

Public Works Commission

**Regular Meeting
City of Berkeley
PUBLIC WORKS COMMISSION**

Thursday, January 7, 2021 at 7:00 PM

**PUBLIC ADVISORY: THIS MEETING WILL BE CONDUCTED EXCLUSIVELY THROUGH ZOOM
VIDEOCONFERENCE AND TELECONFERENCE**

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<https://us02web.zoom.us/j/85981696444>

If you do not wish for your name to appear on the screen, then use the drop-down menu and click on "rename" to rename yourself to be anonymous. To request to speak, use the "raise hand" icon by rolling over the bottom of the screen. To join by phone: Dial **1-669-900-9128** and enter Meeting ID: **859 8169 6444**. If you wish to comment during the public comment portion of the agenda, Press *9 and wait to be recognized by the Chair. **Note: Your phone number will appear on the videoconference screen.**

AGENDA

- 7:00 pm CALL TO ORDER: Chair will call the meeting to order; Secretary will call roll.
- 7:05 pm PUBLIC COMMENT (on agenda items only): Each speaker is limited to three (3) minutes.
- 7:15 pm APPROVAL OF MINUTES:
1. Special Meeting of November 12, 2020
 2. Special Meeting of November 19, 2020
- 7:20 pm CHAIR REPORT:
- 7:25 STAFF REPORT:
- 7:30 pm ACTION ITEMS: (Matters for discussion and possible action)
1. Elections
 2. Work Plan
 3. Paving Policy*
- 9:15 pm INFORMATION ITEMS: (Action may be taken on any information item at this meeting if a majority of Commissioners votes to move it to an action item. This vote may take place at or before the time the item is scheduled to come up).
1. Standing Information Item: Subcommittee Reports
 - On hold due to COVID-19

9:20 am FUTURE AGENDAS:

- Election
- Work Plan
- Long Term Paving Plan
- PRW Forestry Presentation
- Street Lights
- Sidewalks
- Utility Undergrounding

9:30 pm ADJOURNMENT

* Indicates written material included in packet.

** Indicates material to be delivered at meeting.

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SB 343 Disclaimer:

Any writings or documents provided to a majority of the Commission regarding any item on this agenda will be made available for public inspection at the Public Works Department located at the address below.

Communications Disclaimer:

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Commission Secretary:

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Public Works Commission

Special Meeting
PUBLIC WORKS COMMISSION
Action Minutes
Thursday, November 12, 2020
ZOOM Meeting, Berkeley, CA

CALL TO ORDER: 7:05 PM

Present: Matthew Freiberg, Jacqueline Erbe, Bryce Nesbitt, John Hitchen, Mark Humbert, Margo Schueler, Shane Krpata, Sachu Constantine

Absent: Christopher Brennan

Staff: Joe Enke, Andrew Brozyna

PUBLIC COMMENT:

1. Mr. Yep commented on public meetings for T1 and infrastructure needs related to Vision 2050. Council.
2. Gordon Wozniak commented on importance of identifying important projects and also needs related to Vision 2050.

CHAIR REPORT: None.

STAFF REPORT: None.

ACTION ITEMS:

1. Approval of Minutes:
 - Minutes for the Regular Meeting of October 1, 2020 approved (Schueler/Erbe/ 8/0/1).
 - Minutes for the Special Meeting of October 14, 2020 approved with corrections (Humbert/Constantine/ 8/0/1).
 - Minutes for the Special Meeting of November 4, 2020 approved (Hitchen/Constantine/ 8/0/1).
2. Discussion of Measure T1 Phase 2 Project list of projects and phasing - Item discussed, reviewed projects and scoring/rating system. No action taken.
3. 5 – Year Plan Paving Plan Report – Chair Freiberg distributed draft report, item discussed, comments received, and commissioners commented and revised. Motion to approve a resolution that recommends Council approval of the first three years of the Five-Year Paving Plan, for FY2021 to FY2025, as proposed by Staff, with special advisories regarding prioritization of permeable paving on select streets made by Krpata and seconded by Hitchen. Ayes: Freiberg, Humbert, Schueler, Erbe, Constantine; Noes: Nesbitt; Abstain: none; Absent: Brennan.

INFORMATION ITEMS:

1. Standing Information Item: Subcommittee Reports – None due to COVID 19 restrictions.

FUTURE AGENDAS:

Items for the future commission meetings.

1. Measure T1 Phase 2 list of projects: Public Works and Parks & Waterfront Commissions – Concurrent Special Meeting, Thursday, November 19, 2020, 6:30pm – 9:30pm via zoom.
2. Elections for chair/vice chair
3. Work Plan
4. Paving Policy

Motion to ADJOURN - (Nesbit/Schueler 8/0/1) 10:06 pm.

Acting Commission Secretary:

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PUBLIC WORKS COMMISSION
Special Concurrent Meeting with the Parks and Waterfront Commission
Wednesday, November 19, 2020, 6:30pm – 9:30pm, Zoom Meeting

Minutes - Draft

1. Call to Order (chair) at 6:30pm.

Park and Waterfront:

Present: Cox; Diehm; Kamen; Kawczynska; Landoni; McGrath; Skjerping; Srioudom; Wozniak;
Absent: None.

Public Works:

Present: Brennan; Constantine; Erbe; Freiberg; Hitchens; Humbert; Krpata; Nesbitt; Schueler
Absent: None.

2. Approval of Minutes (11-04-2020) and add the Public Works Commissioners in attendance.
(M/S/C: Wozniak/Skjerping/U): Ayes: Cox; Diehm; Kamen; Kawczynska; Landoni; McGrath;
Skjerping; Srioudom; Wozniak; Noes: None; Absent: None.

3. Public Comment (agenda items only):

- a. Jim Frank, SEIU, upgrade HVAC at 1947 Ctr St bldg.
- b. Tom Sephton, SEIU, upgrade HVAC at 1947 Ctr St bldg.
- c. John Caner, Citizens for Cultural Civic Center.
- d. Kieran Allen, UC Save Bees, bollards into planters.
- e. Paul Chang, SEIU, upgrade HVAC at 1947 Ctr St bldg.
- f. PK, use T1 for Black Rep Theater or Maudelle Shirek Bldg.
- g. Rosa Reyes-Orduña, UC Pollinators.
- h. Alina Constantinescu, Berkeley Path Wanderers.
- i. Chuck Soper, upgrade HVAC at 1947 Ctr St bldg.
- j. Eric Anderson, SEIU, upgrade HVAC at 1947 Ctr St bldg.
- k. C Shamban "Cindi", New Street Infrastructure report.

4. Staff Presentation *. (S Ferris provided presentation).

A. Budget and Finance Committee Presentation/Report.

B. 12-01-2020 Council Report – Special Fund Loan.

C. 12-15 -2020 Council Report – Phase 2 Project List Recommendations.

5. Action: Phases 2 and 3 Proposed Project List (both commissions).

A. Parks and Waterfront Commission Recommendations *. On November 19, 2020, the Parks and Waterfront Commission approved a motion to send a list of recommended Phase 2 projects to Council and to endorse the list of recommended projects from the Public Works Commission (Attachment 2): (M/S/C: Kamen/Kawczynska/U): Cox; Diehm; Kamen; Kawczynska; Landoni; McGrath; Skjerping; Srioudom; Wozniak; Noes: None; Abstain: None; Absent: None.

B. Public Works Commission Recommendations *. On November 19, 2020, the Public Works Commissions approved a motion to send a list of recommended Phase 2 projects to Council and to endorse the list of recommended projects from the Parks and Waterfront Commission (Attachment 3): (M/S/C: Krpata/Schueler/U): Brennan; Constantine; Erbe; Freiberg; Hitchens; Humbert; Krpata; Nesbitt; Schueler; Noes: None; Abstain: None; Absent: None.

6. Adjournment (both commissions).

** Handouts are available on the T1 website for 11-04-2020 on Monday, November 1, 2020.

CITY OF BERKELEY STREET REHABILITATION AND REPAIR POLICY

Joint Draft September 2020

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References

- [Resolution 55,384-N.S.](#), the Street Rehabilitation Policy (May 22 1990, updated March 2009)
- [Resolution 64,773-N.S.](#), the Permeable Paver Trial Project (December 15 2009)
- Ordinance 7,726-N.S., relating to installation of video and telecommunications systems (_____)

- Council Resolution ?????, requiring prioritization of crosswalk markings near schools.
- Council Referral: “Develop a Bicycle Lane and Pedestrian Street Improvements Policy” October 29 2019 by Rigel Robinson.
- [Ordinance No. 6,905-N.S.](#), related to Coast Live Oak Trees
- [B.M.C. 12.44.020](#) related to pruning of City trees.
- BMC Section 14.56.060, heavy [truck routes](#).
- MTC report “[Bay Area Roads At Risk](#)” (September 2018).
- City of Berkeley “[Construction Updates](#)” web page.
- Alameda County Transportation Commission, [Implementation Guidelines for Local Streets and Roads Program Funded through Measure B., Measure BB, and Vehicle Registration Fees](#).
- [City of Berkeley Bicycle Plan](#)
- City of Berkeley Vision Zero, Vision 2050 and Utility Undergrounding reports.

Definitions

- **PCI** - Pavement Condition Index, a standardized measure of pavement’s remaining lifetime. PCI does not measure smoothness, and primarily measures infiltration of water due to wear.
- **PWC** - The appointed Public Works Commission, consisting of one representative appointed by each Council member.
- **Arterial & collector**. The most and second most significant streets to motor vehicle traffic, generally as reflected by traffic volume.

General Policy

It shall be the policy of the City of Berkeley for the Public Works Department to develop a Street Rehabilitation and Maintenance Plan (Streets Plan) for the entire City, a Paving Procedures Manual (updated as needed by the Public Works Department), and a Utility Trench and Pothole Repair Plan (updated annually). The Streets Plan shall be updated annually, with the first two years of the plan intended to identify projects that are ready for bid. The goal of the 10 year elements shall primarily to identify long term projects for purposes of coordination with utilities, other master plans, and other long range planning needs. The Trench and Pothole Plan shall be updated annually.

The Streets Plan shall be reviewed by the Public Works Commission over a period of not less than two meetings over three sessions, before being presented to City Council. **The Commission will have the option of passing a resolution in support of the Staff plans and/or creating its own letter to Council.** This process must complete prior to presenting the plan to Council for budget and spending authority. Council approval is required by the beginning of February each year to match the usual bid and contract cycle for such work.

Supporting Graphs and Tables

Public Works shall provide a set of consistent graphs and charts to PWC, policy makers and the public, during the pavement planning and budgeting process, as defined in the *Paving Procedures Manual*.

Allocation of Limited Funds (**VERSION ONE**)

1. All roads within the core transportation network, comprising arterial, collector, bus routes, and the low-stress bikeway network (with bicycle improvements as defined in the City of Berkeley Bicycle Plan), shall be maintained at a PCI of no less than 70.
 - a. Maintenance shall be prioritized over reconstruction of streets when funds are limited.
2. All other resources shall be allocated to transportation network planning zones (Planning zones may be defined by City Staff as any discrete bound area used for evaluating road network surfacing (eg. council districts)) to achieve an equitable condition of road surfaces and associated appurtenances. Within planning zones priority shall be provided to roads in the following order:
 - i. Other bicycle network streets
 - ii. Areas near schools
 - iii. Areas near public transportation
 - iv. Remaining residential local streets
 - v. ~~Industrial~~ Non-residential streets,
 - vi. unpaved streets
3. Where possible, the City shall strive to use long lasting durable, sustainable, and permeable paving materials for road surfacing.

Allocation of Limited Funds (**VERSION TWO**)

The uses of all funding under this policy shall be expended in accordance with any funding rules, restrictions, and covenants associated with the funding source. Compliance with these rules shall be demonstrated in the annual Streets Plan.

Ten percent of the total Streets Program Budget shall be set aside for discretionary use, to be proposed by City Council, for the purposes of implementing demonstration projects, correcting inequities in road surface conditions, or funding any other uses prioritized by City Council.

For the remaining funds:

1. First priority shall be given to roads within the core transportation network: arterial, collector, bus routes, and the low-stress bikeway network (as defined in the City of Berkeley Bicycle Plan). These streets shall be maintained at a PCI of no less than 70.
 - a. Maintenance shall be prioritized over reconstruction of streets when funds are limited.
 - b. Maintenance shall be performed in accordance with the best available “life cycle analysis” practices using analytical programs, such those provided by the Metropolitan Transportation Commission.

- c. Maintenance Bicycle Boulevard streets shall emphasize smoothness of the pavement, in addition to the normal life cycle considerations.
 - d. Maintenance of low-stress bikeway network shall pay particular attention to the condition of pavement in the bicycle travel zone, and on maintenance of any utility covers grates or other obstructions in that travel path.
2. Should funds remain, Public Works shall propose 10% of the total expenditure in each 2 year period be allocated to projects or project elements that improve the bicycle infrastructure of the City.
3. Should funds remain, Public Works shall propose targeted life cycle improvements, consisting of sealing and lifetime extension improvements, on PCI 70 and above streets not already covered.
4. Should funds remain, Public Works may propose up to 5% of the total expenditure in each 2 year period be allocated to targeted sidewalk, ramp or streetscape improvements, not associated with a street resurfacing.
5. Should funds remain, Public Works shall propose projects targeted at areas near schools or based on the localized needs of public transportation vehicles or patrons.
6. Should funds remain, Public Works shall propose projects to improve residential or side streets in Transportation Network Planning Zones, as defined in the *Paving Procedures Manual*. (In general such zones will correspond to local streets bounded by arterial or collector streets.) At the time of paving such a zone, the entire zone must be brought to an equal level of pavement lifetime. In general such projects must be placed on the 10 year plan first, to allow for significant utility coordination prior to the paving project. In general the worst such zones must receive the first available funding.
7. Should funds remain, they may be provided for paving publicly owned unimproved streets in areas other than those zoned S1 (industrial and manufacturing) if at least 75% of the cost is borne by the adjacent property owners.
8. Should funds remain, Public Works may propose other spot surfacing activity on residential or side streets citywide.
9. Should funds remain, projects in areas zoned S1 (industrial and manufacturing) may be considered.
10. Should funds remain, Public Works may propose vanity projects, statues or other wild and crazy ideas preferably reflecting the values and goals of the City in opposition to Federal and State policies.

Equity

It shall be the policy of the City of Berkeley to achieve equity of *results* for residential local streets, both for the street surface condition (measured using PCI or another road surface performance metric) and the overall streetscape (trees, curbs, planting strips, crosswalks, sidewalks, etc.). No area should be left behind, no area favored or disfavored because of location, history or proximity to a given Council District.

Cross-Functional Street Procedures

It shall be the policy of the City of Berkeley to comprehensively review the entire street ecosystem at the time work is planned, creating, and ensure that all relevant City departments and the public have a chance to weigh in on proposed work, and to help ensure that all areas of the City are brought up to similar standards where possible.

Thus, prior to placing a street segment out for bid, Public Works staff must visit the street, take pictures and prepare a short written background report on the condition of the street for both internal use and to share with the Public Works Commission. Each report must cover at least the following.

1. Condition of street trees, including space for root growth.
2. Condition of pedestrian crossings at intersections, where possible, the report should identify places where pedestrian infrastructure can be updated, consistent with recommendations identified in the Vision Zero Plan and the Pedestrian Plan..
3. Condition of sidewalks and curb cuts, paying particular attention to where utility boxes may interfere with ADA or drainage needs.
4. Condition of storm drainage infrastructure.
5. Condition of the roadway curb to the edge of the first travel lane, in the bicycle zone. Identify obstructions such as storm drain grates or maintenance hole covers.
6. Presence of any disused curb cuts, which the property owner no longer needs, and can be restored.
7. Condition of the curbs.
8. For streets that bisect the Hayward Fault, any special considerations that could mitigate the impact of a ground rupture at that location.
9. Known utility coordination issues.
10. Any obvious issues with third party utilities (e.g. worn out, misplaced or maintained equipment).

And make referrals as necessary to other City departments and/or the utility companies, to help come to a single plan.

While not all elements identified in each report will be addressed in each project, the policy goal is to ensure that each element is given proper consideration. It is a goal of this policy to “dig less”, and reduce the number of times that construction crews must visit a given street segment.

General Goals and Purpose

The primary purpose of the street rehabilitation program is to maintain a safe surface conveyance system in the public right-of-way for vehicles, bicycles, transit and pedestrians. The right-of-way also provides ancillary functions of a water conveyance system and location of public utilities. The goal is a process that treats each street as a complete package (e.g. surface treatments, parking, sidewalks, street trees, utilities, drainage, curbs and curb cuts, accommodations for the disabled, pedestrian crossings, etc.), and each area of the City with equity and sensitivity to its unique history and context while balancing cost, equity, expediency and balance long and short term goals.

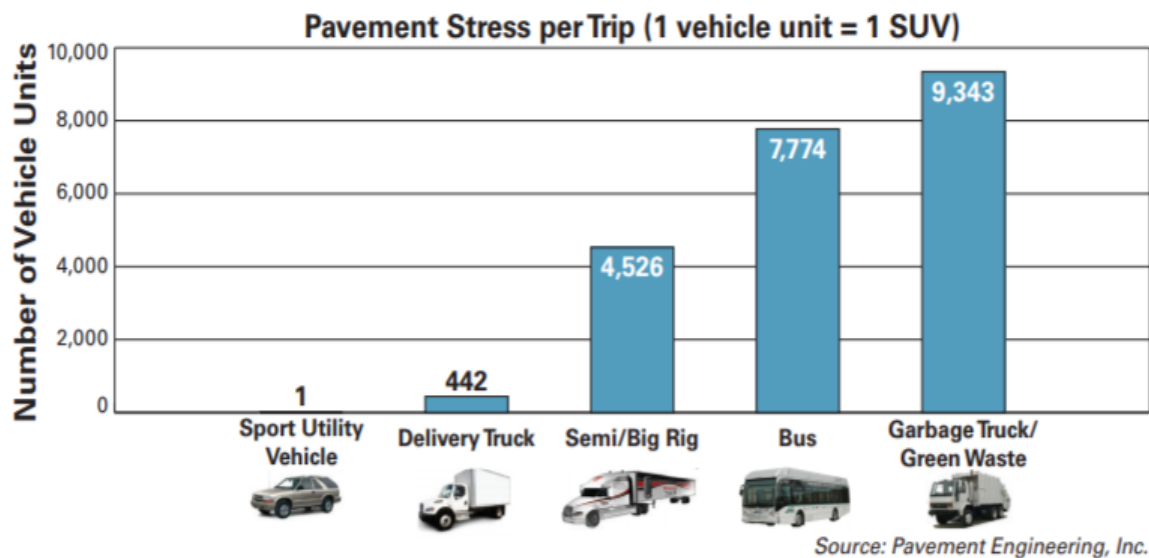
To the extent practicable, this policy shall be evaluated and interpreted with the following priorities in mind:

1. The City's General Plan policy of encouraging use of forms of transportation other than automobiles,
2. The Regional Water Quality Control Board (RWQCB) goals regarding water quality, flooding potential and runoff control.
3. The City's Measure G goal of an 80% reduction of greenhouse gas emissions by 2050.

4. The City’s goal to preferentially maintain crosswalk and pavement markings in the vicinity of schools and BART stations, should it not be possible to maintain all such markings.
5. Goals from Vision Zero goals to reduce the risk to life and happiness from vehicle collisions.
6. Maintenance of the “urban forest” of street trees and sidewalk planting strips.
7. Preparation for the potential of significant sea level rise or shift in rainfall patterns over time.
8. Goals to reduce use of natural gas and convert to 100% electric buildings.
9. The Bicycle Plan, Pedestrian Plan, Vision 2050, Vision Zero, Climate Action Plan, and Tree Removal / Trimming Policies
10. To surface streets in large contiguous areas to minimize deployment costs, minimize seams, and maximize potential for utility coordination.

Mitigating Heavy Vehicle Impacts

It shall be the policy of the City of Berkeley to carefully measure and mitigate the significant effect of heavy vehicles on the City’s investment in street surfacing:



Heavy Vehicle Routes and App Based Directions

No less often than annually, Public Works Staff shall validate and update a City website suitable for processing by automated scanning equipment used by map makers, and at the same time public works staff must send physical paper letters to the major map and trucking software makers informing them of the truck route website, copying the PWC on those letters. The policy goal is to hasten the day when automated route finding software incorporates truck routes, and stops guiding heavy vehicles along unsuitable routes.

Enforcement

Annually the Public Works Department shall coordinate with the Police Department on the subject of enforcement of truck restrictions. This coordination shall be documented in the annual Streets Plan.

Mitigation Transfers

Public Works is empowered and directed to negotiate with heavy vehicle users, regarding impact fees, essentially embedding the cost of the pavement damage into the activity itself. Potential sources include the zero waste division, the fire department and developers of major construction projects expected to bring truck traffic. The parties are encouraged to seek solutions to minimize the pavement impacts, and where that's not possible, to build the cost into the service provided.

Priority Escape Routes and Undergrounding Utilities

It shall be the policy of the City of Berkeley to use regular paving opportunities to build segments of the underground utility network as described in the City "Study to Underground Utility Wires in Berkeley Phase 3 Report." For streets entering the planning process, which have existing underground utilities, or are in the above plan, the Public Works Department shall evaluate the following options:

1. Installing City owned electrical and communication "cross conduit", from poles on each side of the target street, allowing wires that cross the street to be readily removed from over path of travel.
2. Installing City owned electrical and communication conduit along the length of the street.
3. Installing City owned electrical and communication distribution conduit, to reach the frontage of each property
4. Installing City owned electrical and communication distribution conduit, frontage of properties on only the opposite side from the poles.
5. If none of the above are feasible, to explicitly reserve space in the plans for the project for a future undergrounding project. This reserved space shall appear on all copies of the plans, and is intended to reduce the need for future relocation of underground facilities.

All electrical conduit must meet PG&E specifications, with sufficient capacity for 150% of the overhead wires in the area, utilizing specifications published in PG&E's "*Green Book*". All communications conduit must be capable of supporting a minimum of seven unique fiber optic or coaxial cable services, and terminating in common junction boxes.

Technology Review

It shall be the policy of the City of Berkeley that staff moderate an annual discussion, at a regularly scheduled Public Works Commission meeting on new surfacing technology and trends, reviewing current literature and the experiences of other jurisdictions with machines, technology, technique, sustainability, materials and/or life cycle analysis as appropriate.

Permeable Pavement and Stormwater Infiltration

It shall be the policy of the City of Berkeley to incorporate stormwater infiltration into street rehabilitation projects, when feasible. This may take many forms including permeable pavement (as in the Addison Street demonstration project), edge of curb infiltration (as in Ward Street at San Pablo Park), green basins (such as where Cedar and Hopkins diverge). Public Work Staff is directed to incorporate stormwater infiltration when and where budget and physical conditions permit.

Street Cutting Moratorium Policy

It shall be the policy of the City of Berkeley to minimize the number of cuts made into pavement, and to monitor the patching process when patches are necessary.

(1) The purpose of this section is to avoid the inefficiencies, costs, poor aesthetics and negative public responses associated with unnecessary work on newly paved streets.

(2) The Department shall maintain a readily accessible online list of such streets, with the date of expiration of the moratorium for each.

(3) No trenching or excavation shall be permitted in any street that has been constructed or resurfaced within five years after completion thereof without express permission of the Department of Public Works. Any replacement of trench or excavation paving, permitted pursuant under this section, or exempt as emergency work, shall match or exceed the most recent resurfacing pavement section in depth and material.

Through this resolution, Council directs the Building & Safety department to create processes and procedures to minimize the impact of pavement cuts, and to collect mitigation funds or concessions from private developers where possible. Council directs the Building & Safety department to keep developers abreast of the City paving plan, and to issue express permits as required to allow interconnection of utilities, even to developers who have not otherwise completed planning processes.

Utility Trench and Pothole Repair Plan

For purposes of the plan, a trench or a pothole is hereby defined as any pavement surface irregularities with a change of elevation (plus or minus) of more than one (1) inch in twelve (12).

Priority in the plan shall be given where possible to truck and heavy vehicle routes, other streets based on traffic volume and for Bicycle Boulevard streets. Total spending requests for this program shall be guided by life cycle analysis concerns, to maximize the investment in paving infrastructure over the long term, in addition to reducing the downsides of potholes.

While the City will patch all potholes promptly, flaws in utility company created trenches are the responsibility of the respective utility company, and Public Works must seek action or reimbursement from the responsible party.

Gas Tax subventions and General Funds of the City shall be the primary source for pothole repair. Sanitary sewer funds shall be used for City created sewer trench repair, including potholes related to sewer work.

Street Sweeping

Council authorizes Public Works to suspend street sweeping activities on highly degraded streets, due to the risks of dislodging gravel and other materials and creating particulate air pollution.

Council Memo

We submit this update to the City Paving Policy for your consideration. The major goals of this update are to define “equity”, to allocate limited funds more efficiently, reduce “patch paving”, and to increase the transparency of reporting and data available to Council and the public.

The condition of street surface treatments in Berkeley continues to decline, and even with help from measure T1 and the most recent 5 year paving plan, our streets will be in worse condition than they are today.

Quoting from an MTC report on the subject:

A city or county that spends \$1 on timely maintenance to keep a section of roadway in good condition — would have to spend \$5 to restore the same road if the pavement is allowed to deteriorate to a pavement condition index score below 60.

THE BIKE RACK

Definition of Equity (Bryce Attempt)

We have broad consensus that arterials, collectors and bicycle boulevards are citywide assets, on their own funding and paving schedule.

The rest of the streets are the focus of our equity policy. Alternatives considered include:

1. Supply equal funding by Council District (equity of spending)
2. Measure pavement quality by Council District and allocate most funds to the district with the lowest score (equity of results).
3. Fund extra to districts with historic inequity or redlining (the restorative justice approach).
4. Use MTC Streetsaver to keep the average PCI measurement as high as possible, by identifying streets worth investing in, and leaving the rest to deteriorate to gravel. Distribute this money citywide without regard to equity.
5. Break the city into smaller zones. Focus each year’s paving plan on the worst zones.
 - a. As Oakland does, with analysis zones.
 - b. As clocks bounded by arterials or collectors (e.g. the block bounded by Rose/Cedar/Sacramento/MLK).

How big an area to pave?

1. Spread limited funds as far as possible, repaving the worst sections citywide, resulting in paving near every resident, but a very patchy street network, and relatively expensive contracting.
2. Focus new paving on large areas, leaving other areas untouched for many years, and risk the wrath of residents with no locally good streets. Thus:
 - a. Pave entire streets, end to end.
 - b. Pave entire zones between arterials (e.g. the block bounded by Rose/Cedar/Sacramento/MLK).

How do we pave in bigger local street blocks?

1. Pave entire streets, end to end (up to a mile long)
2. Pave zones between arterials & collectors.
3. Follow the utilities: let EBMUD and sewer lead the way, pave on top of their work in whatever pattern happens.
4. Patch pave like today, but do so in bigger contracts, and cluster the patches together.

CITY OF BERKELEY STREET REHABILITATION

PUBLIC WORKS INTERNAL PROCEDURES MANUAL

Joint Draft September 2020

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Purpose

This is a companion document to the Paving Policy (Ordinance _____) spelling out detailed procedures and life cycle analysis procedures consistent with the adopted policy.

Transportation Network Planning Zones

Public Works shall divide the City into approximately forty “pavement analysis zones”, generally consisting of all the residential streets bounded by arterials (e.g. the block enclosed by Sacramento, Hopkins, Cedar and Martin Luther King). TNPZ’s will not correspond to Council districts. TNPZ’s need not be of similar size. Note that some TNPZ’s may correspond closely to areas of the City traditionally impacted by red lining and other discriminatory practices, but they are not themselves an indicator with a social purpose.

A separate TNPZ shall be drawn for major industrial areas, as long as the streets customarily used by adjacent residents are part of the residential TNPZ.

- c. Each **TNPZ**, excluding any arterial, Bicycle Boulevard or unpaved street.
- 8. A spreadsheet table and associated map showing for each street segment:
 - a. The current PCI
 - b. The date of the PCI measurement
 - c. The category of the street (e.g. Arterial, Collector, Local)
 - d. Checkboxes for:
 - i. Bicycle Boulevards
 - ii. Other designated bicycle streets
 - iii. A “priority undergrounding street”
 - iv. Existing underground utilities
 - e. Footnotes

Exclude industrial zones?

Note that the primary definition of equity depends on identifying the worst Transportation Network Planning Zone (TPNZ) and repaving it in its entirety.

Heavy Truck Network

No less often than annually, Public Works Staff shall validate and update a City website suitable for processing by automated scanning equipment used by map makers, consisting of a map and a table in exactly the following format:

Street	From	To	Restrictions	Notes
Marin	City Boundary	Arlington Avenue	3 ton limit	
Bolivar	Addison	Bancroft	Commercial vehicle prohibition	
Gilman	I-80	San Pablo	7 ton limit, designated truck route	To avoid RR crossing, trucks may use Marin or Gilman.

To be reached at the exact website https://www.cityofberkeley.info/truck_routes.

Utility Cut Backfill Technique

TBD

Pothole Repair Technique

TBD

Underground Utilities

Under the adopted policy, the City of Berkeley may place utility conduit during street resurfacing operations. The following details help define the implementation of the adopted goal:

1. All placed conduit will be the property of the City at time of installation.
2. The City must install conduit to accepted industry standards, in particular to the PG&E “Green Book”.
3. PW must maintain accurate GIS maps of the underground conduit so placed.
4. PW must determine a fair value for access to the communication conduit, and make such access available on an equal basis to all utilities with a legitimate purpose for the conduit.
5. It is intended that electrical conduit eventually be traded or bartered for Rule 20A or Rule 20B credits, at the time respective undergrounding projects are planned.

Once the conduit has been placed, the hard part starts. It may be necessary to form Rule 20A or Rule 20B projects, in order to compel the utilities to cooperate with the plan. The utilities will always have the option of digging their own trenches, but the goal here is to make the City conduit more compelling in terms of cost and trouble.

Study Topics

The following

1. Measurement of “smoothness” for Bicycle coordinators.
2. Objective measurements for sidewalk quality for various users.
3. Impact of modest sea level rise on drainage in West Berkeley, and attendant pavement impacts.
4. Design details for undergrounding projects. In particular
 - a. Method for sharing single maintenance holes for communication
 - b. Location of maintenance holes, and the life cycle impacts:
 - i. Mainline street
 - ii. Parking area of street
 - iii. Planting strip
 - iv. Sidewalk

Definition of Bicycle Priority Coordinators

TBD

Utility Coordination

TBD