Mitigation Measures and Monitoring Program

Mitigation Measure	Responsible	Monitoring By	Timing / Frequency	Comments
Winigacion Measure	Agency/Depart-		Taning / Frequency	Continents
1. AIR QUALITY				
a. All active portions of construction sites, earther access roads, and material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the later morning and after work is done for the day	Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	Though not specifically considered to be "mitigation measures", construction-related air quality measures are listed here to improve clarity and effectiveness
b. All clearing, grading, earth moving, or excavation activities shall cease during periods of winds greater than 20 miles per hour averaged over one hour.	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	
c. All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	
d. The area disturbed by clearing, earth moving, or excavation activities shall be minimized at all times. This can be accomplished by mowing instead of disking for weed control and seeding and watering inactive portions of the construction site until grass is evident.	City of Firebaugh/San Joaquin Valley Air Pollution Control District	Public Works Director / Project Manager	Post construction	
e. Construction site vehicle speeds shall be limited to 15 miles per hour	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	
f. If used, petroleum-based dust pallitives shall meet the road oil requirements of the Air District's rule regarding Cutback Asphalt Paving Materials	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	

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	ment			
g. Streets adjacent to the project site shall be swept as needed to remove silt that may have accumulated from construction activities. The streets are required to be wet prior to or in conjunction with rotary sweeping.	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	
h. All internal combustion engine driven equipment shall be properly maintained and well tuned according to the manufacturer's specifications	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	
 During the smog season (May through October) the construction period shall be lengthened to minimize the number of vehicles and equipment operating at the same time 	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	
j. When available, diesel powered or electric equipment shall be utilized in lieu of gasoline-powered engines.	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	
Adherance to the foregoing measures will be made a part of the contract with all contractors involved with the project	City of Firebaugh/San Joaquin Valley Air Pollution Control District	City Engineer / Project Manager	During construction	
2. BIOLOGICAL RESOURCES				
a. Western Pond Turtles 1. A tailgate meeting discussing the purpose of implementing precautionary measures to avoid impacts to transient western pond turtles shall be conducted with onsite workers prior to the start of construction.	City of Firebaugh	City Engineer, consulting biologist	Prior to construction	
Western Pond Turtles Pre-construction surveys shall be conducted to ensure that western pond turtles are absent from the construction	City of Firebaugh	City Engineer, consulting biologist	Prior to construction	

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area supporting potentially suitable habitat prior to ground disturbance.				
Western Pond Turtles The construction zone should be cleared, and silt fencing should be erected and maintained around construction zones to prevent western pond turtles from moving into these areas.	City of Firebaugh	City Engineer, consulting biologist	Prior to construction	
Western Pond Turtles A biological monitor should be present onsite during construction within potentially suitable habitat to ensure that no western pond turtles are harmed, injured, or killed during project build out.	City of Firebaugh	City Engineer, consulting biologist	Prior to construction	
b. Giant Garter Snake 1. To reduce the likelihood of giant garter snake mortality, the project applicant shall implement and comply with the U.S. Fish and Wildlife Service's Standard Avoidance and Minimization Measures During Construction Activities in Giant Garter Snake (Thamnophis gigas) Habitat. These standard avoidance and minimization measures include, but are not limited to: • Avoiding, to the maximum	City of Firebaugh	City Engineer, project contractor	Prior to and/or during construction, as noted.	
extent practicable, construction activities within 200 ft. from the banks of giant garter snake aquatic habitat; • Conducting all construction activities between May 1 and October 1, when giant garter snakes are active and, therefore, easier to detect and relocate (i.e., the likelihood of mortality is reduced). If				

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construction is to occur between October 2 and April 30, the USFWS Sacramento	Ment			
office should be contacted to determine if additional				:
measures are necessary to				
minimize and avoid take.			1	
Conducting an in-service		•		
presentation and awareness training to workers by a				
qualified biologist. This				
training, which would				
include hand-out brochures,				
would instruct workers				
to recognize giant garter				
snakes and their habitat.				
Having a qualified biologist				
survey the project area for				
giant garter snakes within 24		1		
hours prior to construction		1	1	
activities. The project area should be resurveyed if no			1.	
construction activities have				
occurred within two weeks of				
the previous survey. If a				
snake is encountered				
during construction, all				
activities in the immediate			1	
vicinity of the snake shall			1	
cease until appropriate				
corrective measure have been				
completed or it has been	[
determined that the	İ			
snake will not be harmed.				
Any sightings and/or incidental take will be	İ		,	
reported to the				
USFWS immediately.	1			
oor wo manediately.				
o. Giant Garter Snake	City of	City Engineer,	Daily, as	
	Firebaugh	project contractor	construction is	
2. If trenches are to be dug	1100kugu	project contractor	construction as	
nto which a snake could			concluded	
potentially fall, construction				
rews should either fill the				
rench or provide a slope at				
one end of the trench of no	1			
nore than 45 degrees at the		İ		
nd of each workday. Doing		Ì		
o would preclude giant arter snakes from being	l			
apped in the trench after				1

Mitigation Measure	Responsible Agency/Depart- ment	Monitoring By	Timing / Frequency	Comments
working hours.			·	
b. Giant Garter Snake 3. Any pipes in a trench that are to be left open overnight should be capped in order to prevent entry by snakes.	City of Firebaugh	City Engineer, project contractor	Daily, as construction is concluded	
b. Giant Garter Snake 4. A biological monitor should be present for all subsequent construction activities in areas considered possible habitat for the giant garter snake.	City of Firebaugh	City Engineer	During and after construction	
c. Loggerhead Shrike 1. For development that would occur on parcels with suitable trees and large shrubs, trees and large shrubs planned for removal should be removed during the non-breeding season (September 1 through January 31).	City of Firebaugh	City Engineer	Prior to construction	
c. Loggerhead Shrike 2. If it is not possible to avoid such disturbance during the breeding season (February 1 through August 31), a qualified biologist should conduct a preconstruction survey for nesting raptors and loggerhead shrikes in all trees on the project site within 30 days of the onset of site disturbance. If nesting raptors and/or loggerhead shrikes are detected on or adjacent to the site during the survey, a suitable construction-free buffer should be established around all active nests. The precise dimension of the buffers (up to 250 feet) would be determined at that time and may vary depending on	City of Firebaugh	City Engineer, consulting biologist	Prior to construction	

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location. The buffer areas				
should be enclosed with			1	
temporary fencing, and				
construction equipment and workers should not enter the				
enclosed setback areas.		1		
Buffers should remain in		ļ	Į	•
place for the duration of the	1		[
breeding season or until it				
has been confirmed by a	Į	[
qualified biologist that all				•
chicks have fledged and are				
independent of their parents.			[
d. Migratory Nesting Birds	City of	City Engineer 6	Drianta annatanation	
d. Migratory Nesting Bilds	City of	City Engineer &	Prior to construction	
For construction activities	Firebaugh	Consulting	and during	
that would occur in areas		biologist	construction as	1
supporting suitable trees and			necessary.	
	1			
large shrubs, trees and large			ļ	
shrubs planned for removal			·	
should be removed during				
the nonbreeding season			}	
(September 1 through				1
January 31). However, if it is				·
not possible to avoid such				1
disturbance during the			ı	
breeding season (February 1				į.
through August 31), a	. 1			
qualified biologist should		j		
conduct a pre-construction	'		1	1
survey for nesting raptors,	ĺ	1		į
loggerhead shrikes, and other	1			
migratory birds in all trees on	. [1	
the project site within 30				
days of the onset of site	İ			
disturbance. If nesting			1	
migratory birds, including				
raptors and/or loggerhead				
shrikes, are detected on or			1	
adjacent to the site during the				
survey, a suitable	1			. 1
construction-free buffer		'	i	· · ·
should be established around			ľ	
all active nests. The precise dimension of the buffers (up		1	İ	
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to 250 feet) would be determined at that time and	. [
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may vary depending on			.	
species and location. The		1		. •
buffer areas should be				
enclosed with temporary	İ		1	
fencing, and construction				

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equipment and workers should not enter the enclosed setback areas. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. Preconstruction surveys during the non-breeding season are not necessary for migratory birds, as they are expected to abandon their roosts during construction.				
3. NOISE				
a. Noise-generating construction activities at the site shall be limited to daylight hours, Monday through Saturdays	City of Firebaugh	City Engineer and project contractor	During construction	