

PLANTING HIGH VISIBILITY FLOWER BEDS

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Extensive flowerbeds are being used more frequently in today's commercial and residential landscape plantings. Large flowerbeds are used to attract the eye to corporate signs; to highlight entrances to recreational facilities, corporate centers, and shopping centers; to cause a positive psychological impact on the viewer; or to display a company logo or special symbol. To get new ideas, scout around to see what projects have worked for others.

Both the client's needs and the site will greatly influence the bed layout. Symmetrical balance, straight lines, and well-defined edging characterize formal beds. Informal beds generally are more asymmetrical and incorporate free flowing curved lines. Annuals will give continuous color throughout the season. Perennials have a shorter bloom period, but make up for this in the large number of available varieties. Wildflower and naturalized plantings incorporate perennials in the design and are meant to be low maintenance and self-perpetuating.

PLANNING

(6 months in advance is not unreasonable)

1. Select an appropriate site. Choose high visibility locations (main streets, stop signs, entrances). Consider the site's shape and contour; sun, shade, and shadow; water source; drainage; ease of maintenance; formal or naturalized setting.
2. Draw up a budget. Funding for construction and maintenance (and reasonable profit for commercial firms) for these beds may run \$6 or more per square foot.
3. Check topsoil depth and texture. Run soil test for pH and nutrient levels. Premix the organic matter into the soil before testing, if possible, so that it will be included in the tested sample.
4. Design the bed using lines appropriate for the formality and contour of the location. When selecting flowers, consider color, height uniformity, spread, heat and drought tolerance, pest resistance, fragrance, and maintenance requirements. If planning a design, avoid highly complicated patterns.
5. Schedule planting date (generally after last killing frost); order plants. Supplier may need up to 6 months to order seed and get seedlings to transplantable size. Order some extras for replacement of dead or damaged material at transplant or later in the season.
6. Take a "before" photo or digital image now, during planting, and throughout the growing season.
7. Mark bed lines using string and stakes, garden hose, limestone, or other markers to create curved or straight lines. Minimum area: 500 sq. ft.
8. To kill broadleaf and grassy weeds, especially noxious perennials such as bindweed, Canada thistle and multiflora rose, apply glyphosate (*Roundup* or *Kleenup*) according to label directions and wait one or two weeks to be sure of complete kill. If necessary, reapply to control particularly difficult weeds. Wait one week after final spraying before soil preparation.

SOIL PREPARATION

1. Rototill or spade the soil if it's necessary to relieve severe compaction. Remove rocks or other debris. Apply 6 inches sandy loam topsoil (+ or -) and/or 2-3 inches spent mushroom soil or well-rotted manure or compost.
2. Apply slow-release or timed-release fertilizer (such as Osmocote) and limestone according to soil test recommendations.
3. Rototill to incorporate materials to a depth of 6 to 8 inches. Roll or firm the soil lightly to create a smooth planting surface and eliminate rototiller "fluffiness." Do not pack the soil too firmly.

4. Consider using a pre-emergence weed control chemical to reduce labor. Apply according to label directions. Note whether it is pre-plant incorporated or surface-applied after transplanting. If weed control chemicals will not be applied and hand weeding will be especially difficult, consider using a polyethylene weed barrier. Tuck the edges into soil or under landscape ties. Install landscape edging to help prevent soil movement during the transplanting, washing away of mulch during heavy rains, and lawn grass encroachment.

PLANTING

1. Plot the planting design on graph paper. Transfer the design to the prepared soil using string or rope and ice pop sticks or stakes to mark plant placement. It is helpful to color code the sticks to represent different plant species or colors. Vegetable dyes (food coloring) or paints work well to mark the top end of the stick.
2. Insert plants into soil or through the weed barrier. Use a hand or 42-inch bulb planter, a spade or a trowel, or razor knife to pierce the weed barrier at appropriate intervals for plants. A planting grid (a lath grid with holes 6, 9, or 12 inches on center) is useful for proper spacing where a design has not been planned. (225 plants = approx. 2 hr. labor/person)
3. Water thoroughly immediately after transplanting, then twice a week for the first 2 weeks.
4. Apply about 1/2 inch of decorative mulch over the plastic or 2 inches of mulch directly on the soil if no weed barrier is used. Shredded hardwood, woodchips, licorice root, bark chips, and other semi-permanent organic mulches look nice and can eventually be mixed into the soil when they decompose.

MAINTENANCE

1. Maintain regularly (at least once a week): water, weed, pinch back, deadhead, remove litter, and replace dead/damaged plants.
2. Apply topdressings of fertilizers and applications of pest control as needed. Compost or manure tea and water-soluble nutrient sources are easier to apply than granular materials in established plantings.
3. Take more photographs. Plan corrections and improvements for future beds.
4. Remove fading or frost-damaged annuals in fall. Plant bulbs for spring color. Plant flowering kale or cabbage or pansies for color that extends into winter. Cover the bed with evergreen branches to prevent erosion and to look attractive for winter.

DESIGN COMBINATIONS FOR HIGH VISIBILITY ANNUAL FLOWER BEDS

To create distinctive beds, try any of the following or experiment with other combinations. Base choices on growing conditions, including availability of water and sun, and on client's requirements. When choosing two or more colors of one species, use plants from the same "series" for uniformity of bloom, height, and form. For example, the "Accent" series of impatiens includes Accent Red, Accent White, Accent Orange, Accent Rose, Accent Violet, and Accent Coral and are available individually. Mixes are random assortments of color within seed packets or flats, but plants are generally the same size. There are other genera and species of bedding plants available under individual variety names, but are not part of a mix or do not come in a variety of colors. Catalogs are a good source of availability.

"Series" The following are some of the available flower series and mixes.

Begonia-green foliage:	<i>Varsity series, Super Olympia series</i>
Begonia-bronze foliage:	<i>Rio series, Cocktail/Sunbelt series, Ambra series</i>
Celosia (crested or cockscomb)	<i>Chief series, Jewel Box mix</i>
Celosia (plumed)	<i>Century mix or series, Geisha mix or series</i>
Flowering cabbage	<i>Tokyo series</i>
Flowering kale	<i>Nagoya Formula mix, Peacock series</i>
Geranium (zonal)	<i>Elite series, Multibloom series, Orbit series or mix</i>
Gomphrena	<i>Gnome mix</i>
Impatiens:	<i>Accent series, Carousel series, Impact series, Mosaic series, Cinderella series, Princess series, Super Elfin series, Swirl series mix</i>
Lobelia (compact)	<i>Riviera series</i>
Lobelia (trailing)	<i>Fountain mix, Regatta mix</i>

Marigold (American and African types):	<i>Antigua series, Crush series, Discovery series, Galore series, Inca series, Lady series</i>
Marigold (French types):	<i>Aurora series, Bonanza series, Boy series, Hero series, Janie series, Safari series</i>
Mimulus (Monkey flower)	<i>Calypso mix, Mystic mix</i>
Nicotiana:	<i>Domino series, Nicki series or mix, Saratoga series</i>
Pansy (small flower)	<i>Universal Plus series, Majestic series, Springtime series</i>
Pansy (med. flower)	<i>Accord series, Crystal Bowl series, Fama Series, Joker series</i>
Pansy (large flower)	<i>Bingo series, Carolina Giants mix, Imperial series, Swiss Giant series</i>
Pentas	<i>New Look series</i>
Petunia (single trailing)	<i>Wave series</i>
Petunia (floribunda)	<i>Celebrity mix</i>
Petunia (multiflora):	<i>Joy series, Primetime series</i>
Petunia (grandiflora):	<i>Daddy series, Flash series, Hulahoop series, Picotee series, Supercascade series, Supermagic series, Ultra series</i>
Salvia (dwarf):	<i>Carabiniere series, Dress Parade mix</i>
Salvia (med, tall)	
Snapdragon:	<i>Floral Carpet series and mix, Rocket series and mix,</i>
Vinca:	<i>Cooler series, Heat Wave series, Little series, Carpet series, Pacifica series, Tropicana series</i>
Zinnia (dwarf):	<i>Dasher mix, Dreamland mix, Peter Pan mix, Short Stuff mix, Thumbelina mix</i>
Zinnia (medium to tall):	<i>Cactus flowered mix, Giant Dahlia flowered mix, Lilliput mix, Pumila Sprite mix, Ruffle series, Small World series</i>

The following combinations have been tried (some combinations are from trials of the Western Pennsylvania Conservancy in Pittsburgh) and should create successful bed areas. Select taller plants for informality, compact plants for greater formality, contrasting or harmonious colors for interesting effects.

ONE COLOR - ONE SPECIES

Toreador or Century celosia

Forest Fire salvia

Purple wave petunias

TWO COLORS - ONE SPECIES

Scarlet Carabiniere salvia + Purple Carabiniere salvia

Century Fire celosia + Century Yellow celosia

Olympia White begonias + Olympia Red begonias

ONE COLOR - TWO SPECIES

White salvia + dusty miller

Pink nicotiana + pink vinca or begonia

TWO COLORS - TWO SPECIES

Orange or yellow marigolds + red salvia or celosia

White cleome surrounded by red salvia or bronze-red begonias

Forest Fire celosia + white petunias or white vinca

Celosia + dusty miller

Red salvia + white vinca

Dark Opal basil + Pink Supermagic petunias or Scarlet Carabiniere salvia

Victoria Blue salvia + Yellow Boy marigolds

MULTIPLE SPECIES - MULTIPLE COLORS

(Combinations for logos, patterns, informal beds)

Blue Victoria salvia + Red Carabiniere salvia + White Supermagic petunia + ageratum

Red salvia + Yellow Boy marigold + ageratum + parsley

Heliotrope + red nicotiana + white alyssum + yellow gazanias