CITY OF PALO ALTO CITY COUNCIL FINAL MINUTES

Special Meeting
May 13, 2019

The City Council of the City of Palo Alto met on this date in the Council Chambers at 5:08 P.M.

Present: Cormack, DuBois, Filseth, Fine arrived at 5:11 P.M., Kniss, Kou, Tanaka

9. Connecting Palo Alto Grade Separation Planning: Revision of Alternatives for Further Study and Direction to Staff Regarding Evaluation Criteria Weights.

Mayor Filseth advised that he would not participate in this Agenda Item 9 because he lived within 500 feet of the Caltrain right-of-way. He left the meeting at 9:04 P.M.

Council Member Kniss advised that she would not participate in this Agenda Item because she had an interest in real property located within 500 feet of the Caltrain right-of-way. She left the meeting at 9:04 P.M.

Council took a break at 9:04 P.M. and returned at 9:14 P.M.

Chantal Cotton Gaines, Assistant to the City Manager reported on April 22, 2019 the Council approved a work plan, added more Council check-ins with the new working group, approved additional alternatives for study, and directed Staff to return with an AECOM Contract Amendment and an update regarding the Citywide tunnel. Alternatives for study were a trench, hybrid and viaduct for the Meadow/Charleston crossing, a Citywide tunnel, closure and a vicinity viaduct for Churchill Avenue, and a South Palo Alto tunnel. An option for a Citywide tunnel was the removal from consideration the refining of the description of a tunnel from Channing Avenue to the southern City limit.

Etty Mercurio, AECOM Project Manager, explained that starting a Citywide tunnel at the northern City limit would cause major impacts to facilities, increase construction costs, and disrupt traffic to the Downtown area. The train was going to begin its descent into a trench at the southern end of the Palo Alto Station platform. The train was going to traverse the tunnel between Churchill and Meadow/Charleston and then enter a trench, which was going to terminate at the San Antonio Station platform. During construction, shoofly tracks were going to be needed to maintain Caltrain

service. Shoofly tracks had the ability to be constructed immediately east or west of the existing tracks. To the east was Alma Street, the proposed location of the shoofly track. To the west were structures, which had the ability to be impacted. Using the existing tracks for the shoofly tracks and constructing the tunnel on Alma Street increased impacts because the tunnel had to be longer. The initial steps for constructing a tunnel were clearing vegetation, relocating utilities, acquiring rights-of-way, and closing cross streets connected to Alma Street. Next the shoofly tracks were where construction of the trench was to begin. Embarcadero Road required a complete reconfiguration. Ground walls for the trench required the acquisition of subsurface easements on the west side of the trench. During construction of the trench, Churchill Avenue was going to be closed. At Churchill, the portal to the tunnel was going to be approximately 100 feet wide by 40 feet deep. The size of the portal was to be governed by the geometry of the railroad and the geological and geotechnical ground conditions of the site. The shoofly tracks were to be located above the subsurface construction of the tunnel. The California Avenue Station needed to be excavated for access to the train in the tunnel. Elevators and escalators between the station and the surface were going to add to the cost. The tunnel was to be constructed beneath creeks. At the Meadow/Charleston crossing, the shoofly tracks had to be moved to the side so that the trench could begin. South of the Meadow/Charleston crossing, subsurface easements extending into adjacent properties were needed for the ground walls of the trench. Additional rights-of-way were needed to construct the trench across the creek. Finally, Alma Street was to be reconstructed.

Ed Shikada, City Manager, related that construction of shoofly tracks was based on an assumption that Caltrain service was going to continue during construction. The Staff Report contained a general description of value capture and the order of magnitude of value capture.

Council Member Kou noted the popularity of the tunnel alternative in the community. She wanted the total cost of the tunnel alternative broken down into components.

Ms. Mercurio advised that a cost breakdown had been prepared. A Project Study Report considered civil factors and railroad factors and compared them to benchmarks for construction costs. The cost estimate also contained contingencies for unknown factors. Using the costs of other construction projects to estimate the cost of the tunnel alternative was not appropriate because construction costs were extremely volatile over the past year. The costs of other projects were possibly developed several years ago

and were not to be compared to 2019 dollars. The costs of other projects were engineering estimates or the bid costs.

Council Member Kou requested the technical assumptions utilized in the proposed design and the simulation.

Ms. Mercurio reported design factors included track geometry, engineering criteria, safety factors, and train speeds for shoofly tracks and permanent tracks.

Council Member Kou asked if the technical information was provided to the working group.

Ms. Mercurio answered yes, at a high level. Engineering exhibits were available at community and working group meetings and on the website.

Council Member Kou inquired whether the simulation was based on the worst-case scenario.

Ms. Mercurio clarified that the simulation was based on engineering drawings developed for the project.

Council Member Kou wanted to perform her due diligence for the community by reviewing all scenarios for the tunnel alternative.

Mr. Shikada reported the team provided representation of the tunnel alternative and its impacts; they were as accurate as possible. The simulation represented the best estimate of the project based on available information.

Ms. Mercurio added that engineers reviewed a track at a 1 percent grade as required by Caltrain, but it was not going to work for a tunnel. The tunnel required a 2 percent grade, in which Caltrain had to approve a variance for the project.

Council Member Kou inquired whether beginning boring at the south end made a difference.

Ms. Mercurio replied no.

Council Member Kou asked if the information explaining the infeasibility of the tunnel alternative was posted to the website.

Mr. Shikada clarified that no one had stated the tunnel was not feasible. The information provided for the meeting was publicly available.

Council Member Kou remarked that a large portion of the community was not aware of the tunnel. Eliminating the tunnel alternative from further study so early in the process raised concern in the community.

Council Member DuBois requested Staff make the cost breakdowns, engineering drawings, technical assumptions and other technical data available to the public. He requested the cost of the Caltrain station.

Ms. Mercurio responded $400 million.

Council Member DuBois asked if the cost estimate included land acquisitions.

Ms. Mercurio answered yes.

Council Member Tanaka requested the distance between the tracks in the tunnel.

John Maher, AECOM Engineer advised that the track spacing was 49 feet.

Council Member Tanaka asked if the width of the portal was dictated by geotechnical ground conditions.

Mr. Maher clarified that one boring machine was 34 feet wide and the distance between the bores was 15 feet. The distance between bores had the ability to be modified by a few feet following a geotechnical investigation.

Council Member Tanaka estimated a third, or 32 of the 100 foot portal width was going to be dirt surrounding the bores.

Mr. Maher concurred.

Council Member Tanaka asked why the distance between the two bores was not shorter.

Ms. Mercurio explained that the boring machines would bore through clay. If the machines were closer to each other, the boring of one tunnel had the ability to impact the other. If the subsurface material was hard rock, it was possible for the boring machines to be placed closer to each other. A concrete mix was to be injected into the soil to improve the quality of the soil, but that added to the cost of the project. Geotechnical engineers and boring and mining experts recommended the distance used in the drawings.

Council Member Tanaka requested the approximate cost of improving the quality of the soil.

Ms. Mercurio did not have a number, but it was a very expensive process.

Council Member Tanaka asked if the injection cost was contained in the report.

Ms. Mercurio replied no, because ground improvements were not considered.

Council Member Tanaka asked if the cost was $5 billion or $500,000.

Mr. Shikada advised that studies and tests were going to be conducted in order to prepare accurate engineering drawings for a project. Based on the information available, the estimates were reasonable.

Council Member Tanaka believed the distance between the bores pushed the project outside the existing right-of-way, which affected the feasibility and cost of the project dramatically. If the injection process was able to reduce the distance between the bores, the cost of the injection process was estimated to be less than the cost of eminent domain and community support.

Ms. Mercurio reported the injection process would have to be used over the entire width and length of the area between the two portals, if such a large area was even feasible. The cost was going to be more than a couple of million dollars.

Council Member Tanaka wanted to understand the true costs of a Tunnel Project. Pictures of other tunnel projects showed the two bores much closer than 49 feet. Boring through bedrock was to be considerably easier than boring through clay. Clay was more malleable in terms of being able to bore without disrupting the other tunnel. Stating the injection process was expensive was not helpful when the project as a whole was expensive.

Mr. Maher indicated reducing the 15 foot distance between the two bores was not going to completely eliminate property impacts. The distance between the two bores was 15 feet, and the project was to extend more than 15 feet into adjacent properties.

Council Member Tanaka wanted to reduce the width of the portal as close to 68 feet, which was the combined diameter of the two bores, as possible.

Mr. Maher reiterated that placing the two bores side-by-side reduced the portal width by only 15 feet. Placing the two bores side-by-side was not possible. In addition, the outer walls of the portal were not able to be flush with the bore. The drawings showed 8 feet between the outer portal wall and the bore.

Council Member Tanaka felt the portal width of 100 feet was an arbitrary distance.

Mr. Maher indicated the 15 foot distance between the two bores was a minimal distance according to the mining experts.

Ms. Mercurio stated the 100 foot portal width was not arbitrary. A comparison of two tunnel projects was not possible without knowing the design standards and geometry and geotechnical issues of each project.

Council Member Tanaka was not able to accept a portal width of exactly 100 feet.

Mr. Maher clarified that technical information was able to reduce the width by 3 feet on either side. The shoofly tracks impacted driveways for the length of the project.

Council Member Tanaka requested further explanation of the inability to construct the tunnel beneath Alma Street.

Ms. Mercurio elaborated regarding the need to design for train speeds and track geometry. Both of those factors caused a tunnel beneath Alma Street to be longer than the proposed tunnel.

Council Member Tanaka wanted to understand why the geometry for Alma Street was different from the geometry of the existing tracks when they were side-by-side for the length of the tunnel.

Mr. Shikada clarified that a permanent facility located beneath Alma would lengthen the construction zone because the train speed for a permanent facility was higher than the train speed for shoofly or temporary tracks. Also, the construction was to impact the front yards of properties fronting Alma. As proposed, the project was expected to impact backyards.

Ms. Mercurio added that building the portal as proposed and moving the tunnel underneath Alma Street caused the track to curve, which increased the cost of the project. Also, the tunnel was not going to align with the California Avenue Station.

Vice Mayor Fine requested clarification of the proposal for an alternative described as the tunnel from Channing Avenue to the southern City limit.

Mr. Shikada reported the change was intended to define the end points of the tunnel.

Rachel Croft advised that several members of the Mariposa community supported retaining the tunnel alternative, requested access to costs and technical information for the tunnel alternative, opposed the viaduct in the vicinity of Churchill alternative, wanted to understand an Embarcadero alternative that included a viaduct and opposed a viaduct alternative in any area south of Churchill.

Davina Brown remarked that an underground alternative was best for the community.

Neva Yarkin supported eliminating the Citywide tunnel alternative because of its cost and the amount of real property affected by the alternative. She opposed a viaduct alternative for Churchill.

Chandru Venkataraman wanted clarification of the cost of the tunnel alternative. The community was likely to oppose any viaduct alternative.

Manish Baloua requested any alternative that resulted in the use of eminent domain for any property be removed from further consideration.

Carolyn Schmarzo supported removal of the tunnel alternative because of its cost and impacts to real property and streets.

Nadia Naik felt AECOM provided reasonable information and designs. Given the engineering information and the concerns about eminent domain, removal of the tunnel alternative was logical. The Staff Report states the Council moved the freight tracks into the South Palo Alto tunnel; however, the Motion did not reflect that. During the meeting, Council Member DuBois and Council Member Kou opposed the idea.

Adina Levin, Friends of Caltrain questioned the logic of one city in the Caltrain Corridor spending $2 billion to $4 billion for grade separations when Caltrain estimated the cost of all grade separations in the Corridor at $8 billion to $11 billion. Value capture funding was feasible, but the scale of development had to be similar to development planned in San Francisco and San Jose.

Rob Levitsky did not believe the City had the expertise or funding for a tunnel alternative and supported removing it from further study.

Megan Kanne supported removal of the tunnel alternative due to its cost and construction impacts. Staff's recommendation to weight the criteria was tantamount to making a decision; therefore, the Council needed to select a different process.

Stephen Rosenblum remarked that City Staff was biased against the tunnel alternative, as indicated early in the discussions. The cost of the tunnel was not out of the question.

Roland LeBrun advised that a tunnel bore with a diameter of 34 feet was appropriate for a train traveling 220 miles an hour. Trains were not going to travel that fast through Palo Alto. The portals and two shoofly tracks were able to be constructed within the existing 85 foot right-of-way. The only construction impacts were the loss of the footpaths between the stadium bleachers and the tracks.

Mindy Anderson felt the discussion of grade separations had reached a state of analysis paralysis. She offered to help the Council obtain the information it needed in order to end the discussion and reach a decision.

Vice Mayor Fine advised that all City Council Rail Committee meetings were open to the public. As far as community engagement, the Council needed to hear from everyone in the community. He requested clarification of the public comment regarding the South Palo Alto tunnel alternative.

Ms. Gaines reported during the April 22, 2019 meeting, a Council Member inquired whether the alternatives proposed by the working group were in addition to the Staff recommendation; the response was yes.

Vice Mayor Fine noted the City Council Rail Committee discussed the tunneling white paper, and it was available online along with other tunneling documents. More details of cost estimates, property impacts, utility impacts, and the assumptions utilized in the simulation were needed. The Central Subway was a new rail line and did not require shoofly tracks. He questioned whether Council Members needed to submit their comments regarding weighting criteria to Staff by email.

Mr. Shikada suggested the fundamental question was whether the Council wished to weigh the criteria. If the Council preferred, Staff was able to agendize the topic for a future meeting.

Council Member Cormack supported Part A.i of the Staff recommendation because of the cost, the potential use of eminent domain, and the permanent narrowing of Alma Street. Alternatively, she supported Part A.ii. The website was not yet updated. She requested more information regarding the expanded working group.

Mr. Shikada promised to provide the information at a later time.

Council Member Cormack suggested grouping the criteria into actual design criteria, community impacts, funding, and effects on the environment and climate change.

Council Member DuBois stated the tunnel alternative with freight on the surface during the April 22, 2019 meeting was not yet eliminated. Several Council Members clearly indicated they would not support the Motion if that alternative was eliminated. He supported changing the name of the longer tunnel to the tunnel from Channing Avenue to the southern City limit. He wanted each Council Member to rank and sort the projects instead of the Council agreeing to a single ranking. Closure needed to be an alternative that would be scored. He did not know the source for Criteria K. There appeared to be duplicate criteria for cost.

Vice Mayor Fine interpreted finance with feasible funding sources as: the City was able to gather the multiple sources of funding needed for grade separations. In one of Staff's presentations, order of magnitude of cost was defined as low, medium, and high.

Council Member DuBois did not believe the Council had approved Criteria K.

Ms. Gaines advised that Criteria K was placed on the final line to ensure the cost was reflected somewhere. It should not be a criteria.

MOTION: Council Member DuBois moved, seconded by Vice Mayor Fine to:

A. Make public the cost estimates and technical assumptions for the city-wide tunnel;

B. Refine the description of the city-wide alternative that will continue to be studied and considered to “Tunnel from Channing Avenue and the southern City limit;” and

C. Reaffirm consideration of both options for South Palo Alto tunnel.

Vice Mayor Fine related that the Council reduced the number alternatives but was currently expanding the number of alternatives. The Council needed to discuss the criteria evaluation.

Council Member DuBois suggested Council Members and members of the working group individually score the alternatives, that way Staff was able to average the scores. The Council did not need to discuss and agree to a score for each alternative.

Vice Mayor Fine suggested removing the relative weight column and using a 0-10 or 0-100 scale to rank the alternatives. He inquired whether four Council Members supported removing the Citywide tunnel alternative .

Council Member Tanaka did not support the use of eminent domain. The design of the Citywide tunnel was incredibly biased. The Citywide tunnel alternative needed to be placed on a ballot so that the community could either support or oppose it. He requested to know the speed of Caltrain trains as they traveled through Palo Alto.

Ms. Mercurio reported trains in the blended service traveled at 110 miles per hour. Currently, trains were able to travel up to 79 miles per hour.

Council Member Tanaka reiterated his request for an explanation of the use of a bore that was 34 feet in diameter.

Ms. Mercurio indicated the engineers used the Caltrain design criteria for blended service to determine the inside diameter of the bores.

Council Member Tanaka inquired whether Caltrain or High Speed Rail utilized stricter criteria. He wanted to know the required diameter of a tunnel for trains traveling through Palo Alto.

Ms. Mercurio explained that the locomotive selected for the Corridor would be a factor in the design of the tunnel. High Speed Rail had not selected a locomotive.

Council Member Tanaka shared a diagram depicting the diameters of tunnels for trains traveling 200, 220, and 250 miles an hour. The diameter for a train traveling 250 miles an hour was the largest of the three. The inner diameter of a tunnel for a train traveling 200 miles an hour was 28 feet. The surrounding concrete wall was 3 feet thick for a total diameter of 31 feet. The tunnel for High Speed Rail was much smaller than the proposed Citywide tunnel.

Mr. Maher clarified that the diameter of the proposed Citywide tunnel was not dictated by the speed of the train. The diameter was dictated by the size of the train cars and the 17 foot vertical clearance to the wire for the train. Caltrain required a 10 foot minimum clearance from the centerline of track to any edge.

Council Member Tanaka advised that vertical dimensions of the tunnels for High Speed Rail were the same as those for the Citywide tunnel. He inquired whether Caltrain had beefy standards for tunnels.

Mr. Maher indicated the tunnel dimensions were based on Caltrain standards and the opinions of mining/tunneling experts.

Council Member Tanaka understood the cost increased as the tunnel size increased. He doubted the size of the tunnel was appropriate. Value capture was probably the only viable way to fund a Citywide tunnel. He inquired whether Staff had conducted a survey of the community.

Mr. Shikada answered no. A poll was not informative because the public did not have sufficient information to form an opinion.

Council Member Tanaka remarked that the community had to accept the scale of value capture development in order to fund a Citywide tunnel. He inquired whether anyone had explored the possibility of beginning the tunnel in Menlo Park with the City of Menlo Park, assuming the City agreed to pay for it and the tunnel would not create eminent domain issues.

Mr. Shikada requested the rationale for assuming eminent domain issues were not going to exist in Menlo Park.

Council Member Tanaka asked if Staff had explored the option.

Mr. Shikada reported Staff had not suggested placing a portal in Menlo Park.

Vice Mayor Fine advised that the City spoke with adjacent cities and reviewed their work. In Mountain View, part of the issue was the location of a station. Menlo Park was considering a berm on that side of the creek.

Council Member Tanaka had not received answers to his political and technical questions.

MOTION PASSED: 5-0 Filseth, Kniss recused

MOTION: Council Member DuBois moved, seconded by Council Member Cormack to remove the city-wide tunnel alternative, or the "Tunnel from Channing Avenue and the southern City limit."

MOTION PASSED: 4-1 Filseth, Kniss recused, Tanaka no

Molly Stump, City Attorney asked if the intention of the second Motion was to remove all tunnels from further study.

Vice Mayor Fine responded just the Citywide tunnel alternative.

Ms. Stump asked if the tunnel beginning at Channing Avenue would remain as an alternative for study.

Vice Mayor Fine replied no. Essentially Parts A and C were approved, and Part B was replaced with "remove the Citywide tunnel." The South Palo Alto tunnel remained an alternative.

Council Member DuBois clarified that the Council renamed the Citywide tunnel in the first Motion and then eliminated it as an alternative in the second Motion.

Ms. Stump asked if the City would continue to study a tunnel from Channing Avenue to the southern City limit.

Vice Mayor Fine answered no. The South Palo Alto tunnel remained an alternative.

Mr. Shikada added that the South Palo Alto tunnel began south of Oregon Expressway and ended at the southern City limit.

Ms. Stump asked if the South Palo Alto tunnel was the only tunnel remaining on the study list.

Vice Mayor Fine replied yes.

Adjournment: The meeting was adjourned at 11:10 P.M.