CONSULTING SERVICES PROPOSAL FOR FEASIBILITY STUDY OF IMPROVEMENTS ON JOHNSON STREET FROM THE EAST SIDE OF I-95 TO NORTH DIXIE HIGHWAY

Prepared for:

City of Hollywood

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Prepared by:



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HOLL – 038 Complete Streets Johnson Street

Dear Luis,

HBC Engineering Company (HBC) is pleased to offer our consulting services to the City of Hollywood for improvements on portions of Johnson Street from North 30th Road to North Dixie Highway.

As part of this Feasibility Study, HBC will aid the City of Hollywood (CITY) to define a reasonable design alternative to accommodate new sidewalks, new lighting, two-lane two-way roadway with a center turn lane, transit bus stops, and new drainage system within the existing 40' Right of Way (ROW) and/or as requested by the CITY.

This project is funded under the Broward County Mobility Advancement Program – MAP. Specifically, the HOLL-38 Complete Streets Interlocal Agreement ILA between the City of Hollywood and Broward County. The scope and conditions of the ILA are included in and are part of this proposal.

SCOPE OF SERVICES

A. OBJECTIVE/PURPOSE

The primary objective of the feasibility study is for HBC to evaluate a selected alternative for reconstructing Johnston Street from North 30th Road to North Dixie Highway to



accommodate new interconnected sidewalk on one side of the street, new lighting, fully reconstructed two-lane two-way roadway with a center turn lane, new transit bus stops, and new drainage system within the existing 40' Right of Way (ROW) and/or as requested by the CITY.



Figure 1- PROJECT LOCATION MAP

HBC will make use of data collected during the study, prior available data, other studies within the study area, and/or record as built drawings to the extent available for use.

Study activities are organized as follows:

- Task 1 Limited Topographic Survey
- Task 2 Kickoff Meeting and Data Collection
- Task 3 Development of Conceptual Design Alternative
- Task 4 Traffic Analysis of Conceptual Design Alternative
- Task 5 Public Involvement Coordination
- Task 6 Project Management and Meetings



This multi-use characteristic of the corridor requires a multidisciplinary study approach that considered all competing interests (mobility, safety, livability, constructability, and context sensitivity) for the proposed modifications.

B. PROJECT SCOPE

The following sections present the scope of work and tasks required to accomplish the objectives of this study.

Task 1 - Limited Topographic Survey

HBC Team Surveyor will perform a limited topographic survey of the corridor to identify existing roadway features, elevations, drainage features, and all above ground and underground utility features.

Task 2 – Kickoff Meeting and Data Collection

a) Kickoff Meeting: HBC will set up and attend one (1) kick-off meeting with CITY officials and representatives of the CITY to discuss and define the requirements to be followed for this study. HBC will take this opportunity to introduce its Team, establish communication and project protocols, confirm the proposal's scope of work, review the schedule, and discuss the proposed project approach.

The kick-off meeting will be attended via teleconference by HBC's Project Manager and additional HBC representatives (if required) for up to one (1) hour. HBC will prepare a meeting agenda and will issue meeting minutes to document discussion points and action items.

Existing Conditions Analysis: HBC will collect existing record as-built plans and/or studies for the corridor and side streets as available and conduct a desktop review to understand the project area. Following the desktop review, we will visit the project to analyze existing conditions, verify desktop data, and obtain additional data as required to identify and verify current deficiencies along the corridor as they relate to the project objectives. During our site visits, we will photographically document existing conditions, roadway geometrics, typical section elements, signalization, drainage contribution area, traffic operations and safety conditions, evident drainage ponding conditions, and topography and surrounding conditions that may influence the study.



Task 3 - Traffic Analysis of Conceptual Design Alternatives

- a) Conceptual Typical Sections: HBC will develop four conceptual typical sections for the project that address the transportation needs and context for the corridor; new sidewalk, drainage system, bus stops, and street lighting. HBC in coordination with the CITY will conduct a fatal flaw assessment of the four typical sections based on constructability, right-of-way limitations, and other qualitative assessments and select two viable alternatives for further development as described in Item "b" below. All typical section considered will be presented in graphical format in the final report.
- b) Comparative Typical Sections Evaluation: HBC will establish evaluation criteria at the beginning of the Project, which must be agreed upon with the CITY before use in the comparative evaluation of typical section alternatives. After developing the viable alternatives, analyzing alternatives, and estimating costs, HBC will prepare a matrix which compares the impacts, performance, and costs of the two viable typical section alternatives. The matrix will include the performance of the No-Build Alternative as the baseline for comparison. The highest ranked alternative (Selected Alternative) will be carried forward for further development as part of the study.
- c) Conceptual Alternative Layout: HBC will perform geometric design of the selected alternative using the established project design controls and criteria. HBC will also use project traffic data and results of the traffic analysis to design appropriate roadway elements based on the project purpose and need. The design will establish both preliminary vertical profile and horizontal alignments of the mainline and consider environmental constraints, physical constraints, context sensitive solutions for the selected alternative.
- d) Maintenance of Traffic: HBC will evaluate one selected alternative for constructability and the ability to maintain traffic during construction.
- e) Lighting: HBC will evaluate the need for lighting in accordance with applicable manuals, guidelines, standards, and current design memorandums. HBC will include the estimated cost for lighting in the construction cost estimate for the project.



- f) Drainage Analysis: HBC will perform drainage analysis by delineating the basin boundaries by using existing survey data and field observations. We will analyze and determine high water elevations in each basin and use the information to establish the preliminary roadway profile. HBC will evaluate the need for drainage in accordance with applicable manuals, guidelines, standards, and current design memorandums.
- g) HBC will develop an engineer's cost estimate for the selected alternative including maintenance of traffic costs.

Task 4 - Development of Two Conceptual Design Alternatives

- a) Traffic Forecast: HBC will prepare a forecast and analysis methodology which will be submitted to the CITY for approval prior to beginning any analysis. The methodology will state the type of documentation, project study area to be analyzed, and method and assumptions that will be used to analyze existing and future traffic conditions.
- b) Traffic Counts: HBC will collect 4-hour vehicle turning movement counts for peak hours at all signalized intersections within the project limits and 72-hour traffic machine counts at two locations along the corridor.
- c) Traffic Operational Analysis: Using the traffic volume data collected, HBC will evaluate the operational performance of the signalized intersection using Synchro Software to identify deficiencies related to the purpose and need of the project for the two conceptual alternatives and the no build. The analysis will include bicycle, pedestrian, and vehicular operations, as appropriate. The analysis will be conducted for the most critical peak periods of traffic volume. The periods will be determined after an analysis of the 72-hour traffic volume patterns in the corridor to include:
 - a. Weekday AM Peak
 - b. Weekday PM Peak

The analysis will be performed for the following scenarios:

- a. 2022 Existing conditions
- b. 2025 Opening year no-build
- c. 2045 Design year no-build



- d. 2025 Opening year build Selected Alternative
- e. 2045 Design year build Selected Alternative

Safety Analysis: Using historical crash data and/or collision diagrams obtained through Signal 4 Analytics and previously developed crash modification factors from the Highway Safety Manual or the FHWA CMF Clearinghouse, the HBC will perform a qualitative safety evaluation for the build alternative in comparison to the no-build scenario. The comparison will also be presented in the traffic analysis memo.

Task 5 - Public Involvement Coordination

- a) Public Involvement Plan: HBC will research and coordinate as necessary to complete the public involvement plan as coordinated and approved by the CITY.
- b) Notifications: HBC will prepare a template notification letter for elected officials, private property owners, and tenants. This task includes the preparation of a draft notification letter for review and approval by the CITY for two public workshops. Notification letters will be mailed by the CITY.
- c) Rendering: HBC will prepare a rendered roll plot and typical section showing the proposed roadway features, geometry, right of way line, major utilities, drainage, lighting, and driveways at an appropriate scale for use at public information for the selected alternative.
- d) PowerPoint Presentation: HBC will prepare a PowerPoint presentation for use at the public workshops.
- e) Public Meeting Preparations: HBC will prepare materials for one public meeting. Activities may include newspaper display ad template, meeting exhibits, sign-in sheet, comment form, fact sheet, and site selection (cost of site to be paid by the CITY).
- f) Public Meeting Attendance/Follow-up: This Task includes set-up, attendance, and follow-up after one public meeting. HBC will prepare a summary report including a copy of all slides, boards, handouts, completed sign-in sheets, and completed comment forms for two public meeting.



g) Other Agency Meetings: Task includes attendance at up to four agencies/public officials/stakeholder meetings.

Task 6 - Project Management and Meetings

- a) Project Management: Task includes project management efforts for complete setup and maintenance of files, developing monthly progress reports, schedule updates, and work effort to develop and execute agreements with the CITY. A project schedule with milestones and deliverables will be submitted to the CITY within 20 days of the notice to proceed. This task assumes total 8-month duration for the study. Should conditions arise that make the study extend beyond this period, HBC shall bill additional hours for project management at time and material as previously submitted and approved by the CITY.
- b) Meetings: HBC Project Manager will attend a maximum of four meeting with CITY Staff. Decisions and agreements made during the meetings will be documented by the HBC and retained in the project files for future reference.

EXCEPTION AND ASSUMPTIONS

- a) HBC estimates a period of ten business days to receive feedback from the CITY after deliverables have been turned in. This period will be considered for scheduling the tasks in the project.
- b) Coordination activities between the HBC and the CITY staff do not require public notification.
- c) Assumes one draft submittal and final submittal of the following documents:
 - a. Traffic Analysis Memo
 - b. Conceptual Typical Sections
 - c. Notices and Fact Sheets
 - e. Final Report
- d) Submittals are limited to only the above documents and all comments are to be addressed with final submittal.
- e) Payment for services shall be billed month and based on progress reported in monthly progress report.
- f) Scope is limited to only those items specifically stated in this proposal. HBC will promptly notify CITY's PM of any work out of scope and only proceed as approved in writing.



FEES

TASK	AMOUNT
Task 1	\$ 32,044.86
Task 2	\$ 2,500.00
Task 3	\$ 79,550.14
Task 4	\$ 11,000.00
Task 5	\$ 8,200.00
Task 6	\$ 16,700.00
Total Proposal Amount	\$ 149,995.00

Thank you very much for the opportunity to serve the City of Hollywood. HBC's main goal is to make sure that our proposal meets or exceeds the City of Hollywood's expectations and needs. Should you have any questions, please feel free to contact me via email or phone.

Sincerely

Adebayo Coker, PE

President
HBC Engineering Company