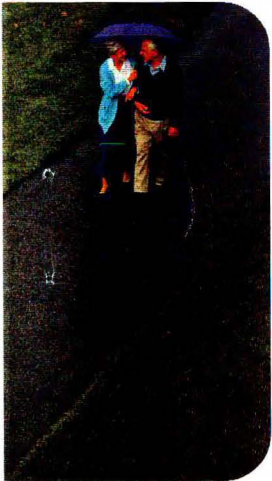




**DELAWARE VALLEY REGIONAL
PLANNING COMMISSION**

Making Secane a Walkable Community



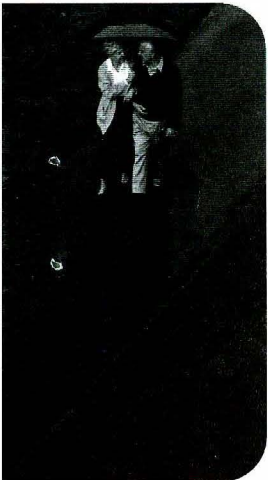
December 2001



DELAWARE VALLEY REGIONAL PLANNING COMMISSION

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Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency that provides continuing, comprehensive and coordinated planning to shape a vision for the future growth of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties, as well as the City of Philadelphia, in Pennsylvania; and Burlington, Camden Gloucester and Mercer counties in New Jersey. DVRPC provides technical assistance and services; conducts high priority studies that respond to the requests and demands of member state and local governments; fosters cooperation among various constituents to forge a consensus on diverse regional issues; determines and meets the needs of the private sector; and practices public outreach efforts to promote two-way communication and public awareness of regional issues and the Commission.



Our logo is adapted from the official DVRPC seal, and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole, while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

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PUBLICATION ABSTRACT

- Title:** Making Secane a Walkable Community
- Publication No.:** 01005
- Date Published:** February 2001
- Geographic Area Covered:** Secane (neighborhood), in parts of Springfield, Upper Darby and Ridley townships, Delaware County
- Key Words:** Pedestrian, safety, operations, facilities, commuter rail, access, station, improvements, SEPTA, R3, urban design, Secane, Delaware County, improvements
- Abstract:** In response to a recommendation by the Federal Highway Administration, DVRPC initiated a study of pedestrian safety and accessibility in suburban locations. Secane, the neighborhood immediately surrounding the SEPTA R3 commuter rail station of the same name, was recommended by Delaware County planners for study. Making Secane a Walkable Community presents the findings of the study, making extensive use of photographs to illustrate dangerous and unpleasant conditions for pedestrians in the area. The report proposes a program of capital improvements designed to make pedestrian travel in the area more safe and appealing. Included is a suggested redesign of the commercial area, presented graphically, which includes landscaping and amenities, consolidation of driveways, alteration of parking, bulb-outs and a raised crosswalk.



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Introduction and Background

Over the last half of the twentieth century, the automobile has taken a predominant role in the life of most Americans, and in the design of our communities. The automobile has been a liberating force in society. Its influence on urban form and design, however, has not been without cost. The costs include degraded air quality, over-reliance on imported oil, the negative health consequences of a sedentary lifestyle, traffic congestion and noise, and declining neighborhood commercial areas. Recognizing these indirect costs, the U.S. Congress set about changing policy to encourage a more balanced transportation system – one that promotes mass transit, bicycling and walking. The two most recent federal transportation bills embody this new thinking. The Commonwealth of Pennsylvania has also embraced this new direction. In response to state and federal policy, the Delaware Valley Regional Planning Commission (DVRPC) has begun an effort to help improve the pedestrian environment in suburban areas. County planners were asked to nominate locations where residential densities and mixed land uses are

Why improve the area for pedestrians?

- ✓ Walking is a healthy, non-polluting form of personal transportation which does not consume limited natural resources, nor requires a costly support infrastructure.
- ✓ An improved walking environment will increase mass transit use, reduce the demand for parking, and help alleviate traffic congestion.
- ✓ It will improve the appearance of the neighborhood, increase retail trade, and boost property values.
- ✓ It will give all area residents — regardless of age, income, or the ability to drive — safe, healthy and appealing mobility options.
- ✓ And finally, it will reduce the incidence of injuries to pedestrians.

conducive to high walking rates, but where the walking environment could stand improvement. In response to a recommendation by the Delaware County Planning Department, DVRPC staff studied the Secane area to determine ways in which the walking environment may be improved. The results of that study are presented in this technical memorandum, intended to initiate discussion among Springfield, Upper Darby and Ridley townships, PennDOT, SEPTA, the county, and area property and

business owners leading to a plan of action, identification and securing of funding, and ultimately the implementation of real improvements. The suggestions and possibilities presented in this report are about making Secane more livable. More specifically, they are about making the area safer and more appealing for travel by foot.



A Description of Secane



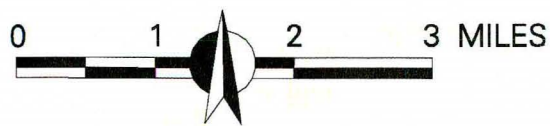
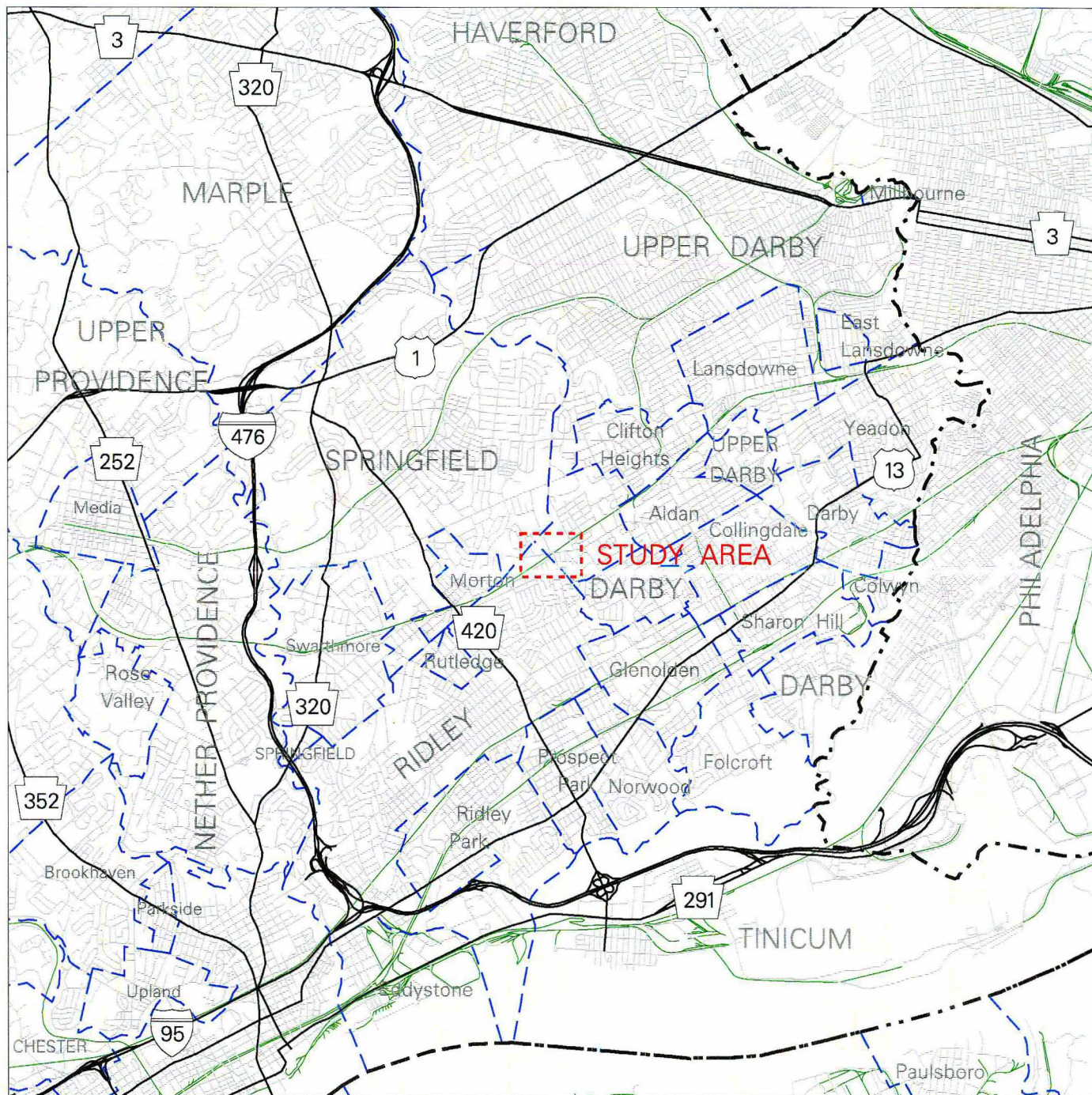
Secane is a suburban neighborhood located in eastern Delaware County, encompassing parts of Upper Darby, Ridley and Springfield townships. At its center is a neighborhood retail node and commuter rail station (the area is additionally served by bus). Immediately surrounding the core area are four large garden apartment complexes, and single family

homes. The neighborhood has a curvilinear/cul de sac street pattern typical of post World War II residential development, served by four minor arterial roadways, three of which converge at the node along with the R3 commuter rail line. In urban form and land use, the area has, with the exception of the street pattern, all the elements of

transit supportive development: high density housing, neighborhood retail, and bus, all within an easy walk (1/4 mile) of commuter rail. These elements contribute to a high rate of access to the train by foot (55 percent of passengers boarding during the peak hours between 6 and 9 a.m.).¹

¹SEPTA R3 Media/Elwyn Rail Line Parking Demand Study. Technical Memorandum. Passenger Survey: Secane Station and Primos Station. Delaware Valley Regional Planning Commission, March 10, 1998.

Delaware County Location Map





Aerial view of study area

Despite the high rate of walking to access the train, a shortage of parking persists at the small, 40 space station lot. The lot is filled to capacity every workday. The shortage of parking spaces at Secane and other stations along SEPTA's R3 Regional Rail Line suppresses ridership on the line, a problem recognized by SEPTA as it currently undertakes a program to expand parking capacity. There is evidence that an improved walking

environment including such basic amenities as sidewalks can help alleviate the parking shortage. In a 1998 ridership survey, 12 percent of survey respondents who currently drove to the station or are were dropped off indicated that they would walk to the station if sidewalks and other pedestrian facilities were provided between their homes and the station.² Most of these respondents live along Providence Road between South Avenue and Oak Lane, where sidewalks

are currently lacking. In urban design the area serves pedestrians poorly.

Issues affecting pedestrian movement in Secane include

- ✓ a history of car-pedestrian crashes at one location;
- ✓ a lack of sidewalks;
- ✓ an unappealing, inhospitable pedestrian environment;
- ✓ a lack of crosswalks at intersections; and
- ✓ a lack of bus stops and amenities.

²Ibid.

Identified Problems

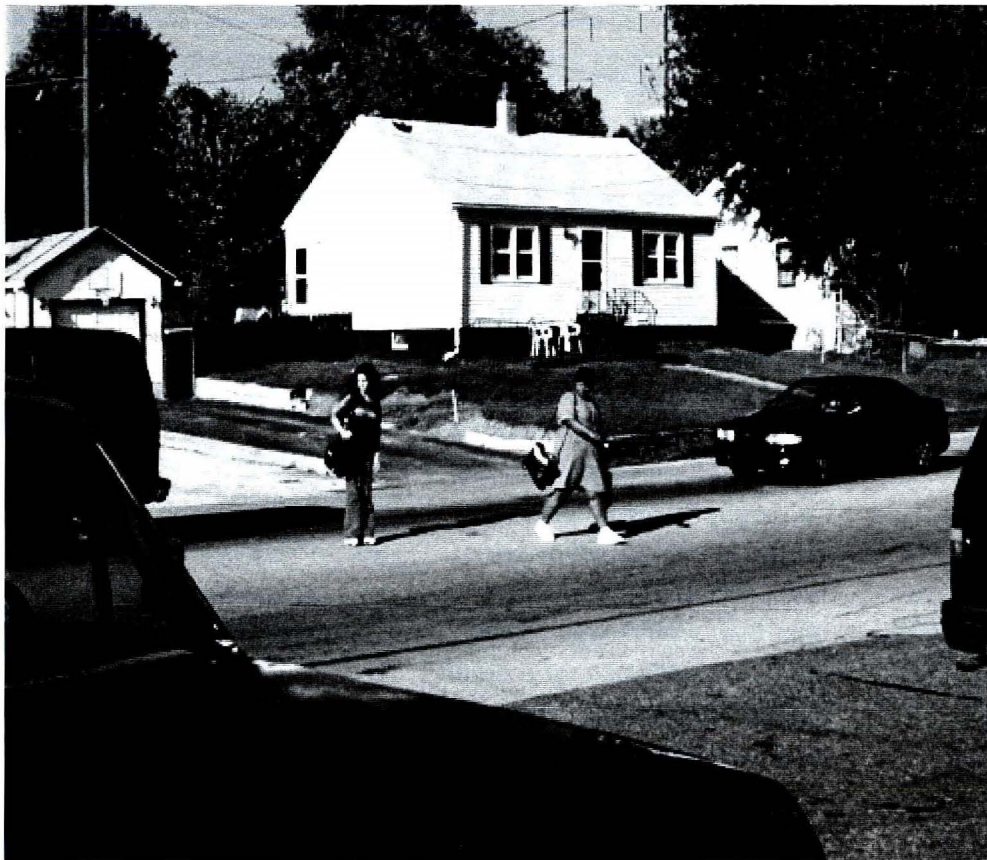
A history of car-pedestrian crashes at one location.

The R3 commuter rail station is by far the most significant generator of pedestrian traffic in the area. During the period 1993-1997, five pedestrians were struck by automobiles while crossing Providence Road in front of the Secane station. Each of these crashes may be classified as "multiple threat³," wherein the pedestrian entered the traffic lane in

front of a standing or stopped vehicle and was struck by another vehicle moving in the same direction as the stopped traffic. In each of the five, the pedestrian was crossing Providence Road just east of South Avenue, either going to, or coming from, the rail station. The pedestrian crossed through, or in front of, a westbound queue, and was then struck by a vehicle traveling in the adjacent lane. In several

instances, a driver in the queue waved the pedestrian through. Three of the pedestrians were adults, and two were teenagers. A sixth crash involved a jogger on Providence Road just east of the station, who was brushed by the protruding mirror of a passing vehicle. Collectively these crashes have qualified the site for designation by PennDOT as a "pedestrian accident cluster."

Three design issues may

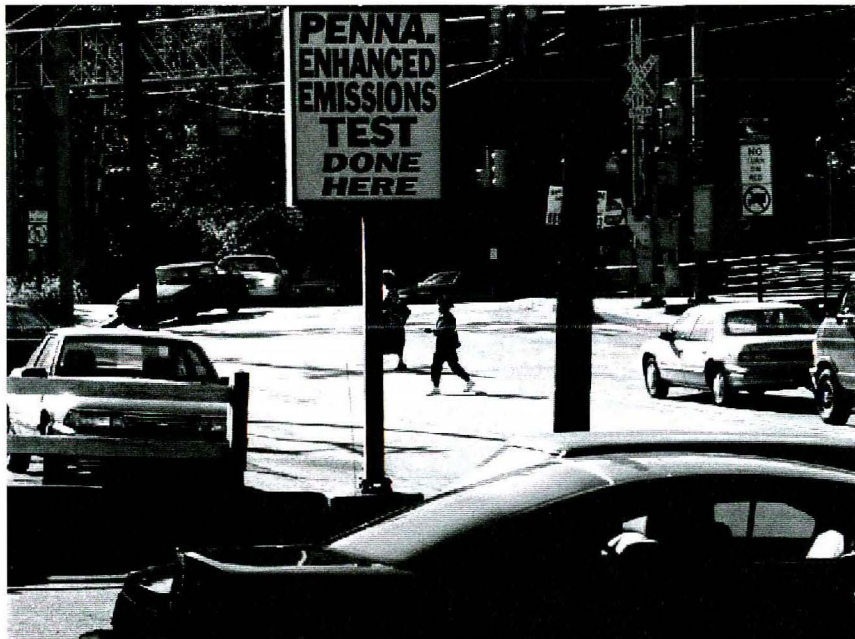


Pedestrians crossing Providence Road midblock at entrance to Secane Station parking lot

³See Pedestrian Crash Types: A 1990s Informational Guide. Hunter, William W., Jane C. Stutts and Wayne E. Pein, Highway Safety Research Center, University of North Carolina: Chapel Hill, April 1997.

have contributed to these crashes:

- ✓ The lack of a nearby crosswalk.
- ✓ Two lanes of westbound traffic on Providence Road in front of the rail station, the primary purpose of which seems to be storage of vehicles queuing at the Providence Road/South Avenue light.
- ✓ A generous turning radius from northbound South Avenue to eastbound Providence Road, which encourages high speeds coming out of the turning movement.



Pedestrians crossing Providence Road illegally at South Avenue intersection in front of rail station



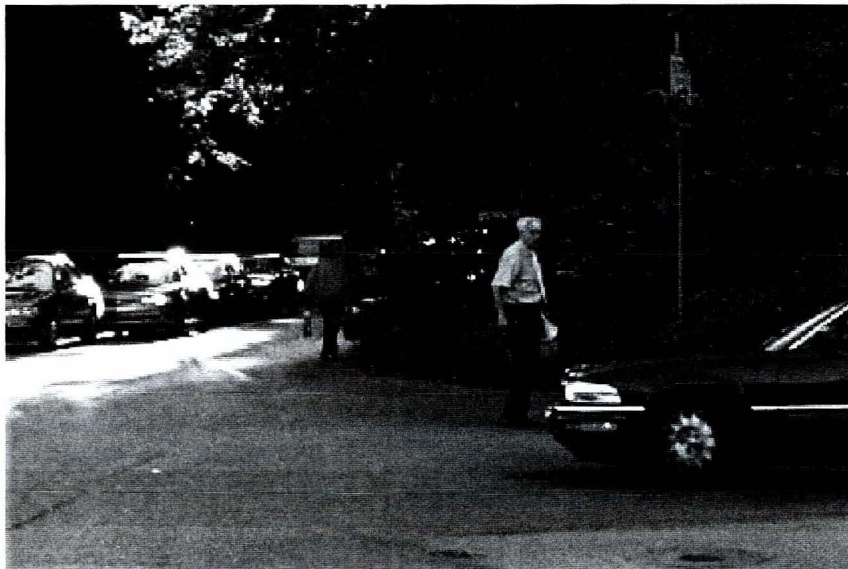
Pedestrians in multiple threat situation, Providence Road at rail station

Lack of sidewalks.

Sidewalks are absent on Providence Road on both sides west of the rail station, and on the north side, east of the station. There is a shoulder on the north side of Providence Road east of the station. During peak hours, pedestrians may be seen competing with cars using the

shoulder as a travel lane when traffic backs up from the Providence Road/South Avenue intersection. An even greater number of pedestrians compete with vehicles for use of the live travel lanes on Providence Road west of the station, where a 24 foot cartway with no shoulders is flanked by

dense vegetation. Additionally, some station-bound pedestrians originating from Bishop Avenue and adjoining streets approach the station by walking along the tracks, for lack of a direct street connection, as well as a lack of sidewalks on both Bishop and Providence. ut of the turning movement.



Pedestrians in live lane on Providence Rd.



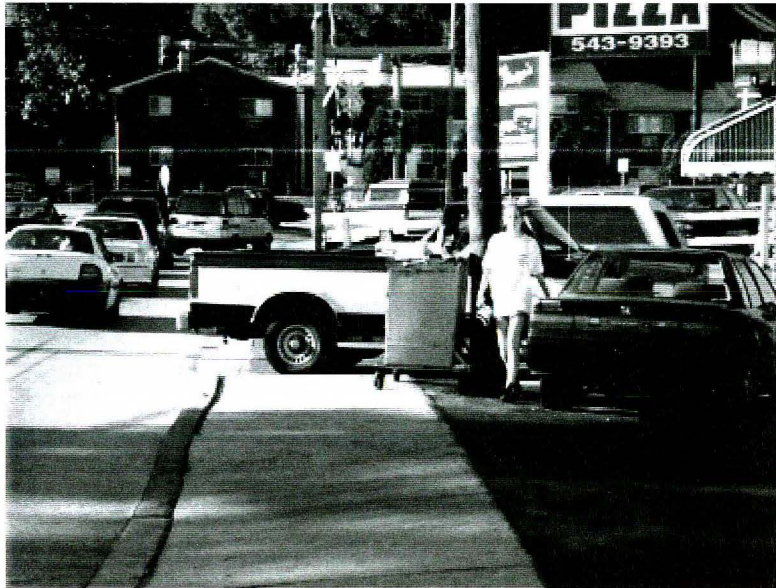
Walkway steps lead directly into live lane

Unappealing, inhospitable pedestrian environment.

The commercial area to the south of the station is inhospitable and unappealing to pedestrians. Head-in parking in front of some businesses, along with numerous driveways, have created an environment in which the pedestrian is made to feel as a guest in the realm

of the automobile, where buildings seem to float in a lake of asphalt. On the west side of South Avenue, a four-foot wide crumbling sidewalk cluttered with utility poles, unseparated from adjacent parking, and broken by driveways, is called to accommodate platoons of twenty or more pedestrians who have just come off the

train. Rather than use this inadequate facility, these platoons walk through the rail ballast adjoining the tracks (sometimes in heels), through the smooth-surfaced parking lots of convenience stores, and between the pumps at a filling station as they make their way southbound on the west side of South Avenue.



Inadequate and unattractive pedestrian environment

Lack of crosswalks at intersections. The "T" intersection of Providence Road and South Avenue is the principal node of the neighborhood: it serves as the connection between the train station and the commercial area to the south. Yet only one of the intersection's three legs has a crosswalk. Signs prohibit pedestrians from crossing on the other two links. A parallel crosswalk to the north of the rail tracks terminates on the south side of Providence Road at a curb with no sidewalk. Similarly, the only crosswalk at the Providence Road/Bishop Road "T" intersection, crossing Providence Road on the western leg, has no ADA accessible ramp, and terminates on the north side at a curb and dense landscape vegetation.



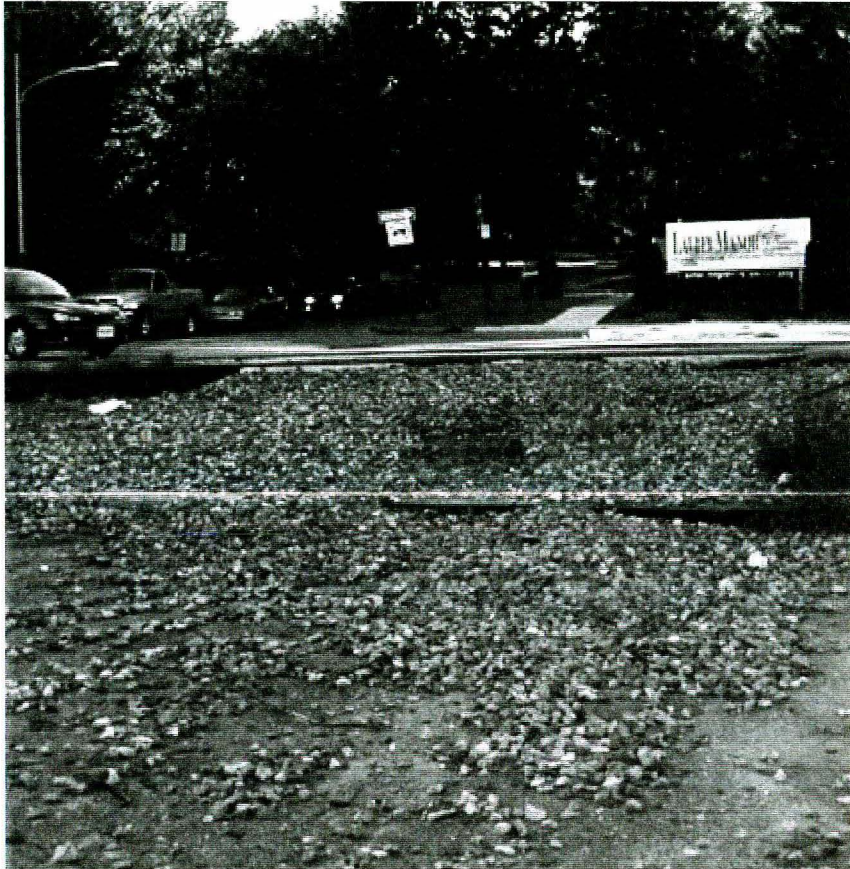
Rail station: pedestrians prohibited



Crosswalk to nowhere, Providence Rd. at Bishop Rd.



Lack of bus stops and amenities. The SEPTA Route 111 bus travels along Franklin Avenue and South Avenue south of Franklin. The stops on South Avenue south of Franklin Avenue have no benches or shelters.



Rail ballast spilling into adjacent parking area: a mess trodden by scores of rail passengers daily (try walking across this in heels!)



Solutions



Below is a prioritized summary of measures which, if taken, would improve pedestrian access, safety and comfort in Secane. The table on page 19 presents these recommendations in further detail, showing the estimated costs and relative locations of each element, and is keyed to an area map on page 18, facing the table.

Create a mid-block raised crosswalk with refuge island and bulbouts across Providence Road just west of the Secane Station parking lot entrance. In order to eliminate the pedestrian crash problem in front of Secane station, a crosswalk is needed that is (1) highly visible, (2) requires pedestrians to cross only one lane of traffic per direction, and (3) provides a refuge island so that the pedestrian need only cross one lane of traffic at a time. To make this action feasible, the head-in parking on the south side of Providence Road must be eliminated, and the area

converted to pedestrian space. This action would effectively eliminate use of the shoulder on Providence east of the parking lot entrance as a queuing lane, and would shorten the two-lane westbound approach to the Providence Road-South Avenue intersection. A conceptual illustration of the crosswalk and commercial area street-scaping is presented on the facing page.

Construct sidewalks.

Sidewalks should be constructed where there are none currently on Providence Road and Bishop Road.

Create an attractive pedestrian environment in the commercial area.

The space in front of businesses should, wherever possible, be turned over to pedestrians. Pedestrian spaces should be curbed, surfaced with decorative paving elements, and contain pedestrian scale lighting, shade trees, benches, bicycle parking and trash receptacles. Head-in parking should be eliminated, and commercial driveways should be consolidated. Striping should be used to delineate driveway crosswalks. The space allocated to pedestrians on the west side

of South Avenue should be widened, and landscape buffers should be placed between the sidewalk and adjacent parking areas, and along the edge of the parking adjoining the railroad. Bus stops with shelters should be incorporated where feasible within the commercial area. Maps of the commercial district illustrating existing conditions and the suggested improvement concept are presented on the following two pages.

Construct a walkway along the southern edge of the rail right of way,

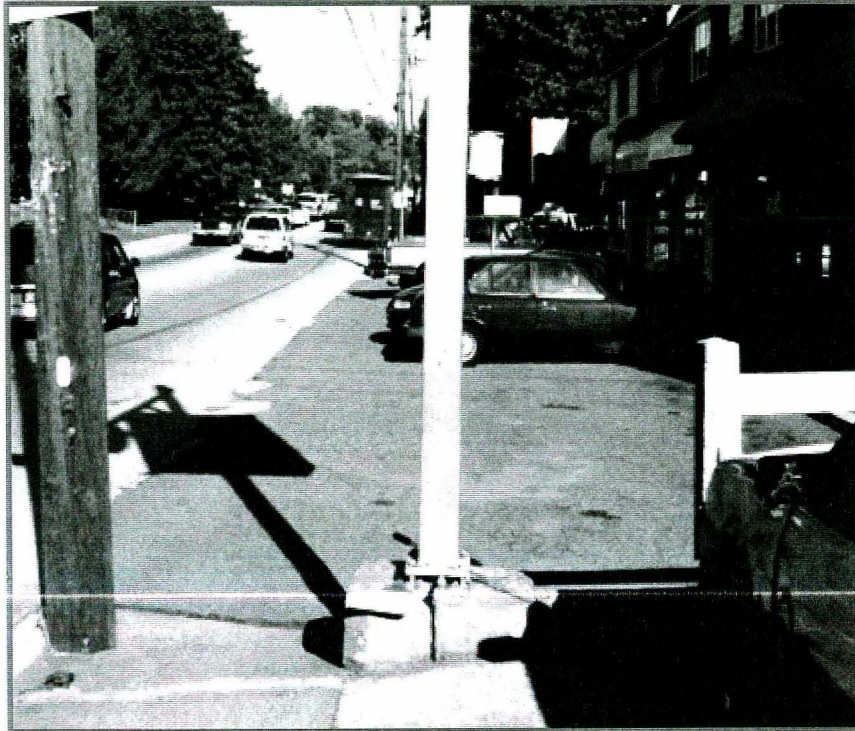
linking the station with Bishop Avenue. There appears to be sufficient right of way to construct a 6' wide walkway with appropriate lighting and fencing, assuming a 10' clear zone between the track center line and the fence.

Eliminate all pedestrian crossing prohibitions at all signalized intersections

(Providence and South, Providence and Bishop, South and Franklin), **and install crosswalks.** These crosswalks should incorporate pedestrian-actuated signal heads, and curb ramps.



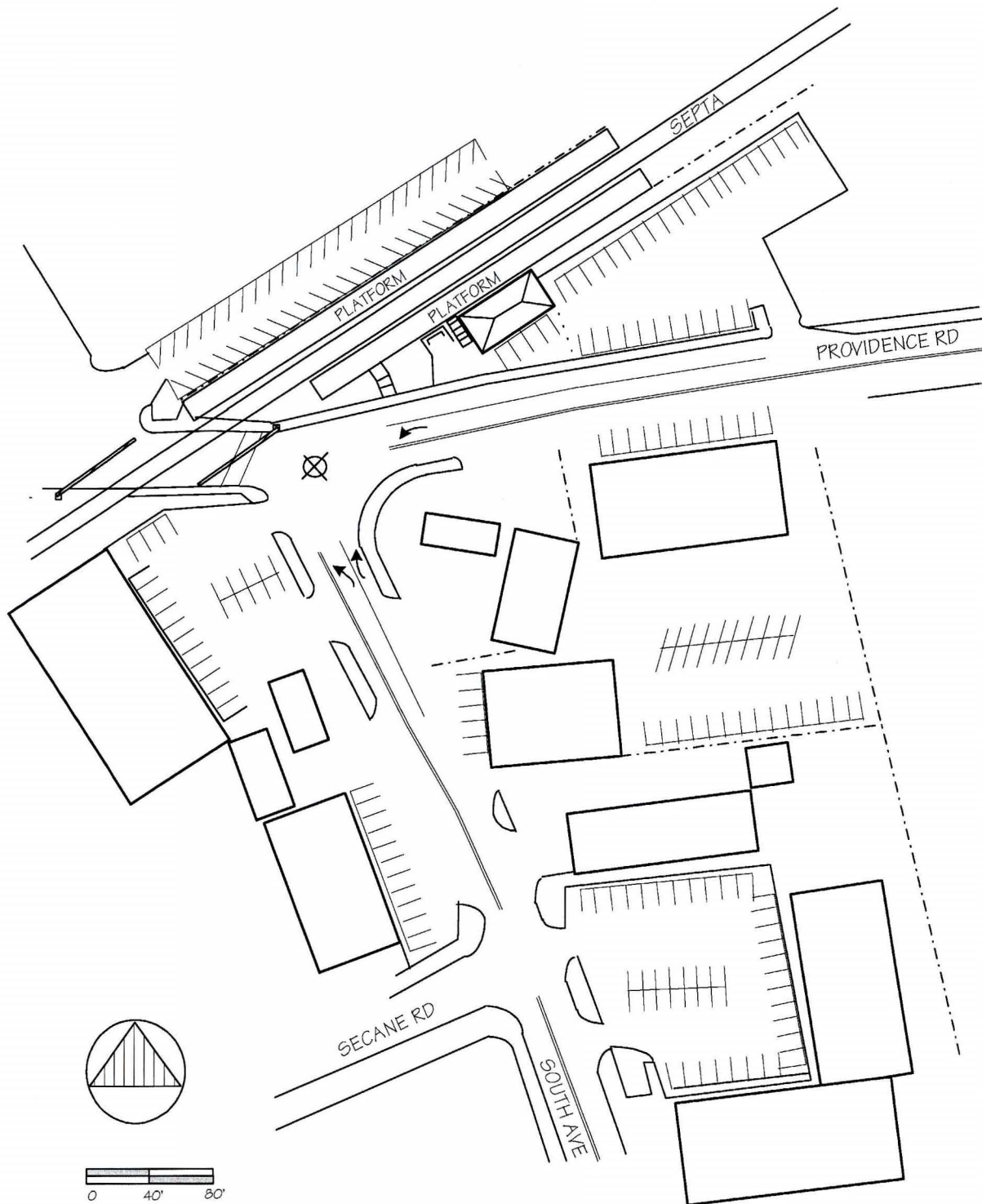
Conceptual illustration, mid-block crosswalk and commercial area street-scaping



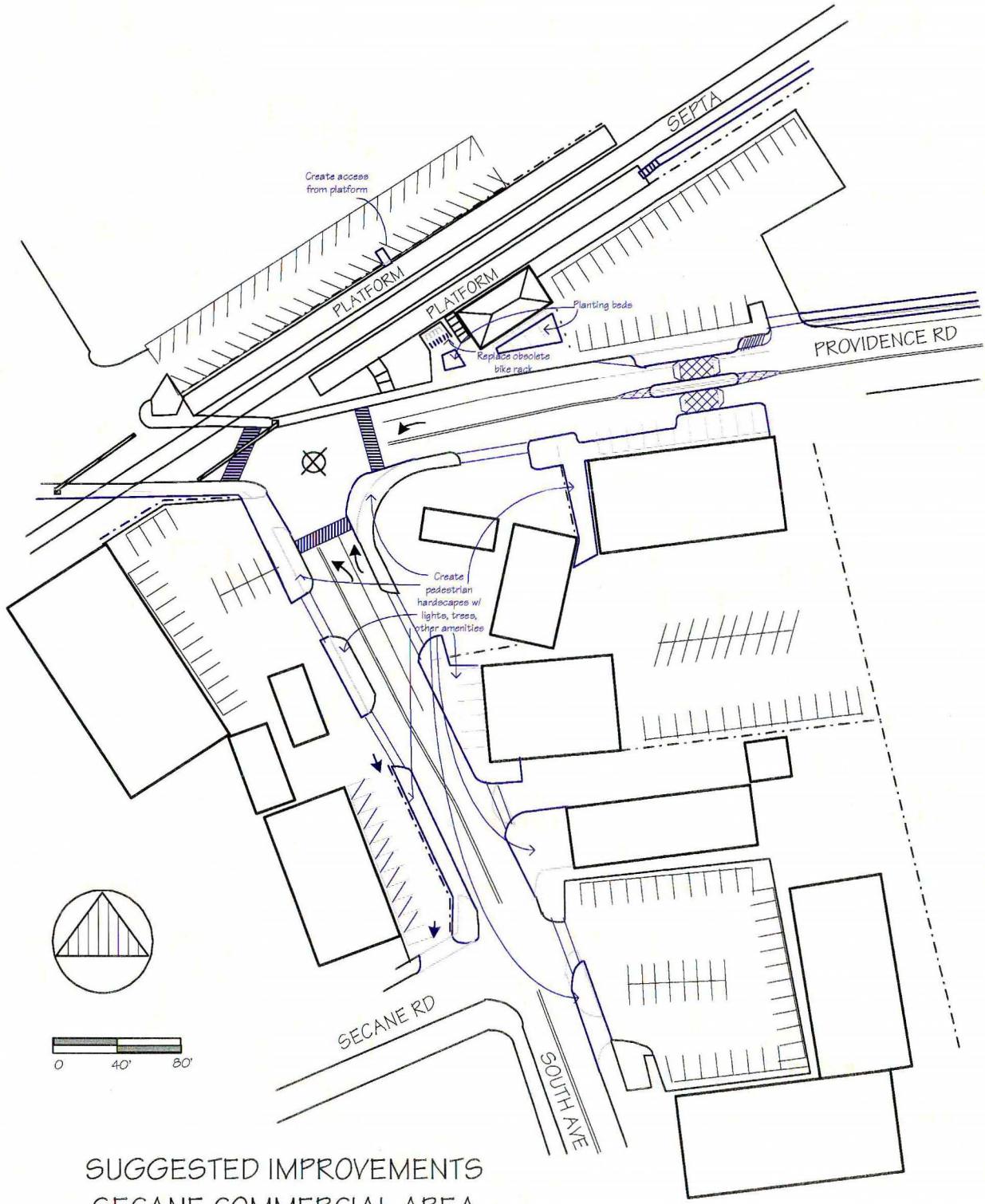
Existing



Proposed



EXISTING CONDITIONS
SECANE COMMERCIAL AREA

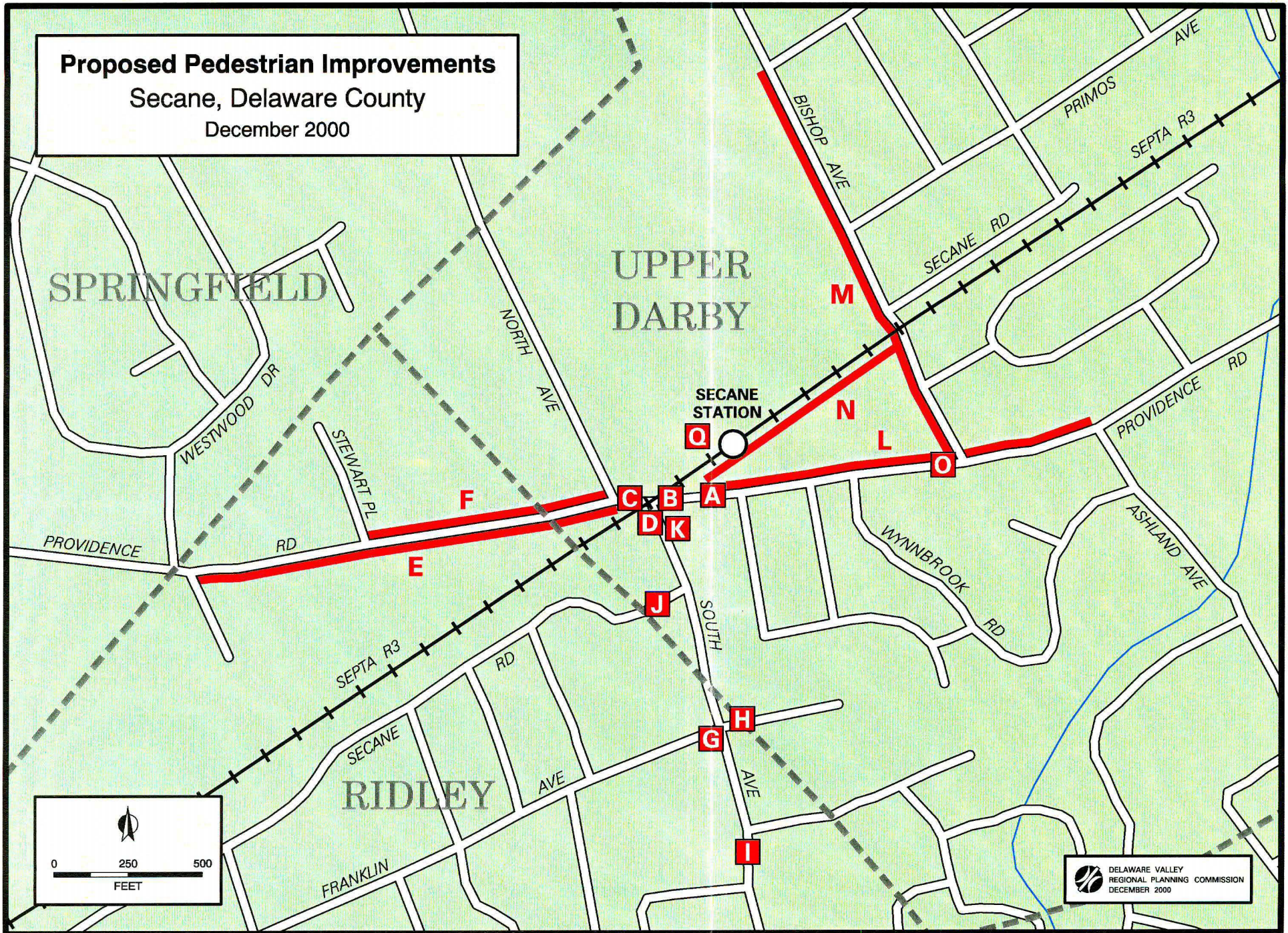


SUGGESTED IMPROVEMENTS
SECANE COMMERCIAL AREA

Recommended Pedestrian Improvement Program for Secane

Map ref.	Location	at	Description	Constr. cost	Design cost	TOTAL
A	Providence Rd.	Midblock, between South Ave. & Howard Dr.	Install raised crosswalk, refuge island, bulb outs; create bus stops with shelters	\$9,000	\$1,800	\$10,800
B	Providence Rd.	South Ave.	Restripe existing crosswalk on western leg, and create new crosswalks on the remaining legs; install pedestrian-actuated crossing signals; reduce turning radius on SE corner.	\$250,000	\$50,000	\$300,000
C	Providence Rd.	W side of SEPTA line	Restripe crosswalk; retime pedestrian signal phase; replace pedestrian signal heads.	\$6,400	\$1,280	\$7,680
D	SEPTA Rail Line	Providence Road crossing	Extend high-type crossing on both sides of track; widen sidewalk; install landscape barrier between shopping strip parking lot and rail ROW.	\$7,000	\$1,400	\$8,400
E	Providence Rd.	W of South Ave., S side, to Edwards La.	Install sidewalks.	\$26,600	\$5,320	\$31,920
F	Providence Rd.	W of South Ave., N side, to Stewarts Pl.	Install sidewalks.	\$15,200	\$3,040	\$18,240
G	South Ave.	Franklin Ave.	Restripe crosswalks; install pedestrian signal heads	\$11,600	\$2,320	\$13,920
H	Franklin Way	South Ave.	Install crosswalk, pedestrian signal heads	\$11,600	\$2,320	\$13,920
I	South Ave.	S. of Franklin Ave.	Install shelters at bus stops.	\$6,000	\$1,200	\$7,200
J	Secane Ave.	W. of South Ave.	Repair buckled sidewalk.	\$1,000	\$200	\$1,200
K	South Ave., Providence Rd.	Commercial properties	Consolidate commercial driveways, eliminate some head-in parking to create attractive pedestrian spaces with shade trees, benches, decorative pavement and pedestrian-scale lighting.	\$78,000	\$15,600	\$93,600
L	Providence Rd.	N. side, between rail station and Ashland Ave.	Install sidewalks.	\$21,900	\$4,380	\$26,280
M	Bishop Ave.	W. side, between Providence Rd. and Belmont Ave.	Install sidewalks.	\$25,700	\$5,140	\$30,840
N	SEPTA Rail Line	S. side, between Bishop Ave. & Secane Sta.	Install walkway, pedestrian scale lighting	\$51,200	\$10,240	\$61,440
O	Providence Rd.	Bishop Ave.	Install wheelchair ramps; replace existing pedestrian signal heads; restripe existing crosswalks; install new crosswalks on remaining two legs.	\$20,200	\$4,040	\$24,240
Q	Rail Station	Westbound platform	Create additional access to adjacent apartment complex at mid-platform and eastern end	\$3,000	\$600	\$3,600
TOTAL				\$544,400	\$108,880	\$653,280

Proposed Pedestrian Improvements
Secane, Delaware County
December 2000



SECANE
STATION

F
E

UPPER
DARBY

M

N

L

RIDLEY

J

C

D

K

B

A

O

G

H

I

DELAWARE VALLEY
REGIONAL PLANNING COMMISSION
DECEMBER 2000



Implementation



These recommendations are for programming purposes only, and, as such, constitute a suggested project scope. As a package, implementation of these recommendations are eligible for both Congestion

Management/Air Quality Improvement Program (CMAQ) and Transportation Enhancements (TE) funding. Applications for the next round of funding for both these programs are due in the Fall of 2001. Much work remains to be done, however, to ready this program for submission. First and foremost, the public and business community must be sold on the need for improvements, and must be involved in defining the scope and detail of those improvements. A design

"charette" should involve the public, business owners, landscape architects and traffic engineers in the crafting of detailed designs. TE applications stand a better chance of funding if the request is for construction dollars only. If TE funding is to be sought for construction only, the necessary design work should be underway, or nearly so, by the time an application for funding is submitted.

Pennsylvania is a place where residents and visitors of all ages can choose to bicycle and walk. People are able to bicycle and walk with confidence, safety and security in every community, both for everyday transportation and to experience and enjoy the remarkable natural resources of the state.

— Vision Statement, PennDOT Statewide Bicycle and Pedestrian Master Plan



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