



Illinois Department of Transportation

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Illinois Department of Transportation

Division of Highways/Region One / District One
201 West Center Court/Schaumburg, Illinois 60196-1096

David Lothspeich

RECEIVED

APR 17 2012

VILLAGE OF LONG GROVE

April 12, 2012

Ms. Maria Rodriguez
Village President
Village of Long Grove
3110 RFD
Long Grove, IL 60047-9635

Dear Ms. Rodriguez:

We are writing to inform you that the Illinois Department of Transportation (Department) has recently initiated preliminary engineering and environmental studies (Phase I) for the improvement of Illinois Route 53 at Old Hicks Road in the Village of Long Grove in Lake County. A location map is enclosed for your reference. This improvement is included in the Department's Fiscal Year 2012-2017 Proposed Highway Improvement Program contingent upon plan readiness, land acquisition, and funding availability through our future annual legislative appropriations. The proposed project is anticipated to consist of intersection improvements.

Proposed highway improvements are typically processed in three distinct phases. In Phase I, proposed geometry, environmental concerns, as well as right-of-way requirements are defined. During Phase II, contract plans are prepared and the necessary right-of-way is acquired. Phase III represents the actual construction of the improvement.

In an effort to ensure that our highway improvement will address actual highway needs and will be sensitive to local and community concerns, we will be contacting you at various points during our preliminary studies. The purpose of these contacts will be to assist us in data gathering, to incorporate locally requested improvements into our highway improvement (as appropriate), and to keep you informed of project status. Please note that our Hydraulics Section may be contacting you independently to discuss the drainage elements of our project.

At this early stage of our project development, we would particularly like to inform the Village of Long Grove (Village) of their opportunity to provide input into the need for pedestrian and bicycle accommodations in the vicinity of our improvement. We would like to know of any existing or planned bicycle usage in the vicinity of the project, particularly bike lanes, separate bicycle trails, or signed bike routes. This information will be helpful in determining whether any special design features need to be considered to accommodate bicyclists or pedestrians within the improvement area.

Based on a preliminary review of existing conditions, it appears as though a separate off-road shared-use path will likely be required in order to accommodate bicyclists and pedestrians. According to our policy, this accommodation would be provided along, or short distances outside of, the project limits if the local agency is willing to participate in cost sharing and accept maintenance responsibilities of this path. If the local agency chooses not to participate in the bicycle or pedestrian accommodations, the Department requests that a local resolution indicating their non-participation be sent to the Department (see enclosed example). Without the local agency cost participation, the Department will consider the highest and best accommodation feasible.

As described in the attached Exhibit "A", the Department is responsible for 100% of the cost for removal and replacement of existing sidewalk or paths affected by the roadway improvements. The local cost share for new pedestrian and bicyclist facilities is 20% of the construction cost, plus a 15% engineering fee. In addition, the Village of Long Grove must agree to assume long-term responsibility for the administration, control, reconstruction, and maintenance of the sidewalk or shared-use path.

Additionally, we request that you provide the following data and information, if it is available. It may be useful to us in the development of this proposed improvement.

- Land use plans and planned developments.
- Zoning ordinances and maps.
- School, park, fire protection, and sanitary districts and boundaries.
- On street parking ordinances, if applicable.
- Other community features, facilities, or items that you feel may be relevant for our consideration in development of this project.

At this time, we request that the Village of Long Grove inform us of any engineering studies and/or programmed improvements, along with their respective schedules, involving Village of Long Grove routes which may affect implementation of our proposed project.

Enclosed for your information and reference is a copy of Exhibit "A" and Exhibit "B". Exhibit "A" generally defines our cost participation policies for highway improvements, including such items as traffic signals, parking lanes, utilities, lighting, sidewalks, and additional work. Exhibit "B" outlines the steps and cost participation specifically for emergency vehicle pre-emption related items. Your areas of participation, if any, will be defined at a later date as the study nears completion. This information will be provided via a Letter of Intent. The Letter of Intent will form the groundwork for the Village/County/Township/State agreement to be written during Phase II, contract plan development.

Ms. Maria Rodriguez
April 12, 2012
Page 3

If you have any questions or need additional information, please contact me or Carlos Feliciano, Acting In-House Studies Unit Head, at (847) 705-4106.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Diane M. O'Keefe".

Diane M. O'Keefe, P.E.
Deputy Director of Highways,
Region One Engineer

Enclosures

cc: Mr. Marc Small, Village Road Commissioner, Village of Long Grove
Mr. David Lothspeich, Village Manager, Village of Long Grove
Mr. Martin G. Buehler, Director of Transportation, Lake County
Ms Paula Trigg, Director of Planning & Programming, Lake County

**SUGGESTED RESOLUTION LANGUAGE FOR NON-PARTICIPATING
LOCAL AGENCIES**

WHEREAS, The Illinois Department of Transportation (Department) has the power to approve and determine the final plans, specifications and estimates for all State highways; and

WHEREAS, the Department's projects must adequately meet the State's transportation needs, exist in harmony with their surroundings, and add lasting value to the communities they serve; and

WHEREAS, the Department must embrace principles of context sensitive design and context sensitive solutions in its policies and procedures for the planning, design, construction, and operation of its projects for new construction, reconstruction, or major expansion of existing transportation facilities by engaging in early and ongoing collaboration with affected citizens, elected officials, interest groups, and other stakeholders to ensure that the values and needs of the affected communities are identified and carefully considered in the development of transportation projects; and

WHEREAS, Bicycle and pedestrian ways must be given full consideration in the planning and development of transportation facilities, including the incorporation of such ways into State plans and programs; and

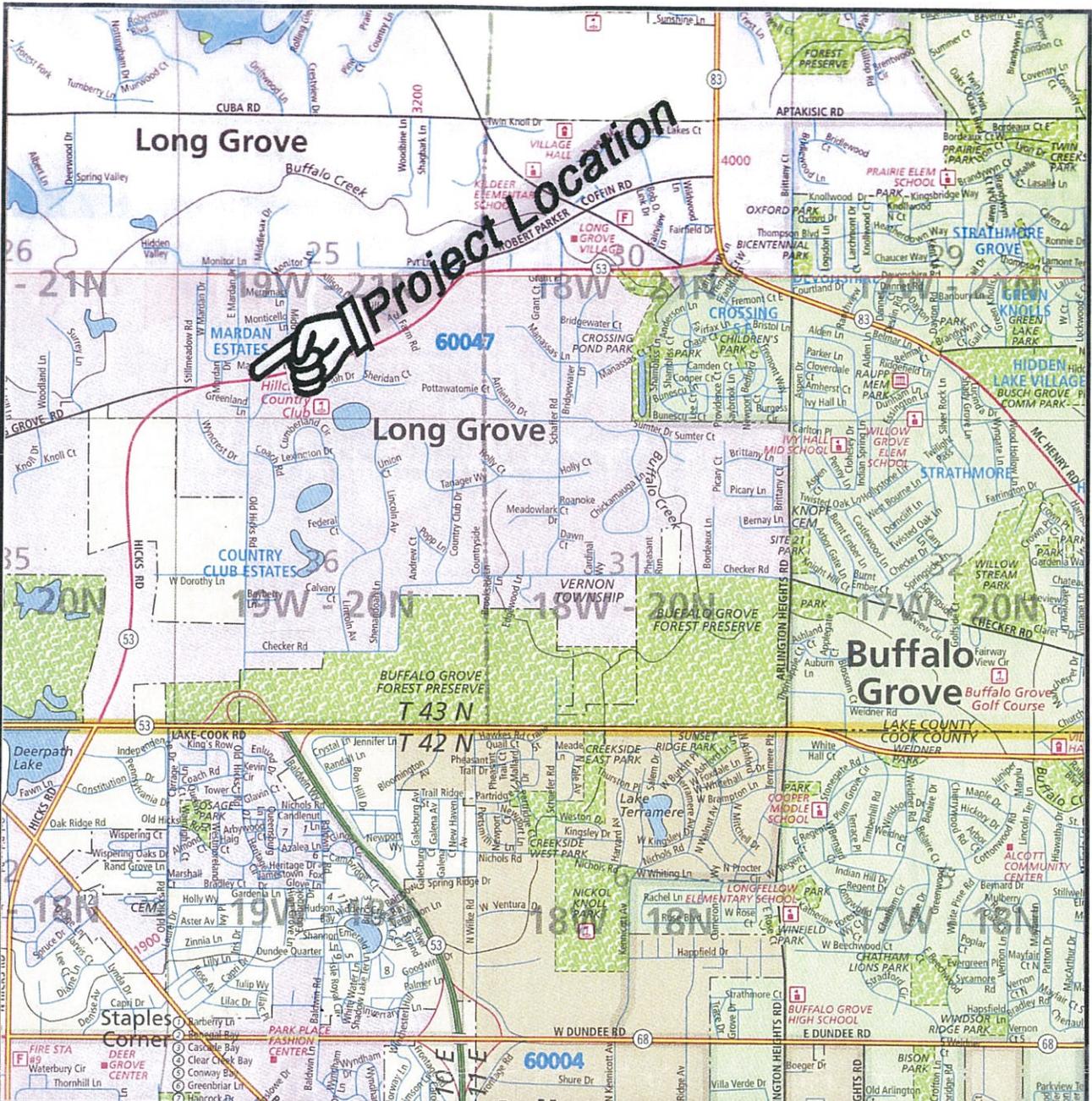
WHEREAS, The State's complete streets law requires bicycle and pedestrian ways to be established in or within one mile of an urban area in conjunction with the construction, reconstruction, or other change of any State transportation facility, except in pavement resurfacing projects that do not widen the existing traveled way or do not provide stabilized shoulders, or where approved by the Secretary of Transportation based upon documented safety issues, excessive cost or absence of need; and

WHEREAS, During the development of highway projects throughout the State, the Department gives consideration to accommodating bicyclists and pedestrians on a need-basis; and

WHEREAS, The Department has presented the local agency, for its consideration, a bicycle and/or pedestrian improvement with funding to be split 80% State, 20% local with maintenance to be provided by the local agency; therefore, be it

RESOLVED, That the local agency hereby rejects the Department's proposed bicycle and/or pedestrian improvement and acknowledges that such rejection will result in a cancellation of the proposed improvement; and be it further

RESOLVED, That a suitable copy of this resolution be presented to the Project Engineer associated with the proposal, or his or her equivalent, within the Department.



Location Map

**Proposed Improvement: IL Rte 53 (FAU 1261)
 At Old Hicks Road
 Village of Long Grove
 Ela Township
 Lake County**

Job # P-91- 451-09

Exhibit "A"

TRAFFIC SIGNAL PARTICIPATION

The cost participation associated with traffic signal installation, modernization, or relocation will be in accordance with 92 Ill. Adm. Code 544 "Financing of Traffic Control Signal Installations, Modernization, Maintenance, and Operation on Streets and Highway under State Jurisdiction."

Traffic signals may be installed only where conditions meet warrants established in the current Illinois Manual on Uniform Traffic Control Devices. If a new signal installation is warranted, it may be included within the roadway improvement.

Current IDOT policy requires that IDOT and Local Agency (ies) share the responsibility for installation, modernization, and relocation of traffic signals. The installation, modernization, and relocation of pedestrian signals associated with traffic signal improvements will also require the Department and Local Agency (ies) to share financial responsibility. The eligible share of the cost to each agency will be in proportion to the number of intersection approaches that the agency maintains. Generally, traffic signal costs are 80% Federal and 20% non-Federal based on established cost participation policy (90% Federal and 10% non-Federal for safety projects). IDOT will participate in the non-Federal portion for the State-owned legs of an intersection. At locations where all legs of an intersection are State-owned, IDOT will participate in 100% of the cost of the traffic signal installation, modernization, or relocation. Closely spaced new or modernized traffic signals within the improvement limits generally require signal coordination or hardware interconnection for the purpose of providing vehicle progression. IDOT will be financially responsible for 100% of coordination or interconnection costs.

IDOT will be financially responsible for 100% of the installation and modernization of traffic signals at ramp terminals of ramps connecting to or from a State highway.

The entire cost of installing push button ("Fire pre-emption") and emergency vehicle pre-emption equipment is the responsibility of the requesting local fire district or municipality.

The entire cost of installing, modernizing, relocating, maintaining and energizing private benefit signals is the responsibility of the private benefit agency being served by the traffic signals. However, IDOT will enter into a formal agreement for a private benefit signal installation only with the local jurisdictional or governmental agency.

It should be noted that an agency involved might voluntarily assume responsibility for another agency's share of the cost in order to expedite the installation or modernization.

When warrants are met for school crossing signals at public road intersections, the eligible share to each agency for the installation and modernization cost shall be split on a 50/50 basis or in proportion to the number of intersection approaches that each agency maintains.

TRAFFIC SIGNAL MAINTENANCE

At intersections lying wholly outside the Corporate Limits of any municipality, IDOT will be responsible for the maintenance of the signals.

At intersections lying wholly or partially within the Corporate Limits of one or more municipalities, IDOT will assume the following costs for the maintenance of traffic signals on State highways within municipalities:

- (A) The total costs for all signals at the intersections of two or more State highways.
- (B) The total costs for all signals at the intersections along State highways that have an average daily traffic in excess of 35,000 vehicles per day as shown on the latest published edition of the traffic volume (AADT) map. The District Engineer will determine the limits of this section within the municipality.
- (C) The total costs for all signals located at the terminals of ramps connecting to or from a State highway.
- (D) At all other intersections IDOT and the municipalities will share in the cost of signal maintenance. The cost to the municipalities will be in proportion to the number of approaches that they maintain.

ENERGY CHARGES

The division of financial responsibility for the energy charges will be as follows:

- (A) At intersections lying wholly outside the Corporate Limits of any municipality, IDOT will pay the energy charges for the operation of the signals.
- (B) At intersections lying wholly within the Corporate Limits of a municipality, IDOT and the municipality will share the energy charges according to the proportionate number of intersection approaches maintained by each agency.
- (C) At intersections lying partially within the Corporate Limits of one or more municipalities, the municipalities will be responsible for the energy charges.

Traffic Signal Master Agreements, consummated by IDOT, give municipality defined maintenance and energy responsibilities required for the operation of traffic signals. New traffic signal improvements shall contain maintenance and energy provisions in the improvement agreement adding the new traffic signals to said Master Agreement. Existing traffic signals to be modernized or relocated, shall contain maintenance and energy provisions in the improvement agreement indicating traffic signal maintenance and energy responsibilities for given traffic signal(s) shall continue to be as outlined in the Master Agreement. Certain circumstances, such as jurisdictional transfers of roadway segments affecting signalized intersections with the improvement limits, could result in a revision to maintenance and energy responsibilities contained in the Master Agreement for a given traffic signal(s). An amendment to the Master Agreement would be required.

IDOT does not share in maintenance costs for school crossing signals unless specified otherwise in the Master Agreement or if the school crossing signals are installed at public road intersections for which the maintenance costs shall be shared in proportion to the number of intersection approaches that each agency maintains.

PARKING LANES

If a new parking lane is added, IDOT will participate in 50% of the cost if the ADT is greater than 5,000 vehicles per day and if the pavement composition and lane width meets the IDOT criteria. The municipality would assume the total cost (100%) of the parking lane if the pavement composition or lane width does not meet IDOT criteria or if the ADT is less than 5,000 vehicles per day.

If an exclusive existing parking lane requires resurfacing, IDOT will participate in 50% of the milling and resurfacing costs for parking with lane widths equal to or less than the adjacent travel lanes. The municipality will assume the total cost (100%) of the milling and resurfacing costs for that portion of the parking that is greater than the width of the adjacent travel lane. The municipality will also assume 100% of any base repair cost for the entire width of the existing parking as well as any patching and curb and gutter repairs. If the municipality declines to participate, a very minimal amount of resurfacing would be done IDOT expense. (Minimal amount of resurfacing is defined as a taper across the parking lane ranging from approximately 1½ inch thick adjacent to the through lane to 1 inch or less adjacent to gutter line).

IDOT will assume the total cost (100%) associated with the milling and resurfacing of parking lanes when parking is eliminated during one or more peak hours.

The municipality is responsible for the total cost (100%) of reconstructing existing parking and any adjacent curb and gutter.

The State will not consider an improvement of a State-maintained highway unless the proposed parking or existing parking adjacent to the traffic lanes is parallel parking except as provided under Chapter 95 1/2 Art. 11-1304(c) (Illinois Revised Statutes).

Parking prohibition ordinances will be required through areas where there are no parking lanes.

ROADWAY MAINTENANCE

The State will assume the maintenance cost associated with the through traffic lanes, turning lanes, and the curb and gutter adjacent to these traffic lanes. The municipality will assume the maintenance cost associated with all other facilities including but not limited to items such as storm sewers, parkways, exclusive parking lanes, curb and gutter adjacent to the parking lanes, sidewalks, landscape features, appurtenances, etc.

UTILITY RELOCATION

Municipal utilities, installed by permit and requiring relocation, will be relocated at no expense to the Department.

Municipal utilities installed prior to the Department's assuming maintenance of the roadway will be relocated, if required, at IDOT expense.

The cost of any improvement to, or betterment of municipal utilities, would be the entire financial responsibility (100%) of the local agency.

ROADWAY LIGHTING

Existing highway lighting that is owned and maintained by the municipality, will be relocated and upgraded to current standards. New lighting, proposed by the municipality, may be incorporated into the total improvement plans.

The cost of the above work would be the entire financial responsibility of the local agency.

PEDESTRIAN AND BICYCLE FACILITIES

Sections 17 Bicycle and Pedestrian Accommodations and 48-2.04 Sidewalks of the IDOT Bureau of Design and Environment Manual establish the criteria to determine pedestrian and bicycle needs. Maintenance responsibilities as well as State and local agency participation toward the cost of these facilities included as part of a roadway construction contract on a State route shall be in accordance with Sections 5-03 and 5-05 of the Bureau of Design and Environment Manual as follows.

Maintenance Responsibilities – The Municipality will maintain any new or replacement sidewalks the Department provides in conjunction with the highway improvement project, excluding those constructed on structures. The Municipality will also maintain any bicycle paths associated with the State highway project other than that portion of the bicycle path carried on state structures. The State will assume the maintenance responsibilities for On-Road Bicycle Lanes or Wide Outside Lane and Widened Shoulders constructed as bicycle accommodations.

Cost Participation

1. New and Deteriorated Sidewalks – Use the criteria in Chapters 17 and 48 to determine the warrants for sidewalks. If these criteria are met and the Local Agency agrees to maintain the sidewalks, proportion the improvement costs associated with new or deteriorated sidewalks as follows:
 - a. New Sidewalks – Proportion the cost between the State and Local Agency at 80/20 for new sidewalks within the project termini or for short distances outside the project termini as may be required to connect sidewalks to significant pedestrian generators (e.g., schools, transit facilities). The Phase I Study Report will document the need for sidewalk construction.
 - b. Deteriorated Sidewalks – The Local Agency will pay 100% of the cost to remove existing deteriorated sidewalks. Proportion the cost 80/20 between the State and Local Agency for deteriorated sidewalk replacement when associated with a highway project. Local Agency will pay 100% of the cost of decorative sidewalks.
 - c. Sidewalk Removal and Replacement – The State is 100% financially responsible for removing and replacing existing sidewalks if such a need is caused by the construction of an IDOT highway improvement.
2. Bicycle Accommodations – Use the criteria in Chapter 17 to determine the warrants for bicycle accommodations. If these criteria are met and the Local Agency agrees to maintain the bicycle accommodation as appropriate, proportion the improvement costs associated with the bicycle accommodations as follows:

- a. On-Road Bicycle Lanes – Proportion the cost 80/20 between the State and Local Agency for the construction of new on-road bicycle lanes as indicated by the facility selection criteria contained in Chapter 17.
 - b. Wide Outside Lanes and Widened Shoulders – The State will pay 100% of all costs for wide outside lanes or widened shoulders indicated for bicycle accommodation.
 - c. New Paths – Proportion the cost 80/20 between the State and Local Agency for construction of new paths within the project termini or for short distances outside the project termini as may be required to connect paths to significant bicycle traffic generators (e.g., schools, transit facilities). The Phase I Study Report will document the need for path construction.
 - d. Path Removal and Replacement – The State is 100% financially responsible for removing and replacing existing paths if such a need is caused by the construction of an IDOT highway improvement.
 - e. Adjustment of Existing Paths – If an existing path requires adjustment due to an IDOT improvement, the State will pay 100% of the adjustment cost. The Department will construct the replacement in accordance with IDOT path criteria. The Local Agency is 100% financially responsible for path adjustments that are caused or initiated by a work request from the Local Agency.
 - f. Paths Above and Beyond Selection Criteria – If facility selection criteria for side paths are not met and the Local Agency still requests side path installation, the Local Agency is 100% financially responsible for all costs for installation of the path above those costs for the improvement identified in the selection criteria, including any necessary right-of-way and construction.
3. Utility Adjustments and Other Items – Proportion the cost 80/20 between the State and Local Agency for reimbursable utility adjustments as defined in Chapter 6, Section 6-1.03 of the BDE Manual, as well as pedestrian barriers, retaining walls, and other collateral items that are required solely for pedestrian and bicycle accommodations not necessitated by the IDOT project. The Local Agency is responsible for 100% of the costs for right-of-way, utility adjustments, barriers, retaining walls, and other collateral items that are not required solely for the pedestrian and bicycle accommodations.
 4. Right-of-Way – Proportion the cost 80/20 between the State and Local Agency for right-of-way if acquired solely for sidewalk construction. Also, the Local Agency will pay 100% of the construction costs for sidewalks associated with the construction of on-system parking not necessitated by the IDOT project. The State will pay 100% for right-of-way if additional right-of-way is required to construct an IDOT-proposed highway cross section.
 5. Local Agency Does Not Accept Maintenance Responsibilities – If the Local Agency does not agree to maintain the sidewalk, the State will not construct it, even if it is warranted. However, the State will take reasonable actions to not preclude future additions of sidewalk at such locations.
 6. Local Agency Does Not Choose To Participate – If the local agency chooses not to participate financially in the bicycle or pedestrian accommodation, the Department will request that that local agency pass a local resolution indicating their non-participation and have this noted in the Phase I Project Report.

ADDITIONAL WORK

IDOT would be receptive to considering additional highway related work items suggested and paid for by the local agency for incorporation within the improvement, providing that the additional work items would not delay the implementation of the project. Such items could include lighting, over-size storm sewer, utilities, emergency vehicle pre-emption equipment etc.

The local agency may be expected to provide plans, specifications, and estimates for such additional work that is requested to be incorporated into the contract plans for the State-owned portion of the project. Said plans and specifications shall be of such quality to facilitate inclusion in the contract package and shall be available in a timeframe consistent with anticipated contract processing schedules and deadlines.

EXHIBIT "B"
(Updated June 2002)

The following improvements are optional and may be incorporated into this traffic signal improvement if the Municipality requests it. Construction costs and engineering costs of these items would have to be borne entirely by the Municipality. Please check the appropriate square. The Bureau of Traffic will not proceed with the design of plans for this improvement until this questionnaire has been completed.

Construction bracket-mounted traffic signals on existing street lighting standards.

Yes No

Install emergency fire pre-emption equipment.

Yes No

If "Yes" indicate what type: _____

Type of existing parking on the four approaches of this intersection:

Parallel Diagonal Existing Parking Prohibition Ordinance

Would the Municipality be willing to prohibit existing parking, including any off street parking within the limits of the State right-of-way, on the approaches to this intersection? (Depending upon individual situations the minimum distance for no parking from the stop line, along any approach, would vary from 30 to 250 feet).

Yes No

Is this intersection located at an established school crossing?

Yes No

If "Yes", across which leg or legs of the intersection do children cross?

North South East West

Additional comments:

By: _____

Date: _____

Pathways Committee Recommendation

Illinois Route 22 Pathway

The Long Grove Pathway Committee recommends that a 10' asphalt "spine" pathway is the most appropriate type of pathway at this location on the south side of Illinois Route 22 subject to resolution of the following concerns;

Response: Thank you for providing your recommendation regarding pedestrian and bicycle accommodations for the Illinois Route 22 (IL 22) project. The path would be asphalt surface, ten-foot wide, and offset five feet from IL 22. The proposed retaining walls between Old McHenry Road and Indian Creek Lane would be removed from the plan and grading would occur in the Scenic Corridor Easements (SCE) adjacent to the path as described in IDOT's pedestrian and bicycle evaluation that was transmitted to the Village on November 11, 2010.

- 1) Why does the pathway stop at Heritage Lane?

Response: The path is shown ending at Heritage Lane because this is the IL 22 project limit where the proposed improvements match the existing roadway section. Heritage Lane is a logical terminus for the path because it provides direct connectivity to neighborhoods that have intersections with IL 22 in the study area, Quentin Road to IL 83, and minimizes right-of-way and SCE impacts. There are no existing pedestrian or bicycle facilities to connect to at the IL 22 and IL 83 intersection.

- 2) Why are so many trees being removed along the north side of Route 22?

Response: Tree removals have been minimized to the extent possible. The proposed alignment of IL 22 generally follows the existing alignment within the Village of Long Grove. As a result, pavement widening is symmetric and any unbalanced removal of trees is unintended with the exception of the area between North Krueger Road and Willowbrook Road. Compensatory floodplain storage grading and a water quality basin are proposed in this area which results in additional tree impacts.

- 3) Is a landscaping plan proposed for tree replacement and if so when will tree planting occur?

Response: A landscaping plan, including proposed tree locations, will be developed during the contract plan preparation and land acquisition phase (Phase II) of the project. IDOT has agreed to the previous Village requests to maximize the number of tree replacements within the Village, to maximize the use of Village protected species, and to include the Village in the landscape design process. Trees are generally planted once roadway construction is completed, during the tree's recommended planting season.

- 4) What is the schedule for completion of the Route 22 improvements; including the pathway?

Response: The project is currently in the preliminary engineering and environmental study phase (Phase I). Phase II and construction (Phase III) are included in IDOT's Fiscal Year 2011-2016 Proposed Highway Improvement Program, subject to funding availability and project readiness. Phase I is anticipated to be completed this year. Phase II typically takes 18 to 24 months to complete. The schedule for construction has not been determined, but can be expected to last two years, depending when construction begins. The path would be constructed as part of this project, subject to cost participation.

- 5) What are the specific plans for the north Krueger Road intersection and is a pathway connection (stub) anticipated for a future tie-in along North Krueger Road?

Response: The improvement of the IL 22 and North Krueger Road intersection would require the reconstruction of North Krueger Road to approximately 500 feet north of IL 22 to Krueger Court. The proposed scope of work includes one traffic lane in each direction along North Krueger Road, a traffic signal, and realignment of Blackhawk Lane directly across from North Krueger Road. The proposed curb and gutter along IL 22 would transition to shoulders along North Krueger Road. Drainage swales would be provided along each side of the roadway. Proposed retaining walls have been minimized at this intersection as requested by public meeting comments. Retaining walls are still required along the west side of North Krueger Road between IL 22 and Krueger Court to avoid encroachment into a SCE. Currently no path is proposed along North Krueger Road, however, the intersection is being designed to accommodate future pedestrian/bicycle crossings. For additional details, see the attached Preliminary Plan & Profile and Typical Section for North Krueger Road.

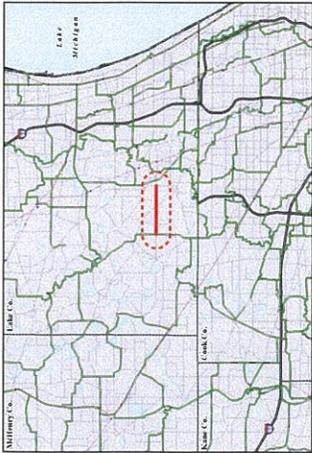
There was concern about the 20% match associated with this proposal and where those funds would come from implementation/completion of this project. The consensus of the Committee was to be aware of the match requirement to deal with the funding issue in the future.

Response: At the end of Phase I, a Letter of Intent will be sent the Village which will estimate the Village's cost participation and maintenance requirements.

Recommendation unanimously approved by the Long Grove Pathway Committee

2.18.11 - Regular Meeting

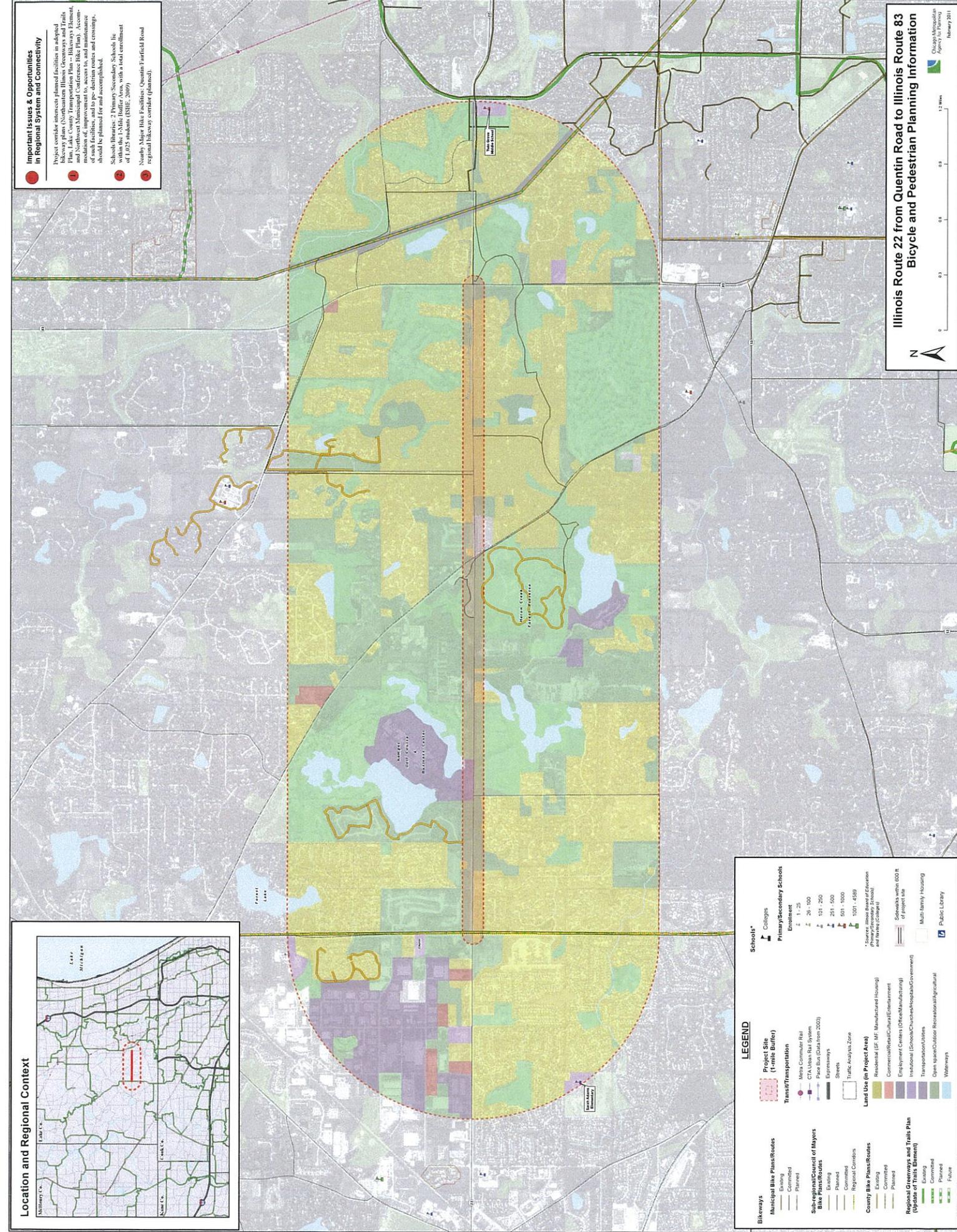
Location and Regional Context



Important Issues & Opportunities in Regional System and Connectivity

Project corridor intersects planned facilities in adopted bikeway plans (Southwest Illinois, Greenways and Trails and Northwest Municipal Conference Bike Plan). Accommodate and improve to, access to, and maintenance of such facilities, and to pre-destination routes and crossings, should be planned for and accomplished.

- 1 School Districts: 2 Primary/Secondary Schools lie within 1/2 mile of the Project Corridor.
- 2 Nearby Major Water Facilities: Cramer Park and Road regional bikeway corridor (planned).



**Illinois Route 22 from Quentin Road to Illinois Route 83
Bicycle and Pedestrian Planning Information**

Chicago Metropolitan Agency for Planning
February 2011
0 0.2 0.4 0.6 0.8 1.2 Miles

LEGEND

Bikeways

- Municipal Bike Plans/Routes
 - Existing
 - Planned
- Sub-regional/Council of Mayors Bike Plans/Routes
 - Existing
 - Planned
- County Bike Plans/Routes
 - Existing
 - Planned
- Regional Greenways and Trails Plan (Regional Greenways)
 - Existing
 - Planned
 - Future

Project Site (1-mile Buffer)

Transit/Transportation

- Metra Commuter Rail
- CTA Urban Rail System
- CTA Pace Bus (Data from 2003)
- Expressways
- Streets
- Traffic Analysis Zone

Land Use (in Project Area)

- Residential (SF, MF, Manufactured Housing)
- Commercial/Industrial/Entertainment
- Employment Centers (Office/Manufacturing)
- Institutional (Schools/Churches/Hospitals/Government)
- Transportation/Utilities
- Open Space/Outdoor Recreation/Agricultural
- Waterways

Schools*

- Colleges
- Primary/Secondary Schools
 - Enrollment
 - 1- 25
 - 26 - 100
 - 101 - 250
 - 251 - 500
 - 501 - 1000
 - 1001 - 4500
 - Schools with 600 ft of Project Site
 - Multi-Family Housing
 - Public Library

*Source: Illinois State Board of Education (Primary/Secondary Schools) and National Center for Education Statistics (Colleges)



Chicago Metropolitan Agency for Planning

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Suite 800
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312 454 0400
www.cmap.illinois.gov

February 22, 2011

Mr. John A. Baczek, P.E.
Project and Environmental Studies Section Chief
Illinois Department of Transportation
Division of Highways / Region One / District One
201 West Center Court
Schaumburg, IL 60196-1096

Re: Illinois Route 22 from Quentin Road to Illinois Route 83
IDOT Project Number: P-91-284-00

Dear Mr. Baczek:

Enclosed in response to your request regarding bicycle facility planning and usage information, in connection with preliminary engineering and environmental studies for the improvement of Illinois Route 22 from Quentin Road to Illinois Route 83 in the Villages of Kildeer and Long Grove in Lake County, is a map that shows existing and planned bicycle facilities from approved and adopted bikeway plans, including:

- *Northeastern Illinois Regional Greenways & Trails Plan* (Updated and Adopted by the Board of CMAP and the MPO Policy Committee, October 2009)
- *Lake County Transportation Plan – Bikeways Element*
- *Northwest Municipal Conference Bike Plan – Regional Corridors* (Updated and Adopted by the NWMC Board in 2010)

The project scope is to provide two lanes in each direction separated by a median, as well as drainage improvements, modernizing traffic signals, and providing additional turn lanes at various intersections.

The attached map is based on information from currently available sources. The map shows not only existing and proposed bicycle facilities, but also how they relate to transit service, roadway facilities, and surrounding land uses.

Bicycle and Pedestrian Trip Generators. In addition to the planned facility crossing the project corridor at its western end, residential and recreational open space land uses along the corridor may be expected to generate pedestrian and cycling activity. These generators of non-motorized trips indicate that facilities to accommodate such trips are warranted as part of this project:

- *Census Journey to Work Data.* Census journey to work data indicate that approximately 172 workers living in the fourteen traffic analysis zones bordering the project site walk or cycle to or from work. Another 171 take bus or rail, which may also involve additional walking trips.
- *Nearby Schools.* Two schools, Twin Groves Middle School and Sarah Adams Elementary School, with a total enrollment of 1,025 students (ISBE, 2009), lie within the 1-mile buffer area. CMAP's *Travel Tracker* household travel inventory data indicate that, in the Collar Counties, the share of students aged 5-13 who walked to school was approximately 13.5%, while about 7.5% of students aged 13-18 walked. Approximately 1.5% of the students in both of these age groups bicycled to school. For the two schools within the 1-mile buffer area, this average would amount to approximately 136 students walking or biking to school.
- *Existing and Planned Regional Trails.* As mentioned above, one planned facility, running along Quentin Road, crosses the project site (at the western limit). Determining the exact location and nature of this facility will involve IDOT coordination with the Lake County Division of

Transportation, the Northwest Municipal Conference, as well as local governments in the Villages of Kildeer and Lake Zurich. This facility would connect – outside the boundaries of our map – important regional bikeways, including the Millennium Trail to the north, the Deer Grove/Jens Jensen Forest Preserve trail system to the south, and the existing facility along Long Grove Road (leading to the Cuba Marsh Forest Preserve) to the southwest.

Current conditions: *Please see accompanying map for land use and other conditions along the complete 3.5-mile project corridor.*

At present, Illinois Route 22 within project limits exhibits a cross-section that consists largely of an undivided two-lane roadway, with either unpaved or narrow paved shoulders. In certain places (at and near intersections), the roadway widens to as many as seven lanes (including turn lanes) for a total width of approximately 92 feet. Medians are installed – mostly painted, though in two instances, raised and planted medians have been constructed – at approaches to major intersections along the project corridor.

The posted speed limit along Illinois Route 22 within the project corridor is 55 mph. The 85th percentile speed is 50 mph. The ADT within the project corridor ranges from 14,100 to 19,200 (IDOT, 2009), with approximately 725 to 800 trucks.

Current conditions at key intersections are shown below in **Figures 1-3**. No pedestrian and bicycle accommodation (pedestrian signals, marked crosswalks, etc.) exist at these intersections or along the

Figure 1: IL-22and Quentin Road

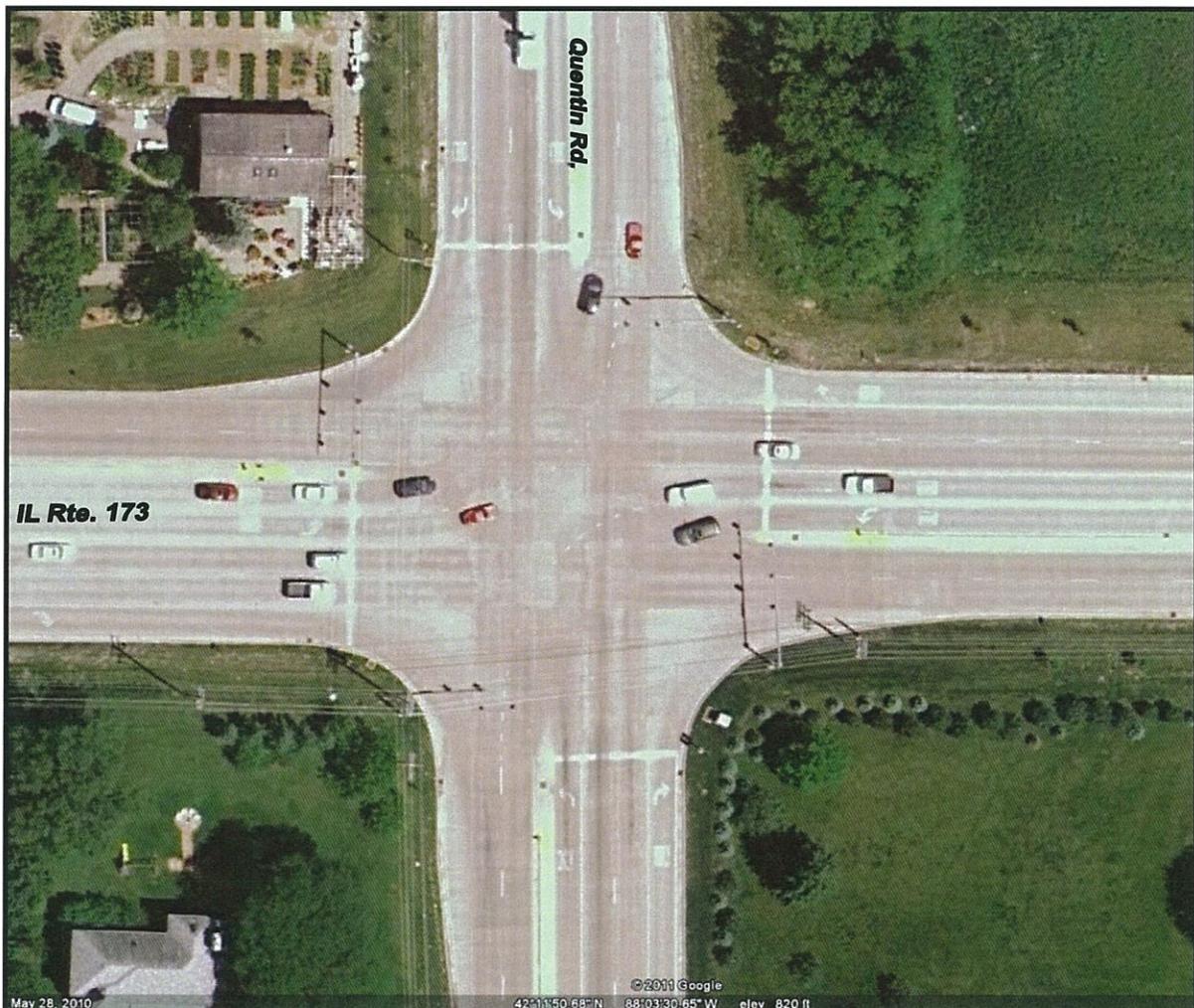
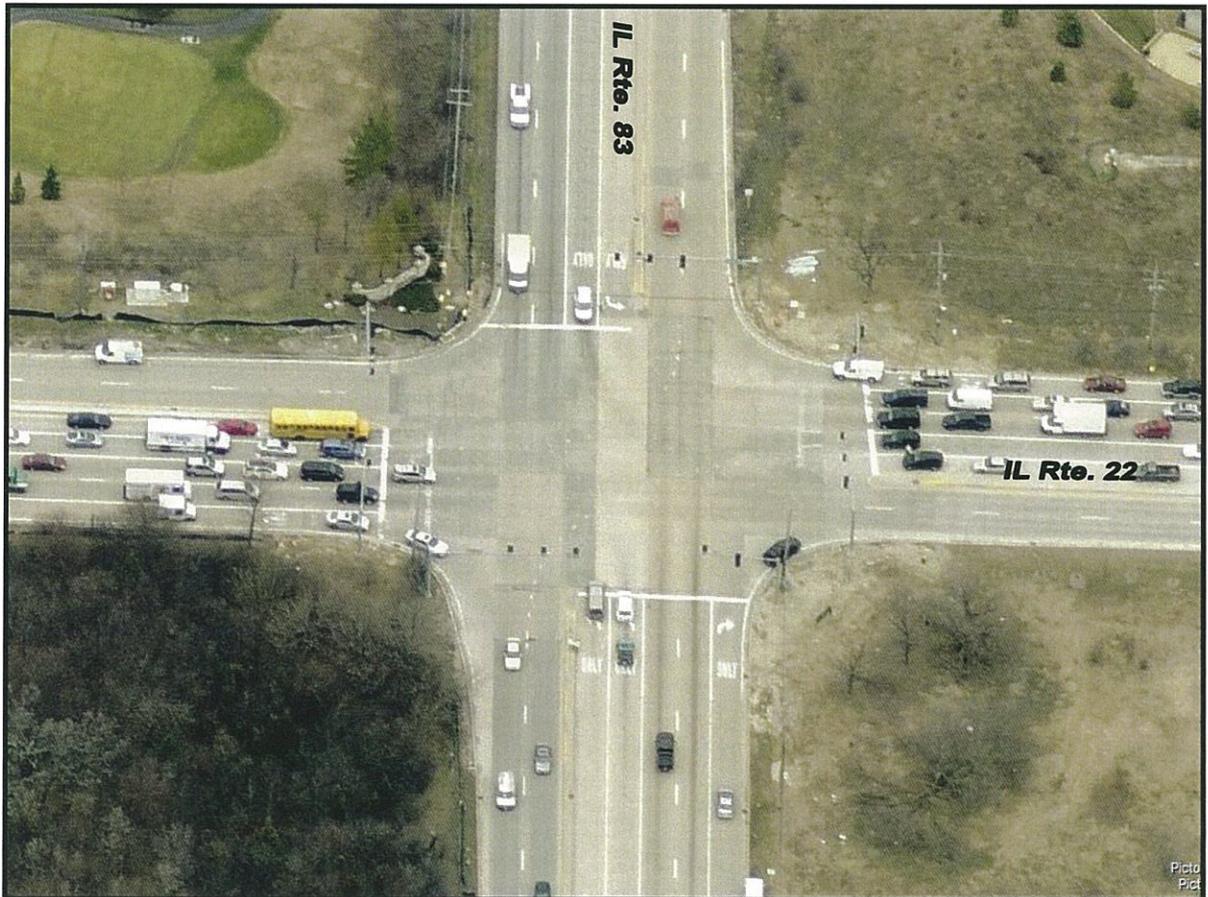


Figure 2: IL-22 and Old McHenry Road



Source: www.bing.com/maps

Figures 3: IL-22 and IL-83



Source: www.bing.com/maps

project corridor. The only sidewalks along or leading to Illinois Route 22 in the project corridor are an unconnected segment in the southeast quadrant of the intersection of IL-22 and Old McHenry Road and two segments – again unconnected – at the eastern end of the project corridor. (See map.)

The shoulders along Illinois 22 in the project area are, as mentioned above, largely unpaved. When paved, they appear too narrow for safe cycling given the speeds and ADT on the roadway.

The land-use within the 1-mile buffer zone is largely single-family residential, with some recreational open space and office/industrial use. The area appears to be experiencing conversion of remnant agricultural and undeveloped land to residential and recreational (including trail) uses – a trend that we anticipate will likely continue over the mid- and longer-term future.

At present, many of the residential neighborhoods and recreational sites along Illinois 22 within project limits are accessible only from Illinois 22. This fact means that travel (motorized and non-motorized) from one neighborhood to another or to a recreational facility must include travel to, along, and from Illinois 22. This is the result of the *cul-de-sac* nature of development along the project corridor.

Recommendations:

- **Sidewalks and Bikeways:** At a minimum, we recommend that IDOT construct sidewalks along Illinois Route 22 where they are currently missing (the majority of the project corridor – see separate map). These – and all other pedestrian facilities – within the project site should be compliant with the proposed Public Right-of-Way Accessibility Guidelines (PROWAG).¹ We further recommend that IDOT consider upgrading a sidewalk to bikeway standards (side path) to provide space for a bikeway, in keeping with the complete streets approach to roadway design.

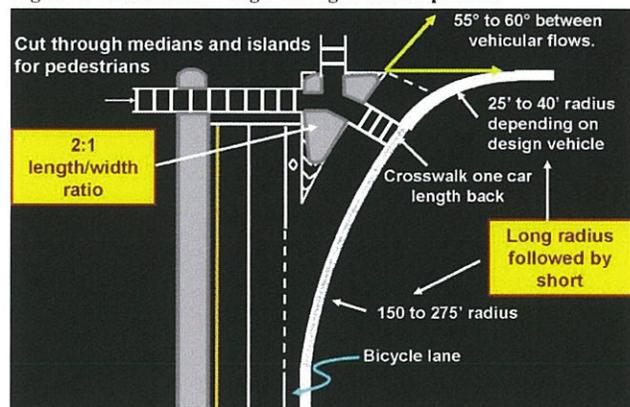
- **Intersection Design:** We strongly recommend that IDOT include geometric and traffic control device improvements to the three signalized intersections (Quentin Road, Old McHenry Road, Illinois Route 83) along the project corridor, in order to more fully and safely accommodate pedestrians and cyclists traveling along and across Illinois Route 22. Specifically, we make the following recommendations:

- **Pedestrian Crosswalks.** We recommend that pedestrian (countdown) signals be installed on at least two of the legs of the signalized intersections

mentioned above (Quentin Road, Old McHenry Road, Illinois Route 83). We further recommend that longitudinally striped crosswalks be used to mark these crossings. To provide accessibility and safety, crosswalks should be straight, in line with ramps and (future) adjoining sidewalks, and when possible, utilize refuge areas provided by medians or ‘pork chop’ islands (see below).

- **Tighter Intersection Design.** Given the high speeds and high ADTs, particular attention to the effect of pedestrian crossings on signal timing must be given. Reducing crossing distances, curb-to-curb, subject to MUTCD signal timing guidance, will reduce pedestrian clearance time in the intersection, thus will add flexibility to the allocation of green time at the congested intersections. Therefore, we recommend consideration of 10-11 foot travel lanes and properly designed pork-chop islands (see below) at the signalized intersections to narrow pedestrian crossing distances. This will not only improve signal timing flexibility but also improve pedestrian safety by reducing exposure to moving traffic.

Figure 4: Recommend Design for Right-turn Slip Lanes



Source: FHWA Report, "How to Develop a Pedestrian Safety Action Plan"

¹ See <http://www.access-board.gov/prowag/index.htm>

- *Pork Chop Islands.* We recommend that IDOT study the feasibility of raised ‘pork chop’ islands at the signalized intersections. Providing “pork-chop” islands and turning roadways like those shown in **Figure 4** (above) can significantly reduce the amount of time required for pedestrian crossings, improving pedestrian safety and adding flexibility to signal operations. These pork-chop islands are strongly recommended for intersections like these (4+ lanes, high speeds, and high ADT). Pedestrian crossing signals should be utilized at the pork-chop islands. Should ‘pork chop’ islands prove not to be feasible, then we would recommend that curb radii be tightened in order to shorten pedestrian crossing distances and lower the speed of turning vehicles.
- *Medians.* We are pleased to note that project scope includes construction of a center median along Illinois 22. We recommend that this median be constructed to clearly and purposefully function at marked crossings as a pedestrian refuge. Such function, at intersections, may involve installation of a “bull-nose” type treatment (see **Figure 5**, below). Pedestrian safety can be greatly enhanced by median pedestrian refuges. Please note the FHWA guidance, which strongly encourages states to adopt raised medians and other countermeasures to increase safety.² The associated guidance is as follows:

#8. Medians and Pedestrian Refuge Areas in Urban and Suburban Areas: *Raised medians (or refuge areas) should be considered in curbed sections of multi-lane roadways in urban and suburban areas, particularly in areas where there are mixtures of a significant number of pedestrians, high volumes of traffic (more than 12,000 ADT) and intermediate or high travel speeds. Medians/refuge islands should be at least 4 feet wide (preferably 8 feet wide for accommodation of pedestrian comfort and safety) and of adequate length to allow the anticipated number of pedestrians to stand and wait for gaps in traffic before crossing the second half of the street.*

Figure 5: Example of Median / Pedestrian Refuge



Photo courtesy of Dan Burden

Recommendation regarding coordination

with the local entities: We recommend that IDOT coordinate with the Lake County Division of Transportation / Council of Mayors, and the Villages of Kildeer and Long Grove in order to integrate plans and harmonize efforts to increase pedestrian and bicyclist safety along and across Illinois Route 22 and to ensure safe and convenient access to the residential areas, recreational sites and facilities, schools, and planned bikeways along and near the project corridor.

Policy: All highway reconstruction projects must be consistent with the officially adopted regional transportation plan. Therefore, please be aware of the following strategic guidance.

The adopted *GO TO 2040 Regional Comprehensive Plan* (posted at <http://www.cmap.illinois.gov/2040/download-the-full-plan>) includes the following recommendations:

[Improvements to the bicycle and pedestrian system] can include sidewalks and other pedestrian facilities, off-street bicycle or multiuse paths, on-street facilities, or other efforts to provide accommodation for non-motorized transportation. Both bicycling and pedestrian travel are important

² To view the complete memo, click on this link: <http://safety.fhwa.dot.gov/policy/memo071008.htm>

components of an integrated, intermodal transportation system. GO TO 2040 supports improving the bicycle and pedestrian environment through projects such as these. The plan also supports policy-based efforts to improve the bicycle and pedestrian systems, such as the use of Complete Streets principles to accommodate non-motorized travel in roadway design (p 272).

A good walking and bicycling environment is essential for our region. Barriers to pedestrians, bicyclists, and people with disabilities can discourage mobility, require expensive auto trips, or even prevent trips. GO TO 2040 supports improving conditions for non-motorized transportation. CMAP has played a central role in encouraging local, county, and state implementers to implement pedestrian and bicycle improvements, and these elements are addressed as critical elements of livable communities in GO TO 2040 (p. 358).

Lastly, please be aware that when in an urban area, the recently enacted "Complete Streets" law (Public Act 095-0665) requires that all road reconstruction projects accommodate bicycle and pedestrian modes of travel:

"In or within one mile of an urban area, bicycle and pedestrian ways shall be established in conjunction with the construction, reconstruction, or other change of any State transportation facility."

Please use the enclosed map and this letter to help plan the accommodation of non-motorized traffic along Illinois Route 22 from Quentin Road to Illinois Route 83 in the Villages of Kildeer and Long Grove in Lake County. For this map, planned routes are conceptual. Alignments are approximate.

Thank you very much for the opportunity to provide this information. If you have questions about this information, please contact me at 312-386-8822.

Sincerely,



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Transportation Planner

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