## SFMTA - TASC SUMMARY SHEET

Public Hearing Regular	PreStaff_Date: 11/24/2020	X Public Hearing	Consent	No objections:
Section Head: MS WS Informational / Other PH - Consent Other:  Location: 7th Avenue, Fulton Street and Woodside Avenue  Subject: Radar Speed Signs  PROPOSAL / REQUEST: ESTABLISH - RADAR SPEED SIGNS - 7th Avenue, southbound, between Lawton and Moraga Streets - Fulton Street, westbound, between 16th and 17th Avenues - Fulton Street, eastbound, between 38th and 39th Avenues - Woodside Avenue, westbound, between Vasquez and Hernandez Streets (Supervisor Districts 1 and 7)  Installing radar speed signs to encourage drivers to comply with the speed limit.  Philip Louie, philip.louie@sfmta.com  BACKGROUND INFORMATION / COMMENTS  The 5 year Radar Speed Sign Program is proposing to install radar speed signs on 7th Avenue, Fulton Street and Woodside Avenue as part of the first year of this program. The locations were determined by staff feedback volumes, speeds, collisions, speed limit changes, exhausting other traffic calming measures and if it's on the	Requested_by: SFMTA	Public Hearing	Regular	Item Held:
Subject: Radar Speed Signs  PROPOSAL / REQUEST: ESTABLISH - RADAR SPEED SIGNS - 7th Avenue, southbound, between Lawton and Moraga Streets - Fulton Street, westbound, between 16th and 17th Avenues - Fulton Street, eastbound, between 38th and 39th Avenues - Woodside Avenue, westbound, between Vasquez and Hernandez Streets (Supervisor Districts 1 and 7)  Installing radar speed signs to encourage drivers to comply with the speed limit.  Philip Louie, philip.louie@sfmta.com  BACKGROUND INFORMATION / COMMENTS  The 5 year Radar Speed Sign Program is proposing to install radar speed signs on 7th Avenue, Fulton Street and Woodside Avenue as part of the first year of this program. The locations were determined by staff feedback volumes, speeds, collisions, speed limit changes, exhausting other traffic calming measures and if it's on the			Other	Other:
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HEARING NOTIFICATION AND PROCESSING NOTES:  SFMTA Attached Pending  CHECK IF PREPARING SEPARATE SFMTA BOARD CALENDAR ITEM FOR PROPOSAL:			☐ SFM7	TA X Attached ☐ Pending



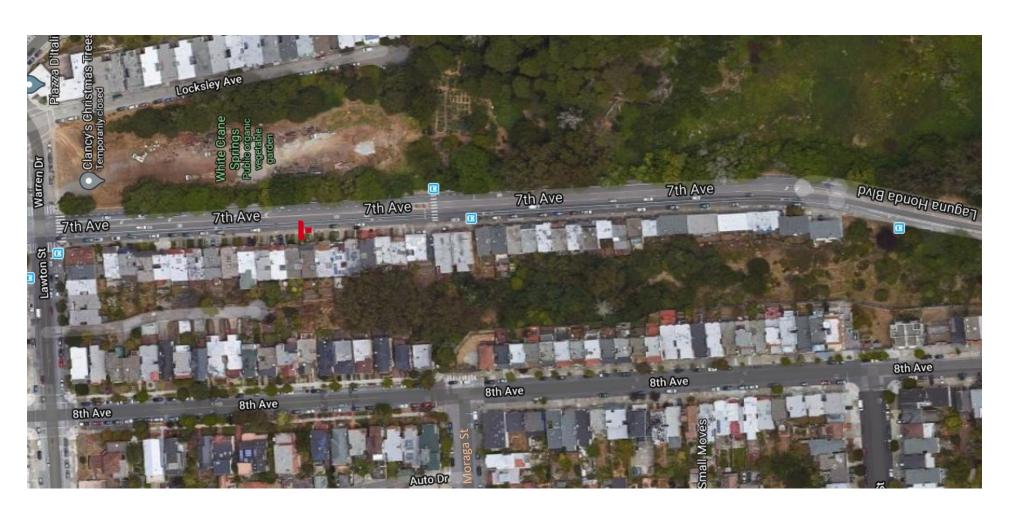
# Department of Parking & Traffic TRAFFIC ENGINEERING



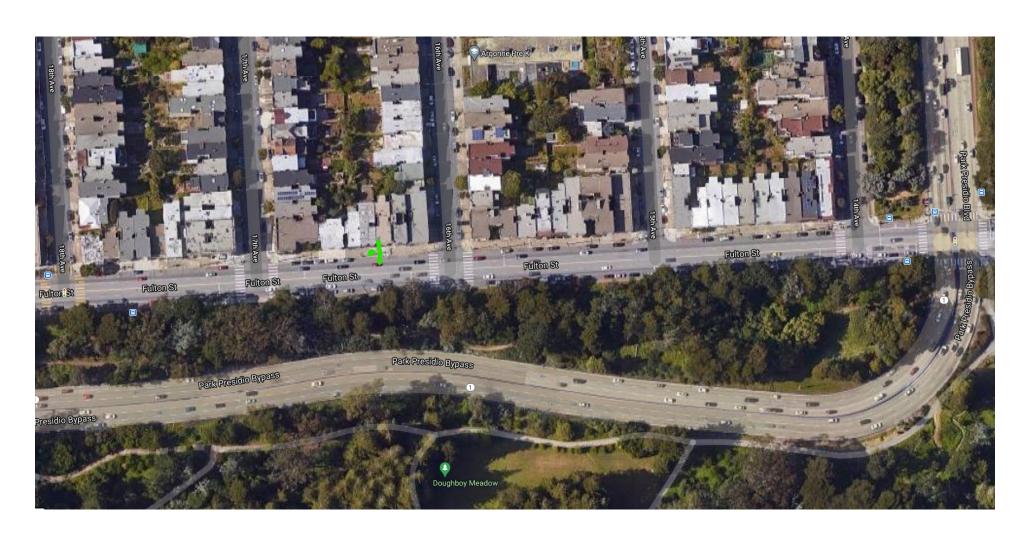
#### TRACKING COVER SHEET FOR LEGISLATION ITEMS WITHOUT CORLOG NUMBER

Request No.			Section	LIV			
TSC No.			Staff Assigned	PL			
Director's No.			<b>Due Date</b>				
Mayor's No.			Neighborhood				
Requested Date			School Name				
Received Date			Organization				
Firm							
Requested By	SFMTA						
Address							
City/State/Zip	San Francisco, CA						
Letter Subject	Radar Speed Signs			]			
	<b>Subject Location</b>			Work Descripti	on		
7th Ave: Lawton-Moraga Sts, Fulton St: 16th-17th Aves, 38th-39th Aves, Woodside Ave near Vasquez Ave							
Addi	tional Correspondence		Legislation	Action	n Date		
F	rom/To	Date	TASC				
			<b>Public Hearing</b>				
			SFMTA Board				
			<b>Board Committ</b>	ee			
			Board of Sups				
			Mayor's				
			Res/Ord No.				
		Con	nment				
		Ren	marks				

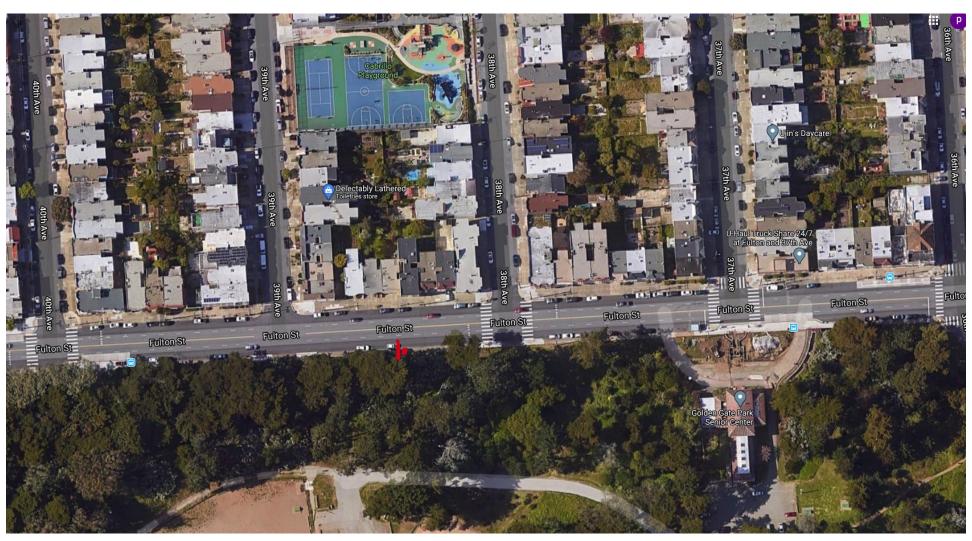
## Proposed Location of Radar Speed Sign on 7th Avenue between Lawton and Moraga Streets



## Proposed Location of Radar Speed Sign on Fulton Street between 16th and 17th Avenues



## Proposed Location of Radar Speed Sign on Fulton Street between 38th and 39th Avenues



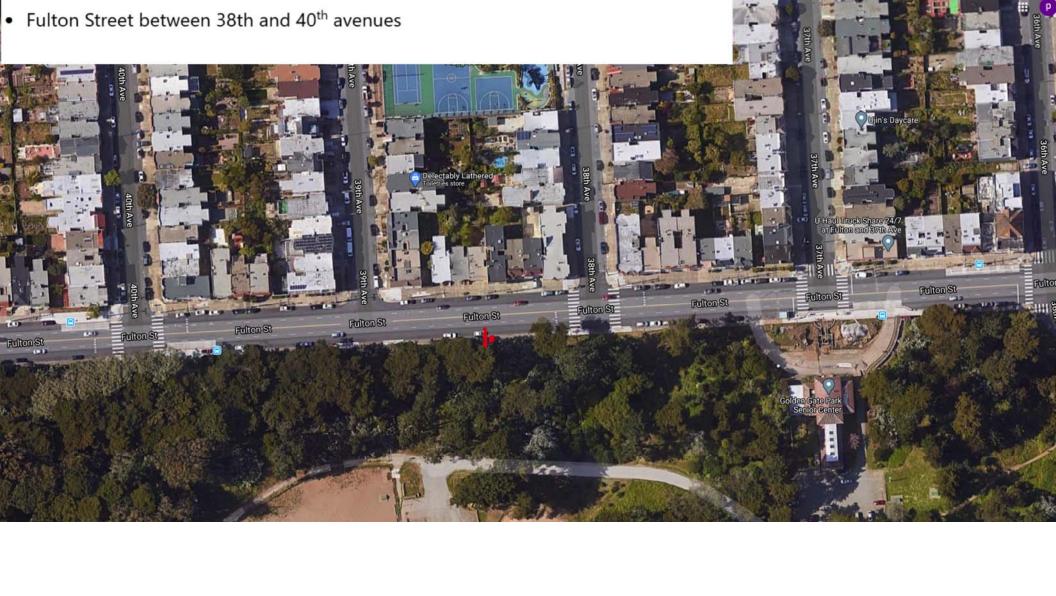
Proposed Location of Radar Speed Sign on Laguna Honda Boulevard between Balceta Avenue and Laguna Honda Boulevard

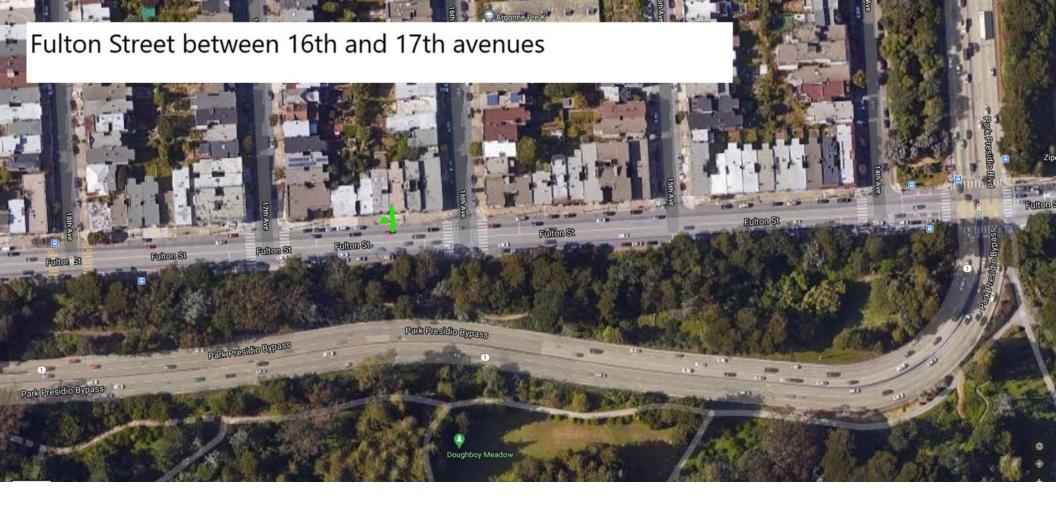


## Attachment 1: Speed Radar Sign Locations

• 7th Avenue near Laguna Honda Boulevard and Lawton Street







# Woodside Avenue between Vasquez and Hernandez avenues



85 MPH

#### PROJECT DESCRIPTION

THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS COMPRISES CAST-IN-DRILLED-HOLE (CIDH) CONCRETE PILE FOUNDATIONS FOR PUC STANDARD LIGHT POLES & 1-A (MODIFIED)

## **GENERAL**

- THESE GENERAL NOTES APPLY THROUGHOUT ALL STRUCTURAL DRAWINGS EXCEPT WHERE SPECIFICALLY SHOWN BY NOTES ON DRAWINGS AND/OR DETAILS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO THE START OF CONSTRUCTION OR FABRICATION. ANY DISCREPANCIES, INCONSISTENCIES, OR UNSOUND CONDITIONS SHALL BE REPORTED TO THE ENGINEER FOR RESOLUTION PRIOR TO THE START OF ANY CONSTRUCTION OR FABRICATION SO THAT A CLARIFICATION CAN BE ISSUED.
- DIMENSIONS IN THE STRUCTURAL DRAWINGS ARE AS NOTED. DO NOT USE DIMENSIONS SCALED FROM THE STRUCTURAL DRAWINGS.
- ANY WORK PERFORMED IN CONFLICT WITH THESE DRAWINGS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE CITY AND COUNTY OF SAN FRANCISCO.
- REFER TO OTHER DISCIPLINES' DRAWINGS AND COORDINATE INFORMATION RELATED TO THOSE OTHER DISCIPLINES' SYSTEMS FOR ITEMS SUCH AS:
  - a. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS, ETC., IN WALLS AND SLABS.
- THESE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS AND/OR METHODS OF CONSTRUCTION. ALTHOUGH THE NEED FOR SHORING MAY SOMETIMES BE INDICATED IN THE STRUCTURAL DRAWINGS, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DESIGN, PROVIDE, AND MAINTAIN TEMPORARY BRACING, SHORING, GUYING, OR OTHER TEMPORARY SUPPORT AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION OF ADJACENT STRUCTURES DURING CONSTRUCTION. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING PIPES, DUCTS, AND UTILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT.
- 10. ALL STRUCTURAL MEMBERS AND ELEMENTS SHOWN ON THE STRUCTURAL DRAWINGS ARE NEW UNLESS NOTED (E) FOR EXISTING CONDITIONS.

## BASIS OF DESIGN

- 1. ALL NEW CONSTRUCTION SHALL CONFORM TO THE 2013 SAN FRANCISCO BUILDING CODE (SFBC) WHICH COMPRISES THE 2013 CALIFORNIA BUILDING CODE (CBC), 2013 SAN FRANCISCO AMENDMENTS, AND 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, SIXTH EDITION.
- DESIGN OF LUMINAIRE SUPPORT IS IN CONFORMANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS "STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS", SIXTH EDITION 2013.
- THE PUBLICATIONS LISTED BELOW ARE THE GOVERNING CODES AND STANDARDS REFERENCE BY THE CBC AND ARE REFERENCED HEREIN BY THEIR BASIC DESIGNATION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE SFBC SHALL GOVERN.
  - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, "STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS". SIXTH EDITION 2013
  - ACI 301-10 AMERICAN CONCRETE INSTITUTE, "SPECIFICATIONS FOR STRUCTURAL CONCRETE", 2010 EDITION
  - AMERICAN CONCRETE INSTITUTE, "BUILDING CODE REQUIREMENTS FOR ACI 318-11

STRUCTURAL CONCRETE", 2011 EDITION

ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS

#### STRUCTURAL DESIGN CRITERIA

1. WIND DESIGN CRITERIA: METHOD:

BASIC WIND SPEED:

SERVICE LEVEL PERFORMANCE CRITERIA:

FOUNDATION DEFLECTION ≤ 1% OF THE POLE'S TOTAL HEIGHT

### **FOUNDATIONS**

- CONTRACTOR SHALL PROVIDE FOR DE-WATERING IF WATER IS PRESENT IN THE EXCAVATION. DE-WATERING PLANS SHALL BE SUBMITTED FOR REVIEW. DE-WATERING PLANS MAY INCLUDE A MONITORING PROGRAM TO EVALUATE SETTLEMENT IN THE ADJACENT IMPROVEMENTS.
- 2. OVER-EXCAVATED FOOTINGS SHALL BE BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM) (fc'min = 100 PSI, fc'max = 1,200 PSI).
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF APPROPRIATE ADEQUATE SHORING AND BRACING OF FOUNDATION EXCAVATION. AND UNDERPINNING OF EXISTING STRUCTURES TO ENSURE PROTECTION OF LIFE AND ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL ORDINANCES. UNDERPINNING, SHORING, LAGGING, ETC., SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND SHALL BE CONSTRUCTED UNDER SEPARATE PERMIT. SHORING PLAN TO BE SUBMITTED TO THE GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER FOR REVIEW TO ENSURE CONFORMANCE WITH DESIGN DOCUMENTS.
- THE CONTRACTOR SHALL NOT UNDERMINE EXISTING FOUNDATIONS AND STRUCTURES DURING EXCAVATION. IF UNDERMINING OCCURS, THE CONTRACTOR SHALL PROVIDE CORRECTIVE MEASURES FOR ENGINEER TO REVIEW AND APPROVE AT CONTRACTOR'S EXPENSE.
- INSTALLATION OF CAST-IN-DRILLED-HOLE (CIDH) PILES SHALL BE PERFORMED WHILE UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA.
- MINIMUM REQUIRED EMBEDMENT SHALL ONLY BE USED IN HOMOGENEOUS SOIL PROFILES. WHERE SOIL IS DIVERSE IN CHARACTER OR CONTENT (HETEROGENEOUS) ALONG THE FOOTING LENGTH, THE REQUIRED EMBEDMENT SHALL BE BASED ON THE WORST SOIL TYPE ENCOUNTERED.
- UNLESS THE FINISHED GROUND SURFACE IS PROTECTED BY CONCRETE PAVEMENT, THE FOOTING LENGTH SHALL ADD 12 INCHES TO THE MINIMUM REQUIRED EMBEDMENT.
- REFER TO QUATERNARY GEOLOGIC MAP OF THE CITY AND COUNTY OF SAN FRANCISCO.

IF A POLE AND ITS FOUNDATION ARE SPECIFIED TO BE IN AN UNPAVED OR LAWN AREA, THE CONTRACTOR SHALL CONSTRUCT A CONCRETE PAD AROUND THE POLE FOUNDATION. THE CONCRETE PAD SHALL BE A MINIMUM LENGTH OF 5 FEET ON EACH SIDE OF THE POLE FOUNDATION UNLESS DIRECTED BY THE RESIDENT ENGINEER.

## CONCRETE

- 1. PIPES OTHER THAN ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY THE ENGINEER. OUTSIDE DIAMETER OF CONDUIT EMBEDDED IN CONCRETE SHALL NOT EXCEED 1/6 TIMES THE MEMBER THICKNESS, OR 1 1/4", WHICHEVER IS LESS, WITHOUT APPROVAL OF THE ENGINEER. MINIMUM CLEAR DISTANCE BETWEEN CONDUITS OR REBAR SHALL BE 3 TIMES CONDUIT-DIAMETER (LARGER CONDUIT) OR 1 INCH. WHICHEVER IS GREATER. CONDUITS SHALL BE FIRMLY TIED TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. CONDUIT CAN BE TIED TO REBAR WHEN ORIENTED PERPENDICULAR TO THEM, PROVIDE THE LOCATION OF THE REBAR IS NOT AFFECTED BY THE CONDUIT.
- 2. ALL CONCRETE EXCEPT SLABS-ON-GRADE 6"THICK OR LESS SHALL BE MECHANICALLY VIBRATED AS TO COMPLETELY FILL THE FORM WITHOUT CAUSING UNDUE SEGREGATION.
- 3. THE CONTRACTOR SHALL REMOVE AND REPLACE ANY CONCRETE WHICH FAILS TO ATTAIN SPECIFIED STRENGTH IN 28 DAYS IF SO DIRECTED BY THE ENGINEER. ANY DEFECTS IN THE HARDENED CONCRETE SHALL BE SATISFACTORILY REPAIRED OR THE HARDENED CONCRETE SHALL BE REPLACED.
- 4. THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS, INCLUDING MATERIAL CERTIFICATES, TO THE CITY REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT.

## STRUCTURAL OBSERVATION

- 1. STRUCTURAL OBSERVATION SHALL BE REQUIRED FOR THE FOLLOWING ITEMS:
  - REINFORCING STEEL PLACEMENT
  - ANCHOR BOLT PLACEMENT
  - c. CONCRETE PLACEMENT
- 2. THE CONTRACTOR SHALL NOTIFY THE CITY REPRESENTATIVE A MINIMUM OF 3 DAYS PRIOR TO WHEN STRUCTURAL OBSERVATION IS REQUIRED.

### REINFORCING STEEL

- 1. REINFORCING STEEL DETAILING, FABRICATION, AND PLACEMENT SHALL CONFORM TO THE ACI 318, CHAPTER 7.
- 2. REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS:

DEFORMED BARS SPIRAL REINFORCEMENT ASTM A615 OR ASTM A706, GRADE 60 ASTM A615

- ALL STEEL REINFORCING BAR BENDS SHALL BE MADE COLD.
- REINFORCEMENT AND EMBEDMENTS SHALL BE ACCURATELY POSITIONED AND SECURED AGAINST DISPLACEMENT BEFORE AND DURING CONCRETE PLACEMENT. PROVIDE SUFFICIENT SUPPORTS TO PREVENT DAMAGE OR DISPLACEMENT DUE TO CONSTRUCTION TRAFFIC ON REINFORCEMENT.
- PROVIDE CONTINUOUS REINFORCEMENT WHEREVER POSSIBLE. SPLICE ONLY AS SHOWN OR
- THE CONTRACTOR SHALL SUBMIT REINFORCING STEEL SHOP DRAWINGS TO THE CITY REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SUBMIT MILL CERTIFICATES FOR REINFORCING STEEL PRIOR TO REBAR PLACEMENT.

### SPECIAL INSPECTION, TESTING, STRUCTURAL OBSERVATION, AND SUBMITTALS

1. WHERE INDICATED WITH AN "X", THE FOLLOWING ITEMS SHALL BE INSPECTED IN ACCORDANCE WITH SFBC 1704 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED SPECIAL INSPECTION AGENCY. "C" INDICATES CONTINUOUS SPECIAL INSPECTION AND "P" INDICATES PERIODIC SPECIAL INSPECTION. THE SPECIAL INSPECTION AGENCY SHALL SEND COPIES OF ALL SPECIAL INSPECTION REPORTS DIRECTLY TO THE RESIDENT ENGINEER, ARCHITECT, ENGINEER, AND BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

VER	IFICATION AND INSPECTION	С	Р	NOTES
CON	CRETE CONSTRUCTION			
1.	INSPECTION OF REINFORCING STEEL PLACEMENT		Х	
2.	INSPECTION OF REINFORCING STEEL WELDING			
	2.1. VERIFICATION OF WELDABILITY			
	2.2. REINFORCING STEEL RESISTING FLEXURAL &			
	AXIAL FORCES IN INTERMEDIATE AND SPECIAL			
	MOMENT FRAMES, AND BOUNDARY ELEMENTS OF			
	SPECIAL REINFORCED CONCRETE SHEAR WALLS			
	2.3. SHEAR REINFORCEMENT			
	2.4. OTHER REINFORCING STEEL			
3.	INSPECT BOLTS TO BE INSTALLED IN CONCRETE	Х		
	PRIOR TO AND DURING PLACEMENT OF CONCRETE			
4.	VERIFY USE OF REQUIRED DESIGN MIX		Х	
5.	FABRICATE SPECIMENS FOR STRENGTH TESTS,			
	PERFORM SLUMP AND AIR CONTENT TESTS, AND			
	DETERMINE TEMPERATURE OF CONCRETE			
6.	INSPECTION OF CONCRETE & SHOTCRETE PLACEMENT	X		
7.	INSPECTION OF CONCRETE CURING			
8.	INSPECTION OF PRESTRESSED CONCRETE			
	8.1. APPLICATION OF PRESTRESSING FORCES			
	8.2. GROUTING OF BONDED PRESTRESSING TENDONS			
9.	ERECTION OF PRECAST CONCRETE MEMBERS			
10.	VERIFICATION OF IN-SITU CONCRETE STRENGTH			
11.	INSPECT FORMWORK FOR SHAPE, LOCATION, AND			
	DIMENSIONS OF THE CONCRETE MEMBER BEING			
	FORMED			

VERI	FICATION AND INSPECTION	С	Р	NOTES
CAS	T-IN-DRILLED HOLE PIER FOUNDATIONS			
1.	OBSERVE DRILLING OPERATIONS AND MAINTAIN	Х		BY GEOTECHNICAL ENGINEER
	RECORDS FOR EACH PIER			
2.	VERIFY LOCATIONS OF PILES AND PLUMBNESS	X		BY GEOTECHNICAL ENGINEER
	2.1. CONFIRM PIER DIAMETERS			
	2.2. BELL DIAMETERS (IF APPLICABLE)			
	2.3. LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE)			
	2.4. ADEQUATE END STRATA BEARING CAPACITY			

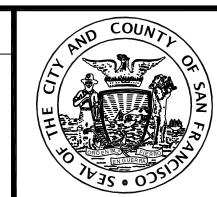
	SHEET INDEX		
SHEET NO.	TITLE	ISSUED FOR CONSTRUCTION	REVISION
S1.0	GENERAL NOTES	Х	
S2.0	STANDARD LIGHT POLE ELEVATION & DETAILS	Х	
S3.0	TYPE 1-A (MODIFIED) POLE ELEVATION & DETAILS	Х	
REFERENCE:			
		MAY 2016	

2. WHERE INDICATED WITH AN "X" BELOW, THE CONTRACTOR SHALL SUBMIT CERTIFICATES OF CONFORMANCE, SHOP DRAWINGS, CALCULATIONS, AND DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. WHERE CALCULATIONS AND DETAILS ARE REQUIRED, THE SUBMITTAL SHALL BE SEALED AND SIGNED BY A REGISTERED DESIGN PROFESSIONAL IN THE STATE OF CALIFORNIA. FOR ADDITIONAL INFORMATION REGARDING SUBMITTALS, SEE SPECIFICATIONS.

ITEM	CERTIFICATES	SHOP	CALCULATIONS	REMARKS
		DRAWINGS	& DETAILS	
CONCRETE, REINFORCING	Χ	χ		
CONCRETE, MIX DESIGN		Х		
CONCRETE, CEMENT	Χ			
CONCRETE, FINE AGGREGATES	Χ			
CONCRETE, COARSE AGGREGATES	Χ			
CONCRETE, ADMIXTURES	Χ			

# FOR ORIGINAL SIGNATURES; SEE REV 0

					REFERENCE INFORMATION & FILE NO. OF SURVEYS
1	7/05/17	Miscellaneous Changes	RR	JS	
NO.	DATE	DESCRIPTION	BY	APP.	
TABLE OF REVISIONS THIS DRAWING WAS LAST MODIFIED: 07/05/17 14:55, BY: RRhee					

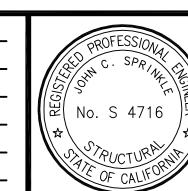






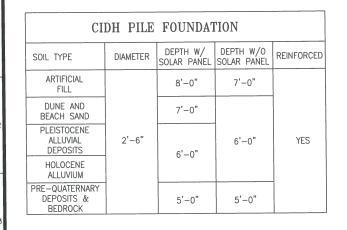
INFRASTRUCTUF AND CONSTRU DEPARTMENT OF PUBI CITY & COUNTY OF SAN 30 VAN NESS AVENUE,

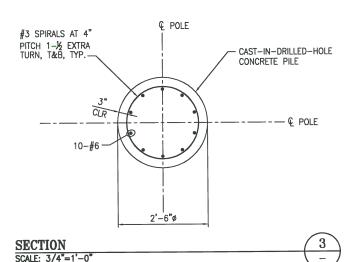
			Date:	DESIGNED	RR
IFRASTRUCTURE DESIGN	Section Mgr:	RAYMOND LUI		DRAWN	TEAM
AND CONSTRUCTION				CHECKED	JS
DEPARTMENT OF PUBLIC WORKS CITY & COUNTY OF SAN FRANCISCO	Acting Deputy Division Mgr:	FERNANDO CISNEROS		REVIEWED	
	Divinion Mary	PATRICK RIVERA		RECOMMENDE	D
30 VAN NESS AVENUE, 5TH FLOOR SAN FRANCISCO, CA 94102 - 6028	Division Mgr:	PATRICK RIVERA		APPROVED	
				DATE	-

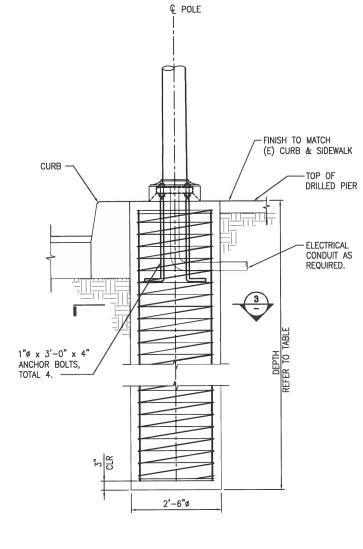


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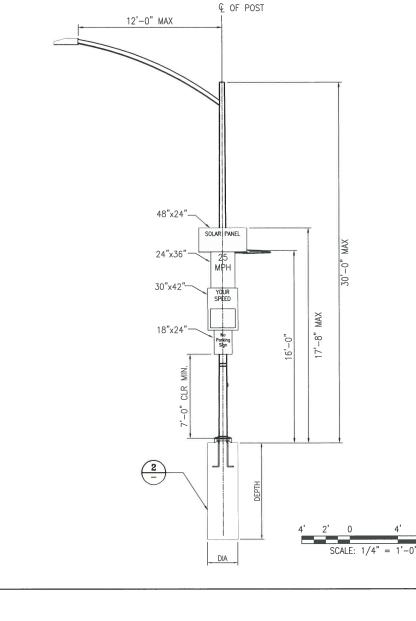
E: AS SHOWN	SFMTA RADAR SPEED DISPLAY SUPPORT POLES	CONTRACT NO. 2559J DRAWING NO. \$1.0
ET OF SHEETS	GENERAL NOTES	FILE NO. 105,437 REV. NO.







**SECTION** SCALE: 3/4"=1'-0"



SCALE: 3/4"=1'-0"

- THIS STANDARD APPLIES TO PUC STANDARD POLE TYPES LS100, LS101, AND LS102. SEE PUC STANDARDS FOR ADDITIONAL INFORMATION INCLUDING POLE SIZES.
- WIND LOADING (3 SECOND): 85 mph.
- UNIT STRESSES (STRUCTURAL STEEL):
  - a. Fy = 55,000 psi (TAPERED STEEL TUBE AND ANCHOR BOLTS)
  - Fy = 50,000 psi (UNLESS OTHERWISE NOTED)
- UNIT STRESSES (REINFORCED CONCRETE):
  - F'c = 3,000 psi (AT 28 DAYS)Fy = 60,000 psi

- PROVIDE A HEX NUT, LEVELING NUT AND 2 WASHERS FOR EACH ANCHOR
- 6. POUR CONCRETE AGAINST UNDISTURBED SOIL.

					REFERENCE INFORMATION & FILE NO. OF SURVEYS
NO.	DATE	DESCRIPTION	BY	APP.	
TLIC	DRAWING W	TABLE OF REVISIONS AS LAST MODIFIED: 02/26/16 11:20	6 RY: rrhee		





INFRASTRUCTURE DESIGN 5 AND CONSTRUCTION DEPARTMENT OF PUBLIC WORKS CITY & COUNTY OF SAN FRANCISCO 30 VAN NESS AVENUE, 5TH FLOOR SAN FRANCISCO, CA 94102 - 6028

		Date:	DESIGNED	RR
Section Mgr.	RAYMOND LUI	delle	DRAWN	TEAM
Active Deputy Division		e/alu	CHECKED	JS
Division Mar. M	PATRICK RIVERA	3/25/10	RECOMMENDED	
ON Now	~	7416	APPROVED DATE	

**ELEVATION** 

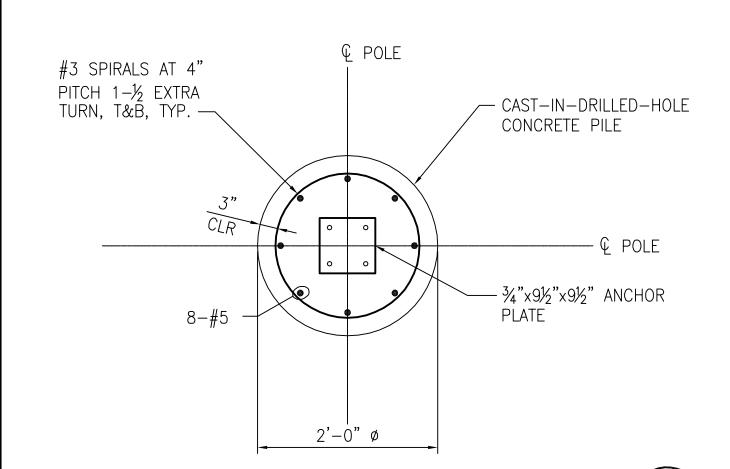
SCALE: 1/4"=1'-0"

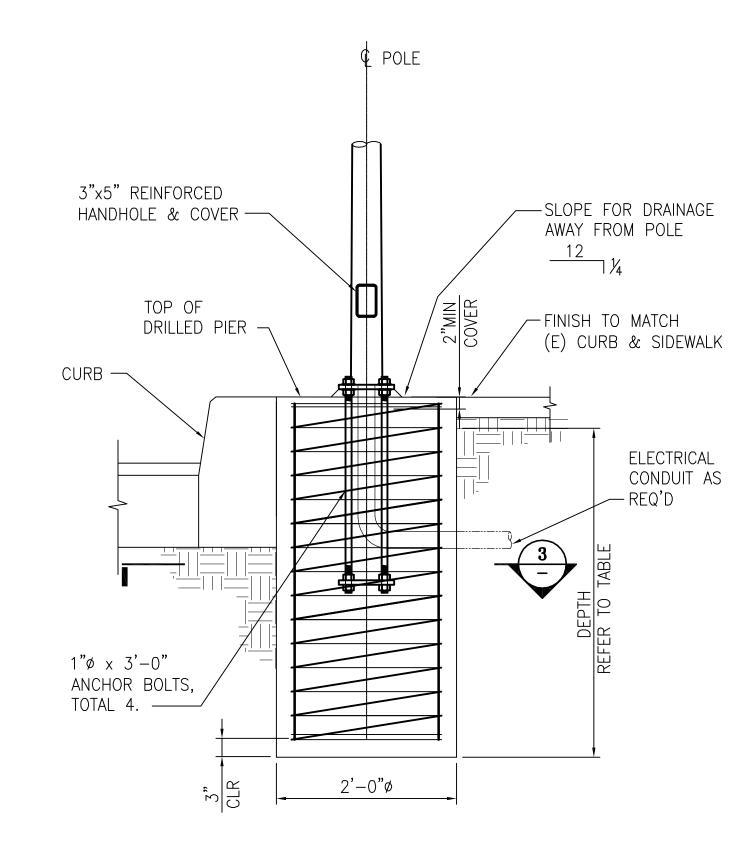
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-	PROFESSIONAL
-	C. SPRINGE
-	STULLE
_	₩ No. S 4716
-	STRUCTURE OF THE
-	OF CALIFORNIA

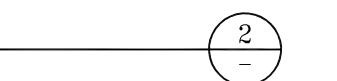
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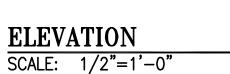
SFMTA RADAR SPEED 2559J DISPLAY SUPPORT POLES S2.0 105,438 STANDARD LIGHT POLE ELEVATION & DETAILS

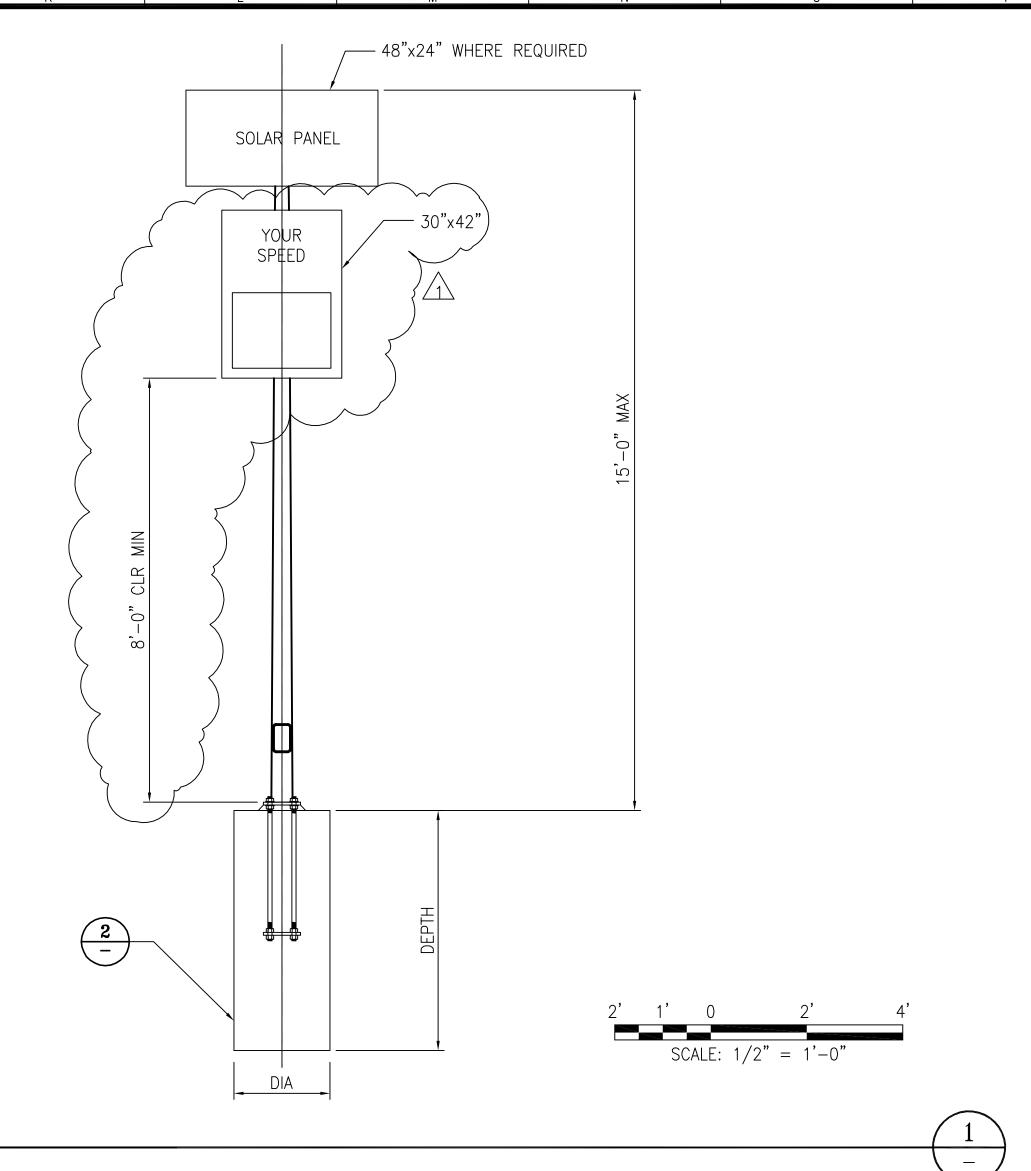
Drawing Path: V:\2559J\_ Plot Time: Wed, 25 May











**SECTION** 

SCALE: 3/4" = 1'-0"

- 1. POLES SHALL BE EITHER  $15'-0"\pm 2"$  OR  $13'-0"\pm 2"$  AS DIRECTED BY SFMTA.
- POLES ARE TO BE TAPERED STEEL POSTS, 0.1196" WALL THICKNESS, 5"ID AT BASE, 41/4"ID AT TOP.
- OUTSIDE DIAMETER, WALL THICKNESS, AND CORRESPONDING SECTION PROPERTIES OF POLES ARE MINIMUMS. UNLESS OTHERWISE SPECIFIED, ALTERNATIVE SECTIONS SHALL REQUIRE APPROVAL BY THE ENGINEER.
- WIND LOADING (3 SECOND): 85 mph.
- UNIT STRESSES (STRUCTURAL STEEL):
  - a. Fy = 55,000 psi (TAPERED STEEL TUBE AND ANCHOR BOLTS)
  - b. Fy = 50,000 psi (UNLESS OTHERWISE NOTED)
- UNIT STRESSES (REINFORCED CONCRETE):
  - a. Fc'= 3,000 psi (AT 28 DAYS) b. Fy = 60,000 psi

- 7. PROVIDE A HEX NUT, LEVELING NUT AND 4 WASHERS FOR EACH ANCHOR
- 8. FOR ANCHOR BOLTS, THREAD TOP 6" AND GALVANIZE TOP 1'-0"; THREAD воттом 6".
- 9. 3"x5" ROUNDED RECTANGLE HANDHOLE REINFORCED WITH RING WELDED TO OUTSIDE OF POLE. HANDHOLE REINFORCEMENT RING SHALL BE 3/2". PROVIDE 1/8" COVER PLATE.
- 10. HANDHOLES SHALL BE LOCATED ON THE DOWNSTREAM SIDE OF TRAFFIC.
- 11. POUR FOUNDATION CONCRETE AGAINST UNDISTURBED SOIL.
- 12. REFER TO 2010 CALTRANS STANDARD PLAN RSP ES-7B FOR ADDITIONAL INFORMATION.

## FOR ORIGINAL SIGNATURES; SEE REV 0

REFERENCE INFORMATION & FILE NO. OF SURVEYS 1 7/05/17 Miscellaneous Changes RR JS NO. DATE DESCRIPTION TABLE OF REVISIONS THIS DRAWING WAS LAST MODIFIED: 07/05/17 14:55, BY: RRhee



SECTION

SCALE: 3/4" = 1'-0"



INFRASTRUCTURE DESIGN AND CONSTRUCTION DEPARTMENT OF PUBLIC WORKS CITY & COUNTY OF SAN FRANCISCO 30 VAN NESS AVENUE, 5TH FLOOR SAN FRANCISCO, CA 94102 - 6028

		Date:	_ DESIGNED	RR
Section Mgr:	RAYMOND LUI		DRAWN	TEAM
			CHECKED	JS
Acting Deputy Division Mgr:	FERNANDO CISNEROS		REVIEWED	00
Division Mgr:	PATRICK RIVERA		RECOMMEND	ED
Division ivigi.	TATHORTIVENA		APPROVED	
			DATE	

PROFESSIONAL CITY OF CALIFORNIA CONTROLLED AND SAFE OF CALIFORNIA CONTROLLED AND

	SCALE:
THE REAL PROPERTY.	AS SH
\R\ \\$	SHEET OF S

SFMTA RADAR SPEED DISPLAY SUPPORT POLES HOWN TYPE 1-A (MODIFIED) POLE SHEETS ELEVATION AND DETAILS

2559J DRAWING NO. S3.0 105,439 REV. NO.



49 South Van Ness Avenue, Suite 1400 San Francisco, CA 94103 628.652.7600 www.sfplanning.org

## **CEQA Exemption Determination**

Proje	ct Address		Block/Lot(s)
SFMTA FY20 Speed Radar Signs			
Case No. Permit No.		Permit No.	
2020-	-009636ENV		
_	ldition/ teration	☐ Demolition (requires HRE for Category B Building)	New Construction
The S various would The  The p new p excave const other	San Francisco Munus locations during to be installed on near proposed location. The Avenue near Fulton Street by Woodside Avenue Historic District project would constituted in depth of eight ruction measure 1	ar Laguna Honda Boulevard and Lawton Street etween 38th and 40th avenues (adjacent to Go etween 16th and 17th avenues (adjacent to Go nue between Vasquez and Hernandez avenues	Ind drivers of their speed. The signs of photocells.  Iden Gate Park Historic District) Iden Gate Park Historic District Iden Gate
	-	ON TYPE  etermined to be exempt under the California  g Facilities. Interior and exterior alterations; ac	
			·
		onstruction. Up to three new single-family resi rcial/office structures; utility extensions; change a CU.	
	10,000 sq. ft. an (a) The project is policies as well a (b) The propose substantially sur (c) The project s (d) Approval of the water quality. (e) The site can	Development. New Construction of seven or a dimeets the conditions described below: so consistent with the applicable general plan deas with applicable zoning designation and reguled development occurs within city limits on a progrounded by urban uses. The has no value as habitat for endangered rare the project would not result in any significant efforth the adequately served by all required utilities and MENTAL PLANNING USE ONLY	signation and all applicable general plan ations. ject site of no more than 5 acres or threatened species. ects relating to traffic, noise, air quality, or
	Other		

Common Sense Exemption (CEQA Guidelines section 15061(b)(3)). It can be seen with certainty that there is no possibility of a significant effect on the environment. FOR ENVIRONMENTAL PLANNING USE ONLY

STEP 2: ENVIRONMENTAL SCREENING ASSESSMENT

## TO BE COMPLETED BY PROJECT PLANNER

	Air Quality: Would the project add new sensitive receptors (specifically, schools, day care facilities, hospitals, residential dwellings, and senior-care facilities within an Air Pollution Exposure Zone? Does the project have the potential to emit substantial pollutant concentrations (e.g. use of diesel construction equipment, backup diesel generators, heavy industry, diesel trucks, etc.)? (refer to The Environmental Information tab on the San Francisco Property Information Map)
	Hazardous Materials: If the project site is located on the Maher map or is suspected of containing hazardous materials (based on a previous use such as gas station, auto repair, dry cleaners, or heavy manufacturing, or a site with underground storage tanks): Would the project involve 50 cubic yards or more of soil disturbance - or a change of use from industrial to residential?  Note that a categorical exemption shall not be issued for a project located on the Cortese List if box is checked, note below whether the applicant has enrolled in or received a waiver from the San Francisco Department of Public Health (DPH) Maher program, or if Environmental Planning staff has determined that hazardous material effects would be less than significant. (refer to The Environmental Information tab on the San Francisco Property Information Map)
	<b>Transportation:</b> Does the project involve a child care facility or school with 30 or more students, or a location 1,500 sq. ft. or greater? Does the project have the potential to adversely affect transit, pedestrian and/or bicycle safety (hazards) or the adequacy of nearby transit, pedestrian and/or bicycle facilities?
	Archeological Resources: Would the project result in soil disturbance/modification greater than two (2) feet below grade in an archeological sensitive area or eight (8) feet in a non-archeological sensitive area? If yes, archeology review is required.
	Subdivision/Lot Line Adjustment: Does the project site involve a subdivision or lot line adjustment on a lot with a slope average of 20% or more? (refer to The Environmental Information tab on the San Francisco Property Information Map) If box is checked, Environmental Planning must issue the exemption.
	Average Slope of Parcel = or > 25%, or site is in Edgehill Slope Protection Area or Northwest Mt.  Sutro Slope Protection Area: Does the project involve any of the following: (1) New building construction, except one-story storage or utility occupancy, (2) horizontal additions, if the footprint area increases more than 50%, or (3) horizontal and vertical additions increase more than 500 square feet of new projected roof area? (refer to The Environmental Planning tab on the San Francisco Property Information Map) If box is checked, a geotechnical report is likely required and Environmental Planning must issue the exemption.
	Seismic Hazard: Landslide or Liquefaction Hazard Zone:  Does the project involve any of the following: (1) New building construction, except one-story storage or utility occupancy, (2) horizontal additions, if the footprint area increases more than 50%, (3) horizontal and vertical additions increase more than 500 square feet of new projected roof area, or (4) grading performed at a site in the landslide hazard zone? (refer to The Environmental tab on the San Francisco Property Information Map) If box is checked, a geotechnical report is required and Environmental Planning must issue the exemption.
Com	ments and Planner Signature (optional): Lauren Bihl
-	pole on Fulton between 38th and 40th Ave should have standard construction measure 1 (accidental every) because there is potential for prehistoric resources. The other three locations would have no effect.

## STEP 3: PROPERTY STATUS - HISTORIC RESOURCE TO BE COMPLETED BY PROJECT PLANNER PROPERTY IS ONE OF THE FOLLOWING: (refer to Property Information Map) Category A: Known Historical Resource. GO TO STEP 5. Category B: Potential Historical Resource (over 45 years of age). GO TO STEP 4. Category C: Not a Historical Resource or Not Age Eligible (under 45 years of age). GO TO STEP 6. STEP 4: PROPOSED WORK CHECKLIST TO BE COMPLETED BY PROJECT PLANNER Check all that apply to the project. 1. Change of use and new construction. Tenant improvements not included. 2. Regular maintenance or repair to correct or repair deterioration, decay, or damage to building. 3. Window replacement that meets the Department's Window Replacement Standards. Does not include storefront window alterations. 4. Garage work. A new opening that meets the Guidelines for Adding Garages and Curb Cuts, and/or replacement of a garage door in an existing opening that meets the Residential Design Guidelines. 5. Deck, terrace construction, or fences not visible from any immediately adjacent public right-of-way. 6. Mechanical equipment installation that is not visible from any immediately adjacent public right-of-way. 7. Dormer installation that meets the requirements for exemption from public notification under Zoning Administrator Bulletin No. 3: Dormer Windows. 8. Addition(s) that are not visible from any immediately adjacent public right-of-way for 150 feet in each direction; does not extend vertically beyond the floor level of the top story of the structure or is only a П single story in height; does not have a footprint that is more than 50% larger than that of the original building; and does not cause the removal of architectural significant roofing features. Note: Project Planner must check box below before proceeding. Project is not listed. GO TO STEP 5. Project does not conform to the scopes of work. GO TO STEP 5. Project involves four or more work descriptions. GO TO STEP 5. Project involves less than four work descriptions. GO TO STEP 6. STEP 5: ADVANCED HISTORICAL REVIEW TO BE COMPLETED BY PRESERVATION PLANNER Check all that apply to the project. 1. Reclassification of property status. (Attach HRER Part I) Reclassify to Category A Reclassify to Category C a. Per HRER (No further historic review) b. Other (specify): 2. Project involves a known historical resource (CEQA Category A) as determined by Step 3 and conforms entirely to proposed work checklist in Step 4. 3. Interior alterations to publicly accessible spaces that do not remove, alter, or obscure character

4. Window replacement of original/historic windows that are not "in-kind" but are consistent with

Façade/storefront alterations that do not remove, alter, or obscure character-defining features.

defining features.

existing historic character.

	6. Raising the building in a manner that does not remove features.	e, alter, or obscure character-defining
	7. <b>Restoration</b> based upon documented evidence of a buphotographs, plans, physical evidence, or similar building	
	8. <b>Work consistent</b> with the Secretary of the Interior State (Analysis required):	ndards for the Treatment of Historic Properties
	9. Work compatible with a historic district (Analysis requ	ired):
	10. Work that would not materially impair a historic res	ource (Attach HRER Part II).
	Note: If ANY box in STEP 5 above is checked,	a Preservation Planner MUST sign below.
	<b>Project can proceed with exemption review</b> . The project Preservation Planner and can proceed with exemption re	
1	nents (optional): ation of sidewalk/ROW for speed radar poles will not result es.	in removal of any historic or potentially historic
Preser	vation Planner Signature: Charles Enchill	
	EP 6: EXEMPTION DETERMINATION BE COMPLETED BY PROJECT PLANNER	
	No further environmental review is required. The proje	
	unusual circumstances that would result in a reasonal	ple possibility of a significant effect.
	Project Approval Action:	Signature:
	City Traffic Engineer Directive	Lauren Bihl
		01/20/2021
	Once signed or stamped and dated, this document constitutes an exem Administrative Code.	nption pursuant to CEQA Guidelines and Chapter 31of the
	In accordance with Chapter 31 of the San Francisco Administrative Coo	,
	Supervisors can only be filed within 30 days of the project receiving the Please note that other approval actions may be required for the project.	• •

#### STEP 7: MODIFICATION OF A CEQA EXEMPT PROJECT

#### TO BE COMPLETED BY PROJECT PLANNER

In accordance with Chapter 31 of the San Francisco Administrative Code, when a California Environmental Quality Act (CEQA) exempt project changes after the Approval Action and requires a subsequent approval, the Environmental Review Officer (or his or her designee) must determine whether the proposed change constitutes a substantial modification of that project. This checklist shall be used to determine whether the proposed changes to the approved project would constitute a "substantial modification" and, therefore, be subject to additional environmental review pursuant to CEQA.

#### **MODIFIED PROJECT DESCRIPTION**

Modi	fied Project Description:	
DE	TERMINATION IF PROJECT (	CONSTITUTES SUBSTANTIAL MODIFICATION
Com	pared to the approved project, w	ould the modified project:
	Result in expansion of the buil	ding envelope, as defined in the Planning Code;
	Result in the change of use the Sections 311 or 312;	at would require public notice under Planning Code
	Result in demolition as defined	I under Planning Code Section 317 or 19005(f)?
	•	nted that was not known and could not have been known mination, that shows the originally approved project may obtion?
If at I	east one of the above boxes is	checked, further environmental review is required.
DET	ERMINATION OF NO SUBSTAI	NTIAL MODIFICATION
	• •	uld not result in any of the above changes.
approv website with Ch	al and no additional environmental revie e and office and mailed to the applicant	ons are exempt under CEQA, in accordance with prior project ew is required. This determination shall be posted on the Planning Department City approving entities, and anyone requesting written notice. In accordance esco Administrative Code, an appeal of this determination can be filed to the of posting of this determination.
Plani	ner Name:	Date:



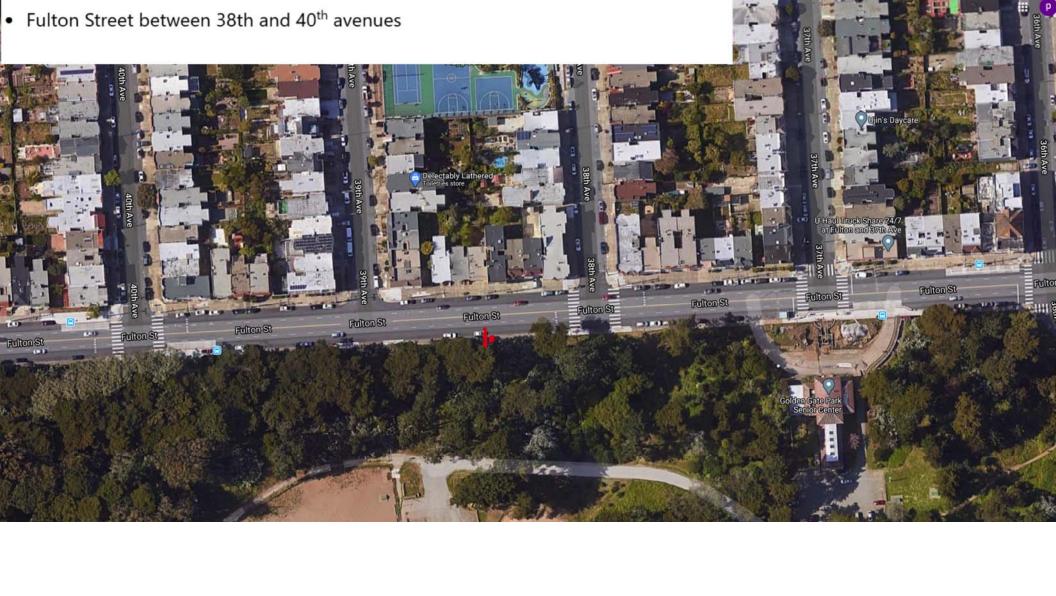


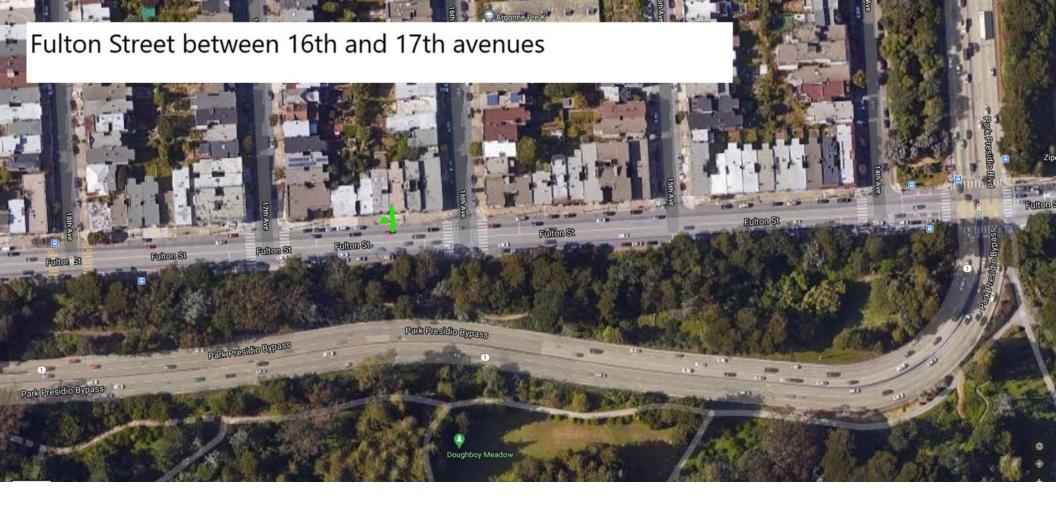
**Approval Action:** 

## Attachment 1: Speed Radar Sign Locations

• 7th Avenue near Laguna Honda Boulevard and Lawton Street







# Woodside Avenue between Vasquez and Hernandez avenues



85 MPH

#### PROJECT DESCRIPTION

THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS COMPRISES CAST-IN-DRILLED-HOLE (CIDH) CONCRETE PILE FOUNDATIONS FOR PUC STANDARD LIGHT POLES & 1-A (MODIFIED)

## **GENERAL**

- THESE GENERAL NOTES APPLY THROUGHOUT ALL STRUCTURAL DRAWINGS EXCEPT WHERE SPECIFICALLY SHOWN BY NOTES ON DRAWINGS AND/OR DETAILS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO THE START OF CONSTRUCTION OR FABRICATION. ANY DISCREPANCIES, INCONSISTENCIES, OR UNSOUND CONDITIONS SHALL BE REPORTED TO THE ENGINEER FOR RESOLUTION PRIOR TO THE START OF ANY CONSTRUCTION OR FABRICATION SO THAT A CLARIFICATION CAN BE ISSUED.
- DIMENSIONS IN THE STRUCTURAL DRAWINGS ARE AS NOTED. DO NOT USE DIMENSIONS SCALED FROM THE STRUCTURAL DRAWINGS.
- ANY WORK PERFORMED IN CONFLICT WITH THESE DRAWINGS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE CITY AND COUNTY OF SAN FRANCISCO.
- REFER TO OTHER DISCIPLINES' DRAWINGS AND COORDINATE INFORMATION RELATED TO THOSE OTHER DISCIPLINES' SYSTEMS FOR ITEMS SUCH AS:
  - a. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS, ETC., IN WALLS AND SLABS.
- THESE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS AND/OR METHODS OF CONSTRUCTION. ALTHOUGH THE NEED FOR SHORING MAY SOMETIMES BE INDICATED IN THE STRUCTURAL DRAWINGS, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DESIGN, PROVIDE, AND MAINTAIN TEMPORARY BRACING, SHORING, GUYING, OR OTHER TEMPORARY SUPPORT AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION OF ADJACENT STRUCTURES DURING CONSTRUCTION. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING PIPES, DUCTS, AND UTILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT.
- 10. ALL STRUCTURAL MEMBERS AND ELEMENTS SHOWN ON THE STRUCTURAL DRAWINGS ARE NEW UNLESS NOTED (E) FOR EXISTING CONDITIONS.

## BASIS OF DESIGN

- 1. ALL NEW CONSTRUCTION SHALL CONFORM TO THE 2013 SAN FRANCISCO BUILDING CODE (SFBC) WHICH COMPRISES THE 2013 CALIFORNIA BUILDING CODE (CBC), 2013 SAN FRANCISCO AMENDMENTS, AND 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, SIXTH EDITION.
- DESIGN OF LUMINAIRE SUPPORT IS IN CONFORMANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS "STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS", SIXTH EDITION 2013.
- THE PUBLICATIONS LISTED BELOW ARE THE GOVERNING CODES AND STANDARDS REFERENCE BY THE CBC AND ARE REFERENCED HEREIN BY THEIR BASIC DESIGNATION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE SFBC SHALL GOVERN.
  - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, "STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS". SIXTH EDITION 2013
  - ACI 301-10 AMERICAN CONCRETE INSTITUTE, "SPECIFICATIONS FOR STRUCTURAL CONCRETE", 2010 EDITION
  - AMERICAN CONCRETE INSTITUTE, "BUILDING CODE REQUIREMENTS FOR ACI 318-11

STRUCTURAL CONCRETE", 2011 EDITION

ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS

#### STRUCTURAL DESIGN CRITERIA

1. WIND DESIGN CRITERIA: METHOD:

BASIC WIND SPEED:

SERVICE LEVEL PERFORMANCE CRITERIA:

FOUNDATION DEFLECTION ≤ 1% OF THE POLE'S TOTAL HEIGHT

### **FOUNDATIONS**

- CONTRACTOR SHALL PROVIDE FOR DE-WATERING IF WATER IS PRESENT IN THE EXCAVATION. DE-WATERING PLANS SHALL BE SUBMITTED FOR REVIEW. DE-WATERING PLANS MAY INCLUDE A MONITORING PROGRAM TO EVALUATE SETTLEMENT IN THE ADJACENT IMPROVEMENTS.
- 2. OVER-EXCAVATED FOOTINGS SHALL BE BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM) (fc'min = 100 PSI, fc'max = 1,200 PSI).
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF APPROPRIATE ADEQUATE SHORING AND BRACING OF FOUNDATION EXCAVATION. AND UNDERPINNING OF EXISTING STRUCTURES TO ENSURE PROTECTION OF LIFE AND ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL ORDINANCES. UNDERPINNING, SHORING, LAGGING, ETC., SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND SHALL BE CONSTRUCTED UNDER SEPARATE PERMIT. SHORING PLAN TO BE SUBMITTED TO THE GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER FOR REVIEW TO ENSURE CONFORMANCE WITH DESIGN DOCUMENTS.
- THE CONTRACTOR SHALL NOT UNDERMINE EXISTING FOUNDATIONS AND STRUCTURES DURING EXCAVATION. IF UNDERMINING OCCURS, THE CONTRACTOR SHALL PROVIDE CORRECTIVE MEASURES FOR ENGINEER TO REVIEW AND APPROVE AT CONTRACTOR'S EXPENSE.
- INSTALLATION OF CAST-IN-DRILLED-HOLE (CIDH) PILES SHALL BE PERFORMED WHILE UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA.
- MINIMUM REQUIRED EMBEDMENT SHALL ONLY BE USED IN HOMOGENEOUS SOIL PROFILES. WHERE SOIL IS DIVERSE IN CHARACTER OR CONTENT (HETEROGENEOUS) ALONG THE FOOTING LENGTH, THE REQUIRED EMBEDMENT SHALL BE BASED ON THE WORST SOIL TYPE ENCOUNTERED.
- UNLESS THE FINISHED GROUND SURFACE IS PROTECTED BY CONCRETE PAVEMENT, THE FOOTING LENGTH SHALL ADD 12 INCHES TO THE MINIMUM REQUIRED EMBEDMENT.
- REFER TO QUATERNARY GEOLOGIC MAP OF THE CITY AND COUNTY OF SAN FRANCISCO.

IF A POLE AND ITS FOUNDATION ARE SPECIFIED TO BE IN AN UNPAVED OR LAWN AREA, THE CONTRACTOR SHALL CONSTRUCT A CONCRETE PAD AROUND THE POLE FOUNDATION. THE CONCRETE PAD SHALL BE A MINIMUM LENGTH OF 5 FEET ON EACH SIDE OF THE POLE FOUNDATION UNLESS DIRECTED BY THE RESIDENT ENGINEER.

## CONCRETE

- 1. PIPES OTHER THAN ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY THE ENGINEER. OUTSIDE DIAMETER OF CONDUIT EMBEDDED IN CONCRETE SHALL NOT EXCEED 1/6 TIMES THE MEMBER THICKNESS. OR 1 1/4". WHICHEVER IS LESS, WITHOUT APPROVAL OF THE ENGINEER. MINIMUM CLEAR DISTANCE BETWEEN CONDUITS OR REBAR SHALL BE 3 TIMES CONDUIT-DIAMETER (LARGER CONDUIT) OR 1 INCH, WHICHEVER IS GREATER. CONDUITS SHALL BE FIRMLY TIED TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. CONDUIT CAN BE TIED TO REBAR WHEN ORIENTED PERPENDICULAR TO THEM, PROVIDE THE LOCATION OF THE REBAR IS NOT AFFECTED BY THE CONDUIT.
- 2. ALL CONCRETE EXCEPT SLABS-ON-GRADE 6"THICK OR LESS SHALL BE MECHANICALLY VIBRATED AS TO COMPLETELY FILL THE FORM WITHOUT CAUSING UNDUE SEGREGATION.
- 3. THE CONTRACTOR SHALL REMOVE AND REPLACE ANY CONCRETE WHICH FAILS TO ATTAIN SPECIFIED STRENGTH IN 28 DAYS IF SO DIRECTED BY THE ENGINEER. ANY DEFECTS IN THE HARDENED CONCRETE SHALL BE SATISFACTORILY REPAIRED OR THE HARDENED CONCRETE SHALL BE REPLACED.
- 4. THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS, INCLUDING MATERIAL CERTIFICATES, TO THE CITY REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT.

## STRUCTURAL OBSERVATION

- 1. STRUCTURAL OBSERVATION SHALL BE REQUIRED FOR THE FOLLOWING ITEMS:
  - REINFORCING STEEL PLACEMENT
  - ANCHOR BOLT PLACEMENT
  - c. CONCRETE PLACEMENT
- 2. THE CONTRACTOR SHALL NOTIFY THE CITY REPRESENTATIVE A MINIMUM OF 3 DAYS PRIOR TO WHEN STRUCTURAL OBSERVATION IS REQUIRED.

### REINFORCING STEEL

- 1. REINFORCING STEEL DETAILING, FABRICATION, AND PLACEMENT SHALL CONFORM TO THE ACI 318, CHAPTER 7.
- 2. REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS:

DEFORMED BARS SPIRAL REINFORCEMENT ASTM A615 OR ASTM A706, GRADE 60 ASTM A615

- ALL STEEL REINFORCING BAR BENDS SHALL BE MADE COLD.
- REINFORCEMENT AND EMBEDMENTS SHALL BE ACCURATELY POSITIONED AND SECURED AGAINST DISPLACEMENT BEFORE AND DURING CONCRETE PLACEMENT. PROVIDE SUFFICIENT SUPPORTS TO PREVENT DAMAGE OR DISPLACEMENT DUE TO CONSTRUCTION TRAFFIC ON REINFORCEMENT.
- PROVIDE CONTINUOUS REINFORCEMENT WHEREVER POSSIBLE. SPLICE ONLY AS SHOWN OR
- THE CONTRACTOR SHALL SUBMIT REINFORCING STEEL SHOP DRAWINGS TO THE CITY REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SUBMIT MILL CERTIFICATES FOR REINFORCING STEEL PRIOR TO REBAR PLACEMENT.

### SPECIAL INSPECTION, TESTING, STRUCTURAL OBSERVATION, AND SUBMITTALS

1. WHERE INDICATED WITH AN "X", THE FOLLOWING ITEMS SHALL BE INSPECTED IN ACCORDANCE WITH SFBC 1704 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED SPECIAL INSPECTION AGENCY. "C" INDICATES CONTINUOUS SPECIAL INSPECTION AND "P" INDICATES PERIODIC SPECIAL INSPECTION. THE SPECIAL INSPECTION AGENCY SHALL SEND COPIES OF ALL SPECIAL INSPECTION REPORTS DIRECTLY TO THE RESIDENT ENGINEER, ARCHITECT, ENGINEER, AND BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

VER	IFICATION AND INSPECTION	С	Р	NOTES
CON	CRETE CONSTRUCTION			
1.	INSPECTION OF REINFORCING STEEL PLACEMENT		Х	
2.	INSPECTION OF REINFORCING STEEL WELDING			
	2.1. VERIFICATION OF WELDABILITY			
	2.2. REINFORCING STEEL RESISTING FLEXURAL &			
	AXIAL FORCES IN INTERMEDIATE AND SPECIAL			
	MOMENT FRAMES, AND BOUNDARY ELEMENTS OF			
	SPECIAL REINFORCED CONCRETE SHEAR WALLS			
	2.3. SHEAR REINFORCEMENT			
	2.4. OTHER REINFORCING STEEL			
3.	INSPECT BOLTS TO BE INSTALLED IN CONCRETE	Х		
	PRIOR TO AND DURING PLACEMENT OF CONCRETE			
4.	VERIFY USE OF REQUIRED DESIGN MIX		Х	
5.	FABRICATE SPECIMENS FOR STRENGTH TESTS,			
	PERFORM SLUMP AND AIR CONTENT TESTS, AND			
	DETERMINE TEMPERATURE OF CONCRETE			
6.	INSPECTION OF CONCRETE & SHOTCRETE PLACEMENT	Х		
7.	INSPECTION OF CONCRETE CURING			
8.	INSPECTION OF PRESTRESSED CONCRETE			
	8.1. APPLICATION OF PRESTRESSING FORCES			
	8.2. GROUTING OF BONDED PRESTRESSING TENDONS			
9.	ERECTION OF PRECAST CONCRETE MEMBERS			
10.	VERIFICATION OF IN-SITU CONCRETE STRENGTH			
11.	INSPECT FORMWORK FOR SHAPE, LOCATION, AND			
	DIMENSIONS OF THE CONCRETE MEMBER BEING			
	FORMED			

VERI	FICATION AND INSPECTION	С	Р	NOTES
CAS	T-IN-DRILLED HOLE PIER FOUNDATIONS			
1.	OBSERVE DRILLING OPERATIONS AND MAINTAIN	Х		BY GEOTECHNICAL ENGINEER
	RECORDS FOR EACH PIER			
2.	VERIFY LOCATIONS OF PILES AND PLUMBNESS	X		BY GEOTECHNICAL ENGINEER
	2.1. CONFIRM PIER DIAMETERS			
	2.2. BELL DIAMETERS (IF APPLICABLE)			
	2.3. LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE)			
	2.4. ADEQUATE END STRATA BEARING CAPACITY			

SHEET INDEX					
SHEET NO.	TITLE	ISSUED FOR CONSTRUCTION	REVISION		
S1.0	GENERAL NOTES	X			
S2.0	STANDARD LIGHT POLE ELEVATION & DETAILS	Х			
S3.0	TYPE 1-A (MODIFIED) POLE ELEVATION & DETAILS	Х			
REFERENCE:					
		MAY 2016			

2. WHERE INDICATED WITH AN "X" BELOW, THE CONTRACTOR SHALL SUBMIT CERTIFICATES OF CONFORMANCE, SHOP DRAWINGS, CALCULATIONS, AND DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. WHERE CALCULATIONS AND DETAILS ARE REQUIRED, THE SUBMITTAL SHALL BE SEALED AND SIGNED BY A REGISTERED DESIGN PROFESSIONAL IN THE STATE OF CALIFORNIA. FOR ADDITIONAL INFORMATION REGARDING SUBMITTALS. SEE SPECIFICATIONS.

ITEM	CERTIFICATES	SHOP	CALCULATIONS	REMARKS
		DRAWINGS	& DETAILS	
CONCRETE, REINFORCING	Χ	χ		
CONCRETE, MIX DESIGN		Х		
CONCRETE, CEMENT	Χ			
CONCRETE, FINE AGGREGATES	Χ			
CONCRETE, COARSE AGGREGATES	Χ			
CONCRETE, ADMIXTURES	Χ			

FOR ORIGINAL SIGNATURES; SEE REV O

REFERENCE INFORMATION & FILE NO. OF SURVEYS |7/05/17 | Miscellaneous Changes NO. DATE DESCRIPTION BY APP. TABLE OF REVISIONS THIS DRAWING WAS LAST MODIFIED: 07/05/17 14:55, BY: RRhee





**PUBLIC WORKS** 

INFRASTE AND C DEPARTMI CITY & COUN 30 VAN NES

			Date:	DESIGNED	RR
IFRASTRUCTURE DESIGN	Section Mgr:	RAYMOND LUI		DRAWN	TEAM
AND CONSTRUCTION				CHECKED	JS
DEPARTMENT OF PUBLIC WORKS CITY & COUNTY OF SAN FRANCISCO	Acting Deputy Division Mgr:	FERNANDO CISNEROS		REVIEWED	
CITT & COUNTY OF SAN FRANCISCO	Di tata a Mara			RECOMMENDED	)
30 VAN NESS AVENUE, 5TH FLOOR SAN FRANCISCO, CA 94102 - 6028	Division Mgr:	PATRICK RIVERA		APPROVED	
				DATE	
				,	

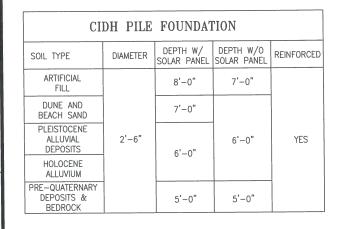
-	PROFESSIONAL C. SPRINGS
-	(6/5/2)
-	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
-	PUCTURALITY OF CALIFORNIA

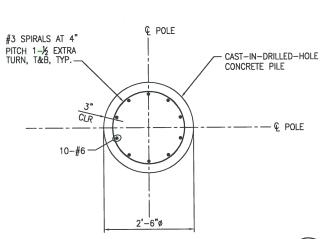
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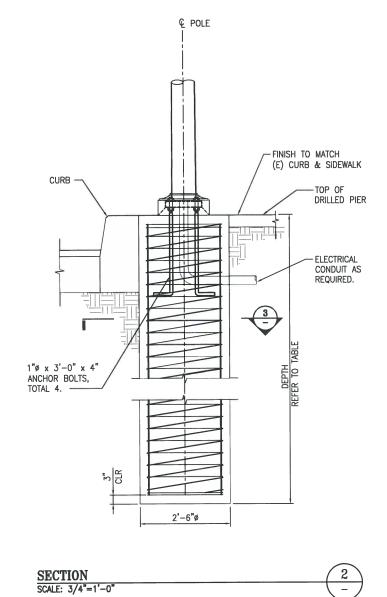
	SCALE:		
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SFMTA RADAR SPEED	CONTRACT NO. 2559J
DISPLAY SUPPORT POLES	DRAWING NO. S1.0
CENEDAL NOMEC	FILE NO. 105,437
GENERAL NOTES	REV. NO.

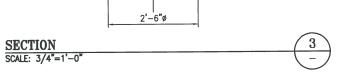
,437







**ELEVATION** SCALE: 1/4"=1'-0"



- THIS STANDARD APPLIES TO PUC STANDARD POLE TYPES LS100, LS101, AND LS102. SEE PUC STANDARDS FOR ADDITIONAL INFORMATION INCLUDING POLE SIZES.
- WIND LOADING (3 SECOND): 85 mph.
- UNIT STRESSES (STRUCTURAL STEEL):
  - a. Fy = 55,000 psi (TAPERED STEEL TUBE AND ANCHOR BOLTS)
  - Fy = 50,000 psi (UNLESS OTHERWISE NOTED)
- UNIT STRESSES (REINFORCED CONCRETE):
  - F'c = 3,000 psi (AT 28 DAYS)
  - Fy = 60,000 psi

- PROVIDE A HEX NUT, LEVELING NUT AND 2 WASHERS FOR EACH ANCHOR
- 6. POUR CONCRETE AGAINST UNDISTURBED SOIL.

					REFERENCE INFORMATION & FILE NO. OF SURVEY
NO.	DATE	DESCRIPTION	BY	APP.	
THIS	DRAWING 1	TABLE OF REVISIONS WAS LAST MODIFIED: 02/26/16 11:26	, BY: rrhee		





INFRASTRUCTURE DESIGN Section Mgr AND CONSTRUCTION DEPARTMENT OF PUBLIC WORKS CITY & COUNTY OF SAN FRANCISCO 30 VAN NESS AVENUE, 5TH FLOOR SAN FRANCISCO, CA 94102 - 6028



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-	PROFESSIONAL C. SPRING CO	S
-	No. S 4716	S
-	PUCTURE OF CALFORD	_

1	SCALE:
	AS SHOWN
	SHEET OF SHEETS

SFMTA RADAR SPEED 2559J DISPLAY SUPPORT POLES S2.0 105,438 STANDARD LIGHT POLE ELEVATION & DETAILS

SCALE: 1/4" = 1'-0'

€ OF POST

12'-0" MAX

48"x24"—

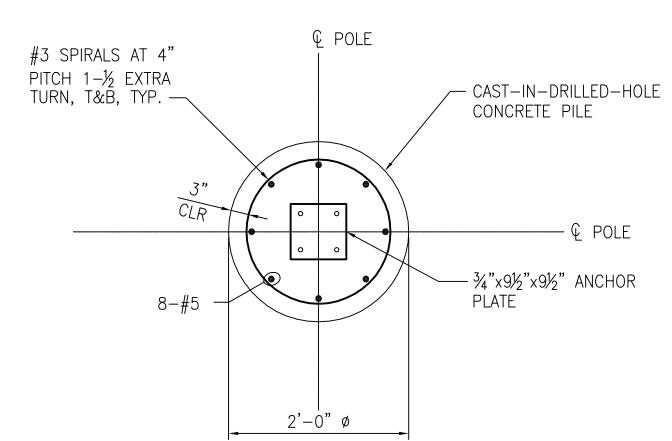
24"x36"-

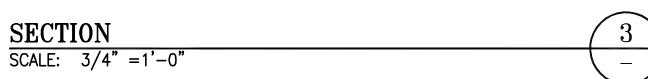
30"x42"-

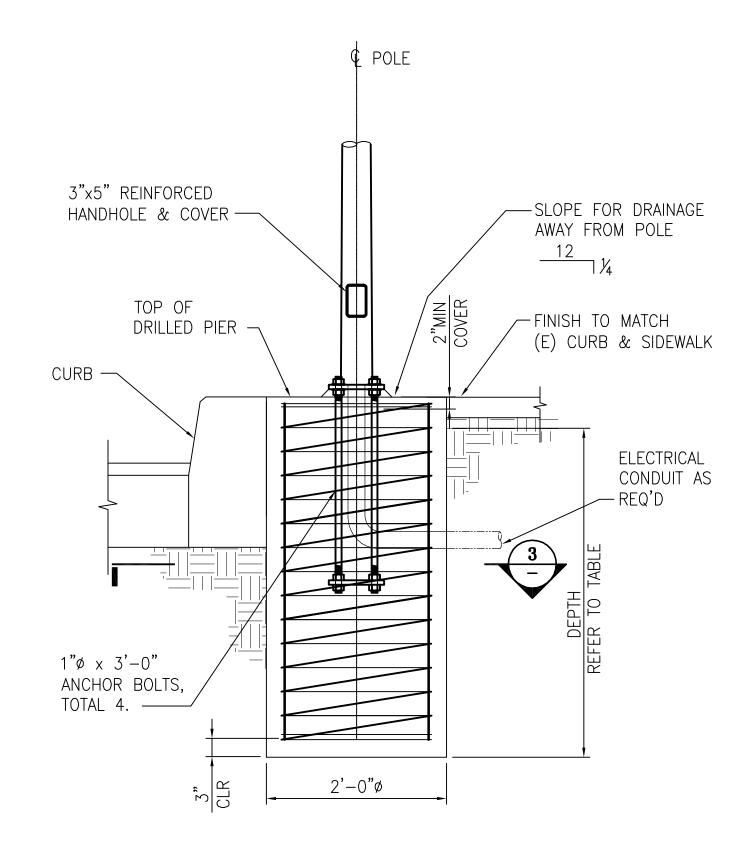
18"x24"

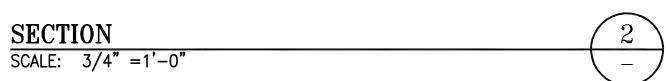
SOLAR PANEL

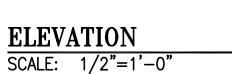
wing Path: V:\2559J\_ t Time: Wed, 25 May











- 1. POLES SHALL BE EITHER  $15'-0"\pm 2"$  OR  $13'-0"\pm 2"$  AS DIRECTED BY SFMTA.
- POLES ARE TO BE TAPERED STEEL POSTS, 0.1196" WALL THICKNESS, 5"ID AT BASE, 41/4"ID AT TOP.
- OUTSIDE DIAMETER, WALL THICKNESS, AND CORRESPONDING SECTION PROPERTIES OF POLES ARE MINIMUMS. UNLESS OTHERWISE SPECIFIED, ALTERNATIVE SECTIONS SHALL REQUIRE APPROVAL BY THE ENGINEER.
- WIND LOADING (3 SECOND): 85 mph.
- UNIT STRESSES (STRUCTURAL STEEL):
  - a. Fy = 55,000 psi (TAPERED STEEL TUBE AND ANCHOR BOLTS)
  - b. Fy = 50,000 psi (UNLESS OTHERWISE NOTED)
- UNIT STRESSES (REINFORCED CONCRETE):
  - a. Fc'= 3,000 psi (AT 28 DAYS) b. Fy = 60,000 psi

- 7. PROVIDE A HEX NUT, LEVELING NUT AND 4 WASHERS FOR EACH ANCHOR
- 8. FOR ANCHOR BOLTS, THREAD TOP 6" AND GALVANIZE TOP 1'-0"; THREAD воттом 6".
- 11. POUR FOUNDATION CONCRETE AGAINST UNDISTURBED SOIL.

- 9. 3"x5" ROUNDED RECTANGLE HANDHOLE REINFORCED WITH RING WELDED TO OUTSIDE OF POLE. HANDHOLE REINFORCEMENT RING SHALL BE 3/2". PROVIDE 1/8" COVER PLATE.
- 10. HANDHOLES SHALL BE LOCATED ON THE DOWNSTREAM SIDE OF TRAFFIC.
- 12. REFER TO 2010 CALTRANS STANDARD PLAN RSP ES-7B FOR ADDITIONAL INFORMATION.

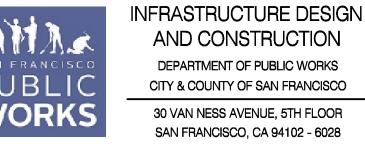
# FOR ORIGINAL SIGNATURES; SEE REV 0

SCALE: 1/2" = 1'-0"

REFERENCE INFORMATION & FILE NO. OF SURVEYS 1 7/05/17 Miscellaneous Changes RR JS NO. DATE DESCRIPTION TABLE OF REVISIONS THIS DRAWING WAS LAST MODIFIED: 07/05/17 14:55, BY: RRhee







			Date:	DESIGNED	RR
1	Section Mgr:	RAYMOND LUI		DRAWN	TEAM
				CHECKED	JS
	Acting Deputy Division Mgr:	FERNANDO CISNEROS		REVIEWED RECOMMENDE	
_	Division Mgr:	PATRICK RIVERA		APPROVED	
				DATE	

PROFESSIONAL CITY OF CALIFORNIA CONTROLLED AND SAFE OF CALIFORNIA CONTROLLED AND

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SFMTA RADAR SPEED 2559J DRAWING NO. DISPLAY SUPPORT POLES S3.0

TYPE 1-A (MODIFIED) POLE ELEVATION AND DETAILS

— 48"x24" WHERE REQUIRED

SOLAR PANEL

SPEED

DIA

105,439 REV. NO.