Case Study \#1:
1 acre property - 43,560 sf
30\% canopy cover goal for Commercial/Freeway Typology 13,068 sf ( $43,560 \times .3=13,068$ )
300 classified inches of protected trees removed
No trees preserved which would have aided in meeting canopy goal cover
Ways to mitigate in SDI:

1) Number of Legacy Trees needed if used for complete mitigation:

Large (1200 sf) = 11 (13,200 sf canopy cover), or
Medium ( 750 sf ) = 18 ( 13,500 sf canopy cover)


1 block = 1 acre = 43,560 sf. Grid represents 64 acre area.
2) Combination Legacy and other trees used in landscape.

- Plant 5 Large Legacy trees ( $5 \times 1200=6,000 \mathrm{sf}$ )
$6,000 \mathrm{sf} / 13,068 \mathrm{sf}=.46$ or $46 \%$ of the $30 \%$ canopy cover goal provided
300 classified inches x. $46=138$ inches mitigated
$300-138=162$ inches remaining to complete mitigation
- 11-3" caliper trees planted to meet Site Tree Requirement of 11 site trees
(11 trees x 3 inches $=33$ inches)
162-33=129 inches left to mitigate
129 inches $\mathrm{x} \$ 193$ = \$24,897 to Reforestation Fund to complete mitigation

Case Study \#2
Site assumptions:
8 acre property - $\mathbf{3 4 8 , 4 8 0} \mathbf{~ s f}$
30\% canopy cover goal for Commercial/Freeway Typology 104,544 sf
2,400 classified inches of protected trees removed No trees preserved which would have aided in meeting canopy goal cover

Ways to mitigate in SDI:

1) Legacy Trees needed if used for complete mitigation:


Development Impact Area
Preserved Trees on Property
Protected Zone (FP, escarpment)

- Large (1200 sf) $=88$ (105,600 sf canopy cover),
- Medium (750 sf) = 140 ( $\mathbf{1 0 5 , 0 0 0 ~ s f ~ c a n o p y ~ c o v e r ) ~}$

2) Combination Legacy and other trees used in landscape.

Site Tree Requirement (Landscape) = 87 site trees

Case Study \#3:
32 acre property - 1,393,920 sf 29 acre development impact area $30 \%$ canopy cover goal - 418,176 sf (9.6 acres) 9,600 classified inches of protected tree removal Legacy Trees to complete replacement:

- Large ( 1200 sf ) $=349(418,800 \mathrm{sf})$,
- Medium ( 750 sf ) $=558$ ( $418,500 \mathrm{sf}$ ), or
- Combination Legacy and other landscape trees.

Site Tree Requirement (Landscape) $=348$ site trees Protected Zone not included in calculations.

## Scenario:

Preserved 130,680 sf of tree canopy (3 acres) (accounts for 3,000 " of reduction) $418,176-130,680=287,496$ sf needed to complete. 287,496 / $1200 \mathrm{sf}=$ equivalent of $\underline{240 \text { Legacy trees. }}$

Planted 200 large Legacy trees (240,000 sf canopy)


1 block $=1$ acre $=43,560$ sf. Grid represents 64 acre area.
9,600 inches are after tree classification of survey.
 $130,680+240,000=370,680$ sf canopy $=88.6 \%$ of goal. $9,600 \times 88.6 \%=8,509$ " ( $1,090^{\prime \prime}$ remaining).
Planted 363 trees @ 3" average in total (all trees) = 1,090" planted.
All required tree replacement is completed in landscape.

Case Study \#4:
64 acre property $-2,787,840$ sf 46 acre development impact area $30 \%$ canopy cover goal - 836,352 sf (19.2 acres)
19,200 classified inches of protected tree removal Legacy Trees to complete replacement:

- Large (1200 sf) $=697(836,400 ~ s f)$,
- Medium ( 750 sf ) $=1,116$ ( $837,000 \mathrm{sf}$ ), or
- Combination Legacy and other landscape trees. Site Tree Requirement (Landscape) $=\underline{697}$ site trees


## Scenario:



Preserved $784,080 \mathrm{sf}$ of tree canopy ( 18 acres) (accounts for 18,000 " of reduction) Preserved additional trees within the DIA. $836,352-784,080=52,272$ sf needed to complete. 52,272 / $1200 \mathrm{sf}=$ equivalent of 44 Legacy trees or other preserved trees in the DIA.

Planted 44 large Legacy trees ( 52,800 sf canopy)
Planted trees to meet mandatory landscape requirements, with 44 Legacy trees included.
All required tree replacement is completed in preserved trees and landscape.


697 Legacy trees is equivalent of $836,400 \mathrm{sf}$ (19.2 acres) of landscape area.

