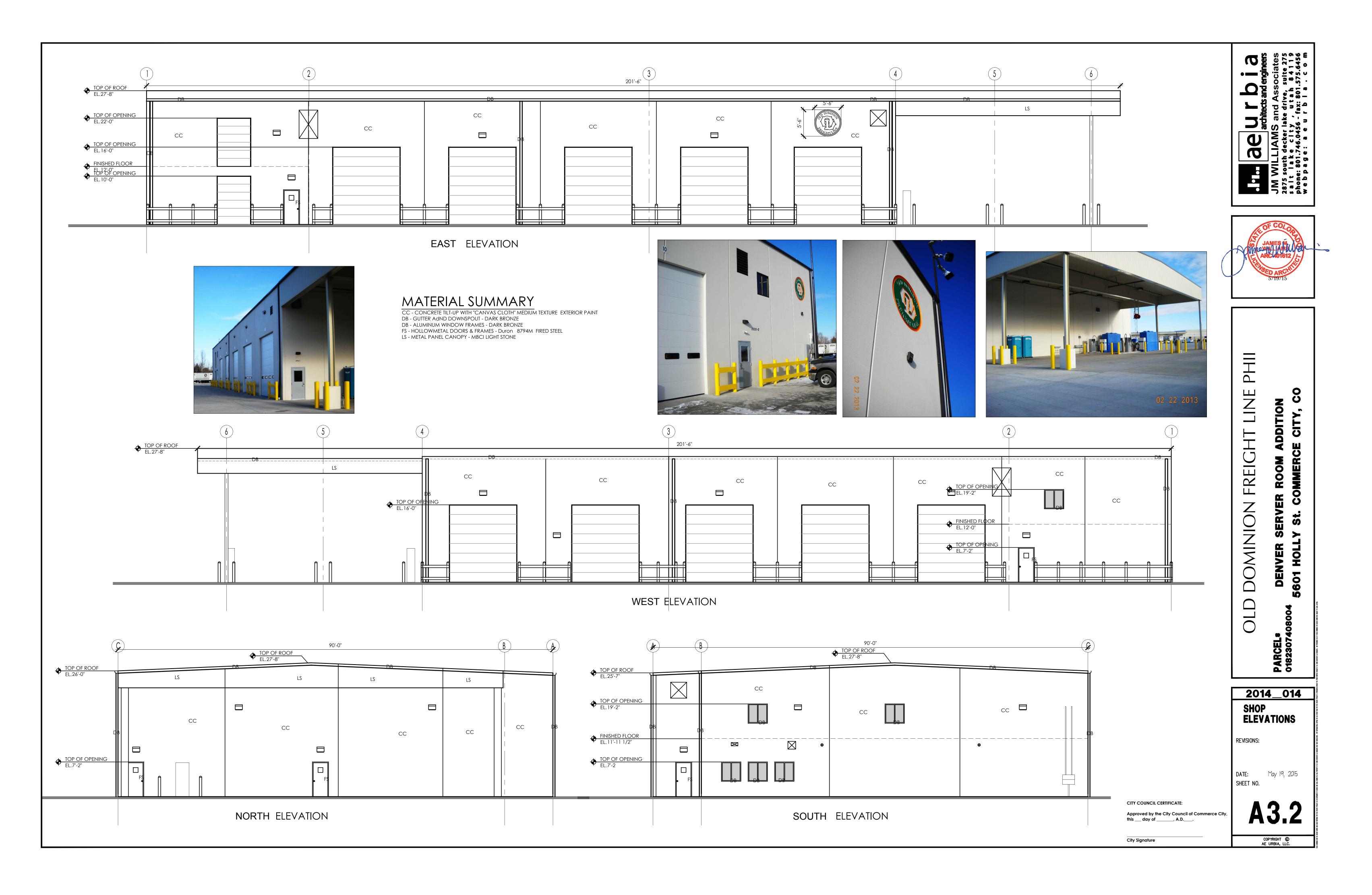


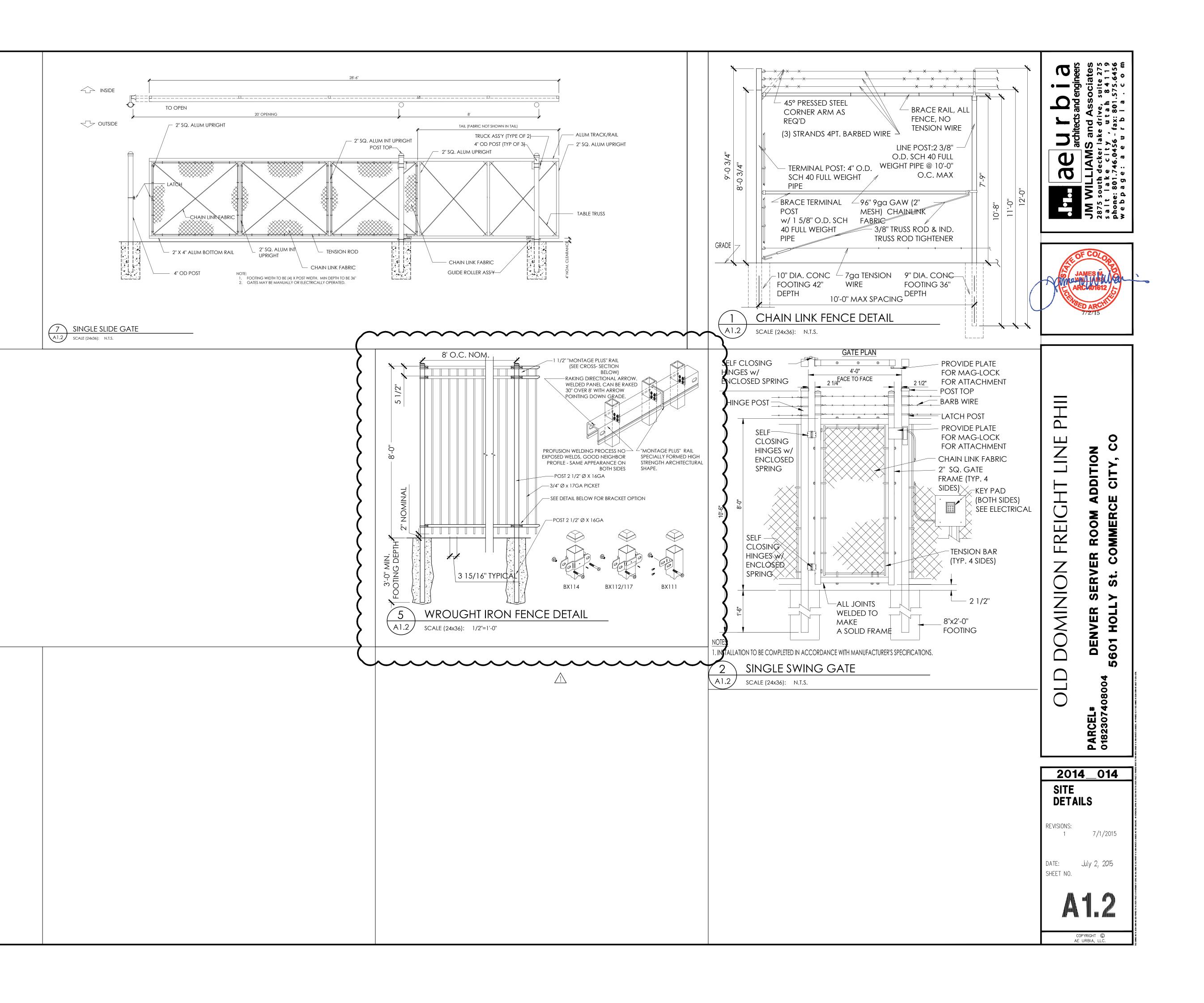
BUILDING AREAS: EXISTING OFFICE BASEMENT MAIN FLOOR UPPER FLOOR EXISTING SERVER AREA EXISTING TERMINAL EXISTING SHOP(TO BE REMOVED TOTAL(AFTER DEMO) NEW OFFICE NEW TERMINAL NEW FORKLIFT SHOP NEW SHOP MAIN UPPER	84,261 SQ. FT. 3,626 SQ. FT. 35,162 SQ. FT. 1,083 SQ. FT. (15,324 SQ. FT.) 12,910 SQ. FT. 2,414 SQ. FT.		ae U r b i a architects and engineers	JM WILLIAMS and Associates 2875 south decker lake drive, suite 275 salt lake city, utah 84119 phone: 801.746.0456 - fax: 801.575.6456 webpage: a e u r b i a . c o m
TOTAL NEW FINAL TOTAL NOTE: 1. ALL AREA CALCULATIONS CAN CHANGE DUE TO CO LOT AREAS: GROSS LOT NET LOT(LESS RIGHT-OF-WAY an EXISTING BUILDING FOOTPRINT NEW BUILDING FOOTPRINT NEW SHOP FOOTPRINT EXISTING LANDSCAPING ASPHALT CONCRETE	ONSTRUCTION TOLERAN 1,739,9 nd LEASE) 1,544,3 IT(REMAINING) 10,4 39,8 12,9 6,02 130, 1,07			ANSU SU ALIANSU SU DARCTITUS 7/2/15
TOLERANCES. PARKING REQUIREME EXISTING SQ.FT. OFFICE MAIN 10,446 S UPPER 10,446 S BASEMENT 10,446 S SERVER 3,678 SG WAREHOUSING MAIN 48,980 TOTAL REQUIRED: NEW SQ.FT. OFFICE 3,626 SG WAREHOUSE 36,245 SHOP MAIN 12,909.SHOP UPPER 2,414.4 FORKLIFT SHOP 1,097.93 TOTAL REQUIRED: TOTAL STALLS REQUIRED: ACCESSIBLE SPACES BICYCLE SPACES NOTES:	ENTS: CITY R sq. ft. 34.82 sq. ft. 34.82 sq. ft. 34.82 q. ft. 12.26 sq. ft. 48.98 166(16 CITY R q. ft. 12.09 sq. ft. 36.24 99 25.82 4 4.83 3 2.20 82(81. 247 429 10 (9 F 14 (12 ARE APPROXIMATE AND ARE APPROXIMATE AND ARE APPROXIMATE AND GATE TO BE INSTALLED ETAIL 2/A1.2 REMOVED	(1/300) (1/300) (1/1000) (1/1000) (1/1000) (1/1000) (1/500) (1/500) (1/500) (1/500) (1/500) (1/500) (1/500) (1/500) (1/500) (1/20 of 246) CAN CHANGE DUE TO CONSTRUCTION DETAIL 1/A1.2 , SEE DETAIL 7/A1.2	IIHA JULI THOIAN PREICHT LINE PHIL	Ž PARCEL* DENVER SERVER ROOM ADDITION Ž 0 0182307408004 5601 HOLLY St. COMMERCE CITY, CO
		CITY COUNCIL CERTIFICATE: Approved by the City Council of Commerce City, this day of, A.D	SHEET NO.	July 2, 2015

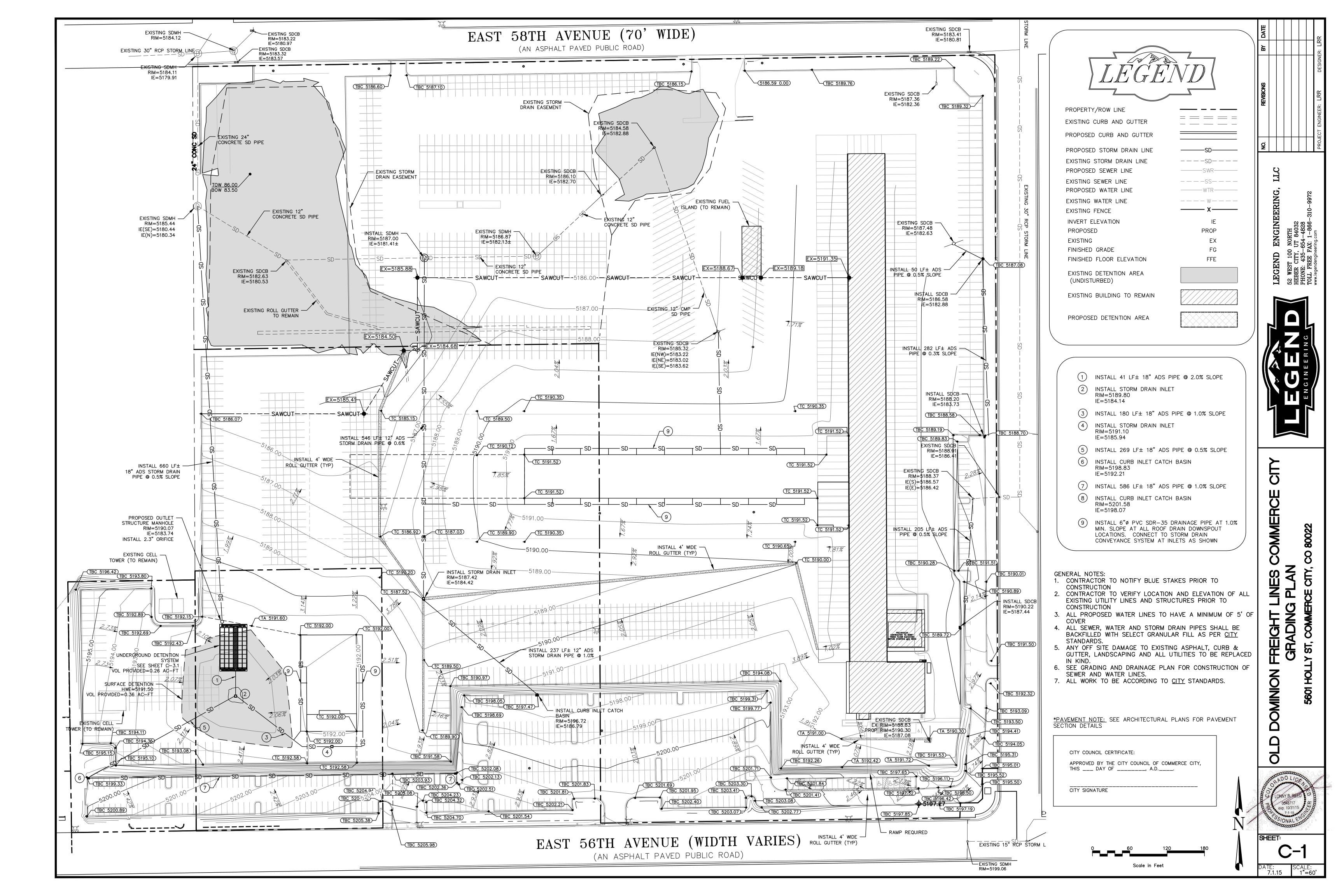
City Signature

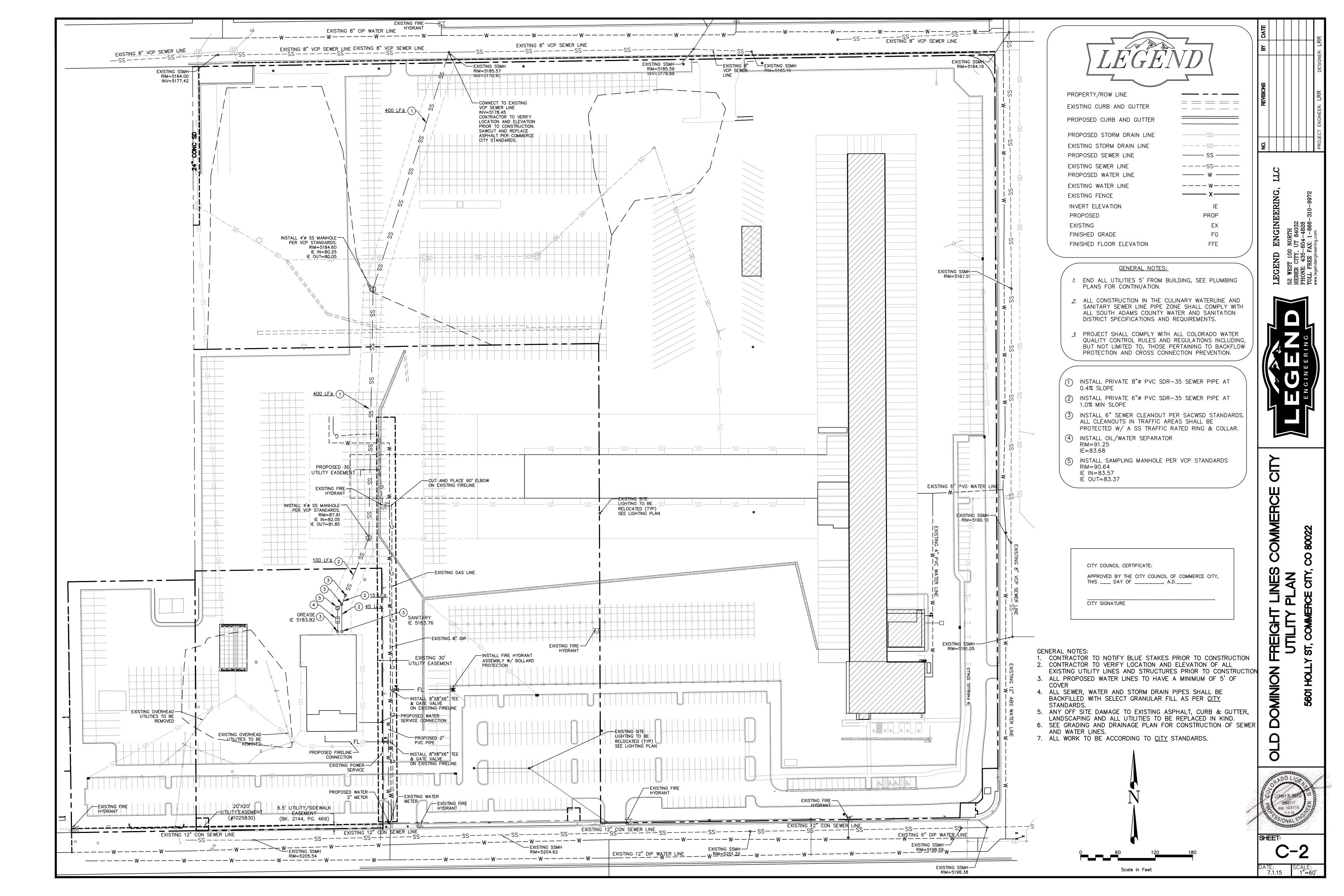
Copyright © Ae Urbia, LLC.

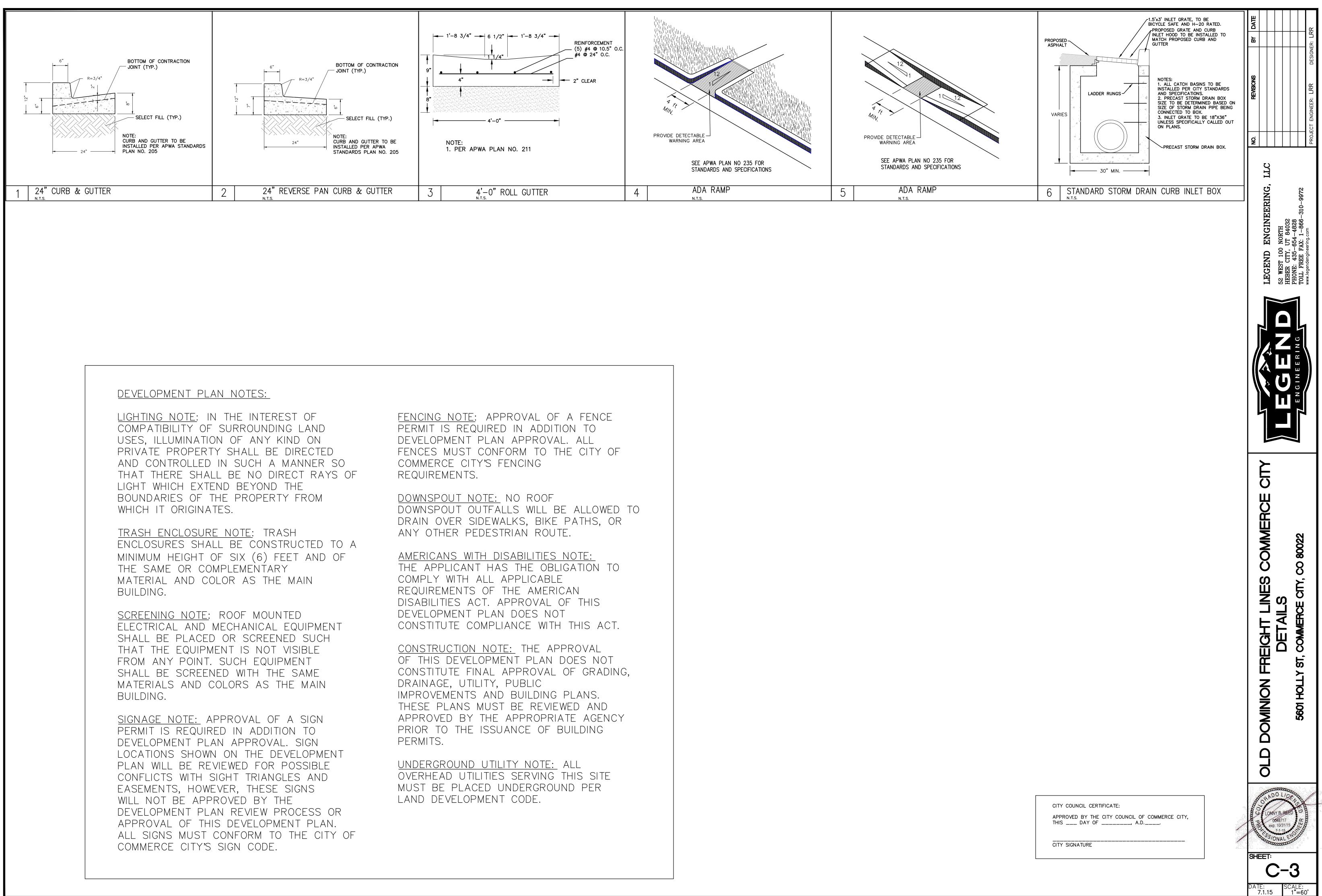


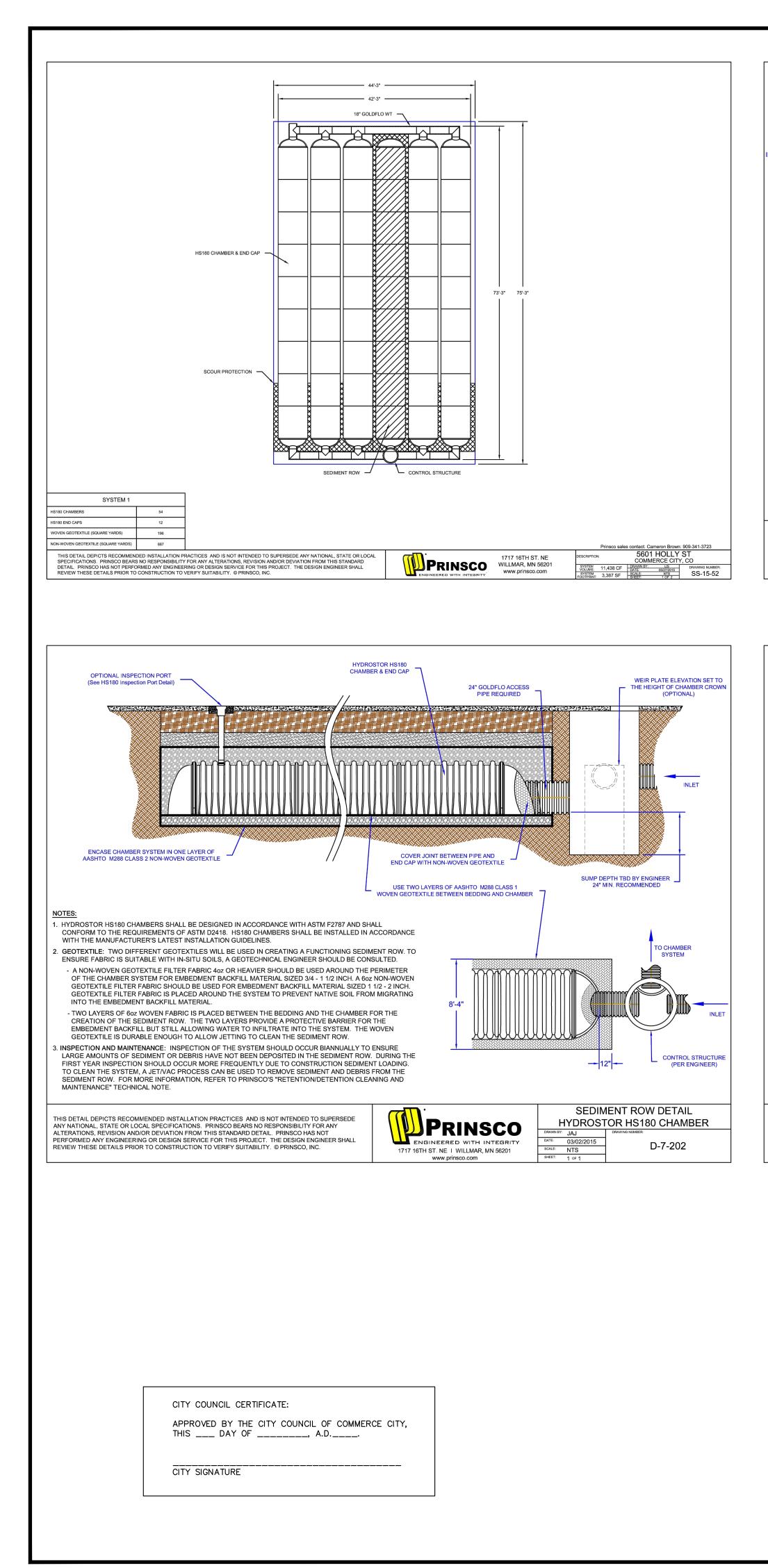


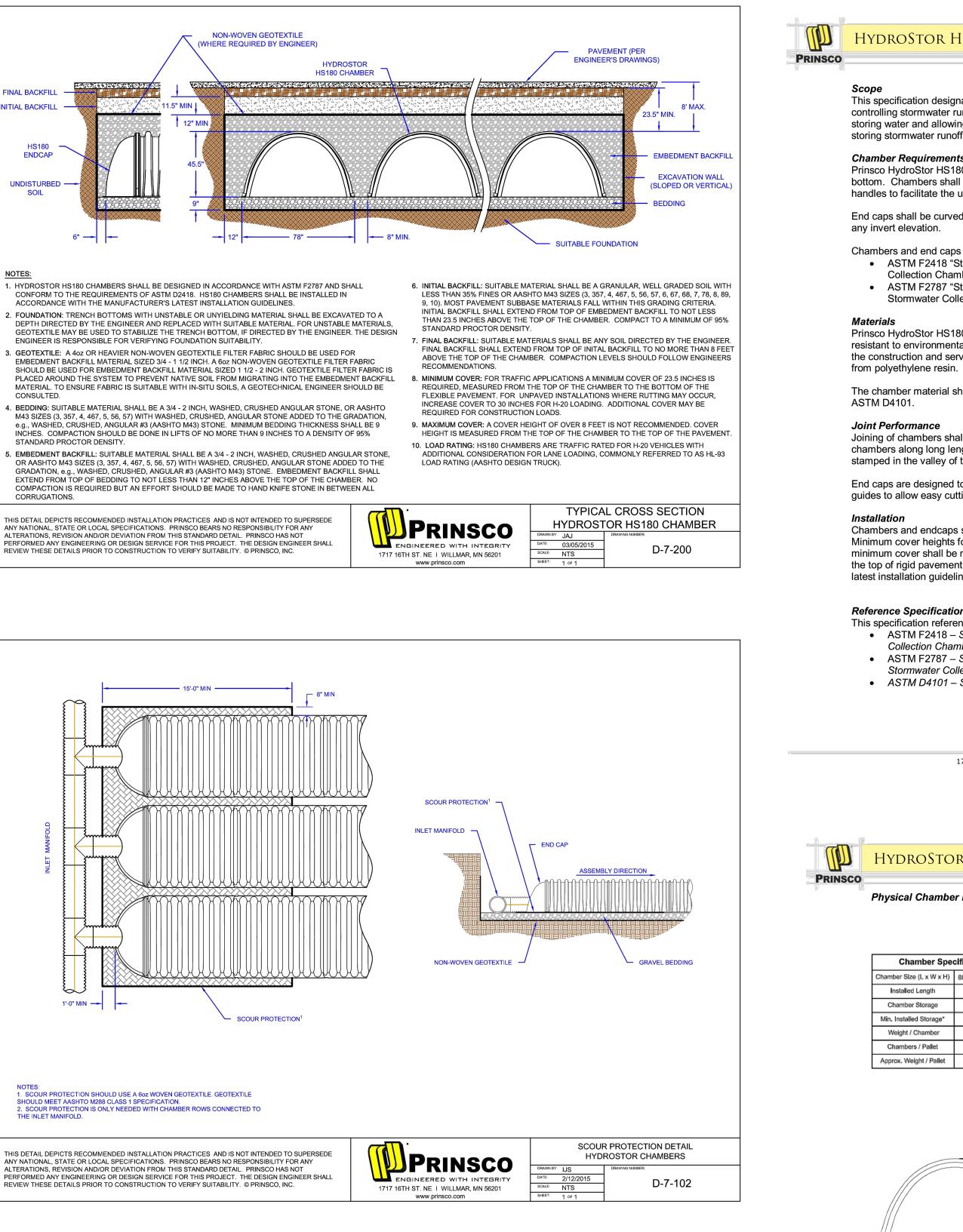












Installed Length End Cap Storage Min. Installed Storage*

Weight / End Cap

*Assumes 12" stone above chambers / end caps, 9" of stone for bedding, 8" of stone between chambers/end caps, 6" of stone perimeter in front of end caps and 40% stone porosity.

HYDROSTOR HS180 CHAMBER SPECIFICATION

This specification designates the requirements for Prinsco HydroStor HS180 Chambers to be used for controlling stormwater runoff. The HydroStor chambers function as a subsurface retention system by storing water and allowing infiltration into the soil or as a subsurface detention system by temporarily storing stormwater runoff and releasing the water at a controlled rate through an outlet.

Chamber Requirements

Prinsco HydroStor HS180 chambers shall be curved to form a continuous arch shape with an open bottom. Chambers shall have 8 annular exterior corrugations. Chambers shall be equipped with lifting handles to facilitate the unloading and installation of the chambers.

End caps shall be curved and have adequate structural capacity to allow the end cap inlets to be cut at

Chambers and end caps shall meet or exceed the following standards: • ASTM F2418 "Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater

Collection Chambers" ASTM F2787 "Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers"

Prinsco HydroStor HS180 chambers shall be injection molded and constructed of polypropylene resin resistant to environmental stress cracking (ESCR) and with ability to maintain adequate stiffness through the construction and service life of the chamber. The end caps shall be thermoformed or injection molded

The chamber material shall meet or exceed the requirements of designation PP0330B99945 as defined in

Joining of chambers shall be accomplished by overlapping the corrugations of longitudinally adjacent chambers along long lengths of chambers. Chambers and joints shall be installed in the direction stamped in the valley of the corrugation.

End caps are designed to fit over top of a corrugation on either end of the chamber. End caps shall have guides to allow easy cutting of various diameters of pipe that may be used to inlet water in to the system.

Chambers and endcaps shall be installed in accordance with Prinsco's published installation guidelines. Minimum cover heights for AASHTO H-20 loads shall be 23.5" as shown in the cross section detail. The minimum cover shall be measured from the top of the chamber to the bottom of flexible pavement or to the top of rigid pavement. Visit <u>www.prinsco.com</u> or contact your local Prinsco representative for the latest installation guidelines.

Reference Specifications

This specification references the latest edition and revisions of the following standard specifications: • ASTM F2418 – Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers

ASTM F2787 – Standard Practice for Structural Design of Thermoplastic Corrugated Wall

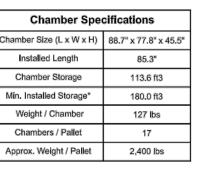
Stormwater Collection Chambers • ASTM D4101 – Standard Specification for Polypropylene Injection and Extrusion Materials

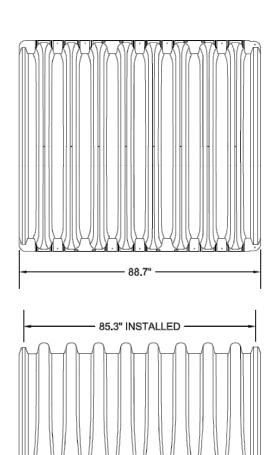
Page 1 of 2

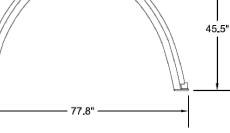
1717 16th St NE | Willmar, MN 56201 | 800.992.1725 | www.prinsco.com © Prinsco, Inc. 02/15

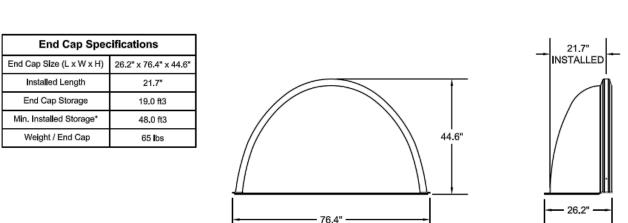
HYDROSTOR HS180 CHAMBER SPECIFICATION

Physical Chamber Dimensions

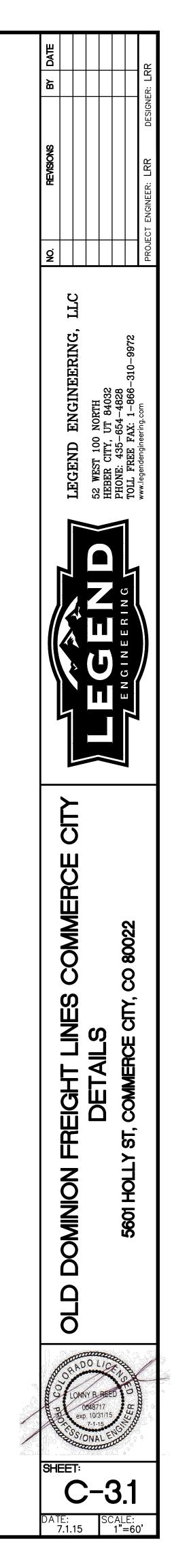








Page 2 of 2 1717 16th St NE | Willmar, MN 56201 | 800.992.1725 | www.prinsco.com © Prinsco, Inc. 02/15



ITEM	QUANTITY
LANDSCAPE TREATMENT AREA:	
A) SQUARE FOOTAGE OF LANDSCAPE AREA	101,202 S.F.
B) SQUARE FOOTAGE OF SOD AND PERCENT OF TOTAL LANDSCAPE AREA:	0 S.F.; 0%
C) SQUARE FOOTAGE OF LIVING PLANT MATERIAL AND PERCENT OF TOTAL LANDSCAPE AREA:	82,542 S.F.; 819
D) NUMBER OF TREES REQUIRED (PER CITY ORDINANCE) (MINIMUM):	111
E) NUMBER OF TREES PROVIDED: (NOT INCL. ZONE BUFFER TREES ON WEST SIDE)	158
F) NUMBER OF SHRUBS REQUIRED (PER CITY ORDINANCE) (MINIMUM):	444
G) NUMBER OF SHRUBS PROVIDED: (NOT INCL. ZONE BUFFER TREES ON WEST SIDE)	934
H) NUMBER OF MULCH TYPES:	2
RIGHT-OF-WAY LANDSCAPE AREA: - N/A_ DEPTH OF LANDSCAPING FROM ROW REQUIRED FOR INDUSTRIAL USES	L
REQUIRED DEPTH	20 FT
AVERAGE DEPTH PROVIDED (REFER TO MM-052-15 - MINOR MODIFICATION)	16-20 FT
C) NUMBER OF TREES REQUIRED (1,563 L.F. @ 1 TREE/40 L.F.)	39
D) NUMBER OF TREES PROVIDED	39
INTERIOR PARKING LOT LANDSCAPE AREA (BOTH PARKING LOT AREAS)	
A) NUMBER OF TREES REQUIRED:	38
B) NUMBER OF TREES PROVIDED:	38
C) NUMBER OF SHRUBS REQUIRED: (ISLANDS * 6)	228
D) NUMBER OF SHRUBS PROVIDED:	181
*) NUMBER OF I GALLON GRASS PROVIDED	67
E) NUMBER OF ISLANDS REQUIRED:	38
F) NUMBER OF ISLANDS PROVIDED:	38
PARKING LOT PERIMETER LANDSCAPE	
A) NUMBER OF TREES REQUIRED: (1 TREE/30 L.F.	76
B) NUMBER OF TREES PROVIDED:	76
C) NUMBER OF SHRUBS REQUIRED: (5 SHRUBS/30 L.F.)	309
D) NUMBER OF SHRUBS PROVIDED:	600

AVERAGE DEPTH OF LANDSCAPING FROM R.O.W.

AVEIAGE DEI III OT EANDOCATING	
DESCRIPTION	LENGTH AND WIDTH
5GTH	
WEST END TO WEST DRIVEWAY	469 L.F. @ 19.71' TO 19.
WEST DRIVEWAY TO EAST DRIVEWAY	235 L.F. @ 19.51 TO 20.
EAST DRIVEWAY TO EAST END	413 L.F. @ 20.01 TO 19.
NARROW PORTION OF EAST END	66 L.F. @ 21.8' TO 19.93
HOLLY	
SOUTH END TO DRIVEWAY	144 L.F. @ 23.08 TO 16.
DRIVEWAY TO NORTH END OF PARKING	369 L.F. @ 16.47' TO 15.
NORTH END OF EMPLOYEE PARKING TO NORTH END	546 L.F. @ 17.9' TO 18.1
58TH	
WEST END TO WEST DRIVEWAY	144 L.F. @ 23.08 TO 16.
WEST DRIVEWAY TO EAST DRIVEWAY	369 L.F. @ 16.47' TO 15.
EAST DRIVEWAY TO EAST END	546 L.F. @ 17.9' TO 18.1

ADJOINING PROPERTY ZONING BUFFER LANDSCAPE AREA

NUMBER OF TREES PROVIDED:) NUMBER OF SHRUBS REQUIRED:

NUMBER OF SHRUBS PROVIDED: MULATIVE, 272 TREES ARE REQUIRED FOR ⁻

NUMBER OF TREES REQUIRED:

** PLANTS BEYOND THE MINIMUM REQUIREMENTS GO TOWARD: * ACHIEVING MINIMUM 75% PLANT MATERIAL COVERAGE IN TOTAL LANDSCAPE AREA

* REQUIRED DENSITY OF TREES AND SHRUBS IN ZONING BUFFER THAT CANNOT COUNT TOWARD OTHER PARTS OF CODE

* REQUIRED DENSITY AND SPACING TO ACHIEVE SCREENING FOR PARKING LOT * REQUIRED DENSITY IN PARKING LOT ISLANDS

* COMPENSATION FOR NOT MEETING 20' LANDSCAPE WIDTH FOR STREET/ROW LANDSCAPE

LOT DATA

ZONE: I-I INDUSTRIAL PARCELS:

182307408004, 182307408002. 182307400026, 182307400027 SEE SHEETS L-2 TO L-6 FOR DETAILED PLANTING PLANS, PLANT LISTS, PLANTING DETAILS AND SPECIFICATIONS.

GENERAL LANDSCAPE NOTES

I. MINIMUM PLANT SIZE REQUIREMENTS AND SOIL PREPARATION: Minimum plant size requirements are 2-inch diameter (caliper) for deciduous trees, 1.5-inch diameter for ornamental trees and 6-foot height for evergreen trees. Minimum size requirements for shrubs are #5 gallon container: ornamental grasses #1 gallon container: perennials and ground covers 2 1/4" pots. Plants should be mixed appropriately 50% conferous (evergreen) and 50% deciduous (tree lawn areas between curbs and detached walks shall be all deciduous shade trees). Minimum soil preparation for plant-ing shall be 5 cubic yards of organic soil ammendment tilled to a depth of 6 inches for every 1,000 s.f. of landscape area. 2. STREET TREES: The Department of Community and Development has identified specific deciduous tree species to be planted within tree lawn areas. All trees chosen for tree lawn applications must be selected from the approved City list.

1.664 L.F.

83

133

3. WEED BARRIER FABRIC: Porous weed fabric must be used in planted beds for weed prevention, because it allows ventilation for roots and transmission of water. Plastic weed barriers in any planted area will not be approved.

4. EDGING: Plastic or fiberglass edging is favorable to metal. However, metal edging may be used provided it has a rollover top or a protective cap is installed.

5. MAINTENANCE: a.) The developer, his successors and assigns, shall be responsible for installation, maintenance and replacement of all andscaping materials shown or indicated on the approved site plan, development plan, or landscape plan, includ- ing those areas found in the right-of-way. b.) Landscaping shall be continuously maintained including necessary watering, weeding, pruning, pest control, and re-placement of dead of diseased plant material. Replacement for dead or diseased plant material shall be of the same type of plant materials as set forth in the approved site plan, for example, a tree must replace a tree, a shrub must replace a shrub, etc. Replacement shall occur in the next planting season, but in any event, such replacement time shall not exceed one (1) year. c.) The approved site plan, development plan, or landscape plan shall be on file in the planning department. All landscaping will be installed as delineated on the plan, prior to issuance of any certificate of occupancy. 6. SIGHT LINE CONSIDERATIONS: Any area determined by the City Engineer to be within a sight-distance-triangle may not contain plant material that at the time of planting or at maturity exceeds 36 inches above the gutter flow line except trees which must be limbed to 8 feet at adequate maturity. Trees shall be planted a minimum of ten feet from intersections and fifteen feet from light or utility poles. All other landscape features shall not exceed 36 inches within sight-distance-triangles. Information on sight distance triangles may be obtained from The City of Commerce City Engineering Standards and Specifications-Section 3.06 Table 3-14.

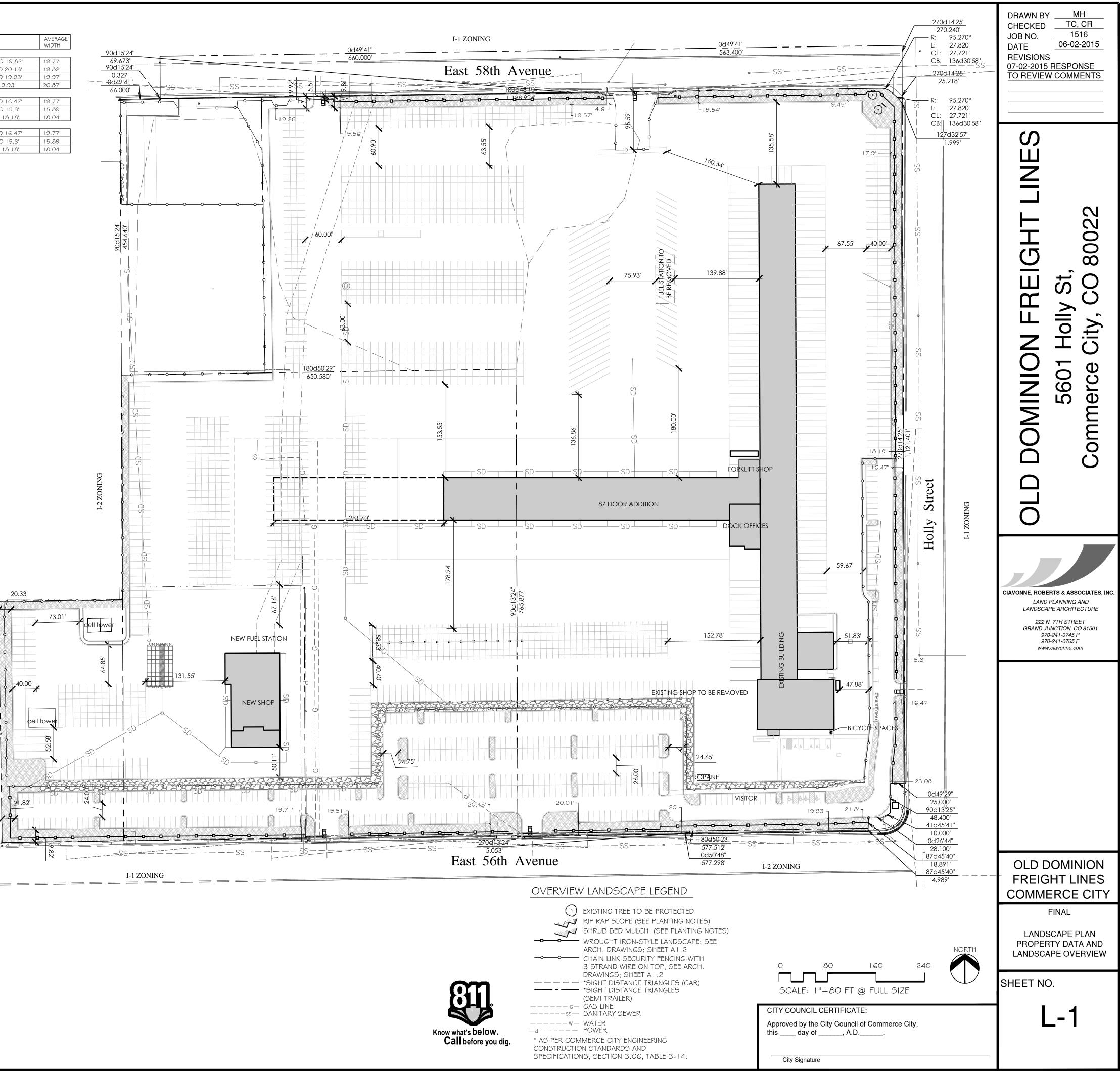
7. IMPLEMENTATION AND COORDINATION OF LANDSCAPE PLAN: The developer shall ensure that the landscape plan is closely coordinated with plans prepared by other consultants so that the proposed grading, storm drainage or other construction does not conflict with or preclude the installation and maintenance of landscape elements as des- ignated on the landscape plan.

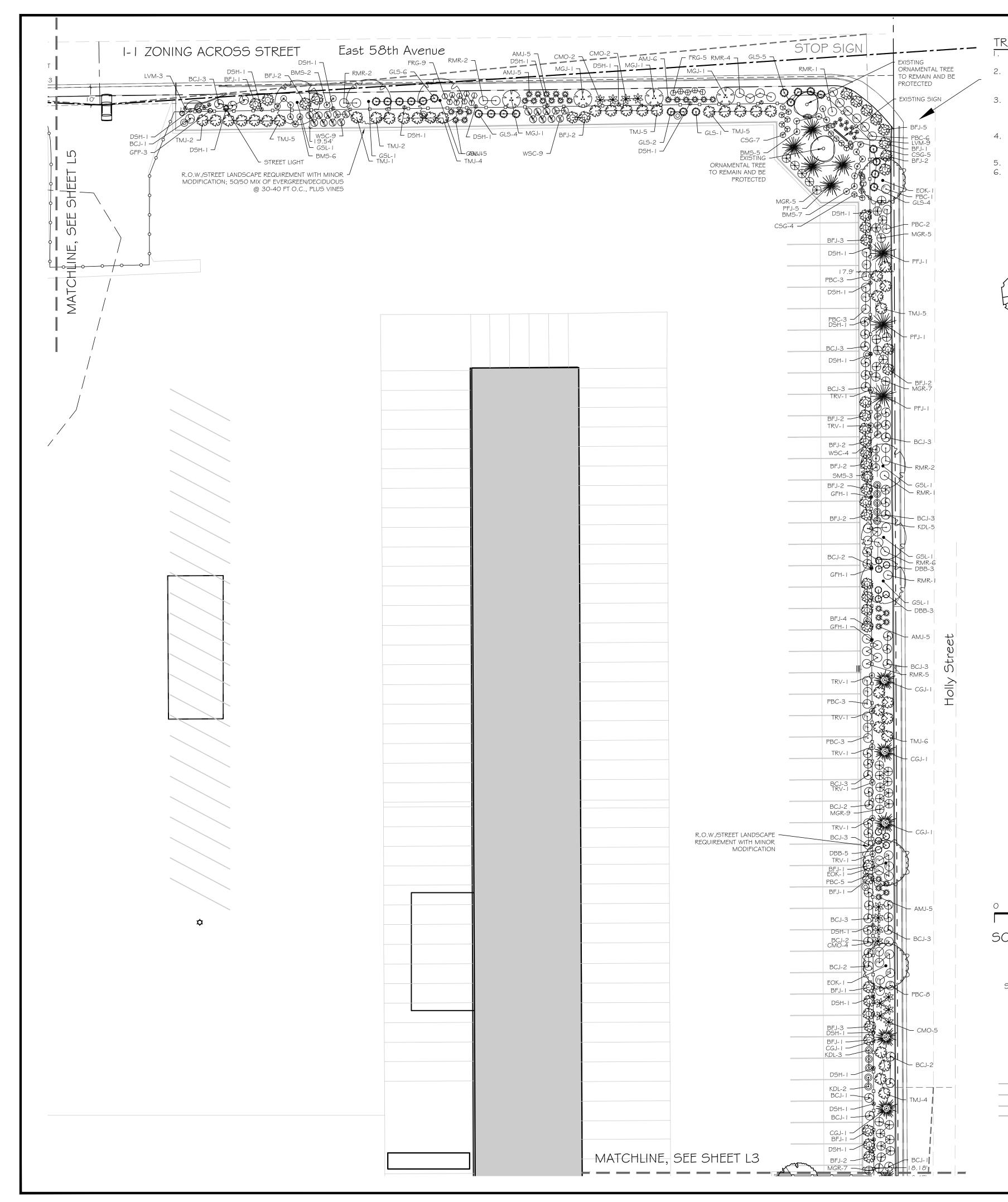
8. IRRIGATION: All landscaped areas and plant materials, except for non-irrigated native, restorative, and dry land grass areas must be watered by an automatic underground irrigation system. Irrigation system design, installation, operation, and maintenance shall conform to the requirements of South Adams County Water and Sanitation District. Approval of this landscape plan does not constitute approval from South Adams County Water and Sanitation District for any irrigation system. All irrigation plans, or portions thereof, designed for public right-of-ways shall specify parts/components from the City approved irrigation parts/component list.

9. NATIVE GRASS NOTE: All areas of the lot not paved or formally landscaped, shall be, at a minimum seeded with native grasses. IO. VEHICLE PARKING NOTE: No vehicle parking is allowed in any landscape treatment area.

PLANTING NOTES

- . CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. OTHER UTILITIES MAY BE PRESENT BUT NOT SHOWN ON THESE DRAWINGS.
- 2. BASE INFORMATION PROVIDED BY LEGEND ENGINEERING AND AE URBIA ARCHITECTURE. 3. ALL LANDSCAPING AND IRRIGATION (NOT PART OF THESE DRAWINGS) TO CONFORM TO CURRENT ASSOCIATED LANDSCAPE CONTRACTORS OF COLORADO STANDARDS AND SPECIFICATIONS.
- 4. EQUAL PART MIXTURE OF ROUND-UP AND 2-4-D DILUTED AS PER MANUFACTURER'S RECOMMENDATIONS SHALL BE APPLIED TO ALL ACTIVELY GROWING WEEDS TWO WEEKS PRIOR TO ANY OPERATIONS.
- 5. ALL PLANTED SHRUB BEDS TO RECEIVE SOIL AMENDMENT. SHRUB BEDS ALSO TO RECEIVE WEED FABRIC AND 3 INCH DEPTH OF MULCH. SEE SHEET L-I FOR GRAPHIC REPRESENTATION OF MULCH IN PLANTED BEDS.
- 6. EXCAVATE AREAS TO BE PLANTED (AS PER DRAWINGS) TO A SUFFICIENT DEPTH TO RECEIVE AMENDED SOIL, AND TO REMOVE UNSATISFACTORY MATERIAL (INCLUDING ROAD BASE, ASPHALT, CONCRETE AND TRASH) AND REMOVE FROM SITE. ALL LANDSCAPE AREAS TO RECEIVE 8" MINIMUM OF AMENDED SOIL. SCARIFY ALL AREAS TO RECEIVE AMENDED SOIL TO A TILLED DEPTH OF 6". 7. SOIL AMENDMENT IS TO CONSIST OF 50% GROUND WELL-AGED MANURE, 50% FINELY GROUND AND AGED WOOD CHIPS. AMENDMENT IS
- TO BE INCORPORATED WITH FERTILIZER BY TILLING AT THE RATE OF 5 CUBIC YARDS/1000 SF INTO ALL PLANTED AREAS. 8. CONTRACTOR SHALL BACKFILL EXCAVATED SHRUB BEDS WITH SPECIFIED AMENDED SOIL. 9. SOIL IS TO BE COMPACTED TO 85% MODIFIED PROCTOR (WHEEL ROLL) TO MINIMIZE SETTLING. BEDS ARE TO BE FILLED TO A DEPTH OF 6"
- ABOVE ADJACENT EDGE OF CURB, SHAPED TO FORM MOUNDED PLANTING AREA. SHRUB BED TO BE FINISHED WITH A 4:1 SLOPE FROM 2" BELOW ADJACENT CONCRETE TO FINISH GRADE. SHRUB BEDS ADJACENT TO BUILDINGS ARE TO DRAIN AWAY FROM BUILDING. IO. WEED FABRIC IS TO BE 3.5 OZ. SPINBOND, PERMEABLE MATERIAL BY LANDMASTER, OR EQUAL. WEED FABRIC IS TO OVERLAP 6 INCHES
- AT SEAMS WITH NO GAPS AT EDGES. FABRIC IS TO BE PINNED IN PLACE WITH SOD STAPLE 5' ON CENTER AND IN ALL CORNERS. II. TREES, SHRUBS, PERENNIALS, VINES AND ORNAMENTAL GRASSES ARE TO BE INSTALLED PER CITY OF COMMERCE CITY DETAILS,
- INCLUDED IN THESE PLANS. 12. ALL PLANTINGS ARE TO SPACED AS SCALED FROM THE PLANTING PLAN.
- 13. MULCH FOR SHRUB BEDS SHALL BE DOUBLE SHREDDED WESTERN RED CEDAR, FREE OF TRASH, STICKS, ROOTS OR OTHER DEBRIS. (3:1 SLOPES OR FLATTER)
- 14. RIP RAP FOR STEEP SLOPES TO BE "MOUNTAIN GRANITE" 5"-18", PLACED ON TOP OF WEED FABRIC. (STEEPER THAN 3:1).SEE SHEELT L-1 FOR GRAPHIC REPRESENTATION OF AREAS TO RECEIVE RIP RAP MATERIAL
- 15. SEE PLANTING DETAILS ON SHEET L-6 I.G. CONTRACTOR IS TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF WORK.

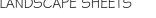


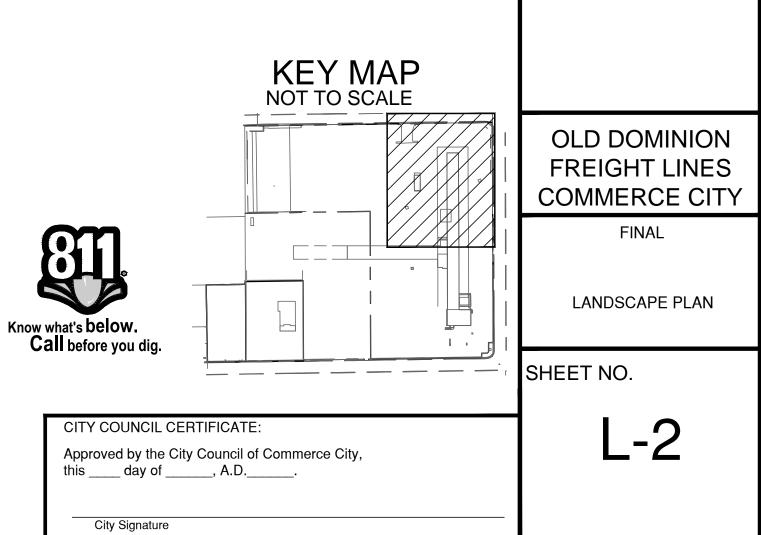


TREE PROTECTION SPECIFICATIONS (as per City of Commerce City Landscape Code) I. Within the drip line of any protected existing tree, there shall be no cut or fill over a four-inch depth unless a qualified arborist or forester has evaluated and approved the disturbance.

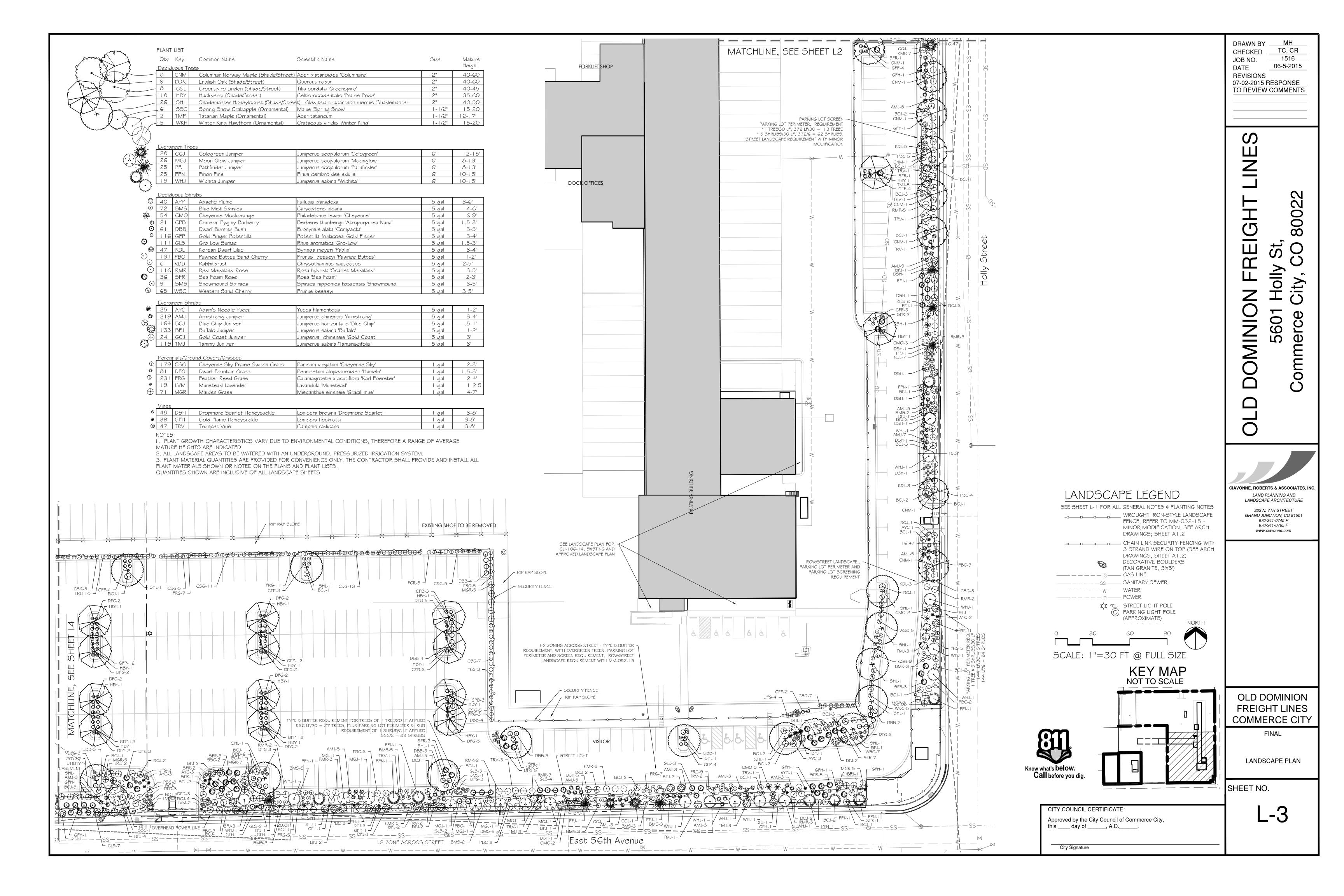
- 2. Prior to and during construction, barriers shall be erected around all protected existing trees with such barriers to be of orange fencing a
- Prior to and during construction, barriers shall be erected around all protected existing trees with such barriers to be of orange fencing a minimum of four feet in height, secured with metal T-posts, no closer than six feet from th etrunk or ½ of the drip line, whichever is greater. There shall be no storage or movement of equipment, material, debris or fill within the fenced tree protection zone.
 Large property areas containing protected trees and separated from construction or land claering areas, road nights-of-way and utility easements may be ribboned off, rather than erecting protective fencing around each tree as required in subsection 2 above. This may be accomplished by placing metal t-post stakes a maximum of 50 feet apart and tying ribbon or rope from stake-to-stake along the outside perimeters of such areas being cleared.
 During the construction stage of development, the applicant shall prevent the cleaning of equipment or material or the storage and disposal of waste material such as paints, oils, solvents, asphalt, concrete, motor oil or any other material harmful to the life of a tree within the drip line of any protected tree or group of trees.
 No damaging attachment, wires, signs or permits may be fastened to any protected tree.
 The installation of utilities, irrigation lines, or any underground fixture requiring excavation deeper than 6 inches shall be accomplished by boring under the root system of protected existing trees at a minimum depth of 24 inches. The auger distance is established from the face of the tree (outer bark) and is scaled from tree diameter at breast height.

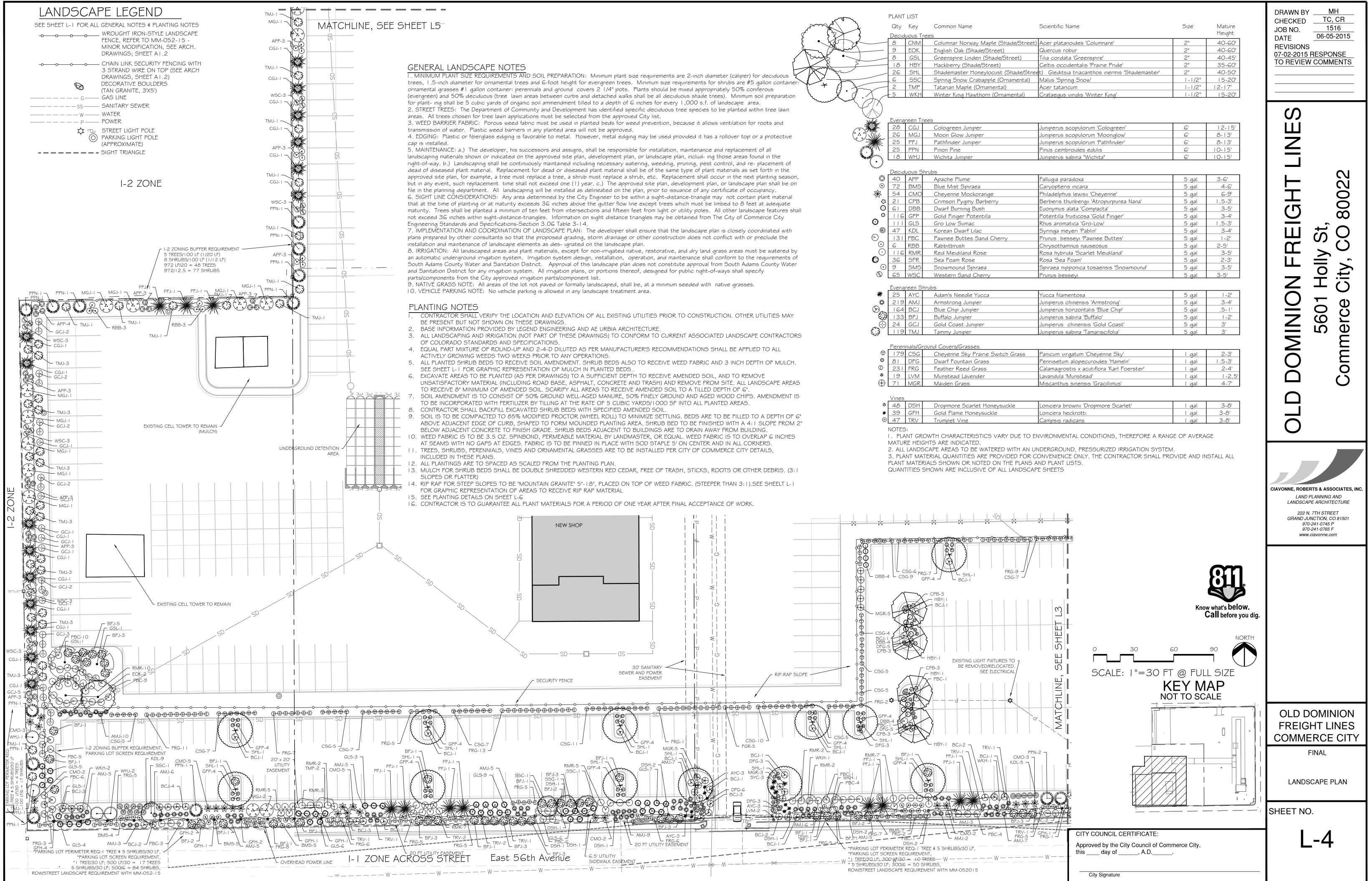
	8 9 8 18 26 6 2 5 5 5 5 5 25 25 18	duous Tre CNM EOK GSL HBY SHL SSC TMP WKH WKH Green Tre CGJ MGJ PFJ PPN WHJ WHJ duous Sh	Columnar Norway Maple (Shade/Street) English Oak (Shade/Street) Greenspire Linden (Shade/Street) Hackberry (Shade/Street) Shademaster Honeylocust (Shade/Stre Spring Snow Crabapple (Ornamental) Tatarian Maple (Ornamental) Winter King Hawthorn (Ornamental)	 Acer platanoides 'Columnare' Quercus robur Tilia cordata 'Greenspire' Celtis occidentalis 'Prairie Pride' Cettis occidentalis 'Prairie Pride' Cet) Gleditsia triacanthos inermis 'Shademaster' Malus 'Spring Snow' Acer tataricum Crataegus viridis 'Winter King' Juniperus scopulorum 'Cologreen' Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis Juniperus sabina "Wichita" 	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Heigh 40-6 40-4 35-6 40-5 15-2 12-17 15-2 12-17 15-2
	9 8 18 26 6 2 5 Evera 28 26 25 25 18	EOK GSL HBY SHL SSC TMP WKH WKH WKH	English Oak (Shade/Street) Greenspire Linden (Shade/Street) Hackberry (Shade/Street) Shademaster Honeylocust (Shade/Stre Spring Snow Crabapple (Ornamental) Tatarian Maple (Ornamental) Winter King Hawthorn (Ornamental) Winter King Hawthorn (Ornamental) ees Cologreen Juniper Moon Glow Juniper Pathfinder Juniper Pinon Pine	Quercus robur Tilia cordata 'Greenspire' Celtis occidentalis 'Prairie Pride' eet) Gleditsia triacanthos inermis 'Shademaster' Malus 'Spring Snow' Acer tataricum Crataegus viridis 'Winter King' Juniperus scopulorum 'Cologreen' Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	2" 2" 2" 2" 1-1/2" 1-1/2" 1-1/2"	40-6 40-4 35-6 40-5 15-2 12-17' 15-2 15-2
	8 18 26 6 2 5 Evera 28 26 25 25 18	GSL HBY SHL SSC TMP WKH WKH WKH CGJ MGJ PFJ PPN WHJ WHJ	Greenspire Linden (Shade/Street) Hackberry (Shade/Street) Shademaster Honeylocust (Shade/Stre Spring Snow Crabapple (Ornamental) Tatarian Maple (Ornamental) Winter King Hawthorn (Ornamental) Winter King Hawthorn (Ornamental) ees Cologreen Juniper Moon Glow Juniper Pathfinder Juniper Pinon Pine	Tilia cordata 'Greenspire' Celtis occidentalis 'Prairie Pride' eet) Gleditsia triacanthos inermis 'Shademaster' Malus 'Spring Snow' Acer tataricum Crataegus viridis 'Winter King' Juniperus scopulorum 'Cologreen' Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	2" 2" 2" -1/2" -1/2" -1/2"	40-4 35-6 40-5 15-2 12-17 15-2 12-1 8-13
	26 6 2 5 5 25 25 25 25 18 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	SHL SSC TMP WKH WKH CGJ PFJ PFN WHJ WHJ duous Sh APP	Shademaster Honeylocust (Shade/Stre Spring Snow Crabapple (Ornamental) Tatarian Maple (Ornamental) Winter King Hawthorn (Ornamental) ees Cologreen Juniper Moon Glow Juniper Pathfinder Juniper Pinon Pine	2et) Gleditsia triacanthos inermis 'Shademaster' Malus 'Spring Snow' Acer tataricum Crataegus viridis 'Winter King' Juniperus scopulorum 'Cologreen' Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	2" - /2" - /2" - /2" - /2"	40-5 15-2 12-17 15-2 12-1 8-13
	6 2 5 5 25 25 25 25 18 3 3 0 € 25 25 18 3 3 0 € 25 25 18 3 3 5 40 3 5 40 3 5 40 3 5 40 3 5 40 3 5 40 3 5 40 3 5 40 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SSC TMP WKH WKH CGJ MGJ PFJ PPN WHJ WHJ	Spring Snow Crabapple (Ornamental) Tatarian Maple (Ornamental) Winter King Hawthorn (Ornamental) ees Cologreen Juniper Moon Glow Juniper Pathfinder Juniper Pinon Pine	Malus 'Spring Snow' Acer tataricum Crataegus viridis 'Winter King' Juniperus scopulorum 'Cologreen' Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	I - I/2" I - I/2" I - I/2" G' G' G' G' G' G'	5-2 2-17 5-2 2-1 8-13
	2 5 5 25 26 25 25 25 18 3 3 0 € 40 72 54 21	TMP WKH CGJ MGJ PFJ PPN WHJ duous Sh APP	Tatarian Maple (Ornamental) Winter King Hawthorn (Ornamental) ees Cologreen Juniper Moon Glow Juniper Pathfinder Juniper Pinon Pine	Acer tataricum Crataegus viridis 'Winter King' Juniperus scopulorum 'Cologreen' Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	- /2" - /2" - /2"	2- 7 5-2 2- 8- 3
	5 Evera 28 26 25 25 25 18 *** • ** • * * • * * • * * * * * * * *	WKH CGJ MGJ PFJ PPN WHJ duous Sh APP	Winter King Hawthorn (Ornamental) ees Cologreen Juniper Moon Glow Juniper Pathfinder Juniper Pinon Pine	Crataegus viridis 'Winter King' Juniperus scopulorum 'Cologreen' Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	6' 6' 6'	5-2 2- 8- 3
	28 26 25 25 18	CGJ MGJ PFJ PPN WHJ duous Sh APP	Cologreen Juniper Moon Glow Juniper Pathfinder Juniper Pinon Pine	Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	6' 6'	8-13
	28 26 25 25 18	CGJ MGJ PFJ PPN WHJ duous Sh APP	Cologreen Juniper Moon Glow Juniper Pathfinder Juniper Pinon Pine	Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	6' 6'	8-13
	26 25 25 18 • • • • • • • • • • • • • • • • • •	MGJ PFJ PPN WHJ duous Sh APP	Moon Glow Juniper Pathfinder Juniper Pinon Pine	Juniperus scopulorum 'Moonglow' Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	6' 6'	8-13
	 25 18 325 18 Decid 40 € 72 54 21 	PPN WHJ duous Sh APP	Pathfinder Juniper Pinon Pine	Juniperus scopulorum 'Pathfinder' Pinus cembroides edulis	i i	8-13
	 → 18 → 18 → Decia ↓ 0 ↓ 0	WHJ duous Sh APP			6'	
	• ** Decid © 40 * 72 * 54 © 21	duous Sh APP	Wichita Juniper	Juniperus sabina "Wichita"		10-15
	 ♥ 40 ♥ 72 ♥ 54 ♥ 21 	APP			6'	0- 5
			rubs Apache Plume	Fallugia paradoxa	5 gal	3-6'
	O 21	BMS	Blue Mist Spiraea	Caryopteris incana	5 gal	4-6
¢		CMO	Cheyenne Mockorange	Philadelphus lewisii 'Cheyenne'	5 gal	6-9
(CPB DBB	Crimson Pygmy Barberry Dwarf Burning Bush	Berberis thunbergii 'Atropurpurea Nana' Euonymus alata 'Compacta'	5 gal 5 gal	<u>ا ا .5-3</u> ع-5
(0 116		Gold Finger Potentilla	Potentilla fruiticosa 'Gold Finger'	5 gal	3-4
)		Gro Low Sumac	Rhus aromatica 'Gro-Low'	5 gal	1.5-3
	¹	KDL	Korean Dwarf Lilac	Syrınga meyeri 'Pablın'	5 gal	3-4
F) 131		Pawnee Buttes Sand Cherry	Prunus besseyi 'Pawnee Buttes'	5 gal	-2
	● 6 ● 6	RBB	Rabbitbrush Rad Majdiland Rasa	Chrysothamnus nauseosus	5 gal	2-5'
1	· <u> ∈</u> ● 36	S RMR SFR	<u>Red Meidiland Rose</u> Sea Foam Rose	Rosa hybrida 'Scarlet Meidiland' Rosa 'Sea Foam'	5 gal 5 gal	<u>3-</u> : 2-3
•	\odot 9	SMS	Snowmound Spiraea	Spiraea nipponica tosaensis 'Snowmound'	5 gal	3-:
	0 65	WSC	Western Sand Cherry	Prunus besseyi	5 gal	3-5'
	Evera * 25	green Shi AYC	rubs Adam's Needle Yucca	Yucca filamentosa	5 gal	- 2
	219) AMJ	Armstrong Juniper	Juniperus chinensis 'Armstrong'	5 gal	3-4
(Dry 164		Blue Chip Juniper	Juniperus horizontalis 'Blue Chip'	5 gal	.5-
	¥Q¥ 133	-i - i -	Buffalo Juniper	Juniperus sabina 'Buffalo'	5 gal	- 2
کنو			Gold Coast Juniper Tammy Juniper	Juniperus chinensis 'Gold Coast' Juniperus sabina 'Tamariscifolia'	5 gal 5 gal	<u> </u>
ζ,			ound Covers/Grasses		<u> </u>	<u></u>
	0 179	CSG	Cheyenne Sky Prairie Switch Grass	Panicum virgatum 'Cheyenne Sky'	l gal	2-3
	Ø 81Ø 231	DFG FRG	Dwarf Fountain Grass Feather Reed Grass	Pennisetum alopecuroides 'Hameln' Calamagrostis x acutiflora 'Karl Foerster'	l gal I gal	<u> </u>
	● 19	LVM	Munstead Lavender	Lavandula 'Munstead'	l gal	-
	71	MGR	Maiden Grass	Miscanthus sinensis 'Gracillimus'	l gal	4-
	Vines Ø 48	B DSH	Dropmore Scarlet Honeysuckle	Lonicera brownii 'Dropmore Scarlet'	l gal	3-8
	* 39	GFH	Gold Flame Honeysuckle	Lonicera heckrotti	l gal	3-8
	⊜ 47	TRV	Trumpet Vine	Campsis radicans	l gal	3-8
	2. ALI 3. PLA PLANT	L LANDSO ANT MAT T MATERI				ƏTALL A
		90 - SIZF				K NO
					Ī	╈═╤
: 1"=30 FT (NDSCAPE	LEGE	END	TING NOTES			
I = 30 FT (NDSCAPE HEET L-1 FOR ALL GENE WRC FENC MINC	LEGE ERAL NOTES DUGHT IRON CE, REFER T	S & PLAN N-STYLE TO MM-C CATION,	LANDSCAPE 052-15 - SEE ARCH.	M		
E: I "= 30 FT (NDSCAPE IEET L-I FOR ALL GENE WRC FENC MINC DRAV 0 CHA 3 ST DRAV	LEGE ERAL NOTES DUGHT IRON CE, REFER T OR MODIFIC WINGS; SH IN LINK SEC	END S & PLAN N-STYLE TO MM-C CATION, IEET A I .2 CURITY F E ON TOI IEET A I .2	LANDSCAPE D52-15 - SEE ARCH. 2 ENCING WITH P (SEE ARCH 2)	E		
E: I "= 30 FT (NDSCAPE IEET L-I FOR ALL GENE WRC FENC MINC DRAV ORAV ORAV ORAV DRAV DECC (TAN ORAS	LEGE ERAL NOTES DUGHT IRON CE, REFER T OR MODIFIC WINGS; SH IN LINK SEC TRAND WIRN WINGS, SH	END 5 ¢ PLAN N-STYLE TO MM-C CATION, IEET A I .2 CURITY F E ON TOI IEET A I .2 OULDERS 3'X5')	LANDSCAPE D52-15 - SEE ARCH. 2 ENCING WITH P (SEE ARCH 2)	Know what's below. Call before you dig.		
: I "= 30 FT (NDSCAPE EET L- I FOR ALL GENE WRC FENC MINC DRAV CHA 3 ST DRAV DECC (TAN) (TAN) (T	LEGE ERAL NOTES DUGHT IRON CE, REFER T OR MODIFIC WINGS; SH IN LINK SEC TRAND WIRI WINGS, SH ORATIVE BO GRANITE, LINE ITARY SEW ER	END 5 ¢ PLAN N-STYLE TO MM-C CATION, IEET A I .2 CURITY F E ON TOI IEET A I .2 OULDERS 3'X5')	LANDSCAPE D52-15 - SEE ARCH. 2 ENCING WITH P (SEE ARCH 2)			
E: I "= 30 FT (NDSCAPE IEET L-I FOR ALL GENE WRC FENC MINC DRAV ORAV CHA 3 ST DRAV DECC (TAN 	LEGE ERAL NOTES DUGHT IRON CE, REFER T OR MODIFIC WINGS; SH IN LINK SEC TRAND WIRI WINGS, SH ORATIVE BO GRANITE, LINE ITARY SEW ER	END S & PLAN N-STYLE TO MM-C CATION, IEET A I .2 CURITY F E ON TOI IEET A I .2 OULDERS 3'X5') 'ER	LANDSCAPE D52-15 - SEE ARCH. 2 ENCING WITH P (SEE ARCH 2)		ارا	





DRAWN BY MH CHECKED TC, CR JOB NO. 1516 DATE 06-05-2015 REVISIONS 07-02-2015 RESPONSE TO REVIEW COMMENTS
OLD DOMINION FREIGHT LINES 5601 Holly St, Commerce City, CO 80022
CIAVONNE, ROBERTS & ASSOCIATES, INC. LAND PLANNING AND LANDSCAPE ARCHITECTURE 222 N. 7TH STREET GRAND JUNCTION, CO 81501 970-241-0765 F www.ciavonne.com
OLD DOMINION FREIGHT LINES COMMERCE CITY FINAL
LANDSCAPE PLAN SHEET NO.
L-2





	25	PPN	Pine
	18	WHJ	Wic
کی در ۲ ۵۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱			
	Decid	uous S	hrubs
\bigotimes_{\bigstar}	40	APP	Apa
$(\mathbf{*})$	72	BMS	Blu
×	54	СМО	Che
O.	21	СРВ	Crii
0 0	61	DBB	Dw
O	116	GFP	Gol
\odot		GLS	Gro
\odot	47	KDL	Kor
P•	131	PBC	Pav
•	6	RBB	Rat
\odot	116	RMR	Rea
O	36	SFR	Sea
▣	9	SMS	Sno
\bigcirc	65	WSC	We
	_	_	
	Everg	reen S	hrubs
*	25	AYC	۸d

on Name	Scientific Name	Sıze	Mature
			Height
nar Norway Maple (Shade/Street)	Acer platanoides 'Columnare'	2"	40-60'
1 Oak (Shade/Street)	Quercus robur	2"	40-60'
spire Linden (Shade/Street)	Tilia cordata 'Greenspire'	2"	40-45'
erry (Shade/Street)	Celtis occidentalis 'Prairie Pride'	2"	35-60'
master Honeylocust (Shade/Stree	t) Gleditsia triacanthos inermis 'Shademaster'	2"	40-50'
Snow Crabapple (Ornamental)	Malus 'Spring Snow'	- /2"	15-20'
an Maple (Ornamental)	Acer tataricum	- /2"	2- 7'
King Hawthorn (Ornamental)	Crataegus viridis 'Winter King'	- /2"	15-20'

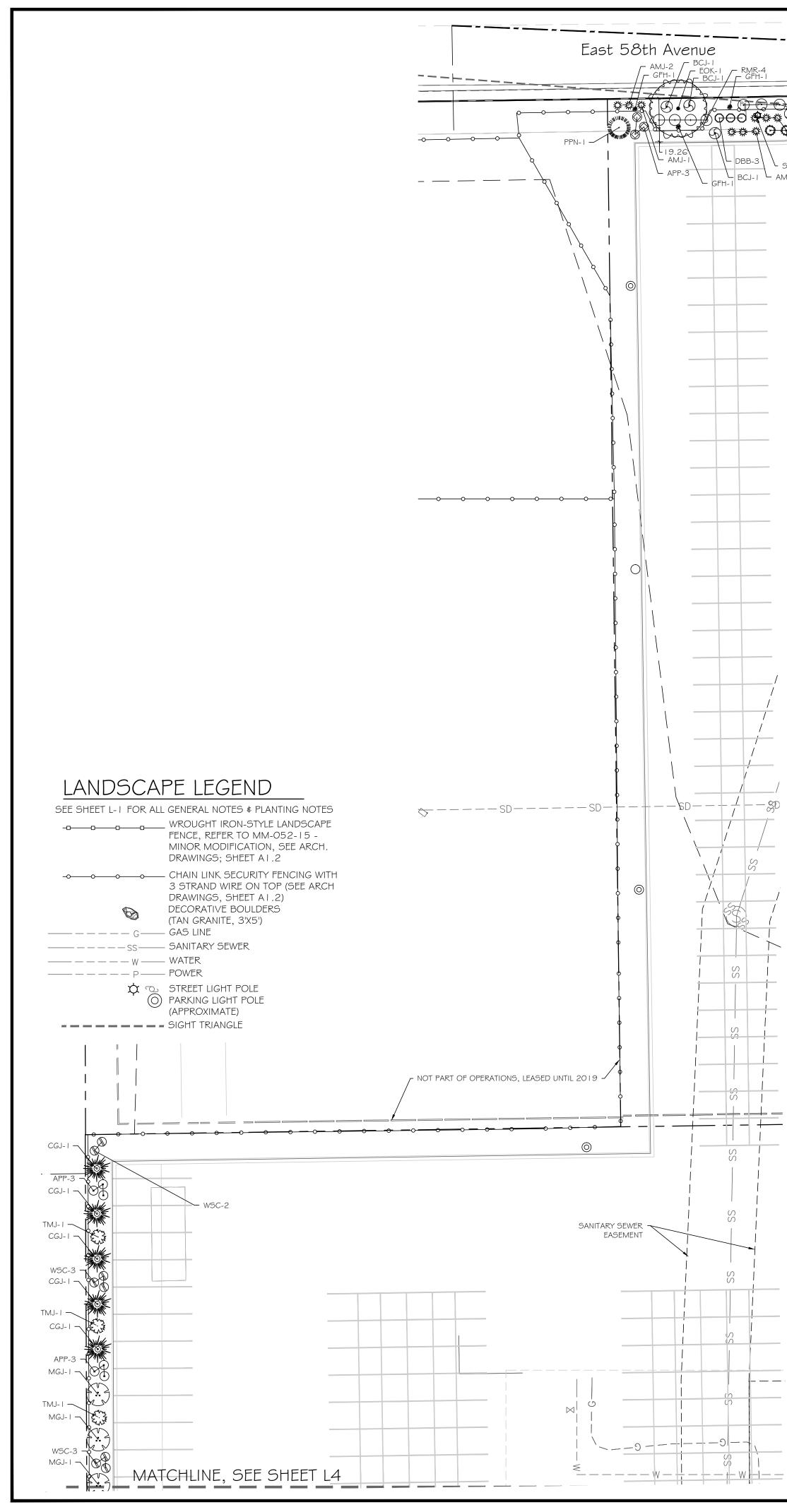
een Juniper	Juniperus scopulorum 'Cologreen'	6'	2- 5'
Glow Juniper	Juniperus scopulorum 'Moonglow'	6'	8-13'
der Juniper	Juniperus scopulorum 'Pathfinder'	6'	8-13'
Pine	Pinus cembroides edulis	6'	10-15'
a Juniper	Juniperus sabina "Wichita"	6'	10-15'

		Jigai	5-6
Aist Spiraea	Caryopteris incana	5 gal	4-6'
enne Mockorange	Philadelphus lewisii 'Cheyenne'	5 gal	6-9'
on Pygmy Barberry	Berberis thunbergii 'Atropurpurea Nana'	5 gal	1.5-3'
Burning Bush	Euonymus alata 'Compacta'	5 gal	3-5'
Finger Potentilla	Potentilla fruiticosa 'Gold Finger'	5 gal	3-4'
ow Sumac	Rhus aromatica 'Gro-Low'	5 gal	1.5-3'
n Dwarf Lilac	Syrınga meyeri 'Pablın'	5 gal	3-4'
e Buttes Sand Cherry	Prunus besseyi 'Pawnee Buttes'	5 gal	1-2'
tbrush	Chrysothamnus nauseosus	5 gal	2-5'
Neidiland Rose	Rosa hybrida 'Scarlet Meidiland'	5 gal	3-5'
oam Rose	Rosa 'Sea Foam'	5 gal	2-3'
mound Spiraea	Spiraea nipponica tosaensis 'Snowmound'	5 gal	3-5'
ern Sand Cherry	Prunus besseyi	5 gal	3-5'
• • •	•		

s Needle Yucca	Yucca filamentosa	5 gal	1-2'
rong Juniper	Juniperus chinensis 'Armstrong'	5 gal	3-4'
Chip Juniper	Juniperus horizontalis 'Blue Chip'	5 gal	.5-1'
o Juniper	Juniperus sabina 'Buffalo'	5 qal	1-2'
Coast Juniper	Juniperus chinensis 'Gold Coast'	5 qal	3'
/ Juniper	Juniperus sabina 'Tamariscifolia'	5 qal	3'
ers/Grasses			
nne Sky Prairie Switch Grass	Panıcum vırgatum 'Cheyenne Sky'	l gal	2-3'
Fountain Grass	Pennisetum alopecuroides 'Hameln'	l gal	1.5-3'
er Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	l gal	2-4'
ead Lavender	Lavandula 'Munstead'	l gal	1-2.5
n Grass	Miscanthus sinensis 'Gracillimus'	l gal	4-7'

Ead Lavendei	LAVAIIGUIA IVIUIISLEAG	I gai	1-2.5
1 Grass	Miscanthus sinensis 'Gracillimus'	l gal	4-7'
ore Scarlet Honeysuckle	Lonicera brownii 'Dropmore Scarlet'	l gal	3-8'
lame Honeysuckle	Lonicera heckrotti	l gal	3-8'
			2 01

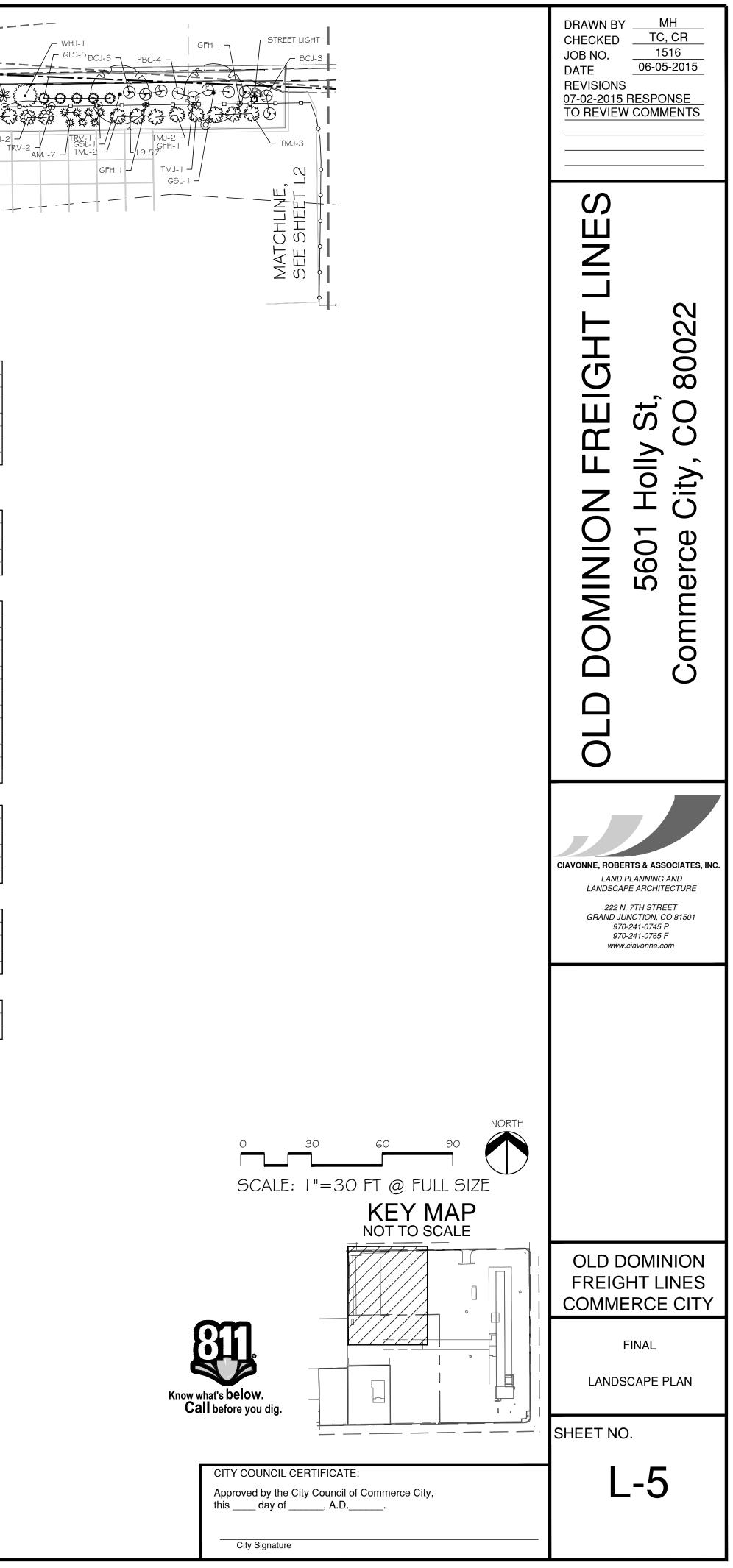
DRAWN BY MH CHECKED TC, CR JOB NO. 1516 DATE 06-05-2015 REVISIONS 07-02-2015 RESPONSE TO REVIEW COMMENTS
OLD DOMINION FREIGHT LINES 5601 Holly St, Commerce City, CO 80022
CIAVONNE, ROBERTS & ASSOCIATES, INC. LAND PLANNING AND LANDSCAPE ARCHITECTURE

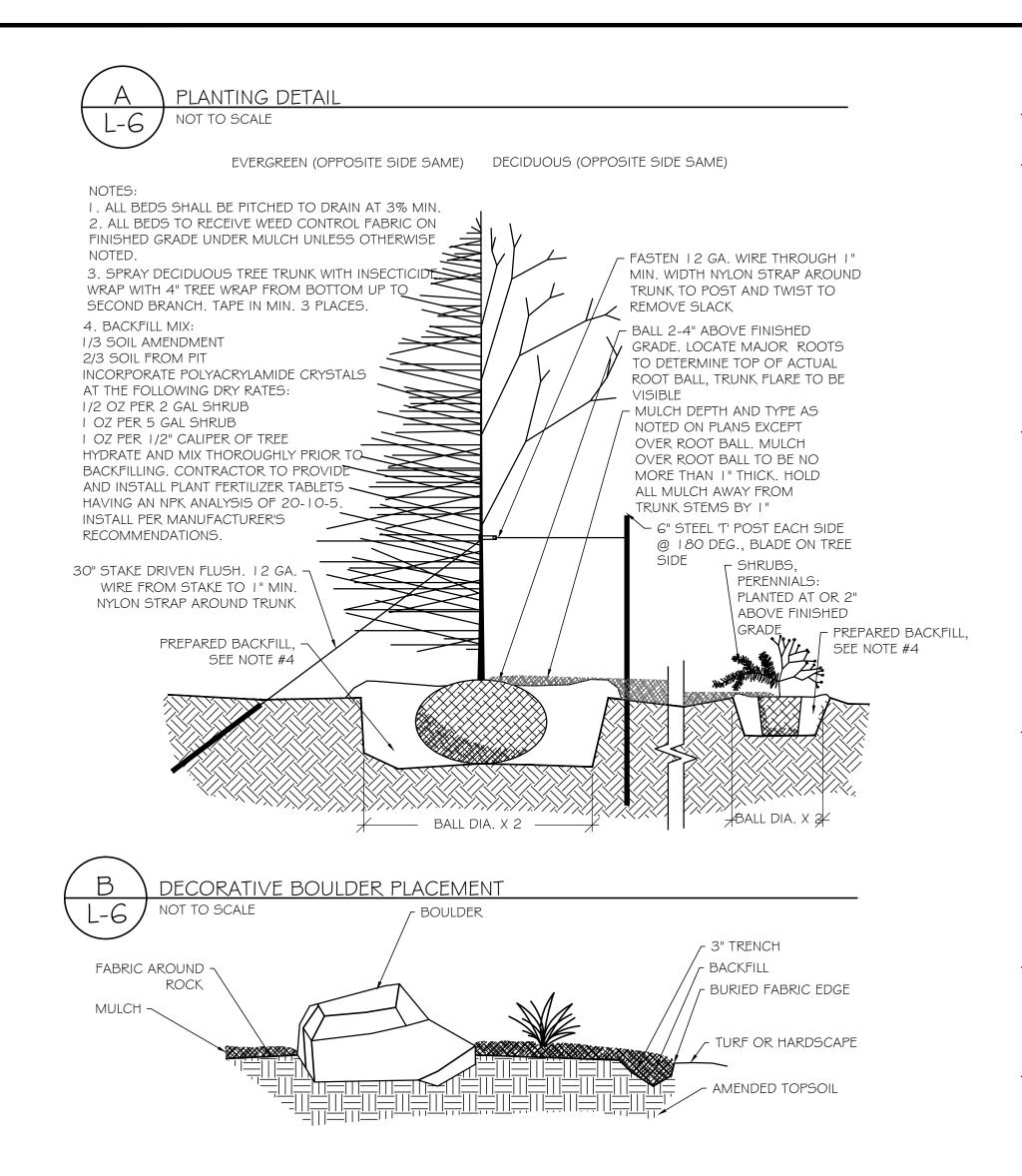


I-I ZONE ACROSS STREET	 5' SS A	ND WAT		$ \frac{FRG-7}{TRV-1} + \frac{AMJ-9}{TRV-1} + \frac{RMR-5}{TRV-1} + RMR-$		
GFH-1		иј-9 РРN-1 -	AMJ-9 SMS-5 RN		PPN-I	
						BFJ-2
BCJ-1 BFL-29.56'/ / GLS-2 GLS-7 / AMJ-3 BCJ-1 BFL-29.56'/ GLS-7 / AMJ-3 BCJ-2 AMJ-3 BCJ-2	CMO-2 TRV-		-2 - RV-1 - TRV-1 - TMJ-2 - TRV-2 - TMJ-1 - TMJ-1 - TMJ-1 - TMJ-1 - TMJ-3 - KDL-5 - STREET LIGHT - TMJ-4 - TMJ-4 -	- BOLA	 BFJ- I ТМЈ-5	
SANITARY SEWER			GTREET LANDSCAPE REQUIREMENT WITH MINOR CATION; 50/50 MIX OF EVERGREEN/DECIDUOUS @ 30-40 FT O.C., PLUS VINES	STORM DRAIN - EASEMENT		=
- Kan	PLANT					
A CONTRACT &	Qty <u>Decid</u>	Key uous Tr	Common Name ees	Scientific Name	Sıze	Mature Height
· ·	. <u>8</u> 9	CNM EOK	Columnar Norway Maple (Shade/Stree English Oak (Shade/Street)	et) Acer platanoides 'Columnare' Quercus robur	2"	40-60' 40-60'
- Auge .	- 8	GSL	Greenspire Linden (Shade/Street)	Tilia cordata 'Greenspire'	2"	40-45'
the second	- 18 - 26	HBY SHL	Hackberry (Shade/Street)	Celtis occidentalis 'Prairie Pride' creet) Gleditsia triacanthos inermis 'Shademaster'	2"	35-60' 40-50'
E Martin	6	SSC	Spring Snow Crabapple (Ornamental)		- /2"	15-20'
+ 1.	2	TMP	Tatarian Maple (Ornamental)	Acer tataricum	- /2"	2- 7
the work +	- 5	WKH	Winter King Hawthorn (Ornamental)	Crataegus viridis 'Winter King'	- /2"	15-20'
		reen Tr				
	28 26	CGJ MGJ	Cologreen Juniper Moon Glow Juniper	Juniperus scopulorum 'Cologreen' Juniperus scopulorum 'Moonglow'	6' 6'	2- 5' 8- 3'
	25	PFJ	Pathfinder Juniper	Juniperus scopulorum 'Pathfinder'	6	8-13
	25	PPN	Pinon Pine	Pinus cembroides edulis	6'	10-15'
	18	WHJ	Wichita Juniper	Juniperus sabina "Wichita"	6'	10-15'
\bigcirc	Uecid 40	uous SI APP	Apache Plume	Falluqia paradoxa	5 qal	3-6'
, (*)	72	BMS	Blue Mist Spiraea	Caryopteris incana	5 gal	4-6'
×	54 21	CMO CPB	Cheyenne Mockorange	Philadelphus lewisii 'Cheyenne'	5 gal	6-9'
©	61	DBB	Crimson Pygmy Barberry Dwarf Burning Bush	Berberis thunbergii 'Atropurpurea Nana' Euonymus alata 'Compacta'	5 gal 5 gal	1.5-3' 3-5'
0	116	GFP	Gold Finger Potentilla	Potentilla fruiticosa 'Gold Finger'	5 gal	3-4'
0		GLS	Gro Low Sumac	Rhus aromatica 'Gro-Low'	5 gal	1.5-3'
	47	KDL PBC	Korean Dwarf Lilac Pawnee Buttes Sand Cherry	Syrınga meyerı 'Pablın' Prunus besseyı 'Pawnee Buttes'	5 gal 5 gal	3-4' -2'
\smile	6	RBB	Rabbitbrush	Chrysothamnus nauseosus	5 gal	2-5'
$\overline{\odot}$	116	RMR	Red Meidiland Rose	Rosa hybrida 'Scarlet Meidiland'	5 gal	3-5'
<u>ہ</u>	36	SFR	Sea Foam Rose	Rosa 'Sea Foam'	5 gal	2-3'
	9 65	SMS WSC	Snowmound Spiraea Western Sand Cherry	Spiraea nipponica tosaensis 'Snowmound' Prunus besseyi	5 gal 5 gal	3-5' 3-5'
		reen St				
*	25	AYC	Adam's Needle Yucca	Yucca filamentosa	5 gal	I -2'
/	219		Armstrong Juniper	Juniperus chinensis 'Armstrong'	5 gal	3-4'
	164	BCJ BFJ	Blue Chip Juniper Buffalo Juniper	Juniperus horizontalis 'Blue Chip' Juniperus sabina 'Buffalo'	5 gal 5 gal	.5-1' -2'
**** 	24	GCJ	Gold Coast Juniper	Juniperus chinensis 'Gold Coast'	5 gal	3'
	119	TMJ	Tammy Juniper	Juniperus sabina 'Tamariscifolia'	5 gal	3'
			ound Covers/Grasses			
	179		Cheyenne Sky Prairie Switch Grass	Panicum virgatum 'Cheyenne Sky'	l gal	2-3'
	81 231	DFG FRG	<u>Dwarf Fountain Grass</u> Feather Reed Grass	Pennisetum alopecuroides 'Hameln' Calamagrostis x acutiflora 'Karl Foerster'	l gal I gal	1.5-3' 2-4'
۵	19	LVM	Munstead Lavender	Lavandula 'Munstead'	l gal	I-2.5'
$\mathbf{igodolarized{a}}$	71	MGR	Maiden Grass	Miscanthus sinensis 'Gracillimus'	l gal	4-7'
	Vines					
o	48	DSH	Dropmore Scarlet Honeysuckle	Lonicera brownii 'Dropmore Scarlet'	l gal	3-8'
* * *		GFH TRV/	Gold Flame Honeysuckle	Lonicera heckrotti	l gal	3-8'
	NOTES	TRV	Trumpet Vine	Campsis radicans	l gal	3-8'
	I. PLA	NT GR		ENVIRONMENTAL CONDITIONS, THEREFORE A RAN	IGE OF AVERA	GE
			HTS ARE INDICATED. CAPE AREAS TO BE WATERED WITH AN	UNDERGROUND, PRESSURIZED IRRIGATION SYSTE	М	
				CONVENIENCE ONLY. THE CONTRACTOR SHALL PR		ISTALL ALL

3. PLANT MATERIAL QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL PLANT MATERIALS SHOWN OR NOTED ON THE PLANS AND PLANT LISTS.

QUANTITIES SHOWN ARE INCLUSIVE OF ALL LANDSCAPE SHEETS





SECTION 32 70 20 LANDSCAPE PLANTING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Landscape development work as shown on the drawings and in specifications.

1.2 SUBMITTALS A. Certification:

- 1. All plants and planting material shall meet or exceed the specifications of Federal, State, and County laws requiring inspection for plant disease, insect control, and weeds. All plants shall be free of insect and disease problems and
- shall be guaranteed healthy. 2. Plants shall be subject to inspection and approval of the Architect upon delivery to site. All plant material shall be true to size and form, and shall conform to the current edition of "Horticultural Standards" for #1 Grade nursery stock
- adopted by the American Association of Nurserymen. 3. All specifications of Article 26, Colorado Nursery Act, pertaining to root spread, definitions, etc. shall be followed. 4. All plants shall be "Colorado Grown", "Colorado Fielded" or "Northern Grown" as defined in ALCC Specifications
- Handbook, Section VIII, unless specified otherwise. B. Maintenance Instructions: Submit two (2) copies of typewritten instructions recommending procedures to be established
- by the Owner for the maintenance of landscape work for one (1) full year. Submit prior to completion of planting for review by Architect.
- C. Topsoil Report: A soil analysis will be done in accordance with C.S.U. S.A.#500 to determine soluble salt and nutrient levels. Test shall be performed by Colorado State University (through local cooperative extension service) or a private laboratory facility.

1.3 QUALITY ASSURANCE

- A. Work of this Section shall be performed by a single firm specializing in landscape work having not less than five (5) vears successful experience in landscape projects of similar scope to this one. All plant material shall be supplied by the Landscape Contractor. Size and quantity shall be equal to or better than specified. B. When specification is not defined within this document, conform to Associated Landscape Contractors of Colorado
- specifications. C. Trees and Shrubs: Provide trees and shrubs grown in a local Colorado nursery in accordance with good horticultural
- practice. Provide healthy, vigorous stock grown under climatic conditions similar to conditions in the locality of the project and free of disease, insects, eggs, larvae and defects such as knots, sun-scald, injuries, abrasions or disfigurement. D. Plant Material Labeling: Durable, legible labels stating in weather-resistant ink indicating the correct plant name and size
- as specified on the plant list shall be securely attached to all plants, bundles or packages of plants of a single species and size, or plant container delivered to the planting site. Plants not properly labeled shall be subject to rejection by the Owners Representative

E. Inspections:

- 1. In addition to normal progress inspections by the Architect, schedule and conduct the following formal inspections, giving the Architect at least 24 hours prior notice of readiness for inspection:
- 2. Inspection of plants and their locations to be prior to planting to check condition and compliance w/drawing. 3. Final inspection to be after completion of planting.
- 4. Final inspection to be at the end of the maintenance period.

1.4 PROJECT/SITE CONDITIONS

A. Utilities: Prior to cutting into the soil, the Landscape Contractor shall locate all underground utilities and shall take proper precaution not to disturb them. Any damage done to the underground utilities or structures shall be repaired at Landscape Contractor's expense.

B. Excavation:

- 1. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions or obstructions, notify Architect before planting.
- 2. Heavy equipment shall be kept off root zone areas of trees as much as possible. Snow fence shall be used if necessary to delineate this area.
- 3. Excavations, necessary for curbing, footings, concrete flatwork, irrigation lines, etc. shall be done with minimal damage to roots of all existing trees and large shrubs scheduled to remain on site. Large roots defined as two (2) inches or more in caliper shall not be cut.
- 4. Prior to placement of fills, rototil or break up soil on sloped surfaces steeper than one vertical to four horizontal so that fill materials will bond with existing surface. Scarify, moisten, and re-compact subgrade for a minimum depth of eight (8) inches prior to the placement of fill and pavement materials.

1.5 WARRANTY

- A. Warrant trees and shrubs for a period of one year after date of acceptance against defects, including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond Landscape Installer's control. All replacement shall be made at the request of
- the Architect and shall have a one (1) year warrantee from date of replacement. B. Plants shall be allowed 90 days to become established. The guarantee shall be a full, 100% guarantee on plant material

and labor for replacement. 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Ship landscape materials with certificates of inspection as required by governmental authorities. Comply with governing
- regulations applicable to landscape materials. B. Deliver all items to the site in their original containers with all labels intact and legible at time of inspection by the Architect. C. Use all means necessary to protect plant materials before, during, and after installation and to protect the installed work
- and materials of all other trades. Plant nursery stock as soon as possible after approval by the Owners Representative. PART 2 PRODUCTS

2.1 TOPSOIL

- A. Topsoil will be stockpiled material taken from top 1 foot (1) or to a depth where material is free of rocks larger than 1 inch; grade material and remove roots, debris, large weeds and foreign matter. Material is to be taken from areas designated for excavation during overlot grading or demolition operations.
- B. Soil Mixes: Soil mix for planting holes shall be one part soil amendment, two parts topsoil.
- C. Plant Backfill: For backfill at trees and shrubs, use excavated material. Excavated material is that on-site material excavated from planting pits which is free from wood, rocks or stones having a dimension greater than one (1) inch and free of other foreign or deleterious materials.
- D. Soil Amendment: 50% ground well-aged cow, horse, sheep or chicken manure, and 50% decomposed wood fiber, nitrogen stabilized, with a proven analysis to verify organic content, PH, electro-conductivity, nitrogen, potassium, and phosphorus content. A sample of the material will be supplied to the Landscape Architect with an analysis. 2.2 PLANT MATERIALS

- A. Plant trees and shrubs during normal seasons for such work in location of project.
- B. Provide plant materials true to name and variety established by the American Joint Committee on Horticultural Nomenclature "Standardized Plant Names," Second Edition, 1942. Dig plants so that replanting will be completed as rapidly as possible and within 24 hours maximum.
- C. Quality: Provide trees, shrubs and other plants complying with the recommendations and requirements of ANSI Z60.1, "Standard for Nursery Stock," and of not less than indicated sizes, balled and burlapped or container grown, unless otherwise indicated or specified. Do not fertilize young trees or shrubs until the following spring. Do not add fertilizer to backfill

D. Deciduous Shrubs: Provide shrubs of the size shown or listed and with not less than the minimum number of canes required by ANSI Z60.1 for the type and height of shrub required...

2.3 MISCELLANEOUS LANDSCAPE MATERIALS

- A. Wrapping: Tree-wrap tape not less than four (4) inches wide, designed to prevent sun scald and dehydration. Wrap from the ground line up to the second whorl of branches and secure.
- B. Stakes and Guys: Provide stakes. Provide wire ties and guys of two-strand, twisted, pliable, galvanized iron wire not lighter than 12 gauge. Provide fabric collar and grommets to protect tree trunks from damage by wires. Guy wire shall be flagged with a conspicuous material.

C. Insecticide: Methoxychlor or similar insecticide.

- D. Weed Control Fabric: Filter fabric for use as weed control shall be 3.5 oz./square yard spunbond, permeable material by Landmaster, or equal. Fabric shall have a water flow rate of 300 gallons/minute/square feet, burst strength of 130 P.S.I. and trapezoidal tear of 65/53 Lbs. Filter fabric shall be used in all tree wells and shrub beds.
- E. Cedar Mulch: Mulch to be Double Shredded Western Red Cedar (Gorilla mulch) in all landscape areas. F. Non-Selective Herbicide: equal part mixture of Round-up and 2-4-D diluted as per manufacturer's recommendations. Contractor to conform to all regulations for the transportation, application, storage and disposal of herbicides.

PART 3 EXECUTION 3.1 GENERAL

- A. All work shall be done in a businesslike manner and method acceptable by Colorado Landscape Industry Contracts & Specifications by the Associated discrepancies found in these plans shall be brought to the attention of the Ar B. The Landscape Contractor shall coordinate all work with other Contractors o delay completion of the work in any way.
- C. No change from the design shall be made without written authorization from D. Requests for substitutions shall be made prior to bid.
- 3.2 PLACEMENT AND COMPACTION:
- A. Place backfill and fill materials in layers not more that four (4) inches in loc
- hand-operated tampers. B. Before compaction, moisten or aerate each layer as necessary to provide the layer to required percentage of maximum dry density for each area classifica
- C. Do not place fill material on surfaces that are muddy or frozen.
- D. Place backfill and fill materials evenly adjacent to structures, to required elev of backfill against structures by carrying the material uniformly around structures

3.3 GRADING

- A. Landscape Contractor is responsible for all finished grades in landscape area inspected by the Owner's Representative prior to installation of irrigation or p flowing. Flat spots, points and any other forced conditions shall be avoided. B. Grade all areas adjacent to building lines to drain away from structures as sh from irregular surface changes and within 0.10 foot of required sub grade or
- modifications as may be necessary to provide adequate drainage. Spread sto (6) inches depth at all areas not designated for walks or structures. C. Areas to be planted with shrubs, groundcovers, or flowers shall be graded or
- on walks, curbs and other walking surfaces unless otherwise noted. All grad (6) inches below top of wall unless noted otherwise. Mechanically compac water settling is to be allowed. 3.4 PREPARATION
- A. Site preparation: Non-selective herbicide shall be applied to all actively grow per manufacturers recommendations, with the exception of Existing Trees Trees on Sheet L-2) . No spraying shall take place during windy or rainy con shall require re-application at Contractor's expense. Herbicide shall be allowed application and prior to any disturbance.
- B. All excess excavated material, trash, debris, and waste materials shall be dis transported to an approved disposal site.
- C. Lay out individual tree and shrub locations and areas for multiple plantings. Architect's acceptance before start of planting work. Make minor adjustment D. Before mixing, clean topsoil of roots, plants, sod, stones, clay lumps and other
- plant growth. E. Mix soil amendments and fertilizers at rates specified. Delay mixing of fertiliz
- soil within a few days. F. Mix soil amendments and fertilizer by suitable means to assure complete mix
- each use as recommended by topsoil report.
- G. Excavation for Trees: 1. Excavate pits with vertical sides and with bottom of excavation slightly ra
- Loosen hard subsoil in bottom of excavation. 2. For balled and burlapped or container grown stock, make excavations at
- two (2) inches shallower than ball depth.
- 3. For container grown stock, excavate as specified for balled and burlappe and depth. Use prepared plant backfill mix for setting and filling all plants 4. Where rubble fill is encountered, notify Architect and prepare planting pit acceptable methods. When conditions encountered are severe and exte
- with additional work at the direction of the Architect. 5. Drainage: If subsoil conditions indicate the retention of water in planting
- evidence indicating presence of underground water, notify the Architect t 6. When directed by Architect, fill tree pits with water. Pits that do not drain with 12-inch diameter, 36-inch deep auger holes (one per tree pit) filled considered as extra work and paid for by change order.

H. Preparation for Other Plantings:

3.5 PLANTING

- J. Planting Trees and Shrubs: 1. In clay or clay loam soil, the planting hole shall be made two (2) inches ball and a minimum of one (1) foot larger in diameter. In well-drained, deeper than the height of the root ball and a minimum of one (1) foot I
- K. Planting Container Grown Stock:
- 1. Containers shall be removed and the fibrous roots teased, manipulated, roots. Care should be taken not to break the root ball.
- 2. Planting on slopes shall be placed in wells for better watering. L. Backfill Material:
- 1. Backfill tree and shrub planting pits with plant backfill mix using topsoil and a. Premix backfill materials, then turn several times with a front end load free of all pockets of unblended material and any clods or stones great D. Pruning:
- 1. Prune, thin out and shape trees and shrubs in accordance with standard required height and spread. Prune shrubs to retain natural character and
- 2. Remove and replace excessively pruned or misformed stock resulting from E. Insecticide Spray: All deciduous tree trunks shall be thoroughly sprayed with
- application of tree wrap. F. Guying and Staking: Guy and stake trees immediately after planting, as indi-
- long steel fence posts at 180° driven vertically into firm soil inside of steel ed double strand of wire securely through nylon strap around trunk at minimum remove slack.
- 3.6 FABRIC AND MULCH A. Fine Grading for Fabric Installation:
- 1. Remove any dikes used to facilitate watering. Smooth surface, contour to
- 2. Form trench at all landscape edgers or pavements to accommodate mult
- B. Fabric Installation:
- 1. Fabric is to be laid flat, with 6" overlap at seams and no gaps at edges. 2. Plants shall be installed through fabric by cutting the fabric neatly and cle
- ball and within 1" of the base of the shrub stem or tree trunk. 3. Fabric is to be pinned in place with sod staple 5' on center and in all corn C. Mulch Installation:
- 1. Place mulch in all areas shown to receive mulch on drawings.
- 2. Spread carefully and evenly to a minimum depth of 3" over Weed Fabric

3.7 MAINTENANCE

- B. Maintain trees, shrubs and other plants by pruning, cultivating and weeding a 30 days. Restore planting saucers. Maintain moisture depth to ensure vigor C. Tighten and repair stake and guy supports and reset trees and shrubs to pro
- Restore and replace damaged wrappings. Spray as required to keep trees a D. Installer will inspect work periodically following maintenance period and notif
- any deficiencies in irrigation or other maintenance procedures. 3.10 CLEANUP AND PROTECTION

 <u>PART 3</u> <u>EXECUTION</u> <u>A. All work shall be done in a businesslike manner and method acceptable by industry standards as outlined in The Guide for Colorado Landscape Industry Contracts & Specifications by the Associated Landscape Contractors of Colorado. Any discrepancies found in these plans shall be brought to the attention of the Architect.</u> B. The Landscape Contractor shall coordinate all work with other Contractors on the job so conflict does not exist and will not delay completion of the work in any way. C. No change from the design shall be made without written authorization from the Architect. D. Requests for substitutions shall be made prior to bid. 2 PLACEMENT AND COMPACTION: A. Place backfill and fill materials in layers not more that four (4) inches in loose depth for material compacted by 		DRAWN BY MH CHECKED TC, CR JOB NO. 1516 DATE 06-05-2015 REVISIONS 07-02-2015 RESPONSE TO REVIEW COMMENTS
 hand-operated tampers. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content. Compact each layer to required percentage of maximum dry density for each area dassification. C. Do not place fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill and fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill appendix structures by carrying the material uniformity around structure to approximately same elevation in each lift. GRADING A. Landscape Contractor is responsible for all finished grades in landscape area. Finish grade shall be established and inspected by the Owner's Representative prior to installation of inglation or planting. All grades shall be established and inspected by the Owner's Representative prior to installation of insin grade elevations. Make minor modifications as may be necessary to provide adequate drainage. Spread stockpild topsoil and compact to minimum six (6) inches depth at all areas not designated for walks or structures. C. Areas to be planted with shrubs, groundcovers, or flowers shall be graded one (1) inch above top of concrete elevation on walks, curbs and other walking surfaces noted. All grades dagicant to training walls shall be est six (6) inches below top of wall unless noted ontherwise. Mechanically compact backfill in 12 inch lifts to avoid settling. No water settling is to be allowed. J. Reperparation: Non-selective herbicide shall be applied to all actively growing plants within the areas to be landscaped as per manufactures recommendations, with the exception of Existing Trees (See specifications for Protecting Existing Trees on Sheet L.2). No spraying shall take place during windy or rainy conditions. Rainfall within 24 weeks after application and prior to any disturbance. B. All excess excevted material, irsh, debris, and waste mat		OLD DOMINION FREIGHT LINES 5601 Holly St, Commerce City, CO 80022
 remaining backfill, sloping level up to crown. Settle soil with water. Do not tamp backfill. Form a water basin just beyond edge of planting hole, if in planting beds. 8.5 PLANTING J. Planting Trees and Shrubs: In clay or clay loam soil, the planting hole shall be made two (2) inches to four (4) inches shallower than the soil ball and a minimum of one (1) foot larger in diameter. In well-drained, sandy loam, the plating hole shall be not deeper than the height of the root ball and a minimum of one (1) foot larger in diameter. In well-drained, sandy loam, the plating hole shall be not deeper than the height of the root ball and a minimum of one (1) foot larger. K. Planting Container Grown Stock: Containers shall be removed and the fibrous roots teased, manipulated, or scarred with a knife to discourage circling roots. Care should be taken not to break the root ball. Planting on slopes shall be placed in wells for better watering. L. Backfill Material: Backfill tree and shrub planting pits with plant backfill mix using topsoil and soil amendments. Premix backfill materials, then turn several times with a front end loader to a uniform, evenly blended consistency, 		CIAVONNE, ROBERTS & ASSOCIATES, INC. LAND PLANNING AND LANDSCAPE ARCHITECTURE 222 N. 7TH STREET GRAND JUNCTION, CO 81501 970-241-0745 P 970-241-0765 F www.ciavonne.com
 free of all pockets of unblended material and any clods or stones greater than one (1) inch in diameter. D. Pruning: Pruning: Prune, thin out and shape trees and shrubs in accordance with standard horticultural practice. Prune trees to retain required height and spread. Prune shrubs to retain natural character and accomplish their use in the landscape design. Remove and replace excessively pruned or misformed stock resulting from improper pruning. Insecticide Spray: All deciduous tree trunks shall be thoroughly sprayed with a Methoxychlor or similar insecticide prior to application of tree wrap. Guying and Staking: Guy and stake trees immediately after planting, as indicated on drawings and details. Place two 6' long steel fence posts at 180° driven vertically into firm soil inside of steel edger tree ring with blade on tree side, run double strand of wire securely through nylon strap around trunk at minimum 1/3 height of tree and back to post, twist to remove stack. FABRIC AND MULCH A. Fine Grading for Fabric Installation: Remove any dikes used to facilitate watering. Smooth surface, contour to distribute drip or bubbler irrigation to root ball. Fabric Installation: Fabric is to be laid flat, with 6" overlap at seams and no gaps at edges. Plants shall be installed through fabric by cutting the fabric neatly and cleanly, with the fabric replaced over the root ball and within 1" of the base of the shrub stem or tree trunk. Fabric is to be pinned in place with sod staple 5' on center and in all corners. Multer Installation: Place mulch in all areas shown to receive mulch on drawings. Spread carefully and evenly to a minimum depth of 3" over Weed Fabric in planted areas. 		
 A. MAINTENANCE A. Begin maintenance immediately after planting. B. Maintain trees, shrubs and other plants by pruning, cultivating and weeding as required for healthy growth for a period of 30 days. Restore planting saucers. Maintain moisture depth to ensure vigorous growth. C. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore and replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease. D. Installer will inspect work periodically following maintenance period and notify Owner in writing (copy to Architect) of any deficiencies in irrigation or other maintenance procedures. 10 CLEANUP AND PROTECTION F. During landscape work, store materials and equipment where directed. Keep pavements clean and work area in an orderly condition. G. Protect landscape work and materials from damage due to landscaping operations, operations by other contractors and trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work is completed, including maintenance, the Architect will, upon request, make an inspection to determine acceptability. B. Where inspected landscape work does not comply with the requirements, replace rejected work and continue specified maintenance until re-inspected by the Architect and found to be acceptable. Rejected materials shall be removed from the project site and replaced by the Landscape Installer at his expense. END OF SECTION 32 70 20 	CITY COUNCIL CERTIFICATE: Approved by the City Council of Commerce City, this day of, A.D	FREIGHT LINES COMMERCE CITY FINAL LANDSCAPE DETAILS AND SPECIFICATIONS SHEET NO. L-6

City Signature