

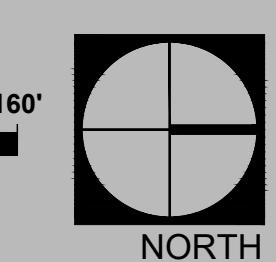
ASPIRE SUBDIVISION
Missoula, Montana

PROPOSED TREE OVERALL PLAN
CONCEPTUAL PHASE
April 11, 2024

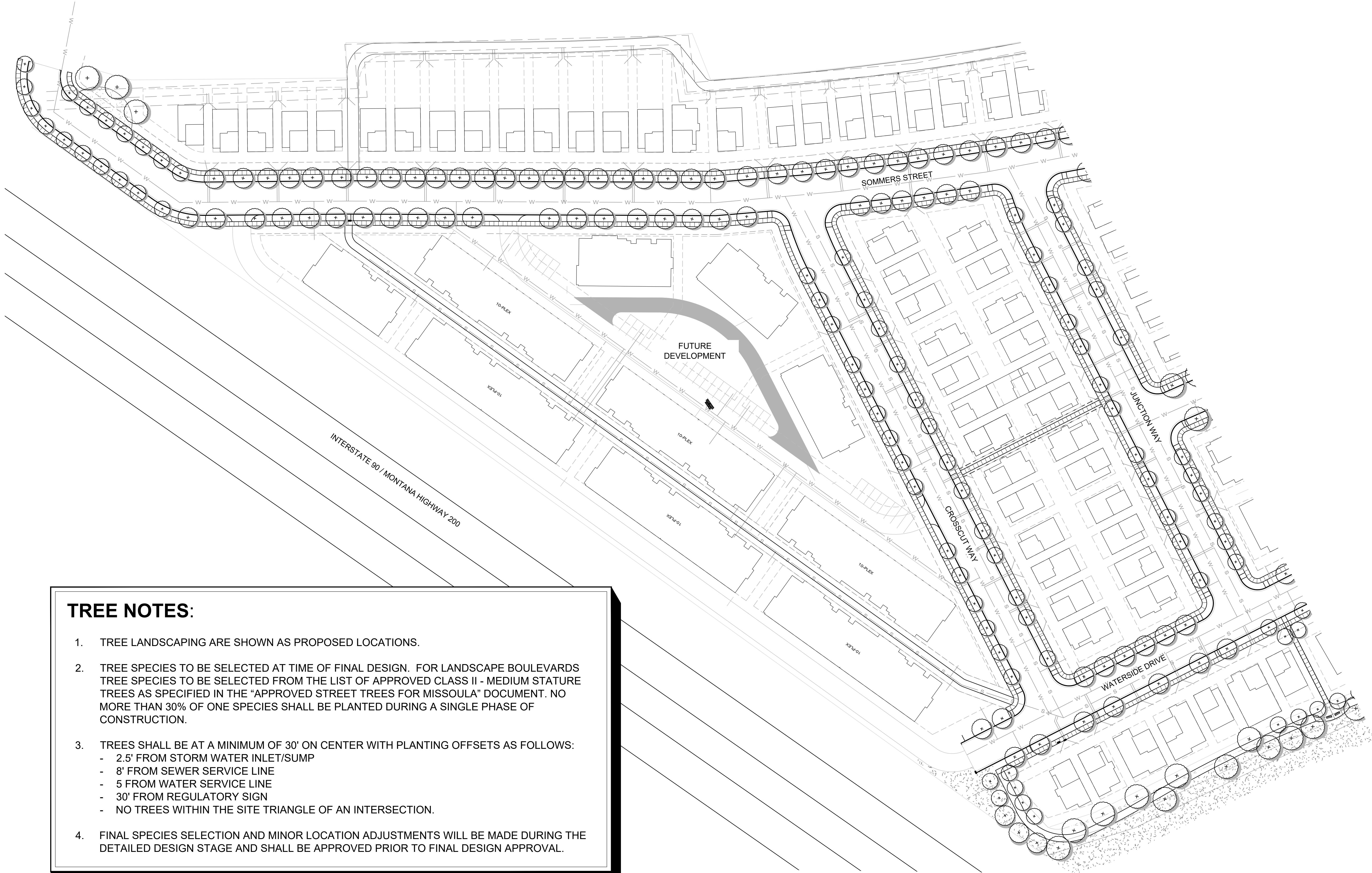
vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596
tel: 925.274.1305
www.vandertoolen.com



0' 40' 80' 160'
SCALE: 1" = 80'-0"



L-1
Project No. 01423



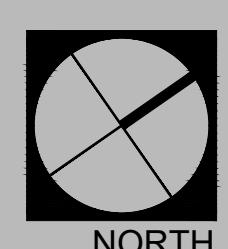
ASPIRE SUBDIVISION
Missoula, Montana

PROPOSED TREE PLAN
CONCEPTUAL PHASE
April 11, 2024

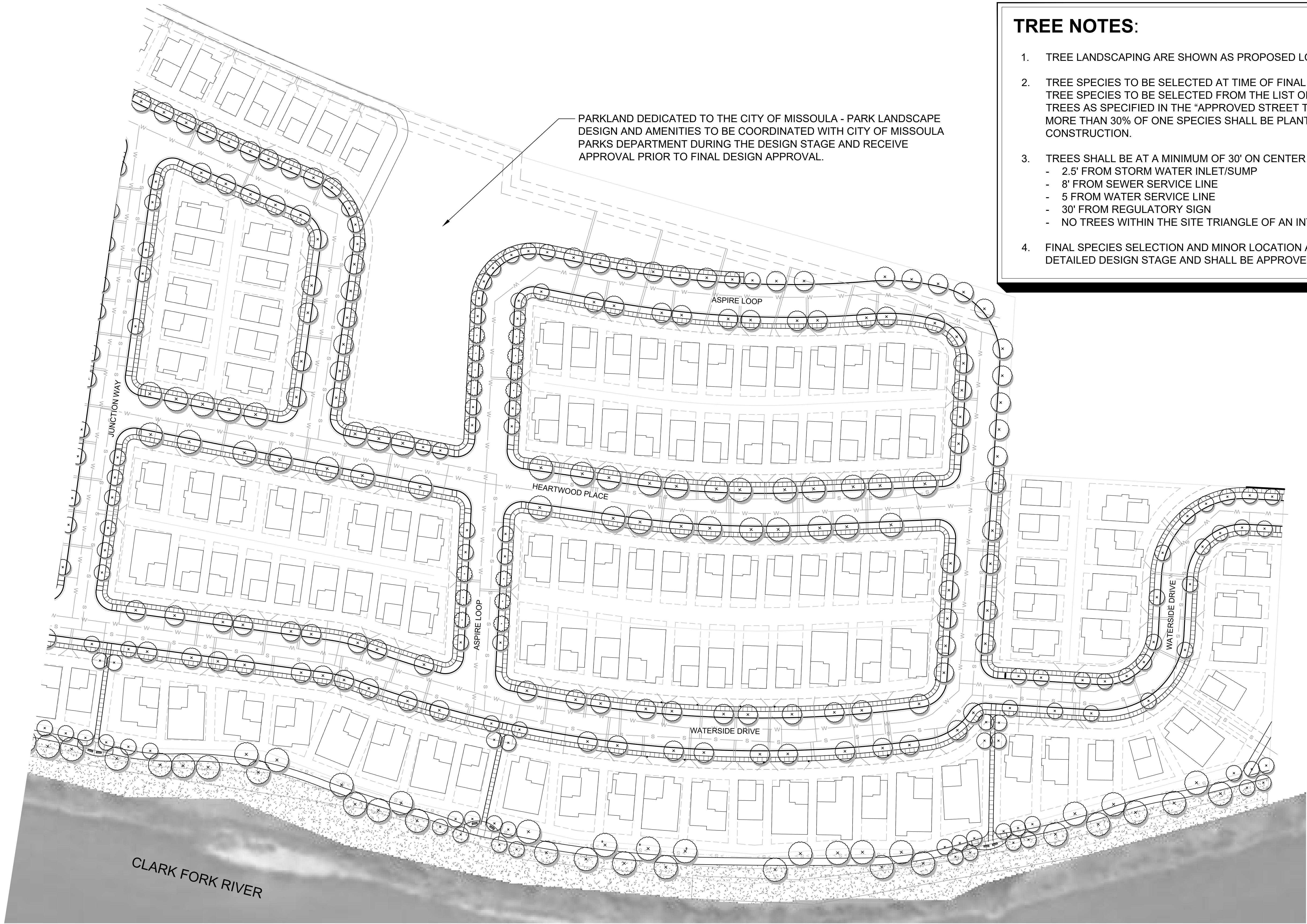
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0' 25' 50' 100'
SCALE: 1" = 50'-0"



L-2
Project No. 01423



ASPIRE SUBDIVISION
Missoula, Montana

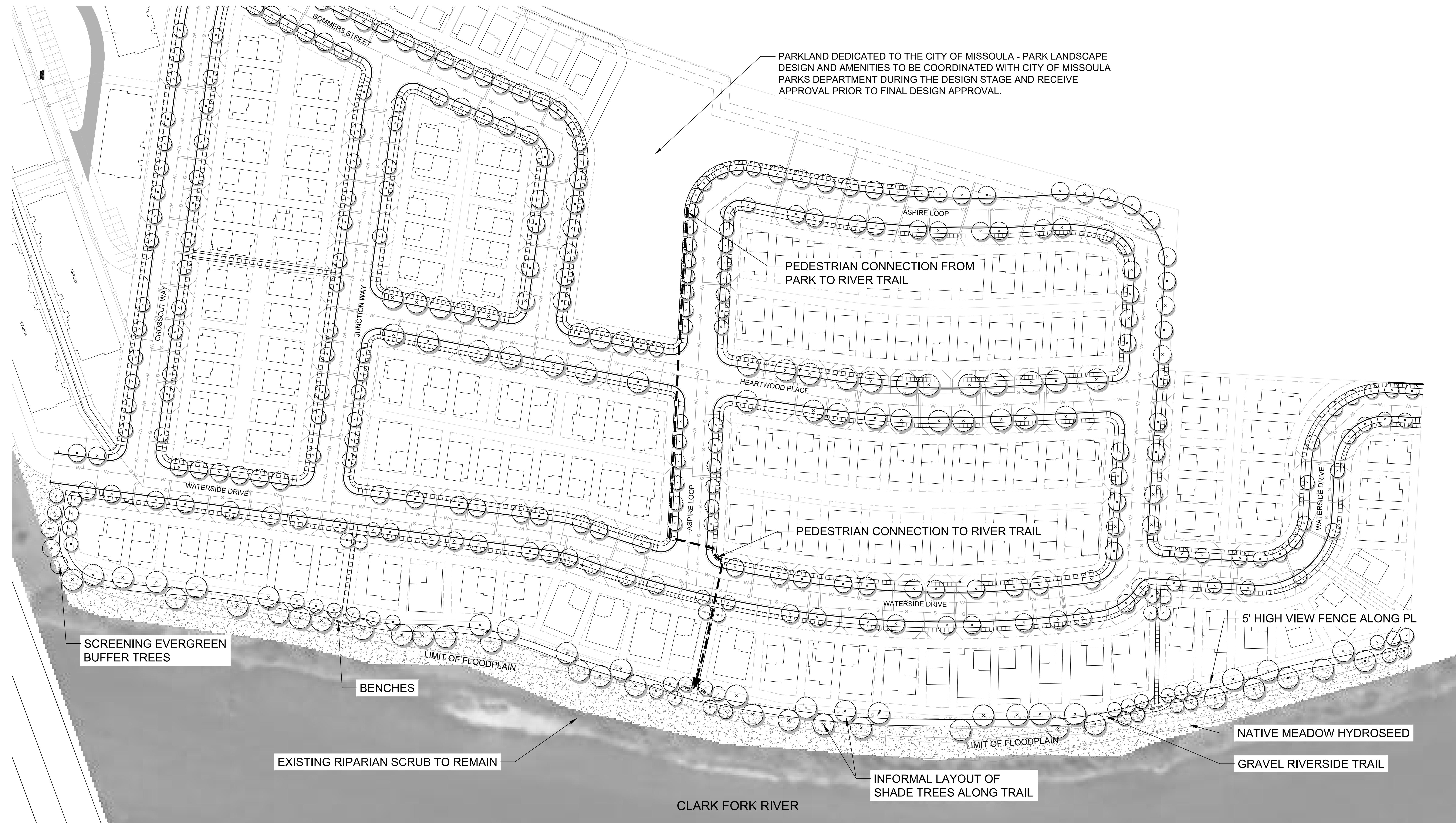
PROPOSED TREE PLAN
CONCEPTUAL PHASE
April 11, 2024

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0' 25' 50' 100'
SCALE: 1" = 50'-0"

L-3
Project No. 01423



GENERAL NOTES:

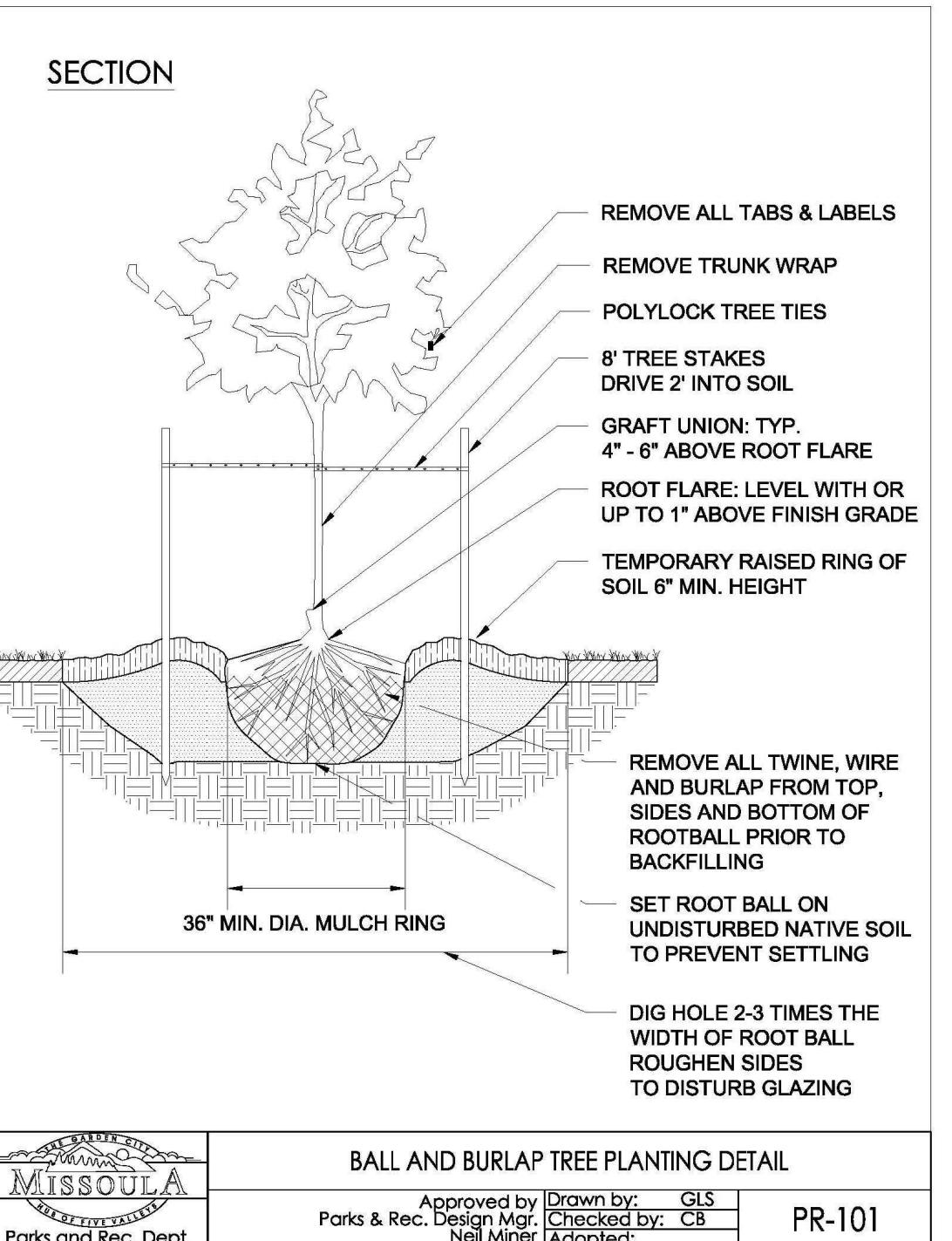
- LOCATE UTILITIES BEFORE PLANTING TREES. NOTIFY MONTANA UTILITY NOTIFICATION CENTER (PHONE #811) PRIOR TO ANY EXCAVATION.
- STREET TREES SHALL BE PLANTED WITHIN SIX (6) MONTHS OF COMPLETION OR OCCUPATION OF PRIMARY STRUCTURE ERECTED ON ANY LOT, WHICHEVER OCCURS FIRST.
- BUILDER OR DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF TOPSOIL AND IRRIGATION IN BOULEVARD AREA FRONTING LOTS.
- CITY OF MISSOULA REQUIRES A PERMIT FOR THE INSTALLATION OF BOULEVARD TREES. SEE CITY OF MISSOULA STREET TREE ORDINANCE CITY MUNICIPAL CODE 12.32.

LANDSCAPE NOTES:

- TREE SELECTIONS FROM THE APPROVED STREET TREES FOR CITY OF MISSOULA
- TREE LAYOUT IS SCHEMATIC. FINAL TREE LOCATIONS AND SPECIES SUBJECT TO CITY REVIEW. OPTIMAL TREE SPACING MAY BE MODIFIED TO ACCOMODATE EXACT LOCATIONS OF UTILITIES, AND STREET LIGHTS. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
- SEE GRADING, DRAINAGE, AND ROAD PLANS PREPARED BY CIVIL ENGINEER FOR MORE DETAILS AND SEPARATION OF TREES UTILITIES, AND LIGHT POLE LOCATIONS.
- STREET CORNERS SHALL BE KEPT CLEAR OF TREES TO ALLOW FOR SITE VISIBILITY AT VEHICULAR INTERSECTIONS
- PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.
- THE PLANTING DESIGN FOR THE SITE CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
- PARKLAND AREAS SHALL BE OWNED BY THE CITY OF MISSOULA. LANDSCAPING IN THESE AREAS SHALL CONSIST OF CLASS I, II, AND III TREES WITH SIMPLE RECREATION AMENITIES SUCH AS TREES AND PEDESTRIAN CIRCULATION PATHS THROUGHOUT THE SPACES, BENCHES AND PICNIC TABLES, NATURAL THEMED PLAY AREA, FLEXIBLE USE OPEN TURF, AND RIVER TRAIL.

IRRIGATION NOTES:

- THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET/'SMART' IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.
- THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, AND POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS AND OVERHEAD SPRAY FOR TURF AREAS.
- PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.



BALL AND BURLAP TREE PLANTING DETAIL

| | | | |
|----------------------|--------------------------------------|----------------|---------------------|
| | BALL AND BURLAP TREE PLANTING DETAIL | | |
| Parks and Rec. Dept. | Approved by: GLS | Drawn by: GLS | PR-101 |
| | Parks & Rec. Design Mgr. | Checked by: CB | Adopted: Neil Miner |

NOTES:

- Plant material must meet the minimum acceptable standard set by the American Association of Nurserymen's American Standard of Nursery Stock: ANSI Z60.1. Broken, damaged, diseased, or substandard stock are prohibited from being planted in the public right-of-way and will be rejected.
- Only class I (small growing) trees are permitted to be planted under or within fifteen (15') of overhead utility lines.
- Prune only broken or damaged branches. Do not apply fertilizer at time of planting.
- The depth of the root ball is measured from the top to the structural root emerges from the trunk. The depth of the root ball shall be measured from the root flare to the bottom of the root ball. Handle B&B plants carefully when transferring to planting hole. Lift or carry by holding the root ball, not the trunk.
- Remove any excess soil from the top of the root ball to expose the root flare. Place tree in planting hole with root flare level with or up to 1" above finish grade.
- Remove all wire baskets and rope from root ball. Be careful to keep the root ball intact.
- Remove all burlap from the root ball. Be careful to keep root ball intact.
- Straighten, cut and remove any circling roots.
- Backfill planting hole 2/3 full with existing soil, settle with water, continue to fill with soil, water again. Water thoroughly after installation to eliminate air pockets.
- Remove any loose soil from the top of the root ball. Be careful to keep the root ball intact.
- Construct mulch ring with a minimum 36" diameter to a depth of 2"-4", leave 3" bare ground between mulch and tree trunk.
- Set stakes parallel to prevailing wind and outside of root ball. Ties must be 1" wide minimum, flexible belt-like strapping. Do not use rope or wire. Do not over-tighten around tree. Ties should be tight enough to support the tree while allowing it to sway. Remove stakes and ties within one year after installation.
- Trees benefit when irrigated separately from turf. Water new trees during summer months to a depth of 12"-18" once per week (about 5 gallons of water per caliper inch) for the first 3 growing seasons. During periods of drought, new trees may need more frequent watering.

BALL AND BURLAP TREE PLANTING NOTES

| | | | |
|----------------------|-------------------------------------|----------------|---------------------|
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TREE NOTES:

- TREE LANDSCAPING ARE SHOWN AS PROPOSED LOCATIONS.
- TREE SPECIES TO BE SELECTED AT TIME OF FINAL DESIGN. FOR LANDSCAPE BOULEVARDS TREE SPECIES TO BE SELECTED FROM THE LIST OF APPROVED CLASS II - MEDIUM STATURE TREES AS SPECIFIED IN THE "APPROVED STREET TREES FOR MISSOULA" DOCUMENT. NO MORE THAN 30% OF ONE SPECIES SHALL BE PLANTED DURING A SINGLE PHASE OF CONSTRUCTION.
- TREES SHALL BE AT A MINIMUM OF 30' ON CENTER WITH PLANTING OFFSETS AS FOLLOWS:
 - 2.5' FROM STORM WATER INLET/SUMP
 - 8' FROM SEWER SERVICE LINE
 - 5' FROM WATER SERVICE LINE
 - 30' FROM REGULATORY SIGN
 - NO TREES WITHIN THE SITE TRIANGLE OF AN INTERSECTION.
- FINAL SPECIES SELECTION AND MINOR LOCATION ADJUSTMENTS WILL BE MADE DURING THE DETAILED DESIGN STAGE AND SHALL BE APPROVED PRIOR TO FINAL DESIGN APPROVAL.

TREE CLEARANCE REQUIREMENTS

| LOCATION | TREE TYPE | MINIMUM CLEARANCE |
|--|----------------------------------|---|
| ADJACENT TO CURBING OR SIDEWALK | CLASS I CLASS II CLASS III | 1.5' OF CURB FACE OR SIDEWALK 3' OF CURB FACE OR SIDEWALK 5' OF CURB FACE OR SIDEWALK |
| ADJACENT TO ANY BUILDING OR STRUCTURE | CLASS I CLASS II & III | 4' OF BUILDING OR STRUCTURE 10' OF BUILDING OR STRUCTURE |
| ADJACENT TO METER BOXES AND PAD TRANSFORMERS | ALL CLASSES | 10' OF METER VAULT BOX OR TRANSFORMER PAD |
| RESIDENTIAL DRIVEWAYS | ALL CLASSES | 10' OF A DRIVEWAY |
| COMMERCIAL DRIVEWAYS | CLASS I CLASS II & III | 15' OF A DRIVEWAY 10' OF A DRIVEWAY |
| ALLEYWAYS | CLASS I CLASS II & III | 15' OF AN ALLEYWAY 10' OF AN ALLEYWAY |
| FIRE HYDRANTS AND UTILITY POLES | ALL CLASSES | 10' OF A HYDRANT OR UTILITY POLE |
| SANITARY SEWER LATERAL | ALL CLASSES | 10' FROM SANITARY SEWER LATERALS |
| STREET LIGHTS | CLASS I CLASS II & III | 10' FROM STREET LIGHTS 20' FROM STREET LIGHTS |
| TRAFFIC CONTROL SIGNS | CLASS I CLASS II & III | 40' IN FRONT OF TRAFFIC CONTROL SIGNS 25' IN FRONT OF TRAFFIC CONTROL SIGNS; TREES MAY BE PLANTED ADJACENT TO SIGNS IF THE BOULEVARD WIDTH IS 10' OR WIDER |
| UNDER POWER LINES | CLASS I CLASS II & III | ALLOWED NOT ALLOWED |
| CORNER SIGHT TRIANGLE | CLASS I CLASS II & III | 40' FROM INTERSECTION RETURN 40' FROM INTERSECTION RETURN ON A BOULEVARD WIDTH OF 8' OR LESS; 30' FROM INTERSECTION RETURN ON BOULEVARD WIDTH OF 8' TO 16' |