Jessica Handlin

From: Melissa Villa
Sent: Wednesday, April 23, 2025 7:51 AM
To: Jesse Reyes; Jessica Handlin
Subject: FW: Public Comment PWSC Commissioners - Fwd: Comments to City Council: 500-600 N Prospect Soundwall/Noi

Thank you,
Melissa

From: Mark Nelson (Home Gmail) [redacted]
Sent: Wednesday, April 23, 2025 2:00 AM
To: CityClerk <CityClerk@redondo.org>
Subject: Public Comment PWSC Commissioners - Fwd: Comments to City Council: 500-600 N Prospect Soundwall/Noi

Please forward. This is communication regarding the issues on the 500-600 Block of N Prospect.

---------- Forwarded message ---------
From: **Mark Nelson (Home Gmail)** [redacted]
Date: Wed, Feb 5, 2025 at 1:24 PM
Subject: Re: Comments to City Council: 500-600 N Prospect Soundwall/Noi
To: Paige Kaluderovic <Paige.Kaluderovic@redondo.org>, Joe Hoffman <Joe.Hoffman@redondo.org>
Cc: Andrew Winje <Andrew.Winje@redondo.org>, Darryl Boyd [redacted]

Adding Joe Hoffman

REGARDING THE SOUNDWALL ISSUE
I may attend, but I'm currently half a day's drive away. We'll see if it works. In the meantime, I find the information from the Washington State DOT very compelling, that it requires a 100-foot thick greenery block to dampen sound at the same level as the lowest functioning soundwall. Shrubbery is pretty, but ineffective due to its low density. I suspect that greenery will not sufficiently control sound due to both the relative narrowness of the divider strip and the relative lack of height of the plants.

REGARDING EXCESSIVE ROAD NOISE
We have at least 2 issues. One being exhaust noise and the other being amplified noise aka loud music. Acceleration up the hill from Beryl to the BCHD egress light is inherently loud. However, aftermarket mufflers and loud motorcycle pipe very much exacerbate the problem. And the loudpipes have an equally noise increasing impact with engine braking coming back down the hill. I have seen electronic signs in Redondo regarding loudpipes will be ticketed, but I'm not aware of a single instance of that occurring.

Is it even possible for RBPD to find the resources to start ticketing motorcycles and cars with non-factory, excessively loud exhaust? Can they issue FIX IT tickets force a return to noise complaint muffler? Who/what agency would ride herd

on compliance? THE MORE UNLIKELY THAT ENFORCEMENT OF THE STATE'S CVC 27202 for excessive motorcycle noise is (and also for auto exhaust noise), the more I believe the residents must pursue a soundwall.

There's also the loud amplified sound issue from vehicles. That's covered under RBMC § 4-24.514 and again, I don't recall any enforcement campaigns. Darryl can speak to it better than I can, but these noises are increasing, not lessening, and I suspect that RBPD is resource constrained regarding noise enforcement.

If I cannot make the trip, it's pretty clear that Darryl is very capable.

Thanks for the note.

Jessica Handlin

From: Melissa Villa
Sent: Wednesday, April 23, 2025 7:51 AM
To: Jesse Reyes; Jessica Handlin
Subject: FW: Public Comment PWSC Commissioners - Fwd: INFO ONLY - Follow-up to Neighborhood Safety Meeting - Proposed Hedge is a Good View Block, only a Minimal Sound Block

Thank you,
Melissa

From: Mark Nelson (Home Gmail) [redacted]
Sent: Wednesday, April 23, 2025 2:07 AM
To: CityClerk <CityClerk@redondo.org>
Subject: Public Comment PWSC Commissioners - Fwd: INFO ONLY - Follow-up to Neighborhood Safety Meeting - Proposed Hedge is a Good View Block, only a Minimal Sound Block

*CAUTION: Email is from an external source; **Stop, Look, and Think** before opening attachments or links.*

Please forward to the PWSC prior to the next meeting. This is a real time analysis of the sound reduction capability of the soundwall at Manhattan Beach Blvd west of McBain. This area was cited by the City as a good example of a hedge. As you can see from the data, the sound dampening is de minimis, as is the safety protection from a car coming through onto the road. It does provide a good view block.

Also, there are no examples of the FHA approving shrubbery as a noise block, since it is well known that the noise deadening ability of the plants is very small. Among others, see https://wsdot.wa.gov/construction-planning/protecting-environment/noise-walls-barriers

"Trees and shrubs can decrease highway-traffic noise levels if high enough, wide enough, and dense enough (cannot be seen through), but are often impractical. It would take at least 100 feet of dense vegetation to provide the same benefit as our smallest feasible noise wall. Trees do provide a visual shield and some psychological benefit. The Federal Highway Administration (FHWA) has not approved using vegetation for noise abatement."

This is provided for information only.

---------- Forwarded message ---------
From: **Mark Nelson (Home Gmail)** [redacted]
Date: Sun, Feb 9, 2025 at 12:15 PM
Subject: INFO ONLY - Follow-up to Neighborhood Safety Meeting - Proposed Hedge is a Good View Block, only a Minimal Sound Block
To: Darryl Boyd [redacted]

bcc: Neighborhood email list

FYI - We own 511, so we'll still have open space in front of us - not a hedge or a sound wall. Darryl needed some technical noise support for the neighborhood so I'm just providing information for folks to use for their decision making.

At the meeting, I asked the City to provide a real world example of one of their planted hedges. Yesterday I took sound measurement equipment there during the mid afternoon time with moderate traffic and also took some pictures of a semi-mature hedge. If you want to look at them, they're at McBain and Manhattan Beach Blvd.

NOT MUCH NOISE REDUCTION FROM THE PROPOSED HEDGE (only 1.3 decibel reduction)

Midafternoon traffic on Manhattan Beach Blvd at McBain (west of Inglewood Ave) is moderate. I setup on both sides of the hedge and took noise samples. A reduction of 1.3 decibels is much less than the typical 5 decibels for a minimum block-type sound wall. I never measured the prior oleander view block's noise reduction, so I don't know if this is the same as what you had. From what I've read in studies, anywhere from 0.5 to 1.5 decibel reductions are the norm, but most of those are 20-foot thick plantings along freeways. I think we only have 9-feet to work with.

	Leq dBA	**Lmax**	**LCPeak**
	Average	**Maximum**	**Peak**
Street Side	68.5 dBA	83.8 dBA	107.8 dBA
House Side	67.2 dBA	83.4 dBA	104.0 dBA
Noise Dampening	**1.3 dBA**		

GOOD VIEW BLOCK FROM THE PROPOSED HEDGE

It's about 8-foot tall, reasonably dense, and provides a good view block of the street. Folks will need to watch carefully to make sure that each of the dead plants is replaced quickly to maintain a uniform look. It looks like some of them failed at planting (or maybe were planted late?), and another one has a big dead spot emerging in it. See photos below.

Soundwall Analysis for 500-600 N Prospect Ave Frontage Road

Prepared by Neighborhood Residents
For District 3 Councilmember Kaluderovic
Public Works Director Winje
February 2025
Questions to [redacted]

Recommendation to Proceed with a Block Soundwall along the 500-600 Blocks of North Prospect Avenue

- **Extensive review of available traffic and noise data was undertaken (see https://bit.ly/NoiseDamages for a National Institutes of Health studies on noise damages to health)**
- **Redondo Beach has no published soundwall criteria, therefore, Metro's criteria were used (similar to adopting agency standards for a CEQA analysis)**
- **Certified peer-reviewed FEIR results demonstrate that the noise to residents along the 500-600 blocks exceeds the Metro minimum for a sound wall**
- **Internet search demonstrates that the expected maximum cost of the soundwall is less than half the cost per dwelling of Metro's cap**
- **We request that the City proceed validating the criteria and developing high confidence project costs in order to move forward with a Soundwall project**

Key Benefits of Soundwalls

Sound walls provide significant benefits for neighborhoods by significantly reducing noise pollution from busy roads or highways, leading to a quieter and more peaceful living environment, which can improve residents' quality of life by reducing stress, improving sleep, and enhancing property values; essentially acting as a buffer between the community and traffic noise.

Key benefits of sound walls for neighborhoods:

- **Noise reduction:**

The primary benefit is the noticeable decrease in traffic noise, particularly for homes situated close to highways, significantly improving the sound quality within the neighborhood.

- **Improved sleep quality:**

Lower noise levels can contribute to better sleep quality for residents, especially those disturbed by nighttime traffic.

- **Reduced stress:**

Constant traffic noise can be a significant stressor, and sound walls can help alleviate this by creating a calmer environment.

- **Enhanced property value:**

A quieter neighborhood due to sound walls can positively impact property values, making homes more attractive to potential buyers.

- **Protection from health concerns:**

Studies have linked excessive noise exposure to various health issues like hypertension and hearing impairment, which sound walls can help mitigate.

- **Community well-being:**

By creating a more peaceful living environment, sound walls can contribute to a stronger sense of community and overall quality of life.

Review and Analysis of 500-600 Block of North Prospect Avenue Resident Noise Levels from Street Noise

- **This study and its recommendations relied on existing Noise and Traffic studies.**
- **BCHD's Certified FEIR (9/2/2021) contained direct Leq measurements and Leq modeling of the 500-600 block of N. Prospect Ave noise levels as part of the BCHD Campus expansion EIR from 312,000 sqft to 793,520 sqft.**
  - BCHD's Certified FEIR has been reviewed by Rincon on behalf of the City.
  - BCHD's Expansion Plan has been reviewed by Placeworks on behalf of the City.
- **Placeworks Draft General Plan presents Ldn noise estimates as a noise contour map with no specific reference to the source work.**
- **Fehr & Peers conducted a 2024 traffic study for the City, however, it only included Prospect from Knob Hill to PCH.**
- **<u>As a result, primary data for the analysis is from the peer-reviewed BCHD FEIR</u>**

Extensive Search, Review, and Analysis of Existing Noise and Traffic Studies of North Prospect was undertaken in Support of the 500-600 Block of N. Prospect Ave.

- **Data was extracted for use from CEQA SCH No. 2019060258 Certified FEIR Chapter 3.11 NOISE that has been peer reviewed by Rincon on behalf of the City of Redondo Beach.**
- **Data is Leq dBA measurement, consistent with the Redondo Beach Municipal Code RBMC 4-24.**
- **Data was measured and modeled specifically to measure levels on "receptors" (residents) of the 500-600 blocks of N. Prospect Ave.**
- **Only baseline data is considered, not BCHD construction noise simulations**

BCHD Certified FEIR (9/2/2021) Maximum Measured Noise Demonstrate Peak Levels of 77.1 dBA to 85.2 dBA with a Morning Average of 64.3 dBA and an Afternoon Average of 68.8 dBA at N. Prospect Ave Receptors using by RBMC Specific Methods (Leq)

Table 3.11-3. Existing Noise Levels Measured in the Project Vicinity (dBA)

		North Prospect Avenue	Diamond Street	Flagler Alley	Flagler Lane	Beryl Street	Mildred Avenue	Del Amo Blvd	190th Street
		Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8
AM Peak	L_{eq}	64.3	56.7	47.1	59.3	66.6	58.9	69.9	70.2
	L_{max}	77.1	66.2	56.2	72.3	82.1	69.1	80.5	79.6
	L_{min}	47.8	44.8	43.4	53.2	52.6	43.3	49.6	47.9
PM Peak	L_{eq}	68.8	55.3	49.4	61.5	64.2	53.0	70.4	71.5
	L_{max}	85.2	64.6	65.9	72.7	76.4	66.3	82.3	85.7
	L_{min}	49.8	46.8	44.2	54.8	51.6	42.6	48.9	47.3

Notes: See Appendix I for noise monitoring results.

BCHD Certified FEIR (9/2/2021) Traffic Model Estimated the the Overall Average Base Noise Level at N. Prospect Avenue Receptors at 69.5 dB During Peak Periods as Measured by RBMC Methods (Leq)

Table 3.11-21. Estimated Peak Period Construction Traffic Noise Levels at Sensitive Receptors

Receiver	Leq		
	2020 Noise Levels	2020 Noise plus Phase 1 Construction	2020 Noise plus Phase 2 Construction
North Prospect Avenue	69.5	70.5	70.1
Diamond Street (S)	61.4	62.0	61.7
Diamond Street (N)	57.5	58.0	57.8
Towers Street	60.1	60.4	60.3
Mildred Avenue	55.4	55.9	55.7
Beryl Street (S)	66.2	67.1	67.0
Beryl Street (N)	65.5	66.4	66.0
Del Amo Boulevard	69.9	70.3	70.1
W. 190th Street (W)	69.0	69.2	69.1
W. 190th Street (E)	70.8	70.8	70.8

Soundwall Criteria from Metro (used as Redondo Beach has no published standards or criteria)

The effectiveness of soundwalls depends on the distance between the receptor and the soundwall. For residents located next to a soundwall, the perceived noise level can be cut in half. Soundwall benefits are insignificant at distances greater than 500 feet from the soundwall, typically where traffic noise does not exceed the decibel threshold.

What are the criteria for a soundwall?

In order for a soundwall to be considered for funding, it must first pass preliminary field tests. The criteria for the field test is summarized below:

1. **Location:** -The location is along residential property, parks, churches or other sensitive receptors that exist prior to the construction of a highway or proposed improvements of a highway.
2. **Noise level:** The hourly noise levels at the location exceeds a 67-decibel threshold.
3. **Noise reduction:** The soundwall will result in a minimum 5-decibel noise reduction
4. **Cost:** The soundwall cost is below "reasonable allowance" as calculated using established Caltrans criteria, which is currently $107,000 per benefited dwelling.

Additional Resources

- Fact Sheet
- Spanish Fact Sheet
- Retrofit Soundwall List

Adopting the Metro/Caltrans Criteria, 500-600 N. Prospect Ave meets all of the Criteria for Soundwall Development

- **Properties are residential sensitive receptors along N. Prospect Ave that pre-existed the increasing noise levels.**
- **Properties are only 50 to 100-feet from the soundwall, making it highly effective.**
- **The current noise level at peak period far exceeds he 67-dB level, both as Lmax 77 dBA to 85 dBA and as an average 69.5 dBA.**
- **Cost-effectiveness is unknown, however, with no land cost acquisition, a 10-foot block soundwall for a single 40-foot dwelling frontage would be approximately $52,000 based on available cost estimates. That is less than 50% of the stated Metro maximum cost.**

Sources and Data

BCHD Certified FEIR -
https://bchd.blob.core.windows.net/docs/hlc/BCHD_FEIR_For%20Print_090221.pdf

Fehr & Peers Traffic Study -
https://cms2.revize.com/revize/redondobeachca/HETrafficStudy.pdf

Placeworks Draft RBGP -
https://cms2.revize.com/revize/redondobeachca/Land%20Use%20Analysis%20-%20non-HE%20Sites_November2024_FINAL.pdf

Metro Soundwall Criteria (used in analysis since Redondo Beach has no published criteria) -
https://www.metro.net/about/highway-soundwalls/

Soundwall Cost Estimate
https://wsdot.wa.gov/construction-planning/protecting-environment/noise-walls-barriers

The City of Redondo Beach has an Existing Contract with Rincon, funded by BCHD, to conduct Due Diligence on BCHD's Certified FEIR. Therefore, the BCHD Certified FEIR Noise Analysis should be Considered as City Approved

WHEREAS, on November 15, 2022, the parties entered into the Agreement for Consulting Services between the City and Consultant (the "Agreement") for peer review services of the Beach Cities Health District Healthy Living Campus Master Plan Final Environmental Impact Report (EIR); and

WHEREAS, the parties desire to extend the term of the Agreement from November 14, 2023 to November 14, 2024.

NOW THEREFORE, in consideration of the promises and mutual covenants contained herein, and intending to be legally bound, the parties hereby agree to make the following amendments to the Agreement:

1. Term. Exhibit "B" of the Agreement is hereby amended to extend the term until November 14, 2024, unless terminated earlier pursuant to the terms of the Agreement.

2. No Other Amendments. The Agreement and this First Amendment constitute the entire agreement between the parties and supersede any previous oral or written agreement with respect to the subject matter hereof. In the event of any inconsistency between the terms of the Agreement and this First Amendment, the terms of this First amendment shall govern.

The City of Redondo Beach has an Engagement with its General Plan Consultant, Placeworks, for work on the BCHD Development Plan and EIR. The City should have high confidence in the BCHD FEIR.

AGREEMENT FOR CONSULTING SERVICES
BETWEEN THE CITY OF REDONDO BEACH
AND PLACEWORKS, INC.

THIS AGREEMENT FOR CONSULTING SERVICES (this "Agreement") is made between the City of Redondo Beach, a Chartered Municipal Corporation ("City") and Placeworks, Inc., a California corporation ("Consultant" or "Contractor").

The parties hereby agree as follows:

1. Description of Project or Scope of Services. The project description or scope of services to be provided by Consultant, and any corresponding responsibilities of City, or services required to be performed by City are set forth in Exhibit "A."

2. Term and Time of Completion. Consultant shall commence and complete the project or services described in Exhibit "A" in accordance with the schedule set forth in Exhibit "B".

3. Compensation. City agrees to pay Consultant for work performed in accordance with Exhibit "C".

Since the City of Redondo Beach has both Placeworks and Rincon evaluating the BCHD Certified FEIR, Resident-Taxpayers should assume that both consultants are either in agreement with BCHD Noise Work, or, that those Contractors have resolved all Objections

- Rincon does not appear to have any independent estimation or measurement of N. Prospect Ave. noise levels. Rincon's role looks to be only review.
- Placeworks reports an ***Lnd*** noise level (SIC – incorrectly labeled in all Placeworks exhibits. Should be ***Ldn***) for N. Prospect Ave. in the General Plan Draft. Based on Placeworks graphics, it appears they assert 65 dB Ldn on the road and 60 dB Ldn at the homes (receptors).
- The official measurement methodology in the RBMC is Leq utilizing A-weighting which is consistent with BCHD Certified FEIR and not with Placeworks analysis or exhibits.

4-24.201 Investigations.

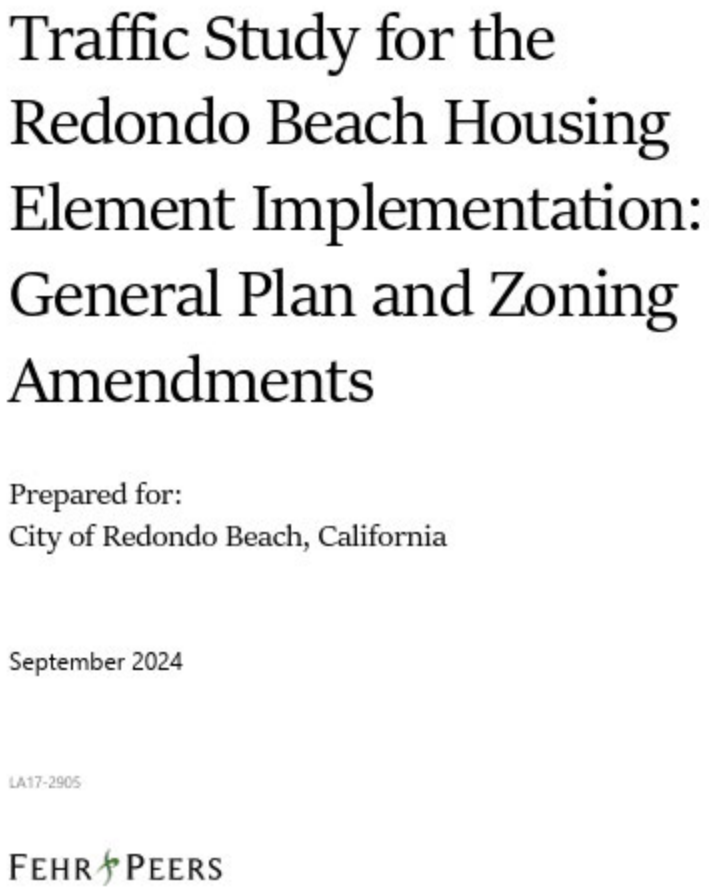
Upon the receipt of a complaint from a citizen, the Noise Control Officer or his delegated representative, equipped with sound level measurement equipment, shall investigate the complaint. The investigation, at the discretion of the NCO or his delegated representative, shall consist of a measurement and the gathering of data to adequately define the noise problem

(b) Actual measurement procedures. Utilizing the A-weighting scale of the sound level meter, the noise level shall be measured at a position or positions along the complainant's property line closest to the noise source or at the location along the boundary line where the noise level is at maximum. In general, the microphone shall be located five (5') feet above the ground, ten (10') feet or more from the nearest reflective surface where possible. However, in those cases where another elevation is deemed appropriate, the latter shall be utilized. If the noise complaint is related to interior noise levels, interior noise measurements shall be made within the affected residential unit or within the commercial or industrial structure, and the alleged violations shall be plotted against the standards set forth in Article 4 of this chapter. The measurement shall be made at a point at least four (4') feet from the wall, ceiling, or floor nearest the noise source with the windows in the normal seasonal configuration. The calibration of the instrument being used shall be performed immediately prior to recording any noise data utilizing an acoustic calibrator. (§ 1, Ord. 2183 c.s., eff. August 11, 1976)

Based on Review of the Fehr and Peers Traffic Analysis, there is no Traffic or Noise Data or Analysis on the Segment from 190th to Knob Hill that competes with the BCHD FEIR

- The only Prospect Ave. analysis in the study appears to be S. Prospect Ave. from Knob Hill to PCH.

98	Prospect Ave	Pacific Coast Hwy
110	Prospect Ave	Knob Hill Ave


Traffic Study for the Redondo Beach Housing Element Implementation: General Plan and Zoning Amendments

Prepared for:
City of Redondo Beach, California

September 2024

LA17-2905

FEHR PEERS

Request for Documents from Redondo Beach

2024-01-28 - CPRA Request - Soundwalls

Mark Nelson (Home Gmail) [redacted] Jan 28, 2025, 12:03 PM (3 days ago)

to Eleanor, Paige, Darryl

For the past weeks, local property owners on the frontage road have been locating, collecting and analyzing available information regarding local noise levels, soundwall criteria and development. In order to assure that we have not missed any relevant information, please process the California Public Records Act request below.

Please provide documents demonstrating:

1) Redondo Beach's specific soundwall development criteria (if any)
2) The most recent soundwall analysis study by Redondo Beach or its vendor (if any)
3) Noise measurements conducted in the last 10 years by Redondo Beach or its vendor on the 500-600 blocks of N Prospect Ave (if any)
4) Modeled noise levels and projections of future noise specific to the 500-600 blocks of N Prospect Ave (if any)
5) Documents explaining the reason for the inconsistency of noise measures chosen in the RBMC (Leq dBA) and the General Plan (Ldn)

Assuming we can get a prompt response, we will wait to present our findings to the Public Safety Commission until your response. If the response will be long in coming, we will move forward and amend our results if needed for presentation to the Council following the Commission meeting.

Thank you.

Your request (48507) has been received - City of Redondo Beach Inbox ×

City of Redondo Beach - Customer Service 10:45 AM (53 minutes ago)

to me

Thank you for electronically submitting your Public Records Act (PRA) request. City Hall will be closed from December 22, 2024, through January 1, 2025. The City will resume normal business hours on Thursday, January 2, 2025. Because your PRA request was submitted during a City Hall closure (which includes after business hours, weekends, or holidays) your PRA will be acknowledged as received on the next regular business day. We look forward to being of service! City Clerk's Office, City of Redondo Beach.

We look forward to being of service!

City Clerk's Office
City of Redondo Beach

View the PDF of peer-reviewed research results on the Damages of noise and traffic to health with clickable links at https://bit.ly/NoiseDamages

RESEARCH & PEER REVIEWED STUDIES OF THE IMPACTS OF CHRONIC STRESS CAUSED BY NOISE

Chronic Stress Causes and Its Health Damages
Blue Zones, a vendor of BCHD that BHCD spent over $2M with, recognizes chronic stress as the silent killer.
https://easyreadernews.com/lockdown-lessons-blue-zones-founder-dan-buettner-on-how-to-make-use-of-staying-at-home/

The following references present peer-reviewed research between noise, chronic stress and negative health impacts:

https://doi.org/10.1111/j.1467-9280.1995.tb00522.x
Chronic Noise and Psychological Stress
We demonstrate for the first time that chronic noise exposure is associated with elevated neuroendocrine and cardiovascular measures, muted cardiovascular reactivity to a task presented under acute noise, deficits in a standardized reading test administered under quiet conditions, poorer long-term memory, and diminished quality of life on a standardized index Children in high-noise areas also showed evidence of poor persistence on challenging tasks and habituation to auditory distraction on a signal-to-noise task They reported considerable annoyance with community noise levels, as measured utilizing a calibration procedure that adjusts for individual differences in rating criteria for annoyance judgment.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5898791/
The Adverse Effects of Environmental Noise Exposure on Oxidative Stress and Cardiovascular Risk
Epidemiological studies have provided evidence that traffic noise exposure is linked to cardiovascular diseases such as arterial hypertension, myocardial infarction, and stroke (high blood pressure, stroke, heart attacks)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1568850/
Noise and stress: a comprehensive approach
The thesis of this paper is that research upon, and efforts to prevent or minimize the harmful effects of noise have suffered from the lack of a full appreciation of the ways in which humans process and react to sound.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2996188/
Noise and Quality of Life
The psychological effects of noise are usually not well characterized and often ignored. However, their effect can be equally devastating and may include hypertension, tachycardia, increased cortisol release and increased physiologic stress.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4873188/
Noise Annoyance Is Associated with Depression and Anxiety in the General Population

https://pubmed.ncbi.nlm.nih.gov/15070524/
Health effects caused by noise: evidence in the literature from the past 25 years
For an immediate triggering of protective reactions (fight/flight or defeat reactions) the information conveyed by noise is very often more relevant than the sound level. It was shown recently that the first and fastest signal detection is mediated by a subcortical area - the amygdala. For this reason even during sleep the noise from airplanes or heavy goods vehicles may be categorized as danger signals and induce the release of stress hormones. In accordance with the noise stress hypothesis, chronic stress hormone dysregulations as well as increases of established endogenous risk factors of ischemic heart diseases have been observed under long-term environmental noise exposure. Therefore, an increased risk of myocardial infarction is to be expected.

https://pubmed.ncbi.nlm.nih.gov/29936225/
Chronic traffic noise stress accelerates brain impairment and cognitive decline

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7503511/
Traffic Noise and Mental Health: A Systematic Review and Meta-Analysis
Public policies to reduce environmental traffic noise might not only increase wellness (by reducing noise-induced annoyance), but might contribute to the prevention of depression and anxiety disorders

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2535640/
Traffic-Related Air Pollution and Stress: Effects on Asthma
Acute and chronic stress produce substantively different physiologic sequelae. Acute stress can induce bronchodilation with elevated cortisol (possibly masking short-term detrimental respiratory effects of pollution), whereas chronic stress can result in cumulative wear and tear (allostatic load) and suppressed immune function over time, increasing general susceptibility

https://pubmed.ncbi.nlm.nih.gov/18629323/
Chronic traffic-related air pollution and stress interact to predict biologic and clinical outcomes in asthma
The physical and social environments interacted in predicting both biologic and clinical outcomes in children with asthma, suggesting that when pollution exposure is more modest, vulnerability to asthma exacerbations may be heightened in children with higher chronic stress.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4918669/
The acute physiological stress response to an emergency alarm and mobilization during the day and at night

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6540098/
Impact of Stressful Events on Motivations, Self-Efficacy, and Development of Post-Traumatic Symptoms among Youth Volunteers in Emergency Medical Services

Chronic Stress Impacts on the Brain
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5573220/
Neurobiological and Systemic Effects of Chronic Stress

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5579396/
The Impact of Stress on Body Function

TO: Redondo Beach City Council, Redondo Beach Public Works Director, Redondo Beach Public Safety Commissioners

FROM: Mark Nelson, North Prospect Avenue Property Owner, Expert Witness

DATE: February 4, 2025

SUBJECT: HEALTH DAMAGES FROM EXCESSIVE TRAFFIC NOISE – SOUNDWALL DISCUSSION

The residents and property owners on the 500-600 blocks of N. Prospect Ave. are currently organizing and in discussions with D3 Councilmember Paige Kaluderovic and City staff regarding safety improvements to the frontage road. Overall, improvements likely include speed cushions; refreshed and enhanced painted pavement markings; enhanced signage; RBPD speed/one-way/U-turn enforcement; replacement of the greenery due to oleander leaf scorch and other diseases; and noise suppression from excessive road noise. This memo is limited to the negative health impacts of Prospect Ave. road-noise on residents.

Peer Reviewed Research

The preponderance of peer reviewed journal articles are targeted to workplace noise exposure as a result of occupational safety laws. Fortunately, over the past several decades the focus of the industrial health damage from noise has shifted from hearing damage to physiological systems damages. This industrial research is directly transferrable to other applications where excessive noise is present.

"**Long-term exposure to noise from transport has negative effects on health**."

As is often the case, the EU leads the developed world in noise research and recently has focused strongly on the noise induced negative health impacts of transportation. The European Environment Agency sums up the damage in its opening statement on the 2022 update for the EU Environmental Noise Directive (END):

"Chronic exposure to environmental noise **significantly affects physical and mental health and well-being**. It can lead to **annoyance**, **stress reactions** and **sleep disturbance**, and **cognitive impairment** in children, and can have **negative effects on the cardiovascular and metabolic systems**."

There are hundreds, if not thousands of peer-reviewed research articles regarding the health damages from noise. A number of relevant articles are cited as an attachment. Those articles document the following negative health impacts of noise:

Amygdala Stimulation (Fight-Flight Response)
Annoyance
Anxiety Disorders
Bronchodilation (Aggravates Asthma)
Cardiovascular Diseases
Chronic Stress
Chronic Stress Hormones Increases
Cortisol Release
Depression

Elevated Neuroendocrine Response
Heart Attack Increased Rates
High Blood Pressure
Poorer Long Term Memory
Psychological Stress
PTSD
Sleep Disorders
Sleep Interruption
Stroke Increased Rates
Tachycardia

Peer Reviewed Evidence is Clear That Excessive Noise Causes Health Damages

The literature clearly demonstrates the damages of noise. The EU currently has an initiative to reduce the level of road and train noise by 2030 predicated by the health savings. This memo is intended as a summary only to provide evidence and references for the City to conduct its own analysis if it chooses. Given the preponderance of evidence that noise causes health damages, that seems unneeded at this time.

PEER REVIEWED STUDIES OF THE IMPACTS OF CHRONIC STRESS CAUSED BY NOISE

THERE IS NO DOUBT – NOISE CAUSES CHRONIC STRESS AND CHRONIC STRESS IS THE "SILENT KILLER" ACCORDING TO BLUE ZONES

https://easyreadernews.com/lockdown-lessons-blue-zones-founder-dan-buettner-on-how-to-make-use-of-staying-at-home/
Chronic Stress Causes and Health Damages
Blue Zones, a vendor of BCHD that BCHD has spent over $2M with, recognizes chronic stress as the "**silent killer**".
The following references present peer-reviewed research between noise, chronic stress and negative health impacts:

https://doi.org/10.1111/j.1467-9280.1995.tb00522.x
Chronic Noise and **Psychological Stress**
We demonstrate for the first time that chronic noise exposure is associated with elevated neuroendocrine and cardiovascular measures, muted cardiovascular reactivity to a task presented under acute noise, deficits in a standardized reading test administered under quiet conditions, poorer long-term memory, and diminished quality of life on a standardized index Children in high-noise areas also showed evidence of poor persistence on challenging tasks and habituation to auditory distraction on a signal-to-noise task They reported considerable annoyance with community noise levels, as measured utilizing a calibration procedure that adjusts for individual differences in rating criteria for annoyance judgment.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5898791/
The Adverse Effects of Environmental Noise Exposure on Oxidative Stress and **Cardiovascular Risk**
Epidemiological studies have provided evidence that traffic noise exposure is linked to cardiovascular diseases such as arterial hypertension, myocardial infarction, and stroke (high blood pressure, stroke, heart attacks)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1568850/
Noise and stress: a comprehensive approach
The thesis of this paper is that research upon, and efforts to prevent or minimize the harmful effects of noise have suffered from the lack of a full appreciation of the ways in which humans process and react to sound. Provides an overview of **health damage from noise**

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2996188/
Noise and **Quality of Life**
The psychological effects of noise are usually not well characterized and often ignored. However, their effect can be equally devastating and may include hypertension, tachycardia, increased cortisol release and increased physiological stress.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4873188/
Noise Annoyance Is Associated with **Depression** and Anxiety in the General Population

https://pubmed.ncbi.nlm.nih.gov/15070524/
Health effects caused by noise: evidence in the literature from the past 25 years
For an immediate triggering of protective reactions (fight/flight or defeat reactions) the information conveyed by noise is very often more relevant than the sound level. It was shown recently that the first and fastest signal detection is mediated by a subcortical area - the amygdala. For this reason, even during sleep the noise from airplanes or heavy goods vehicles may be categorized as danger signals and induce the release of stress hormones. In accordance with the noise stress hypothesis**, chronic stress hormone dysregulations** as well as increases of established endogenous risk factors of ischemic heart diseases have been observed under long-term environmental noise exposure. Therefore**, an increased risk of myocardial infarction is to be expected**.

https://pubmed.ncbi.nlm.nih.gov/29936225/
Chronic traffic noise stress accelerates brain impairment and cognitive decline

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7503511/
Traffic Noise and Mental Health: A Systematic Review and Meta-Analysis
Public policies to reduce environmental traffic noise might not only increase wellness (by reducing noise-induced annoyance), but might contribute to the prevention of **depression and anxiety disorders**

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2535640/
Traffic-Related Air Pollution and Stress: Effects on **Asthma**
Acute and chronic stress produce substantively different physiological sequelae. Acute stress can induce bronchodilation with elevated cortisol (possibly masking short-term detrimental respiratory effects of pollution), whereas chronic stress can result in cumulative wear and tear (allostatic load) and suppressed immune function over time, increasing general susceptibility

https://pubmed.ncbi.nlm.nih.gov/18629323/
Chronic traffic-related air pollution and stress interact to predict biologic and clinical outcomes in asthma
The physical and social environments interacted in predicting both biologic and clinical outcomes in children with asthma, suggesting that when pollution exposure is more modest, vulnerability **to asthma exacerbations may be heightened in children with higher chronic stress.**
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4918669/
The acute physiological stress response to an emergency alarm and mobilization during the day and at night

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6540098/
Impact of Stressful Events on Motivations, Self-Efficacy, and Development of Post-Traumatic Symptoms among Youth Volunteers in Emergency Medical Services
Chronic Stress Impacts on the Brain

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5573220/
Neurobiological and Systemic Effects of Chronic Stress

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5579396/
The Impact of Stress on Body Function

Jessica Handlin

From: Melissa Villa
Sent: Wednesday, April 23, 2025 7:50 AM
To: Jesse Reyes; Jessica Handlin
Subject: FW: Public Comment to PWSC Commissioners - Fwd: Comments to City Council: 500-600 N Prospect Soundwall/Noise
Attachments: Summary of Noise Induced Health Damages.pdf; North Prospect Noise Wall Analysis (Feb 2025) 02012025.pdf

Good morning,

We received a few emails from Mark Nelson that he would like to get to the commissioners.

There are two more that I will forward to you after this.

Thank you,

Melissa Villa
Analyst
310.697.3182
Melissa.Villa@redondo.org

REDONDO BEACH

From: Mark Nelson (Home Gmail) [redacted]
Sent: Wednesday, April 23, 2025 1:58 AM
To: CityClerk <CityClerk@redondo.org>
Subject: Public Comment to PWSC Commissioners - Fwd: Comments to City Council: 500-600 N Prospect Soundwall/Noise

*CAUTION: Email is from an external source; **Stop, Look, and Think** before opening attachments or links.*

Please deliver the following to the PWSC prior to the next meeting. These documents demonstrate that the Certified EIR of BCHD that analyzed noise levels on the 500-600 blocks of N Prospect demonstrate that the area exceed the Metro noise requirement for a soundwall.

As I noted publicly at the neighborhood meeting with CD3 Councilperson and the Mayor, my property will not be behind the hedge, or soundwall, or k-rail, so I am simply providing support to the neighbors in the center of the street that stand to have their damages reduced through City action.

---------- Forwarded message ---------
From: **Mark Nelson (Home Gmail)** [redacted]
Date: Wed, Feb 5, 2025 at 9:00 AM
Subject: Comments to City Council: 500-600 N Prospect Soundwall/Noi

To: <Andrew.Winje@redondo.org>
Cc: Darryl Boyd [redacted], Paige Kaluderovic <Paige.Kaluderovic@redondo.org>

Update on Comments at the City Council Meeting 2/4/25

Public Works Director Winje:

The following comments and attachments were filed at the City Council meeting last night in support of our neighborhood seeking a safer and quieter street. At a future Council meeting I will provide an overview presentation during the non-agenda item public comment period to reinforce the need and provide continued visibility to this important issue.

In the meantime, I would appreciate your staff's review. We are still waiting for the City's reply to our California Public Records Act requests on local soundwall criteria from Redondo Beach, if any.

Thank you.

Mark Nelson
Property Owner
Expert Witness

##########

Comment #1 (RBCC 2/4/25) Public Comment 2/4/25 Non-Agenda Item RB City Council - 500-600 Block N. Prospect Ave. Soundwall Analysis

Please file this analysis and report as a public comment for the non-agenda items of tonight's Council meeting. It is likely premature for me to call in and discuss tonight, however, it is an important issue to our neighborhood. As such, I am placing it into the record for future reference.

Synopsis: Using certified EIR noise results along with Metro soundwall standards, the residents and property owners of 500-600 N Prospect Ave have conducted an analysis of the consistency of a soundwall along Prospect with Metro published standards. A CPRA request for Redondo Beach Soundwall requirements has been submitted. Based on a thorough website search of Redondo.org and online documents, we do not expect that Redondo Beach has such a document available.

The analysis demonstrates consistency with Metro standards/requirements and moves for a formal soundwall analysis. We anticipate bringing it forward for discussion at a future date. Thank you.

Mark Nelson
Property Owner
Expert Witness

#2 (RBCC 2/4/25) Public Comment 2/4/25 Non-Agenda Item RB City Council - 500-600 Block N. Prospect Ave. Summary of Peer Reviewed Noise Induced Negative Health Impacts

Please file this analysis and report as a public comment for the non-agenda items of tonight's Council meeting. It is likely premature for me to call in and discuss tonight, however, it is an important issue to our neighborhood. As such, I am placing it into the record for future reference.

Synopsis: Peer reviewed medical research of noise-induced health damages supports the concept of a soundwall for our

neighborhood. Studies are cited and summarized for the purpose of demonstrating the overwhelming evidence of the damages of transportation road noise.

We anticipate bringing it forward for discussion at a future date. Thank you.

Mark Nelson
Property Owner
Expert Witness

April 23, 2025

To: Redondo Beach City Council, Public Works Sustainability Commission, N. Prospect Service Road Neighborhood

From: Mark Nelson, N Prospect property owner

Subject: PUBLIC COMMENT: REDONDO BEACH CITY COUNCIL AND COMMISSIONS
April 28, 2025 PWSC Meeting Regarding the 500 and 600 Blocks of N. Prospect

As of the end of the day on Wednesday the 23rd, the residents of the service road have little idea of the City's full plan to improve the service road after the prior view block was removed. We believe that Public Works will discuss speed cushions and closing inbound traffic across from BCHD at the PWSC on Monday the 28th. But based on comments, emails, meetings, prior events, etc., there are many neighborhood issues and concerns regarding the two blocks of service road that have been provided, including (in no order):

NOISE

- 70dB road noise at the residential home "receptors" (BCHD Certified FEIR)
- "big" Prospect motorcycle "loud pipes" noise (02-08-2025 meeting)
- "big" Prospect vehicle acceleration noise (02-08-2025 meeting)
- "big" Prospect vehicle braking noise (02-08-2025 meeting)
- "big" Prospect loud vehicle stereo and subwoofers (02-08-2025 meeting)
- "big" Prospect loud vehicle cell phones through stereos (02-08-2025 meeting)

TRAFFIC

- speeding (02-08-2025 meeting)
- cut through traffic from Diamond St (02-08-2025 meeting)
- wrong way, reckless and illegal maneuver driving (02-08-2025 meeting)
- U-Turners from "big" Prospect into T intersection across from BCHD (02-08-2025 meeting)
- insufficient service road width (vehicles parked both sides or illegally parked across driveways) at T-intersection across from BCHD to accommodate turns to Prospect creates long backups and dangerous situations

SAFETY

- vehicles launching themselves off "big" Prospect onto residents' yards (02-08-2025 meeting)
- impaired visibility compromises pedestrian safety at T-intersection across from BCHD due to parked cars and no marked crosswalk from west-to-east on service road
- disabled access to bus stop compromised by parked cars, cut thru traffic, wrong way traffic

HEALTH

- asthma/cancer impacts - PM2.5 from exhaust from "big" Prospect
- asthma/cancer impacts - PM2.5 from service road exhaust idling at access across from BCHD
- noise impacts reduce sleep and increase chronic stress response

VEHICLE AND OTHER CRIME

- vehicle and trailer thefts (various, Prospect and Diamond Streets)
- potential gang activity for theft, etc. (RBPD Video 10-10-2022)
- stalking (RBPD report under CGC§6254(f)(2)(a) and CGC§6255(a))
- mail and package theft (various)
- on-street vehicle hit-and-run (various)
- car break-ins (various)

Perhaps some of these issues belong at the Public Safety Commission instead of PWSC? In any event, it would be helpful to have had the presentation in advance so that we could caucus as a neighborhood and make comments. It would also be helpful to know more about plans for signs, repainting one-way and do not enter markings on the road, a reduced 15 mph speed limit, narrowing the road with paint like Paulina's 500 and 600 blocks, and maybe a discussion about closing the Diamond entrance to the service road to slow and reduce cut through traffic.

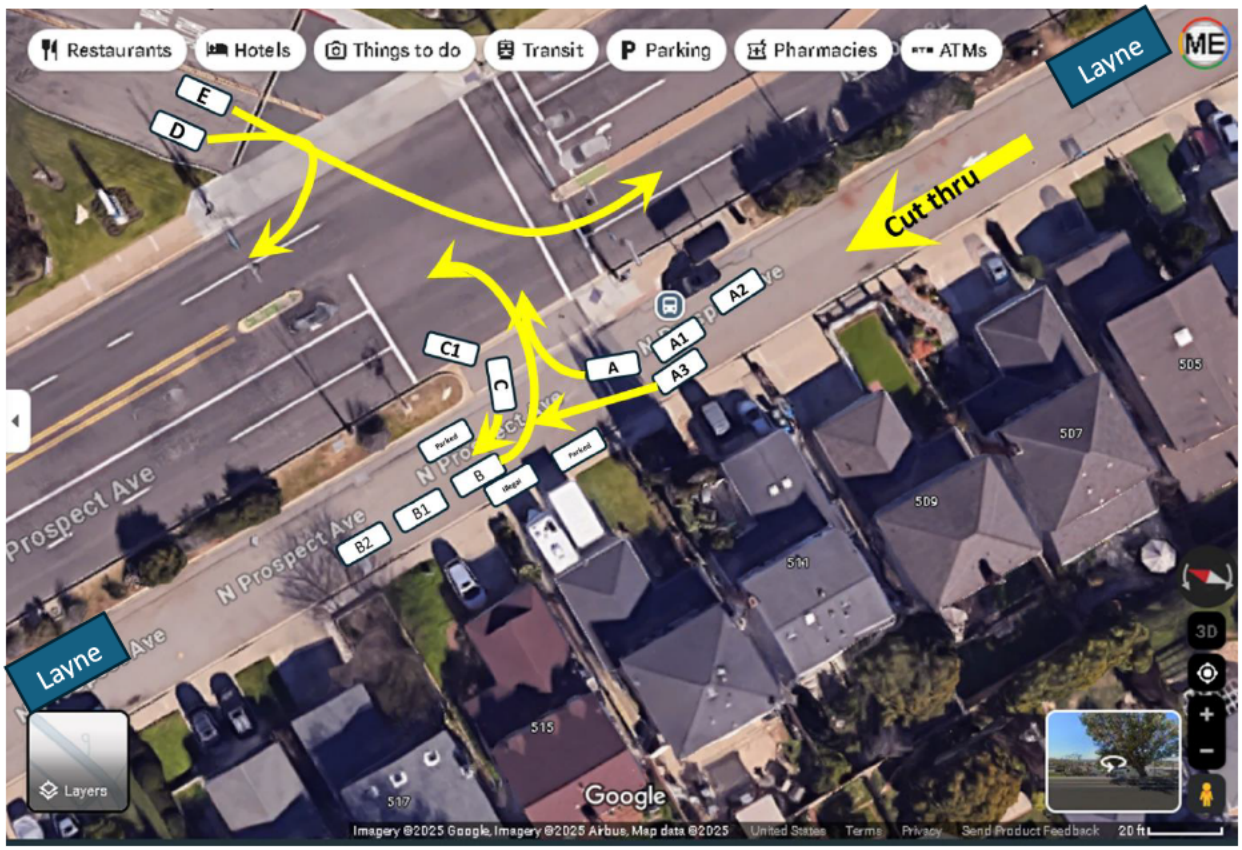
As a retired executive with decades of planning, permitting, environmental and development experience, my intent is to document the many issues to the best of my knowledge so that my neighborhood can pursue the ones that are most important to them. My experience has been that working off a list quickens the pace of consensus by allowing stakeholders to discuss, add, remove, and modify both issues and potential solutions.

This is being circulated to the City and the neighborhood as one of many tools for moving forward to a highly successful outcome. Thanks to everyone for their hard work.

Example of T-intersection across from BCHD gridlock due to lack of road width and both legally and illegally parked cars. Impaired visibility for pedestrians and drivers. Very complicated intersection when BCHD traffic is turning both north and south. Layne Granite trailers narrow street even more.

Right turns for northbound vehicles are essentially tight U-turns that often are 3-point turns
Right turns for southbound "big Prospect" to northbound service road are also tight U-turns
Illegal parking in front of driveways further narrows street and impairs pedestrian views and safety
Stopped cars create noise and exhaust at T-intersection and often wait for more than 1 signal

COMPLICATING FACTOR – BCHD EXITING TRAFFIC SIMULTANEOUSLY, CUT THRU TRAFFIC FROM DIAMOND AVOIDING DIAMOND & PROSPECT SIGNAL



Ryan Liu

From: Andrew Winje
Sent: Thursday, April 24, 2025 08:48
To: Jesse Reyes; Ryan Liu
Cc: Lauren Sablan
Subject: FW: Public Comment regarding upcoming PWSC Meeting on Prospect Service Road Issues
Attachments: Letter to the City on the 28th Meeting Final Version.pdf

Please include the email below and PDF in the AR, perhaps as an attachment that includes other recent public comment.

Thanks,

Andy

Andrew Winje
Director of Public Works
310.697.3151
Andrew.Winje@redondo.org

REDONDO BEACH

From: Mark Nelson (Home Gmail) [redacted]
Sent: Thursday, April 24, 2025 8:05 AM
To: Paige Kaluderovic <Paige.Kaluderovic@redondo.org>; Andrew Winje <Andrew.Winje@redondo.org>
Cc: Darryl Boyd [redacted]; CityClerk <CityClerk@redondo.org>
Subject: Public Comment regarding upcoming PWSC Meeting on Prospect Service Road Issues

*CAUTION: Email is from an external source; **Stop, Look, and Think** before opening attachments or links.*

Councilmember Kaluderovic and Director Winje:

It's doubtful that I will be able to attend the meeting on the 28th. Since the PWSC Agenda and Packet aren't posted, the neighborhood doesn't know what materials will be presented on Monday. As a result, I sat down with my notes and many emails and extracted all the issues that I saw or knew about with the service road so that they'd be top of mind for you and for the neighborhood. The overwhelming majority of issues came up one way or another at the neighborhood meeting that you facilitated.

My list may not be complete, so I'd expect some issues added by others also. If nothing else, this can serve as a starting point for gaining consensus on the issues to pursue beyond speed cushions. Thanks for your assistance.

Public Comment: City Council, PWSC, PSC
Please forward to Commissioners prior to meeting

bcc: the Neighborhood