



WESTMINSTER

Staff Report

TO: The Mayor and Members of the City Council
DATE: May 12, 2004
SUBJECT: Study Session Agenda for Monday, May 17, 2004
PREPARED BY: Steve Smithers, Acting City Manager

Please Note: Study Sessions and Post City Council meetings are open to the public, and individuals are welcome to attend and observe. However, these meetings are not intended to be interactive with the audience, as this time is set aside for City Council to receive information, make inquiries, and provide Staff with policy direction.

Looking ahead to next Monday night's Study Session, the following schedule has been prepared:

A light dinner will be served in the Council Family Room 6:00 P.M.

CONSENT AGENDA

None at this time.

CITY COUNCIL REPORTS

1. Report from Mayor (5 minutes)
2. Reports from City Councillors (10 minutes)

PRESENTATIONS

1. Lobbyist Update (Verbal)
2. Skatepark Plan Overview
3. Revised Landscape Regulations (Attachment I) (Attachment II)

6:30 P.M.

EXECUTIVE SESSION

1. Land Negotiations (Verbal)
2. Wayne Carle Middle School Agreements
3. Metzger Farm Acquisition (Verbal)

INFORMATION ONLY ITEMS – Does not require Council action

1. Development Review Fee Amendments
2. Batting Cages at City Park
3. Monthly Residential Development Report (Attachment)
4. First Quarter, 2004 Report on Purchase Orders Between \$25,000 and \$50,000 (Attachment)

Additional items may come up between now and Monday night. City Council will be apprised of any changes to the Study Session meeting schedule.

Respectfully submitted,

Stephen P. Smithers
Acting City Manager



WESTMINSTER

Staff Report

City Council Study Session Meeting
May 17, 2004



SUBJECT: Skatepark Plan Overview

PREPARED BY: Becky Eades, Landscape Architect II

Recommended City Council Action:

City Council is requested to review the attached Skatepark Master Plan and direct Staff to proceed with bidding the project out.

Summary Statement

- The following funding sources have been secured for the skatepark project:
 - \$50,000 grant from Great Outdoors Colorado (GOCO)
 - \$120,000 from the Jefferson County Open Space Joint Venture Grant Program
 - \$75,000 from the 2002 Carryover Revenues
 - \$50,000 in the Capital Improvement Project Program
- A total of \$295,000 is available for the skatepark construction.
- Three public meetings were held with area skateboarders, in-line skaters, and BMX bikers at the City Park Recreation Center. Approximately 60 future skatepark users attended these meetings.
- The proposed attached master plan is a direct result of the input received from the future skatepark users at these meetings and accommodates both vertical (“vert”) and street skaters.
- Based on preliminary cost estimates and the current project funding, a shade shelter will be constructed in a later phase.
- Construction on the skatepark is expected to begin in the summer of 2004, with completion anticipated in fall of 2004.

Expenditure Required: \$295,000

Source of Funds: \$125,000 CIP funding
\$170,000 grant funding

Policy Issue

Does the City Council wish to adopt the skatepark master plan as shown in the attached site plan?

Alternative

- Council could direct Staff to revise the master plan to focus on only one user group or to revise the scope of the project. Staff doesn't recommend this option as there was unanimous support for this combination at the public meetings.
- Council could choose to not move forward with a public skatepark at this time. Staff does not recommend this option as there have been numerous public requests for a skatepark within Westminster, and the privately owned Van's Skatepark is now out of business. Additionally, \$170,000 in grant funding has been secured for this project. If this project were not to go forward, the City would forfeit those funds.

Background Information

The City Park Master Plan originally proposed building a skateboard facility at City Park. However, when Van's decided to build a new indoor facility at the Westminster Promenade, Staff recommended delaying the construction of a new skatepark to avoid competing with Van's, which provided tax revenue to the City. Van's now has closed its doors and has gone out of business. This action has created an even greater demand for a public skateboard park in Westminster.

A series of three public workshops were held at City Park, and approximately 20 skaters participated in each workshop. The first meeting was held on March 2, 2004. The purpose of this meeting was to obtain information about the City's local skaters, such as age, where they now skate, how they get there, what type of skater they are, and their likes and dislikes about other existing skateparks. This meeting included a brainstorming session on what the City's skatepark should be like. It was clear at this meeting that two different types of skater groups were represented; vertical ("vert") and street skaters. "Vert" skaters prefer to skate deep bowls, while street skaters prefer to skate on obstacles that replicate elements found in the environment such as curbs, ramps, benches, etc.

At the second meeting, held on March 30, 2004, the skaters were shown five options for the Westminster skatepark and asked to vote on which option, or combination of options, they preferred and to mark up the plans with any suggestions. This meeting was very productive, with all participants selecting the same combination of options with some minor revisions at the meeting's conclusion. At this meeting, Staff observed skaters who didn't know one another working and brainstorming together to produce a better design.

For the third meeting, held on April 13, 2004, one final conceptual master plan was shown, and the attendees were asked to comment on the details of the plan, such as how high a grind rail should be. The conceptual master plan was well received by both the "vert" skaters and the street skaters.

The skatepark will be constructed primarily of concrete with steel edging. Due to the difficult nature of this work, contractors will be pre-qualified and the project will be bid out following the City's purchasing ordinance.

Respectfully submitted,

Stephen P. Smithers
Acting City Manager

Attachments



WESTMINSTER

Staff Report

City Council Study Session Meeting
May 17, 2004



SUBJECT: Revised Landscape Regulations

PREPARED BY: Terri Hamilton, Planner III

Recommended City Council Action:

Due to the volume of material presented this Staff Report is being provided one week early. It will be presented for your consideration at the May 17 Study Session. City Council is requested to review the revised Landscape Regulations and direct City Staff bring this item back for official adoption in late June.

Summary Statement

The City of Westminster adopted comprehensive Landscape Regulations in 1997. The revised Landscape Regulations as proposed reflect significant modifications in the area of water conservation, a revised format for posting on the City's web site, as well as additions and amendments to the Regulations regarding various aspects of landscape design, which are used by City Staff in the review and evaluation of landscape plans. Attachments to this Staff Report include a summary of the proposed revisions to the Landscape Regulations, a summary of Single Family Detached requirements, and a copy of the existing Regulations with proposed changes.

This Staff Report and attachments are being sent out a week earlier than usual to provide City Council with adequate time for review prior to the scheduled discussion of this item at the May 17 Study Session.

Expenditure Required: \$34,213 for September – December 2004
\$103,678 for 2005

Source of Funds: Utility Fund

Policy Issues

1. Should City Council direct City Staff to proceed with the approval process for the revised Landscape Regulations?

The attached summary and revised Landscape Regulations indicate the proposed revisions. City Staff hopes to address any desired modifications requested by City Council and/or other entities and proceed with approval of the revised Landscape Regulations early this summer. If desired modifications are significant, approval of the revised Landscape Regulations will most likely occur in late summer/early fall. Staff recommends that the regulations take effect September 1, 2004, if the revised regulations are adopted.

City Staff would like to share the draft of the revised Landscape Regulations with future applicants for new development projects so new development projects are prepared to incorporate increased water conservation measures in their landscape design. The revisions will be best received if developers are made aware of the pending revisions and encouraged to reflect the proposed water conservation measures. Several municipalities have already made similar modifications in their Landscape Regulations. Therefore, the development community and their consultants should already be familiar with similar approaches to landscape and irrigation design.

2. Does City Council support additional City Staff to implement the revised Landscape Regulations?

In order to implement the new regulations two additional positions are proposed. The proposed positions will be paid from the Utility Fund. These positions are:

- a. Landscape Architect II: This position is critical to implementation of the proposed Landscape Regulations. The revised regulations will require expertise regarding review of landscape design, irrigation design, plant materials, and additional field inspection and written agreements in order to implement numerous, detailed, water conservation measures. This position will be part of the development review process, construction plan review including field inspection, and will also interface with the Department of Public Works and Utilities regarding the use of non-potable water where possible in the landscape. Without this position, it will not be possible for the City to evaluate development review and construction documents to ensure the design of the landscape is incorporating the measures necessary to promote water conservation.
- b. Official Development Plan Inspector: This position is critical to implementation of the proposed Landscape Regulations. This position will be responsible for review of landscape and irrigation design, field inspection and written agreements. This position will be part of the development review process, construction plan review including field inspection, and will interface with the Department of Public Works and Utilities regarding the use of non-potable water where possible in the landscape. This position is responsible for ensuring that all private improvements, including landscaping, be installed according to City requirements.

Numerous new requirements for increased water conservation are proposed in the revised Regulations such as: design using hydrozones (three different plant and irrigation zones, based upon watering requirements), identification of plant groups based upon hydrozoning, development of a water budget (a limited, quantified amount of irrigation allowed per irrigation season), limitations of high hydrozone use in non-residential development, additional landscape and irrigation plan requirements, additional verification requirements for soil preparation (amounts to be reflected on landscape plans, certification of installation affidavits, and site inspection), etc. These new requirements will necessitate experienced, knowledgeable Staff to implement.

Without additional Staff to review landscape and irrigation plans for implementation of the proposed water conservation measures and to ensure plans are being followed during construction with field inspections, implementation and enforcement of added requirements in the Landscape Regulations would not be possible. Unlike some other jurisdictions, Westminster does not have a Landscape Architect whose primary responsibility is to review landscape and irrigation plans. Planners and one existing ODP Inspector currently share various responsibilities regarding review and implementation of the existing Landscape Regulations. For instance, past experience regarding soil preparation has indicated that without field inspection, soil preparation is frequently overlooked during construction.

3. Should the City allow artificial turf as proposed?

The revised Landscape Regulations would generally prohibit artificial turf except for use in single-family detached yard areas not adjacent to a street. Other exceptions that are proposed to be considered by the City would be on a case-by-case basis for sports fields or other limited applications. The existing Landscape Regulations do not address artificial turf. Over the past two years, with the ongoing drought, there have been a few requests for artificial turf. Various jurisdictions are handling this issue differently: Arvada, Thornton, Boulder, Broomfield, Lakewood generally prohibit its use; Aurora allows it in limited application and may allow increased use; and Denver allows some use. While limiting artificial turf to rear yards, it may be visible from abutting yards that could be opposed by neighbors. Also, artificial turf requires periodic cleaning especially during dry spells to maintain its appearance.

4. Should the City allow an option in parking lot landscape design to allow for increased parking areas without landscaped medians and shade trees, in exchange for fewer but larger landscaped medians?

Current Landscape Regulations require a landscape median/strip in between every three (can be double) rows of parking spaces. These medians are generally landscaped with shade trees for aesthetic and cooling benefits. The revised Regulations would allow an option of a wider landscape median incorporating a pedestrian walkway (with no loss in overall landscape area) to occur every six rows of parking spaces. This option will increase visibility to buildings from adjacent roadways, provide for a wider landscape median including a walkway through the parking lot for pedestrian linkages to pad sites and parking areas located further away from storefronts, provide for increased protection of plant materials within parking lots, and further water conservation efforts with increased efficiency in irrigation. This revision does not preclude providing a landscape median every three rows of parking, but adds a second design option for landscape design within the parking lot interior.

5. Should the City not require a minimum amount of landscape area for single-family lots in rear (and side) yard areas not adjacent to a street?

The existing Landscape Regulations are currently interpreted to require landscape area in yard area that is not driveway, walkway, deck, etc. The revised Regulations specify an actual amount of minimum landscape area as 50% of the yard area adjacent to a street. Remaining yard area not landscape area must be hardscape (parking, sidewalk, deck, stone, mulch). Yard area not adjacent to a street is proposed to not have a minimum landscape area requirement and to be any combination of hardscape, landscape, mulch, or artificial turf. This revision is similar to that of a number of jurisdictions.

Alternatives

1. Should City Council direct City Staff to proceed with the approval process for the revised Landscape Regulations?

Three alternatives are suggested:

- Proceed with the adoption of the revised Landscape Regulations and any minor revisions thereto.
- Do not revise the Landscape Regulations and to try to negotiate additional water conservation measures and design items - this is what City Staff does now. The existing Regulations along with negotiation by City Staff have resulted in landscape design that incorporates some water conservation measures. Additional water conservation measures are options that the private sector can use now. However, without significant interest in the long-term benefit of water savings, these options that require additional design time and effort as well as up front cost, are generally not chosen. Therefore, because the City is interested in the long-term benefit of water savings, this alternative is not recommended.
- Delay the approval process for the revised Landscape Regulations to allow for significant revisions to what is currently proposed. Significant revisions would result in a somewhat delayed approval schedule in order to incorporate numerous changes. Depending on the extent of the changes, adoption could be delayed until late summer or early fall.

2. Does City Council generally support an impending request for additional City Staff to implement the revised Landscape Regulations?

There are four alternatives to not adding experienced Staff to implement and enforce the numerous revisions to the Landscape Regulations.

- Proceed with the revised Regulations and pursue the request for additional Staff to implement them. This will ensure that landscape and irrigation design and construction occurs as required.
- Do not revise the Regulations and maintain the status quo. (Refer to the second alternative in No. 1 above.)
- Proceed with the additional requirements and have existing City Staff implement and enforce as best they can, acknowledging existing City Staff does not have the necessary expertise and time to be thorough in this endeavor. This will add more workload and lengthen the review process of new developments.
- Direct City Staff to pursue outsourcing of landscape and irrigation design, and field checks, with additional cost to the developer through implementation of new fees for these services. This will also add a significant amount of work and cost to administer.

None of these alternatives are recommended, excepting that of proceeding with the revised Regulations and the additional Staff to implement them, because the other alternatives either do not ensure the desired water savings, or cause delays in development review process and increased workload by City Staff.

3. Should City Council allow artificial turf in single-family lots as proposed?

There are several alternative approaches to regulation of artificial turf:

- Allow artificial turf as proposed in the revised Landscape Regulations. This approach would allow artificial turf in single-family yard areas not adjacent to a public street, and as approved by the City on a case-by-case basis for sports fields and other limited applications. Artificial turf in these yard areas may still be somewhat visible from the street depending upon building setbacks and fencing.

- Further restrict any use of artificial turf by prohibiting its use except as approved by the City on a case-by-case basis for sports fields and other limited applications. Interest in artificial turf has been minimal. Therefore, prohibiting its use in backyards is not a major issue for residents.
- Allow a greater use of artificial turf beyond what is proposed in the revised Landscape Regulations. Staff believes that this could generate opposition from residents who may not like artificial turf.

City Staff supports allowing limited use of artificial turf as proposed in the revised regulations.

4. Should City Council allow an option for fewer, but larger, landscape islands in parking lots?

- Allow a second design option for fewer, but larger landscape islands as proposed in the revised regulations. This allows two landscape design options for parking lot landscaping without any overall reduction of landscape area. One design, currently required, is to provide a landscape median every three rows of parking. A second design option, proposed, is to provide a landscape median every six rows of parking.
- Do not provide a second design alternative regarding the provision of landscape medians within parking lots. This maintains the status quo of requiring a landscape median every three rows of parking.
- Require all parking lots to provide landscape medians every six rows of parking as a new standard.

City Staff recommends allowing the two alternative design options as proposed within the revised Regulations. Both options provide visual and environmental relief within parking areas, while providing design flexibility.

5. Should City Council not require a minimum amount of landscape area for single-family lots in rear (and side) yard areas not adjacent to a street?

Two alternatives are suggested:

- Do not require a minimum amount of landscape area for rear or side yard areas not adjacent to a street for single-family lots, as proposed by the revised Regulations. This allows for any combination of landscape area, hardscape area (deck, patio, sidewalks), mulch or artificial turf in these yard areas. (Yard areas adjacent to a street will be required to provide a minimum of 50% as landscape area.)
- Require a minimum landscape area in the rear yard areas within single-family lots. This alternative would continue to specify a minimum landscape area of 50% of yard areas adjacent to a street, but also require a minimum (25% suggested) of landscape area for rear yard areas not adjacent to a street. (Side yard areas not adjacent to a street could still be exempt from a minimum landscape requirement.) This alternative would preclude the possibility of a rear yard with very little to no landscaping.
- City Staff recommends not regulating the amount of landscape area in rear yards not adjacent to a street, as proposed by the revised Regulations. This approach allows maximum design flexibility within these yard areas, while providing minimum landscape area in yard areas most visible to the public. The existing Landscape Regulations do not specify a minimum amount of landscape area and require clarification in this regard.

Background Information

In 1997, City Council adopted comprehensive Landscape Regulations to address requirements for landscaping. These regulations provided direction regarding landscape design and construction;

established parameters for minimum landscape area and plant materials for the various types of land uses; provided for the preparation of landscape and irrigation plans; provided a list of recommended plant materials (including those plants that can thrive with lowered water requirements), described and encouraged “xeriscape” (water conservation); required the ongoing maintenance of landscaping; and detailed warranty procedures for the installation of landscape improvements during the construction process.

The existing Landscape Regulations address “xeriscaping,” a landscape approach developed in Denver in response to water shortages that refers to an attractive landscape that uses little supplemental water. Xeriscaping involves seven water conservation principles: design, irrigation, soil preparation, mulch, appropriate use of turf, use of low water plants, and maintenance. The existing Landscape Regulations require irrigation, soil preparation, mulch, and long-term maintenance of the landscape. The revised Regulations now address design (both of the landscape and of irrigation), appropriate use of turf, and use of low water plants as requirements instead of options. This is in direct response to the ongoing drought in Colorado and the desire to use water resources more efficiently.

Numerous jurisdictions are in the process of revising, or have recently revised their Landscape Regulations to better address water conservation. City Staff has reviewed numerous regulations, including a state sponsored “Model Landscape Ordinance” to obtain ideas and provide a context for proposed revisions to Westminster’s Landscape Regulations. The Department of Community Development; Department of Parks, Recreation and Libraries; and Department of Public Works and Utilities have worked together to prepare the revisions proposed. The Revised Landscape Regulations have been sent to the Home Builders Association of Metropolitan Denver, the Metro North Chamber of Commerce, the Association of Landscape Contractors of Colorado (ALCC), several developers who have built projects in Westminster, and the Westminster Business Advisory Group for review and input. At the time of this writing, City Staff has had one response from the ALCC that was complimentary to the Regulations as a whole, but suggested better enforcement of long-term maintenance related to water conservation. City Staff gave a brief presentation at a meeting of the MetroNorth Chamber of Commerce where the response was favorable. Two members had questions and several concerns. One concern was having any additional step that affected the timing of a project, a second concern was finding consultants who are knowledgeable, and other concerns/desires related to desires for additional attention and assistance in landscape design by City Staff. No other formal responses have been received. City Staff is scheduled to present the revised Landscape Regulations at the May 19th meeting of the Westminster Business Advisory Group. City Staff will inform City Council of comments received and any subsequent revisions to the Regulations.

Respectfully submitted,

J. Brent McFall
City Manager

Attachments

- Summary of Revisions
- Revised Landscape Regulations

SUMMARY OF REVISIONS TO LANDSCAPE REGULATIONS, 2004

May 17, 2004

The following list identifies primary changes to the 1997 Landscape Regulations, in the order they appear in the regulations. The most significant changes proposed in the 2004 Regulations are intended to result in landscape and irrigation design that incorporates water conservation measures. The proposed regulations also incorporate various criteria the City has historically used in the review and evaluation of landscape plans.

The 2004 Regulations have been re-formatted and re-written. Text that has been re-written or added is in all caps. New requirements that Staff believes to have the greatest impact and interest are identified below, according to their sequence within the 2004 Regulations.

1. Section I: Statement of Intent: Efficient use of water resources is now identified as a purpose of the Landscape Regulations. This intent has significant impact throughout with new requirements for landscape and irrigation design.
2. Section III: Adjustment of Requirements: Criteria and process for adjustment to the requirements has been added.
3. Section V: Considerations in Landscape Design:
 - Water conservation in design, i.e. “Xeriscaping” is explained and now required in all landscape design.
 - Included in Xeriscaping is the requirement to design and group plants by their water needs- “hydrozoning.” Three zones, high, moderate, and low are identified.
 - A maximum water budget, an average of the various water applications, for the landscape irrigation season is required not to exceed 15 gallons or 24 inches of irrigation per square foot of landscape area. (This is less than a design with all bluegrass that would need 18 gallons or 29 inches/SF.)
4. Section VI: General Landscape Provisions for Plant Materials and their Design and Installation:
 - The City will require written verification of the amount of soil amendment installed.
 - Soil amendment must be installed in all portions of the single-family lot that can be landscaped- prior to certificate of occupancy. Installation will be the responsibility of the developer of the lot and verification must be provided to the City regarding the amount of soil amendment installed.
 - Diversity in trees will be required by type of tree (evergreen, shade, ornamental) and a maximum amount of any one species.
 - High hydrozones (bluegrass) will be limited to 50% of non-residential landscape areas (right of way excluded).
 - The City will consider artificial turf for facilities such as sports fields.
 - Artificial turf may be used by resident homeowners of single-family detached or duplex lots in yard areas not adjacent to a street.
 - Alternative turf to bluegrass is recommended in areas not subject to regular pedestrian or canine foot-traffic.
 - Alternative turf, if commercially available as sod, must be installed as sod, except for resident homeowners of single-family detached or duplex lots who can

seed. (Sod reduces weed problems) Other alternative turfs, not commercially available as sod, may be installed by seeding.

- A previous requirement that 50% of the landscape area be turf has been eliminated.
- A two-year warranty period is required for turf installed by seed (landscaping by SFD and Duplex resident homeowner exempt).

5. Section VII: Residential Landscape Standards:

- Redefine the required landscape area for SFD lots as a minimum of 50% of each yard area adjacent to a street. Remaining yard area not landscape area must be hardscape. Yard areas not adjacent to a street have no minimum amount of landscape area and can be any combination of landscape area, hardscape, mulch or artificial turf.
- Clarify that automatic irrigation is required for all landscaping, including SFD by homeowner. (this is not a new requirement.)
- Add a requirement for local street right of way: 1-shade tree/80 linear feet with turf, groundcover or shrubs.
- A 6-foot height berm with a 6-foot height fence or wall will be required to be built by the developer of residential development that is adjacent to an arterial street or highway.

6. Section VIII: Right of Way Landscape Standards:

- Clarify that the requirement to landscape and maintain adjacent ROW includes that of US-36 and I-25.
- Clarify that the City will refer landscape design along highway ROW to The Colorado Department of Transportation for comment.

7. Section IX: Parking Lot Landscape Standards:

- Clarify buffering requirements from adjacent streets and properties by grade, berms, or shrub beds.
- Discourage the use of bluegrass and/or berming in landscape islands and medians.
- Allow a design option of fewer, but wider, landscape medians.

8. Section XII: Landscape and Irrigation Plan Requirements:

- Require a checklist (City will prepare form) to be signed by the developer that landscape and irrigation improvements have been installed according to approved plans and City requirements.
- Require irrigation plans to be prepared by a certified irrigation designer. Require a certified irrigation contractor to be responsible for irrigation installation. Require a certified irrigation auditor to conduct the irrigation audit. (Resident homeowner of SFD and Duplex lots exempt.)
- Require landscape and irrigation plans to show and label hydrozones, show plant and irrigation techniques appropriate to the hydrozone, indicate required amount of soil preparation, and water budget information. (Resident homeowner of SFD and Duplex lots exempt.)
- Avoid irrigation overspray onto non-landscape surfaces.
- Require irrigation technique of drip, micro-spray or sub-surface within landscape areas less than 8 feet in width.

- Require water features to be included in the water budget, to use recycled water, and to use non-potable water if possible.
- Require design to take into account a maximum irrigation time limit of 8 hours every other day.
- Require a master shut off valve. (Rain shut off devices are already required.)
- Require design to identify existing water pressure and design pressure and use of pressure reduction valves or sprinkler heads, or booster valves if necessary.
- Require irrigation clock controllers to have capabilities for seasonal adjustment, multiple programs and start times, etc. Controllers, excepting SFD, shall use evapo-transpiration or soil moisture based programming.
- Require sizing of irrigation clock controllers installed by the developer for SFD lots to have capacity for landscape/irrigation zones added by the future homeowner.
- Require minimum acceptable distribution uniformities of 55% for pop-up sprinkler heads or spray zones and 70% for rotor zones, or current irrigation association minimums. (This is an accepted performance/efficiency standard)
- Require verification of a successful irrigation audit. (This ensures the system operates effectively and establishes a watering schedule.)

6. Section XIII: Plant Materials

- Plant materials are broken down into suggested location by type of hydrozone. Plants that are salt tolerant are identified for use with non-potable water. (This section is now separate from the Regulations so it can be updated on a regular basis to reflect current data regarding water usage.)

7. Section XVI: Definitions are added to the Regulations

LANDSCAPE REGULATIONS 2004

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City of Westminster Landscape Regulations (May 2004) 2004 Edition

I. STATEMENT OF INTENT

THE PURPOSE OF THESE LANDSCAPE REGULATIONS IS TO PROVIDE MINIMUM DESIGN, INSTALLATION AND MAINTENANCE CRITERIA FOR LANDSCAPE ELEMENTS. THE CITY OF WESTMINSTER RECOGNIZES LANDSCAPING AS AN IMPORTANT COMPONENT OF QUALITY DEVELOPMENT, RESULTING IN THE ENHANCEMENT OF WESTMINSTER'S CHARACTER AND IMAGE AS WELL AS PROVIDING BENEFITS TO THE PUBLIC SUCH AS, BUT NOT LIMITED TO:

- ENHANCEMENT OF PROPERTY VALUES
- IMPROVEMENT OF AIR AND WATER QUALITY
- REDUCTION OF HEAT, GLARE, DUST AND NOISE
- BUFFERING OR FRAMING VIEWS
- PROVISION OF WILDLIFE HABITAT AND LIVING ENVIRONMENT
- SEASONAL INTEREST AND VISUAL ENHANCEMENT
- EFFICIENT USE OF WATER RESOURCES

~~The City recognizes that landscaping is an important component of quality development and that the desirability of living and working in the City is increased by enhancing the appearance of residential, commercial and industrial areas of the City. Additionally, the City recognizes that landscaping can be used to improve air quality, reduce dust, act as a noise buffer, visually facilitate traffic flow and access and mitigate the impact of otherwise incompatible uses which abut each other. The purpose of these standards is to assist in the development of quality plans and proposals, encourage quality development in the City, and generally promote the health, safety and welfare of the City's inhabitants.~~

II. APPLICABILITY

These Landscape Regulations have been adopted by ~~Councillors' Bill #~~. THE WESTMINSTER CITY COUNCIL. ALL AREAS TO BE LANDSCAPED SHALL INCORPORATE THE REQUIREMENTS HEREIN. ~~As adopted by the Councillor's Bill~~, Enforcement of the regulations shall be as provided in Section 1-8-1 of the Westminster Municipal Code.

~~City Staff is authorized to require landscaping in new development and re-development projects. Landscaping and irrigation are also required if there is any change in use as determined under the principal permitted uses listed for the individual zone district or on the Preliminary Development Plan. When a change in use occurs which involves an Official Development Plan, Amendment to an Official Development Plan, or Official Development Plan Waiver, the site should be brought up to current development standards, whenever possible and within reason. Final landscape and irrigation drawings in accordance with an approved Official Development Plan shall be submitted to the City prior to beginning construction of any landscape areas.~~

LANDSCAPING WILL BE REQUIRED ACCORDING TO THE LANDSCAPE REGULATIONS IN INSTANCES AS FOLLOWS:

- IN NEW DEVELOPMENT

- IN REDEVELOPMENT, EXCEPT IN CASES WHERE THERE IS NO MODIFICATION THAT INCREASES ANY ASPECT OF NON-CONFORMANCE WITH THESE REGULATIONS NOR INCREASE IN HARDSCAPE/BUILDING AREA OF GREATER THAN 500 SQUARE FEET.
- IN EXISTING DEVELOPMENT WHERE THERE IS AN OFFICIAL DEVELOPMENT PLAN OR AMENDED OFFICIAL DEVELOPMENT PLAN OR OFFICIAL DEVELOPMENT PLAN WAIVER THAT ADDRESSES LANDSCAPING, AND LANDSCAPING IS PROPOSED TO BE MODIFIED FROM WHAT WAS APPROVED.
- IN EXISTING NON-SINGLE FAMILY DETACHED DEVELOPMENT WHERE THERE IS NO OFFICIAL DEVELOPMENT PLAN OR AMENDED OFFICIAL DEVELOPMENT PLAN OR OFFICIAL DEVELOPMENT PLAN WAIVER THAT ADDRESSES LANDSCAPING, AND LANDSCAPE AREA OR MATERIALS IS PROPOSED TO BE MODIFIED. MINOR IMPROVEMENTS WITHIN EXISTING LANDSCAPE AREA OR MATERIALS MUST OCCUR IN A MANNER THAT COMPLIES WITH THE STANDARDS HEREIN OR DECREASES ASPECTS OF NON-CONFORMANCE. LANDSCAPE AREA OR MATERIALS CANNOT BE REDUCED WITHOUT CITY APPROVAL. EXISTING TREES ON THESE PROPERTIES CANNOT BE REMOVED WITHOUT CITY APPROVAL.
- IN EXISTING SINGLE FAMILY DETACHED RESIDENTIAL DEVELOPMENT WHERE THERE IS NO APPROVED OFFICIAL DEVELOPMENT PLAN OR AMENDED OFFICIAL DEVELOPMENT PLAN OR OFFICIAL DEVELOPMENT PLAN THAT ADDRESSES LANDSCAPING, AND LANDSCAPE AREA OR RELATED REQUIREMENTS IS PROPOSED TO BE MODIFIED TO LESS THAN THE STANDARDS HEREIN FOR A NEW SINGLE FAMILY DETACHED LOT.

LANDSCAPE AND IRRIGATION DRAWINGS AND DOCUMENTS RELATED THERETO ARE REQUIRED AS DESCRIBED IN THESE REGULATIONS.

RENTAL HOUSING HAS ADDITIONAL MUNICIPAL CODE REGULATIONS REGARDING LANDSCAPING. REFER TO THE MUNICIPAL CODE AT 11-12-7.

III. ADJUSTMENT OF REQUIREMENTS

THE PLANNING MANAGER IS AUTHORIZED TO ALLOW AN ADJUSTMENT FROM THE STRICT APPLICATION OF THE LANDSCAPE AND IRRIGATION REQUIREMENTS IN CASES THAT INVOLVE PRACTICAL DIFFICULTIES OR UNNECESSARY HARDSHIP, PROVIDED HOWEVER, THAT:

- THE ADJUSTMENT GRANTED IS THE MINIMUM NECESSARY TO ALLEVIATE SUCH PRACTICAL DIFFICULTIES OR UNDUE HARDSHIP UPON THE OWNER OR THE PROPERTY;
- SUCH RELIEF MAY BE GRANTED WITHOUT SUBSTANTIAL DETRIMENT TO THE PUBLIC GOOD AND WITHOUT SUBSTANTIALLY IMPAIRING THE INTENT AND PURPOSE OF THESE REGULATIONS.

IN GRANTING AN ADJUSTMENT, THE PLANNING MANAGER MAY ATTACH REASONABLE CONDITIONS THERETO. THE GRANTING OF ANY ADJUSTMENT

SHALL NOT CONSTITUTE OR BE CONSTRUED AS A PRECEDENT, GROUND OR CAUSE FOR ANY OTHER ADJUSTMENT.

APPEALS FROM THIS SECTION SHALL BE CONSIDERED BY THE PLANNING COMMISSION AND SHALL FOLLOW PROCEDURE AND FEES AS ESTABLISHED BY THE APPROVAL PROCESS FOR OFFICIAL DEVELOPMENT PLANS.

IN THE CASE OF CONFLICT OR LACK OF SPECIFICATION, THE PLANNING MANAGER WILL DETERMINE THE APPROPRIATE REGULATION.

It is recognized that City projects such as parks, street medians or public utility facilities may have unique requirements for landscaping and will be reviewed on an individual basis. To the extent that City projects are similar in nature to private development projects, the Landscape Regulations will apply.

IV. OTHER REFERENCES

Other documents which should be referenced that ~~may~~ ARE ~~be~~ relevant to landscaping include (but are not limited to): the Sitework Specifications; STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS (IN THIS CASE, REQUIREMENTS LISTED FOR PUBLIC IMPROVEMENTS WILL APPLY TO LANDSCAPE RELATED IMPROVEMENTS FOR PRIVATE IMPROVEMENTS); the Single Family Detached Residential Design Guidelines, the Baseline Standards for Single Family Attache dResidential Projects and the Baseline Standards for Multiple Family Residential Projects. THE SINGLE-FAMILY DETACHED, SINGLE-FAMILY ATTACHED, MULTI-FAMILY, AND SENIOR RESIDENTIAL DESIGN GUIDELINES; THE TRADITIONAL MIXED USE NEIGHBORHOOD DEVELOPMENTS DESIGN GUIDELINES; THE RETAIL COMMERCIAL DESIGN GUIDELINES; AND ANY OTHER DESIGN GUIDELINES. Other documents, which apply to specific developments, include the OFFICIAL DEVELOPMENT PLAN AND ANY REFERENCED GUIDELINES.

Questions concerning the landscaping for City owned and maintained trails, greenbelts and parks, should be directed to the Department of Parks, Recreation and Libraries. Questions concerning publicly owned and maintained open space should be directed to the Open Space Division of the Department of Community Development.

**V. ~~GENERAL LANDSCAPING PROVISIONS~~
CONSIDERATIONS IN LANDSCAPE DESIGN**

PRIOR TO DESIGN OF A NEW LANDSCAPE OR MODIFICATIONS TO AN EXISTING LANDSCAPE, THE FOLLOWING LANDSCAPE DESIGN ELEMENTS MUST BE CONSIDERED AND INCORPORATED INTO THE LANDSCAPE AND IRRIGATION DESIGN.

A. WATER CONSERVATION/WATER-WISE LANDSCAPING/XERISCAPING

~~Native or drought tolerant approaches to landscaping will be considered under certain appropriate circumstances. Large landscape areas adjacent to existing, native, open space tracts may be appropriate for xeriscape treatment, as may parts of the primary landscape area when the principles of xeriscaping are well understood and applies. (See Xeriscaping section of these Landscape Regulations). All planted areas, including~~

~~xeriscape areas, require an automatic irrigation system. Regardless of how drought tolerant a plant may be, relatively frequent watering is needed until plants are established. For most woody plants, establishment takes at least two growing seasons. Once established, gradual reduction of watering frequency can be accomplished.~~

THE DENVER METROPOLITAN AREA HAS A SEMI-ARID CLIMATE WITH AN AVERAGE OF ONLY FOURTEEN INCHES OF NATURAL PRECIPITATION A YEAR. BECAUSE LANDSCAPE DESIGN IN COLORADO OFTEN INCORPORATES THE USE OF PLANTS THAT ARE NATIVE TO REGIONS THAT HAVE HIGHER LEVELS OF ANNUAL PRECIPITATION, SUPPLEMENTAL WATER IS NECESSARY TO ENSURE THESE LANDSCAPES SURVIVE IN COLORADO.

1. XERISCAPE

THE CONCEPT OF XERISCAPE WAS DEVELOPED IN DENVER IN RESPONSE TO WATER SHORTAGES AND REFERS TO AN ATTRACTIVE LANDSCAPE THAT USES LITTLE SUPPLEMENTAL WATER. IT DOES NOT REFER TO A DRY, BARREN, NO- MAINTENANCE LANDSCAPE, WITHOUT IRRIGATION. THE XERISCAPE CONCEPT PROMOTES WATER-WISE/WATER CONSERVATION IN LANDSCAPE DESIGN, TO RESULT IN LANDSCAPES WITHIN A SEMI-ARID CLIMATE THAT CAN HAVE SEASONAL INTEREST, FLOWERS, AND GREENERY.

XERICAPING INCORPORATES SEVEN WATER CONSERVING PRINCIPLES. THESE ARE AS FOLLOWS:

- DESIGN - THE WATER CONSERVING LANDSCAPE REQUIRES CAREFUL ATTENTION TO DESIGN. THE DESIGN IS ONE WHICH IDENTIFIES AND DEVELOPS ZONES OF DIFFERENT WATER REQUIREMENTS. DESIGNING WITH DIFFERENT AREA OF WATER DEMANDS IS CALLED "HYDROZONING."
- IRRIGATION - IRRIGATION IS NECESSARY TO EFFECTIVELY ESTABLISH THE LANDSCAPE AND TO MAINTAIN PLANT LIFE THAT REQUIRES SUPPLEMENTAL WATER ON A REGULAR OR PERIODIC BASIS, OR IN PERIODS OF DROUGHT. WATERING DEEPLY AND LESS FREQUENTLY WILL TYPICALLY RESULT IN PLANTS THAT ARE DEEPER ROOTED AND MORE DROUGHT TOLERANT.
- SOIL PREPARATION - SOIL PREPARATION IS VERY IMPORTANT TO THE SUCCESS OF THE LANDSCAPE. ADDING ORGANIC MATERIAL (COMPOST) RESULTS IN SOILS THAT WILL HOLD MOISTURE LONGER. LOOSENING THE SOIL (ROTOTILLING) PROVIDES WATER AND AIR INFILTRATION FOR IMPROVED ROOT DEVELOPMENT.
- MULCH - MULCH COVERS BARE SOIL, REDUCING EVAPORATION, SOIL TEMPERATURE AND EROSION. THIS IMPROVES PLANT GROWTH AND ASSISTS IN REDUCING WEEDS AND THEIR

COMPETITION FOR WATER AND NUTRIENTS. MULCH ALSO MAKES WEEDING EASIER TO PERFORM.

- APPROPRIATE USE OF TURF - CAREFUL CONSIDERATION OF WHERE TURF IS DESIRED AND TYPE OF GRASS USED IS A MAJOR COMPONENT OF XERISCAPING. DETERMINE THE FUNCTION OF TURF IN THE PROPOSED LANDSCAPE, AND THEN CONSIDER THE VARIOUS GRASSES, SUITABILITY FOR ACTIVE USE, THEIR GROWTH HABITS, AND MAINTENANCE REQUIREMENTS.
- USE OF LOW WATER PLANTS - CAREFUL PLANT SELECTION AND GROUPING BASED UPON WATER REQUIREMENTS, WITH THE GOAL OF CONSERVING WATER, CAN RESULT IN A LANDSCAPE DESIGN OF GREAT BEAUTY AND INTEREST. XERISCAPING HAS INCREASED THE POPULARITY OF MANY PLANTS THAT DO NOT REQUIRE SIGNIFICANT LEVELS OF WATER.
- MAINTENANCE - ALL LANDSCAPES REQUIRE REGULAR AND PERIODIC MAINTENANCE. REPLACEMENT OF MULCHES, WEEDING, PRUNING, MOWING, AND IRRIGATION ADJUSTMENT ARE ROUTINE REQUIREMENTS OF BOTH THE XERISCAPE AND TRADITIONAL LANDSCAPE.

2. SPECIFIC WATER - WISE LANDSCAPE ELEMENTS

IN ORDER TO REDUCE THE IMPACT OF DROUGHT ON LANDSCAPES, AND PROVIDE EFFICIENCY IN THE USE OF WATER, LANDSCAPE DESIGN WILL BE REQUIRED TO INCORPORATE VARIOUS WATER-WISE ELEMENTS. THESE ARE AS FOLLOWS:

- DESIGN BASED UPON ZONES OF DIFFERENT WATER REQUIREMENTS- REFERRED TO AS “HYDROZONING.” LOW, MODERATE, AND HIGH HYDROZONES WILL BE REQUIRED TO BE IDENTIFIED ON LANDSCAPE AND IRRIGATION PLANS. PLANT CHOICE AND IRRIGATION DESIGN MUST REFLECT THE RELEVANT HYDROZONE REQUIREMENTS.
- TOTAL ANNUAL WATER APPLICATION BY IRRIGATION (WATER BUDGET) SHALL NOT EXCEED 15 GALLONS/SQUARE FOOT/YEAR (24 INCHES).
- LOW HYDROZONES ARE CLASSIFIED BY PLANTINGS THAT DO NOT REQUIRE MORE THAN 9 INCHES/SQUARE FOOT OF SUPPLEMENTAL WATER PER YEAR, AND PLANTS IN THIS ZONE GENERALLY NEED LOWER LEVELS OF WATER TO THRIVE. ALTHOUGH PLANTS IN THIS ZONE MAY GROW WITH MINIMAL USE OF SUPPLEMENTAL WATER, IN TIMES OF PLANT ESTABLISHMENT OR DROUGHT, THESE LOW WATER USE PLANTS BENEFIT FROM CONTROLLED, SUPPLEMENTAL WATERING. IRRIGATION METHODS IN THIS ZONE WILL TYPICALLY

BE MICRO-SPRAY OR DRIP. BUFFALO GRASS IS A TYPICAL GRASS IN THIS HYDROZONE.

- MODERATE HYDROZONES ARE CLASSIFIED BY PLANTINGS THAT WILL REQUIRE OVER 9 INCHES AND UP TO 15 INCHES/SQUARE FOOT OF SUPPLEMENTAL WATER PER YEAR, AND PLANTS IN THIS ZONE GENERALLY NEED WATER WITHIN THIS RANGE TO THRIVE. IRRIGATION METHODS IN THIS ZONE WILL TYPICALLY BE SPRAY HEADS. TURF-TYPE TALL FESCUE IS A TYPICAL GRASS IN THIS ZONE.
- HIGH HYDROZONES ARE CLASSIFIED BY PLANTINGS THAT WILL REQUIRE 18 INCHES/SQUARE FOOT OF SUPPLEMENTAL WATER PER YEAR. PLANTS IN THIS ZONE GENERALLY NEED THIS HIGH LEVEL OF WATER TO THRIVE. IRRIGATION METHODS IN THIS ZONE WILL TYPICALLY BE SPRAY OR ROTOR HEADS. BLUEGRASS TURF IS A TYPICAL GRASS IN THIS ZONE.
- HIGH HYDROZONES SHOULD NOT BE WITHIN FIVE-FEET OF A BUILDING FOUNDATION TO REDUCE POTENTIAL PROBLEMS FROM EXPANSIVE SOILS. IN GENERAL, FOR PURPOSES OF WATER CONSERVATION, IT IS DESIRABLE TO TRANSITION TO A LOW WATER ZONE ADJACENT TO PAVED AREAS.
- AUTOMATIC IRRIGATION SYSTEMS WILL BE REQUIRED IN ALL LANDSCAPED AREAS, AND MUST BE INSTALLED PRIOR TO PLANT MATERIALS. AUTOMATIC IRRIGATION SYSTEMS INCREASE THE ESTABLISHMENT OF PLANTS, ALLOW FOR REGULAR MONITORING OF WATER USE AND NEEDS, AND ALLOW THE WATERING OF LANDSCAPES WITH MINIMAL MANUAL INVOLVEMENT. THE DESIGN OF THE IRRIGATION SYSTEM MUST REFLECT HYDROZONES AND VARIOUS REQUIREMENTS WITHIN THESE REGULATIONS.
- SOIL PREPARATION, INCLUDING LOOSENING THE SOIL BY ROTOTILLING AND INCORPORATING COMPOST AS A SOIL AMENDMENT, IS A MINIMUM REQUIREMENT IN ALL AREAS OF POTENTIAL LANDSCAPING. A SOIL ANALYSIS INDICATING EXISTING SOIL TEXTURE, PERCENT OF ORGANIC MATERIAL AND A MEASURE OF PH AND SOLUBLE SALTS IS RECOMMENDED TO DETERMINE WHAT OTHER OPTIONAL SOIL IMPROVEMENTS MAY BE NECESSARY. (REFER TO SECTION V. FOR SPECIFIC REQUIREMENTS)
- MULCHING IN ALL NON-TURF AREAS OF THE LANDSCAPE AREA IS REQUIRED. BECAUSE ORGANIC MULCHES (SUCH AS BARK) ASSIST IN RETAINING SOIL MOISTURE, AND REDUCE HEAT ABSORPTION AND REFLECTION, ORGANIC MULCHES WILL BE REQUIRED IN MODERATE AND HIGH HYDROZONES. INORGANIC MULCH (SUCH AS STONE) WILL BE ALLOWED ONLY IN LOW WATER ZONES.

- PLANT SELECTION AND LOCATION WILL BE REQUIRED TO MATCH THE PLANTS' WATER NEEDS TO THE APPROPRIATE WATER ZONE. THIS DESIGN PRACTICE ENHANCES THE EFFICIENT USE OF WATER AND INCREASES THE SURVIVAL RATE AND HEALTH OF PLANTS BY REDUCING OVER-WATERING OR UNDER-WATERING OF PLANTS.

B. Existing Vegetation

All existing healthy trees of desirable species ~~four 4 inch (4") to six 6 inch (6")~~ caliper or more ~~should~~ MUST be shown on the landscape plan, and ~~should~~ MUST be preserved or transplanted on the site ~~whenever possible~~, UNLESS APPROVED OTHERWISE BY THE CITY. ~~Trees six inch (6") caliper or larger should be preserved on site.~~ Grading shall not be permitted within the drip line of trees TO BE PRESERVED OR UNTIL AFTER RELOCATION IS COMPLETE. Tree wells or retaining walls ~~shall~~ MAY be used BEYOND THE LIMITS OF THE DRIPLINE OF THE TREES IN ORDER to protect the trees if grading does not otherwise accommodate preserving the existing grade. THE NUMBER OF TREES TO BE PRESERVED CAN BE CREDITED TOWARD THE TOTAL NUMBER OF TREES REQUIRED FOR THE DEVELOPMENT. THE SIZE OF TREES THAT ARE PRESERVED CANNOT BE APPLIED TOWARD ADDITIONAL REQUIRED LANDSCAPING. ANY REPLACEMENT TREES ARE REQUIRED TO BE IN EXCESS OF THE OTHERWISE MINIMUM TOTAL NUMBER OF TREES.

Any tree removed shall be replaced on a 2:1 caliper-inch ratio. For example, FIVE 2 ½²² INCH CALIPER TREES AND ONE 3 ½ " INCH CALIPER TREE ~~four four inch (4") caliper trees~~ (16 CALIPER INCHES IN TOTAL) would replace one 8 ~~eight-inch (8")~~ caliper tree (8 CALIPER INCHES). Special circumstances may be considered in the total number of trees required for replacement, and off-site planting may be considered in some instances. ~~Any tree greater than 24" caliper shall be treated as a 24" caliper tree in terms of replacement caliper ratio.~~

C. Canals and Watercourses

Setbacks from canals, irrigation ditches or other watercourses are required to protect existing vegetation and channel banks from development encroachment and to minimize slope failures. These setbacks also maintain access to watercourses for maintenance purposes, preserve trees, and provide land for open space and trails.

City Council Resolution No. 2 of 1986, requires that the edge of any improvement (grading, paving or trenching) be set back a minimum of ~~thirty 30 feet (30')~~ from the top of bank or right-of-way line, whichever is the furthest from the watercourse. Any structure shall be set back a minimum of ~~forty 40 feet (40')~~. Where trees exist within ~~twenty 20 feet (20')~~ of the top of the watercourse bank, the edge of any improvement shall be set back a minimum of ~~twenty 20 feet (20')~~ from the tree trunk or from a line connecting tree trunks less than ~~fifty 50 feet (50')~~ apart. Any structure shall be set back a minimum of ~~thirty 30 feet (30')~~ from the tree trunks or a line connecting them.

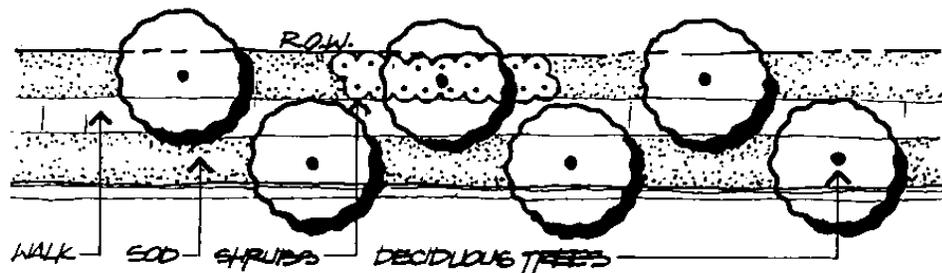
IN ADDITION TO RESOLUTION NO. 2 OF 1986, NO GRADING OR STORAGE OF MATERIALS MAY OCCUR WITHIN THE DRIPLINE OF ANY EXISTING TREES TO BE PRESERVED ON A SITE. THE DRIPLINE MUST BE FENCED PRIOR TO

AND DURING CONSTRUCTION ACTIVITIES. SUPPLEMENTAL WATERING MAY BE NECESSARY DURING CONSTRUCTION, PRIOR TO INSTALLATION OF IRRIGATION SYSTEMS.

D. ~~Plant Locations and Layout~~ PLANT SELECTION AND DESIGN

A formal approach to street tree planting and median landscaping is recommended along ~~major~~ ARTERIAL AND COLLECTOR streets, AS THIS APPEARANCE IS DESIRED BY THE CITY. FORMAL DESIGN INCORPORATES REGULAR SPACING OF SHADE TREES IN A REPETITIVE OR PREDICABLE PATTERN. ~~trees should be regularly spaced and located to avoid~~ POTENTIAL conflicts with pedestrian or vehicular traffic and traffic signage MUST BE TAKEN INTO ACCOUNT. ~~Developers are encouraged and may be required to p~~PlantING trees on both sides of the sidewalk IS REQUIRED in order to create a canopy effect AND TO PROVIDE AREAS OF SHADE FOR THE PEDESTRIAN.

~~A project's interior landscaping will generally have a stronger impression if trees and shrubs are planted in clusters. Shrubs should be planted in groups and massed together to provide a strong landscape statement. Planting large masses of a limited variety of shrub beds is generally more effective than combining many different types of shrubs together.~~



TYPICAL STREET LANDSCAPE

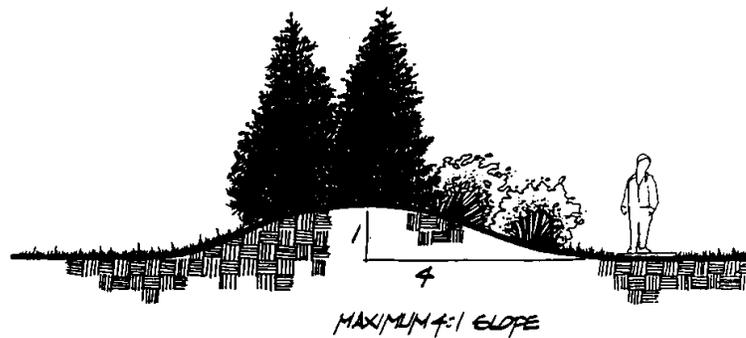
PROVISION OF A VARIETY OF SPECIES IS REQUIRED, AS DETERMINED BY THE CITY. THIS IS NECESSARY NOT ONLY TO PROVIDE VISUAL APPEAL AND DIVERSITY, BUT ALSO TO LIMIT THE IMPACT OF DISEASES AND ENVIRONMENTAL PROBLEMS THAT AFFECT DIFFERENT SPECIES TO VARYING DEGREES.

A mix of evergreen and deciduous trees AND SHRUBS ~~is encouraged~~ IS REQUIRED FOR A SEASONAL APPEARANCE OF GREENERY THROUGHOUT THE YEAR. Long living, deciduous shade trees (Ash, Honeylocust, Linden, Oak, etc.) are preferred and fast-growing trees THAT ARE OFTEN SUBJECT TO SNOW AND WIND DAMAGE (Cottonwoods, Silver Maples) ~~are prohibited~~ MAY BE USED ONLY ON A VERY LIMITED BASIS, AS APPROVED BY THE CITY. (REFER TO PLANT LIST) ~~in vehicular and pedestrian traffic areas.~~

USE OF NON-POTABLE WATER WILL REQUIRE PLANT SELECTION TOLERANT OF HIGHER SALT AND POTASSIUM LEVELS. ADDITIONAL INFORMATION PERTAINING TO THE USE OF NON-POTABLE WATER MAY BE OBTAINED BY CONTACTING THE CITY OF WESTMINSTER DEPARTMENT OF PUBLIC WORKS AND UTILITIES.

E. Buffering Between Uses

Buffering is encouraged between two or more properties of varying use intensities in order to inhibit visibility and/or to mitigate the transmission of noise from one property to another. Buffering can be accomplished by means of plant materials, WALLS, fencing, landforms, or a combination of these measures. BECAUSE EARTH BERMS ARE SO EFFECTIVE IN REDUCING SOUND AND LIMITING UNDESIRABLE VIEWS, ~~It is suggested that berms be installed~~ THE INSTALLATION OF BERMS, in combination with evergreen AND deciduous trees and shrubs, IS REQUIRED TO OCCUR ~~in areas~~ between differing land uses. The maximum slope of berms shall not exceed 4:1 (25%).



LANDSCAPE BUFFER

Intensity: For purposes of this section of the regulations, intensity is a ~~measure~~ GENERAL EXPECTATION of the magnitude and negative impact of a land use on a neighboring land use. ~~It is recommended~~ THE INTENT IS that a lesser intensity use be buffered from THE NEGATIVE IMPACTS OF a higher intensity use. ~~Buffering is recommended on the higher intensity development when that development occurs.~~

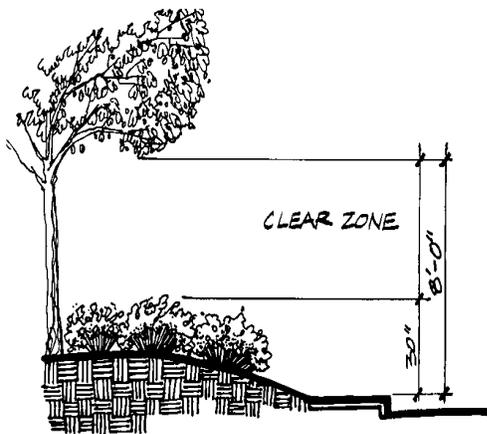
F. Sight Triangles

SAFE INGRESS AND EGRESS FROM ONE STREET OR DRIVEWAY TO ANOTHER, BASED IN PART UPON THE ABILITY OF A DRIVER TO SEE ONCOMING VEHICLES OR PEDESTRIANS IS A NECESSARY CONSIDERATION IN SITE PLANNING AND LANDSCAPE DESIGN.

~~At the intersection of a private drive with a public street, and at the intersection of two public streets, vehicular~~ "Sight triangles" shall be designated in order to insure that there are no visibility obstructions for motorists. Sight triangles shall be shown on all RELEVANT Official Development Plans. (Refer to the ~~City engineering document~~ Intersection Sight Distance Criteria CITY'S STANDARDS AND SPECIFICATIONS

FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS for more detailed information regarding how to calculate a sight triangle.)

All plant material, WALLS, FENCES, BERMS and/or structures in the sight triangle CANNOT EXCEED ~~must maintain a clear zone between thirty inches (30")~~ 24 INCHES above the TOP OF THE ADJACENT curb HEIGHT and ~~eight feet (8') in height above the curb.~~ All shrubs, boulders, etc. ~~must be maintained below a height of thirty inches (30"),~~ and all tree branches in these areas ~~must be pruned to a minimum height of eight feet (8') above the curb.~~ Evergreen trees may not be placed within the sight triangle. THE PLACEMENT OF DECIDIOUS TREES WITHIN SIGHT DISTANCE TRIANGLES IS DISCOURAGED BECAUSE AS TREES MATURE AND TREE TRUNKS INCREASE IN SIZE, VISIBILITY MAY BE IMPACTED TO SUCH A DEGREE THAT REMOVAL OF THE TREE (S) MAY BECOME NECESSARY.



SIGHT TRIANGLE LANDSCAPE

G. Medians, ~~and~~ Landscape Islands, AND LANDSCAPE ADJACENT TO HARDSCAPE

Landscape street medians at development entryways and landscape islands in the center of cul-de-sacs ~~are encouraged and~~ may be required. If landscaped medians are provided, they should be a minimum of ~~fifty~~ 50 feet (50') long and ~~ten~~ 10 feet (10') wide. Medians and landscape islands ~~within a subdivision~~ shall be maintained by the ~~developer/~~PROPERTY owner or homeowner's association- AND INDICATED AS SUCH ON THE RELEVANT OFFICIAL DEVELOPMENT PLAN. WHEN THE CITY IS INTENDED TO MAINTAIN A MEDIAN OR SIMILAR AREA, THE IRRIGATION DESIGN MUST BE SEPARATE FROM LANDSCAPE AREAS MAINTAINED BY OTHERS. THIS INCLUDES A SEPARATE IRRIGATION TAP AND METER. ~~and shall include easements for public utilities. In certain instances, medians shall be maintained by the City, as determined at the time of Official Development Plan.~~

CAREFUL ATTENTION TO THE DESIGN OF BERMS AND SLOPES IS NECESSARY TO MINIMIZE WATER RUNOFF AND DRAINAGE ON ADJACENT AREAS.

PLANTING AREA HEIGHT (INCLUDING MULCH) IMMEDIATELY ADJACENT TO HARDSCAPE, SUCH AS PAVEMENT OR CURBING, SHALL BE LEVEL TO OR BELOW THE SURROUNDING HARDSCAPE OR CURBING TO MINIMIZE WATER RUNOFF AND ENABLE PROPER MAINTENANCE.

H. DRAINAGE AND Detention Areas

~~The developer is responsible for landscaping of detention ponds and other common areas at a rate of one (1) tree and three (3) shrubs for every 550 square feet of landscaped area. The property owner, business association or homeowner's association shall be responsible for the maintenance of the detention pond areas and common area.~~

~~In general plan material shall be located primarily around the perimeter of detention areas. Although some plant material may be allowed in the detention pond area, it shall not interfere with its function by taking up too much room or causing a muddy condition. The use of water tolerant grass is encouraged for the bottom portion of detention ponds. The landscape design shall work in conjunction with the requirements of the Urban Drainage and Flood Control District.~~

THE DEVELOPER/OWNER IS RESPONSIBLE FOR THE INSTALLATION OF LANDSCAPING AND IRRIGATION FOR DRAINAGE AREAS AND DETENTION PONDS. THE DESIGN OF THESE AREAS MUST CONSIDER MAINTENANCE ISSUES SUCH AS: WEED CONTROL MEASURES, MAXIMUM HEIGHTS OF GRASSES/TURF, MOWING, AND WATER RETENTION AND RELEASE RATES THAT CAN RESULT IN SOGGY GROUND AT THE BOTTOMS OF THESE POND AREAS. WHEN CHANNELIZATION OCCURS, DESIGN INCORPORATING PHYSICAL ELEMENTS OR PLANTS FOR A NATURAL APPEARANCE MAY BE REQUIRED. THE DESIGN MUST BE CONSISTENT WITH THE REQUIREMENTS OF THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT.

DETENTION POND AREAS MUST BE PLANTED AT A RATE OF 1 TREE AND 3 SHRUBS PER 550 SQUARE FEET OF AREA ABOVE THE 5-YEAR STORM WATER SURFACE ELEVATION. TREES AND SHRUBS MUST BE LOCATED ABOVE THE 5-YEAR STORM WATER SURFACE ELEVATION. BELOW THE 5-YEAR SURFACE ELEVATION, PLANT MATERIAL IS LIMITED TO TURF OR OTHER GROUNDCOVERS. THE BOTTOMS OF DETENTION PONDS MAY BE PLANTED WITH A MIXTURE OF GRASSES AND FORBS THAT ARE SUITED TO PERIODIC FLOODING AND/OR MAINTAINED FOR NATURAL HABITAT EVOLUTION IF FUNCTION IS NOT IMPAIRED. TIMBER OR CONCRETE WALLS ARE NOT ACCEPTABLE DESIGN SOLUTIONS FOR DETENTION PONDS.

THE DESIGN OF DRAINAGE AREAS SHALL ADDRESS THE SAME ISSUES AND INCORPORATE THE SAME CRITERIA, NOTED HEREIN, AS THAT OF DETENTION PONDS.

THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE ONGOING MAINTENANCE OF DETENTION PONDS AND DRAINAGE AREAS. MAINTENANCE RESPONSIBILITY SHALL BE CLEARLY DEFINED ON THE OFFICIAL DEVELOPMENT PLAN.

DETENTION PONDS AND DRAINAGE AREAS IN NON-RESIDENTIAL DEVELOPMENTS SHALL BE LOCATED WITHIN A BUILDING LOT.

DETENTION PONDS AND DRAINAGE AREAS ARE NOT PERMITTED WITHIN MINIMUM LANDSCAPE SETBACKS. THE LOCATION AND DESIGN MUST BE INTEGRATED WITH THE OVERALL SITE.

All turf and plant material shall be irrigated with an automatic sprinkler system. TO PREVENT A SOGGY BOTTOM AREA, IT IS SUGGESTED THAT THE BOTTOM AREA WITHIN THE DETENTION POND BE A SEPARATE IRRIGATION ZONE FROM THE SLOPED SIDES. ~~All detention areas shall be designed to blend with adjacent areas.~~ Slopes shall not exceed 4:1 ~~unless specifically allowed by the Official Development Plan.~~

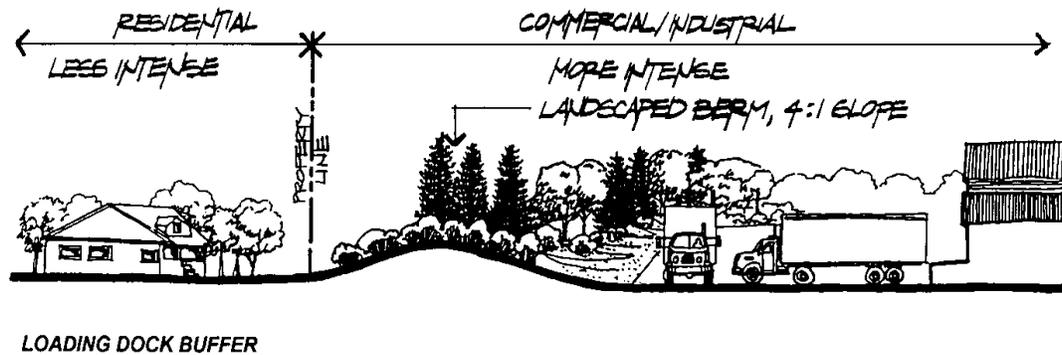
~~Landscape criteria for regional detention ponds shall be determined on a site specific basis.~~

I. Trash and Loading Area Screening

~~Trash dumpsters and truck loading docks shall be screened and buffered from adjacent properties. Trash dumpsters shall be screened by a wall a minimum of six (6') feet in height and may be required to be covered if visible from surrounding area streets. The minimum height requirements may vary depending on use. Walls shall have solid gates. No open, three sided dumpster storage will be permitted. It is suggested that plant material also be used in conjunction with the wall. Walls shall match the materials and colors of the main building.~~

TRASH DUMPSTERS MUST BE SCREENED WITH OPAQUE GATES, FENCES OR WALLS- ACCORDING TO EXISTING ZONING REQUIREMENTS OR DESIGN GUIDELINES. BRICK SCREEN WALLS ARE GENERALLY REQUIRED. DUMPSTERS AND TRASH CANNOT EXCEED THE HEIGHT OF THE SURROUNDING ENCLOSURE. ROOFED ENCLOSURES AND OTHER DESIGN ELEMENTS MAY BE REQUIRED.

TRASH, SERVICE AREAS AND ~~Loading dock areas~~ DOCKING FACILITIES shall be buffered from adjacent properties by means of EVERGREEN plant material, walls, landforms, or a combination of these measures. Berms with a maximum 4:1 slope in combination with evergreen AND deciduous trees and shrubs are recommended. The height of berms will be determined at the time of Official Development Plan.



a. ~~Other Site Elements~~

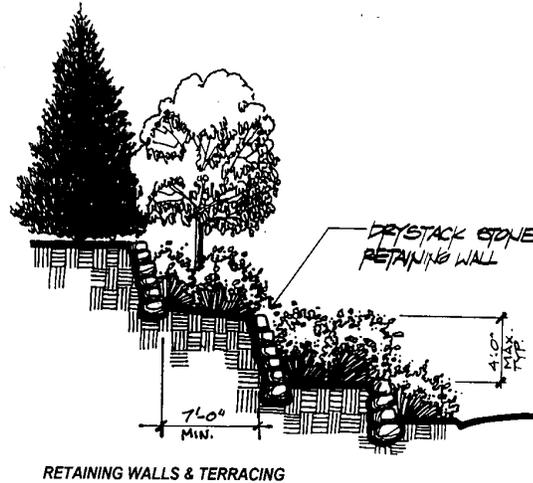
J. **Fencing AND WALLS**

Fencing shall be as per the City Municipal Code, Section ~~11-9-5(D)~~ 11-4-6-(O), REQUIREMENTS AS NOTED IN SPECIFIC LAND USE CATEGORIES HEREIN, AND ANY APPLICABLE DESIGN GUIDELINES. THE OWNERSHIP AND RESPONSIBILITY FOR THE ON-GOING MAINTENANCE OF FENCING AND WALLS MUST BE IDENTIFIED ON THE OFFICIAL DEVELOPMENT PLAN.

K. **Retaining Walls**

Retaining walls are commonly used to reduce steep slopes and create level areas. Wall heights shall not exceed ~~four~~ 4 feet (4'). Terracing steep slopes with a series of low retaining walls is A DESIGN SOLUTION FOR CHANGES IN GRADE THAT EXCEED 4 FEET IN ELEVATION. ~~preferred to retaining slopes with one large (tall) retaining wall.~~ TERRACES RETAINING WALLS shall be spaced a MINIMUM distance apart OF ~~at least seven~~ 7 feet (7') ~~minimum~~. The slope between terraces WALLS shall be per geotechnical recommendations AND SHALL NOT EXCEED 4:1 (25%).

Dry-stacked native stone, ~~or~~ pre-cast masonry block, ~~materials are preferred for wall materials.~~ ~~Cast in place concrete~~ or masonry block walls with stone, brick or stucco facing are ~~also recommended~~ REQUIRED MATERIALS FOR RETAINING WALLS. Treated timber walls are PROHIBITED- EXCEPT FOR USE BY THE RESIDENT HOMEOWNER IN SINGLE FAMILY DETACHED OR DUPLEX LOTS. ~~generally not recommended unless exemplary design is demonstrated. and are prohibited for walls over three feet (3') in height.~~ Railroad tie walls are prohibited. Landscaping, INCLUDING IRRIGATION, is ~~encouraged in conjunction with~~ REQUIRED TO OCCUR WITHIN ANY terraced areas. LARGE SPECIES OF TREES ARE DISCOURAGED WITHIN OR ADJACENT TO TERRACES OR WALLS DUE TO POTENTIAL NEGATIVE IMPACT ON THE STRUCTURAL INTEGRITY OF TERRACES AND WALLS. LOW WATER PLANTINGS AND/OR LOW VOLUME IRRIGATION IS REQUIRED IN THESE AREAS.



L. UTILITIES, FIRE HYDRANTS & EASEMENTS ~~Trees and Shrubs as Obstructions~~

LANDSCAPING WITHIN THESE AREAS MUST BE SHOWN ON THE OFFICIAL DEVELOPMENT PLAN. LANDSCAPING, IRRIGATION, PAVING AND FENCING WITHIN A PUBLIC EASEMENT MUST BE REMOVED AND REPLACED BY THE OWNER OF THE LAND, WHEN REQUESTED BY THE CITY, SO THAT MAINTENANCE WITHIN EASEMENTS CAN BE PERFORMED.

LANDSCAPING ADJACENT TO OVERHEAD UTILITY LINES MUST TAKE INTO ACCOUNT MATURE SIZE AND SHAPE OF PLANTINGS, AND MINIMIZE POTENTIAL CONFLICTS, AS DETERMINED BY THE CITY.

~~Trees and shrubs shall not be placed where they will obstruct the visual line of sight of a public right-of-way or within a vehicular sight triangle (See "Sight Triangles" under Section 5 of these regulations).~~

No plants or other landscape items shall block free access to a fire hydrant. A ~~five-~~ 5-foot (5') minimum setback shall be maintained to each side of all fire hydrants. Access from the front is to be completely unobstructed. (Requirements should be checked against current Uniform Fire Code).

~~3. Hard Surface Areas~~

~~For commercial projects, pedestrian scale elements should be included in addition to the landscape areas, such as: seating areas, the use of patterned concrete, optional public art, fountains, etc. Public art is encouraged and may be installed in lieu of some of the required landscaping, as approved on a case by case basis.~~

~~f. Street Right of Way Standards~~

~~Developers and property owners are responsible for landscaping and maintaining the right of way of all arterials, collectors and local streets within or abutting their development. Right of way landscaping should extend to include entry areas to the~~

~~development. Automatic sprinkler systems are required within the right of way landscape areas. The homeowner's association and/or the individual homeowners are responsible for landscaping and maintaining the right of way areas in front of single-family detached residences.~~

~~**I. Minimum Area**~~

~~The following are minimum standards for street right of way widths. Right of way widths may need to increase to accommodate median nose widths or sound mitigation berms and fencing. Right of way widths may also increase in instances where expanded or meandering landscape and/or fencing areas are provided such as at the Northpark Subdivision or for significant collector streets such as Legacy Ridge Parkway. Additional right of way will also be required at intersections to accommodate additional turn lanes and to maintain the typical landscape and sidewalk setbacks.~~

VI. GENERAL LANDSCAPE PROVISIONS FOR Plant Materials, AND THEIR DESIGN AND INSTALLATION

The standards in these regulations are to be considered the AS minimum requirements. Developers/owners are encouraged to increase the size and/or quantity of plant materials whenever possible. Dependent upon site characteristics, and THE TYPE OF USE, AND DESIRED EFFECT OR APPEARANCE, the City may HAS THE OPTION TO require landscaping beyond the minimum standards for a particular project.

THE OWNER OF A PROJECT IS REQUIRED TO CHECK WITH THE CITY'S DEPARTMENT OF PUBLIC WORKS AND UTILITIES TO DETERMINE THE PROXIMITY OF THE PROJECT TO THE CITY'S NON-POTABLE WATER SYSTEM AND THE FEASIBILITY OF TYING INTO THIS SYSTEM.

The health, SIZE and general appearance of plant material at the time of planting shall be in accordance with the recognized standards of the American Standards for Nursery Stock, published by the American Association of Nurserymen, and the standard specifications of the Associated Landscape Contractors of Colorado. THE CITY RETAINS THE RIGHT TO REJECT ANY AND ALL PLANTS NOT DETERMINED BY THE CITY TO BE OF HIGH QUALITY, AT TIME OF LANDSCAPE INSTALLATION OR ACCEPTANCE.

ALL AREAS TO BE LANDSCAPED REQUIRE SOIL AMENDMENT IN ACCORDANCE WITH THE CITY'S "STANDARDS AND SPECIFICATIONS FOR THE DESIGN OF CONSTRUCTION OF PUBLIC IMPROVEMENT." THIS REQUIRES A MINIMUM OF 5 CUBIC YARDS OF AN ORGANIC AMENDMENT PER 1,000 SQUARE FEET OF LANDSCAPE AREA, TILLED 8 INCHES IN DEPTH INTO THE SOIL. (THIS ALSO EQUALS A MINIMUM OF 1 5/8 INCH DEPTH SPREAD OVER THE LANDSCAPE AREA SURFACE- PRIOR TO TILLING.) THE TOTAL REQUIRED AMOUNT OF SOIL AMENDMENT MUST BE INDICATED ON THE OFFICIAL DEVELOPMENT PLAN, INCLUDING CALCULATIONS INDICATING HOW THE TOTAL AMOUNT WAS DERIVED. AGED GROUND MANURE OR COMPOST CONTAINING A MINIMUM OF 50 PERCENT ORGANIC MATTER IS A GENERAL RECOMMENDATION, HOWEVER SOIL TEXTURE, PH, AND AMOUNT OF SOLUABLE SALTS IN THE SOIL AND THE AMENDMENT SHOULD BE CONSIDERED. IF NON-POTABLE WATER IS TO BE USED, THE ORGANIC SOIL AMENDMENT WILL NEED TO BE LOW IN SODIUM.

FOR ALL PROPERTIES THAT WILL HAVE LANDSCAPE AREA MAINTAINED BY A HOMEOWNERS' ASSOCIATION, RENTAL PROPERTIES, AND ALL NON-RESIDENTIAL PROPERTIES, AN INSPECTION WILL BE REQUIRED TO OCCUR AFTER SPREADING OF THE SOIL AMENDMENT, AND PRIOR TO TILLING. AT TIME OF INSPECTION, THE CITY MUST BE PROVIDED WITH VERIFICATION, INCLUDING A RECEIPT, FROM THE SUPPLIER OF THE AMOUNT AND TYPE OF SOIL AMENDMENT DELIVERED.

ALL SINGLE FAMILY LOTS WILL BE REQUIRED TO HAVE SOIL AMENDMENT, ACCORDING TO CITY REQUIREMENTS NOTED HEREIN, INSTALLED IN ALL AREAS OF THE YARD NOT COVERED WITH HARDSCAPE. INSTALLATION MUST OCCUR BY THE DEVELOPER PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR EACH LOT; OR IF SURETY IS PROVIDED TO THE CITY, IN AN ALTERNATE TIMEFRAME DETERMINED BY THE CITY. THE CITY MUST BE PROVIDED WITH VERIFICATION, INCLUDING A RECEIPT, FROM THE SUPPLIER OR INSTALLER OF THE AMOUNT AND TYPE OF SOIL AMENDMENT DELIVERED AND INSTALLED. THE

CITY WILL REQUIRE INSPECTION PRIOR TO CERTIFICATE OF OCCUPANCY AND RELEASE OF SURETY.

PLANTS LOCATED WITHIN A PARTICULAR HYDROZONE MUST BE SIMILAR IN WATER REQUIREMENTS TO THE DESIGNATED ZONE.

A. Trees and Shrubs

~~The standard in these regulations are to be considered the minimum requirements. Developers/owners are encouraged to increase the size and/or quantity of the plant materials whenever possible. Dependant upon the site characteristics and the type of use, the City may require landscaping beyond the minimum standards for a particular project.~~

~~A mix of evergreen and deciduous trees is encouraged. Proposed deciduous trees shall be "slow growing, long-lived" species of trees such as Ash, Norway Maple, Honeylocust, Linden, Oak, Hawthorn, etc. Adequate variety in the planting shall be provided to avoid epidemic disease problems. The use of "fast growing" trees such as Cottonwoods, Poplars, Silver Maple, etc. is generally prohibited with several exceptions. Fast growing trees may be acceptable for use in areas where an informal, more heavily wooded appearance is desired such as when a property abuts open space, trails, parks, or abuts another open and informal area. The use of Siberian or Chinese Elm (Ulmus pumila), is prohibited within the City of Westminster. The use of Russian Olive (Elaeagnus angustifolia); is prohibited along creeks and drainage ways.~~

SPECIFIC DESIGN CONSIDERATIONS RELEVANT TO TREES ARE AS FOLLOWS:

- REFER TO THE PREVIOUS SECTION "CONSIDERATIONS IN LANDSCAPE DESIGN" FOR PRIMARY DESIGN REQUIREMENTS.
- LONG-LIVING SHADE TREES SUCH AS ASH, HONEYLOCUST, LINDEN, OAK, ETC. ARE PREFERRED OVER FAST GROWING, SHORTER LIVING TREES. THE MINIMUM SIZE FOR DECIDUOUS SHADE TREES IS 2 INCHES IN CALIPER.
- ORNAMENTAL TREES SHALL NOT COMPRISE MORE THAN 1/3 OF THE TOTAL TREES IN THE LANDSCAPE DESIGN, UNLESS APPROVED OTHERWISE BY THE CITY. THE MINIMUM SIZE OF AN ORNAMENTAL TREE SHALL BE 2 INCHES IN CALIPER. THE MINIMUM SIZE FOR CLUMP ORNAMENTAL TREES SHALL BE 3 TREE TRUNKS AND 6 FEET IN HEIGHT.
- EVERGREEN TREES MUST COMPRISE AT LEAST 1/3 OF THE TOTAL TREES REQUIRED, UNLESS APPROVED OTHERWISE BY THE CITY. THE MINIMUM SIZE OF EVERGREEN TREES SHALL BE 6 FEET IN HEIGHT.
- 20 PERCENT OF THE TOTAL NUMBER OF REQUIRED DECIDUOUS TREES MUST BE INCREASED IN SIZE TO A MINIMUM OF 3 INCHES IN CALIPER. 20 PERCENT OF THE TOTAL NUMBER OF REQUIRED EVERGREEN TREES MUST BE INCREASED IN SIZE TO 8 FEET IN HEIGHT.

- DIVERISTY OF TREES SHALL BE AS FOLLOWS:

<u># OF TREES ON SITE</u>	<u>MAXIMUM % OF ANY ONE SPECIES</u>
10-19	50%
20-39	33%
40-59	25%
60 OR MORE	20%

- EVERGREEN TREES SUCH AS AUSTRIAN PINE, PONDEROSA PINE, AND SPRUCE MUST NOT BE PLANTED CLOSER THAN 10 FEET TO A STREET, SIDEWALK OR PARKING AREA. (MEASURED FROM TRUNK OF TREE TO EDGE OF PAVEMENT)
- TREES SHOULD BE LOCATED TO PROVIDE SUMMER SHADE AND LIMIT WINTER SHADE ON WALKS AND STREETS.
- TREES THAT DROP FRUITS OR HAVE THORNS SHOULD NOT BE PLANTED IN CLOSE PROXIMITY TO SIDEWALKS, WITHIN PARKING LOT ISLANDS OR MEDIANS. (VERY SMALL OR PERSISTENT FRUITS OK)
- THE USE OF SIBERIAN OR CHINESE ELM (ULMUS PUMILA), RUSSIAN OLIVE (ELAEAGNUS ANGUSTIFOLIA) AND SALT CEDAR SHRUBS (TAMARIX) IS PROHIBITED DUE TO EXCESSIVE INSECT INFESTATION OR INVASIVE GROWTH HABITS.
- PERIODIC WINTER WATERING IS TYPICALLY NECESSARY IN COLORADO DUE TO PERIODS OF DRYNESS.
- ALL TREES MUST BE SURROUNDED BY AN AREA OF MULCH, OF NO LESS THAN 3 FEET FROM THE TRUNK AND 6 FEET IN DIAMETER, AND NO LESS THAN 3 INCHES IN DEPTH. KEEP MULCH 3 INCHES AWAY FROM TREE TRUNKS TO REDUCE INSECT AND TRUNK DAMAGE. IT IS RECOMMENDED TO PERIODICALLY INCREASE THE MULCH RING TO THE SIZE OF THE DRIP LINE OF THE TREE. THIS ENCOURAGES ROOT DEVELOPMENT AND CONSERVES WATER FOR THIS PURPOSE. TYPE OF MULCH MUST BE SPECIFIED AND APPROVED BY THE CITY.
- THE PREFERABLE SIZE OF TREE GRATES IS 7 FEET IN CIRCUMFERENCE FOR THE HEALTH OF THE TREE. THE MINIMUM SIZE SHALL BE NO LESS THAN 5 FEET IN CIRCUMFERENCE.
- 1 TREE MAY BE SUBSTITUTED FOR 10 SHRUBS, OR VICE VERSA, IF DETERMINED TO BE DESIRABLE BY THE CITY.

B. Shrub AND PERENNIAL Beds

- REFER TO THE PREVIOUS SECTION “CONSIDERATIONS IN LANDSCAPE DESIGN” FOR PRIMARY DESIGN REQUIREMENTS.

- All shrub AND PERENNIAL bed areas shall be separated from ~~soe~~ TURF areas by an edging material. Edging materials placed near building foundations shall not be so high as to interfere with positive drainage away from the structures. METAL OR PLASTIC EDGING SHALL NOT BE INSTALLED OR MAINTAINED AT A HEIGHT GREATER THAN THE ADJACENT LANDSCAPE SURFACES. EDGING WITH SHARP EDGES IS PROHIBITED.
- NO MORE THAN 25 % OF A SHRUB BED SHALL BE DESIGNED IN SUCH A MANNER AS TO BE FREE OF PLANT MATERIAL WITHIN 5 YEARS OF PLANTING.
- ALL SHRUB BEDS MUST BE MULCHED AND MAINTAINED AT A MINIMUM MULCH DEPTH OF 3 INCHES. AREAS CONTAINING PERENNIAL FLOWER OR GROUNDCOVER SPECIES THAT HAVE A SPREADING GROWTH HABIT, MAY BE MULCHED AT A MINIMUM 1-INCH DEPTH, AS APPROVED BY THE CITY.
- MULCHES CAN BE DIFFICULT TO MAINTAIN ON SLOPED AREAS. PLANT CHOICE AND REDUCED SPACING BETWEEN PLANTS SHOULD BE CONSIDERED FOR SLOPED AREAS.
- THE HEIGHT/GRADE OF THE SOIL WITHIN SHRUB AND PERENNIAL BEDS MUST BE LOWER THAN THE SURROUNDING HARDSCAPE OR TURF AREAS IN ORDER TO ACCOMMODATE THE MULCH DEPTH REQUIREMENTS, AS WELL AS TO MINIMIZE WATER RUNOFF, REDUCE MULCH LOSS TO OTHER AREAS, AND ENABLE PROPER MAINTENANCE.
- THE USE OF WEED BARRIER FABRICS UNDERNEATH MULCH IN SHRUB BEDS IS REQUIRED IN ALL COMMON LANDSCAPE AREAS WHERE THE LANDSCAPING WILL ULTIMATELY BE MAINTAINED BY A HOMEOWNERS ASSOCIATION, IN ALL RENTAL RESIDENTIAL PROPERTIES AND IN ALL NON-RESIDENTIAL DEVELOPMENT. WEED BARRIER FABRICS MUST BE WATER PERMEABLE.
- FOR PURPOSES OF DIVERSITY, LONGEVITY, AND HEALTH, NO MORE THAN 25% OF THE SHRUB TOTAL SHALL BE COMPRISED OF ONE SPECIES.
- ALL SHRUBS MUST BE MINIMUM 5-GALLON CONTAINER IN SIZE.
- ONE 5 GALLON; OR THREE 1 GALLON LONG-LIVED, LARGE PERENNIAL GRASS SPECIES, OR CLIMBING VINE SPECIES, MAY BE SUBSTITUTED FOR ONE FIVE-GALLON SHRUB, AS APPROVED BY THE CITY.
- THE USE OF PERENNIAL AND ANNUAL FLOWER AND HERBACIOUS PLANTS IS ENCOURAGED BUT NOT REQUIRED BY THE CITY. EXCEPT AS NOTED OTHERWISE, PERENNIAL, ANNUAL AND HERBACIOUS PLANTS ARE NOT ACCEPTED IN LIEU OF MINIMUM SHRUB

REQUIREMENTS. ALL GROWDCOVERS AND PERENNIAL FLOWERS, VINES OR GRASSES MUST BE MINIMUM 1-GALLON CONTAINER IN SIZE.

C. TURF AREAS Grass and Other Ground Covers

~~Grass or other living plant material shall be the primary ground cover used in landscape. When a turf area is desired, sodding shall be the only means of installation. Turf areas shall be planted to present a finished appearance and complete coverage after two growing seasons.~~

~~Non-living ground covers such as redwood bark, wood chip mulch, boulders, cobble or river rock shall be limited to an area, not to exceed 50% of the landscape area. The other 50% shall be turf area. All non-living groundcovers shall be placed over a suitable weed barrier or filter fabric. Rock/mulch areas shall be 75% covered with shrubs within a three-year period.~~

- REFER TO THE PREVIOUS SECTION “CONSIDERATIONS IN LANDSCAPE DESIGN” FOR PRIMARY DESIGN REQUIREMENTS. ALSO, REFER TO THE CITY’S “STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS” FOR ADDITIONAL, DETAILED CONSTRUCTION REQUIREMENTS RELATED TO LANDSCAPING.
- FOR REASONS OF WATER CONSERVATION AND WATER-WISE LANDSCAPING, THE HIGH HDROZONE SHALL NOT EXCEED 50 PERCENT OF THE LANDSCAPE AREA OF NON-RESIDENTIAL PROPERTIES, EXCLUSIVE OF RIGHT-OF-WAY, UNLESS APPROVED OTHERWISE BY THE CITY. AN ANNUAL WATER BUDGET NOT TO EXCEED 15 GALLONS/SQUARE FOOT/YEAR IS REQUIRED FOR ALL LANDSCAPES.
- A BLUEGRASS BLEND TURF IS BEST SUITED FOR TURF AREAS THAT WILL RECEIVE REGULAR PEDESTRIAN OR CANINE FOOT TRAFFIC. AREAS THAT DO NOT RECEIVE REGULAR PEDESTRIAN OR CANINE FOOT TRAFFIC WILL BE CONSIDERED FOR ALTERNATIVE TURF GRASSES.
- THE USE OF ARTIFICIAL TURF IS GENERALLY PROHIBITED, EXCEPT FOR USE IN RESIDENT SINGLE FAMILY DETACHED OR DUPLEX LOT YARD AREAS NOT ADJACENT TO A STREET. THE CITY MAY CONSIDER OTHER EXCEPTIONS TO THIS LIMITATION ON A CASE-BY-CASE BASIS FOR SPORTS FIELDS AND OTHER LIMITED APPLICATIONS.
- ALTERNATIVE TURFS SUCH AS BUFFALO GRASS, FESCUE, AND OTHER GRASSES THAT CAN BE MAINTAINED AT A HEIGHT NOT TO EXCEED 6 INCHES ARE RECOMMENDED TO OCCUR ONLY WHERE LESS INTENSIVE USE OF TURF IS ANTICIPATED- AREAS THAT DO NOT RECEIVE REGULAR PEDESTRIAN OR CANINE FOOT TRAFFIC. THE USE OF ALTERNATIVE TURFS IN LIEU OF BLUEGRASS TURF ARE

SUBJECT TO CITY APPROVAL, EXCEPTING THE USE OF ALTERNATIVE TURF BY THE RESIDENT SINGLE FAMILY OR DUPLEX HOMEOWNER COMPLETING THEIR LANDSCAPE.

- ACCEPTABLE METHODS OF INSTALLATION FOR ALTERNATIVE TURFS INCLUDE SODDING, PLUGGING, OR SEEDING. BLUEGRASS, FESCUE, BUFFALO GRASS, AND OTHER GRASSES COMMERCIALY GROWN AS SOD MUST BE INSTALLED BY SODDING, EXCEPTING THAT OF THE RESIDENT SINGLE FAMILY DETACHED OR DUPLEX HOMEOWNER COMPLETING THEIR LANDSCAPE. AUTOMATIC IRRIGATION IS REQUIRED.
- A DESCRIPTION OF PROPOSED TURFS AND METHOD OF INSTALLATION SHALL BE INDICATED ON APPROVED OFFICIAL DEVELOPMENT PLANS AND RELATED LANDSCAPE DOCUMENTS.
- SEED MIXES SHALL SPECIFY THE SPECIES OF GRASSES USED IN THE MIX, THE ANTICIPATED APPEARANCE AND HEIGHT, AND NAME OF SUPPLIER. GRASSES SHALL BE A SPECIES THAT CAN BE MAINTAINED AND IRRIGATED AT A MAXIMUM OF 6 INCHES IN HEIGHT, UNLESS OTHERWISE APPROVED ON THE OFFICIAL DEVELOPMENT PLAN. ALL VARIANCES FROM THE MAXIMUM 6-INCH HEIGHT SHALL BE EXPLICITLY OUTLINED ON THE OFFICIAL DEVELOPMENT PLAN.
- SEED INSTALLATION SHALL BE BY DRILLING OR HYDROSEEDING INCLUDING A MULCH AND TACKIFIER.
- ALL NATIVE SEED AREAS SHALL BE ESTABLISHED AT A MINIMUM OF 4 TO 5 PLANTS PER SQUARE FOOT WITHIN 4 WEEKS AFTER GERMINATION, AND MAINTAINED AT THIS LEVEL, OR SHALL BE RE-SEEDED UNTIL ESTABLISHED AT THAT RATE.
- ALTERNATIVE TURFS INSTALLED BY SEED MAY RESULT IN A HIGHER INCIDENCE OF WEEDS, THEREFORE, AN ESTABLISHMENT AND MAINTENANCE PLAN IS REQUIRED TO BE INDICATED ON ALL LANDSCAPE DOCUMENTS INCLUDING THE OFFICIAL DEVELOPMENT PLAN. THIS PLAN MUST INCLUDE A WEED CONTROL AND REMOVAL PROGRAM, MOWING SCHEDULE, AND TRASH CLEAN UP.
- ALL TURF INSTALLATIONS, OTHER THAN SODDING, WILL REQUIRE AN ADDITIONAL WARRANTY PERIOD OF NO LESS THAN 2 YEARS.
- THE HEIGHT OF GRASSES IMPACTS THE EFFECTIVENESS/COVERAGE OF AUTOMATIC IRRIGATION SYSTEMS. THIS NEEDS TO BE TAKEN INTO ACCOUNT IN THE LANDSCAPE AND IRRIGATION DESIGN, AS WELL AS MAINTENANCE PLAN.

Native or Drought Tolerant Landscaping

Native or drought tolerant approaches to landscaping will be considered for planting where appropriate. Large landscape areas adjacent to existing, native, open space tracts may be appropriate for xeriscape treatment, as may parts of the primary landscape area, including detention ponds, when the principles of xeriscaping are well understood and applied. (See Xeriscaping section of these Landscape Regulations). All planted areas, including xeriscape areas, require an automatic irrigation system. Regardless of how drought tolerant a plant may be, relatively frequent watering is needed until plants are established. For most woody plants, establishment takes at least two growing seasons. Once established, gradual reduction of watering frequency can be accomplished.

~~K.~~ Basic Planting Requirements

For specific instructions on how to physically install plant material in the ground (i.e. depth of hole, soil amendments, etc.) see City Sitework Specifications.

Due to the heavy clay soils in the area, it is required that organic matter (compost or aged ground manure) be added to turf and planting beds at a minimum rate of five cubic yards per one thousand square feet and tilled into the soil.

The health and general appearance of plant material at the time of planting shall be in accordance with the recognized standards of the American Standards for Nursery Stock, published by the American Association of Nurserymen and the standard specifications of the Associated Landscape Contractors of Colorado.

~~K.~~ Trees and Shrubs as Obstructions

Trees and shrubs shall not be placed where they will obstruct the visual line of sight on a public right of way or within a vehicular sight triangle (see "Site Triangles" under Section 5 of these regulations).

No plants or other landscape items shall block free access to fire hydrant. A five foot (5') minimum setback shall be maintained to each side of all fire hydrants. Access from the front is to be completely unobstructed. (Requirements should be checked against current Uniform Fire Code.

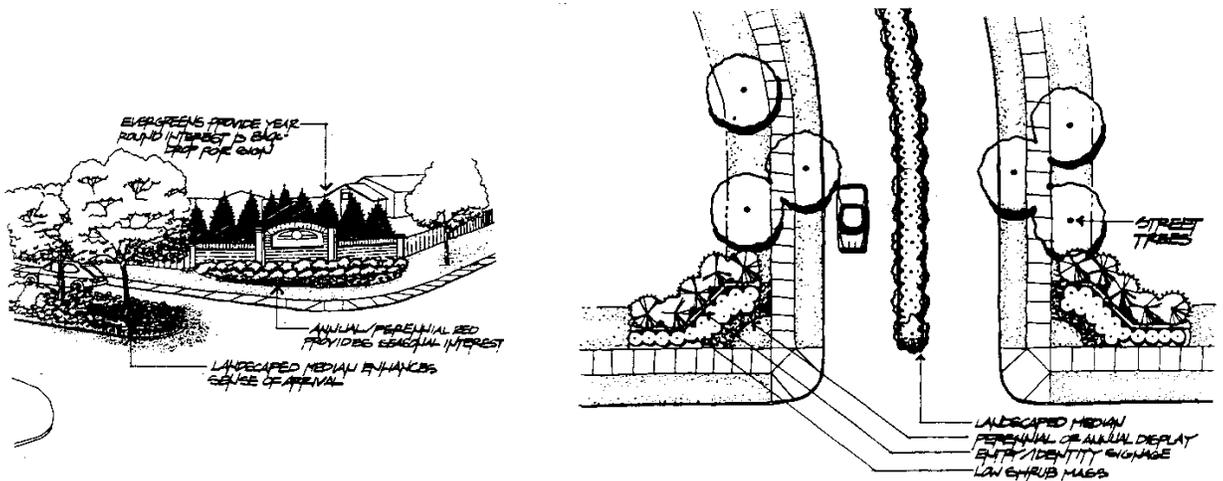
8VII. RESIDENTIAL LANDSCAPE STANDARDS

REQUIREMENTS NOTED IN THE LAND USE CATEGORIES AND SECTIONS HEREIN GENERALLY PERTAIN TO ALL THE RESIDENTIAL LAND USE CATEGORIES AND SECTIONS HEREIN, UNLESS NOTED OTHERWISE.

LAND USE DESIGNATIONS SHALL BE AS DEFINED IN THE CITY'S COMPREHENSIVE LAND USE PLAN.

The following SPECIFIC standards for THE residential landscape ~~design should be considered~~ ARE the minimum requirements. Developers are encouraged to exceed the standards whenever possible.

The entrance to residential developments should be designed to provide an attractive, year round landscape statement AND TO PROVIDE MAXIMUM SAFETY FOR VISIBILITY AND TURNING MOVEMENTS. Street medians/landscape islands are ~~encouraged and may be~~ required at MAJOR ENTRANCES TO THE DEVELOPMENT ~~entranceways~~. If installed, ~~maintenance of the medians/landscape islands within the subdivision, shall be the responsibility of the developer/homeowner's group.~~ Enhanced FORMAL landscaping and signage mounted on masonry walls are encouraged at THE ENTRANCE TO residential DEVELOPMENTS ~~entranceways~~. EVERGREEN TREES PLANTED BEHIND THE ENTRY SIGNAGE ARE ENCOURAGED TO ENHANCE THE COMMUNITY CHARACTER ESTABLISHED WITH THE CITY'S MONUMENT SIGNAGE. All landscaping within the "sight triangle" must be lower than 30 inches (30") or higher than eight feet (8') as measured from the top of the curb. The addition of large trees, especially evergreens, can provide an all season backdrop and direct attention to the entrance. The inclusion of perennials and annuals can provide color for the spring and summer. In some instances, a gated type of entrance may be desirable in order to create a sense of community and provide additional security. Gated communities may include manned or mechanically secured entranceways, as well as secure fencing.



RESIDENTIAL PROJECT ENTRANCE PLAN & PERSPECTIVE

A. Single-Family Detached Residential

FOR THE PURPOSES OF LANDSCAPE REQUIREMENTS, DUPLEX DEVELOPMENT WILL BE DETERMINED BY THE PLANNING MANAGER AS EITHER SINGLE-FAMILY DETACHED OR ATTACHED RESIDENTIAL.

~~Landscaping plays a significant role in the overall quality, appearance, and value of residential neighborhoods. Landscape standards have been established for single family detached subdivisions in order to encourage a quality appearance for individual residences, assist in the transition between uses of varying density and intensity, provide shade, provide variety of design, and enhance the overall appearance of the community.~~

1. Minimum Requirements

a. LANDSCAPE AREA:

- THE MINIMUM LANDSCAPE AREA FOR A SINGLE FAMILY DETACHED OR DUPEX LOT MUST BE A MINIMUM OF 50 PERCENT OF EACH YARD AREA ADJACENT TO A STREET, UNLESS APPROVED OTHERWISE BY THE CITY. REMAINING YARD AREA NOT LANDSCAPE AREA, SHALL BE HARDSCAPE.
- FOR YARD AREAS NOT ADJACENT TO A PUBLIC STREET, THERE IS NO MINIMUM AMOUNT OF LANDSCAPE AREA. THESE YARD AREAS SHALL BE ANY COMBINATION OF LANDSCAPE AREA, HARDSCAPE, MULCH OR ARTIFICIAL TURF. ANY LANDSCAPE AREA WITHIN THESE YARD AREAS SHALL FOLLOW THE REQUIREMENTS HEREIN.
- MAINTENANCE OF LANDSCAPE IMPROVEMENTS WITHIN THE INDIVIDUAL LOT IS THE RESPONSIBILITY OF THE PROPERTY OWNER.

b. PLANT MATERIALS:

1. TREES:

- REFER TO THE PREVIOUS SECTION “CONSIDERATIONS IN LANDSCAPE DESIGN” FOR REQUIREMENTS REGARDING EXISTING TREES.
- For residential lots up to 10,000 square feet in size, a minimum of ~~one~~ (1) 1 shade tree shall be required in the front yard of every residence. ~~Whenever possible the shade tree shall be installed approximately seven feet (7') from the front property line in order to create a streetscape appearance.~~ For lots larger than 10,000 square feet in size, a minimum of ~~two~~ (2) 2 trees shall be required in the front yard of every residence, WITH AT LEAST ONE TREE BEING A SHADE TREE. The use of evergreen trees in conjunction with shade trees is encouraged. ~~Whenever~~

~~possible the shade tree shall be installed approximately seven (7) feet (7') from the front property line in order to create a streetscape appearance.~~

- The required trees shall be installed by the developer prior to certificate of occupancy, OR IF SURETY IS PROVIDED TO THE CITY, IN AN ALTERNATE TIMEFRAME DETERMINED BY THE CITY. ~~if~~ homeowner installation is preferred; a credit in the amount of the required trees (including installation) shall be posted by the developer with a local nursery for use by the homeowner.

2. SHRUBS, GROUNDCOVERS AND TURF:

- MINIMUM LANDSCAPE IMPROVEMENTS WITHIN THE LANDSCAPE AREA OF EACH LOT SHALL CONSIST OF A grass lawn and/or shrubs and/OR groundcovers, AND shall be established by the developer or homeowner. ~~with the yard area adjacent to a public street,~~ REQUIRED LANDSCAPE IMPROVEMENTS BY THE DEVELOPER MUST OCCUR PRIOR TO CERTIFICATE OF OCCUPANCY, OR IF SURETY IS PROVIDED TO THE CITY, IN AN ALTERNATIVE TIMEFRAME DETERMINED BY THE CITY. REQUIRED LANDSCAPE IMPROVEMENTS BY THE HOMEOWNER SHALL OCCUR within one year of the certificate of occupancy.

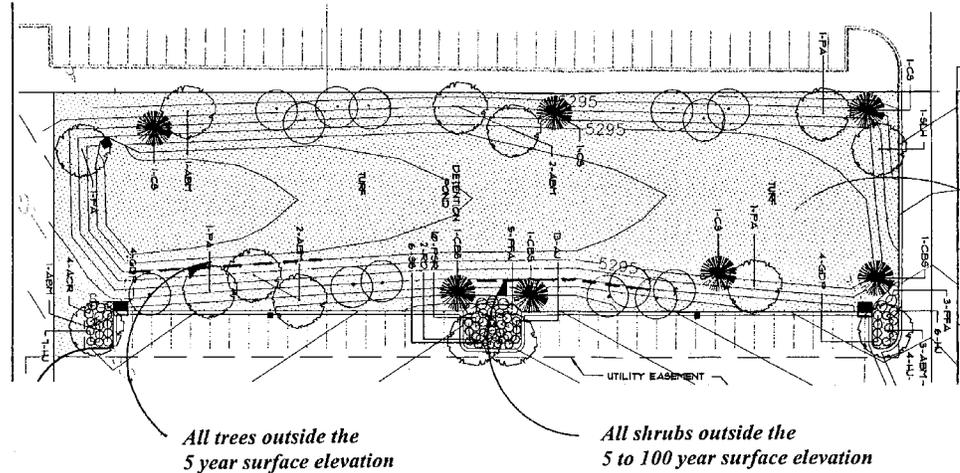
- ~~• A minimum of seventy five (75) percent (75%) of the required landscape area shall be covered by living plant material such as grass, shrubs or ground covers within one year following installation and thereafter.~~ ALL REQUIRED LANDSCAPE AREA SHALL CONSIST OF 100% LIVING GROUNDCOVER, TURF, OR SHRUB BED AREA.

c. ADJACENT RIGHT-OF-WAY (ROW) AND COMMON AREAS:

- THE OFFICIAL DEVELOPMENT PLAN MUST SPECIFY THE DESIGN AND LANDSCAPE REQUIREMENTS OF ALL RIGHT-OF-WAYS AND COMMON AREAS INCLUDING THAT OF RIGHT-OF-WAY ADJACENT TO SINGLE FAMILY OR DUPLEX LOTS. ~~In general, formal, stand alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs.~~
- 1 TREE AND 3 SHRUBS PER EVERY 550 SQUARE FEET OF LANDSCAPE AREA SHALL BE PROVIDED IN ALL RIGHT-OF-WAY AND COMMON AREAS. 100 PERCENT OF THE LANDSCAPE AREA SHALL CONTAIN TURF, GROUNDCOVER, OR SHRUB BEDS. THE FOLLOWING EXCEPTIONS TO THIS REQUIREMENT IS AS FOLLOWS:
 1. THE ROW LANDSCAPE AREA OF LOCAL STREETS WITH DETACHED WALKS SHALL BE PLANTED WITH 1

SHADE TREE EVERY 80 LINEAR FEET AND TURF, GROUND COVER, OR SHRUBS.

2. THE ROW LANDSCAPE AREA OF LOCAL STREETS WITH ATTACHED WALKS SHALL BE PLANTED WITH TURF, GROUND COVER, OR SHRUBS.
 3. DETENTION POND AREA BELOW THE 5-YEAR STORM SURFACE ELEVATION IS LIMITED TO THE PLANTING OF TURF OR GROUND COVER PLANTS.
 4. THE OFFICIAL DEVELOPMENT PLAN SHALL SPECIFY ANY DEVIATION FROM THE ABOVE LANDSCAPE REQUIREMENT FOR PRIVATE PARKS OR OTHER COMMON AREAS OR ROW AREA IF A LARGER AREA OF TURF IS DETERMINED TO BE DESIRABLE BY THE CITY.
- INSTALLATION OF LANDSCAPE IMPROVEMENTS WITHIN THE ADJACENT RIGHT-OF-WAY OF LOCAL OR COLLECTOR STREETS MUST OCCUR BY THE DEVELOPER OR HOMEOWNER NO LATER THAN THE TIME OF THE ADJACENT YARD IMPROVEMENTS (SEE ABOVE). INSTALLATION OF LANDSCAPE IMPROVEMENTS WITHIN ADJACENT RIGHT-OF-WAY OF ALL OTHER ADJACENT STREETS- INCLUDING HIGHWAYS, AND OF ALL OTHER COMMON AREAS MUST OCCUR BY THE DEVELOPER ACCORDING TO PHASING PLANS INDICATED ON THE OFFICIAL DEVELOPMENT PLAN.
 - THE MAINTENANCE OF ALL LANDSCAPE IMPROVEMENTS IN THE ROW IS THE RESPONSIBILITY OF THE ADJACENT LOT OWNER UNLESS SPECIFIED OTHERWISE ON THE OFFICIAL DEVELOPMENT PLAN.
 - THE INSTALLATION AND MAINTENANCE OF ALL LANDSCAPE IMPROVEMENTS WITHIN OTHER COMMON AREAS IS THE RESPONSIBILITY OF THE PROPERTY OWNER.



d. OTHER REQUIREMENTS

- A 6-FOOT HEIGHT BERM (WITH 6 FOOT HEIGHT FENCE OR WALL LOCATION ON TOP OF THE BERM) WILL BE REQUIRED ADJACENT TO ARTERIAL STREETS AND HIGHWAYS.
- REFER TO THE LANDSCAPE REGULATIONS CHART.
- REFER TO OTHER SECTIONS WITHIN THESE LANDSCAPE REGULATIONS FOR OTHER REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, SOIL PREPARATION AND IRRIGATION.
- REFER TO THE MUNICIPAL CODE FOR ADDITIONAL REGULATIONS REGARDING LANDSCAPING FOR RENTAL HOUSING.

~~2. Minimum Plant Sizes~~

~~Deciduous Shade Trees: 2 ½ inch caliper~~

~~Ornamental Trees: 2 ½ inch caliper~~

~~Evergreen Trees: 6 ft. minimum height~~

~~Shrubs: 5 gallon container~~

~~Twenty percent (20%) of deciduous trees to be three inch (3") caliper or eight feet (8') in height if evergreen (applies to ROW & detention ponds).~~

~~Under certain circumstances one (1) tree may be substituted for ten (10) shrubs and vice versa.~~

~~3. Right of Way Landscaping for Streets~~

~~Developers are responsible for the installation of landscaping in the right-of-way of all arterials and collector streets within or abutting their development,~~

~~and occasionally of local streets. (See Section 6 F of these Landscape Regulations for required street right of way widths including landscaping and sidewalks).~~

~~The homeowner's association is responsible for maintenance of the right-of-way landscaping along arterial and collector streets and occasionally along local streets. The adjacent homeowner is generally responsible for maintenance of the right-of-way adjacent to their residence on a local street.~~

~~A minimum of one (1) tree and three (3) shrubs per 550 square feet of landscaped area is required for landscaping within the right of way. In general, formal stand alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs.~~

~~Automatic sprinkler systems are required within the right of way of arterial and collector streets of new subdivisions. Sprinkler systems are required on local streets where maintained by the homeowner's association. The developer is advised to check with the City's Public Works Department to determine the proximity of the project to the City's reclaimed water system and the feasibility of tying into the system.~~

~~4. Buffering Within the Right of Way~~

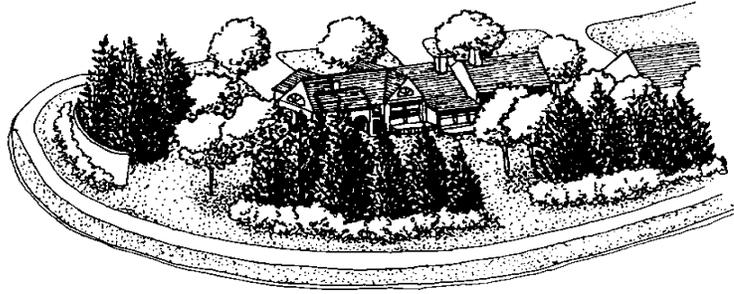
~~Although fencing between the right of way of arterial or collector streets and residential developments is often proposed as a means of providing privacy and buffering, the use of landscape materials and earth berming either in lieu of fencing, or in conjunction with fencing, is highly preferred and shall be required in most instances. The maximum slope of berms shall not exceed 4:1.~~

~~6. Detention Pond~~

~~The developer is responsible for landscaping of the detention pond and other common areas. The homeowner's association shall be responsible for the maintenance of the detention pond areas and common areas.~~

B. Single-Family Attached and Multi-Family Residential

~~Landscaped areas should be provided in single family attached developments to counteract the potential dominance of the hardscape elements such as driveways, buildings, and parking areas. Landscaping adds to the overall visual appearance and function of the development by providing shade, complimenting both passive and active recreation areas, providing visual interest both apart from and next to the buildings, and presenting an aesthetically pleasing streetscape.~~



SINGLE - FAMILY ATTACHED PERSPECTIVE

1. Minimum Requirements

a. LANDSCAPE AREA:

- ALL NON-HARDSCAPE SHALL BE DEVELOPED AS LANDSCAPE AREA, AND NO LESS THAN A minimum of ~~forty~~ 40 percent (40%) of the overall site area shall be landscaped, ~~including the general landscape area, right of ways and~~ RIGHT OF WAY LANDSCAPE AREA IS NOT INCLUDED IN THE 40 PERCENT AREA CALCULATION. ALL NON-HARDSCAPE AREA SHALL BE DEVELOPED AS LANDSCAPE AREA. A minimum ~~twenty-five~~ 25-foot (25') landscape setback is required from the ULTIMATE/FUTURE right-of-way line. A MINIMUM 35-FOOT LANDSCAPE AREA IS REQUIRED ALONG ALL OTHER PROPERTY LINES. ALSO REFER TO THE SINGLE-FAMILY ATTACHED RESIDENTIAL DESIGN GUIDELINES AND OTHER APPLICABLE GUIDELINES.

b. PLANT MATERIALS:

- Within the ~~required~~ landscape area, A MINIMUM OF 1 ~~one~~ (1) tree and 3 ~~three~~ (3) shrubs are required per 550 square feet (EXCEPTING BELOW THE 5 YEAR STORM WATER SURFACE ELEVATION WITHIN DETENTION PONDS). ~~of the landscape area. For developments greater than ten acres, reduction of plant quantities will be considered in cases of exemplary design. A mixture of evergreen and deciduous trees shall be provided.~~
- REFER TO THE SINGLE FAMILY DETACHED REGULATIONS REGARDING REQUIREMENTS FOR TREES, SHRUBS, GROUNDCOVERS AND TURF.
- REFER TO THE FOLLOWING SECTION "ADJACENT RIGHT OF WAY AND COMMON AREAS" FOR INSTALLATION AND MAINTENANCE REQUIREMENTS OF PLANT MATERIALS. LANDSCAPE IMPROVEMENTS WITHIN ANY PRIVATE COURTYARD OR LOT

AREA FOR EACH RESIDENTIAL UNIT SHALL BE THE RESPONSIBILITY OF THE RESIDENT/OWNER UNLESS SPECIFIED OTHERWISE ON THE OFFICIAL DEVELOPMENT PLAN.

c. ADJACENT RIGHT-OF-WAY AND COMMON AREAS:

- THE OFFICIAL DEVELOPMENT PLAN MUST SPECIFY THE DESIGN OF LANDSCAPING WITHIN ALL COMMON AREAS AND RIGHT-OF-WAY. ~~In general, formal, stand-alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs.~~
- LANDSCAPE IMPROVEMENTS WITHIN THE ADJACENT RIGHT OF WAY AREAS, AND COMMON AREAS WITHIN THE DEVELOPMENT MUST OCCUR BY THE DEVELOPER ACCORDING TO PHASING PLANS INDICATED ON THE OFFICIAL DEVELOPMENT PLAN.
- MAINTENANCE OF ALL LANDSCAPE IMPROVEMENTS IN THE ROW AND OTHER COMMON AREAS IS THE RESPONSIBILITY OF THE DEVELOPER UNTIL TURNED OVER TO THE HOMEOWNERS ASSOCIATION/OWNER.

d. OTHER REQUIREMENTS

- REFER TO THE SECTION IN SINGLE-FAMILY DETACHED RESIDENTIAL FOR REQUIREMENTS.

~~No more than fifty (50%) percent of the completed landscape within a shrub bed area should be covered exclusively with stone or wood chip mulch. A minimum of seventy five percent (75%) of the landscaping should be covered by living plant material such as ground cover, shrubs or grass, within three (3) years following installation and thereafter.~~

~~Landscaping and automatic sprinkler systems shall be installed by the developer and ultimately irrigated and maintained by the developer/homeowner's group, unless specifically indicated on the Official Development Plan for certain small areas which will be planted and maintained by the residents. The developer is advised to check with the City's Public Works Department to determine the proximity of the project to the City's reclaimed water system and the feasibility of tying into the system.~~

~~2. **Minimum Plant Sizes**~~

~~Deciduous Shade Trees: 2 ½ inch caliper
Ornamental Trees: 2 ½ inch caliper
Evergreen Trees: 6 ft. minimum height
Shrubs: 5 gallon container~~

Twenty percent (20%) of deciduous trees to be three inch (3") caliper or eight feet (8') in height if evergreen.

Under certain circumstances one (1) tree may be substituted for ten (10) shrubs and vice-versa.

3. ~~Right-of-Way Landscaping for Streets~~

~~Developers are responsible for the installation of landscaping, irrigation and maintenance in the right of way of all freeways, highways, arterials, collectors and local streets within or abutting their development and occasionally of local streets.~~

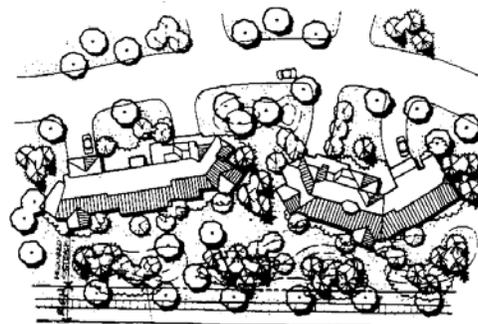
~~A minimum of one (1) tree and three (3) shrubs per 550 square feet of landscaped area is required for landscaping within the right of way. In general, formal stand-alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs. Automatic sprinkler systems are required within the right of way of arterial, collector and local streets of new subdivisions and in some cases, local streets.~~

4. ~~Buffering Within the Right of Way~~

~~Although fencing between the right of way of arterial or collector streets and residential developments is often proposed as a means of providing privacy and buffering, the use of landscape materials and earth berming either in lieu of fencing, or in conjunction with fencing, is highly preferred and shall be required in most instances. The maximum slope of berms shall not exceed 4:1.~~

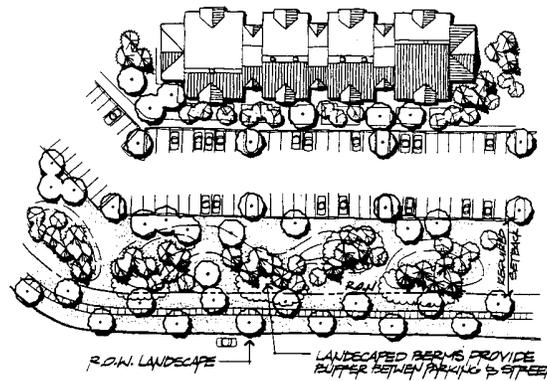
5. ~~Unique Requirements~~

~~It is recognized that certain projects will have unique landscape requirements due to the nature of the site and project characteristics. Such projects will follow the Landscape Regulations to the greatest extent possible, with exceptions to be reviewed by Staff at the time of Official Development Plan.~~



LANDESCAPED BERMS PROVIDE BUFFER
2 CREATES PRIVACY FOR UNITS

SINGLE - FAMILY ATTACHED PLAN



MULTI - FAMILY RESIDENTIAL PLAN

C. Multi-Family Residential

Multi-Family residential sites can be overwhelmed by large buildings and parking lots. Landscape areas should be provided help to counteract the potential dominance of the hardscape elements of the multi-family development such as driveways, buildings, and parking areas. Landscaping adds to the overall visual appearance and function of the development by providing shade, complimenting both passive and active recreation areas, providing visual interest both apart from and next to the buildings, and presenting an aesthetically pleasing streetscape.

1. Minimum Requirements

A minimum of forty percent (40%) of the overall site shall be landscaped, including the general landscape area, right of ways and detention pond areas. Driveways, hardscape parking areas or walks are not included. Parking lot island landscaping is included. A minimum twenty five foot (25') landscape setback is required from the right of way line.

Within the required landscape area, one (1) tree and three (3) shrubs are required per 550 square feet of the landscape area. For developments greater than ten acres, reduction of plant quantities will be considered in cases of exemplary design. A mixture of evergreen and deciduous trees shall be provided.

No more than fifty (50%) percent of the completed landscape within a shrub bed area should be covered exclusively with stone or wood chip mulch. A minimum of seventy five percent (75%) of the landscaping should be covered by living plant material such as ground cover, shrubs or grass, within three (3) years following installation and thereafter.

Landscaping and automatic irrigation systems shall be installed by the developer and ultimately irrigated and maintained by the business association group. The developer is advised to check with the City's Public Works Department to determine the proximity of the project to the City's reclaimed water system and the feasibility of tying into the system.

2. ~~Minimum Plan Sizes~~

~~Deciduous Shade Trees: 2 ½ inch caliper~~

~~Ornamental Trees: 2 ½ inch caliper~~

~~Evergreen Trees: 6 ft. minimum height~~

~~Shrubs: 5-gallon container~~

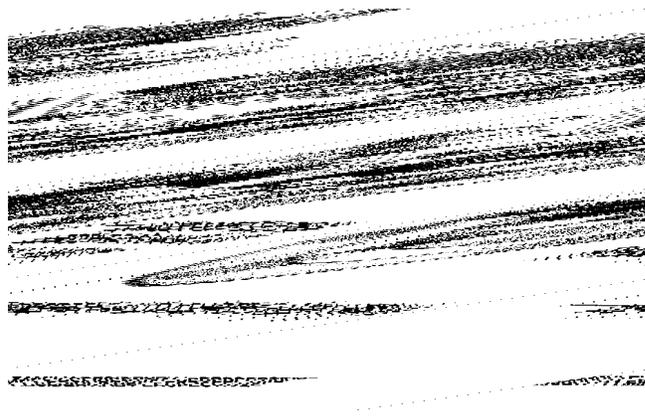
~~Twenty percent (20%) of deciduous trees to be three inch (3") caliper or eight feet (8') in height if evergreen.~~

~~Under certain circumstances one (1) tree may be substituted for ten (10) shrubs and vice-versa.~~

3. ~~Right of Way Landscaping for Streets~~

~~Developers are responsible for the installation of landscaping in the right of way of all arterial and collector streets with or abutting their development, and occasionally of local streets. (See Section 6 F of these Landscape Regulations for required street right of way widths including landscaping and sidewalks). The homeowner's association is responsible for maintenance of the right of way landscaping along arterial and collector streets and occasionally along local streets.~~

~~A minimum of one (1) tree and three (3) shrubs per 550 square feet of landscaped area is required for landscaping within the right of way. In general, formal stand alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs. Automatic sprinkler systems are required within the right of way of arterial, collector and local streets, and the homeowner's association is responsible for the maintenance in the right of way landscaping along arterial and collector streets and occasionally along local streets.~~



4. ~~Buffering Within the Right of Way~~

~~Although fencing between the right of way of arterial or collector streets and residential developments is often proposed as a means of providing privacy and buffering, the use of landscape materials and earth berming either in lieu of, or in~~

~~conjunction with fencing, is highly preferred and shall be required in most instances. The maximum slope of berms shall not exceed 4:1.~~

5. ~~Parking Lot Landscaping~~

~~Parking lots of fifty (50) spaces or more are required to be landscaped. Landscaping is to include the interior area of the parking lot as well as the typical peripheral area landscaping around the outside of the parking lot.~~

~~Landscape islands and/or peripheral landscaping are also encouraged along drive entries.~~

~~Parking lot landscaping may be applied towards the total landscape area required per development.~~

~~Landscape islands shall be no smaller than two standard parking spaces and shall alternate periodically with larger islands for variety and interest. The landscaped islands shall occur approximately every thirty (30) spaces. Continuous landscape strips separating rows of parking are highly encouraged and may be required.~~

~~A minimum of two (2) shade trees and twelve (12) shrubs shall be required per island. If the island is larger than four hundred (400) square feet, the landscape should include one (1) additional shade tree and six (6) additional shrubs for every additional two hundred (200) square feet or a fraction thereof.~~

~~Parking lots shall not be located within the required landscape setback. (25 feet (25') from right of way line).~~

~~Landscape berms to screen parking from adjacent developments are required, unless this requirement is waived.~~

6. ~~Unique Requirements~~

~~It is recognized that certain projects will have unique landscape requirements due to the nature of the site and project characteristics. Such projects will follow the Landscape Regulations to the greatest extent possible, with exceptions to be reviewed by Staff at the time of Official Development Plan.~~

~~8. COMMERCIAL AND INDUSTRIAL STANDARDS~~**VIII. RIGHT OF WAY AREA LANDSCAPE STANDARDS**

RIGHT OF WAY REQUIREMENTS APPLY TO DEVELOPMENTS OF ALL TYPES OF LAND USE. LANDSCAPE IMPROVEMENTS AND THEIR MAINTENANCE, WITHIN ALL RIGHT OF WAY AREAS, ARE THE RESPONSIBILITY OF THE DEVELOPER/OWNER OF ADJACENT PRIVATE PROPERTY.

LANDSCAPE DESIGN OF ALL RIGHT OF WAY AREAS, INCLUDING THAT OF US-36 AND I-25, SHALL BE SHOWN ON THE OFFICIAL DEVELOPMENT PLAN.

LANDSCAPE REQUIREMENTS, INCLUDING BERMS, FENCING OR WALLS BETWEEN STREETS AND RESIDENTIAL DEVELOPMENT, SHALL BE AS DETERMINED BY AN OFFICIAL DEVELOPMENT PLAN OR OTHER RELATED DOCUMENTS, AND AS REQUIRED BY THE REGULATIONS HEREIN. REFER TO THE APPROPRIATE DESIGN GUIDELINES FOR ADDITIONAL REQUIREMENTS.

Although fencing between the right of way of arterial or collector streets and residential developments is often proposed OR REQUIRED as a means of providing privacy and buffering, the use of landscape materials and earth berming either in lieu of fencing, or in conjunction with fencing, is highly preferred and shall be required in most instances. The maximum slope of berms shall not exceed 4:1.

A. MINIMUM AREA

- ALL AREA WITHIN THE ROW NOT COMPRISED OF HARDSCAPE, AS REQUIRED BY THE CITY, SHALL BE LANDSCAPE AREA.

B. PLANT MATERIALS

- REFER TO THE LANDSCAPE REGULATIONS CHART, SINGLE FAMILY DETACHED, AND SECTION VII.A.1.c FOR RELEVANT LANDSCAPE REQUIREMENTS, PLANT MATERIALS AND SIZES, AND AMOUNT OF LANDSCAPING. AUTOMATIC IRRIGATION IS REQUIRED.
- THE CITY HAS THE OPTION TO REDUCE (OR INCREASE) THE AMOUNT OF REQUIRED PLANT MATERIALS.

C. OTHER REQUIREMENTS

- THE CITY WILL REFER PRELIMINARY DESIGN OF LANDSCAPE IMPROVEMENTS WITHIN THE RIGHT OF WAY OF I-25, US 36, FEDERAL BOULEVARD, WADSWORTH BOULEVARD, 120TH AVENUE AND SHERIDAN BOULEVARD SOUTH OF US 36 TO THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) FOR COMMENT AT THE TIME OF OFFICIAL DEVELOPMENT PLAN REVIEW AND APPROVAL. SUBSEQUENT DESIGN REVIEW AND CONSTRUCTION APPROVAL FROM CDOT IS THE RESPONSIBILITY OF THE DEVELOPER.

- THE OWNERSHIP AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS IN THE ROW IS THAT OF THE DEVELOPER UNTIL TURNED OVER TO THE ADJACENT PROPERTY OWNER OR HOMEOWNERS/BUSINESS ASSOCIATION.
- IF AN EXCEPTION IS MADE REGARDING LONG TERM MAINTENANCE OF ANY LANDSCAPE IMPROVEMENTS WITHIN A MEDIAN OR OTHER ROW AREA TO BE THAT OF THE CITY, THE IRRIGATION SYSTEM MUST BE DESIGNED AND CONSTRUCTED WITH ITS OWN SEPARATE WATER TAP (NOT PART OF A LARGER, PRIVATE IRRIGATION SYSTEM).
- REFER TO LANDSCAPE REGULATIONS CHART.
- REFER TO OTHER SECTIONS WITHIN THESE REGULATIONS.

IX. PARKING LOT LANDSCAPE STANDARDS

PARKING LOTS WITHIN ANY LAND USE CATEGORY ARE REQUIRED TO BE LANDSCAPED.

A. MINIMUM AREA

- LANDSCAPE AREA INCLUDES THE PERIPHERAL AREA AROUND THE OUTSIDE OF THE PARKING LOT AS WELL AS INTERNAL TO THE PARKING LOT. ALL NON-HARDSCAPE AREA SHALL CONSIST OF LANDSCAPE AREA.
- Parking lots AND ANY AUTOMOBILE OVERHANG AREA shall not be located within the required landscape setback AREAS (MINIMUM ~~twenty-five (25')~~ 25 FEET from right of way line). REFER TO OTHER APPLICABLE GUIDELINES FOR ADDITIONAL SETBACK INFORMATION.
- Landscape islands/MEDIANS are encouraged along drive ~~entries~~ ENTRANCES; AND REQUIRED AT PERIODIC INTERVALS WITHIN PARKING ROWS, AT THE END OF EACH PARKING ROW AND PERIODICALLY BETWEEN ROWS OF PARKING. (SEE LANDSCAPE REGULATIONS CHART FOR SPECIFIC REQUIREMENTS)
- PARKING LOTS MUST BE BUFFERED, APPROXIMATELY 3 FEET IN GRADE, FROM ADJACENT STREETS AND PROPERTIES WITH THE USE OF BERMS OR SLOPE IN GRADE; SHRUB BEDS MAY REPLACE OR BE USED IN CONJUNCTION WITH BERMS OR SLOPES WHERE IT IS NOT FEASIBLE FOR AN ELEVATION DIFFERENCE OF 3 FEET; AND TREES AS DETERMINED BY THE CITY. AN EXCEPTION TO THIS REGULATION IS THE REQUIRED 6-FOOT BERM ADJACENT TO ARTERIAL STREETS AND HIGHWAYS FOR RESIDENTIAL DEVELOPMENTS AS SPECIFIED ELSEWHERE IN THESE REGULATIONS.
- THE LANDSCAPE DESIGN MUST TAKE INTO ACCOUNT ANY AUTOMOBILE OVERHANG INTO THE LANDSCAPE AREA AND THE MATURE SIZE OF THE PLANT MATERIAL IN ORDER TO MINIMIZE DAMAGE AND CONFLICT.
- BERMING WITHIN LANDSCAPE ISLANDS AND MEDIANS IS DISCOURAGED DUE TO WATER RUNOFF AND HIGHER MAINTENANCE REQUIREMENTS. BLUEGRASS IS DISCOURAGED WITHIN LANDSCAPE ISLANDS AND MEDIANS.
- PEDESTRIAN FOOT TRAFFIC MUST BE CONSIDERED AND REFLECTED IN THE DESIGN OF PARKING LOTS TO IN ORDER TO ACCOMMODATE THE NEEDS OF THE PEDESTRIAN AND MINIMIZE FOOT TRAFFIC WITHIN LANDSCAPE AREAS.
- Curbs shall be provided in all parking lots TO SEPARATE LANDSCAPE AREA FROM PAVEMENT IN ORDER to maintain parking lot surface, protect public

X. NON- RESIDENTIAL LANDSCAPE STANDARDS

The THIS section of the regulations shall apply to ALL NON-RESIDENTIAL LAND USES SUCH AS commercial, OFFICE, and industrial properties, as well as religious, institutional, non-profit, governmental and public utilities types of projects OF A NON-RESIDENTIAL NATURE.

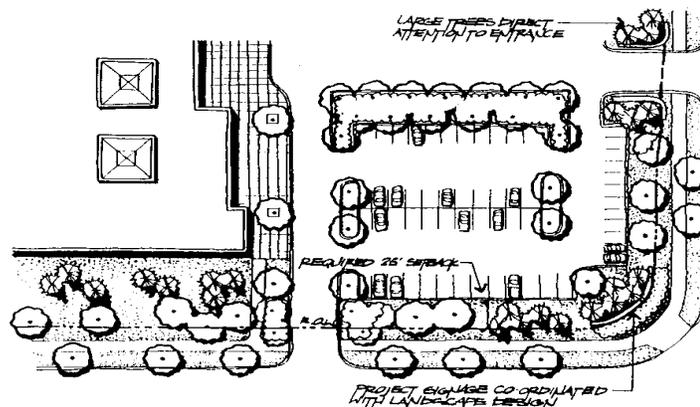
It is required that a minimum distance of ~~twenty-five~~ 25 feet (25') along each property frontage abutting a public right-of-way be landscaped area. The ~~twenty-five~~ 25 feet (25') is measured from the ULTIMATE/FUTURE RIGHT OF WAY ~~property~~-line towards the interior of the site. ~~A minimum of a ten-foot (10') landscape setback area is also required from all interior property lines. When parking lots from adjacent businesses abut, the setback area may, in some instances, be reduced to a three to five feet (3'-5') setback and will be reviewed on a case by case basis at the time of O.D.P.~~ The majority of the landscaping for commercial and/or industrial sites should be situated in the front and/or the sides of the site, and should be visible from abutting right-of-ways. Landscaped areas should not be enclosed by a fence ~~which~~ THAT limits its visibility.

Landscaping, INCLUDING TREES, is encouraged ~~in close proximity~~ ADJACENT to buildings, as well as throughout the general landscape area, and may include landscape ~~cut-outs~~ PLANTERS in the walks and other hard surface areas.

Positive drainage shall be maintained away from buildings. ~~Cut-out areas~~ PLANTER AREAS shall include adequate area for root growth.

TURF OR OTHER PLANTINGS ADJACENT TO PAVEMENT OR FOUNDATIONS ARE ENCOURAGED TO BE OF LOW WATER REQUIREMENTS OR TO BE IRRIGATED WITH LOW VOLUME METHODS.

~~Landscaping and automatic sprinkler system shall be installed by the developer. All landscaping installed shall be irrigated and maintained by the business association/owner. The developer is advised to check with the City's Public Works Department to determine the proximity of the project to the City's reclaimed water system and the feasibility of tying into the system.~~



COMMERCIAL LANDSCAPE PLAN

a. Entrances and Sign Features

The entrances to commercial or industrial centers should be designed to provide an attractive, year round landscape statement. ~~Street m~~Medians/landscape islands are encouraged ~~and may be required~~ at entranceways. ~~When installed, street medians shall be a minimum of ten feet (10') wide and twenty five feet (25') long. If installed, maintenance of the medians/landscape islands within the center shall be the responsibility of the developer/business association.~~

Enhanced landscaping is encouraged for MONUMENT sign feature areas. The addition of large trees, especially evergreens, can provide an all-season backdrop and direct attention to the sign feature area. The inclusion of perennials and annuals can provide color for the spring and summer, and is generally required.

A. Minimum Requirements AREA

- ~~For properties up to ten (10) acres in size, a~~ A minimum of twenty (20%) of the site shall be landscaped including the general landscape area and detention pond areas, AND EXCLUDING RIGHT OF WAY. Driveways, hardscape, parking areas or walks are not included. Parking lot island landscaping is included. RIGHT OF WAY LANDSCAPING IS REQUIRED FOR ADJACENT STREETS AND HIGHWAYS, BUT IS NOT INCLUDED IN THE REQUIRED 20% CALCULATION. ~~Properties over ten (10) acres in size shall be reviewed on an individual basis. Proposals for reduction in overall landscape area required in exchange for an increase in quantities or sizes of plant material may be reviewed on a case by case basis.~~

B. PLANT MATERIALS:

- Within the required landscape area, one (1) tree and three (3) shrubs are required per 550 square feet of the landscape area, (EXCEPTING BELOW THE 5 YEAR STORM WATER SURFACE ELEVATION WITHIN DETENTION PONDS). A mixture of evergreen and deciduous trees shall be provided. IF THE LANDSCAPE AREA EXCEEDS 20%, A REDUCTION IN THE OTHERWISE, RESULTING NUMBER OF TREES AND SHRUBS, MAY BE APPROVED BY THE CITY, IN ORDER TO ENCOURAGE LANDSCAPE AREA IN EXCESS OF MINIMUM REQUIREMENTS.
- REFER TO SINGLE FAMILY DETACHED REGULATIONS REGARDING THE REQUIREMENTS OF LANDSCAPE AREA AND THE GROUND SURFACE COVERAGE.
- HIGH WATER ZONES CANNOT EXCEED 50% OF THE LANDSCAPE AREA, EXCEPTING RIGHT OF WAY AREAS, PARKS, OR OTHER AREAS AS APPROVED BY THE CITY.
- ALL LANDSCAPE IMPROVEMENTS SHALL BE INSTALLED BY THE DEVELOPER PRIOR TO CERTIFICATE OF OCCUPANCY OF THE BUILDING OR BUILDINGS, IN PHASES INDICATED BY THE OFFICIAL DEVELOPMENT PLAN, OR IF SURETY IF PROVIDED TO THE CITY, IN AN ALTERNATE TIMEFRAME DETERMINED BY THE CITY.

- MAINTENANCE OF ALL LANDSCAPE IMPROVEMENTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/OWNER/OR BUSINESS ASSOCIATION.

C. OTHER REQUIREMENTS

- REFER TO LANDSCAPE REGULATIONS CHART
- REFER TO OTHER SECTIONS WITHIN THESE REGULATIONS
- REFER TO THE APPROPRIATE DESIGN GUIDELINES (EXAMPLE: COMMERCIAL DESIGN GUIDELINES) FOR ADDITIONAL REQUIREMENTS.

~~No more than fifty (50%) of the completed landscape within a shrub bed area should be covered exclusively with stone or wood chip mulch. A minimum of seventy five percent (75%) of the landscaping should be covered by living plant material such as ground cover, shrubs or grass, within three (3) years following installation and thereafter.~~

~~b. **Minimum Plant Size**~~

~~Deciduous Shade Trees: 2 ½ inch caliper~~

~~Ornamental Trees: 2 ½ inch caliper~~

~~Evergreen Trees: 6 ft. minimum height~~

~~Shrubs: 5 gallon container~~

~~Twenty percent (20%) of deciduous trees to be three inch (3") caliper or eight feet (8') in height if evergreen.~~

~~Under certain circumstances one (1) tree may be substituted for ten (10) shrubs and vice versa.~~

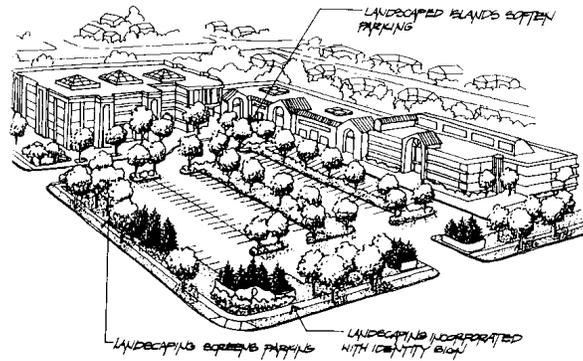
~~d. **Right of Way Landscaping for Streets**~~

~~Developers are responsible for the installation of landscaping, irrigation and maintenance in the right of way of all arterials, collectors and occasionally of local streets abutting their development.~~

~~Arterials, Collectors and Local Streets: A minimum of one (1) tree and three (3) shrubs per 550 square feet of landscaped area is required for landscaping within the right of way. In general formal stand alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs.~~

~~e. **Buffering Within the Right of Way**~~

~~For larger commercial/industrial developments, the use of landscape materials and earth berming is encouraged in the right of way areas for buffering. Berm slopes shall not exceed 4:1.~~



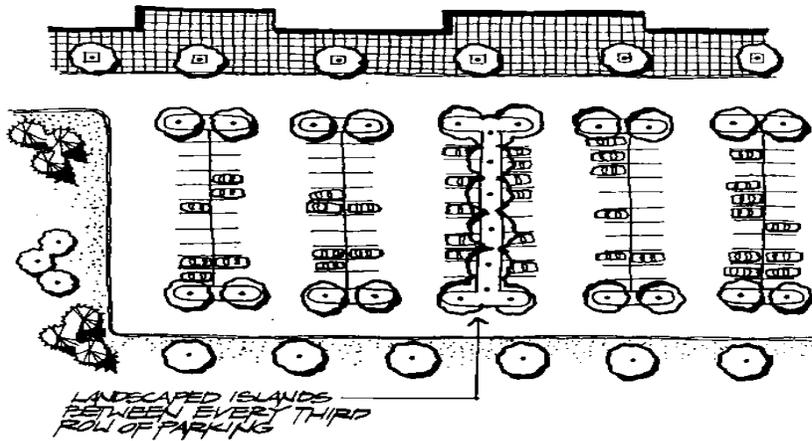
COMMERCIAL LANDSCAPE PERSPECTIVE

f. Unique Requirements

It is recognized that certain projects will have unique landscape requirements due to the nature of the site and project characteristics. Such projects will follow the Landscape Regulations to the greatest extent possible, with exceptions to be reviewed by Staff at the time of Official Development Plan.

g. Parking Lot Landscaping

The interiors of Parking lots of fifty (50) spaces or more are required to be landscaped with parking lot landscaped islands. Landscaping is to include the interior area of the parking lot as well as the typical peripheral area landscaping around the outside of the parking lot. Landscape islands and/or peripheral landscaping are also encouraged along drive entries. Parking lots shall not be located within the required landscape setback (25' from right of way line).



PARKING LOT LANDSCAPE

Parking lot landscaping may be applied towards the total landscape area required per development.

~~Landscape islands shall be no smaller than two standard parking spaces long, and shall be alternated periodically with larger islands for variety and interest. The landscaped islands shall occur approximately every thirty (30) spaces. Larger parking lots of three hundred (300) spaces or more shall also include a minimum nine foot (9') wide landscape strip in between every three (3) rows of parking spaces at a minimum.~~

~~A minimum of two (2) shade trees and twelve (12) shrubs shall be required per island. If the island is larger than four hundred (400) square feet, the landscape should include one (1) additional shade tree and six (6) additional shrubs for every additional two hundred (200) square feet or a fraction thereof.~~

~~Landscape berms to screen parking from adjacent developments or streets are often required. Berms shall not exceed 4:1 slopes.~~

XI. LANDSCAPE REGULATIONS CHART

THIS CHART SUPPLEMENTS BOTH THE GENERAL LANDSCAPE REQUIREMENTS AND THE SPECIFIC LAND USE REQUIREMENTS

REFER TO TEXT PORTION OF REGULATIONS FOR ADDITIONAL INFORMATION	MINIMUM LANDSCAPE REQUIREMENTS	MINIMUM PLANT SIZES*	AMOUNT OF LANDSCAPING REQUIRED IN COMMON AREAS	MINIMUM LANDSCAPE SETBACK AREA	INSTALLATION AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS
<p>SINGLE FAMILY DETACHED (SFD)</p>	<p>LANDSCAPE AREA: MIN. 50% OF EACH YARD AREA ADJACENT TO A STREET. (REMAINING YARD AREA IS HARDSCAPE)</p> <p>TREES IN THE FRONT YARD: 1 SHADE TREE PER LOT UP TO 10,000 SF IN SIZE; 2 TREES (1 SHADE) PER LOT IF LARGER THAN 10,000 SF</p> <p>REQUIRED LANDSCAPE IMPROVEMENTS MUST BE INSTALLED PRIOR TO C.O. BY DEVELOPER OR WITHIN 1 YEAR OF C.O. BY HOMEOWNER</p> <p>ROW ADJACENT TO LOT OR SUBDIVISION: LANDSCAPE BY HOMEOWNER OR DEVELOPER</p> <p>SOIL PREP. VERIFICATION PRIOR TO CERTIFICATE OF OCCUPANCY.</p> <p>AUTOMATIC IRRIGATION IS REQUIRED</p> <p>EXISTING TREES: REFER TO TEXT IN REGULATIONS</p>	<p>DECIDUOUS SHADE TREE: 2 INCH CALIPER</p> <p>ORNAMENTAL TREE: 2- INCH CALIPER</p> <p>EVERGREEN TREE: 6 FOOT HEIGHT</p> <p>SHRUBS: 5 GALLON CONTAINER</p> <p>PERENNIALS, VINES, GROWDCOVERS: 1 GALLON CONTAINER</p> <p>TURF/LAWN: GRASS SPECIES TO BE MAINTAINED AT 6 INCH HEIGHT; SEED OR SOD FOR TURF WHEN INSTALLED BY RESIDENT HOMEOWNER; TYPICALLY SOD FOR ALL TURF BY DEVELOPER OR BUILDER WITHIN RESIDENTIAL BUILDING LOT, ROW, OR WITHIN COMMON AREA LANDSCAPING</p> <p>COMMON AREAS: 20% OF DECIDUOUS TREES TO BE 3 INCH CALIPER AND 8 FOOT HEIGHT FOR EVERGREEN TREES</p>	<p>LANDSCAPE AREA: ALL GROUNDPLANE AREA EXCLUSIVE OF HARDSCAPE IMPROVEMENTS. THE LANDSCAPE AREA SHALL BE PLANTED WITH TREES, SHRUBS, TURF OR GROWDCOVER.</p> <p>ONE TREE AND THREE SHRUBS PER 550 SF OF LANDSCAPE AREA- EXCLUDING THE AREA BELOW THE FIVE YEAR STORM WATER SURFACE ELEVATION IN DETENTION PONDS</p> <p>REFER TO SECTION VII.A.1c FOR LOCAL STREET ROW</p> <p>DETENTION NOT ALLOWED IN ROW</p> <p>THE CITY HAS THE OPTION TO REDUCE THE QUANTITY OF TREES AND/OR SHRUBS FOR LANDSCAPE AREAS SUCH AS PRIVATE PARKS OR OPEN SPACE, WHERE LARGER TURF AREAS ARE DETERMINED BY THE CITY TO BE DESIRABLE.</p>	<p>A 6-FOOT HEIGHT BERM IS REQUIRED ADJACENT TO ARTERIAL STREETS AND HIGHWAYS, MEASURED FROM TOP OF CURB. THIS WILL REQUIRE ADDITIONAL LANDSCAPE SETBACK ALONG ARTERIAL STREETS AND HIGHWAYS. ALTERNATIVE DESIGN SOLUTIONS DEPENDING UPON SITE SPECIFIC GRADING CONSIDERATIONS MAY BE CONSIDERED BY THE CITY.</p> <p>REFER TO SFD RESIDENTIAL DESIGN GUIDELINES.</p>	<p>INSTALLATION BY THE DEVELOPER OR LOT OWNER FOR EACH LOT AND ADJACENT RIGHT OF WAY</p> <p>MAINTENANCE BY THE DEVELOPER THEN HOME OWNERS ASSOCIATION/OWNER FOR ALL RESIDENTIAL LOTS AND COMMON AREAS</p> <p>*MINIMUM PLANT SIZES DO NOT APPLY TOWARD LANDSCAPING BY RESIDENT LOT OWNER IN PRIVATE YARD AREAS, EXCEPTING ANY REQUIRED FRONT YARD TREES OR SHRUBS AS REQUIRED BY THE OFFICIAL DEVELOPMENT PLAN</p> <p>ADDRESS THE DESIGN, OWNERSHIP AND MAINTENANCE OF FENCING AND WALLS ON THE OFFICIAL DEVELOPMENT PLAN</p> <p>*AS APPROVED BY THE CITY: 1 TREE MAY BE SUBSTITUTED FOR 10 SHRUBS, 1 SHRUB FOR ONE 5-GALLON OR THREE 1 GALLON LARGE PERENNIAL GRASSES OR VINES.</p>

REFER TO TEXT PORTION OF REGULATIONS FOR ADDITIONAL INFORMATION	MINIMUM LANDSCAPE REQUIREMENTS	MINIMUM PLANT SIZES	AMOUNT OF LANDSCAPING REQUIRED IN COMMON AREAS	MINIMUM LANDSCAPE SETBACK AREA	INSTALLATION AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS
SINGLE FAMILY ATTACHED (SFA) AND MULTI-FAMILY (MFA)	<p>40 % OF THE OVERALL SITE, EXCLUDING ROW, TO BE LANDSCAPE AREA</p> <p>ROW ADJACENT TO OR WITHIN THE PROPERTY MUST BE LANDSCAPED BY THE DEVELOPER</p> <p>SOIL PREP. VERIFICATION AND INSPECTION PRIOR TO CERTIFICATE OF OCCUPANCY</p> <p>AUTOMATIC IRRIGATION REQUIRED (EXCLUDING ANY PRIVATE COURTYARD AREAS)</p> <p>EXISTING TREES: REFER TO TEXT IN REGULATIONS</p>	REFER TO SFD	REFER TO SFD	<p>25 FEET MINIMUM FROM ULTIMATE RIGHT OF WAY; 35 FEET MINIMUM FROM ADJACENT PROPERTY LINES WITH NO DRIVES, DETENTION POND, OR PARKING IN THIS SETBACK</p> <p>A 6 FOOT HEIGHT BERM IS REQUIRED ADJACENT TO ARTERIAL STREETS AND HIGHWAYS (REFER TO SFD IN FOR SPECIFICS)</p> <p>INCLUDE TALL BERMS NOT TO EXCEED 4:1 SLOPE</p> <p>AUTO OVERHANG INTO THE MINIMUM LANDSCAPE SETBACK REQUIRES THE SETBACK TO BE INCREASED AN EQUAL DIMENSION</p> <p>REFER TO SFA & MF RESIDENTIAL DESIGN GUIDELINES</p>	<p>INSTALLATION BY THE DEVELOPER, MAINTENANCE BY OWNER/ HOME OWNERS ASSOCIATION FOR ALL COMMON AREAS, INCLUDING ROW</p> <p>LOT OWNER IF ANY SEPARATE YARD AREAS, WITH INSTALLATION TO OCCUR WITHIN ONE YEAR OF CERTIFICATE OF OCCUPANCY</p> <p>ADDRESS THE DESIGN, OWNERSHIP AND MAINTENANCE OF FENCING AND WALLS ON THE OFFICIAL DEVELOPMENT PLAN</p>
RIGHT-OF-WAYS (ROW)	REFER TO RELEVANT LAND USE CATEGORY FOR REGULATIONS	REFER TO SFD	REFER TO SFD	NOT APPLICABLE	<p>REFER TO RELEVANT LAND USE CATEGORY</p> <p>ADDRESS THE DESIGN, OWNERSHIP AND MAINTENANCE OF ANY FENCING AND WALLS ON THE OFFICIAL DEVELOPMENT PLAN</p>

REFER TO TEXT PORTION OF REGULATIONS FOR ADDITIONAL INFORMATION	MINIMUM LANDSCAPE REQUIREMENTS	MINIMUM PLANT SIZES	AMOUNT OF LANDSCAPING REQUIRED IN COMMON AREAS	MINIMUM LANDSCAPE SETBACK AREA	INSTALLATION AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS
<p>PARKING LOTS</p>	<p>LANDSCAPE ISLANDS AND MEDIANS ARE WITHIN PARKING LOTS ARE REQUIRED.</p> <p>LANDSCAPE ISLANDS ARE REQUIRED AT THE END OF EACH PARKING ROW AND AT A MINIMUM INTERVAL WITHIN THE ROW OF 30 PARKING SPACES</p> <p>IN PARKING LOTS IN EXCESS OF 300 SPACES, LANDSCAPE MEDIANS ARE REQUIRED TO OCCUR AT EVERY 3RD ROW OF PARKING, MINIMUM 9 FT IN WIDTH; OR EVERY 6TH ROW OF PARKING, MINIMUM 25 FT TOTAL WIDTH- INCLUDING 6 FT SIDEWALK.</p> <p>MINIMUM SIZE OF ISLAND MUST EQUAL OR EXCEED DIMENSIONS OF ADJACENT PARKING STALL IN BOTH WIDTH AND LENGTH</p> <p>REFER TO THE RELEVANT LAND USE CATEGORY FOR OTHER REGULATIONS</p>	<p>REFER TO SFA</p> <p>TURF IS GENERALLY NOT ACCEPTABLE WITHIN LANDSCAPE ISLANDS UNLESS AN UNDERGROUND IRRIGATION SYSTEM IS INSTALLED</p>	<p>REFER TO SFD</p> <p>LANDSCAPE ISLAND: ONE TREE AND 6 SHRUBS PER 171 SF, PLUS ONE SHRUB PER EVERY ADDITIONAL 25 SF AND ONE TREE FOR EVERY ADDITIONAL 150 SF.</p> <p>LANDSCAPE MEDIAN: MINIMUM OF ONE TREE EVERY 40 LINEAL FEET PLUS ONE SHRUB EVERY 25 SQUARE FEET</p>	<p>REFER TO RELEVANT LAND USE CATEGORY DESIGN GUIDELINES</p> <p>ANY AUTOMOBILE OVERHANG INTO THE REQUIRED LANDSCAPE SETBACK AREA OR MEDIAN REQUIRES AN INCREASE IN THE LANDSCAPE SETBACK OR MEDIANS BY AN EQUAL DIMENSION</p>	<p>REFER TO SFA</p>

REFER TO TEXT PORTION OF REGULATIONS FOR ADDITIONAL INFORMATION	MINIMUM LANDSCAPE REQUIREMENTS	MINIMUM PLANT SIZES	AMOUNT OF LANDSCAPING REQUIRED IN COMMON AREAS	MINIMUM LANDSCAPE SETBACK AREA	INSTALLATION AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS
<p>NON-RESIDENTIAL</p>	<p>20% OF THE OVERALL SITE, EXCLUDING ROW, MUST BE LANDSCAPE AREA</p> <p>ROW ADJACENT TO OR WITHIN THE PROPERTY MUST BE LANDSCAPED BY THE DEVELOPER</p> <p>NO MORE THAN 50% OF THE LANDSCAPE AREA TO BE A HIGH HYDRO ZONE</p> <p>SOIL PREPARATION, INSPECTION AND VERIFICATION PRIOR TO CERTIFICATE OF OCCUPANCY</p> <p>AUTOMATIC IRRIGATION</p> <p>EXISTING TREES: REFER TO TEXT IN REGULATIONS</p>	<p>REFER TO SFD</p>	<p>REFER TO SFD</p>	<p>25 FT. FROM ULTIMATE ROW: REFER TO COMMERCIAL GUIDELINES FOR ADDITIONAL SETBACK REQUIREMENTS</p> <p>NO DETENTION OR PARKING IN LANDSCAPE SETBACK AREA</p> <p>DETENTION MUST BE LOCATED WITHIN A BUILDING LOT</p>	<p>DEVELOPER THEN PROPERTY OWNER/ OWNERS OR BUSINESS ASSOCIATION FOR ALL LANDSCAPE AREAS INCLUDING ROW</p>

XII. LANDSCAPE AND IRRIGATION PLAN REQUIREMENTS

~~The Landscape AND IRRIGATION plans shall be submitted AND APPROVED BY to the City with AS PART OF the Official Development Plan (ODP), ODP AMENDMENT OR ODP WAIVER, and shall include a land use summary chart showing square footages of all potential land uses including landscaping, building areas and hard surface paving areas. As required by City Code, final landscape plans in accordance with an approved Official Development Plan (ODP) shall be submitted for approval in conjunction with the Official Development Plan prior to beginning construction of any landscape areas. Landscape AND IRRIGATION plans are also recommended and may be required FOR REDEVELOPMENT OR CHANGE-IN-USE PROJECTS. As determined by the City, minor redevelopment or change-in-use projects may be required only to submit a landscape plan and a written statement describing the type of irrigation system proposed.~~

Landscape AND IRRIGATION plans will not be required of individuals constructing single-family OR DUPLEX residential units that they intend to own and occupy OR OF RESIDENT HOMEOWNERS COMPLETING OR ALTERING THE LANDSCAPING WITHIN THEIR SINGLE FAMILY OR DUPLEX LOT- HOWEVER, THE LANDSCAPE AND IRRIGATION REQUIREMENTS NOTED IN THESE REGULATIONS MUST BE FOLLOWED, UNLESS DETERMINED OTHERWISE BY THE CITY ~~unless specifically identified in the Official Development Plan.~~

LANDSCAPE AND IRRIGATION PLANS SHALL CONTAIN INFORMATION AS NOTED IN THESE REGULATIONS AND THE PLAN SUBMITTAL DOCUMENT.

A SET OF Final landscape AND IRRIGATION construction documents shall be submitted FOR REVIEW AND APPROVAL BY ~~to~~ the ODP inspector prior to APPROVAL OF THE FINAL PLAT, OR IF A FINAL PLAT IS ALREADY IN PLACE, PRIOR TO issuance of a building permit. NO CONSTRUCTION OF LANDSCAPE IMPROVEMENTS CAN OCCUR UNTIL THE CITY APPROVES THE LANDSCAPE AND IRRIGATION CONSTRUCTION PLANS, AND PRIVATE IMPROVEMENTS AGREEMENT. THE LANDSCAPE AND IRRIGATION CONSTRUCTION PLANS MUST BE IN A SIMILAR FORMAT AS OFFICIAL DEVELOPMENT PLANS FOR FILING AND RECORDING PURPOSES BY THE CITY.

LANDSCAPE AND IRRIGATION CONSTRUCTION PLANS MUST REFLECT THE APPROVED LANDSCAPE AND IRRIGATION PLAN REVIEWED AND APPROVED AT TIME OF EARLIER OFFICIAL DEVELOPMENT PLAN OR ODP WAIVER APPROVAL. ANY REVISIONS TO THESE PLANS DURING THE CONSTRUCTION OF A PROJECT MUST BE APPROVED BY THE CITY PRIOR TO THE FIELD CHANGE, AND REFLECTED IN A REVISED SET OF CONSTRUCTION DRAWINGS. AS-BUILT DRAWINGS MUST BE SUBMITTED BY THE DEVELOPER TO THE ODP INSPECTOR AND TO THE OWNER/OWNER'S ASSOCIATION/HOMEOWNER'S ASSOCIATION PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. PRIOR TO RELEASE OF ANY SURETY, THE DEVELOPER MUST ALSO PROVIDE A SIGNED CHECKLIST TO THE CITY VERIFYING THAT THE LANDSCAPE AND IRRIGATION IMPROVEMENTS HAVE BEEN INSTALLED ACCORDING TO APPROVED PLANS AND CITY REQUIREMENTS.

EITHER A LANDSCAPE ARCHITECT OR A LANDSCAPE DESIGNER SHALL PREPARE THE LANDSCAPE PLAN. A CERTIFIED IRRIGATION DESIGNER SHALL PREPARE THE IRRIGATION PLAN AND A CERTIFIED IRRIGATION CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE IRRIGATION SYSTEM. A CERTIFIED IRRIGATION

AUDITOR SHALL CONDUCT THE IRRIGATION AUDIT. (RESIDENT SINGLE FAMILY OR DUPLEX LOT OWNERS ARE EXEMPT FROM THIS REQUIREMENT).

A. Landscape Plans – THE OFFICIAL DEVELOPMENT LANDSCAPE PLAN AND Landscape CONSTRUCTION Plans shall contain the following items:

1. SHEET SIZES ACCORDING TO OFFICIAL DEVELOPMENT PLAN REQUIREMENTS AND NO CASE LARGER THAN 24" X 36" FOR FINAL LANDSCAPE CONSTRUCTION PLANS.
2. Title block CENTERED AT THE TOP OF EACH SHEET – REFER TO THE OFFICIAL DEVELOPMENT PLAN SUBMITTAL DOCUMENT FOR FORMAT, sheet name, COMPANY IDENTIFICATION INCLUDING ADDRESS, PHONE NUMBER, name of person preparing THE plan, and date.
3. Scale – written and graphic. KEEP IN MIND THE IRRIGATION PLAN MUST BE DRAWN TO THE SAME SCALE. 1"= 40 FEET OR LARGER (1"=20 FEET PREFERRED)
4. North arrow.
5. Property lines.
6. Key.
7. Existing and proposed structures, sidewalks, overhangs and paving.
8. Natural features relevant to the site and/or retention/detention areas.
9. PROPOSED GRADING, INDICATING topographic features and spot elevations of the final grading plan, adequate to identify and properly specify landscaping for area needing slope protection as well as adequate to depict any screening of parking areas.
10. SHOW AND LABEL WATER FEATURES, BERMS, RETAINING WALLS, WALLS, FENCES, TRASH ENCLOSURES, OUTDOOR LIGHTING-INCLUDING STREET LIGHTS, AND SIGNAGE.
11. EXISTING AND PROPOSED UTILITY EASEMENTS
12. SIGHT TRIANGLES
13. SHOW AND LABEL LOCATIONS OF PROPOSED (LOW, MODERATE, HIGH) HYDROZONES AND IDENTIFY THE TOTAL SQUARE FOOTAGE OF EACH.
14. SHOW AND LABEL LOCATIONS TO BE IRRIGATED WITH POTABLE AND NON-POTABLE WATER AND IDENTIFY THE TOTAL SQUARE FOOTAGE OF EACH.
15. TOTAL WATER BUDGET AND CALCULATIONS BY HYDROZONE.
16. Existing plant material, including plants to be removed or relocated. (LABEL TYPE, SIZE, CURRENT AND PROPOSED LOCATIONS).
17. Proposed plant material LOCATED ACCORDING TO LOW, MODERATE, OR HIGH HYDROZONES (label NUMBER, SPECIES, AND SIZE IF NOT MINIMUM SIZE). PLANTS WITHIN ANY ONE HYDROZONE SHALL HAVE SIMILAR WATER REQUIREMENTS. DRAW PLANT MATERIAL AT A LOW ESTIMATE OF MATURE SIZE.
18. LANGUAGE AND CALCULATIONS THAT INDICATE OVERALL MINIMUM REQUIREMENTS. THIS INFORMATION MUST REFLECT BOTH THE REQUIRED MINIMUM PERCENT OF LANDSCAPE AREA (AS DETERMINED BY TYPE OF LAND USE), AS WELL AS THE REQUIRED MINIMUM NUMBER OF PLANTS (TREES, SHRUBS, TURF AREA) BROKEN DOWN INTO SPECIFIC LANDSCAPE AREAS (SUCH AS PRIVATE LANDSCAPE AREAS AND RIGHT-OF-WAY LANDSCAPE AREAS). THE PLANT SCHEDULE MUST MEET OR EXCEED THESE REQUIREMENTS.

19. NOTE THE AMOUNT OF REQUIRED SOIL AMENDMENT REQUIRED AND INCLUDE CALCULATIONS INDICATING HOW THE TOTAL AMOUNT WAS DERIVED. THE AMOUNT OF SOIL PREPARATION, AND CALCULATIONS THEREOF, MAY BE BROKEN DOWN BY SPECIFIC AREAS- SUCH AS RIGHT OF WAY, PRIVATE PARK, ETC.
 20. LABEL LOCATIONS OF PROPOSED TURF (SPECIES). INCLUDE INFORMATION REGARDING METHOD OF INSTALLATION (SOD, PLUGS, SEEDING RATES), MAXIMUM AND/OR MAINTAINED HEIGHT, MOWING SCHEDULE AND WEED CONTROL MEASURES.
 21. LABEL OR KEY AREAS OF MULCH AND INDICATE TYPE.
 22. Planting details, SPECIFICATIONS, ~~including the~~ AND installation information FOR PLANT MATERIALS, SOIL PREPARATION, MULCHES, EDGING, ETC. (THE OFFICIAL DEVELOPMENT PLAN LANDSCAPE PLAN WILL PROVIDE GENERAL INFORMATION IN THIS REGARD AND THE CONSTRUCTION LANDSCAPE PLAN WILL PROVIDE ADDITIONAL INFORMATION NECESSARY FOR INSTALLATION). ~~and specification of soil preparation, and mulch.~~
 23. SHOW GENERAL ~~D~~details of ITEMS SUCH AS berms, walls, retaining walls ~~or any other structural buffering device~~, FENCES, TRASH ENCLOSURES, OUTDOOR LIGHTING, SIGNS, ETC. SPECIFIC DETAILS RELATED TO PLANT INSTALLATION, MULCHING, TREE STAKING WILL BE SHOWN ON THE LANDSCAPE CONSTRUCTION PLAN.
 24. SHOW A GENERIC OR MODEL LANDSCAPE DETAIL/PLAN FOR SINGLE FAMILY OR DUPLEX LOTS WHERE THE LANDSCAPING OF A PORTION OF THE LOT IS REQUIRED BY THE BUILDER.
 25. Plant schedule (see below). THE SCHEDULE MUST ACCURATELY REFLECT THE LANDSCAPE PLAN.
- ~~The landscape plan shall indicate the exact number and location of plants of each species.~~
- The schedule shall be divided according to TYPE OF PLANT MATERIAL: EXISTING AND PROPOSED trees (BROKEN INTO CATEGORIES OF DECIDUOUS SHADE TREES, EVERGREEN TREES, ACCENT/ORNAMENTAL TREES), shrubs, ~~and~~ groundcovers, turf types, including ANY seed mixes. PLANT SPECIES WITHIN EACH CATEGORY SHALL ALSO BE LABELED AND GROUPED BY THEIR RESPECTIVE HYDROZONE RATING.
 - PLANT NAME ABBREVIATION (IF USED), ~~P~~plant name (common name, botanical name and variety), and exact quantities OF EACH PLANT shall be included on the plant schedule.
 - The schedule shall ~~also~~ indicate the size ~~and condition~~ of plants. Size shall be expressed in terms of size of container (5 GALLON FOR SHRUBS, 1 GALLON FOR PERENNIALS AND GROUNDCOVERS), height of plant (FOR EVERGREEN TREES), or caliper of tree (FOR DECIDIOUS TREES). ~~Condition shall be expressed in terms of size of container, balled and burlapped, and/or bare root plant.~~
 - PLANT SPACING FOR SHRUBS AND GROUNDCOVERS MUST BE INDICATED (FOR EXAMPLE: "4 FEET ON CENTER- TRIANGULAR SPACING"). ~~The schedule shall be divided according to trees, shrubs and ground covers, turf types, including seed mix.~~
26. Natural features relevant to the site and/or retention/detention areas.

- ~~27. Topographic contours and spot elevations of the final grading plan, adequate to identify and properly specify landscaping for areas needing slope protection as well as adequate to depict any screening of parking areas.~~
28. Information as to who will have responsibility for maintenance of those materials, structures and areas on the plan. INCLUDE NAME, TITLE, ADDRESS AND CONTACT PHONE NUMBER.
- ~~29. An indication of the manner in which lawn areas are to be established.~~
- ~~30. Pertinent information necessary for a contractor to perform the landscape installation, such as planting specifications.~~
31. City of Westminster Standard General Notes. (See Plan Submittal Document packet provided by the City).

FOR ADDITIONAL INFORMATION AND SPECIFIC INSTRUCTIONS ON HOW TO PHYSICALLY INSTALL PLANT MATERIAL REFER TO THE CITY SITEWORK SPECIFICATIONS.

B. Irrigation Plans

A PRELIMINARY Irrigation plans shall be submitted in conjunction with the Official Development Plan, but IS NOT PART OF ~~need not be included in~~ the Official Development Plan document. THE PRELIMINARY IRRIGATION PLAN WILL BE REQUIRED TO COORDINATE WITH THE OFFICIAL DEVELOPMENT LANDSCAPE PLAN AND MUST INDICATE LOCATION AND SIZE (AREA) OF EACH HYDROZONE- INCLUDING ANY ZONES USING NON-POTABLE WATER, TOTAL WATER BUDGET BROKEN DOWN BY EACH HYDROZONE, LOCATION AND SIZE OF WATER TAP AND METER, EXISTING AND DESIGN WATER PRESSURE, TYPE OF IRRIGATION TECHNIQUE (SUCH AS DRIP, MICROSPRAY, SPRAY, ROTOR, UNDERGROUND, ETC.), AND OTHER GENERAL INFORMATION.

Irrigation CONSTRUCTION plans will be ~~reviewed for general layout prior to construction~~ REQUIRED TO INDICATE DESIGN, LAYOUT, AND CONSTRUCTION INFORMATION AS NOTED LATER IN THIS SECTION. ~~The design of the irrigation plan shall be prepared by a qualified landscape architect or other person experienced in irrigation system design and~~ IRRIGATION CONSTRUCTION PLANS shall be submitted FOR REVIEW AND APPROVAL at the time of landscape construction drawings and private improvements agreement.

ALL LANDSCAPE AREA REQUIRES BOTH SOIL PREPARATION AND AN AUTOMATIC IRRIGATION SYSTEM.

THE IRRIGATION SYSTEM IS TO BE INSTALLED AFTER SOIL PREPARATION AND PRIOR TO PLANT MATERIALS.

COORDINATE AND REFLECT DESIGN AND CONSTRUCTION INFORMATION AS TO TYING INTO THE CITY'S NON-POTABLE WATER SYSTEM, IF APPLICABLE. ADDITIONAL INFORMATION IN THIS REGARD MAY BE OBTAINED BY CONTACTING THE CITY OF WESTMINSTER DEPARTMENT OF PUBLIC WORKS AND UTILITIES.

THE IRRIGATION SYSTEM AND IRRIGATION CONSTRUCTION PLAN SHALL BE DESIGNED AND INSTALLED TO ADDRESS ALL OF THE FOLLOWING:

- COORDINATION WITH THE PRELIMINARY LANDSCAPE AND IRRIGATION PLANS.
- IRRIGATION DESIGN AND TECHNIQUES MUST CORRESPOND TO THE HYDROZONE AND TYPE OF PLANT MATERIAL.
- DESIGN FOR BERMS AND SLOPES SHOULD MINIMIZE RUNOFF. (BERMS AND SLOPES MAY NEED REPETITIVE, SHORTER WATERING CYCLES.)
- AVOID OVERSPRAY ONTO NON-LANDSCAPE AREAS.
- IRRIGATION METHODS OF DRIP, MICRO-SPRAY OR SUB-SURFACE IRRIGATION WITHIN LANDSCAPE AREAS LESS THAN 8 FEET IN WIDTH.
- TOTAL ANNUAL WATER APPLICATION BY IRRIGATION (WATER BUDGET) SHALL NOT EXCEED AN AVERAGE OF 15 GALLONS/SQUARE FOOT/YEAR (24 INCHES) TO FACILITATE WATER CONSERVATION. FOR PURPOSES OF CALCULATING THE WATER BUDGET, THE LOW HYDROZONE IS CALCULATED AS 5.5 GALLONS/SQUARE FOOT/YEAR (LESS THAN 9 INCHES); THE MODERATE HYDROZONE CALCULATED AT 13.5 GALLONS/SQUARE FOOT/YEAR (22 INCHES); AND THE HIGH HYDROZONE CALCULATED AT 18 GALLONS/SQUARE FOOT/YEAR (29 INCHES).
- REQUIREMENTS OF WATER FEATURES MUST BE INDICATED AS PART OF THE WATER BUDGET AND WILL BE EVALUATED ON A CASE-BY-CASE BASIS. THE WATER USED IN WATER FEATURES MUST BE RECYCLED. NON-POTABLE WATER MUST BE USED IF POSSIBLE. WATER FEATURES MUST BE MAINTAINED IN WORKING ORDER AND OPERATE DURING THE TIMES SPECIFIED ON THE OFFICIAL DEVELOPMENT PLAN.
- A MAXIMUM IRRIGATION TIME LIMIT OF 8 HOURS EVERY OTHER DAY.
- ~~Regarding precipitation rate, a~~All systems shall be capable of supplying a sufficient number of inches of water per week to the total irrigated area in order to maintain the health of the plant material. ~~Soil moisture sensors shall be included in the system. Watering time shall not exceed eight (8) hours per day for seven days per week.~~
- IDENTIFICATION OF EXISTING WATER PRESSURE AND DESIGN WATER PRESSURE.

- Tap size(s) required shall be ~~determined within these constraints and~~ subject to approval by the City. THE NUMBER AND SIZE Sizing of the tap(s) required shall be ~~determined within these constraints and~~ subject to approval by the City. ~~Sizing of the tap(s) shall be coordinated with the Engineering and Building Division.~~
- SEPARATE IRRIGATION WATER TAPS AND METERS ARE REQUIRED FOR ALL RESIDENTIAL DEVELOPMENTS OTHER THAN SINGLE-FAMILY DETACHED. SEPARATE IRRIGATION WATER TAPS AND METERS ARE REQUIRED FOR ALL NON-RESIDENTIAL DEVELOPMENTS IF THE IRRIGATED AREA EXCEEDS 40,000 SQUARE FEET. AN IRRIGATION WATER TAP SHALL BE USED ONLY FOR IRRIGATION PURPOSES. REFER TO THE WATER REGULATIONS, WESTMINSTER MUNICIPAL CODE, FOR INFORMATION ON WATER TAP REQUIREMENTS.
- USE OF A MASTER SHUT-OFF VALVE TO SHUT OFF WATER TO THE SYSTEM WHEN NOT OPERATING IN ORDER TO REDUCE LEAKAGE OF WATER FROM THE SYSTEM.
- USE OF BACKFLOW PREVENTERS.
- USE OF PRESSURE REDUCTION VALVES (PRV) OR PRESSURE REDUCTION SPRINKLER HEADS IF WATER PRESSURE WITHIN THE IRRIGATION SYSTEM IS ABOVE THE COMPONENT MANUFACTURERS RECOMMENDATIONS. LIKEWISE, USE OF BOOSTER VALVES WHERE WATER PRESSURE IS TOO LOW.
- IRRIGATION TIME CLOCK CONTROLLERS SHALL HAVE THE CAPABILITY TO ALLOW FOR SEASONAL ADJUSTMENTS, INCLUDING GLOBAL WATER BUDGET CONTROLS. ALL CONTROLLERS SHALL ALLOW FOR MULTIPLE PROGRAMS AND START TIMES, 2-3-4-5-7-14 DAY SCHEDULES, AND SHALL ALLOW INDIVIDUAL TIME SETTINGS DOWN TO THE MINUTE. CONTROLLERS (EXCLUDING SINGLE FAMILY DETACHED) SHALL USE EVAPOTRANSPIRATION OR SOIL MOISTURE BASED PROGRAMMING, INCLUDING EITHER LOCAL SENSORS, REMOTE OR HISTORIC EVAPOTRANSPIRATION BASED SCHEDULING, OR SOIL MOISTURE SENSORS.
- IRRIGATION CLOCK CONTROLLERS INSTALLED BY THE DEVELOPER/BUILDER SHALL BE CAPABLE OF A MINIMUM OF 10 ZONES FOR A SINGLE FAMILY OR DUPLEX LOT LESS THAN 10,000 SQUARE FEET IN AREA. LOTS 10,000 SQUARE FEET AND LARGER SHALL REQUIRE AN IRRIGATION CLOCK CONTROLLER OF A MINIMUM OF 12 ZONES.
- USE OF AUTOMATIC RAIN SHUTOFF DEVICES.
- SPRINKLER HEADS MUST PROVIDE HEAD TO HEAD WATER COVERAGE.

- NO SINGLE ZONE SHALL MIX HEAD TYPES.
- TURF AND NON-TURF ZONES SHALL BE IRRIGATED ON SEPARATE VALVES.
- MINIMUM ACCEPTABLE DISTRIBUTION UNIFORMITIES SHALL BE 55% FOR POP UP SPRINKLER HEADS OR SPRAY ZONES AND 70% FOR ROTOR ZONES, OR CURRENT IRRIGATION ASSOCIATION ACCEPTED MINIMUMS.
- THE USE OF SPRINKER HEADS WHICH EMIT LARGE WATER DROPLETS, SUCH AS ROTOR HEADS, WHERE POSSIBLE.
- SLEEVE, PIPE, AND VALVE SIZING. SLEEVE ALL LINES UNDER PAVEMENT.
- IRRIGATION USING NON-POTABLE WATER SHOULD INVESTIGATE THE USE OF POTABLE WATER FOR TREES AND SHRUBS.

Technical details regarding overall functioning of the system shall be the responsibility of the designer, the contractor and the owner. For ADDITIONAL reference information regarding irrigation systems see the Westminster Sitework Specifications. ~~Check with the City Public Works division to determine proximity of project to reclaimed water system and the current or future possibility of tying into the system.~~

Irrigation CONSTRUCTION drawings ~~submitted should~~ SHALL contain the following INFORMATION:

1. SHEET SIZES ACCORDING TO OFFICIAL DEVELOPMENT PLAN REQUIREMENTS AND NO LARGER THAN 24" X 36" FOR FINAL IRRIGATION CONSTRUCTION PLANS.
2. TITLE BLOCK WITH NAME OF PROJECT, SHEET NAME, COMPANY IDENTIFICATION INCLUDING ADDRESS, PHONE NUMBER, NAME OF PERSON PREPARING THE PLAN AND DATE.
3. Scale-written and graphic TO MATCH LANDSCAPE PLAN. 1"=20 FEET IS PREFERRED,
4. North arrow.
5. PROPERTY LINES.
6. KEY.
7. Existing and proposed structures, WATER FEATURES, SIDEWALKS, over hangs and paving. ~~Title block with name of project, sheet name, name of person preparing plan and date.~~
8. PROPOSED GRADES OR SPOT ELEVATIONS IN SLOPED OR BERMED AREAS.
9. SHOW AND LABEL LOCATIONS OF PROPOSED (LOW, MODERATE, HIGH) HYDROZONES AND IDENTIFY THE TOTAL SQUARE FOOTAGE OF EACH.
10. SHOW AND LABEL LOCATIONS TO BE IRRIGATED WITH POTABLE AND NON-POTABLE WATER AND IDENTIFY THE TOTAL SQUARE FOOTAGE OF EACH.

11. TOTAL WATER BUDGET AND CALCULATIONS BY HYDROZONE.
12. ~~The location and type of automatic irrigation systems(s) provided, which shall be designed to provide adequate irrigation to all planted areas, including those areas that are sodded, seeded and/or contain shrubs and/or trees.~~ ALL DESIGN INFORMATION, SYSTEM LAYOUT, AND ~~Details of the system as NOTED EARLIER UNDER IRRIGATION SYSTEM AND IRRIGATION CONSTRUCTION PLANS~~ MUST BE SHOWN AND LABELED. ~~such as the existing water pressure, type and sizes of backflow preventers, valves, sprinkler heads, and piping should be shown. A high quality master shut-off valve is recommended for the whole system.~~
13. ~~The design should be prepared by a qualified professional.~~ INFORMATION AS TO WHO WILL HAVE RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM. INCLUDE NAME, TITLE, ADDRESS AND CONTACT PHONE NUMBER.
14. CITY OF WESTMINSTER STANDARD GENERAL NOTES. (SEE PLAN SUBMITTAL DOCUMENT PACKET PROVIDED BY THE CITY).

COMPLETION OF A SUCCESSFUL IRRIGATION AUDIT WILL BE REQUIRED AFTER INSTALLATION OF THE IRRIGATION SYSTEM, PRIOR TO CITY ACCEPTANCE. (LANDSCAPING BY SINGLE FAMILY DETACHED HOMEOWNER EXEMPT)

A COPY OF THE IRRIGATION SYSTEM AUDIT, PERFORMED BY A IRRIGATION ASSOCIATION CERTIFIED IRRIGATION AUDITOR, ALONG WITH AN IRRIGATION SCHEDULE DEVELOPED FROM THE AUDIT WHICH PROVIDES AT LEAST INDIVIDUAL SPRING, SUMMER, AND FALL SCHEDULES AND TOTAL ANNUAL WATER APPLICATION VIA IRRIGATION IN INCHES (MAXIMUM 15 INCHES/SQUARE FEET/YEAR), AND AN AS-BUILT IRRIGATION PLAN SHALL BE PROVIDED TO THE CITY AND POSTED FOR THE OWNER AND/OR MANAGER AT EACH TIME CLOCK CONTROLLER.

WITHIN 6 WEEKS OF THE INSTALLATION OF NEW LANDSCAPING, THE IRRIGATION SYSTEM INSTALLER SHALL RESET THE TIME CLOCK CONTROLLERS TO THE NORMAL SEASONAL WATERING SCHEDULE. (LANDSCAPING BY SINGLE FAMILY DETACHED HOMEOWNER EXEMPT.)
~~As built drawings shall be presented to the Owner/Homeowner's Association prior to final acceptance of the project.~~

XIII. PLANT MATERIAL LIST BY HYDROZONE-RECOMMENDED PLANTS

Following is a reference list of those plant materials most highly recommended for the Westminister area. A LISTING OF PLANT MATERIAL BY SUGGESTED HYDROZONE PLACEMENT IS AVAILABLE FROM THE CITY'S PLANNING DIVISION. THIS LIST WILL BE UPDATED AND REVISED BY CITY STAFF ON A PERIODIC BASIS. FACTORS SUCH AS DRAMATIC TEMPERATURE CHANGES OVER SHORT PERIODS OF TIME, WIND, SOIL, SLOPE, EXPOSURE, MOISTURE, AND OTHER ENVIRONMENTAL AND MAINTENANCE FACTORS CAN AFFECT THE HARDINESS AND HEALTH OF PLANT MATERIAL. THIS PLANT LIST IS NOT A GUARANTEE OF SUSTAINABILITY OF ANY PARTICULAR SPECIES WITHIN ANY PARTICULAR HYDROZONE. This list is by no means inclusive and is to serve as a guide only. Proposed plant lists are to be submitted with the required landscape plan and will be reviewed on a case-by-case basis. The asterisk (*) sign indicates plant materials which are known to be more drought tolerant and are therefore recommended for xeriscape designs.

USE OF NON-POTABLE WATER WILL REQUIRE PLANT SELECTION THAT IS TOLERANT TO HIGHER SALT AND POTASSIUM LEVELS. PLANTS THAT HAVE INCREASED SALT TOLERANCE ARE IDENTIFIED. THIS IDENTIFICATION IS NOT A GUARANTEE OF SALT TOLERANCE, HEALTH, OR SUSTAINABILITY. FOR FURTHER INFORMATION IN THIS REGARD CONSULT A LANDSCAPE ARCHITECT OR DESIGNER.

Generally, no more than one third (1/3) of the proposed trees on any project shall be "fast-growing" (Cottonwood, Silver Maple, etc.). If specified, fast growing trees will be approved only in low vehicular and pedestrian traffic areas. The remainder of the proposed trees shall be "slower growing", "long lived" species (Ash, Norway Maples, Honeylocust, Linden, Oak, Hawthorn, etc.).

The use of Siberian or Chinese Elm (Ulmus pulmila) and Russian Olive (Eleagnus angustifolia) trees and Tamarix (Salt Cedar) shrubs are prohibited within the City of Westminister.

Deciduous Shade Trees

<u>Common Name</u>	<u>Botanical Name</u>
Ash, Autumn Purple	Fraxinus americana 'Autumn Purple'*
Ash, Marshall Seedless	Fraxinus p. 'Marshall'*
Ash, Patmore	Faxinus p. 'Patmore'*
Ash, Summit	Fraxinus p. 'Summit'*
Buckeye, Ohio	Aesculus glabra
Catalpa, Western	Catalpa speciosa*
Cottonwood, Cottonless	Populus sargentii
Cottonwood, Lanceleaf	Populus acuminata
Cottonwood, Narrowleaf	Populus angustifolia
Hackberry	Celtis occidentals*
Honeylocust, Imperial	Gleditsia t. i. 'Imperial'*
Honeylocust, Shademaster	Gleditsia t. i. 'Shademaster'*

Honeylocust, Skyline	Gleditsia t. i. 'Skyline'*	
Kentucky Coffee Tree	Gymnocadus dioecia	
Linden, American	Tilia americana	
Linden, Glenleven	Tilia cordata 'Glenleven'	
Linden, Greenspire	Tilia cordata 'Greenspire'	
Linden, Redmond	Tilia euchlora 'Redmond'	
Maple, Autumn Blaze	Acer freemanii 'Autumn Blaze'	
Maple, Norway (sp)	Acer platanoides (species)	
Maple, Sugar	Acer saccharum	
c. Ornamental Trees	Botanical Name	
Alder, Thin Leaf	Alnus Tenuifolia	
Aspen, Quaking	Populus tremuloides	
Cherry, Canadian Red	Prunus v. 'Shubert'	
Chokecherry, Amur	Prunus mackii	
<u>Crabapple, David</u>	<u>Malus 'David'</u>	
Crabapple, Dolgo	Malus 'Dolgo'	
<u>Crabapple, Indian Summer</u>	<u>Malus</u> Oak, Burr	Quercus macrocarpa
Oak, English	Quercus robor	
Oak, Red	Quercus rubra	
<u>Oak, Swamp White</u>	<u>Quercus bicolor</u>	
Walnut, Black	Juglans nigra	
b. Evergreen Trees	Botanical Name	
Fir, Douglas	Pseudotsuga menziesii	
Fir, White	Abies concolor	
Pine, Austrian	Pinus nigra	
Pine, Bristlecone	Pinus aristata*	
Pine, Pinon	Pinus cembroides edulis*	
Pine, Ponderosa	Pinus ponderosa	
Spruce, Colorado (Blue Spruce)	Picea pungens	
	<u>'Indian Summer'</u>	
Crabapple, Radiant	Malus 'Radiant'	
Crabapple, Spring Snow	Malus 'Spring Snow'	
Golden Raintree	Koelreuteria paniculata*	
Hawthorn, Downy	Crataegus mollis	
Hawthorn, Russian	Crataegus ambigua	
Hawthorn, Thornless	Crataegus crugalli inermis	
Hawthorn, Washington	Crataegus phaenopyrum	
Hornbeam, European	Carpinus betulus fastigiata	
<u>Lilac, Japanese Tree</u>	<u>Syringa japonica</u>	
Maple, Amur	Acer ginnala*	
Newport Plum	Prunus americana 'Newport'	
d. Deciduous Shrubs	Botanical Name	
Barberry, (sp)	Berberis species	
Burning Bush	Euonymus alata	
Butterfly Bush	Buddleia davidii	
Cherry (sp)	Prunus species	
Cherry, Western Sand	Prunus besseyi*	

Chokeberry, Black	Aronia melanocarpa*
Chokeberry, Red	Aronia a. 'Brilliantissima'*
Coralberry, Red	Symphoricarpos orbiculatus
Cotoneaster, (sp)	Cotoneaster species*
Currant, Alpine	Ribes alpinum*
Currant, Yellow	Ribes aureum*
Dogwood, (sp)	Cornus species
Dwarf Burning Bush	Euonymus alata 'Compacta'
Euonymous, Manhattan	Euonymous k. 'Manhattan'
Forsythia, (sp)	Forsythia species
Honeysuckle, (sp)	Lonicera species
Holly, Oregon Grape Compact	Mahonia aquifolium compacta
Leadplant	Amorpha canescens*
Lilac, (sp)	Syringa species
Mockorange, (sp)	Philadelphus species
Mahogany, Curlleaf	Cercocarpus ledifolius*
Ninebark, Dwarf	Physocarpus opulifolius 'Nanus'
Potentilla, (sp)	Potentilla species
Plum, Purple Leaf	Prunus x cistena
Privet, Cheyenne	Ligustrum vulgare 'Cheyenne'
Pyracantha, (sp)	Pyracantha species
Quince, Red	Chaenomeles japonica
Sage, Russian	Perovskia atriplicifolia*
Serviceberry	Amelanchier alnifolia*
Shrub Rose, Native	Rosa woodsii*
Shrub Rose, Purple-Red	Rosa x. 'Hansa'
Snowberry	Symphoricarpos albus
Spirea, Blue Mist	Caryopteris incana*
Spirea, (sp)	Spirea species
Sumac, (sp)	Rhus species*
Viburnum, (sp)	Viburnum species*
Willow, Dwarf Artic	Salix purpurea nana
Yucca, (sp)	Yucca species*

e.	Evergreen Shrubs	<u>Botanical Name</u>
	Juniper, Arcadia	Juniperus s. 'Arcadia'*
	Juniper, Andorra	Juniperus h. 'Youngstown Compacta'
	Juniper, Bar Harbor	Juniperus h. 'Bar Harbor'*
	Juniper, Blue Chip	Juniperus h. 'Blue Chip'*
	Juniper, Buffalo	Juniperus s. 'Buffalo'*
	Juniper, Broadmoor	Juniperus s. 'Broadmoor'*
	Juniper, Hughes	Juniperus h. 'Hughes'
	Juniper, Pfitzer Compact	Juniperus c. 'Pfitzeriana Compact'
	Juniper, Scandia	Juniperus s. 'Scandia'*
	Juniper, Wilton Carpet	Juniperus h. 'Wiltonii'*
	Mugo Pine	Pinus mugo*

11. XERISCAPING

Developers, builders and residents in Westminster are encouraged to become familiar with the fundamental principles of xeriscaping and to integrate all or some of these principles into their

landscape design whenever appropriate. Landscape plans that incorporate the principles of xeriscaping can be developed to assure a successful, lower water demand landscape for all or part of a project depending on the overall desired effect.

The goal of using a xeriscape type design for all or part of a project is not to totally eliminate the need for watering, but rather to gradually reduce the need for water as the more drought tolerant plant materials become established. Xeriscape designs may require a slightly higher amount of design, planning and maintenance initially, but can provide a successful low water, low maintenance type of landscape project in the long run. The fundamental principles of xeriscaping are outlined below.

a. Planning and Design

In addition to aesthetics and function of plants, the soils, drainage patterns, exposure to heat and wind and the manner in which the site is irrigated, must be considered. While a xeriscape requires low amounts of water, supplemental watering is necessary to establish plants and maintain the landscape during long dry spells. An automatic irrigation system should be part of a xeriscape design.

b. Limited Turf Areas

Where appropriate and feasible, use less water demanding materials, such as ground covers, low water usage plants with mulches instead of turf, and locate turf only in areas where it provides functional benefits. Turf is best separated from planting of trees, shrubs, ground covers and flowering plants so that it may be irrigated separately.

Where uniform turf is desired, areas are best planted with fine bladed, sod forming turf varieties such as Buffalo grass or Bluegrass *Fescue* mix/blend for lower water usage. Outlying areas, where soil cover is needed, but foot traffic is limited, can be planted with various coarse grasses such as Tall Fescue and Smooth Brome.

Species of grass which grow with the average rainfall received by Westminster include Tall Fescue, Smooth Brome Fairway Crested Wheatgrass, Ephraim Crested Wheatgrass, Buffalo grass, Blue Gramma and others. Some varieties of Bluegrass that are relatively drought tolerant include Majestic, America and Merion. Check with local sod or Seed Company for detailed information.

Drought tolerant grasses need water to become established. They also need occasional irrigation during a prolonged dry spell. The key to drought tolerance is deep root development. Thorough soil preparation and deep, infrequent watering will help turf establish a deep root system.

c. Soil Improvements

Soil improvement allows for better absorption of water and improved water holding capacity of the soil. Soils that have organic matter also provide nutrients to plants. Improve the soil prior to planting and installation of any irrigation system by digging in a minimum of five (5) cubic yards of organic matter per 1,000 square feet to be planted to a depth of eight inches (8"). Aged ground manure or compost containing a minimum of fifty percent (50%) organic matter is recommended.

d. ~~Efficient Irrigation~~

~~All planted areas, including xeriscape areas, require an automatic irrigation system. Well planned sprinkler systems can save water. For efficient water use, irrigate turf areas separately from other plantings. Plants should also be grouped according to similar water needs. Turf areas are best watered with sprinklers. Trees, shrubs and ground covers can be watered efficiently with low volume drip or spray systems. Rates of application of water should vary with the type of plant community water requirements.~~

~~Regardless of how drought tolerant a plant may be, relatively frequent watering is needed until a plant is established. For most woody plants, establishment takes at least two growing seasons. Once established, gradual reduction of watering frequency can be accomplished.~~

e. ~~Mulches~~

~~Organic mulch planting beds are an ideal replacement for turf areas. Mulches cover and cool the soil, minimize evaporation, reduce weed growth and slow erosion. Mulches also provide landscape interest. Organic mulches are typically bark chips, wood grindings or pole peelings. Inorganic mulches include rock and various gravel products. A minimum of three inches (3") of mulch should be placed over geotextile fabric (filter fabric) where ground cover or shrubs are to be used in order to allow water and air to pass through the fabric and discourage weed growth. Mulched areas should not occur on slopes where mulch is difficult to maintain in place.~~

f. ~~Low Water Use Plants~~

~~Low water use plants can serve every landscape function. See the recommended plants section for a list of xeriscape plants. Drought resistant plants are indicated by the asterisk (*) sign. Low water use plants will still require some irrigation.~~

~~For more extensive detail on xeriscaping contact the Denver Water Board or a landscape architect who specializes in xeriscaping.~~

XIV. LANDSCAPE MAINTENANCE REQUIREMENTS

ALL EXISTING PROPERTIES, EXCLUDING SINGLE FAMILY DETACHED, SHALL NOT MODIFY ANY LANDSCAPE AREA OR PLANT MATERIALS WITHOUT CITY APPROVAL. MAINTENANCE AND MINOR IMPROVEMENTS WITHIN EXISTING LANDSCAPE AREA OR OF PLANT MATERIALS MUST OCCUR IN A MANNER THAT COMPLIES WITH THE STANDARDS HEREIN OR DECREASES EXISTING ASPECTS OF NON-CONFORMANCE.

AN EXISTING SINGLE FAMILY LOT WITHOUT AN OFFICIAL DEVELOPMENT PLAN, OR AMENDED OFFICIAL DEVELOPMENT PLAN OR OFFICIAL DEVELOPMENT PLAN WAIVER THAT ADDRESSES LANDSCAPING, MAY MODIFY EXISTING LANDSCAPING IF MODIFICATIONS COMPLY WITH THE REQUIREMENTS HEREIN, OR DECREASE AN ASPECT OF EXISTING NON-CONFORMANCE.

The property owner, homeowner's or business association shall be responsible for the continual adequate maintenance of the landscaping AND IRRIGATION SYSTEM required by and shown on the Official Development Plans and site plans accompanying Official Development Plan waivers, AND RESULTING CONSTRUCTION DRAWINGS.

All landscaping and ~~required buffering~~ AND LANDSCAPE MATERIALS shall be continually maintained including irrigation, weeding, pruning and replacing in a substantially similar manner as originally approved. The following survival standards shall apply to all LANDSCAPE AREAS AND MATERIALS ~~landscaping and required buffering~~:

- a) ~~Grass or other living plant material shall be the primary ground cover used in landscape areas. Turf areas shall be planted to present a finished appearance and complete coverage after two growing seasons.~~ ALL LIVING PLANT MATERIAL, AS INDICATED BY THE OFFICIAL DEVELOPMENT PLAN, MUST BE MAINTAINED IN PERPETUITY. THE CITY MUST APPROVE REPLACEMENT OR ALTERATION OF PLANT MATERIAL.
- b) ~~Non living ground covers such as wood chip mulch, boulders, cobble or river rock shall be limited to an area not to exceed 50% of the landscape area. Mulch/rock areas shall be 75% covered with shrubs within a three (3) year period.~~ Non-living ground covers, such as rock or ORGANIC mulch, must be HAVE ~~one hundred~~ 100 percent (100%) GROUND SURFACE COVERAGE AND BE MAINTAINED AT THE REQUIRED DEPTH. ~~intact after one year and one hundred percent (100%) intact thereafter. (i.e. not scattered and untidy)~~ ARTIFICIAL TURF SHALL BE INSTALLED ACCORDING TO INDUSTRY SPECIFICATIONS AND MAINTAINED IN A MANNER TO MIMIC A HEALTHY LIVING TURF. REPLACEMENT OF ARTIFICIAL TURF SHALL BE REQUIRED WHEN THE MATERIAL, WEAR, OR INSTALLATION IS SUCH THAT IT IS DETERMINED BY THE CITY THAT IT NO LONGER VISUALLY MIMICS A HEALTHY LIVING LAWN AREA.
- c) ~~Trees and shrubs~~ ALL PLANT MATERIAL INCLUDING TREES, SHRUBS, GROUNDCOVERS, VINES AND TURF must have a ~~one hundred~~ 100 percent (100%) ongoing survival rate.
- d) Any dead or severely damaged (as determined by the City) plant material shall be replaced BY THE OWNER OR ASSIGNS within ~~six (6)~~ 6 months of notification by the City.
- e) PRUNING OF PLANT MATERIAL SHALL NOT DRASTICALLY ALTER THE NATURAL GROWTH PATTERN AND MATURING SIZE, AS DETERMINED BY

THE CITY. IF THE CITY DETERMINES THAT PRUNING HAS OCCURRED THAT VIOLATES THIS REQUIREMENT, THE OWNER WILL BE REQUIRED TO REPLACE THE AFFECTED PLANT WITH AN EQUAL PLANT WITHIN 6 MONTHS OF NOTIFICATION BY THE CITY. THIS REQUIREMENT ALSO APPLIES TO PLANT MATERIAL AFFECTED BY STORM DAMAGE. ALL TREE PRUNING ACTIVITIES SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS (ANSI A300).

- f) PLANTS INFECTED WITH INSECTS OR DISEASE MUST BE TREATED APPROPRIATELY OR REMOVED FROM THE PROPERTY, AS REQUIRED BY THE CITY. REMOVED PLANTS MUST BE REPLACED WITH NEW, EQUAL PLANT MATERIAL, AS DETERMINED BY THE CITY.
- g) WEEDS MUST BE ABATED AND REMOVED.
- h) TURF AREAS GENERALLY REQUIRE PERIODIC MOWING, AERATION, DETHATCHING, FERTILIZATION, AND WEED ABATEMENT. TURF MUST NOT EXCEED 6 INCHES IN HEIGHT UNLESS APPROVED OTHERWISE BY THE CITY. TURF AND GRASS AREAS MUST BE MAINTAINED IN A HEALTHY CONDITION WITHOUT AREAS OF DIRT OR DEAD GRASS, AS DETERMINED BY THE CITY.
- i) IRRIGATION SHOULD NOT OCCUR IN THE HEAT OF THE DAY (BETWEEN THE HOURS OF 10 AM AND 6 PM) IN ORDER TO REDUCE EVAPORATION. EXCESSIVE WATER RUN OFF, AS DETERMINED BY THE CITY, IS NOT PERMITTED.
- j) IRRIGATION SYSTEMS SHALL BE MAINTAINED AND PERIODICALLY ADJUSTED TO ASSURE WATERING EFFICIENCY AND CONSERVATION METHODS. REPLACEMENT PARTS SHALL MATCH OR BE COMPATIBLE WITH THE SYSTEM REQUIREMENTS.

XV. PRIVATE IMPROVEMENTS AGREEMENT

IN ACCORDANCE WITH CITY CODE, A Private Improvements Agreement AND SURETY IS REQUIRED FOR ALL PRIVATE IMPROVEMENTS WITHIN A DEVELOPMENT. PRIVATE IMPROVEMENTS ARE ALL NON-PUBLIC IMPROVEMENTS INCLUDING LANDSCAPING, IRRIGATION, LIGHTING, FENCING, ETC. ~~for landscaping, fencing and other private improvements are required for each project including residential and commercial projects~~ (See Section 11-6-4 of Westminster Municipal Code). The Private Improvements Agreement is a written agreement between the property owner and the City, and shall INCLUDE ~~be established specifying~~ the required landscape and automatic irrigation requirements and projected costs. Construction drawings shall accompany the Private Improvements Agreement. One of the ~~following~~ forms of security AS ESTABLISHED BY CITY CODE shall also accompany the Public Improvements Agreement.

A. ~~Surety Bond~~

~~The owner/developer shall provide a good and sufficient surety bond executed by a corporate surety duly licensed to do business in the state, or by another appropriate institution having adequate assets to perform the terms of the surety bond as determined by the City, in an amount at least equal to one hundred fifteen 115 percent (115%) of the current costs of the landscape improvements. Cost estimates are to be reviewed and approved by the City.~~

B. ~~Cash Bond~~

~~The owner/developer shall deposit with the City Treasurer an amount equal to one hundred fifteen 115 percent (115%) of the current cost of the landscape improvements. Cost estimates are to be reviewed and approved by the City.~~

C. ~~Irrevocable Letter of Credit~~

~~The owner/developer shall provide a clear and sufficient irrevocable letter of credit on a form established by the City, executed by a commercial bank insured by FDIC or other appropriate institutions having adequate assets to perform the terms of the letter of credit as determined by the City. The form and conditions of such irrevocable letter of credit shall be approved by the City Attorney and the City Treasurer. The letter of credit should be an amount equal to one hundred fifteen 115 percent (115%) of the current cost of the landscape improvements. Cost estimates are to be reviewed and approved by the City.~~

D. ~~Plat Restriction~~

~~The owner/developer shall enter upon the Final Plat, language that restricts the conveyance, sale or transfer of any lot, lots, tract or tracts of land within the property until the required landscape improvements are constructed and are accepted by the City. To release the plat restriction, the owner/developer shall complete the landscape improvements and/or supply the City with one of the above forms of surety in an amount as determined by the City.~~

E. ~~Other Guarantees~~

~~The owner/developer shall guarantee the construction of landscape improvements by such other methods as may be specifically approved by City Council.~~

F. Releasing Surety and Warranty Maintenance

The improvements will be accepted in writing by the City when all items are satisfactorily completed in accordance with the terms of the Public Improvements Agreement and the Official Development Plan. Upon such acceptance, the warranty period and performance obligations contained below shall commence and the surety amount may be reduced to ~~fifteen~~ 15 percent ~~(15%)~~ of the original surety amount.

Warranty Maintenance

For a period of one year following the acceptance of the Improvements (the “Warranty Period”), the Owner shall be responsible for making any repairs or replacements required due to (a) defective materials, workmanship, or design or (b) damage that may be done to the Improvements except ordinary wear and tear. Repairs or replacement will be made which, in the opinion of the City, are necessary to maintain the Improvements to the same standards applicable at the time of the City’s acceptance of the Improvements. **THE ONE YEAR PERIOD WILL BE EXTENDED AN ADDITIONAL YEAR FOR TURF AREAS NOT ESTABLISHED BY USE OF SOD.**

During the ninth month of the Warranty Period, a warranty inspection will be conducted by the City and a corrections list will be submitted to the Owner stating what repairs or replacements are necessary pursuant to this Agreement. **A SECOND WARRANTLY INSPECTION WILL OCCUR PRIOR TO THE END OF THE SECOND YEAR FOR TURF AREA NOT ESTABLISHED BY THE USE OF SOD.**

All such deficiencies set forth in the corrections list shall be completed by the Owner within ~~sixty (60)~~ 60 days of notification. Any warranty repair or replacement that is not satisfactorily completed by the Owner within ~~sixty (60)~~ 60 days following notification may be completed by the City and charged to the Owner, which costs the Owner hereby agrees to reimburse to the City, unless modified by written agreement.

The City will monitor the satisfactory completion of all correction list items and, when completed, will provide ~~with~~ the Owner a written acknowledgment of the completion of the Warranty Period and the release of the Improvements of designated portions thereof from warranty. Upon the request of the Owner, the City shall release the surety for any portion of the Improvements released from warranty by the City.

XVI. DEFINITIONS

FOR THE PURPOSES OF THESE LANDSCAPE REGULATIONS, THE FOLLOWING TERMS SHALL BE DEFINED AS NOTED HEREIN.

ALTERNATIVE TURF- REFERS TO GRASSES USED FOR LAWN OR FIELD/MEADOW PURPOSES OTHER THAN BLUEGRASS OR A BLUEGRASS/FESCUE BLEND.

ARTIFICIAL TURF- REFERS TO A NON-LIVING MATERIAL TYPICALLY USED IN LIEU OF A LIVING TURF/LAWN. THE APPEARANCE MIMICS A LIVING TURF OR BLUEGRASS LAWN DURING THE GROWING SEASON.

BERM- AN EARTHEN MOUND INTENDED FOR VISUAL INTEREST OR SCREENING OF UNDESIRABLE VIEWS. A BERM IS EFFECTIVE IN REDUCING NOISE LEVELS.

CALIPER- THE MEASUREMENT IN DIAMETER OF A TREE TRUNK MEASURED 6 INCHES ABOVE THE GROUND FOR TREES UP TO 4-INCH SIZE AND 12 INCHES ABOVE THE GROUND FOR LARGER SIZES.

CITY- THE USE OF THE WORD “CITY” GENERALLY REFERS TO EITHER THE “CITY OF WESTMINSTER” OR MEANS “THE PLANNING MANAGER” FOR THE PURPOSES OF THESE GUIDELINES. IF A DETERMINATION BY THE PLANNING MANAGER THAT AN INTERPRETATION OR DECISION OF PLANNING COMMISSION AND/OR CITY COUNCIL IS WARRANTED, THE USE OF THE WORD CITY CAN INCLUDE PLANNING COMMISSION AND/OR CITY COUNCIL.

CERTIFIED IRRIGATION DESIGNER, CONTRACTOR OR AUDITOR- REQUIRES SUCCESSFUL COMPLETION OF FORMAL TRAINING, CERTIFICATION, LICENSING OR OTHER SIMILAR QUALIFICATION BY THE IRRIGATION ASSOCIATION.

COMMON AREAS- LAND AREA WITHIN A DEVELOPMENT INTENDED FOR JOINT PRIVATE OR PUBLIC OWNERSHIP AND USE. THESE AREAS ARE OFTEN MAINTAINED BY A HOMEOWNERS ASSOCIATION, BUSINESS ASSOCIATION OR IN SOME INSTANCES, THE CITY. RIGHT OF WAY IS CONSIDERED A COMMON AREA FOR THE PURPOSES OF THESE GUIDELINES.

DECIDUOUS- A PLANT WITH FOLIAGE THAT IS SHED ANNUALLY.

DEVELOPER- A PERSON, PERSONS, OR BUSINESS THAT IS RESPONSIBLE FOR THE DEVELOPMENT OF LAND, BUILDINGS AND/OR RELATED IMPROVEMENTS- OFTEN FOR THE PUPOSE OF SALE TO A SUBSEQUENT OWNER. THE DEVELOPER MAY BE THE PROPERTY OWNER.

DOUBLE ROW OF PARKING- TWO ROWS OF PARKING ADJACENT TO EACH OTHER, GENERALLY NOT SEPARATED BY A DRIVE AISLE OR LANDSCAPING.

DRIPLINE- A VERTICAL LINE EXTENDED DOWNWARD FROM THE TIPS OF THE OUTERMOST BRANCHES OF A TREE OR SHRUB TO THE GROUND.

DROUGHT- GENERALLY REFERS TO PERIODS OF A YEAR OR MORE WITH BELOW AVERAGE PERCIPITATION. CAN ALSO REFER TO SEASONS SUCH AS WINTER, SPRING, SUMMER OR FALL, WITH BELOW AVERAGE PERCIPITATION.

EVAPOTRANSPIRATION- THE QUANTITY OF WATER EVAPORATED FROM ADJACENT SOIL SURFACES AND TRANSPIRED FROM PLANTS DURING A SPECIFIC TIME.

EVERGREEN- A PLANT WITH FOLIAGE THAT PERSISTS AND REMAINS GREEN YEAR-ROUND.

EVERGREEN TREE- A TREE WITH EVERGREEN FOLIAGE. MATURE HEIGHT GENERALLY EXCEEDS TWENTY FEET.

FABRIC- REFERS TO A POROUS GEOTEXITILE FABRIC INSTALLED UNDERNEATH MULCH TO RETARD THE GROWTH OF WEEDS INTO AND FROM THE SOIL.

GROUNDCOVER- LIVING PLANT MATERIAL THAT GROWS LOW TO THE GROUND, USUALLY UNDER 24-INCHES IN HEIGHT, OFTEN OF A SPREADING NATURE AND TYPICALLY AVAILABLE IN SMALL POTS FOR PLANTING. DOES NOT INCLUDE ANNUALS, WEEDS, TURF GRASSES, HERBACIOUS PERENNIALS, MULCHES OR TREE CANOPY.

HARDSCAPE- NON-LIVING SITE IMPROVEMENTS AT THE GROUND PLANE SUCH A BUILDING, PAVEMENT, WALKWAYS AND PARKING AREAS- INCLUDING THOSE OF CRUSHED STONE, PATIOS, DECKS, MULCH AREA (EXCLUSIVE OF MULCH AREA IN SHRUB AND PERENNIAL BEDS) AND OTHER SIMILAR IMPROVEMENTS AS DETERMINED BY THE CITY. HARDSCAPE AREA DOES NOT INCLUDE ARTIFICIAL TURF UNLESS AS APPROVED OTHERWISE IN THESE REGULATIONS.

HEIGHT- FOR THE PURPOSES OF THESE REGULATIONS PLANT HEIGHT IS DETERMINED AS TYPICALLY MEASURED BY NATIONAL NURSERY ASSOCIATION STANDARDS.

HYDROZONE- REFERS TO AREAS WITHIN THE LANDSCAPE AREA DEFINED BY SIMILAR WATER NEEDS TO SUSTAIN HEALTHY PLANTS. FOR THE PURPOSES OF THESE GUIDELINES, HYDROZONES ARE BROKEN INTO THREE CATEGORIES AND WILL ULTIMATELY BE APPROVED BY THE CITY AFTER CONSIDERATION OF PLANT MATERIAL AND METHOD OF IRRIGATION:

LOW HYDROZONE: 9 INCHES (5.5 GALLONS) OF WATER OR LESS OF SUPPLEMENTAL WATER IS ADDED IN AN IRRIGATION SEASON. IRRIGATION METHODS IN THIS ZONE WILL USUALLY BE DRIP OR MICROSpray, UNLESS A LOW WATER TURF OR GROUNDCOVER IS BEING IRRIGATED IN WHICH THE METHOD MAY BE SPRAY OR ROTOR HEAD.

MODERATE HYDROZONE: OVER 9 INCHES AND UP TO 22 INCHES (13.5 GALLONS) OF WATER IS ADDED BY SUPPLEMENTAL IRRIGATION IN AN IRRIGATION SEASON. IRRIGATION METHODS FOR THIS ZONE WILL USUALLY BE SPRAY OR ROTOR HEAD WITH LARGE WATER DROPLETS, OR SPRAY HEADS.

HIGH HYDROZONE: 29 INCHES (18 GALLONS) OF WATER IS ADDED BY SUPPLEMENTAL IRRIGATION IN AN IRRIGATION SEASON. IRRIGATION METHODS IN THIS ZONE WILL USUALLY BE SPRAY OR ROTOR HEADS.

IRRIGATION- REFERS TO AN AUTOMATIC, PERMANENT, ARTIFICIAL WATERING SYSTEM DESIGNED TO TRANSPORT AND DISTRIBUTE WATER TO LANDSCAPE PLANTS. UNDERGROUND IRRIGATION SYSTEMS ARE REQUIRED UNLESS APPROVED OTHERWISE BY THE CITY.

IRRIGATION AUDIT- A PROCEDURE ACCORDING TO THE IRRIGATION ASSOCIATION THAT INCLUDES A VISUAL SITE INSPECTION OF THE INSTALLED IRRIGATION SYSTEM FOR PERFORMANCE ACCORDING TO DESIGN CRITERIA; A WATERING SYSTEM TEST; PHYSICAL CORRECTIONS IF NECESSARY; AND ESTABLISHMENT OF A WATERING SCHEDULE. (WWW.IRRIGATION.ORG)

IRRIGATION PLAN- A PLAN DRAWN TO SCALE THAT INDICATES THE IRRIGATION COMPONENTS AND THEIR SPECIFICATIONS AS RELATED TO A SPECIFIC LANDSCAPE PLAN.

IRRIGATION SEASON- SEE “YEAR”.

LAND USE- LAND USE DESIGNATIONS IN THIS GUIDELINE SUCH AS SINGLE FAMILY, SINGLE FAMILY ATTACHED, MULTI-FAMILY, NON-RESIDENTIAL, OR OTHER TYPE OF LAND USE DESIGNATION, ARE AS DEFINED BY THE WESTMINSTER COMPREHENSIVE LAND USE PLAN, WESTMINSTER MUNICIPAL CODE, OR CITY.

LANDSCAPE ARCHITECT/DESIGNER- A PROFESSIONAL WHO HAS SUCCESSFULLY COMPLETED FORMAL STUDY OR TRAINING IN THE FIELD OF LANDSCAPE ARCHITECTURE/DESIGN, CULMINATING IN EITHER CERTIFICATION, LICENSING OR DEGREE.

LANDSCAPE AREA- THE AREA WITHIN A LOT OR PROPERTY NOT COMPRISED OF HARDSCAPE, MEASURED AT THE GROUND PLANE. LANDSCAPE AREA WILL NOT INCLUDE TREE CANOPY AREA, BARE DIRT, OR WEEDS. LANDSCAPE AREA WILL CONSIST OF 100% LIVING GROUNDCOVER, TURF, OR SHRUB BED AREA. WATER FEATURES MAY BE INCLUDED IN THE CALCULATION OF LANDSCAPE AREA. AREAS DEDICATED TO EDIBLE PLANTS SUCH AS ORCHARDS OR VEGETABLE GARDENS ARE NOT INCLUDED.

LANDSCAPE BUFFER- A LANDSCAPE AREA INTENDED TO PHYSICALLY AND VISUALLY SEPARATE ONE LAND USE FROM ANOTHER.

LANDSCAPE IMPROVEMENTS/MATERIALS- ALL ELEMENTS TYPICALLY USED AND/OR PRESENT IN THE DESIGNED LANDSCAPE SUCH AS, BUT NOT LIMITED TO, SOIL, COMPOST, ROCK, PLANT MATERIAL, EDGING, WEED FABRIC, MULCH, IRRIGATION SYSTEM, FENCING, LIGHTING, SEATING. ARTIFICIAL TURF OR PLANTS CANNOT BE SUBSTITUED FOR REQUIRED PLANT MATERIALS EXCEPT AS APPROVED OTHERWISE IN THESE REGULATIONS.

LANDSCAPE PLAN- A PLAN DRAWN TO SCALE THAT SHOWS THE LAYOUT OF ALL LANDSCAPE COMPONENTS AND THEIR SPECIFICATIONS FOR A DEVELOPMENT SITE.

LANDSCAPE SETBACK AREA- AN AREA RESERVED FOR THE PRIMARY USE OF LANDSCAPING MEASURED BY THE HORIZONTAL DISTANCE BETWEEN TWO POINTS OF REFERENCE. OFTENTIMES LANDSCAPE SETBACK REFERS TO A DISTANCE OF LANDSCAPE AREA LOCATED BETWEEN THE PROPERTY LINE AND A BUILDING OR PARKING AREA OR OTHER HARDSCAPE. SIDEWALKS LOCATED WITHIN A LANDSCAPE SETBACK AREA WILL NECESSITATE A CORRESPONDING INCREASE IN THE SETBACK.

MAINTENANCE- ANY ACTIVITY UNDERTAKEN TO PREVENT THE DETERIORATION, IMPAIRMENT, OR NEED FOR REPAIR OF AN AREA, STRUCTURE, RIGHT-OF-WAY, OR LAND USE, INCLUDING BUT NOT LIMITED TO, MANAGEMENT, REPAIR OR REPLANTING OF PLANT MATERIALS AND LANDSCAPE MATERIALS.

MULCH- A NON-LIVING ORGANIC OR INORGANIC MATERIAL SUCH AS BARK, ROCK, OR STONE MATERIALS TYPICALLY IN A LOOSE CONDITION, USED IN THE LANDSCAPE INDUSTRY TO COVER BARE GROUND. MULCH WILL PROVIDE A PROTECTIVE COVERING AROUND PLANTS, RETARD EROSION, RETAIN SOIL MOISTURE, REDUCE WEEDS AND MAINTAIN SOIL TEMPERATURES.

NON-POTABLE WATER- TREATED, RECYCLED WASTE WATER THAT MAY BE AVAILABLE FROM THE CITY FOR A SPECIFIC USE SUCH AS LANDSCAPING, NOT INTENDED FOR HUMAN CONSUMPTION.

ORNAMENTAL TREE- A TREE OF SMALLER SIZE THAN A LARGE SHADE OR EVERGREEN TREE, OFTEN PROVIDING VARIETY AND INTEREST BY FLOWER DISPLAY, ATTRACTIVE FRUIT OR FALL COLOR. EXAMPLES OF ORNAMENTAL TREES ARE CRABAPPLES, ASPEN, HAWTHORN, AND SIMILAR SPECIES.

PARKING LOT ISLAND- A PARKING LOT LANDSCAPE AREA TYPICALLY SURROUNDED ON AT LEAST TWO SIDES BY PARKING SPACES OR DRIVE AISLES.

PERENNIAL- A HERBACIOUS PLANT THAT BLOOMS AND PRODUCES SEED FOR EACH YEAR, EXCEEDING TWO YEARS. A SHORT LIVED PERENNIAL LIVES FOR APPROXIMATELY 3-5 YEARS. LONG LIVED PERENNIALS ARE LIKELY TO LIVE MUCH LONGER AND CAN REMAIN FOR OVER 20 YEARS.

PLANT MATERIALS- LIVING PLANTS SUCH AS TREES, SHRUBS, GROUNDCOVERS, VEGETABLES, AND VINES. DOES NOT INCLUDE WEEDS OR OTHER UNDESIRABLE PLANTS AS DETERMINED BY THE CITY.

RAIN SENSOR OR RAIN SHUTOFF DEVICE- A DEVICE CONNECTED TO AN IRRIGATION CONTROLLER THAT OVERRIDES SCHEDULED IRRIGATION WHEN SIGNIFICANT PRECIPITATION HAS BEEN DETECTED.

SHADE TREE- DECIDUOUS TREES OF LARGE SIZE, GENERALLY THIRTY FEET OR MORE IN HEIGHT WHEN MATURE.

SHRUB- A PLANT THAT TYPICALLY RETAINS BRANCHES ALL THE WAY TO THE GROUND LEVEL- DOES NOT INCLUDE EVERGREEN TREES WITH THE EXCEPTION OF UPRIGHT JUNIPERS.

SOIL AMENDMENT- REFERS TO ORGANIC AND INORGANIC MATERIAL ADDED TO THE SOIL TO IMPROVED TEXTURE, MOISTURE HOLDING CAPACITY AND WATER AND AIR INFILTRATION.

STREET- ANY PUBLIC OR PRIVATE STREET EXCLUDING ALLEYS.

TREE- A WOODY PLANT WITH LEAVES OR NEEDLES THAT GROWS TO ACHIEVE HEIGHT USUSALLY ABOVE THE HUMAN FORM, OFTEN PROVIDING SHADE. WITH THE EXCEPTION OF EVERGREEN TREES, TREES GENERALLY DO NOT OCCUPY A SIGNIFICANT AMOUNT OF GROUND PLANE AREA.

TURF- REFERS TO A GROUPING OF GRASSES THAT GROW IN VERY CLOSE PROXIMITY TO FORM A LIVING SURFACE AT THE GROUND PLANE. TURF IS GENERALLY AN AREA OF THE GROUNDPLANE INTENDED TO BE/OR COULD BE WALKED ON AND WHEN REGULARLY MOWED, FORMS A DENSE GROWTH OF LEAF BLADES AND ROOTS.

WATER BUDGET- AN ESTIMATE OF THE TOTAL AMOUNT OF GALLONS OF WATER FOR IRRIGATION PURPOSES FOR THE IRRIGATION SEASON. THE WATER BUDGET WILL USE SPECIFICATIONS PROVIDED WITHIN THESE REGULATIONS AND ANY ADDITONAL INFORMATION PROVIDED BY THE CITY, TO CALCULATE WATER USAGE BY HYDROZONE TO ARRIVE AT THE TOTAL AMOUNT.

WEEDS- WEEDS ARE DEFINED BY WESTMINSTER MUNICIPAL CODE OR STATE STATUTE.

XERISCAPE- A TERM COINED IN DENVER TO DESCRIBE LANDSCAPING WHERE WATER EFFICIENCY IS ACHIEVED. IT DOES NOT MEAN THAT THE LANDSCAPE IS ONLY DRY, OR THE LANDSCAPE IS ALL ROCK, OR THERE IS NO LAWN, OR ONLY NATIVE PLANTS ARE USED. REFER TO THE TEXT WITHIN THIS DOCUMENT FOR A DETAILED DESCRIPTION OF LANDSCAPING USING XERISCAPE PRINCIPLES.

YARD AREA- ALL PORTIONS OF A LOT NOT COVERED BY BUILDING FOOTPRINT. YARD AREA IS TYPICALLY BROKEN DOWN TO FRONT, REAR, AND SIDE YARD AREAS. THE DEFINITION OF THESE AREAS SHALL BE BY INTERPRETATION OF THE CITY.

YEAR- FOR THE PURPOSES OF THESE REGULATIONS AND CALCULATION OF WATER RATES, A YEAR IS EQUIVILENT TO A TYPICAL IRRIGATION SEASON THAT IS FROM MID-APRIL TO MID-OCTOBER (26 WEEKS).

LANDSCAPE REGULATIONS 2004

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City of Westminster Landscape Regulations (May 2004) 2004 Edition

I. STATEMENT OF INTENT

THE PURPOSE OF THESE LANDSCAPE REGULATIONS IS TO PROVIDE MINIMUM DESIGN, INSTALLATION AND MAINTENANCE CRITERIA FOR LANDSCAPE ELEMENTS. THE CITY OF WESTMINSTER RECOGNIZES LANDSCAPING AS AN IMPORTANT COMPONENT OF QUALITY DEVELOPMENT, RESULTING IN THE ENHANCEMENT OF WESTMINSTER'S CHARACTER AND IMAGE AS WELL AS PROVIDING BENEFITS TO THE PUBLIC SUCH AS, BUT NOT LIMITED TO:

- ENHANCEMENT OF PROPERTY VALUES
- IMPROVEMENT OF AIR AND WATER QUALITY
- REDUCTION OF HEAT, GLARE, DUST AND NOISE
- BUFFERING OR FRAMING VIEWS
- PROVISION OF WILDLIFE HABITAT AND LIVING ENVIRONMENT
- SEASONAL INTEREST AND VISUAL ENHANCEMENT
- EFFICIENT USE OF WATER RESOURCES

~~The City recognizes that landscaping is an important component of quality development and that the desirability of living and working in the City is increased by enhancing the appearance of residential, commercial and industrial areas of the City. Additionally, the City recognizes that landscaping can be used to improve air quality, reduce dust, act as a noise buffer, visually facilitate traffic flow and access and mitigate the impact of otherwise incompatible uses which abut each other. The purpose of these standards is to assist in the development of quality plans and proposals, encourage quality development in the City, and generally promote the health, safety and welfare of the City's inhabitants.~~

II. APPLICABILITY

These Landscape Regulations have been adopted by ~~Councillors' Bill #.~~ THE WESTMINSTER CITY COUNCIL. ALL AREAS TO BE LANDSCAPED SHALL INCORPORATE THE REQUIREMENTS HEREIN. ~~As adopted by the Councillor's Bill,~~ Enforcement of the regulations shall be as provided in Section 1-8-1 of the Westminster Municipal Code.

~~City Staff is authorized to require landscaping in new development and re-development projects. Landscaping and irrigation are also required if there is any change in use as determined under the principal permitted uses listed for the individual zone district or on the Preliminary Development Plan. When a change in use occurs which involves an Official Development Plan, Amendment to an Official Development Plan, or Official Development Plan Waiver, the site should be brought up to current development standards, whenever possible and within reason. Final landscape and irrigation drawings in accordance with an approved Official Development Plan shall be submitted to the City prior to beginning construction of any landscape areas.~~

LANDSCAPING WILL BE REQUIRED ACCORDING TO THE LANDSCAPE REGULATIONS IN INSTANCES AS FOLLOWS:

- IN NEW DEVELOPMENT

- IN REDEVELOPMENT, EXCEPT IN CASES WHERE THERE IS NO MODIFICATION THAT INCREASES ANY ASPECT OF NON-CONFORMANCE WITH THESE REGULATIONS NOR INCREASE IN HARDSCAPE/BUILDING AREA OF GREATER THAN 500 SQUARE FEET.
- IN EXISTING DEVELOPMENT WHERE THERE IS AN OFFICIAL DEVELOPMENT PLAN OR AMENDED OFFICIAL DEVELOPMENT PLAN OR OFFICIAL DEVELOPMENT PLAN WAIVER THAT ADDRESSES LANDSCAPING, AND LANDSCAPING IS PROPOSED TO BE MODIFIED FROM WHAT WAS APPROVED.
- IN EXISTING NON-SINGLE FAMILY DETACHED DEVELOPMENT WHERE THERE IS NO OFFICIAL DEVELOPMENT PLAN OR AMENDED OFFICIAL DEVELOPMENT PLAN OR OFFICIAL DEVELOPMENT PLAN WAIVER THAT ADDRESSES LANDSCAPING, AND LANDSCAPE AREA OR MATERIALS IS PROPOSED TO BE MODIFIED. MINOR IMPROVEMENTS WITHIN EXISTING LANDSCAPE AREA OR MATERIALS MUST OCCUR IN A MANNER THAT COMPLIES WITH THE STANDARDS HEREIN OR DECREASES ASPECTS OF NON-CONFORMANCE. LANDSCAPE AREA OR MATERIALS CANNOT BE REDUCED WITHOUT CITY APPROVAL. EXISTING TREES ON THESE PROPERTIES CANNOT BE REMOVED WITHOUT CITY APPROVAL.
- IN EXISTING SINGLE FAMILY DETACHED RESIDENTIAL DEVELOPMENT WHERE THERE IS NO APPROVED OFFICIAL DEVELOPMENT PLAN OR AMENDED OFFICIAL DEVELOPMENT PLAN OR OFFICIAL DEVELOPMENT PLAN THAT ADDRESSES LANDSCAPING, AND LANDSCAPE AREA OR RELATED REQUIREMENTS IS PROPOSED TO BE MODIFIED TO LESS THAN THE STANDARDS HEREIN FOR A NEW SINGLE FAMILY DETACHED LOT.

LANDSCAPE AND IRRIGATION DRAWINGS AND DOCUMENTS RELATED THERETO ARE REQUIRED AS DESCRIBED IN THESE REGULATIONS.

RENTAL HOUSING HAS ADDITIONAL MUNICIPAL CODE REGULATIONS REGARDING LANDSCAPING. REFER TO THE MUNICIPAL CODE AT 11-12-7.

III. ADJUSTMENT OF REQUIREMENTS

THE PLANNING MANAGER IS AUTHORIZED TO ALLOW AN ADJUSTMENT FROM THE STRICT APPLICATION OF THE LANDSCAPE AND IRRIGATION REQUIREMENTS IN CASES THAT INVOLVE PRACTICAL DIFFICULTIES OR UNNECESSARY HARDSHIP, PROVIDED HOWEVER, THAT:

- THE ADJUSTMENT GRANTED IS THE MINIMUM NECESSARY TO ALLEVIATE SUCH PRACTICAL DIFFICULTIES OR UNDUE HARDSHIP UPON THE OWNER OR THE PROPERTY;
- SUCH RELIEF MAY BE GRANTED WITHOUT SUBSTANTIAL DETRIMENT TO THE PUBLIC GOOD AND WITHOUT SUBSTANTIALLY IMPAIRING THE INTENT AND PURPOSE OF THESE REGULATIONS.

IN GRANTING AN ADJUSTMENT, THE PLANNING MANAGER MAY ATTACH REASONABLE CONDITIONS THERETO. THE GRANTING OF ANY ADJUSTMENT

SHALL NOT CONSTITUTE OR BE CONSTRUED AS A PRECEDENT, GROUND OR CAUSE FOR ANY OTHER ADJUSTMENT.

APPEALS FROM THIS SECTION SHALL BE CONSIDERED BY THE PLANNING COMMISSION AND SHALL FOLLOW PROCEDURE AND FEES AS ESTABLISHED BY THE APPROVAL PROCESS FOR OFFICIAL DEVELOPMENT PLANS.

IN THE CASE OF CONFLICT OR LACK OF SPECIFICATION, THE PLANNING MANAGER WILL DETERMINE THE APPROPRIATE REGULATION.

It is recognized that City projects such as parks, street medians or public utility facilities may have unique requirements for landscaping and will be reviewed on an individual basis. To the extent that City projects are similar in nature to private development projects, the Landscape Regulations will apply.

IV. OTHER REFERENCES

Other documents which should be referenced that ~~may~~ ARE ~~be~~ relevant to landscaping include (but are not limited to): the Sitework Specifications; STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS (IN THIS CASE, REQUIREMENTS LISTED FOR PUBLIC IMPROVEMENTS WILL APPLY TO LANDSCAPE RELATED IMPROVEMENTS FOR PRIVATE IMPROVEMENTS); the Single Family Detached Residential Design Guidelines, the Baseline Standards for Single Family Attache dResidential Projects and the Baseline Standards for Multiple Family Residential Projects. THE SINGLE-FAMILY DETACHED, SINGLE-FAMILY ATTACHED, MULTI-FAMILY, AND SENIOR RESIDENTIAL DESIGN GUIDELINES; THE TRADITIONAL MIXED USE NEIGHBORHOOD DEVELOPMENTS DESIGN GUIDELINES; THE RETAIL COMMERCIAL DESIGN GUIDELINES; AND ANY OTHER DESIGN GUIDELINES. Other documents, which apply to specific developments, include the OFFICIAL DEVELOPMENT PLAN AND ANY REFERENCED GUIDELINES.

Questions concerning the landscaping for City owned and maintained trails, greenbelts and parks, should be directed to the Department of Parks, Recreation and Libraries. Questions concerning publicly owned and maintained open space should be directed to the Open Space Division of the Department of Community Development.

**V. ~~GENERAL LANDSCAPING PROVISIONS~~
CONSIDERATIONS IN LANDSCAPE DESIGN**

PRIOR TO DESIGN OF A NEW LANDSCAPE OR MODIFICATIONS TO AN EXISTING LANDSCAPE, THE FOLLOWING LANDSCAPE DESIGN ELEMENTS MUST BE CONSIDERED AND INCORPORATED INTO THE LANDSCAPE AND IRRIGATION DESIGN.

A. WATER CONSERVATION/WATER-WISE LANDSCAPING/XERISCAPING

~~Native or drought tolerant approaches to landscaping will be considered under certain appropriate circumstances. Large landscape areas adjacent to existing, native, open space tracts may be appropriate for xeriscape treatment, as may parts of the primary landscape area when the principles of xeriscaping are well understood and applies. (See Xeriscaping section of these Landscape Regulations). All planted areas, including~~

~~xeriscape areas, require an automatic irrigation system. Regardless of how drought tolerant a plant may be, relatively frequent watering is needed until plants are established. For most woody plants, establishment takes at least two growing seasons. Once established, gradual reduction of watering frequency can be accomplished.~~

THE DENVER METROPOLITAN AREA HAS A SEMI-ARID CLIMATE WITH AN AVERAGE OF ONLY FOURTEEN INCHES OF NATURAL PRECIPITATION A YEAR. BECAUSE LANDSCAPE DESIGN IN COLORADO OFTEN INCORPORATES THE USE OF PLANTS THAT ARE NATIVE TO REGIONS THAT HAVE HIGHER LEVELS OF ANNUAL PRECIPITATION, SUPPLEMENTAL WATER IS NECESSARY TO ENSURE THESE LANDSCAPES SURVIVE IN COLORADO.

1. XERISCAPE

THE CONCEPT OF XERISCAPE WAS DEVELOPED IN DENVER IN RESPONSE TO WATER SHORTAGES AND REFERS TO AN ATTRACTIVE LANDSCAPE THAT USES LITTLE SUPPLEMENTAL WATER. IT DOES NOT REFER TO A DRY, BARREN, NO- MAINTENANCE LANDSCAPE, WITHOUT IRRIGATION. THE XERISCAPE CONCEPT PROMOTES WATER-WISE/WATER CONSERVATION IN LANDSCAPE DESIGN, TO RESULT IN LANDSCAPES WITHIN A SEMI-ARID CLIMATE THAT CAN HAVE SEASONAL INTEREST, FLOWERS, AND GREENERY.

XERICAPING INCORPORATES SEVEN WATER CONSERVING PRINCIPLES. THESE ARE AS FOLLOWS:

- DESIGN - THE WATER CONSERVING LANDSCAPE REQUIRES CAREFUL ATTENTION TO DESIGN. THE DESIGN IS ONE WHICH IDENTIFIES AND DEVELOPS ZONES OF DIFFERENT WATER REQUIREMENTS. DESIGNING WITH DIFFERENT AREA OF WATER DEMANDS IS CALLED "HYDROZONING."
- IRRIGATION - IRRIGATION IS NECESSARY TO EFFECTIVELY ESTABLISH THE LANDSCAPE AND TO MAINTAIN PLANT LIFE THAT REQUIRES SUPPLEMENTAL WATER ON A REGULAR OR PERIODIC BASIS, OR IN PERIODS OF DROUGHT. WATERING DEEPLY AND LESS FREQUENTLY WILL TYPICALLY RESULT IN PLANTS THAT ARE DEEPER ROOTED AND MORE DROUGHT TOLERANT.
- SOIL PREPARATION - SOIL PREPARATION IS VERY IMPORTANT TO THE SUCCESS OF THE LANDSCAPE. ADDING ORGANIC MATERIAL (COMPOST) RESULTS IN SOILS THAT WILL HOLD MOISTURE LONGER. LOOSENING THE SOIL (ROTOTILLING) PROVIDES WATER AND AIR INFILTRATION FOR IMPROVED ROOT DEVELOPMENT.
- MULCH - MULCH COVERS BARE SOIL, REDUCING EVAPORATION, SOIL TEMPERATURE AND EROSION. THIS IMPROVES PLANT GROWTH AND ASSISTS IN REDUCING WEEDS AND THEIR

COMPETITION FOR WATER AND NUTRIENTS. MULCH ALSO MAKES WEEDING EASIER TO PERFORM.

- APPROPRIATE USE OF TURF - CAREFUL CONSIDERATION OF WHERE TURF IS DESIRED AND TYPE OF GRASS USED IS A MAJOR COMPONENT OF XERISCAPING. DETERMINE THE FUNCTION OF TURF IN THE PROPOSED LANDSCAPE, AND THEN CONSIDER THE VARIOUS GRASSES, SUITABILITY FOR ACTIVE USE, THEIR GROWTH HABITS, AND MAINTENANCE REQUIREMENTS.
- USE OF LOW WATER PLANTS - CAREFUL PLANT SELECTION AND GROUPING BASED UPON WATER REQUIREMENTS, WITH THE GOAL OF CONSERVING WATER, CAN RESULT IN A LANDSCAPE DESIGN OF GREAT BEAUTY AND INTEREST. XERISCAPING HAS INCREASED THE POPULARITY OF MANY PLANTS THAT DO NOT REQUIRE SIGNIFICANT LEVELS OF WATER.
- MAINTENANCE - ALL LANDSCAPES REQUIRE REGULAR AND PERIODIC MAINTENANCE. REPLACEMENT OF MULCHES, WEEDING, PRUNING, MOWING, AND IRRIGATION ADJUSTMENT ARE ROUTINE REQUIREMENTS OF BOTH THE XERISCAPE AND TRADITIONAL LANDSCAPE.

2. SPECIFIC WATER - WISE LANDSCAPE ELEMENTS

IN ORDER TO REDUCE THE IMPACT OF DROUGHT ON LANDSCAPES, AND PROVIDE EFFICIENCY IN THE USE OF WATER, LANDSCAPE DESIGN WILL BE REQUIRED TO INCORPORATE VARIOUS WATER-WISE ELEMENTS. THESE ARE AS FOLLOWS:

- DESIGN BASED UPON ZONES OF DIFFERENT WATER REQUIREMENTS- REFERRED TO AS “HYDROZONING.” LOW, MODERATE, AND HIGH HYDROZONES WILL BE REQUIRED TO BE IDENTIFIED ON LANDSCAPE AND IRRIGATION PLANS. PLANT CHOICE AND IRRIGATION DESIGN MUST REFLECT THE RELEVANT HYDROZONE REQUIREMENTS.
- TOTAL ANNUAL WATER APPLICATION BY IRRIGATION (WATER BUDGET) SHALL NOT EXCEED 15 GALLONS/SQUARE FOOT/YEAR (24 INCHES).
- LOW HYDROZONES ARE CLASSIFIED BY PLANTINGS THAT DO NOT REQUIRE MORE THAN 9 INCHES/SQUARE FOOT OF SUPPLEMENTAL WATER PER YEAR, AND PLANTS IN THIS ZONE GENERALLY NEED LOWER LEVELS OF WATER TO THRIVE. ALTHOUGH PLANTS IN THIS ZONE MAY GROW WITH MINIMAL USE OF SUPPLEMENTAL WATER, IN TIMES OF PLANT ESTABLISHMENT OR DROUGHT, THESE LOW WATER USE PLANTS BENEFIT FROM CONTROLLED, SUPPLEMENTAL WATERING. IRRIGATION METHODS IN THIS ZONE WILL TYPICALLY

BE MICRO-SPRAY OR DRIP. BUFFALO GRASS IS A TYPICAL GRASS IN THIS HYDROZONE.

- MODERATE HYDROZONES ARE CLASSIFIED BY PLANTINGS THAT WILL REQUIRE OVER 9 INCHES AND UP TO 15 INCHES/SQUARE FOOT OF SUPPLEMENTAL WATER PER YEAR, AND PLANTS IN THIS ZONE GENERALLY NEED WATER WITHIN THIS RANGE TO THRIVE. IRRIGATION METHODS IN THIS ZONE WILL TYPICALLY BE SPRAY HEADS. TURF-TYPE TALL FESCUE IS A TYPICAL GRASS IN THIS ZONE.
- HIGH HYDROZONES ARE CLASSIFIED BY PLANTINGS THAT WILL REQUIRE 18 INCHES/SQUARE FOOT OF SUPPLEMENTAL WATER PER YEAR. PLANTS IN THIS ZONE GENERALLY NEED THIS HIGH LEVEL OF WATER TO THRIVE. IRRIGATION METHODS IN THIS ZONE WILL TYPICALLY BE SPRAY OR ROTOR HEADS. BLUEGRASS TURF IS A TYPICAL GRASS IN THIS ZONE.
- HIGH HYDROZONES SHOULD NOT BE WITHIN FIVE-FEET OF A BUILDING FOUNDATION TO REDUCE POTENTIAL PROBLEMS FROM EXPANSIVE SOILS. IN GENERAL, FOR PURPOSES OF WATER CONSERVATION, IT IS DESIRABLE TO TRANSITION TO A LOW WATER ZONE ADJACENT TO PAVED AREAS.
- AUTOMATIC IRRIGATION SYSTEMS WILL BE REQUIRED IN ALL LANDSCAPED AREAS, AND MUST BE INSTALLED PRIOR TO PLANT MATERIALS. AUTOMATIC IRRIGATION SYSTEMS INCREASE THE ESTABLISHMENT OF PLANTS, ALLOW FOR REGULAR MONITORING OF WATER USE AND NEEDS, AND ALLOW THE WATERING OF LANDSCAPES WITH MINIMAL MANUAL INVOLVEMENT. THE DESIGN OF THE IRRIGATION SYSTEM MUST REFLECT HYDROZONES AND VARIOUS REQUIREMENTS WITHIN THESE REGULATIONS.
- SOIL PREPARATION, INCLUDING LOOSENING THE SOIL BY ROTOTILLING AND INCORPORATING COMPOST AS A SOIL AMENDMENT, IS A MINIMUM REQUIREMENT IN ALL AREAS OF POTENTIAL LANDSCAPING. A SOIL ANALYSIS INDICATING EXISTING SOIL TEXTURE, PERCENT OF ORGANIC MATERIAL AND A MEASURE OF PH AND SOLUBLE SALTS IS RECOMMENDED TO DETERMINE WHAT OTHER OPTIONAL SOIL IMPROVEMENTS MAY BE NECESSARY. (REFER TO SECTION V. FOR SPECIFIC REQUIREMENTS)
- MULCHING IN ALL NON-TURF AREAS OF THE LANDSCAPE AREA IS REQUIRED. BECAUSE ORGANIC MULCHES (SUCH AS BARK) ASSIST IN RETAINING SOIL MOISTURE, AND REDUCE HEAT ABSORPTION AND REFLECTION, ORGANIC MULCHES WILL BE REQUIRED IN MODERATE AND HIGH HYDROZONES. INORGANIC MULCH (SUCH AS STONE) WILL BE ALLOWED ONLY IN LOW WATER ZONES.

- PLANT SELECTION AND LOCATION WILL BE REQUIRED TO MATCH THE PLANTS' WATER NEEDS TO THE APPROPRIATE WATER ZONE. THIS DESIGN PRACTICE ENHANCES THE EFFICIENT USE OF WATER AND INCREASES THE SURVIVAL RATE AND HEALTH OF PLANTS BY REDUCING OVER-WATERING OR UNDER-WATERING OF PLANTS.

B. Existing Vegetation

All existing healthy trees of desirable species ~~four 4 inch (4") to six 6 inch (6")~~ caliper or more ~~should~~ MUST be shown on the landscape plan, and ~~should~~ MUST be preserved or transplanted on the site ~~whenever possible~~, UNLESS APPROVED OTHERWISE BY THE CITY. ~~Trees six inch (6") caliper or larger should be preserved on site.~~ Grading shall not be permitted within the drip line of trees TO BE PRESERVED OR UNTIL AFTER RELOCATION IS COMPLETE. Tree wells or retaining walls ~~shall~~ MAY be used BEYOND THE LIMITS OF THE DRIPLINE OF THE TREES IN ORDER to protect the trees if grading does not otherwise accommodate preserving the existing grade. THE NUMBER OF TREES TO BE PRESERVED CAN BE CREDITED TOWARD THE TOTAL NUMBER OF TREES REQUIRED FOR THE DEVELOPMENT. THE SIZE OF TREES THAT ARE PRESERVED CANNOT BE APPLIED TOWARD ADDITIONAL REQUIRED LANDSCAPING. ANY REPLACEMENT TREES ARE REQUIRED TO BE IN EXCESS OF THE OTHERWISE MINIMUM TOTAL NUMBER OF TREES.

Any tree removed shall be replaced on a 2:1 caliper-inch ratio. For example, FIVE 2 ½²² INCH CALIPER TREES AND ONE 3 ½ " INCH CALIPER TREE ~~four four inch (4") caliper trees~~ (16 CALIPER INCHES IN TOTAL) would replace one 8 ~~eight-inch (8")~~ caliper tree (8 CALIPER INCHES). Special circumstances may be considered in the total number of trees required for replacement, and off-site planting may be considered in some instances. ~~Any tree greater than 24" caliper shall be treated as a 24" caliper tree in terms of replacement caliper ratio.~~

C. Canals and Watercourses

Setbacks from canals, irrigation ditches or other watercourses are required to protect existing vegetation and channel banks from development encroachment and to minimize slope failures. These setbacks also maintain access to watercourses for maintenance purposes, preserve trees, and provide land for open space and trails.

City Council Resolution No. 2 of 1986, requires that the edge of any improvement (grading, paving or trenching) be set back a minimum of ~~thirty 30 feet (30')~~ from the top of bank or right-of-way line, whichever is the furthest from the watercourse. Any structure shall be set back a minimum of ~~forty 40 feet (40')~~. Where trees exist within ~~twenty 20 feet (20')~~ of the top of the watercourse bank, the edge of any improvement shall be set back a minimum of ~~twenty 20 feet (20')~~ from the tree trunk or from a line connecting tree trunks less than ~~fifty 50 feet (50')~~ apart. Any structure shall be set back a minimum of ~~thirty 30 feet (30')~~ from the tree trunks or a line connecting them.

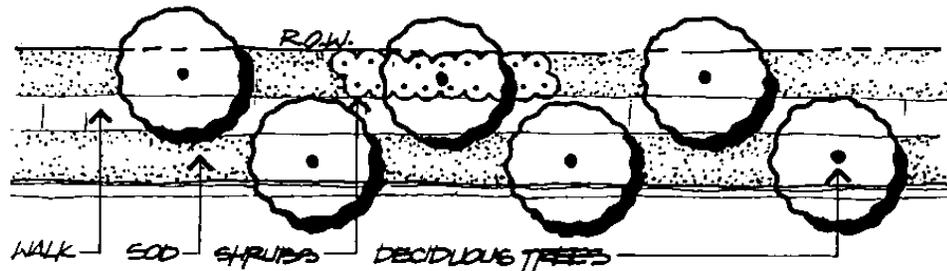
IN ADDITION TO RESOLUTION NO. 2 OF 1986, NO GRADING OR STORAGE OF MATERIALS MAY OCCUR WITHIN THE DRIPLINE OF ANY EXISTING TREES TO BE PRESERVED ON A SITE. THE DRIPLINE MUST BE FENCED PRIOR TO

AND DURING CONSTRUCTION ACTIVITIES. SUPPLEMENTAL WATERING MAY BE NECESSARY DURING CONSTRUCTION, PRIOR TO INSTALLATION OF IRRIGATION SYSTEMS.

D. ~~Plant Locations and Layout~~ PLANT SELECTION AND DESIGN

A formal approach to street tree planting and median landscaping is recommended along ~~major~~ ARTERIAL AND COLLECTOR streets, AS THIS APPEARANCE IS DESIRED BY THE CITY. FORMAL DESIGN INCORPORATES REGULAR SPACING OF SHADE TREES IN A REPETITIVE OR PREDICABLE PATTERN. ~~trees should be regularly spaced and located to avoid~~ POTENTIAL conflicts with pedestrian or vehicular traffic and traffic signage MUST BE TAKEN INTO ACCOUNT. ~~Developers are encouraged and may be required to p~~PlantING trees on both sides of the sidewalk IS REQUIRED in order to create a canopy effect AND TO PROVIDE AREAS OF SHADE FOR THE PEDESTRIAN.

~~A project's interior landscaping will generally have a stronger impression if trees and shrubs are planted in clusters. Shrubs should be planted in groups and massed together to provide a strong landscape statement. Planting large masses of a limited variety of shrub beds is generally more effective than combining many different types of shrubs together.~~



TYPICAL STREET LANDSCAPE

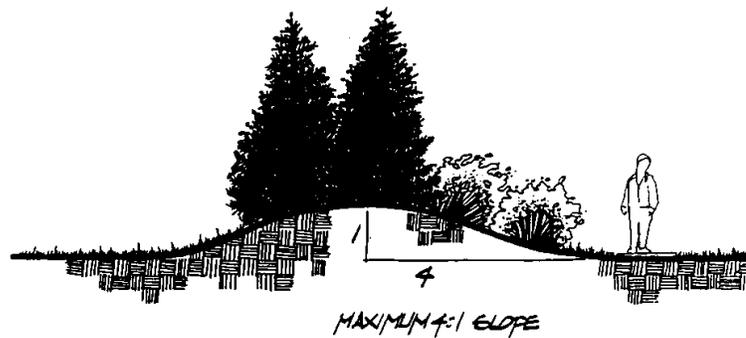
PROVISION OF A VARIETY OF SPECIES IS REQUIRED, AS DETERMINED BY THE CITY. THIS IS NECESSARY NOT ONLY TO PROVIDE VISUAL APPEAL AND DIVERSITY, BUT ALSO TO LIMIT THE IMPACT OF DISEASES AND ENVIRONMENTAL PROBLEMS THAT AFFECT DIFFERENT SPECIES TO VARYING DEGREES.

A mix of evergreen and deciduous trees AND SHRUBS ~~is encouraged~~ IS REQUIRED FOR A SEASONAL APPEARANCE OF GREENERY THROUGHOUT THE YEAR. Long living, deciduous shade trees (Ash, Honeylocust, Linden, Oak, etc.) are preferred and fast-growing trees THAT ARE OFTEN SUBJECT TO SNOW AND WIND DAMAGE (Cottonwoods, Silver Maples) ~~are prohibited~~ MAY BE USED ONLY ON A VERY LIMITED BASIS, AS APPROVED BY THE CITY. (REFER TO PLANT LIST) ~~in vehicular and pedestrian traffic areas.~~

USE OF NON-POTABLE WATER WILL REQUIRE PLANT SELECTION TOLERANT OF HIGHER SALT AND POTASSIUM LEVELS. ADDITIONAL INFORMATION PERTAINING TO THE USE OF NON-POTABLE WATER MAY BE OBTAINED BY CONTACTING THE CITY OF WESTMINSTER DEPARTMENT OF PUBLIC WORKS AND UTILITIES.

E. Buffering Between Uses

Buffering is encouraged between two or more properties of varying use intensities in order to inhibit visibility and/or to mitigate the transmission of noise from one property to another. Buffering can be accomplished by means of plant materials, WALLS, fencing, landforms, or a combination of these measures. BECAUSE EARTH BERMS ARE SO EFFECTIVE IN REDUCING SOUND AND LIMITING UNDESIRABLE VIEWS, ~~It is suggested that berms be installed~~ THE INSTALLATION OF BERMS, in combination with evergreen AND deciduous trees and shrubs, IS REQUIRED TO OCCUR ~~in areas~~ between differing land uses. The maximum slope of berms shall not exceed 4:1 (25%).



LANDSCAPE BUFFER

Intensity: For purposes of this section of the regulations, intensity is a ~~measure~~ GENERAL EXPECTATION of the magnitude and negative impact of a land use on a neighboring land use. ~~It is recommended~~ THE INTENT IS that a lesser intensity use be buffered from THE NEGATIVE IMPACTS OF a higher intensity use. ~~Buffering is recommended on the higher intensity development when that development occurs.~~

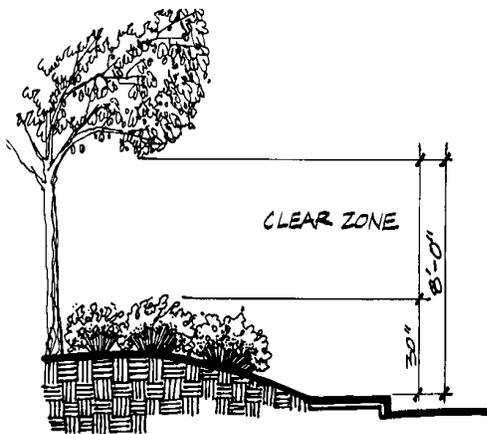
F. Sight Triangles

SAFE INGRESS AND EGRESS FROM ONE STREET OR DRIVEWAY TO ANOTHER, BASED IN PART UPON THE ABILITY OF A DRIVER TO SEE ONCOMING VEHICLES OR PEDESTRIANS IS A NECESSARY CONSIDERATION IN SITE PLANNING AND LANDSCAPE DESIGN.

~~At the intersection of a private drive with a public street, and at the intersection of two public streets, vehicular~~ "Sight triangles" shall be designated in order to insure that there are no visibility obstructions for motorists. Sight triangles shall be shown on all RELEVANT Official Development Plans. (Refer to the ~~City engineering document~~ Intersection Sight Distance Criteria CITY'S STANDARDS AND SPECIFICATIONS

FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS for more detailed information regarding how to calculate a sight triangle.)

All plant material, WALLS, FENCES, BERMS and/or structures in the sight triangle CANNOT EXCEED ~~must maintain a clear zone between thirty inches (30")~~ 24 INCHES above the TOP OF THE ADJACENT curb HEIGHT and ~~eight feet (8') in height above the curb.~~ All shrubs, boulders, etc. must be maintained below a height of thirty inches (30"), and all tree branches in these areas must be pruned to a minimum height of eight feet (8') ~~above the curb.~~ Evergreen trees may not be placed within the sight triangle. THE PLACEMENT OF DECIDIOUS TREES WITHIN SIGHT DISTANCE TRIANGLES IS DISCOURAGED BECAUSE AS TREES MATURE AND TREE TRUNKS INCREASE IN SIZE, VISIBILITY MAY BE IMPACTED TO SUCH A DEGREE THAT REMOVAL OF THE TREE (S) MAY BECOME NECESSARY.



SIGHT TRIANGLE LANDSCAPE

G. Medians, ~~and~~ Landscape Islands, AND LANDSCAPE ADJACENT TO HARDSCAPE

Landscape street medians at development entryways and landscape islands in the center of cul-de-sacs ~~are encouraged and~~ may be required. If landscaped medians are provided, they should be a minimum of ~~fifty~~ 50 feet (50') long and ~~ten~~ 10 feet (10') wide. Medians and landscape islands ~~within a subdivision~~ shall be maintained by the ~~developer/~~PROPERTY owner or homeowner's association- AND INDICATED AS SUCH ON THE RELEVANT OFFICIAL DEVELOPMENT PLAN. WHEN THE CITY IS INTENDED TO MAINTAIN A MEDIAN OR SIMILAR AREA, THE IRRIGATION DESIGN MUST BE SEPARATE FROM LANDSCAPE AREAS MAINTAINED BY OTHERS. THIS INCLUDES A SEPARATE IRRIGATION TAP AND METER. ~~and shall include easements for public utilities. In certain instances, medians shall be maintained by the City, as determined at the time of Official Development Plan.~~

CAREFUL ATTENTION TO THE DESIGN OF BERMS AND SLOPES IS NECESSARY TO MINIMIZE WATER RUNOFF AND DRAINAGE ON ADJACENT AREAS.

PLANTING AREA HEIGHT (INCLUDING MULCH) IMMEDIATELY ADJACENT TO HARDSCAPE, SUCH AS PAVEMENT OR CURBING, SHALL BE LEVEL TO OR BELOW THE SURROUNDING HARDSCAPE OR CURBING TO MINIMIZE WATER RUNOFF AND ENABLE PROPER MAINTENANCE.

H. DRAINAGE AND Detention Areas

~~The developer is responsible for landscaping of detention ponds and other common areas at a rate of one (1) tree and three (3) shrubs for every 550 square feet of landscaped area. The property owner, business association or homeowner's association shall be responsible for the maintenance of the detention pond areas and common area.~~

~~In general plan material shall be located primarily around the perimeter of detention areas. Although some plant material may be allowed in the detention pond area, it shall not interfere with its function by taking up too much room or causing a muddy condition. The use of water tolerant grass is encouraged for the bottom portion of detention ponds. The landscape design shall work in conjunction with the requirements of the Urban Drainage and Flood Control District.~~

THE DEVELOPER/OWNER IS RESPONSIBLE FOR THE INSTALLATION OF LANDSCAPING AND IRRIGATION FOR DRAINAGE AREAS AND DETENTION PONDS. THE DESIGN OF THESE AREAS MUST CONSIDER MAINTENANCE ISSUES SUCH AS: WEED CONTROL MEASURES, MAXIMUM HEIGHTS OF GRASSES/TURF, MOWING, AND WATER RETENTION AND RELEASE RATES THAT CAN RESULT IN SOGGY GROUND AT THE BOTTOMS OF THESE POND AREAS. WHEN CHANNELIZATION OCCURS, DESIGN INCORPORATING PHYSICAL ELEMENTS OR PLANTS FOR A NATURAL APPEARANCE MAY BE REQUIRED. THE DESIGN MUST BE CONSISTENT WITH THE REQUIREMENTS OF THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT.

DETENTION POND AREAS MUST BE PLANTED AT A RATE OF 1 TREE AND 3 SHRUBS PER 550 SQUARE FEET OF AREA ABOVE THE 5-YEAR STORM WATER SURFACE ELEVATION. TREES AND SHRUBS MUST BE LOCATED ABOVE THE 5-YEAR STORM WATER SURFACE ELEVATION. BELOW THE 5-YEAR SURFACE ELEVATION, PLANT MATERIAL IS LIMITED TO TURF OR OTHER GROUNDCOVERS. THE BOTTOMS OF DETENTION PONDS MAY BE PLANTED WITH A MIXTURE OF GRASSES AND FORBS THAT ARE SUITED TO PERIODIC FLOODING AND/OR MAINTAINED FOR NATURAL HABITAT EVOLUTION IF FUNCTION IS NOT IMPAIRED. TIMBER OR CONCRETE WALLS ARE NOT ACCEPTABLE DESIGN SOLUTIONS FOR DETENTION PONDS.

THE DESIGN OF DRAINAGE AREAS SHALL ADDRESS THE SAME ISSUES AND INCORPORATE THE SAME CRITERIA, NOTED HEREIN, AS THAT OF DETENTION PONDS.

THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE ONGOING MAINTENANCE OF DETENTION PONDS AND DRAINAGE AREAS. MAINTENANCE RESPONSIBILITY SHALL BE CLEARLY DEFINED ON THE OFFICIAL DEVELOPMENT PLAN.

DETENTION PONDS AND DRAINAGE AREAS IN NON-RESIDENTIAL DEVELOPMENTS SHALL BE LOCATED WITHIN A BUILDING LOT.

DETENTION PONDS AND DRAINAGE AREAS ARE NOT PERMITTED WITHIN MINIMUM LANDSCAPE SETBACKS. THE LOCATION AND DESIGN MUST BE INTEGRATED WITH THE OVERALL SITE.

All turf and plant material shall be irrigated with an automatic sprinkler system. TO PREVENT A SOGGY BOTTOM AREA, IT IS SUGGESTED THAT THE BOTTOM AREA WITHIN THE DETENTION POND BE A SEPARATE IRRIGATION ZONE FROM THE SLOPED SIDES. ~~All detention areas shall be designed to blend with adjacent areas.~~ Slopes shall not exceed 4:1 ~~unless specifically allowed by the Official Development Plan.~~

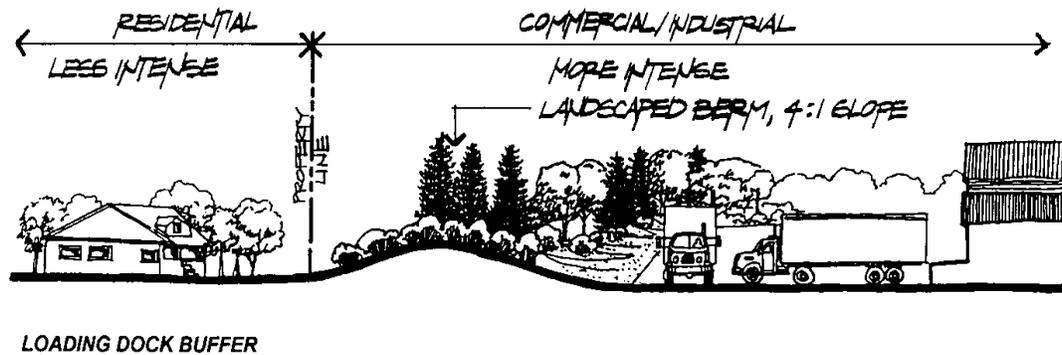
~~Landscape criteria for regional detention ponds shall be determined on a site specific basis.~~

I. Trash and Loading Area Screening

~~Trash dumpsters and truck loading docks shall be screened and buffered from adjacent properties. Trash dumpsters shall be screened by a wall a minimum of six (6') feet in height and may be required to be covered if visible from surrounding area streets. The minimum height requirements may vary depending on use. Walls shall have solid gates. No open, three sided dumpster storage will be permitted. It is suggested that plant material also be used in conjunction with the wall. Walls shall match the materials and colors of the main building.~~

TRASH DUMPSTERS MUST BE SCREENED WITH OPAQUE GATES, FENCES OR WALLS- ACCORDING TO EXISTING ZONING REQUIREMENTS OR DESIGN GUIDELINES. BRICK SCREEN WALLS ARE GENERALLY REQUIRED. DUMPSTERS AND TRASH CANNOT EXCEED THE HEIGHT OF THE SURROUNDING ENCLOSURE. ROOFED ENCLOSURES AND OTHER DESIGN ELEMENTS MAY BE REQUIRED.

TRASH, SERVICE AREAS AND ~~Loading dock areas~~ DOCKING FACILITIES shall be buffered from adjacent properties by means of EVERGREEN plant material, walls, landforms, or a combination of these measures. Berms with a maximum 4:1 slope in combination with evergreen AND deciduous trees and shrubs are recommended. The height of berms will be determined at the time of Official Development Plan.



a. Other Site Elements

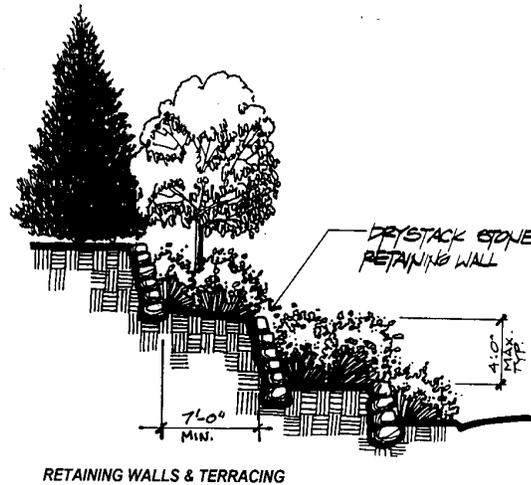
J. Fencing AND WALLS

Fencing shall be as per the City Municipal Code, Section 11-9-5(D) 11-4-6(O), REQUIREMENTS AS NOTED IN SPECIFIC LAND USE CATEGORIES HEREIN, AND ANY APPLICABLE DESIGN GUIDELINES. THE OWNERSHIP AND RESPONSIBILITY FOR THE ON-GOING MAINTENANCE OF FENCING AND WALLS MUST BE IDENTIFIED ON THE OFFICIAL DEVELOPMENT PLAN.

K. Retaining Walls

Retaining walls are commonly used to reduce steep slopes and create level areas. Wall heights shall not exceed ~~four~~ 4 feet (4'). Terracing steep slopes with a series of low retaining walls is A DESIGN SOLUTION FOR CHANGES IN GRADE THAT EXCEED 4 FEET IN ELEVATION. ~~preferred to retaining slopes with one large (tall) retaining wall.~~ TERRACES RETAINING WALLS shall be spaced a MINIMUM distance apart OF ~~at least seven~~ 7 feet (7') ~~minimum~~. The slope between terraces WALLS shall be per geotechnical recommendations AND SHALL NOT EXCEED 4:1 (25%).

~~Dry-stacked native stone, or pre-cast masonry block, materials are preferred for wall materials. Cast in place concrete or masonry block walls with stone, brick or stucco facing are also recommended~~ REQUIRED MATERIALS FOR RETAINING WALLS. Treated timber walls are PROHIBITED- EXCEPT FOR USE BY THE RESIDENT HOMEOWNER IN SINGLE FAMILY DETACHED OR DUPLEX LOTS. ~~generally not recommended unless exemplary design is demonstrated, and are prohibited for walls over three feet (3') in height. Railroad tie walls are prohibited.~~ Landscaping, INCLUDING IRRIGATION, is ~~encouraged in conjunction with~~ REQUIRED TO OCCUR WITHIN ANY terraced areas. LARGE SPECIES OF TREES ARE DISCOURAGED WITHIN OR ADJACENT TO TERRACES OR WALLS DUE TO POTENTIAL NEGATIVE IMPACT ON THE STRUCTURAL INTEGRITY OF TERRACES AND WALLS. LOW WATER PLANTINGS AND/OR LOW VOLUME IRRIGATION IS REQUIRED IN THESE AREAS.



L. UTILITIES, FIRE HYDRANTS & EASEMENTS ~~Trees and Shrubs as Obstructions~~

LANDSCAPING WITHIN THESE AREAS MUST BE SHOWN ON THE OFFICIAL DEVELOPMENT PLAN. LANDSCAPING, IRRIGATION, PAVING AND FENCING WITHIN A PUBLIC EASEMENT MUST BE REMOVED AND REPLACED BY THE OWNER OF THE LAND, WHEN REQUESTED BY THE CITY, SO THAT MAINTENANCE WITHIN EASEMENTS CAN BE PERFORMED.

LANDSCAPING ADJACENT TO OVERHEAD UTILITY LINES MUST TAKE INTO ACCOUNT MATURE SIZE AND SHAPE OF PLANTINGS, AND MINIMIZE POTENTIAL CONFLICTS, AS DETERMINED BY THE CITY.

~~Trees and shrubs shall not be placed where they will obstruct the visual line of sight of a public right-of-way or within a vehicular sight triangle (See "Sight Triangles" under Section 5 of these regulations).~~

No plants or other landscape items shall block free access to a fire hydrant. A ~~five-~~ 5-foot (5') minimum setback shall be maintained to each side of all fire hydrants. Access from the front is to be completely unobstructed. (Requirements should be checked against current Uniform Fire Code).

~~3. Hard Surface Areas~~

~~For commercial projects, pedestrian scale elements should be included in addition to the landscape areas, such as: seating areas, the use of patterned concrete, optional public art, fountains, etc. Public art is encouraged and may be installed in lieu of some of the required landscaping, as approved on a case by case basis.~~

~~f. Street Right of Way Standards~~

~~Developers and property owners are responsible for landscaping and maintaining the right of way of all arterials, collectors and local streets within or abutting their development. Right of way landscaping should extend to include entry areas to the~~

~~development. Automatic sprinkler systems are required within the right of way landscape areas. The homeowner's association and/or the individual homeowners are responsible for landscaping and maintaining the right of way areas in front of single-family detached residences.~~

~~**I. Minimum Area**~~

~~The following are minimum standards for street right of way widths. Right of way widths may need to increase to accommodate median nose widths or sound mitigation berms and fencing. Right of way widths may also increase in instances where expanded or meandering landscape and/or fencing areas are provided such as at the Northpark Subdivision or for significant collector streets such as Legacy Ridge Parkway. Additional right of way will also be required at intersections to accommodate additional turn lanes and to maintain the typical landscape and sidewalk setbacks.~~

VI. GENERAL LANDSCAPE PROVISIONS FOR Plant Materials, AND THEIR DESIGN AND INSTALLATION

The standards in these regulations are to be considered ~~the~~ AS minimum requirements. Developers/owners are encouraged to increase the size and/or quantity of plant materials whenever possible. Dependent upon site characteristics, ~~and~~ THE TYPE OF USE, AND DESIRED EFFECT OR APPEARANCE, the City ~~may~~ HAS THE OPTION TO require landscaping beyond the minimum standards for a particular project.

THE OWNER OF A PROJECT IS REQUIRED TO CHECK WITH THE CITY'S DEPARTMENT OF PUBLIC WORKS AND UTILITIES TO DETERMINE THE PROXIMITY OF THE PROJECT TO THE CITY'S NON-POTABLE WATER SYSTEM AND THE FEASIBILITY OF TYING INTO THIS SYSTEM.

The health, SIZE and general appearance of plant material at the time of planting shall be in accordance with the recognized standards of the American Standards for Nursery Stock, published by the American Association of Nurserymen, and the standard specifications of the Associated Landscape Contractors of Colorado. THE CITY RETAINS THE RIGHT TO REJECT ANY AND ALL PLANTS NOT DETERMINED BY THE CITY TO BE OF HIGH QUALITY, AT TIME OF LANDSCAPE INSTALLATION OR ACCEPTANCE.

ALL AREAS TO BE LANDSCAPED REQUIRE SOIL AMENDMENT IN ACCORDANCE WITH THE CITY'S "STANDARDS AND SPECIFICATIONS FOR THE DESIGN OF CONSTRUCTION OF PUBLIC IMPROVEMENT." THIS REQUIRES A MINIMUM OF 5 CUBIC YARDS OF AN ORGANIC AMENDMENT PER 1,000 SQUARE FEET OF LANDSCAPE AREA, TILLED 8 INCHES IN DEPTH INTO THE SOIL. (THIS ALSO EQUALS A MINIMUM OF 1 5/8 INCH DEPTH SPREAD OVER THE LANDSCAPE AREA SURFACE- PRIOR TO TILLING.) THE TOTAL REQUIRED AMOUNT OF SOIL AMENDMENT MUST BE INDICATED ON THE OFFICIAL DEVELOPMENT PLAN, INCLUDING CALCULATIONS INDICATING HOW THE TOTAL AMOUNT WAS DERIVED. AGED GROUND MANURE OR COMPOST CONTAINING A MINIMUM OF 50 PERCENT ORGANIC MATTER IS A GENERAL RECOMMENDATION, HOWEVER SOIL TEXTURE, PH, AND AMOUNT OF SOLUABLE SALTS IN THE SOIL AND THE AMENDMENT SHOULD BE CONSIDERED. IF NON-POTABLE WATER IS TO BE USED, THE ORGANIC SOIL AMENDMENT WILL NEED TO BE LOW IN SODIUM.

FOR ALL PROPERTIES THAT WILL HAVE LANDSCAPE AREA MAINTAINED BY A HOMEOWNERS' ASSOCIATION, RENTAL PROPERTIES, AND ALL NON-RESIDENTIAL PROPERTIES, AN INSPECTION WILL BE REQUIRED TO OCCUR AFTER SPREADING OF THE SOIL AMENDMENT, AND PRIOR TO TILLING. AT TIME OF INSPECTION, THE CITY MUST BE PROVIDED WITH VERIFICATION, INCLUDING A RECEIPT, FROM THE SUPPLIER OF THE AMOUNT AND TYPE OF SOIL AMENDMENT DELIVERED.

ALL SINGLE FAMILY LOTS WILL BE REQUIRED TO HAVE SOIL AMENDMENT, ACCORDING TO CITY REQUIREMENTS NOTED HEREIN, INSTALLED IN ALL AREAS OF THE YARD NOT COVERED WITH HARDSCAPE. INSTALLATION MUST OCCUR BY THE DEVELOPER PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR EACH LOT; OR IF SURETY IS PROVIDED TO THE CITY, IN AN ALTERNATE TIMEFRAME DETERMINED BY THE CITY. THE CITY MUST BE PROVIDED WITH VERIFICATION, INCLUDING A RECEIPT, FROM THE SUPPLIER OR INSTALLER OF THE AMOUNT AND TYPE OF SOIL AMENDMENT DELIVERED AND INSTALLED. THE

CITY WILL REQUIRE INSPECTION PRIOR TO CERTIFICATE OF OCCUPANCY AND RELEASE OF SURETY.

PLANTS LOCATED WITHIN A PARTICULAR HYDROZONE MUST BE SIMILAR IN WATER REQUIREMENTS TO THE DESIGNATED ZONE.

A. Trees and Shrubs

~~The standard in these regulations are to be considered the minimum requirements. Developers/owners are encouraged to increase the size and/or quantity of the plant materials whenever possible. Dependant upon the site characteristics and the type of use, the City may require landscaping beyond the minimum standards for a particular project.~~

~~A mix of evergreen and deciduous trees is encouraged. Proposed deciduous trees shall be "slow growing, long-lived" species of trees such as Ash, Norway Maple, Honeylocust, Linden, Oak, Hawthorn, etc. Adequate variety in the planting shall be provided to avoid epidemic disease problems. The use of "fast growing" trees such as Cottonwoods, Poplars, Silver Maple, etc. is generally prohibited with several exceptions. Fast growing trees may be acceptable for use in areas where an informal, more heavily wooded appearance is desired such as when a property abuts open space, trails, parks, or abuts another open and informal area. The use of Siberian or Chinese Elm (Ulmus pumila), is prohibited within the City of Westminster. The use of Russian Olive (Elaeagnus angustifolia); is prohibited along creeks and drainage ways.~~

SPECIFIC DESIGN CONSIDERATIONS RELEVANT TO TREES ARE AS FOLLOWS:

- REFER TO THE PREVIOUS SECTION "CONSIDERATIONS IN LANDSCAPE DESIGN" FOR PRIMARY DESIGN REQUIREMENTS.
- LONG-LIVING SHADE TREES SUCH AS ASH, HONEYLOCUST, LINDEN, OAK, ETC. ARE PREFERRED OVER FAST GROWING, SHORTER LIVING TREES. THE MINIMUM SIZE FOR DECIDUOUS SHADE TREES IS 2 INCHES IN CALIPER.
- ORNAMENTAL TREES SHALL NOT COMPRISE MORE THAN 1/3 OF THE TOTAL TREES IN THE LANDSCAPE DESIGN, UNLESS APPROVED OTHERWISE BY THE CITY. THE MINIMUM SIZE OF AN ORNAMENTAL TREE SHALL BE 2 INCHES IN CALIPER. THE MINIMUM SIZE FOR CLUMP ORNAMENTAL TREES SHALL BE 3 TREE TRUNKS AND 6 FEET IN HEIGHT.
- EVERGREEN TREES MUST COMPRISE AT LEAST 1/3 OF THE TOTAL TREES REQUIRED, UNLESS APPROVED OTHERWISE BY THE CITY. THE MINIMUM SIZE OF EVERGREEN TREES SHALL BE 6 FEET IN HEIGHT.
- 20 PERCENT OF THE TOTAL NUMBER OF REQUIRED DECIDUOUS TREES MUST BE INCREASED IN SIZE TO A MINIMUM OF 3 INCHES IN CALIPER. 20 PERCENT OF THE TOTAL NUMBER OF REQUIRED EVERGREEN TREES MUST BE INCREASED IN SIZE TO 8 FEET IN HEIGHT.

- DIVERISTY OF TREES SHALL BE AS FOLLOWS:

<u># OF TREES ON SITE</u>	<u>MAXIMUM % OF ANY ONE SPECIES</u>
10-19	50%
20-39	33%
40-59	25%
60 OR MORE	20%

- EVERGREEN TREES SUCH AS AUSTRIAN PINE, PONDEROSA PINE, AND SPRUCE MUST NOT BE PLANTED CLOSER THAN 10 FEET TO A STREET, SIDEWALK OR PARKING AREA. (MEASURED FROM TRUNK OF TREE TO EDGE OF PAVEMENT)
- TREES SHOULD BE LOCATED TO PROVIDE SUMMER SHADE AND LIMIT WINTER SHADE ON WALKS AND STREETS.
- TREES THAT DROP FRUITS OR HAVE THORNS SHOULD NOT BE PLANTED IN CLOSE PROXIMITY TO SIDEWALKS, WITHIN PARKING LOT ISLANDS OR MEDIANS. (VERY SMALL OR PERSISTENT FRUITS OK)
- THE USE OF SIBERIAN OR CHINESE ELM (ULMUS PUMILA), RUSSIAN OLIVE (ELAEAGNUS ANGUSTIFOLIA) AND SALT CEDAR SHRUBS (TAMARIX) IS PROHIBITED DUE TO EXCESSIVE INSECT INFESTATION OR INVASIVE GROWTH HABITS.
- PERIODIC WINTER WATERING IS TYPICALLY NECESSARY IN COLORADO DUE TO PERIODS OF DRYNESS.
- ALL TREES MUST BE SURROUNDED BY AN AREA OF MULCH, OF NO LESS THAN 3 FEET FROM THE TRUNK AND 6 FEET IN DIAMETER, AND NO LESS THAN 3 INCHES IN DEPTH. KEEP MULCH 3 INCHES AWAY FROM TREE TRUNKS TO REDUCE INSECT AND TRUNK DAMAGE. IT IS RECOMMENDED TO PERIODICALLY INCREASE THE MULCH RING TO THE SIZE OF THE DRIP LINE OF THE TREE. THIS ENCOURAGES ROOT DEVELOPMENT AND CONSERVES WATER FOR THIS PURPOSE. TYPE OF MULCH MUST BE SPECIFIED AND APPROVED BY THE CITY.
- THE PREFERABLE SIZE OF TREE GRATES IS 7 FEET IN CIRCUMFERENCE FOR THE HEALTH OF THE TREE. THE MINIMUM SIZE SHALL BE NO LESS THAN 5 FEET IN CIRCUMFERENCE.
- 1 TREE MAY BE SUBSTITUTED FOR 10 SHRUBS, OR VICE VERSA, IF DETERMINED TO BE DESIRABLE BY THE CITY.

B. Shrub AND PERENNIAL Beds

- REFER TO THE PREVIOUS SECTION “CONSIDERATIONS IN LANDSCAPE DESIGN” FOR PRIMARY DESIGN REQUIREMENTS.

- All shrub AND PERENNIAL bed areas shall be separated from ~~soe~~ TURF areas by an edging material. Edging materials placed near building foundations shall not be so high as to interfere with positive drainage away from the structures. METAL OR PLASTIC EDGING SHALL NOT BE INSTALLED OR MAINTAINED AT A HEIGHT GREATER THAN THE ADJACENT LANDSCAPE SURFACES. EDGING WITH SHARP EDGES IS PROHIBITED.
- NO MORE THAN 25 % OF A SHRUB BED SHALL BE DESIGNED IN SUCH A MANNER AS TO BE FREE OF PLANT MATERIAL WITHIN 5 YEARS OF PLANTING.
- ALL SHRUB BEDS MUST BE MULCHED AND MAINTAINED AT A MINIMUM MULCH DEPTH OF 3 INCHES. AREAS CONTAINING PERENNIAL FLOWER OR GROWDCOVER SPECIES THAT HAVE A SPREADING GROWTH HABIT, MAY BE MULCHED AT A MINIMUM 1-INCH DEPTH, AS APPROVED BY THE CITY.
- MULCHES CAN BE DIFFICULT TO MAINTAIN ON SLOPED AREAS. PLANT CHOICE AND REDUCED SPACING BETWEEN PLANTS SHOULD BE CONSIDERED FOR SLOPED AREAS.
- THE HEIGHT/GRADE OF THE SOIL WITHIN SHRUB AND PERENNIAL BEDS MUST BE LOWER THAN THE SURROUNDING HARDSCAPE OR TURF AREAS IN ORDER TO ACCOMMODATE THE MULCH DEPTH REQUIREMENTS, AS WELL AS TO MINIMIZE WATER RUNOFF, REDUCE MULCH LOSS TO OTHER AREAS, AND ENABLE PROPER MAINTENANCE.
- THE USE OF WEED BARRIER FABRICS UNDERNEATH MULCH IN SHRUB BEDS IS REQUIRED IN ALL COMMON LANDSCAPE AREAS WHERE THE LANDSCAPING WILL ULTIMATELY BE MAINTAINED BY A HOMEOWNERS ASSOCIATION, IN ALL RENTAL RESIDENTIAL PROPERTIES AND IN ALL NON-RESIDENTIAL DEVELOPMENT. WEED BARRIER FABRICS MUST BE WATER PERMEABLE.
- FOR PURPOSES OF DIVERSITY, LONGEVITY, AND HEALTH, NO MORE THAN 25% OF THE SHRUB TOTAL SHALL BE COMPRISED OF ONE SPECIES.
- ALL SHRUBS MUST BE MINIMUM 5-GALLON CONTAINER IN SIZE.
- ONE 5 GALLON; OR THREE 1 GALLON LONG-LIVED, LARGE PERENNIAL GRASS SPECIES, OR CLIMBING VINE SPECIES, MAY BE SUBSTITUTED FOR ONE FIVE-GALLON SHRUB, AS APPROVED BY THE CITY.
- THE USE OF PERENNIAL AND ANNUAL FLOWER AND HERBACIOUS PLANTS IS ENCOURAGED BUT NOT REQUIRED BY THE CITY. EXCEPT AS NOTED OTHERWISE, PERENNIAL, ANNUAL AND HERBACIOUS PLANTS ARE NOT ACCEPTED IN LIEU OF MINIMUM SHRUB

REQUIREMENTS. ALL GROUNDCOVERS AND PERENNIAL FLOWERS, VINES OR GRASSES MUST BE MINIMUM 1-GALLON CONTAINER IN SIZE.

C. TURF AREAS Grass and Other Ground Covers

~~Grass or other living plant material shall be the primary ground cover used in landscape. When a turf area is desired, sodding shall be the only means of installation. Turf areas shall be planted to present a finished appearance and complete coverage after two growing seasons.~~

~~Non-living ground covers such as redwood bark, wood chip mulch, boulders, cobble or river rock shall be limited to an area, not to exceed 50% of the landscape area. The other 50% shall be turf area. All non-living groundcovers shall be placed over a suitable weed barrier or filter fabric. Rock/mulch areas shall be 75% covered with shrubs within a three-year period.~~

- REFER TO THE PREVIOUS SECTION “CONSIDERATIONS IN LANDSCAPE DESIGN” FOR PRIMARY DESIGN REQUIREMENTS. ALSO, REFER TO THE CITY’S “STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS” FOR ADDITIONAL, DETAILED CONSTRUCTION REQUIREMENTS RELATED TO LANDSCAPING.
- FOR REASONS OF WATER CONSERVATION AND WATER-WISE LANDSCAPING, THE HIGH HDROZONE SHALL NOT EXCEED 50 PERCENT OF THE LANDSCAPE AREA OF NON-RESIDENTIAL PROPERTIES, EXCLUSIVE OF RIGHT-OF-WAY, UNLESS APPROVED OTHERWISE BY THE CITY. AN ANNUAL WATER BUDGET NOT TO EXCEED 15 GALLONS/SQUARE FOOT/YEAR IS REQUIRED FOR ALL LANDSCAPES.
- A BLUEGRASS BLEND TURF IS BEST SUITED FOR TURF AREAS THAT WILL RECEIVE REGULAR PEDESTRIAN OR CANINE FOOT TRAFFIC. AREAS THAT DO NOT RECEIVE REGULAR PEDESTRIAN OR CANINE FOOT TRAFFIC WILL BE CONSIDERED FOR ALTERNATIVE TURF GRASSES.
- THE USE OF ARTIFICIAL TURF IS GENERALLY PROHIBITED, EXCEPT FOR USE IN RESIDENT SINGLE FAMILY DETACHED OR DUPLEX LOT YARD AREAS NOT ADJACENT TO A STREET. THE CITY MAY CONSIDER OTHER EXCEPTIONS TO THIS LIMITATION ON A CASE-BY-CASE BASIS FOR SPORTS FIELDS AND OTHER LIMITED APPLICATIONS.
- ALTERNATIVE TURFS SUCH AS BUFFALO GRASS, FESCUE, AND OTHER GRASSES THAT CAN BE MAINTAINED AT A HEIGHT NOT TO EXCEED 6 INCHES ARE RECOMMENDED TO OCCUR ONLY WHERE LESS INTENSIVE USE OF TURF IS ANTICIPATED- AREAS THAT DO NOT RECEIVE REGULAR PEDESTRIAN OR CANINE FOOT TRAFFIC. THE USE OF ALTERNATIVE TURFS IN LIEU OF BLUEGRASS TURF ARE

SUBJECT TO CITY APPROVAL, EXCEPTING THE USE OF ALTERNATIVE TURF BY THE RESIDENT SINGLE FAMILY OR DUPLEX HOMEOWNER COMPLETING THEIR LANDSCAPE.

- ACCEPTABLE METHODS OF INSTALLATION FOR ALTERNATIVE TURFS INCLUDE SODDING, PLUGGING, OR SEEDING. BLUEGRASS, FESCUE, BUFFALO GRASS, AND OTHER GRASSES COMMERCIALY GROWN AS SOD MUST BE INSTALLED BY SODDING, EXCEPTING THAT OF THE RESIDENT SINGLE FAMILY DETACHED OR DUPLEX HOMEOWNER COMPLETING THEIR LANDSCAPE. AUTOMATIC IRRIGATION IS REQUIRED.
- A DESCRIPTION OF PROPOSED TURFS AND METHOD OF INSTALLATION SHALL BE INDICATED ON APPROVED OFFICIAL DEVELOPMENT PLANS AND RELATED LANDSCAPE DOCUMENTS.
- SEED MIXES SHALL SPECIFY THE SPECIES OF GRASSES USED IN THE MIX, THE ANTICIPATED APPEARANCE AND HEIGHT, AND NAME OF SUPPLIER. GRASSES SHALL BE A SPECIES THAT CAN BE MAINTAINED AND IRRIGATED AT A MAXIMUM OF 6 INCHES IN HEIGHT, UNLESS OTHERWISE APPROVED ON THE OFFICIAL DEVELOPMENT PLAN. ALL VARIANCES FROM THE MAXIMUM 6-INCH HEIGHT SHALL BE EXPLICITLY OUTLINED ON THE OFFICIAL DEVELOPMENT PLAN.
- SEED INSTALLATION SHALL BE BY DRILLING OR HYDROSEEDING INCLUDING A MULCH AND TACKIFIER.
- ALL NATIVE SEED AREAS SHALL BE ESTABLISHED AT A MINIMUM OF 4 TO 5 PLANTS PER SQUARE FOOT WITHIN 4 WEEKS AFTER GERMINATION, AND MAINTAINED AT THIS LEVEL, OR SHALL BE RE-SEEDED UNTIL ESTABLISHED AT THAT RATE.
- ALTERNATIVE TURFS INSTALLED BY SEED MAY RESULT IN A HIGHER INCIDENCE OF WEEDS, THEREFORE, AN ESTABLISHMENT AND MAINTENANCE PLAN IS REQUIRED TO BE INDICATED ON ALL LANDSCAPE DOCUMENTS INCLUDING THE OFFICIAL DEVELOPMENT PLAN. THIS PLAN MUST INCLUDE A WEED CONTROL AND REMOVAL PROGRAM, MOWING SCHEDULE, AND TRASH CLEAN UP.
- ALL TURF INSTALLATIONS, OTHER THAN SODDING, WILL REQUIRE AN ADDITIONAL WARRANTY PERIOD OF NO LESS THAN 2 YEARS.
- THE HEIGHT OF GRASSES IMPACTS THE EFFECTIVENESS/COVERAGE OF AUTOMATIC IRRIGATION SYSTEMS. THIS NEEDS TO BE TAKEN INTO ACCOUNT IN THE LANDSCAPE AND IRRIGATION DESIGN, AS WELL AS MAINTENANCE PLAN.

Native or Drought Tolerant Landscaping

Native or drought tolerant approaches to landscaping will be considered for planting where appropriate. Large landscape areas adjacent to existing, native, open space tracts may be appropriate for xeriscape treatment, as may parts of the primary landscape area, including detention ponds, when the principles of xeriscaping are well understood and applied. (See Xeriscaping section of these Landscape Regulations). All planted areas, including xeriscape areas, require an automatic irrigation system. Regardless of how drought tolerant a plant may be, relatively frequent watering is needed until plants are established. For most woody plants, establishment takes at least two growing seasons. Once established, gradual reduction of watering frequency can be accomplished.

~~K. Basic Planting Requirements~~

~~For specific instructions on how to physically install plant material in the ground (i.e. depth of hole, soil amendments, etc.) see City Sitework Specifications.~~

~~Due to the heavy clay soils in the area, it is required that organic matter (compost or aged ground manure) be added to turf and planting beds at a minimum rate of five cubic yards per one thousand square feet and tilled into the soil.~~

~~The health and general appearance of plant material at the time of planting shall be in accordance with the recognized standards of the American Standards for Nursery Stock, published by the American Association of Nurserymen and the standard specifications of the Associated Landscape Contractors of Colorado.~~

~~K. Trees and Shrubs as Obstructions~~

~~Trees and shrubs shall not be placed where they will obstruct the visual line of sight on a public right of way or within a vehicular sight triangle (see "Site Triangles" under Section 5 of these regulations).~~

~~No plants or other landscape items shall block free access to fire hydrant. A five foot (5') minimum setback shall be maintained to each side of all fire hydrants. Access from the front is to be completely unobstructed. (Requirements should be checked against current Uniform Fire Code.~~

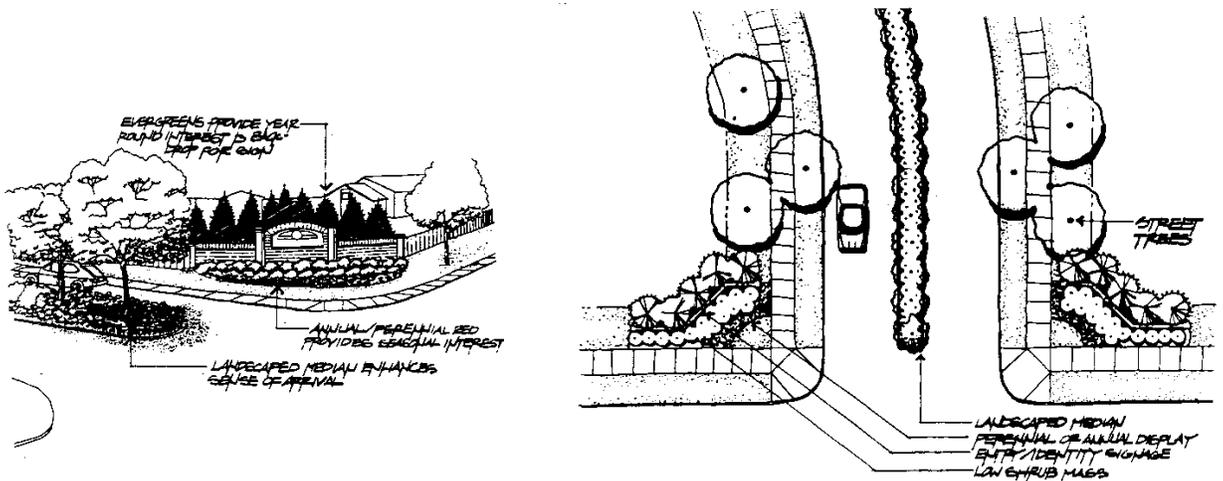
8VII. RESIDENTIAL LANDSCAPE STANDARDS

REQUIREMENTS NOTED IN THE LAND USE CATEGORIES AND SECTIONS HEREIN GENERALLY PERTAIN TO ALL THE RESIDENTIAL LAND USE CATEGORIES AND SECTIONS HEREIN, UNLESS NOTED OTHERWISE.

LAND USE DESIGNATIONS SHALL BE AS DEFINED IN THE CITY'S COMPREHENSIVE LAND USE PLAN.

The following SPECIFIC standards for THE residential landscape ~~design should be considered~~ ARE the minimum requirements. Developers are encouraged to exceed the standards whenever possible.

The entrance to residential developments should be designed to provide an attractive, year round landscape statement AND TO PROVIDE MAXIMUM SAFETY FOR VISIBILITY AND TURNING MOVEMENTS. Street medians/landscape islands are ~~encouraged and may be~~ required at MAJOR ENTRANCES TO THE DEVELOPMENT ~~entranceways~~. If installed, ~~maintenance of the medians/landscape islands within the subdivision, shall be the responsibility of the developer/homeowner's group.~~ Enhanced FORMAL landscaping and signage mounted on masonry walls are encouraged at THE ENTRANCE TO residential DEVELOPMENTS ~~entranceways~~. EVERGREEN TREES PLANTED BEHIND THE ENTRY SIGNAGE ARE ENCOURAGED TO ENHANCE THE COMMUNITY CHARACTER ESTABLISHED WITH THE CITY'S MONUMENT SIGNAGE. All landscaping within the "sight triangle" must be lower than 30 inches (30") or higher than eight feet (8') as measured from the top of the curb. The addition of large trees, especially evergreens, can provide an all season backdrop and direct attention to the entrance. The inclusion of perennials and annuals can provide color for the spring and summer. In some instances, a gated type of entrance may be desirable in order to create a sense of community and provide additional security. Gated communities may include manned or mechanically secured entranceways, as well as secure fencing.



RESIDENTIAL PROJECT ENTRANCE PLAN & PERSPECTIVE

A. Single-Family Detached Residential

FOR THE PURPOSES OF LANDSCAPE REQUIREMENTS, DUPLEX DEVELOPMENT WILL BE DETERMINED BY THE PLANNING MANAGER AS EITHER SINGLE-FAMILY DETACHED OR ATTACHED RESIDENTIAL.

~~Landscaping plays a significant role in the overall quality, appearance, and value of residential neighborhoods. Landscape standards have been established for single family detached subdivisions in order to encourage a quality appearance for individual residences, assist in the transition between uses of varying density and intensity, provide shade, provide variety of design, and enhance the overall appearance of the community.~~

1. Minimum Requirements

a. LANDSCAPE AREA:

- THE MINIMUM LANDSCAPE AREA FOR A SINGLE FAMILY DETACHED OR DUPEX LOT MUST BE A MINIMUM OF 50 PERCENT OF EACH YARD AREA ADJACENT TO A STREET, UNLESS APPROVED OTHERWISE BY THE CITY. REMAINING YARD AREA NOT LANDSCAPE AREA, SHALL BE HARDSCAPE.
- FOR YARD AREAS NOT ADJACENT TO A PUBLIC STREET, THERE IS NO MINIMUM AMOUNT OF LANDSCAPE AREA. THESE YARD AREAS SHALL BE ANY COMBINATION OF LANDSCAPE AREA, HARDSCAPE, MULCH OR ARTIFICIAL TURF. ANY LANDSCAPE AREA WITHIN THESE YARD AREAS SHALL FOLLOW THE REQUIREMENTS HEREIN.
- MAINTENANCE OF LANDSCAPE IMPROVEMENTS WITHIN THE INDIVIDUAL LOT IS THE RESPONSIBILITY OF THE PROPERTY OWNER.

b. PLANT MATERIALS:

1. TREES:

- REFER TO THE PREVIOUS SECTION “CONSIDERATIONS IN LANDSCAPE DESIGN” FOR REQUIREMENTS REGARDING EXISTING TREES.
- For residential lots up to 10,000 square feet in size, a minimum of ~~one~~ (1) 1 shade tree shall be required in the front yard of every residence. ~~Whenever possible the shade tree shall be installed approximately seven feet (7') from the front property line in order to create a streetscape appearance.~~ For lots larger than 10,000 square feet in size, a minimum of ~~two~~ (2) 2 trees shall be required in the front yard of every residence, WITH AT LEAST ONE TREE BEING A SHADE TREE. The use of evergreen trees in conjunction with shade trees is encouraged. ~~Whenever~~

~~possible the shade tree shall be installed approximately seven (7) feet (7') from the front property line in order to create a streetscape appearance.~~

- The required trees shall be installed by the developer prior to certificate of occupancy, OR IF SURETY IS PROVIDED TO THE CITY, IN AN ALTERNATE TIMEFRAME DETERMINED BY THE CITY. ~~if~~ homeowner installation is preferred; a credit in the amount of the required trees (including installation) shall be posted by the developer with a local nursery for use by the homeowner.

2. SHRUBS, GROUNDCOVERS AND TURF:

- MINIMUM LANDSCAPE IMPROVEMENTS WITHIN THE LANDSCAPE AREA OF EACH LOT SHALL CONSIST OF A grass lawn and/or shrubs and/OR groundcovers, AND shall be established by the developer or homeowner. ~~with the yard area adjacent to a public street,~~ REQUIRED LANDSCAPE IMPROVEMENTS BY THE DEVELOPER MUST OCCUR PRIOR TO CERTIFICATE OF OCCUPANCY, OR IF SURETY IS PROVIDED TO THE CITY, IN AN ALTERNATIVE TIMEFRAME DETERMINED BY THE CITY. REQUIRED LANDSCAPE IMPROVEMENTS BY THE HOMEOWNER SHALL OCCUR within one year of the certificate of occupancy.

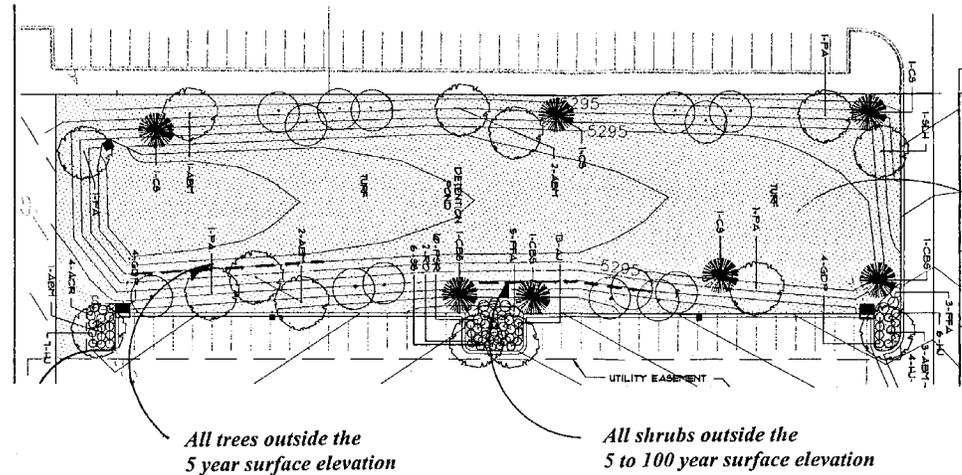
- ~~• A minimum of seventy five (75) percent (75%) of the required landscape area shall be covered by living plant material such as grass, shrubs or ground covers within one year following installation and thereafter.~~ ALL REQUIRED LANDSCAPE AREA SHALL CONSIST OF 100% LIVING GROUNDCOVER, TURF, OR SHRUB BED AREA.

c. ADJACENT RIGHT-OF-WAY (ROW) AND COMMON AREAS:

- THE OFFICIAL DEVELOPMENT PLAN MUST SPECIFY THE DESIGN AND LANDSCAPE REQUIREMENTS OF ALL RIGHT-OF-WAYS AND COMMON AREAS INCLUDING THAT OF RIGHT-OF-WAY ADJACENT TO SINGLE FAMILY OR DUPLEX LOTS. ~~In general, formal, stand alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs.~~
- 1 TREE AND 3 SHRUBS PER EVERY 550 SQUARE FEET OF LANDSCAPE AREA SHALL BE PROVIDED IN ALL RIGHT-OF-WAY AND COMMON AREAS. 100 PERCENT OF THE LANDSCAPE AREA SHALL CONTAIN TURF, GROUNDCOVER, OR SHRUB BEDS. THE FOLLOWING EXCEPTIONS TO THIS REQUIREMENT IS AS FOLLOWS:
 1. THE ROW LANDSCAPE AREA OF LOCAL STREETS WITH DETACHED WALKS SHALL BE PLANTED WITH 1

SHADE TREE EVERY 80 LINEAR FEET AND TURF, GROUNDCOVER, OR SHRUBS.

2. THE ROW LANDSCAPE AREA OF LOCAL STREETS WITH ATTACHED WALKS SHALL BE PLANTED WITH TURF, GROUNDCOVER, OR SHRUBS.
 3. DETENTION POND AREA BELOW THE 5-YEAR STORM SURFACE ELEVATION IS LIMITED TO THE PLANTING OF TURF OR GROUNDCOVER PLANTS.
 4. THE OFFICIAL DEVELOPMENT PLAN SHALL SPECIFY ANY DEVIATION FROM THE ABOVE LANDSCAPE REQUIREMENT FOR PRIVATE PARKS OR OTHER COMMON AREAS OR ROW AREA IF A LARGER AREA OF TURF IS DETERMINED TO BE DESIRABLE BY THE CITY.
- INSTALLATION OF LANDSCAPE IMPROVEMENTS WITHIN THE ADJACENT RIGHT-OF-WAY OF LOCAL OR COLLECTOR STREETS MUST OCCUR BY THE DEVELOPER OR HOMEOWNER NO LATER THAN THE TIME OF THE ADJACENT YARD IMPROVEMENTS (SEE ABOVE). INSTALLATION OF LANDSCAPE IMPROVEMENTS WITHIN ADJACENT RIGHT-OF-WAY OF ALL OTHER ADJACENT STREETS- INCLUDING HIGHWAYS, AND OF ALL OTHER COMMON AREAS MUST OCCUR BY THE DEVELOPER ACCORDING TO PHASING PLANS INDICATED ON THE OFFICIAL DEVELOPMENT PLAN.
 - THE MAINTENANCE OF ALL LANDSCAPE IMPROVEMENTS IN THE ROW IS THE RESPONSIBILITY OF THE ADJACENT LOT OWNER UNLESS SPECIFIED OTHERWISE ON THE OFFICIAL DEVELOPMENT PLAN.
 - THE INSTALLATION AND MAINTENANCE OF ALL LANDSCAPE IMPROVEMENTS WITHIN OTHER COMMON AREAS IS THE RESPONSIBILITY OF THE PROPERTY OWNER.



d. OTHER REQUIREMENTS

- A 6-FOOT HEIGHT BERM (WITH 6 FOOT HEIGHT FENCE OR WALL LOCATION ON TOP OF THE BERM) WILL BE REQUIRED ADJACENT TO ARTERIAL STREETS AND HIGHWAYS.
- REFER TO THE LANDSCAPE REGULATIONS CHART.
- REFER TO OTHER SECTIONS WITHIN THESE LANDSCAPE REGULATIONS FOR OTHER REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, SOIL PREPARATION AND IRRIGATION.
- REFER TO THE MUNICIPAL CODE FOR ADDITIONAL REGULATIONS REGARDING LANDSCAPING FOR RENTAL HOUSING.

2. ~~Minimum Plant Sizes~~

~~Deciduous Shade Trees: 2 ½ inch caliper~~

~~Ornamental Trees: 2 ½ inch caliper~~

~~Evergreen Trees: 6 ft. minimum height~~

~~Shrubs: 5 gallon container~~

~~Twenty percent (20%) of deciduous trees to be three inch (3") caliper or eight feet (8') in height if evergreen (applies to ROW & detention ponds).~~

~~Under certain circumstances one (1) tree may be substituted for ten (10) shrubs and vice versa.~~

3. ~~Right of Way Landscaping for Streets~~

~~Developers are responsible for the installation of landscaping in the right-of-way of all arterials and collector streets within or abutting their development,~~

~~and occasionally of local streets. (See Section 6 F of these Landscape Regulations for required street right of way widths including landscaping and sidewalks).~~

~~The homeowner's association is responsible for maintenance of the right-of-way landscaping along arterial and collector streets and occasionally along local streets. The adjacent homeowner is generally responsible for maintenance of the right-of-way adjacent to their residence on a local street.~~

~~A minimum of one (1) tree and three (3) shrubs per 550 square feet of landscaped area is required for landscaping within the right of way. In general, formal stand alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs.~~

~~Automatic sprinkler systems are required within the right of way of arterial and collector streets of new subdivisions. Sprinkler systems are required on local streets where maintained by the homeowner's association. The developer is advised to check with the City's Public Works Department to determine the proximity of the project to the City's reclaimed water system and the feasibility of tying into the system.~~

~~4. Buffering Within the Right of Way~~

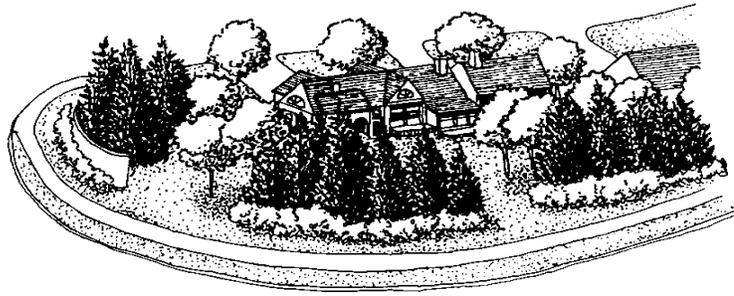
~~Although fencing between the right of way of arterial or collector streets and residential developments is often proposed as a means of providing privacy and buffering, the use of landscape materials and earth berming either in lieu of fencing, or in conjunction with fencing, is highly preferred and shall be required in most instances. The maximum slope of berms shall not exceed 4:1.~~

~~6. Detention Pond~~

~~The developer is responsible for landscaping of the detention pond and other common areas. The homeowner's association shall be responsible for the maintenance of the detention pond areas and common areas.~~

B. Single-Family Attached and Multi-Family Residential

~~Landscaped areas should be provided in single family attached developments to counteract the potential dominance of the hardscape elements such as driveways, buildings, and parking areas. Landscaping adds to the overall visual appearance and function of the development by providing shade, complimenting both passive and active recreation areas, providing visual interest both apart from and next to the buildings, and presenting an aesthetically pleasing streetscape.~~



SINGLE - FAMILY ATTACHED PERSPECTIVE

1. Minimum Requirements

a. LANDSCAPE AREA:

- ALL NON-HARDSCAPE SHALL BE DEVELOPED AS LANDSCAPE AREA, AND NO LESS THAN A minimum of ~~forty~~ 40 percent (40%) of the overall site area shall be landscaped, ~~including the general landscape area, right of ways and~~ RIGHT OF WAY LANDSCAPE AREA IS NOT INCLUDED IN THE 40 PERCENT AREA CALCULATION. ALL NON-HARDSCAPE AREA SHALL BE DEVELOPED AS LANDSCAPE AREA. A minimum ~~twenty-five~~ 25-foot (25') landscape setback is required from the ULTIMATE/FUTURE right-of-way line. A MINIMUM 35-FOOT LANDSCAPE AREA IS REQUIRED ALONG ALL OTHER PROPERTY LINES. ALSO REFER TO THE SINGLE-FAMILY ATTACHED RESIDENTIAL DESIGN GUIDELINES AND OTHER APPLICABLE GUIDELINES.

b. PLANT MATERIALS:

- Within the ~~required~~ landscape area, A MINIMUM OF 1 ~~one~~ (1) tree and 3 ~~three~~ (3) shrubs are required per 550 square feet (EXCEPTING BELOW THE 5 YEAR STORM WATER SURFACE ELEVATION WITHIN DETENTION PONDS). ~~of the landscape area. For developments greater than ten acres, reduction of plant quantities will be considered in cases of exemplary design. A mixture of evergreen and deciduous trees shall be provided.~~
- REFER TO THE SINGLE FAMILY DETACHED REGULATIONS REGARDING REQUIREMENTS FOR TREES, SHRUBS, GROUNDCOVERS AND TURF.
- REFER TO THE FOLLOWING SECTION "ADJACENT RIGHT OF WAY AND COMMON AREAS" FOR INSTALLATION AND MAINTENANCE REQUIREMENTS OF PLANT MATERIALS. LANDSCAPE IMPROVEMENTS WITHIN ANY PRIVATE COURTYARD OR LOT

AREA FOR EACH RESIDENTIAL UNIT SHALL BE THE RESPONSIBILITY OF THE RESIDENT/OWNER UNLESS SPECIFIED OTHERWISE ON THE OFFICIAL DEVELOPMENT PLAN.

c. ADJACENT RIGHT-OF-WAY AND COMMON AREAS:

- THE OFFICIAL DEVELOPMENT PLAN MUST SPECIFY THE DESIGN OF LANDSCAPING WITHIN ALL COMMON AREAS AND RIGHT-OF-WAY. ~~In general, formal, stand-alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs.~~
- LANDSCAPE IMPROVEMENTS WITHIN THE ADJACENT RIGHT OF WAY AREAS, AND COMMON AREAS WITHIN THE DEVELOPMENT MUST OCCUR BY THE DEVELOPER ACCORDING TO PHASING PLANS INDICATED ON THE OFFICIAL DEVELOPMENT PLAN.
- MAINTENANCE OF ALL LANDSCAPE IMPROVEMENTS IN THE ROW AND OTHER COMMON AREAS IS THE RESPONSIBILITY OF THE DEVELOPER UNTIL TURNED OVER TO THE HOMEOWNERS ASSOCIATION/OWNER.

d. OTHER REQUIREMENTS

- REFER TO THE SECTION IN SINGLE-FAMILY DETACHED RESIDENTIAL FOR REQUIREMENTS.

~~No more than fifty (50%) percent of the completed landscape within a shrub bed area should be covered exclusively with stone or wood chip mulch. A minimum of seventy five percent (75%) of the landscaping should be covered by living plant material such as ground cover, shrubs or grass, within three (3) years following installation and thereafter.~~

~~Landscaping and automatic sprinkler systems shall be installed by the developer and ultimately irrigated and maintained by the developer/homeowner's group, unless specifically indicated on the Official Development Plan for certain small areas which will be planted and maintained by the residents. The developer is advised to check with the City's Public Works Department to determine the proximity of the project to the City's reclaimed water system and the feasibility of tying into the system.~~

~~2. **Minimum Plant Sizes**~~

~~Deciduous Shade Trees: 2 ½ inch caliper
Ornamental Trees: 2 ½ inch caliper
Evergreen Trees: 6 ft. minimum height
Shrubs: 5 gallon container~~

Twenty percent (20%) of deciduous trees to be three inch (3") caliper or eight feet (8') in height if evergreen.

Under certain circumstances one (1) tree may be substituted for ten (10) shrubs and vice-versa.

3. ~~Right-of-Way Landscaping for Streets~~

~~Developers are responsible for the installation of landscaping, irrigation and maintenance in the right of way of all freeways, highways, arterials, collectors and local streets within or abutting their development and occasionally of local streets.~~

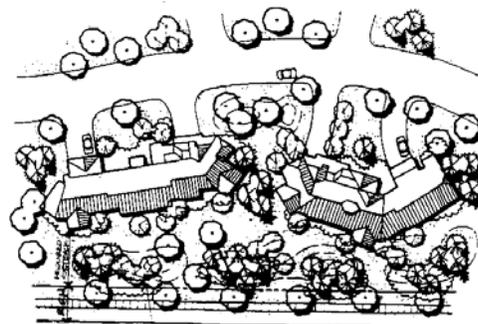
~~A minimum of one (1) tree and three (3) shrubs per 550 square feet of landscaped area is required for landscaping within the right of way. In general, formal stand-alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs. Automatic sprinkler systems are required within the right of way of arterial, collector and local streets of new subdivisions and in some cases, local streets.~~

4. ~~Buffering Within the Right of Way~~

~~Although fencing between the right of way of arterial or collector streets and residential developments is often proposed as a means of providing privacy and buffering, the use of landscape materials and earth berming either in lieu of fencing, or in conjunction with fencing, is highly preferred and shall be required in most instances. The maximum slope of berms shall not exceed 4:1.~~

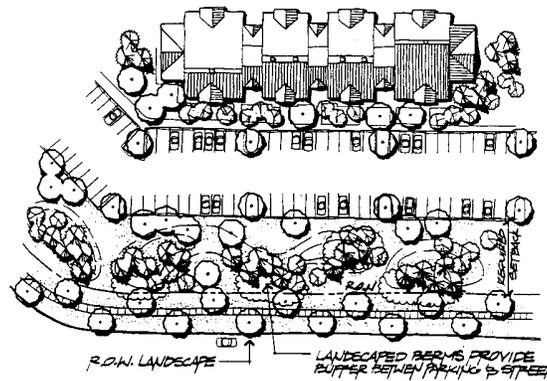
5. ~~Unique Requirements~~

~~It is recognized that certain projects will have unique landscape requirements due to the nature of the site and project characteristics. Such projects will follow the Landscape Regulations to the greatest extent possible, with exceptions to be reviewed by Staff at the time of Official Development Plan.~~



LANDSCAPED BERMS PROVIDE BUFFER
 & CREATES PRIVACY FOR UNITS

SINGLE - FAMILY ATTACHED PLAN



MULTI - FAMILY RESIDENTIAL PLAN

C. Multi-Family Residential

Multi-Family residential sites can be overwhelmed by large buildings and parking lots. Landscape areas should be provided help to counteract the potential dominance of the hardscape elements of the multi-family development such as driveways, buildings, and parking areas. Landscaping adds to the overall visual appearance and function of the development by providing shade, complimenting both passive and active recreation areas, providing visual interest both apart from and next to the buildings, and presenting an aesthetically pleasing streetscape.

1. Minimum Requirements

A minimum of forty percent (40%) of the overall site shall be landscaped, including the general landscape area, right of ways and detention pond areas. Driveways, hardscape parking areas or walks are not included. Parking lot island landscaping is included. A minimum twenty five foot (25') landscape setback is required from the right of way line.

Within the required landscape area, one (1) tree and three (3) shrubs are required per 550 square feet of the landscape area. For developments greater than ten acres, reduction of plant quantities will be considered in cases of exemplary design. A mixture of evergreen and deciduous trees shall be provided.

No more than fifty (50%) percent of the completed landscape within a shrub bed area should be covered exclusively with stone or wood chip mulch. A minimum of seventy five percent (75%) of the landscaping should be covered by living plant material such as ground cover, shrubs or grass, within three (3) years following installation and thereafter.

Landscaping and automatic irrigation systems shall be installed by the developer and ultimately irrigated and maintained by the business association group. The developer is advised to check with the City's Public Works Department to determine the proximity of the project to the City's reclaimed water system and the feasibility of tying into the system.

2. ~~Minimum Plan Sizes~~

~~Deciduous Shade Trees: 2 ½ inch caliper~~

~~Ornamental Trees: 2 ½ inch caliper~~

~~Evergreen Trees: 6 ft. minimum height~~

~~Shrubs: 5-gallon container~~

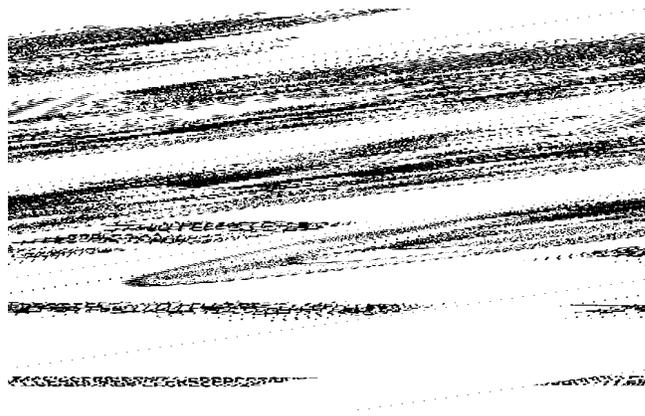
~~Twenty percent (20%) of deciduous trees to be three inch (3") caliper or eight feet (8') in height if evergreen.~~

~~Under certain circumstances one (1) tree may be substituted for ten (10) shrubs and vice-versa.~~

3. ~~Right of Way Landscaping for Streets~~

~~Developers are responsible for the installation of landscaping in the right of way of all arterial and collector streets with or abutting their development, and occasionally of local streets. (See Section 6 F of these Landscape Regulations for required street right of way widths including landscaping and sidewalks). The homeowner's association is responsible for maintenance of the right of way landscaping along arterial and collector streets and occasionally along local streets.~~

~~A minimum of one (1) tree and three (3) shrubs per 550 square feet of landscaped area is required for landscaping within the right of way. In general, formal stand alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs. Automatic sprinkler systems are required within the right of way of arterial, collector and local streets, and the homeowner's association is responsible for the maintenance in the right of way landscaping along arterial and collector streets and occasionally along local streets.~~



4. ~~Buffering Within the Right of Way~~

~~Although fencing between the right of way of arterial or collector streets and residential developments is often proposed as a means of providing privacy and buffering, the use of landscape materials and earth berming either in lieu of, or in~~

~~conjunction with fencing, is highly preferred and shall be required in most instances. The maximum slope of berms shall not exceed 4:1.~~

5. ~~Parking Lot Landscaping~~

~~Parking lots of fifty (50) spaces or more are required to be landscaped. Landscaping is to include the interior area of the parking lot as well as the typical peripheral area landscaping around the outside of the parking lot.~~

~~Landscape islands and/or peripheral landscaping are also encouraged along drive entries.~~

~~Parking lot landscaping may be applied towards the total landscape area required per development.~~

~~Landscape islands shall be no smaller than two standard parking spaces and shall alternate periodically with larger islands for variety and interest. The landscaped islands shall occur approximately every thirty (30) spaces. Continuous landscape strips separating rows of parking are highly encouraged and may be required.~~

~~A minimum of two (2) shade trees and twelve (12) shrubs shall be required per island. If the island is larger than four hundred (400) square feet, the landscape should include one (1) additional shade tree and six (6) additional shrubs for every additional two hundred (200) square feet or a fraction thereof.~~

~~Parking lots shall not be located within the required landscape setback. (25 feet (25') from right of way line).~~

~~Landscape berms to screen parking from adjacent developments are required, unless this requirement is waived.~~

6. ~~Unique Requirements~~

~~It is recognized that certain projects will have unique landscape requirements due to the nature of the site and project characteristics. Such projects will follow the Landscape Regulations to the greatest extent possible, with exceptions to be reviewed by Staff at the time of Official Development Plan.~~

~~8. COMMERCIAL AND INDUSTRIAL STANDARDS~~**VIII. RIGHT OF WAY AREA LANDSCAPE STANDARDS**

RIGHT OF WAY REQUIREMENTS APPLY TO DEVELOPMENTS OF ALL TYPES OF LAND USE. LANDSCAPE IMPROVEMENTS AND THEIR MAINTENANCE, WITHIN ALL RIGHT OF WAY AREAS, ARE THE RESPONSIBILITY OF THE DEVELOPER/OWNER OF ADJACENT PRIVATE PROPERTY.

LANDSCAPE DESIGN OF ALL RIGHT OF WAY AREAS, INCLUDING THAT OF US-36 AND I-25, SHALL BE SHOWN ON THE OFFICIAL DEVELOPMENT PLAN.

LANDSCAPE REQUIREMENTS, INCLUDING BERMS, FENCING OR WALLS BETWEEN STREETS AND RESIDENTIAL DEVELOPMENT, SHALL BE AS DETERMINED BY AN OFFICIAL DEVELOPMENT PLAN OR OTHER RELATED DOCUMENTS, AND AS REQUIRED BY THE REGULATIONS HEREIN. REFER TO THE APPROPRIATE DESIGN GUIDELINES FOR ADDITIONAL REQUIREMENTS.

Although fencing between the right of way of arterial or collector streets and residential developments is often proposed OR REQUIRED as a means of providing privacy and buffering, the use of landscape materials and earth berming either in lieu of fencing, or in conjunction with fencing, is highly preferred and shall be required in most instances. The maximum slope of berms shall not exceed 4:1.

A. MINIMUM AREA

- ALL AREA WITHIN THE ROW NOT COMPRISED OF HARDSCAPE, AS REQUIRED BY THE CITY, SHALL BE LANDSCAPE AREA.

B. PLANT MATERIALS

- REFER TO THE LANDSCAPE REGULATIONS CHART, SINGLE FAMILY DETACHED, AND SECTION VII.A.1.c FOR RELEVANT LANDSCAPE REQUIREMENTS, PLANT MATERIALS AND SIZES, AND AMOUNT OF LANDSCAPING. AUTOMATIC IRRIGATION IS REQUIRED.
- THE CITY HAS THE OPTION TO REDUCE (OR INCREASE) THE AMOUNT OF REQUIRED PLANT MATERIALS.

C. OTHER REQUIREMENTS

- THE CITY WILL REFER PRELIMINARY DESIGN OF LANDSCAPE IMPROVEMENTS WITHIN THE RIGHT OF WAY OF I-25, US 36, FEDERAL BOULEVARD, WADSWORTH BOULEVARD, 120TH AVENUE AND SHERIDAN BOULEVARD SOUTH OF US 36 TO THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) FOR COMMENT AT THE TIME OF OFFICIAL DEVELOPMENT PLAN REVIEW AND APPROVAL. SUBSEQUENT DESIGN REVIEW AND CONSTRUCTION APPROVAL FROM CDOT IS THE RESPONSIBILITY OF THE DEVELOPER.

- THE OWNERSHIP AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS IN THE ROW IS THAT OF THE DEVELOPER UNTIL TURNED OVER TO THE ADJACENT PROPERTY OWNER OR HOMEOWNERS/BUSINESS ASSOCIATION.
- IF AN EXCEPTION IS MADE REGARDING LONG TERM MAINTENANCE OF ANY LANDSCAPE IMPROVEMENTS WITHIN A MEDIAN OR OTHER ROW AREA TO BE THAT OF THE CITY, THE IRRIGATION SYSTEM MUST BE DESIGNED AND CONSTRUCTED WITH ITS OWN SEPARATE WATER TAP (NOT PART OF A LARGER, PRIVATE IRRIGATION SYSTEM).
- REFER TO LANDSCAPE REGULATIONS CHART.
- REFER TO OTHER SECTIONS WITHIN THESE REGULATIONS.

IX. PARKING LOT LANDSCAPE STANDARDS

PARKING LOTS WITHIN ANY LAND USE CATEGORY ARE REQUIRED TO BE LANDSCAPED.

A. MINIMUM AREA

- LANDSCAPE AREA INCLUDES THE PERIPHERAL AREA AROUND THE OUTSIDE OF THE PARKING LOT AS WELL AS INTERNAL TO THE PARKING LOT. ALL NON-HARDSCAPE AREA SHALL CONSIST OF LANDSCAPE AREA.
- Parking lots AND ANY AUTOMOBILE OVERHANG AREA shall not be located within the required landscape setback AREAS (MINIMUM ~~twenty-five (25')~~ 25 FEET from right of way line). REFER TO OTHER APPLICABLE GUIDELINES FOR ADDITIONAL SETBACK INFORMATION.
- Landscape islands/MEDIANS are encouraged along drive ~~entries~~ ENTRANCES; AND REQUIRED AT PERIODIC INTERVALS WITHIN PARKING ROWS, AT THE END OF EACH PARKING ROW AND PERIODICALLY BETWEEN ROWS OF PARKING. (SEE LANDSCAPE REGULATIONS CHART FOR SPECIFIC REQUIREMENTS)
- PARKING LOTS MUST BE BUFFERED, APPROXIMATELY 3 FEET IN GRADE, FROM ADJACENT STREETS AND PROPERTIES WITH THE USE OF BERMS OR SLOPE IN GRADE; SHRUB BEDS MAY REPLACE OR BE USED IN CONJUNCTION WITH BERMS OR SLOPES WHERE IT IS NOT FEASIBLE FOR AN ELEVATION DIFFERENCE OF 3 FEET; AND TREES AS DETERMINED BY THE CITY. AN EXCEPTION TO THIS REGULATION IS THE REQUIRED 6-FOOT BERM ADJACENT TO ARTERIAL STREETS AND HIGHWAYS FOR RESIDENTIAL DEVELOPMENTS AS SPECIFIED ELSEWHERE IN THESE REGULATIONS.
- THE LANDSCAPE DESIGN MUST TAKE INTO ACCOUNT ANY AUTOMOBILE OVERHANG INTO THE LANDSCAPE AREA AND THE MATURE SIZE OF THE PLANT MATERIAL IN ORDER TO MINIMIZE DAMAGE AND CONFLICT.
- BERMING WITHIN LANDSCAPE ISLANDS AND MEDIANS IS DISCOURAGED DUE TO WATER RUNOFF AND HIGHER MAINTENANCE REQUIREMENTS. BLUEGRASS IS DISCOURAGED WITHIN LANDSCAPE ISLANDS AND MEDIANS.
- PEDESTRIAN FOOT TRAFFIC MUST BE CONSIDERED AND REFLECTED IN THE DESIGN OF PARKING LOTS TO IN ORDER TO ACCOMMODATE THE NEEDS OF THE PEDESTRIAN AND MINIMIZE FOOT TRAFFIC WITHIN LANDSCAPE AREAS.
- Curbs shall be provided in all parking lots TO SEPARATE LANDSCAPE AREA FROM PAVEMENT IN ORDER to maintain parking lot surface, protect public

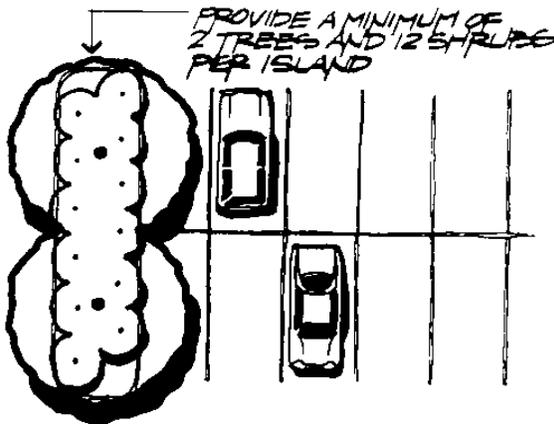
sidewalks from vehicular intrusion and prevent parking in areas where parking is not permitted.

B. PLANT MATERIALS

- REFER TO THE LANDSCAPE REGULATIONS CHART, SINGLE FAMILY DETACHED, FOR MINIMUM LANDSCAPE REQUIREMENTS, MINIMUM PLANT SIZES, AND AMOUNT OF LANDSCAPING IN COMMON AREAS.
- PARKING LOT DESIGN, PLANT SELECTION AND LOCATION SHOULD CONSIDER IMPACT ON VISIBILITY OF PROPOSED SIGNAGE.
- SHADE TREES ARE ENCOURAGED WITHIN AND ADJACENT TO PARKING LOTS FOR PROVISION OF SHADE AND RELIEF FROM HEAT DURING SUMMER MONTHS.
- PLANT SELECTION MUST DISCOURAGE FOOT TRAFFIC THROUGH LANDSCAPE ISLANDS/MEDIANS. PLANTS THAT GROW TO A VERY LOW HEIGHT AND/OR WIDE PLANT SPACING IS THEREFORE DISCOURAGED.

C. OTHER REQUIREMENTS

- REFER TO THE LANDSCAPE REGULATIONS CHART
- REFER TO OTHER SECTIONS WITHIN THESE REGULATIONS



PARKING LOT LANDSCAPE

X. NON- RESIDENTIAL LANDSCAPE STANDARDS

The THIS section of the regulations shall apply to ALL NON-RESIDENTIAL LAND USES SUCH AS commercial, OFFICE, and industrial properties, as well as religious, institutional, non-profit, governmental and public utilities types of projects OF A NON-RESIDENTIAL NATURE.

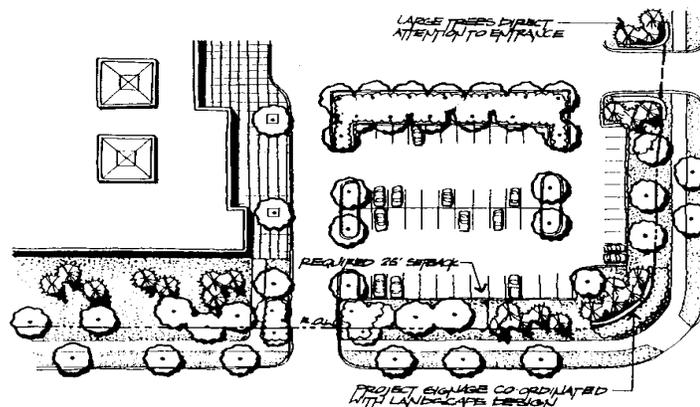
It is required that a minimum distance of ~~twenty-five~~ 25 feet (25') along each property frontage abutting a public right-of-way be landscaped area. The ~~twenty-five~~ 25 feet (25') is measured from the ULTIMATE/FUTURE RIGHT OF WAY ~~property~~ line towards the interior of the site. ~~A minimum of a ten-foot (10') landscape setback area is also required from all interior property lines. When parking lots from adjacent businesses abut, the setback area may, in some instances, be reduced to a three to five feet (3'-5') setback and will be reviewed on a case by case basis at the time of O.D.P.~~ The majority of the landscaping for commercial and/or industrial sites should be situated in the front and/or the sides of the site, and should be visible from abutting right-of-ways. Landscaped areas should not be enclosed by a fence ~~which~~ THAT limits its visibility.

Landscaping, INCLUDING TREES, is encouraged ~~in close proximity~~ ADJACENT to buildings, as well as throughout the general landscape area, and may include landscape ~~cut-outs~~ PLANTERS in the walks and other hard surface areas.

Positive drainage shall be maintained away from buildings. ~~Cut-out areas~~ PLANTER AREAS shall include adequate area for root growth.

TURF OR OTHER PLANTINGS ADJACENT TO PAVEMENT OR FOUNDATIONS ARE ENCOURAGED TO BE OF LOW WATER REQUIREMENTS OR TO BE IRRIGATED WITH LOW VOLUME METHODS.

~~Landscaping and automatic sprinkler system shall be installed by the developer. All landscaping installed shall be irrigated and maintained by the business association/owner. The developer is advised to check with the City's Public Works Department to determine the proximity of the project to the City's reclaimed water system and the feasibility of tying into the system.~~



COMMERCIAL LANDSCAPE PLAN

a. Entrances and Sign Features

The entrances to commercial or industrial centers should be designed to provide an attractive, year round landscape statement. ~~Street m~~Medians/landscape islands are encouraged ~~and may be required~~ at entranceways. ~~When installed, street medians shall be a minimum of ten feet (10') wide and twenty five feet (25') long. If installed, maintenance of the medians/landscape islands within the center shall be the responsibility of the developer/business association.~~

Enhanced landscaping is encouraged for MONUMENT sign feature areas. The addition of large trees, especially evergreens, can provide an all-season backdrop and direct attention to the sign feature area. The inclusion of perennials and annuals can provide color for the spring and summer, and is generally required.

A. Minimum Requirements AREA

- ~~For properties up to ten (10) acres in size, a~~ A minimum of twenty (20%) of the site shall be landscaped including the general landscape area and detention pond areas, AND EXCLUDING RIGHT OF WAY. Driveways, hardscape, parking areas or walks are not included. Parking lot island landscaping is included. RIGHT OF WAY LANDSCAPING IS REQUIRED FOR ADJACENT STREETS AND HIGHWAYS, BUT IS NOT INCLUDED IN THE REQUIRED 20% CALCULATION. ~~Properties over ten (10) acres in size shall be reviewed on an individual basis. Proposals for reduction in overall landscape area required in exchange for an increase in quantities or sizes of plant material may be reviewed on a case by case basis.~~

B. PLANT MATERIALS:

- Within the required landscape area, one (1) tree and three (3) shrubs are required per 550 square feet of the landscape area, (EXCEPTING BELOW THE 5 YEAR STORM WATER SURFACE ELEVATION WITHIN DETENTION PONDS). A mixture of evergreen and deciduous trees shall be provided. IF THE LANDSCAPE AREA EXCEEDS 20%, A REDUCTION IN THE OTHERWISE, RESULTING NUMBER OF TREES AND SHRUBS, MAY BE APPROVED BY THE CITY, IN ORDER TO ENCOURAGE LANDSCAPE AREA IN EXCESS OF MINIMUM REQUIREMENTS.
- REFER TO SINGLE FAMILY DETACHED REGULATIONS REGARDING THE REQUIREMENTS OF LANDSCAPE AREA AND THE GROUND SURFACE COVERAGE.
- HIGH WATER ZONES CANNOT EXCEED 50% OF THE LANDSCAPE AREA, EXCEPTING RIGHT OF WAY AREAS, PARKS, OR OTHER AREAS AS APPROVED BY THE CITY.
- ALL LANDSCAPE IMPROVEMENTS SHALL BE INSTALLED BY THE DEVELOPER PRIOR TO CERTIFICATE OF OCCUPANCY OF THE BUILDING OR BUILDINGS, IN PHASES INDICATED BY THE OFFICIAL DEVELOPMENT PLAN, OR IF SURETY IF PROVIDED TO THE CITY, IN AN ALTERNATE TIMEFRAME DETERMINED BY THE CITY.

- MAINTENANCE OF ALL LANDSCAPE IMPROVEMENTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/OWNER/OR BUSINESS ASSOCIATION.

C. OTHER REQUIREMENTS

- REFER TO LANDSCAPE REGULATIONS CHART
- REFER TO OTHER SECTIONS WITHIN THESE REGULATIONS
- REFER TO THE APPROPRIATE DESIGN GUIDELINES (EXAMPLE: COMMERCIAL DESIGN GUIDELINES) FOR ADDITIONAL REQUIREMENTS.

~~No more than fifty (50%) of the completed landscape within a shrub bed area should be covered exclusively with stone or wood chip mulch. A minimum of seventy five percent (75%) of the landscaping should be covered by living plant material such as ground cover, shrubs or grass, within three (3) years following installation and thereafter.~~

~~b. **Minimum Plant Size**~~

~~Deciduous Shade Trees: 2 ½ inch caliper~~

~~Ornamental Trees: 2 ½ inch caliper~~

~~Evergreen Trees: 6 ft. minimum height~~

~~Shrubs: 5 gallon container~~

~~Twenty percent (20%) of deciduous trees to be three inch (3") caliper or eight feet (8') in height if evergreen.~~

~~Under certain circumstances one (1) tree may be substituted for ten (10) shrubs and vice versa.~~

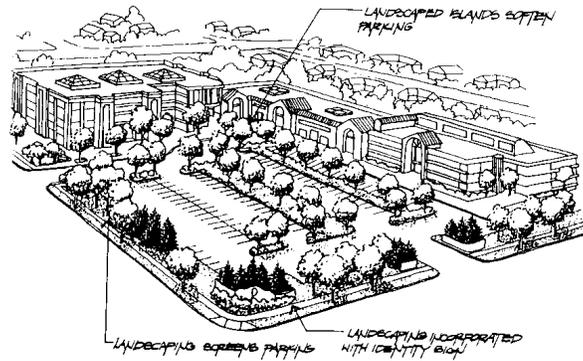
~~d. **Right of Way Landscaping for Streets**~~

~~Developers are responsible for the installation of landscaping, irrigation and maintenance in the right of way of all arterials, collectors and occasionally of local streets abutting their development.~~

~~Arterials, Collectors and Local Streets: A minimum of one (1) tree and three (3) shrubs per 550 square feet of landscaped area is required for landscaping within the right of way. In general formal stand alone trees are encouraged along major streets and in medians, with less formal, clustered tree type design at the intersections and entrances. Whenever possible, designs should include clustering of shrubs.~~

~~e. **Buffering Within the Right of Way**~~

~~For larger commercial/industrial developments, the use of landscape materials and earth berming is encouraged in the right of way areas for buffering. Berm slopes shall not exceed 4:1.~~



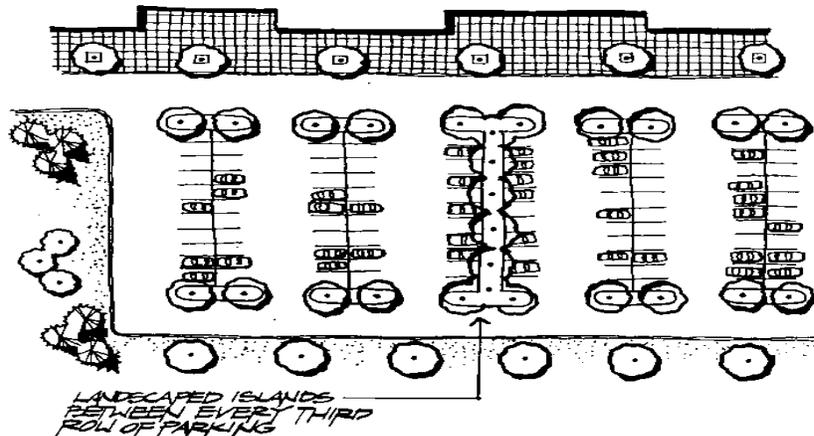
COMMERCIAL LANDSCAPE PERSPECTIVE

f. Unique Requirements

It is recognized that certain projects will have unique landscape requirements due to the nature of the site and project characteristics. Such projects will follow the Landscape Regulations to the greatest extent possible, with exceptions to be reviewed by Staff at the time of Official Development Plan.

g. Parking Lot Landscaping

The interiors of Parking lots of fifty (50) spaces or more are required to be landscaped with parking lot landscaped islands. Landscaping is to include the interior area of the parking lot as well as the typical peripheral area landscaping around the outside of the parking lot. Landscape islands and/or peripheral landscaping are also encouraged along drive entries. Parking lots shall not be located within the required landscape setback (25' from right of way line).



PARKING LOT LANDSCAPE

Parking lot landscaping may be applied towards the total landscape area required per development.

~~Landscape islands shall be no smaller than two standard parking spaces long, and shall be alternated periodically with larger islands for variety and interest. The landscaped islands shall occur approximately every thirty (30) spaces. Larger parking lots of three hundred (300) spaces or more shall also include a minimum nine foot (9') wide landscape strip in between every three (3) rows of parking spaces at a minimum.~~

~~A minimum of two (2) shade trees and twelve (12) shrubs shall be required per island. If the island is larger than four hundred (400) square feet, the landscape should include one (1) additional shade tree and six (6) additional shrubs for every additional two hundred (200) square feet or a fraction thereof.~~

~~Landscape berms to screen parking from adjacent developments or streets are often required. Berms shall not exceed 4:1 slopes.~~

XI. LANDSCAPE REGULATIONS CHART

THIS CHART SUPPLEMENTS BOTH THE GENERAL LANDSCAPE REQUIREMENTS AND THE SPECIFIC LAND USE REQUIREMENTS

REFER TO TEXT PORTION OF REGULATIONS FOR ADDITIONAL INFORMATION	MINIMUM LANDSCAPE REQUIREMENTS	MINIMUM PLANT SIZES*	AMOUNT OF LANDSCAPING REQUIRED IN COMMON AREAS	MINIMUM LANDSCAPE SETBACK AREA	INSTALLATION AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS
SINGLE FAMILY DETACHED (SFD)	<p>LANDSCAPE AREA: MIN. 50% OF EACH YARD AREA ADJACENT TO A STREET. (REMAINING YARD AREA IS HARDSCAPE)</p> <p>TREES IN THE FRONT YARD: 1 SHADE TREE PER LOT UP TO 10,000 SF IN SIZE; 2 TREES (1 SHADE) PER LOT IF LARGER THAN 10,000 SF</p> <p>REQUIRED LANDSCAPE IMPROVEMENTS MUST BE INSTALLED PRIOR TO C.O. BY DEVELOPER OR WITHIN 1 YEAR OF C.O. BY HOMEOWNER</p> <p>ROW ADJACENT TO LOT OR SUBDIVISION: LANDSCAPE BY HOMEOWNER OR DEVELOPER</p> <p>SOIL PREP. VERIFICATION PRIOR TO CERTIFICATE OF OCCUPANCY.</p> <p>AUTOMATIC IRRIGATION IS REQUIRED</p> <p>EXISTING TREES: REFER TO TEXT IN REGULATIONS</p>	<p>DECIDUOUS SHADE TREE: 2 INCH CALIPER</p> <p>ORNAMENTAL TREE: 2- INCH CALIPER</p> <p>EVERGREEN TREE: 6 FOOT HEIGHT</p> <p>SHRUBS: 5 GALLON CONTAINER</p> <p>PERENNIALS, VINES, GROWDCOVERS: 1 GALLON CONTAINER</p> <p>TURF/LAWN: GRASS SPECIES TO BE MAINTAINED AT 6 INCH HEIGHT; SEED OR SOD FOR TURF WHEN INSTALLED BY RESIDENT HOMEOWNER; TYPICALLY SOD FOR ALL TURF BY DEVELOPER OR BUILDER WITHIN RESIDENTIAL BUILDING LOT, ROW, OR WITHIN COMMON AREA LANDSCAPING</p> <p>COMMON AREAS: 20% OF DECIDUOUS TREES TO BE 3 INCH CALIPER AND 8 FOOT HEIGHT FOR EVERGREEN TREES</p>	<p>LANDSCAPE AREA: ALL GROUNDPLANE AREA EXCLUSIVE OF HARDSCAPE IMPROVEMENTS. THE LANDSCAPE AREA SHALL BE PLANTED WITH TREES, SHRUBS, TURF OR GROWDCOVER.</p> <p>ONE TREE AND THREE SHRUBS PER 550 SF OF LANDSCAPE AREA- EXCLUDING THE AREA BELOW THE FIVE YEAR STORM WATER SURFACE ELEVATION IN DETENTION PONDS</p> <p>REFER TO SECTION VII.A.1c FOR LOCAL STREET ROW</p> <p>DETENTION NOT ALLOWED IN ROW</p> <p>THE CITY HAS THE OPTION TO REDUCE THE QUANTITY OF TREES AND/OR SHRUBS FOR LANDSCAPE AREAS SUCH AS PRIVATE PARKS OR OPEN SPACE, WHERE LARGER TURF AREAS ARE DETERMINED BY THE CITY TO BE DESIRABLE.</p>	<p>A 6-FOOT HEIGHT BERM IS REQUIRED ADJACENT TO ARTERIAL STREETS AND HIGHWAYS, MEASURED FROM TOP OF CURB. THIS WILL REQUIRE ADDITIONAL LANDSCAPE SETBACK ALONG ARTERIAL STREETS AND HIGHWAYS. ALTERNATIVE DESIGN SOLUTIONS DEPENDING UPON SITE SPECIFIC GRADING CONSIDERATIONS MAY BE CONSIDERED BY THE CITY.</p> <p>REFER TO SFD RESIDENTIAL DESIGN GUIDELINES.</p>	<p>INSTALLATION BY THE DEVELOPER OR LOT OWNER FOR EACH LOT AND ADJACENT RIGHT OF WAY</p> <p>MAINTENANCE BY THE DEVELOPER THEN HOME OWNERS ASSOCIATION/OWNER FOR ALL RESIDENTIAL LOTS AND COMMON AREAS</p> <p>*MINIMUM PLANT SIZES DO NOT APPLY TOWARD LANDSCAPING BY RESIDENT LOT OWNER IN PRIVATE YARD AREAS, EXCEPTING ANY REQUIRED FRONT YARD TREES OR SHRUBS AS REQUIRED BY THE OFFICIAL DEVELOPMENT PLAN</p> <p>ADDRESS THE DESIGN, OWNERSHIP AND MAINTENANCE OF FENCING AND WALLS ON THE OFFICIAL DEVELOPMENT PLAN</p> <p>*AS APPROVED BY THE CITY: 1 TREE MAY BE SUBSTITUTED FOR 10 SHRUBS, 1 SHRUB FOR ONE 5-GALLON OR THREE 1 GALLON LARGE PERENNIAL GRASSES OR VINES.</p>

REFER TO TEXT PORTION OF REGULATIONS FOR ADDITIONAL INFORMATION	MINIMUM LANDSCAPE REQUIREMENTS	MINIMUM PLANT SIZES	AMOUNT OF LANDSCAPING REQUIRED IN COMMON AREAS	MINIMUM LANDSCAPE SETBACK AREA	INSTALLATION AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS
SINGLE FAMILY ATTACHED (SFA) AND MULTI-FAMILY (MFA)	<p>40 % OF THE OVERALL SITE, EXCLUDING ROW, TO BE LANDSCAPE AREA</p> <p>ROW ADJACENT TO OR WITHIN THE PROPERTY MUST BE LANDSCAPED BY THE DEVELOPER</p> <p>SOIL PREP. VERIFICATION AND INSPECTION PRIOR TO CERTIFICATE OF OCCUPANCY</p> <p>AUTOMATIC IRRIGATION REQUIRED (EXCLUDING ANY PRIVATE COURTYARD AREAS)</p> <p>EXISTING TREES: REFER TO TEXT IN REGULATIONS</p>	REFER TO SFD	REFER TO SFD	<p>25 FEET MINIMUM FROM ULTIMATE RIGHT OF WAY; 35 FEET MINIMUM FROM ADJACENT PROPERTY LINES WITH NO DRIVES, DETENTION POND, OR PARKING IN THIS SETBACK</p> <p>A 6 FOOT HEIGHT BERM IS REQUIRED ADJACENT TO ARTERIAL STREETS AND HIGHWAYS (REFER TO SFD IN FOR SPECIFICS)</p> <p>INCLUDE TALL BERMS NOT TO EXCEED 4:1 SLOPE</p> <p>AUTO OVERHANG INTO THE MINIMUM LANDSCAPE SETBACK REQUIRES THE SETBACK TO BE INCREASED AN EQUAL DIMENSION</p> <p>REFER TO SFA & MF RESIDENTIAL DESIGN GUIDELINES</p>	<p>INSTALLATION BY THE DEVELOPER, MAINTENANCE BY OWNER/ HOME OWNERS ASSOCIATION FOR ALL COMMON AREAS, INCLUDING ROW</p> <p>LOT OWNER IF ANY SEPARATE YARD AREAS, WITH INSTALLATION TO OCCUR WITHIN ONE YEAR OF CERTIFICATE OF OCCUPANCY</p> <p>ADDRESS THE DESIGN, OWNERSHIP AND MAINTENANCE OF FENCING AND WALLS ON THE OFFICIAL DEVELOPMENT PLAN</p>
RIGHT-OF-WAYS (ROW)	REFER TO RELEVANT LAND USE CATEGORY FOR REGULATIONS	REFER TO SFD	REFER TO SFD	NOT APPLICABLE	<p>REFER TO RELEVANT LAND USE CATEGORY</p> <p>ADDRESS THE DESIGN, OWNERSHIP AND MAINTENANCE OF ANY FENCING AND WALLS ON THE OFFICIAL DEVELOPMENT PLAN</p>

REFER TO TEXT PORTION OF REGULATIONS FOR ADDITIONAL INFORMATION	MINIMUM LANDSCAPE REQUIREMENTS	MINIMUM PLANT SIZES	AMOUNT OF LANDSCAPING REQUIRED IN COMMON AREAS	MINIMUM LANDSCAPE SETBACK AREA	INSTALLATION AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS
<p>PARKING LOTS</p>	<p>LANDSCAPE ISLANDS AND MEDIANS ARE WITHIN PARKING LOTS ARE REQUIRED.</p> <p>LANDSCAPE ISLANDS ARE REQUIRED AT THE END OF EACH PARKING ROW AND AT A MINIMUM INTERVAL WITHIN THE ROW OF 30 PARKING SPACES</p> <p>IN PARKING LOTS IN EXCESS OF 300 SPACES, LANDSCAPE MEDIANS ARE REQUIRED TO OCCUR AT EVERY 3RD ROW OF PARKING, MINIMUM 9 FT IN WIDTH; OR EVERY 6TH ROW OF PARKING, MINIMUM 25 FT TOTAL WIDTH- INCLUDING 6 FT SIDEWALK.</p> <p>MINIMUM SIZE OF ISLAND MUST EQUAL OR EXCEED DIMENSIONS OF ADJACENT PARKING STALL IN BOTH WIDTH AND LENGTH</p> <p>REFER TO THE RELEVANT LAND USE CATEGORY FOR OTHER REGULATIONS</p>	<p>REFER TO SFA</p> <p>TURF IS GENERALLY NOT ACCEPTABLE WITHIN LANDSCAPE ISLANDS UNLESS AN UNDERGROUND IRRIGATION SYSTEM IS INSTALLED</p>	<p>REFER TO SFD</p> <p>LANDSCAPE ISLAND: ONE TREE AND 6 SHRUBS PER 171 SF, PLUS ONE SHRUB PER EVERY ADDITIONAL 25 SF AND ONE TREE FOR EVERY ADDITIONAL 150 SF.</p> <p>LANDSCAPE MEDIAN: MINIMUM OF ONE TREE EVERY 40 LINEAL FEET PLUS ONE SHRUB EVERY 25 SQUARE FEET</p>	<p>REFER TO RELEVANT LAND USE CATEGORY DESIGN GUIDELINES</p> <p>ANY AUTOMOBILE OVERHANG INTO THE REQUIRED LANDSCAPE SETBACK AREA OR MEDIAN REQUIRES AN INCREASE IN THE LANDSCAPE SETBACK OR MEDIANS BY AN EQUAL DIMENSION</p>	<p>REFER TO SFA</p>

REFER TO TEXT PORTION OF REGULATIONS FOR ADDITIONAL INFORMATION	MINIMUM LANDSCAPE REQUIREMENTS	MINIMUM PLANT SIZES	AMOUNT OF LANDSCAPING REQUIRED IN COMMON AREAS	MINIMUM LANDSCAPE SETBACK AREA	INSTALLATION AND MAINTENANCE OF LANDSCAPE IMPROVEMENTS
<p>NON-RESIDENTIAL</p>	<p>20% OF THE OVERALL SITE, EXCLUDING ROW, MUST BE LANDSCAPE AREA</p> <p>ROW ADJACENT TO OR WITHIN THE PROPERTY MUST BE LANDSCAPED BY THE DEVELOPER</p> <p>NO MORE THAN 50% OF THE LANDSCAPE AREA TO BE A HIGH HYDRO ZONE</p> <p>SOIL PREPARATION, INSPECTION AND VERIFICATION PRIOR TO CERTIFICATE OF OCCUPANCY</p> <p>AUTOMATIC IRRIGATION</p> <p>EXISTING TREES: REFER TO TEXT IN REGULATIONS</p>	<p>REFER TO SFD</p>	<p>REFER TO SFD</p>	<p>25 FT. FROM ULTIMATE ROW: REFER TO COMMERCIAL GUIDELINES FOR ADDITIONAL SETBACK REQUIREMENTS</p> <p>NO DETENTION OR PARKING IN LANDSCAPE SETBACK AREA</p> <p>DETENTION MUST BE LOCATED WITHIN A BUILDING LOT</p>	<p>DEVELOPER THEN PROPERTY OWNER/ OWNERS OR BUSINESS ASSOCIATION FOR ALL LANDSCAPE AREAS INCLUDING ROW</p>

XII. LANDSCAPE AND IRRIGATION PLAN REQUIREMENTS

~~The Landscape AND IRRIGATION plans shall be submitted AND APPROVED BY to the City with AS PART OF the Official Development Plan (ODP), ODP AMENDMENT OR ODP WAIVER, and shall include a land use summary chart showing square footages of all potential land uses including landscaping, building areas and hard surface paving areas. As required by City Code, final landscape plans in accordance with an approved Official Development Plan (ODP) shall be submitted for approval in conjunction with the Official Development Plan prior to beginning construction of any landscape areas. Landscape AND IRRIGATION plans are also recommended and may be required FOR REDEVELOPMENT OR CHANGE-IN-USE PROJECTS. As determined by the City, minor redevelopment or change-in-use projects may be required only to submit a landscape plan and a written statement describing the type of irrigation system proposed.~~

Landscape AND IRRIGATION plans will not be required of individuals constructing single-family OR DUPLEX residential units that they intend to own and occupy OR OF RESIDENT HOMEOWNERS COMPLETING OR ALTERING THE LANDSCAPING WITHIN THEIR SINGLE FAMILY OR DUPLEX LOT- HOWEVER, THE LANDSCAPE AND IRRIGATION REQUIREMENTS NOTED IN THESE REGULATIONS MUST BE FOLLOWED, UNLESS DETERMINED OTHERWISE BY THE CITY ~~unless specifically identified in the Official Development Plan.~~

LANDSCAPE AND IRRIGATION PLANS SHALL CONTAIN INFORMATION AS NOTED IN THESE REGULATIONS AND THE PLAN SUBMITTAL DOCUMENT.

A SET OF Final landscape AND IRRIGATION construction documents shall be submitted FOR REVIEW AND APPROVAL BY ~~to~~ the ODP inspector prior to APPROVAL OF THE FINAL PLAT, OR IF A FINAL PLAT IS ALREADY IN PLACE, PRIOR TO issuance of a building permit. NO CONSTRUCTION OF LANDSCAPE IMPROVEMENTS CAN OCCUR UNTIL THE CITY APPROVES THE LANDSCAPE AND IRRIGATION CONSTRUCTION PLANS, AND PRIVATE IMPROVEMENTS AGREEMENT. THE LANDSCAPE AND IRRIGATION CONSTRUCTION PLANS MUST BE IN A SIMILAR FORMAT AS OFFICIAL DEVELOPMENT PLANS FOR FILING AND RECORDING PURPOSES BY THE CITY.

LANDSCAPE AND IRRIGATION CONSTRUCTION PLANS MUST REFLECT THE APPROVED LANDSCAPE AND IRRIGATION PLAN REVIEWED AND APPROVED AT TIME OF EARLIER OFFICIAL DEVELOPMENT PLAN OR ODP WAIVER APPROVAL. ANY REVISIONS TO THESE PLANS DURING THE CONSTRUCTION OF A PROJECT MUST BE APPROVED BY THE CITY PRIOR TO THE FIELD CHANGE, AND REFLECTED IN A REVISED SET OF CONSTRUCTION DRAWINGS. AS-BUILT DRAWINGS MUST BE SUBMITTED BY THE DEVELOPER TO THE ODP INSPECTOR AND TO THE OWNER/OWNER'S ASSOCIATION/HOMEOWNER'S ASSOCIATION PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. PRIOR TO RELEASE OF ANY SURETY, THE DEVELOPER MUST ALSO PROVIDE A SIGNED CHECKLIST TO THE CITY VERIFYING THAT THE LANDSCAPE AND IRRIGATION IMPROVEMENTS HAVE BEEN INSTALLED ACCORDING TO APPROVED PLANS AND CITY REQUIREMENTS.

EITHER A LANDSCAPE ARCHITECT OR A LANDSCAPE DESIGNER SHALL PREPARE THE LANDSCAPE PLAN. A CERTIFIED IRRIGATION DESIGNER SHALL PREPARE THE IRRIGATION PLAN AND A CERTIFIED IRRIGATION CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE IRRIGATION SYSTEM. A CERTIFIED IRRIGATION

AUDITOR SHALL CONDUCT THE IRRIGATION AUDIT. (RESIDENT SINGLE FAMILY OR DUPLEX LOT OWNERS ARE EXEMPT FROM THIS REQUIREMENT).

A. Landscape Plans – THE OFFICIAL DEVELOPMENT LANDSCAPE PLAN AND Landscape CONSTRUCTION Plans shall contain the following items:

1. SHEET SIZES ACCORDING TO OFFICIAL DEVELOPMENT PLAN REQUIREMENTS AND NO CASE LARGER THAN 24" X 36" FOR FINAL LANDSCAPE CONSTRUCTION PLANS.
2. Title block CENTERED AT THE TOP OF EACH SHEET – REFER TO THE OFFICIAL DEVELOPMENT PLAN SUBMITTAL DOCUMENT FOR FORMAT, sheet name, COMPANY IDENTIFICATION INCLUDING ADDRESS, PHONE NUMBER, name of person preparing THE plan, and date.
3. Scale – written and graphic. KEEP IN MIND THE IRRIGATION PLAN MUST BE DRAWN TO THE SAME SCALE. 1"= 40 FEET OR LARGER (1"=20 FEET PREFERRED)
4. North arrow.
5. Property lines.
6. Key.
7. Existing and proposed structures, sidewalks, overhangs and paving.
8. Natural features relevant to the site and/or retention/detention areas.
9. PROPOSED GRADING, INDICATING topographic features and spot elevations of the final grading plan, adequate to identify and properly specify landscaping for area needing slope protection as well as adequate to depict any screening of parking areas.
10. SHOW AND LABEL WATER FEATURES, BERMS, RETAINING WALLS, WALLS, FENCES, TRASH ENCLOSURES, OUTDOOR LIGHTING-INCLUDING STREET LIGHTS, AND SIGNAGE.
11. EXISTING AND PROPOSED UTILITY EASEMENTS
12. SIGHT TRIANGLES
13. SHOW AND LABEL LOCATIONS OF PROPOSED (LOW, MODERATE, HIGH) HYDROZONES AND IDENTIFY THE TOTAL SQUARE FOOTAGE OF EACH.
14. SHOW AND LABEL LOCATIONS TO BE IRRIGATED WITH POTABLE AND NON-POTABLE WATER AND IDENTIFY THE TOTAL SQUARE FOOTAGE OF EACH.
15. TOTAL WATER BUDGET AND CALCULATIONS BY HYDROZONE.
16. Existing plant material, including plants to be removed or relocated. (LABEL TYPE, SIZE, CURRENT AND PROPOSED LOCATIONS).
17. Proposed plant material LOCATED ACCORDING TO LOW, MODERATE, OR HIGH HYDROZONES (label NUMBER, SPECIES, AND SIZE IF NOT MINIMUM SIZE). PLANTS WITHIN ANY ONE HYDROZONE SHALL HAVE SIMILAR WATER REQUIREMENTS. DRAW PLANT MATERIAL AT A LOW ESTIMATE OF MATURE SIZE.
18. LANGUAGE AND CALCULATIONS THAT INDICATE OVERALL MINIMUM REQUIREMENTS. THIS INFORMATION MUST REFLECT BOTH THE REQUIRED MINIMUM PERCENT OF LANDSCAPE AREA (AS DETERMINED BY TYPE OF LAND USE), AS WELL AS THE REQUIRED MINIMUM NUMBER OF PLANTS (TREES, SHRUBS, TURF AREA) BROKEN DOWN INTO SPECIFIC LANDSCAPE AREAS (SUCH AS PRIVATE LANDSCAPE AREAS AND RIGHT-OF-WAY LANDSCAPE AREAS). THE PLANT SCHEDULE MUST MEET OR EXCEED THESE REQUIREMENTS.

19. NOTE THE AMOUNT OF REQUIRED SOIL AMENDMENT REQUIRED AND INCLUDE CALCULATIONS INDICATING HOW THE TOTAL AMOUNT WAS DERIVED. THE AMOUNT OF SOIL PREPARATION, AND CALCULATIONS THEREOF, MAY BE BROKEN DOWN BY SPECIFIC AREAS- SUCH AS RIGHT OF WAY, PRIVATE PARK, ETC.
 20. LABEL LOCATIONS OF PROPOSED TURF (SPECIES). INCLUDE INFORMATION REGARDING METHOD OF INSTALLATION (SOD, PLUGS, SEEDING RATES), MAXIMUM AND/OR MAINTAINED HEIGHT, MOWING SCHEDULE AND WEED CONTROL MEASURES.
 21. LABEL OR KEY AREAS OF MULCH AND INDICATE TYPE.
 22. Planting details, SPECIFICATIONS, ~~including the~~ AND installation information FOR PLANT MATERIALS, SOIL PREPARATION, MULCHES, EDGING, ETC. (THE OFFICIAL DEVELOPMENT PLAN LANDSCAPE PLAN WILL PROVIDE GENERAL INFORMATION IN THIS REGARD AND THE CONSTRUCTION LANDSCAPE PLAN WILL PROVIDE ADDITIONAL INFORMATION NECESSARY FOR INSTALLATION). ~~and specification of soil preparation, and mulch.~~
 23. SHOW GENERAL ~~D~~details of ITEMS SUCH AS berms, walls, retaining walls ~~or any other structural buffering device~~, FENCES, TRASH ENCLOSURES, OUTDOOR LIGHTING, SIGNS, ETC. SPECIFIC DETAILS RELATED TO PLANT INSTALLATION, MULCHING, TREE STAKING WILL BE SHOWN ON THE LANDSCAPE CONSTRUCTION PLAN.
 24. SHOW A GENERIC OR MODEL LANDSCAPE DETAIL/PLAN FOR SINGLE FAMILY OR DUPLEX LOTS WHERE THE LANDSCAPING OF A PORTION OF THE LOT IS REQUIRED BY THE BUILDER.
 25. Plant schedule (see below). THE SCHEDULE MUST ACCURATELY REFLECT THE LANDSCAPE PLAN.
- ~~The landscape plan shall indicate the exact number and location of plants of each species.~~
- The schedule shall be divided according to TYPE OF PLANT MATERIAL: EXISTING AND PROPOSED trees (BROKEN INTO CATEGORIES OF DECIDUOUS SHADE TREES, EVERGREEN TREES, ACCENT/ORNAMENTAL TREES), shrubs, ~~and~~ groundcovers, turf types, including ANY seed mixes. PLANT SPECIES WITHIN EACH CATEGORY SHALL ALSO BE LABELED AND GROUPED BY THEIR RESPECTIVE HYDROZONE RATING.
 - PLANT NAME ABBREVIATION (IF USED), ~~P~~plant name (common name, botanical name and variety), and exact quantities OF EACH PLANT shall be included on the plant schedule.
 - The schedule shall ~~also~~ indicate the size ~~and condition~~ of plants. Size shall be expressed in terms of size of container (5 GALLON FOR SHRUBS, 1 GALLON FOR PERENNIALS AND GROUNDCOVERS), height of plant (FOR EVERGREEN TREES), or caliper of tree (FOR DECIDIOUS TREES). ~~Condition shall be expressed in terms of size of container, balled and burlapped, and/or bare root plant.~~
 - PLANT SPACING FOR SHRUBS AND GROUNDCOVERS MUST BE INDICATED (FOR EXAMPLE: "4 FEET ON CENTER- TRIANGULAR SPACING"). ~~The schedule shall be divided according to trees, shrubs and ground covers, turf types, including seed mix.~~
26. Natural features relevant to the site and/or retention/detention areas.

- ~~27. Topographic contours and spot elevations of the final grading plan, adequate to identify and properly specify landscaping for areas needing slope protection as well as adequate to depict any screening of parking areas.~~
28. Information as to who will have responsibility for maintenance of those materials, structures and areas on the plan. INCLUDE NAME, TITLE, ADDRESS AND CONTACT PHONE NUMBER.
- ~~29. An indication of the manner in which lawn areas are to be established.~~
- ~~30. Pertinent information necessary for a contractor to perform the landscape installation, such as planting specifications.~~
31. City of Westminster Standard General Notes. (See Plan Submittal Document packet provided by the City).

FOR ADDITIONAL INFORMATION AND SPECIFIC INSTRUCTIONS ON HOW TO PHYSICALLY INSTALL PLANT MATERIAL REFER TO THE CITY SITEWORK SPECIFICATIONS.

B. Irrigation Plans

A PRELIMINARY Irrigation plans shall be submitted in conjunction with the Official Development Plan, but IS NOT PART OF ~~need not be included in~~ the Official Development Plan document. THE PRELIMINARY IRRIGATION PLAN WILL BE REQUIRED TO COORDINATE WITH THE OFFICIAL DEVELOPMENT LANDSCAPE PLAN AND MUST INDICATE LOCATION AND SIZE (AREA) OF EACH HYDROZONE- INCLUDING ANY ZONES USING NON-POTABLE WATER, TOTAL WATER BUDGET BROKEN DOWN BY EACH HYDROZONE, LOCATION AND SIZE OF WATER TAP AND METER, EXISTING AND DESIGN WATER PRESSURE, TYPE OF IRRIGATION TECHNIQUE (SUCH AS DRIP, MICROSPRAY, SPRAY, ROTOR, UNDERGROUND, ETC.), AND OTHER GENERAL INFORMATION.

Irrigation CONSTRUCTION plans will be ~~reviewed for general layout prior to construction~~ REQUIRED TO INDICATE DESIGN, LAYOUT, AND CONSTRUCTION INFORMATION AS NOTED LATER IN THIS SECTION. ~~The design of the irrigation plan shall be prepared by a qualified landscape architect or other person experienced in irrigation system design and~~ IRRIGATION CONSTRUCTION PLANS shall be submitted FOR REVIEW AND APPROVAL at the time of landscape construction drawings and private improvements agreement.

ALL LANDSCAPE AREA REQUIRES BOTH SOIL PREPARATION AND AN AUTOMATIC IRRIGATION SYSTEM.

THE IRRIGATION SYSTEM IS TO BE INSTALLED AFTER SOIL PREPARATION AND PRIOR TO PLANT MATERIALS.

COORDINATE AND REFLECT DESIGN AND CONSTRUCTION INFORMATION AS TO TYING INTO THE CITY'S NON-POTABLE WATER SYSTEM, IF APPLICABLE. ADDITIONAL INFORMATION IN THIS REGARD MAY BE OBTAINED BY CONTACTING THE CITY OF WESTMINSTER DEPARTMENT OF PUBLIC WORKS AND UTILITIES.

THE IRRIGATION SYSTEM AND IRRIGATION CONSTRUCTION PLAN SHALL BE DESIGNED AND INSTALLED TO ADDRESS ALL OF THE FOLLOWING:

- COORDINATION WITH THE PRELIMINARY LANDSCAPE AND IRRIGATION PLANS.
- IRRIGATION DESIGN AND TECHNIQUES MUST CORRESPOND TO THE HYDROZONE AND TYPE OF PLANT MATERIAL.
- DESIGN FOR BERMS AND SLOPES SHOULD MINIMIZE RUNOFF. (BERMS AND SLOPES MAY NEED REPETITIVE, SHORTER WATERING CYCLES.)
- AVOID OVERSPRAY ONTO NON-LANDSCAPE AREAS.
- IRRIGATION METHODS OF DRIP, MICRO-SPRAY OR SUB-SURFACE IRRIGATION WITHIN LANDSCAPE AREAS LESS THAN 8 FEET IN WIDTH.
- TOTAL ANNUAL WATER APPLICATION BY IRRIGATION (WATER BUDGET) SHALL NOT EXCEED AN AVERAGE OF 15 GALLONS/SQUARE FOOT/YEAR (24 INCHES) TO FACILITATE WATER CONSERVATION. FOR PURPOSES OF CALCULATING THE WATER BUDGET, THE LOW HYDROZONE IS CALCULATED AS 5.5 GALLONS/SQUARE FOOT/YEAR (LESS THAN 9 INCHES); THE MODERATE HYDROZONE CALCULATED AT 13.5 GALLONS/SQUARE FOOT/YEAR (22 INCHES); AND THE HIGH HYDROZONE CALCULATED AT 18 GALLONS/SQUARE FOOT/YEAR (29 INCHES).
- REQUIREMENTS OF WATER FEATURES MUST BE INDICATED AS PART OF THE WATER BUDGET AND WILL BE EVALUATED ON A CASE-BY-CASE BASIS. THE WATER USED IN WATER FEATURES MUST BE RECYCLED. NON-POTABLE WATER MUST BE USED IF POSSIBLE. WATER FEATURES MUST BE MAINTAINED IN WORKING ORDER AND OPERATE DURING THE TIMES SPECIFIED ON THE OFFICIAL DEVELOPMENT PLAN.
- A MAXIMUM IRRIGATION TIME LIMIT OF 8 HOURS EVERY OTHER DAY.
- ~~Regarding precipitation rate, a~~All systems shall be capable of supplying a sufficient number of inches of water per week to the total irrigated area in order to maintain the health of the plant material. ~~Soil moisture sensors shall be included in the system. Watering time shall not exceed eight (8) hours per day for seven days per week.~~
- IDENTIFICATION OF EXISTING WATER PRESSURE AND DESIGN WATER PRESSURE.

- Tap size(s) required shall be ~~determined within these constraints and~~ subject to approval by the City. THE NUMBER AND SIZE Sizing of the tap(s) required shall be ~~determined within these constraints and~~ subject to approval by the City. ~~Sizing of the tap(s) shall be coordinated with the Engineering and Building Division.~~
- SEPARATE IRRIGATION WATER TAPS AND METERS ARE REQUIRED FOR ALL RESIDENTIAL DEVELOPMENTS OTHER THAN SINGLE-FAMILY DETACHED. SEPARATE IRRIGATION WATER TAPS AND METERS ARE REQUIRED FOR ALL NON-RESIDENTIAL DEVELOPMENTS IF THE IRRIGATED AREA EXCEEDS 40,000 SQUARE FEET. AN IRRIGATION WATER TAP SHALL BE USED ONLY FOR IRRIGATION PURPOSES. REFER TO THE WATER REGULATIONS, WESTMINSTER MUNICIPAL CODE, FOR INFORMATION ON WATER TAP REQUIREMENTS.
- USE OF A MASTER SHUT-OFF VALVE TO SHUT OFF WATER TO THE SYSTEM WHEN NOT OPERATING IN ORDER TO REDUCE LEAKAGE OF WATER FROM THE SYSTEM.
- USE OF BACKFLOW PREVENTERS.
- USE OF PRESSURE REDUCTION VALVES (PRV) OR PRESSURE REDUCTION SPRINKLER HEADS IF WATER PRESSURE WITHIN THE IRRIGATION SYSTEM IS ABOVE THE COMPONENT MANUFACTURERS RECOMMENDATIONS. LIKEWISE, USE OF BOOSTER VALVES WHERE WATER PRESSURE IS TOO LOW.
- IRRIGATION TIME CLOCK CONTROLLERS SHALL HAVE THE CAPABILITY TO ALLOW FOR SEASONAL ADJUSTMENTS, INCLUDING GLOBAL WATER BUDGET CONTROLS. ALL CONTROLLERS SHALL ALLOW FOR MULTIPLE PROGRAMS AND START TIMES, 2-3-4-5-7-14 DAY SCHEDULES, AND SHALL ALLOW INDIVIDUAL TIME SETTINGS DOWN TO THE MINUTE. CONTROLLERS (EXCLUDING SINGLE FAMILY DETACHED) SHALL USE EVAPOTRANSPIRATION OR SOIL MOISTURE BASED PROGRAMMING, INCLUDING EITHER LOCAL SENSORS, REMOTE OR HISTORIC EVAPOTRANSPIRATION BASED SCHEDULING, OR SOIL MOISTURE SENSORS.
- IRRIGATION CLOCK CONTROLLERS INSTALLED BY THE DEVELOPER/BUILDER SHALL BE CAPABLE OF A MINIMUM OF 10 ZONES FOR A SINGLE FAMILY OR DUPLEX LOT LESS THAN 10,000 SQUARE FEET IN AREA. LOTS 10,000 SQUARE FEET AND LARGER SHALL REQUIRE AN IRRIGATION CLOCK CONTROLLER OF A MINIMUM OF 12 ZONES.
- USE OF AUTOMATIC RAIN SHUTOFF DEVICES.
- SPRINKLER HEADS MUST PROVIDE HEAD TO HEAD WATER COVERAGE.

- NO SINGLE ZONE SHALL MIX HEAD TYPES.
- TURF AND NON-TURF ZONES SHALL BE IRRIGATED ON SEPARATE VALVES.
- MINIMUM ACCEPTABLE DISTRIBUTION UNIFORMITIES SHALL BE 55% FOR POP UP SPRINKLER HEADS OR SPRAY ZONES AND 70% FOR ROTOR ZONES, OR CURRENT IRRIGATION ASSOCIATION ACCEPTED MINIMUMS.
- THE USE OF SPRINKER HEADS WHICH EMIT LARGE WATER DROPLETS, SUCH AS ROTOR HEADS, WHERE POSSIBLE.
- SLEEVE, PIPE, AND VALVE SIZING. SLEEVE ALL LINES UNDER PAVEMENT.
- IRRIGATION USING NON-POTABLE WATER SHOULD INVESTIGATE THE USE OF POTABLE WATER FOR TREES AND SHRUBS.

Technical details regarding overall functioning of the system shall be the responsibility of the designer, the contractor and the owner. For ADDITIONAL reference information regarding irrigation systems see the Westminster Sitework Specifications. ~~Check with the City Public Works division to determine proximity of project to reclaimed water system and the current or future possibility of tying into the system.~~

Irrigation CONSTRUCTION drawings ~~submitted should~~ SHALL contain the following INFORMATION:

1. SHEET SIZES ACCORDING TO OFFICIAL DEVELOPMENT PLAN REQUIREMENTS AND NO LARGER THAN 24" X 36" FOR FINAL IRRIGATION CONSTRUCTION PLANS.
2. TITLE BLOCK WITH NAME OF PROJECT, SHEET NAME, COMPANY IDENTIFICATION INCLUDING ADDRESS, PHONE NUMBER, NAME OF PERSON PREPARING THE PLAN AND DATE.
3. Scale-written and graphic TO MATCH LANDSCAPE PLAN. 1"=20 FEET IS PREFERRED,
4. North arrow.
5. PROPERTY LINES.
6. KEY.
7. Existing and proposed structures, WATER FEATURES, SIDEWALKS, over hangs and paving. ~~Title block with name of project, sheet name, name of person preparing plan and date.~~
8. PROPOSED GRADES OR SPOT ELEVATIONS IN SLOPED OR BERMED AREAS.
9. SHOW AND LABEL LOCATIONS OF PROPOSED (LOW, MODERATE, HIGH) HYDROZONES AND IDENTIFY THE TOTAL SQUARE FOOTAGE OF EACH.
10. SHOW AND LABEL LOCATIONS TO BE IRRIGATED WITH POTABLE AND NON-POTABLE WATER AND IDENTIFY THE TOTAL SQUARE FOOTAGE OF EACH.

11. TOTAL WATER BUDGET AND CALCULATIONS BY HYDROZONE.
12. ~~The location and type of automatic irrigation systems(s) provided, which shall be designed to provide adequate irrigation to all planted areas, including those areas that are sodded, seeded and/or contain shrubs and/or trees.~~ ALL DESIGN INFORMATION, SYSTEM LAYOUT, AND ~~Details of the system as NOTED EARLIER UNDER IRRIGATION SYSTEM AND IRRIGATION CONSTRUCTION PLANS~~ MUST BE SHOWN AND LABELED. ~~such as the existing water pressure, type and sizes of backflow preventers, valves, sprinkler heads, and piping should be shown. A high quality master shut-off valve is recommended for the whole system.~~
13. ~~The design should be prepared by a qualified professional.~~ INFORMATION AS TO WHO WILL HAVE RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM. INCLUDE NAME, TITLE, ADDRESS AND CONTACT PHONE NUMBER.
14. CITY OF WESTMINSTER STANDARD GENERAL NOTES. (SEE PLAN SUBMITTAL DOCUMENT PACKET PROVIDED BY THE CITY).

COMPLETION OF A SUCCESSFUL IRRIGATION AUDIT WILL BE REQUIRED AFTER INSTALLATION OF THE IRRIGATION SYSTEM, PRIOR TO CITY ACCEPTANCE. (LANDSCAPING BY SINGLE FAMILY DETACHED HOMEOWNER EXEMPT)

A COPY OF THE IRRIGATION SYSTEM AUDIT, PERFORMED BY A IRRIGATION ASSOCIATION CERTIFIED IRRIGATION AUDITOR, ALONG WITH AN IRRIGATION SCHEDULE DEVELOPED FROM THE AUDIT WHICH PROVIDES AT LEAST INDIVIDUAL SPRING, SUMMER, AND FALL SCHEDULES AND TOTAL ANNUAL WATER APPLICATION VIA IRRIGATION IN INCHES (MAXIMUM 15 INCHES/SQUARE FEET/YEAR), AND AN AS-BUILT IRRIGATION PLAN SHALL BE PROVIDED TO THE CITY AND POSTED FOR THE OWNER AND/OR MANAGER AT EACH TIME CLOCK CONTROLLER.

WITHIN 6 WEEKS OF THE INSTALLATION OF NEW LANDSCAPING, THE IRRIGATION SYSTEM INSTALLER SHALL RESET THE TIME CLOCK CONTROLLERS TO THE NORMAL SEASONAL WATERING SCHEDULE. (LANDSCAPING BY SINGLE FAMILY DETACHED HOMEOWNER EXEMPT.)
~~As built drawings shall be presented to the Owner/Homeowner's Association prior to final acceptance of the project.~~

XIII. PLANT MATERIAL LIST BY HYDROZONE-RECOMMENDED PLANTS

Following is a reference list of those plant materials most highly recommended for the Westminister area. A LISTING OF PLANT MATERIAL BY SUGGESTED HYDROZONE PLACEMENT IS AVAILABLE FROM THE CITY’S PLANNING DIVISION. THIS LIST WILL BE UPDATED AND REVISED BY CITY STAFF ON A PERIODIC BASIS. FACTORS SUCH AS DRAMATIC TEMPERATURE CHANGES OVER SHORT PERIODS OF TIME, WIND, SOIL, SLOPE, EXPOSURE, MOISTURE, AND OTHER ENVIRONMENTAL AND MAINTENANCE FACTORS CAN AFFECT THE HARDINESS AND HEALTH OF PLANT MATERIAL. THIS PLANT LIST IS NOT A GUARANTEE OF SUSTAINABILITY OF ANY PARTICULAR SPECIES WITHIN ANY PARTICULAR HYDROZONE. This list is by no means inclusive and is to serve as a guide only. Proposed plant lists are to be submitted with the required landscape plan and will be reviewed on a case-by-case basis. The asterisk (*) sign indicates plant materials which are known to be more drought tolerant and are therefore recommended for xeriscape designs.

USE OF NON-POTABLE WATER WILL REQUIRE PLANT SELECTION THAT IS TOLERANT TO HIGHER SALT AND POTASSIUM LEVELS. PLANTS THAT HAVE INCREASED SALT TOLERANCE ARE IDENTIFIED. THIS IDENTIFICATION IS NOT A GUARANTEE OF SALT TOLERANCE, HEALTH, OR SUSTAINABILITY. FOR FURTHER INFORMATION IN THIS REGARD CONSULT A LANDSCAPE ARCHITECT OR DESIGNER.

Generally, no more than one third (1/3) of the proposed trees on any project shall be “fast-growing” (Cottonwood, Silver Maple, etc.). If specified, fast growing trees will be approved only in low vehicular and pedestrian traffic areas. The remainder of the proposed trees shall be “slower growing”, “long lived” species (Ash, Norway Maples, Honeylocust, Linden, Oak, Hawthorn, etc.).

The use of Siberian or Chinese Elm (Ulmus pulmila) and Russian Olive (Eleagnus angustifolia) trees and Tamarix (Salt Cedar) shrubs are prohibited within the City of Westminister.

————— **Deciduous Shade Trees**

<u>Common Name</u>	<u>Botanical Name</u>
Ash, Autumn Purple	Fraxinus americana ‘Autumn Purple’*
Ash, Marshall Seedless	Fraxinus p. ‘Marshall’*
Ash, Patmore	Faxinus p. ‘Patmore’*
Ash, Summit	Fraxinus p. ‘Summit’*
Buckeye, Ohio	Aesculus glabra
Catalpa, Western	Catalpa speciosa*
Cottonwood, Cottonless	Populus sargentii
Cottonwood, Lanceleaf	Populus acuminata
Cottonwood, Narrowleaf	Populus angustifolia
Hackberry	Celtis occidentals*
Honeylocust, Imperial	Gleditsia t. i. ‘Imperial’*
Honeylocust, Shademaster	Gleditsia t. i. ‘Shademaster’*

Honeylocust, Skyline	Gleditsia t. i. 'Skyline'*
Kentucky Coffee Tree	Gymnocadus dioecia
Linden, American	Tilia americana
Linden, Glenleven	Tilia cordata 'Glenleven'
Linden, Greenspire	Tilia cordata 'Greenspire'
Linden, Redmond	Tilia euchlora 'Redmond'
Maple, Autumn Blaze	Acer freemanii 'Autumn Blaze'
Maple, Norway (sp)	Acer platanoides (species)
Maple, Sugar	Acer saccharum
c. Ornamental Trees	Botanical Name
Alder, Thin Leaf	Alnus Tenuifolia
Aspen, Quaking	Populus tremuloides
Cherry, Canadian Red	Prunus v. 'Shubert'
Chokecherry, Amur	Prunus mackii
<u>Crabapple, David</u>	<u>Malus 'David'</u>
Crabapple, Dolgo	Malus 'Dolgo'
<u>Crabapple, Indian Summer</u>	<u>Malus</u> Oak, Burr
macrocarpa	Quercus
Oak, English	Quercus robor
Oak, Red	Quercus rubra
<u>Oak, Swamp White</u>	<u>Quercus bicolor</u>
Walnut, Black	Juglans nigra
b. Evergreen Trees	Botanical Name
Fir, Douglas	Pseudotsuga menziesii
Fir, White	Abies concolor
Pine, Austrian	Pinus nigra
Pine, Bristlecone	Pinus aristata*
Pine, Pinon	Pinus cembroides edulis*
Pine, Ponderosa	Pinus ponderosa
Spruce, Colorado (Blue Spruce)	Picea pungens
<u>'Indian Summer'</u>	
Crabapple, Radiant	Malus 'Radiant'
Crabapple, Spring Snow	Malus 'Spring Snow'
Golden Raintree	Koelreuteria paniculata*
Hawthorn, Downy	Crataegus mollis
Hawthorn, Russian	Crataegus ambigua
Hawthorn, Thornless	Crataegus crugalli inermis
Hawthorn, Washington	Crataegus phaenopyrum
Hornbeam, European	Carpinus betulus fastigiata
<u>Lilac, Japanese Tree</u>	<u>Syringa japonica</u>
Maple, Amur	Acer ginnala*
Newport Plum	Prunus americana 'Newport'
d. Deciduous Shrubs	Botanical Name
Barberry, (sp)	Berberis species
Burning Bush	Euonymus alata
Butterfly Bush	Buddleia davidii
Cherry (sp)	Prunus species
Cherry, Western Sand	Prunus besseyi*

Chokeberry, Black	Aronia melanocarpa*
Chokeberry, Red	Aronia a. 'Brilliantissima'*
Coralberry, Red	Symphoricarpos orbiculatus
Cotoneaster, (sp)	Cotoneaster species*
Currant, Alpine	Ribes alpinum*
Currant, Yellow	Ribes aureum*
Dogwood, (sp)	Cornus species
Dwarf Burning Bush	Euonymus alata 'Compacta'
Euonymous, Manhattan	Euonymous k. 'Manhattan'
Forsythia, (sp)	Forsythia species
Honeysuckle, (sp)	Lonicera species
Holly, Oregon Grape Compact	Mahonia aquifolium compacta
Leadplant	Amorpha canescens*
Lilac, (sp)	Syringa species
Mockorange, (sp)	Philadelphus species
Mahogany, Curlleaf	Cercocarpus ledifolius*
Ninebark, Dwarf	Physocarpus opulifolius 'Nanus'
Potentilla, (sp)	Potentilla species
Plum, Purple Leaf	Prunus x cistena
Privet, Cheyenne	Ligustrum vulgare 'Cheyenne'
Pyracantha, (sp)	Pyracantha species
Quince, Red	Chaenomeles japonica
Sage, Russian	Perovskia atriplicifolia*
Serviceberry	Amelanchier alnifolia*
Shrub Rose, Native	Rosa woodsii*
Shrub Rose, Purple-Red	Rosa x. 'Hansa'
Snowberry	Symphoricarpos albus
Spirea, Blue Mist	Caryopteria incana*
Spirea, (sp)	Spirea species
Sumac, (sp)	Rhus species*
Viburnum, (sp)	Viburnum species*
Willow, Dwarf Artic	Salix purpurea nana
Yucca, (sp)	Yucca species*

e.	Evergreen Shrubs	<u>Botanical Name</u>
	Juniper, Arcadia	Juniperus s. 'Arcadia'*
	Juniper, Andorra	Juniperus h. 'Youngstown Compacta'
	Juniper, Bar Harbor	Juniperus h. 'Bar Harbor'*
	Juniper, Blue Chip	Juniperus h. 'Blue Chip'*
	Juniper, Buffalo	Juniperus s. 'Buffalo'*
	Juniper, Broadmoor	Juniperus s. 'Broadmoor'*
	Juniper, Hughes	Juniperus h. 'Hughes'
	Juniper, Pfitzer Compact	Juniperus c. 'Pfitzeriana Compact'
	Juniper, Scandia	Juniperus s. 'Scandia'*
	Juniper, Wilton Carpet	Juniperus h. 'Wiltonii'*
	Mugo Pine	Pinus mugo*

11. XERISCAPING

Developers, builders and residents in Westminster are encouraged to become familiar with the fundamental principles of xeriscaping and to integrate all or some of these principles into their

landscape design whenever appropriate. Landscape plans that incorporate the principles of xeriscaping can be developed to assure a successful, lower water demand landscape for all or part of a project depending on the overall desired effect.

The goal of using a xeriscape type design for all or part of a project is not to totally eliminate the need for watering, but rather to gradually reduce the need for water as the more drought tolerant plant materials become established. Xeriscape designs may require a slightly higher amount of design, planning and maintenance initially, but can provide a successful low water, low maintenance type of landscape project in the long run. The fundamental principles of xeriscaping are outlined below.

a. Planning and Design

In addition to aesthetics and function of plants, the soils, drainage patterns, exposure to heat and wind and the manner in which the site is irrigated, must be considered. While a xeriscape requires low amounts of water, supplemental watering is necessary to establish plants and maintain the landscape during long dry spells. An automatic irrigation system should be part of a xeriscape design.

b. Limited Turf Areas

Where appropriate and feasible, use less water demanding materials, such as ground covers, low water usage plants with mulches instead of turf, and locate turf only in areas where it provides functional benefits. Turf is best separated from planting of trees, shrubs, ground covers and flowering plants so that it may be irrigated separately.

Where uniform turf is desired, areas are best planted with fine bladed, sod forming turf varieties such as Buffalo grass or Bluegrass *Fescue* mix/blend for lower water usage. Outlying areas, where soil cover is needed, but foot traffic is limited, can be planted with various coarse grasses such as Tall Fescue and Smooth Brome.

Species of grass which grow with the average rainfall received by Westminster include Tall Fescue, Smooth Brome Fairway Crested Wheatgrass, Ephraim Crested Wheatgrass, Buffalo grass, Blue Gramma and others. Some varieties of Bluegrass that are relatively drought tolerant include Majestic, America and Merion. Check with local sod or Seed Company for detailed information.

Drought tolerant grasses need water to become established. They also need occasional irrigation during a prolonged dry spell. The key to drought tolerance is deep root development. Thorough soil preparation and deep, infrequent watering will help turf establish a deep root system.

c. Soil Improvements

Soil improvement allows for better absorption of water and improved water holding capacity of the soil. Soils that have organic matter also provide nutrients to plants. Improve the soil prior to planting and installation of any irrigation system by digging in a minimum of five (5) cubic yards of organic matter per 1,000 square feet to be planted to a depth of eight inches (8"). Aged ground manure or compost containing a minimum of fifty percent (50%) organic matter is recommended.

d. ~~Efficient Irrigation~~

~~All planted areas, including xeriscape areas, require an automatic irrigation system. Well planned sprinkler systems can save water. For efficient water use, irrigate turf areas separately from other plantings. Plants should also be grouped according to similar water needs. Turf areas are best watered with sprinklers. Trees, shrubs and ground covers can be watered efficiently with low volume drip or spray systems. Rates of application of water should vary with the type of plant community water requirements.~~

~~Regardless of how drought tolerant a plant may be, relatively frequent watering is needed until a plant is established. For most woody plants, establishment takes at least two growing seasons. Once established, gradual reduction of watering frequency can be accomplished.~~

e. ~~Mulches~~

~~Organic mulch planting beds are an ideal replacement for turf areas. Mulches cover and cool the soil, minimize evaporation, reduce weed growth and slow erosion. Mulches also provide landscape interest. Organic mulches are typically bark chips, wood grindings or pole peelings. Inorganic mulches include rock and various gravel products. A minimum of three inches (3") of mulch should be placed over geotextile fabric (filter fabric) where ground cover or shrubs are to be used in order to allow water and air to pass through the fabric and discourage weed growth. Mulched areas should not occur on slopes where mulch is difficult to maintain in place.~~

f. ~~Low Water Use Plants~~

~~Low water use plants can serve every landscape function. See the recommended plants section for a list of xeriscape plants. Drought resistant plants are indicated by the asterisk (*) sign. Low water use plants will still require some irrigation.~~

~~For more extensive detail on xeriscaping contact the Denver Water Board or a landscape architect who specializes in xeriscaping.~~

XIV. LANDSCAPE MAINTENANCE REQUIREMENTS

ALL EXISTING PROPERTIES, EXCLUDING SINGLE FAMILY DETACHED, SHALL NOT MODIFY ANY LANDSCAPE AREA OR PLANT MATERIALS WITHOUT CITY APPROVAL. MAINTENANCE AND MINOR IMPROVEMENTS WITHIN EXISTING LANDSCAPE AREA OR OF PLANT MATERIALS MUST OCCUR IN A MANNER THAT COMPLIES WITH THE STANDARDS HEREIN OR DECREASES EXISTING ASPECTS OF NON-CONFORMANCE.

AN EXISTING SINGLE FAMILY LOT WITHOUT AN OFFICIAL DEVELOPMENT PLAN, OR AMENDED OFFICIAL DEVELOPMENT PLAN OR OFFICIAL DEVELOPMENT PLAN WAIVER THAT ADDRESSES LANDSCAPING, MAY MODIFY EXISTING LANDSCAPING IF MODIFICATIONS COMPLY WITH THE REQUIREMENTS HEREIN, OR DECREASE AN ASPECT OF EXISTING NON-CONFORMANCE.

The property owner, homeowner's or business association shall be responsible for the continual adequate maintenance of the landscaping AND IRRIGATION SYSTEM required by and shown on the Official Development Plans and site plans accompanying Official Development Plan waivers, AND RESULTING CONSTRUCTION DRAWINGS.

All landscaping and ~~required buffering~~ AND LANDSCAPE MATERIALS shall be continually maintained including irrigation, weeding, pruning and replacing in a substantially similar manner as originally approved. The following survival standards shall apply to all LANDSCAPE AREAS AND MATERIALS ~~landscaping and required buffering~~:

- a) ~~Grass or other living plant material shall be the primary ground cover used in landscape areas. Turf areas shall be planted to present a finished appearance and complete coverage after two growing seasons.~~ ALL LIVING PLANT MATERIAL, AS INDICATED BY THE OFFICIAL DEVELOPMENT PLAN, MUST BE MAINTAINED IN PERPETUITY. THE CITY MUST APPROVE REPLACEMENT OR ALTERATION OF PLANT MATERIAL.
- b) ~~Non living ground covers such as wood chip mulch, boulders, cobble or river rock shall be limited to an area not to exceed 50% of the landscape area. Mulch/rock areas shall be 75% covered with shrubs within a three (3) year period.~~ Non-living ground covers, such as rock or ORGANIC mulch, must be HAVE ~~one hundred~~ 100 percent (100%) GROUND SURFACE COVERAGE AND BE MAINTAINED AT THE REQUIRED DEPTH. ~~intact after one year and one hundred percent (100%) intact thereafter. (i.e. not scattered and untidy)~~ ARTIFICIAL TURF SHALL BE INSTALLED ACCORDING TO INDUSTRY SPECIFICATIONS AND MAINTAINED IN A MANNER TO MIMIC A HEALTHY LIVING TURF. REPLACEMENT OF ARTIFICIAL TURF SHALL BE REQUIRED WHEN THE MATERIAL, WEAR, OR INSTALLATION IS SUCH THAT IT IS DETERMINED BY THE CITY THAT IT NO LONGER VISUALLY MIMICS A HEALTHY LIVING LAWN AREA.
- c) ~~Trees and shrubs~~ ALL PLANT MATERIAL INCLUDING TREES, SHRUBS, GROUNDCOVERS, VINES AND TURF must have a ~~one hundred~~ 100 percent (100%) ongoing survival rate.
- d) Any dead or severely damaged (as determined by the City) plant material shall be replaced BY THE OWNER OR ASSIGNS within ~~six (6)~~ 6 months of notification by the City.
- e) PRUNING OF PLANT MATERIAL SHALL NOT DRASTICALLY ALTER THE NATURAL GROWTH PATTERN AND MATURING SIZE, AS DETERMINED BY

THE CITY. IF THE CITY DETERMINES THAT PRUNING HAS OCCURRED THAT VIOLATES THIS REQUIREMENT, THE OWNER WILL BE REQUIRED TO REPLACE THE AFFECTED PLANT WITH AN EQUAL PLANT WITHIN 6 MONTHS OF NOTIFICATION BY THE CITY. THIS REQUIREMENT ALSO APPLIES TO PLANT MATERIAL AFFECTED BY STORM DAMAGE. ALL TREE PRUNING ACTIVITIES SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS (ANSI A300).

- f) PLANTS INFECTED WITH INSECTS OR DISEASE MUST BE TREATED APPROPRIATELY OR REMOVED FROM THE PROPERTY, AS REQUIRED BY THE CITY. REMOVED PLANTS MUST BE REPLACED WITH NEW, EQUAL PLANT MATERIAL, AS DETERMINED BY THE CITY.
- g) WEEDS MUST BE ABATED AND REMOVED.
- h) TURF AREAS GENERALLY REQUIRE PERIODIC MOWING, AERATION, DETHATCHING, FERTILIZATION, AND WEED ABATEMENT. TURF MUST NOT EXCEED 6 INCHES IN HEIGHT UNLESS APPROVED OTHERWISE BY THE CITY. TURF AND GRASS AREAS MUST BE MAINTAINED IN A HEALTHY CONDITION WITHOUT AREAS OF DIRT OR DEAD GRASS, AS DETERMINED BY THE CITY.
- i) IRRIGATION SHOULD NOT OCCUR IN THE HEAT OF THE DAY (BETWEEN THE HOURS OF 10 AM AND 6 PM) IN ORDER TO REDUCE EVAPORATION. EXCESSIVE WATER RUN OFF, AS DETERMINED BY THE CITY, IS NOT PERMITTED.
- j) IRRIGATION SYSTEMS SHALL BE MAINTAINED AND PERIODICALLY ADJUSTED TO ASSURE WATERING EFFICIENCY AND CONSERVATION METHODS. REPLACEMENT PARTS SHALL MATCH OR BE COMPATIBLE WITH THE SYSTEM REQUIREMENTS.

XV. PRIVATE IMPROVEMENTS AGREEMENT

IN ACCORDANCE WITH CITY CODE, A Private Improvements Agreement AND SURETY IS REQUIRED FOR ALL PRIVATE IMPROVEMENTS WITHIN A DEVELOPMENT. PRIVATE IMPROVEMENTS ARE ALL NON-PUBLIC IMPROVEMENTS INCLUDING LANDSCAPING, IRRIGATION, LIGHTING, FENCING, ETC. ~~for landscaping, fencing and other private improvements are required for each project including residential and commercial projects~~ (See Section 11-6-4 of Westminster Municipal Code). The Private Improvements Agreement is a written agreement between the property owner and the City, and shall INCLUDE ~~be established specifying~~ the required landscape and automatic irrigation requirements and projected costs. Construction drawings shall accompany the Private Improvements Agreement. One of the ~~following~~ forms of security AS ESTABLISHED BY CITY CODE shall also accompany the Public Improvements Agreement.

A. ~~Surety Bond~~

~~The owner/developer shall provide a good and sufficient surety bond executed by a corporate surety duly licensed to do business in the state, or by another appropriate institution having adequate assets to perform the terms of the surety bond as determined by the City, in an amount at least equal to one hundred fifteen 115 percent (115%) of the current costs of the landscape improvements. Cost estimates are to be reviewed and approved by the City.~~

B. ~~Cash Bond~~

~~The owner/developer shall deposit with the City Treasurer an amount equal to one hundred fifteen 115 percent (115%) of the current cost of the landscape improvements. Cost estimates are to be reviewed and approved by the City.~~

C. ~~Irrevocable Letter of Credit~~

~~The owner/developer shall provide a clear and sufficient irrevocable letter of credit on a form established by the City, executed by a commercial bank insured by FDIC or other appropriate institutions having adequate assets to perform the terms of the letter of credit as determined by the City. The form and conditions of such irrevocable letter of credit shall be approved by the City Attorney and the City Treasurer. The letter of credit should be an amount equal to one hundred fifteen 115 percent (115%) of the current cost of the landscape improvements. Cost estimates are to be reviewed and approved by the City.~~

D. ~~Plat Restriction~~

~~The owner/developer shall enter upon the Final Plat, language that restricts the conveyance, sale or transfer of any lot, lots, tract or tracts of land within the property until the required landscape improvements are constructed and are accepted by the City. To release the plat restriction, the owner/developer shall complete the landscape improvements and/or supply the City with one of the above forms of surety in an amount as determined by the City.~~

E. ~~Other Guarantees~~

~~The owner/developer shall guarantee the construction of landscape improvements by such other methods as may be specifically approved by City Council.~~

F. Releasing Surety and Warranty Maintenance

The improvements will be accepted in writing by the City when all items are satisfactorily completed in accordance with the terms of the Public Improvements Agreement and the Official Development Plan. Upon such acceptance, the warranty period and performance obligations contained below shall commence and the surety amount may be reduced to ~~fifteen~~ 15 percent ~~(15%)~~ of the original surety amount.

Warranty Maintenance

For a period of one year following the acceptance of the Improvements (the “Warranty Period”), the Owner shall be responsible for making any repairs or replacements required due to (a) defective materials, workmanship, or design or (b) damage that may be done to the Improvements except ordinary wear and tear. Repairs or replacement will be made which, in the opinion of the City, are necessary to maintain the Improvements to the same standards applicable at the time of the City’s acceptance of the Improvements. **THE ONE YEAR PERIOD WILL BE EXTENDED AN ADDITIONAL YEAR FOR TURF AREAS NOT ESTABLISHED BY USE OF SOD.**

During the ninth month of the Warranty Period, a warranty inspection will be conducted by the City and a corrections list will be submitted to the Owner stating what repairs or replacements are necessary pursuant to this Agreement. **A SECOND WARRANTLY INSPECTION WILL OCCUR PRIOR TO THE END OF THE SECOND YEAR FOR TURF AREA NOT ESTABLISHED BY THE USE OF SOD.**

All such deficiencies set forth in the corrections list shall be completed by the Owner within ~~sixty (60)~~ 60 days of notification. Any warranty repair or replacement that is not satisfactorily completed by the Owner within ~~sixty (60)~~ 60 days following notification may be completed by the City and charged to the Owner, which costs the Owner hereby agrees to reimburse to the City, unless modified by written agreement.

The City will monitor the satisfactory completion of all correction list items and, when completed, will provide ~~with~~ the Owner a written acknowledgment of the completion of the Warranty Period and the release of the Improvements of designated portions thereof from warranty. Upon the request of the Owner, the City shall release the surety for any portion of the Improvements released from warranty by the City.

XVI. DEFINITIONS

FOR THE PURPOSES OF THESE LANDSCAPE REGULATIONS, THE FOLLOWING TERMS SHALL BE DEFINED AS NOTED HEREIN.

ALTERNATIVE TURF- REFERS TO GRASSES USED FOR LAWN OR FIELD/MEADOW PURPOSES OTHER THAN BLUEGRASS OR A BLUEGRASS/FESCUE BLEND.

ARTIFICIAL TURF- REFERS TO A NON-LIVING MATERIAL TYPICALLY USED IN LIEU OF A LIVING TURF/LAWN. THE APPEARANCE MIMICS A LIVING TURF OR BLUEGRASS LAWN DURING THE GROWING SEASON.

BERM- AN EARTHEN MOUND INTENDED FOR VISUAL INTEREST OR SCREENING OF UNDESIRABLE VIEWS. A BERM IS EFFECTIVE IN REDUCING NOISE LEVELS.

CALIPER- THE MEASUREMENT IN DIAMETER OF A TREE TRUNK MEASURED 6 INCHES ABOVE THE GROUND FOR TREES UP TO 4-INCH SIZE AND 12 INCHES ABOVE THE GROUND FOR LARGER SIZES.

CITY- THE USE OF THE WORD “CITY” GENERALLY REFERS TO EITHER THE “CITY OF WESTMINSTER” OR MEANS “THE PLANNING MANAGER” FOR THE PURPOSES OF THESE GUIDELINES. IF A DETERMINATION BY THE PLANNING MANAGER THAT AN INTERPRETATION OR DECISION OF PLANNING COMMISSION AND/OR CITY COUNCIL IS WARRANTED, THE USE OF THE WORD CITY CAN INCLUDE PLANNING COMMISSION AND/OR CITY COUNCIL.

CERTIFIED IRRIGATION DESIGNER, CONTRACTOR OR AUDITOR- REQUIRES SUCCESSFUL COMPLETION OF FORMAL TRAINING, CERTIFICATION, LICENSING OR OTHER SIMILAR QUALIFICATION BY THE IRRIGATION ASSOCIATION.

COMMON AREAS- LAND AREA WITHIN A DEVELOPMENT INTENDED FOR JOINT PRIVATE OR PUBLIC OWNERSHIP AND USE. THESE AREAS ARE OFTEN MAINTAINED BY A HOMEOWNERS ASSOCIATION, BUSINESS ASSOCIATION OR IN SOME INSTANCES, THE CITY. RIGHT OF WAY IS CONSIDERED A COMMON AREA FOR THE PURPOSES OF THESE GUIDELINES.

DECIDUOUS- A PLANT WITH FOLIAGE THAT IS SHED ANNUALLY.

DEVELOPER- A PERSON, PERSONS, OR BUSINESS THAT IS RESPONSIBLE FOR THE DEVELOPMENT OF LAND, BUILDINGS AND/OR RELATED IMPROVEMENTS- OFTEN FOR THE PUPOSE OF SALE TO A SUBSEQUENT OWNER. THE DEVELOPER MAY BE THE PROPERTY OWNER.

DOUBLE ROW OF PARKING- TWO ROWS OF PARKING ADJACENT TO EACH OTHER, GENERALLY NOT SEPARATED BY A DRIVE AISLE OR LANDSCAPING.

DRIPLINE- A VERTICAL LINE EXTENDED DOWNWARD FROM THE TIPS OF THE OUTERMOST BRANCHES OF A TREE OR SHRUB TO THE GROUND.

DROUGHT- GENERALLY REFERS TO PERIODS OF A YEAR OR MORE WITH BELOW AVERAGE PERCIPITATION. CAN ALSO REFER TO SEASONS SUCH AS WINTER, SPRING, SUMMER OR FALL, WITH BELOW AVERAGE PERCIPITATION.

EVAPOTRANSPIRATION- THE QUANTITY OF WATER EVAPORATED FROM ADJACENT SOIL SURFACES AND TRANSPIRED FROM PLANTS DURING A SPECIFIC TIME.

EVERGREEN- A PLANT WITH FOLIAGE THAT PERSISTS AND REMAINS GREEN YEAR-ROUND.

EVERGREEN TREE- A TREE WITH EVERGREEN FOLIAGE. MATURE HEIGHT GENERALLY EXCEEDS TWENTY FEET.

FABRIC- REFERS TO A POROUS GEOTEXITILE FABRIC INSTALLED UNDERNEATH MULCH TO RETARD THE GROWTH OF WEEDS INTO AND FROM THE SOIL.

GROUNDCOVER- LIVING PLANT MATERIAL THAT GROWS LOW TO THE GROUND, USUALLY UNDER 24-INCHES IN HEIGHT, OFTEN OF A SPREADING NATURE AND TYPICALLY AVAILABLE IN SMALL POTS FOR PLANTING. DOES NOT INCLUDE ANNUALS, WEEDS, TURF GRASSES, HERBACIOUS PERENNIALS, MULCHES OR TREE CANOPY.

HARDSCAPE- NON-LIVING SITE IMPROVEMENTS AT THE GROUND PLANE SUCH A BUILDING, PAVEMENT, WALKWAYS AND PARKING AREAS- INCLUDING THOSE OF CRUSHED STONE, PATIOS, DECKS, MULCH AREA (EXCLUSIVE OF MULCH AREA IN SHRUB AND PERENNIAL BEDS) AND OTHER SIMILAR IMPROVEMENTS AS DETERMINED BY THE CITY. HARDSCAPE AREA DOES NOT INCLUDE ARTIFICIAL TURF UNLESS AS APPROVED OTHERWISE IN THESE REGULATIONS.

HEIGHT- FOR THE PURPOSES OF THESE REGULATIONS PLANT HEIGHT IS DETERMINED AS TYPICALLY MEASURED BY NATIONAL NURSERY ASSOCIATION STANDARDS.

HYDROZONE- REFERS TO AREAS WITHIN THE LANDSCAPE AREA DEFINED BY SIMILAR WATER NEEDS TO SUSTAIN HEALTHY PLANTS. FOR THE PURPOSES OF THESE GUIDELINES, HYDROZONES ARE BROKEN INTO THREE CATEGORIES AND WILL ULTIMATELY BE APPROVED BY THE CITY AFTER CONSIDERATION OF PLANT MATERIAL AND METHOD OF IRRIGATION:

LOW HYDROZONE: 9 INCHES (5.5 GALLONS) OF WATER OR LESS OF SUPPLEMENTAL WATER IS ADDED IN AN IRRIGATION SEASON. IRRIGATION METHODS IN THIS ZONE WILL USUALLY BE DRIP OR MICROSpray, UNLESS A LOW WATER TURF OR GROUNDCOVER IS BEING IRRIGATED IN WHICH THE METHOD MAY BE SPRAY OR ROTOR HEAD.

MODERATE HYDROZONE: OVER 9 INCHES AND UP TO 22 INCHES (13.5 GALLONS) OF WATER IS ADDED BY SUPPLEMENTAL IRRIGATION IN AN IRRIGATION SEASON. IRRIGATION METHODS FOR THIS ZONE WILL USUALLY BE SPRAY OR ROTOR HEAD WITH LARGE WATER DROPLETS, OR SPRAY HEADS.

HIGH HYDROZONE: 29 INCHES (18 GALLONS) OF WATER IS ADDED BY SUPPLEMENTAL IRRIGATION IN AN IRRIGATION SEASON. IRRIGATION METHODS IN THIS ZONE WILL USUALLY BE SPRAY OR ROTOR HEADS.

IRRIGATION- REFERS TO AN AUTOMATIC, PERMANENT, ARTIFICIAL WATERING SYSTEM DESIGNED TO TRANSPORT AND DISTRIBUTE WATER TO LANDSCAPE PLANTS. UNDERGROUND IRRIGATION SYSTEMS ARE REQUIRED UNLESS APPROVED OTHERWISE BY THE CITY.

IRRIGATION AUDIT- A PROCEDURE ACCORDING TO THE IRRIGATION ASSOCIATION THAT INCLUDES A VISUAL SITE INSPECTION OF THE INSTALLED IRRIGATION SYSTEM FOR PERFORMANCE ACCORDING TO DESIGN CRITERIA; A WATERING SYSTEM TEST; PHYSICAL CORRECTIONS IF NECESSARY; AND ESTABLISHMENT OF A WATERING SCHEDULE. (WWW.IRRIGATION.ORG)

IRRIGATION PLAN- A PLAN DRAWN TO SCALE THAT INDICATES THE IRRIGATION COMPONENTS AND THEIR SPECIFICATIONS AS RELATED TO A SPECIFIC LANDSCAPE PLAN.

IRRIGATION SEASON- SEE “YEAR”.

LAND USE- LAND USE DESIGNATIONS IN THIS GUIDELINE SUCH AS SINGLE FAMILY, SINGLE FAMILY ATTACHED, MULTI-FAMILY, NON-RESIDENTIAL, OR OTHER TYPE OF LAND USE DESIGNATION, ARE AS DEFINED BY THE WESTMINSTER COMPREHENSIVE LAND USE PLAN, WESTMINSTER MUNICIPAL CODE, OR CITY.

LANDSCAPE ARCHITECT/DESIGNER- A PROFESSIONAL WHO HAS SUCCESSFULLY COMPLETED FORMAL STUDY OR TRAINING IN THE FIELD OF LANDSCAPE ARCHITECTURE/DESIGN, CULMINATING IN EITHER CERTIFICATION, LICENSING OR DEGREE.

LANDSCAPE AREA- THE AREA WITHIN A LOT OR PROPERTY NOT COMPRISED OF HARDSCAPE, MEASURED AT THE GROUND PLANE. LANDSCAPE AREA WILL NOT INCLUDE TREE CANOPY AREA, BARE DIRT, OR WEEDS. LANDSCAPE AREA WILL CONSIST OF 100% LIVING GROUNDCOVER, TURF, OR SHRUB BED AREA. WATER FEATURES MAY BE INCLUDED IN THE CALCULATION OF LANDSCAPE AREA. AREAS DEDICATED TO EDIBLE PLANTS SUCH AS ORCHARDS OR VEGETABLE GARDENS ARE NOT INCLUDED.

LANDSCAPE BUFFER- A LANDSCAPE AREA INTENDED TO PHYSICALLY AND VISUALLY SEPARATE ONE LAND USE FROM ANOTHER.

LANDSCAPE IMPROVEMENTS/MATERIALS- ALL ELEMENTS TYPICALLY USED AND/OR PRESENT IN THE DESIGNED LANDSCAPE SUCH AS, BUT NOT LIMITED TO, SOIL, COMPOST, ROCK, PLANT MATERIAL, EDGING, WEED FABRIC, MULCH, IRRIGATION SYSTEM, FENCING, LIGHTING, SEATING. ARTIFICIAL TURF OR PLANTS CANNOT BE SUBSTITUED FOR REQUIRED PLANT MATERIALS EXCEPT AS APPROVED OTHERWISE IN THESE REGULATIONS.

LANDSCAPE PLAN- A PLAN DRAWN TO SCALE THAT SHOWS THE LAYOUT OF ALL LANDSCAPE COMPONENTS AND THEIR SPECIFICATIONS FOR A DEVELOPMENT SITE.

LANDSCAPE SETBACK AREA- AN AREA RESERVED FOR THE PRIMARY USE OF LANDSCAPING MEASURED BY THE HORIZONTAL DISTANCE BETWEEN TWO POINTS OF REFERENCE. OFTENTIMES LANDSCAPE SETBACK REFERS TO A DISTANCE OF LANDSCAPE AREA LOCATED BETWEEN THE PROPERTY LINE AND A BUILDING OR PARKING AREA OR OTHER HARDSCAPE. SIDEWALKS LOCATED WITHIN A LANDSCAPE SETBACK AREA WILL NECESSITATE A CORRESPONDING INCREASE IN THE SETBACK.

MAINTENANCE- ANY ACTIVITY UNDERTAKEN TO PREVENT THE DETERIORATION, IMPAIRMENT, OR NEED FOR REPAIR OF AN AREA, STRUCTURE, RIGHT-OF-WAY, OR LAND USE, INCLUDING BUT NOT LIMITED TO, MANAGEMENT, REPAIR OR REPLANTING OF PLANT MATERIALS AND LANDSCAPE MATERIALS.

MULCH- A NON-LIVING ORGANIC OR INORGANIC MATERIAL SUCH AS BARK, ROCK, OR STONE MATERIALS TYPICALLY IN A LOOSE CONDITION, USED IN THE LANDSCAPE INDUSTRY TO COVER BARE GROUND. MULCH WILL PROVIDE A PROTECTIVE COVERING AROUND PLANTS, RETARD EROSION, RETAIN SOIL MOISTURE, REDUCE WEEDS AND MAINTAIN SOIL TEMPERATURES.

NON-POTABLE WATER- TREATED, RECYCLED WASTE WATER THAT MAY BE AVAILABLE FROM THE CITY FOR A SPECIFIC USE SUCH AS LANDSCAPING, NOT INTENDED FOR HUMAN CONSUMPTION.

ORNAMENTAL TREE- A TREE OF SMALLER SIZE THAN A LARGE SHADE OR EVERGREEN TREE, OFTEN PROVIDING VARIETY AND INTEREST BY FLOWER DISPLAY, ATTRACTIVE FRUIT OR FALL COLOR. EXAMPLES OF ORNAMENTAL TREES ARE CRABAPPLES, ASPEN, HAWTHORN, AND SIMILAR SPECIES.

PARKING LOT ISLAND- A PARKING LOT LANDSCAPE AREA TYPICALLY SURROUNDED ON AT LEAST TWO SIDES BY PARKING SPACES OR DRIVE AISLES.

PERENNIAL- A HERBACIOUS PLANT THAT BLOOMS AND PRODUCES SEED FOR EACH YEAR, EXCEEDING TWO YEARS. A SHORT LIVED PERENNIAL LIVES FOR APPROXIMATELY 3-5 YEARS. LONG LIVED PERENNIALS ARE LIKELY TO LIVE MUCH LONGER AND CAN REMAIN FOR OVER 20 YEARS.

PLANT MATERIALS- LIVING PLANTS SUCH AS TREES, SHRUBS, GROUNDCOVERS, VEGETABLES, AND VINES. DOES NOT INCLUDE WEEDS OR OTHER UNDESIRABLE PLANTS AS DETERMINED BY THE CITY.

RAIN SENSOR OR RAIN SHUTOFF DEVICE- A DEVICE CONNECTED TO AN IRRIGATION CONTROLLER THAT OVERRIDES SCHEDULED IRRIGATION WHEN SIGNIFICANT PRECIPITATION HAS BEEN DETECTED.

SHADE TREE- DECIDUOUS TREES OF LARGE SIZE, GENERALLY THIRTY FEET OR MORE IN HEIGHT WHEN MATURE.

SHRUB- A PLANT THAT TYPICALLY RETAINS BRANCHES ALL THE WAY TO THE GROUND LEVEL- DOES NOT INCLUDE EVERGREEN TREES WITH THE EXCEPTION OF UPRIGHT JUNIPERS.

SOIL AMENDMENT- REFERS TO ORGANIC AND INORGANIC MATERIAL ADDED TO THE SOIL TO IMPROVED TEXTURE, MOISTURE HOLDING CAPACITY AND WATER AND AIR INFILTRATION.

STREET- ANY PUBLIC OR PRIVATE STREET EXCLUDING ALLEYS.

TREE- A WOODY PLANT WITH LEAVES OR NEEDLES THAT GROWS TO ACHIEVE HEIGHT USUSALLY ABOVE THE HUMAN FORM, OFTEN PROVIDING SHADE. WITH THE EXCEPTION OF EVERGREEN TREES, TREES GENERALLY DO NOT OCCUPY A SIGNIFICANT AMOUNT OF GROUND PLANE AREA.

TURF- REFERS TO A GROUPING OF GRASSES THAT GROW IN VERY CLOSE PROXIMITY TO FORM A LIVING SURFACE AT THE GROUND PLANE. TURF IS GENERALLY AN AREA OF THE GROUNDPLANE INTENDED TO BE/OR COULD BE WALKED ON AND WHEN REGULARLY MOWED, FORMS A DENSE GROWTH OF LEAF BLADES AND ROOTS.

WATER BUDGET- AN ESTIMATE OF THE TOTAL AMOUNT OF GALLONS OF WATER FOR IRRIGATION PURPOSES FOR THE IRRIGATION SEASON. THE WATER BUDGET WILL USE SPECIFICATIONS PROVIDED WITHIN THESE REGULATIONS AND ANY ADDITONAL INFORMATION PROVIDED BY THE CITY, TO CALCULATE WATER USAGE BY HYDROZONE TO ARRIVE AT THE TOTAL AMOUNT.

WEEDS- WEEDS ARE DEFINED BY WESTMINSTER MUNICIPAL CODE OR STATE STATUTE.

XERISCAPE- A TERM COINED IN DENVER TO DESCRIBE LANDSCAPING WHERE WATER EFFICIENCY IS ACHIEVED. IT DOES NOT MEAN THAT THE LANDSCAPE IS ONLY DRY, OR THE LANDSCAPE IS ALL ROCK, OR THERE IS NO LAWN, OR ONLY NATIVE PLANTS ARE USED. REFER TO THE TEXT WITHIN THIS DOCUMENT FOR A DETAILED DESCRIPTION OF LANDSCAPING USING XERISCAPE PRINCIPLES.

YARD AREA- ALL PORTIONS OF A LOT NOT COVERED BY BUILDING FOOTPRINT. YARD AREA IS TYPICALLY BROKEN DOWN TO FRONT, REAR, AND SIDE YARD AREAS. THE DEFINITION OF THESE AREAS SHALL BE BY INTERPRETATION OF THE CITY.

YEAR- FOR THE PURPOSES OF THESE REGULATIONS AND CALCULATION OF WATER RATES, A YEAR IS EQUIVILENT TO A TYPICAL IRRIGATION SEASON THAT IS FROM MID-APRIL TO MID-OCTOBER (26 WEEKS).



WESTMINSTER

Staff Report

Information Only Staff Report
May 17, 2004



SUBJECT: Development Review Fee Amendments

PREPARED BY: Michelle Lamm, Records Management Technician

Summary Statement:

This report is for City Council information only and requires no action by City Council.

City staff is recommending changes in the fees charged to developers as part of the development review process. The following changes are proposed:

- Addition of a Development Proposal Sign Posting fee of \$50 for any development proposal or rezoning request in review.
- Increase of the Board of Adjustments and Appeals fee from \$25 to \$250 and move the fee from a separate section of the Code to the Development Review Fee Schedule. (This requires repeal of Section 2-6-5 of the Westminster Municipal Code.)
- Deletion of the Conditional Use fee from the Development Review Fee Schedule.
- These changes will be brought back to City Council for official action at a future date.

Background Information

Development Proposal Signage

Several other municipalities (including Fort Collins, Longmont, Loveland and Thornton) have begun posting general "Development Proposal Under Review" signs on any property that has submitted a proposal to the City. (See attached sample photo.) The posting allows interested parties to contact the City Planning Division with questions about the development proposal well before final project approval. Staff has researched how other cities recover the cost of posting these signs. Some cities (Fort Collins and Greeley) charge the developer from \$50 to \$100 for sign posting, while others (Golden, Northglenn, Thornton) recover the cost in higher overall development fees.

Currently the City of Westminster posts a property only when the development proposal requires a public hearing prior to approval by the Planning Commission or City Council. The proposed fee would pay for the posting giving the public the opportunity to comment on all proposals, even if the project can be administratively approved and does not require public notice. The existing requirement to post property for upcoming public meetings will remain unchanged.

Board of Adjustment Proposed Fee Increase

The Board of Adjustment and Appeals fee increase was originally planned to be included under Councillor's Bill No. 28, amending the Westminster Municipal Code concerning Land Use and Development Review fees adopted on June 9, 2003, but was inadvertently left out. Board of Adjustment cases typically require many hours of Staff time in preparation - file review, property photos, PowerPoint presentation, agenda preparation public posting and costs associated with the actual Board public hearing. Staff believes that the proposed fee increase is needed to bring the fee in line with the other fees already in effect, and to recover more of the costs of providing the service.

Staff research reveals that Board of Adjustment fees in some cities (Fort Collins, Golden, Thornton) have not been reviewed in several years and are still between \$50 and \$100. Other cities including Greeley and Wheat Ridge charge \$300 plus the cost of public notice, while Denver charges \$500. City Staff is recommending increasing the fee from \$50 to \$250 to cover more of the costs associated with these reviews.

Conditional Use Permit Deletion

City of Westminster does not allow conditional use permits, so the conditional use fee is extraneous. Removing the fee from the Development Review Fee schedule brings the Code into conformance with current requirements.

Staff will schedule this matter for Council action in the near future.

Respectfully submitted,

Stephen P. Smithers
Acting City Manager

Attachments

- Photo of "Development Proposal Under Review" Sign – Fort Collins Example



W E S T M I N S T E R

Staff Report

Information Only Staff Report
May 17, 2004



SUBJECT: Batting Cages at City Park

PREPARED BY: Bill Walenczak, Director of Parks, Recreation and Libraries

Summary Statement:

This report is for City Council information only and requires no action by City Council.

At the City Council Meeting of April 26, 2004, Councillor Hicks brought up the suggestion to install batting cages at Christopher Fields. A Master Plan for City Park was developed in 1997 and approved by City Council. That plan does show a location for batting cages to be installed just east of the ballfields.

Staff has previously done a budget proforma on this subject and it was determined to be economically feasible if no debt were to be incurred for the installation. The approximate cost to install this type of facility is \$275,000 to \$325,000. Currently, this project is not on the department's five-year capital improvement list because of other priorities to be funded including: Citywide trail development, continual improvements to the City's existing parks, recreation center improvements, and continued new park development efforts.

Background Information

In 2002, the City opened its new four-plex softball complex at City Park. A second phase to that project would include the installation of batting cages. Batting cages do produce revenue and city Staff believes that when sufficient funding becomes available that it would be appropriate to move forward with this project. At this time, however, the funding is not available.

Staff would be happy to discuss this further if Councillors so desire.

Respectfully submitted,

Stephen P. Smithers
Acting City Manager

Attachment



Staff Report

Information Only Staff Report
May 17, 2004



SUBJECT: Monthly Residential Development Report

PREPARED BY: Shannon Sweeney, Planning Coordinator

Summary Statement:

This report is for City Council information only and requires no action by City Council.

- The following report updates 2004 residential development activity per subdivision...
The table below shows an overall increase (30.2%) in new residential construction for 2004 year-to-date compared to 2003 year-to-date totals.
Residential development activity so far in 2004 reflects increases in single-family detached (14.8%), single-family attached (33.3%), and multi-family, and no change in senior housing development when compared to last year at this time.

NEW RESIDENTIAL UNITS (2003 AND 2004)

Table with 7 columns: UNIT TYPE, APRIL (2003, 2004), % CHG., YEAR-TO-DATE (2003, 2004), % CHG. Rows include Single-Family Detached, Single-Family Attached, Multiple-Family, Senior Housing, and TOTAL.

Background Information

In April 2004, service commitments were issued for 92 new housing units within the subdivisions listed on the attached table. There were a total of 49 single-family detached, 26 single-family attached, 17 multi-family, and no senior housing building permits issued in April.

The column labeled “# Rem.” on the attached table shows the number of approved units remaining to be built in each subdivision.

Total numbers in this column increase as new residential projects (awarded service commitments in the new residential competitions), Legacy Ridge projects, build-out developments, etc. receive Official Development Plan (ODP) approval and are added to the list.

Respectfully submitted,

Stephen P. Smithers
Acting City Manager

Attachment: Active Residential Development Table

ACTIVE RESIDENTIAL DEVELOPMENT

<u>Single-Family Detached Projects:</u>	Mar-04	Apr-04	2003 YTD	2004 YTD	# Rem.*	2003 Total
Asbury Park III (94th & Teller)	0	0	0	0	1	1
Bradburn (120th & Tennyson)	3	3	14	11	183	64
CedarBridge (111th & Bryant)	0	4	0	4	6	0
Covenant (115th & Sheridan)	0	0	11	6	0	40
Habitat for Humanity (two locations)	0	0	0	0	0	2
Hazelwood Annexation (147th & Huron)	1	0	0	1	0	0
Huntington Trails (144th & Huron)	0	0	0	0	210	0
Legacy Ridge (108th & Leg. Ridge Pky.)	0	0	0	0	2	1
Legacy Ridge West (104th & Leg. Ridge Pky.)	15	28	18	71	135	93
Lexington (140th & Huron)	0	0	0	0	5	1
Maple Place (75th & Stuart)	2	2	0	4	0	0
Meadow View (107th & Simms)	1	0	0	1	19	0
Quail Crossing (136th & Kalamath)	3	2	7	9	0	20
Ranch Reserve (114th & Federal)	0	1	5	1	0	10
Ranch Reserve II (114th & Federal)	0	1	8	2	25	18
Ranch Reserve III (112th & Federal)	2	0	9	3	8	16
Savory Farm (112th & Federal)	2	0	1	4	0	22
Various Infill	0	1	0	1	11	3
Village at Harmony Park (128th & Zuni)	9	7	12	17	185	61
Wadsworth Estates (94th & Wads. Blvd.)	0	0	10	5	1	13
Weatherstone (118th & Sheridan)	0	0	27	0	0	45
Winters Property (111th & Wads. Blvd.)	0	0	0	0	8	0
Winters Property South (110th & Wads. Blvd.)	0	0	0	0	10	0
<i>SUBTOTAL</i>	38	49	122	140	809	410
<u>Single-Family Attached Projects:</u>						
Alpine Vista (88th & Lowell)	0	0	0	0	84	0
Bradburn (120th & Tennyson)	16	10	0	43	122	0
CedarBridge (111th & Bryant)	0	0	0	0	2	0
Center of Hope (93rd & Lark Bunting)	0	0	0	0	28	0
Cottonwood Village (88th & Federal)	0	0	0	10	72	0
Highlands at Westbury (112th & Pecos)	0	0	0	0	171	30
Hollypark (96th & Federal)	0	0	0	0	20	0
Legacy Ridge West (112th & Leg. Ridge Pky.)	0	0	10	0	0	28
Ranch Creek Villas (120th & Federal)	0	16	16	16	16	40
Summit Pointe (W. of Zuni at 82nd Pl.)	0	0	0	0	63	12
Walnut Grove (108th & Wadsworth)	0	0	34	11	19	46
<i>SUBTOTAL</i>	16	26	60	80	597	156
<u>Multiple-Family Projects:</u>						
Bradburn (120th & Tennyson)	0	0	0	0	54	0
Prospector's Point (87th & Decatur)	0	17	0	17	29	0
South Westminster (3 Harris Park projects)	0	0	0	0	27	23
<i>SUBTOTAL</i>	0	17	0	17	110	23
<u>Senior Housing Projects:</u>						
Covenant Retirement Village	0	0	0	0	32	0
Crystal Lakes (San Marino)	0	0	0	0	7	0
East Bay Senior Housing	0	0	0	0	59	0
<i>SUBTOTAL</i>	0	0	0	0	98	0
TOTAL (all housing types)	54	92	182	237	1614	589

* This column refers to the number of approved units remaining to be built in each subdivision.



WESTMINSTER

Staff Report

Information Only Staff Report
May 17, 2004



SUBJECT: First Quarter, 2004 Report on Purchase Orders
Between \$25,000 and \$50,000

PREPARED BY: Carl F. Pickett, Purchasing Specialist

Summary Statement:

This report is for information only and requires no action by City Council.

- City Council requested that the attached report be submitted when Council approved the increased City Manager's spending authority from \$25,000 to \$50,000 on August 1, 2002.
- The report lists all purchase orders that fall in the range between \$25,000 and \$50,000 for the first quarter, January 2004 thru March 2004. The purchases on the report are those Council previously approved and those that Council would have been requested to approve under the previous spending limit requirements, but are now approved by department heads and the City Manager's Office, depending on purchase amount. The report also provides information on what the purchases were, the date, amount and vendor.
- Some of the purchase orders end in even amounts (e.g. \$30,000). These are encumbered purchase orders in which the vendors' invoices will be drawn against the p.o. through the course of the year.

Background Information:

On August 1, 2002, the Ordinance that amended the Municipal Code to increase the dollar amount of purchases that need to come before Council from \$25,000 to \$50,000 passed its second reading, delegating to the City Manager and department heads authority to approve purchases between \$25,000 - \$50,000. Per City Council's request, staff has prepared the attached report to City Council on expenditures authorized between \$25,000 and \$50,000.

From January 2004 thru March 2004, fifty-one purchases between \$25,000 and \$50,000 were made. The attached report lists these purchases starting with purchase date, purchase order number, vendor, purchasing authority used (i.e.: Council approval, three quotes taken, etc.), the National Institute for Government Purchasing (NIGP) code description, and the amount of the purchase.

Respectfully submitted,

Stephen P. Smithers
Acting City Manager

Attachment



WESTMINSTER

Staff Report

Information Only Staff Report
May 17, 2004



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Acting City Manager

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