

16. a

HARRIS COUNTY

Public Infrastructure Department
Architecture & Engineering Division

1001 Preston, 7th Floor
Houston, Texas 77002
(713) 755-5370

December 5, 2014

Vote of the Court:

Honorable County Judge
& Commissioners

Attention: Commissioner R. Jack Cagle

	Yes	No	Abstain
Judge Emmett	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Lee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Morman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Radack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Cagle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBJECT: Recommendation by the Director of Architecture and Engineering that Commissioners' Court Authorize the Submission of a Grant Application to the Houston-Galveston Area Council for Construction Funding for Intersection Capacity Improvements at Various Locations, Precinct 4

Dear Court Members:

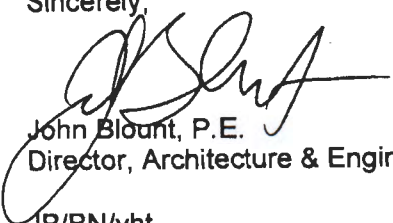
The Architecture and Engineering Division respectfully requests that Commissioners' Court authorize submission of a grant application to the Houston-Galveston Area Council for potential inclusion of funding in the Transportation Improvement Program (TIP) in the amount of \$5,980,375.00 for the construction of Intersection Capacity Improvements at Various Locations in Precinct 4. The purpose of the TIP program is to distribute federal funding to selected transportation projects of regional priority.

If funds are awarded, Precinct 4 would be required to commit \$2,451,953.00 for related expenses as follows:

Engineering Cost:	\$ 1,194,359.00
20% Local Matching Funds:	\$ 1,257,594.00
Total:	\$ 2,451,953.00

Your favorable consideration of the above request is sincerely appreciated.

Sincerely,



John Blount, P.E.
Director, Architecture & Engineering

Presented to Commissioners' Court

DEC 16 2014

APPROVE CLM
Recorded Vol. _____ Page _____

JB/BN/vht
Attachments

- cc: Commissioner R. Jack Cagle, Pct. 4
- Cheryl Guenther, Pct. 4
- Pamela Rocchi, Pct. 4
- Dennis Johnston, Pct. 4
- Bill Lee, Pct. 4
- Cindy Mayfield, Pct. 4
- Arthur L. Storey, Jr., HCPID

- Janice Maaskant, HCPID *JMM*
- Mark Ables, HCPID
- Reid Mrsny, HCPID
- Loyd Smith, HCPID
- Ron Jenson, HCPID
- Nora Martinez, HCPID
- Central File

LANO copy

Adv copy

US- org letter + order copy backup

Eng. copy letter + order copy backup

Budget of (lan) copy
j:\agenda.bid processing\court\2014\budget mgmt agenda - 12-16-14 hgac grant -intersectionn .doc

RM copy

Grant

12-16-14



HARRIS COUNTY, TEXAS

Office of Budget Management 1310 Prairie, Suite 530 Houston, Texas 77002 (713) 755-3301

Grants Coordination Section - Conveyance Form Application Award

Department Name / Number	DUNs	Grant Title
PUBLIC INFRASTRUCTURE - 030	072206378	Intersection Capacity Improvements '15
Funding Source: U.S. Department of Transportation: CFDA#	Grant Agency: Houston-Galveston Area Council	
Program Year: 1 st	Program Ending:	
Grant Begin Date: 06/01/2015	Grant End Date: 12/31/2017	
Grant Org. Key:	If applicable, Prior Year Org. Key: N/A	

Grant Description:

Funded by the U.S. Department of Transportation via the Texas Department of Transportation via the Houston-Galveston Area Council, the Transportation Improvement Program provides grant funding for roadway, transit, bicycle and pedestrian, livable centers, and air quality projects.

	Total Budget	Grant Funded	County Funded
Salary & Benefits	\$0.00	\$0.00	\$0.00
Non-Labor	\$8,432,328.00	\$5,980,375.00	\$2,451,953.00
Sub Tot. Incremental Cost	\$8,432,328.00	\$5,980,375.00	\$2,451,953.00
Indirect Cost	\$0.00	\$0.00	\$0.00
TOTALS	\$8,432,328.00	\$5,980,375.00	\$2,451,953.00

Full Time Equivalent Positions

Date Guidelines are Available

% of Positions Paid by Grant

Grant Submittal Deadline Date

Grant Discussion:

The Public Infrastructure Department, in coordination with Precinct 4, is applying for grant funding of \$5,980,375 under H-GAC's 2015 Transportation Improvement Program for the Intersection Capacity Improvements project. Grant funds would be used for construction of improvements at various intersections located within Precinct 4. The goal of the project is to improve traffic flow and reduce congestion at 38 signalized intersections. Precinct 4 would provide a match of \$2,451,953, consisting of \$1,257,594 in required match plus an additional \$1,194,359 in discretionary funds for engineering costs. Note: This grant would be administered by TxDOT, and the County would not actually receive any grant funds.

County Funded Cost Projection

Year	Required	Discretionary
2016	628,797.00	597,179.50
2017	628,797.00	597,179.50
2018	-	-
2019	-	-
2020	-	-

Completed by: Brian Schmitz Schmitz, Brian

Date: 12/10/14

Reviewed by: [Signature]

Date: 12/10/14

ORDER

STATE OF TEXAS

COUNTY OF HARRIS

On this, the 16th day of December, 2014, the Commissioners' Court of Harris County, Texas, sitting as the governing body of Harris County, upon motion of Commissioner Cagle, seconded by Commissioner Morman, duly put and unanimously carried,

IT IS ORDERED that County Judge Ed Emmett or his designee be hereby authorized to approve, and on behalf of Harris County, Texas, to apply for, the following grant from the U.S. Department of Transportation via the Texas Department of Transportation via the Houston-Galveston Area Council:

**INTERSECTION CAPACITY IMPROVEMENTS '15 – PUBLIC
INFRASTRUCTURE DEPARTMENT**

Grant Funds: \$5,980,375

Cash Match: \$2,451,953

Estimated Grant Period: June 1, 2015 – December 31, 2017

Vote of the Court:

	Yes	No	Abstain
Judge Emmett	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Lee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Morman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Radack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Cagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Presented to Commissioners' Court

DEC 16 2014

APPROVE clm

Recorded Vol. _____ Page _____



R. Jack Cagle, Commissioner
Harris County Precinct 4
1001 Preston, Suite 950
Houston, Texas 77002
713.755.6444
713.755.8801 Fax
Website: www.hcp4.net

MEMORANDUM

TO: Arthur L. Storey, P.E.
Harris County Public Infrastructure Department
Architecture and Engineering Division (HCPID-AED)
Attn: Janice Maaskant, Project Coordinator

FROM: R. Jack Cagle, Commissioner
Precinct Four

DATE: November 18, 2014

SUBJECT: Intersection Capacity Improvements
Beltway 8 West Corridor – 12 Intersections
SH 249 Corridor – 5 Intersections
FM 529 Corridor – 7 Intersections
SH 6/FM 1960 Corridor – 12 Intersections
Spring Cypress Road Corridor
Referral: 140728.14

Precinct 4 and the Harris County Public Infrastructure Department-Architecture and Engineering Division/Traffic Support Services (HCPID-TTS) identified corridor improvements that will provide an improved level of service along the Beltway 8 West Corridor, SH 249 Corridor, FM 529 Corridor, SH 6/FM 1960 Corridor. A total of 37 intersection improvements, along the corridors described will be upgraded to address capacity needs. Therefore, we would appreciate your office obtaining Commissioner's Court approval to pursue the Houston-Galveston Area Council call for projects application process.

The Intersection Capacity Improvements qualify for federal and state funding. We recognize Precinct 4 expenses include engineering design and 20 percent construction costs (representing a total estimated construction cost of \$1,257,594 and approximately \$1,194,359 for engineering design) should the project be selected.

Additional information regarding this project is noted on the enclosed Project Scope. Funding information can be obtained from Esmeralda Rodriguez, Capital Improvement Projects Financial Coordinator at (281) 893-3726 or via email at erodriguez@hcp4.net.

Thank you for your assistance. Please contact Pamela Rocchi, Director, Capital Improvement Projects Division, at (281) 893-3726, should you have any questions.

RJC/PJR/mm
enclosure

cc: C. Guenther, Chief of Staff
G. Love, Superintendent
D. Dean, Superintendent
E. Rodriguez, CIP Financial Coordinator
B. Lee, General Superintendent
C. Mayfield, Director, Administrative Services
F. Jebousek, Superintendent
K. Brown, Fiscal Services Coordinator

PROJECT SCOPE

PROJECT NAME: Intersection Capacity Improvements

LOCATION: Key Map Pages: 371V, 371T, 371S, 370V, 370U, 370T, 370S, 370W, 369Z, 409H, 410J, 410N, 411B, 371W, 369C, 329T, 408R, 408Q, 408P, 407Q, 407P, 406R, 408S, 408F, 369W, 369T, 369U, 370D, 331W, 332L, 333K, 335S, 336V

ROAD LOG NO.s: 4808508, 4316908, 0400316, 0409106, 4374718, 0428009, 4186210, 4250706, 0493636, 4670601, 4902712, 0400319, 0467002, 4823627, 4219317, 4219321, 4208605, 4244816, 4578401, 4441206, 4498501, 3053405, 4W03401, 4W27002, 0429016, 0493631, 4250706, 3198109, 4123201, 4016204, 4316905, 4387302, 1W30101, 1209712, 1W82001, 4198603

DATE: November 18, 2014

FUNDING: Bond Referendum/Mobility Funds
Federal and State Funds

SCOPE: Proposed improvements include the design and construction of (37) intersection improvements at the following locations:

Beltway 8 West Corridor – 12 Intersections [\$2,551,563]

- a. Local Engineering fees \$332,813
- b. Local Construction cost \$281,250
- c. State cost \$162,500
- d. Federal cost \$1,775,000

Beltway 8 at: T. C. Jester Boulevard, Veterans Memorial Drive, Antoine Drive, Bammel N. Houston Road, Hollister Road, SH 249, Fairbanks N. Houston Road, N. Gessner Road (North Side), N. Gessner Road (South Side), Fallbrook Drive, West Road, Philippine Street, W. Gulf Bank Road

SH 249 Corridor – 5 Intersections [\$1,221,875]

- a. Local Engineering fees \$159,375
- b. Local Construction cost \$187,500
- c. State cost \$25,000
- d. Federal cost \$850,000

SH 249 at: Antoine Drive, N. Houston Rosslyn Road, Cypresswood Drive, Louetta Road (East Side), Louetta Road (West Side), Jones Road including Spring Cypress Road from SH 249 to Hufsmith Kohrville Road.

SH 249 at Spring Cypress Road between SH 249 and Hufsmith-Kohrville Road [\$912,969]

- a. Local Engineering fees \$209,983
- b. Local Construction cost \$182,594
- c. State cost \$0
- d. Federal cost \$730,375

FM 529 Corridor – 7 Intersections [\$1,150,000]

- a. Local Engineering fees \$150,000
- b. Local Construction cost \$150,000
- c. State cost \$50,000
- d. Federal cost \$800,000

FM 529 at: N. Eldridge Parkway, Jackrabbit Road, Huffmeister Road, Addicks Satsuma Road, Queenston Boulevard, Barker Cypress Road, Greenhouse Road

SH 6/FM 1960 Corridor – 12 Intersections [\$2,623,438]

- a. Local Engineering fees \$342,188
- b. Local Construction cost \$456,250
- c. State cost \$0
- d. Federal cost \$1,825,000

SH 6/FM 1960 at: W. Little York Road, West Road, Fallbrook Drive, Jones Road, Bobcat Road, Champion Forest, Veterans Memorial Drive/Stuebner Airline Road, Imperial Valley Drive, Humble Westfield Road/Treaschwig Road, Aldine Westfield Road, Kenswick Drive, Woodland Hills Drive

NOTE: 11.17.14 TxDOT has already evaluated the North Eldridge Parkway at Hwy 6/FM 1960 intersection and prepared a schematic design. Therefore, HCPID-TTS will continue to communicate with TxDOT to ensure TxDOT advances the work as planned.

First Name
Pamela

Last Name
Rocchi

Job Title
Director of Capital Improvement Projects

Phone Number
281-893-2736

Email Address
procchi@hcp4.net

Project Title
Intersection Capacity Improvements at various locations in Harris County

Sponsor
Harris County

Has the project been submitted in a prior call?
 No
 Yes

Is the application requesting a minimum of \$150,000?
 No
 Yes

Is this a joint application?
 No
 Yes

Does the proposed project scope qualify for use of a categorical exclusion (CE) and no unusual circumstances exist which would require additional environmental investigation?
 No
 Yes

Is the proposed project exempt from transportation conformity or regional emissions analysis?
 No
 Yes

Preliminary Questions

Project Narrative

Describe the primary problems to be addressed by the project (Project Need):

Northwest Harris County is experiencing increased development and population due to the region's vibrant economy. Increasing traffic as a result of this growth is causing a degradation of traffic operations on Harris County roadways. The problem is especially acute at major intersections, where additional capacity for turning movements would provide relief from localized congestion. The locations identified for these improvements have been identified over the years by observation and citizen feedback. They are considered "hot spots" in Harris County Precinct 4 which would benefit greatly by the improvements.

Describe the primary outcomes to be achieved by the project (Project Purpose):

The proposed geometric improvements at intersections will increase overall intersection capacity as well as alleviate delay on bottleneck approaches. This in turn will have a net positive effect on the overall roadway network by lessening choke points.

Describe the proposed improvement (Facility/Limits/Description):

The improvements are proposed at 38 signalized intersections in Precinct 4, the majority of which intersect TxDOT-owned and maintained roadways. They consist of; adding new left turn and right turn lanes, extending existing left turn lanes, addition of auxiliary lanes, and access management via installation of a raised median.

Describe any alternatives to the proposed improvement which have been considered or will be evaluated:

At signalized intersections, traffic signal timing has been adjusted to optimize the efficiency with the existing geometry. No further improvement can be achieved without the proposed geometric modifications.

Please describe any opportunities for staged construction of the project:

The construction could be staged by grouping locations by corridor or geographical location.

Project Development/Readiness

Has a scoping meeting been conducted with TxDOT or FTA?

<input checked="" type="checkbox"/>	No
<input type="checkbox"/>	Yes (Please attach a completed scoping checklist or meeting summary)

What level of environmental documentation is required for the proposed project?

<input checked="" type="checkbox"/>	Categorical Exclusion (CE)
<input type="checkbox"/>	Environmental Assessment (EA)
<input type="checkbox"/>	Environmental Impact Statement (EIS)

Will any permits from the Army Corps of Engineers, US Coast Guard, railroad, etc. be required before the project can be constructed?

<input checked="" type="checkbox"/>	No
<input type="checkbox"/>	Yes - Please describe the permits needed and the timeline anticipated to acquire them:

Traffic signal timing has been optimized at all of the locations to its maximum extent. No additional benefit can be achieved without geometric improvements.

Please provide an estimated completion date for the 30% Design/PS&E milestone:

The 30% Design should be completed within 90 days of notice to proceed.

Will additional property, or interest in property (easement), be required to implement the project?

<input checked="" type="checkbox"/>	No
<input type="checkbox"/>	Yes
<input type="checkbox"/>	How many parcels or portions thereof remain to be acquired?

Please provide an estimated date for the completion of property acquisition necessary for construction activities to begin:

Has a utility evaluation been completed for the project?

<input checked="" type="checkbox"/>	No
<input type="checkbox"/>	Yes

Please describe the process for utility adjustments/relocations (entity responsible, financial responsibility, etc.):

Preliminary Questions

Will the project improve or significantly affect infrastructure owned or operated by another agency?

No

Yes - Please describe the affect and supply evidence of support from the affected agency:

Several of the proposed improvements are at County road intersections with TxDOT highways. Improving the county-maintained approaches to these intersections will reduce overall delay for the entire intersection. Additionally, several of the proposed improvements are located on TxDOT facilities. Discussions with TxDOT staff have been positive and in support of any improvement to their infrastructure.

Please describe previous and upcoming public involvement activities related to the proposed project.

No public involvement activities have occurred. Any future public involvement will comply with TxDOT policies and procedures.

Please provide any additional project development/readiness information relevant to the proposed project.

No additional right of way is required.

Map/Location

Please provide a clear and concise GIS coverage or PDF map of the proposed project (*.mpk ESRI Map Package file preferred).

Attachment

Benefit /Cost Methodology – Roadway/Mobility (Non-ITS)

Please select the most appropriate Benefits-Cost Analysis (select ONE):	
	Safety - Accident Cost Savings
X	Congestion - Travel Time Savings
	State of Good Repair - Operating/Life-Cycle Cost Savings

Please provide the completed spreadsheet worksheet and narrative explanation of analyses used:
 Attachments

Planning Factors - Roadway/Mobility (Non-ITS)

Regional Impact

20 pts - Will the project improve a NHS/Principal Arterial or a designated evacuation route?:	
X	No (0 pts)
	Designated evacuation route (10 pts)
	NHS/Principal Arterial (20 pts)

10 pts - Will the project improve a designated Heavy Cargo Route?:	
X	No
	Yes - Please explain:

10 pts - Will the project improve a roadway on which fixed route transit service is being provided or otherwise used by other transit services outside of a fixed route service area?:	
X	No
	Yes - Please explain:

Design/Corridor Mobility

10 pts - Does project include construction of raised medians, innovative intersections (e.g. roundabout, diverging diamond, single point urban interchange, etc), or other significant safety/access management technique?	
	No
X	Yes - Please explain:
Raised medians will be installed at certain locations to provide increased traffic flow and safety.	

10 pts - Does project include Ped/Bike accommodations that meet or exceed AASHTO standards?	
X	No
	Yes - Please explain:

10 pts - Does project include a significant ITS or other integrated technology component to increase facility efficiency and reliability?	
X	No

	Yes - Please explain:

Community

10 pts - Is project a recommendation in a Regional or local plan/study?

<input checked="" type="checkbox"/>	No
-------------------------------------	----

	Yes - Please explain:
--	-----------------------

--	--

Please attach or provide a link to the plan/study:

Link/Attachment

10 pts - Does project provide needed connection or capacity identified in an adopted Thoroughfare Plan?

	No
--	----

<input checked="" type="checkbox"/>	Yes - Please explain:
-------------------------------------	-----------------------

All impacted facilities are on the 2013 major thoroughfare plan.	
--	--

Precinct 4 Intersection Capacity Improvements - TIP Application

