

## IMPROVEMENT PLAN

CHECKLIST

i.	MATERIALS REQUIRED OF APPLICANT (COMPLETE SUBMISSION?)
	a. √ or receipt for payment of plan check fee
	b. signed, stamped, & dated soils report (2 sets)
	c. signed, stamped, & dated storm drainage calculations/report (2 sets)
	d. signed, stamped, & dated cost estimate (2 sets)
	e. signed, stamped, & dated earthwork calculations (if applicable-retaining wall) (2 sets)
	f. Preliminary Title Report (issued w/l 6 mos.)
	g. proposed Final Map
	h. (If off-site improvement required) Letter(s) of permission
	<ul> <li>i. (if off-site easements required) legal description &amp; exhibit map(s)</li> </ul>
	j. (If canals to be disturbed) F.I.D. or C.I.D. letter & conditions of approval
	k. 3 sets of proposed Improvement Plans to include:
	Coversheet
	Detail sheet
	Grading plan
	Utilities plan
	Traffic plan
	Sign & street marking plan
	Traffic detour plan (if applicable)
	Traffic signal plan (if applicable)
	Landscape plan
	Irrigation plan
	I. Copies of transmittal letters to:
	P.G.E.
	Verizon
	San Joaquin Valley Air Pollution Control Board
	F.I.D./C.I.D. (if applicable)
	m. Number of current City of Sanger Business License (for engineer)
II.	INFORMATION REQUIRED OF STAFF
11.	a. list & amount of all fees (to be paid prior to approval)
	b. CEQA documentation including mitigation measures
	c. (Subd.)Planning Commission approved Tentative Map conditions of approval
	d. (GP amend/rezone) Council approved conditions of approval
	e. Master Sewer Plan (Are additional lines required?)
	f. Master Storm Drainage Plan (Where are permanent ponds?)g. (If applicable/N. Sphere of Influence) Transmission line crosses property? Check
	regarding S.D. plan.
	h. GP street categorization: local, collector, arterial
	i. FEMA flood plain designation
	i. Master Park Plan

## III. **PLAN REVIEW COVERSHEET** leaend min. lettering size=8 pt. tract # & name vicinity map-include project boundaries, street names & off-site areas benchmark, description, location, elevation, north arrow, scale, graphic scale project engineer's name, address, phone #, e-mail, wet stamp, signature owner/developer's name, address, phone #, e-mail city approval block-City Engineer & Dev. Services Director table of contents/sheet index city recommended construction notes water courses & FEMA designation & limits TYPICAL SECTIONS SHEET(S) scale(s) street x-sections Centerline.crown Limits of R.O.W. Easements Structural section (city approved soils report) Medians- if local street ≥12' no trees if ≤16'/If collector or arterial ≥16' Sidewalk-monolythic if City Eng. Approved & matches existing neighbors ≥5'/≥8' IF BIKE PATH REQUIRED (SEE CONDITIONS) Curb & gutter Does it match city std? Pavement widths Do they match city stds (local, collector, arterial)? Bicycle lanes/path Does it meet the Bike Plan std? Walls/fences- Do they match the conditions of approval? The new city stds? Retaining walls-Has the engineer submitted calcs? Does the CBO approve? **GRADING PLAN** bench mark, description, location, elevation existing & proposed elevations and/or contours @6" intervals. (screen ex.) Clearly marked "TOP OF SLOPE" and "TOE OF SLOPE." existing trees, fences, roads, power poles, bodies of water, buildings, etc. notes; "TO BE REMOVED" and/or "TO BE REMOVED & RELOCATED" arrows to denote the existing and proposed direction of storm drainage flow typical lot grading detail details concerning erosion control to be used clearly marked areas of "CUT" and "FILL" plus quantities; cut, fill, import and/or export clearly marked areas where retaining walls will be located clearly marked pad and finish floor elevations if the project site has specific points of storm drainage in-flow and out-flow FEMA zone designations & limits **UTILITIES PLAN (S)** All sheets: FEMA zone designation & limits

## STREETS

\_\_\_\_(plan) bearing & distance for all stationed lines with reference to basis \_\_\_\_(plan) R.O.W., easements, lot line \_\_\_\_(plan & profile) numbered stations (conform to ex. stations)

\_\_\_\_(plan & profile) location of ex. & proposed utilities. Mark any ex. utilities to be removed.

be removed.

\_\_\_\_(plan & profile) ex. (if applicable) & proposed centerline. Clearly label vertical curve data on profile. NOTE: ALL INTERSECTIONS WILL BE 90

ROUNDABOUTS MAY BE USED FOR LOCAL STREET INTERSECTIONS ONLY. SEE CITY STD. FOR LAYOUT AND DESIGN. (plan)centerline curve data & B.C./E.C. clearly marked. Compound curves (back-to-back) permitted on local & collector streets. Permitted on arterials so long as speed limit is ≤45 m.p.h. (AASHTO, 2004 ed., p 164) Min. centerline curve radius: Local street≥154' Collector & arterial street ≥533' (design speed 40 m.p.h., p 147) (plan) provide curve data table with I.D. #, delta, radius, length) (plan & profile)curb data- ex. (if applicable) & proposed (plan) curb radius marked on corners curb radius local street to local= 20' curb radius local street to collector/arterial= 25' curb radius collector street to collector= 25' curb radius collector street to arterial =- 30' curb radius arterial street to arterial= 30' (plan) show sidewalks. Min. width=5" If bike path req≥ 8' If meandering sidewalks included in conditions of approval, must go straight in segments ≥ 200' (plan) show curbs and appropriate elevations TC, flowline, inlet (1.5% - 5% x-slope from lip of gutter to high point on cul-de-sacs. Paved gutter grade≥.25% (plan) Indicate location of all inlets, size & type. (plan) Indicate direction of S.D. flow with arrows (plan) Indicate all handicap ramps & driveway aprons/ramps STREET LIGHTS (plan) cobra lights on collector & arterials. Decorative lights on local unless otherwise approved by City Engineer. For distances- see city std. (plan) street lights will not obstruct sidewalk. When the sidewalk is monolythic, lights should be located 18" from back of sidewalk (not curb). Where sidewalks meander, the lights should be placed 18" from back of curb in those areas to be planted. ALL LIGHTS SHOULD HAVE VANDAL PROOF COVER. (plan) show pull box location & std when not located adjacent to pole. (plan) service points & conduit location **SEWER** (plan & profile) ex. & proposed location, type, size, length, slope, materialnoted on plan. Check Master Sewer Plan for major line sizing. Manholes ≤ 500' apart. Service to each new lot. Stub-outs for future hook-ups, extension as appropriate. See General Plan & Specific Area Plans. Min. slopes = 6" line= .50% 8" line= .34% 10" line= .25% 12" line= .20% (plan & profile) manholes/cleanout numbers& elevations must match (profile) min. (horizontal) distance between water & sewer= 10' min. (vertical) distance between water & sewer = 4' (unless schedule C-900, class 200 pipe used and/or sewer enclosed in concrete) (profile) min. cover = 4' (plan and profile) clear delineation of public & private (plan & profile) With arrows, indicate direction of flow (plan & profile) ex. & proposed grades, inverts, slopes (plan & profile) manholes numbered concurrently STORM DRAINAGE (plan) Check Master Storm Drainage Report for size, location of major lines & ponds.

DEGREES UNLESS EXPRESSLY APPROVED BY THE CITY ENGINEER.

(plan & profile) Indicate ex. & proposed location, type, size, length, slop invert, elevation of flowlines, materials. If ex. is to be removed, it should marked, "TO BE REMOVED."	pe, be
(plan & profile) manholes/cleanouts @ ≤500' intervals. Avoid 90 degr curves. When needed, use cleanout. For lines ≥ 48", use 60" manhole (plan & profile) Indicate direction of flow with arrows.	ee
(profile) Where utilities cross, clearly illustrate(plan & profile) for proposed above ground changes to ex. conditions and construction of pond, clearly illustrate top and toe of slope, use topograp contours at 6" (or an appropriate) interval, for channels, canals indicate propose slope of flowline, min. distance from top of slope to property line ≥ 15'.	hic
MAILBOXES	
(plan)Indicate proposed locations for gang mailboxes. Must not obstrusidewalk. If located on collector or arterial street, must include pull-up w transition for two cars.	
WATER	
(plan & profile) indicate ex. & proposed lines, size, type/material, & length(plan) indicate individual hook-ups, valves, valve sizes, valve boxes(plan) indicate location of fire hydrants per Fire Chief designation and control std. Must not obstruct sidewalk & must have concrete pad	
TRAFFIC, SIGN, & PAVEMENT MARKING PLAN	
(plan) indicate all street signs and traffic signs. Street signs in accordance with c	city
std, traffic signs in accordance with MUTCD	8.11
(plan) indicate all pavement markings in accordance with city std. & MUTCD. pavement markings must be thermoplastic	All
(plan & notes) min. pavement marking thickness .06" for stripes, .10" for markings	
TRAFFIC DETOUR PLAN  (plan) clearly indicates routes to be used during construction. The routes must	ha
approved by the Director of Public Works or his designee.	DC
LANDSCAPE PLAN (WITHIN R.O.W.)	
(plan) all proposed plants (including size) from the city approved list	
(plan) planting must adhere to city approved stds	
TREES  Root barriers when ≤ 10' from any paved surface	
w/l medians when median≥ 16' wide	
planted at intervals between 30-50'	
planted no closer than 30' from intersections & street lights	
planted no closer than 10' from other above ground utilities	
SHRUBS  If planted w/l 30' of intersection mature height ≤ 36"	
VINES	
Must be planted at 5' o.c. intervals along all fences & walls	
IRRIGATION PLAN (WITHIN R.O.W.)	
(plan) must include Rainmaster controller	
(plan) check with Public Works supervisor about line pressure. If needed, requ	ire
booster pump. (plan) line size, head distribution should be checked by Greg Ireland, city consulta	an+
(plan) line size, head distribution should be checked by Greg freiand, city consults (916-1984)	ai il
(plan) all above ground equipment must be covered by locked, vandal-proof cage	
(plan) S.D. flow should be away from above-ground equipment	