



Municipality of Princeton

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MEMORANDUM

DATE: June 25, 2021

TO: Mayor and Council

FROM: Deanna Stockton, P.E., C.M.E., Municipal Engineer

RE: **WITHERSPOON STREET PHASE 1 (NASSAU STREET TO GREEN STREET) FINAL CONCEPT PLAN FOR APPROVAL**

In February 2020, the Engineering and Planning Departments began a community engagement process to create a master plan for the Witherspoon Street corridor from Nassau Street (New Jersey State Highway 27) to Valley Road. A design charrette was held to gather community thoughts and desires for Witherspoon Street; some of the comments received are available at <https://www.princetonnj.gov/DocumentCenter/View/418/2-2020-Public-Comments-Witherspoon-Meeting-1-PDF>. From February 13, 2020 through June 17, 2021, the Witherspoon Street concept plan has been discussed at thirty meetings per the attached chronology. Due to the Covid-19 pandemic and a funding deadline, in September 2020, the focus of most of the meetings shifted to Phase 1, which is defined as the section of Witherspoon Street between Nassau Street and Green Street.

In June 2020, Council approved a reconfiguration of the Witherspoon Street traffic movement and roadway usage to accommodate the physical distancing requirements for the reopening of dining and retail activities during the COVID-19 pandemic. Witherspoon Street was made one-way in the northbound direction between Nassau Street and Spring Street. Twenty feet (20') of vehicular space was allocated for loading activities, curbside pickup and through traffic. A majority of the remaining curb space from Nassau Street to Spring Street was reallocated for use by adjacent businesses.

The Engineering Department conducted two surveys in 2020 to understand the user experience of the modified streetscape during the COVID pandemic, and to receive feedback on possible design concepts to make permanent changes to traffic flow and road usage. The public was very positive of the increased dining opportunities and pedestrian spaces. Of five concepts presented in September 2020, the creation of a pedestrian only space – a pedestrian plaza – from Nassau Street to Spring Street was the public favorite. The one-way northbound concept with one service lane loading / parking was a close second choice. Additionally, there are currently, 1201 signatories on a petition (<https://www.change.org/p/princeton-council-make-witherspoon-street-a-pedestrian-and-dining-paradise>) in support of prioritizing pedestrians in the redesign of Witherspoon Street. While a pedestrian-only plaza is an exciting design

concept, we recognize that business owners need to receive and send out deliveries and that we want to entice driving visitors off of Nassau Street into parking garages in order to experience our central business district. We also recognize that these improvements will be in place for the next 35 years, and we are cognizant that many industries (vehicles, deliveries, retail, hospitality, travel, etc.) are in a period of rapid change. We have promoted a concept that maintains northbound traffic from Nassau Street into the central business district and limits parking in the space. McMahon Associates completed traffic studies which described the traffic impacts to making Witherspoon Street one-way, and provide recommended mitigation measures. More information on these studies is available at <https://www.princetonnj.gov/246/Witherspoon-St-Improvement-Project-Nassa>.

As Witherspoon Street intersects with a State Highway (Nassau Street / New Jersey State Highway 27), the New Jersey Department of Transportation (NJDOT) has collaborated with Princeton to support the Covid-related changes to the street. In September 2020, NJDOT began a stakeholder dialogue with Princeton regarding a project to replace the traffic signal at the Witherspoon Street / Nassau Street intersection. The project is a safety improvement project to address pedestrian related deficiencies in the intersection, which predated the Covid-19 pandemic. The current preliminary design includes an exclusive pedestrian phase in the signal timing and bumpouts / curb extensions on the University and town sides of the intersection. Per the December 2020 ordinance adopted by Council, NJDOT has included the one-way northbound operation on Witherspoon Street into their design. In March 2021, Princeton Council adopted a resolution to support the attached preferred design alternative.

In January 2021, Princeton's consultant T&M Associates began to update the December working concept based on the size of delivery vehicles that serve businesses in the area. Consideration was also given to accommodate business requests for on-street parking and emergency vehicle access. This vehicular space of the roadway was increased to accommodate turning movements of trucks at the intersections and emergency vehicle setup space in emergencies. The intent of the design was to balance the needs of road users and adjacent businesses while still providing a pedestrian-focused plan. Midblock crosswalks and curb bumpouts were incorporated in the plan to improve pedestrian safety by shortening the distance between crosswalks and the length of the crosswalk itself. Hybrid / parking service lanes were proposed on both sides of the road to provide some frontage loading and parking access to businesses on each side of the roadway and to minimize jaywalking. The updated plan was presented to Council on May 10, 2021 and we heard that Council felt that this plan was too timid and did not fulfill the vision for a pedestrian-focused streetscape.

Thus, on May 25, 2021, Princeton Council held a special Council meeting to review the working concept. The following list summarizes the Council directives for the Witherspoon Street concept plan:

1. Design for the roadway one-way operation between Nassau Street and Spring Street (but consider how to accommodate a two-way operation);
2. Design for ability to close off the Nassau to Spring block for pedestrian use;
3. Provide parking / loading zones / drop off / garbage service areas;

4. Provide a 20' paved area +/- to include parking / loading / drop off areas and through traffic. The smaller the vehicular space, the better to achieve a pedestrian-prioritized design;
5. Provide green infrastructure; and
6. Maximize remaining right of way area for public pedestrian usage.

Provided below is the Design Teams' response to each directive:

1. Design for the roadway one-way operation between Nassau Street and Spring Street (but consider how to accommodate a two-way operation)

The attached concept plan continues to support the design of a one-way street. The through lane has been reduced in width from 20' to 12'. A 10' wide multipurpose service lane has been established on the western side of the road, which will provide widened areas for setting up emergency vehicles. As illustrated in the attached photos, at least 20 feet of width is needed to accommodate the fire vehicle and its outriggers. The trees, street lights, and a majority of the green infrastructure along the west side of the road are aligned so that, if the service lane was turned into a through traffic lane, fewer built improvements would require removal. In that event, the curb extensions at Nassau, Spring and the midblock crosswalk would be removed to facilitate through traffic. We will coordinate to the best of our ability with NJDOT to ensure that the new traffic signal equipment proposed at the Nassau Street intersection will not be in conflict with this accommodation.

The horizontal placement of the roadway within the right of way has been established to carry the roadway centerline from the two-way traffic section north of Spring Street into the one-way roadway section south of Spring Street. The eastern curb line between Nassau and Spring will not require modification if two through lanes are created. As noted above, only the western curb line will require a change in that event. This horizontal placement does create a layout in which there is slightly more sidewalk width on the west side of the roadway (2' additional) than the east side.

2. Design for ability to close off the Nassau to Spring block for pedestrian use

The intersections at Nassau Street and Spring Street have been reduced from 25' and 23', respectively to approximately 14'. This narrower road section can easily be closed to facilitate pedestrian-only programming of Witherspoon Street between Nassau Street and Spring Street.

In order to convey that this space is pedestrian-focused, the Engineering Department recommends that a single color of pavers be utilized for the roadway and sidewalk areas, rather than a different color for each area previously considered. As the new Nassau Streetscape design guidelines specify a gray concrete in the bluestone color family, we are considering a gray paver tone for Witherspoon Street which will be distinct but complementary.

3. Provide parking / loading zones / drop off / garbage service areas

A 10' wide parking / loading / drop off / garbage service lane has been created along the western edge of the roadway between Nassau and Spring Streets. It is shown on the attached final concept as a multipurpose area that can be used for additional pedestrian space and bicycle parking in addition to the loading areas. Metered on-street parking is not currently programmed for this service lane between Nassau and Spring Streets. If parking is needed in the future, consideration will be need to be given regarding the type of meter (individual versus paystation) and the time limits. The Engineering Department is currently working on a wayfinding signage package to direct visitors to the Spring Street parking garage. The garage parking is advantageous because it is more cost-effective for longer stays but it also includes free parking for the first 30 minutes; short term visits downtown can potentially be free if the Spring Street garage is utilized.

Between Spring Street and Paul Robeson Place, on-street metered parking spaces are included on both sides of Witherspoon Street. At the Arts Council, the drop off / bus stop zone is being maintained.

Additional ADA parking spaces are being considered at the Tulane Yard parking lot in response to Council and community feedback. Due to the need for a loading area next to the parking space, we cannot accommodate the ADA space in a parallel parking position on Witherspoon Street.

4. Provide a 20' paved area +/- to include parking / loading / drop off areas and through traffic. The smaller the vehicular space, the better to achieve a pedestrian-prioritized design

The attached concept plan provides for a maximum vehicular space of 22' where a 10' wide service lane is provided adjacent to the 12' wide through lane. Currently, there is 20' of vehicular space on Witherspoon Street and there is very little clearance between larger service vehicles. Photographs of two side by side Public Works vehicles are attached, and illustrate that a 22' wide space should be provided. Photographs of two fire vehicles on the 20' wide Witherspoon Street vehicular space are also attached to illustrate the tightness of a road this size.

5. Provide green infrastructure

Witherspoon Street Phase 1 is close to being 100 percent impervious. Municipal and state stormwater regulations do not require that we provide stormwater management in this project because we are not creating more impervious surface. However, as this is the uppermost reach of the Harry's Brook watershed, the Engineering Department and T&M Associates are endeavoring to install green infrastructure to provide a landscaped corridor along the roadway, and to detain and clean the stormwater generated on Witherspoon Street. Street trees will be incorporated into this linear landscaping along the roadway to provide the scenic gateway and framing of the historic FitzRandolph Gate which is located in

front of Nassau Hall at the southern side of the Witherspoon Street / Nassau Street intersection.

6. Maximize remaining right of way area for public pedestrian usage

The attached concept plan provides for pedestrian zones ranging in size from 14' to 18'. The widened sidewalks provide adequate space to accommodate large dining tables and a 6' pedestrian through zone. Conversion of a portion of the service lane also provides an additional 10' feet of pedestrian space. At the intersection bumpouts, the pedestrian space increases up to almost 30'. The Engineering Department has met twice with the Arts Council to discuss potential public art installations for the pedestrian space. We look forward to collaborating with the Arts Council as well as the Public Art Commission to introduce interesting art into this reimagined space.

The concept plan and streetscape elevations will be presented and detailed at the June 28, 2021 Council meeting. If you have any questions, please contact me.

Attachments

Cc: Bernard Hvozdovic, Administrator
Delores Williams, Clerk
Michael La Place, Planner
Justin Lesko, Senior Planner,
Dan Van Mater, Director of Public Works
Elizabeth Kim, Historic Preservation Officer
Ian Baker, E.I.T., Construction Engineer
T&M Associates