of resources as it is expected that these will continue to evolve as future tasks are developed.

DATA COLLECTION

PLANS

As part of the data collection, the project team gathered, reviewed and evaluated information on relevant plans and studies related to Essex County's transportation network. These resources are summarized below:

Essex County Comprehensive Transportation Plan:

As stated in the Executive Summary of this June 2013 Plan, "The Essex County Comprehensive Transportation Plan (Plan) has been developed to improve mobility and safety across Essex County, New Jersey. The Plan builds upon and reinforces many of the goals and objectives of the North Jersey Transportation Planning Authority's (NJTPA) Plan 2035, which identifies and promotes policies that help support and reinforce the recommended improvements, and provides a framework for selecting and prioritizing among proposed implementation strategies, plans, and projects."

This plan includes land use, roadway and multi-modal inventories; needs assessments; documents public outreach; and recommends a prioritized list of projects focused on enhancing transportation safety in Essex County.

Port Authority NY NJ Bicycle Master Plan:

The Port Authority prepared a Bicycle Master Plan, published on September 29, 2010. This Bicycle Master Plan establishes the framework for various facilities owned and/or operated by the Port



Authority of New York and New Jersey to meet the goals and objectives contained in the February 25, 2010 Bicycle Policy. It identifies recent trends, current conditions, and challenges while offering both short- and long-term initiatives to improve the accommodations for bicyclists at the Aviation, Ports, Port Authority Trans Hudson, and Tunnels, Bridges, and Terminals facilities.

This plan includes concepts to provide bicycle access to Newark Liberty International Airport from the surrounding Newark neighborhood. This will be the first non-motorized access to the airport. Creating a viable bicycle commute option could encourage mode shift by employees currently traveling to and from work via private motor vehicle or bus to try bicycle commuting.

Essex County Natural Resources Inventory:

This inventory is currently being provided and will serve as a resource for identifying major destinations, park facilities, and roadways throughout Essex County. The Essex County Environmental Commission released the first-ever Essex County Natural Resource Inventory on Thursday, March 19th, 2010. The 334-page study provides a comprehensive description of Essex County's natural features and characteristics and is a valuable resource that will help municipalities and the County shape environmental policy and development practices.

POLICIES

Essex County Complete Streets Policy: *(anticipated to be updated as part of this plan)*

The Essex County Complete Streets Policy was adopted on April 26, 2012. The intent of this policy is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of Essex County's "Complete Streets." The goal of this project is to create an Action Plan that will help the Department of Public Work's engineers, planners and maintenance team to implement the policy.

Essex County Book of Policies (2000): *(anticipated to be updated as part of this plan)*

Essex County has 19 roadway policies ranging in topics from traffic signals to awnings to sidewalks and trees. A copy of the cover page with an index of the policies is provided as an **Appendix A** to this tech memo.



SPECIFICATIONS AND REGULATIONS

Essex County Standard Specifications 2009: *(anticipated to be updated as part of this plan)*

The Specifications include the Essex County Road Opening Specifications and Fee Schedule for construction in the Essex County Right of Way, dated June 2009. This includes the ordinance establishing a fee schedule for work within the County roadways, and copies of applications.

Subdivision Review Regulations: *(anticipated to be updated as part of this plan)*

Adopted by the Essex County Board of Chosen Freeholders on 11/26/1968, and reprinted in April 1997, this document contains the definitions, procedures, plat details, design standards, and standards and criteria for adjusting or waiving subdivision review requirements.

Site Plan Review Regulations: *(anticipated to be updated as part of this plan)*

Adopted by the Essex County Board of Chosen Freeholders on 11/26/1968, and reprinted in April 1997, this document contains the rules, regulations and standards to guide land development along county roads in order to promote public health, safety, convenience and general welfare of the County. There are several references to federal documents such as the 1984 AASHTO *Policy of Geometric Design of Rural Highways* and the 1984 *Highway Capacity Manual*.

GUIDELINES

NJDOT - Roadway Design Manual:

This manual provides detailed information about how to design state system roadways. The NJDOT recently incorporated bicycle, pedestrian and traffic calming elements into the Roadway Design Manual.

AASHTO - A Policy on Geometric Design of Highways and Streets:

A Policy on Geometric Design of Highways and Streets, commonly referred to as the "Green Book," contains the current design research and practices for highway and street geometric design. Produced by the American Association of State Highway and Transportation Officials (AASHTO), this is the standard 'go to' manual when designing roadways. In recent years, this publication has been supplemented by the AASHTO Bicycle and AASHTO Pedestrian Design Guidelines.



FHWA - Manual on Uniform Traffic Control Devices (MUTCD):

This manual, issued by the Federal Highway Administration (FHWA), provides standards, guidance and options regarding how signs and striping are included on roadway projects.

ITE - Traffic Engineering Handbook:

As stated in the introduction of the handbook, "The purpose of the publication is to collate, in one volume, basic traffic engineering information as a guide to the best practice in the field. It provides a day-to-day source of reference on the principles and proven techniques in the practice of traffic engineering."

ITE - Transportation Planning Handbook:

This is a reference for practicing transportation professionals involved with the administrative, technical and legal aspects of transportation planning. It assists transportation professionals in the governmental, consulting and educational fields with the planning of transportation infrastructure. Written by 22 authors in the field of transportation, and reviewed by leading transportation professionals, this handbook includes a wide range of transportation planning issues, ranging from a basic understanding, to application context and strategy-specific planning.

ITE - Manual of Traffic Signal Design:

Published in January of 1998, this manual covers traffic signal fundamentals. It includes wiring and cabling specifics; and focuses on preparing contractual documents; and explains construction supervision techniques.

New Jersey Statutes – Title 39 – Motor Vehicles and Traffic Regulation:

This section of the New Jersey State Law dictates how travelers may legally operate on public roadways.

Essex County Highway Statutes: *(anticipated to be updated as part of this plan)*

These publications are currently being provided by Essex County for review.



FORMS

Essex County Planning Board Site Plan Application: *(anticipated to be updated as part of this plan)*

The application for a site plan includes a filing fee schedule, applicant information and proposed site information. Four copies of signed and sealed plans are required to be submitted with the application. A copy of the application form is provided as an **Appendix B** to this tech memo.

Essex County Planning Board Subdivision Application:

The application for a subdivision includes a filing fee schedule, applicant information and proposed site information. Four copies of signed and sealed plans are required to be submitted with the application. A copy of the application form is provided as an **Appendix C** to this tech memo.

MAPS

Highway Master Plan Map narrative 1984:

This narrative includes a detailed inventory of the County roadways, including width of the roadway right of way, which is typically 66', 86', or 108'. There is also a list of planned Capital Improvement Projects to be initiated in 1984, "as an attempt to coordinate and integrate all County funded activity into a comprehensive plan". This list includes a list of roadways to be resurfaced (up to ¾" overlay, or up to 1 ½" overlay) and a list of supplemental roadways that would also be resurfaced if funds are available.

Official Essex County Map 1981:

This graphic map depicts the existing and proposed county roadways and municipal boundaries on an 11" x 17" black and white image. The right of way width is displayed by a numbered code along each road segment. State and interstate roadways are also displayed.

Essex County Transportation Map:

This color map shows all roadways in Essex County, and labels the state and county roads. The NJDOT GIS department produced the map using ortho-photos from 2000. Map coverage extends into Hudson, Union, Morris and Passaic counties to fill the map coverage to a rectangular page limit.



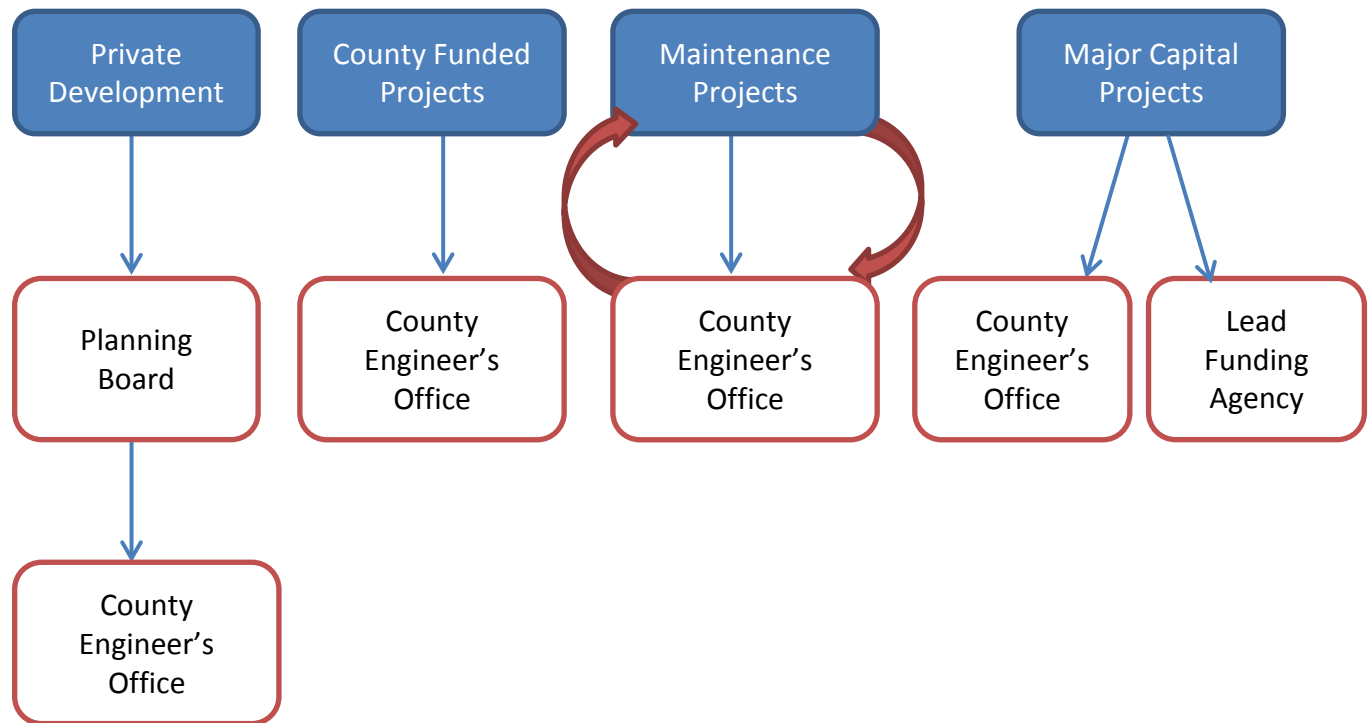
PROCEDURES

As part of the data collection phase of the *Essex County Complete Streets Implementation Action Plan* process, confidential interviews were requested with individuals to get their insight on the County's Complete Streets policy and how it integrates with their work. Key County staff who possess various interests and insights into the Essex County project development, design and maintenance and operation process were sent invitations to be interviewed (see **Appendix D** for invitee list) by the project team. The interview was conducted as a focus group session with two County Department of Public Works staff on Friday November 15th and lasted approximately an hour and a half. Interviewees were asked a series of questions (see **Appendix D**) regarding the County's plans, policies, procedures and guidelines. Overall responses are summarized below.

Project Development

- All project design is done in one phase – there is no separation between preliminary design and final design.
- Roadway development or improvements by private developers is not regulated by the County's Complete Streets policy.
- Requests for project planning and design can be initiated internally by County staff; through a maintenance request; or can come from the public organization/agency.
- Concept development happens in the engineering department not the planning department and there is no sign-off from the planning department to review these concepts.
- Currently site plan development is vetted by the Planning Board and the County Engineer's office.
- The County does not have a formal problem statement form or checklist for its engineers to complete during project development.
- There is no formal organization/flow chart of the Essex County project development process; however the process, as described, has been illustrated in Figure 1 on the following page:

Figure 1. Essex County Pipeline for Project Development



Preliminary Engineering

- The County does not have its own design standards – they currently follow the NJDOT standards
- They have not granted any exemptions under the Complete Streets policy because the full roll-out of implementation hasn't happened

Maintenance/Operations/Construction

- Municipalities are only notified about roadway improvements (on county roadways) after they've already been designed by the County

INITIAL ANALYSIS AND NEXT STEPS

INITIAL ANALYSIS

In conjunction with the review of existing documents, RBA has begun identifying instances where Complete Streets language needs to be incorporated into Essex County's plans, policies, guidelines or procedures to translate the stated goals and objectives of the adopted policy into actual on-the-ground improvements. Updating these items will ensure that Complete Streets implementation is carried through the planning, design, construction, funding, operation and maintenance of Essex



County's transportation network. Here is a brief summary of these instances based on the information to date:

1. All policies and guidelines, especially the Complete Streets policy, should be revised to include the following resources:
 - National Association of City Transportation Officials (NACTO), *Urban Bikeway Design Guide*, April 2011, 2nd Edition
 - National Association of City Transportation Officials (NACTO), *Urban Street Design Guide*, September 2013
 - AASHTO, *Guide for the Development of Bicycle Facilities*, 2012, 4th Edition
 - AASHTO, *Guide for the Planning, Design, and Operation of Pedestrian Facilities*, July 2004
 - Institute of Transportation Engineers (ITE), *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*, 2010.

Inclusion of these resources will ensure that Essex County is utilizing resources that cover recent national advances in Complete Streets and strengthen the Complete Street Implementation Action Plan. These documents are supported on a national level by the Federal Highway Authority, which encourages agencies to appropriately use these guides and other resources to help fulfill the aims of the 2010 [US DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations](#) - "...DOT encourages transportation agencies to go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate." Since these publications are periodically updated, County staff should ensure that they consistently check for any updates.

2. All references to documents currently used by County staff should be verified to ensure that they are the most current and up-to-date.
3. The current project development process should be augmented by the addition of a problem statement document.
4. Roadway/sidewalk improvements proposed as part of the site/subdivision process need to have guidance to ensure they comply with the Complete Streets policy and soon to be developed checklist.
5. The checklist, to be developed as Task 5, needs to include a sign-off from the County planning department.



6. The current maintenance and operations process should be augmented by a checklist to ensure that all improvements comply with the Complete Streets policy.
7. Local officials and engineers should be amply notified in the planning, maintenance, and construction of County roadways within its municipality.
8. The problem statement should include a checkbox to note if the problem area/location has already been identified in the Essex County Comprehensive Transportation Plan.

NEXT STEPS

Specific recommendations for updating many of these documents will be completed in future tasks (Task 5 – Updating County Plans, Policies, Guidelines and Procedures, and Task 6 – Integrating Complete Streets into the Subdivision and Site Plan Review Process.)

Results of this task will also contribute to the development of the curriculum for the County's Complete Streets training workshops (Task 3).



APPENDIX B

Relevant Statutes

<http://law.onecle.com/new-jersey/27-highways/16-6.html>

27:16-6. Maintenance of roads; easements and rights of way

The duty of maintaining and keeping in repair every road so laid out and opened, taken over, or acquired, shall devolve exclusively upon the board of chosen freeholders, and all other duties and all powers respecting such road shall be imposed upon and be vested in it, but when a road is acquired in accordance with section 27:16-5 of this title nothing herein contained shall divest any municipality in which the road or any portion thereof may be, or through which it may extend, of its authority to light such road, or its power to construct, grade, curb, pave or repair the sidewalks and curbs along it, nor shall this power of the municipalities divest the board of chosen freeholders of its right to construct across or under the sidewalks of the road the necessary culverts or other structures for the proper drainage, protection and maintenance of the road.

The board of chosen freeholders shall not grant an easement, right of way, or use in, under or over, any portion of a county road in a municipality, unless the governing body of the municipality, or the board of public utility commissioners, shall consent thereto. When, in connection with any such grant, the consent of property owners is required by law, it shall be obtained before such grant of any such easement, right of way or use.

<http://law.onecle.com/new-jersey/27-highways/16-8.html>

27:16-8. County to maintain road to full width

The board of chosen freeholders shall maintain every road laid out, opened, taken over, or acquired by it, between the curb lines, and keep it in repair, safe and convenient for travel during all seasons of the year.

<http://law.onecle.com/new-jersey/40-municipalities-and-counties/65-13.html>

40:65-13. Sidewalks on land under control of county; cost; assessments and collection

The governing body may improve any street, parkway, or highway under control of any county board or commission, not wholly within the limits of a county park, with suitable curbing, gutters and sidewalks, after obtaining the approval of the county board or commission to the plans of the proposed improvement, and assess the cost thereof upon the real estate abutting upon the line of the improvement, to the extent of the benefits received, and any difference between the amount assessed and the total cost shall be paid by the municipality. The proceedings relating to the making of such improvement and the ascertainment and assessment of the cost, and the collection of the assessments made shall be the same as provided in this chapter for sidewalk improvements made upon streets not under the control of a county board or commission. All such

assessments shall be a lien upon the real estate assessed until paid with interest thereon, as provided by law for assessments for local improvements.

40:65-14. Sidewalks in municipalities; ordinances for imposition on abutting landowners of expense of construction, repair, alteration or maintenance; procedure

Any municipality may prescribe by general ordinance in what case curbs and sidewalks shall be constructed, repaired, altered, relaid or maintained at the expense of the abutting landowners; wherever in any municipality it shall hereafter become the duty of any owner of abutting lands under said ordinance or ordinances of the municipality to construct, repair, alter or relay any curb or sidewalk, or section thereof, the authorities of such municipality having charge of street affairs may, by resolution, cause a notice in writing to be served upon the owners or occupant of said lands, requiring the necessary specified work to said curb or sidewalk to be done by the said owner or occupant within a period of not less than 30 days from the date of service of such notice; whenever any lands are unoccupied and the owner cannot be found within the municipality, the same may be mailed, postage prepaid, to his or her post-office address, if the same can be ascertained; in case such owner is a nonresident of the municipality or his or her post-office address cannot be ascertained, then the notice may be inserted for 4 weeks, once a week in some newspaper of such municipality or if none be published therein, then in some newspaper published in the State and circulating in said municipality; in case the owner or occupant of such lands shall not comply with the requirements of such notice, it shall be lawful for the street department of the municipality, upon filing due proof of the service or publication of the aforesaid notice in the appropriate department of the municipality, to cause the required work to be done, and paid for out of the municipal funds available for that purpose; the cost of such work shall be certified by the department or person having charge thereof to the department or person having charge of the collection of assessments in such municipality; upon filing the said certificate, the amount of the cost of such work shall be and become a lien upon the said abutting lands in front of which such work was done to the same extent that assessments for local improvements are liens in such municipality under its charter or the general law, and shall be collected in the manner provided by law for the collection of such other assessments, and shall bear interest at the same rate; in addition thereto the municipality may have an action to recover the said amount against the owner of said lands, in any court having competent jurisdiction thereof; a certified copy of the aforesaid certificate shall in such action be prima facie evidence of the existence of a debt due from the said owner to the municipality.

L.1970, c. 297, s. 1, eff. Dec. 14, 1970.



APPENDIX C

Existing Essex County
Complete Streets Policy
&
Essex County Complete Streets Policy with
Proposed Changes



COUNTY OF ESSEX, NEW JERSEY
BOARD OF CHOSEN FREEHOLDERS

State of New Jersey,}
County of Essex } ss

*I Deborah Davis Ford Clerk of the Board of Chosen
Freeholders of the County of Essex in the State of New Jersey
Do Hereby Certify, the foregoing to be a true copy of a resolution adopted at a
meeting of said Board on Wednesday
the 25th day of April 2012, together with the certification,
signatures and endorsements thereon.*

RESOLUTION NO: R-2012-00392

*I, N. Testimony WHEREOF, I have hereunto set my
hand and affixed the official seal of said County at
Newark this 17th day of
December A.D. 2012*


Clerk

PLEASE NOTE: Resolution Nos. R-12-0392, become R-2012-00392, as per Ordinance No. O-2011-00010, adopted August 17, 2011.



RESOLUTION OF THE BOARD OF CHOSEN FREEHOLDERS
COUNTY OF ESSEX

RESOLUTION NO. R-R-0392
PROPOSED BY: FREEHOLDER GILL

AUTHORITY FOR RESOLUTION N.J.S.A. 40:41A-38(a)
AUTHORITY FOR ACTION C.C.E. 3:2-29(B)

SUBJECT:

RESOLUTION ESTABLISHING AND ADOPTING AN ESSEX COUNTY COMPLETE STREETS POLICY

WHEREAS, a Complete Street is defined as a means to provide safe access for all users by designing and operating a comprehensive, integrated, connected multi-modal network of transportation options; and

WHEREAS, the benefits of Complete Streets include improving safety for pedestrians, bicyclists, children, older citizens, non-drivers and the mobility challenged as well as those that cannot afford a car or choose to live car free; providing connections to bicycling and walking trip generators such as employment, education, residential, recreation, retail centers and public facilities; promoting healthy lifestyles; creating more livable communities; reducing traffic congestion and reliance on carbon fuels thereby reducing greenhouse gas emissions; and saving money by incorporating sidewalks, bike lanes, safe crossings and transit amenities into the initial design of a project, thus sparing the expense of retrofits later; and

WHEREAS, the Essex County Board of Chosen Freeholders wishes to establish a Complete Streets policy though the planning, design, construction, maintenance and operation of new and retrofit transportation facilities, enabling safe access and mobility; and

WHEREAS, it is the intent of the Board of Chosen Freeholders that to the extent practicable, the Essex County Complete Streets policy shall include all road, bridge, and building projects.

NOW, THEREFORE, be it resolved that the Essex County Board of Chosen Freeholders establish the following Complete Streets Policy with the following goals and objectives:

1. Provide safe and accessible accommodations for existing and future pedestrian, bicycle and transit facilities.
2. Establish a checklist of pedestrian, bicycle and transit accommodations such as accessible sidewalks curb ramps, crosswalks, countdown pedestrian signals, signs, curb extensions, pedestrian scale lighting, bike lanes, and shoulders for consideration in each project where county jurisdiction applies.
3. Additionally, in rural areas, paved shoulders or a multi-use path shall be in all new construction and reconstruction projects on roadways used by more than 1,000 vehicles per day. Paved shoulders provide safety and operational advantages for all road users. Exemptions shall be considered for County and State designated routes such as Scenic Roads, and Historic or Cultural Byways. If there is evidence of heavy pedestrian usage then sidewalks shall be considered in the project.
4. Establishment of a procedure to evaluate resurfacing projects for Complete Streets inclusion according to length of project, local support, environmental constraints, right-of-way limitations, funding resources, and bicycle and/or pedestrian compatibility.
5. Transportation facilities constructed for long-term use shall anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements.
6. Designs shall address the need for bicyclists and pedestrians to cross corridors, as well as travel along them, in a safe, accessible and convenient manner.
7. Bicycle and pedestrian facilities shall be designed and constructed to the best currently available standards and practices including the New Jersey Roadway Design Manual, the AASHTO Guide for the Development of Bicycle Facilities, AASHTO's Guide for the Planning, Design and Operation of Pedestrian Facilities, the Manual of Uniform Traffic Control Devices and others as related.



8. Provisions shall be made for pedestrians and bicyclists when closing roads, bridges or sidewalks for construction projects as outlined in NJDOT Policy #705 -Accommodating Pedestrian and Bicycle Traffic During Construction.

9. Improvements shall also consider connections for Safe Routes to Schools, Safe Routes to Transit, Transit Villages, trail crossings and areas or population groups with limited transportation options.

10. Improvements shall comply with Title VII Environmental Justice, Americans with Disabilities Act (ADA) and complement the context of the surrounding community.

11. Exemptions to the Complete Streets policy shall be presented for final decision to the County Engineer in writing and documented with supporting data that indicates the reason for the decision and are limited to the following:

- a) Non-motorized users are prohibited on the roadway.
- b) Scarcity of population, travel and attractors, both existing and future, indicate an absence of need for such accommodations.
- c) Detrimental environmental or social impacts outweigh the need for these accommodations.
- d) Cost of accommodations is excessively disproportionate to cost of project.
- e) The safety or timing of a project is compromised by the inclusion of Complete Streets.
- f) An exemption other than those listed above must be documented with supporting data and must be approved by the County Engineer.

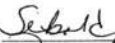
BE IT FURTHER RESOLVED, that a certified copy of this Resolution shall be sent to the Office of the County Administrator, Office of County Counsel and Department of Public Works.

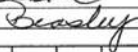




Approved as to form and legality _____

RECORD OF VOTE (X=Vote N.V.=Absention ABS=Absent)

Moved by Freeholder 

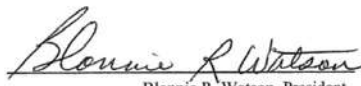
Second by Freeholder 

Freeholder	Yes	No	N.V.	ABS	Freeholder	Yes	No	N.V.	ABS
BEASLEY	✓				LUCIANO	✓			
BOBADILLA	✓				PAYNE, JR				X
CLARK	✓				SEBOLD, VICE PRES.	✓			
GILL	✓								
JOHNSON	✓				WATSON, PRES.	✓			

It is hereby certified that the foregoing Resolution was ~~by~~ adopted () defeated () tabled by roll call vote at a regular meeting of the Board of Chosen Freeholders of the County of Essex, New Jersey held on April 25, 2012.

Is Publication Required () Yes () No

Date Published _____


 Blonnie R. Watson, President



Essex County Complete Streets Policy

The following changes should be made to the Essex County Complete Streets Policy:

RESOLUTION OF THE BOARD OF CHOSEN FREEHOLDERS COUNTY OF ESSEX

RESOLUTION
PROPOSED BY: ~~FRE~~ *-t- Q 5q; i, _* HOLDER GILL

AUTHORITY FOR RESOLUTION N.J.S.A. 40:41A-38Cq1
AUTHORITY FOR ACTION C.C.E. 3-2-29(8)

SUBJECT:

RESOLUTION ESTABLISHING AND ADOPTING AN ESSEX COUNTY COMPLETE STREETS POLICY

WHEREAS, a Complete Street is defined as a means to provide safe access for all users by designing and operating a comprehensive, integrated, connected multi-modal network of transportation options; and

WHEREAS, the benefits of Complete Streets include improving safety for pedestrians, bicyclists, children, older citizens, non-drivers and the mobility challenged as well as those that cannot afford a car or choose to live car free; providing connections to bicycling and walking trip generators such as employment, education, residential, recreation, retail centers and public facilities; promoting healthy lifestyles; creating more livable communities; reducing traffic congestion and reliance on carbon fuels thereby reducing greenhouse gas emissions; and saving money by incorporating sidewalks, bike lanes, safe crossings and transit amenities into the initial design of a project, thus sparing the expense of retrofits later; and

WHEREAS, the Essex County Board of Chosen Freeholders wishes to establish a Complete Streets policy through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities, enabling safe access and mobility; and

WHEREAS, it is the intent of the Board of Chosen Freeholders that to the extent practicable, the Essex County Complete Streets policy shall apply to all road, bridge, and building projects.

NOW, THEREFORE, be it resolved that the Essex County Board of Chosen Freeholders establish the following Complete Streets Policy with the following goals and objectives:

1. Provide safe and accessible accommodations for existing and future pedestrian, bicycle and transit facilities.
2. Establish a checklist of pedestrian, bicycle and transit accommodations such as accessible sidewalks curb ramps, crosswalks, countdown pedestrian signals, signs, curb extensions, pedestrian scale lighting, bike lanes, and shoulders for consideration in each project where county jurisdiction applies.
3. Additionally, in rural areas, paved shoulders or a multi-use path shall be included in all new construction and reconstruction projects on roadways used by more than 1,000 vehicles per day. Paved shoulders provide safety and operational advantages for all road users. Exemptions shall be considered for County and State designated routes such as Scenic Roads, and Historic or Cultural Byways. If there is evidence of heavy pedestrian usage then sidewalks shall be considered in the project.
4. Establishment of a procedure to evaluate resurfacing projects for Complete Streets inclusion according to length of project, local support, environmental constraints, right-of-way limitations, funding resources, and bicycle and/or pedestrian compatibility.
5. Transportation facilities constructed for long-term use shall anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements.
6. Designs shall address the need for bicyclists and pedestrians to cross corridors, as well as travel along them, in a safe, accessible and convenient manner.
7. Bicycle and pedestrian facilities shall be designed and constructed to the best currently available standards and practices including the New Jersey Roadway Design Manual, the AASHTO Guide for the Development of Bicycle Facilities, AASHTO's Guide for the Planning, Design and Operation of Pedestrian Facilities, the Manual of Uniform Traffic Control Devices, *National Association of City Transportation Officials (NACTO), Urban Bikeway Design Guide and Urban Street Design Guide, Institute of Transportation Engineers (ITE), Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*, and others as related.

8. Provisions shall be made for pedestrians and bicyclists when closing roads, bridges or sidewalks for construction projects as outlined in NJDOT Policy #705 -Accommodating Pedestrian and Bicycle Traffic During Construction.

9. Improvements shall also consider connections for Safe Routes to Schools, Safe Routes to Transit, Transit Villages, trail crossings and areas or population groups with limited transportation options.

10. Improvements shall comply with Title VII Environmental Justice, Americans with Disabilities Act (ADA) and complement the context of the surrounding community.

11. Exemptions to the Complete Streets policy shall be presented for final decision to the **Complete Streets Implementation Committee (consisting of the County Engineer and Directors of the Divisions of Planning and Roads & Bridges)** in writing and documented with supporting data that indicates the reason for the ~~decision~~ request. **The role of the Exemptions Committee is to review and sign off on any exemption requests. Exemptions and** are limited to the following:

- a) Non-motorized users are prohibited on the roadway.
- b) Scarcity of population, travel and attractors, both existing and future, indicate an absence of need for such accommodations.
- c) Constrained Environment: Detrimental environmental or social impacts outweigh the need for these accommodations.
- d) Cost of **fully providing Complete Streets** accommodations is excessively disproportionate to cost of project, **considering the cost as part of the entire Capital Program, not just the isolated project cost.**
- e) The safety or timing of a project is compromised by the inclusion of Complete Streets.
- f) A shared use path is being provided in place of on-road bicycle accommodations.
- g) ~~Any~~ **Any** exemption other than those listed above must be documented with supporting data and must be approved by the **Complete Streets Implementation Committee.**

Projects that are granted exceptions shall be made publically available for review.

BE IT FURTHER RESOLVED, that a certified copy of this Resolution shall be sent to the Office of the County Administrator, Office of County Counsel and Department of Public Works.



APPENDIX D

Project Purpose and Needs Statements



PROJECT PURPOSE & NEEDS STATEMENT

Contact Name:

Phone/Email:

Project Name:

Project Limits (Include Route, Mileposts, Structure Number, Municipality, Other Limits):

Brief Description of the Project

Describe Project Impetus

Check all the goals contained in the *Essex County Comprehensive Transportation Plan (CTP)* that apply to your problem location:

- ☐ Maintain a safe & efficient roadway system
- ☐ Increase the use of mass transit
- ☐ Increase and/or provide opportunities for walking and bicycling
- ☐ Connectivity for all modes of transportation
- ☐ Foster and support development and industrial growth



Describe how the project will meet the goal(s) noted above

Describe the key performance measures and targets used to track success in obtaining the goal(s)

Is this roadway currently included in the CTP as a candidate project for improvement?

Yes ☐

No ☐

If yes, please explain how the proposed project plan will address any or all of the recommendations in the CTP?



CONSISTENCY WITH COMPLETE STREETS POLICY AND GUIDING PRINCIPLES

Existing Conditions

1. Explain how the project area currently accommodates pedestrians (including ADA compliance), bicyclists, and transit users.

- 1a. Explain how the proposed project will accommodate them once completed.

2. What is the current and projected Level of Service (LOS)? Please provide existing Average Daily Traffic (ADT) counts for all modes for which counts are available.

3. Please provide the percentage of truck traffic. Alternatively, you may provide vehicle classification counts.

4. Please describe the existing character of the project area, including land use, estimated pedestrian and bicycle traffic, any unofficial walking paths, density of development, street furniture/lighting, emergency call boxes, perceived safety issues, transit routes and stops.

5. Please attach a map of the project area, showing land use and existing and future trip generators. Existing and future trip generators are places that attract customers, employees, students, visitors, and others. The following are some examples:

- *Employment centers*
- *Schools/Colleges*
- *Libraries*
- *Residential areas*
- *Recreational facilities (parks, etc.)*
- *Tourist destinations*
- *Community gathering places (churches, etc.)*
- *Entertainment*
- *Shopping*
- *Logistic centers*

6. Please fill out the following:

Existing ROW Width:		Proposed ROW Width:	
Existing Pavement Width:		Proposed Pavement Width:	
Existing Number of Lanes:	NB/EB SB/WB	Proposed Number of Lanes:	NB/EB SB/WB
Is there an existing 2-way center turn lane?	Yes No	Is there a proposed 2-way center turn lane?	Yes No
Existing Shoulder Widths:	NB/EB SB/WB	Proposed Shoulder Widths:	NB/EB SB/WB
Existing Sidewalk Widths:	N/E S/W	Proposed Sidewalk Widths:	N/E S/W
Existing Bike Lane Widths:	NB/EB SB/WB	Proposed Bike Lane Widths:	NB/EB SB/WB
Existing MUP Width:		Proposed MUP Width:	
Existing Speed Limit	MPH	Proposed Speed Limit	MPH
Number of railroad facilities within the project limits:			



7. What are the functional classifications of the roads covered by this project? Check all that apply.

Functional Classification:

- | | |
|---|---|
| ☐ Urban Interstate Highway | ☐ Rural Minor Arterial |
| ☐ Urban Other Expressway | ☐ Rural Major Collector |
| ☐ Urban Principal Arterial | ☐ Rural Minor Collector Local Road |
| ☐ Urban Minor Arterial Urban Collector | ☐ Other – Please specify: _____ |
| ☐ Rural Interstate Highway | |
| ☐ Rural Principal Arterial | |

8. Briefly explain how the project will improve safety. All crash data and methodology used should be attached for supporting documentation. Crash information should include the number of pedestrian and bicycle crashes by severity, as well as if the project area includes any locations (corridors or intersections) that are on NJTPA and/or NJDOT’s high-crash lists.

9. Project limits should be selected so that they can accommodate existing and future connections. In this regard, were logical termini chosen to include connections through “pinch points” such as overpasses, railroad crossings, and bridges? If the project touches another jurisdiction, was a systems approach taken? Were cross-jurisdictional connections considered? Please explain:



10. Does the project area include recommendations that are contained in any of the following plans? Please check all that apply.

- ☐ ADA Transition plans
- ☐ Pedestrian and/or Bicycle plans
- ☐ Sidewalk inventories
- ☐ Freight plans
- ☐ Greenways plans
- ☐ Active Transportation/Open Space plans
- ☐ Short-range and/or Long-range transit plans
- ☐ NJTPA Regional Transportation Plan
- ☐ NJDOT plans
- ☐ Safe Routes to School travel plans
- ☐ Any neighborhood or mobility plans
- ☐ Any other _____



If yes, how does your project fulfill the recommendations in any of these plans? Please specify the plan name(s).

11. Is there additional information you would like to provide about the project?

Signature of Initiator: _____ **Date:** _____

Print Name of Initiator: _____

NOTE: The Essex County DPW will return a Project Purpose and Need Statement to the initiator if it is deemed incomplete.



ESSEX COUNTY DPW SIGN-OFF

Based on the information herein, it is recommended that this project statement be:

- ☐ Advanced for Concept Development
- ☐ Advanced for Resurfacing
- ☐ Advanced to DPW Maintenance Department to initiate a maintenance work order
- ☐ Terminated because of the lack of need or because the recommendation within the problem statement is already being addressed by an existing project
- ☐ Tabled for future study and advancement (i.e. when funding is available to address the issue)

Signature of Reviewer: _____ **Date:** _____

Print Name of Reviewer: _____



APPENDIX E

Exemption Worksheets

Exemption A – Prohibition of Bicycles and Pedestrians worksheet	Highway/Roadway	Limits/Termini	Type of Project
Project ID 0000-00-00		Proposed posted speed	Design Year AADT (year)

Section 1 Roadway Characteristics

Are bicycles and pedestrians prohibited from the highway by statute or limited access regulation Yes ☐ No ☐

Will the proposed highway be designated as a freeway or expressway and signed or marked to prohibit bicycles and pedestrians? Yes ☐ No ☐
(If no, Exception 1 does not apply and pedestrian/bicycle accommodations must be provided.)

Section 2 Alternative Accommodations

☐ Parallel accommodations **are** being provided through:

☐ Shared-use path.

☐ Parallel and adjacent local roadways (provide separation distance _____ feet).

Section 3 Roadway Crossings

☐ The project **includes** road grade separations and/or interchanges.
List existing & proposed crossings;

1)
2)
3)
4)

☐ Pedestrian accommodations **are** being provided on the crossing roadway(s) through:

☐ Sidewalks. Shared-
☐ use Paths.

☐ Pedestrian accommodations **are not** being provided on the crossing roadway because of:

☐ Excessive cost – Attach Exception D Worksheet.
☐ Constrained environment – Attach Exception C Worksheet.
☐ Absence of need – Attach Exception B Worksheet.
☐

☐ Bicycle accommodations **are** being provided on the crossing roadway through:

☐ Bike Lanes.
☐ Bike lane/parking lane combination.
☐ Bike lane full time.
☐ Short term parking restriction.
☐ Wide curb lane.
☐ Paved shoulders. Paved shoulder width is _____ feet.
☐ Other – Explain:

☐ Bicycle accommodations **are not** being provided on the crossing roadway because of:

☐ Shared use path - Attach Exception F Worksheet
☐ Excessive cost – Attach Exception D Worksheet
☐ Constrained environment – Attach Exception C Worksheet
☐ Absence of need – Attach Exception B Worksheet.

☐ Roadway work for these crossing(s) is not included within the scope of this project.

Explain:

☐ The project **does not include** road grade separations and/or interchanges.

☐ Dedicated ped/bike crossings (eg shared use path overpass or underpasses) **are** being incorporated into the project.
Identify each and explain: (add worksheets if necessary)

☐ Dedicated ped/bike crossings (eg shared use path overpass or underpasses) have been reviewed and **are not** being incorporated into the project.

Explain:

Section 4 Prepared and Submitted by

The exemption has been approved (based on excessively disproportionate costs). The project manager will re-evaluate the accommodations and engage the Complete Streets Implementation Committee in further discussions and request an updated approval.

Signature

Printed Name (Project Services Section Chief)

Date: _____

EXEMPTION B – ABSENCE OF NEED WORKSHEET

Project ID	Highway/Roadway	Limits/Termini	
		Proposed posted speed	Design Year AADT (year)

Section 1 Bicycle Accommodations

Urban/Semi Urban Roadways and Bridges

- ☐ The design year AADT is less than 1500 vpd.

Urban/Outlying District Roadways and Bridges (Both boxes must be checked to qualify for the exception for absence of need.)

- ☐ The construction year AADT is less than 750 vpd and any of the following conditions apply:
- ☐ Roadway is not in the Essex County Transportation Plan or other government-endorsed Essex County supported bicycle plan.
 - ☐ Two-way bicycle volume is projected to be less than 25 cyclists per day on the 10 most traveled days of the year.
 - ☐ Bicycle accommodations are not needed to complete gaps in an otherwise continuous bicycle route.
 - ☐ Bicycle accommodations are not needed to connect communities or urban areas within 3 miles of each other.

☐ There will be no significant development within the next 10 years based on an official land use plan or the design year ADT is less than 750*.

* If the design year AADT is less than 750, consider establishing a bikeway that will complete a gap of one mile or less in an otherwise continuous bike route.

Section 2 Pedestrian Accommodations

Urban/Semi Urban Roadway and Bridges

- ☐ The roadway travels through an urban area however a portion of this roadway passes through a rural area and there is no significant development, based on an official land use plan, within the next 10 years.
- ☐ This is a semi urban area where on each side of the roadway within any 1,000 feet along the roadway the buildings fronting thereon average not more than 200 feet apart or where both sides of the roadway considered collectively average not more than 200 feet apart (does not meet exception).
- ☐ Local land use, bike and pedestrian, and transportation plans cited
 - ☐ County land use, bike and pedestrian, and transportation plans cited
 - ☐ Plan cited

Cite the source used to describe the planned development.

Urban Roadways or Bridges

- ☐ The roadway travels through rural area where on each side of the roadway within any 1,000 feet along the roadway the buildings fronting thereon average more than 200 feet apart and there is no significant development, based on an official land use plan, within the next 10 years.
- ☐ Local land use, bike and pedestrian, and transportation plans cited
 - ☐ County land use, bike and pedestrian, and transportation plans cited
 - ☐ MPO plan cited

Cite the source used to describe the planned development.

Section 3 Bicycle and Pedestrian Accommodations within Project Design Life

Roadway/Bridge Design Life

Defined as 20 years for a roadway, 75 years for a bridge (sidewalks, bikeways).

- ☐ Project evaluated changing patterns of use during the design life of the highway
- ☐ Use is expected to increase (does not meet exception).
 - ☐ Use is not expected to increase.
- ☐ Local land use, bike and pedestrian, and transportation plans cited
 - ☐ County land use, bike and pedestrian, and transportation plans cited
 - ☐ MPO plan cited

Cite the source used to describe the planned development.

Section 4 Prepared and Submitted by

The exemption has been approved (based on excessively disproportionate costs). The project manager will re-evaluate the accommodations and engage the Complete Streets Implementation Committee in further discussions and request an updated approval.

Signature

Printed Name (Project Services Section Chief)

Date: _____

EXEMPTION C – CONSTRAINED ENVIRONMENT WORKSHEET

Project ID	Highway/Roadway	Limits/Termini	
		Proposed posted speed	Design Year AADT (year)

Section 1 Urban Roadway Constrained Environment

- ☐ The minimum provision of pedestrian and bicycle accommodations would have excessively negative impacts. **At least one of the following must be checked.**
- ☐ The provision of bikeway and sidewalk, or just a sidewalk, would require the reduction of the roadway width for more than 50 percent of the total project length.
- ☐ The provision of bicycle and pedestrian facilities would result in the relocation of a residence or business or improvement adjacent to the highway that would dramatically reduce the aesthetic value or functionality of the remaining area.
- ☐ The environmental documentation process shows that providing bike or pedestrian facilities would result in excessively negative impacts or would result in loss or degradation of natural resources, historical or archaeological sites potentially eligible for the National Registry of Historic Places (NRHP).

Section 2 Rural Roadway Constrained Environment

- ☐ The minimum provision of bicycle accommodations would have excessively negative impacts. **One of the following must be checked.**
- ☐ The provision of bicycle and pedestrian facilities would result in the relocation of a residence or business or improvement adjacent to the highway that would dramatically reduce the aesthetic value or functionality of the remaining area.
- ☐ The environmental documentation process shows that providing bicycle facilities would result in an unacceptable loss or degradation of natural resources or has an adverse impact on historical or archaeological sites potentially eligible for the National Registry of Historic Places (NRHP).

Section 3 Partial Accommodations

Urban Roadways and Bridges

Pedestrian Accommodations

If sidewalks and bikeways cannot both be accommodated, consideration shall be given to sidewalks before adding bikeways; however the project must include bike/ped facilities to the greatest extent practicable.

- ☐ Pedestrian accommodations are being provided on both sides of roadway.
- ☐ Pedestrian accommodations are being **partially** provided.

Explain:

- ☐ Pedestrian accommodations **are not** being provided.

Explain:

Bicycle Accommodations

- ☐ Bicycle accommodations are being provided.
- ☐ Bicycle accommodations are being **partially** provided.

Explain:

- ☐ Bicycle accommodations will be available for portions of the day through parking restrictions.
- ☐ Bicycle accommodations will be available on a parallel route.

Explain:

- ☐ Bicycle accommodations **are not** being provided.

Explain:

Rural Roadways and Bridges

Bicycle Accommodations

- ☐ Bicycle accommodations are being provided.
- ☐ Bicycle accommodations are being **partially** provided.

Explain:

- ☐ Bicycle accommodations will be available on a parallel route.

Explain:

- ☐ Bicycle accommodations **are not** being provided.

Explain:

Section 4 Prepared and Submitted by

The exemption has been approved (based on excessively disproportionate costs). The project manager will re-evaluate the accommodations and engage the Complete Streets Implementation Committee in further discussions and request an updated approval.

Signature

Printed Name (Project Services Section Chief)

Date: _____

EXEMPTION D – EXCESSIVELY DISPROPORTIONATE COST WORKSHEET

Project ID	Highway/Roadway	Limits/Termini	
		Proposed posted speed	Design Year AADT (year)

Section 1 Urban Roadway Costs

☐ The costs to provide pedestrian and/or bicycle accommodations exceed 20 percent of the project costs. **All of the following must be considered.**

- ☐ The minimum accommodations were considered in the calculation of the ped/bike accommodation costs.
- ☐ Only marginal construction costs associated with the ped/bike accommodations were considered.
(E.g., extra pavement, extra storm sewer. Do not include inlets or curb and gutter unless ped/bike accommodations are the sole reason for their replacement)
- ☐ Cost of replacing an existing ped/bike facility was not included in the calculation. (Replacement of existing facilities is considered a project cost.)
- ☐ Only eligible right-of-way acquisition costs and utility relocation costs were included in the calculation. Check applicable box below:
 - ☐ There is sufficient room in the existing right-of-way to accommodate bicycle and pedestrian facilities – Only 20% of the costs for new right-of-way were included in the calculation.
 - ☐ There is not sufficient room in the existing right-of-way to accommodate bicycle and pedestrian facilities – Only the incremental costs for the new right-of-way needed for the provision of ped/bike accommodation were included in the calculation.
 - ☐ Only compensable utility relocation costs needed solely for the provision of ped/bike accommodations were included in the calculation.

Total cost for project: Cost for minimum accommodations of bicycle and pedestrian facilities: (attach cost estimates).

Bicycle/pedestrian accommodation cost as percentage of total project costs:

Section 2 Rural Roadway Costs

☐ The costs to provide bicycle accommodations exceed 20 percent of the project costs. **All of the following must be checked.**

- ☐ The minimum accommodations were considered in the calculation of the bike accommodation costs.
- ☐ Only marginal construction costs associated with the bicycle accommodations were considered.
(For example: only the extra pavement width added to the shoulder, not the aggregate base)
- ☐ Only eligible right-of-way acquisition costs and utility relocation costs were included in the calculation. Check applicable box below:
 - ☐ There is sufficient room in the existing right-of-way to accommodate bicycle facilities – Only 20% of the costs for new right-of-way were included in the calculation.
 - ☐ There is not sufficient room in the existing right-of-way to accommodate bicycle facilities – Only the incremental costs for the new right-of-way needed for the provision of bicycle accommodations were included in the calculation.
 - ☐ Only compensable utility relocation costs needed solely for the provision of bicycle accommodations were included in the calculation.

Total cost for project: Cost for minimum accommodations of bicycle facilities: (attach cost estimates).

Bicycle accommodation cost as percentage of total project costs:

Section 3 Partial Accommodations

Urban Roadways and Bridges

If sidewalks and bikeways cannot both be accommodated, consideration shall be given to sidewalks before adding bikeways; however the project must include bike/ped facilities to the greatest extent practicable.

- ☐ Pedestrian accommodations are being provided on both sides of roadway.
- ☐ Pedestrian accommodations are being partially provided.
- ☐ Pedestrian accommodations are not being provided.
Explain:
- ☐ Bicycle accommodations are being provided.
- ☐ Bicycle accommodations are being partially provided.
Explain:
- ☐ Bicycle accommodations are not being provided.
Explain:

Rural Roadways and Bridges

- ☐ Bicycle accommodations are being provided.
- ☐ Bicycle accommodations are being partially provided.
Explain:
- ☐ Bicycle accommodations are not being provided.
Explain:

Total cost for project: Cost for partial provision of pedestrian and bicycle facilities:

Partial pedestrian and bicycle accommodation cost as percentage of total project costs:

Section 4 Prepared and Submitted by

The exemption has been approved (based on excessively disproportionate costs). The project manager will re-evaluate the accommodations and engage the Complete Streets Implementation Committee in further discussions and request an updated approval.

Signature

Printed Name (Project Services Section Chief)

Date: _____

EXEMPTION E – THE SAFETY OR TIMING OF A PROJECT IS COMPROMISED BY THE NEED TO COMPLY WITH COMPLETE STREETS WORKSHEET

Project ID	Highway/Roadway	Limits/Termini	Type of Project
		Proposed posted speed	Design Year AADT (year)

Section 1 Bicycle Accommodations

- ☐ Public safety is compromised by the need to include bicycle accommodations.
Explain:
- ☐ The project is a response to an emergency situation and the need to include bicycle accommodations would result in an unacceptable delay in addressing the emergent need.
Explain:
- ☐ Bicycle accommodations can be provided once the emergency situation has been resolved.

Section 2 Pedestrian Accommodations (including transit access)

- ☐ Public safety is compromised by the need to include pedestrian accommodations.
Explain:
- ☐ The project is a response to an emergency situation and the need to include pedestrian accommodations would result in an unacceptable delay in addressing the emergent need.
Explain:
- ☐ Pedestrian accommodations can be provided once the emergency situation has been resolved.

Section 3 Prepared and Submitted by

The exemption has been approved (based on excessively disproportionate costs). The project manager will re-evaluate the accommodations and engage the Complete Streets Implementation Committee in further discussions and request an updated approval.

Signature

Printed Name (Project Services Section Chief)

Date: _____

EXEMPTION F – SHARED USE PATH TO BE PROVIDED INSTEAD OF ON-ROAD BICYCLE ACCOMMODATIONS WORKSHEET

Project ID	Highway/Roadway	Limits/Termini	Type of Project
		Proposed posted speed	Design Year AADT (year)

Section 1 Bicycle Accommodations	
This project is: ☐ Urban ☐ Semi urban ☐ Outlying district ☐ Rural	The exception(s) that apply to this request? ☐ Exception D (excessively disproportionate cost). ☐ Exception C (constrained environment). ☐ Other:

Section 2 Exceptional Situations
Provide a brief explanation of the constrains and circumstances that require a shared use path instead of on-road bicycle accommodations:

Section 3 Prepared and Submitted by	
The exemption has been approved (based on excessively disproportionate costs). The project manager will re-evaluate the accommodations and engage the Complete Streets Implementation Committee in further discussions and request an updated approval.	
Signature Printed Name (Project Services Section Chief)	Date:



APPENDIX F

Recommended Additions and Changes to Essex County Roadway Policies



Date 2000
Rev. 2014

COUNTY OF ESSEX

ROADWAY POLICIES

1. Modernization of Existing Traffic Signals
2. Installation of Brick Paver Sidewalks & Crosswalks
3. Installation of Bump Outs, Mid-Block Crosswalks
4. Installation of School Flashing Signs
5. Installation of Ground Mounted Yield to Pedestrian
6. Establishment of Speed Limit
7. Establishment of School Zone Area
- B. Installation of Special Traffic Control Devices
9. Approval of Municipal Ordinances
10. Utility Trench Restoration Under a Moratorium
11. Construction of Fixed Objects such as Planters, Refuse Containers, signs, tc...
12. Installation of Awnings
13. Signalization of Unsignalized Intersections
14. Placing Outdoor Establishments such as Sidewalk Cafes, Vendors Carts, Sales, etc.
15. Establishing or Revising Truck Prohibitions
16. Installation of Fire Pre-emption Systems
17. Installation of New Utilities
18. Installation of Flashing Beacon Signals
19. Trees and sidewalks located in front of private properties within the County right-of-way along County roads.
20. Complete Streets



COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS

DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE
VERONA, NEW JERSEY 07044-1393

(973) 226-8506

(973) 226-7469

COUNTY POLICY ON
MODERNIZATION OF THE EXISTING TRAFFIC SIGNALS

• *WHEN ONE OR MORE TRAFFIC SIGNALS ARE SELECTED FOR MODERNIZATION BY THE COUNTY*

- 1- The Office of the County Engineer prioritizes the traffic signals under the County jurisdiction for modernization and intersection improvement based on the accident rates, safety and traffic operation. Each year, one or a group of intersections are selected for modernization within a County Capital Improvement Project.

However, prior to inclusion of an intersection or improvements in a County Capital Improvement Program, the municipality must submit a concurrence letter to the Office of the County Engineer consenting to the proposed improvement of that particular intersection.

- 2- Office of the County Engineer will prepare the traffic signal design and specifications **which are to take into account the Essex County Complete Streets Policy.**
- 3- A preliminary set of the design plans will be submitted to the municipality for review, comments, recommendations and/or any other input.
- 4- Upon finalizing the plans, the Office of the County Engineer will obtain the authorization to install traffic signal from the NJDOT.
- 5- The County will be responsible for the design, construction and construction administration and future maintenance of the traffic signal and obtain the final approval of the traffic signals from the NJDOT.
- 6- The municipality is to adopt ordinances/resolutions to implement new traffic regulations or revise the existing ones at the intersection if required for the new traffic signal design. The traffic regulations include prohibition or reinstatement of Parking, Stopping or Standing, Left or Right Turning Movements, Turn on Red and One-Way Street restriction along the intersection approaches.

-
- *WHEN ONE OR MORE TRAFFIC SIGNALS ARE NEEDED TO BE MODERNIZED AS A RESULT OF CONSTRUCTION OF SITE OR SUBDIVISION PLANS*
 - 1- Follow the same procedures as "The New Traffic Signalization is Required as a result of construction of a Site or Subdivision Plans" with the exception of performing warrant analysis and maintenance contribution by the applicant. The County will be responsible for maintaining the traffic signals after the modernization.



COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS

900 BLOOMFIELD AVE. WE
VERONA, NEW JERSEY 07044-13.93

- (973) 226-8500

(973) 226-7469

COUNTY POLICY ON

INSTALLATION OF "BRICK PAVERS CROSSWALKS AND SIDEWALKS"
ALONG COUNTY ROADS AND INTERSECTIONS UNDER THE COUNTY
JURISDICTION

- *MID BLOCK AND AT INTERSECTIONS BRICK PAVERS CROSSWALKS*
 1. If the mid block crosswalk area does not presently exist must be formally and legally established. The Municipal Administrator and/or Engineer must submit a written request along with a plan indicating the location of the new mid-block crosswalk **to the County Engineer.**
 2. The municipal governing body shall submit a study indicating that the location is warranted for the installation of a pedestrian mid-block crosswalk in accordance with the Manual Traffic Control Devices for Streets and Highways (MUTCD) standards. If the Office of County Engineer concurs with the study, the plan will be reviewed for comments and recommendations. **The review will take into account Complete Street principles in accordance with Essex County's CS Policy.** Crosswalk areas at intersections must be statutorily approved by the New Jersey Statutory Law, Title 39:4-36.
 3. Upon preliminary approval of the mid-block cross walk area by the County, the municipality must adopt an ordinance designating the mid-block crosswalk. The process of approval of the ordinance by the Office County Engineer, Essex County Board of Chosen Freeholders and New Jersey Department of Transportation (NJDOT) has been indicated under the County Policy on Approval of Municipal Ordinances.
 4. The total construction cost of brick paving the crosswalk areas, at mid blocks and/or intersections and their maintenance shall be the responsibility of the municipality. There will be no cost to the County. The municipal governing body must adopt an ordinance to indicate the responsibility of installing and maintaining the brick pavers crosswalks.

The Office of County Engineer reserves the rights to remove the brick pavers from the crosswalk area at any time after they were constructed if they are not maintained properly and/or create hazardous situations for pedestrian and vehicles. At signalized intersections, no brick pavers crosswalks shall be constructed over the loop detectors. Also, if the brick pavers are damaged and/or removed as a result of a roadway milling, resurfacing, snow plowing and/or any type of road excavation, the municipality must restore them quickly and within a reasonable time frame. If not, the County may remove them entirely.

-
- 5. The crosswalk brick pavers shall be constructed in accordance with the County Specifications. The general contractor who is retained by the municipality for the construction of the crosswalk brick pavers must obtain a County road-opening permit, County construction details sheet for the crosswalk brick pavers and place a performance guaranty bond prior to starting construction.
 - 6. When the construction of the crosswalk brick pavers are completed, the municipality is required to submit a mylar of the As Built Plan condition of the mid-block crosswalk/ intersection signed and sealed by a Professional Engineer Registered in the State of New Jersey to the Office of County Engineer for approval.
 - 7. For the mid-block crosswalks, the municipality shall also adopt ordinances/resolutions to implement new traffic regulations or revise the existing ones as required by the New Jersey Statutory Law, Title 39:4-138.

- ***BRICK PAVER SIDEWALK***

- 1. Generally, the County maintains the roads under its jurisdiction from curb to curb. Sidewalk construction and maintenance are a municipal function. Nevertheless, if the Municipality wishes to brick pave the sidewalk area along County roads, they shall submit a written request along with a plan showing the proposed sidewalk brick pavers.
- 2. The other requirements for brick paver sidewalks such as County approval, construction according to the County specifications, municipality assumes the cost of design and reconstruction, adopting an ordinance by the municipality for timely and proper maintenance of the sidewalk brick pavers, not creating hazardous condition, reserving the rights by the County for removal of the brick pavers from the sidewalk at any time in the event of improper maintenance and hazards, obtaining the County road opening permits and placing performance guaranty bond by the contractor and submission of the as built plan by the municipality after the completion of the construction will basically follow the requirements as indicated for construction of brick pavers pedestrian crosswalks.



COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS

100 SLOOMFIELD AVE., SUITE 200
MIDLAND, NEW JERSEY 07044-1393

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COUNTY POLICY ON

INSTALLATION OF "BUMPOUTS", "MID BLOCK PEDESTRIAN
CROSSWALKS" and "BRICK PAVERS" WHEN REQUESTED BY
MUNICIPALITIES

- .. *BUMPOUTS AT THE INTERSECTIONS UNDER THE COUNTY JURISDICTION
WHEN INTERSECTION HAS BEEN SCHEDULED FOR MODERNIZATION OR
SIGNALIZATION IF UNSIGNALIZED*
- 1- The Municipal Administrator and/or Engineer shall submit a written request along with a fully detailed construction plan to the Office of the County Engineer for construction of bumpouts at the subject intersection for review and approval. *The review will take into account Complete Streets principles in accordance with the County's CS Policy.*
 - 2- If the Office of the County Engineer concurs with the request, the plan will be reviewed for comments and recommendations. The bumpouts shall not create any hazardous condition for vehicles and pedestrians and must conform to the Manual on Traffic Control Devices for Streets and Highways (MUTCD) standards. Also, the bumpouts shall not degrade the level of service at the intersection *nor* conflict with the intersection modernization or signalization designs.

When the construction of the bump out is approved, they must be constructed and completed prior to start the modernization or signalization of the intersection. However, the Office of County Engineer reserves the rights to remove the bumpouts, entirely or partially, at any time after they were constructed if they conflict with the intersection improvements design, create hazards and/or create *undo* difficulty for turning vehicles.

The bumpouts shall be constructed and completed within the time frame that Office of County Engineer provides to the municipality. Otherwise, the bumpouts construction approval will be voided. In addition, the general contractor who is retained by the municipality for the construction of the bumpouts must obtain the County road-opening permit and place a performance guaranty bond prior to starting the bumpouts construction.

- 3- Prior to the construction of the bumpouts, the municipality shall adopt an ordinance to accept the total cost and future maintenance of the bumpouts and responsibility of removal of snow accumulated within the bumpouts areas. A certified copy of the

ordinance shall be forwarded to the Office of County Engineer to be recommended to the Essex County Board of Chosen Freeholder for review and approval

- 4- The municipality shall also adopt ordinances/resolutions to implement new traffic regulations or revise the existing ones at the intersection if required as a result of construction of the bumpouts. The traffic regulations may include prohibition or reinstatement of Parking, Stopping or Standing, Left or Right Turning Movements, Turn on Red and One-Way Street restriction along the intersection approaches.
- 5- When the construction of the bumpouts completed, the municipality **is required** to submit a mylar of the As Built Plan condition of the intersection signed and sealed by a Professional Engineer Registered in the State of New Jersey to the Office of County Engineer.

***BUMPOUTS AT THE INTERSECTIONS UNDER THE COUNTY JURISDICTION
WHEN INTERSECTION HAS NOT BEEN SCHEDULED FOR MODERNIZATION OR
SIGNALIZATION IF UNSIGNALIZED***

1. The Municipal Administrator and/or Engineer shall submit a written request along with a fully detailed construction plan to the Office of the County Engineer for construction of bumpouts at the subject intersection for review and approval. **The review will include consideration of Complete Streets principles in accordance with the County's CS Policy.**
2. If the Office of the County Engineer concurs with the request, the plan will be reviewed for comments and recommendations. The bumpouts shall not create any hazardous condition for vehicles and pedestrians and must confirm to the Manual on Traffic Control Devices for Streets and Highways (MUTCD) standards. Also, the bumpouts shall not degrade the level of service at the intersection and conflict with the intersection modernization or signalization designs.

The bumpouts shall be constructed and completed within the time frame that Office of County Engineer provides to the municipality. Otherwise, the bumpouts construction approval will be voided. In addition, the general contractor who is retained by the municipality for the construction of the bumpouts must obtain the County road-opening permit and place a performance guaranty bond prior to starting the bumpouts construction. The Office of County Engineer reserves the rights to remove the bumpouts, entirely or partially, at any time after they were constructed if they create hazards and/or conflict and create **undo** difficulties for turning vehicles.

3. Prior to the construction of the bumpouts, the municipality shall adopt an ordinance to accept the total cost and future maintenance of the bumpouts and responsibility of removal of snow accumulated within the bumpouts areas. A certified copy of the ordinance shall be forwarded to the Office of County Engineer to be recommended to the Essex County Board of Chosen Freeholder for review and approval
4. The municipality shall also adopt ordinances/resolutions to implement new traffic regulations or revise the existing ones at the intersection if required as a result of construction of the bumpouts. The traffic regulations may include prohibition or reinstatement of Parking, Stopping or Standing, Left or Right Turning Movements, Turn on Red and One-Way Street restriction along the intersection approaches.
5. When the construction of the bumpouts completed, the municipality requires to submit a mylar of the As Built Plan condition of the intersection signed and sealed by a Professional Engineer Registered in the State of New Jersey to the Office of County Engineer.

* ***BUMPOUTS ALONG ROADWAYS (MID BLOCK) UNDER COUNTY JURISDICTION***

1. The Municipal Administrator and/or Engineer shall submit a written request along with a fully detailed construction plan to the Office of the County Engineer for construction of bumpouts at the subject intersection for review and approval.
2. If the Office of the County Engineer concurs with the request, the plan will be reviewed for comments and recommendations. The **The review will take into account Complete Streets principles in accordance with the County's CS Policy.** bumpouts shall not create any hazardous condition for vehicles and pedestrians and must confirm to the Manual on Traffic Control Devices for Streets and Highways (MUTCD) standards. Also, the bumpouts shall not degrade the level of service at the intersection and conflict with the intersection modernization or signalization designs.
3. The Office of County Engineer reserves the rights to remove the bumpouts, entirely or partially, at any time after they were constructed, if they create any hazardous condition. If the roadway is resurfaced and bumpouts should be removed, the municipality will be responsible for reconstruction of them.
4. The bumpouts shall be constructed and completed within the time frame that Office of County Engineer provides to the municipality. Otherwise, the bumpouts construction approval will be voided. In addition, the general contractor who is retained by the municipality for the construction of the bumpouts must obtain the County road-opening permit and place a performance guaranty bond prior to starting the bumpouts construction.

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- 6- Prior to the construction of the bumpouts, the municipality shall adopt an ordinance to accept the total cost and future maintenance of the bumpouts and responsibility of removal of snow accumulated within the bumpouts areas. A certified copy of the ordinance shall be forwarded to the Office of County Engineer to be recommended to the Essex County Board of Chosen Freeholder for review and approval
 - 7- The municipality shall also adopt ordinances/resolutions to implement new traffic regulations or revise the existing ones if required as a result of construction of the bumpouts. The traffic regulations may include prohibition or reinstatement of Parking, Stopping or Standing, Left or Right Turning Movements, Turn on Red and One-Way Street restriction along the intersection approaches.
 - 8- When the construction of the bumpouts completed, the municipality **is required** to submit a mylar of the As Built Plan condition of the intersection signed and sealed by a Professional Engineer Registered in the State of New Jersey to the Office of County Engineer.



**COUNTY OF ESSEX
OFFICE OF THE COUNTY ENGINEER**

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COUNTY POLICY ON
INSTALLATION OF SCHOOL FLASHING SIGNS

- 1- The Municipal Administrator and/or Engineer shall submit a written request to the Office of the County Engineer for installation of School Flashing Signs along a County Road.
- 2- Upon the initial approval, the municipality shall submit a plan signed and sealed by a Professional Engineer registered in the State of New Jersey to the Office of the County Engineering indicating the location and type of School Flashing Signs along with the specifications of the signs for review and approval. **The review will include consideration of CS principles in accordance with the County's CS Policy.**
- 3- Upon approval of plans by the County Engineer, Municipalities shall submit a certificate signed and sealed by a Professional Engineer registered in New Jersey to indicate that the School Flashing Signs locations, designs and their application are conforming to the MUTCD standards. A mylar of the plan is to be submitted to the County Engineer which will be forwarded to the NJDOT to obtain the authorization to install.
- 4- Municipality is to retain a qualified contractor approved by the County to install the signs. The cost of the design, construction, construction administration and future maintenance of the School Flashing Signs will be the municipality responsibility. Municipal governing body shall adopt a resolution/ordinance accepting the maintenance responsibility of the signs promptly and at no cost to the County.
- 5- Upon completion of the School Flashing Signs installation, the As Built mylar signed and sealed by a Professional Engineer registered in the State of New Jersey shall be prepared and submitted to the Office of the County Engineer along with a certificate also signed and sealed by a Professional Engineer registered in the State of New Jersey indicating that the signs have been built in accordance with the as built plan. The Office of the County Engineer will obtain the final approval from the NJDOT.



COUNTY OF ESSEX
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COUNTY POLICY ON
INSTALLATION OF GROUND MOUNTED STOP FOR PEDESTRIAN SIGNS

- 1- The Municipal Administrator and/or Engineer shall submit a written request to the Office of the County Engineer for installation ground mounted yield to pedestrian Signs along a County Road.
- 2- All Yield to Pedestrian Signs must be fabricated and installed conforming to the specifications published by the New Jersey Department of Transportation (NJDOT). A copy of these specifications is attached.
- 3- Upon the initial approval, the municipality shall provide a certificate indicating that the Yield to Pedestrian signs will be fabricated and installed according to the NJDOT specifications. The municipal governing body must also certify that the municipality will be responsible for the installation, maintenance, replacement and/or any other cost that may occur as a result of the signs. If the signs are removed during the snow removal, the Municipality is responsible to restore them. The Municipality shall submit a plan or sketch indicating the exact locations of the signs along with the sign manufacturer specifications to the Office of County Engineer for review and approval.
- 4- Upon approval of the signs by the County Engineer, the Municipality shall request a permit from the County by filling out the County designated permit application. The hours that the signs are scheduled to be kept on the pavement are to be indicated on certificate and permit application. The signs should be placed on the road only when heavy pedestrian crossing is expected. The completed permit application along with the above-mentioned certificates and plan shall be submitted to the Office of County Engineer for issuing the permit. The permit fee will be waived for this sign installation.
- 5- Upon receiving the required permit, the Municipality may install the signs accordingly. However, the Office of County Engineer will reserve the rights to remove the signs from the County roads at any time, if they create hazardous conditions for motorists, bicyclists and pedestrians.



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COUNTY POLICY ON
ESTABLISHMENT OF SPEED LIMIT

- *WHEN A SPEED LIMIT HAS BEEN ESTABLISHED AND POSTED ON A COUNTY ROAD*

- 1- The posted speed limit on a County road has been determined by conducting a speed survey based on 85th percentile of the pace speed. The NJDOT, County and Municipality have reviewed and approved the posted speed limit.

However, in order to change an approved and posted speed limit, another speed survey must be conducted. The NJDOT must review the result of the new speed survey and recommend a new speed limit. The new speed limit will be forwarded to the municipality. If agreed, an ordinance shall be adopted by the municipal governing body and be submitted to the Office of the County Engineer to be forwarded to the Essex County Board of Chosen Freeholders for consent. Once the Freeholders adopted a resolution, the Division of Roads and Bridges will post the new speed limit signs along the road.

- 2- If a municipality desires to change a posted speed limit along a County road, that municipality must conduct a speed survey based on the MUTCD standards to determine 85th percentile of the pace speed. The result of the speed survey is to be forwarded to the Office of the County Engineer to pass through the required stages as described above.

- *WHEN A STATUTORY SPEED LIMIT CONTROLS A COUNTY ROAD*

- 1- A Statutory speed limit governs a road when no speed survey has been conducted for that road. Currently, the New Jersey Statutory Motor Vehicle and Traffic Law (Title 39) has established three (3) different statutory speed limits, 25, 35 and 50 miles per hour.
- 2- It is the municipality responsibility to determine which of the three (3) statutory speed limits is appropriate for a roadway. The criteria, regulations and application of each statutory speed limit have been explained in Title 39. The statutory speed limits do not have to be approved by the Municipality, County and/or NJDOT.
- 1- Revising an existing statutory speed limit to a non statutory one would require following the same procedures for changing an approved posted speed limit as described above.



COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS

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COUNTY POLICY ON

ESTABLISHMENT OF SCHOOL ZONE AREA

Should a Municipality requesting to establish a segment of the County Road as School Zone, the following procedures must be followed:

- 1- The Municipal Administrator and/or Engineer shall submit a written request to the Office of the County Engineer for establishment of a school zone along the County Road.
- 2- Upon initial approval from the County the municipality shall submit a study performed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) standards justifying that that particular location has been warranted for School Zone. **The study shall consider and take into account Complete Streets principles in accordance with the County's CS Policy.** If so, a plan signed and sealed by a Professional Engineer registered in the State of New Jersey along with the supporting documents/studies are to be forwarded to the Office of the County Engineer.
- 3- The Municipality who has requested the School Zone shall also submit a certificate signed and sealed by a Professional Engineer registered in New Jersey to indicate that the area is warranted to be established as School Zone. A mylar of the plan, also signed and sealed by a Professional Engineer showing the limits of the School Zone is to be submitted to the Office of County Engineer.
- 4- The Municipal governing body shall adopt an ordinance to **establish** the School Zone as indicated in the engineer's certificate. The Office of County Engineer will forward the mylar, school zone study, engineer's certificate and a certified copy of the municipal ordinance to the New Jersey Department of Transportation (NJDOT) for review, recommendation and pre approval. Should the NJDOT pre approve the School Zone, the Office of County Engineer will submit the NJDOT pre approval letter and a certified copy of the adopted Municipal ordinance requesting the School Zone to the Essex County Board of Chosen Freeholders for concurrence.

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- 5- Should the Essex County Board of Chosen Freeholders concur with the School Zone, a resolution will be adopted to consent to the provision of the ordinance. The Freeholders resolution will be forwarded to the NJDOT for the final approval.
 - 6- Upon receiving the NJDOT final approval of the School Zone, the Office of County Engineer will advise the Division of Roads and Bridges to install proper School Zone signage in accordance with the MUTCD standards along the County Road.



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COUNTY POLICY ON

INSTALLATION OF SPECIAL TRAFFIC CONTROL DEVICES FOR
ELDERLY AND HANDICAPPED MOTORISTS AND PEDESTRIANS

- 1- The municipal governing board shall submit a written request to the Office of the County Engineer for installation of such devices at particular locations.
- 2- The Office of the County Engineer will perform the necessary investigation at the location. If the location warrants a special traffic control device, the Division of Engineering will prepare necessary documents and provide funding for installation of the special devices. The Division of Engineering will also maintain such devices. The devices must have received approval from the NJDOT.
- 3- The Office of the County Engineer will install special traffic control devices for elderly and handicapped motorists and pedestrians to provide safer and easier traffic and pedestrian activities based on individual request and need. **An example of a special device is an Audible Pedestrian Signal Head.**



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COUNTY POLICY ON
APPROVAL OF MUNICIPAL ORDINANCES

1. The Municipal Administrator/Engineer/Traffic Officer must forward a draft copy of the ordinance directly to the NJDOT for investigation and pre approval. The ordinance is to be submitted to the following address:

Bureau of Traffic Engineering & Investigations New
Jersey Department of Transportation
1035 Parkway Avenue
Trenton, New Jersey 08625-0613

UPDATE

A copy of the draft ordinance should also be forwarded to the Office of County Engineer for review.

2. Once the NJDOT staff completes the investigation and upon approval, they would issue a pre approval for the provisions of the ordinance and forward it to the municipality.
3. When municipal officials receive the NJDOT approval of draft ordinance, they must adopt the ordinance officially and submit a certified copy of it to the Office of the County Engineer to be recommended to the Essex County Board of Chosen Freeholders for review and approval. Upon approval of the ordinance, the Board of Chosen Freeholders will adopt a resolution concurring with the provisions of the ordinance. A copy of the ordinance and resolution will also be submitted to the NJDOT for final approval. Upon receiving the NJDOT final approval, the provisions of the ordinance will be fully enforceable.



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COUNTY POLICY ON

UTILITY TRENCH RESTORATION ON COUNTY ROADWAY **UNDER A MORATORIUM REGULATIONS**

1. The utility companies must notify the office of County Engineer of any emergency work to be carried out on County roadway prior to implementing work on a County roadway.
2. Utility company/contractor shall be responsible for the Maintenance and Protection of Traffic (MPT) during the construction operation. MPT plans should be according to the Manual on Uniform Traffic Control Devices (MUTCO) standards and shall include maintenance of bicycle and pedestrian traffic. If it is required, an off duty police officer must be retained to direct traffic during the construction work.
3. All work within the County Right-Of-Way shall be according to Essex County Standards.
4. Upon approval by Essex County Engineer, contractor must obtain a construction permit from the Essex County Division of Engineering before commencing any work. Additional requirements required in the permitting process must also be followed. Applicant must contact Essex County permit section for further details.
5. Any other state or local permits must be obtained as required.
6. The Office of the County Engineer reserves the right to require for any additional information, modifications and revisions before granting the construction permit.
7. Contractor must protect existing traffic control boxes, loop detectors, Property and/or Right-of-Way Monuments, near proposed work area. Damage to any County property, including but not limited to; roadway, curb, sidewalk, traffic

County Policy - Utilities (Continued)

stripes, etc., during construction shall be repaired and/or replaced immediately after completion of proposed work to the Essex County Engineers satisfaction.

8. County shall not be held responsible for the design, construction and proper functioning of proposed utility and all other related work.
9. Township/Utility Company shall be responsible for maintenance, repair and relocation of their utility lines as necessary.
10. Entire utility trench must be backfilled with quarry processed (QP) stone or approved equal material. Backfilling operation must be in accordance with the Essex County permit regulations under the supervision of Essex County Inspectors.
11. Roadway shall be constructed with minimum of six inches (6") of QP, six inches (6") of stabilized base course and two inches (2") of fine aggregate base course unless otherwise directed by the County Engineer.
12. Roadway shall be milled and resurfaced to a minimum of one hundred (100) feet to the both sides of the trench and from the centerline of the roadway to curb unless otherwise directed by the County Engineer.

If within one year, noticeable subsidence (as determined by the County Engineer) of the trenched area has occurred, the Utility Contractor will be required to restore and resurface the area of subsidence.



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COUNTY POLICY ON

CONSTRUCTION OF FIXED OBJECTS SUCH AS PLANTERS, GARBAGE
DESPOSAL CANS, SIGNS, ETC...PROPOSED TO BE CONSTRUCTED
WITHIN COUNTY RIGHT OF WAY

- 1- The Municipal Administrator and/or Engineer shall submit a written request to the Office of the County Engineer requesting construction of fixed objects in County right of way. Along with the request letter, specifications and sketches showing the locations of the fixed objects shall be submitted for review and approval. **The review will take into account Complete Streets principles in accordance with the County's CS Policy. Fixed objects shall not adversely affect bicycle and pedestrian travel nor impede access to transit.**
- 2- Upon the initial approval, a scaled plan (1'=20" is preferred) also indicating the type, exact locations and specifications of the fixed objects signed and sealed by a Professional Engineer registered in New Jersey are to be submitted to the County. It is to be noted that the nature, purposes, design and construction of the fixed objects must conform to the standards set forth in the Manual on Uniform Traffic Control Devices for Street and Highways, New Jersey Motor Vehicles and Traffic Laws (Title 39), AASHTO Policy on Geometric Design of Highways and Streets and any other Federally and State approved and recognized design and construction manuals as applicable.
- 3- The municipality shall adopt ordinances/resolutions 1) accepting responsibility of installation and maintenance of the fixed objects and 2) indicating that the County will be held harmless from any claims and litigation resulting from any types of incidence related to fixed objects installed within the County right of way. These ordinances/resolutions will be reviewed by the County Counsel for approval. Also, the County shall be named as one of the insured parties in the insurance coverage which municipality would obtain for the liabilities of the fixed objects. A copy of this insurance policy shall also be submitted to the Office of County Engineer for review and approval.

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- 4- Under no circumstances, shall the fixed objects create any obstacle and/or sight distance obstruction for the motorists, bicyclists and pedestrians to move and observe the upcoming traffic, signals, signing and striping, pavement marking and/or any other hazardous conditions. The County reserves the right to remove the fixed objects at any time if such hazardous situations are observed. Furthermore, if the fixed objects interfere with widening the County roads, intersection improvements, under and above ground utility repairs and/or any other modifications that may have been planned for the locations that fixed objects are installed, they have to be removed or relocated.
 - 5- A mylar to indicate the as built locations of the fixed objects shall be submitted to the Office of County Engineer for the filing purposes. A Professional Engineer registered in the State of New Jersey must sign the mylar prior to submission to the County. The full and complete details and specifications of the fixed objects shall be indicated on the mylar.
 - 6- The County road-opening permit shall be obtained for the installation of the fixed objects along the County right of way. All conditions required for the road opening permit must be satisfied.



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COUNTY POLICY ON
INSTALLATION OF AWNINGS WITHIN COUNTY RIGHT OF WAY

- 1- Applicants who intend to install awnings along the County right of way shall apply for the County Permits. The following items shall be submitted for the initial review and approval of the awnings installation:
 - A non-refundable Application Review Fee in amount of \$250.00 payable to the County of Essex. It is to be noted that this fee is only for reviewing the above mentioned items and does not include the pennit fee.
 - A scaled location plan depicting and identifying the awnings including their dimensions, specifications, method of installation and etc. In addition, the plan shall show all existing fixed and temporary objects within the County right of way such as signing, striping, parking regulations, trees, benches, utility poles, parking meters, catch basins, traffic signal equipments, and, etc..... along and in the vicinity of the proposed awnings.
- 2- The Office of County Engineer reserves the rights to review the submitted materials, approve or reject them. The applicant may be required to submit additional items and supporting information and document if requested by the Office of County Engineer for completing the review process. The applicant must comply with the County requirements in order to receive the permit.
- 3- Upon the initial approval, the applicant shall submit the following:
 - Fully executed permit application including the full amount of Permit Fee payable to the County of Essex. The full amount of permit fee will be a minimum of \$205.00, which covers the permit fee plus two inspections fees. The Office of County Engineer will perform the inspections during the installation of the awnings.
 - Certificate of liability Insurance carrying a minimum of \$2,000,000 insurance which must indemnify the County safe and harmless from any and all claims on Injury to persons or damage to property attributable, in whole or part, to existence, location and installation of the awnings in the County right of way. This insurance liability shall be reviewed approved by the County Counsel prior to issuing the final approval

- A mylar of the approved plan showing the approved location of the awnings. This mylar shall be signed and sealed by a Professional Engineer or Registered Architect registered in the State of New Jersey
 - Copies of any other applicable permits and approvals that may require to be obtained from Municipalities, State, Department of Health, DEP, EPA and etc.
 - Placing a performance guaranty bond in amount of \$2,000 valid for a minimum of one year with the County. This bond will be used for any expenses that may occurred if the County needs to remove the awnings because of violations, correct an unsafe situation, clean up and/or any other problems that may happened as a result of the installation of the awnings. The bond or the unused portion of it will be returned to the applicant after one year or permanent removal of the awnings and equipment and restoration of the County right of way to its original condition whichever comes first.
4. The County will review the application and its supporting documents for completeness. Once every applicable code and requirement were addressed and satisfied, the final approval and permit will be granted.

General Provisions:

1. Under no circumstances, the awnings shall create any obstacles and/or sight distance obstructions **for motorists, bicyclists and pedestrians** to observe the upcoming traffic, signals, signing and striping, pavement marking and/or any other hazardous conditions **nor will the awnings impede pedestrian travel along or across the sidewalk when accessing abutting property.** The County reserves the right to remove the awnings and revoke the permit at any time at the applicants cost if such hazardous situations are observed. Furthermore, if the awnings and its related accessories interfere with widening the County roads, intersection improvements or any other modifications that may have been planned for the location the awnings, the applicant is required to remove the awnings as needed and immediately.
2. The applicant shall install the awning as shown on the **approved** plan and permit application. The awnings shall be installed at the approved locations as indicated on the plan. Any deviations from the approved plan and specifications will result revoking the permit and removal of the awnings.

3. The awnings shall not be extended to the pavement in the roadway shoulder or traveling lanes. Also, it shall not extend across the frontage of adjacent property unless written permission is obtained from abutting properties owners.
4. The awnings shall not extended and hang over the sidewalk beyond a point that measures 4 feet or less from the edge of the pavement or curb line.
5. The minimum height of the lowest portion of the awnings to the sidewalk shall be seven (7) feet. If steps, stairs, platforms or any other raised structures are installed under the awnings, the minimum of seven-(7) height clearance is measured from the top of that structure
6. Installation of accessories such as Signs & Advertising may be permitted on the awnings as along as they have been pre approved during the initial review process and shown on the plan. They shall not create any types of hazards and sight obstructions for the motorists, bicyclists and pedestrians. Visually impaired people must be able to identify the awnings and its accessories. All signs shall be in English language. The number of accessories shall be pre approved by the Office of County Engineer and indicated on the plan and permit application.
7. The awnings shall not be, attached, leaned or chained to the County, Municipalities and Utility Companies properties such as Traffic Signals, Utility Poles, Fire Hydrants, Sign Posts and etc...
8. The awnings must be made of and constructed with durable and weather resistant materials. However, they must be secured enough to withstand high wind and other forces for not being turned over or airborne. Should the applicant decide to remove the awning after its installation, he/she shall notify the County in writing. In addition, the applicant shall restore the sidewalk and County and Municipal properties to their original conditions to the satisfaction of the County and Municipality after removal of the awnings.
9. The awnings shall leave a minimum with of 4 feet of unobstructed walkway to the entrance of the building, Also, emergency vehicles shall have rights to enter the building without interfering with the awnings as often and as needed.
10. If lighting is attached to the awnings, they shall be of a temporary nature and shall not project onto adjacent properties, roadways or conflict with the traffic control devices.

Also, the lighting installation shall have been pre approved during the initial review and shown on the plan.

11. The permit issued by the County for the installation of awnings is not transferable and shall be used only by the applicant



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COUNTY POLICY ON
SIGNALIZATION OF UNSIGNALIZED INTERSECTIONS

- *WHEN ALL THE INTERSECTION APPROACHES ARE UNDER THE COUNTY JURISDICTION*
 - 1- The Municipal Administrator and/or Engineer shall submit a written request to the Office of the County Engineer for signalization of the subject intersection.
 - 2- The Office of the County Engineer will perform a traffic signal Warrant analysis in accordance with the Manual on Traffic Control Devices for Streets and Highways standards (MUTCD).
 - 3- Upon completion of the warrant analysis, if the intersection meets the warrants, the Office of the County Engineer will request funding for the project based on the availability of capital funds.
 - 4- The County will obtain all the required traffic signal approvals from the New Jersey Department of Transportation (NJDOT).
 - 5- The County will pay the entire cost of the traffic signal design, construction and construction administration and future maintenance of the traffic signal. *The traffic signal design will comply with the County's Complete Streets Policy by accommodating the needs of pedestrians, bicyclists and transit patrons.*
 - 6- The municipality shall adopt ordinances/resolutions to implement new traffic regulations or revise the existing ones at the intersection if required for the new traffic signal design. The traffic regulations include prohibition or reinstatement of Parking, Stopping or Standing, Left or Right Turning Movements, Turn on Red and One-Way Street restriction along the intersection approaches.
- *WHEN THE INTERSECTION APPROACHES ARE UNDER BOTH COUNTY AND MUNICIPALITY JURISDICTIONS*
 - 1- The Municipal Administrator and/or Engineer shall submit a written request to the Office of the County Engineer for signalization of the subject intersection.

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- 2- The Office of the County Engineer will provide the municipal governing body details of the cost sharing agreement. The Cost, Sharing Agreement would make the municipality obligated to pay its fair share toward the total cost of signalization of the subject intersection. The municipality fair share cost is determined based on the number of the intersection legs under the municipal jurisdiction.

For Example, if the intersection has three (3) legs and municipality maintains only one of them, the municipality will be responsible for 1/3rd of the total cost of signalization. A four- (4) leg intersection with two (2) legs under the municipality jurisdiction would make the municipality to bear half of the total cost of traffic signalization:

- 3- The municipal governing body shall submit a resolution to the Office of the County Engineer agreeing to the Cost Sharing Agreement.
- 4- Upon receiving the Cost Sharing Agreement, the Office of the County Engineer will perform a traffic signal warrant analysis in accordance with the MUTCD standards. **The traffic signal design shall take into account Complete Streets principles in accordance with the County's Complete Streets Policy.**
- 5- If the location meets the warrants, the Office of the County Engineer will request funding for the project through the County Capital Improvement Program.
- 6- The Office of the County Engineer will obtain all required approvals from the NJDOT as needed for the design and construction of the traffic signals.
- 7- The municipal governing body shall adopt and submit a resolution consenting to pay the amount of its proportionate share toward the total cost of the new traffic signalization upon completion of the construction of the traffic signal. The resolution is to be received by the Office of the County Engineer prior to advertising the project for bid.
- 8- Upon completion of the signal installation, the municipal governing body shall forward its fair share amount to the Office of the County Engineer as indicated in the resolution.
- 9- The municipal governing body shall adopt ordinances/resolutions to implement new traffic regulations or revise the existing ones at the intersection if required for the new traffic signal design. The traffic regulations include prohibition or reinstatement of Parking, Stopping or Standing, Left or Right Turning Movements, Turn on Red and One-Way Street restriction along the intersection approaches.
- 10- The cost of the future maintenance of the traffic signal will be the County responsibility.

- *WHEN NEW TRAFFIC SIGNALIZATION IS REQUIRED AS A RESULT OF CONSTRUCTION OF SITE OR SUBDIVISION PLANS*

- 1- The applicant is to submit warrant analyses according to the MUTCD standards by a Registered Professional Engineer. Full documentation with all information used in the warrant analyses is to be submitted to the Office of the County Engineer for review and approval. The intersection shall meet at least one warrant and become qualified by the engineering judgement for signalization.
- 2- The applicant shall submit to the Office of the County Engineer the coordination, progression, offsets, acceptable band width provided by time space diagram, timing side of the proposed traffic signal (if any).
and levels of service for the proposed traffic signal and the existing signals on either

A Consultant Engineering Firm approved by the Office of the County Engineer is to proceed with the design of the new traffic signalization and specifications. **The traffic signal design shall take into account Complete Streets principles in accordance with the County's Complete Streets Policy.** The signal design at various stages and specification are to be submitted to the Office of the County Engineering for review and approval.

- 4- Upon final approval of the plans and contract documents, the design engineer shall submit the sealed and signed Mylar's of the Traffic Signals, Signing and Striping and Timing Sequence sheets to the Office of the County Engineer along with a Certificate signed and sealed by a Registered Professional Engineer certifying that the intersection is warranted for signalization and the traffic signal design conform to the MUTCD standards and engineering judgement.
- 5- The applicant is to submit a certificate to the County certifying that the new traffic signal installation including its design, construction and construction administration has no cost to the County. This Certificate is to be approved by the County Engineer and County Counsel Office.
- 6- The municipality shall submit a letter to the Office of the County Engineer consenting to installation of the new traffic signalization.
- 7- The Office of the County Engineer will submit the plans to the New Jersey Department of Transportation (NJDOT) to obtain the Authorization to Design and Install Traffic Signalization.

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- 8- Upon receiving the NJDOT authorizations, the applicant shall retain the services of a contractor approved by the Office of the County Engineer for the construction of the traffic signal and a professional engineer, also approved by the Office of the County Engineer, to provide full time construction engineering and inspection services. The scope of work for the construction engineering and inspection services is to be approved by the Division of Engineering.
 - 9- Once the proposed traffic signal and roadway improvements have been constructed, as-built plans on 4 mil thick Mylar's and electric copy on CD shall be submitted to the Office of the County Engineering along with the certification of the professional engineer that the improvements have been constructed in accordance with the approved plans.
 - 10- The applicant shall contribute \$4,200. per year to the County of Essex for the future operation and maintenance of this traffic signal with the condition that the \$4,200. will be increased 5 percent per year commencing January 1, 2001.
 - 11- An agreement between the applicant and the County of Essex for the traffic signal maintenance contribution shall be prepared by applicant's attorney for review and approval by County Counsel and the Essex County Board of Chosen Freeholders.
 - 12- Upon acceptance by the Office of the Engineer, the ownership of the Traffic Signal shall be transferred to the County of Essex.
 - 13- The municipality is to adopt ordinances/resolutions to implement new traffic regulations or revise the existing ones at the intersection if required for the new traffic signal design. The traffic regulations include prohibition or reinstatement of Parking, Stopping or Standing, Left or Right Turning Movements, Turn on Red and One-Way Street restriction along the intersection approaches.

NOTE: A performance guarantee in an amount to be determined by the Essex County Engineer shall be submitted to the Essex County prior to beginning any work on the project. The performance guarantee is to be in the form of a letter of credit or certified check. Paper bonds are not acceptable.



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JOSEPH N. DIVINCENZO, JR.
COUNTY EXECUTIVE

Philip A. LiVecchi, Director
Department of Public Works

Sanjeev Varghese, P.E., P.P.
County Engineer

Dennis R. Scdaille
Assistant County Engineer

COUNTY POLICY ON

PLACING OUT DOOR ESTABLISHMENT SUCH AS SIDEWALK CAFES & RESTAURANTS, VENDORS, SALE AND ETC... WITHIN COUNTY RIGHT OF WAY

- 1- Any applicant who intends to create a sidewalk establishment such as cafe, restaurants, sidewalk sales and etc... in the County right of way shall apply for the County Permit. The following items shall be submitted for the initial review and approval:
 - A scaled location plan depicting and identifying the items that are proposed to be installed within the County right of way. In addition, the plan shall show all existing fixed and temporary objects within the County right of way such as signing, striping, parking regulations, trees, benches, utility poles, parking meters, catch basins, traffic signal equipments, and, etc..... along and in the vicinity of the outdoor establishment.
 - A report to describe the nature of the establishment including duration of the outdoor establishment as applies, months, days and hours of operation. A pedestrian flow analyses shall also be submitted to determine the level of service of pedestrian utilizing the sidewalk within the location of the outdoor establishment.
 - A non-refundable Application Review Fee in amount of \$250.00 payable to the County of Essex. It is to be noted that this fee is only for reviewing the above mentioned items. The applicant shall be required to pay the applicable permit fee when the County grants the initial approval.
- 2- The Office of County Engineer reserves the rights to review the submitted materials, approve or reject them. The applicant may be required to submit additional items and supporting information and document if requested by the Office of County Engineer for completing the review process. The applicant must comply with the County requirements in order to receive the permit.
- 3- Upon the initial approval, the applicant shall submit the following:
 - Fully executed permit application. The permit will be valid for 12 months as of the date of its issue. This permit is not renewable and the applicant must reapply for the initial review process each year to request a new permit,

-
- Full amount of Permit Fee payable to the County of Essex. The full amount of permit fee will be a minimum of \$205.00, which covers the permit fee plus two inspections fees. The inspections will be performed by the Office of County Engineer during the operation of the outdoor establishment.
 - Certificate of Liability Insurance carrying a minimum of \$2,000,000 insurance which must indemnify the County safe and harmless from any and all claims on Injury to persons or damage to property attributable, in whole or part, to existence, location and operation of an outdoor establishment in the County right of way. This insurance liability shall be reviewed and approved by the County Counsel prior to issuing the final approval
 - A Mylar of the approved plan showing the approved locations, items, hours and days of operation and any other information related to the outdoor establishment. This Mylar shall be signed and sealed by a Professional Engineer or Registered Architect registered in the State of New Jersey
 - Copies of any other applicable permits and approvals that may require to be obtained from Municipalities, State, Department of Health, DEP, EPA, Alcoholic Beverages Commissioner, etc.
 - Placing a performance guaranty bond in amount of \$2,000 valid for a minimum of one year with the County. This bond will be used for any expenses that may occur if the County needs to remove the outdoor establishment items in case of violations, correct an unsafe condition, clean up and/or any other problems that may have happened as a result of the outdoor establishment. The bond or the unused portion of it will be returned to the applicant after the expiration of the permit, permanent removal of the outdoor establishment items and equipment and restoration of the County right of way to its original condition:
4. The County will review the application and its supporting documents for completeness. Once every applicable code and requirement were addressed and fulfilled, the final approval and permit will be granted.

General Provisions:

- L Under no circumstances, the items pertains to the outdoor establishment objects shall create any obstacles and/or sight distance obstructions for the motorists, bicyclists and pedestrians to observe the upcoming traffic, signals, signing and striping, pavement marking and/or any other hazardous conditions. The County reserves the right to remove the objects and revoke the permit at any time at the applicant's cost if such hazardous situations are observed. Furthermore, if the outdoor establishment and its related equipment interfere with widening the County roads, intersection improvements or any other modifications that may have been planned for the location of the outdoor establishment, the applicant is required to remove the outdoor establishment as needed.
2. The applicant shall install only the items specified on the approved plan and permit application. The items shall be installed at the approved locations as shown on the plan. Any deviations from the approved plan and specifications will result in revoking the permit and removal of the items.
3. The items for the outdoor establishment shall not be placed prior to and extended beyond the time period specified on the permit application. The permits granted by the County, Municipality and/or other governmental bodies shall be kept on display during the operation of the outdoor establishment.
4. The outdoor establishment shall not be extended to the pavement in the roadway shoulder or traveling lanes. Also, it shall not extend across the frontage of adjacent property unless written permission is obtained from abutting property owners.
5. The minimum width of sidewalk space where an outdoor establishment is to be approved is 10 feet. Minimum of 4 feet clear and unobstructed sidewalk area shall be provided along the outdoor establishment for pedestrian traffic.
6. The outdoor establishment may be fenced around the perimeter not exceeding 3 feet in height. Open fencing is preferred to solid fencing. The visually impaired individuals must be able to identify fencing if walking along the outdoor establishment. No fencing shall obstruct the motorist, bicyclist or pedestrian views. Fencing shall be pre approved during the initial review process.

7. Installation of accessories such as Awnings and Umbrellas, Signs & Advertising, Landscaping may be permitted within the outdoor establishment as long as they have been pre approved during the initial review process and shown on the plan. They shall not create any types of hazards and obstructions for the motorists and pedestrians. Visually impaired people must be able to identify the accessories. All signs shall be in English language. The number of accessories shall be approved by the Office of County Engineer and indicated on the plan and permit application.
8. No items shall be, attached, leaned or chained to the County, Municipalities and Utility Companies properties such as Traffic Signals, Utility Poles, Fire Hydrants, Sign Posts and etc...
9. All items must be removable and not permanently fixed in place. They must be made of and constructed with durable and weather resistant materials. However, they must be secured enough to withstand high wind and other forces for not being turned over or airborne. All objects must be removed prior to the expiration of the permit. The sidewalk and County and Municipal properties shall be restored to its original condition to the satisfaction of the County and Municipality.
10. Music or any other entertainment provided for patrons of an outdoor establishment shall not provide a nuisance of abutting property owners. No loud noises such as bell, whistle, radio, sound amplifier or similar devices are permitted.
11. The County, Municipality and Utility Companies retain the right of access to the approved outdoor establishment area for the installation, maintenance and repair of pipes, cables, wires, poles, hydrants, etc. as often and as necessary.
12. The applicant shall maintain a minimum of 4 feet of unobstructed walkway to the entrance of the building. Also, emergency vehicles shall have rights to enter the outdoor establishment area as often and as needed.
13. Any lighting of the outdoor establishment shall be of a temporary nature and shall not project onto adjacent properties or conflict with the traffic control devices.
14. The month of operation of an outdoor establishment shall be May 1 through October 31. The hours of operation shall be between 7:00A.M. to 11:00 P.M. unless otherwise approved.
15. The permit issued by the County for the outdoor establishment is not transferable and shall be used only by the applicant.



COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS

DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE
VERONA, NEW JERSEY 07044-1393

(973) 226-8506

(973) 226-7469

COUNTY POLICY ON
ESTABLISHING OR REVISING TRUCK PROHIBITION REGULATIONS ON
COUNTY ROADS

- 1- The Municipal Administrator and/or Engineer shall submit a written request to the Office of the County Engineer for revising the existing or establishing new truck prohibition regulations along a County Road.
- 2- Upon the initial approval, the municipality shall conduct a truck traffic study including establishing an alternate truck route for rerouting the trucks that are intended to be prohibited from traveling on that particular County road. A map to depict the alternate truck route shall also be submitted. If other Municipal Streets, State and/or County Roads are involved and designated as the new truck alternative, their approvals and consents to the alternate truck route would be required. No conflicts between the existing truck prohibition regulations and the proposed truck route shall be created. It is recommended that rerouting the trucks on the other streets and roads under other governmental jurisdictions be pre approved prior to submission of the new alternate truck routes to the County. **Consistent with the County's Complete Streets Policy, the truck traffic study will consider the impact of implementing the revised truck route on other modes of travel (pedestrian, bicyclists and transit).**
- 3- The truck traffic study and the alternate truck route shall be forwarded to the County. The Office of County Engineer will forward the request for the new truck prohibition, truck study and the alternate truck route to the New Jersey Department of Transportation (NJDOT) for review, recommendations and pre approval. Upon receiving the NJDOT pre approval for the new truck restriction and alternate truck route, the municipal officials shall adopt an ordinance to establish the provisions as indicated in the NJDOT pre approval letter.
- 4- The municipal government body would be required to submit a certified copy of the adopted ordinance along with a mylar of the map showing the new alternate truck route signed and sealed by a Professional Engineer registered in the State of New Jersey to the Office of County Engineer. If the new truck route extends along the streets and roads under the jurisdictions of the other Municipalities, Counties and/or NJDOT, their written approvals for the new truck route shall also be submitted.

-
5. The Office of County Engineer will submit the municipal ordinance along with the NJDOT pre approval letter to the Essex County Board of Chosen Freeholders for review and approval. The Board of Chosen Freeholders will adopt a resolution concurring with the provisions of the ordinance if they approve the ordinance. This resolution will be submitted to the NJDOT for the final approval.
 6. Upon receiving the NJDOT final approval letter, the Office of County Engineer will install the truck prohibition signs corresponding with the new truck prohibition regulations along the County roads only. If additional truck signs are required to be installed along other roads, which are not under the Essex County jurisdiction, the governmental bodies who are responsible for maintenance of those roads shall be required to install the related truck signs and maintain them.



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(973) 226-7469

COUNTY POLICY ON

INSTALLATION OF NEW UTILITIES UNDER COUNTY RIGHT OF WAY

1. The Municipal Administrator and/or Engineer shall submit a written request along with a fully detailed construction plan, signed and sealed by a Professional Engineer licensed in the State of New Jersey, to the Office of the County Engineer for construction of new utility pipes at the proposed location for review and approval.
2. Submit scaled (1"=20' is preferred) plan, profiles and cross sections with all the pertaining details including all underground and aboveground utility crossings with existing and proposed elevations to our office for review.
3. Proposed utility pipes must be located behind the existing curb line. Under no circumstances travel lanes and/or shoulder areas will be allowed to be used for this purposes.
4. Submit Maintenance and Protection of Traffic (MPT) plans for review by our staff. MPT plans should be according to the Manual on Uniform Traffic Control Devices (MUTCD) standards and consistent with the County's Complete Streets Policy. If it is required, an off duty police officer must be retained to direct traffic during the construction work.
5. All work within the County Right-Of-Way shall be according to Essex County Standards and proposed plan shall show all County standards.
6. Upon approval of plans by Essex County Engineer, contractor must obtain a construction permit from the Essex County Division of Engineering before commencing any work. Additional requirements as required in the permitting process must also be followed.
7. Any other state or local permits must be obtained as required.

-
8. The Office of the County Engineer reserves the right to require for any additional information, modifications and revisions before granting the approvals or rejecting the plans_
9. Contractor must protect existing traffic control boxes, loop detectors, Property and/or Right-of-Way Monuments, near proposed work area. Damage to any County property, including but not limited to; roadway, curb, sidewalk, **designated bicycle facilities**, traffic stripes, etc_, during construction shall be repaired and/or replaced immediately after completion of proposed work to the Essex County Engineers satisfaction.
10. County shall not be held responsible for the design, construction and proper functioning of proposed utility and other related work.
11. Township/Utility Company shall be responsible for maintenance, repair and relocation of their utility lines as necessary.



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DEPARTMENT OF PUBLIC WORKS

DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE
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(973) 226-8506

(973) 226-7469

COUNTY POLICY ON
INSTALLATION OF FLASHING BEACON SIGNALS

- 1- The Municipal Administrator and/or Engineer shall submit a written request to the Office of the County Engineer for installation of Flashing Beacon Signals **including rectangular rapid flashing beacons (RRFB)** along a County Road.
- 2- Upon the initial approval, the municipality shall submit a warrant analysis, performed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) standards, justifying that the location has been warranted for installation of a flashing beacon signal assembly. If so, a plan signed and sealed by a Professional Engineer registered in the State of New Jersey is to be forwarded to the Office of the County Engineer indicating the location and type of the flashing beacon signals along with the specifications of the signals for review and approval.
- 3- Upon approval of the plan by the County Engineer, the Municipality who has requested the signal shall submit a certificate signed and sealed by a Professional Engineer registered in New Jersey to indicate that the Flashing Beacon Signals locations, designs and their application are conforming to the MUTCD standards. A mylar of the plan showing the signals is to be submitted to the Office of County Engineer, which will be forwarded to the NJDOT to obtain the authorization to install.
- 4- The Municipality is to retain a qualified contractor approved by the County Engineer to install the flashing beacon signals. The cost of the design, construction, construction administration and future maintenance of the flashing beacon signals will be the municipality responsibility. Municipal governing body shall adopt a resolution/ordinance accepting the installation cost and maintenance responsibility of the flashers.
- 5- Upon completion of the Flashing Signals installation, the As Built mylar signed and sealed by a Professional Engineer registered in the State of New Jersey shall be prepared and submitted to the Office of the County Engineer along with a certificate also signed and sealed by a Professional Engineer registered in the State of New Jersey indicating that the flashing beacon signals have been constructed in accordance with the as-built plan. The Office of the County Engineer will obtain the final approval from the NJDOT.



COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS

DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE
VERONA, NEW JERSEY 07044-1393

W (973) 226-8506
(973) 226-7469

COUNTY POLICY ON
INSTALLATION OF FIRE PRE-EMPTION SYSTEMS

- *WHEN THE LOCATION HAS BEEN INCLUDED IN A CAPITAL IMPROVEMENT PROJECT*
 - 1- The municipal governing board is to submit a written request to the Office of the County Engineer for installation of a Fire Pre-emption system for at a particular location
 - 2- The Division of Engineering would perform an investigation at that location and if warranted, the installation of the Fire-Pre-emption System will be included in the modernization project.
- *WHEN THE LOCATION HAS NOT BEEN INCLUDED IN A CAPITAL IMPROVEMENT PROJECT*
 - 1- The municipal governing board is to submit a written request to the Office of the County Engineer for installation of a Fire Pre-Emption system for at a particular location
 - 2- The Division of Engineering would perform an investigation at that location and if warranted, the Division will issue an initial approval.
 - 3- The municipality shall design the system according to the MUTCD standards and submit the plans and specifications to the Division for review and approval. The traffic signal connected to the preemption system shall be capable of such connection. Otherwise, municipality may require contributing its fair share toward modernization of the traffic signal in order to make it compatible for the Fire Pre-Emption system connection.
 - 4- The municipal governing board shall submit a Certificate from a Registered Professional in New Jersey to the Office of the County Engineering certifying that the pre-emption system has been designed in accordance with the MUTCD standards. The County Engineer will request the authorization to install from the NJDOT.

-
- 5- Upon final approval and receiving the authorization to install, the municipality shall retain a qualified contractor approved by the Office of the County Engineer to perform the installation. The cost of the design, installation and future maintenance of the pre-emption system is to be the municipality responsibility. The municipality shall adopt a resolution accepting the future maintenance of the pre-emption system.
 - 6- The municipality must forward the As-Built plans and a Certificate signed and sealed by a Registered Professional Engineer in New Jersey to the Division of Engineering indicating that the pre-emption system has been installed in accordance with the as built plans upon completion of the system installation. The Office of the County Engineering will request the final approval from the NJDOT.



COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE
VERONA, NEW JERSEY 07044-1393

ir (973) 226-8500
(973) 226-7469

ESSEX COUNTY POLICY

TREES AND SIDEWALKS LOCATED IN FRONT OF PRIVATE PROPERTIES WITHIN THE COUNTY RIGHT-OF-WAY ALONG COUNTY ROADS

- 1) Essex County does not maintain any sidewalks fronting private properties along County Roads. This responsibility falls on either the property owner or the local municipality as determined by local ordinance. As provided in New Jersey Statutes (copy attached), the installation of the sidewalk is a function of the municipality. The County is responsible for maintaining County Roads from curb to curb.
- 2) If a sidewalk has been uplifted due to the tree roots then, upon request, the County's maintenance crew will come and trim the roots at the time of sidewalk reconstruction or grind down the stump if a dead tree has been removed.
- 3) In the event the root cannot be trimmed or cut, or the tree is creating unwanted obstructions, the owner of the property may be able to remove and/or replace that tree on their own. Proper permits from both the local municipality and the Essex County Division of Engineering must be obtained prior to removal and/or replacement.
- 4) Essex County will grind down the stump unless it is deemed safe to remove the entire stump.
- 5) If a tree located on an Essex County road right-of-way is found to be dead or in danger of falling, the County will remove it as long as a proper request, verification, and approvals have been given.
- 6) The homeowner or contractor must obtain a construction permit from the Essex County Division of Engineering before any work is commenced on an Essex County right-of-way.
- 7) All work within an Essex County right-of-way shall be performed in accordance with County standards **including the County's Complete Streets Policy.**

Any questions concerning the above, should be addressed to the Essex County Division of Engineering at (973) 226-8500.



APPENDIX G

- Recommended Additions/Changes to Site Plan Application
- Site Plan Complete Streets Checklist
- Recommended Additions/Changes to Site Plan Review Regulations
- Recommended Additions/Changes to Subdivision Application
- Subdivision Complete Streets Checklist
- Recommended Additions/Changes to Subdivision Review Regulations



TOGETHER
**NORTH
JERSEY.**

Changes to Subdivision & Site Plan Standards



ESSEX COUNTY

Complete Streets
Implementation
Action Plan



Submitted
by:
RBA

November 2013



**ESSEX COUNTY PLANNING BOARD
SITE PLAN APPLICATION**

**JOSEPH N. DIVINCENZO, Jr.
COUNTY EXECUTIVE**

COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS
900 BLOOMFIELD AVENUE
VERONA, NEW JERSEY 07044-1393

☎ (973) 226-8500 x 2580
(973) 226-7469 FAX

**Joseph Alessi
Chairman**

**Peter Scarpelli
Secretary**

Date Application Received

SP # _____

FEE \$ _____

Date Completed Application

INITIAL FILING FEE

RESIDENTIAL	\$250.00 + \$30/ Dwelling Unit
COMMERCIAL/INDUSTRIAL	\$300.00 + \$20/ Parking Space
MIXED USE	\$300.00 + \$30/ Dwelling Unit+ \$20/ Parking Space
CELLULAR ANTENNA AND/OR TOWER	\$350.00 + \$20/ Parking Space

ADDITIONAL FEES (If Applicable)

CONNECTION TO STORMWATER SYSTEM	\$400.00
APPEAL OR WAIVER	\$200.00

Make Check or Money Order Payable to the 'County of Essex'

PLEASE SUBMIT FOUR (4) COPIES OF THE SIGNED AND SEALED PLANS

Applicant _____

Address _____

Signature of Applicant/Agent

PRINT

☎ () _____

E-Mail Address _____

Property Owner _____

Plans By: _____

Address _____

Address _____

☎ () _____

☎ () _____

SITE INFORMATION

Municipality _____ Block _____ Lot _____

Address _____

Number of Dwelling Units: Existing _____ New _____ Total _____

Number of Parking Spaces: Existing _____ New _____ Total _____

This plan has also been filed with the following municipal agencies:

Planning Bd. (Date) _____ Bd. of Adjustment (Date) _____ Const. Official (Date) _____ Status _____

Square Feet of Building: Existing _____ Proposed _____

Impervious Surfaces: Existing _____ Proposed _____

Is Site in Flood Plain? YES (If Yes enclose approved NJDEP permit) NO

Acreage of Entire Tract _____

Description of Proposed Improvements/Reason for Site Plan Application:

Description of Proposed Streets with Complete Streets Elements:

Number, location and classification of streets: _____

Location and Description of Connection(s)/Driveways with a County Road _____

Description of proposed pedestrian, bicyclist, and transit accommodations:



SITE PLAN COMPLETE STREETS CHECKLIST

This checklist is intended to be used in conjunction with the Essex County Site Plan application form, Essex County Complete Streets Policy, and Site Plan regulations for Essex County. Copies of those documents can be obtained from the County Planning Office. This checklist should be reviewed with the County Planning Office and Engineer prior to completion to confirm which Complete Streets elements would be required and/or desired for the proposed site development.

The requirements for pedestrian, bicyclist and transit access will vary dependent on the scale, uses, and location of the proposed development. Refer to the Essex County Site Plan Regulations for guidance on what to include for your proposal.

This completed form will be made part of the application package for County approval. Please keep a copy for your records.

Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Site Plan?	Description of how the item will be addressed via the proposed site plan (Required)	If no new accommodations will be made – explain why not
Overall Site design	Does the organization of structures and landscape elements contribute to an overall pedestrian-oriented, and walkable environment?	☐	☐	☐			
	Within any development cluster, are building fronts oriented to the street and buildings along a public street generally to be built to meet the property line.						
Overall Site Design	Do proposed streets provide sufficient width as determined by the County Engineer to accommodate the construction of planned new complete streets elements?						

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Site Plan?	Description of how the item will be addressed via the proposed site plan (Required)	If no new accommodations will be made – explain why not
<i>Bicycle Accommodations</i>	Will bicyclists regularly access the property? Is there an existing network for bicycle access within ½ mile of the site?	☐	☐	☐			
<i>Bicycle Accommodations</i>	For sites with anticipated bicyclist access, are bike racks provided along a major building approach line and clearly visible from the approach. Is the bike rack area no more than 100 feet from the entrance it serves (preferably be within 50 feet.)	☐	☐	☐			
<i>Bicycle Accommodations</i>	Is there at least one (1) secured bicycle parking space per 2 multi-family dwelling units and/or one (1) secured bicycle parking space per 3,000 sq. ft. of commercial space or 10% of the number of automobile spaces (whichever is greater) ?	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Site Plan?	Description of how the item will be addressed via the proposed site plan (Required)	If no new accommodations will be made – explain why not
<i>Bicycle and Pedestrian Accommodations</i>	Are off-street parking areas designed to be: • Located behind buildings fronting on the street • Offer a safe and convenient network of pedestrian ways within the site • Minimize potential conflict points between vehicles and pedestrians or bicyclists • Provide sidewalks and pathways which connect all parking areas to the larger sidewalk network	☐	☐	☐			
<i>Pedestrian Accommodations</i>	How will pedestrians circulate into and within the property Is there an existing network of sidewalks or paths for pedestrian access within ½ mile of the site?	☐	☐	☐			
<i>Pedestrian Accommodations</i>	Are driveways designed to minimize interruptions to the sidewalk system and pedestrian access along the site frontage and/or along the County Road?	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Site Plan?	Description of how the item will be addressed via the proposed site plan (Required)	If no new accommodations will be made – explain why not
<i>Pedestrian Accommodations</i>	Does the design of sidewalks and other pedestrian paths, include amenities to ensure pedestrian safety and respite areas. Does the site plan include pedestrian scale lighting? Were other amenities considered where complementary to site design such as strategically placed benches or other seating, water fountains, shade areas, trash receptacles, and wayfinding signage or kiosks?	☐	☐	☐			
<i>Pedestrian Accommodations</i>	Do pedestrian walkways provide a direct path from building entrances to transit stops?	☐	☐	☐			
<i>Existing Transit Accommodations</i>	Is there existing or planned Transit Service on County Roads serving the proposed development? If so, are the following features present to make the development accessible by public transportation vehicles?	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Site Plan?	Description of how the item will be addressed via the proposed site plan (Required)	If no new accommodations will be made – explain why not
	- Intersection radii for driveways and intersections designed for a 50-foot outside turning radius. - Roadway grades that are 6% or less. - Transit Stops with way-finding and pull-off area - Bus loading pads designed with a minimum 8" portland cement concrete jointed reinforced pavement and a 4" subbase of stabilized granular material. - Lane widths of 12 feet. - Curb heights of 6 inches.						
<i>Transit Accommodations</i>	Are paved passenger waiting areas provided at all near-side corners of collector and arterial street intersections?	☐	☐	☐			
<i>Transit Accommodations</i>	For developments designed with central collector streets or Major or Minor Collector Road as defined in the NJ RSIS, is access provided for transit vehicles?	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Site Plan?	Description of how the item will be addressed via the proposed site plan (Required)	If no new accommodations will be made – explain why not
<i>Transit Accommodations</i>	Are passenger amenities (shelters, benches, adequate lighting, bicycle storage facilities, and landscaping) provided at bus stops?	☐	☐	☐			
<i>Transit Accommodations</i>	Are transit stops located within one-quarter mile (one-half mile in low density developments) or less of all buildings within the development?	☐	☐	☐			
<i>Transit Accommodations</i>	Have bus turnouts, berths, turnarounds and/or park-n-ride facilities been incorporated into appropriate roadway or development designs?	☐	☐	☐			
<i>Existing Transit Accommodations</i>	Is adequate lighting provided at bus stops, passenger waiting areas and along pedestrian walkways?	☐	☐	☐			
<i>Existing ADA Accommodations</i>	Are walkways, curbs, bus stops, building entrances, parking areas and transit facilities designed for the mobility limited?	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Site Plan?	Description of how the item will be addressed via the proposed site plan (Required)	If no new accommodations will be made – explain why not
Existing ADA Accommodations	Do parking spaces for the mobility limited conform in dimension and number to the New Jersey Statutes and Americans with Disabilities Act (ADA) Standards for Accessible Design?	☐	☐	☐			
Existing ADA Accommodations	Are parking spaces for the mobility limited located adjacent to the primary building entrance from the parking lot?	☐	☐	☐			

ESSEX COUNTY DPW PLANNING DEPARTMENT SIGN-OFF

Statement of Compliance	YES	NO	If NO, please describe why (cite the specific Exemption from the Complete Streets Policy)
The proposed site plan accommodates all users as defined and set forth in the Essex County Complete Streets Policy and Implementation Action Plan.	☐	☐	

Signature: _____

Date: _____ **Print Name:** _____

SITE -PLAN REVIEW

ESSEX COUNTY PLANNING BOARD

ADOPTED BY THE ESSEX COUNTY
BOARD OF CHOSEN FREEHOLDERS
NOVEMBER 26, 1968
IN ADDORDANCE WITH CHAPTER 8S
OF THE LAWS OF 1958
EFFECTIVE DATE - JAN. 1, 1970

ESSEX COUNTY
NEW JERSEY

DEPARTMENT OF
PLANNING-ECONOMIC-DEVELOPMENT-CONSERVATION

Reprinted
April, 1997

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Section 1 – Title, Purpose, and Approving Agency

1. Short Title

This resolution shall be known and may be cited as "The Site Plan Review Resolution of the County of Essex, New Jersey".

2. Purpose

The purpose of this resolution shall be to provide rules, regulations and standards to guide land developments along county roads in the County of Essex, New Jersey, in order to promote the public health, safety, convenience and general welfare of the County.

3. Approving Agency

The approval provisions of this resolution shall be administered by the Planning Board of the County of Essex, in accordance with Chapter 285 of the Laws of 1968.

Section 2 - General

Prior to the issuance of any building permit by a local building official for any proposed land development including commercial, industrial, multi-family structures containing five or more units or any land development requiring off-street parking area or off-street standing area for an excess of five vehicles, or producing surface runoff directly or indirectly to a county road, on any property having frontage on a county road, a site plan shall be submitted to the county planning board for its review and action. Site plans are not required for the following uses but developers of such uses are urged to consult with the County Planning Board concerning these proposed

developments: residential structures containing less than five Units and other land developments providing five or less vehicle parking spaces.

The local building official or other agency with authority to approve a site plan or issue a building permit shall defer action of any application requiring county planning board approval pursuant to this resolution until the same shall have been submitted to said county for its approval of the site plan.

The County Planning Board shall act on any site plan submitted to it for review within 30 days after receipt of the same from the local approval agency. If the County Planning Board, or its duly appointed approval authority, fails to act on a site plan within the 30 day period, said site plan shall be deemed to have been approved by the County Planning Board unless, by mutual agreement between the County Planning Board and the local approval agency, with approval of the applicant or his authorized agent, the 30 day period shall be extended for an additional 30 day period, and any such extension shall so extend the time period within a municipal approving authority shall be required by law to act thereon.

The County Planning Board shall notify the local approval authority in writing of its action on the site plan. A copy of such action shall be forwarded to the Applicant.

In the event that the County Planning Board disapproves a site plan application, the reasons for disapproval shall be stated in writing. Copies of the report disapproving said site plan shall be forwarded by certified mail to the local approval authority and to the applicant.

In acting upon any site plan submitted to it, the County Planning Board shall ascertain that all of the terms, conditions and requirements of this resolution are met.

When approval is granted, no changes or alterations shall be made in any portion of the site plan over which the County Planning Board has approval power without approval of the said change by the County Planning Board. No change of engineering design shall be made without the approval of the County Engineer.

The County Planning Board may, by the adoption of appropriate by-laws, vest its power to review and approve site plans with the County Planning Director and a committee of said county planning board which shall include the County Engineer.

Section 3 - Application

Applications, plus four copies of the site plan and all supporting documents and data, shall be filed with the local building official or agency having site plan approval authority who shall forthwith forward the same to the County Planning Board, or they may be submitted by the applicant or his authorized agent who shall be required to sign a statement to the effect that the site plan has been duly filed with the appropriate local approval agency.

Section 4 - Site Plan Details

Any site plan presented to the County Planning Board shall be drawn at a scale not smaller than one inch equals fifty feet and not larger than one inch equals ten feet, except that plans for land development that will occupy sites of more than forty acres may be drawn in accordance with the following table:

<u>Area</u>	<u>Scale</u>
Between 40 and 150 acres	1" = 100'
Over 150 acres	1" = 200'

Any site plans shall include and show the following information with respect to the subject lot or lots:

- a. The sizes of all maps and plans of any proposed land development shall be consistent with the sizes permitted under Chapter 141 of the laws of 1960 known as the New Jersey Map Filing Act as follows:

8 1/2 x 13 inches

15 x 21 inches

24 x 36 inches

30 x 42 inches

- b. The name and address of the applicant and the owner, and the name, address and title of the person preparing the plan, maps including appropriate map titles, and accompanying data.
- c. An appropriate place for the signatures of the County Planning Board, Secretary, and Planning Director.
- d. The municipal tax map lot and block numbers of the lot or lots, tax sheet number and key location map.
- e. A date, scale, and north arrow on any map.
- f. The zone district in which the lot or lots are located.

- g. All existing and proposed setback dimensions, landscaped areas, trees over six inch caliper, and fencing within 100 feet of the county right-of-way line.
- h. All existing and proposed signs and lighting standards, utility poles and their size, type construction, and location within twenty-five feet of the county road right-of-way line or, where appropriate, proposed county right-of-way line.
- i. The existing and proposed principal building or structure and all accessory buildings or structures, if any and finished grade elevations at all corners of said buildings.
- j. Existing topography based upon U.S.C. & G. datum and proposed grading with a maximum of two foot contour intervals.
- k. The location, type and size of all existing and proposed catch basins, storm drainage facilities, utilities, plus all required design data supporting the adequacy of the existing or proposed facility to handle future storm flows.
- l. The location, type and size of all existing and proposed curbs sidewalks, crosswalks, pedestrian amenities, bicycle facilities, transit access points/stops, driveways, fences, retaining walls, parking space areas and the layouts thereof and all off street loading areas, together with the dimensions of all the foregoing on the site in question and within 100 feet of said site.
- m. The location, size and nature of all existing and proposed rights-of-way, easements and other encumbrances which may affect the lot or lots in question and the location, size and description of any lands to be dedicated to a municipality or to the County of Essex.

- n. The location, size and nature of the entire lot or lots in question, and any contiguous lots owned by the applicant or in which the applicant has a direct or indirect interest even though only a portion of the entire property is involved in the site plan for which approval is sought; provided, however, that where it is physically impossible to show such entire lot or lots or contiguous lots on one map, a key map thereof shall be submitted.
- o. The location, names and widths of all existing and proposed streets including cross sections and profiles abutting the lot or lots in question and within 200 feet of said lot.
- p. Any and all other information and data necessary to meet any of the requirements of this resolution not listed above.

Section 5 - Site Plan Conformance

Failure to comply with any of the conditions of site plan approval subsequent to the receipt of a building permit shall be conditions for: (a) refusal of the county to issue a road opening or access permit for said site development; (b) a request to the local approval authority to revoke or to withhold the local building permit and/or certificate of occupancy for said site development; (c) forfeiture of any performance bond or other payment guarantee required by the county to cover the costs of improvements specified in that portion of the site plan over which the county has control; (d) appropriate court action initiated by the County Planning Board.

A written notice of non-compliance shall be forwarded, by certified mail, to the local approval agency and applicant requesting compliance with the conditions of site plan approval within a period of not less than five days.

Section 6 - Site Plan Approval Time Period

Any site plan approved by the County Planning Board under the terms of this resolution shall be valid for the same period of time as the local site plan approval or building permit.

Section 7 - Appeals

In the event the applicant for site plan approval is aggrieved by an action taken by the planning director and a committee of the board, said applicant may file an appeal in writing to the County Planning Board within ten days after the date of notice by certified mail of the said action. Any person aggrieved by the action of the County Planning Board in regard to site plan approval may file an appeal in writing to the Board of Chosen Freeholders within ten days after the date of notice by certified mail. The County Planning Board or the Board of Chosen Freeholders to which an appeal is taken shall consider such an appeal at a regular or special public meeting within forty-five days from the date of its filing.

Notice of said hearing shall be made by certified mail at least ten days prior to the hearing to the applicant and to such of the following officials as deemed appropriate for each specific case; the municipal clerk, municipal planning board, board of adjustment, building inspector, zoning officer, board of chosen freeholders, and the county planning board. The board to which appeal is taken shall render a decision within 30 days from the date of the hearing.

Section 8 - Dedications and Reservations of Road Right-of-Way

As a condition to the approval of a site plan, the County Planning Board may require the dedication of additional right-of-way in accordance with the County Master Plan adopted by the county planning board or an official county map adopted by the Board of Chosen Freeholders **as well as the Essex County Complete Streets Policy**. On an existing road the additional right-of-way shall be that portion of the site which abuts a county road and which lies between the existing right-of-way and the proposed future right-of-way line for the county road as set forth in the County Master Plan adopted by the County Planning Board, **to accommodate compliance with the Essex County Complete Streets Policy**, or as set forth on an official county map adopted by the Board of Chosen Freeholders.

However, where the proposed future right-of-way lines for an existing county road are drawn so that the total additional right-of-way is to be secured from just one side of the county road, only one half of that additional right-of-way shall be required to be dedicated as a condition to the approval of a site plan. Also, the County Planning Board may require the reservation of the remaining area of future right-of-way for future acquisition. The building setback line shall be measured from the future right-of-way line.

In order to effect dedications required by this section, a deed or easement for such lands shall be furnished to the county in a form approved by the county counsel.

Section 9 - Performance and Payment Guarantees

As a condition to the approval of a site plan, the County Planning Board shall require the developer to submit to the county a performance guarantee in a form approved by the county counsel and in an amount determined by the county engineer, adequate to cover the costs of all of those improvements that are required by the County Planning Board in connection with the site plan.

The performance guarantee shall be retained until all improvements have been completed to the satisfaction of the planning board.

In fixing the terms for retaining the performance guarantee, the planning board shall specify that upon certification of the county engineer to the planning board that all improvements required by the resolution have been completed in accordance with the approved site plan and approved construction standards and upon certification from the Board of Chosen Freeholders that improvements to be retained on the county right-of-way are acceptable to that board, the planning board shall authorize return and release of this performance guarantee. The applicant shall assume all liability during construction and until such time as improvements are accepted by the county.

In instances when the provisions of this resolution allow or require a cash contribution to the county to cover a share of the cost of all improvements, the approval of a site plan shall be further conditioned on the receipt of such contribution in the form of a certified check made out to the treasurer of the County of Essex, and deposited in an account reserved for such improvements.

The County may accept payments in lieu of construction of complete streets elements proposed on the site plan. Such payments in lieu of construction shall conform to the requirements for payment guarantees as described above.

Section 10 - Design Standards *

SITE ORGANIZATION: The organization of structures and landscape elements for any new development or any redevelopment should reinforce and contribute to an overall cohesive, human scale, pedestrian-oriented, and walkable environment. To accomplish this, within any village or other development cluster, building fronts should be oriented to the street and buildings along a public street should generally be built to meet the property line.

10 (a) OFF STREET PARKING Number of

Off Street Parking Spaces

Each land development subject to County:site plan approval shall provide on its lot the number of off-street parking spaces required by any zoning, subdivision, site planning or other ordinance of the municipality in which the land development is to be located.

Design of Off-Street Parking Areas

Off-street parking areas shall be designed to prevent the maneuvering of vehicles into or out of a parking spaces or the storage of vehicles within any portion of entrance driveway lane that is within 20 feet of the right-of-way line of the county road. Off-street parking areas shall be so designed to permit all vehicles to turn around on the site in order to prevent the necessity of any vehicle backing on to the County road from such site. If a Land Development approved by a municipality only provides the minimum number of parking spaces required by its zoning subdivision, site planning or other ordinance, the maneuvering of vehicles into or out of a parking space (s) or the storage of a vehicle (s) within any portion of an entrance driveway lane that is within 20 feet of the right-of-way line of the county road may be waived if it cannot be provided.

All off-street parking areas shall be designed to:

- Be located behind buildings fronting on the street when feasible and practical.
- Provide a safe and convenient network of pedestrian ways within parking areas as feasible
- Minimize potential conflict points between pedestrians or bicyclists and motor vehicles.
- Provide sidewalks and pathways which connect all parking areas to the larger sidewalk network; sites should be laid out to maximize pedestrian connectivity between uses and sites.

No required off-street parking space including adjacent parking access lanes or maneuvering space shall be located within the existing or proposed right-of-way of the County road, including the sidewalk area.

No part of any parking space shall be located within three (3) feet of the County right-of-way line of the county road.

Note (*): The design standards used in this section are derived from "A Policy on Geometric Design of Rural Highways". American Association of State Highway Officials (1984) "Traffic Engineering Handbook", Institute of Traffic Engineer (1984) and information compiled from the New Jersey Department of Transportation.

The design standards in this section are also drawn from the intent and design guidance provided in the Essex County Complete Street Policy

10 (b) Off-Street Loading Spaces and Areas

Each land development subject to County site plan approval shall provide on its lot the number of off-street truck loading or unloading spaces required by any zoning, subdivisions, site planning or other ordinance of the municipality in which the land development is to be located.

No part of any off-street truck loading within the right-of-way of the County road including the sidewalk area. Off-street truck loading and unloading space shall be located and designed to permit any truck to maneuver from a driveway into and out of such space without encroaching upon any portion of a County road existing or proposed right-of-way including the sidewalk area.

10(c) Customer Service Areas

Any site plan that provides temporary stopping space or maneuvering space for vehicles of customers or patrons seeking service at a roadside business establishment such as a roadside grocery stand, filling station, drive-in bank, etc., shall be located so that the stopping or maneuvering space is at least ten feet back of the existing, or where applicable, future right-of-way line, of the County road.

10 (d) Driveways

Number of Driveways

The number of driveways provided from a site directly to anyone County road shall be recommended as follows:

<u>Length of Site Frontage</u>	<u>Recommended Number of Driveways</u>
100 feet or less	1
More than 100 to 800 feet	2

Over 800 feet to be specified by the County Planning Board upon receipt of advice of the County Engineer and the County Planning Director.

Location of Driveways

1. All entrance and exit driveways to a County road shall be located to afford maximum safety to traffic on the County road.
2. Any exit driveway or driveway lane shall be so designed in profile and grading and shall be so located to permit the following minimum sight distance measured in each direction along the County road: the measurement shall be from the drivers seat of a vehicle standing on that portion of the exit driveway that is immediately outside the edge of the County road traveled way or shoulder:

<u>Allowable Speed on County Road</u>	<u>Required Sight Distance in Feet</u>
25 MPH	150
30 MPH	200
35 MPH	250
40 MPH ←	300 ←
45 MPH	350
50 MPH	400

3. Where a site occupies a corner of two intersecting roads, no driveway entrance or exit may be located within a minimum of 10 feet of the tangent of the existing or proposed curb radius of that site. However, the 10 feet minimum required distance between the driveway and the tangent of the curb radius may be reduced to 5 feet if no other driveway is located at the adjacent side of the intersection within 10 feet of the tangent of the curb.

4. No part of any driveway may be located within 10 feet of a side property line, however, upon application to the Planning Board and upon approval of design by the County Engineer, the Planning Board may permit a driveway serving two or more adjacent sites to be located on or within 10 feet of a side property line between the adjacent site. Furthermore, the 10 feet minimum required distance between the driveway and a side property line may be waived if no other driveway is located within 10 feet of the side property line of the adjacent property.

5. No entrance or exit driveway shall be located on the following portions of a county road: on a rotary; on a ramp of an interchange; or within 20 feet of the beginning of any ramp or other portion on an interchange.

6. Where two or more driveways connect a single site to anyone County road, a minimum clear distance of 25 feet measured along the right-of-way line shall separate the closest edges of any two such driveways. However, if the length of the site frontage is less than 150 feet, the minimum clear distance of 15 feet may be measured along the right-of-way line of the County road between the closest edges of the two driveways.

7. Driveways shall be designed to the extent feasible to minimize interruptions to the sidewalk system and pedestrian access along the site frontage and/or along the County Road.

Driveway Angle

A) two-way Operation: Driveways used for two-way operation will intersect the County road at an angle to as near 90 degrees as site conditions will permit and in no case will be less than 60 degrees.

B) one-way Operation: Driveways used by vehicles in one direction of travel (right turn only) shall not form an angle smaller than 45 degrees with a County road, unless acceleration and deceleration lanes are provided.

Driveway Dimensions

The dimensions of driveways shall be designed to adequately accommodate the volume and character of vehicles anticipated to be attracted daily onto the land development for which a site plan is prepared. The required maximum and minimum dimensions for driveways are indicated in the Table. Driveways serving large volumes of daily traffic or traffic over 25 percent of which is truck traffic shall be required to utilize high to maximum dimensions. Driveways serving low daily traffic volumes or traffic less than 25 percent of which is truck traffic shall be permitted to use low to minimum dimensions:

ONE-WAY OPERATIONTWO-WAY OPERATION

CURBLINE OPENING (IN FEET)	DRIVEWAY WIDTH (IN FEET)	CURBLINE OPENING (IN FEET)	DRIVEWAY WIDTH IN FEET
18-25	10-15	18-32	10-24
26-32	18-24	32-42	24-34
26-32	18-24	38-44	30-36
32-42	24-34	48-56	40-46
26-32	24-34	32-42	24-34

COMMERCIAL DRIVEWAYS VOLUME CHARACTERISTICS ARE DESCRIBED AS FOLLOWS:

COMMERCIAL DRIVEWAY

<u>VOLUME</u>	<u>ADT RANGE</u>	<u>ADT AVERAGE</u>
Low	0-500	250
Medium	501 - 1500	1000
High	71500	2000

ADT=PHV

.112

ADT=AVERAGE DAILY TRAFFIC

PHV =PEAK HOUR VOLUME

DRIVEWAY NORTH SHALL BE MEASURED ALONG THE COUNTY ROAD RIGHT-OF-WAY LINE.

IF AN EXISTING DRIVEWAY CANNOT MEET THE COUNTY STANDARDS AND DOES NOT CREATE HAZARDOUS CONDITIONS AT THE PRESENT, THE COUNTY ENGINEER MAY PERMIT THE EXISTING LAYOUT OF THE DRIVEWAY TO BE MAINTAINED IF THE DRIVEWAY TRAFFIC VOLUME WILL NOT BE INCREASED DUE TO THE PROPOSED DEVELOPMENT CONDITIONS.

Driveway Surfacing

The surface of any driveway subject to County site plan approval shall be constructed with a permanent pavement of a type specified by standards set by the County Engineer. Such pavement shall extend to the paved traveled way or paved shoulder of the County Road; and such pavement shall extend throughout the area defined by the required driveway dimensions specified in Section (d).

10 (e) Acceleration Lanes

Where a driveway serves right turning traffic from a parking area providing 200 or more parking spaces, and the County road has a peak hour traffic volume exceeding 1,000 vehicles per hour, an acceleration lane shall be provided in accordance with "A Policy of Geometric Design of Rural Highways". c. 1984 American Association of State Highway Officials.

10 (f) Deceleration Lanes

Where a driveway serves as an entrance to a land development providing 50 or more parking spaces, a deceleration lane shall be provided for traffic turning right into the driveway from the County road. The deceleration lane is to be at least 200 feet long and at least 13 feet wide measured from the County road curbline. A minimum 40 foot curb return radius will be used from the deceleration lane into the driveway.

A deceleration lane may be omitted when the County roadway pavement is a minimum of 40 feet wide and the County road peak hour traffic does not exceed 500 vehicles per hour.

10 (g) Left Turn. Jughandles and Overpasses

The construction of and/or the conveyance of land to the County for left turn lanes, jughandles, and overpasses may be required by the County Planning Director, with the approval of the County Engineer, under one or more of the following circumstances:

1. Where a Master Plan, Official Map, or "traffic control plan" for a particular or County-wide area exists which shows the proposed location of jughandles and/or overpasses.
2. Where a development is proposed that provides 200 or more parking spaces on the site.
3. Where the sight distance is below that recommended in Section 10 (d).
4. Where the existing level of service is level "C" during the time period when the County road would be utilized by drivers entering and leaving the development, as described in the Highway Capacity Manual (1984) published by the Highway Research Board.

10 (h) Sidewalks

Each land development subject to County site plan approval shall provide a sidewalk within the County road right-of-way if such is required by any zoning subdivision, site planning or other ordinance of the municipality in which the land development is to be located. Where no local ordinance requires a sidewalk, the County Planning Board may require the installation of a sidewalk in the County right-of-way in order to protect pedestrian traffic while facilitating vehicular traffic **and in conformance with the Essex County Complete Streets Policy.**

If a sidewalk is required as a condition of approval under this resolution or is required by a municipality, such sidewalk shall be located in accordance with local specifications. In event that no local specifications exist, the following shall apply:

1. Sidewalks shall be constructed of portland cement concrete, 2,500 lbs, in accordance with the standards and specifications of the New Jersey Department of Transportation. Portland cement concrete sidewalk is hereinafter termed concrete sidewalk.

2. Sidewalk location: Sidewalk shall be a minimum of 4 feet in width. The outside edge of the sidewalk shall be one foot inside the right-of-way line except in commercial areas.

3. Sidewalk Connectivity: New sidewalks shall provide a convenient connection to an existing sidewalk system along any adjacent County Road or public off-road pedestrian pathway, or sidewalk or pedestrian pathway in any abutting development. Where no existing or immediately adjacent sidewalk or public pedestrian pathway is present, the sidewalk(s) and streets within the development shall be designed so as to facilitate future pedestrian connections and not conflict with or obstruct future planned pedestrian systems elsewhere.

4. Sidewalk grade: In all cases, the sidewalk shall conform to standard slope specifications of sidewalk and sidewalk area which shall be 1/4" per foot rising from the top of standard curb, except where depressed curb type driveways require a lowering of the sidewalk grade in accordance with the driveway specifications outlined in this resolution.

5. Pedestrian Amenities: The design of all sidewalks, other pedestrian paths, and transit stops shall include amenities to ensure pedestrian safety and respite areas. Pedestrian scale lighting shall be provided along all pedestrian ways. Other amenities to be provided where complementary to site design shall include strategically placed benches or other seating, water fountains, shade areas, trash receptacles, and wayfinding signage or kiosks.

D. Bicycle Facilities

The construction of bicycle facilities within the right-of-way of County Roads, and/or on a system of multi-use paths within the site, and along proposed new streets shall be considered. If proposed, they shall be constructed in conformance with the Essex County Complete Streets Policy. Additionally, within the proposed site development:

- A bike rack should be located along a major building approach line and clearly visible from the approach.
- The bike rack area should be no more than 100 feet from the entrance it serves and should preferably be within 50 feet.
- Bicycle racks should be of architectural character to compliment that of the buildings and other site features such as lighting and pedestrian amenities
- There shall be one (1) secured bicycle parking space per 2 dwelling units.
- There shall be one (1) secured bicycle parking space per 3,000 sq. ft. of commercial space or 10% of the number of automobile spaces (whichever is greater)

E. Transit Stops

Where a site plan calls for more than 5 residential units or for a development requiring 20 or more parking spaces, and will access a County Road with public transit service available, the design of the site shall include set-aside of an area for a minimum of one transit pull-off or stop. The design of this transit stop area shall be developed in consultation with the County Engineer's office.

10 (i) Curbing

Each land development requiring County site plan approval shall install curbs along the entire property frontage of the County road in accordance with the standards and specifications as set forth by the County Engineer.

Alignment and Grade

The alignment and grade of curbing is to be determined by that established or existing in the area and subject to the approval of the County Engineer.

Curbing at Driveway Openings

Where a proposed driveway is to serve any land development providing 50 or more parking spaces, curbing need not be carried across the driveway opening as a depressed curb: rather it may be swept back as curb returns as in the case of a street intersection.

If the driveway serves a facility having less than 50 parking spaces, a depressed curb driveway shall be used.

Where depressed curbs are used at driveways, the following specifications shall apply.

1. Existing curb: To construct a depressed curb where curbing exists, the existing curb shall be modified in accordance with the requirements in Figure 6.
2. New Depressed curb: New depressed curb shall be constructed in accordance with specifications as set forth by the County Engineer.
3. Height of depressed curb above street pavement or shoulder: The top of the depressed curb shall be no greater than one and one half inches higher than the gutter grade.
4. The horizontal transition of depressed curb from full curb height to depressed curb height shall not exceed 18 inches except where the sidewalk is narrow and close to the curb that a portion of the sidewalk four feet or less from its outer edge has a slope exceeding 6: 1. In this case, the depressed curb transition may be modified to prevent the outer four feet of sidewalk from exceeding a slope of 6: 1.

10 (j) Shoulder Paving

Each land development requiring County Site Plan approval shall install paving in the area between the edge of existing pavement and curbing along the entire property frontage of the County road in accordance with standards and specifications as set forth by the County Engineer.

10 (k) Right-of-Way Encroachment

No part of the County road right-of-way may be used for the conduct of private business. The County road right-of-way is to be kept clear of buildings, sales, or merchandise displays, shrubbery and trees, vehicular parking areas, servicing of vehicles, service equipment and appurtenances thereto.

10 (l) Signs

Directional, Regulatory, and Advisory Signs

To facilitate the safe and efficient movement of installation of specified directional, regulatory or advisory signs or pavement markings at designated locations on the site on the County right-of-way. Such signs shall be of a size, color and design specified in accordance with the "Uniform Manual of Traffic Control Devices" .

Advertising Signs

No advertising sign, device or marking may be designed to be erected on or overhead a County right-of-way. Advertising signs which revolve, move, flash, or give the illusion of movement shall be prohibited within 25 feet of the existing or proposed future curbline.

10 (m) Clear Sight Areas

In order to afford maximum safety to traffic on a County road, clear sight area shall be established on a site plan subject to County approval. Sight triangle easements shall be dedicated as follows: The area bounded by the right-of-way lines and a straight line connecting "sight points" on street centerlines which are the following distances from the intersection of the centerlines:

- a) Where a minor street intersects a collector road in the County system, ninety (90) feet on the minor and two hundred (200) feet on the collector.
- b) Where a collector or minor intersects an arterial and either road is in the County system ninety (90) feet back on the collector and three hundred (300) feet on the arterial.

c) Where a collector intersects a collector and either road is in the County System, two hundred (200) feet on the road designated as a through road in the adopted "Through Street Resolution" of the County and ninety (90) feet on the other collector.

d) Where an arterial intersects an arterial and either road is in the County system, two overlapping sight triangles shall be required formed by (300) feet and ninety (90) feet on each arterial.

10 (n) Drainage

Each land development subject to County site plan approval shall provide adequate drainage structures in accordance with standards set by the County Engineer for handling storm water that is generated on and/or through such site and that now flows or will flow directly or indirectly to a County road or under a County bridge or culvert.

Where no drainage will flow to the County road that is adjacent to the site but where in order to serve the site, any driveway, acceleration or deceleration lane, shoulder or other facility will be installed within the adjacent County right-of-way in accordance with the requirements of other sections of this ordinance, drainage facilities shall be installed in the County road in accordance with standards set by the County Engineer under or in conjunction with such driveways, acceleration and deceleration lanes, shoulders or other facilities.

10 (o) Conformance to Provisions of Traffic Control Plan

In addition to the above requirements, the Planning Board may specify that a driveway or driveways or other site plan features shall conform in location and design to the provisions of an adopted Traffic Control Plan for the County road that abuts the site for which site approval is sought subject to the approval of the appropriate State Agency.

Section 11 - Variances

The rules, regulations and standards herein set forth are designed as minimum requirements for the safety and welfare of the people of the County. However, if an applicant can demonstrate that, with reference to his site plan, the literal enforcement of one or more of said rules, regulations or standards will exact an undue hardship, the Planning Board, may permit such variance or variances as may be reasonable and within said general purposes.

Section 12 - Validity

If any section, subsection, paragraph, clause, phrase or provision of this resolution shall be adjudged invalid or held unconstitutional such adjudication shall not affect the validity of this resolution as a whole or any part of provisions hereof other than the part so adjudged to be invalid or unconstitutional.

Section 13 - Repeal of Conflicting Resolutions

All resolutions or parts of resolutions which are inconsistent with the provisions of this resolution are hereby repealed to the extent of such inconsistency.

Section 14 - Effective Date

This resolution shall take effect as provided by law.

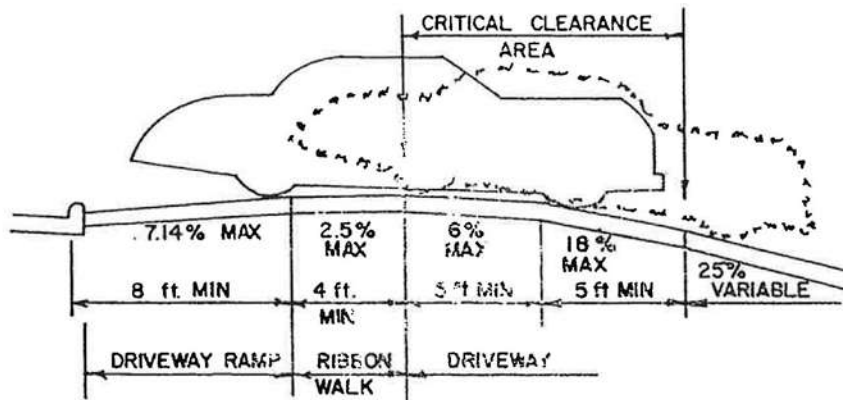


FIGURE 3
CASE A-2 SIDEWALK 8' MORE FROM CURB, DOWNHILL DRIVE

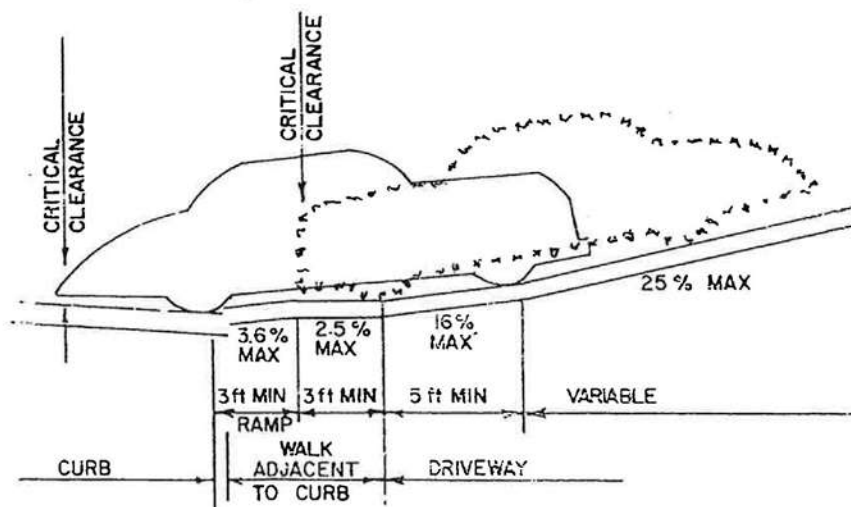


FIGURE 4
CASE B-1 -- SIDEWALK WITHIN 3' OF CURB, UPHILL DRIVE

Should the sidewalk be so close to the curb at a depressed curb driveway as to cause the ramp to be too steep and be likely to cause undercarriage drag, the sidewalk shall be appropriately lowered to provide a suitable ramp gradient. An application of this is shown in Figure 6.

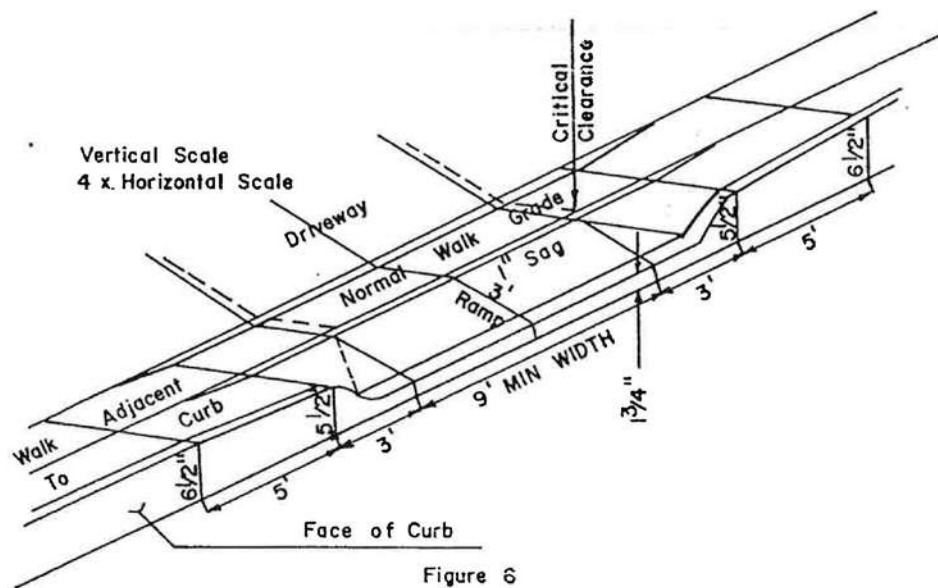


Figure 6
Typical case B curb cut and sidewalk design

Driveway Profile

Any vertical curve on a driveway shall be flat enough to prevent the dragging of any vehicle undercarriage. The maximum permitted gradients for driveways are shown in Figures 2 to 5. The profile dimensions given beyond the sidewalk are maximum for grades and minimum for grade lengths.

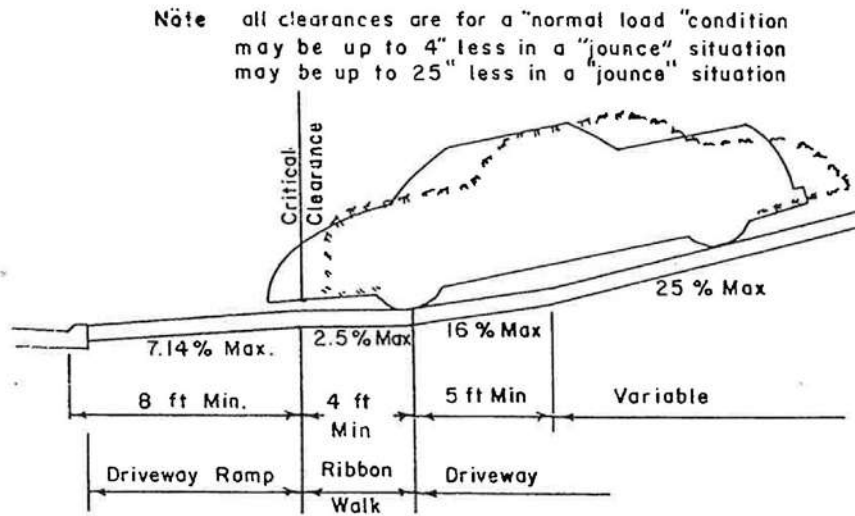


Figure 2

Case A-1-- Sidewalk 8' or more from curb, uphill drive

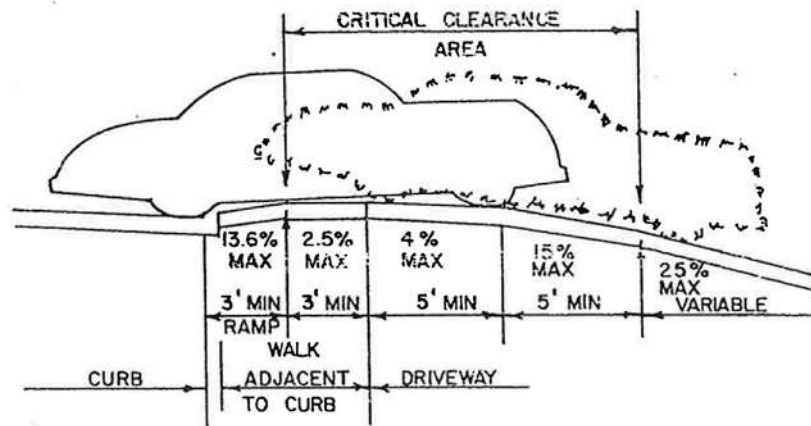
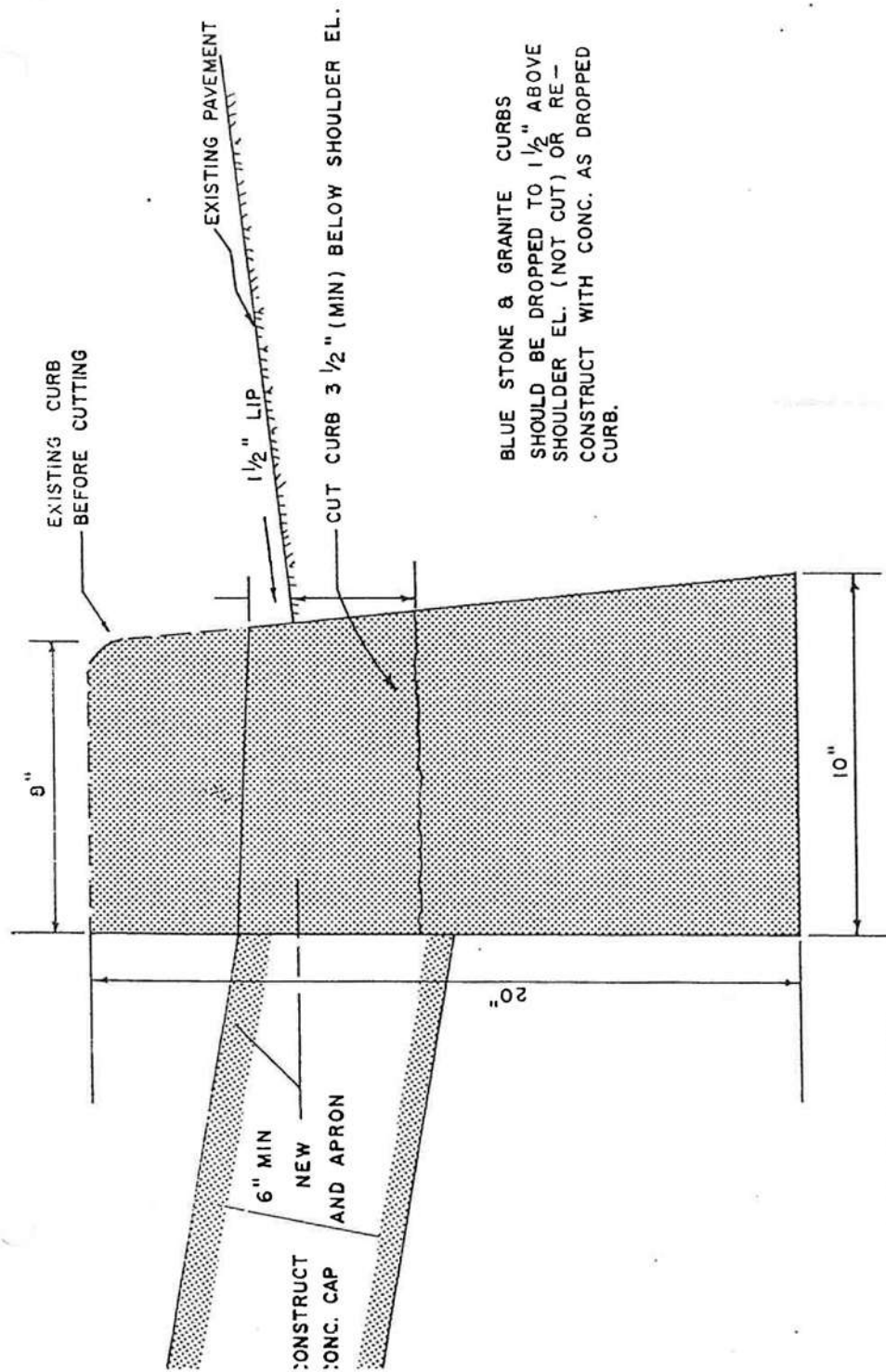


FIGURE 5
CASE B-2-- SIDEWALK WITHIN 8' OF CURB, DOWNHILL DRIVE



ESSEX COUNTY, N. J.
DETAIL OF CUTTING EXISTING CURB FOR NEW DRIVEWAY

SCALE 3" = 1'

STEPS FOR CONDUCTING TRAFFIC IMPACT ANALYSIS

I. INVENTORY EXISTING AND PROPOSED LAND USE

A. Existing Land Use

- Proposed Site's Land Use
- Proposed Site's Physical Location
- Proposed Site's Physical Characteristics
- Existing Zoning Land Use Classification

B. Proposed Land Use

- Comprehensive Land Use Plan
- Other Approved/Proposed Projects in the Area
- Develop Quantification of Trip Generation

II. INVENTORY EXISTING & PROPOSED TRANSPORTATION SYSTEM

A. Existing Transportation System

- Street Network by Classification of Route & No. Lanes
- Geometrics & Characteristics at Critical Intersections
- Traffic Control Locations
- Existing Intersection & Site Access Points
- Existing Right-of-way
- Available Hourly Traffic Counts
- Peak Period Turning Movement Counts
(Critical Intersections)
- Accident Information
- Transit Routes/Headways
- Transit Stops/Station Locations
- Sidewalks and pedestrian ways
- Bicycle facilities

B. Proposed Transportation System

- Comprehensive Transportation Plan
- Future Improvements (Committed & Planned)
- Future Complete Streets elements (as described in the Essex County Complete Streets Policy)

III. FORECASTED NONSITE TRAFFIC VOLUMES

- A. Comprehensive Transportation Plan or Related Data
 - Check Land Use and Socioeconomic Information
- B. Annual Growth Rate
 - Sufficient Historic Volume Information
 - Develop Factors to Apply to Existing Counts
 - Known Site-Specific Development in Planning or Construction Phases.

IV. SITE RELATED TRAFFIC

- A. Identify Critical Hours of Analysis
 - Morning Peak Hour
 - Evening Peak Hour
 - Facility Peak Hour
- B. Identify Trip Generation Units of Measure and Rates
- C. Estimate Site Generated Traffic Volumes
- D. Trip Distribution
- E. Modal Split
- F. Trip Assignment

V. TRAFFIC ANALYSIS

- A. Combine Nonsite Traffic & Site Related Traffic
 - Morning Peak Hour
 - Evening Peak Hour
 - Facility Peak Hour

- B. Volume/Capacity Evaluation
 - Critical Intersections/links
 - Access Points
- C. Identify Capacity Deficient Locations
- D. Identify Safety Related Constraints

VI. ROAD AND ACCESS IMPROVEMENTS

- A. External Roadway Improvements
 - Review Design Vehicle Requirements
 - New Roadways or Lanes
 - New or Modified Interchanges
 - Additional Through Lanes
 - Turn Lanes including Storage Length
 - Acceleration/Deceleration Lanes
 - New Signals
 - Modifications of Existing Signals
- B. Internal Road System
 - Review Design Vehicle Requirements
 - Lane Requirements
 - Traffic Control
 - Driveway Design
- C. Evaluate Improvements
 - Impact on Operating Characteristics
 - Cost



COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS
900 BLOOMFIELD AVENUE
VERONA, NEW JERSEY 07044-1393

☎ (973) 226-8500 x 2580
(973) 226-7469 FAX

Joseph Alessi
Chairman

Peter Scarpelli
Secretary

Date Application Received

SUB # _____

FEE \$ _____

Date Completed Application

INITIAL FILING FEE

Minor Subdivision (1 to 3 Lots)	\$200.00 + \$40/Lot
Boundary Adjustment (No New Lots)	\$150.00
Consolidation of Lots (Reverse Subdivision)	\$200.00
Major Subdivision (4 Lots or More)	\$500.00 + \$50/Lot

ADDITIONAL FEES (If Applicable)

Final Plat- Signature	\$100.00
Connection to County's Stormwater System	\$400.00
Appeal or Waiver	\$200.00

Make Check or Money Order Payable to the 'County of Essex'

PLEASE SUBMIT FOUR (4) COPIES OF THE SIGNED AND SEALED PLANS

=====

Applicant _____

Address _____

Signature of Applicant/Agent

PRINT

☎ () _____

E-Mail Address _____

Property Owner _____

Plans By: _____

Address _____

Address _____

☎ () _____

☎ () _____

SITE INFORMATION

Municipality _____ Block _____ Lot _____

Address _____

Number of Lots: Existing _____ Proposed _____

Proposed Use of Site: Residential _____ Commercial _____ Industrial _____

Multi-Family _____ Mixed-Use _____ Other (Specify) _____

Description - Proposed Streets with Complete Streets Elements

Location of Connection(s) with a County Road _____

Number, location and classification of streets _____

Description of proposed pedestrian, bicyclist, and transit accommodations

This plan has also been filed with the following municipal agencies:

Planning Bd. (Date)_____ Bd. of Adjustment (Date)_____ Status_____

Is Site in Flood Plain? YES (If Yes enclose approved NJDEP permit) NO

Acreage of Entire Tract _____

Reason for Subdivision Application:

ESSEX COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER



SUBDIVISION COMPLETE STREETS CHECKLIST

This checklist is intended to be used in conjunction with the Essex County Subdivision application form, Essex County Complete Streets Policy, and Subdivision Regulations for Essex County. Copies of those documents can be obtained from the County Planning Office. This checklist should be reviewed with the County Planning Office and Engineer prior to completion to confirm which Complete Streets elements would be required and/or desired for the proposed subdivision.

The requirements for pedestrian, bicyclist and transit access will vary dependent on the scale, uses, and location of the proposed development. Refer to the Essex County Subdivision Regulations for guidance on what to include for your proposal. In general, residential subdivisions of 5 lots or less and/or with no new streets as part of the proposal may provide the following Complete Streets Elements at their discretion, except that where the subdivision fronts on a County Road with sidewalks, the sidewalk system shall be completed along the subdivision frontage.

This completed form will be made part of the application package for County approval. Please keep a copy for your records.

Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Subdivision Plan?	Description of how the item will be addressed	If no new accommodations will be made – explain why not
<i>Overall Site design</i>	Does the organization of lots contribute to an overall pedestrian-oriented and walkable environment? Do proposed streets provide sufficient width as determined by the County Engineer to accommodate the construction of planned new complete streets elements	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Subdivision Plan?	Description of how the item will be addressed	If no new accommodations will be made – explain why not
<i>Bicycle Accommodations</i>	Is there an existing network for bicycle access within ½ mile of the subdivision? If so, have connections to that off-site network been considered/provided?	☐	☐	☐			
<i>Bicycle Accommodations</i>	Has the construction of bicycle facilities within the right-of-way along the subdivision frontage of County Roads been considered/provided?	☐	☐	☐			
<i>Bicycle Accommodations</i>	Has access for bicyclists been incorporated into subdivision street design?	☐	☐	☐			
<i>Bicycle Accommodations</i>	Have off-road multi-use paths been provided?	☐	☐	☐			
<i>Pedestrian Accommodations</i>	Is there an existing network of sidewalks or paths for pedestrian access within ½ mile of the subdivision?	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Subdivision Plan?	Description of how the item will be addressed	If no new accommodations will be made – explain why not
	If so, have connections to the off-site network been provided/						
<i>Pedestrian Accommodations</i>	Has access for pedestrians been incorporated into subdivision street design? Have off-road multi-use paths been provided?	☐	☐	☐			
<i>Pedestrian Accommodations</i>	Are driveways designed to minimize interruptions to the sidewalk system and pedestrian access along the subdivision streets and/or along the County Road?	☐	☐	☐			
<i>Pedestrian Accommodations</i>	Does the design of sidewalks and other pedestrian paths, include amenities to ensure pedestrian safety and respite areas.	☐	☐	☐			
<i>Existing Transit Accommodations</i>	Is there existing or planned Transit Service on County Roads serving the proposed subdivision? If so, are the following features present to make the subdivision	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Subdivision Plan?	Description of how the item will be addressed	If no new accommodations will be made – explain why not
	accessible by public transportation vehicles? • Intersection radii for driveways and intersections designed for a 50-foot outside turning radius. • Roadway grades that are 6% or less. • Transit Stops with way-finding and pull-off area • Bus loading pads designed with a minimum 8" portland cement concrete jointed reinforced pavement and a 4" subbase of stabilized granular material. • Lane widths of 12 feet. • Curb heights of 6 inches.						
<i>Transit Accommodations</i>	Are paved passenger waiting areas provided at all near-side corners of County collector and arterial street intersections?	☐	☐	☐			
<i>Transit Accommodations</i>	For subdivisions designed with central collector streets or Major or Minor Collector Road as defined in the NJ RSIS, is access provided for transit vehicles?	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Subdivision Plan?	Description of how the item will be addressed	If no new accommodations will be made – explain why not
<i>Transit Accommodations</i>	Are passenger amenities (shelters, benches, adequate lighting, bicycle storage facilities, and landscaping) provided at bus stops?	☐	☐	☐			
<i>Transit Accommodations</i>	Are transit stops located within one-quarter mile (one-half mile in more rural areas) or less of the subdivision? If so, have pedestrian connections to the off-site transit stop been provided?	☐	☐	☐			
<i>Transit Accommodations</i>	Have bus turnouts, berths, turnarounds and/or park-n-ride facilities been incorporated into appropriate roadway or development designs?	☐	☐	☐			
<i>Transit Accommodations</i>	Is adequate lighting provided at bus stops, passenger waiting areas and along pedestrian walkways?	☐	☐	☐			
<i>ADA Accommodations</i>	Are walkways, curbs, bus stops, building entrances, parking areas and transit facilities	☐	☐	☐			

Essex County Complete Streets Implementation Action Plan

Checklist



Item to be Addressed	Checklist Consideration	YES	NO	N/A	Shown on Proposed Subdivision Plan?	Description of how the item will be addressed	If no new accommodations will be made – explain why not
	designed for the mobility limited?						

ESSEX COUNTY DPW PLANNING DEPARTMENT SIGN-OFF

Statement of Compliance	YES	NO	If NO, please describe why (cite the specific Exemption from the Complete Streets Policy)
The proposed subdivision plan accommodates all users as defined and set forth in the Essex County Complete Streets Policy and Implementation Action Plan.	☐	☐	

Signature: _____ **Date:** _____ **Print Name:** _____

\$3.00

SUB-DIVISION REVIEW

ESSEX COUNTY PLANNING BOARD

ADOPTED BY THE ESSEX
COUNTY BOARD OF CHOSEN
FREEHOLDERS NOVEMBER 26,
1968
IN ACCORDANCE WITH CHAPTER 285
OF THE LAWS OF 1968
EFFECTIVE DATE - JAN. 1, 1970

ESSEX COUNTY
NEW JERSEY

DEPARTMENT OF
PLANNING - ECONOMIC DEVELOPMENT -
CONSERVATION

Reprinted
April, 1997

SUBDIVISION REVIEW

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I. DEFINITIONS FOR COUNTY ROAD RESOLUTION:

A. Definitions

1. Abutting County Road - Any existing or proposed County Road shown on the adopted County Master Plan or Official Map which adjoins a lot or parcel of land submitted for approval under this resolution.
2. Adverse Drainage Condition - The absence of drainage facilities or drainage easements in a drainageway leading to, along, or through a County Road or County drainage structure, either within or exterior to a proposed subdivision, or such location, size, design, construction or condition to provide adequately for storm drainage: (1) without causing flooding, erosion, silting, or other damaging effect to a County Road or County drainage structure; (2) without threatening to damage private property as a result of storm drainage from, along or through County drainage structure.
3. Agricultural Purposes - Farming and related pursuits not including the erection, alteration, enlargement, occupancy or use of any building designed for our suitable for residential occupancy.
4. Bicycle facility – any transportation facility designed or designated exclusively for travel by bicyclists including lanes, paved street shoulders, sharrows, or off-road paths
5. Bridge - A structure having a clear span in excess of twenty (20) feet designed to convey vehicles and/or pedestrians over a water course, railroad, or highway.
6. Complete Streets – street design practices collectively aimed at the safety, mobility, and accessibility needs of all users of all ages and abilities

7. County Master Plan - or "Master Plan" means a composite of the Master Plan for the physical development of the County, with the accompanying maps, plats, charts, and descriptive and explanatory matter adopted by the County Planning Board pursuant to Revised Statute 40:27-2.
6. Culvert - A structure designed to convey a water course under a road or pedestrian walk not incorporated in a closed drainage system, having a clear span of twenty (20) feet or less.
7. Drainage Right-of-Way - or Drainage Easement means the land required for the installation of storm water sewers or drainage ditches, or required along a natural stream or water course by preserving the channel and providing for the flow therein to safeguard the public against flood damage in accordance with Chapter One of Title 58 of the Revised Statutes 40:55-12.
8. Easement for County Road Purposed - An easement to the County for the purpose of installation of utilities, construction, reconstruction widening or improving a County Road including the repair and maintenance of the County Road and the construction, reconstruction or alteration of facilities related to the safety, convenience or carrying capacity of the County Road including drainage facilities and traffic control devices.
9. Final Plat - the final map of all or portion of a subdivision meeting all of the standards and regulations of this resolution and meeting all of the conditions established by the County Planning Board in granting Preliminary Approval to the subdivision.

10. Lot - A parcel or portion of land legally separated from other parcels or portions by description as on a subdivision or record of survey map or by metes and bounds for the purpose of sale, lease or separate use.
11. Maintenance Bond - Any security that is acceptable to the County Counsel to assure the maintenance of improvements installed by developers for a period of two (2) years after release of subdivider's performance guarantee with respect to such improvements.
12. New Building Lot - Any lot being created by a subdivision upon which one or more principal buildings or structures could be erected under the provisions of the Municipal Zoning Ordinance in the municipality in which said lot is located.
13. Official County Map - Means the map, with changes and additions thereto, adopted and established from time to time, by resolution of the Board of Chosen Freeholders of the County pursuant to revised Statutes 40:27-5.
14. Owner - Any individual, firm association, syndicate, co-partnership or corporation having sufficient proprietary interest in the land sought to be subdivided to commence and maintain proceedings to subdivide the same under a Municipal Subdivision Ordinance and this resolution.
15. Performance Guarantee - Means any security approved by the County Counsel which may be accepted in lieu of a requirement that certain improvements be made before the County Planning Board grants Final Approval to a Subdivision.

16. Preliminary Plat - The preliminary map indicating the proposed layout of the subdivision showing or being accompanied by all of the information required under Plat Details for Preliminary Plats.
17. Sidewalk - A paved or other hard surface path for pedestrians including a walkway along the side of a street.
18. Sight Easements at Intersections - A triangular-shaped area established in accordance with the requirements of this resolution, in which nothing shall be erected, placed planted, or allowed to grow in such a manner as to obstruct vision between a height of two (2) feet and ten (10) feet above the center line grade of either street. The County shall have the right of entry to remove any obstruction to vision within the sight easement area not conforming to the standards of this definition, following due notice to the property owner.
19. Siltation Basin - A temporary, designed in accordance with the standards of this resolution, to collect silt and eroded soil resulting from grading the area of a subdivision, for the purpose of limiting the deposit of silt and eroded soil in streams and brooks.
20. Sketch Plat - The sketch map of a subdivision of sufficient accuracy to be used for the purpose of discussion and meeting the requirements for Plat Details under this resolution.
21. Street - Means any street, avenue, boulevard, road, lane parkway, or freeway which is an existing State, County or Municipal Roadway, or a street or way showing

upon a plat heretofore approved pursuant to law and includes the land between the street lines, whether improved or unimproved, and may comprise pavement, shoulders, gutters, sidewalks parking areas, and other areas within the street lines.

(Include definitions of various classifications of roads under Master Plan).

22. Subdivider - Any individual, firm association, syndicate, co-partnership, corporation, trust, or any other legal entity commencing proceedings under the provisions of a Municipal Subdivision Ordinance and this resolution to effect a subdivision of land for himself or for another.

23. Subdivision - The division of a lot, tract, or parcel of land into two (2) or more lots, sites, or other divisions of land for the purpose, whether immediate or future, of sale or building development; except that where no new streets or roads are involved. The following divisions shall not be considered subdivisions: Divisions of land for agricultural purposes where the resulting parcels are three (3) acres or larger in size; Divisions of Land for agricultural purposes where the resulting parcels are three (3) acres or larger in size; Divisions of land by testamentary or interstate provisions, or division of land upon court order. "Subdivision" also includes re-subdivision, and where appropriate to the context, relates to the process of subdividing or to the lands or territory divided.

24. Subdivision Application - Means the application for approval of a subdivision pursuant to the "Municipal Planning Act" (1953) (p.L. 1953, C.433) (C.S3-1) et seq. as amended and supplemented or an application for approval of a planned unit

development pursuant to the "Municipal Planned Unit Development Act" (1967) (P.L. 1967, C.61) (C.40:55-54 et seq), as amended and supplemented.

25. Subdivision Committee - A committee established by resolution of the County Planning Board consisting of at least three (3) members appointed by the Chairman to review and approve subdivisions with the County Planning Director and acting in behalf of the County Planning Board in administering the provisions of this resolution.

26. Water Course - Any natural swale, stream, brook or river which is the natural course of storm or running water through which water flows ordinarily and frequently but not necessarily continuously. This definition includes water courses which have been artificially realigned or improved.

II. PROCEDURE:

A. GENERAL REGULATIONS

1. All subdivisions of land within ESSEX COUNTY shall be submitted to the County Planning Board for review and/or approval, prior to approval by the local municipal approving authority. If the County Planning Board fails to report to the municipal approving authority within a thirty (30) day period, said subdivision application shall be deemed to have been approved by the County Planning Board unless an extension is granted under the terms of this resolution.

2. Subdivision applications or sketch, preliminary, and final plats shall be submitted to the County Planning Board by the Municipal Official designated to receive such applications on behalf of the Local Planning Board, or they may be submitted by the

Applicant who shall be required to sign a statement to the effect that the plat has been duly filed with the appropriate local official.

3. The action taken by the County Planning Board on all subdivisions shall be duly set forth in writing with a copy of said report to be submitted to the Local Planning Board and the applicant. Said report shall set forth all conditions required for County approval and if disapproved, all reasons for said disapproval.

B. SUBMISSION OF SKETCH PLAN

1. Within thirty (30) days of the receipt of a sketch plat, the County Planning Board shall take one of the following actions:

a. Review the subdivision if it involves more than three (3) lots and/or new streets and offer comments relating to County standards and requirements or suggestions for modifications or changes to be incorporated on the preliminary.

b. Waive its right to review said subdivision if the subdivision contains no new streets, does not abut a County Road, does not create an adverse drainage condition, and does not result in more than three (3) lots.

c. Approve said subdivision if it abuts a County Road and meets the requirements for right-of-way under the adopted County Master Plan or Official Map, and does not involve new streets or result in more than three (3) lots or result in an adverse drainage condition.

d. Disapprove the subdivision or grant Conditional Approval.

C. SUBMISSION OF PRELIMINARY PLAT

1. At least four (4) legible prints of the preliminary plat and a copy of the application form submitted to the Municipality shall be submitted to the County Planning Board for all preliminary plats.
2. A copy of the preliminary plat shall be submitted to the County Engineer for an engineering evaluation of the subdivision in accordance with the standards and criteria established in this resolution, **in the Essex County Complete Streets policy, and for residential subdivisions, the New Jersey Residential Site Improvement Standards (NJ RSIS)**. The County Planning Board shall not act on a preliminary plat until the report from the County Engineer's Office is received, containing recommendations for County requirements and the amount of performance guarantees, maintenance bonds, payments in lieu of County Road **or complete streets** improvements, and proportionate share of future installation of drainage **and/or complete streets** facilities.
3. Within thirty (30) days of the receipt of a preliminary plat the County Planning Board shall take one of the following actions:
 - a. review the subdivision if the subdivision does not abut a County Road, or create an adverse drainage condition, and offer any constructive comments for Municipal consideration relating to planning matters.
 - b. Approve or Conditionally Approve the subdivision if it abuts a County Road or creates an adverse drainage condition.
 - c. Disapprove the subdivision.

D. IMPROVEMENTS OR GUARANTEES PRIOR TO FINAL APPROVAL

Before consideration of a final subdivision plat, the subdivider will have installed the Improvements specified in granting approval for the preliminary plat by the County Planning Board, or the posting of adequate performance guarantees, to assure the installation of the required improvements. The subdivider shall also submit any required maintenance bonds, payments in lieu of improvements to the County Road or proportionate share for the future installation of County drainage facilities or complete streets elements, specifically those to be constructed on a County Road. All payments in lieu of improvements shall be in the form of Certified Checks. Any monies or guarantees received by the County shall not duplicate bonds or other guarantees required by Municipalities for Municipal purposes.

E. SUBMISSION OF FINAL PLAT

1. At least four (4) prints of final plats shall be submitted to the County Planning Board with a copy of the Municipal application form.
2. Within thirty (30) days the Planning Director or an alternate representative designated to act in the absence of the Planning Director by the County Planning Board, will take one of the following actions on the Final Plat:
 - a. Review and exempt the subdivision if it does not involve County requirements.
 - b. Approve the subdivision if it abuts a County road or affects County drainage facilities if all the preliminary plat conditions and requirements have been met and the map does not contain substantial revisions affecting County requirements.

If substantial revisions are incorporated on the final plat which affect or could affect County requirements, a revised preliminary plat shall be submitted to the County Planning Board for processing as a new preliminary plat.

c. If substantial revisions are incorporated on the final plat which affect or could affect County requirements, a revised preliminary plat shall be submitted to the County Planning Board for processing as a new preliminary plat.

d. Disapprove the subdivision.

3. The action taken on the final plat shall be recorded on the tracing and cloth copy duplicate to be filled in the County Clerks office. When they are presented at the County Planning Board Office, the County Planning Director shall sign the plat or in his absence, an alternate representative designated by the County Planning Board.

F. RELEASE OF PERFORMANCE GUARANTEES

1. The County Engineer's Office shall inspect all completed improvements required by the County Planning Board for which a performance guarantee has been posted and certify that the improvements have been satisfactorily constructed in conformance with the standards and specifications of this resolution and the terms and conditions of the performance guarantee.

2. The County Engineer's Office shall forward a copy of their certification to the County Planning Board for transmittal to the Board of Chosen Freeholders with a request for release of the bond.

3. The Board of Chosen Freeholders at their next regular meeting after receipt of the request for release of the bond from the County Planning Board, shall by resolution

release the performance guarantee.

G. RELEASE OF MAINTENANCE BOND

1. The County Engineer's Office shall inspect all County facilities covered by a maintenance bond thirty (30) days prior to the expiration date of the bond and certify that the facilities are in satisfactory condition.

2. A copy of the certification shall be forwarded to the County Planning Board for transmittal to the Board of Chosen Freeholders with a request for release of the maintenance bond.

3. The Board of Chosen Freeholders at their next regular meeting after receipt of the request for release of the bond from the County Planning Board shall by resolution release the maintenance bond.

H. OTHER REGULATIONS

1. In the case of unusual circumstances in connection with any subdivision, the County Planning Board may request the approval of the Municipal approving authority and the applicant for a thirty (30) day extension of time to take action on the subdivision and an approved extension of time granted to the County Planning Board shall extend the time within which the Municipal approval authority is required to act.

2. Should the County Planning Board fail to act within thirty (30) days on any subdivision and fail to receive an approved extension of time, the Secretary of the County Planning Board shall attest on the plat the failure of the County Planning Board to act within the required time period, indicating authorization for Municipal approval and recording with the County Recording Officer.

3. In the event an applicant for subdivision approval is aggrieved by the action of the County Planning Board within ten days after the date of notice by certified mail of the said action. Any person aggrieved by the action of the County Planning Board in regard to subdivision approval may file an appeal in writing to the Board of Chosen Freeholders within ten days after the date of notice by certified mail of such action. The County Planning Board or the Board of Chosen Freeholders to which an appeal is taken shall consider such an appeal at a regular or special public meeting within forty-five days from the date of its filing.

Notice of said hearing shall be made by certified mail at least ten (10) days prior to the hearing to the applicant and to such of the following officials as are deemed appropriate for each specific case: the Municipal Clerk, Municipal Planning Board, Board of Adjustment, Building Inspector, Zoning Officer, Board of Chosen Freeholders, and the County Planning Board. The Board to which appeal is taken, shall render a decision within 30 days from the date of the hearing.

4. Any and all Moines received by the County to insure performance and to meet the requirements established for subdivisions under this resolution shall be paid to the County Treasurer who shall provide a suitable depository therefore. Such funds shall be used only for County Roads or County drainage facilities for which they are deposited unless such projects are not initiated for a period of ten (10) years, at which time said funds shall be transferred to the General Fund of the County.

5. The applicant for a subdivision or his agents shall assume full liability during construction and until the release of his performance guarantee for any improvements required by the County Planning Board.

III. PLAT DETAILS

A. SKETCH PLAT - Minimum plat details required for review by County Planning Board.

1. A key map showing the entire subdivision and its relation to surrounding areas.

2. The sketch plat shall be based on tax map information or some other similarly accurate base at a scale not less than 200 feet to the inch to enable the entire tract to be shown on one sheet and shall show or include the following information:

a. The location of that portion which is to be subdivided in relation to the entire tract.

b. All existing structures within the portion to be subdivided and within 200 feet thereof.

c. The name of the owner and all adjoining property owners as disclosed by the most recent Municipal tax records.

d. The tax map sheet, block, and lot numbers.

e. All existing and proposed streets or roads within or adjoining the proposed subdivision with the right-of-way widths clearly indicated.

f. All existing and proposed sidewalks, pedestrian amenities, crosswalks, bicycle facilities, bicycle parking, and transit stops with relevant right-of-way dimensions and cross-sections of proposed design clearly indicated.

g. All proposed lot lines and lot lines to be eliminated by the proposed subdivision shall be clearly indicated.

h. The location, width, and direction flow of all streams, brooks, drainage structures, and drainage ditches in the area to be subdivided or within 200 feet of the subdivision.

i. The location and width of all existing and proposed utility easements in the area to be subdivided.

j. North arrow.

k. Scale of the plat.

l. Acreage of the entire tract and the area being subdivided

m. The number of new lots created.

n. Name and address of owner, subdivider, and person preparing plat.

For a subdivision abutting a County Road containing not more than three (3) lots, the plat shall be accompanied by a deed or easement for County Road purposes in conformance with the standards for the County Road established in the adopted County Master Plan or official map and for the purposes of the County providing complete streets elements in conformance with the Essex County Complete Streets Policy.

B. PRELIMINARY PLAT - Minimum plat details required for acceptance. All preliminary plats and accompanying drawings shall be of a size to conform with the specifications of the Map Filing Act.

1. A key map showing the entire subdivision and the proposed street pattern in the area to be subdivided and the relationship of the tract to the surrounding area.

2. The name of the subdivision, Municipal tax map sheet, block and lot number, date reference meridian and scale.

3. The subdivision shall have clearly indicated on it the following information:

- a. Name and address of the subdivider and owner.
- b. Name and address of the person who prepared the map.
- c. Acreage of tract to be subdivided to the nearest tenth of an acre.

4. The location of existing and proposed property lines, building setback lines from streets, existing buildings and structures with an indication of whether they will be retained or removed and the location and extent of wooded areas.

5. The plat shall show or be accompanied by profiles and cross-sections of proposed streets within the subdivision and existing streets and highways abutting the subdivision. The typical cross-section of streets shall clearly indicate the type and width of pavement and location of curb, location of sidewalks, and shade tree planting strips. At intersections, any existing or proposed sight triangles and the radius of curblines shall be clearly indicated.

6. The plat shall show locations and be accompanied by cross-sections for all 'complete streets' elements including proposed sidewalks, pedestrian amenities (such as benches and lighting), crosswalks, multi-use paths, bicycle facilities, bicycle parking, and transit stops with dimensions clearly indicated. This information shall demonstrate the manner in which the proposed complete streets elements provide a continuous network of non-motorized access and connectivity within the subdivision and linked to the adjacent County Road(s) and other adjacent County bicycle, pedestrian, and transit network facilities.

7. Contours at two (2) foot intervals. All contour lines shall be referenced to the United States Geological Survey datum.

8. All existing water courses shall be shown and accompanied by the following information or data:-

a. When a brook or stream is proposed for alteration, improvement or relocation or when a drainage structure is proposed on a running stream, with a drainage area of one half square mile or greater, evidence of submission of the improvement to the New Jersey Division of Water Policy and Supply shall accompany the subdivision.

b. Cross-sections of water courses at an appropriate scale showing extent of flood plain, (if defined), top of bank, normal water level and bottom elevations at the following locations:

1. At any point where a water course crosses a boundary of the subdivision.

2. At 50 foot intervals for a distance 300 feet downstream of any proposed culvert or bridge within or adjacent to the subdivision.

3. Immediately upstream and downstream of any point of juncture of two or more water courses.

4. At a maximum of 500 foot intervals along all water courses which run through or adjacent to the subdivision.

c. When ditches, streams, or brooks are to be altered, improved or

relocated the method of stabilizing slopes and measures to control erosion and siltation during construction shall be shown on the plan or accompany it.

d. The boundaries of the flood plains of all water courses within or adjacent to the subdivision (if defined).

9. The total acreage in the drainage basin of any water course running through or adjacent to a subdivision in the area upstream of the subdivision.

10. The total acreage in the drainage basin to the nearest downstream drainage structure and the acreage in the subdivision which drains to the structure.

11. The location and extent of drainage and conservation easements and stream encroachment lines.

12. The location, extent and water level elevation of all existing or proposed lakes or ponds within or adjacent to the subdivision.

13. The preliminary plat shall show or be accompanied by plans for any storm drainage systems including the following:-

a. All existing or proposed storm sewer lines within or adjacent to the subdivision showing size of lines, direction of flow and slope and the location of each catch basin and inlet.

b. The location and extent of any proposed dry wells, ground water recharge basins, retention basins, or other water conservation devices.

14. The preliminary plat shall show or be accompanied by plans showing existing and proposed sanitary sewerage facilities showing existing and proposed sanitary sewerage facilities serving the subdivision including the following:

a. Location, size, and slope of all sanitary sewer lines, pumping station, and connections to existing facilities.

b. Location of any proposed sanitary sewage treatment plants.

15. The preliminary plat shall show or be accompanied by plan showing the size and location of all water mains.

16. Identification of lands to be dedicated or reserved for public use.

17. The location of any other underground utilities and the easements to accommodate them shall be clearly indicated on the plan.

NOTE: After Preliminary Approval and prior to consideration of the final plat, detailed plans and specifications for all proposed culverts and bridges which may become structures under County jurisdiction or improvements to existing County culverts or bridges shall be submitted to the County Planning Board for review and approval of the County Engineer's Office. The plans shall also be accompanied by the permit of the Division of Water Policy and Supply indicating their approval the proposed facility.

C. FINAL PLAT - Minimum plat details required for acceptance of a final plat by a County Planning Board:

1. Plat must be drawn in conformance with the provisions of the Map Filing Act and contain all the requirements for drainage easements, sight triangles at intersections and new or additional rights-of-way or easements for County Roads, established by the County Planning Board for the preliminary plat.

IV. DESIGN STANDARDS:

A. GENERAL

The design of any subdivision shall conform to the proposals and standards contained in the adopted County Master Plan or Official Map for County Roads, **Essex County Complete Streets Policy, NJ RSIS**, and drainage facilities and the standards and requirements contained in this resolution.

B. STREETS

1. The requirement for existing and proposed County Roads for right-of-way **and complete streets** shall conform with the classification of County Roads contained in the adopted County Master Plan or Official Map, **the Essex County Complete Streets Policy, the NJ RSIS**, and the improvements as defined on the diagram of "Cross-Section Requirements".

2. Where subdivisions abut County Roads and marginal roads or reverse frontage are provided, the improvements to the County Road shall be limited to the following:

a. Drainage facilities made necessary by the construction of the subdivision.

b. Uniform grading of the additional right-of-way or easement for County Road purposes with a positive slope of one quarter (1/4) inch to the foot toward the pavement of the County Road. Top soil shall be uniformly distributed over the graded area and the area seeded.

c. Curbs for a distance of two hundred (200) feet from the curb return each side of any new road connecting with a County Road located twenty (20) feet of the center line of the existing pavement. In addition to the two hundred (200) feet of curb each side of the intersection, a transition of the curb to one (1) foot off the existing pavement shall be provided. The transition shall be a uniform rate of ten (10) feet of curb for each foot of offset from the existing pavement.

d. The area between the existing pavement and the new curb shall be improved in accordance with the specifications of the Diagram of County Road Cross-Sections which is a part of this resolution (and the Essex County Complete Streets Policy).

3. No subdivision with frontage on a County Road showing lands controlling access to County Roads shall be approved except where the ownership of such lands is by a public body.

4. Subdivisions that adjoin or include existing County Roads that do not conform to widths as shown on the adopted County Master Plan or Official Map or provide sufficient width as determined by the County Engineer to accommodate the construction of planned new complete streets elements shall dedicate additional width along either one or

both sides of said road. If the subdivision is along one side only, one-half (1/2) of the required extra width shall be dedicated, measured from the existing center line of the road.

5. Where by reason of special or unusual conditions or to conform to the adopted Master Plan or Official Map, said total additional right-of-way is to be secured from just one side of an existing road, only one-half (1/2) of the additional right-of-way may be required to be dedicated and the remaining area proposed for right-of-way shall be reserved for future acquisition and all building setbacks shall be measured from the limits of the reserved area.

6. When subdivisions result in lots abutting County Roads which are classified as Primary or Secondary Arterials or Collectors, one of the following shall be required:

a. A marginal service road where a subdivision has more than one (1,000) feet of frontage on one side of a County Road, or

b. The frontage shall be reversed so that the lots contiguous to such Primary or Secondary Arterial or Collector Road will front on an internal street with no direct access to the County Road.

7. Where a subdivision involves lands with frontage on a Primary or secondary Arterial or Collector Road in the County system, which due to its size, shape or other peculiar or unusual circumstance makes the provision of a marginal road or reverse frontage impractical or unnecessary, the lot or lots in said subdivision shall have driveways so laid out that it is possible to turn passenger vehicles on the lot and it is not necessary to back any passenger vehicle into the County Road.

C. ROAD INTERSECTIONS

1. Angle at Intersections

Streets or roads connecting with any road in the County Road System shall be at right angles wherever possible, and intersections of less than sixty (60) degrees (measured at the center line of streets) shall not be permitted.

2. Spacing

Only one new street connecting with the County Road System will be permitted for a subdivision except where large frontages are present. In those cases, streets shall not connect with the same side of a Primary or Secondary Arterial or Collector Road at intervals of less than eight hundred (800) feet. In the spacing of streets, consideration will be given to the location of existing intersections on both sides of the development. Streets which connect with the County Road System from opposite sides of a County Road shall not be offset. If conditions require the streets to be offset, they shall be separated by at least one hundred and fifty (150) feet between their center lines.

3. Grading

The minimum practical grades shall be maintained on streets connecting with County Roads on the approaches to the intersection.

4. Extra Widths

Where any road classified as an Arterial or Collector in the adopted County Master Plan or Official Map intersects an Arterial or Collector in the County Road System the right-of-way requirement shall be increased by (20) feet on both roads for a distance of two hundred and fifty (250) feet from the intersection of the

center lines.

5. Sight Triangles

In addition to the right-of-way widths required in accordance with the adopted Master Plan or Official Map and extra widths at intersections, as specified above, sight triangle easements shall be dedicated as follows:-

The area bounded by the right-of-way lines and a straight line connecting "sight points" on street center lines which are the following distances from the intersection of the center lines;

- a. Where a minor street intersects a Collector Road in the County System, ninety (90) feet on the minor, and two hundred (200) feet on the collector.
- b. Where a Collector or minor intersects an Arterial and either road is in the County System, ninety (90) feet back on the collector and three hundred (300) feet on the arterial.
- c. Where a Collector intersects a Collector and either road is in the County System, two hundred (200) feet on the road designated as a through road in the adopted "Through Street Resolution" of the County and ninety (90) feet on the other Collector.
- d. Where an Arterial intersects an Arterial and either road is in the County System, two overlapping sight triangles shall be required formed by three hundred (300) feet and ninety (90) feet on each Arterial.

6. The radii of curbs at the intersections where either road or both roads are in the County Road System shall meet the following standards based on the classification of the intersecting roads on the adopted Master Plan and/or Official Map. The highest classification of road forming the intersection shall determine the standard.

Arterials - Forty (40) feet
Collectors - Thirty-Five (35) feet
Minors - Thirty (30) feet

7. The radii of right-of-way lines at intersections where either road or both

8. Where a subdivision includes proposed new streets, those streets shall be constructed in conformance with the Essex County Complete Streets policy. This shall include marginal or frontage roads except as provided in Section B above.

D. SIDEWALKS

The construction of sidewalks within the right-of-way of County Roads shall be required in conformance with the standards of the Cross-Section of County Roads which is a part of this resolution, for subdivisions abutting County Roads and in conformance with the Essex County Complete Streets Policy.

E. Bicycle Facilities

The construction of bicycle facilities within the right-of-way of County Roads shall be considered. If proposed, they shall be constructed in conformance with the standards of the Cross-Section of County Roads which is a part of this resolution, for subdivisions abutting County Roads and in conformance with the Essex County Complete Streets Policy.

F. Transit Stops

Where a subdivision for more than 5 residential lots or for an office or industrial park will access a County Road and there is public transit service available along that road, the design of the subdivision shall include set-aside of an area for a transit pull-off or stop. The design of this transit stop area shall be developed in consultation with the County Engineer's office.

G. DRAINAGE

Each subdivision submitted to the County Planning Board shall be reviewed by the County Engineer's Office to establish requirements to prevent an adverse drainage condition relating to a County Road or County drainage facility.

1. Basis for Calculations

a. Rainfall Intensity

Provide for one of the following storm frequencies.

15 Minutes rainfall once in 2 years

30 Minutes rainfall once in 5 years

45 Minutes rainfall in 15 years

60 Minutes rainfall once in 25 years

A minimum intensity factor" 1" equal to 2.6 inches of rainfall per hour satisfies the above requirements.

b. Runoff Determination

In setting the value of the runoff coefficient "C", consideration will be given to the physical features of the drainage basin and the County Planning Board's estimate of its future development.

Due consideration will be given to Municipal Zoning Ordinances by the

County Planning Board in estimating the future density of development of the drainage basin. In general, the value of the runoff coefficient "C" will fall within the following range:

Classification	Runoff Factor "C"
Parks Lands, Golf Courses,	0.15 to 0.30
etc. Open Residential	0.30 to 0.50
Dense Residential and Business	0.50 to 0.70
Commercial and Industrial	0.70 to 0.90

In computing runoff the rational formula shall be used:

$$Q = C I A$$

in which Q = Volume in cubic feet per second

C = Runoff factor

I = Intensity of rainfall in inches per hour

A = Watershed area in acres

c. Pipe Line and Open Channel Hydraulics

All sewers shall serve two major functions:

1. To carry the maximum discharge for which it is designed.
2. To transport suspended solids in such a manner that deposits in the sewer are kept to a minimum.

Design Formuli

Sewers shall be designed using the Manning Formula for flow in pipes.

1. Pipes shall be considered "flowing full" at maximum capacity.
2. Minimum design velocity at "flowing full" condition shall be three (3) feet per second.
3. Friction factor "n" shall be 0.015 for circular cross-section, non-porous concrete pipe. The cross-sections or pipe materials shall have commensurate friction factors as may be approved by the Engineer.

Line Transitions

In pipe sizes less than forty-eight (48) inches in diameter, all transitions in slope, horizontal direction, junctions and change in

pipe sizes shall be confined to manholes, catch basins, or other accessible structures designed for one or more of these purposes. In forty-eight (48) inch Q12elines and larger, vertical and horizontal deflections may be accomplished using one hundred (100) foot

Open Channel Flow (Ditches)

1. Permissible Design Velocities (feet per second)

<u>Excavation Material</u>	<u>Velocity</u>
Fine sand to firm loam	2.5 to 3.5
Stiff clay to hardpan	3.75 to 6.00
Concrete lined ditch	15

Velocity shall be controlled by use of check dams or ditch banks shall be protected by use of sod, rip rap or paving, as design velocity dictates.

2. Discharge Flow

Manning Formula

3. Values of "n" - Manning Formula

.015 - Best concrete lined ditch

.025 - Best unlined ditch

.03 to .15 - Fair to poor natural streams and water courses.

d. Layout of Storm sewer Systems

1. Inlet spacings shall not exceed five hundred (500) feet or a design inlet flow of 6.0 cfs, whichever condition shall be more stringent.

Access manholes shall be spaced at five hundred (500) feet intervals (maximum) through rights-of-way and at sewer junctions where there are no catch basins.

2. "Dish street intersections are not permissible. Sufficient catch basins shall be installed at each street intersection to avoid gutter overflow and at low points in the street grade.

3. Pipe used shall be circular reinforced concrete pipe Class III Wall B unless otherwise directed by County Engineer and laid with not less than two (2) feet depth of cover over top of pipe whenever possible.

4. Catch basins and manholes shall be constructed in accord with the New Jersey State Standard Specifications for Road and Bridge

Construction, 1961 Edition. Casting curb head height shall be two (2) inches greater than curb height specified. Castings shall conform to New Jersey State Standards.

5. Ends of pipe starting or terminating in an open ditch shall have suitable headwalls.

2. New Culverts and Bridges

The County will assume responsibility for the future maintenance of culverts or bridges on new public roads within developments when approved by the County before construction, subject to the following conditions:

- a. The drainage basin upstream of proposed bridge or culvert exceeds one half ($1/2$) square mile (320 acres) in area.
- b. Application has been made and a permit issued by the New Jersey Division of Water Policy and Supply for the proposed structure.
- c. The structure is designed to carry A.A.S.H.O. H20-44 loading.
- d. Deck width

- 1. Culverts - Full width of road right-of-way.

- 2. Bridges - Planned pavement width plus 2-5' wide sidewalks.

Plans and specifications of proposed structure be submitted to and receive approval of the County Engineer.

f. Notification of commencement of construction so that periodic inspections can be made by County.

g. Final inspection by the County Engineer and certification by Municipal

Engineer that the construction is in accord with the approved plans and specifications.

3. Existing County Bridges and Culverts on Roads to be Widened in Connection with Subdivision.

a. Where developer's frontage includes both sides of stream and the existing structure has adequate water way area and is not scheduled for early replacement by reason of structural inadequacy, the developer shall widen culverts to full width of proposed right-of-way and bridges to width of future pavement plus ten (10) feet for sidewalks. Plans for proposed work shall have the approval of the New Jersey Division of Water Policy and Supply and the County Engineer. The County

Engineer upon approving plans will set the amount of bond to be posted to guarantee the satisfactory completion of the work.

b. Prior to commencement of construction developer will be required to obtain a permit from the Essex County Roads and Bridges Department.

All requirements of the permit will prevail except that no additional posting of bond will be required.

c. In cases where developer's frontage includes only one side of a stream and the structure is scheduled for early replacement for hydraulic or structural reasons, or is of such construction that widening of the existing structure is impractical in the opinion of the County Engineer, or has been widened in the past to accommodate the future pavement

width the developer shall make a cash payment sufficient to cover the cost of the improvement. This cost will be determined by the County Engineer using current competitive bid prices for the units involved.

4. Bridges and Culverts Downstream of Projects

All projects except residential subdivisions, of three or less lots involving no addition of payment, situated in a drainage basin of less than one (1) square mile (640 acres) or involving more than 20% of the existing drainage basin, regardless of size, above an existing County Bridge or culvert will be considered to directly increase the hydraulic requirements of these structures.

When the County Planning Board finds that a project situated in a drainage basin as above defined, would create an adverse drainage condition to a County drainage structure, or that such project lies in a drainage basin for which drainage facilities have previously been installed or altered under the provisions of this resolution in order to correct a previously existing adverse drainage condition, the developer will be required to pay a proportion of the cost of correcting the condition. The proportion of the cost of such facilities to be paid by a subdivider whose proposed subdivision would drain into such facility will be equal to the proportion that the acreage of the proposed subdivision bears to the acreage of the entire drainage area when fully developed, based upon a reasonable assumption of the future density of development of the basin

The County Engineer shall in behalf of the Planning Board perform all calculations of storm runoff based on consideration of the physical features of the basin and the County Planning Board's estimate of future development in the drainage basin.

The cost of the drainage facility installation or alteration will be the estimated cost of installing the new facility as calculated by the County Engineer, plus 10% for contingencies. In cases where the payment is to be made toward the cost of facilities previously installed or the cost of previously performed alterations, the actual cost of the work performed will be used in place of an estimated cost.

Regardless of any other provision in this resolution, the subdivider will not be financially responsible for any part of existing drainage facilities for which payment in full has previously been made for such part of such facilities to the County by other subdividers in the same drainage basin.

5. Drainage Systems on County Roads

a. Adequate drainage facilities shall be required relating to County Roads where a subdivision would create an adverse drainage condition as a result of the construction of the development.

b. When a drainage system or any part thereof is proposed in connection with a subdivision which relates to a County Road and additional capacity is necessary to accommodate anticipated additional

storm water runoff from the future development of other areas tributary to the drainage system, the following procedure shall be followed:

1. The capacity and design of the drainage system to accommodate storm water runoff from the development shall be determined by the subdivider's engineer and approved by the County Engineer. The County Engineer shall calculate the cost of the system.

2. The capacity of the enlarged system to provide for the subdivision and areas outside of the development tributary to the drainage system shall be determined by the County Engineer.

The plans of the system shall be prepared by the subdivider's engineer and the estimated cost of the enlarged system calculated by the County Engineer.

3. The subdivider shall make a payment to the County in lieu of the installation of the drainage system related to the County Road based on the system required by his subdivision.

4. The County Shall provide the addition funds required for the enlarged system and assume the responsibility for the construction of the drainage system.

5. When subdivisions occur which are tributary to a drainage system which has been enlarged by the County, the developer

shall make a payment to the County based on the proportion that the acreage in his subdivision is of the total acreage served by the system times the actual construction cost of the system.

6. Drainage Easements

In lieu of providing any required drainage easement exterior to the subdivision relating to County Road drainage, the County Planning Board may accept a cash contribution to cover the cost or part thereof of said drainage easement if the subdivider cannot secure it at a fair price.

V. STANDARDS AND CRITERIA FOR ADJUSTING OR WAIVING REQUIREMENTS

1. No additional right-of-way or improvements will be required for subdivisions adjusting boundaries between two (2) existing lots which does not result in the creation of new building lots.
2. In cases where subdivisions fronting on County Roads include existing structures in a condition to permit use and occupancy, the County Planning Board is permitted to waive or adjust the right-of-way width requirement for the lot upon which such building or structure is located provided,
 - a. Such lot created upon which said building or structure exists would be a non-conforming lot pursuant to zoning regulations of the municipality in which the subdivision is located because of inadequate setback, and

b. The new right-of-way line required under the standards of the County

Master Plan would be within ten (10) feet of such building or structure.

3. Any subdivision fronting on a County Road involving no new streets, and not causing an adverse drainage condition related to County facilities and resulting in not more than three (3) lots shall only be required to provide additional right-of-way in accordance with the Master Plan or Official Map.

4. Any subdivision with less than three hundred (300) feet of frontage on a County Road which in the opinion of the County Engineer would result in a hazardous traffic condition because of the limited improvement to the County Road may make payment to the County of Essex of an amount equivalent to the cost of improvements required under this resolution as calculated by the County Engineer and based on the standards and specifications for improvements contained in this resolution.

5. In cases where a County Road is scheduled for improvement under the Capital Improvement Budget will result in a change in alignment or profile of the road which would destroy the improvements undertaken in connection with this subdivision, the developer may contribute monies in lieu of all or part of the improvements required under this resolution.

The payments shall be calculated by the County Engineer and based on standards and specifications for improvements contained in this resolution.

6. The Planning Board may waive the requirement for additional right-of-way under the Master Plan or Official Map for the remaining parcel in a subdivision which does not create an adverse drainage condition and meets the following conditions.

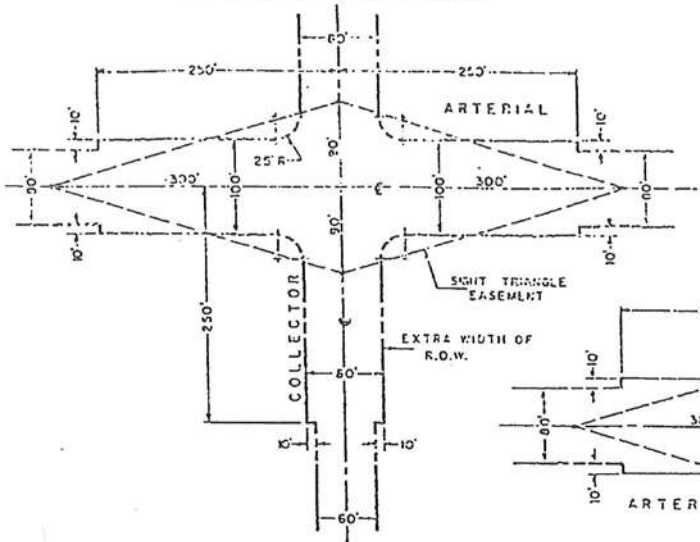
- a. The subdivision does not involve more than three (3) lots.
- b. The remaining parcel contains sufficient land to be further subdivided under the Zoning Ordinance requirements of the municipality in which it is located.

COUNTY ROAD INTERSECTION DIAGRAMS

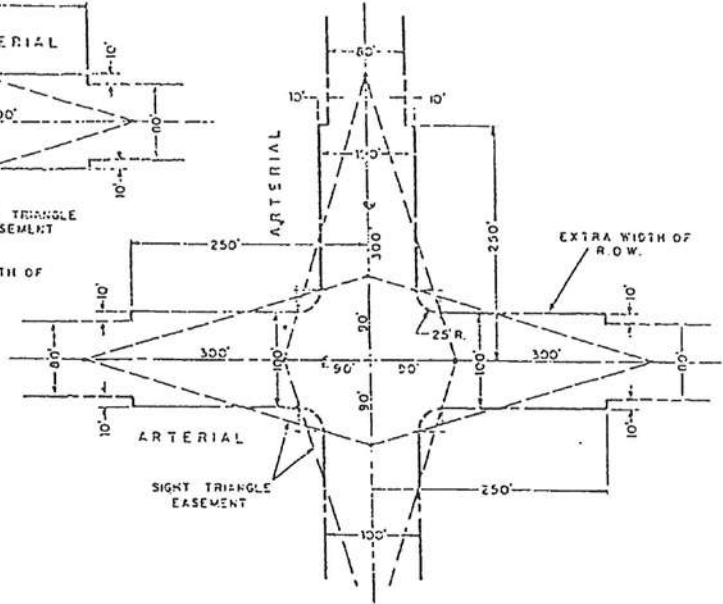
NOTE: Diagrams of acceptable complete streets elements – sidewalks, bicycle facilities, transit stops, etc. should be added to the following County Road Intersection Diagrams. See [NACTO.org](https://www.nacto.org) for state of the practice guidance.

COUNTY ROAD INTERSECTION DIAGRAMS

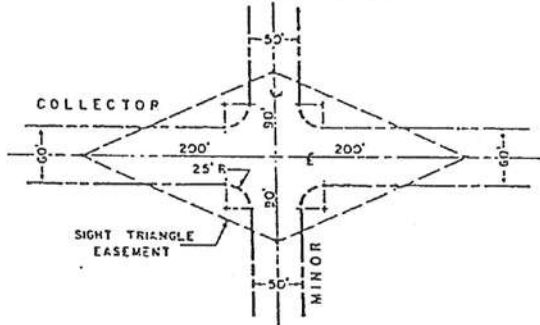
ARTERIAL - COLLECTOR



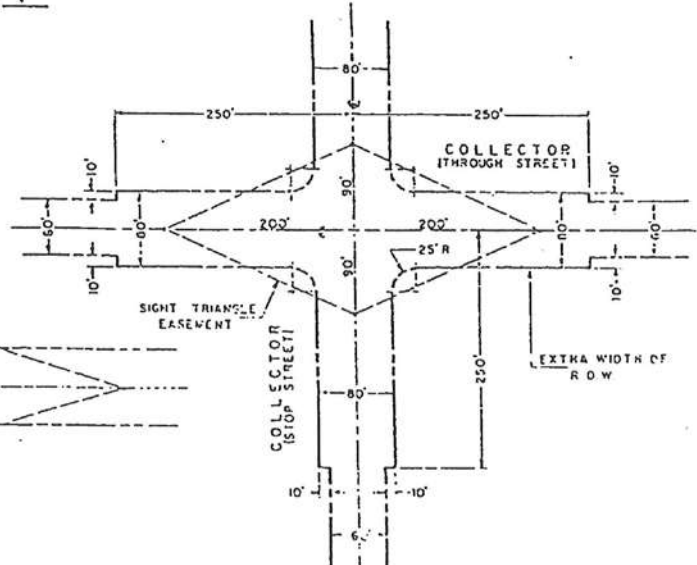
ARTERIAL - ARTERIAL



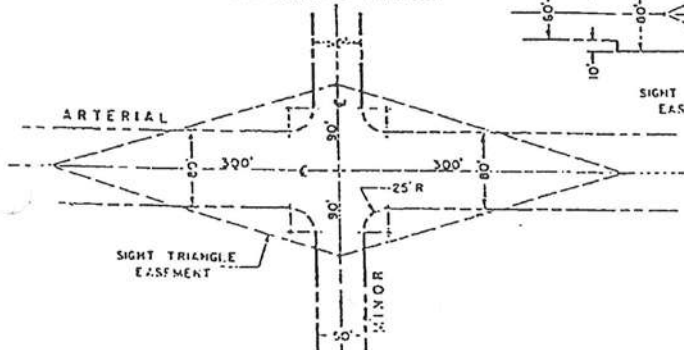
COLLECTOR - MINOR



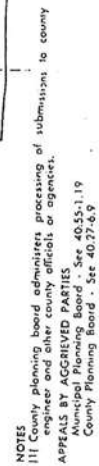
COLLECTOR - COLLECTOR



ARTERIAL - MINOR



FILING PLAN
IR.5.46:23-9.9 ET SEQ.)
(WITHIN 90 DAYS OF FINAL APPRO





APPENDIX H

Comparative Profile of Traditionally Disadvantaged Populations

Comparative Profile of Traditionally Disadvantaged Populations

Variable	Bloomfield	Caldwell	Livingston	Maplewood	Montclair	Newark	Nutley	Orange	South Orange	Together North Jersey Region
Population¹	47,315	7,822	29,366	23,867	37,669	277,140	28,370	30,134	16,198	6,579,907
Households²	18,051	3,501	9,311	8,210	14,520	92,618	10,888	11,192	5,253	2,365,263
Households in Poverty²	1,591	79	189	229	860	23,370	642	1,960	420	209,488
Percent Households in Poverty	8.8%	2.3%	2.0%	2.8%	5.9%	25.2%	5.9%	17.5%	8.0%	8.9%
Racially Concentrated Areas in Poverty (RCAPs)^{1,2}										
Persons Living in RCAPs	-	-	-	-	2,211	137,668	-	8,151	-	564,916
Percent Living in RCAPs	0.0%	0.0%	0.0%	0.0%	5.9%	49.7%	0.0%	27.0%	0.0%	8.6%
Minority Population¹	25,024	1,516	7,831	11,282	15,749	245,018	7,174	28,777	6,967	2,800,362
Percent Minority	52.9%	19.4%	26.7%	47.3%	41.8%	88.4%	25.3%	95.5%	43.0%	42.6%
Non-Hispanic Minority Population	13,418	730	6,639	9,687	12,939	151,272	3,820	22,246	5,974	1,515,462
Percent Non-Hispanic Minority	28.4%	9.3%	22.6%	40.6%	34.3%	54.6%	13.5%	73.8%	36.9%	23.0%
Hispanic Population	11,606	786	1,192	1,595	2,810	93,746	3,354	6,531	993	1,284,900
Percent Hispanic	24.5%	10.0%	4.1%	6.7%	7.5%	33.8%	11.8%	21.7%	6.1%	19.5%
Families in Poverty with Children²	423	20	44	54	360	10,823	179	866	66	82,452
Percent Families in Poverty with Children	3.7%	1.1%	0.6%	0.9%	3.9%	18.1%	2.5%	12.6%	1.8%	5.0%
Female Head of Household with Childrer²	1,240	134	299	613	1,072	15,717	500	1,449	273	153,224
Percent Female Head of Household with Childrer	6.7%	4.0%	3.0%	7.4%	7.1%	16.6%	4.4%	12.9%	4.9%	6.4%
Persons with Limited English Proficiency (5 Years+)²	4,606	677	2,311	1,560	992	60,025	2,226	5,398	436	837,019
Percent Persons with Limited English Proficiency	10.4%	9.3%	8.6%	7.1%	2.8%	23.6%	8.4%	19.6%	2.9%	13.7%
Carless Households²	2,301	279	245	580	1,281	35,613	696	3,219	508	295,271
Percent Carless Households	12.7%	8.0%	2.6%	7.1%	8.8%	38.5%	6.4%	28.8%	9.7%	12.5%
Elderly Persons (75 Years+)¹	2,823	700	2,629	1,314	2,144	9,602	2,122	1,524	867	431,770
Percent Elderly Persons	6.0%	8.9%	9.0%	5.5%	5.7%	3.5%	7.5%	5.1%	5.4%	6.6%
Persons with Disabilities³	4,287	654	2,500	1,840	2,445	35,809	2,414	3,669	792	606,368
Percent Persons with Disabilities	9.1%	8.4%	8.6%	7.7%	6.5%	13.4%	8.5%	12.2%	4.9%	9.3%
HUD Units⁴	135	159	5	9	415	20,747	208	1,688	71	84,907
Units/1,000 Population	3	20	0.17	0.38	11	75	7	56	4	13
Public Housing Units	0	0	0	0	0	8,209	0	390	0	31,069
Units/1,000 Population	0	0	0	0	0	30	0	13	0	5
Multi-Family Housing Units	135	159	5	9	415	8,674	208	799	71	38,689
Units/1,000 Population	3	20	0.17	0.38	11	31	7	27	4	6
Low-Income Tax Credit Units	0	0	0	0	0	3,864	0	499	0	15,149
Units/1,000 Population	0	0	0	0	0	14	0	17	0	2

Sources:

¹ U.S. Census Bureau, 2010 Census; ² U.S. Census Bureau, 2006-2010 American Community Survey; ³ U.S. Census Bureau 2008-2012 American Community Survey; ⁴ U.S. Department of Housing and Urban Development, A Picture of Subsidized Households, 2012, Using 2010 Census Geography



APPENDIX I

Demonstration Project - Essex
County Complete Streets
Implementation Action Plan



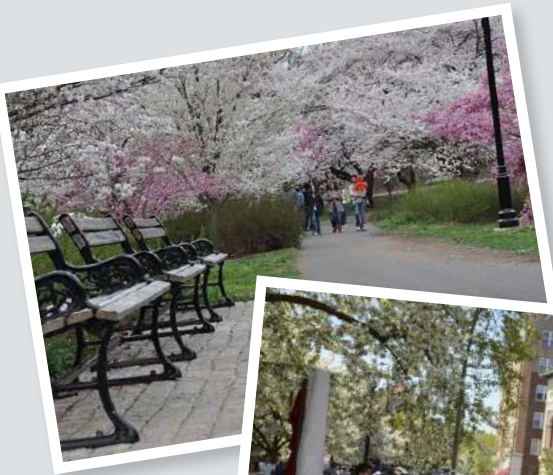
TOGETHER
**NORTH
JERSEY.**

Demonstration Project



ESSEX COUNTY

Complete Streets
Implementation
Action Plan



Submitted
by:
RBA

April 2014



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Background

To demonstrate the process of applying the Essex County Complete Streets Policy and implementation of project proposals from a Complete Streets perspective, Essex County staff undertook an accelerated concept level planning effort to evaluate a project proposal and identify possible improvements consistent with a Complete Streets philosophy, in that they address the needs of a variety of users appropriate to context.

The process considered several different project approaches with varying levels of effort. Each approach conforms to the three below mentioned types of projects for which Complete Streets questionnaires were developed as part of the *Complete Streets Implementation Action Plan*. These types of projects are: 1) a maintenance project; 2) a resurfacing project; and 3) a reconstruction concept development.

The extent of benefits resulting from each approach varies depending on the type of project, with modest benefits accruing from the maintenance type project, more substantive benefits from the resurfacing approach and significant improvements from the reconstruction approach. Although the extent of anticipated benefits derived from the varying projects types is relevant and would play a role in determining how best to address the intended purpose and need (i.e., which pipeline should be followed), what is important is that regardless of the scope of the effort, each can take into account the Complete Streets philosophy, ensuring that the needs of all modes are addressed.

Selection of the Demonstration Project Location

A variety of potential project locations were considered for this Demonstration Pilot Program. The selection process consisted of the RBA working with County staff to identify candidate pilot project locations. A set of potential locations was selected, each of which had been identified as a “high crash” location in the Essex County Master Plan. A set of evaluation criteria and rating points awarded for each criterion was also developed. The various alternative locations were rated and scored. Based on this rating process (see Pilot Location Screening Matrix, Table 1), the intersection of Bloomfield Avenue (CR506) and Grove Street (CR509) in Bloomfield was selected as the site of the demonstration process. This selection was based on the location being perceived as having:

- high potential for multimodal use,
- its transit focus,
- its low potential for related environmental impacts,
- the proximity of walkable destinations in the vicinity,
- its typicality, as it represents a typical intersection found throughout Essex County
- allowing for the transferability of results,
- the available physical space,
- its potential for public awareness/visibility,
- the municipality (Bloomfield) has adopted a Complete Streets Policy of its own, and
- there are no street enhancements or improvements currently underway.

Analysis

RBA analyzed the needs, deficiencies and opportunities associated with the demonstration project site in terms of their impact on existing and potential uses of the County right-of-way.

Benefits and assets include:

- Bus shelter along Bloomfield Avenue westbound
- Frequent bus service
- Pedestrian scale lighting by stop
- Pedestrian signal heads with countdown timers
- Curb ramps with contrasting color and truncated domes



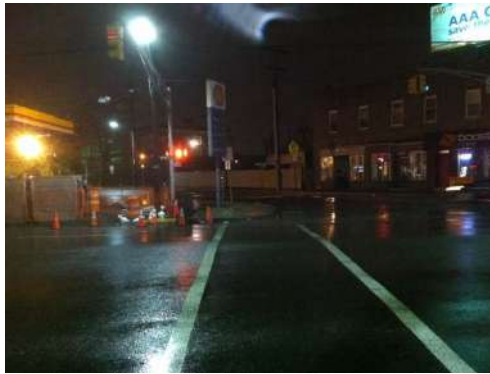
Bus stop with pedestrian scale lighting



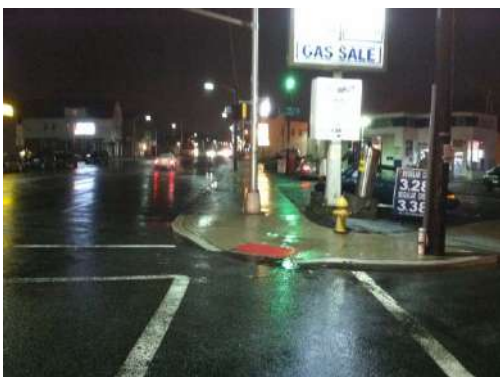
Well lighted bus stop



Pedestrian signal heads



Countdown pedestrian signal heads



Curb ramp contrasting color and truncated domes (apex locations)

Issues and deficiencies included:

- Skewed intersection alignment with excessively long or indirect crosswalks
- High incident of motor vehicle and pedestrian crashes
- Lack of street trees or other aesthetic or “green” features
- Bus stops not opposite one another requiring additional exposure during street crossings by transit patron (eastbound bus service is via stop at Ampere Parkway one block to the east)
- Curb ramps not always provided independently for each crosswalk
- Crosswalk striping is “standard” with edge lines only – this is not very visible at night or in wet weather
- “LOOK LEFT” pavement legends are a good enhancement, but they are worn and difficult to read



Minimally visible crosswalk



“Look Left” pavement legend closeup



“Look Left” marking in crosswalk

Recommendations

A set of recommendations was prepared for each of the three possible project types (pipeline assignments), maintenance, resurfacing, and concept development. Each set of recommendations is consistent with the scope of the pipeline assignment and was selected to address the needs and deficiencies associated with all users of the public right-of-way in accordance with the principles espoused in the Essex County Complete Streets Policy.

These proposals were selected from state-of-the-practice standards and guidance such as the AASHTO Highways and Streets, Bicycle and Pedestrian Guidelines, NACTO Urban Bikeway Design Guide, ADA, PROWAG, and NJDOT Roadway Design Guidelines.

Figures 1, 2 and 3 present the conceptual improvements associated with each type of improvement. Each shows:

- Project site location maps
- An aerial of existing conditions
- A summary of purpose and need
- A listing of proposed concept level treatments associated with each “pipeline” assignment
- Concept level plan of proposed treatments
- Images of proposed treatments

PROPOSED IMPROVEMENTS



EXISTING CONDITIONS



ESSEX COUNTY
Complete Streets
Implementation
Action Plan

DEMONSTRATION/PILOT PROJECT
*Bloomfield Avenue
&
Grove Street*
BLOOMFIELD, NJ

RBA 04/09/2014

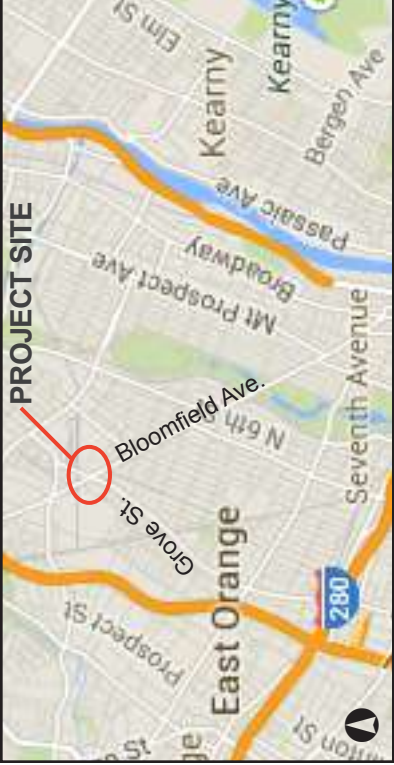


Fig. 1
Pipeline #1: Maintenance

- 1 – Restripe crosswalks with piano bar/continental crosswalk striping
- 2 – Ensure all lighting and traffic signal fixtures operate properly
- 3 – Fill in any potholes in the vicinity

▲ Lighting Maintenance



▲ Piano Bar Continental Crosswalk



PURPOSE & NEED

DESCRIPTION: The signalized intersection of Bloomfield Avenue and Grove Street has a high pedestrian crash rate. There is frequent bus transit service and commercial land uses in the immediate area, increasing potential pedestrian demand.

IMPETUS: This intersection is one of the **Top 10** priority locations identified in the Essex County Comprehensive Transportation Plan, in terms of the Plan 4 Safety Crash Data Statistics.

GOALS: Reduce the pedestrian and motor vehicle crash rate through changes in the built environment.

PERFORMANCE MEASURES: County and Municipal Police Reports for crashes involving pedestrians

PROPOSED IMPROVEMENTS



EXISTING CONDITIONS



ESSEX COUNTY
Complete Streets
Implementation
Action Plan

DEMONSTRATION/PILOT PROJECT
*Bloomfield Avenue
&
Grove Street*
BLOOMFIELD, NJ

RBA 04/09/2014

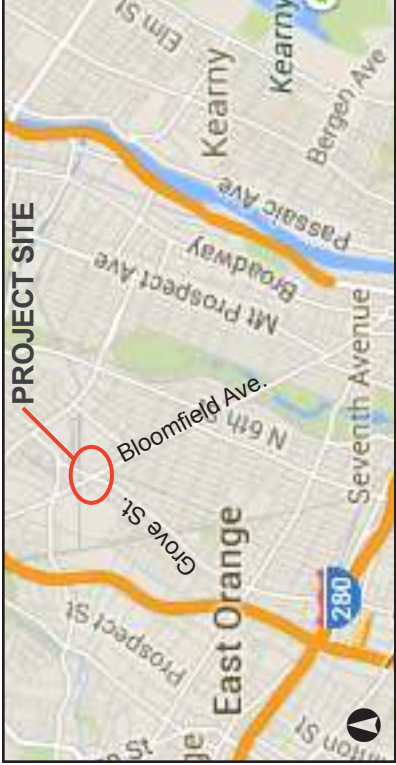


Fig. 2
Pipeline #2: Resurfacing

- 1 – Reconfigure the crosswalks to follow anticipated travel paths (ergonomic layout)
- 2 – Identify bus stop areas and potential curb extension areas with pavement markings to shorten crossing distances
- 3 – Resurface intersection with skid resistant pavement surface treatments (Mill & Overlay)
- 4 – Install bicycle shared lane markings

PURPOSE & NEED

DESCRIPTION: The signalized intersection of Bloomfield Avenue and Grove Street has a high pedestrian crash rate. There is frequent bus transit service and commercial land uses in the immediate area, increasing potential pedestrian demand.

IMPETUS: This intersection is one of the **Top 10** priority locations identified in the Essex County Comprehensive Transportation Plan, in terms of the Plan 4 Safety Crash Data Statistics.

GOALS: Reduce the pedestrian and motor vehicle crash rate through changes in the built environment.

PERFORMANCE MEASURES: County and Municipal Police Reports for crashes involving pedestrians

PROPOSED IMPROVEMENTS



EXISTING CONDITIONS



ESSEX COUNTY
Complete Streets
Implementation
Action Plan

DEMONSTRATION/PILOT PROJECT
*Bloomfield Avenue
&
Grove Street*
BLOOMFIELD, NJ

RBA 04/09/2014

◀ Constructed Curb
Extensions



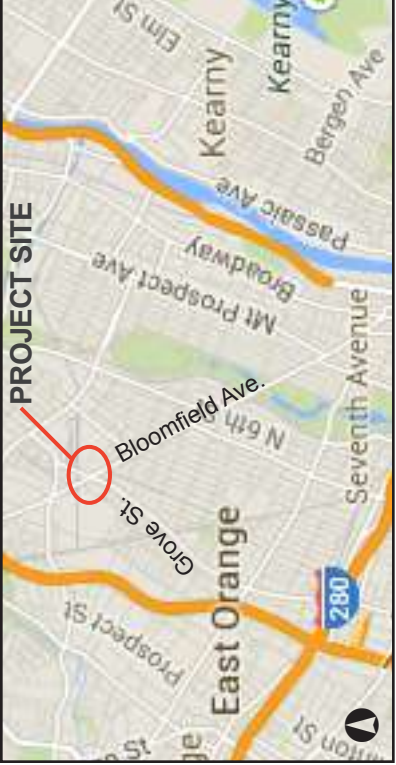
◀ Ergonomic
Crosswalk



◀ Before Road Diet



◀ After Road Diet



PURPOSE & NEED

DESCRIPTION: The signalized intersection of Bloomfield Avenue and Grove Street has a high pedestrian crash rate. There is frequent bus transit service and commercial land uses in the immediate area, increasing potential pedestrian demand.

IMPETUS: This intersection is one of the **Top 10** priority locations identified in the Essex County Comprehensive Transportation Plan, in terms of the Plan 4 Safety Crash Data Statistics.

GOALS: Reduce the pedestrian and motor vehicle crash rate through changes in the built environment.

PERFORMANCE MEASURES: County and Municipal Police Reports for crashes involving pedestrians

Cost Estimates

Order of magnitude cost estimates for the proposed treatments is as follows:

Pipeline 1: Maintenance

1. Restripe Crosswalks with Piano Bar pattern.

$$50' + 60' + 50' + 40' = 200' \times 10' \text{ wide} = 2,000 \text{ SF} \div 2 = 1,000$$

$$\text{\$5/SF} \times 1,000 \text{ SF} = \text{\$5,000}$$

2. Lighting fixture maintenance - \\$ unknown; assumes this is part of ongoing maintenance.
3. Pothole Repair – maintenance budget - \\$ unknown.

Total Cost of Pipeline 1 Maintenance ~\\$5,000

Pipeline 2: Resurfacing

1. Restripe Crosswalks to follow ergonomic layout.

50' x 30' (average) =	1,500 SF
50' x 40' (average) =	2,000 SF
40' x 25' (average) =	1,000 SF
30' x 30' (average) =	<u>900 SF</u>
	7,100 SF ÷ 2 = 3,550 SF x \\$5 SF = \\$17,750

2. Pavement Surface Treatment for Bus Stop and Curb Extension areas.

Bus Stop 10' x 50' =	500 SF
Curb Extensions 8' x 60' =	480 SF
8' x 20' =	<u>160 SF</u>
	1,140 SF x \\$5 SF = \\$5,700

3. Skid Resistant Surface Treatment

$$40' \times 60' = 2,400 \text{ SF} \div 9 = 267 \text{ SY}$$

$$267 \text{ SY} \times 115 \text{ \#/in/SY} \times 2 \text{ in} \times = 61,410 \text{ \#} \div 2,000 \text{ \#/Ton} = 30 \text{ Tons}$$

$$\text{\$150/Ton} \times 30 \text{ Tons} = \$4,500$$

$$\text{Milling} - \$5/\text{SY} \times 267 \text{ SY} = \$1,335 \sim \$1,500$$

Paving Total ~\\$6,000

4. Shared Lane Marking (to be part of a larger network), assume 3 Pavement Legends/ Direction.

$$3 \text{ Legends} \times 4 \text{ leg} = 12 \text{ Legends} \times \$200 \text{ each} = \$2,400$$

Total Cost of Pipeline 2 Resurfacing = \$31,850 ~\$32,000

Pipeline 3: Concept Development / Design

1. Skid Resistant Surface Treatment

$$\begin{aligned} 40' \times 60' &= 2,400 \text{ SF} \div 9 = 267 \text{ SY} \\ 267 \text{ SY} \times 115 \text{ \#/in/SY} \times 2 \text{ in} &= 61,410 \text{ \#} \div 2,000 \text{ \#/Ton} = 30 \text{ Tons} \\ \$150/\text{Ton} \times 30 \text{ Tons} &= \$4,500 \\ \text{Milling} - \$5/\text{SY} \times 267 \text{ SY} &= \$1,335 \sim \$1,500 \end{aligned}$$

Paving Total ~\$6,000

2. Construct Curb Extensions.

$$\begin{aligned} 8' \times 90' &= 480 \text{ SF} = \$10,000 \\ 8' \times 90' &= 480 \text{ SF} = \underline{\$10,000} \\ &\quad \mathbf{\$20,000} \end{aligned}$$

Note: Assumes no drainage impact or reconstruction – to be determined during design phase.

3. Restripe Crosswalks to follow ergonomic layout.

$$\begin{aligned} 50' \times 30' \text{ (average)} &= 1,500 \text{ SF} \\ 50' \times 40' \text{ (average)} &= 2,000 \text{ SF} \\ 40' \times 25' \text{ (average)} &= 1,000 \text{ SF} \\ 30' \times 30' \text{ (average)} &= \underline{900 \text{ SF}} \\ 7,100 \text{ SF} \div 2 &= 3,550 \text{ SF} \times \$5 \text{ SF} = \mathbf{\$17,750} \end{aligned}$$

4. Road Diet – Striping only as part of Resurfacing = **\$0**

5. Landscaping and Street Trees.

$$\begin{aligned} \text{Assume 5 Trees} &\quad \sim \$5,000 \\ \text{Plantings} &\quad \underline{\$2,000} \\ &\quad \mathbf{\$7,000} \end{aligned}$$



6. Pavement Surface Treatment for Bus Stop

$$10' \times 50' = 500 \text{ SF} \times \$5 = \quad \mathbf{\$2,500}$$

7. Shared Lane Marking (to be part of a larger network), assume 3 Pavement Legends/ Direction.

$$3 \text{ Legends} \times 4 \text{ leg} = 12 \text{ Legends} \times \$200 \text{ each} = \$2,400$$

Total Cost of Pipeline 3 Concept Development / Design = \$55,650 ~\$56,000



Potential Funding Sources

The following is a compilation and brief description of sources of funding that have been or could be used to fund pedestrian Complete Streets (including bicycle and pedestrian) improvements in New Jersey. The list is not exhaustive, but identifies funding sources that can be utilized to fund bicycle and pedestrian planning and project development activities, as well as construction.

Federal

- Transportation Alternatives
- Highway Safety Improvement Program (HSIP)
- Congestion Mitigation and Air Quality Program (CMAQ)
- Transportation Alternatives Program (TAP)
- Community Development Block Grants (CDBGs)
- Green Infrastructure and Stormwater Management Sources

State and Local

- NJDOT Bikeway Grant Program
- NJDOT Safe Streets to Transit (SSTT) Program
- NJDOT Centers of Place Grant Program
- NJDOT County Aid
- NJDOT Bicycle and Pedestrian Local Transportation Planning Assistance Program (LTPA)

Private and Non-profit Funding Sources

- Association of New Jersey Environmental Commissions (ANJEC)

Others to Consider

- County Allocations

Federal Funding Opportunities

Transportation Alternatives Program (TAP) is the largest federal source for trail and greenway funding under MAP-21, the most recent federal transportation funding law. The Transportation Alternatives Program is a combination of two core active transportation programs from SAFETEA-LU—Transportation Enhancements and Safe Routes to Schools (SRTS). While Transportation Alternatives projects are federally funded, the funds are administered by the New Jersey Department of Transportation and the state's Metropolitan Planning Organizations (MPOs). Funding categories include:

- Bicycle and pedestrian facilities
- Safe routes for non-drivers
- Abandoned railroad corridors for trails
- Turnouts, overlooks and viewing areas
- Environmental mitigation activity including stormwater mitigation
- Community improvement activities including vegetation management, historic preservation, archeological activities related to transportation projects, and boulevard construction

Project sponsors are generally responsible for 20 percent of the project's cost. In New Jersey, the Local Matching funds have been provided by the state. Under MAP-21, half of the state apportionment, or \$8.1 million, is available to the Transportation Alternatives Program. For New Jersey, of these TAP funds 50% will be proportionately split among the three MPOs. The NJTPA will develop a competitive program for subregions to fund projects based on the above-named categories. For more information on the Transportation Enhancements program in New Jersey, visit www.state.nj.us/transportation/business/localaid/enhancements.shtm. For more on the SRTS program in New Jersey, visit www.state.nj.us/transportation/business/localaid/srts.shtm

The **Highway Safety Improvement Program (HSIP)** is administered by FHWA to fund any project with a history of crash rates on a public road, trail or path that addresses an emphasis area in NJ's *Strategic Highway Safety Plan* and corrects a safety problem, such as an unsafe roadway element, or fixes a hazardous location. Eligible projects include, but are not limited to the following: intersection improvements, construction of shoulders, traffic calming, data collection, and improvements for bicyclists, pedestrians, and individuals with disabilities. For more information, visit [http:// safety.fhwa.dot.gov/hsip/](http://safety.fhwa.dot.gov/hsip/)

Congestion Mitigation and Air Quality Program (CMAQ) is jointly administered by FHWA and the Federal Transit Administration (FTA). The NJTPA has established the CMAQ Local Mobility Initiatives Program to promote a variety of initiatives to lessen the level of pollutants and greenhouse gases generated through the use of fossil fuels including ridesharing, transit usage, travel demand management and traffic mitigation projects. Proposals must implement strategies and policies in the Regional Transportation Plan, *Plan 2035*. Starting in FY 2013 all CMAQ projects will require a 20% local match, with the exception of carpool & vanpool projects, which will remain 100% Federal. Projects must be included in *Plan 2035: The Regional Transportation Plan for Northern New Jersey* and the transportation improvement program (TIP). In FY2013, NJTPA received \$2,000,000 in funding for the

CMAQ Local Mobility Initiatives Program. For more information visit, <http://www.njtpa.org/Project/Mobility/CMAQ/CMAQMobility.aspx>

Transit Alternatives Program, formerly known as **Transit Enhancements**, is a program that requires that at least one percent of transit expenditures for urbanized areas of more than 200,000 people (known as 5307 formula funds) go to projects that improve access to transit service. Many of these projects focus on cycling and walking. The Draft FY 2014 State Transportation Improvement Program (STIP) includes \$490,000 of Section 5307-TAP funding for the Transit Enhancement Program for eligible projects in the NJTPA region.

Community Development Block Grants (CDBGs) are provided by the U.S. Housing and Urban Development (HUD) to communities for a wide range of community planning initiatives including neighborhood revitalization, economic development and improvement of community facilities and services, especially in low- and moderate-income areas. These grants require no match of funds or services from the community. In New Jersey, HUD distributes the funds in two distinct ways: directly to the more populous municipalities and counties, and to the New Jersey Department of Community Affairs (NJDCA) for distribution to projects in the less populous locales (towns with less than 50,000 people).

Green Infrastructure and Stormwater Management Sources. Fund greenway trail corridors that create the opportunity to address stormwater management and pollution by incorporating green infrastructure. As a strategy for compliance with the Federal Clean Water Act, green infrastructure, including such strategies as bioretention, vegetated buffers, and infiltration swales, and urban forestry can serve the environmental, social, and economic missions of the city with low lifecycle costs. By incorporating Stormwater Best Management Practices (BMP's) along the length of a greenway trail corridor, a city can create an engaging environment that provides measurable benefits in stormwater management and pollution reduction. To view the application of green infrastructure to stormwater management practices, visit the Philadelphia Water Department website or the green infrastructure page of the New Jersey Department of Environmental Protection website.

Funding for the improvement of water quality through the use of green infrastructure is available from several sources. The federal Environmental Protection Agency awards funding for green infrastructure through a number of programs, including Urban Waters, the EPA Clean Water Act Nonpoint Source Grant, the EPA Clean Water State Revolving Fund, and the EPA Community Action for a Renewed Environment Grant. Additionally, because green infrastructure serves environmental purposes beyond stormwater management and may include the planting of trees as a management strategy, sources such as the U.S. Forest Service's Urban and Community Forestry Challenge Cost Share grant program and the New Jersey Department of Environmental Protection's Green Communities Grant may also be pursued as viable funding opportunities.

State and Local Funding Opportunities

The **NJDOT Bikeway Grant Program** provides funds to counties and municipalities to promote bicycling as an alternate mode of transportation in New Jersey. A primary objective of the Bikeway Grant Program is to support the State's goal of constructing 1,000 new miles of dedicated bike paths

(facilities that are physically separated from motorized vehicular traffic by an open space or barrier either within the highway right of way or within an independent right of way). In an effort to establish regionally connected bicycle networks, this program is available to every municipality and county throughout New Jersey. Although priority will be given to construction of new bike paths, the proposed construction or delineation of any new bicycle facility will be considered. Ineligible projects/activities include right-of-way purchases associated with any project, operating costs associated with any project, and planning activity costs. In order to be eligible, a project must place no restrictions upon hours of use by bicyclists (with the exception of dusk-to-dawn closings, as of some parks). Applicants must use the *AASHTO 2012 Guide for the Development of Bicycle Facilities*. In the 2013 program, three projects in New Jersey were awarded a total of \$1,000,000. For more information, visit www.state.nj.us/transportation/business/localaid/bikewaysf.shtm

NJDOT Safe Streets to Transit (SSTT) program provides funding to counties and municipalities in improving access to transit facilities and all nodes of public transportation. The objectives of the SSTT program are:

- To improve the overall safety and accessibility for mass transit riders walking to transit facilities.
- To encourage mass transit users to walk to transit stations.
- To facilitate the implementation of projects and activities that will improve safety in the vicinity of transit facilities (approximately one-half mile for pedestrian improvements).

In 2013, the SSTT Program awarded \$1,000,000 to six projects. Projects include installation of a HAWK signal, pedestrian safety improvements, sidewalk improvements, and intersection improvements. For more information, visit www.state.nj.us/transportation/business/localaid/safe.shtm

NJDOT Centers of Place Grant Program. The funding from the Center of Place Grant program is meant to help communities in New Jersey make non-traditional transportation improvements that are meant to aid in managing growth. If a project is selected for funding, it must follow certain standards, including the *NJDOT Bicycle Compatible Roadways Planning and Design Guidelines* and the *AASHTO Guide for the Development of New Bicycle Facilities*. Many different kinds of projects that can be funded with Local Aid for Centers of Place would benefit pedestrians and bicyclists. These include traffic calming improvements, bicycle lanes or modifications to existing roadways to accommodate bicycles, bicycle lockers at transportation facilities, retail complexes and public buildings, mid-block connections/paths to ease bicycle and pedestrian circulation, and strategies which enable mixed use of a "Main Street" as both public space and a transportation link. Additionally, bicycle trails and pedestrian trails in abandoned railway corridors can also be funded through Local Aid for Centers of Place. Other possible projects that could benefit pedestrians or bicyclists and that can be funded through this program include signage for downtown circulation and street side landscaping.

The grants can be used for project-related activities including preliminary or final design and/or construction, including construction inspection and material testing according to the Transportation Trust Fund Authority Act. Several New Jersey communities have received funding

from NJDOT through this program for local pedestrian- and bicycle-oriented projects. In 2011, Jersey City received \$300,000 for their Newark Avenue Streetscape project. For more on the program, visit www.state.nj.us/transportation/business/localaid/centerplace.shtm

County Aid funds are appropriated by the Legislature annually for the improvement of public roads and bridges under county jurisdiction. Public transportation and other transportation projects are also included. Counties are allotted funds not less than their combined total of 1984 apportioned Federal Aid Urban System funds and State match including their portion of any non-attributable funds made available to Small Urban Areas. The minimum allotment is \$300,000.

Each county must develop an Annual Transportation Program (ATP). In accordance with the adoption of revisions to the County Aid regulations N.J.A.C. 16:20A, the ATP shall list a pool of eligible projects by name and location with a brief description of each project and an estimate of the construction cost. The total cost of the pool of projects may exceed the amount of county local aid funds available. The ATP shall be approved by the Board of Chosen Freeholders and submitted to the [Local Aid District Office](#) for approval.

NJDOT Bicycle and Pedestrian Local Transportation Planning Assistance Program (LTPA)

Provides professional transportation and land use planning consulting services to municipalities desiring to promote the Department's Smart Growth policy and NJ's *State Development and Redevelopment Plan*. Municipalities are able to develop or update local circulation elements, conduct downtown traffic calming and parking management studies, develop access management plans, and plan for improved bicycle, pedestrian and local transit services.

Private and Non-profit Funding Sources

The **Association of New Jersey Environmental Commissions** (ANJEC) provides matching grants to New Jersey municipalities through its Sustainable Land Use Planning Grants Program. The program provides funding to help towns develop capacity-based, sustainable land use plans and ordinances. It also strengthens municipal environmental commissions by providing opportunities for them to participate in the local land use planning process. Over the past nine years, ANJEC has awarded \$1.47 million in grants for 205 local planning projects involving 186 municipalities and counties. <http://anjec.org/SmartGrowthGrants.htm>

Other Potential Funding Sources

Municipal and County Allocations. The most common sources of funding at the municipal and county level include allocations from a specific department, such as the Department of Public Works, or a line item in a consolidated capital improvement program (CIP) budget.