



Maudelle Miller Shirek Community

Berkeley, California

The Maudelle Miller Shirek Community Housing development will provide 87 affordable housing apartments for large families and households with special needs, in an amenity- and transit-rich location.

Please refer to the following pages for important resources and information.

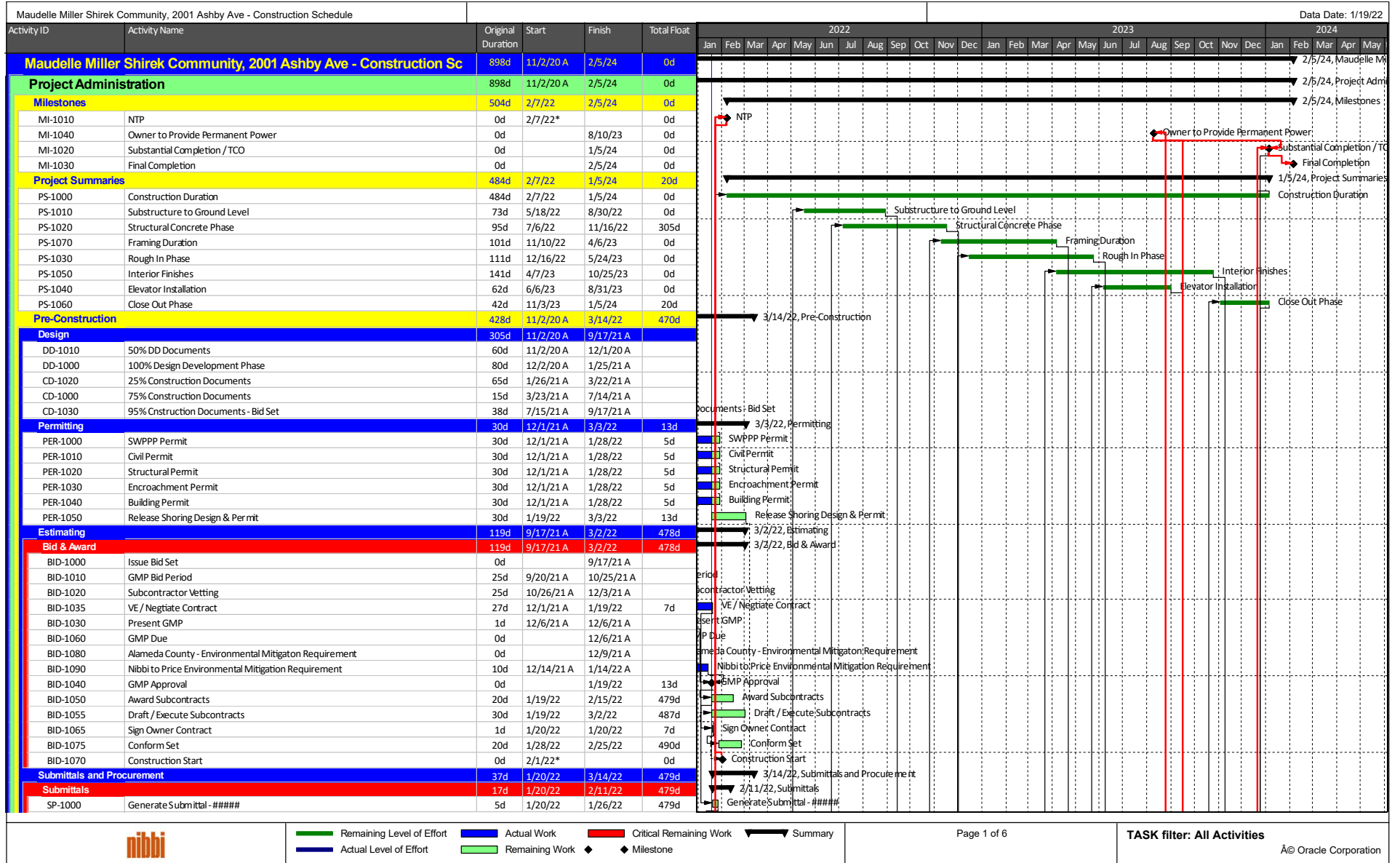
Contact

For questions or inquiries, please contact the Nibbi project team using the info provided below:

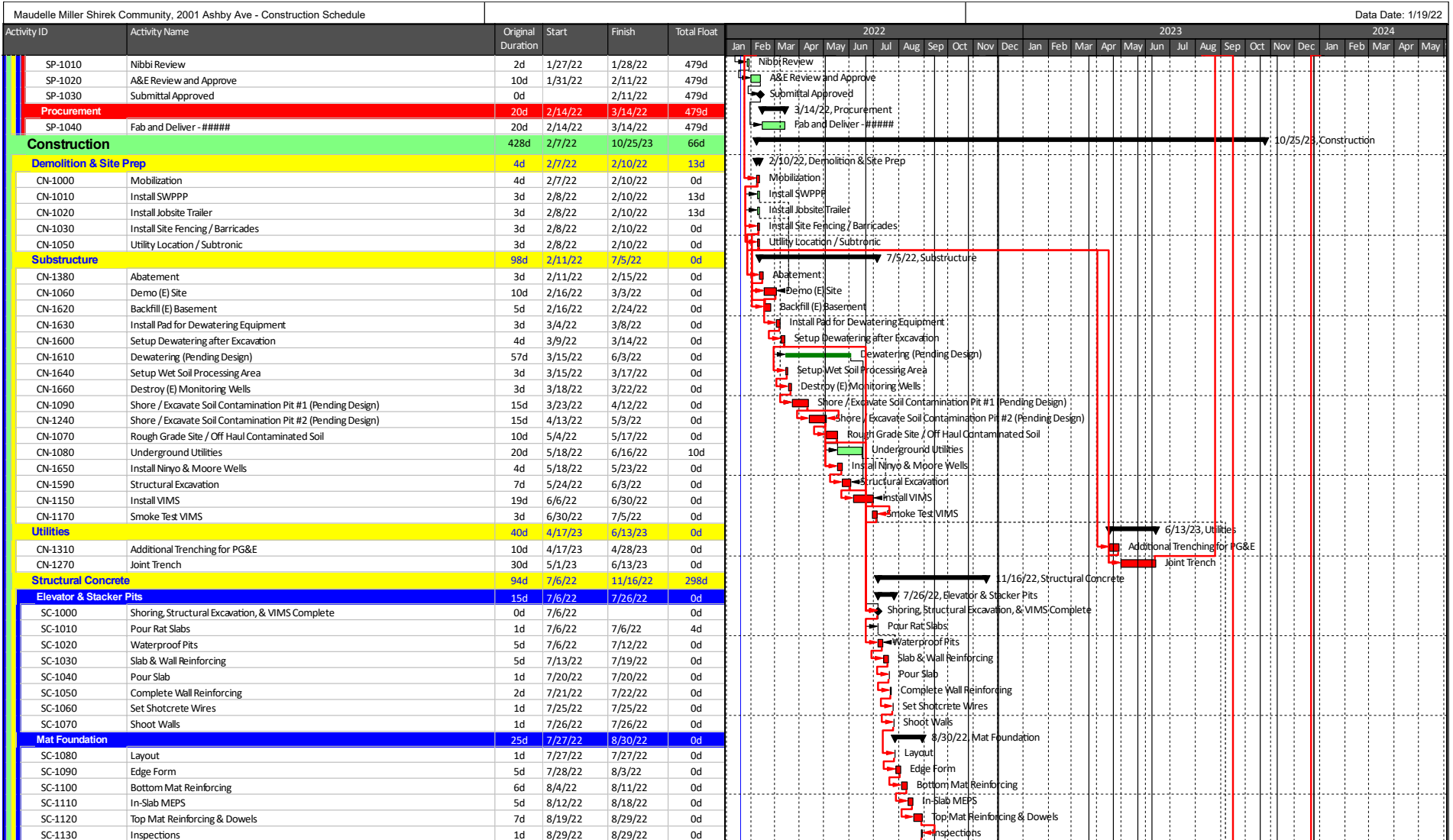
E | maudellemillershirek@nibbi.com

P | 415.863.1820

CONSTRUCTION SCHEDULE



CONSTRUCTION SCHEDULE



█ Remaining Level of Effort █ Actual Work █ Critical Remaining Work Summary
█ Actual Level of Effort █ Remaining Work ◆ Milestone

CONSTRUCTION SCHEDULE

Maudelle Miller Shirek Community, 2001 Ashby Ave - Construction Schedule																		Data Date: 1/19/23																								
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2022												2023												2024												
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May								
CN-1500	State Elevator Inspection	10d	9/14/23	9/27/23	0d																															█	State Elevator Inspection					
Parking Garage																																				█	9/8/23, Parking Garage					
CN-1320	Install Car Stackers	20d	6/16/23	7/17/23	33d																															█	Install Car Stackers					
CN-1470	Stripe Parking Garage	2d	8/29/23	8/30/23	33d																															█	Stripe Parking Garage					
CN-1480	Install Garage Signage	5d	8/31/23	9/8/23	33d																															█	Install Garage Signage					
Interior Rough-In																																				█	6/23/23, Level 1					
Level 1																																				█	MEPF Rough-In - L1					
CN-1140	MEPF Rough-In - L1	25d	12/16/22	1/24/23	0d																															█	MEPF Rough-In - L1					
CN-3450	Insulation - Drop ceilings - Set Tubs	9d	1/25/23	2/6/23	84d																															█	Insulation - Drop ceilings - Set Tubs					
CN-3460	Inspections to Cover	3d	2/7/23	2/9/23	84d																															█	Inspections to Cover					
CN-1330	Pest Control	3d	2/8/23	2/10/23	98d																															█	Pest Control					
CN-3470	Insulation & Sheetrock	15d	2/10/23	3/6/23	84d																															█	Insulation & Sheetrock					
CN-3480	Interiors Doors & Casing	10d	3/3/23	3/16/23	84d																															█	Interiors Doors & Casing					
CN-3490	Tape Top & Texture	20d	3/15/23	4/11/23	84d																															█	Tape Top & Texture					
CN-3500	Prime Paint walls & Ceilings	12d	4/7/23	4/24/23	84d																															█	Prime Paint walls & Ceilings					
CN-3510	Install Casework & Counter Tops	12d	4/21/23	5/8/23	84d																															█	Install Casework & Counter Tops					
CN-3520	Flooring & Carpet	12d	5/5/23	5/22/23	84d																															█	Flooring & Carpet					
CN-3530	MEPs Trim & Mirrors	15d	5/18/23	6/9/23	84d																															█	MEPs Trim & Mirrors					
CN-3540	Hardware & Shades	8d	6/7/23	6/16/23	84d																															█	Hardware & Shades					
CN-3550	Punch List and Turn Over	5d	6/19/23	6/23/23	84d																															█	Punch List and Turn Over					
Level 2																																				█	7/26/23, Level 2					
CN-1160	MEPF Rough-In - L2	25d	1/19/23	2/24/23	0d																															█	MEPF Rough-In - L2					
CN-2100	Insulation - Drop ceilings - Set Tubs	9d	2/27/23	3/9/23	63d																															█	Insulation - Drop ceilings - Set Tubs					
CN-2150	Inspections to Cover	3d	3/10/23	3/14/23	63d																															█	Inspections to Cover					
CN-2160	Pest Control	3d	3/13/23	3/15/23	77d																															█	Pest Control					
CN-2170	Insulation & Sheetrock	15d	3/15/23	4/4/23	63d																															█	Insulation & Sheetrock					
CN-2260	Interiors Doors & Casing	10d	4/3/23	4/14/23	63d																															█	Interiors Doors & Casing					
CN-2340	Tape Top & Texture	20d	4/13/23	5/10/23	63d																															█	Tape Top & Texture					
CN-2520	Prime Paint walls & Ceilings	12d	5/8/23	5/23/23	63d																															█	Prime Paint walls & Ceilings					
CN-2630	Install Casework & Counter Tops	12d	5/22/23	6/8/23	63d																															█	Install Casework & Counter Tops					
CN-2750	Flooring & Carpet	12d	6/7/23	6/22/23	63d																															█	Flooring & Carpet					
CN-2830	MEPs Trim & Mirrors	15d	6/20/23	7/12/23	63d																															█	MEPs Trim & Mirrors					
CN-2950	Hardware & Shades	8d	7/10/23	7/19/23	63d																															█	Hardware & Shades					
CN-3110	Punch List and Turn Over	5d	7/20/23	7/26/23	63d																															█	Punch List and Turn Over					
Level 3																																				█	8/24/23, Level 3					
CN-1180	MEPF Rough-In - L3	25d	2/21/23	3/27/23	0d																															█	MEPF Rough-In - L3					
CN-3120	Insulation - Drop ceilings - Set Tubs	9d	3/28/23	4/7/23	42d																															█	Insulation - Drop ceilings - Set Tubs					
CN-3130	Inspections to Cover	3d	4/10/23	4/12/23	42d																															█	Inspections to Cover					
CN-3560	Pest Control	3d	4/11/23	4/13/23	56d																															█	Pest Control					
CN-3140	Insulation & Sheetrock	15d	4/13/23	5/3/23	42d																															█	Insulation & Sheetrock					
CN-3150	Interiors Doors & Casing	10d	5/2/23	5/15/23	42d																															█	Interiors Doors & Casing					
CN-3160	Tape Top & Texture	20d	5/12/23	6/12/23	42d																															█	Tape Top & Texture					
CN-3170	Prime Paint walls & Ceilings	12d	6/8/23	6/23/23	42d																															█	Prime Paint walls & Ceilings					
CN-3180	Install Casework & Counter Tops	12d	6/22/23	7/11/23	42d																															█	Install Casework & Counter Tops					
CN-3190	Flooring & Carpet	12d	7/10/23	7/25/23	42d																															█	Flooring & Carpet					
CN-3200	MEPs Trim & Mirrors	15d	7/21/23	8/10/23	42d																															█	MEPs Trim & Mirrors					
CN-3210	Hardware & Shades	8d	8/8/23	8/17/23	42d																															█	Hardware & Shades					
CN-3220	Punch List and Turn Over	5d	8/18/23	8/24/23	42d																															█	Punch List and Turn Over					
Level 4																																				█	9/26/23, Level 4					
CN-1200	MEPF Rough-In - L4	25d	3/22/23	4/25/23	0d																															█	MEPF Rough-In - L4					

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						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
CN-1560	Landscaping & Planting	10d	10/12/23	10/25/23	0d																											
CN-1570	Install Benches	5d	10/19/23	10/25/23	0d																											
Close Out		70d	9/22/23	1/8/24	20d																											
CO-1000	Develop Punchlist	6d	10/26/23	11/2/23	0d																											
CO-1010	Life Safety / Pre-Testing	20d	10/26/23	11/22/23	0d																											
CO-1020	Punchlist Corrections	10d	11/3/23	11/16/23	15d																											
CO-1060	Air Balance & Commissioning	15d	11/7/23	11/29/23	45d																											
CO-1030	Construction Complete	0d		11/16/23	15d																											
CO-1080	Life Safety Inspections	5d	11/21/23	11/29/23	0d																											
CO-1050	Temporary Certificate of Occupancy Inspections(TCO)	8d	11/30/23	12/11/23	0d																											
CO-1040	Weather Allowance	15d	12/12/23	1/5/24	0d																											
CO-1070	Owner Move In	0d	1/8/24		20d																											
Vapor Mitigation System		40d	9/22/23	11/16/23	15d																											
CN-1100	Complete VIMS	5d	9/22/23	9/28/23	15d																											
CN-1110	VIMS Field Test	10d	9/29/23	10/12/23	15d																											
CN-1120	VIMS Lab Results	10d	10/13/23	10/26/23	15d																											
CN-1130	VIMS County Review	15d	10/27/23	11/16/23	15d																											



█ Remaining Level of Effort
 █ Actual Work
 █ Critical Remaining Work
 ▼ Summary
█ Actual Level of Effort
 █ Remaining Work
 ◆ ◆ Milestone

TRANSPORTATION

ALL DRIVEWAYS TO REMAIN OPEN UNLESS OTHERWISE INDICATED.


FLAGGERS TO ASSIST WITH PEDESTRIAN TRAFFIC.

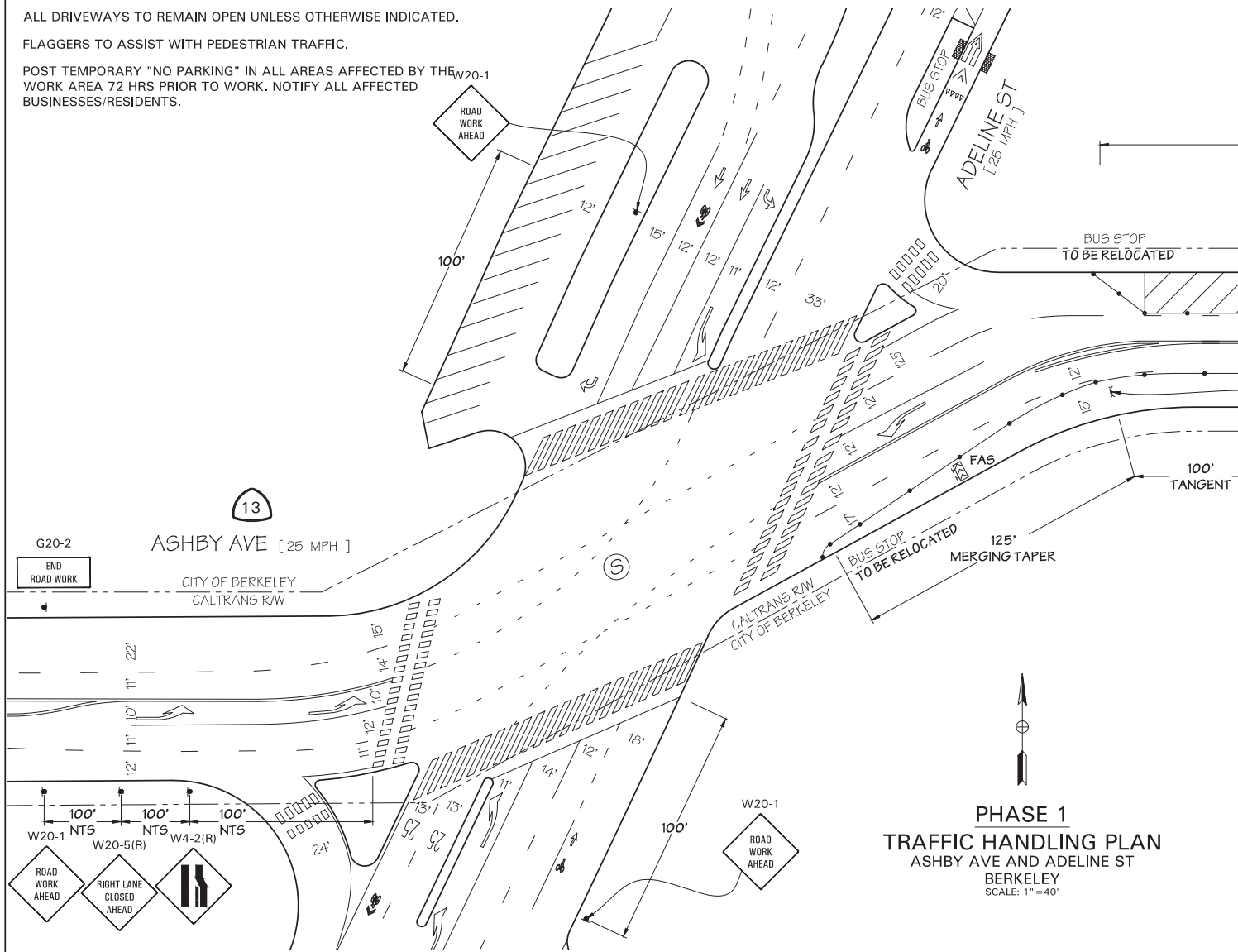
POST TEMPORARY "NO PARKING" IN ALL AREAS AFFECTED BY THE WORK AREA 72 HRS PRIOR TO WORK. NOTIFY ALL AFFECTED BUSINESSES/RESIDENTS.

DIST	COUNTY	ROUTE	EXIT #	SHEET NO	TOTAL SHEETS
2	ALA	13	NA	1	2

PLANS APPROVAL DATE _____

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

 TRAFFIC MANAGEMENT, INC.
2435 LEMON AVE
SIGNAL HILL, CA 90755
PHONE - 800-763-3999
FAX - 562-424-0266



PHASE 1
TRAFFIC HANDLING PLAN
ASHBY AVE AND ADELIN ST
BERKELEY
SCALE: 1" = 40'



NOT APPROVED FOR
CONSTRUCTION UNLESS SIGNED

TRANSPORTATION

ALL DRIVEWAYS TO REMAIN OPEN UNLESS OTHERWISE INDICATED.
 FLAGGERS TO ASSIST WITH PEDESTRIAN TRAFFIC.
 POST TEMPORARY "NO PARKING" IN ALL AREAS AFFECTED BY THE WORK AREA 72 HRS PRIOR TO WORK. NOTIFY ALL AFFECTED BUSINESSES/RESIDENTS.



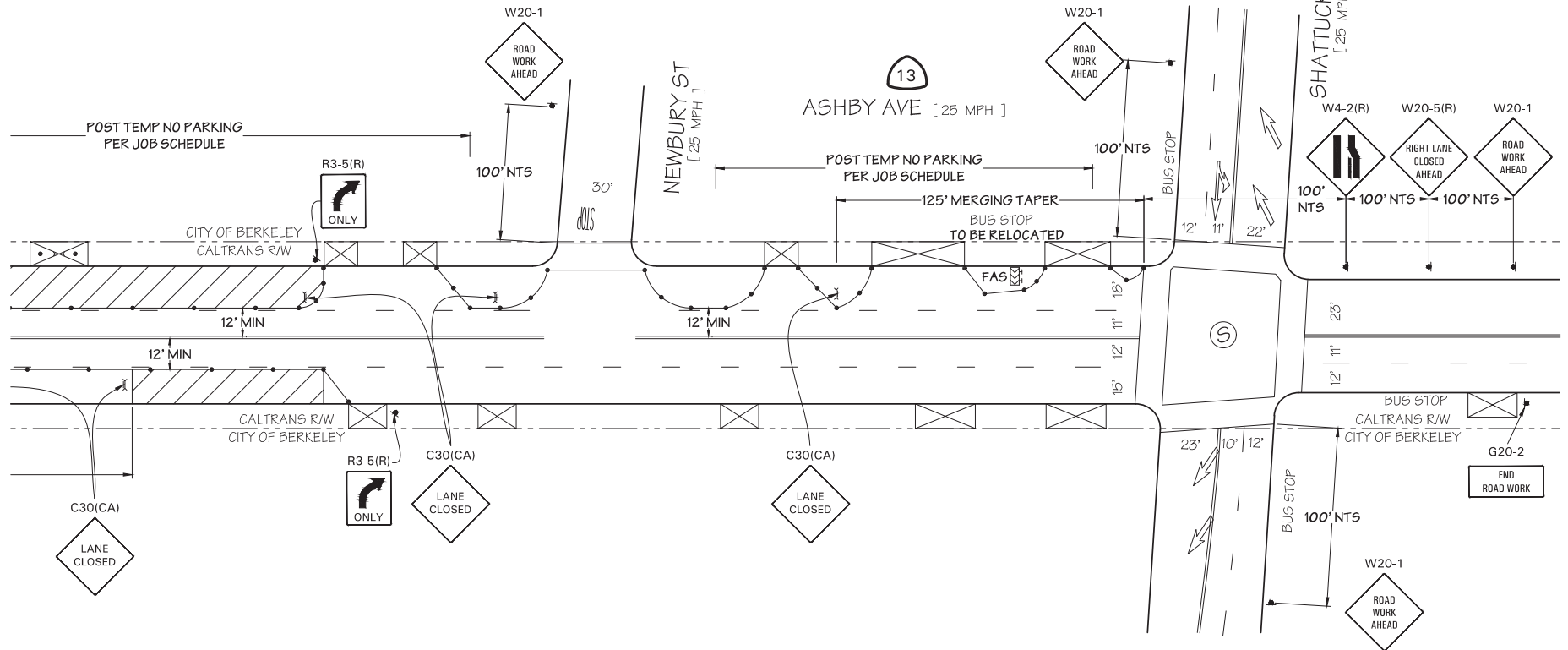
PHASE 1 TRAFFIC HANDLING PLAN ASHBY AVE AND ADELINE ST BERKELEY SCALE: 1" = 40'



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 CONSTRUCTION UNLESS SIGNED

DIST	COUNTY	ROUTE	EXIT #	SHEET NO	TOTAL SHEETS
2	ALA	13	NA	1	2

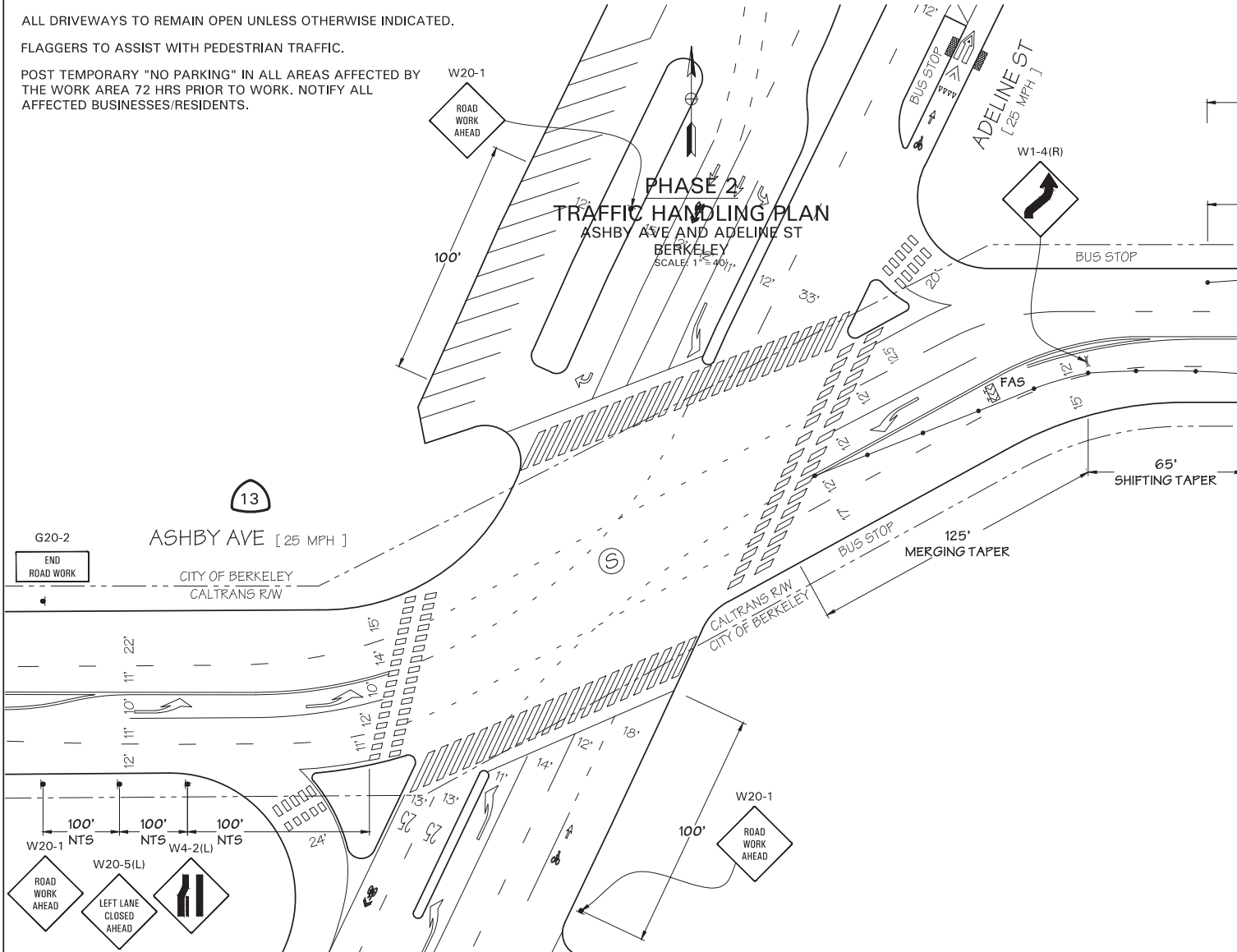
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TRANSPORTATION

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 FLAGGERS TO ASSIST WITH PEDESTRIAN TRAFFIC.
 POST TEMPORARY "NO PARKING" IN ALL AREAS AFFECTED BY THE WORK AREA 72 HRS PRIOR TO WORK. NOTIFY ALL AFFECTED BUSINESSES/RESIDENTS.

PHASE 2 TRAFFIC HANDLING PLAN ASHBY AVE AND ADELINE ST BERKELEY SCALE 1" = 40'



DIST	COUNTY	ROUTE	EXIT #	SHEET NO	TOTAL SHEETS
2	ALA	13	NA	3	4

PLANS APPROVAL DATE _____
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ALL DRIVEWAYS TO REMAIN OPEN UNLESS OTHERWISE INDICATED.

FLAGGERS TO ASSIST WITH PEDESTRIAN TRAFFIC.

POST TEMPORARY "NO PARKING" IN ALL AREAS AFFECTED BY THE WORK AREA 72 HRS PRIOR TO WORK. NOTIFY ALL AFFECTED BUSINESSES/RESIDENTS.



DIST	COUNTY	ROUTE	EXIT #	SHEET NO	TOTAL SHEETS
2	ALA	13	NA	4	4

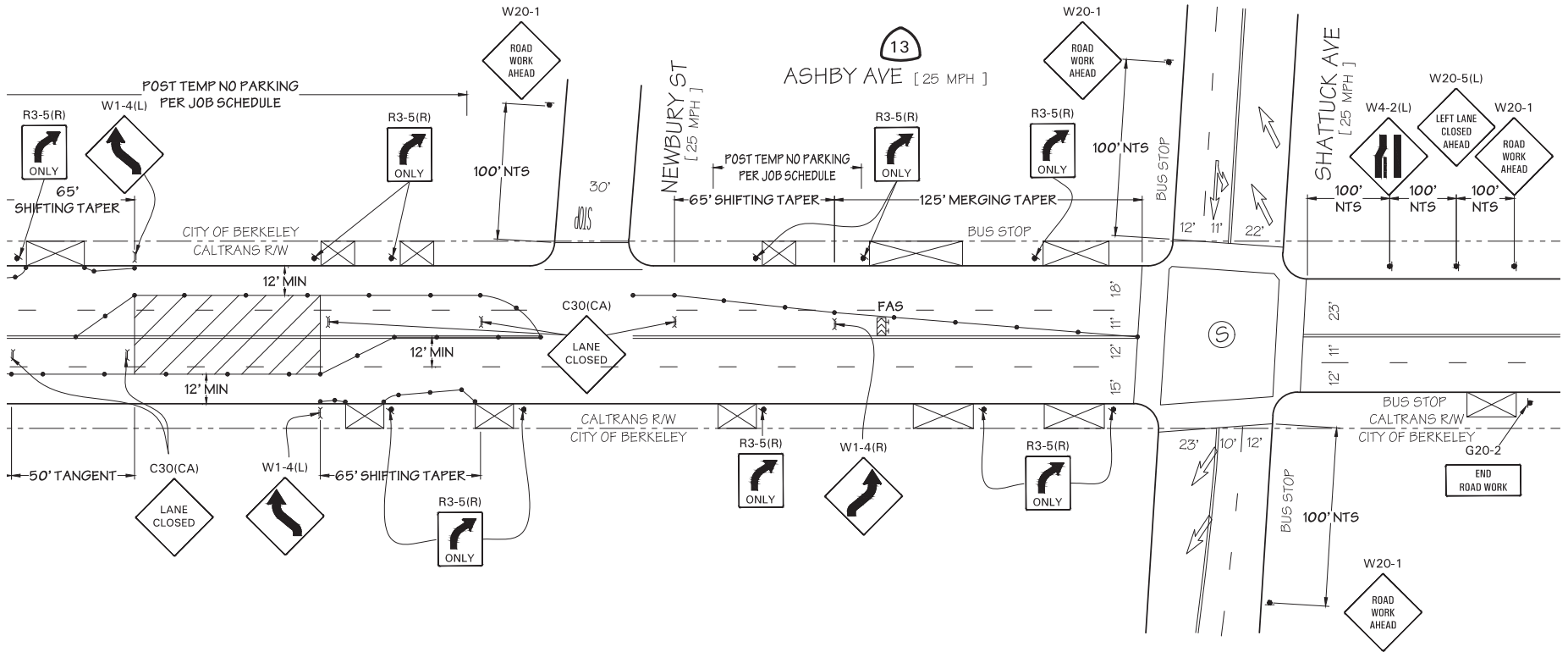
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SIGNAL HILL, CA 90755
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PHASE 2
TRAFFIC HANDLING PLAN
ASHBY AVE AND ADELINE ST
BERKELEY
SCALE: 1" = 40'

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TRANSPORTATION

GENERAL NOTES-TRAFFIC CONTROL

It is the responsibility of the contractor performing work to install and maintain the traffic control devices as shown herein, as well as any such additional traffic control devices as may be required to ensure the safe movement of vehicular and pedestrian traffic through or around the closure area and provide maximum protection and safety to workers.

All traffic control devices shall be kept in their proper position at all times and shall be repaired, replaced, or cleaned as necessary to preserve their appearance, continuity and capability.

All traffic control devices shall conform to the latest accepted edition of the California Manual on Uniform Traffic Control Devices (M.U.T.C.D.).

Any revisions to these drawings shall be approved in writing by the Engineer of Record and the Agency having jurisdiction.

The Agency Traffic Engineering Division reserves the right to observe the traffic control operations and to make any necessary changes. Any directed changes shall supersede these plans and shall be implemented at the sole expense of the contractor.

All flashing arrow signs shall be solar powered.

Contractor shall provide flagmen as necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered.

Contractor shall remove temporary traffic delineation, signage, and other devices when no longer required, and shall restore areas to original conditions.

Contractor shall cover existing signs where they conflict with construction detours and signing.

All open excavation or construction work shall be a minimum of 5' from any operating traffic lanes.

Contractor shall post uneven pavement signs, and ramp vertical pavement offset of 1 inch or more with flagmen for smooth transition.

Contractor shall coordinate with the agency for any temporary traffic signal timing modifications.

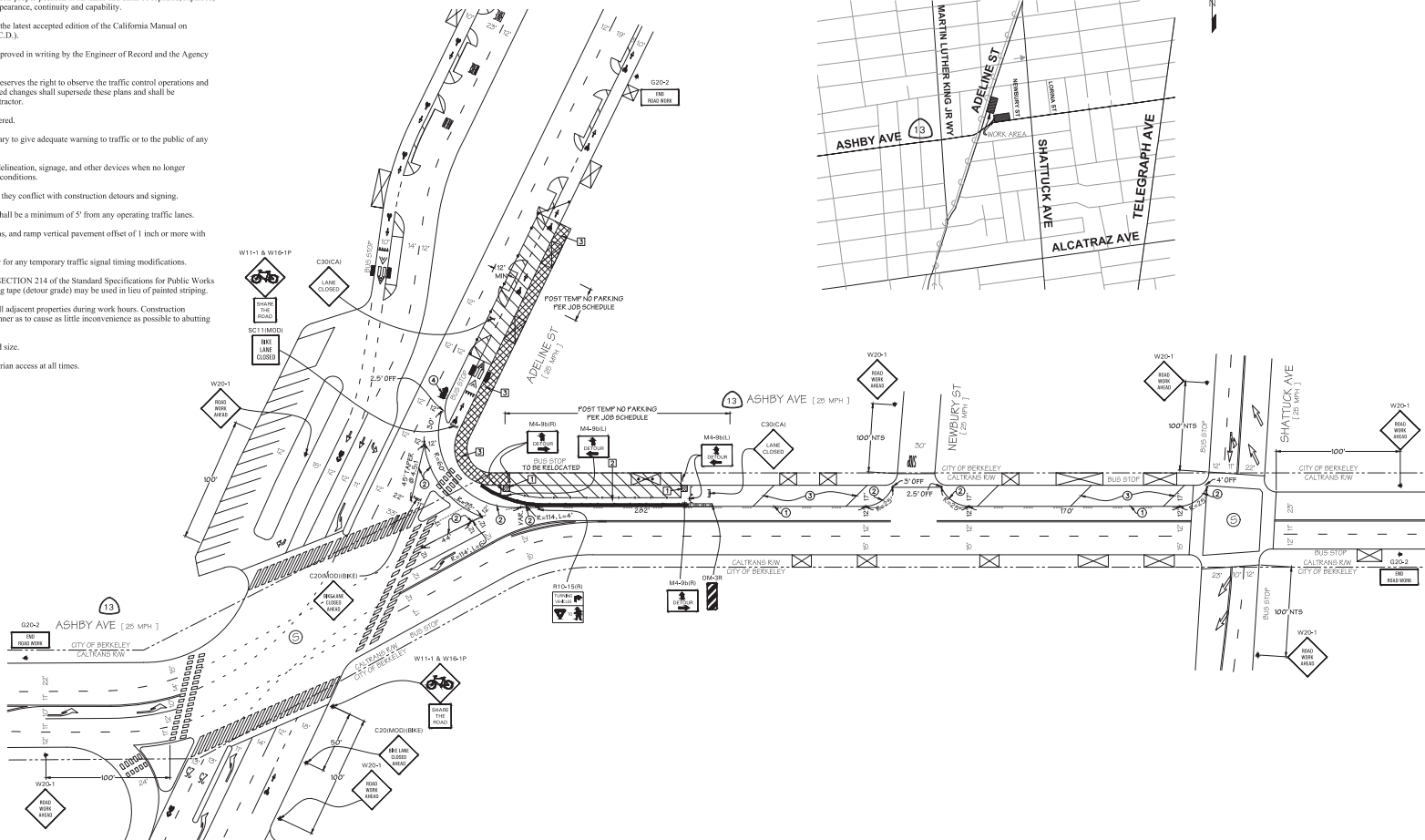
All striping and marking shall conform to SECTION 214 of the Standard Specifications for Public Works Construction. Temporary removable striping tape (detour grade) may be used in lieu of painted striping.

The contractor shall provide for access to all adjacent properties during work hours. Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners/operators.

All signs shall be reflectorized and standard size.

The contractor shall provide for safe pedestrian access at all times.


OVERVIEW MAP: NOT TO SCALE



LEGEND:	
	- WORK AREA
	- FLASHING ARROW SIGN (FAS)
	- FLAGGER
	- ADA COMPLIANT PEDESTRIAN BARRICADE W/ SIGN
	- TYPE III BARRICADE W/ SIGN
	- TYPE I OR II BARRICADE W/ SIGN
	- CHANNELIZATION DEVICE
	- SIGN
	- EXISTING SIGN
	- SLED ATTENUATOR (TL-2)
	- 10' CONCRETE K-RAIL
	- 20' CONCRETE K-RAIL
	STRIPING TO REMAIN
	STRIPING TO REMOVE
	STRIPING TO ADD

- BUBBLE NOTES:**
- CALTRANS DETAIL 27B (4" WHITE EDGE LINE)
 - CALTRANS DETAIL 38A (8" WHITE CHANNELIZING LINE)
 - 12" WHITE DIAGONAL LINE @ 75' C-C
 - BIKE SHARROW

- CONSTRUCTION NOTES:**
- CONTRACTOR SHALL INSTALL ADA-COMPLIANT PEDESTRIAN RAMP.
 - CONTRACTOR SHALL MAINTAIN MIN. 5'-WIDE PEDESTRIAN WALKWAY AT ALL TIMES.
 - CONTRACTOR SHALL INSTALL A PEDESTRIAN CANOPY.




TRAFFIC MANAGEMENT, INC.
California - Great Lakes
800.763.3999
www.trafficmanagement.com

Traffic Control Services
Sales & Rentals
Permits & Consulting
Engineering
Training
LICENSE # 785804 - Class 31

CITY OF BERKELEY

NIBBI BROS ASSOCIATES INC.

ASHBY AVE
AND ADELINE ST



NOT APPROVED FOR CONSTRUCTION UNLESS SIGNED

TMI PROJECT MANAGER:
MARK C.

SUBMITTAL DATE: 9/30/21 - SJ

REVISION DATES:

ACCEPTED BY: _____ DATE: _____

DATE: _____

THE CONTRACTOR, TRAFFIC BEHAVIOR MANAGEMENT AND PUBLIC RELATIONS REPRESENTATIVE AND THE SOLE PROPRIETOR OF TRAFFIC MANAGEMENT, INC. SHALL BE SUBJECT TO THE EXCLUSIVE JURISDICTION OF THE SUPERIOR COURT OF THE COUNTY OF ALameda, CALIFORNIA FOR THE ENFORCEMENT OF ANY AND ALL CONTRACTS HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF BERKELEY AND THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND PUBLIC SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND PUBLIC SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND PUBLIC SAFETY.

Plan Order #: 66465

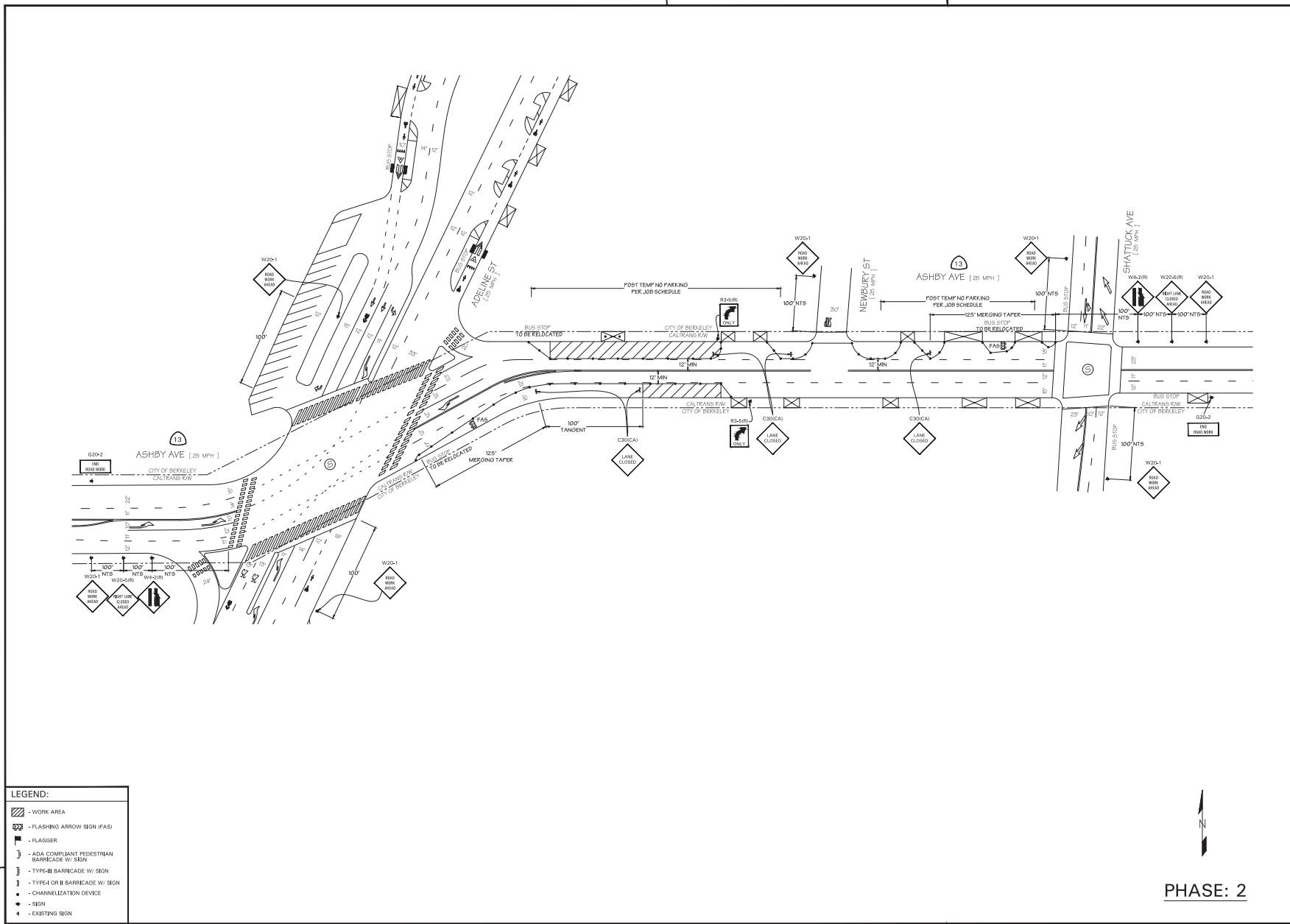
SCALE: 1" = 40'

ORIGINAL PLAN SIZE: 24" x 36"

SHEET
1 OF 3

PHASE: 1

TRANSPORTATION



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TMI PROJECT MANAGER:
 MARK C.
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ACCEPTED BY: _____ DATE: _____
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THE COMPANY, TRAFFIC MANAGEMENT, INC. AND ITS PROJECT MANAGER REPRESENTS AND WARRANTS THAT THE PREPARED DOCUMENTS ARE THE SOLE PROPERTY OF TRAFFIC MANAGEMENT, INC. AND ARE SUBJECT TO THE EXCLUSIVE AND EXCLUSIVE RIGHTS OF TRAFFIC MANAGEMENT, INC. IN THE PREPARED DOCUMENTS. NO PART OF THE PREPARED DOCUMENTS SHALL BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF TRAFFIC MANAGEMENT, INC. THE COMPANY AND ITS PROJECT MANAGER SHALL BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE INFORMATION PROVIDED AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF THIS INFORMATION FROM UNAUTHORIZED DISCLOSURE.

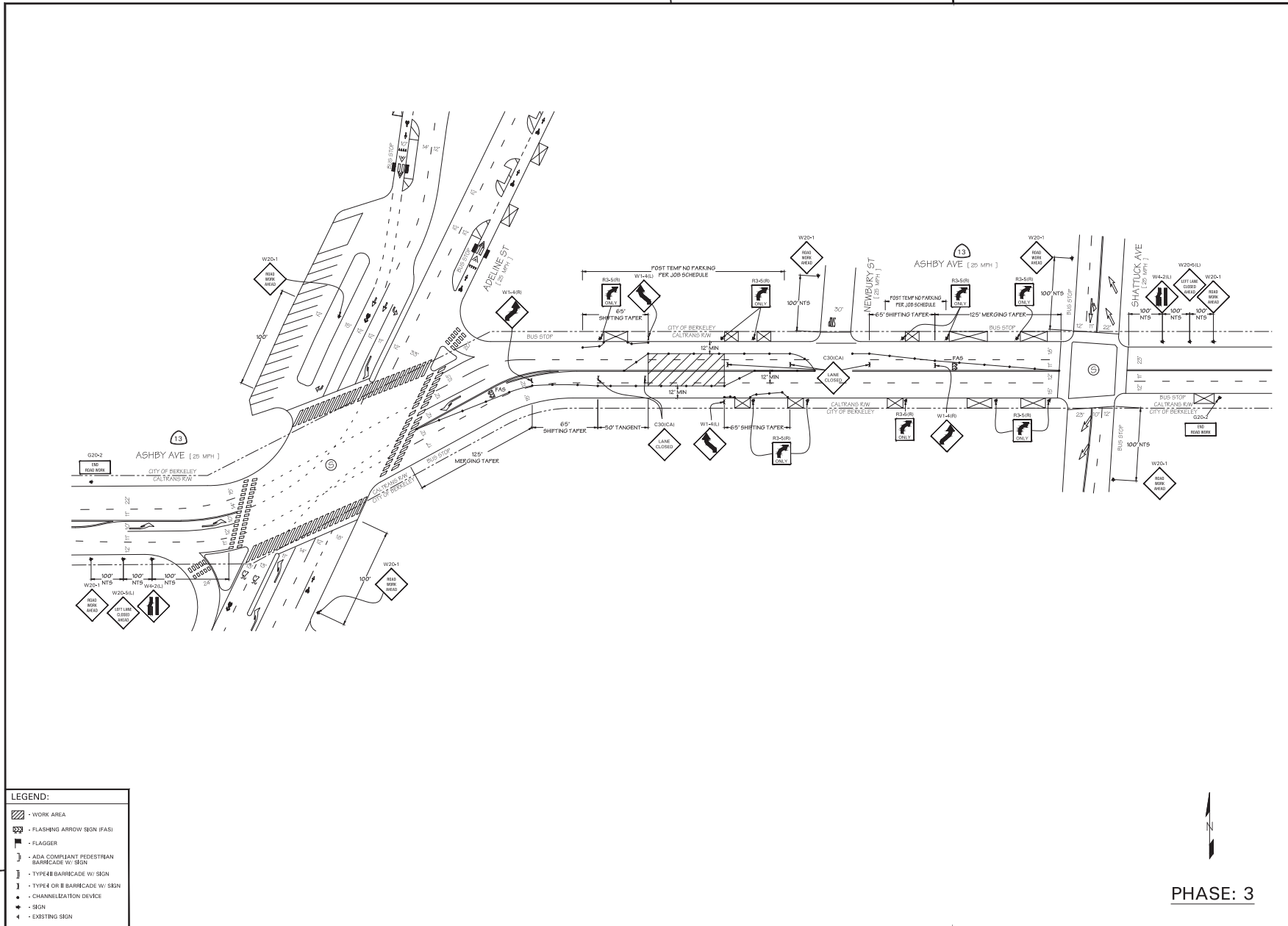
Plan Order #: 66465

0' 20' 40' 80'
 SCALE: 1" = 40'
 ORIGINAL PLAN SIZE: 24" x 36"

PHASE: 2

SHEET
 2 OF 3

TRANSPORTATION



LEGEND:

- WORK AREA
- FLASHING ARROW SIGN (FAS)
- FLAGGER
- ADA COMPLIANT PEDESTRIAN BARRICADE W/ SIGN
- TYPE 4B BARRICADE W/ SIGN
- TYPE 4 OR II BARRICADE W/ SIGN
- CHANNELIZATION DEVICE
- SIGN
- EXISTING SIGN



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TMI PROJECT MANAGER:
MARK C.

SUBMITTAL DATE: 9/30/21 - SJ

REVISION DATES:

ACCEPTED BY: _____ DATE: _____

DATE: _____

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Plan Order #: 66465

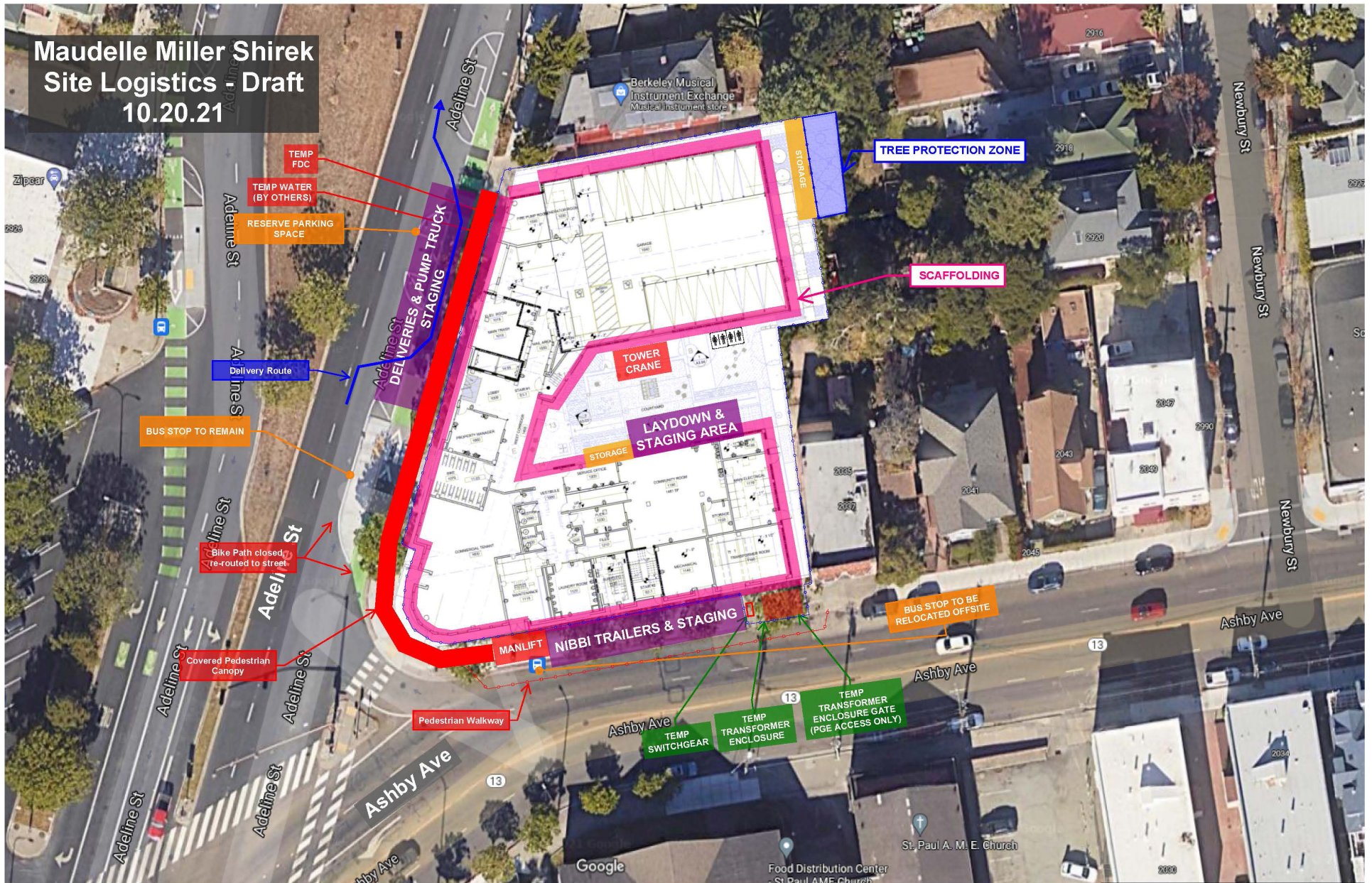
SCALE: 1" = 40'
 ORIGINAL PLAN SIZE: 24" x 36"

SHEET

3 OF 3

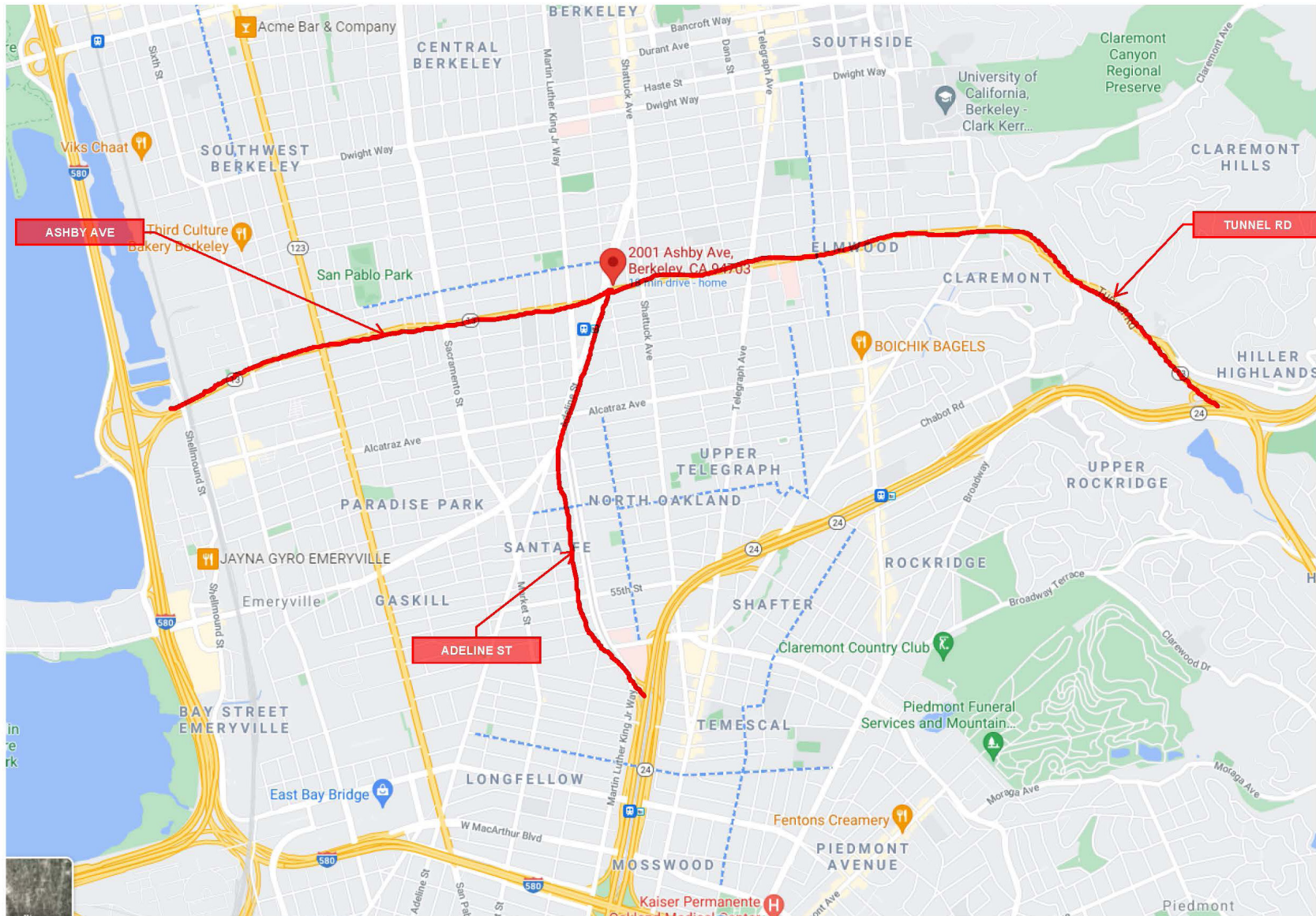
PHASE: 3

CONSTRUCTION PLAN



CONSTRUCTION PLAN

Maudelle Miller Shirek City of Berkeley Approved Truck Routes - Draft



Notice of Construction

Starting Monday February 7, 2022

Project Address: 2001 Ashby Avenue, Berkeley

Project Name: Maudelle Miller Shirek Community

Project Description: Renovation of Credit Union Bank and Building Areas. Construction of new mixed-use 6 story structure with 87 100% affordable residential units & community support spaces. Including landscaped courtyard and commercial tenant space at ground floor.

What you can expect

Noise related to Construction Activities such as Heavy Equipment Demolition, Excavating, Drilling, Earth Moving, Machinery, Hammering and other noises related to construction activity.

**Work Hours from 7am-7pm Weekdays
9am-8pm Weekends (as needed)**

**For Construction or Noise related issues please contact our job liaison
Mike Joyce of Nibbi Brothers Construction at 925 360-5126**

**Nibbi Brothers General Contractors
1000 Brannan St #102
San Francisco, CA 94103
415 863-1820**

Maudelle Miller Shirek

2001 Ashby Avenue, Berkeley, CA

CONSTRUCTION NOISE REDUCTION PROGRAM

28 January 2022

Prepared for: Nicole Brown
Resources for Community Development
2020 Oxford Street
Berkeley, CA 94704
nbrown@rcd.org

Prepared by: **Salter**
Blake Wells, LEED GA – Associate bwells@salter-inc.com
Jason Duty, PE – Senior Vice President jduty@salter-inc.com

Salter Project 22-0042



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salter-inc.com

Acoustics
Audiovisual
Telecommunications
Security

INTRODUCTION

We understand the City of Berkeley has requested a site-specific construction noise reduction program as part of the Conditions of Approval for the new Maudelle Miller Shirek mixed-use project. The project is at the northeast corner of Adeline Street and Ashby Avenue in Berkeley. We have reviewed the proposed construction equipment and schedule and predicted the noise levels expected at the nearby properties.

Construction is scheduled to begin February 2022 and be completed within approximately 24 months. Construction activity will be limited to the hours of 7 am to 6 pm on Monday through Friday, and 9 am to 4 pm on Saturday. No construction-related activity shall occur on Sunday or any federal holiday.

This report summarizes the results of our analysis and provides recommendations for construction noise reduction measures. The report consists of the following sections:

- 1.0 Executive Summary
- 2.0 Applicable Criteria
- 3.0 Construction Noise Analysis
- 4.0 Noise Reduction Measures

1.0 EXECUTIVE SUMMARY

1. Construction noise levels and duration of noise will vary depending on the type and location of the construction activities. We expect that noise levels could temporarily exceed the ordinance criteria without noise reduction measures at the nearest properties when construction is occurring close to the properties.
2. The site-specific noise reduction measures will be implemented. Additional noise reduction measures, such as equipment relocation away from residential receivers and additional barriers, should be considered to further reduce the construction noise levels. This is discussed in Section 4.0.

2.0 APPLICABLE CRITERIA

2.1 Berkeley Municipal Code

The City of Berkeley Municipal Code, Section 13.40.070 provides provisions for construction/demolition noise levels. These provisions are as follows:

- a. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work before 7 am on a weekday (or before 9 am on a weekend or holiday) or after 7 pm on a weekday (or after 8 pm on a weekend or holiday) such that the sound therefrom across a residential or commercial real property line violates Section 13.40.050 or 13.40.060, except for emergency work of public service utilities or by variance issued by the EHD.

- b. Noise Restrictions at Affected Properties. Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum sound levels at affected properties will not exceed those listed in the following schedule.

Table 1: Maximum Noise Levels for Long-Term Operation of Stationary Equipment, dBA

	Residential (R-1, R-2)	Multi-Family Residential (R-3)	Commercial/ Industrial
Weekdays (7 am to 7 pm)	60	65	70
Weekends/Holidays (9 am to 8 pm)	50	55	60

The City of Berkeley Municipal Code, Section 13.40.050 also states:

If the measured ambient noise level is greater than the level permissible within any of the noise limit categories above, the sound level when measured on any other property shall not exceed:

- a. The ambient noise level for a cumulative period of more than 30 minutes in any hour
- b. The ambient noise level plus 5 dBA for a cumulative period of more than 15 minutes in any hour
- c. The ambient noise level plus 10 dBA for a cumulative period of more than 5 minutes in any hour
- d. The ambient noise level plus 15 dBA for a cumulative period of more than 1 minute in any hour
- e. The ambient noise level plus 20 dBA for any period of time

The project is in the Adeline Street Commercial (C-AC) zone. The adjacent buildings to the north, south, and west are also in the C-AC commercial zone. A South Area Commercial (C-SA) zone is to the southeast and a Multi-family Residential (R-4) zone is to the northeast.

2.2 Conditions of Approval, Attachment D

Item 12: Construction Noise Reduction Program

The applicant shall develop a site-specific noise reduction program prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible, subject to review and approval of the Zoning Officer. The noise reduction program should include the time limits for construction listed above, as measures needed to ensure that construction complies with BMC Section 13.40.070. The noise reduction program should include, but shall not be limited to, the following available controls to reduce construction noise levels as low as practical:

- A. Construction equipment should be well maintained and used judiciously to be as quiet as practical.
- B. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.

- C. Utilize "quiet" models of air compressors and other stationary noise sources where technology exists. Select hydraulically or electrically powered equipment and avoid pneumatically powered equipment where feasible.
- D. Locate stationary noise-generating equipment as far as possible from sensitive receptors when adjoining construction sites. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible.
- E. Prohibit unnecessary idling of internal combustion engines.
- F. If impact pile driving is required, pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.
- G. Construct solid plywood fences around construction sites adjacent to operational businesses, residences, or other noise-sensitive land uses where the noise control plan analysis determines that a barrier would be effective at reducing noise.
- H. Erect temporary noise control blanket barriers. If necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.
- I. Route construction related traffic along major roadways and away from sensitive receptors where feasible.

Item 14: Prior To Issuance of Any Building & Safety Permit (Demolition or Construction):

At least two weeks prior to initiating any demolition or construction activities at the site, the applicant shall provide notice to businesses and residents within **500 feet** of the project site. This notice shall at a minimum provide the following: (1) project description, (2) description of construction activities during extended work hours and reason for extended hours, (3) daily construction schedule (i.e., time of day) and expected duration (number of months), (4) the name and phone number of the Project Liaison for the project that is responsible for responding to any local complaints, and (5) that construction work is about to commence. The liaison would determine the cause of all construction-related complaints (e.g., starting too early, bad muffler, worker parking, etc.) and institute reasonable measures to correct the problem. A copy of such notice and methodology for distributing the notice shall be provided in advance to the City for review and approval.

2.3 Existing Noise Environment

Noise measurements were conducted by Wilson Ihrig from 5 to 10 September 2020 along Adeline Street and Ashby Avenue as part of their Title 24 Noise Study. See **Figure 1** for their measurement locations.

Figure 1: Existing Noise Environment Measurement Locations



Table 2 shows the measured noise levels as the range of hourly L_{eq}^1 in dBA.

Table 2: Range of Existing Noise Environment During Construction Hours

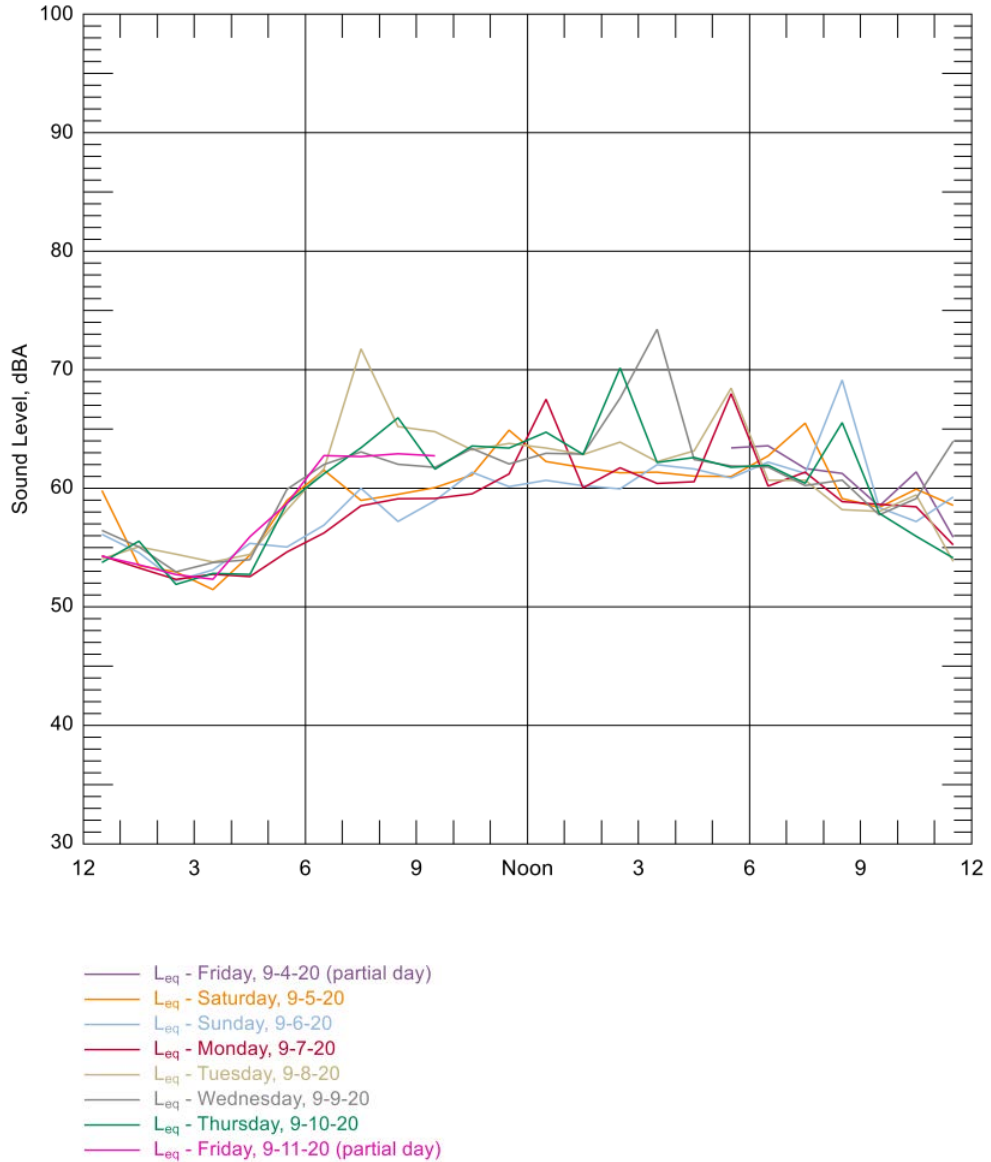
Location	Measured Hourly (7 am to 6 pm) $L_{eq}(h)$ (dBA)	Noise Ordinance Prescribed Noise Limit (dBA)
Adeline Street (L1)	57 to 74	70
Ashby Avenue (L2)	62 to 75	65

As shown, the existing noise levels exceed the maximum allowable receiving noise level standards at the neighboring properties for long-term construction with stationary equipment. Therefore, the criteria should be increased to the existing ambient noise levels (e.g., 74 dBA and 75 dBA) at each location, per

1 L_{eq} – The equivalent steady-state A-weighted sound level that, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same period.

Section 13.40.050. See **Figures 2 and 3** for graphical representations² of their measured noise levels during the measurement period.

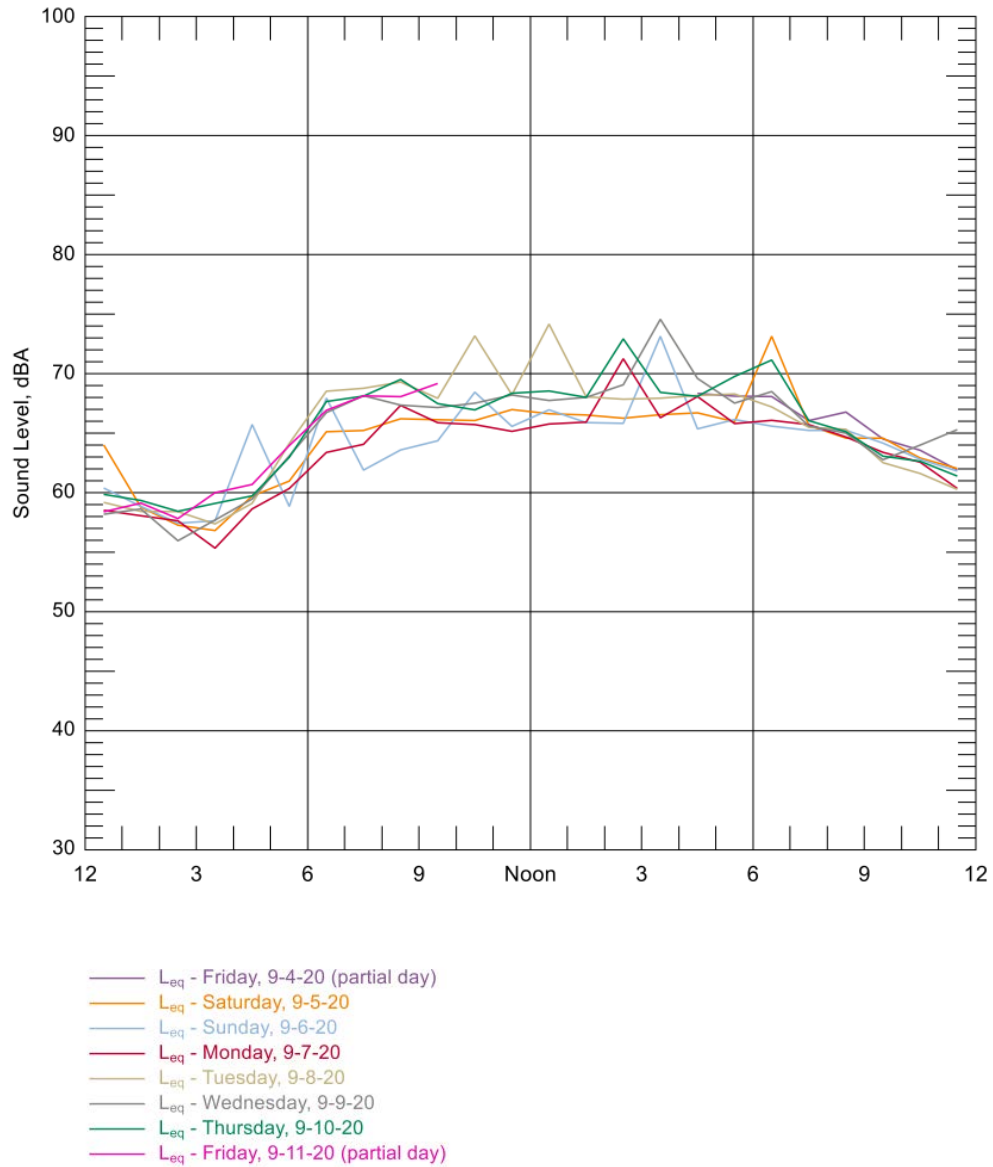
Figure 2: Measured Hourly Noise Levels (dBA) at Adeline Street (L1)



*Data provided by Wilson Ihrig, 6 April 2021

2 Data and graphics from “Maudelle Mixed-Use Development, CCR Title 24 Noise Study Report” by Wilson Ihrig, 6 April 2021

Figure 3: Measured Hourly Noise Levels (dBA) at Ashby Avenue (L2)



*Data provided by Wilson Ihrig, 6 April 2021

3.0 CONSTRUCTION NOISE ANALYSIS

3.1 Phases of Construction

We understand that the construction will be completed in five main phases across 24 months with multiple activities in each phase. The detailed construction schedule is included in **Appendix A**. The site logistics plan is included in **Appendix B**.



A general description of the phases and potential tools and activities that might happen during construction is listed below. This does not constitute a comprehensive list of activities, tools, and potential impacts. Actual tools used, activities, suggested areas of noise, and durations described might vary depending on site conditions, subcontractor techniques, and general sequencing of the schedule.

Phase 1: Demolition, Site Preparation, Shoring Wall, Soil Remediation, Substructure

Duration: 4 months

Activities:

- Demolition of existing building and parking lot
- Installation of dewatering and groundwater treatment wells
- Excavation of soil remediation pits
- Rough grading and off-haul of spoils
- Structural excavation (car stacker pits, footings, etc.)

Equipment, Tools and Noise: Most of the noise will be at-grade or below.

Shoring wall installation: Drill rig (Soilmec SR75 or similar), beam setter (Mantis Crawler or similar), concrete pump (Putzmeister BSA120 or similar), forklift, 60-foot manlift, skidsteer, mini-excavator, 185 cfm compressor

Demolition, excavation, and grading operations:

Activity	Type
Excavation	CAT 330
	CAT 321
	CAT D6 Dozer
	CAT 966 Loader
Compaction	CAT 815
	84" Vibratory Smooth Drum Roller
	84" Vibratory Sheepsfoot
Finish	CAT 14G Blade
	Skip Loader
	Skid Steer Loader/Bobcat
	Rubber Tired Backhoe 426
Water	2 Axel 1,600 Gallon Water Truck
	Water Wagon Tow Behind
Misc.	Gradeall Forklift
	Vacuum Street Sweeper
Asphalt	AC Street Planer
	AC Paver



Phase 2: Structural Concrete

Duration: 5 months

Activities:

- Pour concrete slabs at pits
- Shotcrete concrete walls at pits and Level 1
- Pour Level 1 slab on grade
- Install concrete columns and deck shoring from Level 1 to podium deck
- Pour Level 2 podium deck
- Stress PT cables at Level 2 podium deck

Equipment, Tools and Noise: Forklift, concrete trucks, bobcats, air compressors, saws, nail guns, dump trucks. Most of the noise will be at-grade.

Phase 3: Superstructure

Duration: 10 months (overlapping with Phase 4)

Activities:

- Framing of the structure
- Installation of sheathing and waterproofing
- Installation of windows and exterior doors
- Installation of the roof
- Application of stucco and metal siding/tiles
- Mechanical, Electrical, and Plumbing rough-in and routing

Equipment, Tools and Noise: Forklift, self-erecting crane (with air horn per OSHA), air compressor, saws, nail gun, delivery trucks. Most of the noise will be at-grade to Level 5.

Phase 4: Interior Rough-In

Duration: 10 months (overlapping with Phase 3)

Activities:

- Installation of interior Mechanical, Electrical, and Plumbing systems
- Installation of interior drywall
- Gypsum concrete at subfloor
- Installation of Flooring
- Finish MEP trim out

Equipment, Tools and Noise: Forklift, self-erecting crane (with air horn per OSHA), personnel lifts, air compressors, saws, delivery trucks. Most noise will be inside the building. The intent is to have exterior building envelope, including windows, installed during this phase.



Phase 5: Interior Finishes, Elevator Installation, Close Out

Duration: 5 months

Activities:

- Install interior trim, doors, hardware
- Cabinet installation
- Interior and exterior painting
- Finish grading
- Elevator installation
- Placement of site concrete and asphalt

Equipment, Tools and Noise: Air compressors, scissor lifts, saws, screw guns, delivery trucks. Most noise will be inside the building. The entire building envelope will be installed.

3.2 Predicted Construction Equipment Noise Levels

Based on the proposed construction equipment list, **Table 3** indicates the expected equipment noise levels and usage factors. These noise levels are the basis of our analysis.

Table 3: Typical Equipment Noise Levels Used for the Analysis³

Equipment	Usage Factor (%)	Hourly Average Noise Level (dBA) @ 50 Feet per Usage Factor
<i>Earthmoving</i>		
Backhoe	40	74
Compactor	20	76
Dozer	40	78
Drill Rig (Auger)	20*	77
Dump Truck	40*	72
Excavator	40	77
Front Loader	40	76
<i>Materials Handling</i>		
Bobcat	40*	71
Concrete Mixer	40	75
Concrete Pump	40	78
Forklift	40	79
Trucks	40	71
<i>Impact</i>		
Compressor (pneumatic tools)	40	74

³ Sources: U.S. Environmental Protection Agency (1971), FHWA Construction Noise Handbook Tables 9.1 and 9.9



<i>Stationary</i>		
Crane	50*	80
Personnel Lift	50*	72
Saw	40*	72
Scissor Lift	50*	71
<i>Other</i>		
Roller	20	67
Water Truck	50*	72

*Usage factor estimated

Based on our review of the phasing and equipment plan, as well as these equipment noise levels, we have estimated the noise levels at the nearest noise-sensitive properties without mitigation measures, as shown in Tables 4 and 5.

Table 4: Construction Noise Analysis at North Property Line (Hourly L_{eq})

Phase	Estimated Construction Noise Levels (dBA)	Noise Limit During Construction Hours (dBA)
1	74 to 93	
2	72 to 93	
3	72 to 94	74
4	71 to 94	
5	66 to 91	

Table 5: Construction Noise Analysis at East Property Line (Hourly L_{eq})

Phase	Estimated Construction Noise Levels (dBA)	Noise Limit During Construction Hours (dBA)
1	76 to 93	
2	74 to 93	
3	74 to 94	75
4	73 to 94	
5	68 to 91	

3.3 Analysis

Although the estimated noise levels exceed the construction noise thresholds set out in the Municipal Code, the levels will vary as the project progresses around the site and construction moves to the interior of the building.

Some construction activities could result in instantaneous noise levels above 90 dBA. Based on our experience, these might include air horns, material handling, air brakes, back-up beepers, and other



impact-generating activities. Noise levels will be monitored during construction to refine these estimates and corresponding noise reduction measures, as needed. All feasible techniques prescribed in Section 4.0 shall be implemented to reduce the noise impacts.

4.0 NOISE REDUCTION MEASURES

4.1 Conditions of Approval

The noise abatement measures set forth and required by the City’s Conditions of Approval will be implemented throughout the project with the following actions. Statements of compliance per the Conditions of Approval are based on conversations with the general contractor.

Condition of Approval	Action
Construction equipment should be well maintained and used judiciously to be as quiet as practical.	Will comply.
Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.	Will comply.
Utilize "quiet" models of air compressors and other stationary noise sources where technology exists. Select hydraulically or electrically powered equipment and avoid pneumatically powered equipment where feasible.	Will comply.
Locate stationary noise-generating equipment as far as possible from sensitive receptors when adjoining construction sites. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible.	Will comply.
Prohibit unnecessary idling of internal combustion engines.	Will comply.
If impact pile driving is required, pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.	Pile driving will not be used.
Construct solid plywood fences around construction sites adjacent to operational business, residences, or other noise-sensitive land uses where the noise control plan analysis determines that a barrier would be effective at reducing noise.	A solid fence should be constructed at the project boundary. The fence should be 8 feet high and have a minimum surface density of 3 psf (e.g., plywood, sound blanket) with no cracks or gaps. This will help to reduce noise up to 10 dB at the typical pedestrian head-height – depending on the height of the equipment noise source (e.g., excavation is at grade, but equipment engine

exhausts are above grade) – where line-of-sight to the construction activity will be broken. Gates will be used for entrances/exits to maintain a solid barrier and shall remain closed when not in use.

Erect temporary noise control blanket barriers. If necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.

The project will assess the use of sound blankets, as needed.

Route construction related traffic along major roadways and away from sensitive receptors where feasible.

Will comply. See Truck Routes in **Appendix B**.

At least two weeks prior to initiating any demolition or construction activities at the site, the applicant shall provide notice to businesses and residents within 500 feet of the project site. This notice shall at a minimum provide the following: (1) project description, (2) description of construction activities during extended work hours and reason for extended hours, (3) daily construction schedule (i.e., time of day) and expected duration (number of months), (4) the name and phone number of the Project Liaison for the project that is responsible for responding to any local complaints, and (5) that construction work is about to commence. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem.

Will comply. See signage in **Appendix C**.

4.2 Site-Specific Noise Reduction Measures

The following additional noise reduction measures are acknowledged by the contractor and will be implemented throughout construction.

- Utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible) for equipment and trucks
- Use electric forklifts



- Manage truck traffic to reduce idling
- Use back-up beepers only when required by law. Spotters or flaggers should be used in lieu of back-up beepers to direct backing operations when allowable
- Minimize drop height when loading excavated materials onto trucks
- Minimize drop height when unloading or moving materials on-site
- Sequence the noisiest activities to coincide with the noisiest ambient hours (see **Figures 2 and 3**)
- Locate noisy equipment within the building structure once the exterior facade is installed

4.3 Estimated Construction Equipment Noise Levels with Mitigation

Tables 6 and 7 show the estimated construction noise levels with the proposed mitigation methods described above. However, noise levels are expected to fluctuate as construction moves around the site and into the building.

Table 6: Construction Noise Analysis (Hourly L_{eq}) at L1 with Mitigation

Phase	Estimated Range of Construction Noise Levels (dBA)	Noise Limit During Construction Hours (dBA)
1	68 to 81 dBA	
2	66 to 81 dBA	
3	66 to 82 dBA	74 dBA
4	65 to 82 dBA	
5	60 to 79 dBA	

Table 7: Construction Noise Analysis (Hourly L_{eq}) at L2 with Mitigation

Phase	Estimated Range of Construction Noise Levels (dBA)	Noise Limit During Construction Hours (dBA)
1	70 to 81 dBA	
2	68 to 81 dBA	
3	68 to 82 dBA	74 dBA
4	67 to 82 dBA	
5	62 to 79 dBA	

During construction, Salter will monitor construction noise at two locations (CNM1 and CNM2) identified in **Figure 4**. Ambient noise levels can be measured before construction commences to confirm the pre-construction noise environment.

Figure 4: Construction Noise Monitoring Measurement Locations



The measured hourly L_{eq} during construction would be compared to the hourly L_{eq} pre-construction. If hourly L_{eq} during construction are greater than the limits prescribed in Berkeley Municipal Code Section 13.40.050, exceedance recordings⁴ would be used to identify what activities (e.g., construction, traffic, sirens) caused noise levels to rise.

Bi-weekly noise levels would be reported to Resources for Community Development within one week of the measurements being taken. Noise reduction measures would be recommended to the contractor to mitigate a recurrence, as needed. If no action is feasible (e.g., back-up beepers as a safety requirement), then none would be taken.

4 Our monitors can be programmed to record events above an established noise level to capture extreme noise-generating events. These recordings are triggered only when the established noise level is exceeded.

APPENDIX A

Construction Schedule



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2022												2023												2024											
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May							
Maudelle Miller Shirek Community, 2001 Ashby Ave - Construction Sc						898d 11/2/20 A 2/5/24 0d																																			
Project Administration						898d 11/2/20 A 2/5/24 0d																																			
Milestones						504d 2/7/22 2/5/24 0d																																			
MI-1010	NTP	0d	2/7/22*		0d	NTP																																			
MI-1040	Owner to Provide Permanent Power	0d		8/10/23	0d	Owner to Provide Permanent Power																																			
MI-1020	Substantial Completion / TCO	0d		1/5/24	0d	Substantial Completion / TCO																																			
MI-1030	Final Completion	0d		2/5/24	0d	Final Completion																																			
Project Summaries						484d 2/7/22 1/5/24 20d																																			
PS-1000	Construction Duration	484d	2/7/22	1/5/24	0d	Construction Duration																																			
PS-1010	Substructure to Ground Level	73d	5/18/22	8/30/22	0d	Substructure to Ground Level																																			
PS-1020	Structural Concrete Phase	95d	7/6/22	11/16/22	305d	Structural Concrete Phase																																			
PS-1070	Framing Duration	101d	11/10/22	4/6/23	0d	Framing Duration																																			
PS-1030	Rough In Phase	111d	12/16/22	5/24/23	0d	Rough In Phase																																			
PS-1050	Interior Finishes	141d	4/7/23	10/25/23	0d	Interior Finishes																																			
PS-1040	Elevator Installation	62d	6/6/23	8/31/23	0d	Elevator Installation																																			
PS-1060	Close Out Phase	42d	11/3/23	1/5/24	20d	Close Out Phase																																			
Pre-Construction						428d 11/2/20 A 3/14/22 470d																																			
Design						305d 11/2/20 A 9/17/21 A																																			
DD-1010	50% DD Documents	60d	11/2/20 A	12/1/20 A		50% DD Documents																																			
DD-1000	100% Design Development Phase	80d	12/2/20 A	1/25/21 A		100% Design Development Phase																																			
CD-1020	25% Construction Documents	65d	1/26/21 A	3/22/21 A		25% Construction Documents																																			
CD-1000	75% Construction Documents	15d	3/23/21 A	7/14/21 A		75% Construction Documents																																			
CD-1030	95% Cnstruction Documents - Bid Set	38d	7/15/21 A	9/17/21 A		95% Cnstruction Documents - Bid Set																																			
Permitting						30d 12/1/21 A 3/3/22 13d																																			
PER-1000	SWPPP Permit	30d	12/1/21 A	1/28/22	5d	SWPPP Permit																																			
PER-1010	Civil Permit	30d	12/1/21 A	1/28/22	5d	Civil Permit																																			
PER-1020	Structural Permit	30d	12/1/21 A	1/28/22	5d	Structural Permit																																			
PER-1030	Encroachment Permit	30d	12/1/21 A	1/28/22	5d	Encroachment Permit																																			
PER-1040	Building Permit	30d	12/1/21 A	1/28/22	5d	Building Permit																																			
PER-1050	Release Shoring Design & Per mit	30d	1/19/22	3/3/22	13d	Release Shoring Design & Per mit																																			
Estimating						119d 9/17/21 A 3/2/22 478d																																			
Bid & Award						119d 9/17/21 A 3/2/22 478d																																			
BID-1000	Issue Bid Set	0d		9/17/21 A		Issue Bid Set																																			
BID-1010	GMP Bid Period	25d	9/20/21 A	10/25/21 A		GMP Bid Period																																			
BID-1020	Subcontractor Vetting	25d	10/26/21 A	12/3/21 A		Subcontractor Vetting																																			
BID-1035	VE / Negtiate Contract	27d	12/1/21 A	1/19/22	7d	VE / Negtiate Contract																																			
BID-1030	Present GMP	1d	12/6/21 A	12/6/21 A		Present GMP																																			
BID-1060	GMP Due	0d		12/6/21 A		GMP Due																																			
BID-1080	Alameda County - Environmental Mitigaton Requirement	0d		12/9/21 A		Alameda County - Environmental Mitigaton Requirement																																			
BID-1090	Nibbi to Price Environmental Mitigation Requirement	10d	12/14/21 A	1/14/22 A		Nibbi to Price Environmental Mitigation Requirement																																			
BID-1040	GMP Approval	0d		1/19/22	13d	GMP Approval																																			
BID-1050	Award Subcontracts	20d	1/19/22	2/15/22	479d	Award Subcontracts																																			
BID-1055	Draft / Execute Subcontracts	30d	1/19/22	3/2/22	487d	Draft / Execute Subcontracts																																			
BID-1065	Sign Owner Contract	1d	1/20/22	1/20/22	7d	Sign Owner Contract																																			
BID-1075	Conform Set	20d	1/28/22	2/25/22	490d	Conform Set																																			
BID-1070	Construction Start	0d	2/1/22*		0d	Construction Start																																			
Submittals and Procurement						37d 1/20/22 3/14/22 479d																																			
Submittals						17d 1/20/22 2/11/22 479d																																			
SP-1000	Generate Submittal - #####	5d	1/20/22	1/26/22	479d	Generate Submittal - #####																																			



█ Remaining Level of Effort
 █ Actual Work
 █ Critical Remaining Work
 Summary
█ Actual Level of Effort
 █ Remaining Work
 ◆ Milestone

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2022												2023					2024						
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SP-1010	Nibbi Review	2d	1/27/22	1/28/22	479d	[Gantt bar for SP-1010]																							
SP-1020	A&E Review and Approve	10d	1/31/22	2/11/22	479d	[Gantt bar for SP-1020]																							
SP-1030	Submittal Approved	0d		2/11/22	479d	[Gantt bar for SP-1030]																							
Procurement		20d	2/14/22	3/14/22	479d	[Gantt bar for Procurement]																							
SP-1040	Fab and Deliver - #####	20d	2/14/22	3/14/22	479d	[Gantt bar for SP-1040]																							
Construction		428d	2/7/22	10/25/23	66d	[Gantt bar for Construction]																							
Demolition & Site Prep		4d	2/7/22	2/10/22	13d	[Gantt bar for Demolition & Site Prep]																							
CN-1000	Mobilization	4d	2/7/22	2/10/22	0d	[Gantt bar for CN-1000]																							
CN-1010	Install SWPPP	3d	2/8/22	2/10/22	13d	[Gantt bar for CN-1010]																							
CN-1020	Install Jobsite Trailer	3d	2/8/22	2/10/22	13d	[Gantt bar for CN-1020]																							
CN-1030	Install Site Fencing / Barricades	3d	2/8/22	2/10/22	0d	[Gantt bar for CN-1030]																							
CN-1050	Utility Location / Subtronic	3d	2/8/22	2/10/22	0d	[Gantt bar for CN-1050]																							
Substructure		98d	2/11/22	7/5/22	0d	[Gantt bar for Substructure]																							
CN-1380	Abatement	3d	2/11/22	2/15/22	0d	[Gantt bar for CN-1380]																							
CN-1060	Demo (E) Site	10d	2/16/22	3/3/22	0d	[Gantt bar for CN-1060]																							
CN-1620	Backfill (E) Basement	5d	2/16/22	2/24/22	0d	[Gantt bar for CN-1620]																							
CN-1630	Install Pad for Dewatering Equipment	3d	3/4/22	3/8/22	0d	[Gantt bar for CN-1630]																							
CN-1600	Setup Dewatering after Excavation	4d	3/9/22	3/14/22	0d	[Gantt bar for CN-1600]																							
CN-1610	Dewatering (Pending Design)	57d	3/15/22	6/3/22	0d	[Gantt bar for CN-1610]																							
CN-1640	Setup Wet Soil Processing Area	3d	3/15/22	3/17/22	0d	[Gantt bar for CN-1640]																							
CN-1660	Destroy (E) Monitoring Wells	3d	3/18/22	3/22/22	0d	[Gantt bar for CN-1660]																							
CN-1090	Shore / Excavate Soil Contamination Pit #1 (Pending Design)	15d	3/23/22	4/12/22	0d	[Gantt bar for CN-1090]																							
CN-1240	Shore / Excavate Soil Contamination Pit #2 (Pending Design)	15d	4/13/22	5/3/22	0d	[Gantt bar for CN-1240]																							
CN-1070	Rough Grade Site / Off Haul Contaminated Soil	10d	5/4/22	5/17/22	0d	[Gantt bar for CN-1070]																							
CN-1080	Underground Utilities	20d	5/18/22	6/16/22	10d	[Gantt bar for CN-1080]																							
CN-1650	Install Ninyo & Moore Wells	4d	5/18/22	5/23/22	0d	[Gantt bar for CN-1650]																							
CN-1590	Structural Excavation	7d	5/24/22	6/3/22	0d	[Gantt bar for CN-1590]																							
CN-1150	Install VIMS	19d	6/6/22	6/30/22	0d	[Gantt bar for CN-1150]																							
CN-1170	Smoke Test VIMS	3d	6/30/22	7/5/22	0d	[Gantt bar for CN-1170]																							
Utilities		40d	4/17/23	6/13/23	0d	[Gantt bar for Utilities]																							
CN-1310	Additional Trenching for PG&E	10d	4/17/23	4/28/23	0d	[Gantt bar for CN-1310]																							
CN-1270	Joint Trench	30d	5/1/23	6/13/23	0d	[Gantt bar for CN-1270]																							
Structural Concrete		94d	7/6/22	11/16/22	298d	[Gantt bar for Structural Concrete]																							
Elevator & Stacker Pits		15d	7/6/22	7/26/22	0d	[Gantt bar for Elevator & Stacker Pits]																							
SC-1000	Shoring, Structural Excavation, & VIMS Complete	0d	7/6/22		0d	[Gantt bar for SC-1000]																							
SC-1010	Pour Rat Slabs	1d	7/6/22	7/6/22	4d	[Gantt bar for SC-1010]																							
SC-1020	Waterproof Pits	5d	7/6/22	7/12/22	0d	[Gantt bar for SC-1020]																							
SC-1030	Slab & Wall Reinforcing	5d	7/13/22	7/19/22	0d	[Gantt bar for SC-1030]																							
SC-1040	Pour Slab	1d	7/20/22	7/20/22	0d	[Gantt bar for SC-1040]																							
SC-1050	Complete Wall Reinforcing	2d	7/21/22	7/22/22	0d	[Gantt bar for SC-1050]																							
SC-1060	Set Shotcrete Wires	1d	7/25/22	7/25/22	0d	[Gantt bar for SC-1060]																							
SC-1070	Shoot Walls	1d	7/26/22	7/26/22	0d	[Gantt bar for SC-1070]																							
Mat Foundation		25d	7/27/22	8/30/22	0d	[Gantt bar for Mat Foundation]																							
SC-1080	Layout	1d	7/27/22	7/27/22	0d	[Gantt bar for SC-1080]																							
SC-1090	Edge Form	5d	7/28/22	8/3/22	0d	[Gantt bar for SC-1090]																							
SC-1100	Bottom Mat Reinforcing	6d	8/4/22	8/11/22	0d	[Gantt bar for SC-1100]																							
SC-1110	In-Slab MEPS	5d	8/12/22	8/18/22	0d	[Gantt bar for SC-1110]																							
SC-1120	Top Mat Reinforcing & Dowels	7d	8/19/22	8/29/22	0d	[Gantt bar for SC-1120]																							
SC-1130	Inspections	1d	8/29/22	8/29/22	0d	[Gantt bar for SC-1130]																							



■ Remaining Level of Effort
 ■ Actual Work
 ■ Critical Remaining Work
 ▼ Summary
■ Actual Level of Effort
 ■ Remaining Work
 ◆ Milestone

APPENDIX B

Site Logistics Plan and Truck Routes



Maudelle Miller Shirek Site Logistics - Draft 10.20.21



TEMP FDC

TEMP WATER (BY OTHERS)

RESERVE PARKING SPACE

Delivery Route

BUS STOP TO REMAIN

Bike Path closed, re-routed to street

Covered Pedestrian Canopy

Pedestrian Walkway

TEMP SWITCHGEAR

TEMP TRANSFORMER ENCLOSURE

TEMP TRANSFORMER ENCLOSURE GATE (PGE ACCESS ONLY)

DELIVERIES & PUMP TRUCK STAGING

TOWER CRANE

LAYDOWN & STAGING AREA

MANLIFT

NIBBI TRAILERS & STAGING

STORAGE

TREE PROTECTION ZONE

SCAFFOLDING

BUS STOP TO BE RELOCATED OFFSITE

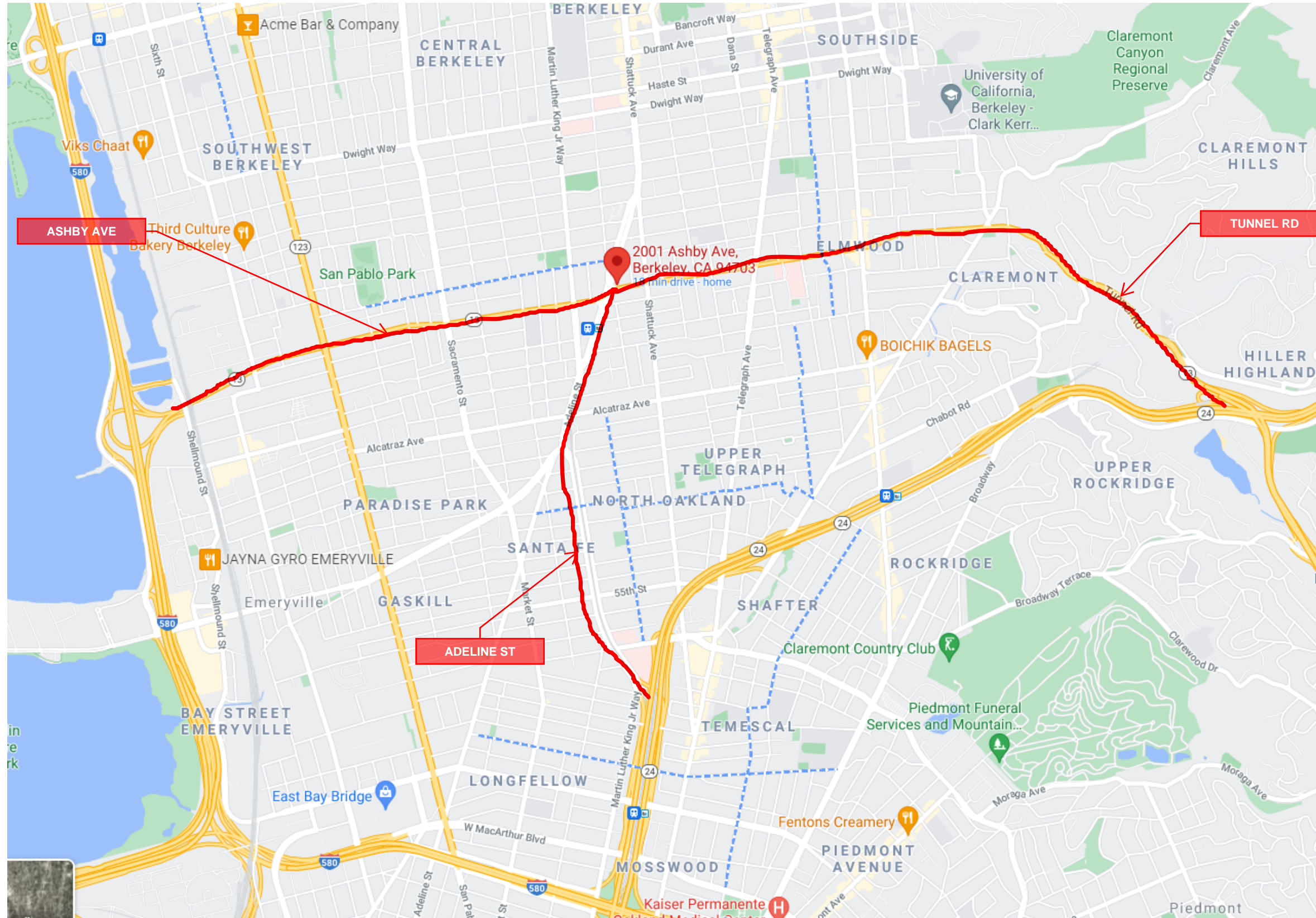
Berkeley Musical Instrument Exchange
Musical instrument store

St. Paul A. M. E. Church

Food Distribution Center - St. Paul A.M.E. Church

Google

Maudelle Miller Shirek City of Berkeley Approved Truck Routes - Draft



APPENDIX C

Notice of Construction





Notice of Construction

Starting Monday February 7, 2022

Project Address: 2001 Ashby Avenue, Berkeley

Project Name: Maudelle Miller Shirek Community

Project Description: Demolition of existing building, construction of new mixed-use 6 story structure with (87) affordable residential units & community spaces.

What you can Expect

Noise related to Construction Activities such as Heavy Equipment Demolition, Excavating, Drilling, Earth Moving, Machinery, Hammering, Cutting, and other noises.

Work Hours

7am-7pm Weekdays

9am-8pm Weekends

For any local complaints regarding construction noise, please contact:

Mike Joyce, Project Manager

Cell: 925.360.5126

Email: MikeJ@Nibbi.com

**Nibbi Brothers General Contractors
1000 Brannan St #102
San Francisco, CA 94103
415 863-1820**

Maudelle Miller Shirek

2001 Ashby Avenue, Berkeley, CA

CONSTRUCTION VIBRATION IMPACT ASSESSMENT

28 January 2022

Prepared for: Nicole Brown
Resources for Community Development
2020 Oxford Street
Berkeley, CA 94704
nbrown@rcd.org

Prepared by: **Salter**
Blake Wells, LEED GA – Associate bwells@salter-inc.com
Jason Duty, PE – Senior Vice President jduty@salter-inc.com

Salter Project 22-0042



San Francisco | San Jose | Los Angeles | Honolulu | Seattle
salter-inc.com

Acoustics
Audiovisual
Telecommunications
Security

INTRODUCTION

We understand the City of Berkeley has requested a vibration impact assessment as part of the Conditions of Approval for the new Maudelle Miller Shirek mixed-use project, addressing the potential impacts of construction vibration on the adjacent buildings. The project is at the northeast corner of Adeline Street and Ashby Avenue in Berkeley. There are two historical landmarks nearby. The new building will not have a basement. There will be demolition and excavation with no pile driving.

Construction is scheduled to begin February 2022 and be completed within approximately 24 months. Construction activity will be limited to the hours of 7 am to 6 pm on Monday through Friday, and 9 am to 4 pm on Saturday. No construction-related activity shall occur on Sunday or any federal holiday.

This report summarizes our assessment of vibration impacts to address the City's request. Our review is based on the information provided and our experience with similar projects.

SUMMARY

Construction activity will likely temporarily increase vibration levels to adjacent properties, but is expected to comply with industry standards, provided the recommended vibration reduction measures are implemented.

CRITERIA

Conditions of Approval, Attachment D

Item 13: Damage Due to Construction Vibration

The project applicant shall submit screening level analysis prior to, or concurrent with demolition building permit. If a screening level analysis shows that the project has the potential to result in damage to structures, a structural engineer or other appropriate professional shall be retained to prepare a vibration impact assessment (assessment). The assessment shall take into account project specific information such as the composition of the structures, location of the various types of equipment used during each phase of the project, as well as the soil characteristics in the project area, in order to determine whether project construction may cause damage to any of the structures identified as potentially impacted in the screening level analysis. If the assessment finds that the project may cause damage to nearby structures, the structural engineer or other appropriate professional shall recommend design means and methods of construction that to avoid the potential damage, if feasible. The assessment and its recommendations shall be reviewed and approved by the Building and Safety Division and the Zoning Officer. If there are no feasible design means or methods to eliminate the potential for damage, the structural engineer or other appropriate professional shall undertake an existing conditions study (study) of any structures (or, in case of large buildings, of the portions of the structures) that may experience damage. This study shall

- establish the baseline condition of these structures, including, but not limited to, the location and extent of any visible cracks or spalls; and
- include written descriptions and photographs.

The study shall be reviewed and approved by the Building and Safety Division and the Zoning Officer prior to issuance of a grading permit. Upon completion of the project, the structures (or, in case of large buildings, of the portions of the structures) previously inspected will be resurveyed, and any new cracks or other changes shall be compared to pre-construction conditions and a determination shall be made as to whether the proposed project caused the damage. The findings shall be submitted to the Building and Safety Division and the Zoning Officer for review. If it is determined that project construction has resulted in damage to the structure, the damage shall be repaired to the pre-existing condition by the project sponsor, provided that the property owner approves of the repair.

California Department of Transportation Construction Vibration Criteria

The California Department of Transportation¹ (Caltrans) provides vibration design criteria for construction damage. This table is included below as a guideline for the project vibration levels. Transient vibrations are classified as impulsive events that are short in duration (e.g., debris falling). Continuous vibrations are more sustained vibration events over longer periods of time (e.g., jackhammering, drilling).

Table 1 provides a summary of the building effects when exposed to continuous vibration. Thresholds for continuous vibrations are lower than those for transient vibrations and are therefore more conservative. These are standard significance thresholds used in the industry to determine impacts of ground-borne vibrations on structures.

Table 1: Vibration Effect on Buildings²

PPV (in/sec)	Effect on Buildings
0.4 to 0.6	Architectural damage and possible minor structural damage
0.2	Threshold at which there is a risk of architectural damage to normal dwelling houses (houses with plastered walls and ceilings)
0.1	Virtually no risk of architectural damage to normal buildings
0.08	Recommended upper limit of vibration to which ruins and ancient monuments should be subjected
0.006 to 0.019	Vibration unlikely to cause damage of any type

Based on the above table, it is recommended to stay below the threshold of 0.1 PPV (in/sec) at the historical landmarks and below 0.2 PPV (in/sec) at all other adjacent properties.

1 Transportation and Construction Vibration Guidance Manual September 2013 (Caltrans Document)

2 Table 12 of the Caltrans document

PROJECT CONDITIONS

The project is at the northeast corner of Adeline Street and Ashby Avenue in Berkeley, within a commercial zone. The adjacent buildings to the north, south, west, and southeast are also in a commercial zone. A residential zone is to the northeast. Further to the south (3027 Adeline Street) and southwest (2988 Adeline Street) are City of Berkeley Historical Landmarks.

Vibration-Sensitive Receptors

The project site and nearest vibration-sensitive receptors (VSR) in each direction are shown in **Figure 1** and summarized in **Table 1**.

Figure 1: Vibration-Sensitive Receptors



Table 1: Vibration-Sensitive Receptors

Receptor	Address	Direction from Site	Use Type	Approximate Distance from Project Site
VSR-1	2923 Adeline Street	North	Commercial	12 feet
VSR-2	2037 Ashby Avenue	East	Commercial/ Residential	10 feet
VSR-3	2024 Ashby Avenue	South	Commercial	100 feet
VSR-4	2918 Adeline Street	West	Commercial	175 feet
VSR-5	2988 Adeline Street	Southwest	Historical	290 feet
VSR-6	3027 Adeline Street	South	Historical	260 feet

Construction Schedule and Equipment

Based on the information provided by the contractor and the construction schedule, the activities that are expected to generate the highest levels of vibration will be during demolition and grading phases. We understand that there will not be pile driving or slurry wall construction.

Equipment such as excavators, breakers, other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) might exceed the significance threshold if operated at the adjacent property lines. Erection of the project building structure and interior construction work are not anticipated to be sources of substantial vibration, except for sporadic events such as dropping of heavy objects, which should be avoided.

Vibration levels from construction activities will vary depending on the type of equipment being used, the process, and location. Construction of the project will be completed in five main phases, as listed below. The expected construction equipment for each of these phases is listed in **Table 2**.

- Phase 1: Demolition, Site Preparation, Shoring Wall, Soil Remediation, Substructure: 4 months
- Phase 2: Structural Concrete: 5 months
- Phase 3: Superstructure: 10 months (overlapping with Phase 4)
- Phase 4: Interior Rough-In: 10 months (overlapping with Phase 3)
- Phase 5: Interior Finishes, Elevator Installation, Close Out: 5 months



Table 2: Construction Equipment by Phase

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Drill Rig	Forklift	Forklift	Forklift	Compressor
Beam Setter	Concrete Trucks	Crane	Crane	Scissor Lift
Forklift	Bobcat	Compressor	Manlift	Saws
Manlift	Compressor	Saws	Compressor	Delivery Trucks
Skidsteer	Saws	Nail Gun	Saws	Hand Tools
Mini-Excavator	Nail Gun	Delivery Trucks	Delivery Trucks	
Compressor	Dump Trucks			
Loader				
Compactor				
Backhoe				
Vibratory Roller				
Water Truck				

ANALYSIS

Construction Equipment Vibration

Table 3 summarizes “typical” vibration levels for the construction equipment at each VSR. Equipment vibration levels are assumed to be equivalent to similar equipment specified by the Federal Transit Administration³. Where no vibration source levels are available, data from the most similar piece of equipment is used. Equipment that is not listed is not expected to be a significant source of vibration.

Table 3: Calculated Vibration Levels at Locations VSR-1 to 6

Equipment	VSR-1 12 ft (PPV)	VSR-2 10 ft (PPV)	VSR-3 100 ft (PPV)	VSR-4 175 ft (PPV)	VSR-5 290 ft (PPV)	VSR-6 260 ft (PPV)
Backhoe	0.067	0.088	0.003	0.001	0.001	0.001
Compactor	0.151	0.198	0.006	0.003	0.001	0.001
Drill Rig	0.067	0.088	0.003	0.001	0.001	0.001
Dump Truck	0.002	0.003	0.000	0.000	0.000	0.000
Forklift	0.002	0.003	0.000	0.000	0.000	0.000
Loader	0.002	0.003	0.000	0.000	0.000	0.000
Mini Excavator	0.067	0.088	0.003	0.001	0.001	0.001
Skid Steer	0.060	0.079	0.002	0.001	0.001	0.001
Truck	0.151	0.198	0.006	0.003	0.001	0.001
Vibratory Roller	0.060	0.079	0.002	0.001	0.001	0.001
Water Truck	0.067	0.088	0.003	0.001	0.001	0.001

³ FTA Transit Noise and Vibration Impact Assessment Manual, September 2018, Table 7-4 and Equation 7-3

The calculated equipment vibration levels do not exceed the 0.2 PPV (in/sec) criterion at the nearest VSR in each direction. The calculated equipment vibration levels also do not exceed the 0.1 PPV (in/sec) criterion at the historical landmarks (i.e., VSR-5 and VSR-6).

VIBRATION REDUCTION

The highest levels of vibration typically occur during the demolition, excavation, and grading phases. Equipment such as drillers, excavators, other high-power or vibratory tools, and rolling stock equipment (e.g., tracked vehicles, compactors, breakers) that might be used could exceed the significance threshold if operated simultaneously near the adjacent buildings. Erection of the building structures and interior construction work are not anticipated to be sources of substantial vibration, except for sporadic events such as dropping of heavy objects, which should be avoided.

The following mitigation measures should be implemented to manage construction activities and reduce the impact from construction vibration.

- Earth-moving and ground-impacting operations should be phased so as not to occur at the same time along the same property line to mitigate cumulative vibration impacts.
- Minimize discontinuities in roadway pavement where trucks will travel.
- Avoid using vibratory rollers and tampers within 25 feet of adjacent structures. Sheepsfoot rollers should be used instead.
- Piers should be drilled, not driven. We understand that piledriving and blasting will not be used.
- Avoid routing heavily loaded trucks through residential streets.
- Operate earth-moving equipment on the construction lot as far away from VSR as possible.
- Limit construction activities to the hours of 7 am to 6 pm on Monday through Friday, and 9 am to 4 pm on Saturday. No construction-related activity shall occur on Sunday or any federal holiday.
- Designate a disturbance coordinator and post this person's number around the project site. The disturbance coordinator shall be responsible for responding to any complaints about construction activities. The disturbance coordinator shall receive all public complaints about construction disturbances; and, in consultation with the City, is responsible for determining the cause of the complaint and implementation of feasible measures to be taken to alleviate the problem. The City shall have the authority to halt vibration-generating activity, if necessary, to protect public health and safety.
- Notify the nearby VSR of the construction schedule (in particular, prior to days of high-vibration activity, such as demolition) and provide the name and contact information of the project disturbance coordinator.

We expect that construction efforts for a project of this small size will be relatively light duty. Nevertheless, ground vibration-generating activities over the construction period could have an impact without implementation of reasonable vibration reduction measures to manage construction activities. With the measures stated above, the impact from construction vibration would be reduced.





Planning and Development Department
Land Use Planning Division

SENT VIA E-MAIL

December 22, 2021

Nicole Brown
Resources for Community Development (RCD)
2220 Oxford Street
Berkeley, CA 94704
nbrown@rcdhousing.org

RE: PLN2021-0054 – 2001 Ashby Avenue, Letter of Compliance, SB 35 Modification Application for Modification to a Mixed-Use Development (86 dwelling units, ranging in affordability from 20% to 80% AMI, one manager’s dwelling unit, approximately 1,963 square feet of ground floor commercial space), previously approved pursuant to [Senate Bill (SB) 35], Government Code Section 65913.4

Dear Ms. Brown:

Under Government Code Section 65913.4(g), a development proponent may request a modification to a development that has been approved under the streamlined, ministerial approval process provided in subdivision (c) if that request is submitted to the local government before the issuance of the final building permit required for construction of the development. On November 4, 2021, you submitted materials to demonstrate compliance, as set forth in the attachments to this letter, for modifications to development project PLN2019-0059 at 2001 Ashby Avenue, which was previously approved pursuant to Government Code Section 65913.4 SB 35 on December 20, 2019.

City staff has completed its review of the modification application and has found it to be: 1) eligible for SB 35, ministerial review, and 2) consistent with all applicable objective zoning standards in effect at the time of submittal of the original application on October 9, 2019.

Additional Requirements and Next Steps

Per the Streamlined Ministerial Approval Process Guidelines, Section 301(a)(5), “Approval of ministerial processing does not preclude imposed standard conditions of approval as long as those conditions are objective and broadly applicable to development within the locality regardless of streamlined approval. This includes any objective process requirements related to the issuance of a building permit. However, any further approvals, such as demolition, grading and building period or, if required, final map, on a ministerial basis is subject to the objective standards”. (California Department of Housing and Community Development, 2018, p.11) The project is subject to the Standard Conditions of Approval that were applied to the original Zoning Certificate, PLN2019-0059 (Attachment B).

Please be sure to read the document thoroughly to better understand project requirements moving forward into the building permit phase, which is the next step.

If you have any questions, please contact me at (510) 981-7429 or via email at SGong@cityofberkeley.info.

Sincerely,



Sharon Gong
Principal Planner
Department of Planning & Development

Attachments:

- Attachment A: Statement of Modifications
- Attachment B: Standard Conditions of Approval
- Attachment C: Modified Project Plans

**2001 Ashby Avenue, Berkeley, California
Government Code Section 65913.4 Project Submittal
Statement of Modifications
09/29/21**

OVERVIEW

This is an application for a modification to a development permit at 2001 Ashby Ave issued to Resources for Community Development (RCD) on December 20, 2019, pursuant to Government Code 65913.4, otherwise known as Senate Bill 35 (SB 35).

This application is organized as follows:

1. Overview of Modifications
2. Legislative Context
3. Consistency with Objective Standards

Please note that none of the eligibility criteria for an SB35 submittal has changed and so the statements and maps provided in the original submittal are still valid.

2001 Ashby Avenue

SB 35 Zoning Certificate (PLN #2019-0059)

Application to demolish a 6,297-square-foot commercial building and construct a six-story, approximately 90,500-square-foot, affordable housing development consisting of 86 restricted Below Market Rate dwelling units, one manager's unit, approximately 1,850 square feet of ground floor commercial space and a ground level parking garage.

I. STANDARD CONDITIONS OF APPROVAL FOR ALL PROJECTS

The following conditions, as well as all other applicable provisions of the Zoning Ordinance, apply to this Permit:

1. Conditions Shall be Printed on Plans

The conditions of this Permit shall be printed on the *second* sheet of each plan set submitted for a building permit pursuant to this Permit, under the title 'Permit Conditions.' *Additional sheets* may also be used if the *second* sheet is not of sufficient size to list all of the conditions. The sheet(s) containing the conditions shall be of the same size as those sheets containing the construction drawings; 8-1/2" by 11" sheets are not acceptable.

2. Applicant Responsible for Compliance with Conditions

The applicant shall ensure compliance with all of the following conditions, including submittal to the project planner of required approval signatures at the times specified. Failure to comply with any condition may result in construction being stopped, issuance of a citation, and/or modification or revocation of the Permit.

3. Uses Approved Deemed to Exclude Other Uses (Section 23B.56.010)

- A. This Permit authorizes only those uses and activities actually proposed in the application, and excludes other uses and activities.
- B. Except as expressly specified herein, this Permit terminates all other uses at the location subject to it.

4. Modification of Permits (Section 23B.56.020)

No change in the use or structure for which this Permit is issued is permitted unless the change is consistent with objective zoning standards and objective design review standards ("Objective Standards") in effect at the time the change is submitted. Any change that does not meet Objective Standards shall be subject to the discretionary process as prescribed by the Zoning Ordinance.

5. Plans and Representations Become Conditions (Section 23B.56.030)

Except as specified herein, the site plan, floor plans, building elevations and/or any additional information or representations, whether oral or written, indicating the proposed structure or manner

of operation submitted with an application or during the approval process are deemed conditions of approval.

6. Subject to All Applicable Laws and Regulations (Section 23B.56.040)

The approved use and/or construction is subject to, and shall comply with, all applicable City Ordinances and laws and regulations of other governmental agencies. Prior to construction, the applicant shall identify and secure all applicable permits from the Building and Safety Division, Public Works Department and other affected City divisions and departments.

7. Exercised Permit for Use Survives Vacancy of Property (Section 23B.56.080)

Once a Permit for a use is exercised and the use is established, that use is legally recognized, even if the property becomes vacant, except as set forth in Standard Condition #8, below.

8. Exercise and Lapse of Permits (Section 23B.56.100)

- A. A permit for the use of a building or a property is exercised when, if required, a valid City business license has been issued, and the permitted use has commenced on the property.
- B. A permit for the construction of a building or structure is deemed exercised when a valid City building permit, if required, is issued, and construction has lawfully commenced.
- C. A permit may be declared lapsed and of no further force and effect if it is not exercised within one year of its issuance, except that permits for construction or alteration of structures or buildings may not be declared lapsed if the permittee has: (1) applied for a building permit; or, (2) made substantial good faith efforts to obtain a building permit and begin construction, even if a building permit has not been issued and/or construction has not begun.

9. Indemnification Agreement

The applicant shall hold harmless, defend, and indemnify the City of Berkeley and its officers, agents, and employees against any and all liability, damages, claims, demands, judgments or other losses (including without limitation, attorney's fees, expert witness and consultant fees and other litigation expenses), referendum or initiative relating to, resulting from or caused by, or alleged to have resulted from, or caused by, any action or approval associated with the project. The indemnity includes without limitation, any legal or administrative challenge, referendum or initiative filed or prosecuted to overturn, set aside, stay or otherwise rescind any or all approvals granted in connection with the Project, any environmental determination made for the project and granting any permit issued in accordance with the project. This indemnity includes, without limitation, payment of all direct and indirect costs associated with any action specified herein. Direct and indirect costs shall include, without limitation, any attorney's fees, expert witness and consultant fees, court costs, and other litigation fees. City shall have the right to select counsel to represent the City at Applicant's expense in the defense of any action specified in this condition of approval. City shall take reasonable steps to promptly notify the Applicant of any claim, demand, or legal actions that may create a claim for indemnification under these conditions of approval.

Prior to Submittal of Any Building Permit

10. Project Liaison. The applicant shall include in all building permit plans and post onsite the name and telephone number of an individual empowered to manage construction-related complaints generated from the project. The individual’s name, telephone number, and responsibility for the project shall be posted at the project site for the duration of the project in a location easily visible to the public. The individual shall record all complaints received and actions taken in response, and submit written reports of such complaints and actions to the project planner on a weekly basis.
Please designate the name of this individual below:

Project Liaison _____
Name Phone #

11. Address Assignment. The applicant shall file an “Address Assignment Request Application” with the Permit Service Center (1947 Center Street) for any address change or new address associated with this Permit. The new address(es) shall be assigned and entered into the City’s database prior to the applicant’s submittal of a building permit application.

12. Construction Noise Reduction Program. The applicant shall develop a site specific noise reduction program prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible, subject to review and approval of the Zoning Officer. The noise reduction program shall include the time limits for construction listed above, as measures needed to ensure that construction complies with BMC Section 13.40.070. The noise reduction program should include, but shall not be limited to, the following available controls to reduce construction noise levels as low as practical:

- A. Construction equipment should be well maintained and used judiciously to be as quiet as practical.
- B. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.
- C. Utilize “quiet” models of air compressors and other stationary noise sources where technology exists. Select hydraulically or electrically powered equipment and avoid pneumatically powered equipment where feasible.
- D. Locate stationary noise-generating equipment as far as possible from sensitive receptors when adjoining construction sites. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible.
- E. Prohibit unnecessary idling of internal combustion engines.
- F. If impact pile driving is required, pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.
- G. Construct solid plywood fences around construction sites adjacent to operational business, residences or other noise-sensitive land uses where the noise control plan analysis determines that a barrier would be effective at reducing noise.
- H. Erect temporary noise control blanket barriers, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.
- I. Route construction related traffic along major roadways and away from sensitive receptors where feasible.

13. Damage Due to Construction Vibration. The project applicant shall submit screening level analysis prior to, or concurrent with demolition building permit. If a screening level analysis shows that the

project has the potential to result in damage to structures, a structural engineer or other appropriate professional shall be retained to prepare a vibration impact assessment (assessment). The assessment shall take into account project specific information such as the composition of the structures, location of the various types of equipment used during each phase of the project, as well as the soil characteristics in the project area, in order to determine whether project construction may cause damage to any of the structures identified as potentially impacted in the screening level analysis. If the assessment finds that the project may cause damage to nearby structures, the structural engineer or other appropriate professional shall recommend design means and methods of construction that to avoid the potential damage, if feasible. The assessment and its recommendations shall be reviewed and approved by the Building and Safety Division and the Zoning Officer. If there are no feasible design means or methods to eliminate the potential for damage, the structural engineer or other appropriate professional shall undertake an existing conditions study (study) of any structures (or, in case of large buildings, of the portions of the structures) that may experience damage. This study shall

- establish the baseline condition of these structures, including, but not limited to, the location and extent of any visible cracks or spalls; and
- include written descriptions and photographs.

The study shall be reviewed and approved by the Building and Safety Division and the Zoning Officer prior to issuance of a grading permit. Upon completion of the project, the structures (or, in case of large buildings, of the portions of the structures) previously inspected will be resurveyed, and any new cracks or other changes shall be compared to pre-construction conditions and a determination shall be made as to whether the proposed project caused the damage. The findings shall be submitted to the Building and Safety Division and the Zoning Officer for review. If it is determined that project construction has resulted in damage to the structure, the damage shall be repaired to the pre-existing condition by the project sponsor, provided that the property owner approves of the repair.

Prior to Issuance of Any Building & Safety Permit (Demolition or Construction)

- 14. Construction Noise Management - Public Notice Required.** At least two weeks prior to initiating any demolition or construction activities at the site, the applicant shall provide notice to businesses and residents within **500 feet** of the project site. This notice shall at a minimum provide the following: (1) project description, (2) description of construction activities during extended work hours and reason for extended hours, (3) daily construction schedule (i.e., time of day) and expected duration (number of months), (4) the name and phone number of the Project Liaison for the project that is responsible for responding to any local complaints, and (5) that construction work is about to commence. The liaison would determine the cause of all construction-related complaints (e.g., starting too early, bad muffler, worker parking, etc.) and institute reasonable measures to correct the problem. A copy of such notice and methodology for distributing the notice shall be provided in advance to the City for review and approval.
- 15. Construction Phases.** The applicant shall provide the Zoning Officer with a schedule of major construction phases with start dates and expected duration, a description of the activities and anticipated noise levels of each phase, and the name(s) and phone number(s) of the individual(s) directly supervising each phase. The Zoning Officer or his/her designee shall have the authority to require an on-site meeting with these individuals as necessary to ensure compliance with these conditions. The applicant shall notify the Zoning Officer of any changes to this schedule as soon as possible.

16. Demolition. Demolition of the existing building cannot commence until a complete application is submitted for the replacement building. In addition, all plans presented to the City to obtain a permit to allow the demolition are subject to these conditions.
17. Construction and Demolition. Applicant shall submit a Waste Diversion Form and Waste Diversion Plan that meet the diversion requirements of BMC Chapters 19.24 and 19.37.
18. First Source Agreement. The applicant and/or end user(s) shall enter into a First Source Agreement with the City of Berkeley. First Source promotes the hiring of local residents on local projects. The agreement requires contractors/employers to engage in good faith efforts to hire locally, including utilizing graduates of local job training programs. Please call (510) 981-4970 for further information, or visit the City's Employment Programs office at 2180 Milvia, 1st Floor.
19. Toxics. The applicant shall contact the Toxics Management Division (TMD) at 1947 Center Street or (510) 981-7470 to determine which of the following documents are required and timing for their submittal:
 - A. Environmental Site Assessments:
 - 1) Phase I & Phase II Environmental Site Assessments (latest ASTM 1527-13). A recent Phase I ESA (less than 6 months old*) shall be submitted to TMD for developments for:
 - All new commercial, industrial and mixed use developments and all large improvement projects.
 - All new residential buildings with 5 or more dwelling units located in the Environmental Management Area (or EMA).
 - EMA is available online at:
 - http://www.cityofberkeley.info/uploadedFiles/IT/Level_3_-_General/ema.pdf
 - 2) Phase II ESA is required to evaluate Recognized Environmental Conditions (REC) identified in the Phase I or other RECs identified by TMD staff. The TMD may require a third party toxicologist to review human or ecological health risks that may be identified. The applicant may apply to the appropriate state, regional or county cleanup agency to evaluate the risks.
 - 3) If the Phase I is over 6 months old, it will require a new site reconnaissance and interviews. If the facility was subject to regulation under Title 15 of the Berkeley Municipal Code since the last Phase I was conducted, a new records review must be performed.
 - B. Soil and Groundwater Management Plan:
 - 1) A Soil and Groundwater Management Plan (SGMP) shall be submitted to TMD for all non-residential projects, and residential or mixed-use projects with five or more dwelling units, that: (1) are in the Environmental Management Area (EMA) and (2) propose any excavations deeper than 5 feet below grade. The SGMP shall be site specific and identify procedures for soil and groundwater management including identification of pollutants and disposal methods. The SGMP will identify permits required and comply with all applicable local, state and regional requirements.
 - 2) The SGMP shall require notification to TMD of any hazardous materials found in soils and groundwater during development. The SGMP will provide guidance on managing odors during excavation. The SGMP will provide the name and phone number of the individual responsible for implementing the SGMP and post the name and phone number for the person responding to community questions and complaints.
 - 3) TMD may impose additional conditions as deemed necessary. All requirements of the approved SGMP shall be deemed conditions of approval of this Permit.
 - C. Building Materials Survey:

- 1) Prior to approving any permit for partial or complete demolition and renovation activities involving the removal of 20 square or lineal feet of interior or exterior walls, a building materials survey shall be conducted by a qualified professional. The survey shall include, but not be limited to, identification of any lead-based paint, asbestos, polychlorinated biphenyl (PBC) containing equipment, hydraulic fluids in elevators or lifts, refrigeration systems, treated wood and mercury containing devices (including fluorescent light bulbs and mercury switches). The Survey shall include plans on hazardous waste or hazardous materials removal, reuse or disposal procedures to be implemented that fully comply state hazardous waste generator requirements (22 California Code of Regulations 66260 et seq). The Survey becomes a condition of any building or demolition permit for the project. Documentation evidencing disposal of hazardous waste in compliance with the survey shall be submitted to TMD within 30 days of the completion of the demolition. If asbestos is identified, Bay Area Air Quality Management District Regulation 11-2-401.3 a notification must be made and the J number must be made available to the City of Berkeley Permit Service Center.

D. Hazardous Materials Business Plan:

- 1) A Hazardous Materials Business Plan (HMBP) in compliance with BMC Section 15.12.040 shall be submitted electronically at <http://cers.calepa.ca.gov/> within 30 days if on-site hazardous materials exceed BMC 15.20.040. HMBP requirement can be found at <http://ci.berkeley.ca.us/hmr/>

Prior to Issuance of Any Building (Construction) Permit

20. Interior Noise Levels. Prior to issuance of a building permit, the applicant shall submit a report to the Building and Safety Division and the Zoning Officer by a qualified acoustic engineer certifying that the interior residential portions of the project will achieve interior noise levels of no more than 45 Ldn (Average Day-Night Levels). If the adopted Building Code imposes a more restrictive standard for interior noise levels, the report shall certify compliance with this standard.
21. Electric Vehicle (EV) Charging. The project shall provide the number and type of pre-wired and equipped Level 2 (240 Volt/40 amp) plug-in electric vehicle (EV) charging system installation for both residential and commercial use as specified by the Office of Energy and Sustainable Development. Any Level 2 EV charging systems installed at parking spaces will be counted toward the applicable pre-wiring requirement. Pre-wiring for EV charging and EV charging station installations shall be noted on site plans.
22. Recycling and Organics Collection. Applicant shall provide recycling and organics collection areas for occupants, clearly marked on site plans, which comply with the Alameda County Mandatory Recycling Ordinance (ACWMA Ordinance 2012-01).
23. Water Efficient Landscaping. Applicant shall provide an updated Bay-Friendly Basics Landscape Checklist that includes detailed notes of any measures that will not be fully met at the project. Landscape improvements shall be consistent with the current versions of the State's Water Efficient Landscape Ordinance (WELO) and the East Bay Municipal Utility District's Section 31: Water Efficiency Requirements.
24. Public Works ADA. Plans submitted for building permit shall include replacement of sidewalk, curb, gutter, and other streetscape improvements, as necessary to comply with current City of Berkeley standards for accessibility.

- 25. Parking for Disabled Persons.** Per BMC Section 23E.28.040.D of the Zoning Ordinance, “Notwithstanding any reduction in off-street parking spaces that may be granted for mixed-use projects in non-residential districts listed in Sub-title 23E, the requirement for off-street parking spaces for disabled persons in the project shall be calculated as if there had been no reduction in total parking spaces.”

Prior to Demolition or Start of Construction

- 26. Construction Meeting.** The applicant shall request of the Zoning Officer an on-site meeting with City staff and key parties involved in the early phases of construction (e.g., applicant, general contractor, foundation subcontractors) to review these conditions and the construction schedule. The general contractor or applicant shall ensure that all subcontractors involved in subsequent phases of construction aware of the conditions of approval.

During Construction

- 27. Construction Hours.** Construction activity shall be limited to between the hours of 7:00 AM and 6:00 PM on Monday through Friday, and between 9:00 AM and 4:00 PM on Saturday. No construction-related activity shall occur on Sunday or any Federal Holiday.
- 28. Construction Hours - Exceptions.** It is recognized that certain construction activities, such as the placement of concrete, must be performed in a continuous manner and may require an extension of these work hours. Prior to initiating any activity that might require a longer period, the developer must notify the Zoning Officer and request an exception for a finite period of time. If the Zoning Officer approves the request, then two weeks prior to the expanded schedule, the developer shall notify businesses and residents within 500 feet of the project site describing the expanded construction hours. A copy of such notice and methodology for distributing the notice shall be provided in advance to the City for review and approval. The project shall not be allowed more than 15 extended working days.
- 29. Transportation Construction Plan.** The applicant and all persons associated with the project are hereby notified that a Transportation Construction Plan (TCP) is required for all phases of construction, particularly for the following activities:
- Alterations, closures, or blockages to sidewalks, pedestrian paths or vehicle travel lanes (including bicycle lanes);
 - Storage of building materials, dumpsters, debris anywhere in the public ROW;
 - Provision of exclusive contractor parking on-street; or
 - Significant truck activity.

The applicant shall secure the City Traffic Engineer’s approval of a TCP. Please contact the Office of Transportation at 981-7010, or 1947 Center Street, and ask to speak to a traffic engineer. In addition to other requirements of the Traffic Engineer, this plan shall include the locations of material and equipment storage, trailers, worker parking, a schedule of site operations that may block traffic, and provisions for traffic control. The TCP shall be consistent with any other requirements of the construction phase.

Contact the Permit Service Center (PSC) at 1947 Center Street or 981-7500 for details on obtaining Construction/No Parking Permits (and associated signs and accompanying dashboard permits). Please note that the Zoning Officer and/or Traffic Engineer may limit off-site parking of construction-related vehicles if necessary to protect the health, safety or convenience of the surrounding

neighborhood. A current copy of this Plan shall be available at all times at the construction site for review by City Staff.

- 30. Project Construction Website.** The applicant shall establish a project construction website with the following information clearly accessible and updated monthly or more frequently as changes warrant:
- Contact information (i.e. "hotline" phone number, and email address) for the project construction manager
 - Calendar and schedule of daily/weekly/monthly construction activities
 - The final Conditions of Approval, Mitigation Monitoring and Reporting Program, Transportation Construction Plan, Construction Noise Reduction Program, and any other reports or programs related to construction noise, air quality, and traffic.
- 31. Halt Work/Unanticipated Discovery of Tribal Cultural Resources.** In the event that cultural resources of Native American origin are identified during construction, all work within 50 feet of the discovery shall be redirected. The project applicant and project construction contractor shall notify the City Planning Department within 24 hours. The City will again contact any tribes who have requested consultation under AB 52, as well as contact a qualified archaeologist, to evaluate the resources and situation and provide recommendations. If it is determined that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.
- 32. Avoid Disturbance of Nesting Birds.** Initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 30), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and CFGC, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and January 31.
- 33. Air Quality - Diesel Particulate Matter Controls during Construction.** All off-road construction equipment used for projects with construction lasting more than 2 months shall comply with **one** of the following measures:
- A. The project applicant shall prepare a health risk assessment that demonstrates the project's on-site emissions of diesel particulate matter during construction will not exceed health risk screening criteria after a screening-level health risk assessment is conducted in accordance with current guidance from BAAQMD and OEHHA. The health risk assessment shall be

submitted to the Public Works Department for review and approval prior to the issuance of building permits.

- B. All construction equipment shall be equipped with Tier 2 or higher engines and the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board (CARB). The equipment shall be properly maintained and tuned in accordance with manufacturer specifications.

In addition, a Construction Emissions Minimization Plan (Emissions Plan) shall be prepared that includes the following:

- An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.
- A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract. The Emissions Plan shall be submitted to the Public Works Department for review and approval prior to the issuance of building permits.

34. Archaeological Resources (Ongoing throughout demolition, grading, and/or construction).

Pursuant to CEQA Guidelines section 15064.5(f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore:

- A. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist, historian or paleontologist to assess the significance of the find.
- B. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Berkeley. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by the qualified professional according to current professional standards.
- C. In considering any suggested measure proposed by the qualified professional, the project applicant shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, project design, costs, and other considerations.
- D. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation measures for cultural resources is carried out.
- E. If significant materials are recovered, the qualified professional shall prepare a report on the findings for submittal to the Northwest Information Center.

35. Human Remains (Ongoing throughout demolition, grading, and/or construction).

In the event that human skeletal remains are uncovered at the project site during ground-disturbing activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site

preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

- 36. Paleontological Resources (Ongoing throughout demolition, grading, and/or construction).** In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards [SVP 1995,1996]). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.
- 37. Stormwater Requirements.** The applicant shall demonstrate compliance with the requirements of the City's National Pollution Discharge Elimination System (NPDES) permit as described in BMC Section 17.20. The following conditions apply:
- A. The project plans shall identify and show site-specific Best Management Practices (BMPs) appropriate to activities conducted on-site to limit to the maximum extent practicable the discharge of pollutants to the City's storm drainage system, regardless of season or weather conditions.
 - B. Trash enclosures and/or recycling area(s) shall be covered; no other area shall drain onto this area. Drains in any wash or process area shall not discharge to the storm drain system; these drains should connect to the sanitary sewer. Applicant shall contact the City of Berkeley and EBMUD for specific connection and discharge requirements. Discharges to the sanitary sewer are subject to the review, approval and conditions of the City of Berkeley and EBMUD.
 - C. Landscaping shall be designed with efficient irrigation to reduce runoff, promote surface infiltration and minimize the use of fertilizers and pesticides that contribute to stormwater pollution. Where feasible, landscaping should be designed and operated to treat runoff. When and where possible, xeriscape and drought tolerant plants shall be incorporated into new development plans.
 - D. Design, location and maintenance requirements and schedules for any stormwater quality treatment structural controls shall be submitted to the Department of Public Works for review with respect to reasonable adequacy of the controls. The review does not relieve the property owner of the responsibility for complying with BMC Chapter 17.20 and future revisions to the City's overall stormwater quality ordinances. This review shall be conducted prior to the issuance of a Building Permit.
 - E. All paved outdoor storage areas must be designed to reduce/limit the potential for runoff to contact pollutants.
 - F. All on-site storm drain inlets/catch basins must be cleaned at least once a year immediately prior to the rainy season. The property owner shall be responsible for all costs associated with proper operation and maintenance of all storm drainage facilities (pipelines, inlets, catch basins, outlets, etc.) associated with the project, unless the City accepts such facilities by Council action. Additional cleaning may be required by City of Berkeley Public Works Engineering Dept.

- G. All private or public projects that create and/or replace 10,000 square feet or more of impervious surface must comply with Provision C.3 of the Alameda County NPDES permit and must incorporate stormwater controls to enhance water quality. Permit submittals shall include a Stormwater Requirement Checklist and detailed information showing how the proposed project will meet Provision C.3 stormwater requirements, including a) Site design measures to reduce impervious surfaces, promote infiltration, and reduce water quality impacts; b) Source Control Measures to keep pollutants out of stormwater runoff; c) Stormwater treatment measures that are hydraulically sized to remove pollutants from stormwater; d) an O & M (Operations and Maintenance) agreement for all stormwater treatment devices and installations; and e) Engineering calculations for all stormwater devices (both mechanical and biological).
 - H. All on-site storm drain inlets must be labeled "No Dumping – Drains to Bay" or equivalent using methods approved by the City.
 - I. Most washing and/or steam cleaning must be done at an appropriately equipped facility that drains to the sanitary sewer. Any outdoor washing or pressure washing must be managed in such a way that there is no discharge or soaps or other pollutants to the storm drain. Sanitary connections are subject to the review, approval and conditions of the sanitary district with jurisdiction for receiving the discharge.
 - J. Sidewalks and parking lots shall be swept regularly to prevent the accumulation of litter and debris. If pressure washed, debris must be trapped and collected to prevent entry to the storm drain system. If any cleaning agent or degreaser is used, wash water shall not discharge to the storm drains; wash waters should be collected and discharged to the sanitary sewer. Discharges to the sanitary sewer are subject to the review, approval and conditions of the sanitary district with jurisdiction for receiving the discharge.
 - K. The applicant is responsible for ensuring that all contractors and sub-contractors are aware of and implement all stormwater quality control measures. Failure to comply with the approved construction BMPs shall result in the issuance of correction notices, citations, or a project stop work order.
- 38. Public Works - Implement BAAQMD-Recommended Measures during Construction.** For all proposed projects, BAAQMD recommends implementing all the Basic Construction Mitigation Measures, listed below to meet the best management practices threshold for fugitive dust:
- A. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
 - B. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
 - C. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
 - D. All vehicle speeds on unpaved roads shall be limited to 15 mph.
 - E. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
 - F. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
 - G. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
 - H. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours.

The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

39. Public Works. All piles of debris, soil, sand, or other loose materials shall be covered at night and during rainy weather with plastic at least one-eighth millimeter thick and secured to the ground.
40. Public Works. The applicant shall ensure that all excavation takes into account surface and subsurface waters and underground streams so as not to adversely affect adjacent properties and rights-of-way.
41. Public Works. The project sponsor shall maintain sandbags or other devices around the site perimeter during the rainy season to prevent on-site soils from being washed off-site and into the storm drain system. The project sponsor shall comply with all City ordinances regarding construction and grading.
42. Public Works. Prior to any excavation, grading, clearing, or other activities involving soil disturbance during the rainy season the applicant shall obtain approval of an erosion prevention plan by the Building and Safety Division and the Public Works Department. The applicant shall be responsible for following these and any other measures required by the Building and Safety Division and the Public Works Department.
43. Public Works. The removal or obstruction of any fire hydrant shall require the submission of a plan to the City's Public Works Department for the relocation of the fire hydrant during construction.
44. Public Works. If underground utilities leading to adjacent properties are uncovered and/or broken, the contractor involved shall immediately notify the Public Works Department and the Building & Safety Division, and carry out any necessary corrective action to their satisfaction.

Prior to Final Inspection or Issuance of Occupancy Permit

45. Compliance with Conditions. The project shall conform to the plans and statements in the Permit. The developer is responsible for providing sufficient evidence to demonstrate compliance with the requirements throughout the implementation of this Permit.
46. Compliance with Approved Plan. The project shall conform to the plans and statements in the Permit. All landscape, site and architectural improvements shall be completed per the attached approved drawings dated December 9, 2019, except as modified by conditions of approval.
47. Construction and Demolition Diversion. A Waste Diversion Report, with receipts or weigh slips documenting debris disposal or recycling during all phases of the project, must be completed and submitted for approval to the City's Building and Safety Division. The Zoning Officer may request summary reports at more frequent intervals, as necessary to ensure compliance with this requirement. A copy of the Waste Diversion Plan shall be available at all times at the construction site for review by City Staff.

BELOW MARKET RATE UNITS

48. Number of Below Market Rate Units. The project shall provide at least 79 below market rate rental dwelling units ("BMR Units") affordable to households with incomes of no more than 110% of Area Median Income to comply with the State Density Bonus Law and local regulations to implement Government Code Section 65915(n).

49. Regulatory Agreement. Prior to the issuance of a building permit, the applicant shall enter into a Regulatory Agreement that implements Government Code Section 65915 and this Permit. The Regulatory Agreement may include any terms and affordability standards determined by the City to be necessary to ensure such compliance.

At All Times

50. Exterior Lighting. All exterior lighting shall be energy efficient where feasible; and shielded and directed downward and away from property lines to prevent excessive glare beyond the subject property.

51. Rooftop Projections. No additional rooftop or elevator equipment shall be added to exceed the approved maximum roof height without submission of an application for a Permit Modification, subject to Board review and approval.

52. Drainage Patterns. The applicant shall establish and maintain drainage patterns that do not adversely affect adjacent properties and rights-of-way. Drainage plans shall be submitted for approval of the Building & Safety Division and Public Works Department, if required.

53. Electrical Meter. Only one electrical meter fixture may be installed per dwelling unit.

54. Loading. All loading/unloading activities associated with deliveries to all uses shall be restricted to the hours of 7:00 a.m. to 10:00 p.m. daily.
