

ORIGINAL SHEET - ANSI D

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CAWLEY - FOURTEEN555 14555 DALLAS PARKWAY

Permit-Seal

Project Number: 222011532

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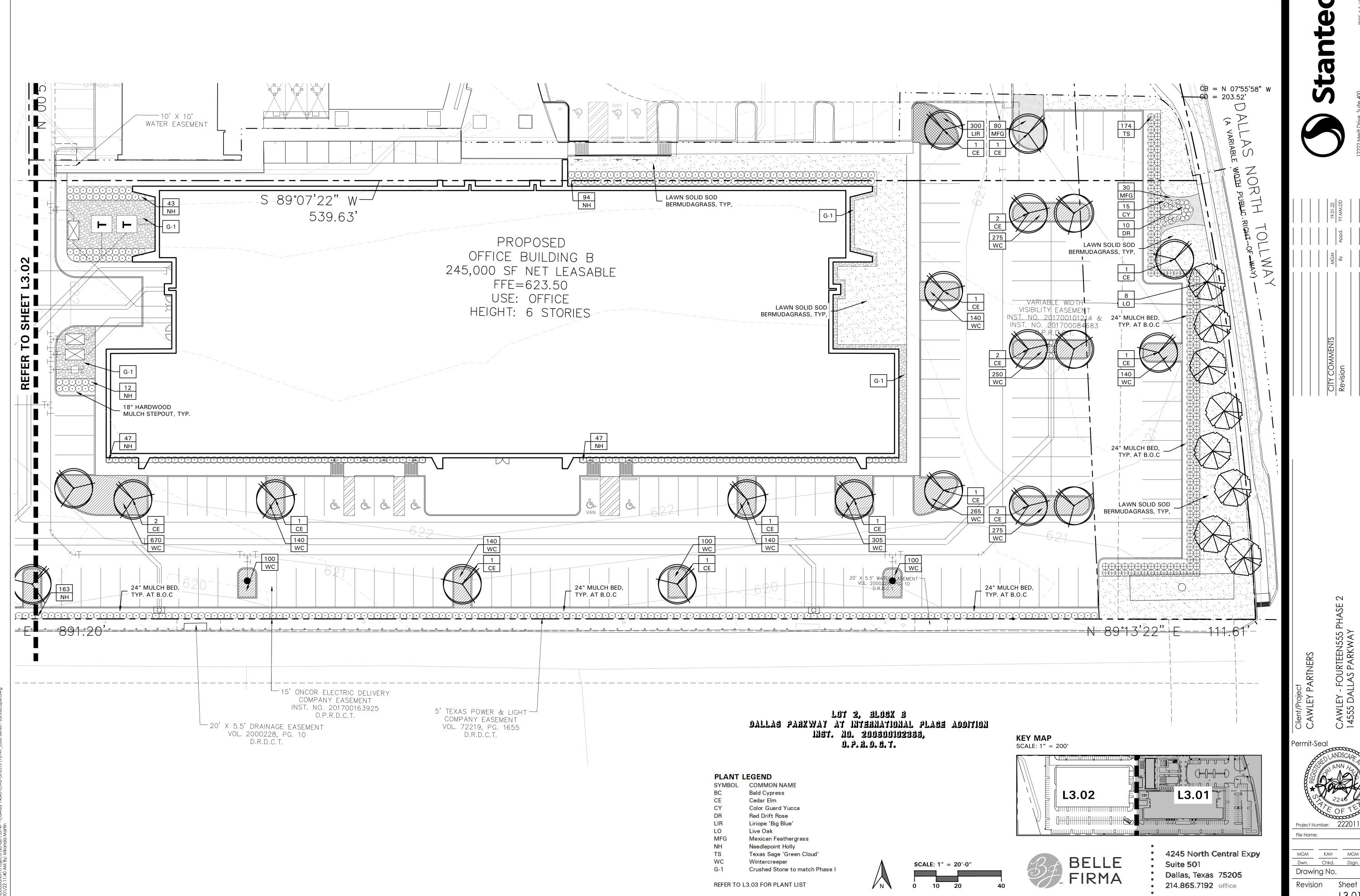
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Drawing No. Revision Sheet

Dallas, Texas 75205

• 214.865.7192 office

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ORIGINAL SHEET - ANSI D



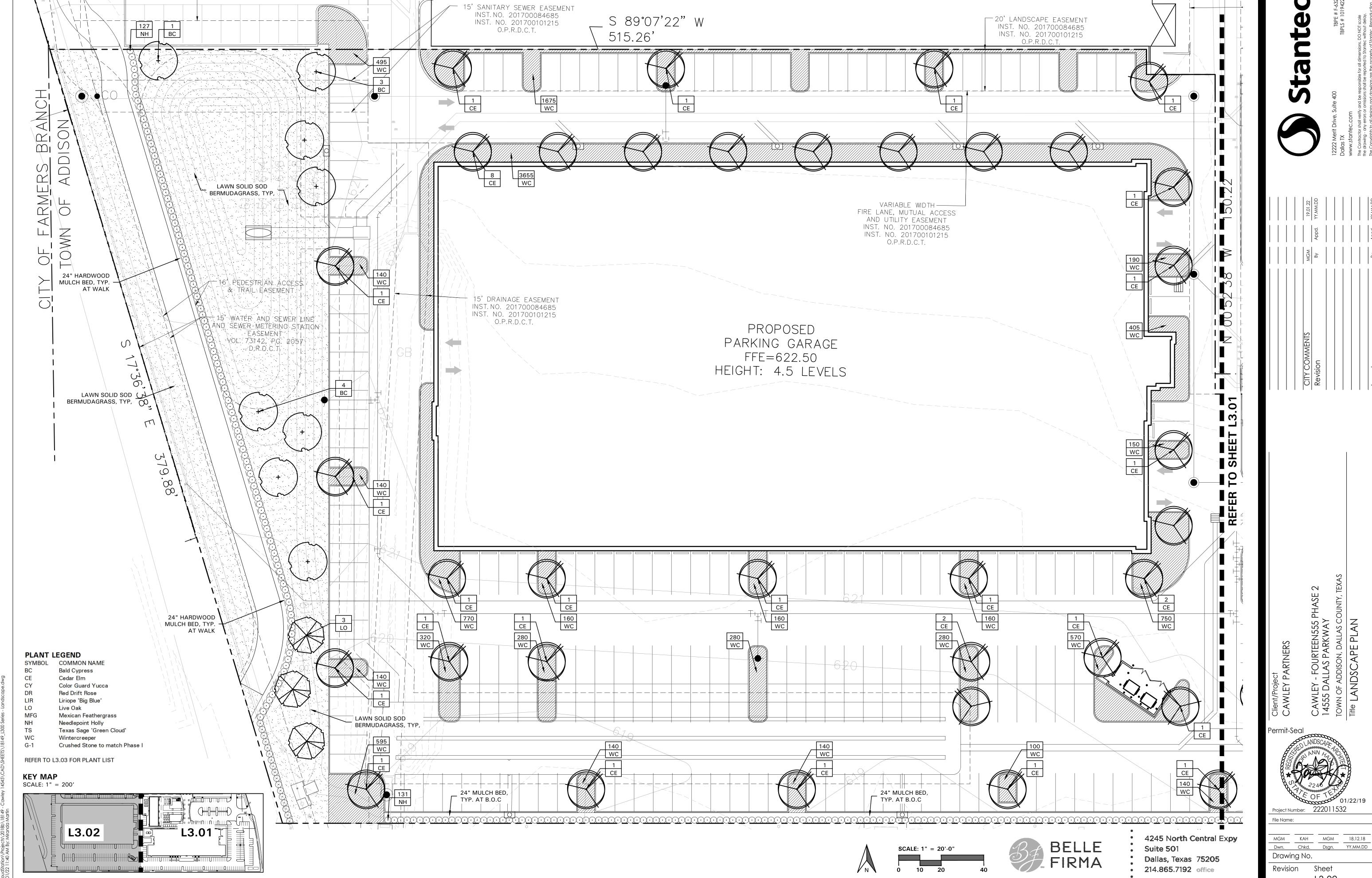


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Project Number: 222011532

L3.02

ORIGINAL SHEET - ANSI D

LANDSCAPE TABULATIONS

THE CITY OF ADDISON, TEXAS

PHASE II:

Required

SITE LANDSCAPE 1. 20% of the site to be landscape area.

Total Site Area: 289,497 s.f. (6.646 acre)

Provided

58,194 s.f. (20%)

STREET LANDSCAPE BUFFER

57,899 s.f. (20%)

- 1. 20' landscape buffer. 2. One (1) shade tree, 4" cal., per 30 l.f. of street
- 3. Evergreen shrubs planted 3' to 3.5' on center.

Dallas North Tollway: 236 l.f. Required

Provided 20' landscape buffer provided (8) trees, 4" cal. (8) trees, 4" cal. evergreen shrubs 3' o.c. evergreen shrubs 3' o.c.

PARKING LOT PERIMETER

1. Evergreen shrubs planted 3' to 3.5' on center.

Parking Lot Perimeter: 813 l.f.

evergreen shrubs, 3' o.c evergreen shrubs, 3' o.c

PARKING LOT SCREENING

- 1. Evergreen shrubs planted 3' on center in a single row in a bed at least 42" wide.
- 2. The surface parking lot screening must be at least 3.5' higher than the finished elevation of the adjacent parking lot.

evergreen shrubs, 3' o.c. evergreen shrubs, 3' o.c.

PARKING LOT LANDSCAPE

1. 10% of the total parking area to be landscaped.

2. One (1) large shade tree per 10 parking spaces.

Total Parking Area: 117,755 s.f.

Total Parking spaces: 339 Required 11,776 s.f. (10%) 14,556 s.f. (12%)

(34) shade tree, 4" cal. (46) shade tree, 4" cal.

LANDSCAPE NOTES

- 1. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
- 2. CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND UTILITIES.
- 3. CONTRACTOR SHALL PROVIDE A MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES.
- 4. CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
- 5. ALL PLANTING BEDS AND LAWN AREAS SHALL BE SEPARATED BY STEEL EDGING. NO STEEL EDGING SHALL BE INSTALLED ADJACENT TO BUILDINGS. WALKS, OR CURBS. CUT STEEL EDGING AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS AND CURBS.
- 6. TOP OF MULCH SHALL BE 1/2" MINIMUM BELOW THE TOP OF WALKS AND CURBS.
- 7. ALL LAWN AREAS SHALL BE SOLID SOD BERMUDAGRASS, UNLESS OTHERWISE NOTED ON THE
- 8. ALL REQUIRED LANDSCAPE AREAS SHALL BE PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS AND EVAPOTRANSPIRATION (ET) WEATHER-BASED CONTROLLERS AND SAID IRRIGATION SYSTEM SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL AND INSTALLED BY A LICENSED IRRIGATOR.
- 9. CONTRACTOR SHALL PROVIDE BID PROPOSAL LISTING UNIT PRICES FOR ALL MATERIAL PROVIDED.
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPE AND IRRIGATION PERMITS.

MAINTENANCE NOTES

- 1. THE OWNER, TENANT AND THEIR AGENT, IF ANY, SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE.
- 2. ALL LANDSCAPE SHALL BE MAINTAINED IN A NEAT AND ORDERLY MANNER AT ALL TIMES. THIS SHALL INCLUDE MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING AND OTHER SUCH ACTIVITIES COMMON TO LANDSCAPE MAINTENANCE.
- 3. ALL LANDSCAPE AREAS SHALL BE KEPT FREE OF TRASH, LITTER, WEEDS AND OTHER SUCH MATERIAL OR PLANTS NOT PART OF THIS PLAN.
- 4. ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION AS IS APPROPRIATE FOR THE SEASON OF THE YEAR.
- 5. ALL PLANT MATERIAL WHICH DIES SHALL BE REPLACED WITH PLANT MATERIAL OF EQUAL OR BETTER VALUE.
- 6. CONTRACTOR SHALL PROVIDE SEPARATE BID PROPOSAL FOR ONE YEAR'S MAINTENANCE TO BEGIN AFTER FINAL ACCEPTANCE.

GENERAL LAWN NOTES

- 1. CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER.
- 2. CONTRACTOR SHALL LEAVE LAWN AREAS 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
- 3. CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED ON CIVIL PLANS. ADJUST CONTOURS TO ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS. PROVIDE UNIFORM ROUNDING AT TOP AND BOTTOM OF SLOPES AND OTHER BREAKS IN GRADE. CORRECT IRREGULARITIES AND AREAS WHERE WATER MAY STAND.
- 4. ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
- 5. CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLODS, STICKS, CONCRETE SPOILS, ETC. PRIOR TO PLACING TOPSOIL AND LAWN INSTALLATION.
- 6. CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: MOWING, WATERING, WEEDING, CULTIVATING, CLEANING AND REPLACING DEAD OR BARE AREAS TO KEEP PLANTS IN A VIGOROUS, HEALTHY CONDITION.
- 7. CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT FROM LOCAL SUPPLY IF NECESSARY.

SOLID SOD NOTES

- 1. PLANT SOD BY HAND TO COVER INDICATED AREAS COMPLETELY. ENSURE EDGES OF SOD ARE TOUCHING. TOP DRESS JOINTS BY HAND WITH TOPSOIL TO FILL
- 2. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE, FREE FROM UNNATURAL UNDULATIONS.
- 3. WATER SOD THOROUGHLY AS SOD OPERATION PROGRESSES.
- 4. IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1 AND MARCH 1, OVER-SEED BERMUDAGRASS SOD WITH WINTER RYEGRASS, AT A RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1000) SQUARE FEET.

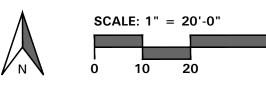
PLANT LIST

MISCELLANEOUS

SYMBOL	BOTANICAL NAME TREES	COMMON NAME	QTY.	SIZE	REMARKS
BC	Taxodium distichum	Bald Cypress	8	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
CE	Ulmus crassifolia	Cedar Elm	54	4" cal.	container grown, 15' ht., 5' spread, 5' branching ht., matching
LO	Quercus virginiana	Live Oak	11	4" cal.	container grown, 15' ht., 5' spread, 5' branching ht., matching
	SHRUBS/GROUNDCOVER				
CY	Yucca filamentosa 'Color Guard'	Color Guard Yucca	15	5 gal.	container full, 24" o.c.
DR	Rosa 'Red Drift'	Red Drift Rose	10	5 gal.	container full, 24" spread, 24" o.c.
LIR	Liriope muscari 'Big Blue'	Liriope 'Big Blue'	300	4" pots	container full top of container, 12" o.c.
MFG	Nassella tenuissima	Mexican Feathergrass	110	1 gal.	container full, 24" o.c.
NH	llex cornuta 'Needlepoint'	Needlepoint Holly	664	5 gal.	container full, 24" spread, 36" o.c.
TS	Leucophyllum frutescens 'Green Cloud'	Texas Sage 'Green Cloud'	174	5 gal.	container full, 20" spread, 36" o.c.
WC	Euonymus fortunei 'Coloratus'	Wintercreeper	14,875	4" pots	container (3) 12" runners min., 12" o.c.
	Cynodon dactylon	Common Bermudagrass			refer to notes

Crushed Stone to match Phase I

NOTE: ALL TREES SHALL HAVE STRAIGHT TRUNKS AND BE MATCHING WITHIN VARIETIES. PLANT LIST IS AN AID TO BIDDERS ONLY. CONTRACTOR SHALL VERIFY ALL QUANTITIES ON PLAN. ALL HEIGHTS AND SPREADS ARE MINIMUMS. ALL PLANT MATERIAL SHALL MEET OR EXCEED REMARKS AS INDICATED.





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Dallas, Texas 75205 214.865.7192 office

4" depth with weed barrier fabric

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Permit-Seal

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KAH

Drawing No.

Revision

MGM

Sheet L3.03

MGM 18.12.18

1.1 REFERENCED DOCUMENTS

A. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.

1.2 DESCRIPTION OF WORK

- A. Work included: Furnish all supervision, labor, materials, services, equipment and appliances required to complete the work covered in conjunction with the landscaping covered in these specifications and landscaping plans, including:
- 1. Planting (trees, shrubs and grasses)
- 2. Bed preparation and fertilization
- 3. Notification of sources
- 4. Water and maintenance until final acceptance
- Guarantee

1.3 REFERENCE STANDARDS

- A. American Standard for Nursery Stock published by American Association of Nurserymen: 27 October 1980, Edition; by American National Standards Institute, Inc. (Z60.1) - plant material
- B. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized Plant Names.
- C. Texas Association of Nurserymen, Grades and Standards
- D. Hortis Third, 1976 Cornell University

1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

A. Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel, crushed stone, steel edging and tree stakes. Samples shall be approved by Owner's Authorized Representative before use on the project.

1.5 JOB CONDITIONS

- A. General Contractor to complete the following punch list: Prior to 1.7 QUALITY ASSURANCE Landscape Contractor initiating any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below final finish grade of sidewalks, drives and curbs as shown on the drawings. All lawn areas to receive solid sod shall be left one (1") inch below the final finish grade of sidewalks, drives and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.
- B. Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.

1.6 MAINTENANCE AND GUARANTEE

A. Maintenance:

- 1. The Landscape Contractor shall be held responsible for the maintenance of all work from the time of planting until final acceptance by the Owner. No trees, shrubs, groundcover or grass will be accepted unless they show healthy growth and satisfactory foliage conditions.
- 2. Maintenance shall include watering of trees and plants, cultivation, weeding spraying, edging, pruning of trees, mowing of grass, cleaning up and all other work necessary of maintenance.
- 3. A written notice requesting final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by the Owner's Authorized Representative will be completed prior to written acceptance.

- 1. Trees, shrubs and groundcover shall be guaranteed for a twelve (12) month period after final acceptance. The Contractor shall replace all dead materials as soon as weather permits and upon notification of the Owner. Plants, including trees, which have partially died so that shape, size, or symmetry have been damaged, shall be considered subject to replacement. In such cases, the opinion of the Owner shall be final.
- a. Plants used for replacement shall be of the same size and kind as those originally planted and shall be planted as originally specified. All work, including materials, labor and equipment used in replacements, shall carry a twelve (12) month guarantee. Any damage, including ruts in lawn or bed areas, incurred as a result of making replacements shall be immediately repaired.
- b. At the direction of the Owner, plants may be replaced at the start of the next year's planting season. In such cases, dead plants shall be removed from the premises 1.8 PRODUCT DELIVERY, STORAGE AND HANDLING immediately.
- c. When plant replacements are made, plants, soil mix, fertilizer and mulch are to be utilized as originally specified and re-inspected for full compliance with the contract requirements. All replacements are to be included under "Work" of this section.
- 2. The Owner agrees that for the guarantee to be effective, he will water plants at least twice a week during dry periods and cultivate beds once a month after final acceptance.
- 3. The above guarantee shall not apply where plants die after acceptance because of injury from storms, hail, freeze, insects, diseases, injury by humans, machines or theft.
- 4. Acceptance for all landscape work shall be given after final inspection by the Owner provided the job is in a complete, undamaged condition and there is a stand of grass in all lawn areas. At that time, the Owner will assume maintenance on the accepted work.
- Repairs: Any necessary repairs under the Guarantee must be made within ten (10) days after receiving notice, weather permitting. In the event the Landscape Contractor does not make repairs accordingly, the Owner, without further notice to Contractor, may provide materials and men to make such repairs at the expense to the Landscape Contractor.

- A. General: Comply with applicable federal, state, county and local regulations governing landscape materials and work.
- B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foreman acceptable to Landscape Architect.
- C. Selection of Plant Material: Make contact with suppliers immediately upon obtaining notice of contract acceptance to select and book materials. Develop a program of maintenance (pruning and fertilization) which will ensure the purchased materials will meet and / or exceed project specifications.
- 2. Substitutions: Do not make plant material substitutions. If the specified landscape material is not obtainable, submit proof of non-availability to Landscape Architect, together with proposal for use of equivalent material. At the time bids are submitted, the Contractor is assumed to have located the materials necessary to complete the job as specified.
- 3. Landscape Architect will provide a key identifying each tree location on site. Written verification will be required to document material selection, source and delivery schedules
- 4. Measurements: Measure trees with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements six inches above ground for trees up to and including 4" caliper size, and twelve inches above ground for larger sizes. Measure main body of all plant material of height and spread dimensions,

do not measure from branch or root tip-to-tip.

- 5. Owner's Authorized Representative shall inspect all plant material with requirements for genus, species, cultivar variety size and quality.
- 6. Owner's Authorized Representative retains the right to further inspect all plant material upon arrival to the site and during installation for size and condition of root balls and root systems, limbs, branching habit, insects, injuries and latent defects.
- 7. Owner's Authorized Representative may reject unsatisfactory or defective material at any time during the process work. Remove rejected materials immediately from the site and replace with acceptable material at no additional cost to the Owner. Plants damaged in transit or at job site shall be rejected.

A. Preparation:

- Balled and Burlapped (B&B) Plants: Dig and prepare shipment in a manner that will not damage roots, branches, shape and future development.
- 2. Container Grown Plants: Deliver plants in rigid container to hold ball shape and protect root mass.

B. Delivery:

- 1. Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored on site.
- 2. Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available
- 3. Protect root balls by heeling in with sawdust or other approved moisture retaining material if not planted within 24
- 4. Protect plants during delivery to prevent damage to root balls or desiccation of leaves. Keep plants moist at all
- times. Cover all materials during transport. 5. Notify Owner's Authorized Representative of delivery schedule 72 hours in advance job site.
- 6. Remove rejected plant material immediately from job site.
- 7. To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

PART 2 - PRODUCTS

2.1 PLANTS

- A. General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from tops of root balls to nominal tops of plants. Plant spread refers to nominal outer width of the plant. not to the outer leaf tips. Plants will be individually approved by the Owner's Authorized Representative and his decision as to their acceptability shall be final.
- Quantities: The drawings and specifications are complimentary. 2.3 MISCELLANEOUS MATERIALS Anything called for on one and not the other is as binding as if shown and called for on both. The plant schedule is an aid to bidders only. Confirm all quantities on plan.
- C. Quality and size: Plant materials shall conform to the size given on the plan, and shall be healthy, symmetrical, well-shaped, full branched and well rooted. The plants shall be free from injurious insects, diseases, injuries to the bark or roots, broken branches objectionable disfigurements, insect eggs and larvae, and are to be of specimen quality.
- Approval: All plants which are found unsuitable in growth, or are in any unhealthy, badly shaped or undersized condition will be rejected by the Owner's Authorized Representative either before or after planting and shall be removed at the expense of the

specified at no additional cost to the Owner.

- E. Trees shall be healthy, full-branched, well-shaped, and shall meet the minimum trunk and diameter requirements of the plant schedule. Balls shall be firm, neat, slightly tapered and well wrapped in burlap. Any tree loose in the ball or with a broken PART 3 - EXECUTION root ball at time of planting will be rejected. Balls shall be ten (10") inches in diameter for each one (1") inch of trunk diameter, 3.1 BED PREPARATION & FERTILIZATION measured six (6") inches above ball. (Nomenclature confirms to the customary nursery usage. For clarification, the term "multi-trunk" defines a plant having three (3) or more trunks of nearly equal diameter.)
- F. Pruning: All pruning of trees and shrubs, as directed by the Landscape Architect prior to final acceptance, shall be executed by the Landscape Contractor at no additional cost to the Owner

2.2 SOIL PREPARATION MATERIALS

A. Sandy Loam:

- 1. Friable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones and other extraneous material and reasonably free of weeds and foreign grasses. Loam containing Dallasgrass or Nutgrass shall be rejected.
- 2. Physical properties as follows: Clay – between 7-27 percent
- Silt between 15-25 percent c. Sand – less than 52 percent
- 3. Organic matter shall be 3%-10% of total dry weight.
- 4. If requested, Landscape Contractor shall provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.
- B. Organic Material: Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of 3.2 INSTALLATION course and fine textured material.
- C. Premixed Bedding Soil as supplied by Vital Earth Resources, Gladewater, Texas; Professional Bedding Soil as supplied by Living Farth Technology, Dallas, Texas or Acid Gro Municipal Mix as supplied by Soil Building Systems, Dallas, Texas or approved
- D. Sharp Sand: Sharp sand must be free of seeds, soil particles and
- E. Mulch: Double Shredded Hardwood Mulch, partially decomposed, dark brown. Living Earth Technologies or approved equal.
- F. Organic Fertilizer: Fertilaid, Sustane, or Green Sense or equal as recommended for required applications. Fertilizer shall be delivered to the site in original unopened containers, each bearing the manufacturer's guaranteed statement of analysis.
- G. Commercial Fertilizer: 10-20-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic Nitrogen (SCU or UF) with a minimum 8% sulfur and 4% iron, plus micronutrients
- H. Peat: Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.

- Steel Edging: All steel edging shall be 3/16" thick x 4" deep x 16' long with 6 stakes per section, painted black at the factory as manufactured by The J.D. Russell Company and under its trade name DURAEDGE Heavy Duty Steel.
- B. Staking Material for Shade Trees: refer to details.
- C. Gravel: Washed native pea gravel, graded 1 inch to 1-1/2 inch.
- D. Filter Fabric: 'Mirafi Mirascape' by Mirafi Construction Products available at Lone Star Products, Inc., (469) 523-0444 or approved equal.

O2 SHRUB / GROUNDCOVER DETAIL NOT TO SCALE

E. River Rock: 'Colorado' or native river rock, 2" - 4" dia.

F. Decomposed Granite: Base material shall consist of a natural material mix of granite aggregate not to exceed 1/8" diameter in size and shall be composed of various stages of decomposed

- A. Landscape Contractor to inspect all existing conditions and report any deficiencies to the Owner.
- B. All planting areas shall be conditioned as follows:
- 1. Prepare new planting beds by scraping away existing grass and weeds as necessary. Till existing soil to a depth of six (6") inches prior to placing compost and fertilizer. Apply fertilizer as per Manufacturer's recommendations. Add six (6") inches of compost and till into a depth of six (6") inches of the topsoil. Apply organic fertilizer such as Sustane or Green Sense at the rate of twenty (20) pounds per one thousand (1,000) square feet.
- 2. All planting areas shall receive a two (2") inch layer of specified mulch.
- 3. Backfill for tree pits shall be as follows: Use existing top soil on site (use imported topsoil as needed) free from large clumps, rocks, debris, caliche, subsoils, etc., placed in nine (9") inch layers and watered in thoroughly.

C. Grass Areas:

Blocks of sod should be laid joint to joint (staggered joints) after fertilizing the ground first. Roll grass areas to achieve a smooth, even surface. The joints between the blocks of sod should be filled with topsoil where they are evidently gaped open, then watered thoroughly.

- A. Maintenance of plant materials shall begin immediately after each plant is delivered to the site and shall continue until all construction has been satisfactorily accomplished.
- Plant materials shall be delivered to the site only after the beds are prepared and areas are ready for planting. All shipments of nursery materials shall be thoroughly protected from the drying winds during transit. All plants which cannot be planted at once, after delivery to the site, shall be well protected against the possibility of drving by wind and Balls of earth of B & B plants shall be kept covered with soil or other acceptable material. Al plants remain the property of the Contractor until final

Position the trees and shrubs in their intended location as per

- D. Notify the Owner's Authorized Representative for inspection and approval of all positioning of plant materials.
- E. Excavate pits with vertical sides and horizontal bottom. Tree pits shall be large enough to permit handling and planting without injury to balls of earth or roots and shall be of such depth that, when planted and settled, the crown of the plant shall bear the same relationship to the finish grade as it did to soil surface in original place of growth.
- F. Shrub and tree pits shall be no less than twenty-four (24") inches wider than the lateral dimension of the earth ball and six (6") inches deeper than it's vertical dimension. Remove and haul from site all rocks and stones over three-quarter (3/4") inch in diameter. Plants should be thoroughly moist before removing 3.3 CLEANUP AND ACCEPTANCE

G. Dig a wide, rough sided hole exactly the same depth as the

height of the ball, especially at the surface of the ground. The

sides of the hole should be rough and jagged, never slick or

H. Percolation Test: Fill the hole with water. If the water level does not percolate within 24 hours, the tree needs to move to another END OF SECTION location or have drainage added. Install a PVC stand pipe per

- tree planting detail as approved by the Landscape Architect if the percolation test fails.
- Backfill only with 5 parts existing soil or sandy loam and 1 part bed preparation. When the hole is dug in solid rock, topsoil from the same area should not be used. Carefully settle by watering to prevent air pockets. Remove the burlap from the top $\frac{1}{3}$ of the ball, as well as all nylon, plastic string and wire. Container trees will usually be root bound, if so follow standard nursery practice
- of 'root scoring'. J. Do not wrap trees.

K. Do not over prune.

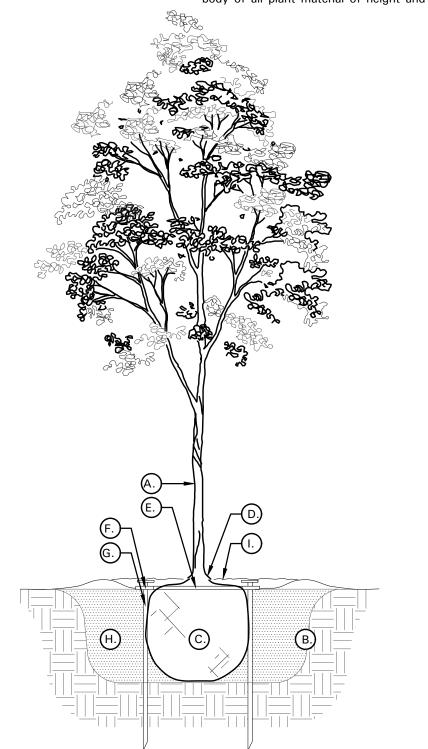
- Mulch the top of the ball. Do not plant grass all the way to the trunk of the tree. Leave the area above the top of the ball and mulch with at least two (2") inches of specified mulch.
- M. All plant beds and trees to be mulched with a minimum settled thickness of two (2") inches over the entire bed or pit.
- N. Obstruction below ground: In the event that rock, or underground construction work or obstructions are encountered in any plant pit excavation work to be done under this section, alternate locations may be selected by the Owner. Where locations cannot be changed, the obstructions shall be removed to a depth of not less than three (3') feet below grade and no less than six (6") inches below the bottom of ball when plant is properly set at the required grade. The work of this section shall include the removal from the site of such rock or underground obstructions encountered at the cost of the Landscape
- O. Trees and large shrubs shall be staked as site conditions require. Position stakes to secure trees against seasonal prevailing winds.
- P. Pruning and Mulching: Pruning shall be directed by the Landscape Architect and shall be pruned in accordance with standard horticultural practice following Fine Pruning, Class I pruning standards provided by the National Arborist Association.
- Dead wood, suckers, broken and badly bruised branches shall be removed. General tipping of the branches is not permitted. Do not cut terminal branches.
- 2. Pruning shall be done with clean, sharp tools
- 3. Immediately after planting operations are completed, all tree pits shall be covered with a layer of organic material two (2") inches in depth. This limit of the organic material for trees shall be the diameter of the plant pit.

Q. Steel Curbing Installation:

- Curbing shall be aligned as indicated on plans. Stake out limits of steel curbing and obtain Owners approval prior to installation.
- 2. All steel curbing shall be free of kinks and abrupt bends.
- 3. Top of curbing shall be $\frac{1}{2}$ " maximum height above final
- 4. Stakes are to be installed on the planting bed side of the curbing, as opposed to the grass side.
- 5. Do not install steel edging along sidewalks or curbs.
- 6. Cut steel edging at 45 degree angle where edging meets sidewalks or curbs.

A. Cleanup: During the work, the premises shall be kept neat and orderly at all times. Storage areas for all materials shall be so organized so that they, too, are neat and orderly. All trash and debris shall be removed from the site as work progresses. Keep paved areas clean by sweeping or hosing them at end of each

work day.



1 TREE PLANTING DETAIL NOT TO SCALE

TREE PLANTING DETAIL LEGEND **AND NOTES**

- A. TREE: TREES SHALL CONFORM WITH LATEST AMERICAN STANDARD FOR NURSERY STOCK. www.anla.org
- B. TREE PIT: WIDTH TO BE AT LEAST TWO (2) TIMES THE DIAMETER OF THE ROOT BALL CENTER TREE IN HOLE & REST ROOT BALL ON UNDISTURBED NATIVE
- C. ROOT BALL: REMOVE TOP 1/3 BURLAP AND ANY OTHER FOREIGN OBJECT; CONTAINER GROWN STOCK TO BE INSPECTED FOR GIRDLING ROOTS.

FLARE IS EXPOSED, FREE FROM MULCH,

AND AT LEAST TWO INCHES ABOVE

GRADE. TREES SHALL BE REJECTED

D. ROOT FLARE: ENSURE THAT ROOT

- WHEN GIRDLING ROOTS ARE PRESENT & ROOT FLARE IS NOT APPARENT. E. ROOTBALL ANCHOR RING: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. PLACE ROOTBALL ANCHOR RING ON BASE OF ROOTBALL, TRUNK
- F. ROOT ANCHOR BY TREE STAKE SOLUTIONS.

SHOULD BE IN THE CENTER OF THE

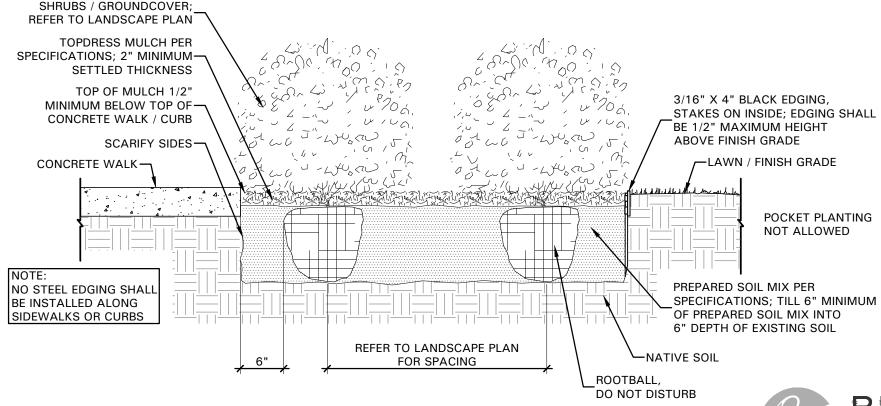
STAKE: MANUFACTURER'S GUIDELINES FOR SIZING. INSTALL NAIL STAKES WITH HAMMER OR MALLET FIRMLY INTO UNDISTURBED GROUND. DRIVE NAIL STAKES FLUSH WITH "U" BRACKET ADJACENT TO ROOTBALL (DO NOT DISTURB ROOTBALL).

- H. BACKFILL: USE EXISTING NATIVE SOIL (no amendments) WATER THOROUGHLY TO ELIMINATE AIR POCKETS.
- HARDWOOD MULCH 2 INCH SETTLED THICKNESS, WITH 2" HT. WATERING RING: ENSURE THAT ROOT FLARE IS EXPOSED. BELOW GROUND STAKE SHOULD NOT BE VISIBLE.
- AVAILABLE FROM: Tree Stake Solutions ATTN: Jeff Tuley (903) 676-6143
- NECESSARY; ABOVE GROUND STAKING IS EXPRESSLY PROHIBITED.
- THE SPECIFICATIONS PRIOR INSTALLATION.

- MULCH: DOUBLE SHREDDED
- TREE STAKES: TREE STAKE SOLUTIONS 'SAFETY STAKE' BELOW GROUND MODEL

jeff@treestakesolutions.com

- www.treestakesolutions.com OR APPROVED EQUAL. TREES SHALL BE STAKED BELOW GROUND WHERE
- K. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A COPY MANUFACTURER'S INSTALLATION OF TREE STAKES. CONTRACTOR SHALL ADHERE TO MANUFACTURER'S INSTALLATION GUIDELINES, SPECIFICATIONS, AND OTHER REQUIREMENTS FOR TREE STAKE



4245 North Central Expy Suite 501

Dallas, Texas 75205 214.865.7192 office

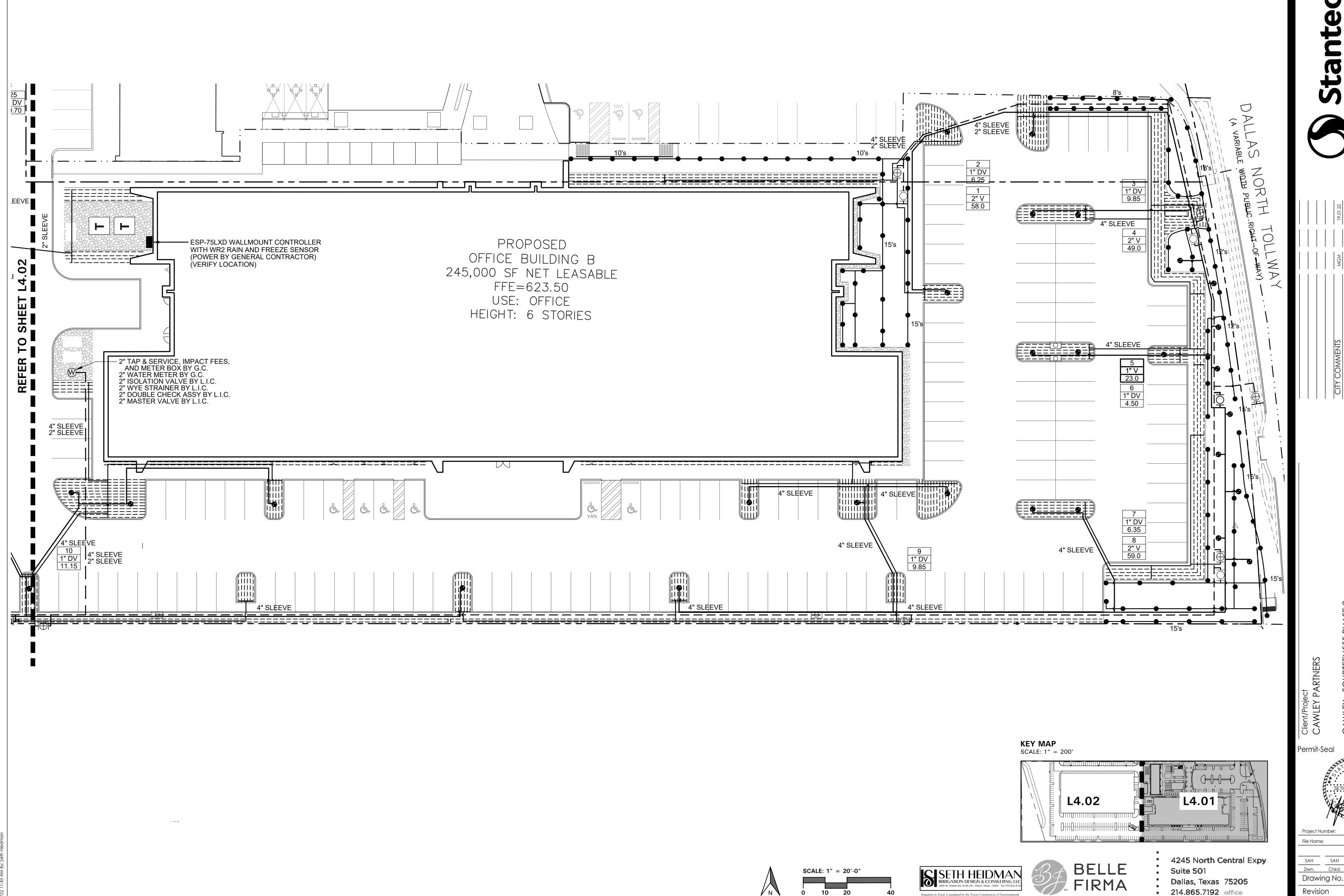
Permit-Seal Project Number: 222011532 MGM KAH MGM 18.12.18

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Drawing No. Revision Sheet L3.04

ORIGINAL SHEET - ANSI D



ORIGINAL SHEET - ANSI D

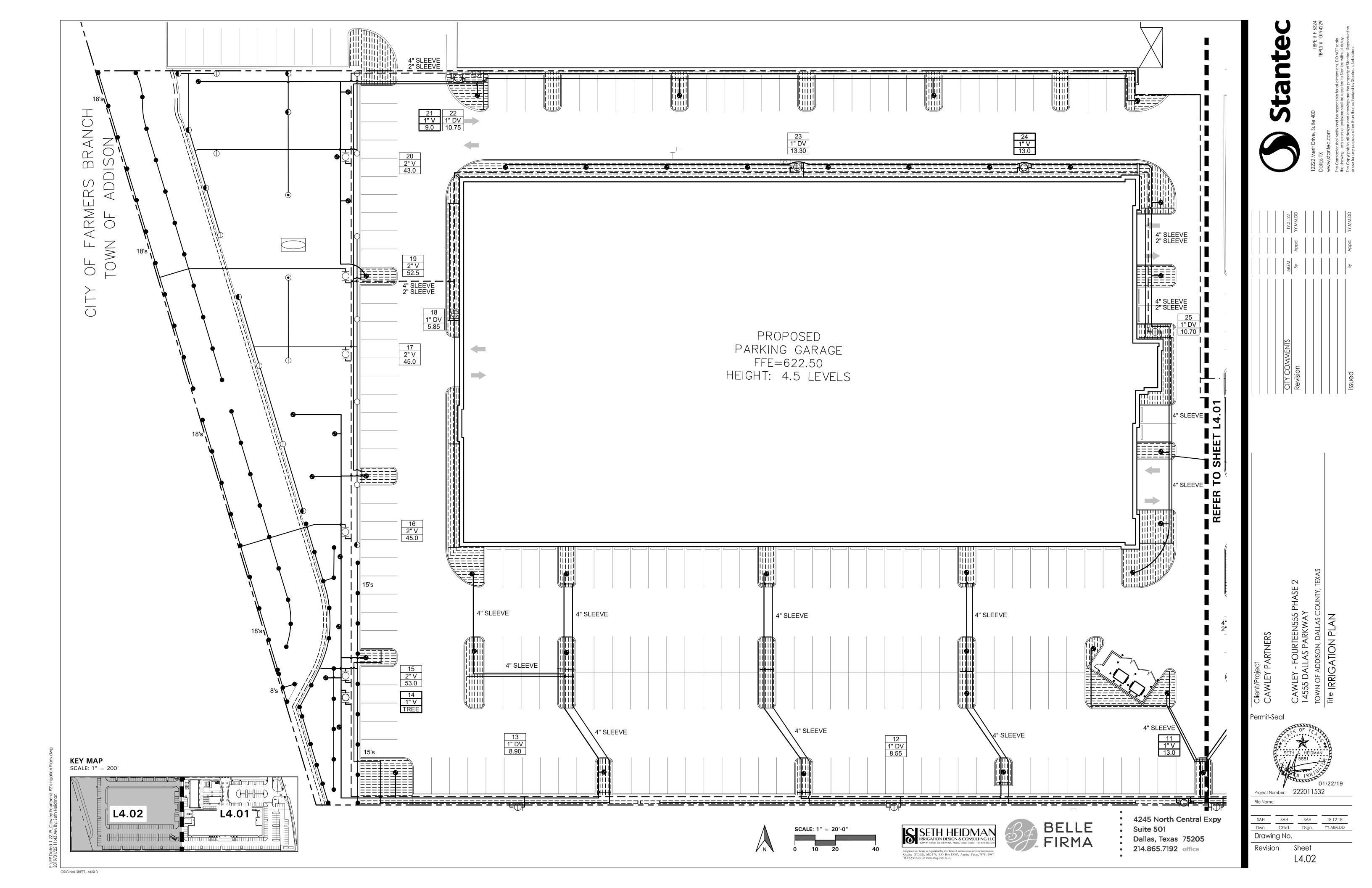


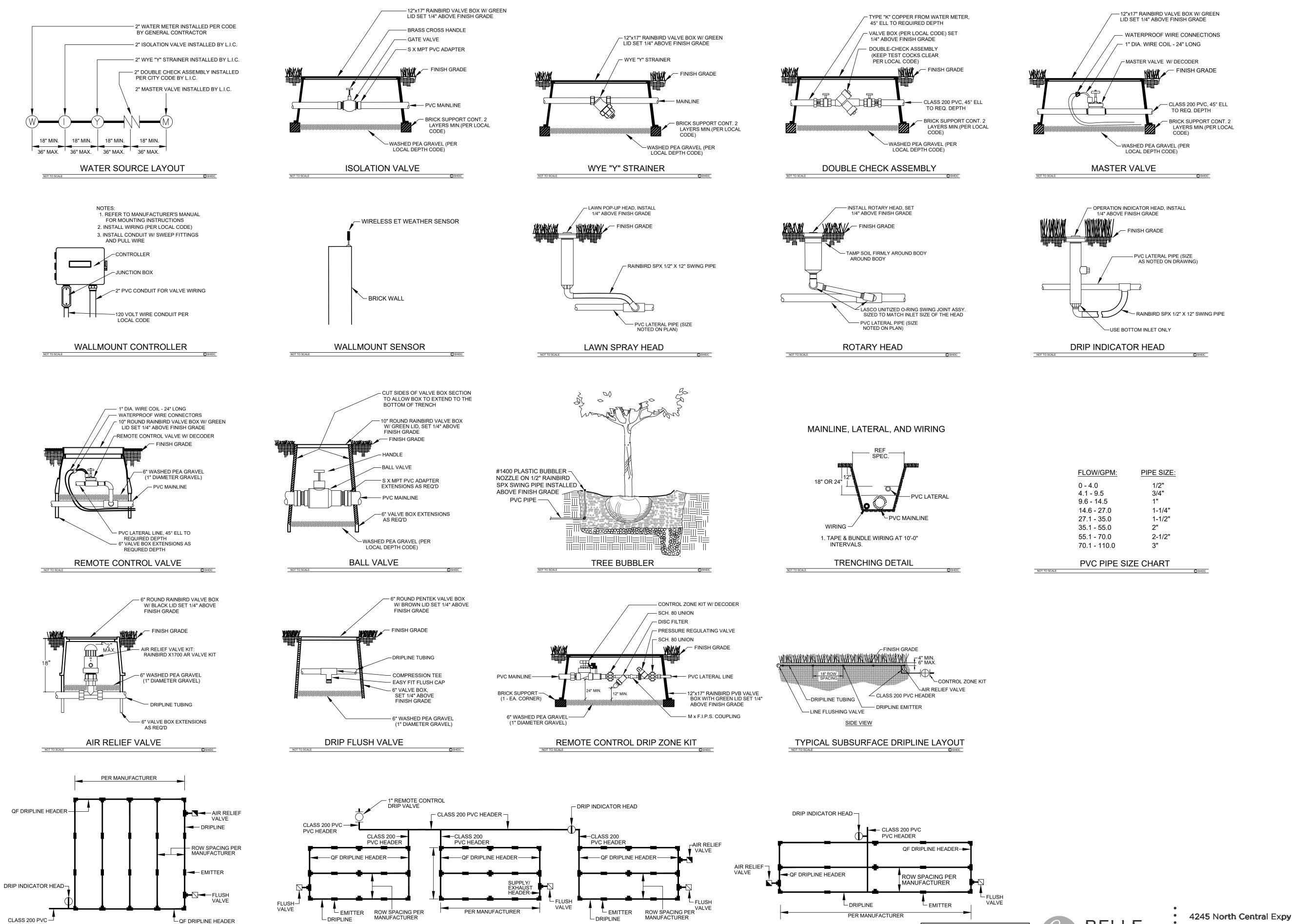
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Sheet L4.01





TYPICAL DRIPLINE LAYOUT

7

AWLEY - FOURTEEN555 4555 DALLAS PARKWAY

CAWLEY PARTNERS



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Revision Sheet L4.03

ORIGINAL SHEET - ANSI D

PVC HEADER

TYPICAL DRIPLINE LAYOUT

Irrigation in Texas is regulated by the Texas Commission of Environmental Quality (TCEQ), MC-178, P.O. Box 13087, Austin, Texas, 78711-3087. TCEQ website is: www.tceq.state.tx.us

TYPICAL DRIPLINE LAYO SETH HEIDMAN IRRIGATION DESIGN & CONSULTING, LLC 4009 M, Parker Red. #149-221, Plano, Texas 75093 Tel: 972-816-5141

NOTES:

- ALL VALVE WIRING SHALL BE PAIGE P7072D 14-2UF DOUBLE JACKETED. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR PROPER WIRE SIZE. WIRE SPLICES SHALL BE RAINBIRD DBRY20 PERMANENT AND WATERPROOF PER THE SPECIFICATIONS.
- 2. COORDINATE INSTALLATION OF IRRIGATION SYSTEM WITH LANDSCAPE CONTRACTOR TO ENSURE ALL PLANT MATERIAL WILL BE WATERED IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
- 3. PIPING AND VALVES IN PAVING SHOWN FOR CLARITY, INSTALL IN ADJACENT PLANTING BED OR LAWN AREA.
- 4. LATERAL PIPING SHALL HAVE A MINIMUM OF 12" OF COVER. MAINLINE AND PIPING UNDER PAVING SHALL HAVE A MINIMUM OF 18" OF COVER. ALL FITTINGS TO BE SCHEDULE 40 PVC. USE WELD-ON #705 SOLVENT AND #P-68 PRIMER FOR PVC CONNECTIONS PER THE SPECIFICATIONS.
- 5. SIZE PIPING PER MANUFACTURER'S RECOMMENDATIONS OF NOT EXCEEDING 5 FPS. REFERENCE CHART.
- CONNECT LAWN, HIGH-POP, AND DRIP INDICATOR HEADS TO LATERAL PIPING WITH RAINBIRD 1/2" SPX SWING PIPE. CONNECT ROTARY HEADS TO LATERAL PIPE WITH LASCO #T722 SERIES"UNITIZED", O-RING SWING JOINTS .
- PERFORM ELECTRICAL WORK IN ACCORDANCE WITH LOCAL BUILDING CODE. POWER (120V) SHALL BE LOCATED IN A JUNCTION BOX AND HARDWIRED WITHIN FIVE (5') FEET OF CONTROLLER LOCATION BY GENERAL CONTRACTOR.
- 8. INSTALL REMOTE CONTROL VALVES WITH DECODERS AND WIRE SPLICES IN TEN (10") INCH ROUND RAINBIRD PVB VALVE BOXES.
- INSTALL SLEEVES UNDER ALL HARDSCAPE SURFACES SUCH AS ROADS, DRIVES, WALKS, ETC. WHETHER SHOWN OR NOT. SLEEVES SHALL BE CLASS 200 PVC, SIZED AS NOTED ON PLANS AND INSTALLED BY LANDSCAPE IRRIGATION CONTRACTOR.
- 10. ADJUST NOZZLES FOR SITUATIONS THAT REQUIRE LESS THAN 90° DEGREE RADIUS SPRAY. NO OVERSPRAY ALLOWED ON ANY HARDSCAPE SURFACES.
- 11. DESIGN PRESSURE IS 00.0 PSI. STATIC PRESSURE IS 00 PSI. TEN DAYS PRIOR TO START OF CONSTRUCTION, VERIFY STATIC PRESSURE. IF STATIC PRESSURE IS LESS THAN STATED DO NOT START WORK UNTIL NOTIFIED TO PROCEED BY OWNER.
- 12. MINIMUM DISTANCE BETWEEN MAIN LINE AND LATERAL LINE FITTINGS (EXCEPT FOR REDUCER BUSHINGS) TO BE EIGHTEEN (18") INCHES AND MINIMUM HORIZONTAL DISTANCE OF TWENTY-FOUR (24") INCHES BETWEEN ANY VALVES THAT ARE INSTALLED SIDE BY SIDE.
- 13. INSTALL REMOTE CONTROL DRIP ZONE KIT VALVES WITH DECODER IN TWELVE BY SEVENTEEN (12"x17") INCH RAINBIRD PVB VALVE BOX.
- 14. INSTALL DRIPLINE MINIMUM OF 2" AND A MAXIMUM OF 4" FROM HARDSCAPE SURFACES. DO NOT EXCEED MANUFACTURER'S RECOMMENDATIONS OF 5'-0" PER SECOND IN DRIPLINE.
- 15. PROVIDE AND INSTALL DISTRIBUTION TUBING, STAKES, EMITTERS, TRANSFER FITTINGS, DIFFUSER BUG CAP, QF DRIPLINE HEADERS, CONTROL ZONE KITS, ETC. NECESSARY FOR PROPER INSTALLATION OF THE DRIP SYSTEM. ALL PVC HEADER PIPING TO BE CLASS 200 PVC SOLVENT WELD PIPE. INSERT XF BARBED INSERT FITTINGS PER MANUFACTURER'S RECOMMENDATIONS. INSTALL RAINBIRD OPERATION INDICATOR FOR EACH DRIP ZONE.
- AIR RELIEF VALVE TO BE RAINBIRD AR VALVE KIT INSTALLED IN A SIX-INCH (6") RAINBIRD PVB ROUND VALVE BOX WITH BLACK LID AND 6" OF GRAVEL SUMP. FLUSH VALVES TO BE 1/2" LASCO BALL VALVE ON IPS FLEXIBLE PIPE AND 1/2" SCHEDULE 40 FITTINGS INSTALLED IN A SIX-INCH (6") RAINBIRD PVB ROUND VALVE BOX WITH BLACK LID AND 6" OF GRAVEL SUMP
- 17. ALL XFS CV DRIPLINE AND DISTRIBUTION TUBING TO BE INSTALLED BELOW FINISH GRADE APPROXIMATELY 4" TO 6" PER MANUFACTURER'S RECOMMENDATIONS. ALL DRIPLINE TO BE INSTALLED MIN. OF 14" AND MAX. OF 20" ROW SPACING UNLESS INSTRUCTED OTHERWISE. VERIFY THE EXACT EMITTER FLOW, EMITTER SPACING, AND ROW SPACING WITH MANUFACTURER PRIOR TO INSTALLING TO PROVIDE PROPER PRECIPITATION RATE BASED ON PLANT MATERIAL AND SOIL TYPE. TUBING TO BE STAKED WITH RAINBIRD 12 GA. GALVANIZED TIE DOWNS. INSTALL STAKES EVERY 3'-0" ALONG ENTIRE LENGTH OF TUBING AND A MINIMUM OF 24" FROM ANY FITTINGS.
- 18. INCLUDE THE FOLLOWING ALLOWANCES FOR PROVIDING AND INSTALLING AIR RELIEF VALVES AND FLUSH VALVES FOR THE DRIP SYSTEM. EXACT QUANTITY AND LOCATION OF THESE DEVICES WILL BE DETERMINED AT THE TIME OF INSTALLATION. IN GENERAL, ALL AIR RELIEF VALVES WILL BE INSTALLED AT THE HIGH POINTS AND FLUSH VALVES WILL BE INSTALLED AT THE LOW POINTS OF EXHAUST HEADER. ALLOW FOR APPROXIMATELY ONE (1) AIR RELIEF VALVE AND APPROXIMATELY ONE (1) FLUSH VALVE FOR EACH DRIP ZONE KIT.
- 19. PROVIDE ALL LABOR AND MATERIAL NECESSARY TO INSTALL A RAINBIRD TWO-WIRE SYSTEM PER THE MANUFACTURER'S RECOMMENDATIONS. THIS WORK TO INCLUDE BUT NOT LIMITED TO ESP-LXD CONTROLLER, FD-TURF DECODERS, PAIGE P7072D COMMUNICATION WIRE, PBC-LXD PROGRAM BACKUP CARTRIDGE, LIMR-KIT, LSP1TURF LINE SURGE PROTECTION, DPU-210 PROGRAMMING UNIT, GROUNDING, ETC. FOR A COMPLETE AND FULLY AUTOMATED IRRIGATION SYSTEM. FOR ANY QUESTIONS REGARDING THIS WORK, CONTACT THE LOCAL RAINBIRD REPRESENTATIVE.
- 20. DO NOT INSTALL ANY MAINLINES, VALVES, OR CONTROL WIRES WITHIN THE R.O.W. UNLESS CITY APPROVED.
- 21. PROVIDE ALL LABOR AND MATERIAL NECESSARY TO HAND DIG WITHIN ALL EXISTING TREE ROOT ZONES. CONTRACTOR MUST STAKE DITCHES AND RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO ANY TRENCHING OR DIGGING.
- 22. THIS PROJECT MAY REQUIRE THE "STACKING" OF DRIP ZONES IN THE CONTROLLER TO ACHIEVE THE RUNTIME. DO NOT EXCEED? GALLONS PER MINUTE BASED ON THE DESIGN HYDRAULICS OF THE SYSTEM.
- 23. ALL STATE OF TEXAS LAWS/RULES AND ALL LOCAL CODES/ORDINANCES ARE MADE PART OF THESE PLANS AND SPECIFICATIONS WHETHER SHOWN OR NOT. THESE LAWS AND ORDINANCES WILL SUPERCEDE THE PLANS, DETAILS, AND/OR SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS CAUTIONED THAT HE IS TO INCLUDE ANY AND ALL COST NECESSARY TO MEET OR EXCEED THE LAWS OF THE STATE OF TEXAS OR LOCAL CODES CONCERNING LANDSCAPE IRRIGATION. A LICENSED IRRIGATOR OR LICENSED IRRIGATION TECHNICIAN SHALL BE ON-SITE AT ALL TIMES WHILE THE LANDSCAPE IRRIGATION SYSTEM IS BEING INSTALLED PER TOWN OF ADDISON REQUIREMENTS.

IRRIGATION LEGEND:

GPM (APPROX.)

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL NO,
•	LAWN SPRAY HEAD	RAINBIRD (30 PSI)	1804 WITH MPR PLASTIC NOZZLES UNLESS NOTED OTHERWISE
\oplus	BUBBLER HEAD	RAINBIRD (30 PSI)	#1402 NOZZLE ON 1/2" FLEX PVC UNLESS OTHERWISE NOTED
•	BUBBLER HEAD	RAINBIRD (30 PSI)	#1404 NOZZLE ON 1/2" FLEX PVC UNLESS OTHERWISE NOTED
0	ROTARY HEAD PART-CIRCLE	RAINBIRD (40 PSI)	3504 W/ #1.5 NOZZLE ON 1/2" SWING JOINT UNLESS OTHERWISE NOTED
	ROTARY HEAD PART-CIRCLE	RAINBIRD (40 PSI)	5004 W/ #1.5 NOZZLE ON 3/4" SWING JOINT UNLESS OTHERWISE NOTED
	ROTARY HEAD FULL-CIRCLE	RAINBIRD (40 PSI)	5004 W/ #3.0 NOZZLE ON 3/4" SWING JOINT UNLESS OTHERWISE NOTED
\bigcirc	ROTARY HEAD PART-CIRCLE	RAINBIRD (40 PSI)	5004 W/ #4.0 NOZZLE ON 3/4" SWING JOINT UNLESS OTHERWISE NOTED
	ROTARY HEAD FULL-CIRCLE	RAINBIRD (40 PSI)	5004 W/ #8.0 NOZZLE ON 3/4" SWING JOINT UNLESS OTHERWISE NOTED
	REMOTE CONTROL VALVE	RAINBIRD	PEB WITH DECODER AND PRESSURE REGULATOR, REFER TO PLAN FOR SIZE
	BALL VALVE	LASCO	COMPACT, LINE SIZE
	CONTROLLER	RAINBIRD	ESP-50LXD WALLMOUNT WITH WR2 WIRELESS RAIN/FREEZE SENSOR
	MAINLINE PIPING	REFER TO SPEC.	CLASS 200 PVC
	LATERAL PIPING	REFER TO SPEC.	3/4" & LARGER - CLASS 200 PVC 1/2" - CLASS 315 PVC
	REMOTE CONTROL DRIP VALVE	RAINBIRD	XCZ-100-PRB-COM VALVE KIT W/ DECODER, REFER TO PLAN FOR SIZE
	DRIP HEADER PIPING	REFER TO SPEC.	1-INCH CLASS 200 PVC UNLESS NOTED OTHERWISE
	PLANTING BED DRIPLINE TUBING	RAINBIRD	XFD-06-18 AT 18" O.C. WITH XF INSERT FITTINGS, TDS-050 GALVANIZED STAKES, QF HEADERS AND OPERATION INDICATOR
	TURF SOD DRIPLINE TUBING	RAINBIRD	XFS-06-18 AT 18" O.C. WITH XF INSERT FITTINGS, TDS-050 GALVANIZED STAKES, QF HEADERS AND OPERATION INDICATOR
W	WATER METER	REFER TO SPEC.	PER LOCAL BUILDING CODE
	ISOLATION VALVE	NIBCO	#T-29, REFER TO PLAN FOR SIZE
Y	WYE STRAINER	FEBCO	#650, REFER TO PLAN FOR SIZE
M	BACKFLOW PREVENTER	FEBCO	#850BV, REFER TO PLAN FOR SIZE
M	MASTER VALVE	RAINBIRD	PEB WITH DECODER, REFER TO PLANS FOR SIZE
	STATION NUMBER VALVE SIZE GPM (APPROX.)		

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4245 North Central Expy Suite 501 Dallas, Texas 75205

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AND LEGEND

AWLEY - FOURTEEN5 4555 DALLAS PARKW

Permit-Seal

SAH SAH 18.12.18

Drawing No. Revision