

San Joaquin Valley Unified Air Pollution Control District

Version 7
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Specifications for installation of a Lower Air Profiler on the grounds of the Tracy Airport

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GENERAL SPECIFICATIONS.

- The work specified hereunder involves preparing a site for the placement of an **“equipment room”** used to house scientific **instruments** and placement of a radar antenna array. The work will progress in two stages. The first stage involves pouring a radar array and trailer concrete pad, trenching and installing conduit for the utility service between the trailer and the antenna array & meteorological tower, and installing fencing to enclose these items. The suggested order of events would allow the District to place and mount the trailer on the pad in time to allow correct placement of the conduit. This is to be completed no later than the date specified on the Request for Quotation.
- The contractor is responsible for contacting the City of Tracy, and coordinating the installation and inspection of the site in a timely manner.
- The contractor is responsible for providing labor and all necessary materials such as lumber, conduit, connectors, wire, concrete, forms, fencing, etc. except as noted.
- The contractor is to remove all debris created during the work and also clean up the site to the level it was found at.
- At all times the contractor is to keep the contact person above apprised of each stage of development. A representative of the District is to be present during all on-site work, both as an observer, and to provide access to the site.
- Most of the items on the plot maps use a pre-existing airport property fence line as a point of reference. Most of the dimensions on the plots are reasonably accurate (measured with 100' tape measure), but some may contain minor errors. The plots were not surveyed. Refer to the Air Profiler Location and Site Location Map plots for general orientation.

- If you wish access to the area, please call to arrange an appointment. The site is located at the Tracy Municipal Airport, south of the existing T-Hangers and southwest of the water treatment plant.
- The job is to be installed and inspected in accordance with the requirements of the City of Tracy, County of San Joaquin, the State of California, Pacific Gas and Electric, FAA, SBC California, and San Joaquin Valley Air Pollution Control District (SJVAPCD) contact personnel.
- If any of these specifications seem erroneous, or would violate any building codes, or is outside of common practice in the construction field, please call the contact person above.

SPECIFICATIONS FOR RADAR ARRAY CONCRETE PAD

1. Pad is an octagon with dimensions as per attached Lap Pad Detail plot plan. Approximate surface area is **771** sq. ft.
2. Pad is to be a minimum of 6" thick.
3. Composition is to be a "6 sack" mix, or better. No "filler material" such as broken concrete, etc. may be used in any fashion.
4. Pad is to contain reinforcing, either "driveway mesh" or fiber reinforcement added at the batch plant.
5. Upper surface of pad is to be at least **4"** above the surrounding soil. The pad is to have a trowel sweat or broom finish for slip resistance.
6. A layer of sand (1" minimum) is to be placed under the slab to minimize cracking from settling. The sand is to be wet down and compacted. The underlying soil is to also be properly compacted to prevent settling of the slab. It is very important that this pad be level, and remain level, as even a few degrees of tilt will significantly effect the accuracy of the system.
7. A 4" Schedule 80 PVC electrical conduit is to emerge 12" above the pad in the location given on the plan LAP Pad Anchor Detail. A weather-proof junction box that will accommodate a 4" conduit on one side of the bottom and several smaller sized conduits on the other side of the bottom is to be **loosely** placed on this conduit. **Do not glue**. The other end of the conduit will emerge by the trailer pad as indicated on the plan and rise at least 12" above the top of the pad. The District will attach to the conduit at a later date. The conduit is to be placed at least 3 feet deep and is to use large radius 90° elbows. Two pull-ropes (3/32" or 1/4") are to be left in the conduit.

8. There are to be 16 anchors placed in the pad (when wet) at the locations shown on the plan titled LAP Pad Anchor Detail. There are 8 sets of anchors, 2 per set. The anchors are to be placed along a line from each vertex point on the octagon to the center of the pad (or to the corresponding vertex on the opposite side of the pad). The first anchor is to be placed 8" in from the outside of the pad, with the second anchor being placed 5 feet inside of the first. Each anchor is to be made from a 6" x 3/8" eye-bolt with two nuts and a washer as shown on the plan. The hardware is to be zinc coated for weather resistance.
9. The pad is to be installed and inspected in accordance with the requirements of San Joaquin County, the City of Tracy, the FAA, SJVAPCD contact personnel and all other applicable codes.
10. If the pad is improperly installed, the contractor will remove and replace it at their expense.

SPECIFICATIONS FOR TRAILER CONCRETE PAD

1. Pad is to be designed according to the PAD / Pier / Anchor Design and must extend 2" beyond the exterior of the trailer in all directions.
2. Pad is to be a minimum of 6" thick.
3. Composition is to be a "6 sack" mix, or better. No "filler material" such as broken concrete, etc. may be used in any fashion.
4. The District will provide the trailer foundation and anchor drawings and diagrams (as is indicated in the PAD / Pier / Anchor Design).
5. The City of Tracy has required a special inspection form to be completed during the installation of the anchor bolts using epoxy.
6. The contractor must follow and adhere to the drawings and diagrams as outlined in Item #4. If any of these specifications seem erroneous, or would violate any building codes, or is outside of common practice in the construction field, please call the contact person above.
7. Pad is to contain reinforcing, either "driveway mesh" or fiber reinforcement added at the batch plant.
8. Upper surface of pad is to be at least 4" above the surrounding soil. The pad is to have a trowel sweat or broom finish for slip resistance.
9. A layer of sand (1" minimum) is to be placed under the slab to minimize cracking from settling. The sand is to be wet down and compacted. The underlying soil is to also be properly compacted to prevent settling of the slab.
10. A separate entrance walkway is to be installed a minimum of 6" thick, near the front entrance to the trailer. This entrance concrete pad should measure 4 feet by 14 feet and be at least 4" above the ground, with a slightly slope for water runoff.

11. The pad is to be installed and inspected in accordance with the requirements of San Joaquin County, the City of Tracy, the FAA, SJVAPCD contact personnel, and all other applicable codes.
12. If the pad is improperly installed, the contractor will remove and replace it at their expense.

SPECIFICATIONS FOR FENCING

1. Fence layout is shown on the Site Location Map plan. All components (fabric, poles, top rails, gates, etc.) of the fencing are to be commercial grade.
2. The fence fabric is to be 6' high chain-link, of heavy gauge galvanized steel wire (minimum 10 ga.) with a heavy zinc coating. The top of the fence must not have any sharp pointed steel exposed.
3. The fence poles are to be anchored at least 2½' into the ground, and spaced 8' apart (with allowances, however, for the dimensions of enclosures). The poles are to be galvanized with galvanized top caps.
4. The poles are to be set in standard concrete that is mixed prior to being placed in the holes. No "fence post" concrete is to be used, nor is the "dry pack" method.
5. There are two 8' gates in the large enclosure, located as shown on the plan. The poles holding the gates are to be larger and rated for that function (3½" or larger), and set deeper than the line & corner poles (3½' deep). The latch pole receiver is to be set in concrete. The gates are to open outward (see the plan). This will result in the trailer being approximately aligned in the center of the gate opening.
6. There is one 4' gate in the small enclosure surrounding the meteorological tower. The gate will open outward (see the Site Location Map plot).
7. There is one 5' gate along the pathway of the large enclosure, located as shown on the plan. The gate will open outward (see the Site Location Map plot).
8. The fabric is to be properly stretched. There is to be a rigid top rail along the top of the fabric between the poles and a heavy wire runner along the bottom of the fabric. All components of and hardware used on the fence are to be galvanized or otherwise weather resistant.
9. The fencing is to be installed and inspected in accordance with the requirements of San Joaquin County, the City of Tracy, the FAA, SJVAPCD contact personnel, and all other applicable codes.

End of specifications