

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #**Project Title:** Water System Improvement & Treatment Project

Lead Agency: City of McFarland

Contact Person: Yerlys Hernandez

Mailing Address: 401 W. Kern Avenue

Phone: (661) 792-3091

City: McFarland

Zip: 93250

County: Kern

Project Location: County: Kern

City/Nearest Community: McFarland

Cross Streets: Elmo Highway

Zip Code: 93250

Longitude/Latitude (degrees, minutes and seconds): 35 ° 41 ' 18.91 " N / 119 ° 14 ' 2.49 " W Total Acres: .86

Assessor's Parcel No.: 201-010-36

Section: 12

Twp.: 26S

Range: 25E

Base: MDBM

Within 2 Miles: State Hwy #: CA-99

Waterways: None

Airports: None

Railways: UPRR

Schools: Kern Avenue Elementary

Document Type:CEQA: ☐ NOP☐ Draft EIRNEPA: ☐ NOIOther: ☐ Joint Document☐ Early Cons☐ Supplement/Subsequent EIR☐ EA☐ Final Document☐ Neg Dec

(Prior SCH No.) _____

☐ Draft EIS☐ Other: _____☒ Mit Neg Dec

Other: _____

☐ FONSI**Local Action Type:**☐ General Plan Update☐ Specific Plan☐ Rezone☐ Annexation☐ General Plan Amendment☐ Master Plan☐ Prezone☐ Redevelopment☐ General Plan Element☐ Planned Unit Development☐ Use Permit☐ Coastal Permit☐ Community Plan☒ Site Plan☐ Land Division (Subdivision, etc.)☐ Other: _____**Development Type:**☐ Residential: Units _____

Acres _____

☐ Office: Sq.ft. _____

Acres _____

Employees _____

☐ Transportation: Type _____☐ Commercial: Sq.ft. _____

Acres _____

Employees _____

☐ Mining: Mineral _____☐ Industrial: Sq.ft. _____

Acres _____

Employees _____

☐ Power: Type _____

MW _____

☐ Educational: _____☐ Waste Treatment: Type _____

MGD _____

☐ Recreational: _____☐ Hazardous Waste: Type _____☒ Water Facilities: Type Supply/Storage

MGD 1

☐ Other: _____**Project Issues Discussed in Document:**☒ Aesthetic/Visual☐ Fiscal☒ Recreation/Parks☐ Vegetation☒ Agricultural Land☒ Flood Plain/Flooding☐ Schools/Universities☒ Water Quality☒ Air Quality☐ Forest Land/Fire Hazard☐ Septic Systems☒ Water Supply/Groundwater☒ Archeological/Historical☒ Geologic/Seismic☐ Sewer Capacity☒ Wetland/Riparian☒ Biological Resources☒ Minerals☒ Soil Erosion/Compaction/Grading☐ Growth Inducement☐ Coastal Zone☒ Noise☐ Solid Waste☒ Land Use☐ Drainage/Absorption☒ Population/Housing Balance☒ Toxic/Hazardous☒ Cumulative Effects☐ Economic/Jobs☒ Public Services/Facilities☒ Traffic/Circulation☒ Other: _____**Present Land Use/Zoning/General Plan Designation:**

The City of McFarland's 2040 General Plan Designation is Facility: Government

Project Description: (please use a separate page if necessary)

See attached hereto.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".
If you have already sent your document to the agency please denote that with an "S".

☒ Air Resources Board	☐ Office of Historic Preservation
☐ Boating & Waterways, Department of	☐ Office of Public School Construction
☐ California Emergency Management Agency	☐ Parks & Recreation, Department of
☐ California Highway Patrol	☐ Pesticide Regulation, Department of
☐ Caltrans District # _____	☐ Public Utilities Commission
☐ Caltrans Division of Aeronautics	☒ Regional WQCB # <u>5F</u>
☐ Caltrans Planning	☐ Resources Agency
☐ Central Valley Flood Protection Board	☐ Resources Recycling and Recovery, Department of
☐ Coachella Valley Mtns. Conservancy	☐ S.F. Bay Conservation & Development Comm.
☐ Coastal Commission	☐ San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
☐ Colorado River Board	☐ San Joaquin River Conservancy
☐ Conservation, Department of	☐ Santa Monica Mtns. Conservancy
☐ Corrections, Department of	☐ State Lands Commission
☐ Delta Protection Commission	☐ SWRCB: Clean Water Grants
☐ Education, Department of	☒ SWRCB: Water Quality
☐ Energy Commission	☒ SWRCB: Water Rights
☒ Fish & Game Region # <u>4</u>	☐ Tahoe Regional Planning Agency
☐ Food & Agriculture, Department of	☐ Toxic Substances Control, Department of
☐ Forestry and Fire Protection, Department of	☒ Water Resources, Department of
☐ General Services, Department of	☐ Other: _____
☐ Health Services, Department of	☐ Other: _____
☐ Housing & Community Development	
☒ Native American Heritage Commission	

Local Public Review Period (to be filled in by lead agency)

Starting Date 11/24/2025 Ending Date 12/24/2025

Lead Agency (Complete if applicable):

Consulting Firm: <u>Dee Jaspar & Associates, Inc.</u>	Applicant: <u>City of McFarland</u>
Address: <u>2730 Unicorn Road, Building A</u>	Address: <u>401 W. Kern Avenue</u>
City/State/Zip: <u>Bakersfield/CA/93308</u>	City/State/Zip: <u>McFarland/CA/93250</u>
Contact: <u>Curtis Skaggs, PE</u>	Phone: <u>661-792-3091</u>
Phone: <u>661-393-4796</u>	

Signature of Lead Agency Representative: *Curtis Skaggs* Date: 11-18-25

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

CITY OF MCFARLAND
WATER SYSTEM IMPROVEMENT & TREATMENT PROJECT

I. PROJECT DESCRIPTION

The proposed project is for the City of McFarland (City) and involves drilling and equipping a new municipal water well, construction of an oxidation, coagulation, filtration iron removal water treatment system, construction of a welded steel water storage tank and booster station, and a connection to the existing City distribution system.

The well site property is approximately 100-ft by 400-ft or approximately 0.9-acres. The site is currently a vacant, unimproved lot. The earthwork will involve moving approximately 1,000 cubic yards which will be off-hauled for disposal off site as directed by the City.

The site grading is anticipated to involve approximately 20 working days. It is anticipated that the following pieces of equipment will be used during construction activities:

- Loader
- Backhoe
- Excavator
- Skip and Drag
- Sheepsfoot Compactor
- Rammax Compactor
- Whacker Packers

The site earthwork requirements include over-excavation to 18-inches below proposed concrete foundations and will be recompact to 90% relative compaction to reduce the potential for settlement. Concrete foundations will be constructed for the deep well pump and motor, the booster pump foundations, the skid-mounted LayneOx treatment system, storage tank foundations, chemical building foundations, electrical foundation, and the hydropneumatic tank footings.

The well site property will be secured with approximately 930-ft of 8-ft tall masonry block wall and include drive gates and a personnel gate to Elmo Highway for site access. The well site will be surfaced with a combination of ¾" Class II aggregate base and hot mix asphalt paving, with the limits being the perimeter block wall.

The well is planned to be drilled to an approximate depth of 900-ft using the reverse rotary method. Water quality zone testing will be performed in the well pilot hole. The well construction work will include installing a 50-ft deep, 36-inch diameter steel conductor, drilling a 17 ½ - inch diameter pilot hole,

performing geophysical logging, water quality depth sampling, reaming of the pilot hole to 28-inch diameter, installation of 16-inch diameter steel casing, installation of gravel pack, installation of a bentonite annular seal, and well development. The initial development water will be disposed of in a 20,000-gallon tank and removed from the site. The development water will then be discharged to the existing adjacent storm drain sump. It is expected that the completed well will exceed the secondary drinking water standard for iron and that well head treatment in the form of oxidation, coagulation, and filtration will be used to remove iron.

The production well drilling phase will involve the drilling, construction, and development of a new municipal water supply well. It is anticipated to involve approximately 90 working days with active well drilling taking place 24 hours per day, seven days per week for approximately 45 of those working days. It is anticipated that the following pieces of equipment will be used during construction activities:

- Well Drilling Rig with Pipe Trailer
- Mud Pits
- Backhoe
- Loader
- Forklift

The deep well will have a 10-ft by 10-ft by 30-in thick concrete foundation and be equipped with a vertical turbine pump and vertical hollowshaft electric motor with a variable speed drive. The well will have a 10-ft by 10-ft by 11-ft high removable metal enclosure building for noise attenuation. The 12-inch well discharge piping will be metered using an electromagnetic flow meter.

The well discharge flow will be divided so that approximately two-thirds of the flow is conveyed to a skid-mounted LayneOx iron treatment system with a concrete foundation that is 68-ft by 19-ft by 24-in thick. The remaining one-third of the well flow will bypass the LayneOx iron treatment system. The bypass flow rate will be regulated using an automatic modulating control valve and will be blended with the treated flow from the LayneOx iron removal treatment system.

The blended flow will be conveyed into an AWWA D100 welded steel storage tank that will be constructed with a concrete ringwall foundation and oiled sand cushion. The storage tank dimensions will be 60-ft diameter and 24-ft side shell height. The storage tank outlet piping will be 18-inch diameter steel piping that feeds the suction header for three horizontal centrifugal split-case booster pumps. Each booster pump will have a concrete foundation that is 3-ft by 6-ft by 36-in thick. The booster pumps are each equipped with variable speed drives. Two of the pumps are 50hp and the third pump is 100hp. The pump discharge piping then enters a 12-in diameter discharge header. The discharge header enters a 3,000-gallon hydropneumatic pressure vessel which will be anchored to two concrete

footings each 13-ft long by 5-ft wide by 24-in thick. The 12-inch diameter booster station piping will transition below ground after the pressure vessel and transition to 12-inch C900 PVC pipe that will connect to the existing 12" PVC City distribution system water main that runs along the north side of the well site on the south side of Elmo Highway.

In addition, there will be a 144,000-gallon backwash tank with dimensions of 32-ft diameter and 24-ft side shell height. The tank will be an AWWA D100 welded steel storage tank on a concrete ringwall foundation and oiled sand cushion. The backwash tank will drain the supernatant back to the well discharge for treatment and/or drain to the City sewer.

There will be two fiber-reinforced polymer (FRP) chemical enclosure buildings to house the dual-walled chemical storage tanks, duplex chemical feed pump skids, and the continuous reagent-free pH and chlorine analyzer.

The first FRP building (18 ft × 12 ft) will provide protection for the 550-gallon chlorine storage tank, the 150-gallon ferric chloride storage tank, and the duplex chemical feed pump skids. These pumps will inject chlorine and ferric chloride for chemical pre-treatment of the raw groundwater prior to filtration through the LayneOx media.

The second FRP building (10 ft × 12 ft) will house the 550-gallon sulfuric acid storage tank and the duplex chemical feed pump skid used for sulfuric acid injection. This system will provide pre-treatment pH adjustment upstream of the LayneOx filter media vessels.

The well and treatment facility will be painted a neutral color (tan) and site landscaping installed around the perimeter of the site for it to be aesthetically pleasing and blend in with the adjacent community and neighborhood.

The well equipping and site development phase is anticipated to involve approximately 12 months. However, the equipment will not run continually or daily throughout this entire construction period. It is anticipated that the following heavy pieces of equipment will be used for approximately 180 working days during construction activities:

- Excavator
- Loader
- Backhoe
- Crane
- Concrete Trucks
- Generator
- Air Compressor
- Small Tools
- Service Trucks

Construction of the project is anticipated to span an approximate 18-to-24-month period.

The well site will be routinely visited by a City operator – typically once per day to check on the operation and inspect for any issues along with the preparation of a daily report. Routine maintenance operations will include:

- Well Lubrication Check - daily
- Chlorine Tank Level Check – daily
- Sulfuric Acid Tank Level Check – daily
- Ferric Chloride Tank Level Check – daily
- Chlorine Residual Check – daily
- pH Check – daily
- Iron Level Check – daily
- Water Production Reading Check – daily
- Booster Pump check – monthly
- Well water level measurements – monthly
- Air Conditioning service – annually
- Site Cleanup - quarterly

A back-up emergency generator will also be installed as part of this project.