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ENGINEER

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GEOTECHNICAL

TERRACON CONSULTANTS, INC.
10625 W 170 FRONTAGE RD N STE 3
WHEAT RIDGE, CO
EMAIL: MATT.BEHESHTI@TERRACON.COM
CONTACT: MATT BEHESHTI

	EXISTING	PROPOSED
CURB AND GUTTER		
BARRIER CURB		
CONCRETE		
ASPHALT		
GRIND AND OVERLAY		
LANDSCAPING AREA		
SAWCUT LINE		
CONCRETE JOINT		
PAINT STRIPING		
DIRECTIONAL ARROW		
BOLLARD		
SIGN		
BUILDING LINE		
CONTOURS		
WATER LINE		
FIRE HYDRANT		
WATER METER		
WATER VALVE		
FIRE DEPARTMENT CONN.		
POST INDICATOR VALVE		
STORM LINE		
CATCH BASIN TYPE 1		
CATCH BASIN TYPE 2		
SANITARY SEWER LINE		
SANITARY SEWER MANHOLE		
CLEANOUT (AS NOTED)		
POWER OVERHEAD		
POWER UNDERGROUND		
POWER METER		
UTILITY POLE		
JUNCTION BOX (TYPE 1,2,3)		
LUMINAIRE		
YARD LIGHT		
TELEPHONE		
GAS		
GAS METER		
GAS VALVE		

"The name DUTCH BROS. and all associated logos, distinctive designs, content, information, and other materials featured, displayed, contained herein, and made available by Dutch Bros., including but not limited to, the "look and feel" of the establishments and products, all text, images, colors, configurations, graphics, designs, illustrations, photographs, and pictures (collectively, the "Materials") are owned by and/or licensed by DB Franchising USA, LLC and are protected by copyright, trademark, trade dress, patent, and/or other intellectual property rights and unfair competition laws under the United States and foreign laws."

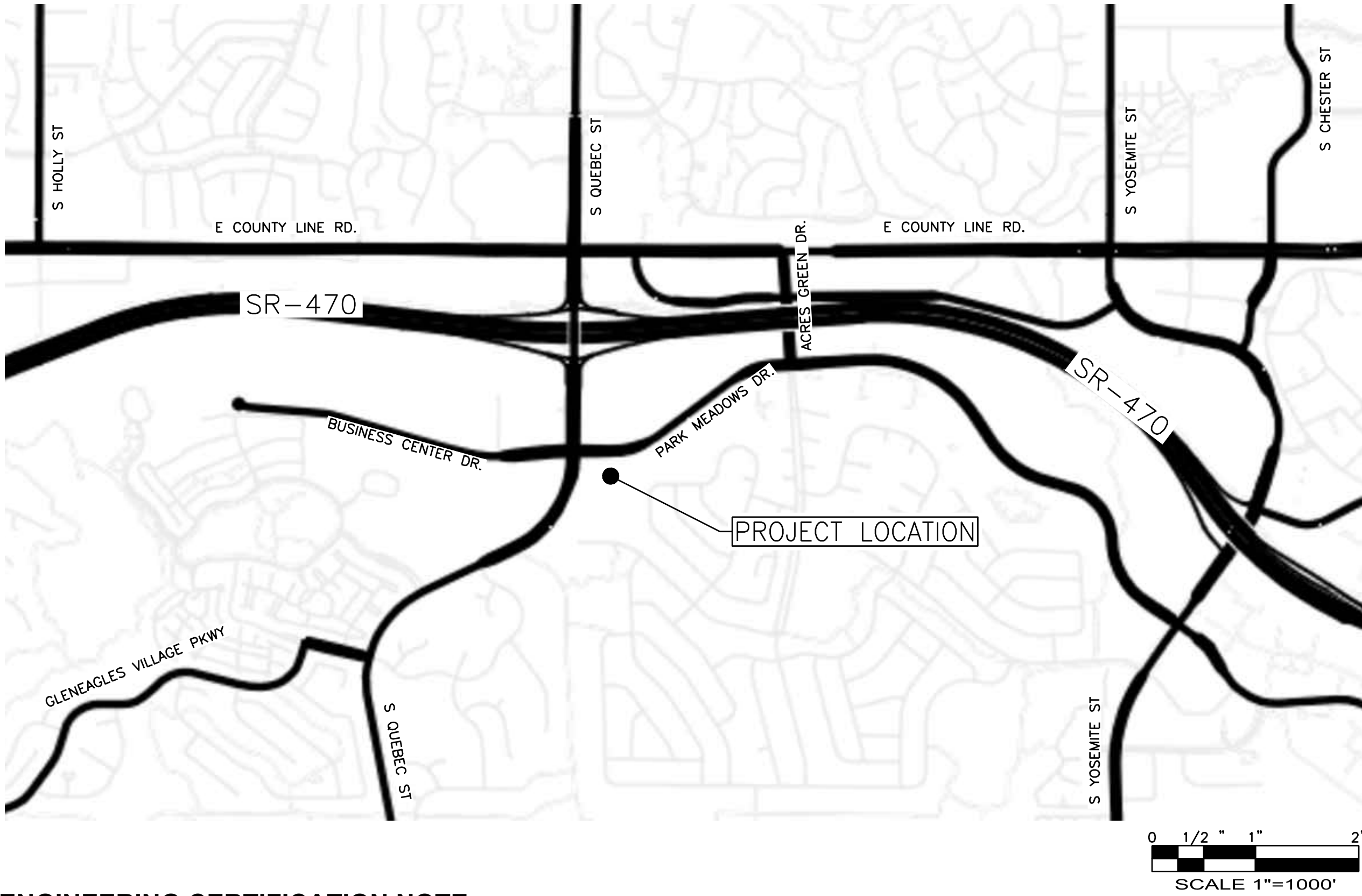
DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

0.588 ACRES, SP25-0002

COVER SHEET



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ENGINEERING CERTIFICATION NOTE

THESE CONSTRUCTION PLANS FOR DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF DOUGLAS COUNTY'S ROADWAY DESIGN AND CONSTRUCTION STANDARDS, STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA, AND THE GRADING, EROSION AND SEDIMENT CONTROL MANUAL.

MICHAEL T. LESMEISTER, P.E.
BARGHAUSEN CONSULTING ENGINEERS, LLC

2

6/30/25

NRN

MTL

CITY COMMENTS – REVISION 2

1

5/9/25

NRN

MTL

CITY COMMENTS – REVISION 1

No.

Date

By

Cdd.

Appr.

Revision

Title:

COVER SHEET
SEQ PARK MEADOWS DR AND S QUEBEC ST
LONE TREE, CO

For:

Scale:

Horizontal
1" = 1000'

Vertical
N/A

Designed
NRN

Drawn
NRN

Checked
MTL

Approved
MTL

Date
6/30/25

Barghausen Consulting Engineers, LLC.

18215 72nd Avenue South
Kent, WA 98032
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Job Number
23707

Sheet
1 OF 17
DB Franchising USA, LLC

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONE TREE FOR STREET AND DRAINAGE, GRADING AND EROSION CONTROL, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

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LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

0.588 ACRES, SP25-0002

GENERAL SITE NOTES:

1. THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE COPIES OF THE APPLICABLE GOVERNING AGENCY STANDARDS AT THE JOB SITE DURING THE RELATED CONSTRUCTION OPERATIONS.
2. CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE OR SHOWN ON RECORD DRAWING PROVIDED BY OTHERS ARE SHOWN HEREON. EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND ARE SUBJECT TO A DEGREE OF UNKNOWN VARIATION. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. BARGHAUSEN CONSULTING ENGINEERS, LLC, ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS OR RECORDS OF OTHERS. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, LLC, TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE APPROPRIATE UTILITIES INVOLVED PRIOR TO CONSTRUCTION.
6. INSPECTION OF SITE WORK WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE GOVERNING JURISDICTION. INSPECTION OF PRIVATE FACILITIES WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL CONSTRUCTION.
7. PRIOR TO ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY THE CONTRACTOR SHALL CONTACT THE AGENCY AND/OR UTILITY INSPECTION PERSONNEL AND ARRANGE ANY REQUIRED PRE-CONSTRUCTION MEETING(S). CONTRACTOR SHALL PROVIDE ONE WEEK MINIMUM ADVANCE NOTIFICATION TO OWNER, FIELD ENGINEER AND ENGINEER OF PRE-CONSTRUCTION MEETINGS.
8. THE CONTRACTOR IS RESPONSIBLE FOR WORKER AND SITE SAFETY AND SHALL COMPLY WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED.
10. PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ALL ADJACENT PUBLIC AND PRIVATE PROPERTIES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITY SERVICES THAT ARE TO REMAIN OPERATIONAL WITHIN THE CONSTRUCTION AREA WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
11. TWO (2) COPIES OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. ONE (1) SET WITH RECORDS OF AS-BUILT INFORMATION SHALL BE SUBMITTED TO BARGHAUSEN CONSULTING ENGINEERS, LLC. AT COMPLETION OF PROJECT.
12. CONTRACTOR SHALL OBTAIN SERVICES OF A LICENSED LAND SURVEYOR TO STAKE HORIZONTAL CONTROL FOR ALL NEW IMPROVEMENTS. STAKING CONTROL SHALL BE TAKEN FROM ELECTRONIC PLAN FILES PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, LLC.
13. CONTRACTOR SHALL REQUEST FROM BARGHAUSEN CONSULTING ENGINEERS, LLC, PRIOR TO ANY CONSTRUCTION STAKING OR CONSTRUCTION WORK, A FORMAL CONSTRUCTION RELEASE, PLAN SET OR SPECIFIC RELEASE IN WRITING. THE APPROVED RELEASE, PLAN SET OR SPECIFIC RELEASES WILL NOT BE CONSIDERED CONSTRUCTION RELEASE PLANS BY BARGHAUSEN CONSULTING ENGINEERS, LLC. UNLESS BARGHAUSEN CONSULTING ENGINEERS, LLC, HAS GIVEN A FORMAL WRITTEN RELEASE OR ISSUED A CONSTRUCTION RELEASE PLAN SET.

A PARCEL OF LAND LOCATED IN SECTIONS 04, TOWNSHIP 06 SOUTH, RANGE 67 WEST, 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO AND BEING A PORTION OF LOT 1, LONE TREE TOWN CENTER - SECOND AMENDMENT ON FILE IN THE CLERK AND RECORDER'S OFFICE OF DOUGLAS COUNTY AND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTH 00°31'26" WEST, ALONG THE EASTERLY LINE OF SAID LOT 1, 595.00 FEET TO A CORNER ON THE EASTERLY LINE OF SAID LOT 1; THENCE NORTH 66°41'44" WEST, 179.67 FEET TO THE POINT OF BEGINNING;
THENCE SOUTH 89°28'34" WEST, 205.65 FEET TO THE WESTERLY LINE OF SAID LOT 1;
THENCE NORTH 00°31'26" WEST, 167.43 FEET;
THENCE SOUTH 89°14'01" EAST, 154.67 FEET TO A POINT, SAID POINT BEING THE BEGINNING OF A NON-TANGENT CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 18.96 FEET, THE CENTER BEARS AT SAID POINT (SOUTH 07°23'07" WEST);
THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE 22.88 FEET THROUGH A CENTRAL ANGLE OF 69°08'50" TO A POINT OF COMPOUND CURVATURE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 92.86 FEET, THE CENTER BEARS AT SAID POINT (SOUTH 76°31'57" WEST);
THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE 16.89 FEET THROUGH A CENTRAL ANGLE OF 107°25'08" TO A POINT OF SINGULAR CURVATURE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 183.65 FEET, THE CENTER BEARS AT SAID POINT (NORTH 88°01'16" EAST);
THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE 43.34 FEET THROUGH A CENTRAL ANGLE OF 1°33'123";
THENCE SOUTH 19°12'53" EAST, 3.04 FEET;
THENCE SOUTH 20°17'52" EAST, 32.39 FEET TO A POINT, SAID POINT BEING THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 75.64 FEET, THE CENTER BEARS AT SAID POINT (SOUTH 68°12'39" WEST);
THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE 28.77 FEET THROUGH A CENTRAL ANGLE OF 21°47'31" TO THE POINT OF BEGINNING.

THIS PARCEL CONTAINS 30492 SQUARE FEET OR 0.7000 ACRES MORE OR LESS.

NORTH 00°31'26" WEST - BEING THE EASTERLY LINE OF LOT 1, LONE TREE TOWN CENTER - SECOND AMENDMENT ON FILE IN THE CLERK AND RECORDER'S OFFICE OF DOUGLAS COUNTY AS SHOWN ON SURVEY SHEET 2.

ELEVATION SHOWN HEREON ARE BASED ON BENCHMARK IDENTIFIED IN SURVEY PREPARED BY BYRDWAY SURVEYS. ELEVATION = 5830.02' NAVD 88; FOUND REBAR & CAP.

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, MAP NUMBER 08035C0042G, WHICH BEARS A EFFECTIVE DATE OF MARCH 16, 2016 AND IS NOT LOCATED IN SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY. ZONE "X" DENOTES AREAS OF MINIMAL FLOOD HAZARD.

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811.
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

SANITARY SEWER: (SHEET 8)
WATER SERVICE: (SHEET 8)

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL. IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATORS, ORIENTATION OUTLET STRUCTURES, OR OTHER DRAINAGE STRUCTURES). FAILURE TO NOTIFY ENGINEER/INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

1. THE FOLLOWING GEOTECHNICAL REPORTS FOR THE SITE SHALL BE CONSIDERED PART OF THESE CONSTRUCTION DOCUMENTS:

GEOTECHNICAL ENGINEERING REPORT
TERRACON CONSULTANTS, INC.
PROJECT NO.: 25245279
10625 W 170 FRONTAGE RD N STE
WHEAT RIDGE, CO

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL PROVISIONS OF THE SOILS REPORT FOR THE SITE BE OBSERVED AND COMPLIED WITH DURING ALL PHASES OF THE SITE PREPARATION, GRADING OPERATIONS, FOUNDATION, SLAB, AND PAVING CONSTRUCTION.
3. ANY PROVISIONS OF THE SOILS REPORT WHICH CONFLICT WITH INFORMATION SHOWN ELSEWHERE ON THESE DRAWINGS, OR WHICH REQUIRE FURTHER CLARIFICATION, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR DETERMINATION.
4. A REPRESENTATIVE OF THE SOILS ENGINEER SHALL BE AVAILABLE TO OBSERVE AND APPROVE THE EARTHWORK OPERATIONS AND TO VERIFY FIELD CONDITIONS AS WORK PROCEEDS. THE SOILS ENGINEER SHALL SUBMIT FIELD REPORTS CERTIFYING THAT THE METHODS AND MATERIALS OF THE EARTHWORK OPERATIONS WERE IN ACCORDANCE WITH THE CONDITIONS OF THE SOILS SOLUTION AND THAT THE WORK WAS PERFORMED TO HIS/HER SATISFACTION.
5. THE SOILS ENGINEER SHOULD BE NOTIFIED AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY SITE CLEARING OR GRADING.

AN TOPOGRAPHIC AND BOUNDARY SURVEY, DATED SEPTEMBER 10, 2024; PERFORMED BY BYRDWAY SURVEYS, HAS BEEN PROVIDED TO BARGHAUSEN CONSULTING ENGINEERS, INC. BARGHAUSEN CONSULTING ENGINEERS, INC. HAS NOT VERIFIED THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. SITE DESIGN HAS BEEN BASED ON ABOVE REFERENCED SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER TO HAVE ALL IMPROVEMENTS FIELD VERIFIED PRIOR TO CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BARGHAUSEN CONSULTING ENGINEERS, LLC IMMEDIATELY.

CONTRACTOR SHALL HAVE ALL PROPERTY LINES, CURB, SIDEWALK, STRUCTURES, CONCRETE PADS AND ANY OTHER ABOVE GROUND PERMANENT STRUCTURE DEPICTED ON THESE PLANS STAKED FOR CONSTRUCTION BY A LICENSED SURVEYOR. LICENSED SURVEYOR SHALL STAKE ALL ITEMS USING COORDINATE GEOMETRY (RECTIFIED TO SITE CONTROL) CONTAINED IN CAD DRAWING FILES PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, LLC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RETRIEVE LATEST CAD FILES FROM BARGHAUSEN CONSULTING ENGINEERS LLC, REFLECTING ANY ISSUED PLAN REVISIONS. BARGHAUSEN CONSULTING ENGINEERS SHALL IMMEDIATELY BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLES THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE OR 811 AND THEN POTHOLES ALL OF THE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PHYSICALLY VERIFY THAT NO CONFLICTS EXIST AT THE LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, LLC TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

ALL EXISTING SURVEY MONUMENTS ARE TO BE PRESERVED PER COLORADO REVISED STATUTES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT MONUMENTS ARE PROPERLY PROTECTED AND/OR PERPETUATED. IF ANY OF THE MONUMENTS ARE DISTURBED OR ARE NEAR THE AREA OF CONSTRUCTION, A LICENSED SURVEYOR MUST CONFIRM THAT THE MONUMENTS HAVE BEEN PROTECTED AND/OR PERPETUATED AND THE APPROPRIATE DOCUMENTATION HAS BEEN RECORDED. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING PERMITS FROM ANY JURISDICTIONS HAVING AUTHORITY FOR REMOVING AND REPLACING ALL MONUMENTS. IF ANY MONUMENTS ARE DAMAGED, DISTURBED, OR REMOVED, CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING MONUMENTS DISPLACED, REMOVED, OR DESTROYED SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR, AT THE COST AND AT THE DIRECTION OF THE CONTRACTOR, PURSUANT TO THESE REGULATIONS. THE APPROPRIATE FORMS FOR REPLACEMENT OF SAID MONUMENTATION SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.

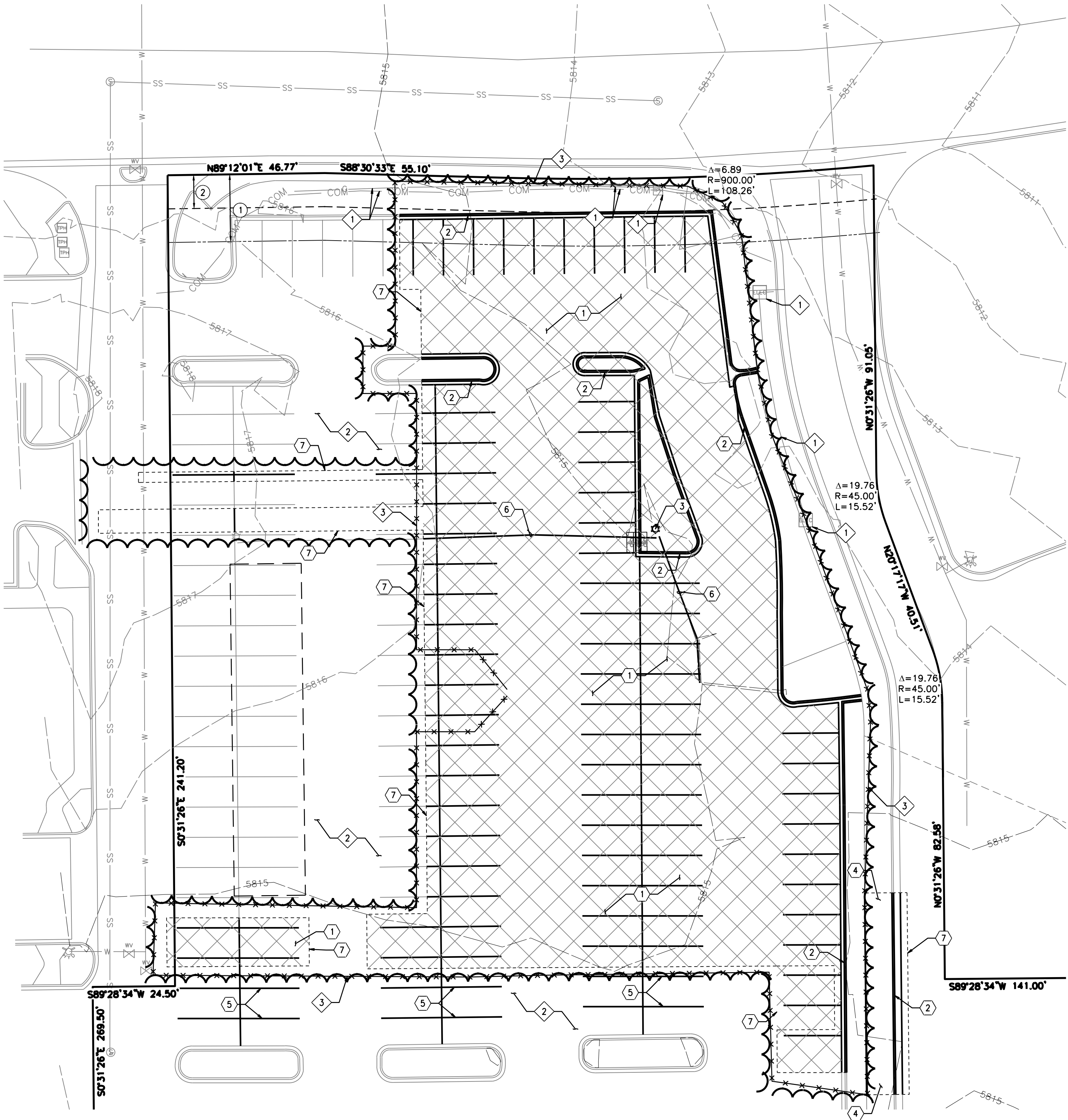
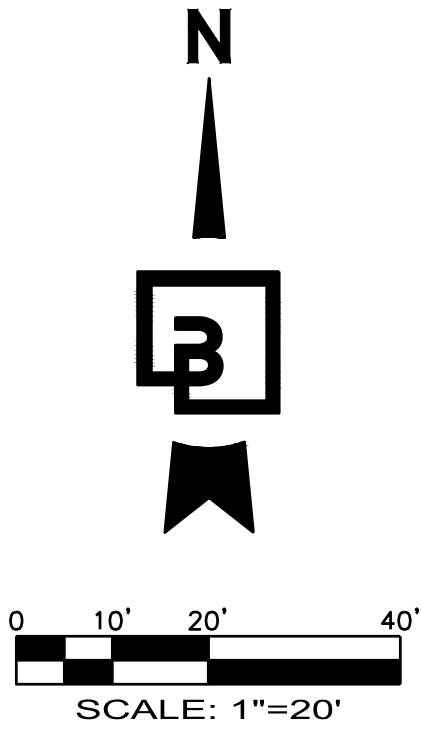
Job Number 23707		Sheet 2 OF 17 2018 BB Financing, LLC		
 Barghausen Consulting Engineers, LLC. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com		Designed <u>NRN</u> Drawn <u>NRN</u> Checked <u>MTL</u> Approved <u>MTL</u> Date <u>6/30/25</u> Scale: Horizontal N/A Vertical N/A		
Title: GENERAL NOTES SEQ PARK MEADOWS DR AND S QUEBEC ST LONE TREE, CO		For:  		
Revision		Revision		
No.	Date	By	Cd.	Appr.
2	6/30/25	NRN	MTL	MTL
1	5/9/25	NRN	MTL	MTL
CITY COMMENTS – REVISION 1				
CITY COMMENTS – REVISION 2				



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DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT
SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO
0.588 ACRES, SP25-0002
DEMOLITION PLAN



DEMOLITION NOTES:

- DEMOLISH ASPHALT TO EXTENTS SHOWN AND DISPOSE OF OFF-SITE. PRIOR TO DEMOLITION CONTRACTOR TO CONFIRM APPLICABILITY OF WORK. CLEAR AND GRUB PER GEOTECHNICAL RECOMMENDATIONS.
- DEMOLISH CURB AND GUTTER TO EXTENTS SHOWN AND DISPOSE OF OFF-SITE. PRIOR TO DEMOLITION CONTRACTOR TO CONFIRM APPLICABILITY OF WORK.
- DEMOLISH AND REMOVE EXISTING SITE LIGHT. PROTECT POWER CONDUIT AND MAINTAIN CONTINUITY.
- DEMOLISH AND REMOVE EXISTING SIDEWALK.
- REMOVE EXISTING PAINT STRIPING.
- REMOVE EXISTING UTILITY LINE PER PURVEYORS STANDARDS. CONTRACTOR TO MAINTAIN CONTINUITY DURING AND AFTER REMOVAL.
- APPROXIMATE SAWCUT LIMITS.

PROTECTION NOTES:

- PROTECT EXISTING UTILITY BOXES, MANHOLES, PEDESTALS, AND ASSOCIATED UNDERGROUND UTILITIES FROM DAMAGE DURING CONSTRUCTION, TYPICAL.
- PROTECT EXISTING ASPHALT.
- INSTALL TEMPORARY CONSTRUCTION FENCE AROUND LIMITS OF PROPERTY; PROVIDE ACCESS GATE(S) AS NEEDED.

DEMOLITION NOTES:

- ITEMS FOR DEMOLITION ARE DEPICTED PER DESIGN DRAWINGS. CONTRACTOR TO VERIFY AND LOCATE ALL ITEMS FOR DEMOLITION PRIOR TO START OF CONSTRUCTION AND NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. IMMEDIATELY OF ANY DISCREPANCIES.
- CONTRACTOR TO REVIEW AS-BUILT DRAWINGS IN PROJECT AREA AND REMOVE AND/OR RELOCATE ANY SITE APPURTENANCES IN PROJECT AREA THAT IMPACT THE PROJECT.
- CONCRETE SIDEWALK REPLACEMENT, CONTRACTOR SHALL REMOVE AND REPLACE TO THE NEAREST JOINT.

EASEMENT NOTES

- 20' BUILDING SETBACK; REC. NO. 342829
- 10' EASEMENT FOR SNOW REMOVAL, UTILITIES, AND LANDSCAPING, PER PLAT RECEPTION NO. 342829.

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE AT 811 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, LLC TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

UTILITY PROTECTION AND REROUTING NOTE:

APPROXIMATE LOCATION OF EXISTING UTILITIES ON-SITE. CONTRACTOR TO PROTECT ALL EXISTING UTILITY SERVICES AND APPURTENANCES DURING CONSTRUCTION UNLESS OTHERWISE NOTED. CONTRACTOR TO REROUTE ALL REQUIRED EXISTING UTILITIES TO NEW PROPOSED BUILDING. SEE SITE PLAN FOR POINT OF CONNECTIONS FOR ALL UTILITIES.

DRIVEWAY & SIDEWALK TEMPORARY CLOSURE

CONTRACTOR TO ENSURE ALL NECESSARY SIGNAGE, COORDINATION, AND NOTICE ARE GIVEN OR INSTALLED FOR ANY DISTURBANCE TO DRIVEWAY OR PEDESTRIAN ACCESS PRIOR TO CONSTRUCTION. CONTRACTOR TO COORDINATE WITH THE CITY OF LONE TREE AS REQUIRED.

UTILITY COORDINATION NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES PRIOR TO PERFORMING ANY DEMOLITION ACTIVITIES TO ENSURE PROPER PROTECTION AND DISCONNECTION PROCEDURES ARE IN PLACE.

DAMAGE TO PUBLIC IMPROVEMENTS

ALL PUBLIC IMPROVEMENTS SHALL BE CONSTRUCTED IN A MANNER THAT DOES NOT DAMAGE EXISTING PUBLIC IMPROVEMENTS. ANY DAMAGE SHALL BE DETERMINED BY AND CORRECTED BY THE DEVELOPER TO THE SATISFACTION OF THE CITY ENGINEER.

PARKING NOTE

NO CONTRACTOR OR EMPLOYEE MAY STORE, OR PERMIT TO BE STORED, A COMMERCIAL OR CONSTRUCTION VEHICLE/TRUCK; OR PERSONAL VEHICLE, TRUCK, OR OTHER PERSONAL PROPERTY ON PUBLIC-RIGHT-OF-WAY OR OTHER PUBLIC PROPERTY WITHOUT PERMISSION OF THE CITY ENGINEER.

CITY OF LONE TREE

DATE

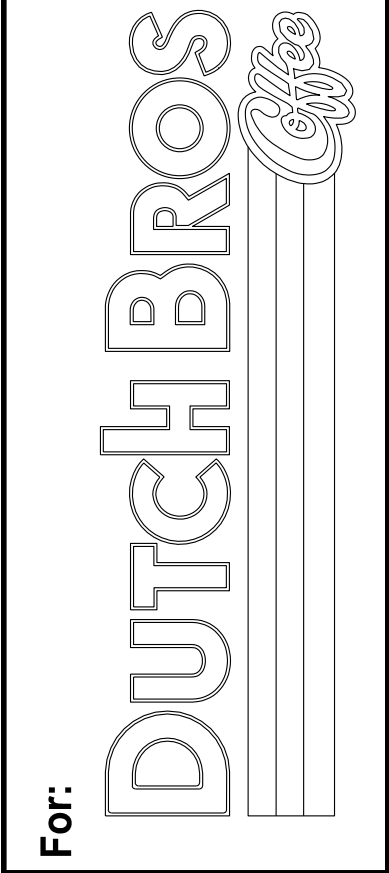
THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED
BY THE CITY OF LONE TREE FOR STREET AND
DRAINAGE, GRADING AND EROSION CONTROL, SIGNAGE
AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

2	6/30/25	NRN	MTL	MTL	CITY COMMENTS - REVISION 2
1	5/9/25	NRN	MTL	MTL	CITY COMMENTS - REVISION 1

No.	Date	By	Ckd.	Appr.	Revision
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Title:					
DEMOLITION PLAN					
SEQ PARK MEADOWS DR AND S QUEBEC ST					
LONE TREE, CO					



Scale:	Horizontal	Vertical
	1" = 20'	N/A

Designed	NRN	Drawn	NRN	Checked	MTL	Approved	MTL	Date	6/30/25
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Barghausen Consulting Engineers, LLC.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

23707
Job Number

3 OF 17
Sheet

ENGINEERING DIVISION ACCEPTANCE BLOCK



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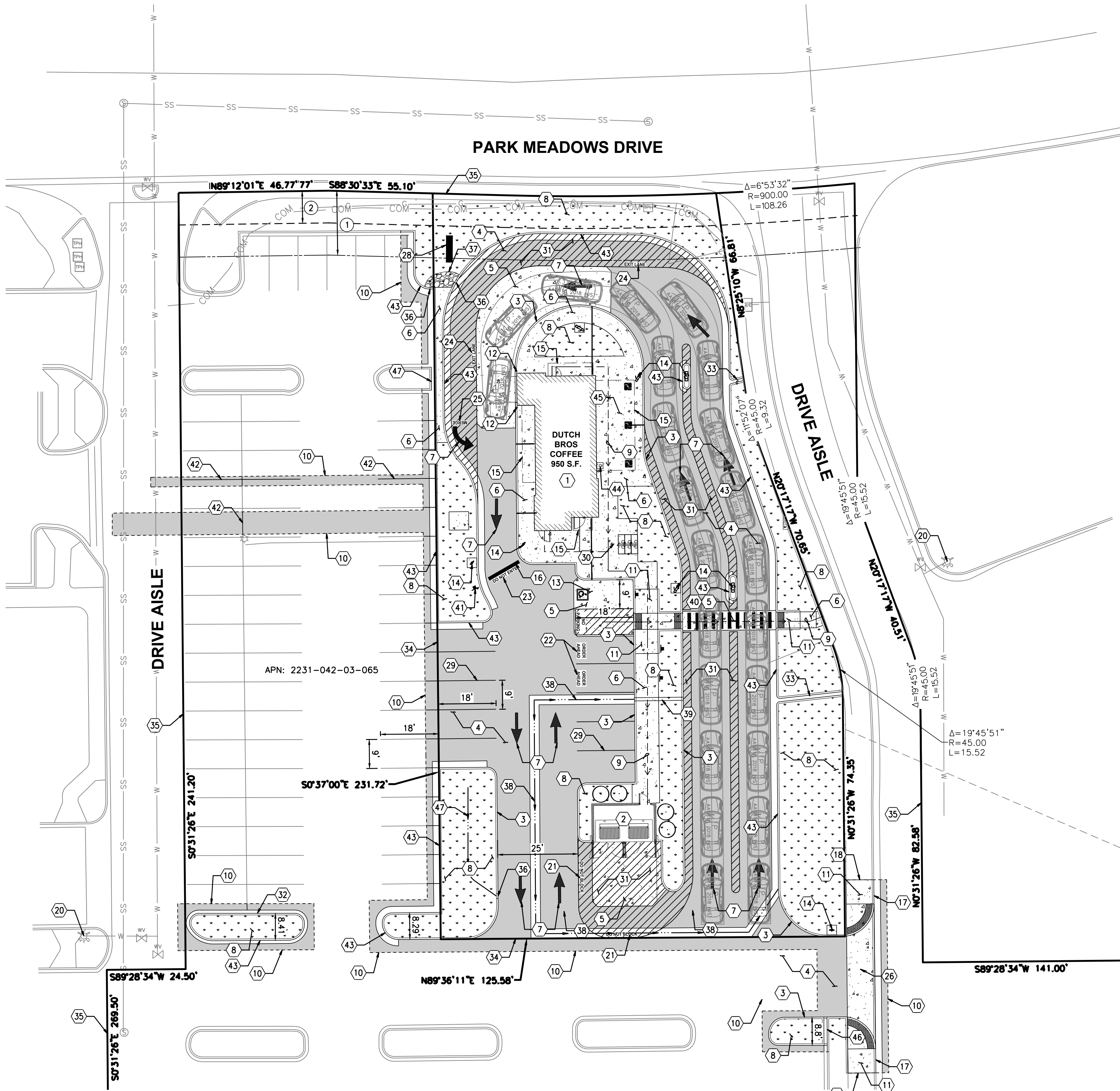
DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

0.588 ACRES, SP25-0002

SITE PLAN

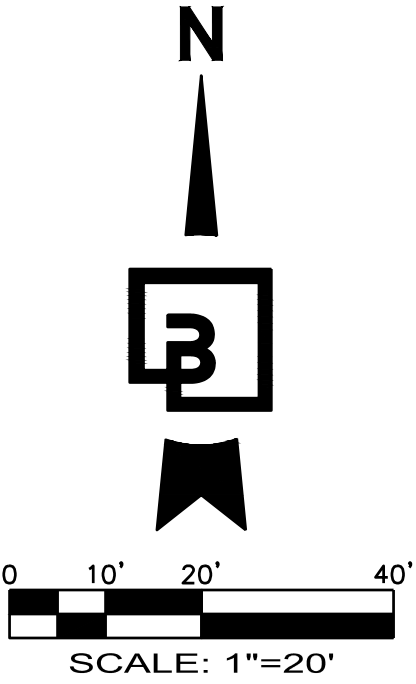


CONSTRUCTION NOTES:

1. DUTCH BROS COFFEE BUILDING; REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS.
2. CONSTRUCT TRASH ENCLOSURE, REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS. INSTALL PCC PAD PER 2/10 AND GEOTECHNICAL ENGINEER RECOMMENDATIONS.
3. 6" CONCRETE BARRIER CURB PER 4/10, TYPICAL.
4. CONSTRUCT ASPHALT PAVEMENT PER 1/10 AND GEOTECHNICAL ENGINEER RECOMMENDATIONS.
5. CONSTRUCT CONCRETE PAVEMENT PER 2/10 AND GEOTECHNICAL ENGINEER RECOMMENDATIONS.
6. CONSTRUCT CONCRETE SIDEWALK (WIDTH VARIES), TYPICAL. CONSTRUCT NEW SIDEWALK AND JOINTS PER DETAILS 10/10 AND 3/11.
7. INSTALL PAVEMENT MARKING PER 7/10.
8. LANDSCAPE AREA, TYPICAL.
9. ACCESSIBLE PATH, TYPICAL.
10. APPROXIMATE LOCATION OF NEAT SAW CUT LINE. PROVIDE HOT TAR SEAL AT ALL ASPHALT JOINTS.
11. ADA ACCESSIBLE RAMP. CONSTRUCT NEW PEDESTRIAN RAMPS PER CDOT STANDARD PLAN M-608-1 STANDARD SHEET 4 OF 10/11.
12. CONSTRUCT BOLLARD PER ARCHITECTURAL DRAWINGS AND 2/11.
13. CONSTRUCT ADA ACCESSIBLE STALL PER 1/11. PAINT INTERNATIONAL SYMBOL OF ACCESSIBILITY PER 6/10. SIGN POST PER 12/10.
14. INSTALL SIGNAGE. SEE SIGN DRAWINGS FOR ADDITIONAL DETAILS. PROVIDE CONCRETE BASE IF LOCATED IN LANDSCAPE.
15. BUILDING AWNING/CANOPY, SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DETAILS.
16. PAINT STOP BAR PER CDOT STANDARD DRAWING S-627-1 STANDARD SHEET 3 OF 11/9.
17. REPLACE CURB AND GUTTER IN KIND AFTER INSTALLATION OF DRIVEWAY.
18. NORTHERN LIMIT OF SIDEWALK REMOVAL.
19. SOUTHERN LIMIT OF SIDEWALK REMOVAL.
20. EXISTING FIRE HYDRANT LOCATION.
21. PAINT 12" WHITE "DO NOT BLOCK" PAVEMENT MARKING.
22. PAINT 12" WHITE "ORDER AHEAD" PAVEMENT MARKING. INSTALL "ORDER AHEAD" SIGN IN FRONT OF PARKING SPACE. SIGN BASE PER DETAIL 12/10.
23. PAINT 12" WHITE "DO NOT ENTER" PAVEMENT MARKING.
24. PAINT 12" WHITE "EXIT LANE" PAVEMENT MARKING.
25. PAINT 12" WHITE "MERGE" PAVEMENT MARKING.
26. PROVIDE CURB OPENING AND CONSTRUCT DRIVEWAY PER DOUGLAS COUNTY RWD STD DWG SP.22 AND GEOTECHNICAL REPORT RECOMMENDATIONS.
27. CONSTRUCT SITE LIGHT. SEE LIGHTING DRAWINGS FOR ADDITIONAL DETAILS.
28. APPROXIMATE LOCATION OF NEW MONUMENT SIGN. REFER TO STRUCTURAL AND SIGN PLANS FOR ADDITIONAL DETAILS.
29. PAINT 4" WIDE WHITE REFLECTIVE PAINT PARKING STALL STRIPES, TYPICAL.
30. INSTALL SHORT TERM BICYCLE PARKING PER DETAIL 2/9.
31. PAINT 4" WIDE WHITE REFLECTIVE STRIPING 2' O.C. AT 45'.
32. CONSTRUCT ON-SITE CURB AND GUTTER PER 3/10.
33. PROVIDE LANDSCAPE CUT THROUGH PER DETAIL 5/10. CONNECT TO EXISTING UNDER-SIDEWALK TRENCH DRAIN. CONTRACTOR TO VERIFY MATCH ELEVATIONS PRIOR TO CONSTRUCTION. REPORT RESULTS TO ENGINEER.
34. LOCATION OF NEW PROPOSED PROPERTY LINE.
35. LOCATION OF EXISTING PROPERTY LINE.
36. PROVIDE CURB CUT PER DETAIL 11/10.
37. INSTALL 1-2" QUARRY SPALLS, 6" DEPTH IN LANDSCAPE AREA. ENSURE THERE IS ADEQUATE SLOPE FOR DRAINAGE.
38. CONSTRUCT CONCRETE VALLEY GUTTER PER DETAIL 9/10.
39. INSTALL 12"x4" RECTANGULAR PIPE. REFER TO DETAIL A/8 FOR MORE INFORMATION. PROVIDE 4" CONCRETE EACH SIDE OF PIPE.
40. PAINT WHITE CONTINENTAL TYPE PEDESTRIAN CROSSWALK MARKING. 12" WIDE, 2.5' O.C.
41. INSTALL X-R5-1 "DO NOT ENTER" SIGN. SIGN POST AND BASE PER DETAIL 12/10.
42. PROVIDE TRENCH, PAVEMENT, AND STRIPING RESTORATION PER CITY OF LONE TREE AND CDOT STANDARDS.
43. INSTALL MEDIAN CURB AND GUTTER PER DETAIL 2/12.
44. INSTALL TRASH RECEPTACLE PER ARCHITECTURAL DETAILS.
45. LOCATION OF 12'x28' OUTDOOR PATIO AREA.
46. PROVIDE LANDSCAPE CUT-THROUGH PER DETAIL 5/10.
47. PROVIDE LANDSCAPE SWALE PER GRADES ON SHEET 7.

PARKING CALCULATION TABLE

	NUMBER OF UNITS/TOTAL SF	REQUIRED PARKING (PER UNIT OR SF.)	TOTAL REQUIRED (PER UNIT OR SF.)
USE TYPE: RESTAURANT, FAST FOOD	950 SF	1/100 SF	10
# OF EMPLOYEES ON MAX. SHIFT	N/A	N/A	N/A
		TOTAL PARKING REQUIRED	10
PERCENTAGE REDUCTION	N/A		
		TOTAL PARKING PROVIDED	11



ACCESSIBLE PATH OF TRAVEL NOTE:

WALKWAYS ALONG ACCESSIBLE ROUTES OF TRAVEL SHALL BE CONTINUOUSLY ACCESSIBLE. A MINIMUM 48" IN WIDTH, HAVE A MAXIMUM 2.0% CROSS SLOPE, AND SHALL HAVE RAMPS COMPLYING WITH ADA STANDARDS (SECTION 405) WHERE NECESSARY TO CHANGE ELEVATION AT A LONGITUDINAL SLOPE EXCEEDING 5% (1:20). A CONTINUOUS 36" WIDE DETECTABLE WARNING STRIP MEETING ADA STANDARDS (SECTION 406.8) SHALL BE PLACED WHERE A WALK CROSSES OR ADJOINS A VEHICULAR WAY AND IS NOT SEPARATED BY A CURB, RAILING, OR OTHER ELEMENT MEETING ADA STANDARDS.

EASEMENT NOTES

1. 20' BUILDING SETBACK; REC. NO. 342829
2. 10' EASEMENT FOR SNOW REMOVAL, UTILITIES, AND LANDSCAPING, PER PLAT RECEPTION NO. 342829.

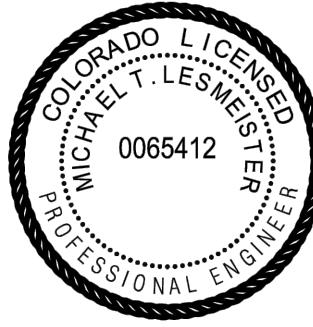
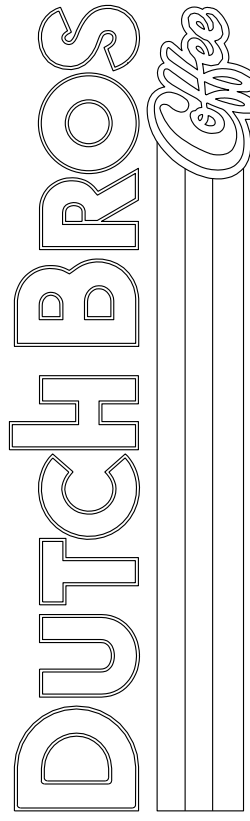
SITE DATA TABLE

ITEM	SQUARE FOOTAGE	% OF GROSS SITE
GROSS SITE AREA	28,900	100%
TOTAL BUILDING FOOTPRINT	1,190	4.10%
DUTCH BROS BUILDING	950	3.3%
TRASH ENCLOSURE	240	0.8%
PARKING/ROADS	18,050	62.5%
LANDSCAPED/HARDSCAPED AREAS	9,660	33.40%
LANDSCAPE AREA	7,080	24.5%
HARDSCAPED AREA	2,580	8.9%
LAWN/TURF AREA	0	
NATIVE SEED AREA	0	
NATURAL AREA RETAINED	0	
BUILDING SIZE		
TOTAL FLOOR AREA	950 SF	3.3%
DUTCH BROS BUILDING	950 SF	3.3%
PARKING	REQUIRED	PROVIDED
STANDARD SPACES	9	10
ACCESSIBLE SPACES	1	1
BICYCLE SPACES	1	3
DELIVERY/LOADING SPACES	0	0

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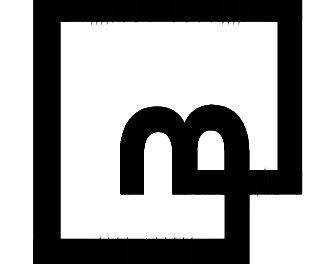
2	6/30/25	NRN	MTL	MTL	CITY COMMENTS - REVISION 2
1	5/9/25	NRN	MTL	MTL	CITY COMMENTS - REVISION 1
No.	Date	By	Ckd.	Appr.	Revision

For:



Scale:	Horizontal	Vertical
	1" = 20'	N/A
Designed	NRN	
Drawn	NRN	
Checked	MTL	
Approved	MTL	
Date	6/30/25	

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Job Number
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CITY OF LONE TREE

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK



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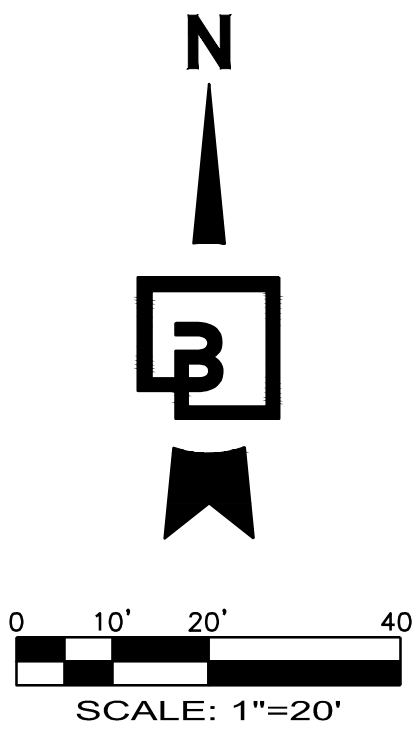
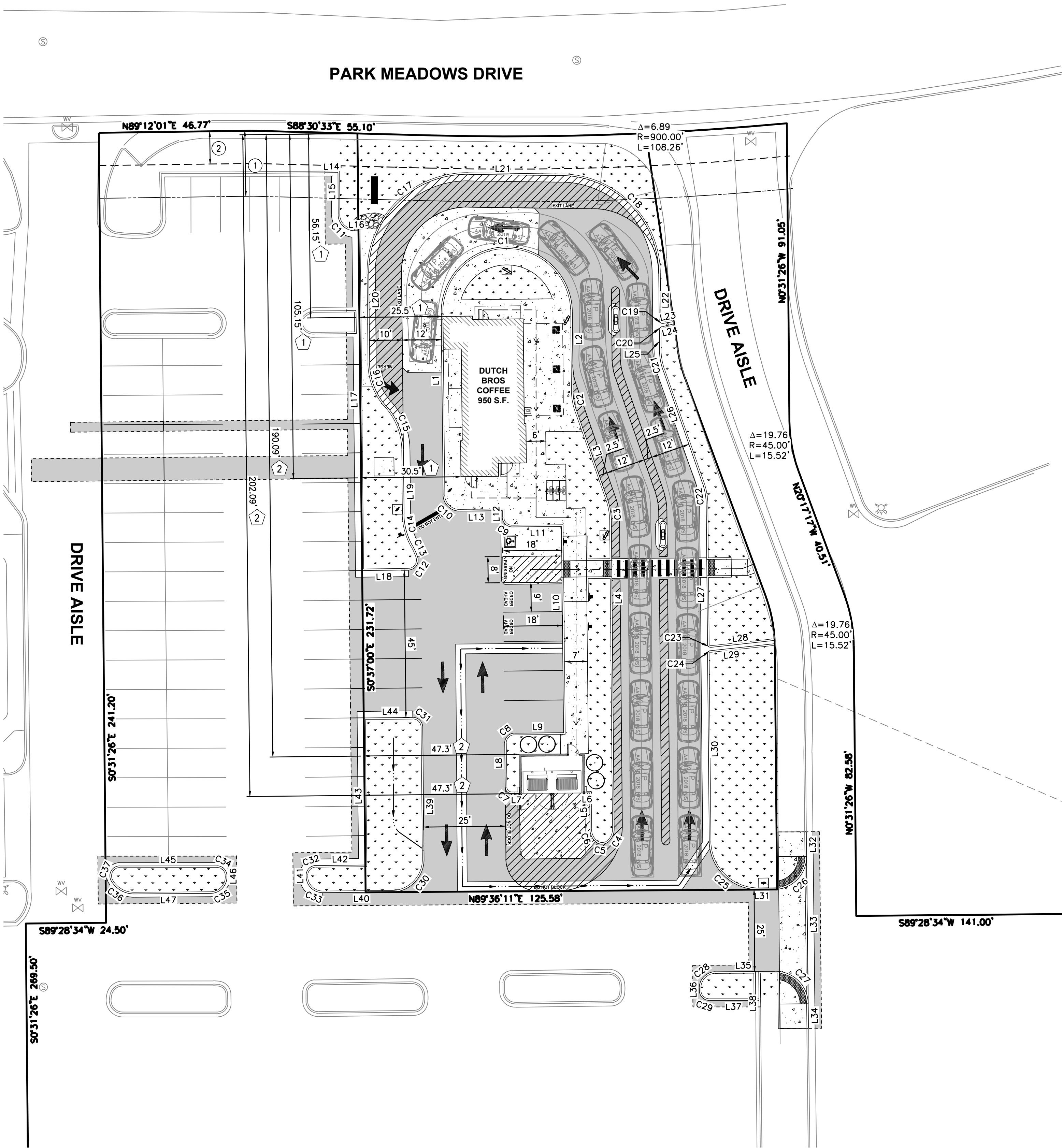
DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

0.588 ACRES, SP25-0002

HORIZONTAL CONTROL PLAN



LINE TABLE		
Line #	Length	Direction
L1	55.50	S0° 36' 14.35"E
L2	23.97	N0° 36' 14.35"W
L3	28.67	N19° 12' 52.85"W
L4	94.19	N0° 31' 26.00"W
L5	11.17	S0° 27' 14.01"E
L6	1.43	N89° 36' 11.15"E
L7	2.35	N89° 36' 18.95"E
L8	13.43	S0° 36' 14.35"E
L9	15.00	S89° 23' 45.65"W
L10	63.00	S0° 36' 14.35"E
L11	15.00	N89° 23' 45.65"E
L12	2.00	S0° 36' 14.35"E
L13	13.00	N89° 23' 45.65"E
L14	4.00	N89° 31' 13.66"E
L15	12.77	S0° 14' 42.44"E
L16	1.15	N89° 23' 45.65"E
L17	72.37	S0° 36' 04.48"E
L18	14.17	N89° 21' 51.86"E
L19	19.74	N0° 36' 14.35"W
L20	27.33	N0° 36' 14.35"W
L21	28.51	S89° 14' 01.12"E
L22	14.45	S0° 36' 14.35"E
L23	3.18	N80° 24' 57.41"E
L24	3.72	S76° 38' 50.89"W

LINE TABLE		
Line #	Length	Direction
L25	5.96	S0° 36' 14.35"E
L26	36.53	S19° 12' 52.85"E
L27	42.69	S0° 31' 26.00"E
L28	19.65	S83° 46' 23.38"W
L29	19.97	S83° 46' 21.23"W
L30	57.08	S0° 31' 26.00"E
L31	4.67	N89° 36' 11.12"E
L32	7.50	N0° 38' 08.28"W
L33	45.00	S0° 38' 08.28"E
L34	7.50	N0° 38' 08.28"W
L35	18.18	S89° 36' 11.12"W
L36	0.73	S0° 21' 55.21"E
L37	15.18	N90° 00' 00.00"E
L38	2.00	S0° 23' 48.88"E
L39	40.29	N0° 34' 24.19"W
L40	21.01	N89° 36' 11.12"E
L41	0.27	S0° 34' 17.21"E
L42	15.05	S89° 20' 58.50"W
L43	44.91	S0° 35' 04.61"E
L44	14.99	S89° 21' 51.86"W

CURVE TABLE			
Curve #	Length	Radius	Delta
C1	31.89	20.00	91.37
C2	6.50	20.00	18.61
C3	6.52	20.00	18.69
C4	4.27	5.00	48.90
C5	4.32	3.00	82.45
C6	4.26	5.00	48.77
C7	3.13	2.00	89.79
C8	4.71	3.00	90.00
C9	4.71	3.00	90.00
C10	7.85	5.00	90.00
C11	7.89	5.00	90.36
C12	5.66	3.00	108.05
C13	3.80	20.00	10.88
C14	10.11	20.00	28.96
C15	14.45	20.00	41.41
C16	14.45	20.00	41.41
C17	47.84	30.00	91.37
C18	46.41	30.00	88.63
C19	1.73	1.00	98.98

CURVE TABLE			
Curve #	Length	Radius	Delta
C20	1.35	1.00	77.25
C21	6.50	20.00	18.61
C22	6.52	20.00	18.69
C23	1.67	1.00	95.70
C24	1.47	1.00	84.30
C25	23.53	15.00	89.87
C26	15.75	10.00	90.24
C27	14.36	10.00	82.29
C28	7.85	5.00	89.97
C29	4.69	3.00	89.63
C30	15.74	10.00	90.18
C31	4.72	3.00	90.06
C32	4.71	3.00	89.92
C33	7.84	5.00	89.83
C34	4.69	3.00	89.54
C35	7.86	5.00	90.12
C36	8.47	8.00	60.63
C37	6.27	3.00	119.72

HORIZONTAL CONTROL NOTE:

- HORIZONTAL CONTROL DIMENSIONS FOR THE BUILDING ARE SHOWN FROM THE NORTHWEST PROPERTY CORNER OF THE PARCEL TO THE FACE OF FINISHED SURFACE AT THE BUILDING CORNER. BUILDING IS PARALLEL TO WESTERN PROPERTY LINE.
- HORIZONTAL CONTROL DIMENSIONS FOR THE TRASH ENCLOSURE BUILDING ARE SHOWN FROM THE NORTHWEST PROPERTY CORNER OF THE PARCEL TO THE FACE OF CMU BLOCK AT THE BUILDING CORNER. BUILDING IS PARALLEL TO WESTERN PROPERTY LINE.

EASEMENT NOTES

- 20' BUILDING SETBACK; REC. NO. 342829
- 10' EASEMENT FOR SNOW REMOVAL, UTILITIES, AND LANDSCAPING, PER PLAT RECEPTION NO. 342829.

CITY OF LONE TREE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

2

16/30/25

MTL

MTL

CITY COMMENTS – REVISION 2

1

5/9/25

NRN

MTL

CITY COMMENTS – REVISION 1

No.

Date

By

Ckd.

Appr.

Revision

Title:

HORIZONTAL CONTROL PLAN

SEQ PARK MEADOWS DR AND S QUEBEC ST

LONE TREE, CO

For:

DUTCH BROS

City

COLORADO LICENSED PROFESSIONAL ENGINEER

MICHAEL T. LESKISER

0065412

Scale:

Horizontal

Vertical

1" = 20'

N/A

Designed

Drawn

Checked

Approved

NRN

NRN

MTL

MTL

Date

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18215 72nd Avenue South

Kent, WA 98032

425.251.6222

barghausen.com

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Engineering Division

Planning USA, LLC

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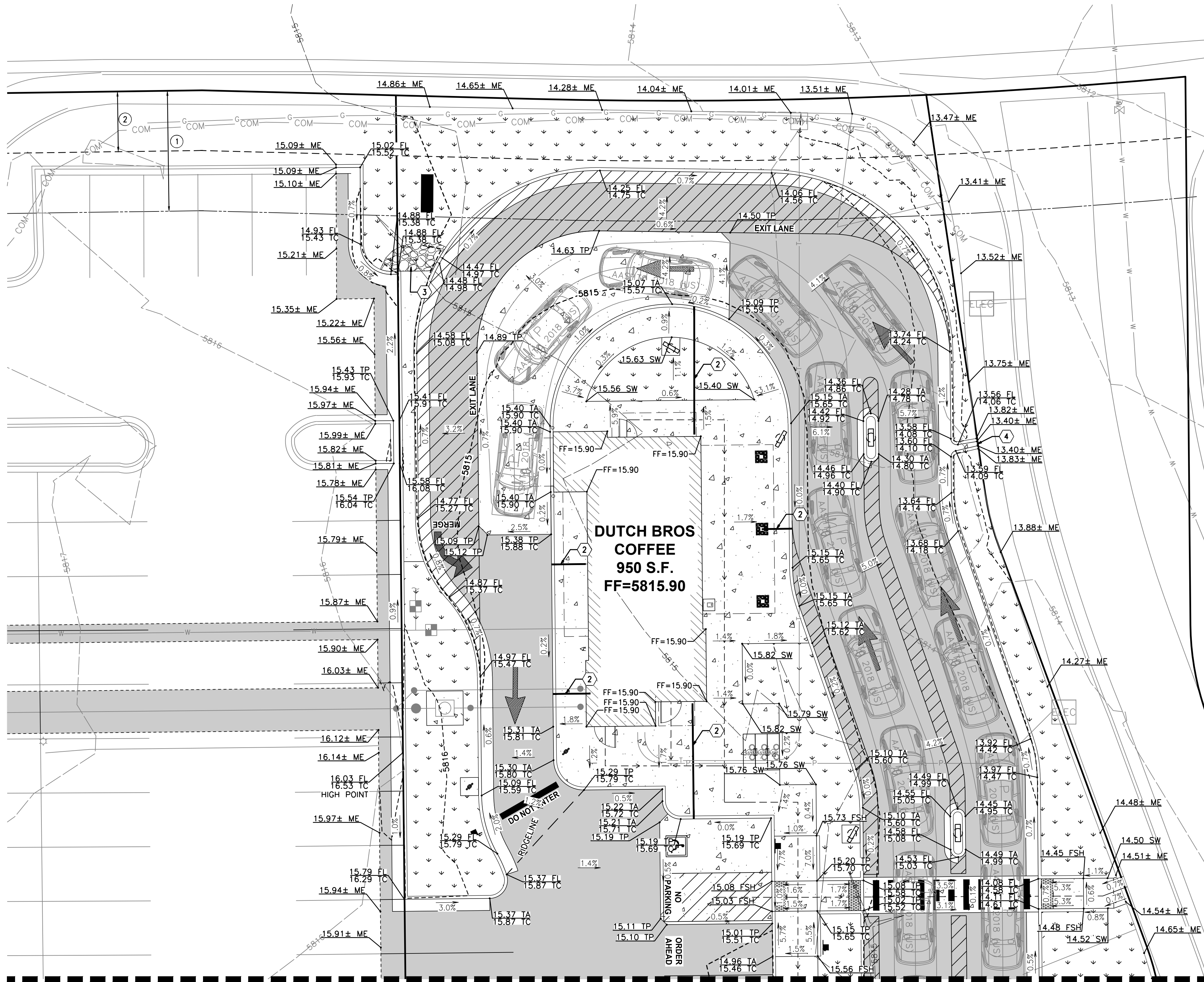
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0.588 ACRES, SP25-0002

GRADING AND DRAINAGE PLAN



MATCHLINE - SEE SHEET 8 OF 17 FOR CONTINUATION

ACCESSIBLE PATH OF TRAVEL NOTE:

WALKWAYS ALONG ACCESSIBLE ROUTES OF TRAVEL SHALL BE CONTINUOUSLY ACCESSIBLE, A MINIMUM 48" IN WIDTH, HAVE A MAXIMUM 2.0% CROSS SLOPE, AND SHALL HAVE RAMPS COMPLYING WITH ADA STANDARDS (SECTION 405) WHERE NECESSARY TO CHANGE ELEVATION AT A LONGITUDINAL SLOPE EXCEEDING 5% (1:20). A CONTINUOUS 36" WIDE DETECTABLE WARNING STRIP MEETING ADA STANDARDS (SECTION 406.8) SHALL BE PLACED WHERE A WALK CROSSES OR ADJOINS A VEHICULAR WAY AND IS NOT SEPARATED BY A CURB, RAILING, OR OTHER ELEMENT MEETING ADA STANDARDS.

EXISTING UTILITY STRUCTURES:

ALL EXISTING UTILITY STRUCTURES AND ASSOCIATED LIDS THAT FALL WITHIN THE AREA OF WORK SHALL BE ADJUSTED TO FINISHED GRADE ELEVATIONS. CONTRACTOR SHALL CONFIRM THE FEASIBILITY OF ADJUSTING EXISTING UTILITY STRUCTURE LIDS TO FINISHED GRADE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

EASEMENT NOTES

- 20' BUILDING SETBACK; REC. NO. 342829
- 10' EASEMENT FOR SNOW REMOVAL, UTILITIES, AND LANDSCAPING, PER PLAT RECEPTION NO. 342829.

FLOOD ZONE DESIGNATION:

ACCORDING TO FLOOD INSURANCE RATE MAP (F.I.R.M.) NUMBER 0800460116H, WITH AN EFFECTIVE DATE OF NOVEMBER 20, 2013, THE ENTIRE PROPERTY LIES ENTIRELY WITHIN THE FOLLOWING ZONE DESIGNATION:

ZONE X – AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

GRADING GENERAL NOTES:

- ALL GRADING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THE CURRENT CITY ORDINANCE AND STANDARD PLANS. THE GRADING IS SUBJECT TO THE OBSERVATION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL PROPOSED GRADES IN RELATIONSHIP TO SURVEYED BASIS OF ELEVATION.
- ALL EXISTING UTILITY STRUCTURES AND ASSOCIATED LIDS THAT FALL WITHIN THE AREA OF WORK SHALL BE ADJUSTED TO FINISHED GRADE ELEVATIONS. CONTRACTOR SHALL CONFIRM THE FEASIBILITY OF ADJUSTING EXISTING UTILITY STRUCTURE LIDS TO FINISHED GRADE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- CONTRACTOR TO PROTECT AND MAINTAIN EROSION CONTROL FACILITIES DURING GRADING OPERATIONS.
- CONTRACTOR TO OBTAIN ANY NECESSARY RIGHT-OF-WAY PERMITS IF REQUIRED FOR WORK SHOWN ON PLANS.
- CONTRACTOR SHALL MATCH EXISTING ELEVATIONS AT ALL SAWCUT LOCATIONS.
- ALL SPOT ELEVATIONS SHOWN ARE TO FINISH SURFACE (TOP OF ASPHALT OR TOP OF CONCRETE PAVEMENT, NOT TOP OF CURB/SIDEWALK) UNLESS OTHERWISE NOTED. (TP = TOP OF PAVEMENT, TC = TOP CURB, ME = MATCH EXISTING ELEVATIONS, FSH = FLUSH CURB, FL = FLOW LINE, GB = GRADE BREAK, GRD = FINISH GROUND, TPI = TOP OF ISLAND).
- ALL SPOT ELEVATIONS SHOWN HAVE BEEN 'TRUNCATED' TO INCREASE VISUAL CLARITY. ALL ELEVATIONS SHOWN ARE PLUS 5800', EG. 5815.25 = 15.25.

CONSTRUCTION NOTES:

- NOTE NOT USED.
- PROVIDE UNDER-SIDEWALK DRAIN PER DETAIL 1/12. DISCHARGE THROUGH FACE OF CURB.
- INSTALL 1-2" QUARRY SPALLS, 6" DEPTH IN LANDSCAPE AREA. CONTRACTOR SHALL GROUT IN PLACE PER MEANS AND METHODS APPROPRIATE IN THE FIELD TO ENSURE SPALLS REMAIN AS PLACED. ENSURE THERE IS ADEQUATE SLOPE FOR DRAINAGE.
- CONNECT GUTTER TO EXISTING UNDER-SIDEWALK DRAIN. CONTRACTOR TO VERIFY MATCH ELEVATIONS PRIOR TO CONSTRUCTION. REPORT RESULTS TO ENGINEER.

ABBREVIATIONS:

FL - FLOWLINE
FG - FINISH GRADE
FSH - FLUSH
GP - CURB GUTTER PLATE
GB - GRADE BREAK
ME - MATCH EXISTING ELEVATION
SW - TOP OF SIDEWALK
TC - TOP OF CURB/SIDEWALK
TP - TOP OF PAVEMENT
TA - TOP OF ASPHALT PAVING
TOW - TOP OF WALL
BOW - BOTTOM OF WALL

GEOTECHNICAL GRADING NOTES:

THE FOLLOWING NOTES HAVE BEEN REFERENCED FROM THE GEOTECHNICAL EVALUATION PREPARED BY GROUND ENGINEERING, DATED FEBRUARY 3, 2025. REFER TO THE COMPLETE REPORT FOR ALL EARTHWORK REQUIREMENTS.

EXISTING FILL MATERIALS:

FILL MATERIALS EXTENDING TO A DEPTH OF UP TO ABOUT 7 FEET WERE ENCOUNTERED IN THE EXPLORATORY BORINGS. NOTE THAT THE FILL DEPTHS SHOWN IN THE BORING LOGS ARE APPROXIMATE, AND THE DEPTH, LATERAL EXTENT, AND COMPOSITION OF THE FILL SHOULD BE EXPECTED TO VARY. WE HAVE NO INFORMATION INDICATING WHETHER THE FILL WAS PLACED UNDER THE OBSERVATION OF A GEOTECHNICAL ENGINEER.

BASED ON THE RESULTS OF OUR FIELD EXPLORATION AND LABORATORY TESTING, IT IS OUR OPINION THAT THE EXISTING FILL SHOULD NOT BE USED TO SUPPORT FOUNDATIONS, INTERIOR SLABS, EXTERIOR SLABS-ON-GRADE, OR PAVEMENTS WITHOUT COMPLETE REMOVAL AND MODIFICATION.

IF THE OWNER IS WILLING TO ACCEPT AN INCREASED RISK OF MOVEMENT FOR PAVEMENTS AND EXTERIOR SLABS, IT MAY BE FEASIBLE TO OVEREXCAVATE A PORTION OF THE EXISTING FILL BELOW THESE ELEMENTS, THEN PROCESS, MOISTURE CONDITION, AND COMPACT THE MATERIALS BACK TO SUBGRADE ELEVATION.

THERE IS A POTENTIAL FOR CONSTRUCTION DEBRIS AND/OR DOMESTIC TRASH TO BE PRESENT WITHIN THE FILL. HOWEVER, BASED ON OUR FIELD EXPLORATION, WE BELIEVE THE LIKELIHOOD OF ENCOUNTERING SUCH MATERIALS IS LOW. THE FILL SHOULD BE MONITORED FOR DEBRIS AND TRASH DURING GRADING AND CONSTRUCTION ACTIVITIES.

THE EXISTING FILL CAN BE REUSED AS ENGINEERED FILL FOR THIS PROJECT, PROVIDED THAT ANY DELETERIOUS MATERIALS ARE REMOVED. SOME REMOVAL AND REPLACEMENT MAY BE NECESSARY IF UNSUITABLE OR SOFT MATERIALS ARE FOUND BENEATH THE EXISTING FILL.

GROUNDWATER:

GROUNDWATER WAS NOT ENCOUNTERED AT ANY OF THE BORING PERFORMED ONSITE.

SITE PREPARATION:

REMOVE EXISTING PAVEMENTS, FLATWORK, UNSUITABLE FILLS, VEGETATION, ORGANICS, AND OTHER DELETERIOUS MATERIALS FROM PROPOSED BUILDING AND PAVEMENT AREAS. ALL EXPOSED SURFACES MUST BE FREE OF MOUNDS AND DEPRESSIONS THAT COULD INTERFERE WITH UNIFORM COMPACTION.

STRIPPED MATERIALS, INCLUDING VEGETATION, UNSUITABLE FILLS, AND ORGANICS, SHOULD BE WASTED FROM THE SITE OR USED TO REVEGETATE LANDSCAPED AREAS OR EXPOSED SLOPES AFTER GRADING IS COMPLETE.

WHENEVER POSSIBLE, THE SITE SHOULD FIRST BE GRADED TO CREATE A RELATIVELY LEVEL SURFACE TO RECEIVE FILL AND TO PROVIDE A UNIFORM THICKNESS OF FILL BENEATH PROPOSED BUILDINGS AND IMPROVEMENTS. ALL CLEARED AREAS THAT WILL RECEIVE FILL SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES, CONDITIONED TO NEAR OPTIMUM MOISTURE CONTENT, AND COMPACTED. IT IS ESSENTIAL TO PROTECT THE MOISTURE CONTENT OF PREPARED MATERIALS FROM DRYING OUT.

IN AREAS WHERE ENGINEERED FILL WILL BE PLACED TO ACHIEVE PROPOSED GRADES, ALL EXISTING FILL MUST BE REMOVED, MOISTURE CONDITIONED, AND COMPACTED BEFORE PLACING NEW ENGINEERED FILL.

ALTHOUGH NO UNDERGROUND FACILITIES WERE OBSERVED DURING EXPLORATION, SUCH FEATURES MAY STILL BE ENCOUNTERED DURING CONSTRUCTION. IF UNEXPECTED FILLS OR UNDERGROUND STRUCTURES ARE FOUND, THEY MUST BE REMOVED AND THE EXCAVATION THOROUGHLY CLEANED BEFORE PLACING BACKFILL OR CONTINUING CONSTRUCTION.

EXCAVATION FOR THE PROPOSED CONSTRUCTION IS EXPECTED TO BE ACHIEVABLE WITH CONVENTIONAL EARTHMOVING EQUIPMENT. HOWEVER, ZONES OF HARD CLAYSTONE MAY BE PRESENT AND MAY REQUIRE HEAVY-DUTY EQUIPMENT TO EXCAVATE.

SUBGRADE SOIL STABILITY MAY BE AFFECTED BY PRECIPITATION, REPEATED CONSTRUCTION TRAFFIC, OR OTHER FACTORS. IF UNSTABLE CONDITIONS OCCUR DURING CONSTRUCTION, WORKABILITY MAY BE IMPROVED BY OVER-EXCAVATING WET ZONES AND MIXING THE SOIL WITH CRUSHED GRAVEL. GEOTEXTILES COULD ALSO BE USED AS A STABILIZATION METHOD. LIGHTWEIGHT EXCAVATION EQUIPMENT MAY HELP REDUCE SUBGRADE PUMPING.

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONE TREE FOR STREET AND DRAINAGE, GRADING AND EROSION CONTROL, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

GRADING AND DRAINAGE PLAN

SEQ PARK MEADOWS DR AND S QUEBEC ST
LONE TREE, CO

Title:

Dutch Bros

For:

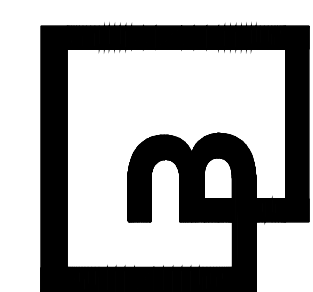


Scale:

Horizontal 1" = 20'
Vertical N/A

Designed NRN
Drawn NRN
Checked MTL
Approved MTL
Date 6/30/25

Barghausen Consulting Engineers, LLC.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



23707
6 OF 17
Sheet
Job Number
Job Number
Job Number

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DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

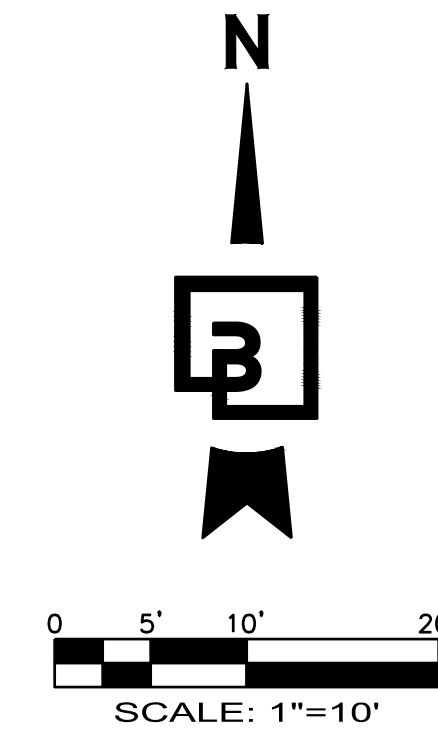
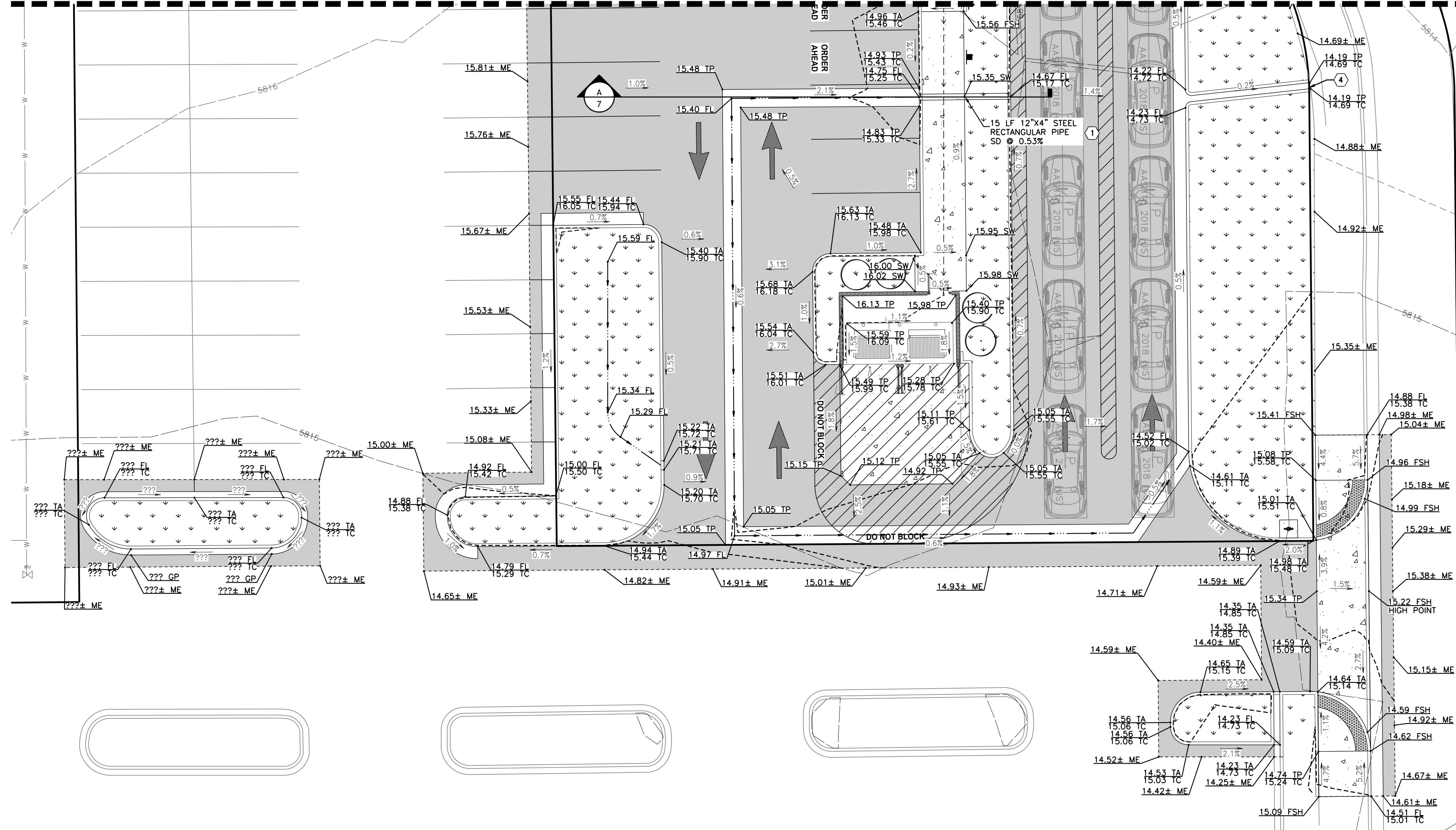
LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

0.588 ACRES, SP25-0002

GRADING AND DRAINAGE PLAN

MATCHLINE - SEE SHEET 7 OF 17 FOR CONTINUATION

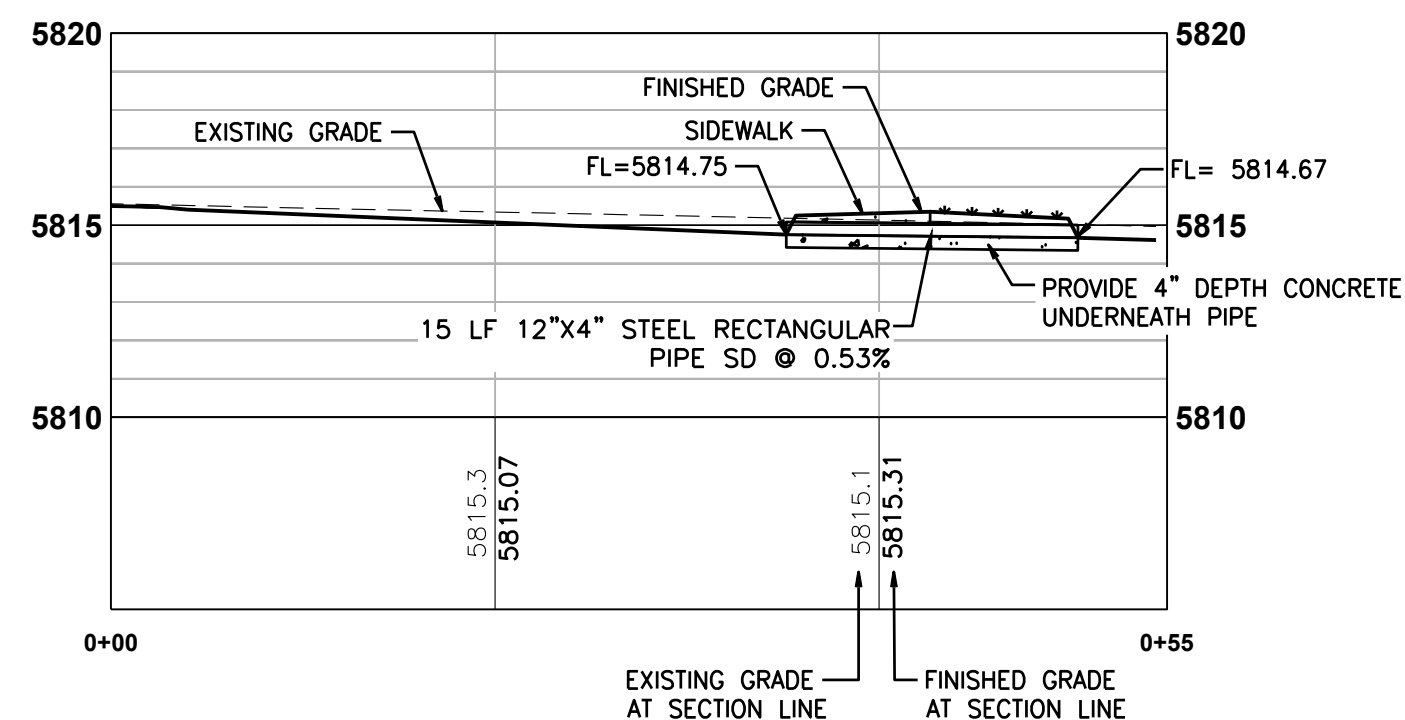


CONSTRUCTION NOTES:

1. INSTALL 12" X 4" RECTANGULAR STEEL PIPE PER DETAIL A/THIS SHEET. PROVIDE 4" CONCRETE ON BOTH SIDES OF PIPE.
2. NOTE NOT USED.
3. NOTE NOT USED.
4. CONNECT GUTTER TO EXISTING UNDER-SIDEWALK DRAIN. CONTRACTOR TO VERIFY MATCH ELEVATIONS PRIOR TO CONSTRUCTION. REPORT RESULTS TO ENGINEER.

GRADING GENERAL NOTES:

1. ALL GRADING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THE CURRENT CITY ORDINANCE AND STANDARD PLANS. THE GRADING IS SUBJECT TO THE OBSERVATION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL PROPOSED GRADES IN RELATIONSHIP TO SURVEYED BASIS OF ELEVATION.
3. ALL EXISTING UTILITY STRUCTURES AND ASSOCIATED LIDS THAT FALL WITHIN THE AREA OF WORK SHALL BE ADJUSTED TO FINISHED GRADE ELEVATIONS. CONTRACTOR SHALL CONFIRM THE FEASIBILITY OF ADJUSTING EXISTING UTILITY STRUCTURE LIDS TO FINISHED GRADE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. CONTRACTOR TO PROTECT AND MAINTAIN EROSION CONTROL FACILITIES DURING GRADING OPERATIONS.
5. CONTRACTOR TO OBTAIN ANY NECESSARY RIGHT-OF-WAY PERMITS IF REQUIRED FOR WORK SHOWN ON PLANS.
6. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS AT ALL SAWCUT LOCATIONS.
7. ALL SPOT ELEVATIONS SHOWN ARE TO FINISH SURFACE (TOP OF ASPHALT OR TOP OF CONCRETE PAVEMENT, NOT TOP OF CURB/SIDEWALK) UNLESS OTHERWISE NOTED. (TP = TOP OF PAVEMENT, TC = TOP CURB, ME = MATCH EXISTING ELEVATIONS, FSH = FLUSH CURB, FL = FLOW LINE, GB = GRADE BREAK, GRD = FINISH GROUND, TPI = TOP OF ISLAND).
8. ALL SPOT ELEVATIONS SHOWN HAVE BEEN "TRUNCATED" TO INCREASE VISUAL CLARITY. ALL ELEVATIONS SHOWN ARE PLUS 5800', EG. 5850.25 = 50.25.



UNDERSIDEWALK DRAIN

SCALE: 1"=10' H; 1"=5' V

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED
BY THE CITY OF LONE TREE FOR STREET AND
DRAINAGE, GRADING AND EROSION CONTROL, SIGNAGE
AND STRIPING IMPROVEMENTS ONLY.

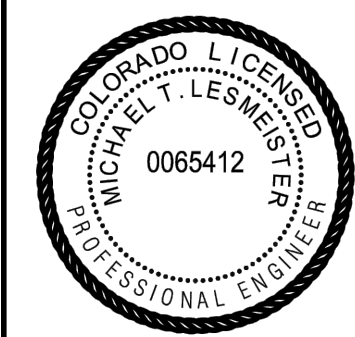
ENGINEERING DIVISION ACCEPTANCE BLOCK

No.	Date	By	Appr.	City Comments	Revision
2	6/30/25	NRN	MTL	MTL	CITY COMMENTS - REVISION 2
1	5/9/25	NRN	MTL	MTL	CITY COMMENTS - REVISION 1

Title:

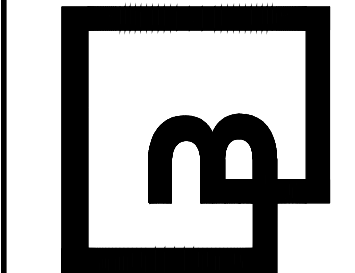
GRADING AND DRAINAGE PLAN
SEQ PARK MEADOWS DR AND S QUEBEC ST
LONE TREE, CO

For:



Scale:	Horizontal	Vertical
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DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

0.588 ACRES, SP25-0002

UTILITY PLAN

GENERAL UTILITY NOTES:

1. ALL STRUCTURE ELEVATIONS SHOWN ARE TO CENTER OF STRUCTURE AT FINISH SURFACE (TOP OF ASPHALT OR TOP OF CONCRETE PAVEMENT, NOT TOP OF CURB/SIDEWALK) UNLESS OTHERWISE NOTED.
2. ALL UTILITY STRUCTURES EXPOSED TO TRAFFIC SHALL BE TRAFFIC RATED INCLUDING STRUCTURE, LID, ETC.
3. ALL UTILITY STRUCTURES WITH LIDS EXPOSED TO PEDESTRIAN TRAFFIC SHALL BE SLIP RESISTANT IN ACCORDANCE WITH ACCESSIBILITY REQUIREMENTS.
4. PROVIDE ALL INCIDENTAL FITTINGS, BENDS, WYES, TEES, COUPLINGS, GASKETS, ETC. REQUIRED TO CONSTRUCT THE INFRASTRUCTURE DEPICTED.
5. ALL TRENCHING SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE PURVEYOR.
6. PROVIDE MARKING TAPE AND LOCATE WIRE WITH ALL TRENCH INSTALLATIONS.
7. ALL SANITARY SEWER PIPING SHALL BE PVC UNLESS DENOTED OTHERWISE. ALL PVC SEWER PIPE SHALL BE SDR-35 CONFORMING TO ASTM D3034.
8. ALL WATER PIPING DENOTED AS PVC SHALL CONFORM TO ASTM D1785, SCHEDULE 40.
9. ALL SANITARY SEWER MUST MEET THE REQUIREMENTS OF THE CITY OF DENVER PUBLIC UTILITIES.

1 SANITARY CONSTRUCTION NOTES:

1. CONNECT TO EXISTING 8" PVC SANITARY SEWER MAIN AT ELEVATION 5797.72'. POT HOLE AND VERIFY POINT OF CONNECTION LOCATION, PIPE DIAMETER, PIPE MATERIAL, AND DEPTH PRIOR TO CONSTRUCTION. REPORT RESULTS TO ENGINEER PRIOR TO ORDERING MATERIALS.
2. INSTALL SEWER CLEANOUT PER 1/9 AND 8/10. RIM AND INVERT ELEVATIONS PER STRUCTURE TABLE, THIS SHEET.
3. INSTALL 50 GALLON GREASE INTERCEPTOR PER 3/12 WITH SV-10 SAMPLING PORT PER 4/12. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL DETAILS.
4. CONSTRUCT SANITARY SEWER CONNECTION TO BUILDING. INSTALL CLEANOUTS TO GRADE PER DETAIL 1/9 AND 8/10. RIM AND INVERT ELEVATIONS PER STRUCTURE TABLE, THIS SHEET.
5. CONSTRUCT SDR-35 PVC SANITARY SEWER LATERAL TO CITY OF LONE TREE STANDARDS. SIZE AND SLOPE PER PLAN.

2 WATER CONSTRUCTION NOTES:

1. PROPOSED CONNECTION TO EXISTING 12" D.I. WATER MAIN FOR DOMESTIC AND IRRIGATION WATER SERVICE. 1" TAP INSTALLED BY WATER PURVEYOR. CONTRACTOR TO COORDINATE INSTALLATION WITH PURVEYOR PRIOR TO START OF CONSTRUCTION. POT HOLE AND VERIFY POINT OF CONNECTION LOCATION, PIPE DIAMETER, PIPE MATERIAL AND DEPTH PRIOR TO CONSTRUCTION. REPORT RESULTS TO ENGINEER PRIOR TO ORDERING MATERIALS.
2. CONSTRUCT 1" METER FOR 1.5" DOMESTIC SERVICE PER DENVER WATER STANDARD DRAWING 33269/9. WATER SERVICE FROM TAP TO METER PER DENVER WATER STANDARD DRAWING 33264/9.
3. CONSTRUCT 3/4" METER FOR 1" IRRIGATION SERVICE PER DENVER WATER STANDARD DRAWING 33269/9. CONSTRUCT 1" REDUCED PRESSURE BACKFLOW ASSEMBLY PER DENVER WATER STANDARD DRAWING 32054/9 IN ABOVE-GROUND, LOCKABLE, CLIMATE CONTROLLED HOT-BOX PER DENVER WATER STD.
4. APPROXIMATE LOCATION OF WATER SERVICE CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR FINAL LOCATION. REDUCED PRESSURE BACKFLOW ASSEMBLY INSTALLED INSIDE BUILDING PER PLUMBING AND ARCHITECTURAL DRAWINGS.
5. CONSTRUCT 1" IRRIGATION STUB. CONTINUATION BY OTHERS. SEE IRRIGATION DRAWINGS FOR DETAILS.
6. INSTALL 26 LF OF 1.5" PVC DOMESTIC WATER PIPE.
7. INSTALL 92 LF OF TYPE K COPPER WATER SERVICE FROM TAP TO METER PER DENVER WATER STANDARD DRAWING 33264/9.
8. CONSTRUCT UTILITY TRENCH FOR WATER LINE INSTALLATION PER DENVER WATER STANDARD DRAWING 31002/9. ANY REQUIRED SHORING PERMITTING AND DESIGN TO BE PERFORMED BY CONTRACTOR.

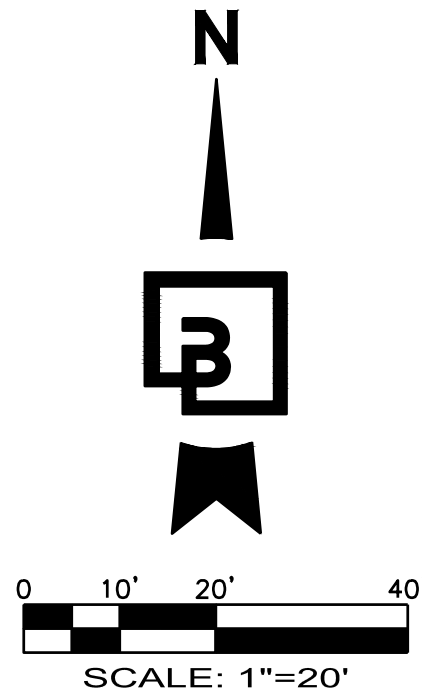
3 DRY UTILITIES CONSTRUCTION NOTES:

1. APPROXIMATE LOCATION OF POWER CONNECTION TO EXISTING POWER UTILITY BOX. CONTRACTOR TO COORDINATE EXACT LOCATION WITH PURVEYOR PRIOR TO BEGINNING CONSTRUCTION.
2. APPROXIMATE LOCATION OF UNDERGROUND POWER SERVICE LINE. CONTRACTOR SHALL INSTALL 76 LF OF TWO (2) 5" CONDUITS WITH PULL TAPE FOR ELECTRICAL INSTALLATION. CONTRACTOR TO COORDINATE SCOPE OF WORK WITH MEP PLANS AND PURVEYOR PRIOR TO CONSTRUCTION.
3. INSTALL ELECTRICAL CONNECTION TO BUILDING. CONTRACTOR TO COORDINATE SCOPE OF WORK WITH MEP PLANS AND PURVEYOR PRIOR TO CONSTRUCTION.
4. APPROXIMATE LOCATION OF TELECOM CONNECTION TO EXISTING UTILITY BOX. CONTRACTOR TO COORDINATE EXACT LOCATION WITH PURVEYOR PRIOR TO BEGINNING CONSTRUCTION.
5. APPROXIMATE LOCATION OF UNDERGROUND PHONE/CABLE, AND INTERNET SERVICE LINE. CONTRACTOR SHALL INSTALL 131 LF OF ONE (1) 4" CONDUIT WITH PULL TAPE FOR INSTALLATION. CONTRACTOR TO COORDINATE SCOPE OF WORK WITH MEP PLANS PRIOR TO CONSTRUCTION.
6. INSTALL TELECOM CONNECTION TO BUILDING. CONTRACTOR TO COORDINATE SCOPE OF WORK WITH MEP PLANS AND PURVEYOR PRIOR TO CONSTRUCTION.

4 EASEMENT NOTES

1. 20' BUILDING SETBACK; REC. NO. 342829
2. 10' EASEMENT FOR SNOW REMOVAL, UTILITIES, AND LANDSCAPING, PER PLAT RECEPTION NO. 342829.

SANITARY SEWER STRUCTURE	
TABLE	
3	GREASE INTERCEPTOR, RIM=5815.94 IE=5812.58 (6" IN E) IE=5812.58 (6" OUT W)
3	SAMPLE PORT, RIM=5816.21 IE=5812.52 (6" IN E) IE=5812.35 (6" OUT W)
4	SSCO #1, W/ SOLID LOCKING CAP RIM=5815.88 IE=5813.00 (6" OUT W)
4	SSCO #2, W/ SOLID LOCKING CAP RIM=5815.88 IE=5813.00 (6" OUT W)
2	SSCO #3, W/ SOLID LOCKING CAP RIM=5815.60 IE=5812.63 (6" IN E) IE=5812.63 (6" OUT W)
2	SSCO #4, W/ SOLID LOCKING CAP RIM=5816.16 IE=5812.45 (6" IN E) IE=5812.35 (6" OUT SW)
2	SSCO #5, W/ SOLID LOCKING CAP RIM=5816.01 IE=5812.28 (6" IN E) IE=5812.28 (6" OUT W)



WATER SYSTEM - GENERAL NOTES:

1. ALL WATER LINES, SYSTEM PLANS, AND CONSTRUCTION WILL CONFORM TO CURRENT SOUTHGATE WATER DISTRICT SYSTEM SPECIFICATIONS AND THE DENVER WATER ENGINEERING STANDARDS, AND ARE SUBJECT TO CONSTRUCTION OBSERVATION BY SOUTHGATE PERSONNEL OR A SOUTHGATE REPRESENTATIVE. A COPY OF SOUTHGATE'S SPECIFICATIONS ARE AVAILABLE AT WWW.SOUTHGATEDISTRICTS.ORG.
2. ONLY AFTER CONSTRUCTION PLANS HAVE BEEN REVIEWED AND APPROVED BY SOUTHGATE, THE OWNER, THE OWNER'S ENGINEER OR CONTRACTOR, WILL SCHEDULE A PRE-CONSTRUCTION MEETING WITH SOUTHGATE AT LEAST 2 BUSINESS DAYS PRIOR TO THE START OF CONSTRUCTION. APPROVED CONSTRUCTION PLANS, SIGNED BY THE DISTRICT MANAGER AND DISTRICT ENGINEER, WILL BE DISTRIBUTED AT THE PRE-CONSTRUCTION MEETING.
3. CONSTRUCTION WILL NOT BE PERMITTED TO START UNTIL ALL EASEMENTS ARE SIGNED AND RECORDED AND THE PRE-CONSTRUCTION MEETING HAS BEEN HELD.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE PROCUREMENT OF ALL PERMITS FOR THE CONSTRUCTION OF ANY BREAK IN CONSTRUCTION (DUE TO WEATHER, SCHEDULING, ETC.) AND WHEN CONSTRUCTION WILL RESUME.
5. SOUTHGATE REQUIRES 2 BUSINESS DAYS NOTICE PRIOR TO START OF CONSTRUCTION AND NOTIFICATION OF ANY BREAK IN CONSTRUCTION.
6. SOUTHGATE REQUIRES 2 BUSINESS DAYS NOTICE PRIOR TO ANY OVERTIME WORKED ON A WISKEYWAY. COSTS INCURRED BY SOUTHGATE ASSOCIATED WITH CONSTRUCTION OVERTIME WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. A COPY EACH OF ALL SURVEY CUT SHEETS MUST BE SUBMITTED TO SOUTHGATE AND TO THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
8. THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES FOR NOTIFICATION AND LOCATES PRIOR TO CONSTRUCTION COMMENCING. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES AND COSTS THAT RESULT BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES, INCLUDING SOUTHGATE UTILITIES.
9. SOUTHGATE OR ITS REPRESENTATIVE IS NOT A GUARANTOR OF THE CONSTRUCTION CONTRACTORS OBLIGATIONS AND PERFORMANCE OF CONTRACT.
10. OBSERVATIONS OR WORK IN PROGRESS VISITS ARE NOT TO BE CONSTRUED AS A GUARANTEE BY SOUTHGATE OR SOUTHGATE'S REPRESENTATIVE AND THE CONTRACTORS PERFORMANCE.
11. SOUTHGATE AND SOUTHGATE'S REPRESENTATIVE IS NOT RESPONSIBLE FOR SAFETY IN, ON, OR ABOUT THE PROJECT SITE, NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY OF ANY REGULATORY AGENCIES.
12. SOUTHGATE AND SOUTHGATE'S REPRESENTATIVE EXERCISES NO CONTROL OF THE SAFETY OR ADEQUACY OF ANY EQUIPMENT, BUILDING COMPONENTS, SCAFFOLDING, FORMS, OR ANY OTHER WORK AIDS USED IN OR ABOUT THE PROJECT, OR IN THE SUPERINTENDING OF THE SAME.
13. SOUTHGATE REQUIRES 2 BUSINESS DAYS NOTICE PRIOR TO ANY WEEKEND OR NIGHT WORK. COSTS INCURRED BY SOUTHGATE ASSOCIATED WITH WEEKEND AND NIGHT WORK WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
14. A SET OF APPROVED PLANS SHALL BE MAINTAINED BY THE CONTRACTOR AND KEPT ON SITE AT ALL TIMES. THESE PLANS SHALL BE USED TO MAKE THE "AS-CONSTRUCTED" NOTES DURING THE COURSE OF CONSTRUCTION. THESE NOTES SHALL INCLUDE BUT ARE NOT LIMITED TO, ANY DEVIATIONS FROM THE APPROVED PLANS, NOTING THE TYPES AND LOCATIONS OF THE MATERIALS IN PLACE.
15. ALL REQUIRED TESTING EQUIPMENT WILL BE SUPPLIED BY THE CONTRACTOR. SOUTHGATE REQUIRES 2 BUSINESS DAYS NOTICE PRIOR TO TESTING FOR SCHEDULING PURPOSES.
16. THE CONTRACTOR SHALL SCHEDULE COMPACTION TESTING WITH THE SOILS CONSULTANT. SEVERAL COMPACTION TESTS ARE REQUIRED AT INTERSECTIONS WITH OTHER UTILITIES, SERVICE STUBS, AND AT RANDOM LOCATIONS OVER THE WATER LINE. TESTING WILL BE REQUIRED WHEN SOILS MATERIAL CHANGES. TESTING WILL BE REQUIRED FOR EVERY THIRD SERVICE INSTALLATION. THE SOILS ENGINEER IS REQUIRED TO SUBMIT COMPACTION TEST RESULTS ON A DAILY BASIS. THE OWNER/DEVELOPER IS RESPONSIBLE FOR COSTS ASSOCIATED WITH COMPACTION TESTING.
17. CONSTRUCTION WATER IS AVAILABLE BY PURCHASING A PERMIT FROM SOUTHGATE AND DENVER WATER. CURRENT DENVER WATER CERTIFICATION IS REQUIRED ON ALL WATER METERS. SOUTHGATE DOES NOT SUPPLY WATER METERS.
18. PIPELINE ACCEPTANCE AND THE START OF THE WARRANTY PERIOD OF THE NEW WATER MAINS WILL NOT BE CONSIDERED UNTIL ALL REQUIREMENTS FOR ACCEPTANCE HAVE BEEN FULFILLED, INCLUDING:
 - a. ALL TESTING IS COMPLETE WITH SATISFACTORY RESULTS.
 - b. COMPLETE SET OF SIGNED COMPACTION TEST RESULTS IS SUBMITTED TO SOUTHGATE AND THE APPLICABLE CITY/COUNTY.
 - c. ALL PUNCH LIST ITEMS ARE COMPLETED TO THE SATISFACTORY OF SOUTHGATE.
 - d. FIRST LIFT OF PAVING IS COMPLETED AT A MINIMUM.
 - e. SURVEYED RECORD DRAWINGS HAVE BEEN SUBMITTED TO AND APPROVED BY SOUTHGATE. CONTACT THE SOUTHGATE ENGINEERING DEPARTMENT FOR REQUIREMENTS PRIOR TO SUBMITTING RECORD DRAWINGS.
 - f. RECORDED ADDRESS PLAT, IF APPLICABLE, IS SUBMITTED TO SOUTHGATE.
 - g. WARRANTY FUNDS ARE SUBMITTED TO SOUTHGATE IN THE FORM OF A LETTER OF CREDIT OR CHECK EQUAL TO TEN PERCENT (10%) OF THE TOTAL COST OF WATER IMPROVEMENTS. THE LETTER OR CHECK WILL BE EFFECTIVE FOR A MINIMUM OF FIFTEEN (15) MONTHS FROM START OF WARRANTY PERIOD.
 - h. THEORETICAL STATIC WATER PRESSURES ARE ESTIMATED TO RANGE FROM PSI AT USGS ELEVATION TO PSI AT USGS ELEVATION BASED UPON A HYDRAULIC GRADIENT OF USGS ELEVATION.SOUTHGATE HAS PROVIDED THE HYDRAULIC GRADIENT ELEVATION. THIS HYDRAULIC GRADIENT, OF WHICH WAS PROVIDED AT THE TIME OF PLAN REVIEW, MAY CHANGE IN THE FUTURE AS OVERALL WATER SYSTEM OPERATIONS WARRANT.
19. THE LINE SHALL BE CHLORINATED IN ACCORDANCE WITH THE REQUIREMENTS OF DENVER WATER ENGINEERING STANDARDS AND THE COLORADO STATE BOARD OF HEALTH. CHLORINATION SHALL OCCUR PRIOR TO HYDROSTATIC TESTING.
20. ALL NEW WATER LINES WILL BE HYDROSTATIC PRESSURE TESTED. THE TESTING EQUIPMENT AND/OR ANY COSTS SHALL BE PROVIDED BY THE CONTRACTOR. THE TEST WILL BE CONDUCTED AT 60 PSI ABOVE NORMAL OPERATING PRESSURE OR AT 150 PSI, WHICHEVER IS GREATER, UPON WRITTEN RECORD OF A PASSING CHLORINE TEST AND SATISFACTORY COMPACTION TEST RESULTS. SOUTHGATE WILL WITNESS PRESSURE TESTING AT THE CONTRACTORS CONVENIENCE.
21. ALL NEW WATER LINES WILL REQUIRE A CLEAR WATER TEST TAKEN BY A STATE CERTIFIED LAB FOR BACTERIOLOGICAL RESULTS. THE RESULTS MUST BE SUBMITTED TO SOUTHGATE AND DENVER WATER. CLEAR WATER TESTS WILL BE TAKEN AT THE CONTRACTORS EXPENSE PRIOR PIPELINE ACCEPTANCE, START OF THE WARRANTY PERIOD, AND PRIOR TO THE RELEASING TAPS OR CONNECTION TO EXISTING PIPE.
22. ADDITIONAL TESTING MAY BE REQUIRED AT THE DISCRETION OF SOUTHGATE.
23. SOUTH METRO FIRE RESCUE AUTHORITY WILL ALSO INSPECT FIRELINES AND WILL OBSERVE TESTING.
24. EXISTING VALVES OWNED AND OPERATED BY SOUTHGATE MAY ONLY BE OPERATED BY SOUTHGATE PERSONNEL. VALVES INSTALLED BY THE CONTRACTOR MAY BE OPERATED UNTIL SOUTHGATE ACCEPTS THE SYSTEM. COORDINATE WITH SOUTHGATE. A MINIMUM OF 7 BUSINESS DAYS BEFORE EXISTING VALVES ARE TO BE OPERATED.
25. RELEASE OF SECURITY AND WARRANTY OF FACILITIES IS DEPENDENT UPON SUCCESSFUL COMPLETION OF A MINIMUM OF ONE (1) YEAR WARRANTY PERIOD AND CONVEYANCE OF DOCUMENTS.
26. THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF THE SYSTEM FROM PERIOD ACCEPTANCE TO RELEASE OF SECURITY AND WARRANTY. FAILURE TO MAINTAIN WATER LINES BY THE TERMS OF THE IMPROVEMENTS AGREEMENT MAY BE CONSIDERED GROUNDS FOR PERMANENT ABANDONMENT OF FACILITIES.
27. STUB-IN AGREEMENTS ARE AVAILABLE THRU SOUTHGATE AND DENVER WATER ONLY AFTER COMPLETED TESTING AND MAIN LINE INSTALLATION, BUT MAY BE OBTAINED PRIOR TO PIPELINE ACCEPTANCE AND START OF THE WARRANTY PERIOD.
28. WATER SERVICE TAPS WILL NOT BE SOLD UNTIL PROJECT ACCEPTANCE IS ACHIEVED.
29. ONLY THE FOLLOWING FIRE HYDRANTS ARE PERMITTED BY SOUTHGATE:
 - a. MILLER CENTURION MODEL A-425
 - b. WATERLOO PAPER MODEL WB-9 WITH BRONZE BUSHED SHOE AND SHAFT COUPLING
 - c. AWK SERIES 27
30. ONLY ONE (1) CONNECTION POINT IS PERMITTED TO EXISTING SYSTEM PRIOR TO COMPLETION OF TESTING.
31. THE CONTRACTOR SHALL VERIFY ELEVATIONS OF EXISTING LINES AND CONNECTION POINTS BY MEANS OF CERTIFIED SURVEY PRIOR TO STAKING AND INSTALLATION.
32. THE ALIGNMENT SHALL BE STAKED AND GRADED EVERY FIFTY (50) FEET. ALL FITTINGS AND VERTICAL DEPRESSIONS ARE TO BE STAKED. THE FIRE HYDRANTS WILL BE STAKED AND GRADED TO THE BOTTOM OF FLANGE FITTING. THE GRADE WILL BE SET THREE (3) INCHES ABOVE PROPOSED GRADING FINISH ELEVATIONS. STAKE BOTH SIDES OF EASEMENTS WHERE THE WATER LINE IS NOT LOCATED IN PAVED AREAS.
33. WATER LINES SHALL HAVE A MINIMUM OF FOUR AND ONE-HALF (4.5) FEET OF COVER.
34. ALL WATER LINES SHALL BE LOCATED A MINIMUM OF TEN (10) FEET FROM SANITARY SEWER LINES, AND THREE (3) FEET FROM THE EDGE OF CONCRETE CURB AND GUTTER OR CONCRETE PAVEMENT.
35. PRIOR TO INSTALLATION OF WATER MAINS, ROAD CONSTRUCTION, AT A MINIMUM, MUST HAVE PROCEEDED TO "SUB-GRADE" STAGE. SUB-GRADE IS DEFINED AS AN ELEVATION OF NO MORE THAN SEVEN (7) INCHES BELOW THE FINISHED STREET GRADE. THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES AND ALL FIRE HYDRANTS TO FINAL GRADE.
36. TRENCH COMPACTION IN STREET RIGHT-OF-WAY IS TO CONFORM TO APPLICABLE MUNICIPAL STANDARDS (COLORADO DEPARTMENT OF TRANSPORTATION, ARAPAHOE COUNTY, DOUGLAS COUNTY, CITY OF GREENWOOD VILLAGE, CITY OF CENTENNIAL, OR THE CITY OF LONE TREE).
37. THE BEDDING WILL BE PER SOUTHGATE'S STANDARD DETAIL, I.E. 6 INCHES UNDERNEATH THE PIPE AND 12 INCHES OVER THE TOP OF THE PIPE.
38. ALL FIRE HYDRANTS ARE TO BE PAINTED RED.
39. A MINIMUM OF FOUR (4) FEET, TWO (2) FEET EITHER SIDE OF A SERVICE TAP SHALL BE EXPOSED FOR EACH CONNECTION.
40. ALL PRIVATE SERVICE LINES MUST BE INSPECTED BEFORE BACKFILL - CALL SOUTHGATE AT 303-779-0261 TO SCHEDULE YOUR INSPECTION.
41. WATER SHUT-OFFS MUST BE SCHEDULED WITH SOUTHGATE A MINIMUM OF 2 BUSINESS DAYS IN ADVANCE - CALL 303-779-0261 TO SCHEDULE. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING CUSTOMERS AFFECTED BY SHUT-OFF A MINIMUM OF 48 HOURS NOTICE.

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REVISED	
BY	DATE

 SOUTHGATE WATER DISTRICT GENERAL NOTES	
SCALE NOT TO SCALE	ISSUE DATE FEBRUARY 2016
SHEET 1 OF 1	DRAWING NO. W-19

CITY OF LONE TREE

DATE

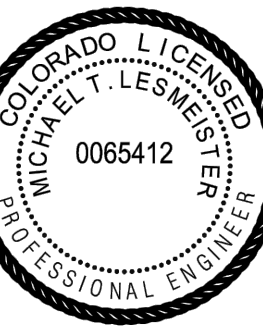
THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONE TREE FOR STREET AND DRAINAGE, GRADING AND EROSION CONTROL, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UTILITY PLAN

SEQ PARK MEADOWS DR AND S QUEBEC ST
LONE TREE, CO

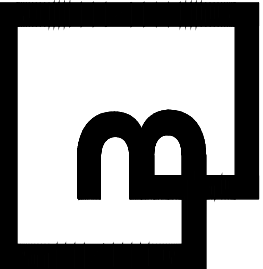
Dutch Bros
Coffee



Scale:	Horizontal	Vertical
1" = 20'	20'	N/A

Designed: NRN
Drawn: NRN
Checked: MTL
Approved: MTL
Date: 6/30/25

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Kent, WA 98032
425.251.6222
barghausen.com



Job Number
23707
Sheet
8 OF 17
Drawing Date
6/19/2025
Drawing Location
Franklin, USA, LLC

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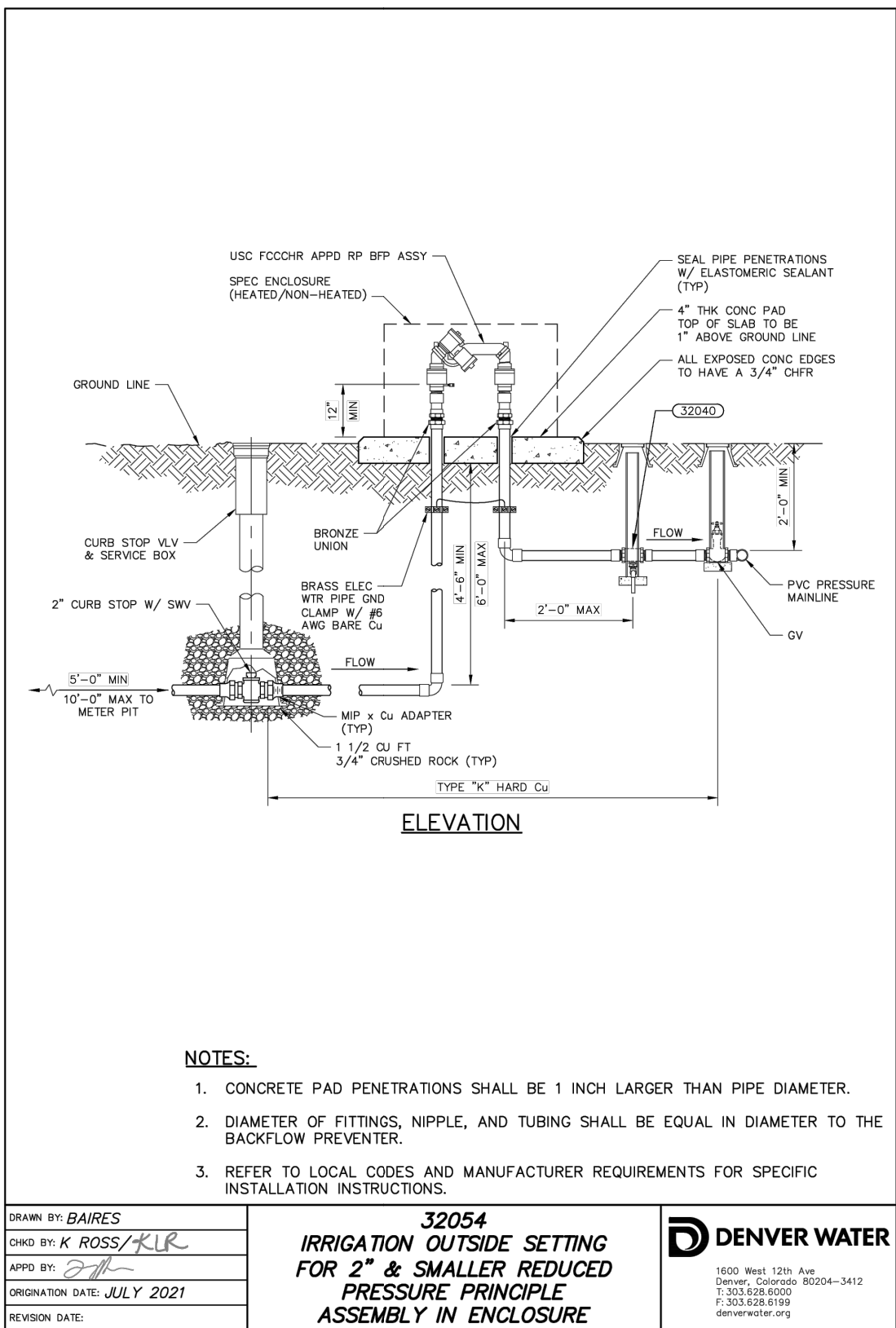
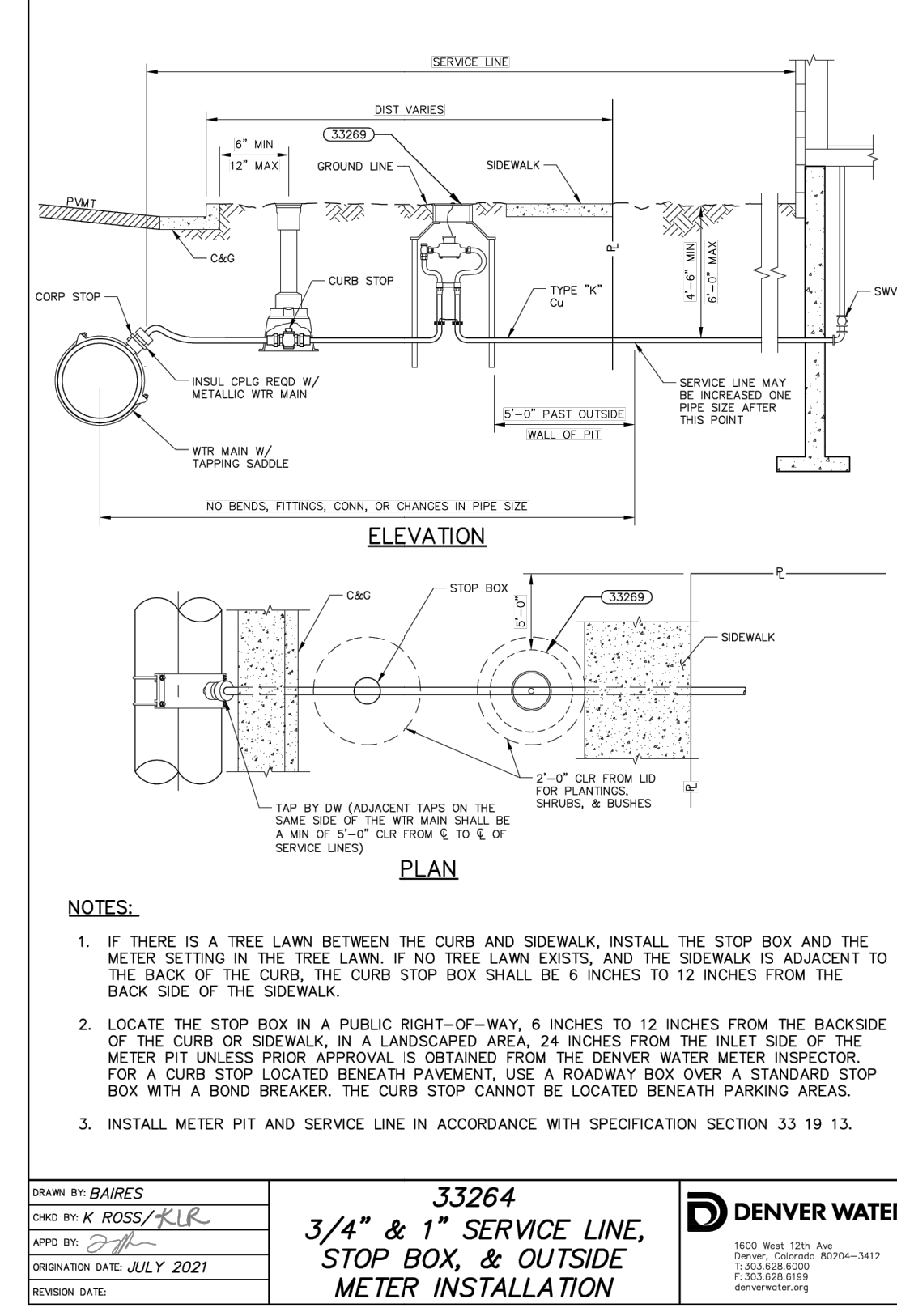
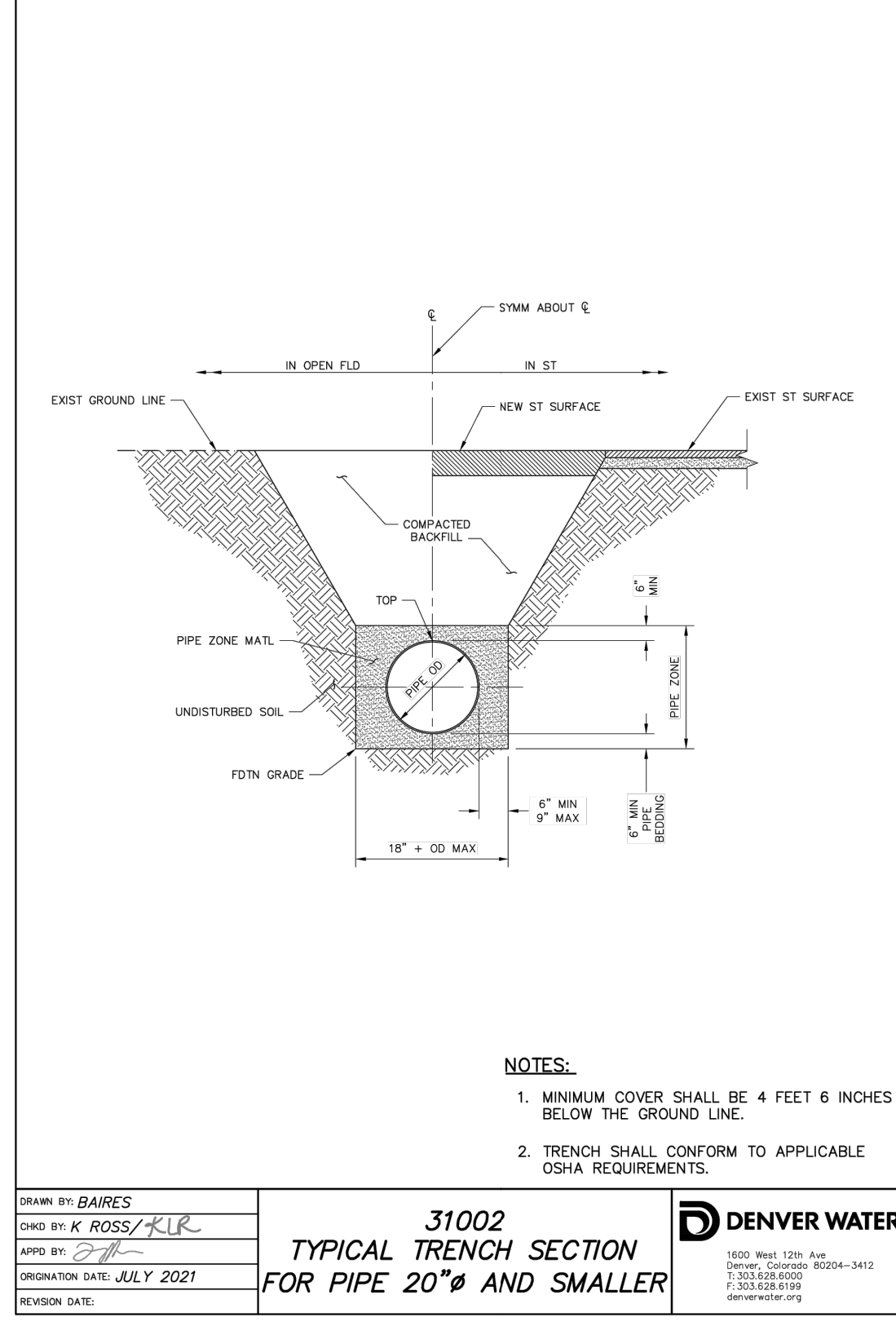
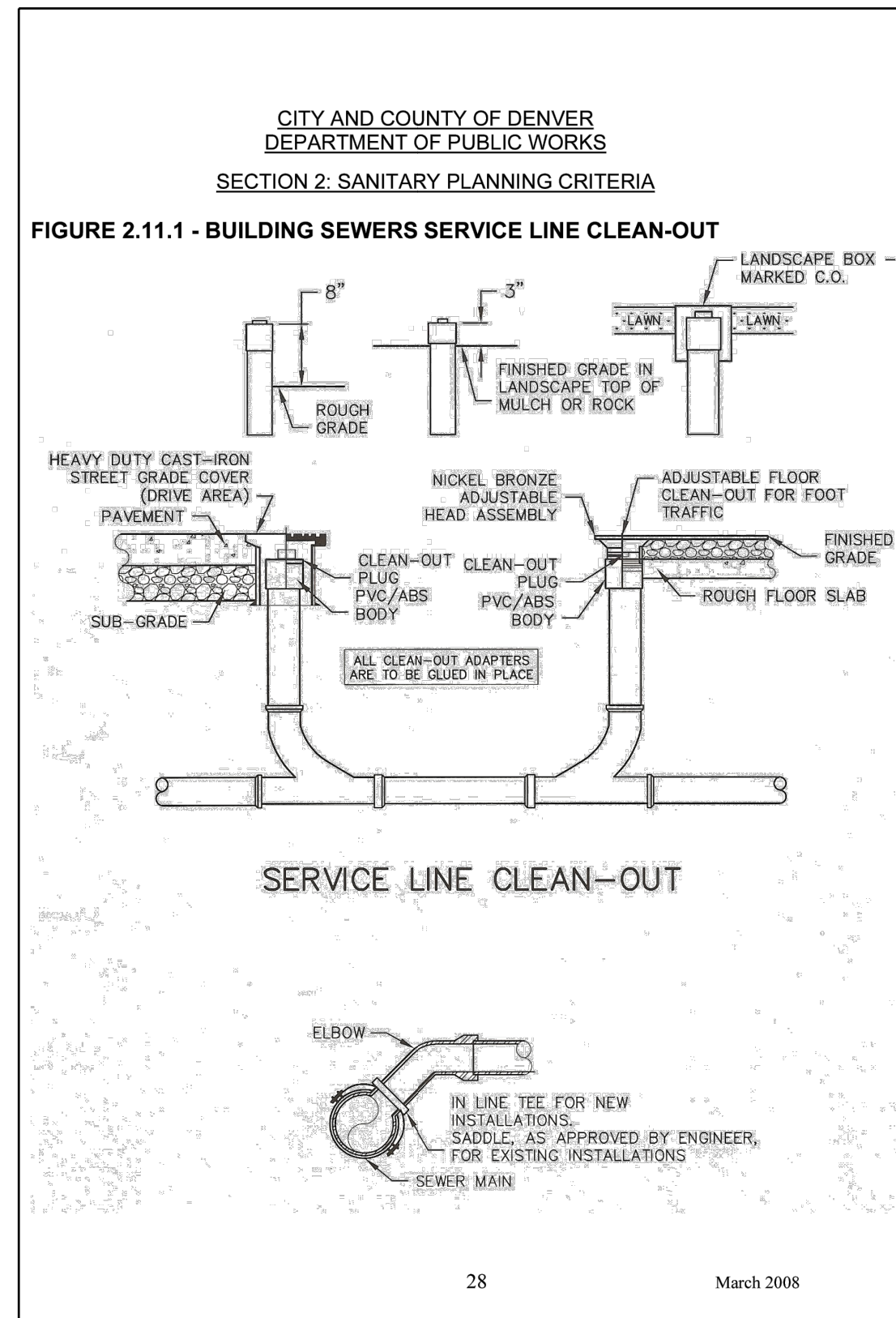
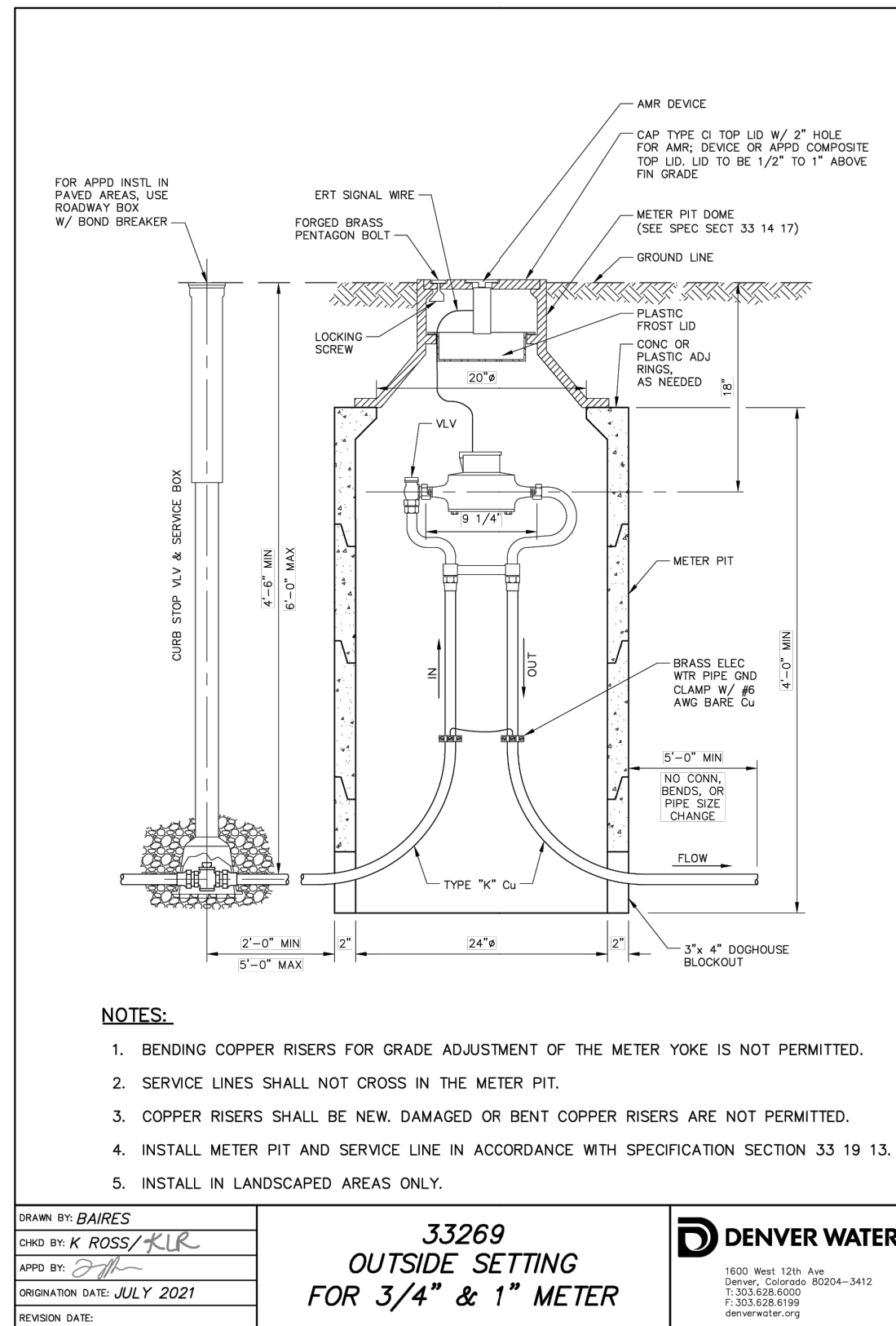
DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

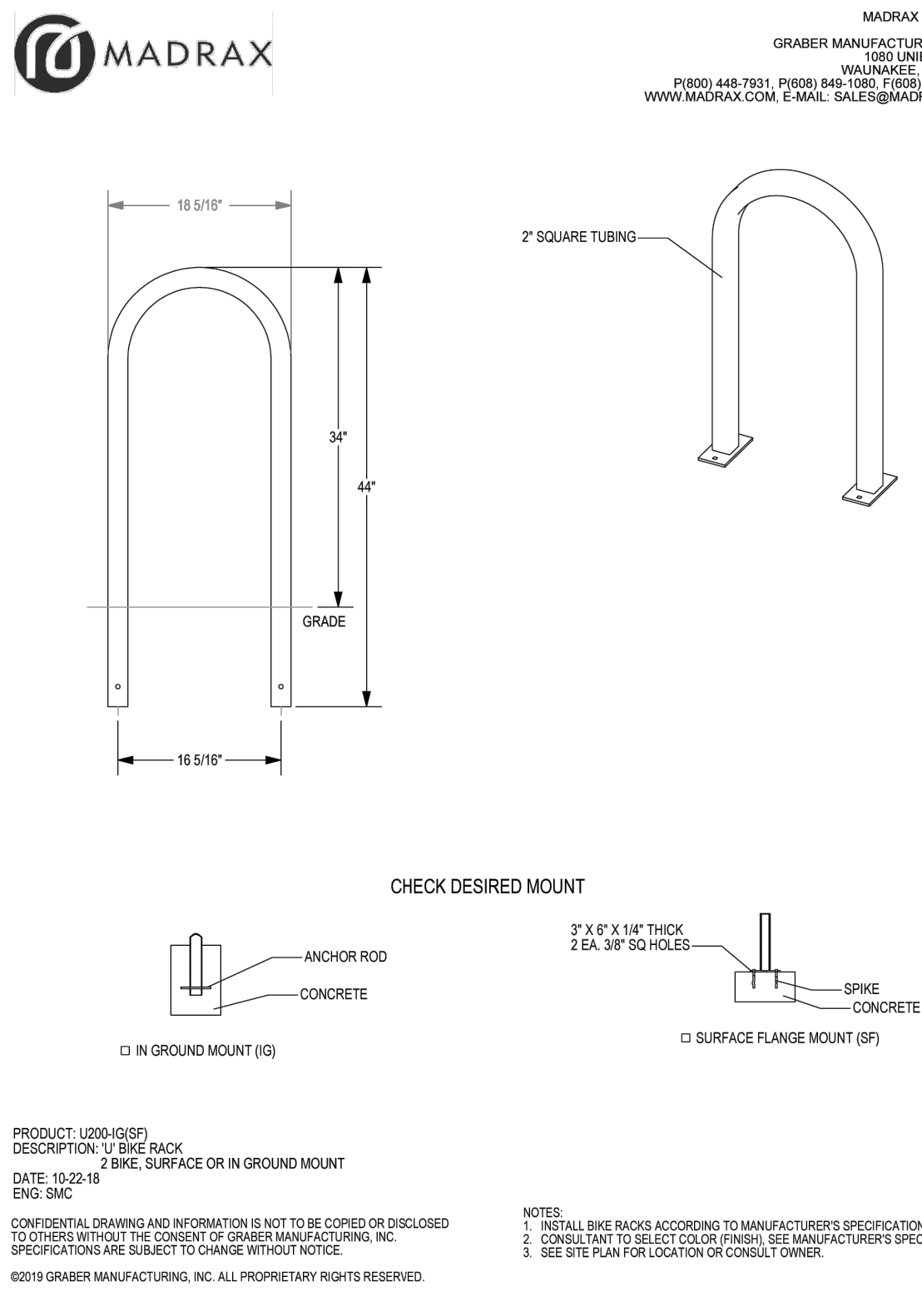
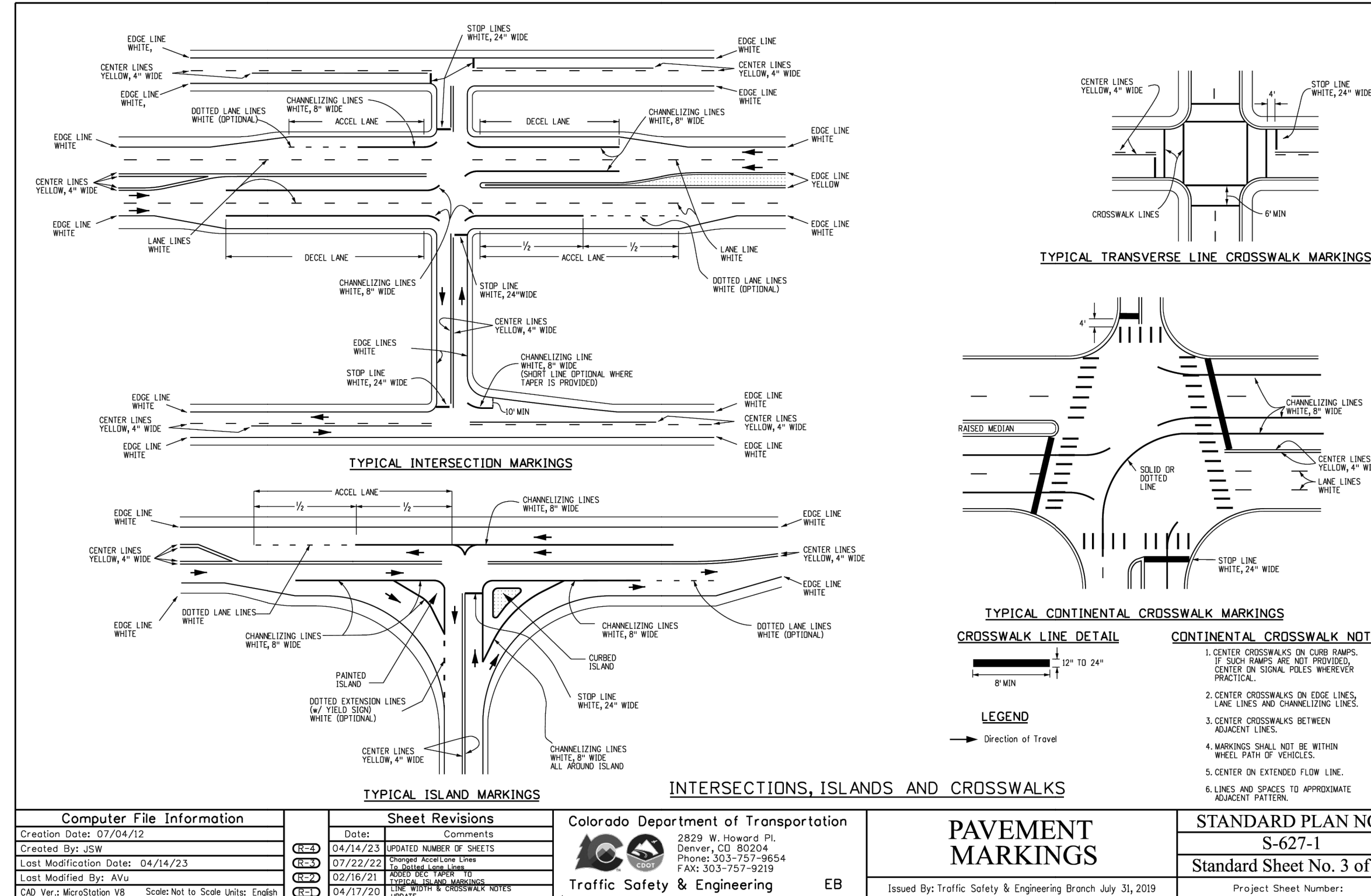
0.588 ACRES, SP25-0002

CIVIL DETAILS



SANITARY SEWER CLEANOUT

NOT TO SCALE



SHORT TERM BICYCLE PARKING

NOT TO SCALE

CIVIL DETAILS

SEQ PARK MEADOWS DR AND S QUEBEC ST

LONE TREE, CO

Dutch Bros

For:

Colorado Licensed Professional Engineer

Michael T. Lemister

0065412

Scale:

Horizontal: N/A

Vertical: N/A

Designed: NRN

Drawn: NRN

Checked: MTL

Approved: MTL

Date: 6/30/25

Barghausen Consulting Engineers, LLC.

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Kent, WA 98032

425.251.6222

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Job Number: 23707

Sheet: 9 OF 17

Job Number: 23707

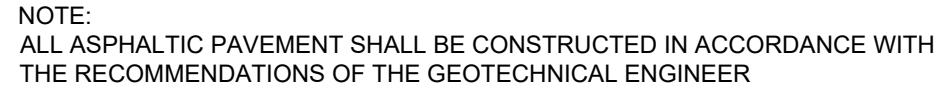
Sheet: 9 OF 17

Job Number: 23707

Sheet: 9 OF 17



LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT
SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO
0.588 ACRES, SP25-0002



NOTE:
ALL PORTLAND CEMENT CONCRETE PAVEMENT (PCC)
SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE
RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.

ON-SITE BARRIER CURB

4
10

NOT TO SCALE



- A. SYMBOL TO BE CENTERED ON WIDTH OF PARKING STALL.
- B. BOTTOM OF SYMBOL TO BE LOCATED FLUSH WITH ACCESS DRIVE, CENTERED ON PARKING SPACE.
- C. SYMBOL IS REQUIRED TO CONTRAST WITH BACKGROUND.

 **INTERNATIONAL SYMBOL OF ACCESSIBILITY**

NOT TO SCALE



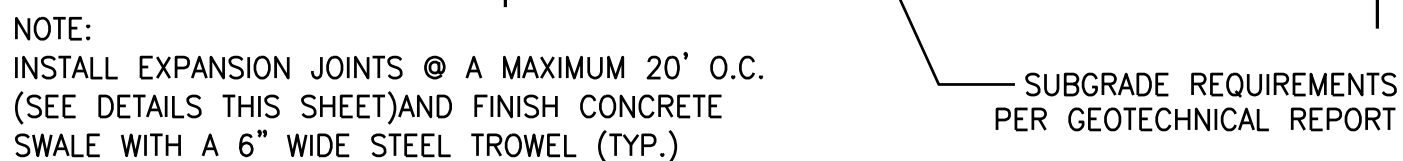
APPLY 2 COATS OF CHLORINATED RUBBER-TYPE TRAFFIC-LANE MARKING PAINT OVER CLEANED PAVING SURFACE ACCORDING TO LAYOUT SHOWN ON THE SITE PLAN. PAINT AS REQUIRED BY CITY CODE.

TRAFFIC MARKINGS

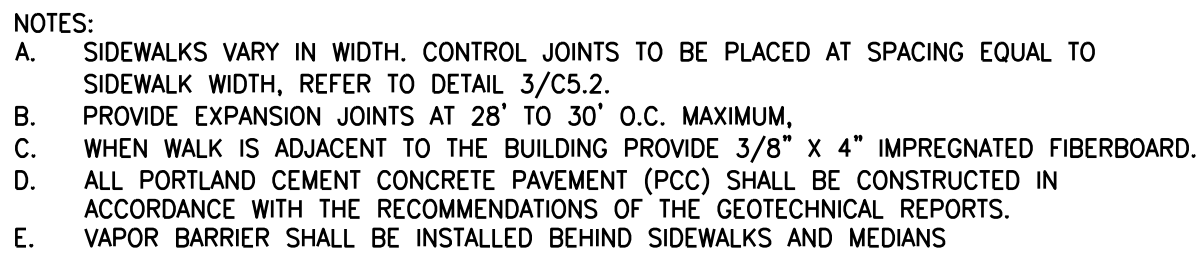


1. RING AND ACCESS COVER SHALL BE H20 TRAFFIC RATED AND DUCTILE OR CAST IRON CASTING.
2. RING AND COVER SHALL BE SET FLUSH WITH FINISHED SURFACE.
3. ALL PIPE/FITTING SHALL CONFORM TO SPECIFICATIONS ON UTILITY SHEET(S).

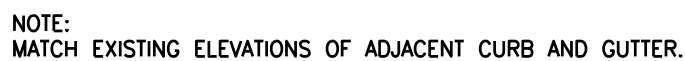
CLEANOUT DETAIL
NOT TO SCALE



CONCRETE VALLEY GUTTER



ON-SITE CONCRETE SIDEWALK



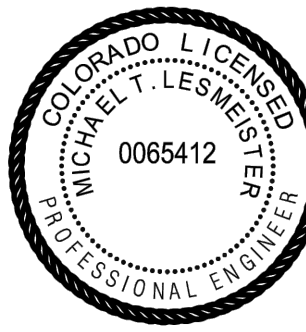
ON-SITE CURB CUT

No.	Date	By	Ckd.	Appr.	Revision
2	6/30/25	NRN	MTL	MTL	CITY COMMENTS – REVISION 2
1	5/9/25	NRN	MTL	MTL	CITY COMMENTS – REVISION 1

Title:

CIVIL DETAILS
SEQ PARK MEADOWS DR AND S QUEBEC ST
LONE TREE, CO

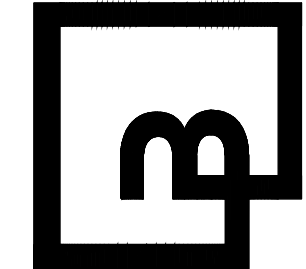
For:



Scale:

Designed	<u>NRN</u>
Drawn	<u>NRN</u>
Checked	<u>MTL</u>
Approved	<u>MTL</u>
Date	6/30/25

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Consulting Engineers, LLC.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 **barghausen.com**



Job Number

Sheet
10 OF 17
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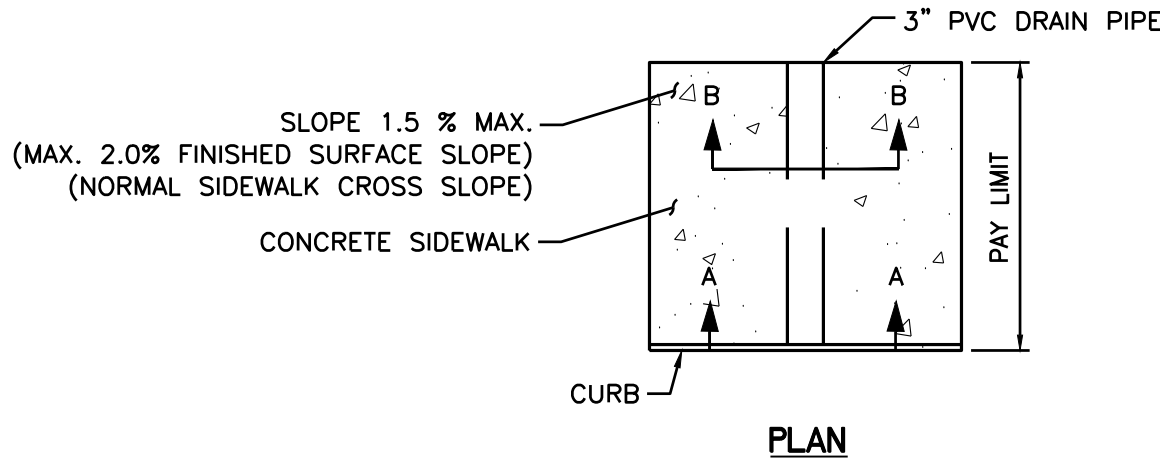
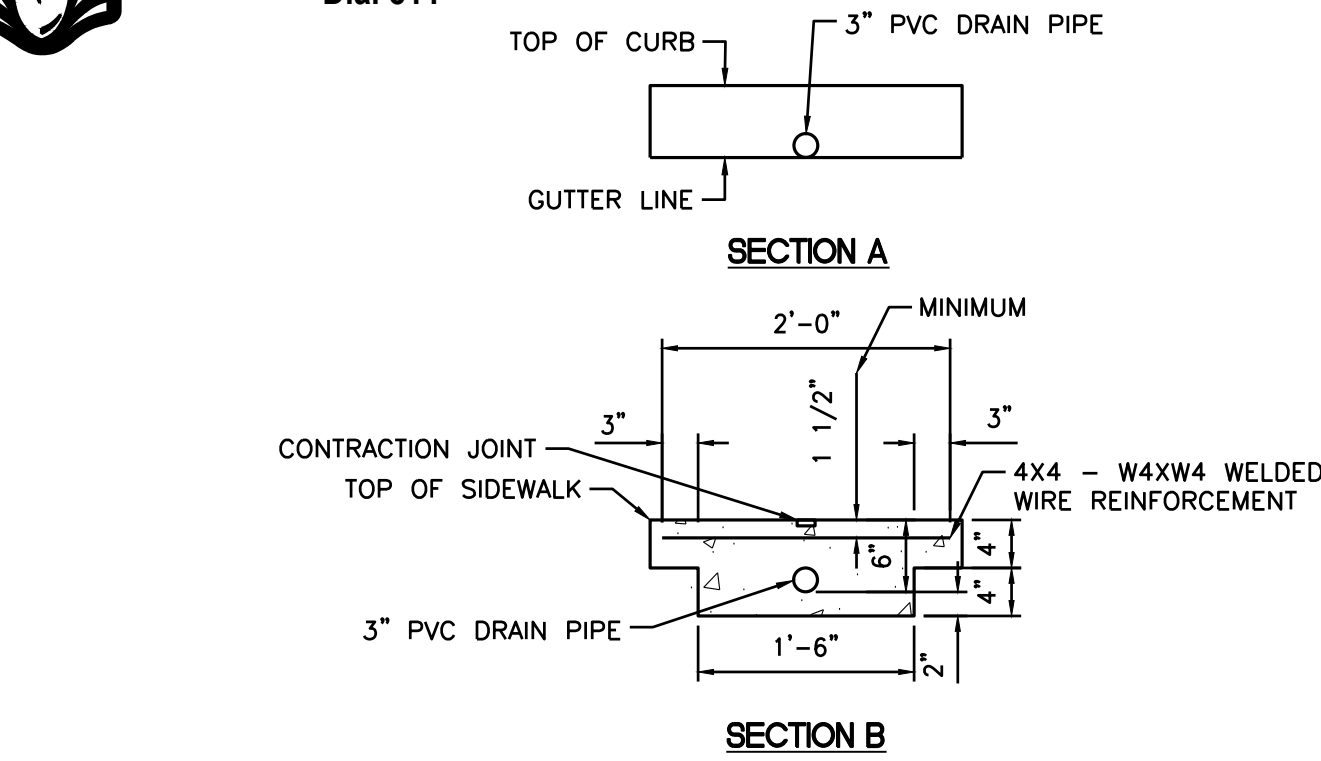
Know what's below.
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DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

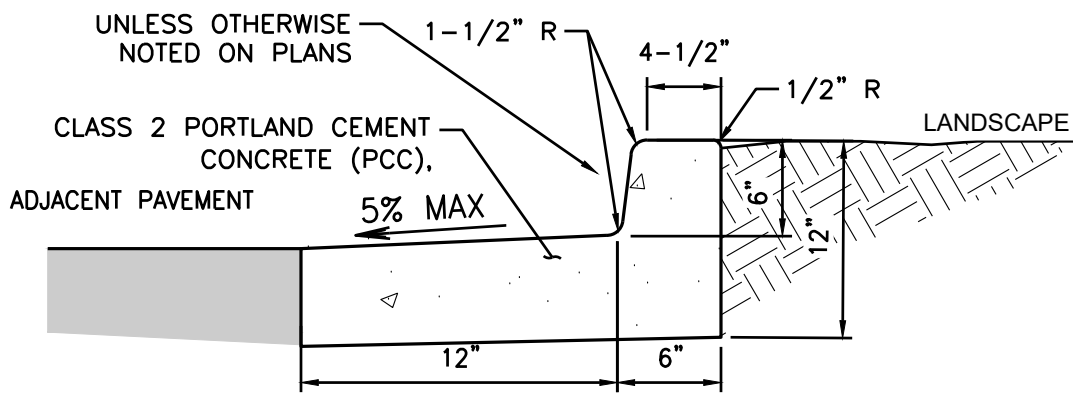
LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT
SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

0.588 ACRES, SP25-0002

CIVIL DETAILS



- NOTE:
1. CONNECT DRAIN PIPE TO EXISTING BUILDING ROOF DRAIN IN APPROVED MANNER.
 2. SLOPE SIDEWALK DRAIN PIPE TO DRAIN AT GUTTER LINE.
 3. USE WHERE SHOWN ON PLANS, AND ALLOWED BY JURISDICTION. PLACE CONTRACTION JOINT OVER TOP OF PIPE.
 4. ALL CONCRETE SHALL BE COMMERCIAL GRADE CONCRETE.



MEDIAN CURB AND GUTTER

2
12 NOT TO SCALE

UNDER-SIDEWALK DRAIN

1
12 NOT TO SCALE

SPECIFICATIONS

Notes:

1. 4" FPT inlet/outlet with 4" plain end adapters, single inlet and triple outlet.
2. Unit weight - w/ cast iron cover: 148 lbs. (For wet weight add 542 lbs.)
3. Maximum operating temperature: 150° F continuous
4. Capacities - Liquid: 65 gal.; Grease: 439.5 lbs. (60 gal.) @50GPM Grease: 287.2 lbs. (43 gal.) @75GPM Solids: 13 gal.
5. For gravity drainage applications only.
6. Do not use for pressure applications.
7. Cover placement allows full access to tank for proper maintenance.
8. Vent not required unless per local code.
9. Engineered inlet and outlet diffusers with inspection ports are removable to inspect / clean piping.
10. Integral air relief / Anti-siphon / Sampling access.
11. Adjustable cover adapters provide up to 4" of additional height.
12. Designed for below-grade, above-grade, indoor or outdoor installations.
13. Safety Star®, access restrictor built into each cover adapter, prevents accidental entry to tanks (450 lb rating).

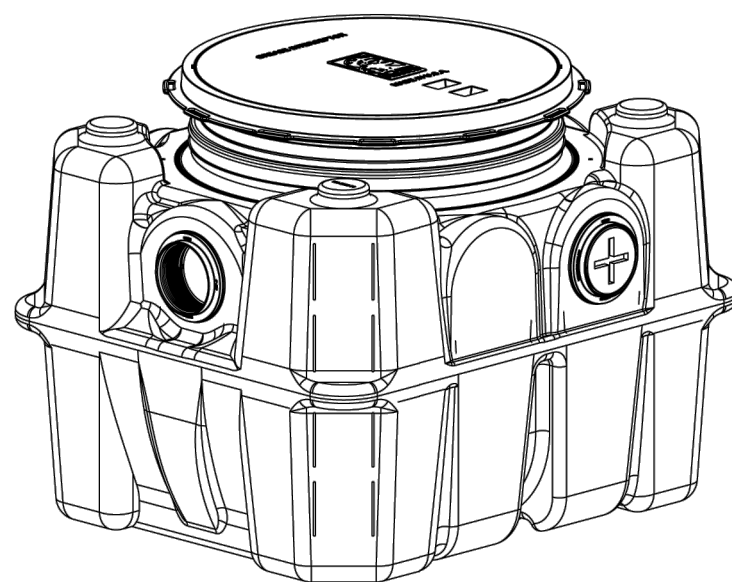
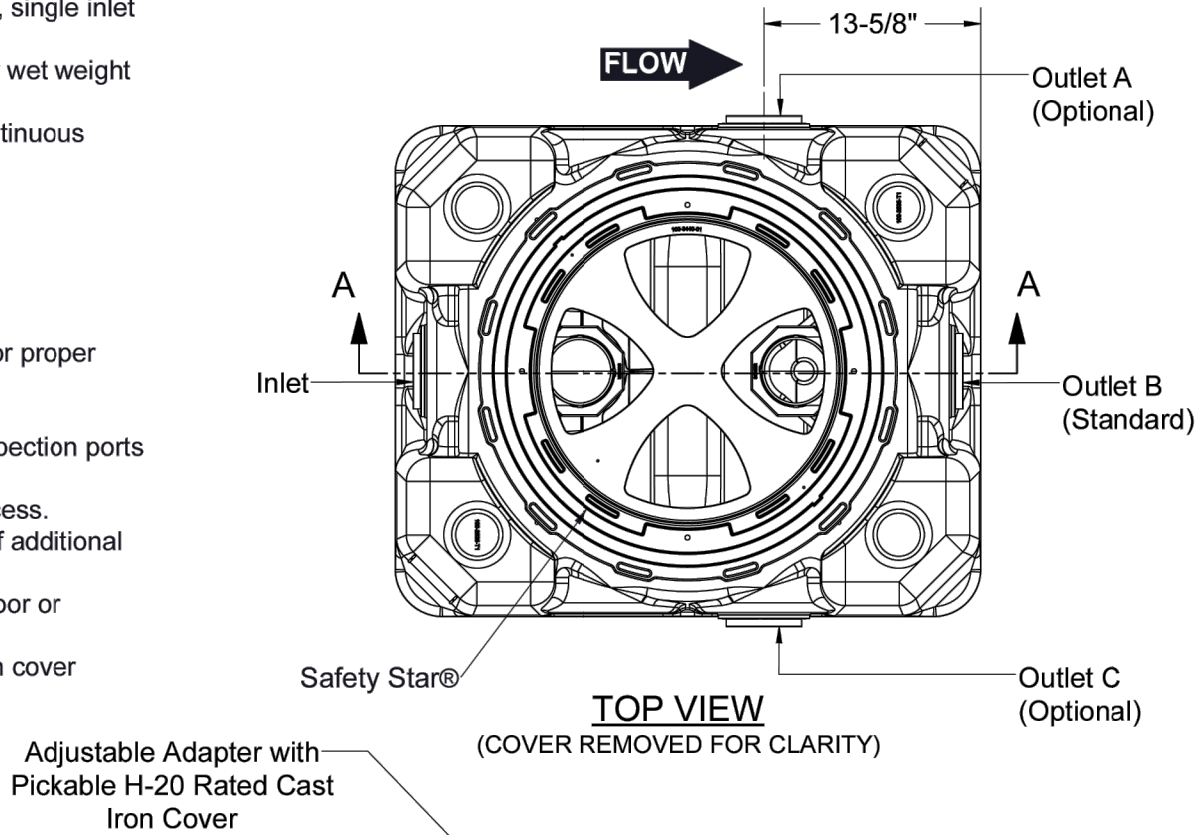
ENGINEER SPECIFICATION GUIDE

Schier Great Basin™ grease interceptor model # GB-50 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene with minimum 3/8" uniform wall thickness. Interceptor shall be furnished for above or below-grade installation with adjustable cover adapter and three outlet options. Interceptor shall be certified to ASME A112.14.3 (Type D) and CSA B481.1. Interceptor flow rate shall be 50 GPM or 75 GPM. Interceptor grease capacity shall be 439.5 lbs. Cover shall provide water/gas-tight seal and have minimum 16,000 lbs. load capacity.

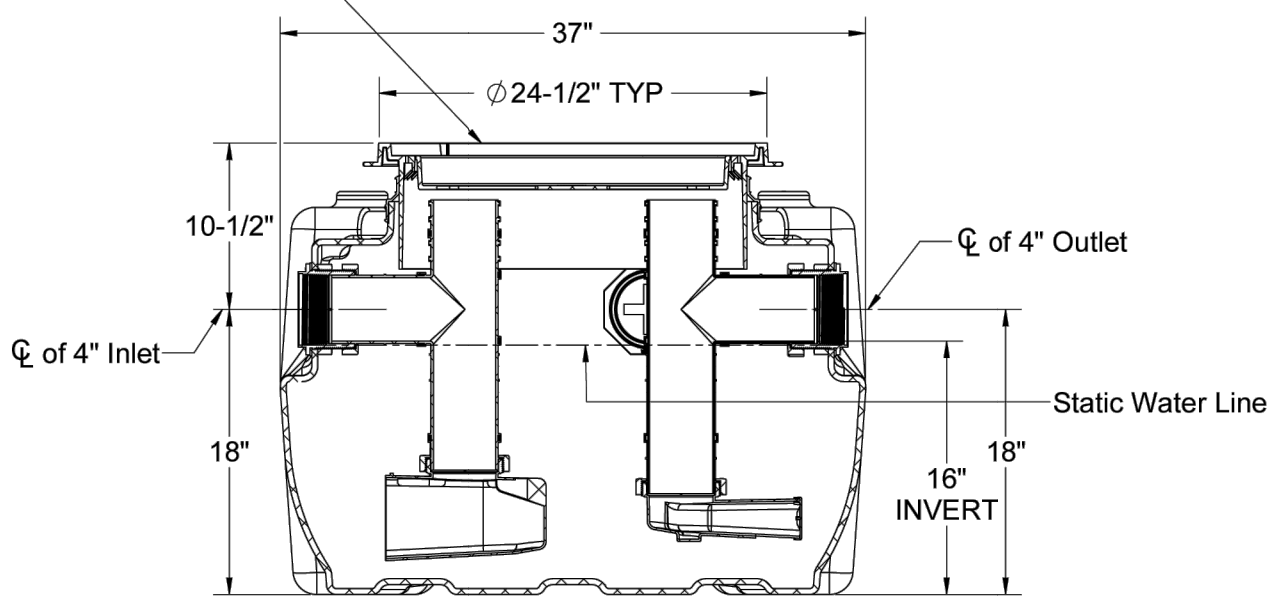
CERTIFIED PERFORMANCE

Great Basin™ hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME #A112.14.3 and CSA B481.1 grease interceptor standards and greatly exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.

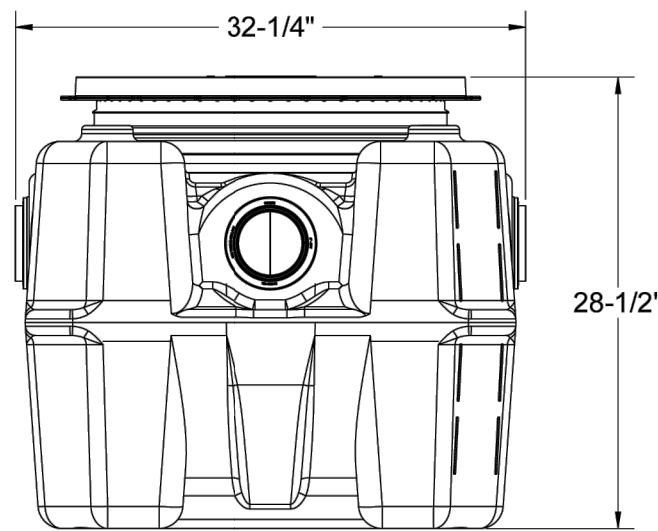
Type D certification does not require a flow control



ISOMETRIC VIEW



SECTION A-A



END VIEW

NOTES

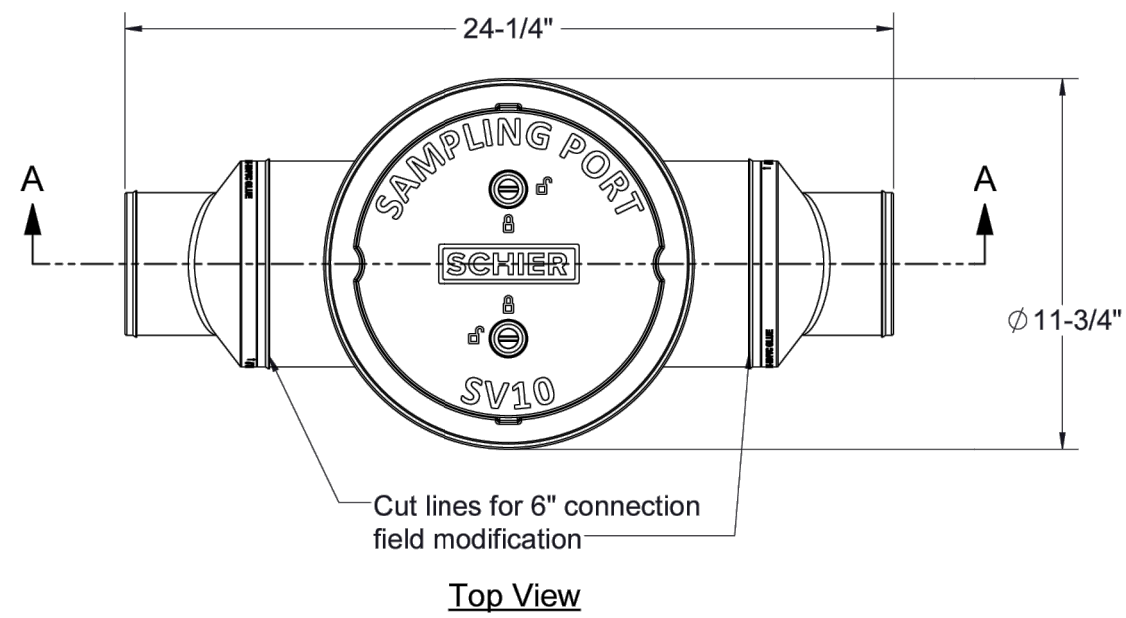
1. 4" plain end inlet/outlet
2. Field modifiable to 6" plain end inlet/outlet
3. Unit weight - 9 lbs.
4. Maximum operating temperature: 150° F continuous
5. Offset connections
6. 2 rolls of 33" x 2" butyl mastic tape provided for sealing build-your-own riser joints

ENGINEER SPECIFICATION GUIDE

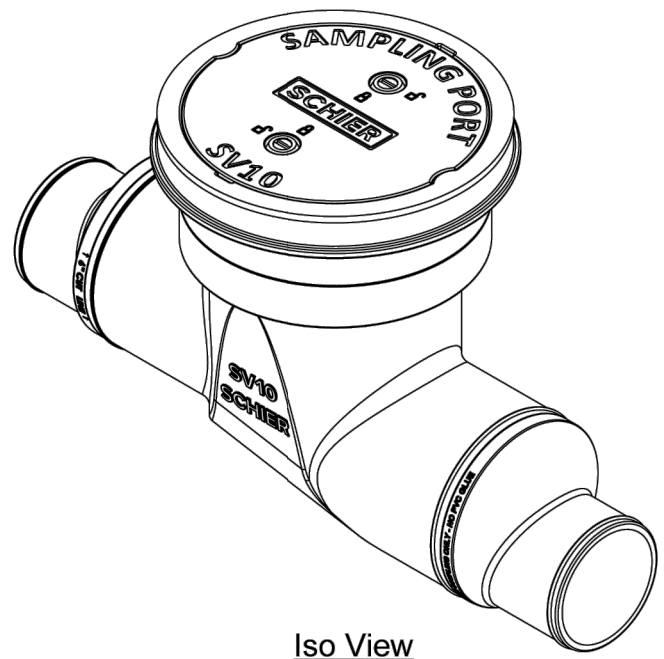
Schier Sewer Viewer™ sampling port model # SV10 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene. Sampling port shall be furnished for above or below grade installation. Cover shall provide water/gas-tight seal and have minimum 16,000 lbs. load capacity.

ACCESSORIES:

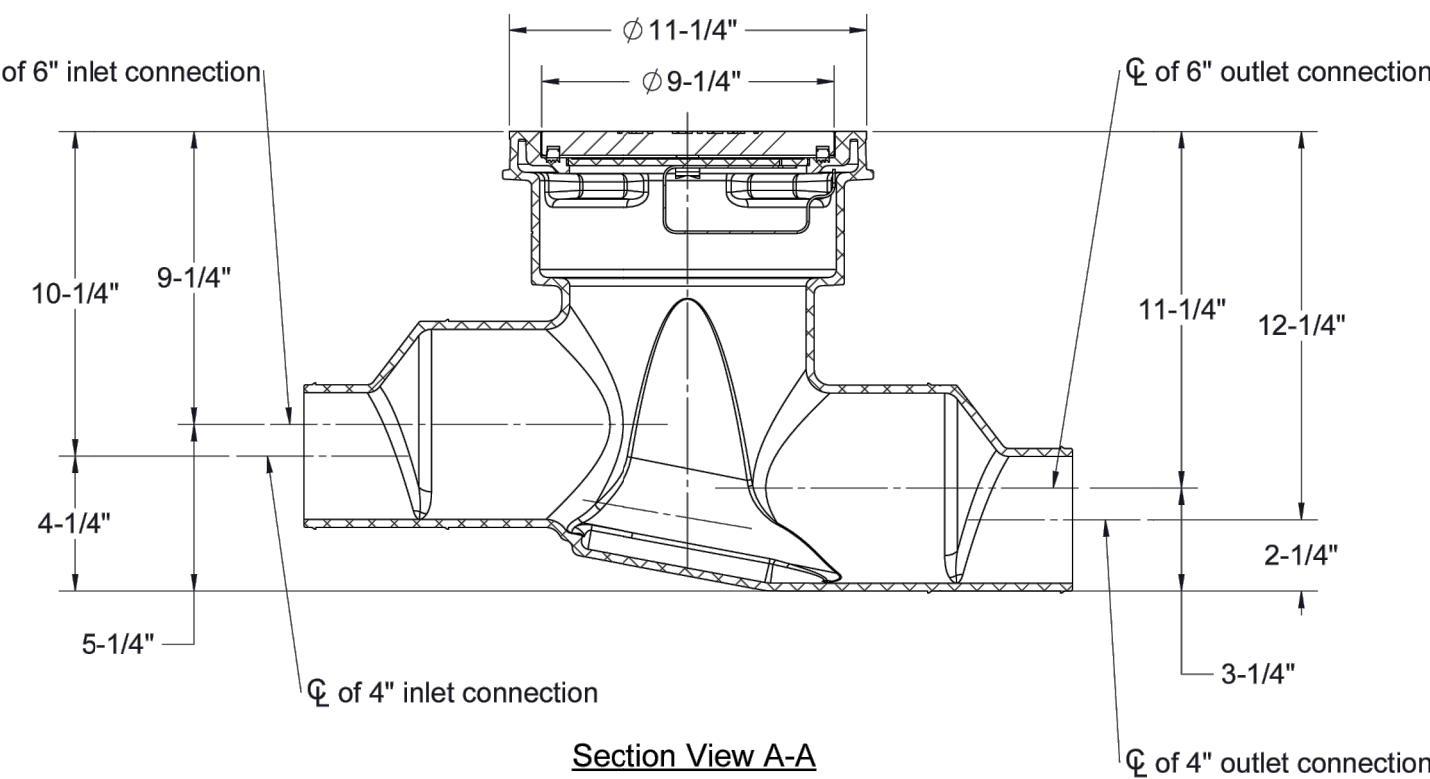
- Field Cut Risers for extending cover to grade



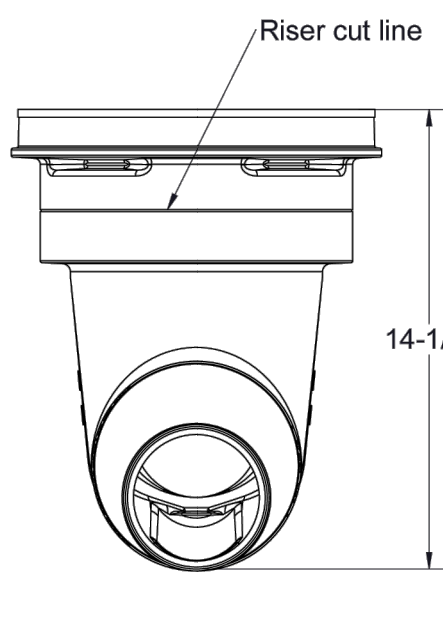
Top View



Iso View



Section View A-A



Outlet End View

SPECIFICATION SHEET

MODEL NUMBER:	PART NUMBER:		
GB-50	4025-009-01		
DESCRIPTION:	DESCRIPTION:		
GB-50 GREASE INTERCEPTOR 50 GPM / 75 GPM, 4" INLET/OUTLET, H-20 RATED CAST IRON COVER	SV10 SEWER VIEWER SAMPLING PORT, 4" CONNECTIONS (FIELD MODIFIABLE TO 6"), POLYETHYLENE COVER		
DWG BY:	DATE:	REV:	ECO:
T.ASAY	8/16/2022	-	-

SAMPLING PORT

4
12 NOT TO SCALE

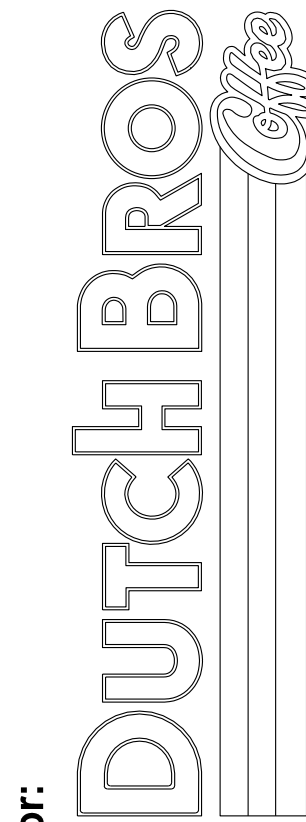
GREASE INTERCEPTOR

3
12 NOT TO SCALE

2	16/30/25	NRN	MTL	MTL	CITY COMMENTS -	REVISION 2
1	5/9/25	NRN	MTL	MTL	CITY COMMENTS -	REVISION 1
No.	Date	By	Ckd.	Appr.		Revision

Title:

CIVIL DETAILS
SEQ PARK MEADOWS DR AND S QUEBEC ST
LONE TREE, CO



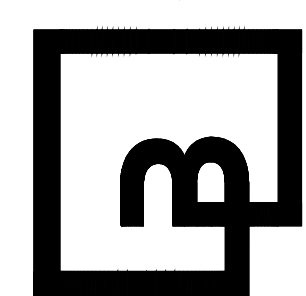
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Date: 6/30/25

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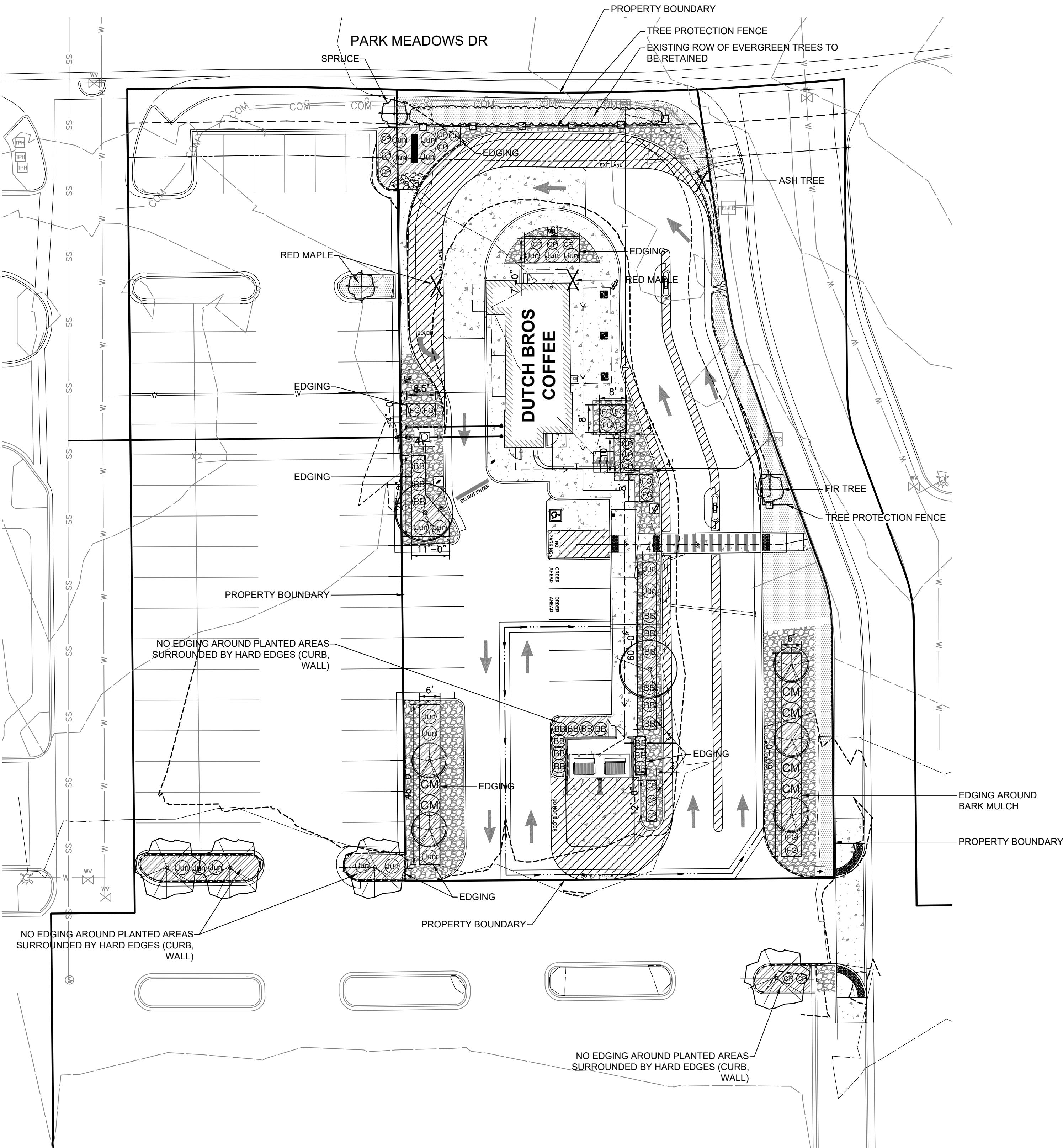
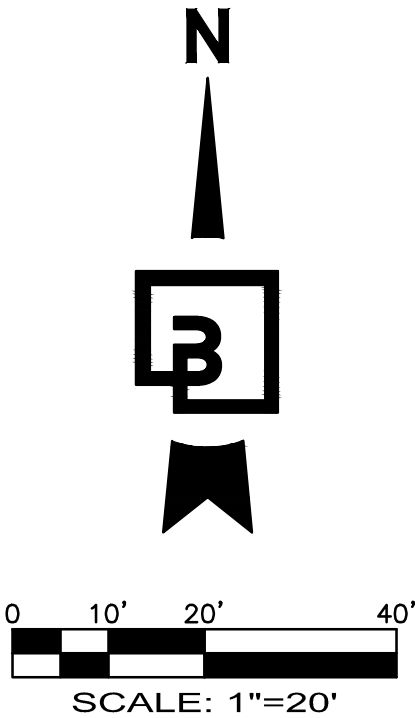
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DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT
SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO
0.588 ACRES, SP25-0002

LANDSCAPE PLANTING PLAN

LEGEND

- EXISTING LANDSCAPING TO BE RETAINED. RETURN ANY AREAS IMPACTED DURING CONSTRUCTION TO PRE-CONSTRUCTION CONDITION. LANDSCAPE CONTRACTOR TO REMODEL EXISTING IRRIGATION SYSTEM AS NECESSARY TO ACCOMMODATE REVISED LANDSCAPE BED LAYOUT
- EXISTING TREE TO BE RETAINED. PROTECT DURING CONSTRUCTION
- TREE PROTECTION FENCE. 4' HEIGHT METAL T-POSTS WITH ORANGE CONSTRUCTION FENCE
- EXISTING TREE TO BE REMOVED

PLANT SCHEDULE

SYMBOL	BOTANICAL/COMMON NAMES	SIZE CONDITION	MATURE HT. & WIDTH	QTY	REMARKS	% OF TOTAL PLANTINGS	WATER USAGE
TREES:							
	GYMNOCLADUS DIOICUS / KENTUCKY COFFEETREE	2" CAL.	60'-80' HT. 40'-55' WIDTH	2	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN, BRANCHED AT 5'	2.4%	MEDIUM
	QUERCUS X BIMUNDORUM 'CRIMSCHMIDT' / 'CRIMSON SPIRE' COLUMNAR OAK	2" CAL.	40' HT. 15' WIDTH	4	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN, BRANCHED AT 5'	4.7%	MEDIUM
	PICEA GLAUCA 'DENSATA' / BLACK HILLS SPRUCE	6' HT.	20'-40' HT. 10'-15' WIDTH	5	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN	6.1%	LOW
LARGE DECIDUOUS SHRUBS:							
	EUONYMUS ALATA 'COMPACTA'* / BURNING BUSH	5 GALLON	6'-8' HT. 8'-10' WIDTH	19	FULL & BUSHY	23.1%	LOW
	CERCOCARPUS MONTANUS* / MT. MAHOGANY	5 GALLON	6'-8' HT. 8'-10' WIDTH	6	FULL & BUSHY	7.4%	LOW
SMALL DECIDUOUS SHRUBS:							
	BERBERIS THUN. 'CRIMSON PYGMY'* / DWARF REDLEAF BARBERRY	5 GALLON	2' HT. 3' WIDTH	17	FULL & BUSHY	20.6%	LOW
LOW EVERGREEN SHRUBS:							
	JUNIPERUS HORIZ. 'WILTONII'* / WILTON CARPET JUNIPER	5 GALLON	UP TO 1' HT. 6'-8' WIDTH	19	FULL & BUSHY	23.4%	LOW
ORNAMENTAL GRASSES:							
	PENNISETUM SETACEUM / FOUNTAIN GRASS	5 GALLON	3.5' HT. 3.5' WIDTH	10	FULL & BUSHY	12.3%	LOW
				81		100%	

*SHRUB SPECIES TAKEN FROM THE LONE TREE TOWN CENTER PLANNED DEVELOPMENT PDF

MULCH:
A MINIMUM OF 3 INCHES OF MULCH SHALL BE ADDED IN NON-TURF AREAS TO THE SOIL SURFACE AFTER PLANTING. NON-POROUS MATERIALS SHALL NOT BE PLACED UNDER THE MULCH.

AFTER ALL PLANTING IS COMPLETE, CONTRACTOR SHALL INSTALL A LAYER OF ROCK MULCH. MATCH EXISTING ROCK TYPE AND COLOR. INSTALL ROCK MULCH OVER WEED BARRIER FABRIC, IN ALL PLANTING AREAS. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER ROCK MULCH HAS BEEN INSTALLED.

DO NOT INSTALL TOPSOIL OR AMENDMENTS IN AREAS WHERE ONLY ROCK MULCH IS TO BE INSTALLED.

PER GP-O, A MINIMUM OF 3 INCHES (COMPACTED) OF SHREDDED BARK MULCH TO BE INSTALLED IN PLANTED AREAS. INSTALL OVER POROUS WEED BARRIER FABRIC.

EDGING:
PERMALOC CLEANLINE ALUMINUM EDGING MILL FINISH 3/16-IN. x 4-IN. x 16-FEET OR APPROVED EQUAL. SEE DETAIL THIS SET. INSTALL PER MANUFACTURER'S SPECIFICATIONS. SEE PLAN FOR LOCATIONS

CITY OF LONE TREE LANDSCAPE NOTES

ALL PLANTS INSTALLED SHALL FOLLOW THE PLANT SCHEDULE, INSTALLATION INSTRUCTIONS AND THE LANDSCAPE DRAWINGS ON THE APPROVED LANDSCAPE PLAN INCLUDED IN THIS SITE IMPROVEMENT PLAN. ANY CHANGES TO THE APPROVED LANDSCAPE PLAN, TO INCLUDE PLANT SUBSTITUTIONS, MUST BE APPROVED BY THE CITY IN ADVANCE OF INSTALLATION.

ALL MULCH AND/OR ROCK COBBLE SHALL BE INSTALLED AND MAINTAINED TO THE DEPTH(S) PROVIDED ON THE APPROVED LANDSCAPE PLAN INCLUDED IN THIS SITE IMPROVEMENT PLAN. ORGANIC MULCH SHALL NOT BE PLACED WITHIN SIX (6) FEET OF STORM INLETS.

THE USE OF IMPERMEABLE SHEET PLASTIC AS A WEED BARRIER IS PROHIBITED.

PER GP-N, ALL SOILS FOR GENERAL LANDSCAPING SHALL BE AMENDED WITH ORGANIC COMPOST. INCORPORATE A MINIMUM OF 4-CUBIC YARDS OF COMPOST PER 1,000-SQUARE FEET TO A DEPTH OF AT LEAST 4 INCHES BY ROTOTILLING OR OTHER SUITABLE MEANS.

LANDSCAPE AREA

TOTAL SQUARE FEET OF IRRIGATED LANDSCAPE AREA (BARK MULCH): 1,490 SF

TOTAL SQUARE FEET OF ROCK MULCH ONLY AREA: 2,731 SF

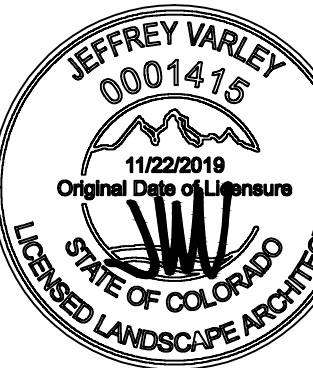
TOTAL AREA OF EXISTING LANDSCAPING TO BE RETAINED: 2,179 SF

DOES NOT INCLUDE OFFSITE AREAS

Title:

LANDSCAPE PLANTING PLAN
SEQ PARK MEADOWS AND QUEBEC
LONE TREE, CO

For:

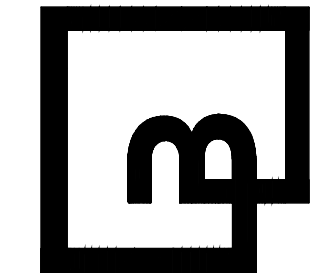


Scale:

Horizontal 1" = 20'
Vertical N/A

Designed JMV
Drawn JMV
Checked JMV
Approved JMV
Date 1/13/25

Barghausen
Consulting Engineers, LLC.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



Job Number
23707

Sheet
13 OF 17
Franchising USA, LLC

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DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

0.588 ACRES, SP25-0002

LANDSCAPE NOTES

Required, General

The following notes are required for all SIPs; these notes shall appear on the cover page of the SIP plan set.

- The property described herein is subject to all applicable requirements of the Lone Tree Zoning Code and Design Standards, including but not limited to, property maintenance, lighting, parking, signage, landscaping and outdoor storage, except as may otherwise be addressed in an approved planned development plan, sub-area plan, or other applicable plan or agreement approved by the City.
- The applicant assumes responsibility to ensure the project is completed in accordance with the approved SIP and any associated materials sample boards and further assumes the risk associated with any changes or omissions made without prior City approval. Modifications to structures or sites may require an amendment to the SIP as determined by the City's Community Development Director, per Sec. 16-27-180. Unauthorized changes or omissions made without prior City approval corrective actions, delay of permits or citations for zoning violations with associated fines and legal measures. Building plans shall conform to the approved SIP.
- Within site triangles, as shown, limited landscaping shall be allowed with no solid structures permitted as stated in the City of Lone Tree's Landscape Design Guidelines and Standards for Landscaping. Landscaping within the sight triangle shall be maintained by the property owner or appropriate association or district, as may be identified in maintenance agreements recorded with the Douglas County Clerk and Recorder's Office.
- The owner is responsible for the installation of all roadway signage, including "no parking/fire lane" signage, as required by the City Public Works Department and/or

the Fire District. Such signage shall be maintained by the property owner or appropriate association or district, as may be identified in maintenance agreements recorded with the Douglas County Clerk and Recorder's Office.

- Site landscaping, site amenities and furnishings, and all site improvements including, but not limited to, sidewalks and parking areas shall be maintained in a state of good repair consistent with the approved SIP and the Lone Tree Municipal Code and Design Guidelines and Standards. Such maintenance shall include the regular maintenance of pet waste stations (when present), to include waste collection and waste bag replacement. Landscape plantings must be alive and all irrigation must be functional. All maintenance obligations shall be completed by the property owner or appropriate association or district, as may be identified in maintenance agreements recorded with the Douglas County Clerk and Recorder's Office.
- The City of Lone Tree requires that maintenance access be provided to all storm drainage facilities to assure continuous operational capability of the system. The property owner shall be responsible for the maintenance of all drainage facilities, including inlets, pipes, culverts, channels, ditches, hydraulic structures and detention basins located on their land unless modified by the site improvement plan improvements agreement. Should the owner fail to adequately maintain said facilities, the City of Lone Tree shall have the right to enter said land for the purposes of operations and maintenance. All such maintenance costs will be assessed to the property owner or the responsible maintenance authority.

Required, Landscaping

The following notes are required for any SIP that includes landscaping; these notes should appear on the first page of the Landscape Plan section of the SIP plan set.

- All plants installed shall follow the plant schedule, installation instructions and the landscape drawings on the approved landscape plan included in this Site Improvement Plan. Any changes to the approved landscape plan, to include plant substitutions, must be approved by the City in advance of installation.
- All mulch and/or rock cobble shall be installed and maintained to the depth(s) provided on the approved landscape plan included in this Site Improvement Plan. Organic mulch shall not be placed within six (6) feet of storm inlets.
- The use of impermeable sheet plastic as a weed barrier is prohibited.

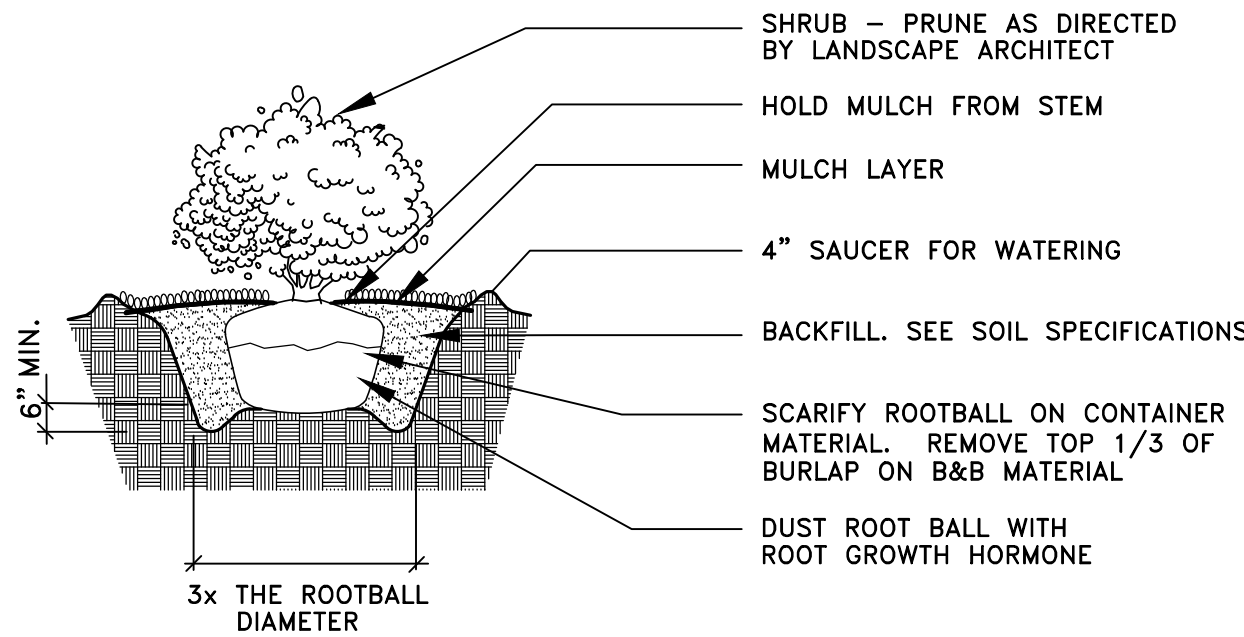
Required, Irrigation

The following notes are required for any SIP that includes landscaping; these notes should appear on the first page of the Irrigation Plan section of the SIP plan set.

- Irrigation shall occur between the hours of 8:00 p.m. and 6:00 a.m.
- Any irrigation equipment mounted to the building shall be painted to match the building.

Maintenance Responsibilities

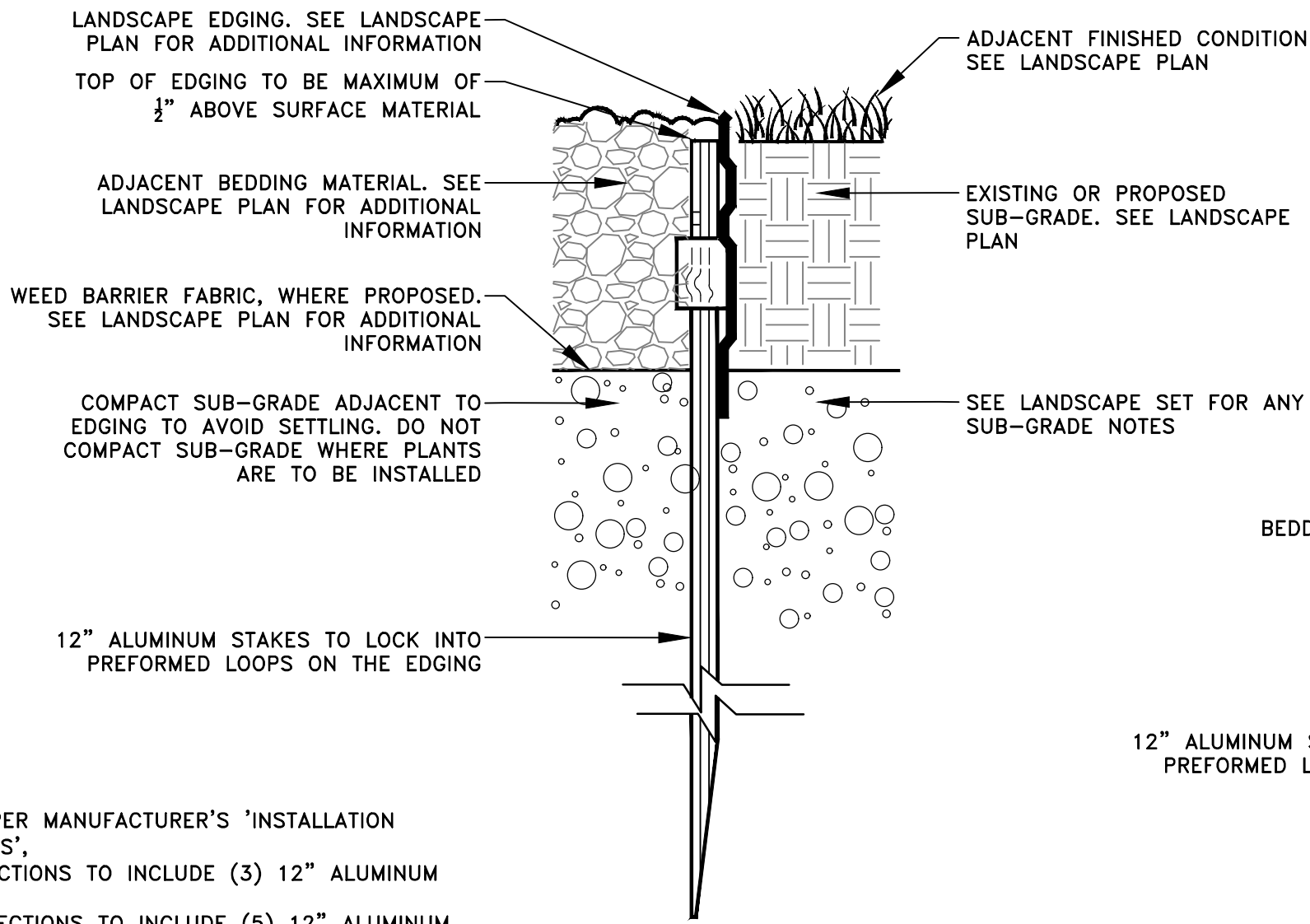
- It shall be the responsibility of the owner (or responsible association or district, as may be identified by maintenance agreements) to maintain all improvements on the property in a state of good repair, to ensure all irrigation is functional, and to ensure all plantings are alive, consistent with the approved landscape and irrigation plan and Lone Tree Municipal Code.
- Within sight triangles and sight easements, as shown, limited landscaping shall be allowed with no solid structures permitted, as stated in the City of Lone Tree's Landscape Design Guidelines and Standards. Landscaping within the sight triangle shall be maintained by the property owner or responsible association or district, as may be identified by maintenance agreements.



NOTE:
APPLY ADDITIONAL 4 OZ. 8-32-16 FERTILIZER INTO TOP 2\"/>

SHRUB PLANTING DETAIL

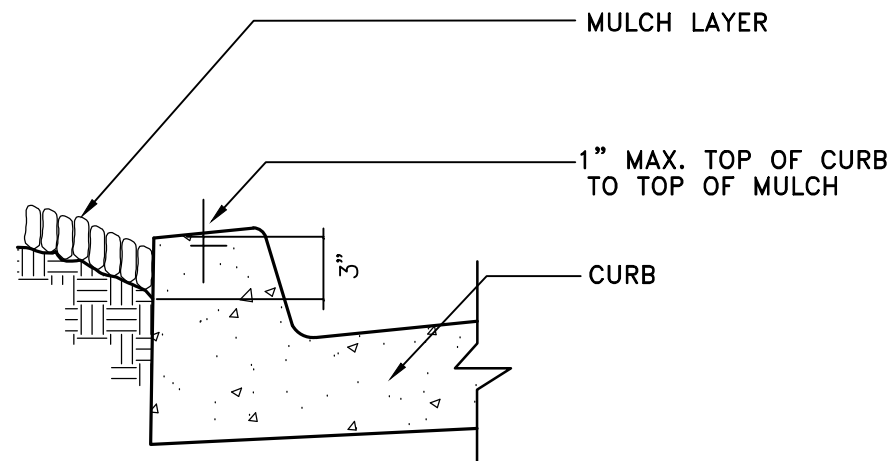
NOT TO SCALE



NOTE:
1. INSTALL PER MANUFACTURER'S 'INSTALLATION GUIDELINES',
2. 8'-0\"/>

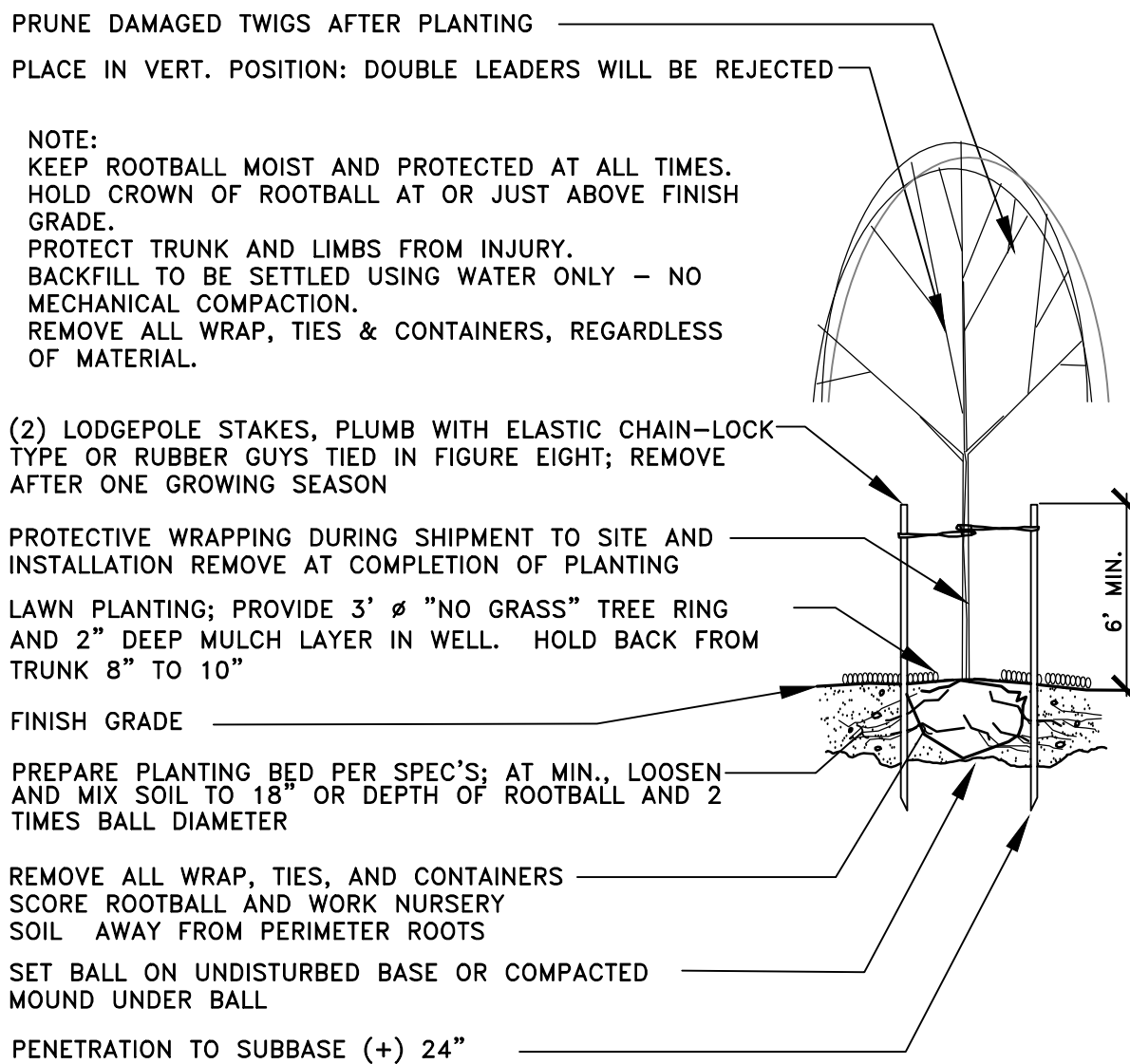
METAL LANDSCAPE EDGING

NOT TO SCALE



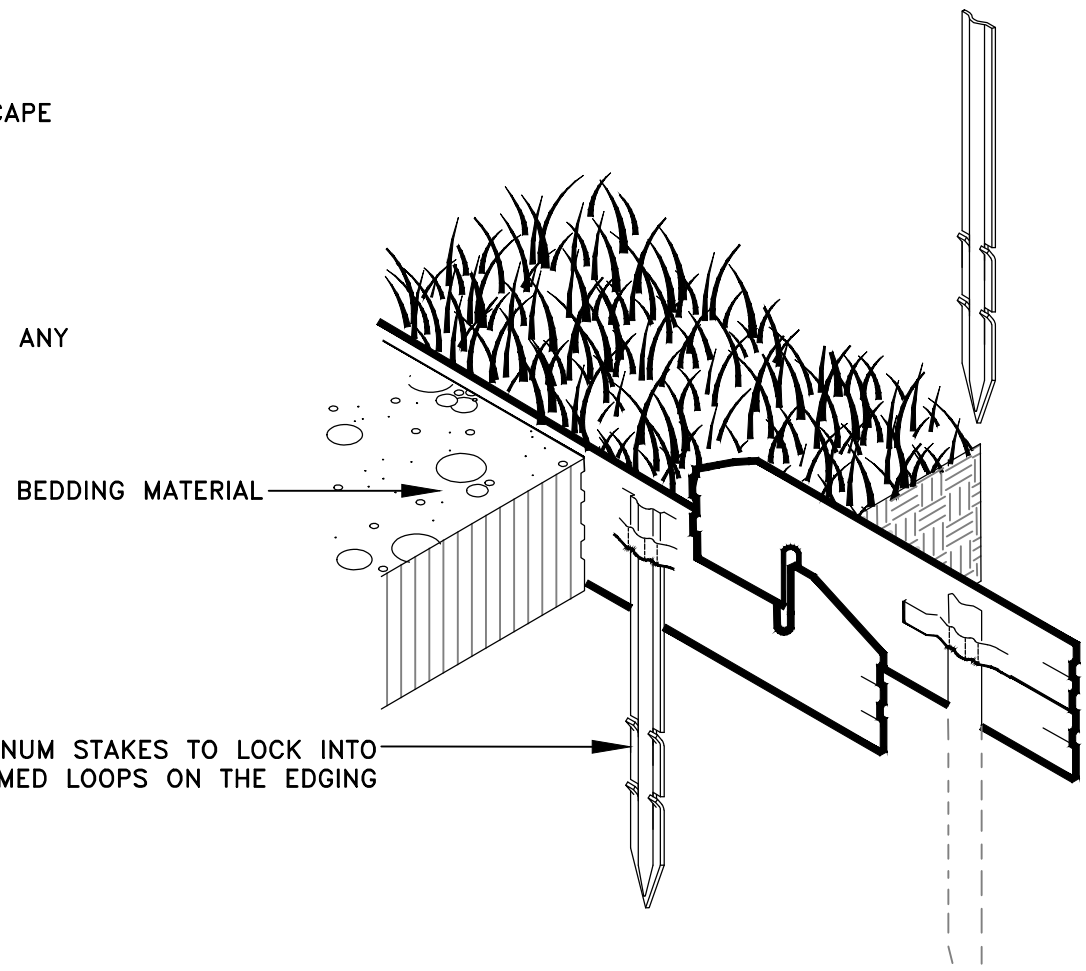
MULCH AT CURB DETAIL

NOT TO SCALE



DECIDUOUS TREE PLANTING/STAKING DETAIL

NOT TO SCALE

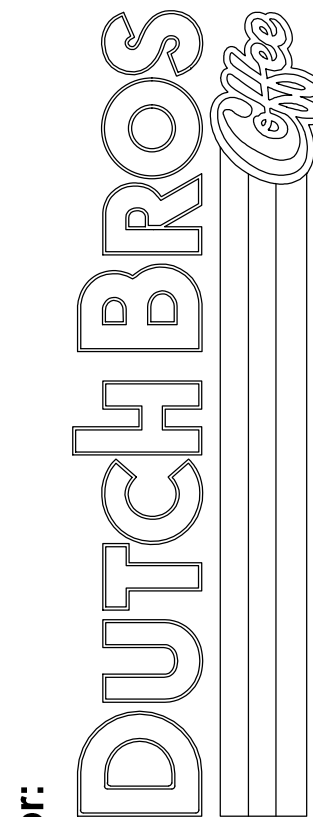


ISOMETRIC VIEW

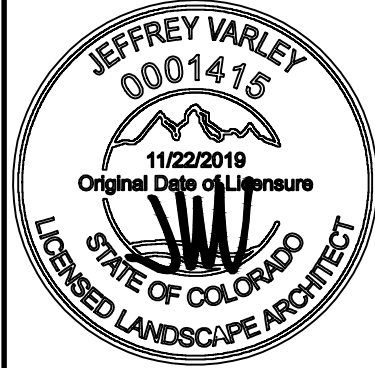
LANDSCAPE NOTES

SEQ PARK MEADOWS AND QUEBEC
LONE TREE, CO

Title:



For:

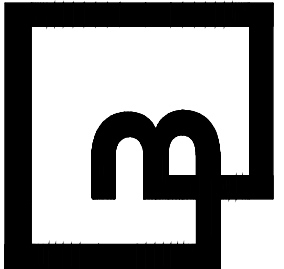


Scale: Horizontal N/A, Vertical N/A

Designed JMV, Drawn JMV, Checked JMV, Approved JMV, Date 1/13/25

Barghausen Consulting Engineers, LLC.
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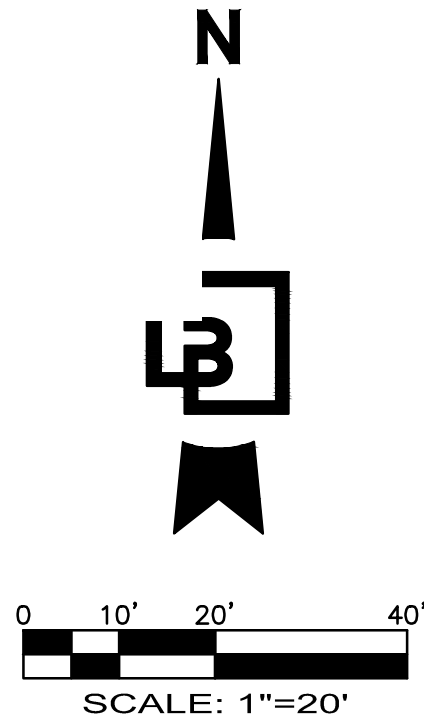
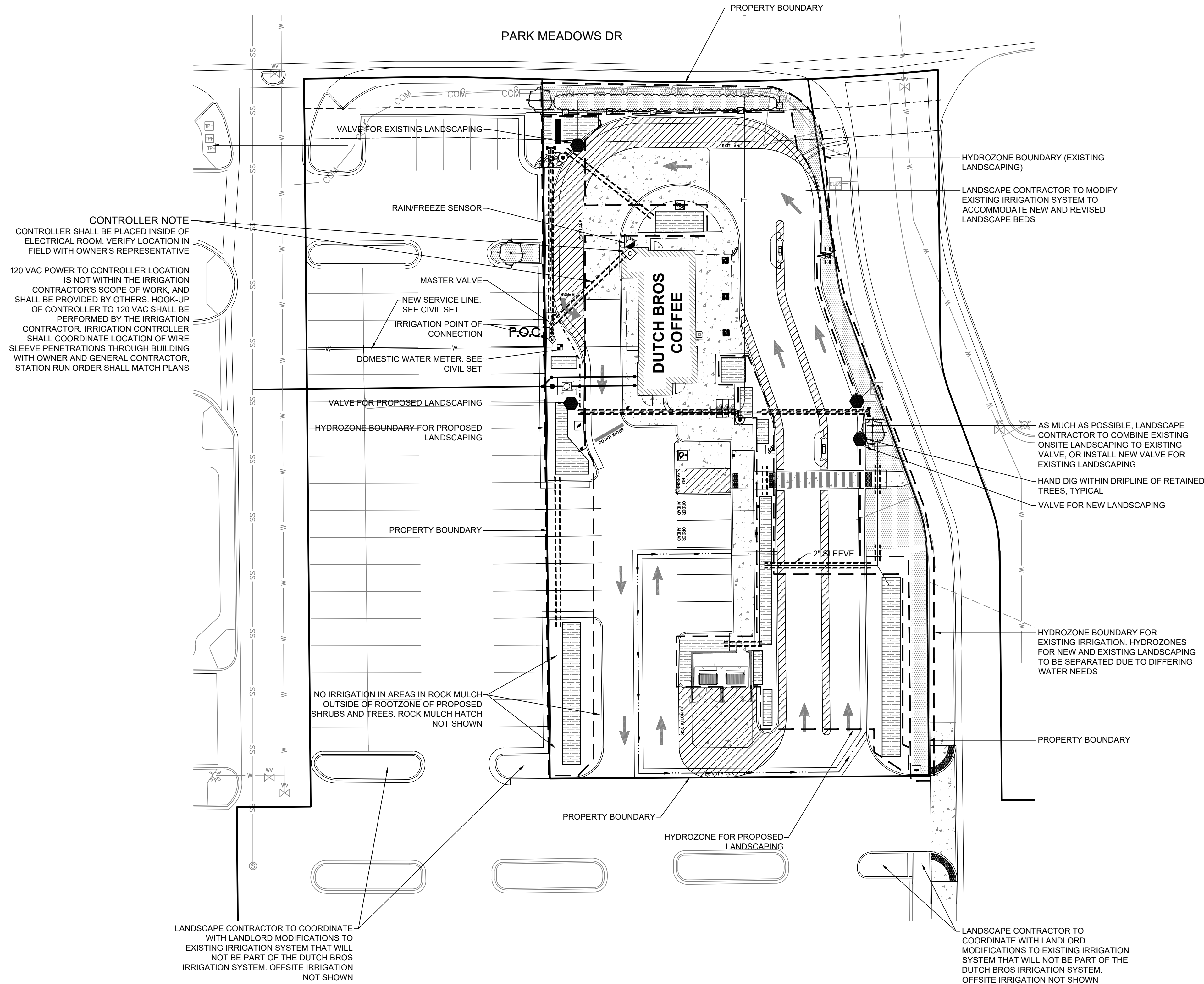
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0.588 ACRES, SP25-0002

IRRIGATION PLAN



IRRIGATION LEGEND

EXISTING LANDSCAPING TO BE RETAINED, RETURN ANY AREAS IMPACTED DURING CONSTRUCTION TO PRE-CONSTRUCTION CONDITION. LANDSCAPE CONTRACTOR TO REMODEL EXISTING IRRIGATION SYSTEM AS NECESSARY TO ACCOMMODATE REVISED LANDSCAPE BED LAYOUT

IRRIGATION SCHEDULE

NOTE: ALL PROPOSED PLANT MATERIAL IS TO RECEIVE SUPPLEMENTAL WATER VIA PERMANENT UNDERGROUND IRRIGATION SYSTEM UTILIZING COMPONENTS AS SHOWN IN THIS IRRIGATION SCHEDULE.

ALL EQUIPMENT STRIPED PURPLE TO NOTE USE OF RECYCLED WATER

SYMBOL	DESCRIPTION	MIN. PSI	EMITTER SPACING	EMITTER GPH
	RAINBIRD XFS-CV-06-12 SUB-SURFACE DRIPLINE COMPONENTS: TO BE USED WITH RAINBIRD XF DRIPLINE INSERT FITTINGS OR TWIST LOCK FITTINGS			
	XFS-CV SUB-SURFACE DRIP IRRIGATION FOR PLANTING AREAS WITH GROUND COVER, SHRUBS AND TREES. ABOVE NOTED DRIPLINE IS DESIGNED WITH .40 GPH EMITTERS SPACED AT 12 INCHES APART AND A ROW SPACING OF 18" INCHES	20	12"	.40
	NOTE: XFS-CV HAS A CHECK VALVE INTEGRATED. INSTALL RAINBIRD 163-100 3" BLANK DISTRIBUTION TUBING IN AREAS WHERE PLANTS ARE NOT INSTALLED			
	EXISTING IRRIGATION VALVE. IF VALVE DOES NOT EXIST OR IS NO LONGER IN GOOD WORKING ORDER, REPLACE WITH RAINBIRD FEB-SERIES VALVE			
	VALVES FOR DRIP IRRIGATION: RAINBIRD XCZ-100-PRB-COM / 150-PRB-COM SERIES AUTOMATIC DRIP VALVE ASSEMBLY WITH 40 PSI PRESSURE REGULATING 40 PSI			
	XCZ-100-PRB-COM: 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40 PSI QUICK-CHECK BASKET FILTER, 0.3 GPM TO 20 GPM.			
	XCZ-150-PRB-LCDR: 1-1/2" PESB-R SCRUBBER GLOBE VALVE WITH SINGLE 1-1/2" PRESSURE REGULATING (40 PSI) QUICK-CHECK BASKET FILTERS. FLOW RANGE: 15-62 GPM			
	INSTALL NEW 3/4" METER FOR 1" IRRIGATION SERVICE PER DENVER WATER STANDARD DRAWING 33269/7. INSTALL NEW 1" REDUCED PRESSURE BACKFLOW ASSEMBLY PER DENVER WATER STANDARD DRAWING 32054/7 IN ABOVE-GROUND, LOCKABLE, CLIMATE CONTROLLED HOT-BOX PER DENVER WATER STD.			
	RAINBIRD "MASTER" ELECTRIC VALVE (SAME SIZE AS METER) WITH RAINBIRD FLOW SENSOR MODEL #MU100B SERIES			
	RAINBIRD ESPME3 SERIES AUTOMATIC WALL MOUNT CONTROLLER WITH ONE ESP4ME1 STATION MODULE			
	WRS-RFC RAIN/FREEZE SENSOR. LOCATE SENSOR AS FIELD-DIRECTED BY THE LANDSCAPE ARCHITECT			
	LASCO "V" SERIES SCH 80 PVC TRUE UNION BALL VALVE, MAINLINE SIZE			
	MAINLINE - SCH 40 PVC (18" COVER); 1-1/2" SIZE MINIMUM			
	LATERAL - CLASS 200 (12" COVER); SIZE PER TABLE, 3/4" SIZE MINIMUM			
	IRRIGATION SLEEVE - SCH 40 PVC; 24" MINIMUM COVER AT VEHICLE CROSSINGS; TWICE SIZE OF PIPE TO BE INSERTED, 4-INCH MINIMUM. SEE ADDITIONAL NOTES THIS SHEET FOR ADDTL SLEEVE SIZES			

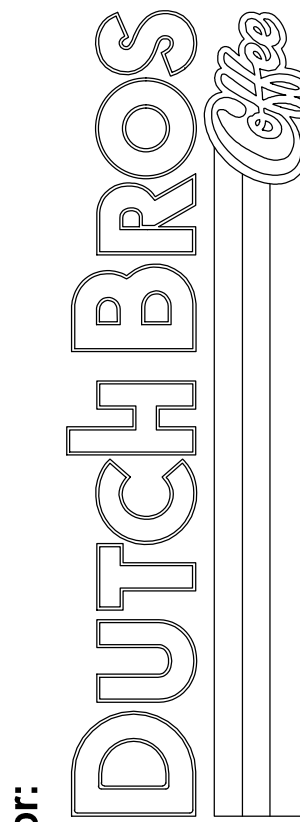
ALL PROPOSED IRRIGATION TO BE DRIP. ONLY EXISTING SPRAY IRRIGATION WILL BE RETAINED. ALL PROPOSED PLANT MATERIAL IS CONSIDERED DROUGHT TOLERANT ONCE IT BECOMES ESTABLISHED.

IRRIGATION SHALL OCCUR BETWEEN THE HOURS OF 8:00 PM AND 6:00 AM. ANY IRRIGATION EQUIPMENT MOUNTED TO THE BUILDING SHALL BE PAINTED TO MATCH THE BUILDING

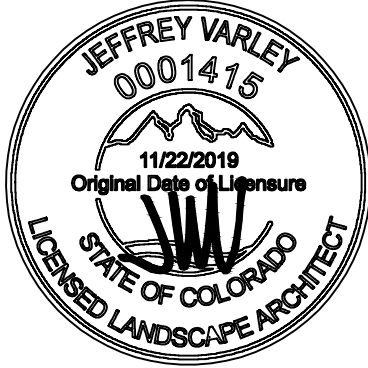
IRRIGATION PLAN

SEQ PARK MEADOWS AND QUEBEC
LONE TREE, CO

Title:



For:



Scale:

Horizontal 1" = 20'
Vertical N/A

Designed JMV

Drawn JMV

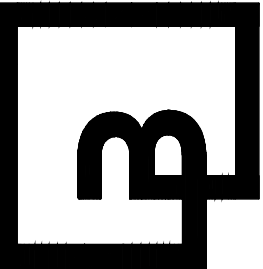
Checked JMV

Approved JMV

Date 1/13/25

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IRRIGATION SPECIFICATIONS
GENERAL

A. QUALIFICATIONS OF IRRIGATION CONTRACTOR

- ALL WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE IRRIGATION CONTRACTING FIRM SPECIALIZING IN IRRIGATION SYSTEMS. SEE THE IRRIGATION PLAN FOR SPECIFIC EQUIPMENT AND SYSTEM LAYOUT.
- THE IRRIGATION CONTRACTOR MUST HAVE ON ITS STAFF A LICENSED IRRIGATION INSTALLER, AS REGULATED BY THE APPROPRIATE LOCAL JURISDICTION. A LICENSED IRRIGATION INSTALLER SHALL BE PRESENT AT THE PROJECT SITE AT ALL TIMES AS WORK IS IN PROGRESS. THE OWNER MAY DEMAND THAT WORK STOP UNTIL THE CONTRACTOR PROVIDES FOR A LICENSED IRRIGATION INSTALLER TO BE PRESENT AT THE PROJECT SITE AND SUPERVISING ALL IRRIGATION WORK.

B. SCOPE OF WORK

- WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES, FEES, AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HEREIN AND/OR SHOWN ON THE IRRIGATION PLANS, NOTES, AND DETAILS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS. IN CASE OF CONFLICT BETWEEN THESE PLANS AND LOCAL AND/OR STATE CODES, CODES SHALL PREVAIL.

C. INTENT OF THE IRRIGATION SYSTEM IS TO PROVIDE 100% COVERAGE OF ALL LANDSCAPE AREAS. THE IRRIGATION PLAN IS GENERALLY DIAGRAMMATIC; COORDINATE IRRIGATION INSTALLATION WITH UTILITY INSTALLATIONS. ACTUAL LOCATION OF CONTROLLER, BACKFLOW DEVICE, PIPING, VALVES, SPRAY HEADS, DRIP IRRIGATION, AND RELATED EQUIPMENT MAY NEED TO BE ADJUSTED BASED ON ACTUAL SITE CONDITIONS.

D. FOR CLARITY PURPOSES, SOME IRRIGATION LINES AND EQUIPMENT ARE SHOWN IN HARDSCAPE AREAS WITHOUT ACCESS SLEEVES; THESE LINES SHALL BE INSTALLED IN A COMMON TRENCH OR AT THE BACK OF CURB IN LANDSCAPE AREAS. MINOR FIELD ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

E. ALL MATERIALS SHALL BE NEW AND WITHOUT FLAWS OR DEFECTS OF ANY TYPE AND SHALL BE THE BEST OF THEIR CLASS AND KIND. ALL MATERIALS SHALL HAVE A MINIMUM GUARANTEE OF ONE YEAR AGAINST MATERIAL DEFECTS OR DEFECTIVE WORKMANSHIP. ALL MATERIALS SHALL BE OF THE BRANDS AND TYPES NOTED ON THE DRAWINGS OR AS SPECIFIED HEREIN, OR APPROVED EQUAL.

- THE CONTRACTOR MUST FIRST OBTAIN APPROVAL FROM THE IRRIGATION DESIGNER FOR AN 'APPROVED EQUAL' BEFORE INSTALLING SUCH MATERIALS IN THE FIELD, OR THE CONTRACTOR MAY BE REQUIRED TO REPLACE SUCH MATERIALS AT HIS OWN COST.
- BACKFLOW PREVENTION DEVICES SHALL BE OF THE SIZE AND TYPE INDICATED ON THE DRAWINGS. INSTALL BACKFLOW PREVENTION UNITS IN ACCORDANCE WITH IRRIGATION CONSTRUCTION DETAILS AND ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.

- PIPING
- PRESSURE SUPPLY LINES, DOWNSTREAM OF THE POINT-OF-CONNECTION:
 - SCHEDULE 40 PVC FOR ALL PIPE 1-1/2" OR LESS
 - CLASS 315 PVC FOR ALL PIPE 2" TO 2-1/2"
 - CLASS 200 PVC, GASKETED, FOR ALL PIPE 3" AND LARGER
- SLEEVING AND NON-PRESSURE LATERAL LINES (DOWNSTREAM FROM VALVES): CLASS 200 PVC

F. FITTINGS: SCH. 40 PVC, EXCEPT AS NOTED OTHERWISE.

G. VALVES AND DRIP VALVE ASSEMBLIES: TYPE AND SIZE AS NOTED ON PLANS. EACH VALVE SHALL BEAR A PRE-MANUFACTURED, NUMBERED WATERPROOF TAG BEARING A NUMBER CORRESPONDING TO ITS VALVE SEQUENCE OF OPERATION ON THE CONTROLLER. THE OPERATION SEQUENCE SHALL MATCH THAT AS SHOWN ON THE PLANS.

H. QUICK COUPLERS, BALL VALVES, AND GATE VALVES: TYPE AND SIZE PER PLANS.

I. VALVE BOXES: TYPE AND SIZE AS NOTED ON DETAILS. ALL VALVE BOXES SHALL BE LOCKING BOLT-DOWN TYPE, FURNISHED WITH LIDS AND BOLTS. BOXES SHALL BE OF A SIZE TO CONTAIN THE ENTIRE VALVE AND/OR VALVE ASSEMBLY. THE VALVE BOX LID SHALL HAVE THE VALVE STATION NUMBER HEAT-BRANDED INTO THE LID WITH 2" HIGH LETTERS.

J. FIXED SPRAY HEADS AND ROTORS: PLASTIC BODY POP-UP, WITH A REMOVABLE PLASTIC SPRAY NOZZLE. EXACT TYPE, MODEL, AND NOZZLE SHALL BE AS INDICATED ON PLANS.

K. INTEGRAL EMITTER DRIP TUBING: TUBING MODEL AND FLOW RATE AS NOTED ON PLANS, WITH INTEGRAL EMITTERS WELDED TO THE INSIDE WALL OF THE TUBING AS AN INTEGRAL PART OF THE TUBING ASSEMBLY.

L. AUTOMATIC CONTROLLER: TYPE AND MODEL PER PLANS. PROVIDE VANDAL-PROOF ENCLOSURE FOR ALL EXTERIOR INSTALLATIONS. PROVIDE LINE-VOLTAGE DISCONNECT SWITCH WITH GROUND FAULT PROTECTION.

M. 24 VOLT VALVE WIRE SHALL BE A MINIMUM OF #14 GAUGE, U.F. APPROVED FOR DIRECT BURIAL, SINGLE CONDUCTOR IRRIGATION WIRE. EACH CONTROLLER SHALL HAVE A DIFFERENT COLOR STATION AND COMMON WIRE.

N. STATION WIRE - ANY COLOR EXCEPT WHITE OR BLUE

O. COMMON WIRE - WHITE

P. EXTRA COMMON WIRES - BLUE

Q. WIRE SPLICES SHALL BE ENCASED IN A WATERPROOF COMPOUND OR GEL. ALL FIELD SPLICES SHALL BE LOCATED IN A 6 INCH ROUND VALVE BOX.

R. RAIN SENSOR: TYPE AND MODEL PER PLANS.

S. METHODS

T. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS INDICATED ON PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST. ENSURE FIELD COORDINATION IS MADE EARLY ON IN THE CONSTRUCTION PHASE SO PLACEMENT LOCATION IS CORRECT.

U. THE IRRIGATION CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK, AND SHALL OBTAIN ALL ENGINEERING, LANDSCAPE, AND OTHER APPLICABLE PLANS & DOCUMENTS. THE CONTRACTOR SHALL THOROUGHLY REVIEW THE PLANS AND REPORT ANY CONFLICTS OR DISCREPANCIES TO THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE IMMEDIATELY.

V. THE IRRIGATION CONTRACTOR SHALL NOT WILFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADES OR DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE IRRIGATION DESIGNER. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS AND NECESSARY COSTS.

W. THE IRRIGATION CONTRACTOR SHALL PAY ANY AND ALL FEES AND PERMITS ASSOCIATED WITH THE INSTALLATION OF THE IRRIGATION SYSTEM.

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0.588 ACRES, SP25-0002

IRRIGATION NOTES

X. AT LEAST SEVEN DAYS BEFORE BEGINNING WORK, CONFIRM THE STATIC WATER PRESSURE IS AT LEAST 65 PSI. IF STATIC WATER PRESSURE IS OUTSIDE OF THE STATED RANGE, DO NOT PROCEED WITHOUT FIRST NOTIFYING THE IRRIGATION DESIGNER AND OWNER IN WRITING, AND OBTAINING SUBSEQUENT DIRECTION FOR CORRECTIONAL MEASURES. SHOULD THE IRRIGATION CONTRACTOR CHOOSE TO BEGIN THE INSTALLATION WITHOUT SUCH NOTIFICATION, THE IRRIGATION CONTRACTOR WILL ASSUME THE RESPONSIBILITY FOR ALL COSTS INCURRED TO ENSURE THE SYSTEM IS WORKING PROPERLY. NO CHANGE ORDERS WILL BE AUTHORIZED IN SUCH CIRCUMSTANCES.

Y. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, STRUCTURES AND UTILITIES.

Z. COORDINATE WITH THE OWNER THE PROPOSED LOCATIONS OF THE AUTOMATIC CONTROLLER AND ANY REQUIRED SLEEVES THROUGH THE BUILDING FOR CONTROL WIRES.

AA. TRENCHING NEAR EXISTING TREES:

AB. CONTRACTOR SHALL NOT DISTURB ROOTS 1-1/2" AND LARGER IN DIAMETER WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS DEFINED AS A CIRCULAR AREA EXTENDING OUTWARD FROM THE TREE TRUNK, WITH A RADIUS EQUAL TO 1' FOR EVERY 1" OF TRUNK DIAMETER-AT-BREAST-HEIGHT (4.5' ABOVE THE AVERAGE GRADE AT THE TRUNK).

AC. ALL EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ.

AD. ALTER ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER. WHERE TREE ROOTS 1-1/2" AND LARGER IN DIAMETER ARE ENCOUNTERED IN THE FIELD, TUNNEL UNDER SUCH ROOTS. WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS.

AE. ALL SEVERED ROOTS SHALL BE HAND PRUNED WITH SHARP TOOLS AND ALLOWED TO AIR-DRY. DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS.

AF. BACKFILL

AG. ALL BACKFILL MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE OWNER. BACKFILL MATERIAL SHALL BE FREE FROM RUBBISH, ROCK LARGER THAN 1", LARGE STONES, BRUSH, SOD, FROZEN MATERIAL OR OTHER UNSUITABLE SUBSTANCES THAT MAY DAMAGE PIPE DURING THE BACKFILLING OPERATIONS. SEPARATE OUT ROCKS LARGER THAN 1 INCH IN ANY DIRECTION FROM EXCAVATED MATERIAL, AND REMOVE FROM AREAS TO RECEIVE LANDSCAPING. COVER FOR BOTH TOP AND SIDES OF PIPE SHALL BE A MINIMUM OF 2 INCHES OF ROCK-FREE SOIL, SAND, OR OTHER APPROVED MATERIAL.

AH. IN THE EVENT THAT THE MATERIAL FROM THE EXCAVATION OR TRENCHING IS FOUND TO BE UNSUITABLE FOR USE IN BACKFILL, IT SHALL BE REMOVED FROM THE SITE AND PROPERLY AND LEGALLY DISPOSED OF BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL THEN PURCHASE AND FURNISH SUITABLE BACKFILL MATERIAL CONSISTING OF EARTH, LOAM, SANDY CLAY, SAND OR OTHER APPROVED MATERIALS FREE OF DEBRIS.

AI. BACKFLOW PREVENTER INSTALLATION: CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING WATER SOURCES AT LOCATION SHOWN ON PLANS AND AS APPROVED BY THE OWNER, AND SHALL MAKE ANY MINOR CHANGES IN LOCATION AS MAY BE NECESSARY DUE TO ACTUAL SITE CONDITIONS. BACKFLOW PREVENTER HEIGHT SHALL BE AS PER LOCAL CODES AND IRRIGATION DETAILS. INSTALL A BRASS BALL VALVE IMMEDIATELY UPSTREAM OF THE BACKFLOW DEVICE TO SERVE AS AN ISOLATION VALVE. TO EVERY EXTENT POSSIBLE, INSTALL BACKFLOW PREVENTER ION A LOCATION SCREENED FROM PUBLIC VIEW (SUCH AS BEHIND A SHRUB ROW).

AJ. PIPING

AK. PIPE SIZE SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS FOR LARGER SIZES MAY BE APPROVED.

AL. MAINLINE PIPE AND WIRES SHALL BE INSTALLED WITH A MINIMUM COVER OF 18 INCHES (24" FOR MAINLINE 3"-5", AND 30" FOR MAINLINE 6" AND GREATER). LATERAL PIPE SHALL BE INSTALLED WITH A MINIMUM COVER OF 12 INCHES.

AM. ASSEMBLE ALL THREADED FITTINGS WITH TEFLON TAPE, WHICH SHALL BE APPLIED TO MALE THREADS ONLY.

AN. ALL SOLVENT-WELD CONNECTIONS SHALL BE MADE WITH APPROVED SOLVENT-WELD PRIMER AND GLUE.

AO. PIPE SHALL BE INSTALLED WITH A MINIMUM OF 4" HORIZONTAL CLEARANCE FROM ANY OTHER PIPE AND 2" VERTICAL CLEARANCE FROM ANY PIPES THAT CROSS OVER OR UNDER.

AP. VALVES

AQ. VALVES SHALL BE INSTALLED PER MANUFACTURER'S DIRECTIONS AND THE IRRIGATION DETAILS.

AR. VALVE BOXES SHALL BE INSTALLED FLUSH WITH THE GRADE, WITH CLEAN PEA GRAVEL LOCATED BELOW THE VALVE AS NOTED ON THE DETAILS. LOCATE BOXES WITHIN 12 TO 24" OF SIDEWALKS OR LANDSCAPE EDGES, WITH TOPS OF BOXES 1" ABOVE FINISH GRADE IN TURF, AND 3" ABOVE FINISH GRADE IN SHRUB AREAS (TO AVOID BEING COVERED BY MULCH).

AS. EACH VALVE BOX COVER SHALL BE HEAT-BRANDED WITH THE CONTROLLER STATION NUMBER.

AT. DO NOT INSTALL MORE THAN TWO VALVES IN A JUMBO BOX.

AU. DRIP IRRIGATION EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S DIRECTIONS AND THE IRRIGATION DETAILS.

AV. SUBSURFACE DRIP LINES SHALL BE BURIED NO MORE THAN 2" BELOW FINISH GRADE.

AW. DRIP LINES MOUNTED ON GRADE SHALL BE LOCATED BENEATH LANDSCAPE FABRIC, AND SECURED IN PLACE WITH WIRE STAPLES AT A MAXIMUM OF 24"-36" ON CENTER.

AX. SPRAY, ROTOR, AND BUBBLER HEADS:

AY. ALL SPRAY AND ROTOR HEAD LOCATIONS SHALL BE STAKED, FLAGGED AND/OR OTHERWISE CLEARLY MARKED ON THE GROUND PRIOR TO INSTALLATION. SPRINKLER HEAD STAKING SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE INSTALLATION.

AZ. ALL SPRAY HEADS SHALL BE CONNECTED WITH A 12 INCH MINIMUM LENGTH OF 12 INCH FLEX THE FLEX PVC SHALL BE SOLVENT WELDED TO SCHEDULE 40 PVC FITTINGS WITH WELD-ON #795 SOLVENT AND #P-70 PRIMER. ALL ROTORS SHALL BE CONNECTED TO LATERAL LINES WITH PRE-MANUFACTURED SWING JOINTS.

BA. ALL ROTOR, SPRAY AND BUBBLER HEADS SHALL BE SET PERPENDICULAR AND FLUSH TO FINISH GRADE AND WITH A CLEARANCE OF FOUR INCHES (MINIMUM) FROM THE EDGE OF ANY BUILDINGS, WALLS, BOULDERS, AND HARDSCAPE, WITH A CLEARANCE OF TWELVE INCHES (MINIMUM) FROM BUILDINGS, UNLESS OTHERWISE SPECIFIED.

BB. ALL ROTOR, SPRAY AND BUBBLER HEADS AND VALVES SHALL BE FLUSHED AND ADJUSTED FOR OPTIMUM COVERAGE WITH MINIMUM OVERSPRAY ON WALKS, STREETS, WALLS, ETC.

BC. LATERAL PIPE TO TREE STREAM BUBBLER HEADS IS OMITTED FOR GRAPHIC CLARITY. CONNECT TREE BUBBLER HEADS TO VALVES AS SHOWN WITH CLASS 200 PVC PIPE SIZED TO ALLOW A MAXIMUM FLOW VELOCITY OF 5 FEET PER SECOND

OB. AUTOMATIC CONTROLLER:

- INSTALL THE CONTROLLER AT THE LOCATION INDICATED BY THE OWNER. INSTALL CONTROLLER WITH A BACKUP BATTERY AS RECOMMENDED BY THE MANUFACTURER.
- THE IRRIGATION CONTRACTOR SHALL COORDINATE 120 V.A.C. ELECTRICAL POWER TO CONTROLLER AND DEDICATE ONE (1) 20-AMP BREAKER FOR EACH CONTROLLER. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE ELECTRICAL SOURCE TO THE CONTROLLER UNIT ONLY.

- ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO SPLICES SHALL BE ALLOWED EXCEPT AT VALVES AND CONTROLLER. WHERE SPLICES MAY BE NECESSARY DUE TO EXCESSIVELY LONG WIRE RUNS, THE CONTRACTOR SHALL MAKE ALL SPLICES IN 6" ROUND VALVE BOXES WITH 3M'S "DBY-DIRECT BURIAL SPLICE KIT". THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL SPLICES AND VALVE MANIFOLDS, AND SHALL LEAVE A 24" COIL OF EXCESS WIRE AT EACH CONNECTION.
- PROVIDE #10 COMMON WIRE, DIRECT BURIAL, TO ALL REMOTE CONTROL VALVES.
- CONNECT ALL DIRECT BURIAL WIRES TO VALVES USING 3M'S "DBY-DIRECT BURIAL SPLICE KIT" (UNLESS OTHERWISE SPECIFIED).
- PROVIDE THREE ADDITIONAL IRRIGATION CONTROL WIRES ALONG EACH BRANCH OF MAINLINE FOR FUTURE EXPANSION. STUB ADDITIONAL CONTROL WIRES INTO BACK OF IRRIGATION CONTROLLERS.

- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE SLEEVES AND PIPE SLEEVES UNDER PAVED AREAS PRIOR TO PAVING - SEE SLEEVING NOTES.
- INSTALL THE RAIN SENSOR IN THE VICINITY OF THE CONTROLLER, AND COORDINATE LOCATION WITH THE OWNER. PROVIDE MINIMUM 5' CLEARANCE FROM OTHER OUTDOOR EQUIPMENT, FREE AND CLEAR OF ANY TREE CANOPY OR OTHER OVERHEAD OBSTRUCTIONS, AND ABOVE THE HEIGHT OF THE SPRINKLER COVERAGE. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THE RAIN SENSOR IS PLACED IN A LOCATION WHERE IT CAN RECEIVE ADEQUATE RAINFALL WITHOUT OBSTRUCTIONS. IF IT IS PLACED IN AN INADEQUATE LOCATION, THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO RELOCATE IT AT NO ADDITIONAL COST TO THE OWNER.

- ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- QUALITY CONTROL

- PERFORM COVERAGE TESTS AFTER IRRIGATION SYSTEM IS COMPLETED, BUT PRIOR TO ANY PLANTING AND PERFORM TESTING IN THE PRESENCE OF THE IRRIGATION DESIGNER AND THE CONSTRUCTION MANAGER.
- TEST SYSTEM TO ASSURE THAT ALL LAWN AND PLANTING AREAS ARE WATERED COMPLETELY AND UNIFORMLY.

- MAKE ALL NECESSARY ADJUSTMENTS TO PROVIDE COMPLETE COVERAGE, INCLUDING REALIGNMENT OF HEADS AND REPLACEMENT OF NOZZLES.
- CLEAN UP

- DURING IRRIGATION EXCAVATION AND INSTALLATION, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS IN A NEAT, ORDERLY CONDITION.
- DISPOSED LEGALLY OF ALL EXCAVATED MATERIALS OFF THE PROJECT SITE.

- INSPECTION AND ACCEPTANCE
- UPON COMPLETION OF THE WORK, THE IRRIGATION CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE IRRIGATION CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.

- WHEN THE INSPECTED WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S SATISFACTION WITHIN 24 HOURS.
- THE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.

- CONTROLLER CHART: THE IRRIGATION CONTRACTOR SHALL PROVIDE A 11" X 17" COLOR-CODED, LAMINATED COPY OF THE IRRIGATION LAYOUT AND PLACE IT IN THE CONTROLLER'S COVER. THE CONTROLLER CHART SHALL CLEARLY DELINEATE THE AREAS COVERED BY EACH VALVE, USING A SEPARATE COLOR FOR EACH ZONE.
- TURN THE FOLLOWING ITEMS IN TO THE OWNER UPON COMPLETION OF THE INSTALLATION:

- QUICK COUPLER KEYS (2)
- CONTROLLER MANUAL (1)
- CONTROLLER KEYS (2)
- A MINIMUM OF (2) COPIES OF RECORD DRAWINGS. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.

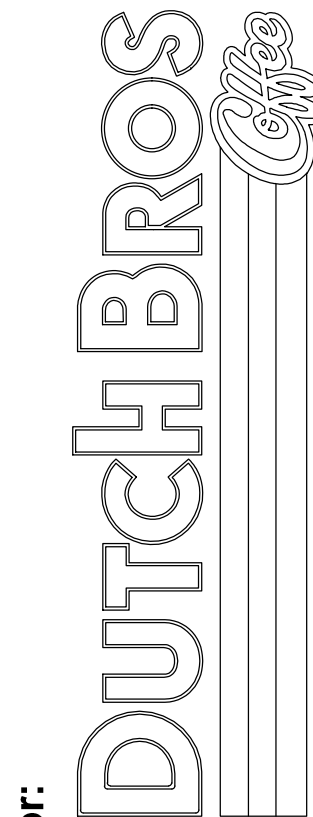
- REFER TO THE PLANTING SPECIFICATIONS FOR ADDITIONAL CONDITIONS OF FINAL ACCEPTANCE AND START OF THE MAINTENANCE PERIOD.
- WARRANTY

- THE IRRIGATION SYSTEM SUPPLIED AND INSTALLED SHALL BE WARRANTED (LABOR AND MATERIALS) TO REMAIN OPERATIONAL FOR A PERIOD OF 12 MONTHS AFTER THE DATE OF FINAL ACCEPTANCE. DURING THIS PERIOD, THE CONTRACTOR SHALL ALSO REPAIR ANY SETTLEMENT OF THE IRRIGATION TRENCHES.
- BY THE END OF THE WARRANTY PERIOD, ANY IRRIGATION PART THAT IS EITHER NON-OPERATIONAL OR THAT IS OPERATING BELOW STANDARDS AS DETERMINED BY THE OWNER, SHALL BE REMOVED FROM THE SITE AND SHALL BE REPLACED. REPLACEMENTS SHALL BE OF THE SAME KIND AS SPECIFIED IN THE IRRIGATION LEGEND, AND SHALL BE INSTALLED AS ORIGINALLY SPECIFIED.

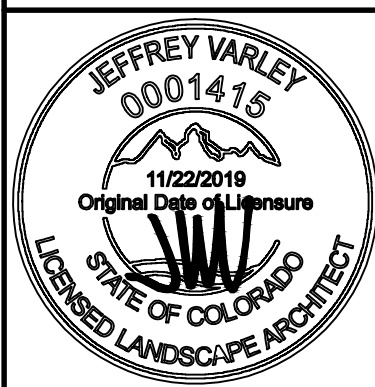
- IRRIGATION PARTS DAMAGED OR IMPAIRED DUE TO ACTS OF GOD, VANDALISM, AND/OR THE OWNER'S IMPROPER MAINTENANCE SHALL NOT BE COVERED BY THIS WARRANTY.
- SHOULD THE PERMITTING JURISDICTION REQUIRE AN IRRIGATION AUDIT, THE IRRIGATION CONTRACTOR SHALL RETAIN THE SERVICES OF A THIRD-PARTY CERTIFIED LANDSCAPE IRRIGATION AUDITOR, AT NO ADDITIONAL COST TO THE OWNER.

IRRIGATION NOTES

Title:



For:



Scale:

Horizontal N/A Vertical N/A

Designed JMV

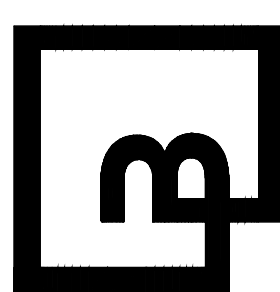
Drawn JMV

Checked JMV

Approved JMV

Date 1/13/25

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Job Number

23707

Sheet

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DB Franchising USA, LLC

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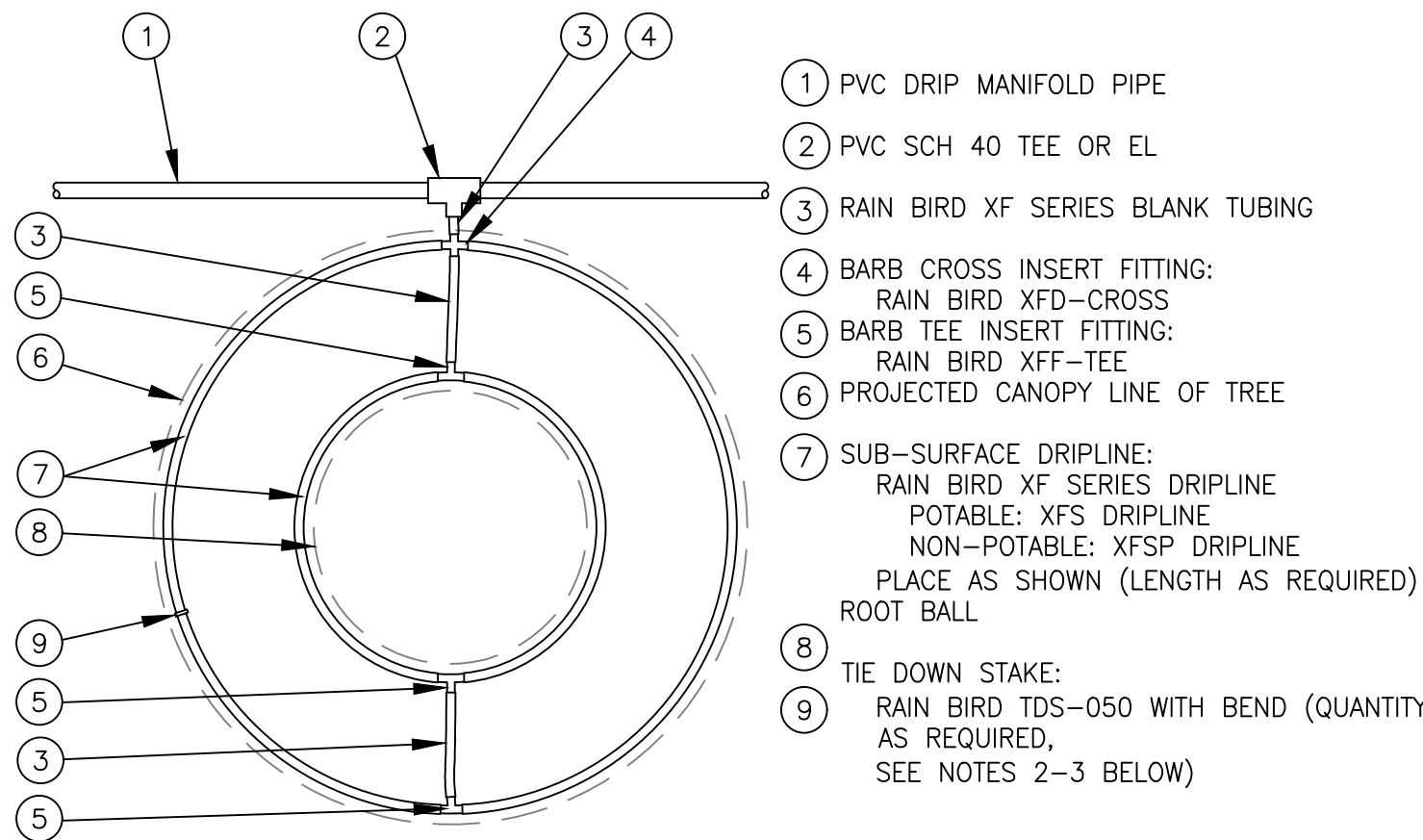
DUTCH BROS COFFEE CIVIL IMPROVEMENT PLAN

LOT 1B LONE TREE TOWN CENTER – THIRD AMENDMENT

SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE
6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

0.588 ACRES, SP25-0002

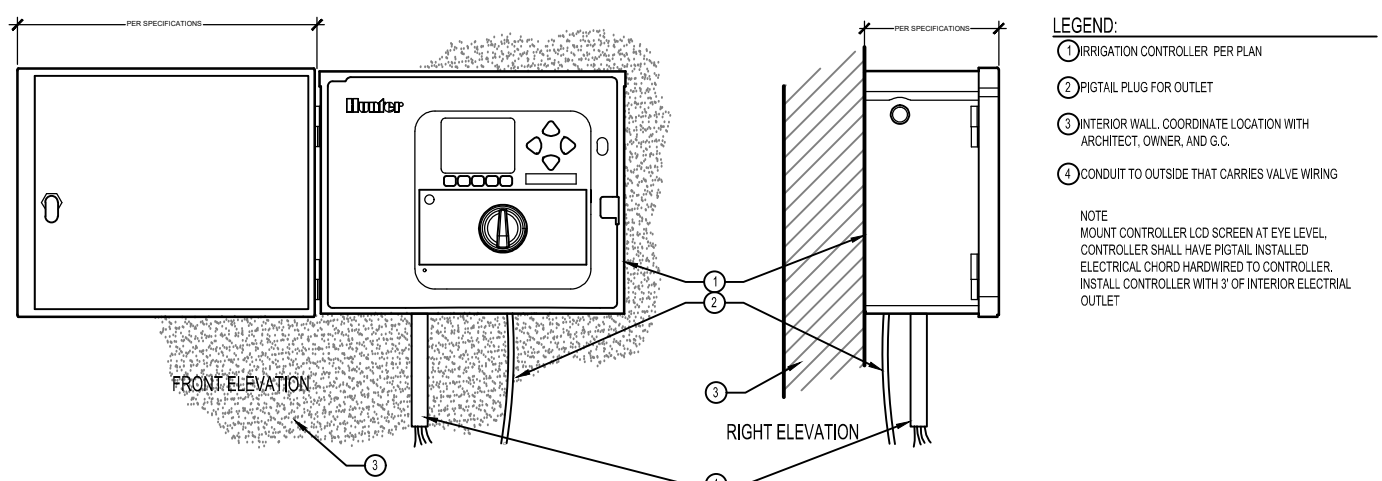
IRRIGATION DETAILS



- NOTES:
- DISTANCE BETWEEN LATERAL RINGS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, AND TREE CANOPY. SEE RAIN BIRD XF-SDI DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
 - PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
 - AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

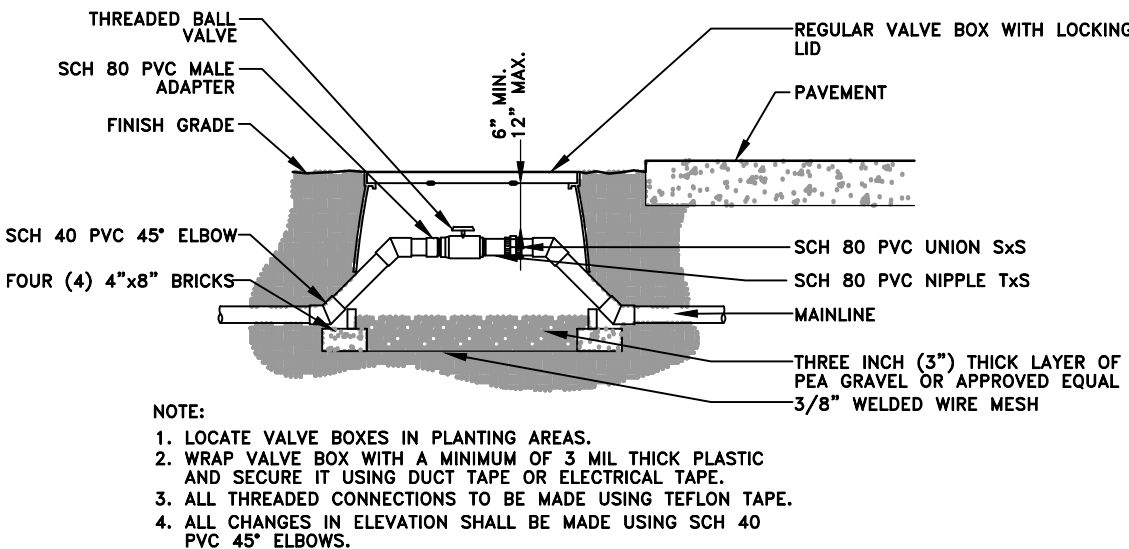
DRIPLINE AROUND TREE

NOT TO SCALE



IRRIGATION CONTROLLER, INTERIOR WALL MOUNT

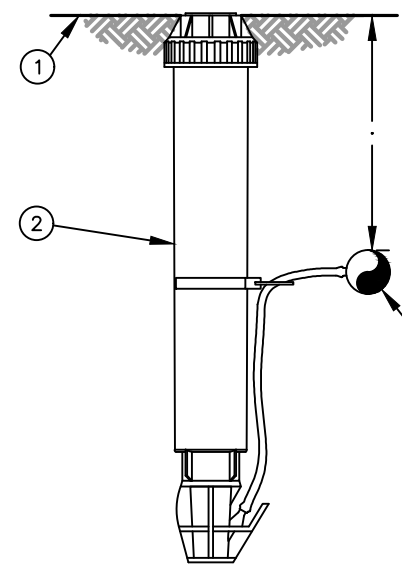
NOT TO SCALE



- NOTE:
- LOCATE VALVE BOXES IN PLANTING AREAS.
 - WRAP VALVE BOX WITH A MINIMUM OF 3 MIL THICK PLASTIC AND SECURE IT USING DUCT TAPE OR ELECTRICAL TAPE.
 - ALL THREADED CONNECTIONS TO BE MADE USING TEFLON TAPE.
 - ALL CHANGES IN ELEVATION SHALL BE MADE USING SCH 40 PVC 45" ELBOWS.

BALL VALVE DETAIL

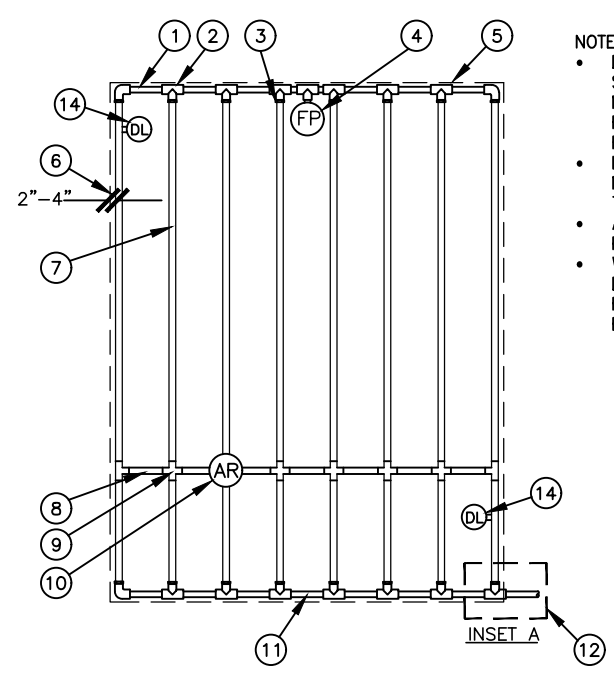
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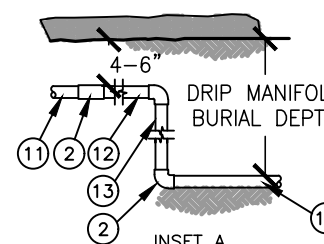
- NOTE:
- INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
 - VAN NOZZLE MAY BE SET TO CLOSED, OR IF IT IS DESIRED TO SEE SPRAY FROM THE NOZZLE, SET THE ARC TO 1/4 PATTERN. THE FLOW FROM THE NOZZLE, 0.3 GPM, SHOULD BE ACCOUNTED FOR IN THE SYSTEM DESIGN.

DRIPLINE INDICATOR

NOT TO SCALE

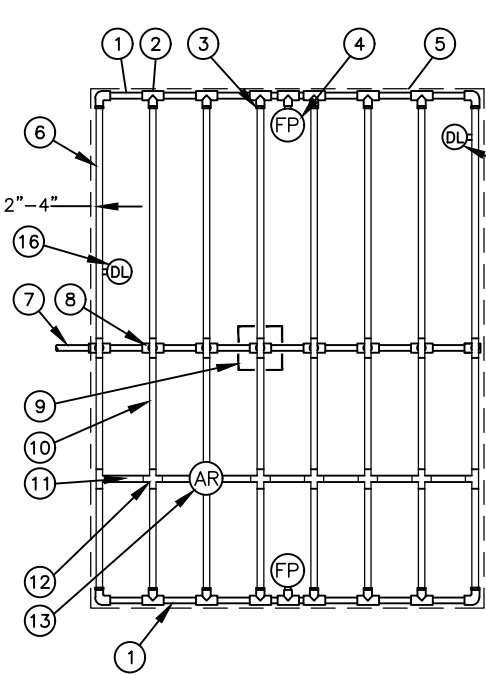


- NOTES:
- DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE RAIN BIRD XFSDI DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
 - LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
 - AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
 - WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.



DRIPLINE END FEED LAYOUT

NOT TO SCALE



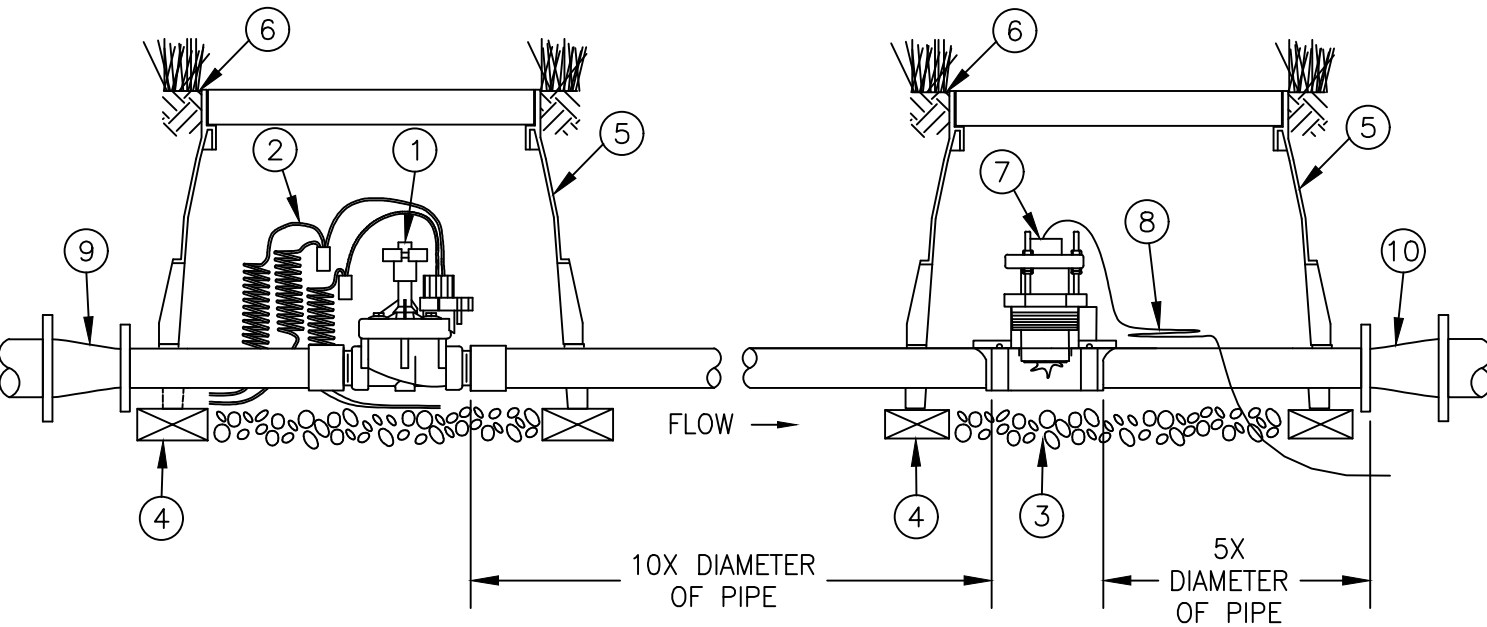
- 10 SUB-SURFACE DRIPLINE:
RAIN BIRD XF SERIES DRIPLINE (TYPICAL)
POTABLE: XFS DRIPLINE
NON-POTABLE: XFSP DRIPLINE
11 RAIN BIRD XF SERIES BLANK TUBING
12 BARB X MALE INSERT TEE OR CROSS:
RAIN BIRD XFT-TTEE OR
RAIN BIRD XFD-CROSS (TYPICAL)
13 1/2" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050
SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION
14 BARB X FEMALE FITTING:
RAIN BIRD XFD-TFA-075 FITTING
15 1/2" PVC NIPPLE, LENGTH AS NECESSARY
16 DRIPLINE INDICATOR. SEE DETAIL FOR ADDITIONAL INFORMATION

XFS Dripline Maximum Lateral Lengths (Feet)				
Inlet Pressure psi	12" Spacing	18" Spacing	24" Spacing	30" Spacing
15	275	155	114	85
20	315	185	134	100
25	355	215	154	115
30	395	245	174	130
35	435	275	194	145
40	475	305	214	160
45	515	335	234	175
50	555	365	254	190
55	595	395	274	205
60	635	425	294	220

- NOTES:
- DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE RAIN BIRD XFSDI DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
 - LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
 - INSTALL AIR RELIEF VALVE AT HIGH POINTS IN DRIPLINE LATERAL.
 - WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

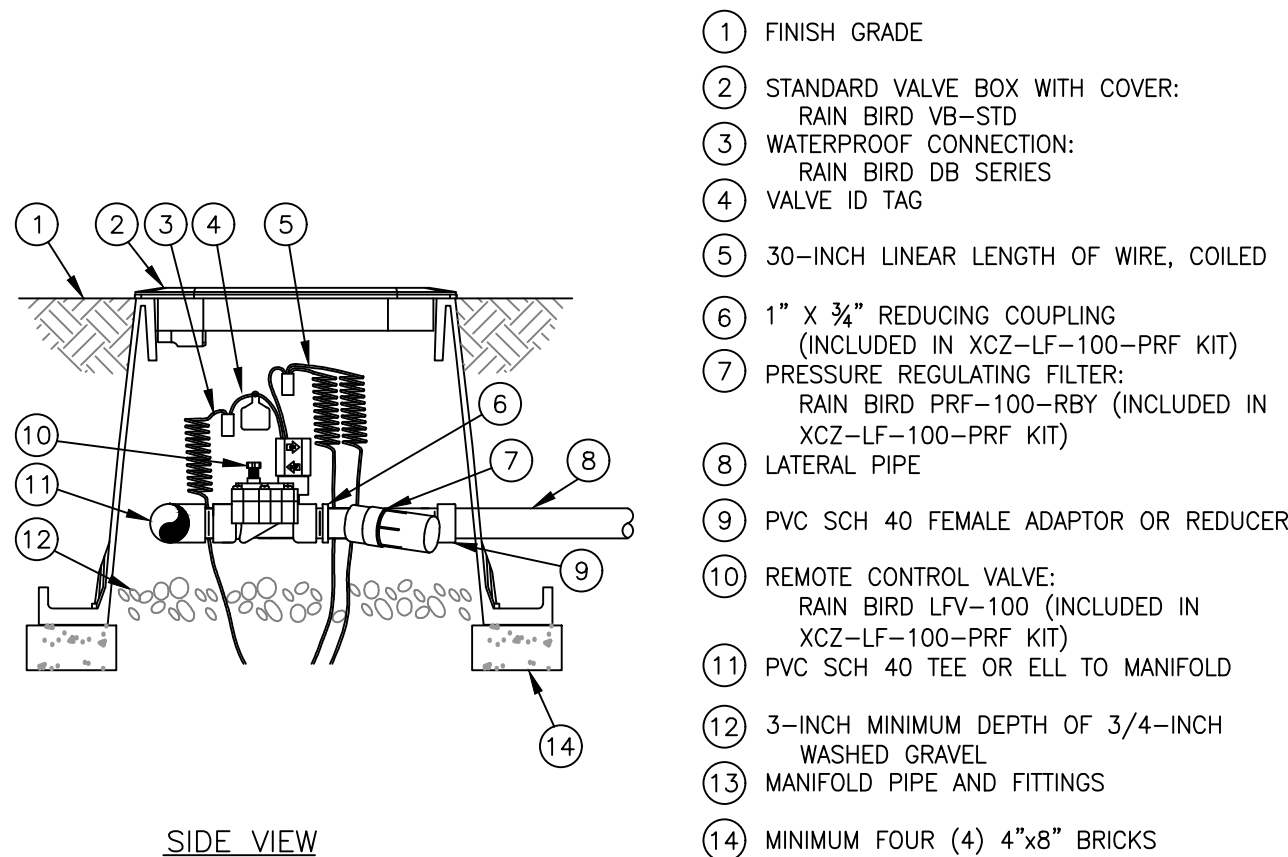
DRIPLINE CENTER FEED LAYOUT

NOT TO SCALE



MASTER VALVE (NORMALLY CLOSED) WITH FLOW SENSOR DETAIL

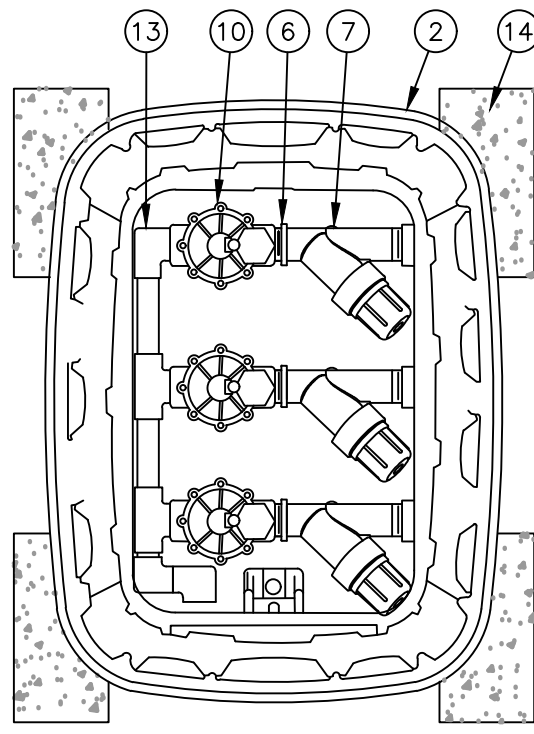
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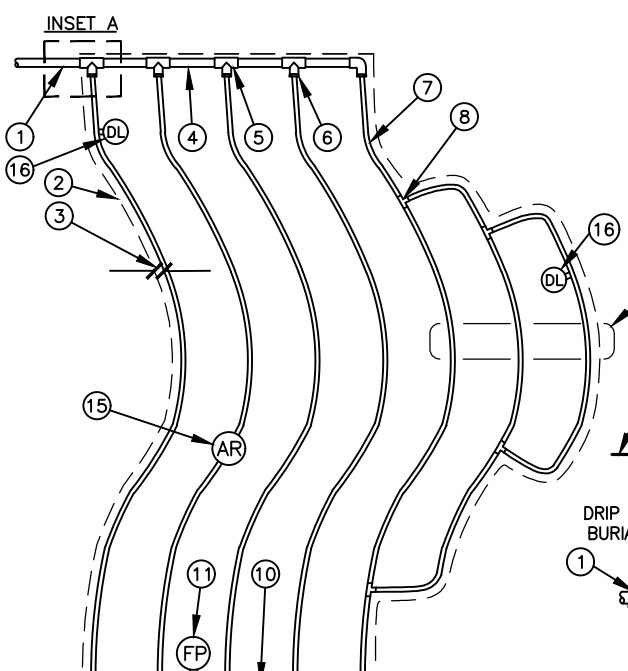
SIDE VIEW

DRIPLINE IRRIGATION VALVE

NOT TO SCALE



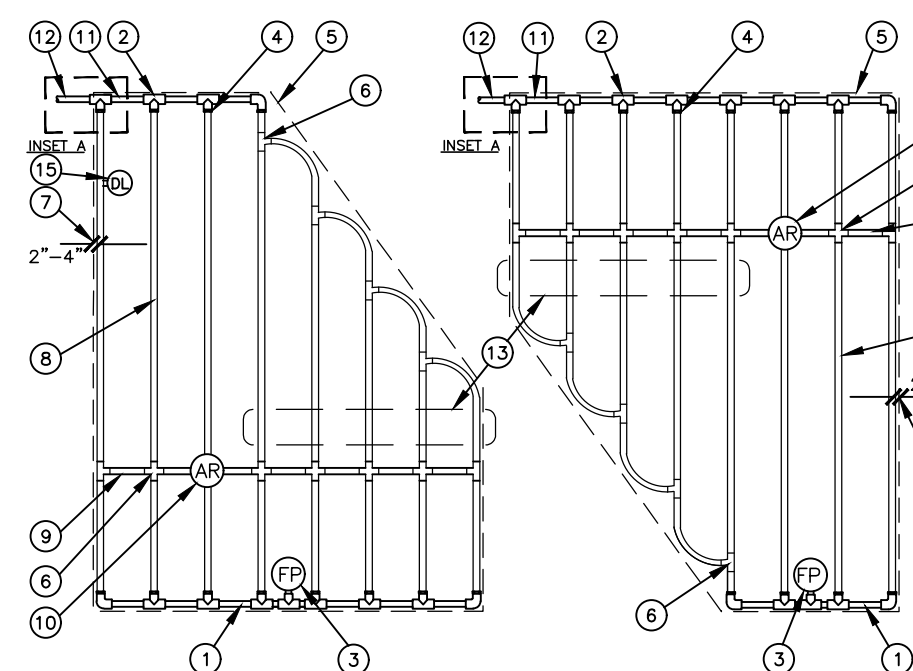
TOP VIEW



DRIPLINE ODD CURVES LAYOUT

NOT TO SCALE

- 1 PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
2 PERIMETER OF AREA
3 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
4 PVC SUPPLY MANIFOLD
5 PVC SCH 40 TEE OR EL (TYPICAL)
6 BARB X MALE FITTING:
RAIN BIRD XFT-TTEE OR
RAIN BIRD XFD-CROSS (TYPICAL)
7 SUB-SURFACE DRIPLINE:
RAIN BIRD XF SERIES DRIPLINE (TYPICAL)
POTABLE: XFS DRIPLINE
NON-POTABLE: XFSP DRIPLINE
8 BARB X BARB INSERT TEE:
RAIN BIRD XFT-TTEE (TYPICAL)
9 TOTAL LENGTH OF SELECTED DRIPLINE SHOULD NOT EXCEED LENGTH SHOWN IN TABLE
10 PVC FLUSH HEADER
11 FLUSH POINT:
SEE RAIN BIRD XFS DETAILS FOR FLUSH POINT INSTALLATION
12 PVC RISER PIPE
13 TURF OR MULCH
14 FINISH GRADE
15 1/2" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050
SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION
16 DRIPLINE INDICATOR. SEE DETAIL FOR ADDITIONAL INFORMATION



DRIPLINE IRREGULAR SHAPED LAYOUT

NOT TO SCALE

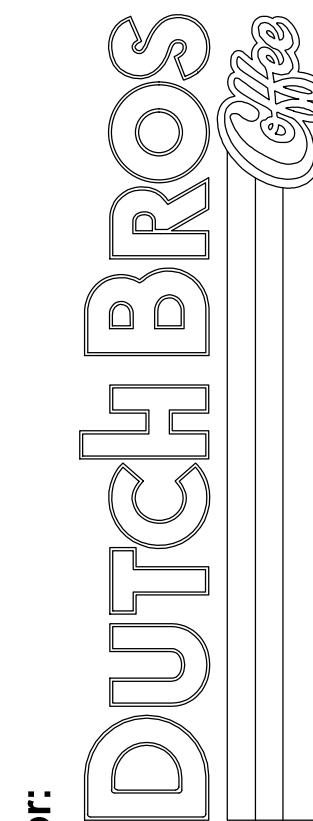
- 1 PVC EXHAUST HEADER
2 PVC SCH 40 TEE OR EL (TYPICAL)
3 FLUSH POINT (TYPICAL)
SEE RAIN BIRD XFSDI DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
4 BARB X MALE FITTING:
RAIN BIRD XFT-TTEE OR
RAIN BIRD XFD-CROSS (TYPICAL)
5 PERIMETER OF AREA
6 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
7 SUB-SURFACE DRIPLINE:
RAIN BIRD XF SERIES DRIPLINE (TYPICAL)
POTABLE: XFS DRIPLINE
NON-POTABLE: XFSP DRIPLINE
8 RAIN BIRD XF SERIES BLANK TUBING
9 1/2" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050
SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION
10 PVC SUPPLY MANIFOLD
11 PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
12 TOTAL LENGTH OF SELECTED DRIPLINE SHOULD NOT EXCEED LENGTH SHOWN IN TABLE
13 PVC SCH 40 RISER PIPE
14 DRIPLINE INDICATOR. SEE DETAIL FOR ADDITIONAL INFORMATION

- NOTES:
- DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE RAIN BIRD XFSDI DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
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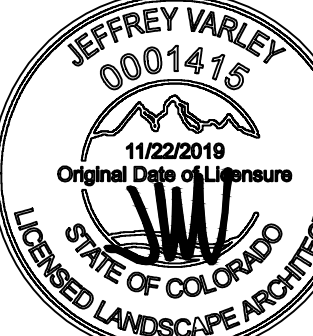
IRRIGATION DETAILS

SEQ PARK MEADOWS AND QUEBEC
LONE TREE, CO

Title:



For:



Scale:

Horizontal

N/A

Vertical

N/A

Designed

JMV

Drawn

JMV

Checked

JMV

Approved

JMV

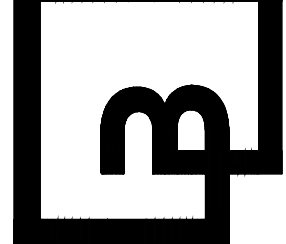
Date

1/13/25

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Job Number

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Sheet

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