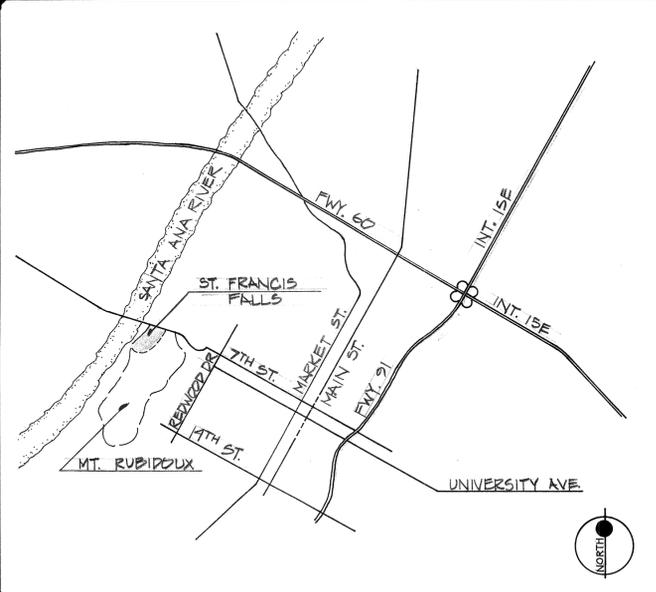


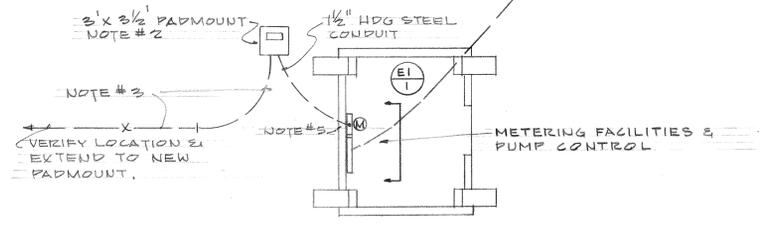
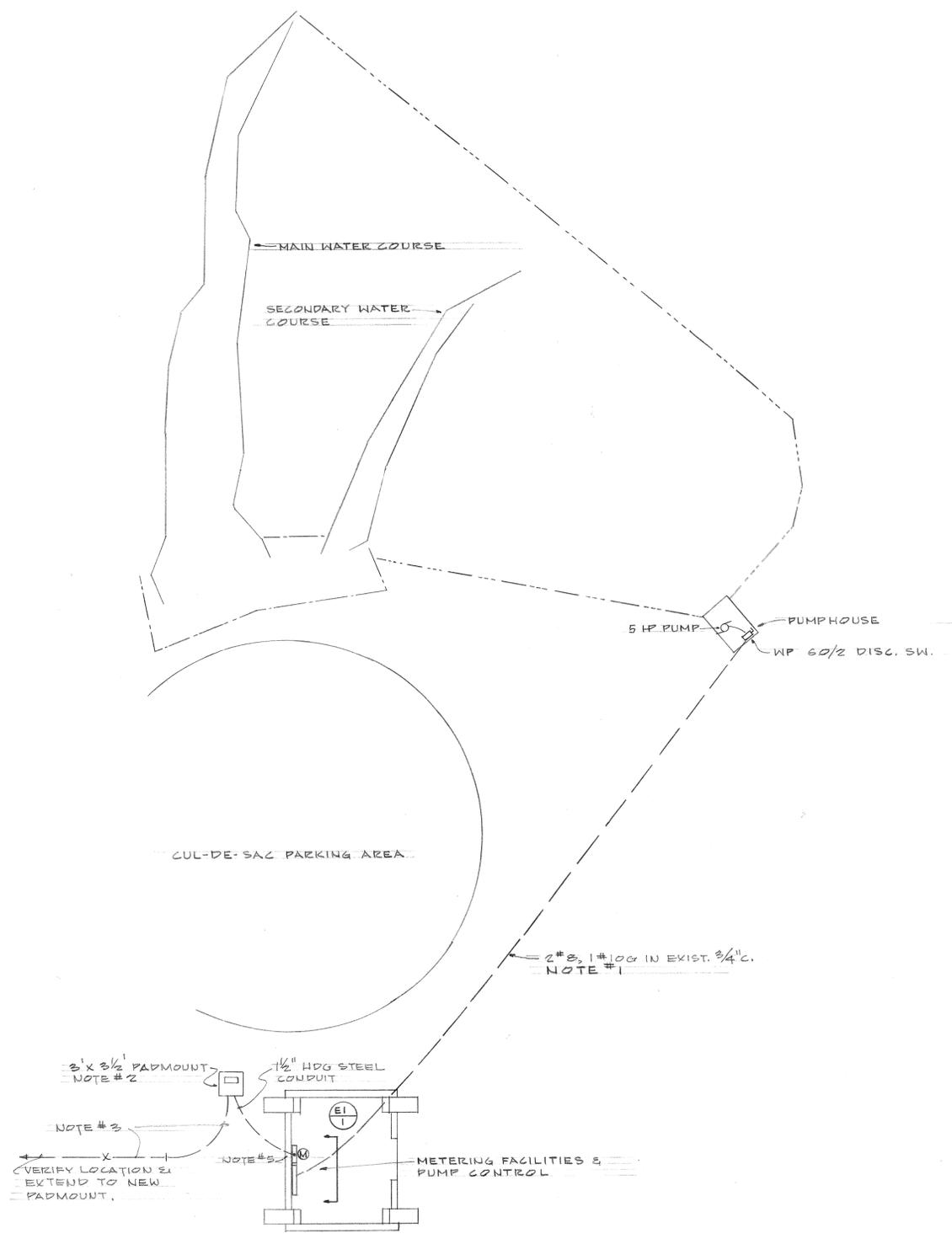
① SINGLE LINE DIAGRAM



location map

| TABLE OF SYMBOLS |                         |
|------------------|-------------------------|
| SYMBOL           | DESCRIPTION             |
|                  | MOTOR OUTLET            |
|                  | DISCONNECT SWITCH       |
|                  | CONDUIT RUN UNDERGROUND |
|                  | 1/2", 2 OR 3#12         |

- NOTES
1. REMOVE EXISTING CONDUCTORS, CLEAN CONDUIT BY RUNNING MANDREL THRU IT, AND REPULL NEW CONDUCTORS.
  2. 3' X 3 1/2" PADMOUNT PER ITEM TP-1 OF UGS-620 CITY OF RIVERSIDE.
  3. INTERCEPT EXIST. HDG STEEL CONDUIT & EXTEND TO PADMOUNT. FIELD DETERMINE CONDUIT SIZE, CAUTION SHALL BE EXERCISED ON EXIST. 4 KV HV UG ELEC. PRIMARY SERVICE, COORDINATE SHUTDOWN W/ UTILITY.
  4. 120/240 V. 1# 3W. SERVICE SHALL BE RESTORED IN COMPLIANCE WITH REQUIREMENTS OF THE PUBLIC UTILITY DEPT., CITY OF RIVERSIDE. ALL SERVICE CHARGES SHALL BE PAID BY THE ELECTRICAL CONTRACTOR.
  5. EXCAVATE BELOW TOWER FOOTING & CORE THRU FOR 1/2" SECONDARY SERVICE CONDUIT. FILL & PATCH.
  6. SERVICE CONDUITS SHALL BE INSTALLED PER CITY OF RIVERSIDE STANDARDS UGS-100.1



SITE PLAN  
SCALE 1" = 10'-0"

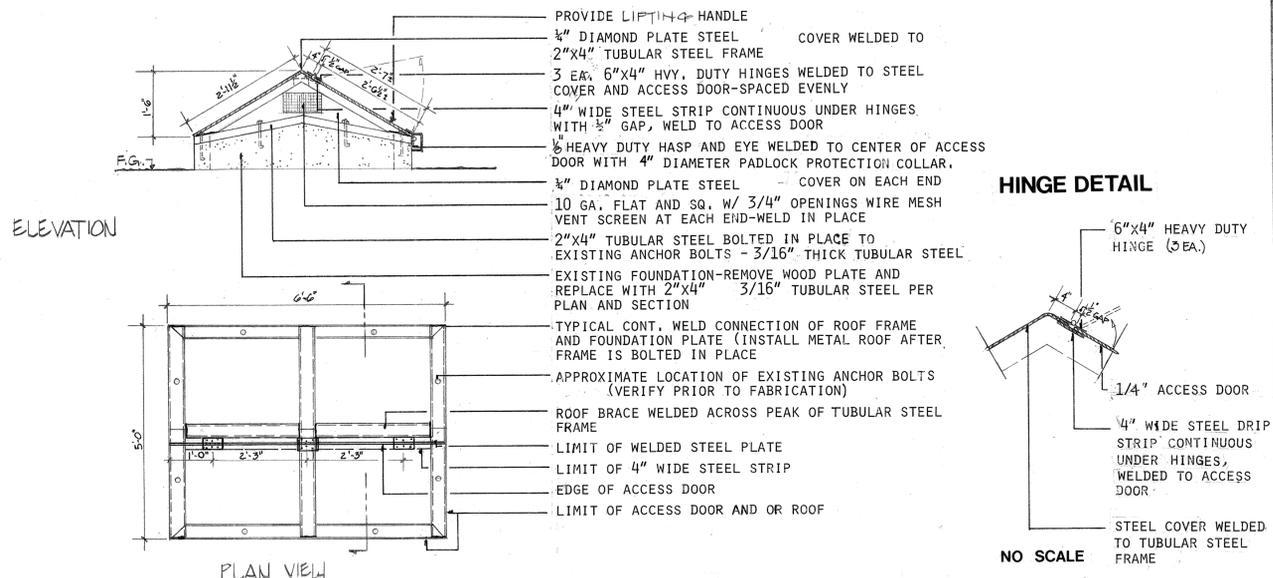
*K. Matsuo*  
 KEN MATSUOKA, E. E.  
 479 N. Tustin Ave., Suite 110  
 GRANGE, CALIFORNIA 92626  
 (714) 933-7761, CA. Reg. #E-26517

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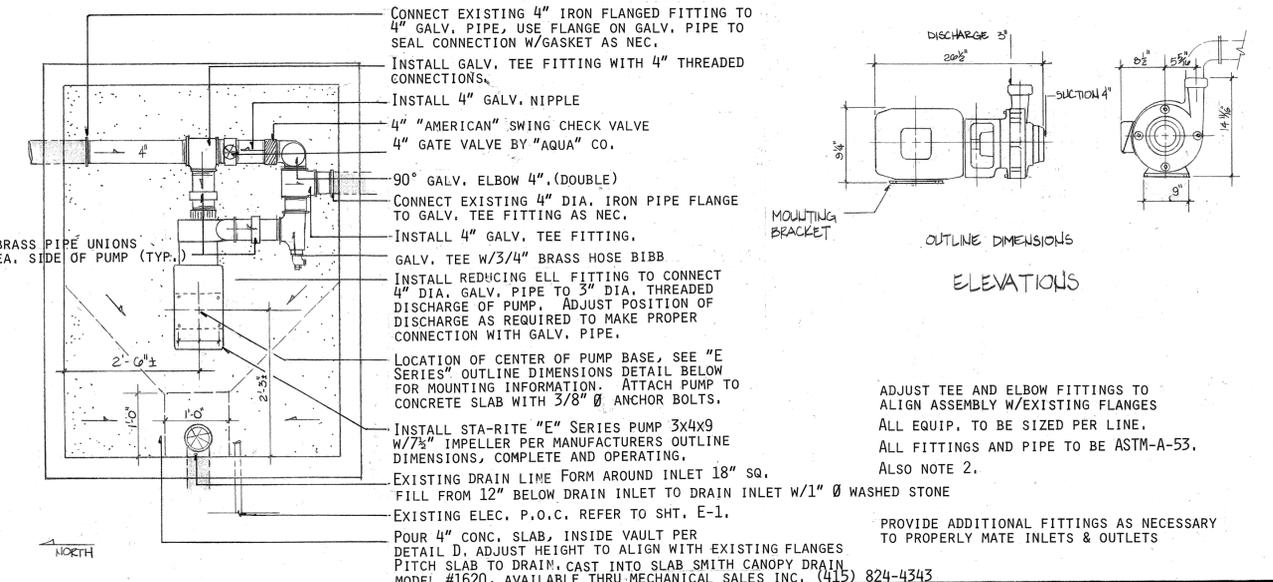


**ST. FRANCIS FALLS**  
**City of Riverside**  
**ELECTRICAL**  
**plan - details**

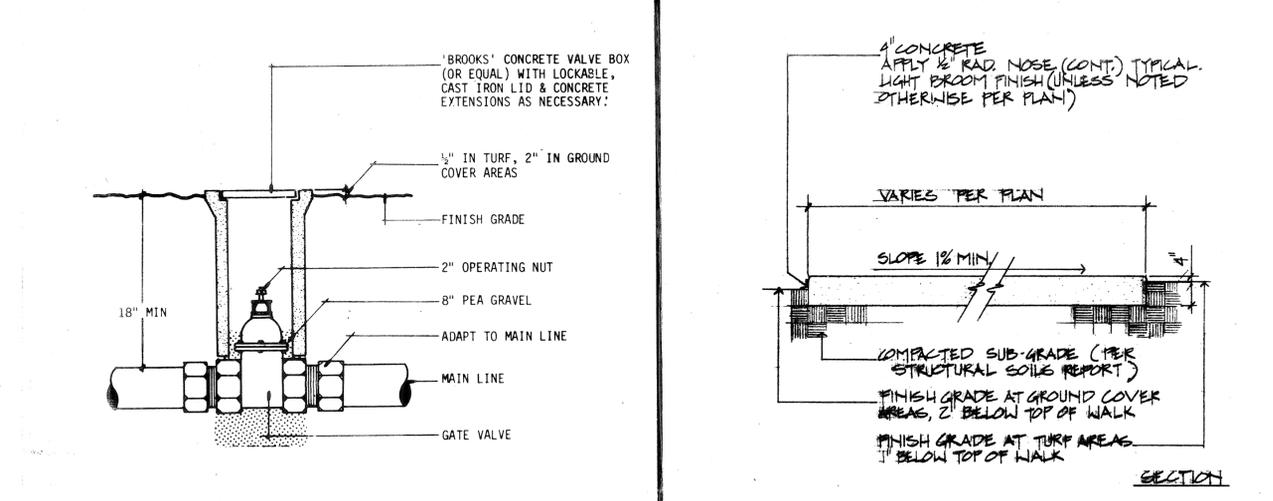
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|---------------------|
| DRAWN<br>DKM        |
| CHECKED<br>K.M.     |
| DATE<br>10-2-81     |
| SCALE<br>1" = 10'   |
| JOB NO.             |
| SHEET<br><b>E-1</b> |
| OF ONE SHEETS       |



**a PUMPHOUSE ROOF** SCALE 1/2-1-0"

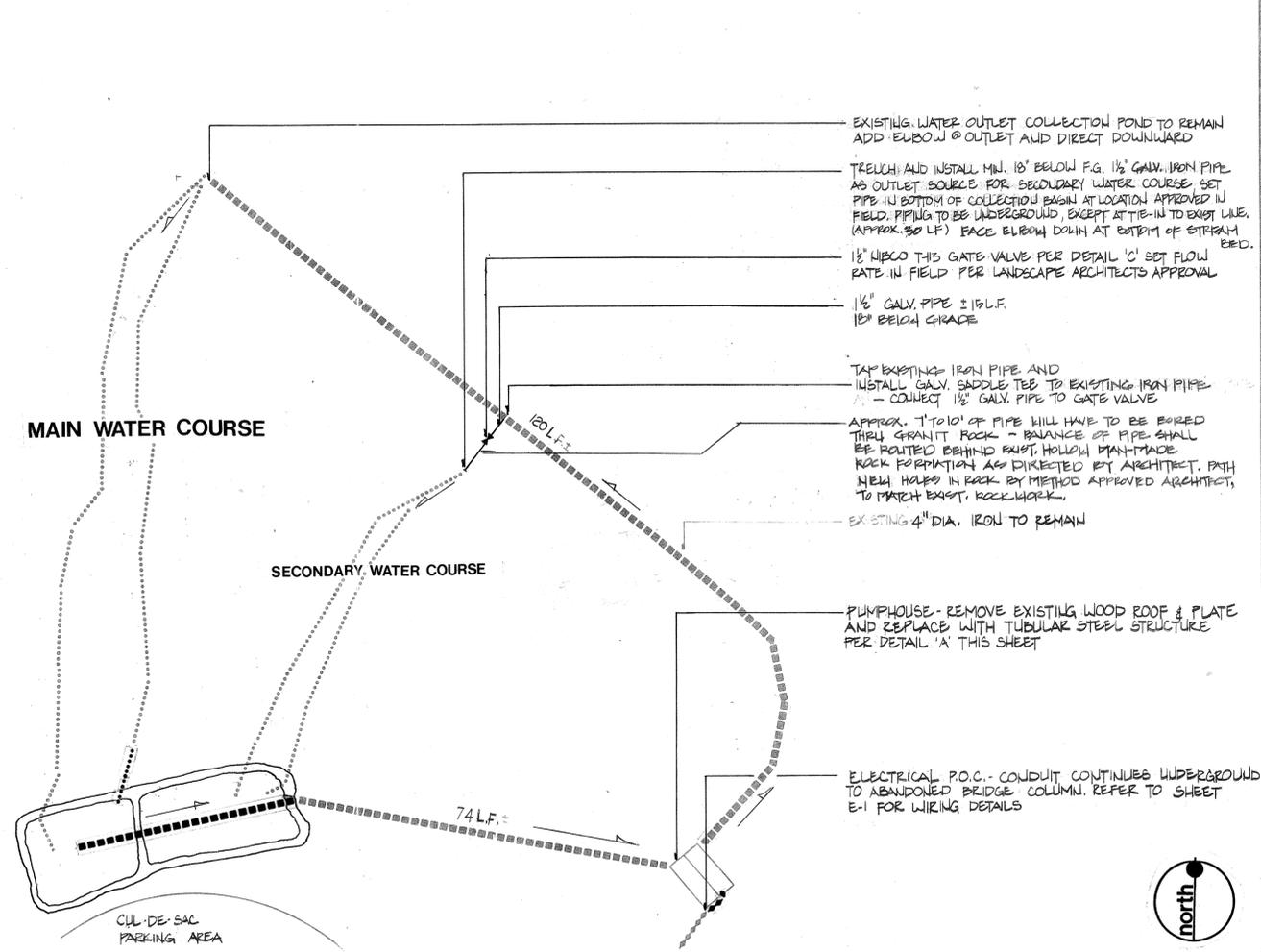


**b PUMP REPLACEMENT** SCALE 3/4-1-0"



**c GATE VALVE** **d CONC. SLAB**

**SCHEMATIC ILLUSTRATIVE**



**NOTES:**

- REFER TO WRITTEN SPECIFICATIONS FOR PLUMBING AND ELECTRICAL REPAIRS - ST. FRANCIS FALLS.
- SCOPE OF WORK: THE INTENTION OF THE WORK IS TO INSTALL A NEW PUMP, ELECTRICAL, REBUILD PUMP HOUSE ROOF AND MAKE MINOR REVISIONS AS NECESSARY TO PROVIDE A COMPLETE OPERATING WATER-FALL HYDRAULIC SYSTEM AS FOLLOWS:
  - INSTALL NEW PUMP IN EXISTING VAULT/PUMP HOUSE.
  - CLEAN/FLUSH EXISTING IRON PIPING AND CONNECT TO PUMP, INSTALL NEW PVC LINE TO SECONDARY STREAM, AND OTHER MISCEL. WORK PER PLAN.
  - FABRICATE AND INSTALL METAL ROOF STRUCTURE FOR EXISTING VAULT/PUMP HOUSE.
  - INSTALL NEW ELECTRICAL FROM EXISTING SOURCE TO THE NEW PUMP, PER ELECTRICAL PLANS. UTILIZE EXISTING MOTOR STARTER AND EXISTING CONDUIT RUN FROM PANEL TO PUMP VAULT.
  - PERFORM OPERATIONAL TEST OF ALL NEW AND EXISTING WORK, ADJUST WATER FLOWS AND TIMERS AS DIRECTED BY LANDSCAPE ARCHITECT.
  - ALL NEW WORK SHALL BE GUARANTEED BY THE CONTRACTOR AS TO MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
- THE NEW PUMP IS TO BE INSTALLED IN THE EXISTING PUMP HOUSE/VAULT: REMOVE 2" X 4" WOOD LEDGER FROM THE TOP OF VAULT, TAKING CARE NOT TO DAMAGE EXISTING ANCHOR BOLTS. FABRICATE NEW METAL ROOF STRUCTURE, PER DETAIL, AND INSTALL. PAINT ALL METAL WITH ONE PRIMER COAT AND TWO FINISH COATS-AMERITONE #290A- PROVIDE COLOR CHIP.
- PRIOR TO CONSTRUCTION THE EXISTING DAMAGED ROCK/STREAM WORK WILL BE REPAIRED BY OTHERS.
- THE EXISTING 4" RECIRCULATION AND SUCTION LINES SHALL BE CLEARED OF ANY DEBRIS AND FLUSHED CLEAN. PRESSURE TEST EXISTING LINES AT 150 PSI FOR ONE (2) HOURS MIN. TO VERIFY THAT THE PIPING IS WATER TIGHT. PROVIDE PLUGS AND EQUIPMENT AS NECESSARY TO PERFORM THE TESTING.
- ALL PVC SOLVENT WELD CONNECTIONS SHALL BE MADE WITH SOLVENT-WELD MATERIALS AS RECOMMENDED BY THE PIPE MANUFACTURER. ALL PVC LINE FITTINGS SHALL BE WELDED USING PRIMER AND SOLVENT CEMENT IN A 'TWO-STEP' PROCESS.
- ALL PVC FITTINGS SHALL BE SCHEDULE 40.
- EXTREME CARE SHALL BE EXERCISED IN WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL VERIFY THE LOCATION AND CONDITION OF ALL UTILITIES/ EXISTING PLUMBING SYSTEM AND BE RESPONSIBLE FOR ALL DAMAGE.
- CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND FREE OF EXCESS EQUIPMENT, MATERIALS, AND RUBBISH INCIDENTAL TO HIS WORK.
- THE LANDSCAPE ARCHITECT SHALL DECIDE ALL QUESTIONS RELATING TO INTERPRETATION OF THE DRAWINGS AND THE ACCEPTABLE FULFILLMENT OF THE CONTRACT.
- INSTALL A STA-RITE ORGANIZATION "E SERIES" END SUCTION CENTRIFUGAL PUMP 3 X 4 X 9 W/7/8" IMPELLER PER DETAIL B SHT. M-1 COMPLETE. MAKE ALL NECESSARY CONNECTIONS TO PROVIDE COMPLETE, OPERATING PUMP.
- PIPING SHOWN ON PLANS AND WATERFALL COURSE IS ESSENTIALLY DIAGRAMMATIC. EXISTING LINES ARE TO REMAIN IN PLACE. INSTALL NEW LINE FOR SECONDARY STREAM.
- ALL THREADED BRASS, GALVANIZED OR STAINLESS STEEL CONNECTIONS SHALL BE COATED WITH TEFLON TAPE OR LEO-LUBE COMPOUND (OR EQUAL). ALL P.V.C. THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.
- UPON COMPLETION OF ALL WORK, CONTRACTOR SHALL FILL POND, AND PERFORM A 4 HOUR OPERATING TEST OF NEW SYSTEM IN THE PRESENCE OF THE ARCHITECT AND THE CITY. ALL PIPING SHALL BE PROVEN WATER TIGHT AND WATER COURSE FLOW RATES ADJUSTED AS FOLLOWS: 160 GPM FOR MAIN WATER COURSE (AS DETERMINED BY LANDSCAPE ARCHITECT), 30 GPM FOR SECONDARY WATER COURSE (AS DETERMINED BY LANDSCAPE ARCHITECT.)
- CONTRACTOR TO SUBMIT SHOP DRAWINGS OF INTENDED INSTALLATION AND BRAND NAMES & MANUFACTURER OF EQUIPMENT NOT SPECIFIED IN THE DRAWING. PLACEMENT OF ALL EQUIPMENT IN HOUSING TO BE SHOWN ON SHOP DRAWINGS.

DIRECTOR OF PARKS & RECREATION: *[Signature]* CULTURAL HERITAGE BOARD: *[Signature]*

PARKS SUPERINTENDENT: *[Signature]* 12/8/81

RECREATION SUPERINTENDENT: *[Signature]* 12/8/81

PARK PROJECT COORDINATOR: *[Signature]* 12/1/81

REGISTERED LANDSCAPE ARCHITECT: *[Signature]* 15-00000-81 STATE OF CALIFORNIA

**NOTES**

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**RHA**  
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 Mechanical Engineer  
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 3816 Main Street, Riverside, CA 92503  
 Telephone: (714) 781-1320

**ST. FRANCIS FALLS MECHANICAL**  
**City of Riverside details~ notes**

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| DRAWN<br>E.C.H.III |
| CHECKED<br>R.H.    |
| DATE<br>12 JUN 81  |
| SCALE<br>N/A       |
| JOB NO.<br>8124    |
| SHEET              |

**M-1**  
 OF ONE SHEETS