# CITY OF FRESNO PUBLIC WORKS DEPARTMENT LANDSCAPE AND IRRIGATION PLAN SUBMITTAL REQUIREMENTS

## A. INITIAL SUBMITTAL FOR PLAN CHECK

- 1. A MINIMUM OF 4 COPIES OF FOLDED BOND PLANS SHALL BE SUBMITTED FOR REVIEW AND DISTRIBUTION TO THE PUBLIC WORKS DEPARTMENT/ENGINEERING SERVICES, ADDITIONAL SUBMITTALS MAY BE REQUIRED. CHECK PRINTS SHALL BE RETURNED WITH ONE BOND FOLDED COPY OF CORRECTED PLANS TO THE PUBLIC WORKS DEPARTMENT FOR BACK CHECK.
- 2. PLANS WILL ONLY BE REVIEWED AND APPROVED FOR LANDSCAPE AND IRRIGATION CONSTRUCTION ONLY. ALL OTHER CONSTRUCTION SHALL BE SUBMITTED WITH APPROPRIATE PLAN SETS FOR REVIEW AND APPROVAL. AFTER FINAL APPROVAL, AN ENCROACHMENT PERMIT WILL BE REQUIRED TO BE PULLED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- 3. UPON FINAL APPROVAL OF THE LANDSCAPE/IRRIGATION PLANS, RETURN OF THE ORIGINAL VELLUMS PLUS 3 BOUND BOND COPIES IS REQUIRED.

### B. GENERAL INFORMATION AND PLAN SHEETS

- 1. PLANS SHALL BE DRAWN ON CITY STANDARD DRAWING P-85, SIZE "C", 12" X 36" SHEETS. SAME SHEET SIZE AS THE STREET CONSTRUCTION PLANS IS ACCEPTABLE.
- 2. PROVIDE APPROPRIATE COVER SHEET TO INCLUDE PROJECT TITLE, DATE, AND SITE MAP WITH NEAREST MAJOR CROSS-STREETS, DESIGNER AND ALL PERTINENT INFORMATION IDENTIFYING PROJECT.
- 3. PLANS SHOULD HAVE THE FOLLOWING: LANDSCAPE/IRRIGATION DESIGNER NAME, BUSINESS LOCATION, PHONE #, FAX #, AND E-MAIL ADDRESS.
- 4. DIRECTIONAL ARROW.
- 5. SCALE: 1'' = 20'
- 6. SHOW ALL EASEMENTS, PROPERTY LINES AND STREET NAMES.
- 7. PROJECTS SHALL COMPLY WITH INDUSTRY STANDARDS, PLANNING & DEVELOPMENT AND PUBLIC WORKS DEPARTMENT'S CONDITIONS, STANDARDS AND SPECIFICATIONS.

#### C. MINIMUM CONSTRUCTION PLAN REQUIREMENTS

- 1. SHOW ALL EXISTING AND PROPOSED UTILITIES WITHIN AREAS TO BE LANDSCAPED. THE DESIGN SHALL ALSO COMPLY WITH THE REQUIREMENTS OF ALL UTILITY(S) ORGANIZATIONS HAVING JURISDICTION OVER THE PROJECT.
- 2. SHOW ALL EXISTING AND PROPOSED WALKS, DRIVEWAYS, FENCES AND/OR WALLS, TREE WELLS, PLANTING AREAS, AND OTHER STRUCTURES WITHIN THE PROJECT AREA.
- 3. SHOW THE LOCATION AND CONFIGURATION OF ALL MEDIAN ISLANDS FRONTING THE PROPOSED PROJECT. ALL PLANS SHALL BE SUBMITTED FOR STAFF REVIEW AND EVALUATION FOR MEDIAN ISLAND LANDSCAPING REQUIREMENTS. EXISTING UTILITIES, INCLUDING, BUT NOT LIMITED TO CITY WATER LINES/SERVICE POINTS, SANITARY SEWER, STORM DRAINS, ELECTRICAL LINES, EXISTING LANDSCAPING (INCLUDING TREES, SHRUBS, GROUND COVER BEDS, IRRIGATION FACILITIES, AND OTHER MISCELLANEOUS LANDSCAPE FEATURES) SHALL

ALSO BE CLEARLY DEFINED ON THE BASE MAPS SUBMITTED FOR REVIEW. ALL PROPOSED MEDIAN ISLANDS ARE REQUIRED TO BE CONSTRUCTED WITH ONE FOOT WIDE COLORED CONCRETE STRIPS WITH A 12" X 12" SLATE PATTERN IN DAVIS BRICK RED ALONG ONE CURB EDGE, OR AS APPROVED BY THE ENGINEER.

- 4. SHOW TYPICAL CROSS-SECTION DETAIL (S) OF LANDSCAPED AREA WITH DIMENSIONS AND SLOPE CLEARLY INDICATED FOR ALL PARKWAYS, BUFFERS, MEDIAN ISLANDS AND MULTI-PURPOSE TRAILS. MAXIMUM SLOPES SHALL NOT EXCEED 4:1 WITH 1' OF LEVEL GROUND BETWEEN THE SLOPE AND THE BACK OF THE SIDEWALK AND/OR FACE OF FENCE. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED ON ALL SLOPES 4:1 OR STEEPER. SUCH EROSION CONTROL SHALL, AT A MINIMUM, INCLUDE THE USE OF SYNTHETIC EROSION CONTROL NETTING IN COMBINATION WITH GROUND COVER SPECIES APPROVED BY THE PUBLIC WORKS DEPARTMENT. THE EROSION CONTROL NETTING SHALL BE APPROVED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO SHIPPING, AND THE NETTING SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER.
- 5. PROPOSED LOCATIONS OF ALL PLANTING AND IRRIGATION MATERIALS TO BE INSTALLED.
- 6. DELINEATE BOUNDARIES OF CITY MAINTENANCE RESPONSIBLITY WITH A 12" X 6" CONCRETE MOWSTRIP. PROVIDE DETAIL.
- D. IRRIGATION PLAN MINIMUM REQUIREMENTS
  - 1. SHOW INSTALLATION OF IRRIGATION SHALL BE IN ACCORDANCE TO THE CITY OF FRESNO STANDARD SPECIFICATIONS, SECTION 25 AND AS DIRECTED BY THE ENGINEER.
  - 2. PROPOSED LOCATION AND SIZE OF WATER METER(S) AND SERVICE(S). IF CONNECTION TO EXISTING SERVICE POINTS IS PERMITTED BY THE CITY OF FRESNO, A FLOW METER SHALL BE INSTALLED. EXISTING LATERAL LINES SHALL NOT BE TAPPED AND EXTENDED TO PROVIDE IRRIGATION TO THE NEWLY PROPOSED CONTIGUOUS LANDSCAPE AREAS. NEW VALVES SHALL BE INSTALLED ON THE EXISTING MAIN LINES IF CAPACITY ALLOWS, OR A NEW MAINLINE SHALL BE INSTALLED AS NEEDED TO SUPPLY THE REQUIRED FLOW.
  - 2. PROPOSED LOCATION AND SIZE OF BACKFLOW PREVENTION DEVICE, AND AUTOMATIC CONTROLLER (BACKFLOW PREVENTION DEVICE SHALL BE LOCATED WITHIN 10' DOWNSTREAM OF METER).
  - 3. STATIC WATER AND DESIGN PRESSURE AT POINT OF CONNECTION.
  - 4. LOCATION OF POWER SOURCE.
  - 5. LOCATION, TYPE, SIZE AND DEPTH OF ALL IRRIGATION MAIN AND LATERAL LINES, AND SLEEVES.
  - 6. LOCATION, TYPE, SIZE, CIRCUIT NUMBER AND GALLONS PER MINUTE (OR GALLONS PER HOUR) FOR EACH CONTROL VALVE.
  - 7. LOCATION AND TYPE OF ALL IRRIGATION HEADS, QUICK COUPLERS, GATE VALVES, AUTOMATIC FLUSH VALVES, AIR VACUUM RELIEF VALVES, AND OTHER RELATED EQUIPMENT.
  - 8. INSTALLATION DETAILS FOR BACKFLOW PREVENTION DEVICE, METAL CAGING, CONTROLLER, CONTROL VALVES, QUICK COUPLERS, EMITTER HEADS, AUTOMATIC AND/OR MANUAL FLUSH VALVES, AIR VACUUM RELIEF VALVES, MAIN LINE AND LATERAL LINE PIPE, WIRE CONNECTION DETAILS, AND ALL OTHER IRRIGATION RELATED OPERATIONS.
  - 9. PROJECTS SHALL COMPLY WITH FMC 12-306-N-23 AND AB1881, AND SHALL INCLUDE THE WATER CONSERVATION COMPLIANCE STATEMENT ON THE COVER SHEET.
  - 11. IRRIGATION LEGEND WITH SYMBOL, SIZE, MANUFACTURER, MODEL NUMBER, PSI AND GPM SHOWN ON EACH SHEET.

- 12. PROVIDE IRRIGATION GENERAL NOTES AS REQUIRIED AND APPLICABLE TO PROJECT.
- 13. PROVIDE MONTHLY WATERING SCHEDULE ON PLANS.

## E. LANDSCAPING PLAN MINIMUM REQUIREMENTS

- 1. ALL PLANTING SHALL BE IN ACCORDANCE TO THE CITY OF FRESNO STANDARD SPECIFICATIONS, SECTION 26 AND AS DIRECTED BY THE ENGINEER.
- 2. PLANTING LEGEND WITH SYMBOL, SIZE (GALLONS), BOTANICAL, VARIETY (IF ANY), COMMON NAME, AND COMMENTS INCLUDED ON EACH SHEET. A SEPARATE PLANTING SCHEDULE FOR THE ENTIRE PROJECT SHOWING TOTAL QUANTITY OF EACH PROPOSED SPECIES AND THE TOTAL SQUARE FOOTAGE OF SHRUB, TURF AND SIDEWALK AREA SHALL BE LOCATED ON THE COVER SHEET.
- 3. INCLUDE TYPICAL PLANTING DETAILS FOR TREES, SHRUBS AND VINES, AND GROUNDCOVERS ON DETAIL SHEET.
- 4. PROVIDE REQUIRED PLANTING NOTES AS THEY APPLY FOR EACH PROJECT.
- 5. CROSS-SECTION DETAILS OF LANDSCAPED AREA WITH DIMENSIONS AND SLOPE INDICATED FOR ALL BUFFERS, MEDIAN ISLANDS AND MULTI-PURPOSE TRAILS.
- 6. ROOT BARRIERS ARE REQUIRED FOR TREES PLANTED TEN FEET OR LESS FROM CONCRETE HARDSCAPE. INSTALLATION SHALL BE AS DESIGNATED BY THE ENGINEER AND AS PER THE CITY OF FRESNO STANDARD SPECIFICATIONS. ROOT BARRIERS SHALL BE INSTALLED UP AGAINST AND FLUSH TO HARDSCAPE AND WITH THE TOP EVEN WITH FINISH GRADE, WITH A MINIMUM DEPTH OF 24 INCHES.
- 7. SECTIONS OF THE MEDIAN ISLAND IN EXCESS OF SEVEN (7) FEET WIDE (BACK OF CURB (BOC) TO BACK OF CURB DIMENSION) SHALL BE LANDSCAPED WITH A FULL RANGE OF SHRUBS AND/OR GROUND COVERS AND TREES WHERE ALLOWED. FOR THE PURPOSES OF WORKER SAFETY, AND TREE MORTALITY, TREES SHALL NOT BE PLANTED IN SECTIONS OF THE MEDIAN WHICH ARE LESS THEN SEVEN (7) FEET IN WIDTH (BOC TO BOC). NARROW PORTIONS OF MEDIAN LESS THEN SEVEN (7) FEET IN WIDTH (BOC TO BOC) SHALL BE CAPPED WITH CONCRETE AS AN INTEGRAL PART OF THE OFF SITE IMPROVEMENT PROCESS, WHETHER THE MEDIAN IS LANDSCAPED OR NOT.
- 8. MINIMUM SIZE OF PLANT CONTAINER SHALL BE AS LISTED BELOW, UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DEPARTMENT. PLANT CONTAINERS SHALL BE OF THE FOLLOWING MINIMUM SIZE:
  - A. TREES: 15 GALLON MINIMUM SIZE
  - B. SHRUBS: 5 GALLON MINIMUM SIZE
  - C. VINES: 5 GALLON MINIMUM SIZE
  - D. GROUND COVERS: MAY BE PLANTED VIA SEED, FLATS, LINERS OR ONE GALLON CONTAINERS.
- 9. LANDSCAPE MATERIAL SHALL BE INSTALLED AND SPACED IN ACCORDANCE WITH CITY OF FRESNO STANDARDS, INDUSTRY STANDARDS AND AS DETERMINED BY THE ENGINEER. REQUIRED SPACING FROM UTILITIES, SIGNS, DRIVEWAYS, ALLEYS, ETC. SHALL BE IN ACCORDANCE TO THE CITY OF FRESNO STANDARD SPECIFICATIONS.