

**COUNTY COUNCIL OF GOVERNMENTS (COG)
CACHE TECHNICAL ADVISORY COMMITTEE (CTAC)**

PROJECT INFORMATION

2018-5: 3100 North, Hyde Park City, new road construction and right-of-way purchase

FINAL CTAC SCORING RECOMMENDATION

Congestion Score	Advance Corridor Preservation Score	Safety Score	Final CTAC Scoring Criteria Score
15 Possible	9 Possible	15 Possible	39 Possible
15	0	0	15

INITIAL APPLICATION/PLAN REVIEW FINDINGS

Technical Review for CCCOG Applications: This review has been provided by the CMPO, County staff, and consulting engineers (CRS & JUB Engineers) to determine the eligibility and outline technical considerations for each project. All reviews are done to maintain compliance with the Local Transportation Funds Program Manual and best engineering and transportation practices.

Initial application/plan review determination: Project is not eligible as submitted.

Initial other findings, observations and technical considerations:

- Submitted design is missing significant information that should be included for a 90% project design
- Not enough plan information is available to understand this project for plan set review.

REQUEST FOR ADDITIONAL INFORMATION REVIEW

Applicants were given an opportunity to provide additional information in response to the initial review findings.

Subsequent staff review determination: Substantial plan-set information was turned in after the application deadline.

- Third party consulting engineer review of the plan set (submitted after CTAC review) has not been completed. Original plans were too incomplete for meaningful review.

Final Project Eligibility Review

	YES	NO	N/A
Regionally Significant Transportation Facility Arterial, Collector, or Logan-Cache Airport	X		
Spot Improvement (\$200,000 Limit)			X
Rural Set Aside (Outside MPO Boundaries)			X
Included within the CMPO Transportation Plan	X		
Multi-Jurisdictional Letters of Support	X		
Pavement Design New Road or full depth reconstruction	X		
90% Design for Construction Projects	X		
30% Design for Right-of-Way Projects			X
Detailed Cost Estimate Bids, Opinion of Probable Cost, non-COG betterments	X		



CACHE • LANDMARK
ENGINEERS • SURVEYORS • PLANNERS

August 7, 2018

Jeff Gilbert /Jim Gass
CMPO
Cache County Administration Building
179 N Main Street, Suite 305
Logan, UT 84321

RE: Hyde Park 3100 North 400 East to 1600 East COG Application Review Response

Jeff,

This letter answers and responds to questions raised during the review of Hyde Park's 3100 North 400 East to 1600 East COG Application. The questions asked by the reviewing Engineer are shown in italics. The responses and clarifications are listed below each question.

Additional Findings and Technical Considerations:

- 1) *Submitted design is missing significant information that should be included for a 90% project design.*

Response: The plans have been updated to reflect a 90% design.

- 2) *Not enough plan information is available to understand this project for plan set review.*

Response: The plans have been updated to 90% design to show the proposed project and required information for the proposed project.

90% Comments:

1. *The plans provided are not to a 90% level.*

Response: The plans have been updated to reflect a 90% design.

2. *Missing roadway plan & profile sheets, storm drain profiles, striping plan sheets, and erosion control plans. The information on these sheets is needed to understand the roadway improvements better.*

Response: The plans have been updated to reflect a 90% design. The plans include all the required sheets. The erosion control plans will be completed by the contractor during construction.

3. *What material QC/QA testing frequency and requirements will be followed for construction? Utah APWA or other?*

Response: The QC/QA plan will follow APWA and City standards.

4. *No specifications or measurement & payment documentation has been provided.*

Response: The project specifications will be APWA standards supplemented with Hyde Park Public Work Standards. The measurement & payment items are listed in the OPC.

5. *Label all streets on the drawings to help orient better.*

Response: The plans have been updated labeling the existing streets.

6. *How is the roadside drainage being addressed?*

Response: The drainage on the south side of the road will be handled with new Curb and Gutter. The north side will be handled by a drainage swale. The updated plans show the proposed drainage improvements.

7. *Has environmental permitting been completed, specifically to deal with canal crossings and/ or any potential wetlands?*

Response: No environmental permits are required. There are no potential wetlands within the project limits.

8. *Have the canal crossings been coordinated with the canal companies?*

Response: Yes, the canal companies have been contacted and the proposed plans reflect the requirements of the canal company. An encroachment permit with the canal company will be finalized once COG funding for the project has been approved.

9. *Typical Sections: what type of material is needed for fill material?*

Response: The road is designed to use granular borrow for fill material except outside of pavement sections, which native embankment material will be used.

10. *Typical Sections: Need to clarify what the project will do from the edge of asphalt to the sidewalk, and on the shoulder. Is a drainage swale to be placed? On callouts for items to be constructed in the future by others, label as such. As shown currently, it appears as if the contractor is to do all the work items.*

a. *Suggested to only show improvements that will be constructed now. In the dimensions on the top labeled as "by Future Developer", add what will be completed in the future. Example C & G, sidewalk and park strip to be constructed by future developer.*

Response: The typical section has been updated to reflect and clarify the proposed road improvements for this project and the reference to future developed areas have been removed from the section.

11. *Right-of-Way Plan:*

a. *The only information shown is width of R/W and it is not adequate for purchasing of R/W.*

Response: The R/W plans have been updated to show the dimensions of the existing R/W and proposed R/W. Tables of the parcel, owner, and square footage are provided on each page.

12. Existing topographic information is not shown.

Response: The updated plans have the existing and proposed grades on the roadway plan and profile sheets.

13. Utility Plans

- a. Show and label existing utilities (water, sewer, gas, electric, cable, fiber, storm drain, etc.). This includes at side streets.
- b. Sewer lines are shown with curves. Per state code sewer lines should be straight between manholes. Sewer profiles are needed.
- c. Locations for fire hydrant, water meter, valve, loops, fittings and connection to existing main lines are not shown.

Response: The updated utility plans show what is intended to be constructed for this project and show the existing utilities.

14. C-5.0: text overlapping on details 2 & 3.

Response: The updated plans corrected the details required for this project.

Sampling Review Comments:

1. The 77' Typical Road Section is really 72'. The shoulder width is not accounted for correctly.

Response: The updated plans show the proposed typical road section. The plan has been updated to reflect a proposed 80 feet R/W from 400 East to 1600 East. The updated plans show the proposed typical cross section constructed within the 80 feet Right-of-Way for this project.

2. The 80' Typical Road Section is really 75'. The shoulder width is not accounted for correctly.
 - a. Why is there only a small section of 80' ROW? It appears to be random. Typically, you would maintain that width from Main Street (US91) to at least 800 East.
 - b. The North Logan, Hyde Park and Smithfield Transportation Corridor Plan shows an 80' ROW all the way to 1200 East from US-91.

Response: The updated plans show the proposed typical road section for an 80 foot right-of-way. The plan has been updated to reflect a proposed 80 feet R/W from 400 East to 1600 East. The updated plans show the proposed typical cross section constructed within the 80 feet Right-of-Way.

3. What will be done for the section between the edge of asphalt and the 10' asphalt path before a developer constructs the curb and gutter?

Response: The updated plans show a curb and gutter in this space that will be constructed by the City as a betterment. This area will have topsoil placed between the curb and gutter and the 10' asphalt path.

4. *Will a slope easement be acquired for the work outside of the ROW? Who will cover that cost?*

Response: The updated plans show the project limit lines. Slope easements will not be required; however, construction easements will be required along the south side of the project and this is shown on the updated Right-of-Way plans. The Construction Easements will be negotiated during R/W acquisitions.

5. *There is not sufficient information to review roadway or drainage design.*

Response: The updated plans show the proposed roadway and drainage design.

6. *Once roadway alignment information is provided, the geometrics will need to be verified that they meet a Collector roadway minimum standard. Many of the horizontal curves appear to be substandard based on a 35-mph design speed.*

Response: The updated plans show the reflect the 35-mph design speed criteria.

7. *The utility plans are considered a betterment; however, it appears that there are not enough water valves or sewer manholes being installed.*

Response: The updated utility plans provide enough information for construction and meet City requirements for water valves and sewer manholes.

8. *There is no detail for the asphalt path.*

Response: The updated typical road cross section shows asphalt pat detail.

Design Standard Comments:

1. *Inadequate information provided to verify that design standards are met. Also, it is assumed that they would follow Cache County standards.*

Response: The updated typical road cross section meets the County road standards of 28 feet of asphalt.

Eligibility Comments

1. *Need detailed cost estimates with items included in the costs, including right-of-way, etc. to understand what is eligible.*

Response: An opinion of probable costs (OPC) has been updated and submitted with proposed plans. The OPC lists all items considered for the road project that are eligible and the proposed betterments for the project provided by the City.

2. *Once an OPC has been provided, verify that wat line and sewer line work is a betterment.*

Response: The water and sewer construction are considered a betterment for this project.

OPC Comments:

1. *No OPC was provided.*

Response: An opinion of probable costs (OPC) has updated and submitted with proposed plans.

2. *Cost in the application seems low to purchase e ROW and construct a roadway from 400 East to 1200 East. However, there is not a detailed estimate to verify against.*

Response: The OPC shows the detailed estimate of ROW acquisition costs.

3. *Where is the City getting the funding to pay for the betterments-\$2,570,000: That work is critical to be finished before the COG roadway is constructed?*

Response: There was a mistake in the application. The submitted OPC shows the proposed project costs and funding. The proposed funding from the City is only \$0.8 million. The overall cost of the project is \$2.5 million. The City has requested the \$1.75 million from the COG.

4. *Would the ROW purchase for 80' instead of 66' be considered a betterment?*

Response: As previously mentioned the proposed Right-of-Way purchase is an 80-foot Right-of-Way per City Road Master Plan and the CMPO Regional Transportation Plan 2040.

ROW Comments:

1. *Will the COG pay for the 80' right-o-way or only 66'? It seems other locations are only able to get 66', which is enough for the road pavement and sidewalk.*

Response: As previously mentioned the proposed Right-of-Way purchase is an 80-foot Right-of-Way per City Master Plan and the CMPO Regional Transportation Plan 2040.

2. *On sheet C1.1—will the COG pay for the additional ROW on the south side near Sta 14+00? What will happen to that property?*

Response: The ROW south side purchase will be utilized for roadway drainage and a detention pond will be constructed on the property.

If you have any questions you can contact myself by phone or email.

Sincerely,



Lance Anderson, P.E.

Principal Engineer

lance@cachelandmark.com

**CACHE COUNTY COUNCIL OF GOVERNMENTS
CACHE TECHNICAL ADVISORY COMMITTEE**

Technical Review for CCCOG Applications: This review has been provided by the CMPO, County staff, and consulting engineers (CRS & JUB Engineers) to determine the eligibility and outline technical considerations for each project. All reviews are done to maintain compliance with the Local Transportation Funds Program Manual and best engineering and transportation practices.

Project: 2018-5 Hyde Park 3100 North
New road construction and right-of-way purchase

Project Eligibility Review

	YES	NO	N/A
Regionally Significant Transportation Facility Arterial, Collector, or Logan-Cache Airport	X		
Spot Improvement (\$200,000 Limit)			X
Rural Set Aside (Outside MPO Boundaries)			X
Included within the CMPO Transportation Plan	X		
Multi-Jurisdictional Letters of Support	X		
Pavement Design New Road or full depth reconstruction		X	
90% Design for Construction Projects		X	
30% Design for Right-of-Way Projects			X
Detailed Cost Estimate Bids, Opinion of Probable Cost, non-COG betterments		X	

Project is not eligible as submitted.

Additional Findings and Technical Considerations:

- 1) Submitted design is missing significant information that should be included for a 90% project design
- 2) Not enough plan information is available to understand this project for plan set review.
- 3)
- 4)
- 5)
- 6)

Detailed reviews provided by consulting engineer attached.

Cache County Council of Governments (COG)

Project Oversight & Cache County Stewardship Memo

Project Name: 3100N (400E to 1600E)

Project Sponsor: Hyde Park City

Memo is to include list of concerns/recommendations based on checklist items. In addition, the draft memo should provide the following:

1. *Professional opinion of issues related to the overall functionality of the design.*
2. *Professional opinion of the project independent utility (if part of a phased project)*
3. *Professional opinion as to design elements that fail to incorporate "best design practices".*

Application and Plan Set Checklist

- Verify that plans are to 90% design for construction projects and 30% for ROW only projects (if engineering is required).*

90% Comments:

1. The plans provided are not to a 90% level.
2. Missing roadway plan & profile sheets, storm drain profiles, striping plan sheets, and erosion control plans. The information on these sheets is needed to understand the roadway improvements better.
3. What material QC/QA testing frequency and requirements will be followed for construction? Utah APWA or other?
4. No specifications or measurement & payment documentation has been provided.
5. Label all streets on the drawings to help orient better.
6. How is the roadside drainage being addressed?
7. Has environmental permitting been completed, specifically to deal with canal crossings and/or any potential wetlands?
8. Have the canal crossings been coordinated with the canal companies?
9. Typical Sections: what type of material is needed for fill material?
10. Typical Sections: Need to clarify what the project will do from the edge of asphalt to the sidewalk, and on the shoulder. Is a drainage swale to be placed? On callouts for items to be constructed in the future by others, label as such. As shown currently, it appears as if the contractor is to do all the work items.
 - a. Suggested to only show improvements that will be constructed now. In the dimensions on the top labeled as "By Future Developer", add what will be completed in the future. Example C&G, sidewalk and park strip to be constructed by future developer.
11. Right-of-Way Plan:
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13. Utility Plans

- a. Show and label existing utilities (water, sewer, gas, electric, cable, fiber, storm drain, etc). This includes at side streets.
 - b. Sewer lines are shown with curves. Per state code sewer lines should be straight between manholes. Sewer profiles are needed.
 - c. Locations for fire hydrant, water meter, valve, loops, fittings and connection to existing main lines are not shown
14. C-5.0: text overlapping on details 2 & 3.

Provide a sampling (spot check) review of the design. Check if something is being oversized or undersized (e.g. retaining walls, pipes, culverts, etc).

Sampling Review Comments:

1. The 77' Typical Road Section is really 72'. The shoulder width is not accounted for correctly.
2. The 80' Typical Road Section is really 75'. The shoulder width is not accounted for correctly.
 - a. Why is there only a small section of 80' ROW? It appears to be random. Typically, you would maintain that width from Main Street (US-91) to at least 800 East.
 - b. The North Logan, Hyde Park and Smithfield Transportation Corridor Plan shows an 80' ROW all the way to 1200 East from US-91.
3. What will be done for the section between the edge of asphalt and the 10' asphalt path before a developer constructs the curb & gutter?
4. Will a slope easement be acquired for the work outside of the ROW? Who will cover that cost?
5. There is not sufficient information to review roadway or drainage design.
6. Once roadway alignment information is provided, the geometrics will need to be verified that they meet a Collector roadway minimum standard. Many of the horizontal curves appear to be substandard based on a 35 mph design speed.
7. The utility plans are considered a betterment; however, it appears that there are not enough water valves or sewer manholes being installed.
8. There is no detail for the asphalt path.

Verify that project has been designed, reviewed and stamped by licensed professional engineers.

PE Verification Comments:

1. Plans appear to have been reviewed and stamped by a PE.

Verify what design standard is being followed and that it is being met. A minimum is to adhere to Cache County road standards.

Design Standard Comments:

1. Inadequate information provided to verify that design standards are met. Also, it is assumed that they would follow Cache County standards.

Review geotechnical report/pavement design.

Geotechnical/Pavement Design Comments:

1. Was a geotechnical report/ pavement design completed?
2. The asphalt and road base depth seem insufficient for a major collector roadway.

Review structural design.

Structural Review Comments:

1. Are there box culvert structures crossing over the canals? Or how are the canals being crossed?
 - a. If using a box culvert, the structural plans will need to be provided for review.
2. If only pipe crossings, is the canal company okay with that and do they want structural headwalls?

Review eligible versus non-eligible costs.

Verify that the betterments have been correctly identified.

Eligible items include:

- *All roadway construction activities that are associated with constructing the roadway pavement section (including bike lanes).*
- *Any required utility system relocations (does not include utility upgrades or improvements).*
- *Sidewalks or shared use paths (within same project limits and contribute to transportation function).*
- *Road right-of-way purchase (limited to width needed for road pavement and sidewalks or pathways).*
- *Drainage system improvements (required as a result of the project, but does not include curb and gutter).*
- *Residential or business relocation costs required by roadway improvement (requires approval of the COG Executive Committee on a case-by-case basis at time of application).*
- *Roadway safety elements (e.g. guardrail, signals, cross-walks, signage and pavement marking etc).*
- *Site environmental cleanup or remediation costs will be considered on a case-by-case basis by the COG Executive Committee for eligibility.*

Non-eligible items include (to be considered a betterment):

- *Curb, gutter or decorative landscaping (beyond that required for soil stabilization with native seeding).*
- *Right of way cost beyond that needed to accommodate the actual road cross-section (the local jurisdiction must pay the cost difference of remnant property or full property "takes").*

- *Project design or COG application development costs.*
- *Utility system upgrades.*
- *Roadway lighting.*

Eligibility Comments:

1. Need detailed cost estimates with items included in the costs, including right-of-way, etc. to understand what is eligible.
2. Once an OPC has been provided, verify that water line and sewer line work is a betterment.

Review Opinion of Probable Cost.

Verify that betterments are broken out separately.

Verify that necessary project costs are accounted for, including but not limited to:

- *Construction costs*
- *Utility relocations*
- *ROW acquisitions and easements*
- *Design Engineering (applicable as match)*
- *Construction Engineering Management services*
- *Permitting*
- *Project Sponsor cost match*

OPC Comments:

1. No OPC was provided.
2. Cost in the application seems low to purchase ROW and construct a roadway from 400 East to 1200 East. However, there is not a detailed estimate to verify against.
3. Where is the City getting the funding to pay for the betterments - \$2,570,000? That work is critical to be finished before the COG roadway is constructed.
4. Would the ROW purchase for 80' instead of 66' be considered a betterment?

Review right-of-way (ROW) needs and process.

Verify appropriate amount of ROW width being acquired for construction.

Review full takes and partial takes being acquired and verify what portion of it will be needed for the project. Verify that the additional amount is included as a betterment.

Verify that the ROW is consistent with the COG ROW purchase policy (see COG program manual).

Verify that relocation costs have been approved by the County Executive Committee.

ROW Comments:

1. Will the COG pay for an 80' right-of-way or only 66'? It seems other locations are only able to get 66', which is enough for the road pavement and sidewalk.
2. On sheet C1.1 – will the COG pay for the additional ROW on the south side near Sta. 14+00? What will happen to that property?

Recommendations:

1. Plans do not appear to be 90% complete.
 - a. Roadway, drainage, striping, and details related to the roadway need to be provided before a recommendation regarding the design can be made.
 - b. Existing topographic information is missing from the plans and is needed to verify if the project is addressing all existing items.
2. A detailed Opinion of Probable Cost needs to be provided before a project recommendation can be provided.
3. Jeff Gilbert to verify eligibility of the roadway for the COG funding. It does not appear on the UDOT Functional Classification map, contrary to what is stated in the application.