

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

LEGAL DESCRIPTION

LOT 1,
FOUNDERS VILLAGE, FILING NO. 24, AMENDMENT NO. 1,
COUNTY OF DOUGLAS,
STATE OF COLORADO

PUBLIC IMPROVEMENT CONSTRUCTION PLANS
AVILLA FOUNDERS VILLAGE
SOUTHEAST 1/4 OF SECTION 8, TOWNSHIP 8 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS, STATE OF COLORADO
TOWN OF CASTLE ROCK PROJECT NO. CD22-0035

GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE TOWN OF CASTLE ROCK (TOR) MUNICIPAL CODE, TOR TECHNICAL MANUALS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE TECHNICAL MANUAL OR ANY APPLICABLE STANDARDS, THE MORE STRINGENT STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE TOR CONSTRUCTION INSPECTOR.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE.

3. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

4. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE TOWN AND ALL UTILITY COMPANIES INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.

5. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOURS NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS/TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.

6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE CRITERIA AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ONSITE AT ALL TIMES.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

8. IF DURING THE CONSTRUCTION PROCESS CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE TOR CONSTRUCTION INSPECTOR IMMEDIATELY.

9. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD UNLESS SPECIFICALLY STATED OTHERWISE.

10. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH MUTCD TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (TOWN, COUNTY OR STATE) FOR APPROVAL PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.

11. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR AS DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED UNLESS SPECIFICALLY NOTED OTHERWISE.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE AND AVAILABLE TO THE TOR CONSTRUCTION INSPECTOR AT ALL TIMES.

13. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTANT ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.

14. ALL INITIAL SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PER THE TEMPORARY EROSION & SEDIMENT CONTROL (TESC) PLAN PRIOR TO ANY EARTH-DISTURBING ACTIVITY. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION AT ALL TIMES. REMOVAL OF CONTROL MEASURES SHALL NOT OCCUR WITHOUT THE APPROVAL OF THE STORMWATER INSPECTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE. THE CONTRACTOR SHALL ALSO COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO CONSTRUCTION GENERAL PERMIT FOR STORMWATER DISCHARGES.

15. THE CONTRACTOR SHALL PROVIDE AN ACTION PLAN IMMEDIATELY FOLLOWING THE PRE-CONSTRUCTION MEETING DETAILING SUFFICIENT MEANS TO MITIGATE DUST ON SITE DURING OVERLOT GRADING, ROCK CRUSHING OR OTHER EARTHWORK ACTIVITIES. IF THE CONTRACTOR FAILS TO CONTROL DUST, ALL EARTH DISTURBING ACTIVITIES SHALL BE STOPPED UNTIL SUFFICIENT MEASURES ARE TAKEN TO THE TOWN'S SATISFACTION. THE CONTRACTOR SHALL ALSO COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO AIR QUALITY REGULATIONS FOR LAND DEVELOPMENT, AS REQUIRED.

16. THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF THE WATER LINES AND DRY UTILITIES.

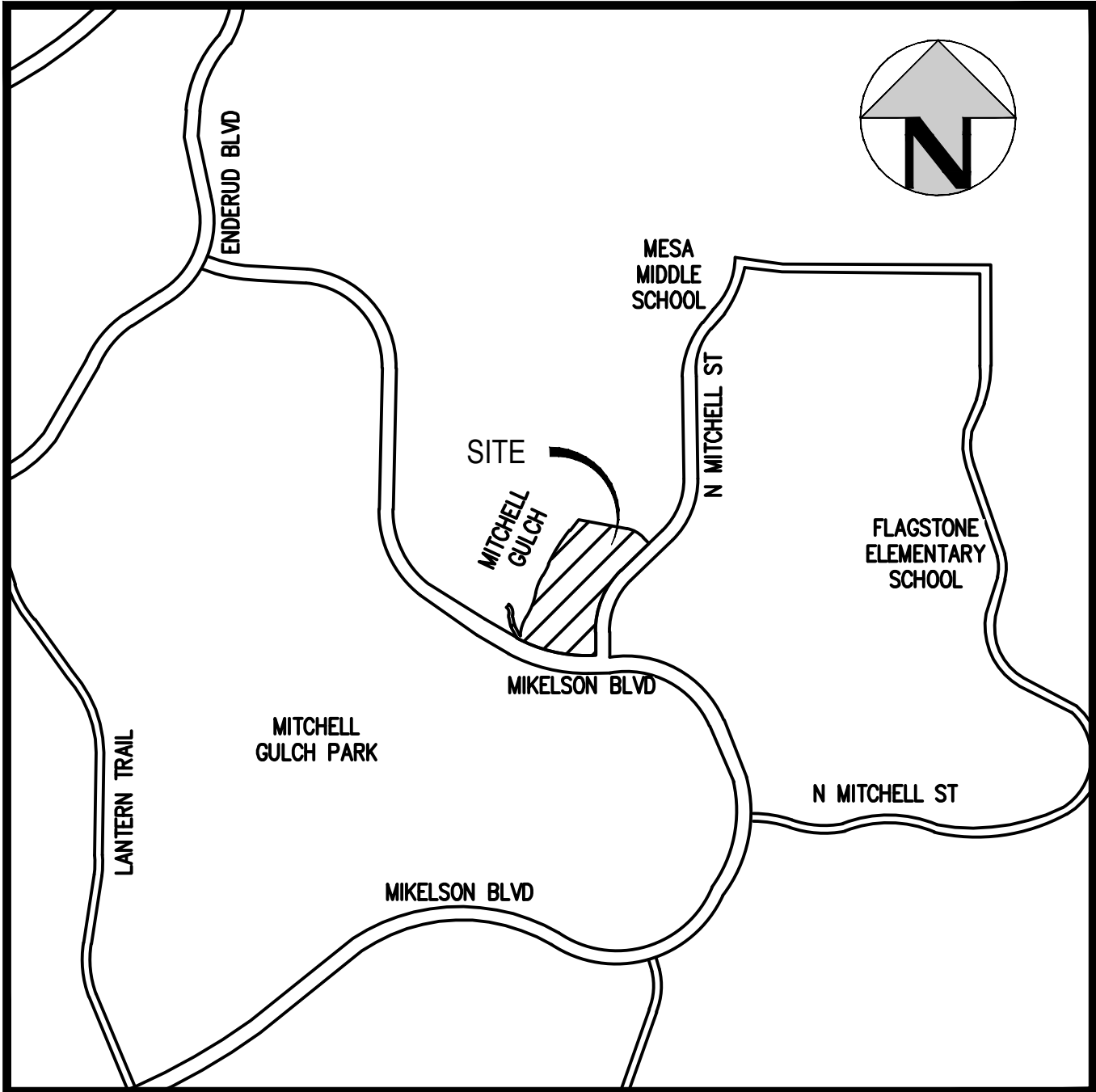
17. THERE SHALL BE NO SITE CONSTRUCTION ACTIVITIES ON SATURDAYS UNLESS SPECIFICALLY APPROVED BY THE TOR CONSTRUCTION INSPECTOR AND NO SITE CONSTRUCTION ACTIVITIES ON SUNDAYS OR HOLIDAYS UNLESS THERE IS PRIOR WRITTEN APPROVAL BY THE PUBLIC WORKS DIRECTOR.

18. NO SOLID OBJECT (EXCLUDING FIRE HYDRANTS AND TRAFFIC CONTROL DEVICES AND TRAFFIC SIGNS) EXCEEDING THIRTY (30) INCHES IN HEIGHT ABOVE THE FLOWLINE ELEVATION OF THE ADJACENT STREET, INCLUDING BUT NOT LIMITED TO BUILDINGS, UTILITY CABINETS, WALLS, FENCES, LANDSCAPE PLANTINGS, CROPS, CUT SLOPES, AND BERMS, SHALL BE PLACED WITHIN SIGHT DISTANCE LINES AND SIGHT DISTANCE EASEMENTS.

19. THIS PROPERTY IS LOCATED WITHIN ZONE X AS PER FEMA FIRM MAP NO. 08035C0306G DATED 03-16-2016.

20. **BENCHMARK:** DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

21. **BASIS OF BEARINGS:** BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.



VICINITY MAP
SCALE: 1" = 1000'

SHEET INDEX	
Sheet Number	Sheet Title
1	COVER
2	NOTES
3	DEMOLITION PLAN
4	SITE PLAN
5	OVERALL GRADING PLAN
6	DETAILED GRADING PLAN
7	DETAILED GRADING PLAN
8	DETAILED GRADING PLAN
9	DETAILED GRADING PLAN
10	DETAILED GRADING PLAN
11	DETAILED GRADING PLAN
12	DETAILED GRADING PLAN
13	DETAILED GRADING PLAN
14	DETAILED GRADING PLAN
15	DETAILED GRADING PLAN
16	DETAILED GRADING PLAN
17	DETAILED GRADING PLAN
18	OVERALL UTILITY PLAN
19	STORM LINE A PLAN & PROFILE
20	STORM LINE A PLAN & PROFILE
21	STORM LINES B, C, D, & E PLANS & PROFILES
22	STORM LINES F, G, H, & J PLANS & PROFILES
23	STORM LINES K, L, M, & N PLANS & PROFILES
24	LANDSCAPE DRAIN PLAN
25	LANDSCAPE DRAIN PLAN
26	LANDSCAPE DRAIN PLAN
27	LANDSCAPE DRAIN PIPE TABLES
28	LANDSCAPE DRAIN PIPE TABLES
29	STORM DETAILS
30	STORM DETAILS
31	WATER LINE A PLAN & PROFILE
32	WATER LINE A PLAN & PROFILE
33	WATER LINE A PLAN & PROFILE
34	WATER SERVICES PLAN
35	WATER SERVICES PLAN
36	WATER SERVICES PLAN
37	WATER SERVICES PLAN
38	WATER SERVICES PLAN
39	WATER SERVICES PLAN
40	WATER SERVICES PLAN
41	WATER SERVICES PLAN
42	WATER SERVICES PLAN
43	WATER SERVICES PLAN

44	WATER DETAILS
45	WATER DETAILS
46	WATER DETAILS
47	OVERALL SANITARY SYSTEM PLAN
48	SANITARY LINE A PLAN & PROFILE
49	SANITARY LINE A PLAN & PROFILE
50	SANITARY LINE A PLAN & PROFILE
51	SANITARY LINES B & C PLAN & PROFILE
52	SANITARY LINES D, E, & F PLAN & PROFILE
53	SANITARY SERVICES PLAN
54	SANITARY SERVICES PLAN
55	SANITARY SERVICES PLAN
56	SANITARY SERVICE PIPE TABLES
57	SANITARY DETAILS
58	SANITARY DETAILS
59	SIGNAGE & STRIPING PLAN
60	DRY UTILITY PLAN
61	PHASING PLAN
62	RAMP DETAILS
63	RAMP DETAILS
64	LANDSCAPE NOTES
65	LANDSCAPE SCHEDULES
66	OVERALL LANDSCAPE PLAN
67	LANDSCAPE PLAN
68	LANDSCAPE PLAN
69	LANDSCAPE PLAN
70	LANDSCAPE PLAN
71	LANDSCAPE ENLARGEMENT
72	LANDSCAPE DETAILS
73	HARDSCAPE DETAILS
74	HARDSCAPE DETAILS
75	HARDSCAPE DETAILS
76	HARDSCAPE DETAILS
77	HARDSCAPE DETAILS
78	IRRIGATION SCHEDULE & NOTES
79	IRRIGATION CHARTS
80	IRRIGATION PLAN
81	IRRIGATION PLAN
82	IRRIGATION PLAN
83	IRRIGATION PLAN
84	IRRIGATION PLAN
85	IRRIGATION DETAILS
86	IRRIGATION DETAILS
87	IRRIGATION DETAILS
88	SITE LIGHTING PHOTOMETRIC
89	LIGHTING DETAILS

LEGEND

	EXISTING	PROPOSED
PROPERTY BOUNDARY	---	---
RIGHT-OF-WAY	---	---
UTILITY EASEMENT	---	---
ACCESS EASEMENT	---	---
ACCESSIBLE ROUTE	---	---
SANITARY SEWER W/ MANHOLE	SS	SS
SANITARY SERVICE W/CLEANOUT	---	---
WATER LINE AND GATE VALVE	W	W
WATER SERVICE	---	---
STORM SEWER W/ MANHOLE & INLETS	ST	ST
WATER METER MANHOLE	---	---
FIRE HYDRANT	---	---
STREET LIGHT	---	---
SIGN	---	---
FENCE	---	---
TRANSFORMER	---	---

INDEMNIFICATION AND ADHERENCE TO STANDARDS STATEMENTS

THESE PLANS HAVE BEEN REVIEWED BY THE TOWN OF CASTLE ROCK FOR CONCEPT ONLY. THE REVIEW DOES NOT IMPLY RESPONSIBILITY BY THE REVIEWING DEPARTMENT, THE TOWN ENGINEER, OR THE TOWN OF CASTLE ROCK FOR ACCURACY AND CORRECTNESS OF THE CALCULATIONS. FURTHERMORE, THE REVIEW DOES NOT IMPLY THAT QUANTITIES OF ITEMS ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSTRUED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE TOWN FOR ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF CASTLE ROCK MUNICIPAL CODE, TECHNICAL MANUALS AND/OR OTHER TOWN-APPROVED APPLICABLE STANDARDS.

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450

DATE

TOWN OF CASTLE ROCK
PUBLIC WORK DEPARTMENT

4175 N. CASTLETON COURT
CASTLE ROCK, CO 80109
P: 720.733.2462
EMAIL: MCAMMALLER@CORGOV.COM

CASTLE ROCK WATER

175 KELLOGG COURT CASTLE
ROCK, CO 80109
P: 720.733.6000
EMAIL: WATER@CORGOV.COM

DEVELOPER



5601 OLD E. WADSWORTH BLVD SUITE 220
ARVADA, CO 80002
P: 720.728.1221
POC: TYLER ELICK
TYLER@NEXMETRO.COM

ARCHITECT



9025 E. MINERAL CIRCLE SUITE 200
CENTENNIAL, CO 80112
P: 720.638.6355
POC: JEFF ALCARAZ
JEFF.ALCAZAR@FELTENGROUP.COM

PLANNER/
LANDSCAPE ARCHITECT



1101 BANNOCK STREET
DENVER, CO 80204
P: 303.892.1166
F: 303.892.1186
POC: KAYLEIGH ROBINSON
ROBINSON@NORRIS-DESIGN.COM

CIVIL ENGINEER



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocher@hksmith.com
POC: RACHEL PATTON
RPATTON@HKSENG.COM

CURRENT OWNER

FOURTH INVESTMENT USA, LLC
POC: JOHN V. HILL
P: 970-470-2087
JVHILL.CO@gmail.com

FIELD CHANGE ORDER TABLE

FCO#	DATE	PURPOSE/DESCRIPTION

ISSUE DATE: 08-11-2022 PROJECT #: 210431	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



Know what's below.
Call before you dig.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

STREET CONSTRUCTION NOTES

1. ALL STREET CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE STREET CONSTRUCTION NOTES LISTED HERE.
2. A PAVING SECTION DESIGN, SIGNED AND SEALED BY A COLORADO REGISTERED PROFESSIONAL ENGINEER, MUST BE SUBMITTED TO THE TCR PUBLIC WORKS DEPARTMENT FOR APPROVAL PRIOR TO ANY STREET CONSTRUCTION ACTIVITY (FULL-DEPTH ASPHALT SECTIONS ARE NOT PERMITTED AT A DEPTH GREATER THAN 8" ASPHALT). THE JOB MIX SHALL BE SUBMITTED FOR APPROVAL PRIOR TO PLACEMENT OF ANY ASPHALT.
3. WHERE PROPOSED PAVING ADJOINS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT A MINIMUM DISTANCE OF 12" FROM THE EXISTING EDGE TO CREATE A CLEAN CONSTRUCTION JOINT. THE DEVELOPER SHALL BE REQUIRED TO REMOVE EXISTING PAVEMENT TO A DISTANCE WHERE A CLEAN CONSTRUCTION JOINT CAN BE MADE.
4. STREET SUBGRADES SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12" AND RE-COMPACTED PRIOR TO SUB-BASE INSTALLATION. NO BASE MATERIAL SHALL BE LAID UNTIL THE SUBGRADE HAS BEEN INSPECTED AND APPROVED BY THE TCR CONSTRUCTION INSPECTOR.
5. VALVE BOXES ARE TO BE BROUGHT UP TO GRADE AT THE TIME OF PAVEMENT PLACEMENT OR OVERLAY. VALVE BOX ADJUSTING RINGS ARE NOT ALLOWED.

SIGNAGE AND STRIPING NOTES

1. ALL SIGNAGE AND STRIPING IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE SIGNAGE AND STRIPING NOTES LISTED HERE.
2. ALL PAINT SHALL BE 15 MIL THICK UPON INSTALLATION AND 8 MIL THICK WHEN DRY.
3. ALL PERMANENT LONGITUDINAL PAVEMENT STRIPING ON ASPHALT SURFACES (CENTERLINES, LANE LINES, BAY LINES, ETC.) SHALL BE INSTALLED USING AN APPROVED REFLECTIVE TRAFFIC PAINT OR PAVEMENT MARKING TAPE. REFLECTIVE BEADS SHALL BE APPLIED IN ACCORDANCE WITH CDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE MANUFACTURER'S REQUIREMENTS. WHEN TAPE IS USED ON AN ASPHALT STREET, IT SHALL BE ROLLED INTO THE FINAL LIFT. ON CONCRETE SURFACES TAPE SHALL BE UTILIZED WITH A CONTRASTING BLACK EDGE AND GROOVED INTO THE PAVEMENT.
4. THERMO-PLASTIC APPLICATIONS SHALL BE AS SPECIFIED IN THE PLANS AND/OR PER TOWN CRITERIA.
5. ALL SURFACES THAT ACCEPT PAINT/THERMO-PLASTIC STRIPING OR PRE-FORMED MARKINGS SHALL BE FIRST SANDBLASTED AND THOROUGHLY CLEANED PRIOR TO INSTALLATION OF STRIPING OR MARKINGS.
6. ALL ARROW MARKINGS SHALL BE PRE-FORMED TAPE, THERMO-PLASTIC OR EPOXY-PAINTED.
7. STOP BARS SHALL BE 90 MIL THERMO-PLASTIC.
8. ALL ROADWAY SIGNAGE SHALL CONFORM TO THE MUTCD AND/OR THE TOWN'S CRITERIA.
9. ALL SIGNPOSTS SHALL UTILIZE BREAKAWAY ASSEMBLIES AND FASTENERS, PER THE TCR STANDARD DETAIL.

FIRE NOTES

1. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN DRIVE LANES FOR EMERGENCY VEHICLE INGRESS AND EGRESS, INCLUDING SNOW REMOVAL.
2. EMERGENCY VEHICLE ACCESS ROAD IS REQUIRED TO ALLOW ACCESS WITHIN 150' OF ALL EXTERIOR OF THE BUILDING BY AN APPROVED ROUTE.
3. FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRES APPARATUS AND SHALL BE PROVIDED WITH A SURFACE SO AS TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES. ACCESS ROAD SHALL BE EITHER CONCRETE, ASPHALT, OR OTHER APPROVED ALTERNATIVE MATERIAL ACCOMPANIED WITH AN ENGINEER'S STAMP STATING THE MATERIAL WILL SUPPORT A 75,000 POUND IMPOSED LOAD.
4. FIRE HYDRANT(S) ARE REQUIRED TO BE INSTALLED AND MADE SERVICEABLE PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ONTO THE SITE AND DURING THE TIME OF VERTICAL CONSTRUCTION.
5. NO PARKING FIRE LANE SIGNS ARE REQUIRED IN AREAS THAT MEET THE FOLLOWING CRITERIA AND IN AREAS DESIGNATED BY THE FIRE PREVENTION BUREAU. SIGNS SHALL BE POSTED ON BOTH SIDES OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS AND DRIVEWAYS LESS THAN 26 FEET WIDE. SIGNS SHALL BE POSTED ON ONE SIDE ONLY OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS BETWEEN 26 FEET WIDE AND 32 FEET WIDE. NO SIGNAGE IS REQUIRED FOR ACCESS ROADWAY FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS EXCEEDING 32 FEET WIDE.
6. WHEN FIRE APPARATUS ACCESS ROADS OR A WATER SUPPLY FOR FIRE PROTECTION IS REQUIRED TO BE INSTALLED, SUCH PROTECTION SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ONTO THE SITE AND THE BUILDING CONSTRUCTION GOING VERTICAL.
7. TRACER WIRE SHALL BE INSTALLED ON ALL FIRE SERVICE LINES AND AT ALL FIRE HYDRANTS. REFER TO TOWN OF CASTLE ROCK STANDARD DETAILS, THE WATER LINE CONSTRUCTION NOTES, AND THE TRACER WIRE INSTALLATION NOTES LISTED HEREIN.

WATER LINE CONSTRUCTION NOTES

1. ALL WATER LINE CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE WATER LINE CONSTRUCTION NOTES LISTED HEREIN.
2. ALL WATER LINES SHALL BE: 1) DUCTILE IRON PIPE (DIP), CONFORMING TO THE REQUIREMENTS OF AWWA C150, CL350 (6"-12"), CL250 (16" AND 20"), CL200 (>24"), WITH PUSH-ON GASKETED JOINTS OR MECHANICAL JOINT ENDS, IN CONFORMANCE WITH AWWA C111. PIPE SHALL BE CEMENT-LINED IN ACCORDANCE WITH AWWA C104, AND AN EXTERIOR COATING IN ACCORDANCE WITH C151; OR 2) PVC PIPE, CONFORMING TO AWWA C900 FOR PIPE SIZES 8" AND 12", CL305 (DR14) AND AWWA C905 FOR PIPE SIZE OF 16", CL235 (DR18). MINIMUM DISTRIBUTION MAIN SIZE SHALL BE 8". WATER LINES THAT ARE 10", 14", AND 18" IN DIAMETER ARE NOT PERMITTED.
3. WATER LINE FITTINGS SHALL BE DIP CONFORMING TO AWWA C153 OR C110 AND SHALL HAVE A PRESSURE RATING NOT LESS THAN THE PIPE. ALL FITTINGS SHALL BE MECHANICAL JOINT, UNLESS APPROVED BY CASTLE ROCK WATER.
4. ALL DIP AND FITTINGS SHALL BE ENCASED IN POLYETHYLENE TO PREVENT CORROSION. POLYETHYLENE WRAP, TAPE AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AWWA C105.
5. GATE VALVES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AWWA C509-1 AND AWWA C515-01, AS APPROPRIATE, AND SHALL BE DUCTILE IRON BODY AND BONNET, RESILIENT-SEATED WEDGE GATE, NON-RISING STEM TYPE, O-RING SEALS, AND SLIP-ON CONNECTIONS (TAPPING VALVES, WHERE ALLOWED, SHALL BE FLANGE X MJ). VALVE ENDS SHALL BE MECHANICAL JOINT, UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE VALVES SHALL BE SUITABLE FOR A WORKING PRESSURE OF 200 PSI. THEY SHALL BE CLOSED BY TURNING CLOCKWISE AND SHALL HAVE TWO-INCH SQUARE CAST IRON OPERATING NUTS WITH AN ARROW CAST IN THE NUT INDICATING THE DIRECTION OF OPENING. VALVES SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C105. THEY SHALL BE OF SUCH DESIGN AS TO MAINTAIN THE FULL AREA OF THE PIPE THROUGH THE VALVE WHEN OPEN AND SHALL BE DESIGNED TO TAKE FULL PRESSURE ON EITHER FACE. VALVE SHALL HAVE TYPE 304 STAINLESS STEEL BONNET BOLTS AND NUTS AND TYPE 304 STAINLESS STEEL O-RING GLAND BOLTS AND NUTS. VALVES SHALL BE MANUFACTURED BY AMERICAN FLOW CONTROL, KENNEDY OR MUELLER AND SHALL HAVE THE MANUFACTURER'S NAME OR INITIALS AND THE PRESSURE RATING CAST ON THE BODY.
6. ALL FIRE HYDRANTS SHALL BE PACER WB67-250"BY WATEROUS CO. OR SUPER CENTURION 250"BY MUELLER CO., OPENING TO THE LEFT. REFER TO TCR STANDARD DETAIL W-11.
7. ALL WATER LINES SHALL BE BURIED AN ABSOLUTE MINIMUM OF 5 FEET FROM FINAL GRADE TO THE TOP OF THE WATER MAIN. THE MAXIMUM BURY DEPTH SHALL BE 6 FEET, UNLESS ADDITIONAL DEPTH IS REQUIRED FOR UTILITY CROSSINGS OR OTHER CONFLICTS. WHEREVER SUCH CROSSINGS OR CONFLICTS OCCUR, THE TCR STANDARD DETAIL W-17 SHALL BE USED.
8. ALL WATER LINES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL W-21.
9. CONTRACTOR SHALL MAINTAIN A MINIMUM 18-INCH VERTICAL CLEARANCE AND 10-FOOT HORIZONTAL CLEARANCE EDGE-TO-EDGE BETWEEN ALL WATER LINES AND ANY OTHER PIPED UTILITIES.
10. ALL BENDS, TEES, FIRE HYDRANTS AND PLUGS AT DEAD-END MAINS SHALL BE RESTRAINED FROM THRUST BY USING METALLIC RESTRAINTS PER TCR STANDARD DETAIL W-18 IN COMBINATION WITH CONCRETE THRUST BLOCKS PER TCR STANDARD DETAIL W-22.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL FIRE HYDRANTS AND VALVE BOXES TO FINISH GRADE IN ACCORDANCE WITH TCR STANDARD DETAILS W-10 AND W-11.
12. PRIOR TO CONNECTING TO THE TOWN'S EXISTING WATER SYSTEM, ALL NEW WATERLINES AND/OR SEGMENTS OF WATERLINES SHALL BE DISINFECTED, PRESSURE TESTED, AND BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH SECTION 450.5 OF THE TOWN OF CASTLE ROCK CONSTRUCTION METHODOLOGY AND MATERIALS MANUAL; AWWA C651-14 AND C800-5-2; AND DETAILS W-35A AND/OR W-35B. PLEASE NOTE THAT THIS DISINFECTION AND TESTING WILL BE PERFORMED WHILE THE NEW WATERLINES AND/OR SEGMENTS OF WATERLINES ARE NOT PHYSICALLY CONNECTED TO THE TOWN'S EXISTING WATER SYSTEM. TOWN AND CONTRACTOR SHALL FURNISH MATERIALS AS SHOWN ON DETAILS W-35A AND/OR W-35B. CONTRACTOR SHALL PERFORM ALL PROCEDURES FOR TESTING, FLUSHING AND DISINFECTING OF ALL WATER LINES. TESTING SHALL BE DONE IN THE PRESENCE OF THE TCR CONSTRUCTION INSPECTOR. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOUR NOTICE TO, AND OBTAIN APPROVAL FROM THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720)733-2200, PRIOR TO DISINFECTION, PRESSURE TESTING, AND BACTERIOLOGICAL TESTING OF ANY NEW WATERLINES AND/OR SEGMENTS OF WATERLINES.
13. DISTANCES FOR WATER LINES ARE HORIZONTAL DISTANCE FROM THE CENTER OF THE FITTING TO CENTER OF THE FITTING. THEREFORE, DISTANCES SHOWN ON THE PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND FITTING DIMENSIONS.
14. ALL DOMESTIC WATER SERVICE LINES SHALL BE TYPE K COPPER INSULATED WITH POLYWRAP. FROM THE MAIN TO THE METER, THE WATER METER SHALL BE SUPPLIED BY THE TOWN AND INSTALLED BY THE CONTRACTOR. THE WATER METER WILL BE AVAILABLE FOR PICK UP AT CASTLE ROCK WATER. THE INDIVIDUAL PICKING UP THE WATER METER MUST HAVE PROOF OF A PERMIT AND MUST HAVE PAID ALL FEES ASSOCIATED WITH THE WATER METER.
15. WATER LINE TRENCHES SHALL BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES, IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REQUIREMENTS. FOR ALL EXCAVATION OPERATIONS, SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
16. WATER LINES SHALL BE ALIGNED 6 FEET OFF THE NORTH AND EAST GUTTER FLOW LINES OF PUBLIC STREETS WHEREVER POSSIBLE. SEE DETAIL W-13.
17. WHERE WATER LINE IMPROVEMENTS ARE DIFFICULT TO LOCATE ON THE SURFACE, THE CONTRACTOR SHALL BE REQUIRED TO INSTALL PERMANENT WATER LINE MARKERS, IN ACCORDANCE WITH TCR STANDARD DETAIL W-23, OR AT THE DISCRETION OF THE TCR CONSTRUCTION INSPECTOR.
18. TRACER WIRE SHALL BE USED ON ALL DIP AND PVC WATER MAINS, AND WARNING TAPE SHALL BE PLACED 1 FOOT ABOVE ALL DIP AND PVC PIPE. REFER TO TOWN OF CASTLE ROCK STANDARD TRACER WIRE REQUIREMENTS, IN THESE GENERAL NOTES. TEST STATIONS SHALL BE

CONSTRUCTED PER STANDARD DETAIL W-28.

19. THE MINIMUM DISTANCE BETWEEN TEES, CROSSES, VALVES, AND BENDS SHALL BE 10 FEET WHEREVER POSSIBLE.
20. MAXIMUM DEFLECTION FOR WATER MAINS SHALL NOT EXCEED ONE-HALF OF THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION OR 2.5 DEGREES, WHICHEVER IS LESS.
21. ALL RESIDENTIAL WATER SERVICE LINES SHALL BE CONSTRUCTED PERPENDICULAR TO THE FRONT PROPERTY LINE IN CONFORMANCE WITH THE TOWN OF CASTLE ROCK WATER SYSTEM DESIGN CRITERIA MANUAL AND WATER DETAILS.
22. THE MAXIMUM DEFLECTION OF DOMESTIC WATER SERVICE LINES AND IRRIGATION LINES SHALL NOT EXCEED THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION.
23. THE SIZE OF THE IRRIGATION TAP, LINE, METER AND BACKFLOW PREVENTION ASSEMBLY SHALL BE THE SAME TO A MINIMUM DISTANCE OF 10 PIPE DIAMETERS PAST THE WINTERIZATION TEE.
24. THE MINIMUM HORIZONTAL SEPARATION BETWEEN UTILITY LINES CARRYING THE SAME MATERIAL (E.G., WATER AND WATER) SHALL BE 5 FEET.
25. WHEN INSTALLING CUT IN TEES OR OTHER APPURTENANCES ON/IN AN EXISTING WATER LINE, THE PIPE MATERIAL BETWEEN THE EXISTING WATER LINE AND THE CUT IN TEE OR OTHER APPURTENANCE SHALL REMAIN CONSISTENT.
26. CONTRACTOR IS RESPONSIBLE TO PROVIDE BACKFLOW PREVENTION DOWNSTREAM OF THE METER. ACCEPTABLE BACKFLOW PREVENTION ASSEMBLIES ARE AS FOLLOWS:
- COMMERCIAL POTABLE WATER SERVICE: REDUCED PRESSURE ASSEMBLY.
 - RESIDENTIAL POTABLE WATER SERVICE: DOUBLE CHECK VALVE ASSEMBLY, REDUCED PRESSURE ASSEMBLY.
 - COMMERCIAL FIRE SERVICE: REDUCED PRESSURE DETECTOR ASSEMBLY, DOUBLE CHECK VALVE DETECTOR ASSEMBLY.
 - RESIDENTIAL FIRE SERVICE: REDUCED PRESSURE DETECTOR ASSEMBLY, DOUBLE CHECK VALVE DETECTOR ASSEMBLY.
 - COMMERCIAL AND MULTIFAMILY IRRIGATION WATER SERVICE: REDUCED PRESSURE ASSEMBLY.

THE DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) IS THE ONLY BACK FLOW PREVENTION DEVICE RATED FOR HORIZONTAL OR VERTICAL INSTALLATION.

STORM DRAINAGE CONSTRUCTION NOTES

1. ALL STORM DRAINAGE CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE STORM DRAINAGE CONSTRUCTION NOTES LISTED HERE.
2. ALL STORM DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE (RCP) PER ASTM C76, CL III INSTALLED WITH FLEXIBLE PLASTIC (BITUMEN) GASKETS, ACCORDING TO THE MANUFACTURER'S INSTALLATION GUIDELINES. ANY STORM DRAINAGE PIPE UNDER A PROPOSED OR FUTURE TRAFFIC AREA SHALL BE RCP CL III AS A MINIMUM. RCP TO BE JACKED SHALL BE CL-V AS A MINIMUM.
3. ALL STORM DRAINAGE PIPES SHALL HAVE A MINIMUM COVER OF 24" UNLESS LOAD CALCULATIONS ARE PROVIDED. UNDER NO CIRCUMSTANCES WILL ANY PIPE HAVE LESS THAN 18" COVER FROM THE FINISH SURFACE TO THE OUTSIDE WALL OF THE PIPE.
4. ALL STORM DRAINAGE PIPES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL SD-2.
5. ALL STORM DRAINAGE TRENCHES SHALL BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES AND IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REQUIREMENTS. ALL EXCAVATION OPERATION SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
6. ALL MANHOLE RIM ELEVATIONS GIVEN ON THESE PLANS ARE TO BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL SET THE FINAL RIM ELEVATION BASED ON THE COMPLETED FINISH SURFACE.
7. ALL STORM DRAINAGE PIPES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10' FROM ALL WATER LINES. WHERE LINES CROSS, THERE SHALL BE A MINIMUM OF 18" CLEAR VERTICAL SEPARATION.
8. ALL INLETS AND MANHOLES SHALL BE PLACED ON A MINIMUM OF 1' OF ¾" WASH ROCK. IF ADDITIONAL SUBGRADE IS DISTURBED, EXCAVATION SHALL BE BACKFILLED WITH ¾" WASH ROCK OR OTHER APPROVED STRUCTURAL SOIL COMPACTED TO 95% OF ASTM D698 UNLESS OTHERWISE INSTRUCTED BY THE INSPECTOR.

SANITARY SEWER CONSTRUCTION NOTES

1. ALL SANITARY SEWER CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE SANITARY SEWER CONSTRUCTION NOTES LISTED HEREIN.
2. ALL SANITARY SEWER PIPELINES SHALL BE PVC, SDR-35, IN ACCORDANCE WITH ASTM D-3034, BELL AND SPIGOT WITH ELASTOMERIC SEAL.
3. ALL SANITARY SEWER PIPELINES SHALL HAVE A MINIMUM COVER OF 5 FEET AND MAXIMUM COVER OF 20 FEET.
4. ALL SANITARY SEWER PIPELINES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL SS-8.
5. ALL MANHOLE RIM ELEVATIONS GIVEN ON THESE PLANS ARE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL SET THE FINAL RIM ELEVATION BASED ON THE COMPLETE FINISH SURFACE AND PER TCR STANDARD DETAIL SS-3.
6. SANITARY SEWER PIPELINE SHALL BE ALIGNED 6 FEET OFF THE SOUTH AND WEST GUTTER FLOW LINES OF PUBLIC STREETS WHEREVER POSSIBLE.
7. ALL SEWER LINES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET EDGE-TO-EDGE FROM ALL WATER LINES. WHERE LINES CROSS, THERE SHALL BE A MINIMUM OF 18" CLEAR VERTICAL SEPARATION.
8. ALL SANITARY SEWER LINES MUST BE TESTED IN ACCORDANCE WITH SECTION 450.6 OF THE TOWN OF CASTLE ROCK CONSTRUCTION METHODOLOGY AND MATERIALS MANUAL IN THE PRESENCE OF A TCR CONSTRUCTION INSPECTOR.
9. ALL SANITARY SEWER LINE TRENCHES SHALL BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES, IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REQUIREMENTS. ALL EXCAVATION OPERATION SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. SANITARY SEWER SERVICES SHALL BE CONNECTED A MINIMUM OF 5 FEET OUTSIDE OF MANHOLES WITH A WYE CONNECTION IN ACCORDANCE WITH TCR STANDARD DETAIL SS-2.
11. MINIMUM COVER FOR SANITARY SEWER SERVICE LINES SHALL BE 5 FEET AND THE MINIMUM SLOPE SHALL BE 2.0%.
12. ALL SANITARY SEWER SERVICE LINES SHALL BE CONSTRUCTED ALONG THE SHORTEST AND STRAIGHTEST ROUTE POSSIBLE IN CONFORMANCE WITH THE TOWN OF CASTLE ROCK WASTEWATER SYSTEM DESIGN CRITERIA MANUAL.
13. THE MINIMUM HORIZONTAL SEPARATION BETWEEN UTILITY LINES CARRYING THE SAME MATERIAL (E.G., WASTEWATER AND WASTEWATER) SHALL BE 5 FEET.
14. THE PLUM CREEK WASTEWATER AUTHORITY MUST APPROVE OIL AND GREASE INTERCEPTORS FOR COMMERCIAL INSTALLATIONS.
15. ALL MANHOLES SHALL BE PLACED ON A MINIMUM OF 1' OF ¾" WASH ROCK. IF ADDITIONAL SUBGRADE IS DISTURBED, EXCAVATION SHALL BE BACKFILLED WITH ¾" WASH ROCK OR OTHER APPROVED STRUCTURAL SOIL COMPACTED TO 95% OF ASTM D698 UNLESS OTHERWISE INSTRUCTED BY THE INSPECTOR.

LANDSCAPE NOTES

1. NON-IRRIGATED NATIVE SEED AREAS SHALL BE INSTALLED USING THE TOWN OF CASTLE ROCK GRADING EROSION AND SEDIMENT CONTROL MANUAL (GESCO) STANDARD DETAIL #17.
2. NO TURF AND/OR OVERHEAD IRRIGATION ON SLOPES 3:1.
3. NO SLOPES GREATER THAN 3:1 ARE PERMITTED.
4. TOP SOIL, IF DISTURBED SHALL BE STOCK PILED AND REUSED ON THE SITE.
5. NO MORE THAN SIXTY PERCENT OF THE TOTAL COMMERCIAL LANDSCAPE AREA SHALL INCLUDE IRRIGATED TURF GRASS.
6. NO INDIVIDUAL PLANT MAY HAVE SUPPLEMENTAL WATER DEMAND GREATER THAN 15" PER GROWING SEASON.

IRRIGATION NOTES

1. THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A BACKFLOW PREVENTION ASSEMBLY APPROVED BY THE TOWN OF CASTLE ROCK.
2. IRRIGATION TAP, LINE, METER AND BACKFLOW PREVENTION ASSEMBLY MUST BE THE SAME SIZE FROM THE TAP TO A MINIMUM DISTANCE OF 10 PIPE DIAMETERS PAST THE BACKFLOW PREVENTION ASSEMBLY AND WINTERIZATION TEE.
3. WATER WASTE IS NOT ALLOWED PER THE TOWN OF CASTLE ROCK'S WATER USE MANAGEMENT PLAN. THEREFORE, ALL NOZZLES ARE TO BE FINE TUNE/ADJUSTED SO THAT OVERSPRAY ONTO HARD SURFACES IS ELIMINATED.
4. IRRIGATION IS NOT PERMITTED ON 3:1 SLOPES.
5. VELOCITY SHALL NOT EXCEED 7.5 FPS THROUGH THE WATER METER.
6. NO OVERHEAD IRRIGATION IN AREAS LESS THAN 10 FEET WIDE.
7. THERE IS TO BE NEITHER PLANT MATERIAL NOR IRRIGATION IN AREAS LESS THAN 4 FEET WIDE.

TRACER WIRE INSTALLATION NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT TOWN OF CASTLE ROCK STANDARD NOTES, DETAILS AND SPECIFICATIONS.
2. TRACER WIRE IS REQUIRED ON ALL UNDERGROUND PIPE. A MAINLINE TRACER WIRE MUST BE INSTALLED WITH ALL SERVICE LATERAL TRACER WIRES PROPERLY CONNECTED TO ENSURE FULL LOCATING CAPABILITIES FROM A SINGLE CONNECTION POINT.
3. TRACER WIRE COLORS FOR STORM SEWER, DRAIN LINES, SANITARY SEWER, AND WATER MAINS SHALL BE IN ACCORDANCE WITH AMERICAN PUBLIC WORKS ASSOCIATION (APWA) UNIFORM COLOR CODE. ALL GROUNDING WIRE SHALL BE RED OR BLACK.
4. "OPEN TRENCH" TRACER WIRE SHALL BE #8 OR #10 AWG COPPER SOLID OR #12 AWG COPPER CLAD HIGH STRENGTH WITH MINIMUM 30-MIL HDPE INSULATION THICKNESS COMPLYING WITH ASTM D-1248, AND A MINIMUM AVERAGE TENSILE BREAK LOAD OF 450 LBS.
5. TRACER WIRE SHALL BE SECURED EVERY 5 FEET TO THE TOP OF THE PIPE AND TO THE SIDES OF MANHOLES AND INLETS USING TAPE, PLASTIC TIES, OR APPROVED ADHESIVE AT 5-FOOT INTERVALS.
6. TRACER WIRE SHALL BE SECURELY BONDED TOGETHER AT ALL WIRE JOINTS WITH LOCKABLE, CORROSION PROOF, WATERTIGHT CONNECTORS SPECIFICALLY DESIGNED FOR DIRECT BURIAL, AND FILLED WITH NON-HARDENING DIELECTRIC SILICONE SEALANT.
7. ANY DAMAGE OCCURRING DURING INSTALLATION OF THE TRACER WIRE MUST BE IMMEDIATELY REPAIRED BY REMOVING THE DAMAGED WIRE AND INSTALLING A NEW SECTION OF WIRE WITH APPROVED CONNECTORS. TAPING AND/OR SPRAY COATING IS NOT ALLOWED.
8. A MINIMUM OF 2 FEET OF EXCESS/SLACK WIRE IS REQUIRED IN ALL TRACER WIRE TEST STATIONS, MANHOLES, AND INLETS AFTER MEETING FINAL ELEVATION.
9. TRACER WIRE MUST BE PROPERLY GROUNDING AT ALL DEAD ENDS (MANHOLES, INLETS, OUTFALLS, FUTURE CONNECTIONS, ETC.) USING A MAGNESIUM GROUND ROD. THE GROUND ROD WILL BE CONNECTED TO 12- OR 14-AWG COPPER-CLAD STEEL WIRE WITH 30 MIL HDPE INSULATION AND RATED FOR DIRECT BURY USE AT 30 VOLTS WITH 21% CONDUCTIVITY.
10. TEST STATIONS SHALL PROVIDE PROTECTED ACCESS FOR A DIRECT CONNECTION TO THE TRACER WIRE SYSTEM AT GROUND SURFACE.
11. TRUNK LINE TRACER WIRE SHALL BE CONTINUOUS, AND PASS AROUND THE OUTSIDE OF VALVES AND OTHER STRUCTURES ON THE NORTH OR EAST SIDE.
12. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS (EXCAVATION, CONCRETE, TRAFFIC CONTROL, ETC.) AND PROVIDE A MINIMUM TWENTY-FOUR (24) HOURS NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, TO REQUEST A TRACER WIRE INSPECTION.
13. ALL NEW TRACER WIRE INSTALLATIONS SHALL BE TESTED AND LOCATED PRIOR TO ACCEPTANCE. TESTING AND LOCATING SHALL BE PERFORMED BY THE TCR CONSTRUCTION INSPECTOR AT THE COMPLETION OF ROUGH GRADING AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. ANY DEFICIENCIES SHALL BE CORRECTED PRIOR TO FINAL ACCEPTANCE.

FILEPATH: K:\210431\ENGINEERING\CD\CD - COVER.DWG LAYOUT: LAYOUT2
DESIGNED BY: MJS
CHECKED BY: RCP
PLOTTED: MON 04/10/23 8:35:16A BY: MILES SUSTAD



Know what's below.
Call before you dig.

DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

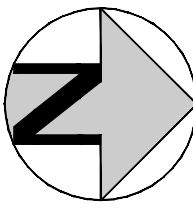


AVILLA FOUNDERS VILLAGE
NOTES

PROJECT #: 210431
SHEET NUMBER

2

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



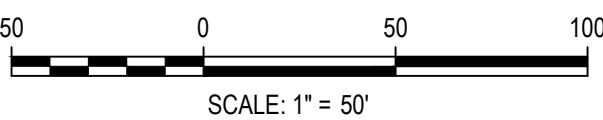
HORIZONTAL CONTROL
BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION
I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

**PRELIMINARY
NOT FOR
CONSTRUCTION**

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date



DESIGNED BY: <DESIGNER>
CHECKED BY: <REVIEWER>
DRAWN BY: <DRAWN>

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



**HARRIS
KOCHER
SMITH**

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



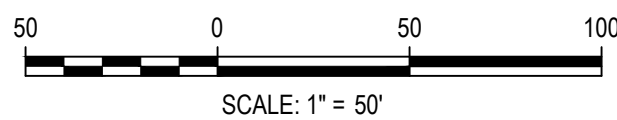
AVILLA FOUNDERS VILLAGE
DEMOLITION PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILEPATH: K:\210431\ENGINEERING\G0303 - SITE PLANNING LAYOUT LAYOUT: 10-31-2022
DESIGNED BY: <DESIGNER> CHECKED BY: <REVIEWER> DRAWN BY: <DRAWN>
PLOTTED: MON 04/10/23 8:35:34A BY: MILES SUSTAD



Know what's below.
Call before you dig.



ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

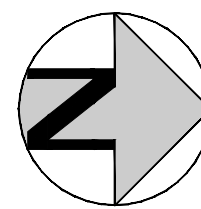


AVILLA FOUNDERS VILLAGE
SITE PLAN

PROJECT #: 210431
SHEET NUMBER

4

4 OF 87



LEGEND:

	EXISTING	PROPOSED
PROPERTY BOUNDARY		
RIGHT OF WAY		
UTILITY EASEMENT		
ACCESS EASEMENT		
FIRE HYDRANT		
SIGN		
STREET LIGHT		
STORM MANHOLE & INLET		
SANITARY MANHOLE		
WATER METER		
TRANSFORMER		

REFER TO SIA ARG22-0024 FOR
CONDITIONS AND DETAILS REGARDING
ROUNDAABOUT DESIGN AND CONSTRUCTION,
TIMING OF BUILDING PERMITS, AND OTHER
OFFSITE IMPROVEMENTS.

MITCHELL STREET
90' PUBLIC ROW

MITCHELL GULCH
TRACT S
FOUNDERS VILLAGE FILING NO. 24
REC NO. 2006064806
OWNER: TOWN OF CASTLE ROCK

TRACT C BELLA MESA
FILING NO. 1
ZONED PUD

TRACT B
FOUNDERS VILLAGE FILING NO. 24
AMENDMENT NO. 1
REC NO.
OWNER: TOWN OF CASTLE ROCK

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE
OF THE NORTHEAST QUARTER OF
SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A
#6 REBAR WITH A 3.25" ALUMINUM CAP
STAMPED: SURVCON 2006 PLS 30289 AND
AT THE CENTER-EAST SIXTEENTH CORNER
BY A 2.5" PIPE WITH A 3.5" ALUMINUM
CAP STAMPED: 1986 PLS 22100, AS
BEARING SOUTH 88°58'05" WEST, PER THE
PLAT OF FOUNDERS VILLAGE FILING NO. 24
AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4"
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

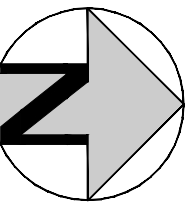
PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE
PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH
ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO
STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY
RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID
PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date _____

Development Services

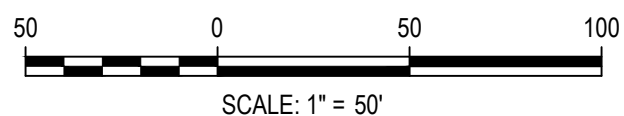
DATE

PROJECT #: 210431

SHEET NUMBER

5

5 OF 87



DESIGNED BY: <DESIGNER>
CHECKED BY: <REVIEWER>
DRAWN BY: <DRAWN>

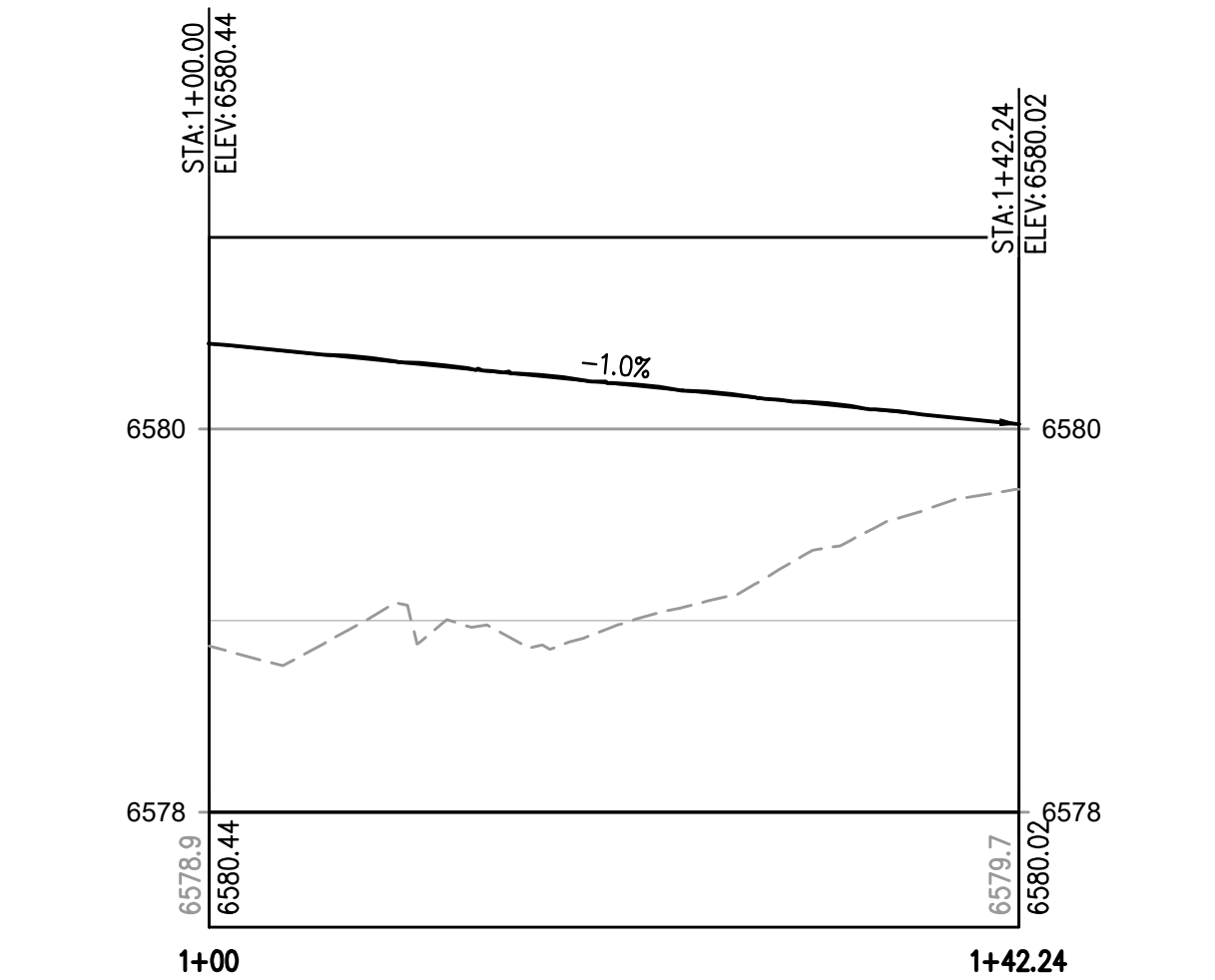
ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

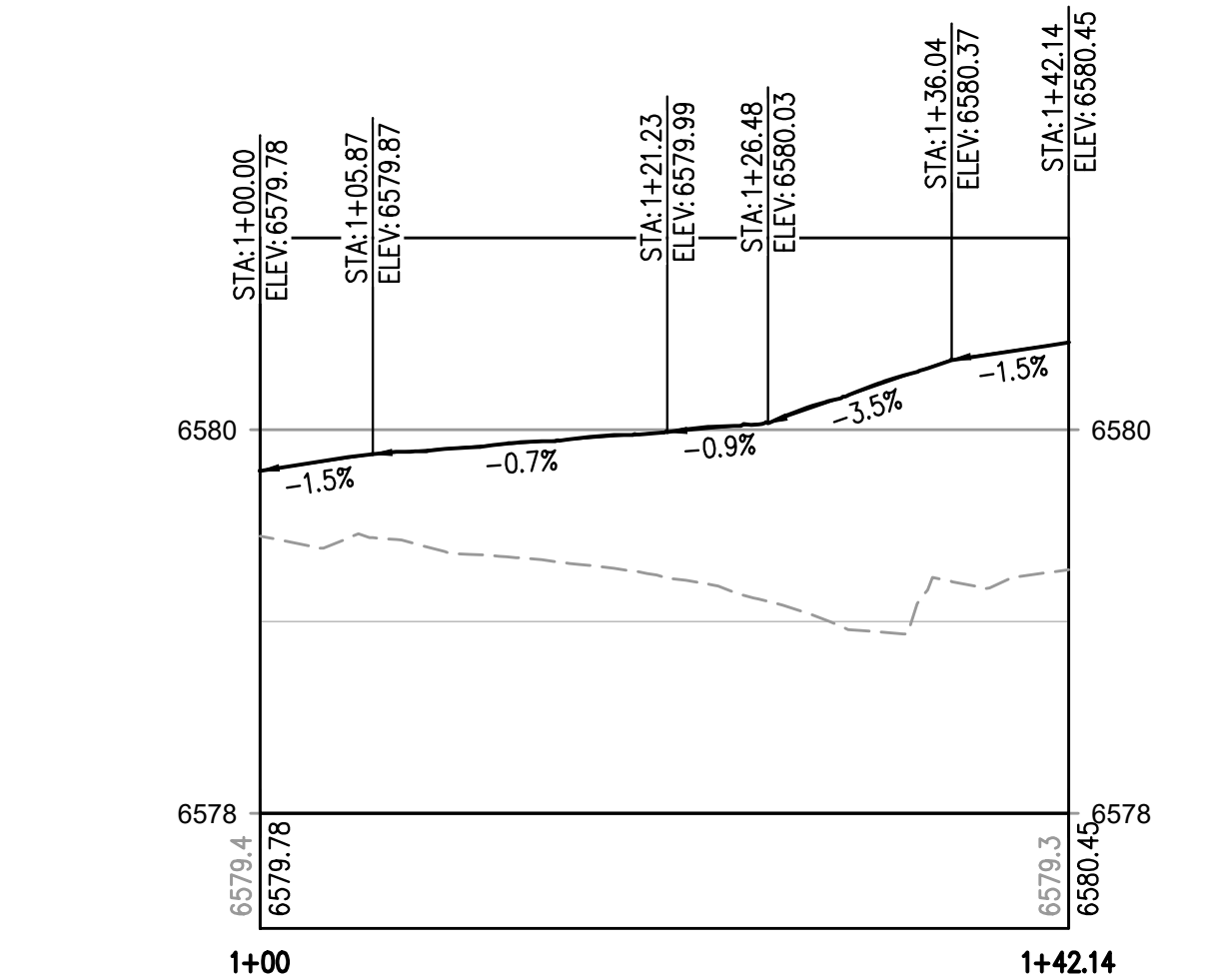
NEXmetro
Communities

AVILLA FOUNDERS VILLAGE
OVERALL GRADING PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

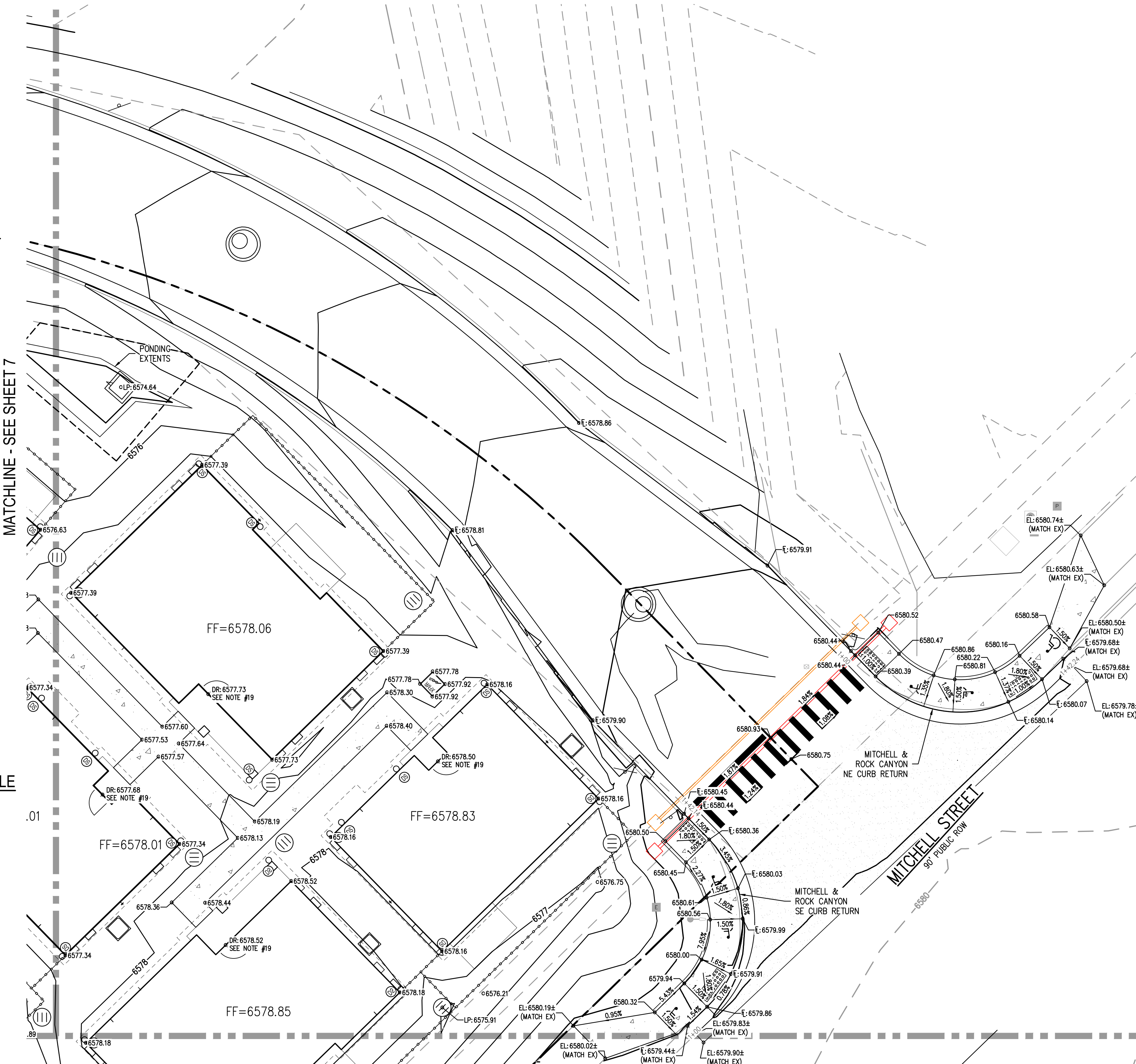


MITCHELL & ROCK CANYON NE CURB RETURN PROFILE
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 1'



MITCHELL & ROCK CANYON SE CURB RETURN PROFILE
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 1'

MATCHLINE - SEE SHEET 7



MATCHLINE - SEE SHEET 11

GENERAL GRADING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT HANDRAILS, STAIRS, CURB RAMPS, AND RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. LONGITUDINAL SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5%. LONGITUDINAL SLOPES ON RAMPS SHALL NOT EXCEED 8.33%. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HANDRAILS ON BOTH SIDES.
4. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
5. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 10% FOR 10-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE, 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALL, BARS, AND GRILLS).
14. TOP STEP ELEVATIONS FOR STOOPS AND PATIOS ARE SHOWN FOR REFERENCE ONLY. TOP OF STEPS AND PATIO ELEVATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS/DETAILS AND AS-BUILT STOOP/PATIO ELEVATIONS.
15. ELECTRICAL TRANSFORMER PADS AND AC-UNIT PADS ARE TO BE SET A MINIMUM OF 2-INCHES ABOVE THE ADJACENT FINISHED GRADE AROUND THE PERIMETER OF THE PAD. CONTRACTOR SHALL PROVIDE A CONCRETE TURNDOWN AS NECESSARY. CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE AWAY FROM, AND AROUND, ALL ELECTRICAL PADS AND AC-UNIT PADS.
16. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT.
17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4- FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
19. DOOR ELEVATION REPRESENTS BOTTOM OF 4" STEP AT DOOR THRESHOLD PER STRUCTURAL DRAWINGS. SEE STRUCTURAL FOUNDATION PLANS (BY OTHERS) FOR MORE INFORMATION.
20. ADJACENT BASE FLOOD ELEVATION IS 6540.60. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 2- FEET ABOVE BASE FLOOD ELEVATION.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE-YEAR FROM

DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By:

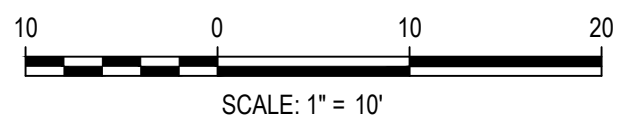
Development Services Date

PROJECT #: 210431

SHEET NUMBER

8

8 OF 87



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

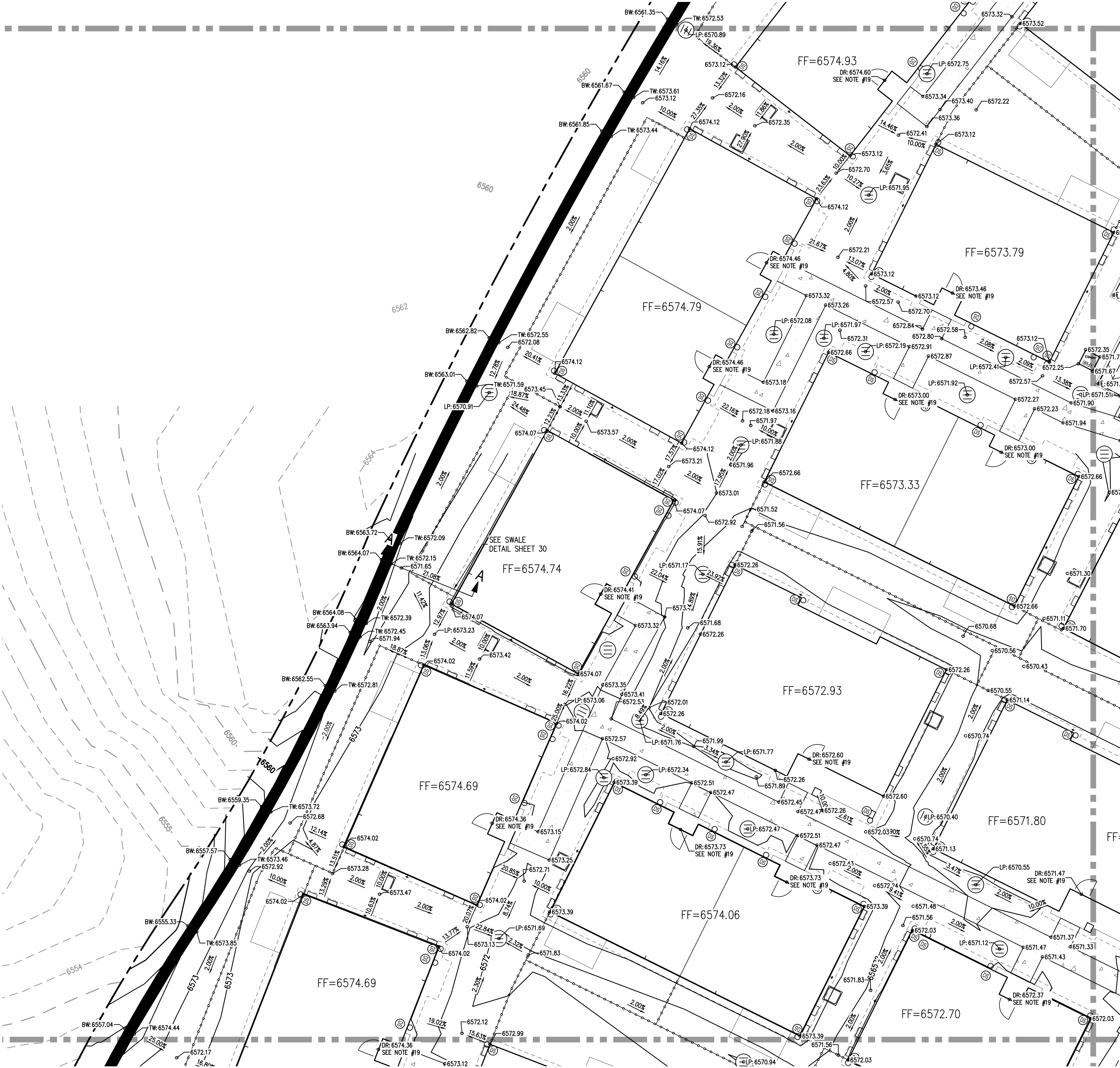


AVILLA FOUNDERS VILLAGE
DETAILED GRADING PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILES: K:\210431\ENGINEERING\GRAVING\03- DETAILED GRADING PLAN.DWG LAYOUT1
DESIGNED BY: RCP
CHECKED BY: RCP
PLOTTED: MON 04/10/23 8:36:40A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 6



MATCHLINE - SEE SHEET 12

GENERAL GRADING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT HANDRAILS, STAIRS, CURB RAMPS, AND RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. LONGITUDINAL SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5%. LONGITUDINAL SLOPES ON RAMPS SHALL NOT EXCEED 8.33%. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HANDRAILS ON BOTH SIDES.
4. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
5. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 10% FOR 10'-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALL, BARS, AND GRILLS).
14. TOP STEP ELEVATIONS FOR STOOPS AND PATIOS ARE SHOWN FOR REFERENCE ONLY. TOP OF STEPS AND PATIO ELEVATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS/DETAILS AND AS-BUILT STOOP/PATIO ELEVATIONS.
15. ELECTRICAL TRANSFORMER PADS AND AC-UNIT PADS ARE TO BE SET A MINIMUM OF 2-INCHES ABOVE THE ADJACENT FINISHED GRADE AROUND THE PERIMETER OF THE PAD. CONTRACTOR SHALL PROVIDE A CONCRETE TURNDOWN AS NECESSARY. CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE AWAY FROM, AND AROUND, ALL ELECTRICAL PADS AND AC-UNIT PADS.
16. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT.
17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4- FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
19. DOOR ELEVATION REPRESENTS BOTTOM OF 4" STEP AT DOOR THRESHOLD PER STRUCTURAL DRAWINGS. SEE STRUCTURAL FOUNDATION PLANS (BY OTHERS) FOR MORE INFORMATION.
20. ADJACENT BASE FLOOD ELEVATION IS 6540.60. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 2- FEET ABOVE BASE FLOOD ELEVATION.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE-YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By:

Development Services

Date

PROJECT #: 210431

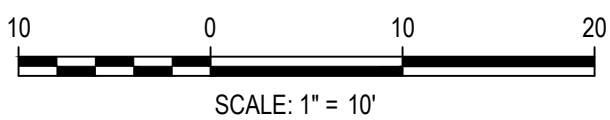
SHEET NUMBER

9

9 OF 87



Know what's below.
Call before you dig.



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
DETAILED GRADING PLAN

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT HANDRAILS, STAIRS, CURB RAMPS, AND RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. LONGITUDINAL SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5%.
4. LONGITUDINAL SLOPES ON RAMPS SHALL NOT EXCEED 8.33% RAMP, EXCEPT CURB RAMPS SHALL HAVE HANDRAILS ON BOTH SIDES.
5. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
6. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 10% FOR 10-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE, 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALL, BARS, AND GRILLS).
14. TO STEP VARIATIONS FOR STOODS AND PATIOS ARE SHOWN FOR REFERENCE ONLY. TOP OF STAIRS AND RAMP ELEVATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS/DETAILS AND AS-BUILT STOOD/PATIO ELEVATIONS.
15. ELECTRICAL TRANSFORMER PADS AND AC-UNIT PADS ARE TO BE SET A MINIMUM OF 2-INCHES ABOVE THE ADJACENT FINISHED GRADE AROUND THE PERIMETER OF THE PAD. CONTRACTOR SHALL PROVIDE A CONCRETE TURNDOWN AS NECESSARY. CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE AWAY FROM, AND AROUND, ALL ELECTRICAL PADS AND AC-UNIT PADS.
16. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT.
17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4-FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PERMITS WORK PERMIT.
19. DOOR ELEVATION REPRESENTS BOTTOM OF 4" STEP AT DOOR THRESHOLD PER STRUCTURAL DRAWINGS. SEE STRUCTURAL FOUNDATION PLANS (BY OTHERS) FOR MORE INFORMATION.
20. ADJACENT BASE FLOOD ELEVATION IS 6540.60. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 2- FEET ABOVE BASE FLOOD ELEVATION.

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4"
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"S28656". NAVD 88 ELEVATION=6572.29

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

RACHEL C PATTON, P.E. #54450 DATE _____

TOWN APPROVAL BLOCK

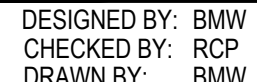
TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By: _____

Development Services _____ Date _____

11 OF 87



**HKS HARRIS
KOCHER
SMITH**
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

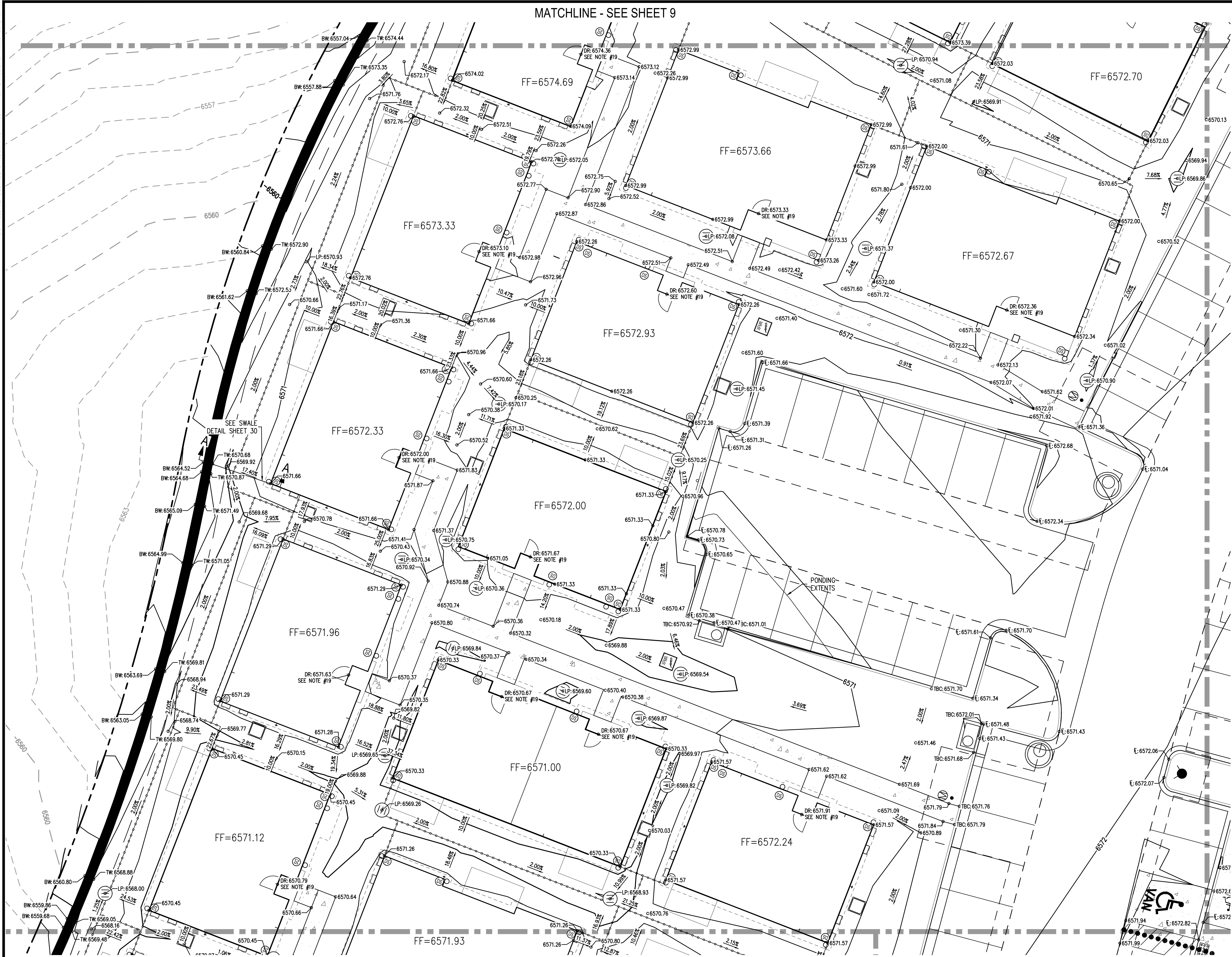


AVILLA FOUNDERS VILLAGE

DETAILED GRADING PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\210431\ENGINEERING\GRAVING\CD - DETAILED GRADING PLAN\2.DWG LAYOUT\1\PROJECT: MON 04/10/23 8:37:19A BY: MILES SUSTAD



GENERAL GRADING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT HANDRAILS, STAIRS, CURB RAMPS, AND RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. LONGITUDINAL SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5%. LONGITUDINAL SLOPES ON RAMPS SHALL NOT EXCEED 8.33%. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HANDRAILS ON BOTH SIDES.
4. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
5. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 10% FOR 10-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE, 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALL, BARS, AND GRILLS).
14. TOP STEP ELEVATIONS FOR STOOPS AND PATIOS ARE SHOWN FOR REFERENCE ONLY. TOP OF STEPS AND PATIO ELEVATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS/DETAILS AND AS-BUILT STOOP/PATIO ELEVATIONS.
15. ELECTRICAL TRANSFORMER PADS AND AC-UNIT PADS ARE TO BE SET A MINIMUM OF 2-INCHES ABOVE THE ADJACENT FINISHED GRADE AROUND THE PERIMETER OF THE PAD. CONTRACTOR SHALL PROVIDE A CONCRETE TURNDOWN AS NECESSARY. CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE AWAY FROM, AND AROUND, ALL ELECTRICAL PADS AND AC-UNIT PADS.
16. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT.
17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4- FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
19. DOOR ELEVATION REPRESENTS BOTTOM OF 4" STEP AT DOOR THRESHOLD PER STRUCTURAL DRAWINGS. SEE STRUCTURAL FOUNDATION PLANS (BY OTHERS) FOR MORE INFORMATION.
20. ADJACENT BASE FLOOD ELEVATION IS 6540.60. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 2- FEET ABOVE BASE FLOOD ELEVATION.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

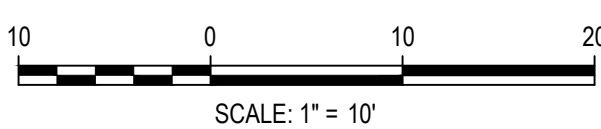
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE-YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



AVILLA FOUNDERS VILLAGE
DETAILED GRADING PLAN

PROJECT #:	210431
SHEET NUMBER	12
12 OF 87	

MATCHLINE - SEE SHEET 10

GENERAL GRADING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT HANDRAILS, STAIRS, CURB RAMPS, AND RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. LONGITUDINAL SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5%. LONGITUDINAL SLOPES ON RAMPS SHALL NOT EXCEED 8.33%. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HANDRAILS ON BOTH SIDES.
4. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
5. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 10% FOR 10'-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE, 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALL, BARS, AND GRILLS).
14. TOP STEP ELEVATIONS FOR STOOPS AND PATIOS ARE SHOWN FOR REFERENCE ONLY. TOP OF STEPS AND PATIO ELEVATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS/DETAILS AND AS-BUILT STOOP/PATIO ELEVATIONS.
15. ELECTRICAL TRANSFORMER PADS AND AC-UNIT PADS ARE TO BE SET A MINIMUM OF 2-INCHES ABOVE THE ADJACENT FINISHED GRADE AROUND THE PERIMETER OF THE PAD. CONTRACTOR SHALL PROVIDE A CONCRETE TURNDOWN AS NECESSARY. CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE AWAY FROM, AND AROUND, ALL ELECTRICAL PADS AND AC-UNIT PADS.
16. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT.
17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4'-FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
19. DOOR ELEVATION REPRESENTS BOTTOM OF 4" STEP AT DOOR THRESHOLD PER STRUCTURAL DRAWINGS. SEE STRUCTURAL FOUNDATION PLANS (BY OTHERS) FOR MORE INFORMATION.
20. ADJACENT BASE FLOOD ELEVATION IS 6540.60. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 2'-FEET ABOVE BASE FLOOD ELEVATION.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE-YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date

PROJECT #: 210431
SHEET NUMBER

13

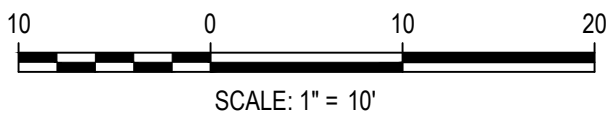
13 OF 87

MATCHLINE - SEE SHEET 12

MATCHLINE - SEE SHEET 15



Know what's below.
Call before you dig.



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



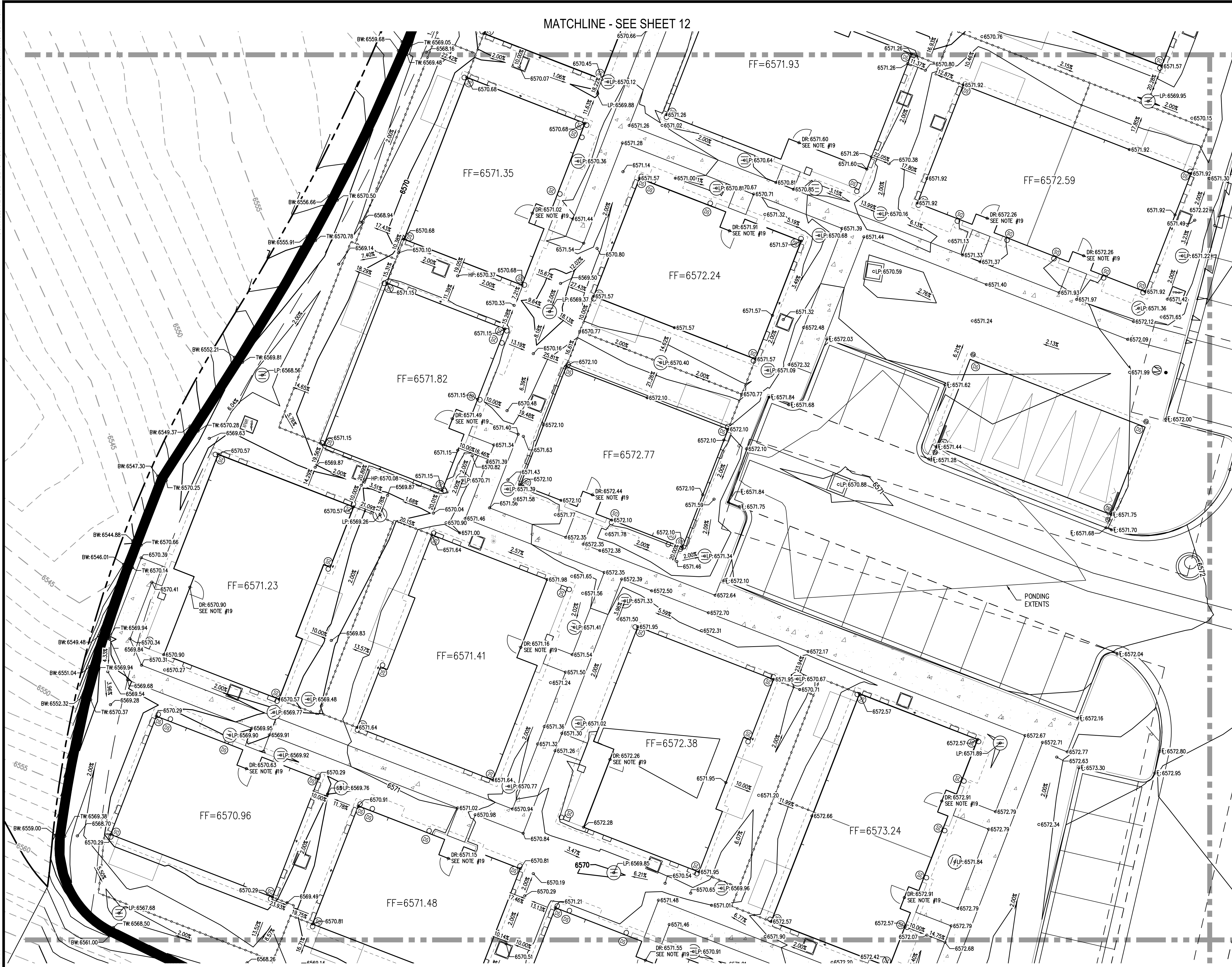
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
DETAILED GRADING PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILES: H:\K12\0431\ENGINEERING\GRAVING\CD - DETAILED GRADING PLAN\2.DWG LAYOUT LAYOUT3
LOCATED: MON 04/10/23 8:37:36A BY: MILES SUSTAD



GENERAL GRADING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT HANDRAILS, STAIRS, CURB RAMPS, AND RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. LONGITUDINAL SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5%. LONGITUDINAL SLOPES ON RAMPS SHALL NOT EXCEED 8.33%. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HANDRAILS ON BOTH SIDES.
4. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
5. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 10% FOR 10-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE, 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALLS, BARS, AND GRILLS).
14. TOP STEP ELEVATIONS FOR STOOPS AND PATIOS ARE SHOWN FOR REFERENCE ONLY. TOP OF STEPS AND PATIO ELEVATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS/DETAILS AND AS-BUILT STOOP/PATIO ELEVATIONS.
15. ELECTRICAL TRANSFORMER PADS AND AC-UNIT PADS ARE TO BE SET A MINIMUM OF 2-INCHES ABOVE THE ADJACENT FINISHED GRADE AROUND THE PERIMETER OF THE PAD. CONTRACTOR SHALL PROVIDE A CONCRETE TURNDOWN AS NECESSARY. CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE AWAY FROM, AND AROUND, ALL ELECTRICAL PADS AND AC-UNIT PADS.
16. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT.
17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4- FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
19. DOOR ELEVATION REPRESENTS BOTTOM OF 4" STEP AT DOOR THRESHOLD PER STRUCTURAL DRAWINGS. SEE STRUCTURAL FOUNDATION PLANS (BY OTHERS) FOR MORE INFORMATION.
20. ADJACENT BASE FLOOD ELEVATION IS 6540.60. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 2- FEET ABOVE BASE FLOOD ELEVATION.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

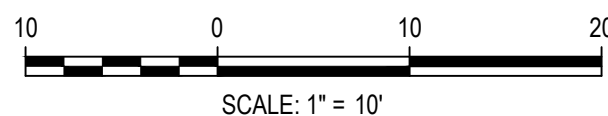
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE-YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



AVILLA FOUNDERS VILLAGE
DETAILED GRADING PLAN

PROJECT #: 210431
SHEET NUMBER
14
14 OF 87

MATCHLINE - SEE SHEET 13

GENERAL GRADING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT HANDRAILS, STAIRS, CURB RAMPS, AND RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. LONGITUDINAL SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5%. LONGITUDINAL SLOPES ON RAMPS SHALL NOT EXCEED 8.33%. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HANDRAILS ON BOTH SIDES.
4. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
5. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 10% FOR 10'-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE, 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALL, BARS, AND GRILLS).
14. TOP STEP ELEVATIONS FOR STOOPS AND PATIOS ARE SHOWN FOR REFERENCE ONLY. TOP OF STEPS AND PATIO ELEVATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS/DETAILS AND AS-BUILT STOOP/PATIO ELEVATIONS.
15. ELECTRICAL TRANSFORMER PADS AND AC-UNIT PADS ARE TO BE SET A MINIMUM OF 2-INCHES ABOVE THE ADJACENT FINISHED GRADE AROUND THE PERIMETER OF THE PAD. CONTRACTOR SHALL PROVIDE A CONCRETE TURNDOWN AS NECESSARY. CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE AWAY FROM, AND AROUND, ALL ELECTRICAL PADS AND AC-UNIT PADS.
16. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT.
17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4'-FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
19. DOOR ELEVATION REPRESENTS BOTTOM OF 4" STEP AT DOOR THRESHOLD PER STRUCTURAL DRAWINGS. SEE STRUCTURAL FOUNDATION PLANS (BY OTHERS) FOR MORE INFORMATION.
20. ADJACENT BASE FLOOD ELEVATION IS 6540.60. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 2'-FEET ABOVE BASE FLOOD ELEVATION.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/2 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE
TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE-YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date: _____

Development Services Date

PROJECT #: 210431
SHEET NUMBER

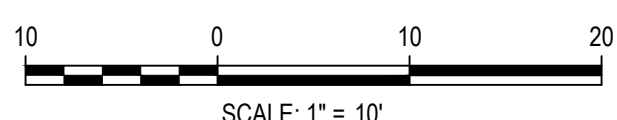
15

15 OF 87

MATCHLINE - SEE SHEET 17



Know what's below.
Call before you dig.



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



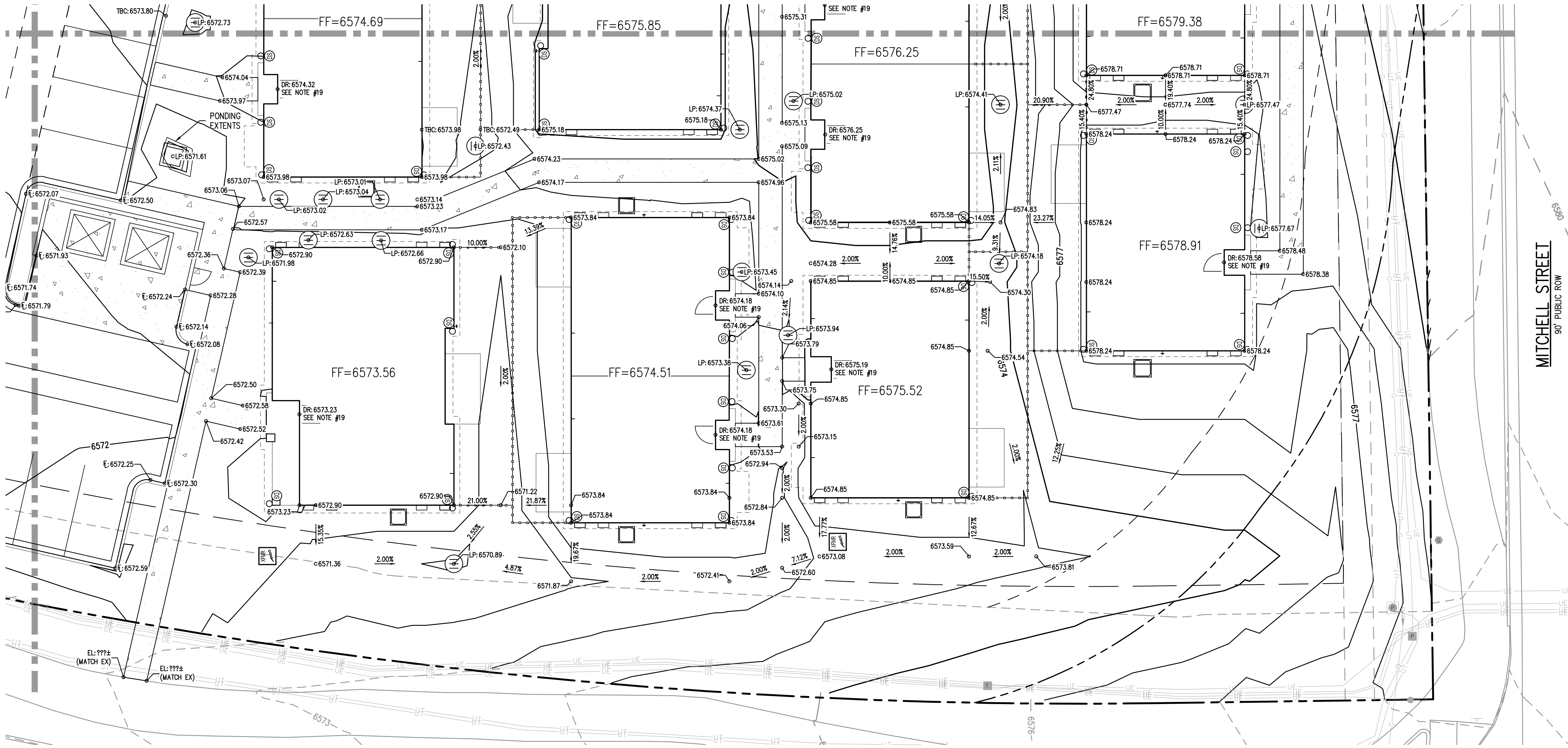
AVILLA FOUNDERS VILLAGE
DETAILED GRADING PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE: 24-1-K121041ENGINEERINGGRAING-CD - DETAILED GRADING PLAN-2.DWG LAYOUT: LAYOUT16
PLOT DATE: MON 04/10/23 8:38:08A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 16

MATCHLINE - SEE SHEET 15



GENERAL GRADING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT HANDRAILS, STAIRS, CURB RAMPS, AND RAMPS ARE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL STATE AND/OR FEDERAL REGULATIONS AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT (ADA), THE FAIR HOUSING ACT (FHA) AND THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
2. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE OR AT LANDINGS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. LONGITUDINAL SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5%. LONGITUDINAL SLOPES ON RAMPS SHALL NOT EXCEED 8.33%. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HANDRAILS ON BOTH SIDES.
4. GUTTER SLOPES AT THE CURB RAMPS SHALL NOT EXCEED 5%.
5. GUTTER PANS SURROUNDING HANDICAP SPACES SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
6. ALL GRADES ARE FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. ROCK MULCH, IF PLACED UPSTREAM OF CONCRETE FLATWORK OR GRASSED AREA, SHALL BE PLACED ON TOP OF FINISHED GRADE SHOWN ON THESE PLANS. ROCK MULCH AREAS SHALL BE DESIGNED AND CONSTRUCTED TO ADEQUATELY DRAIN AND NOT RETAIN WATER. ALL LANDSCAPE EDGE MATERIALS SHALL NOT PREVENT DRAINAGE TO PASS THROUGH.
8. ALL GRADES ADJACENT TO THE BUILDINGS SHALL BE AT MINIMUM 8-INCHES BELOW FINISHED FLOOR ELEVATION, UNLESS OTHERWISE NOTED.
9. NON-PAVED GRADES ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 10% FOR 10-FT. ALL PAVED GRADES ATTACHED TO BUILDINGS SHALL SLOPE AWAY FROM ALL BUILDINGS AT A MINIMUM OF 1%, UNLESS OTHERWISE NOTED.
10. ALL GRADES FOR WALLS ARE FINISHED GRADE ELEVATIONS AT BOTTOM OF FRONT FACE (BW) AND TOP-BACK OF WALL (TW). THE WALL ELEVATIONS DO NOT INDICATE FOUNDATION DEPTHS OR ELEVATIONS. RETAINING WALL DETAILS SHALL BE PROVIDED BY OTHERS.
11. REFER TO STRUCTURAL PLANS FOR BUILDING FOUNDATION STEP LOCATIONS WHEN APPLICABLE.
12. PORTIONS OF STAIRS THAT DO NOT MEET THE MINIMUM 4-INCH RISER HEIGHT (DUE TO AN ADJACENT SLOPING PUBLIC WAY) SHALL HAVE A DISTINCTIVE MARKING STRIPE, 1-INCH TO 2-INCHES IN WIDTH, WITH A SLIP-RESISTANT SURFACE, IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE REGULATIONS.
13. SEE LANDSCAPE ARCHITECT PLANS FOR HEIGHT AND TOP OF COURTYARD AMENITIES (PLANTER CURBS, SEAT WALLS, BENCHES, FIRE WALL, MEDIA WALL, BARS, AND GRILLS).
14. TOP STEP ELEVATIONS FOR STOOPS AND PATIOS ARE SHOWN FOR REFERENCE ONLY. TOP OF STEPS AND PATIO ELEVATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS/DETAILS AND AS-BUILT STOOP/PATIO ELEVATIONS.
15. ELECTRICAL TRANSFORMER PADS AND AC-UNIT PADS ARE TO BE SET A MINIMUM OF 2-INCHES ABOVE THE ADJACENT FINISHED GRADE AROUND THE PERIMETER OF THE PAD. CONTRACTOR SHALL PROVIDE A CONCRETE TURNDOWN AS NECESSARY. CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE AWAY FROM, AND AROUND, ALL ELECTRICAL PADS AND AC-UNIT PADS.
16. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT.
17. CONTRACTOR SHALL ENSURE ACCESSIBLE EXTERIOR DOORS AND GATES ARE CONSTRUCTED WITH ADEQUATE LANDING WIDTH AND DEPTH TO COMPLY WITH APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) MANEUVERING CLEARANCES AT DOOR REQUIREMENTS (BASED ON THE DIRECTION OF APPROACH OF THE SIDEWALK).
18. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4- FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
19. DOOR ELEVATION REPRESENTS BOTTOM OF 4" STEP AT DOOR THRESHOLD PER STRUCTURAL DRAWINGS. SEE STRUCTURAL FOUNDATION PLANS (BY OTHERS) FOR MORE INFORMATION.
20. ADJACENT BASE FLOOD ELEVATION IS 6540.60. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 2- FEET ABOVE BASE FLOOD ELEVATION.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE-YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date _____

Development Services

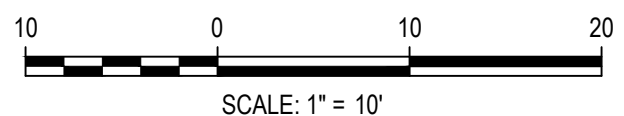
Date

PROJECT #: 210431

SHEET NUMBER

17

17 OF 87



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022

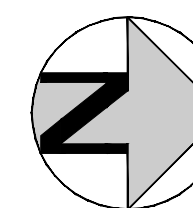
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



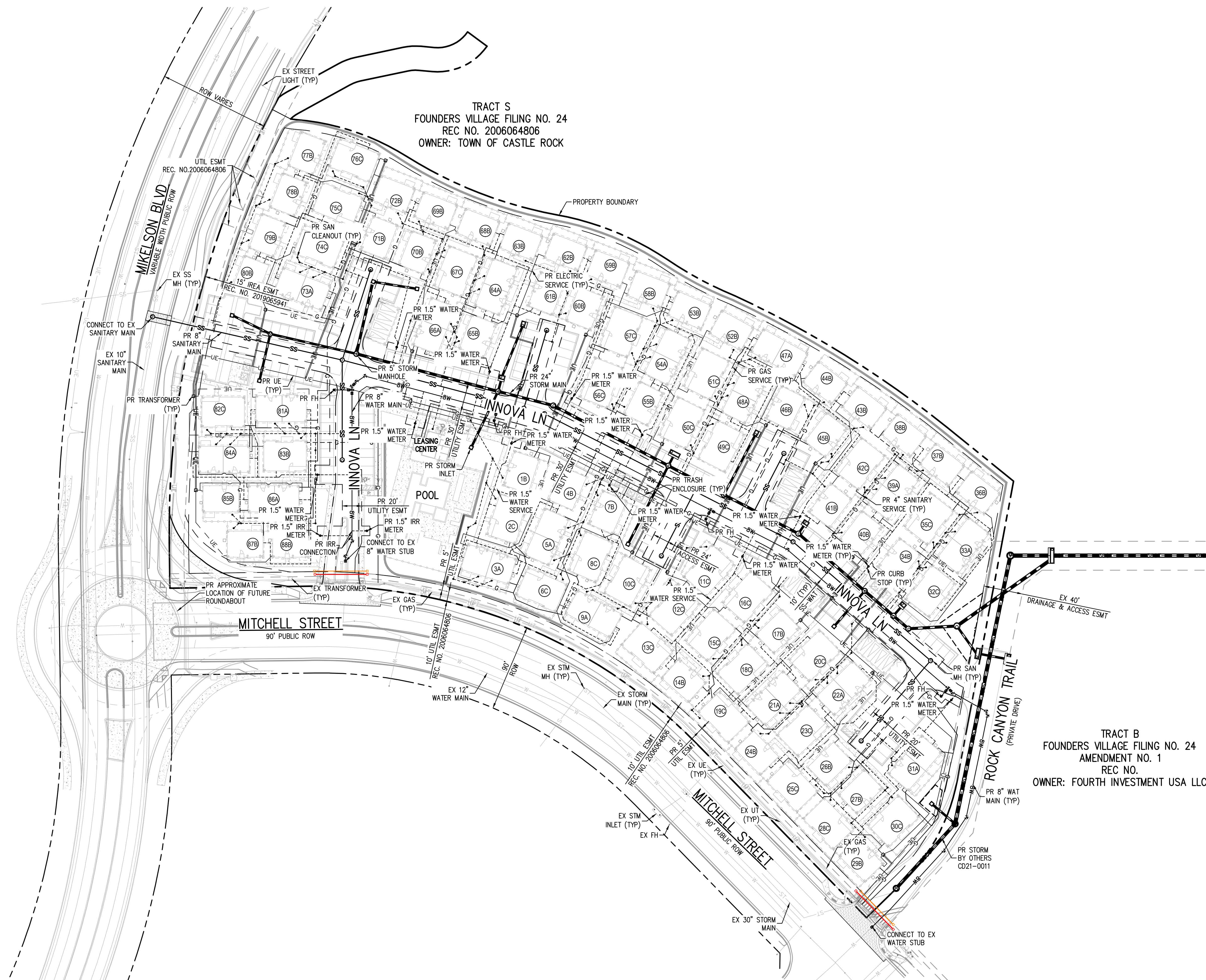
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
DETAILED GRADING PLAN



TRACT S
FOUNDERS VILLAGE FILING NO. 24
REC NO. 2006064806
OWNER: TOWN OF CASTLE ROCK



LEGEND

	EXISTING	PROPOSED
PROPERTY BOUNDARY		
RIGHT-OF-WAY		
UTILITY EASEMENT		
SANITARY SEWER W/ MANHOLE	 SS	 SS
SANITARY SERVICE W/CLEANOUT		
WATER LINE AND GATE VALVE	 W	 W
WATER SERVICE		
STORM SEWER W/ MANHOLE & INLETS	 ST	
WATER METER MANHOLE		
FIRE HYDRANT		
STREET LIGHT		

NOTES:

1. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR OR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY OR WATER PRIOR TO COMMENCING WORK.
2. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
3. UTILITY CUTS IN THE ROW WILL REQUIRE A SEPARATE ROW PERMIT. ROADWAY DEGRADATION FEES WILL BE APPLIED.

HORIZONTAL CONTROL

HORIZONTAL CONTROL
BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMFNDMENT NO. 1.

VERTICAL DATUM

VERTICAL DATUM
DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4"
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DAY

TOWN APPROVAL BLOCK

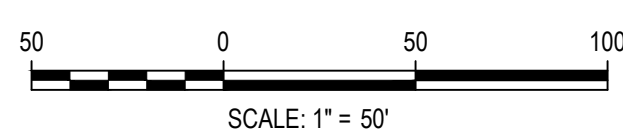
TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By:



Know what's below.
Call before you dig.



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022

ISSUE DATE: 06-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

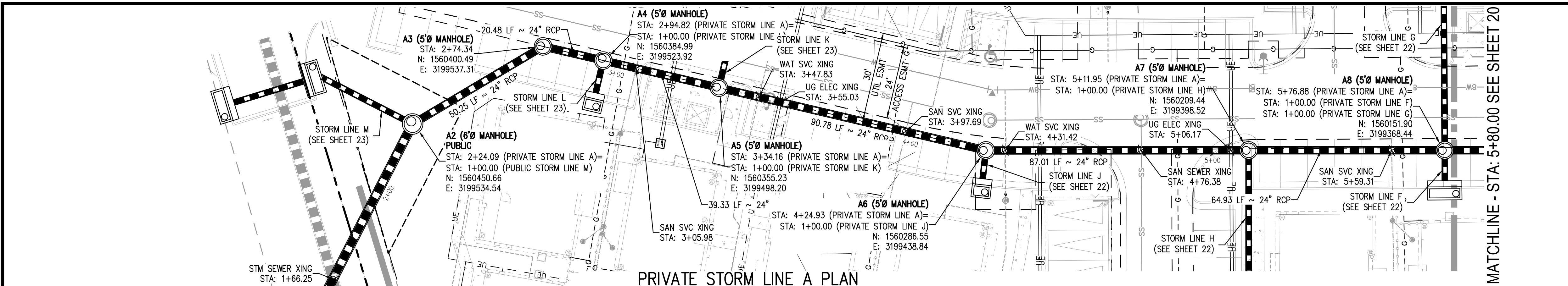
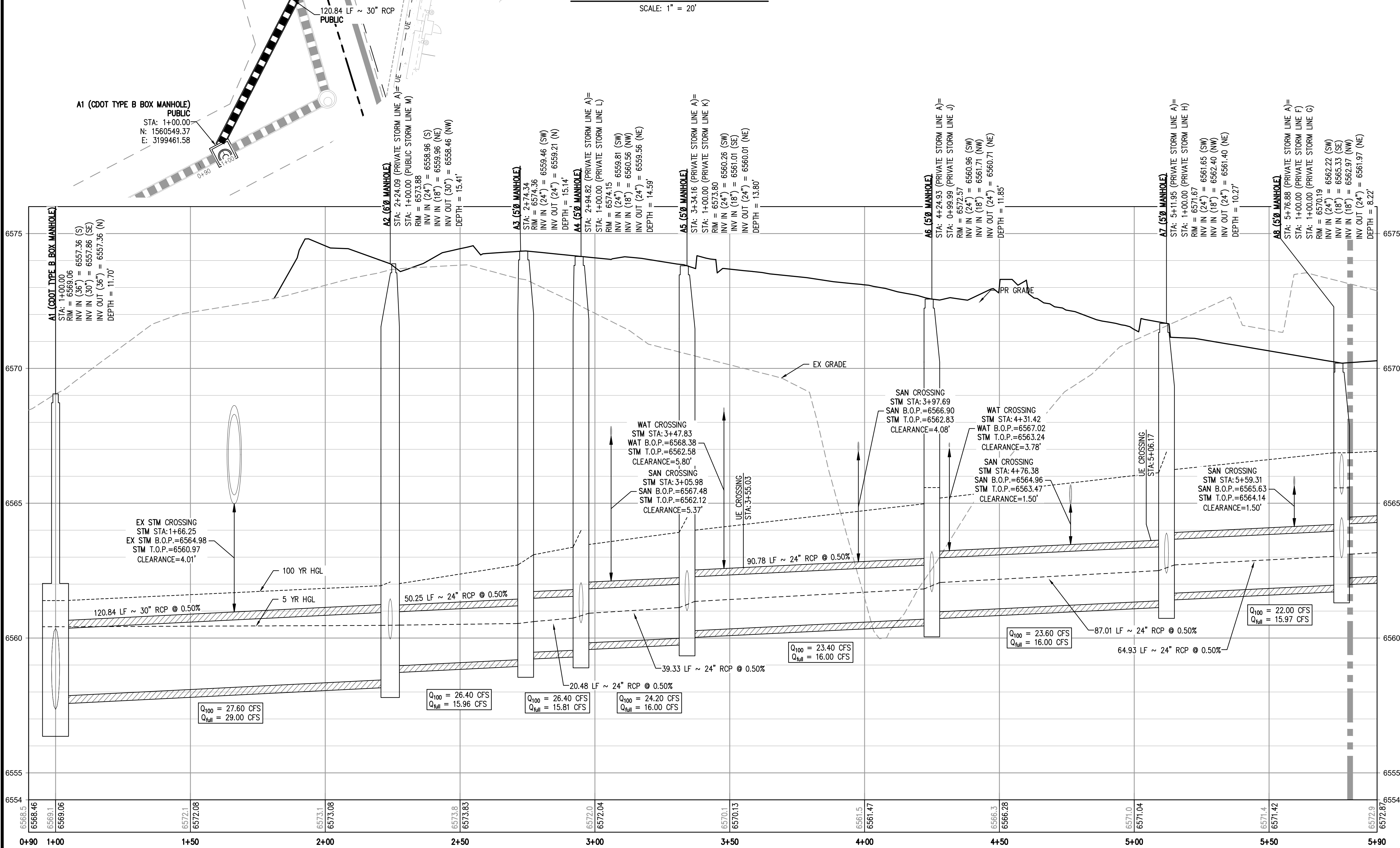


AVILLA FOUNDERS VILLAGE

OVERALL UTILITY PLAN

PROJECT #:	210431
SHEET NUMBER	

18



LEGEND

UTILITY EASEMENT
STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING

GENERAL STORM NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOECHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE FACE OF THE UTILITY OR TO OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
4. STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
5. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
6. CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
9. ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TIE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
10. CONTRACTOR SHALL ADJUST ALL EXISTING RISE ELEVATIONS TO MATCH THE PROPOSED GRADE.
11. CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
12. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING BAFFLES, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
13. ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN VOLUMES AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A POND, THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES POND DESIGN. THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
14. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOURS NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR (TORCI) PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR CUSTOMER'S. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CWR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CWR WATER PRIOR TO COMMENCING WORK.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE
OF THE NORTHEAST QUARTER OF THE
SOUTHEAST QUARTER OF SECTION 8, AS
MONUMENTED AT THE EAST CORNER BY A
#6 REBAR WITH A 3.25" ALUMINUM CAP
STAMPED: SURVCON 2006 PLS 30289 AND
AT THE CENTER-EAST SIXTEENTH CORNER
BY A 2.5" PIPE WITH A 3.5" ALUMINUM
CAP STAMPED: 1986 PLS 22100, AS
BEARING SOUTH 88°58'05" WEST, PER THE
PLAT OF FOUNDERS VILLAGE FILING NO. 24
AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE _____

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By: _____

Development Services Date

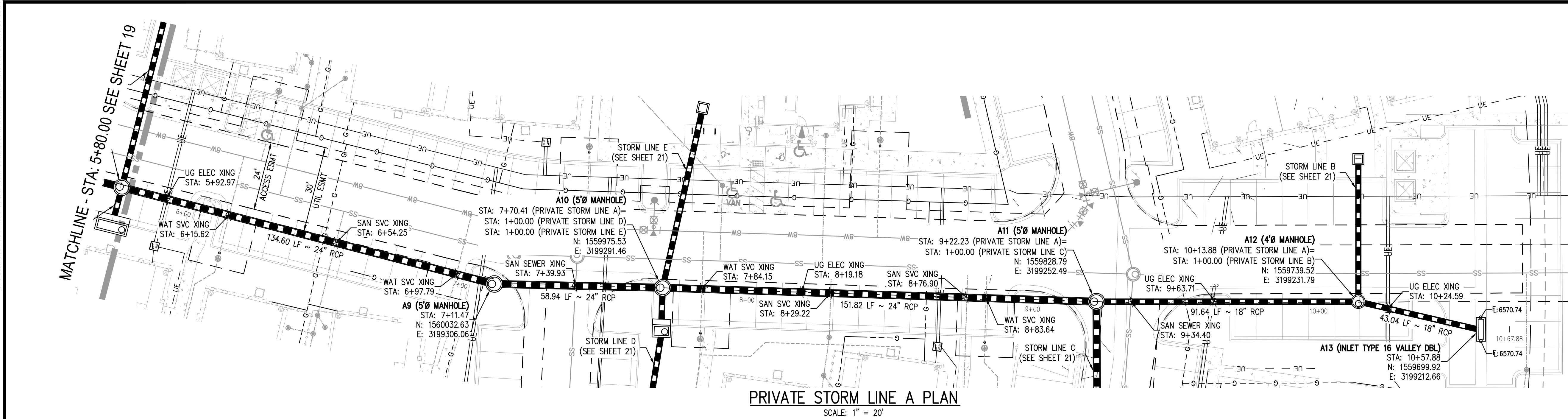
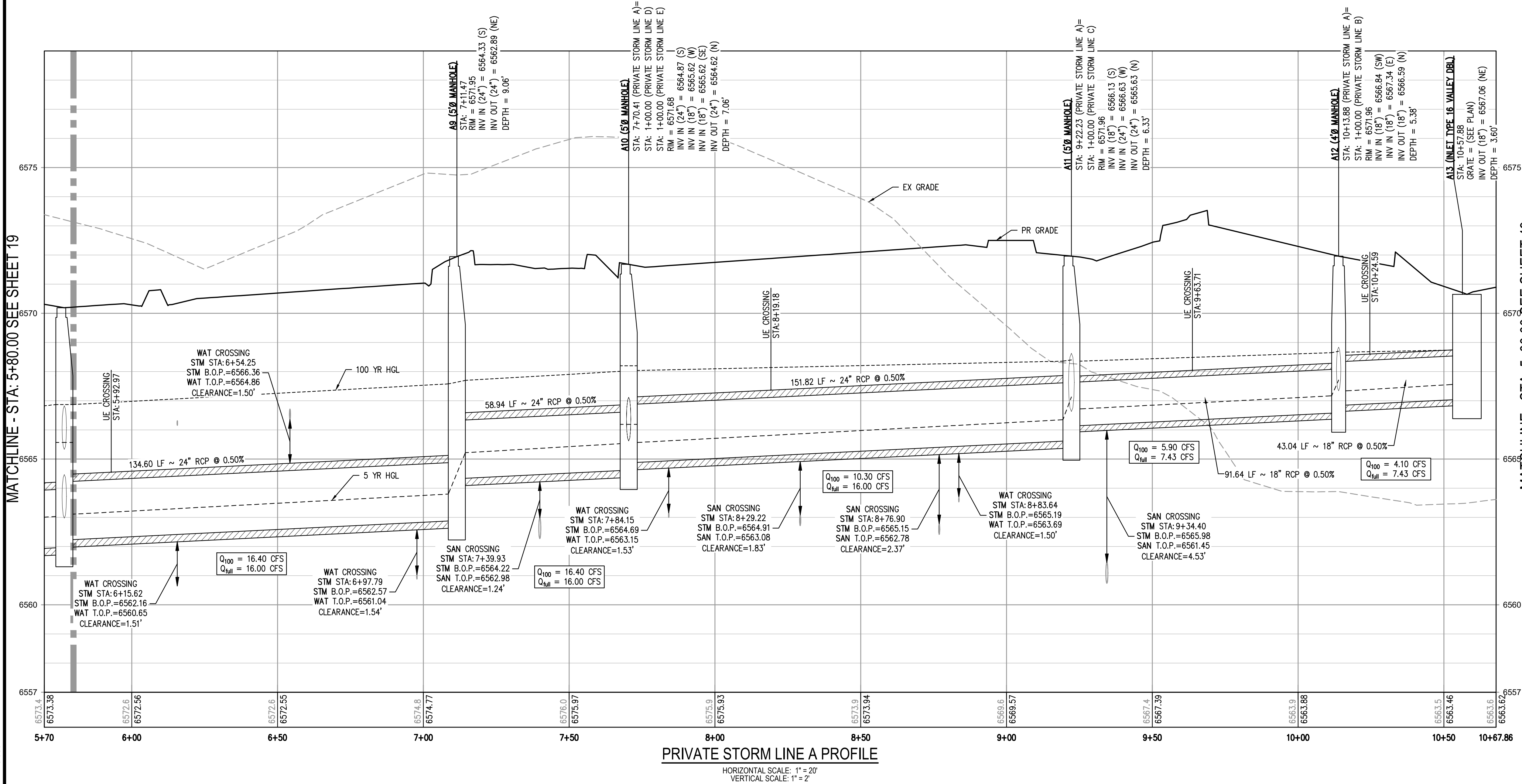
PROJECT #:	210431
SHEET NUMBER	

19

19 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\2024\ENGINEERING\UTILITIES\STORM\CD - STORM P&P\DWG LAYOUT\LAYOUT2
DESIGNED BY: RCP
CHECKED BY: RCP
PLOTTED: MON 04/10/23 8:39:19A BY: MILES SUSTAD



LEGEND

EXISTING	PROPOSED
UTILITY EASEMENT	ST
STORM SEWER W/ MANHOLE AND INLET	SS
SANITARY SEWER W/ MANHOLE AND FLOW DIRECTION	SW
SANITARY SERVICE W/ CLEANOUT	SW
WATER LINE W/ MANHOLE	W
WATER SERVICE	W
FIRE HYDRANT	FD
WATER FITTINGS AND APPURTENANCES	FD
GATE VALVE	GV
STREET LIGHT	SL
ELECTRICAL TRANSFORMER	ET
A/C UNIT	AC
RETAINING WALL	RW
HANDICAP RAMP	HR
SIGN	S
HANDICAP PARKING	HP

GENERAL STORM NOTES:

- THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
- PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
- STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
- ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
- CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
- FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
- ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
- ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
- CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
- CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING BAFLES, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
- ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN VOLUMES AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PROPRIETARY AND/OR PRE-MANUFACTURED DETENTION AND/OR WATER QUALITY SYSTEM, THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
- CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR OR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY OR WATER PRIOR TO COMMENCING WORK.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656", NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

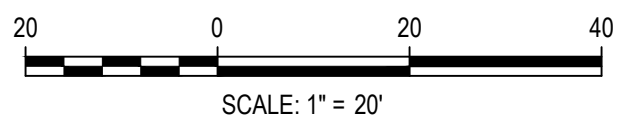
I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



Know what's below.
Call before you dig.



DESIGNED BY: <DESIGNER>
CHECKED BY: <REVIEWER>
DRAWN BY: <DRAWN>

ISSUE DATE: 08-11-2022	REVISION COMMENTS
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

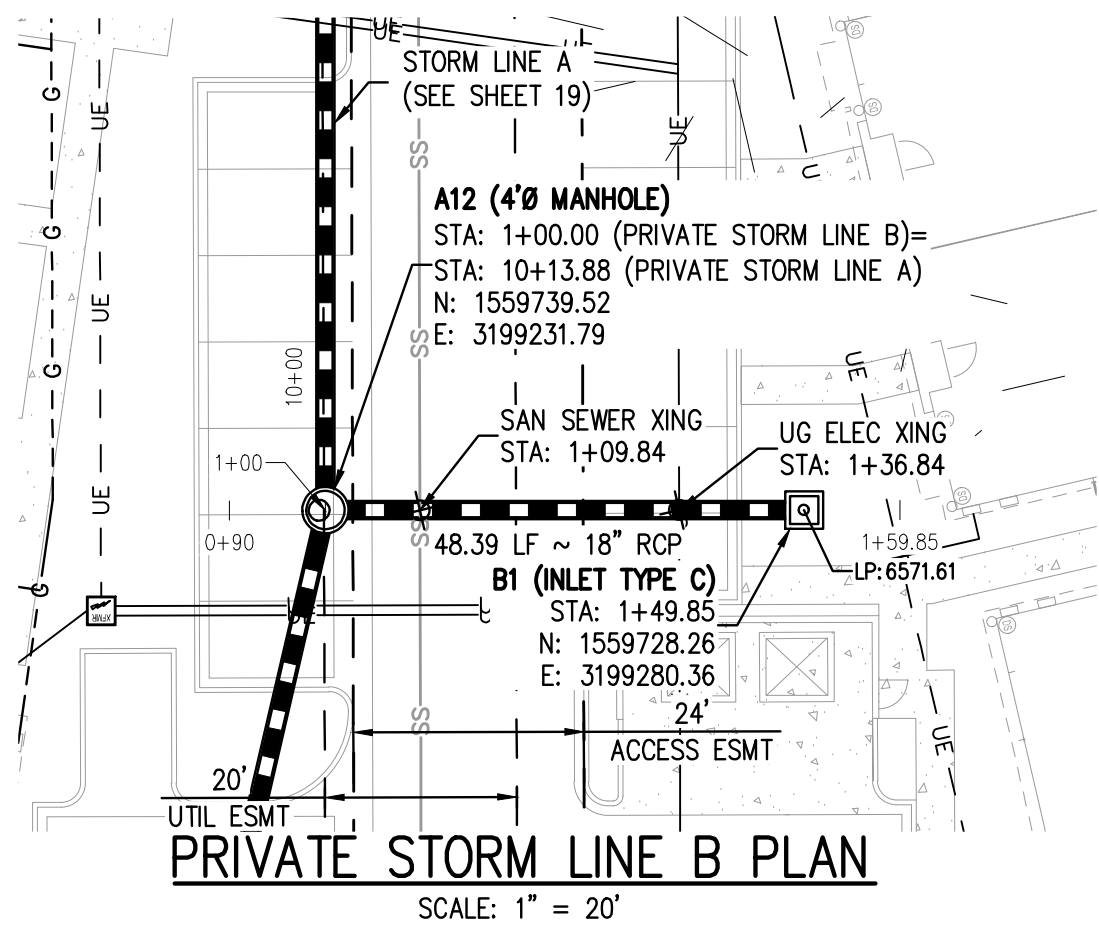
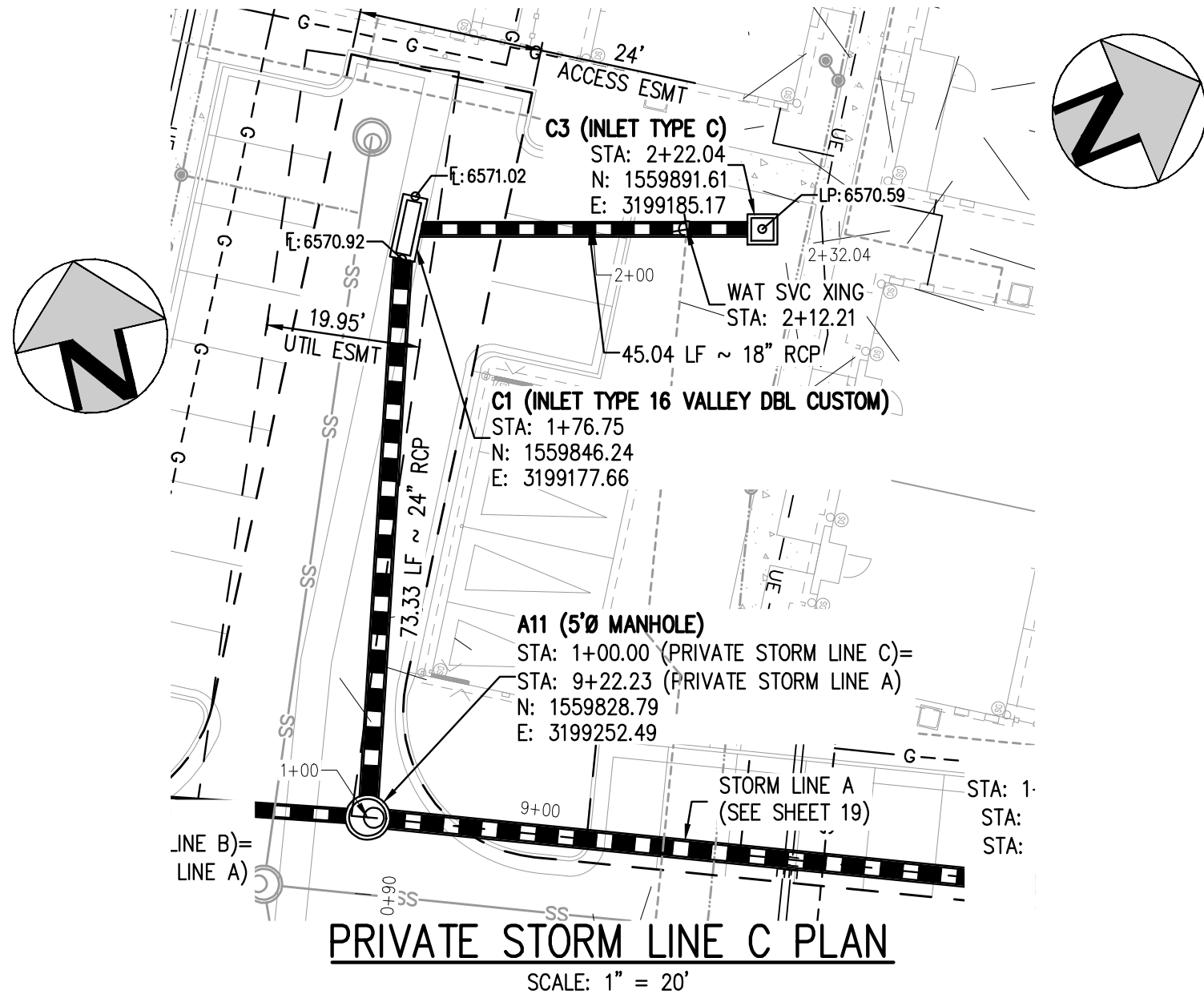
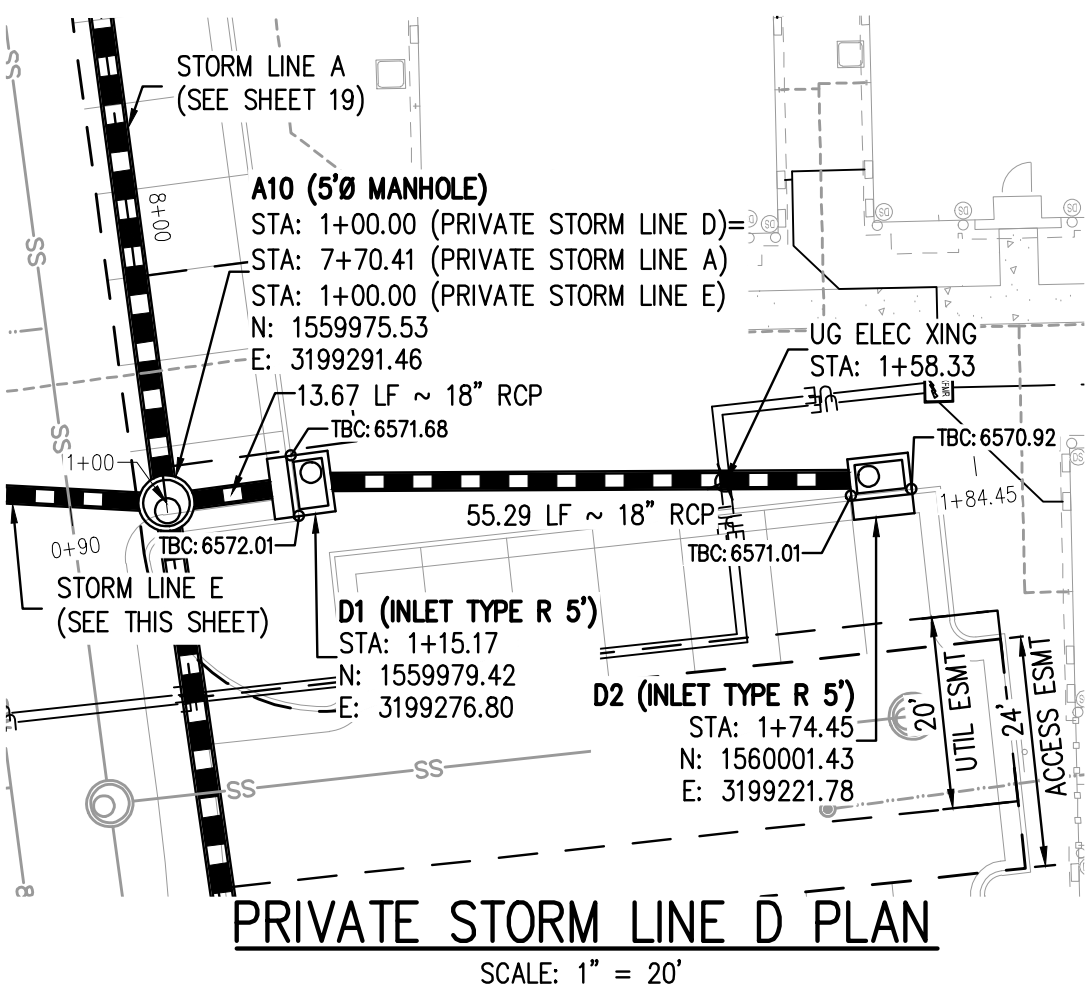
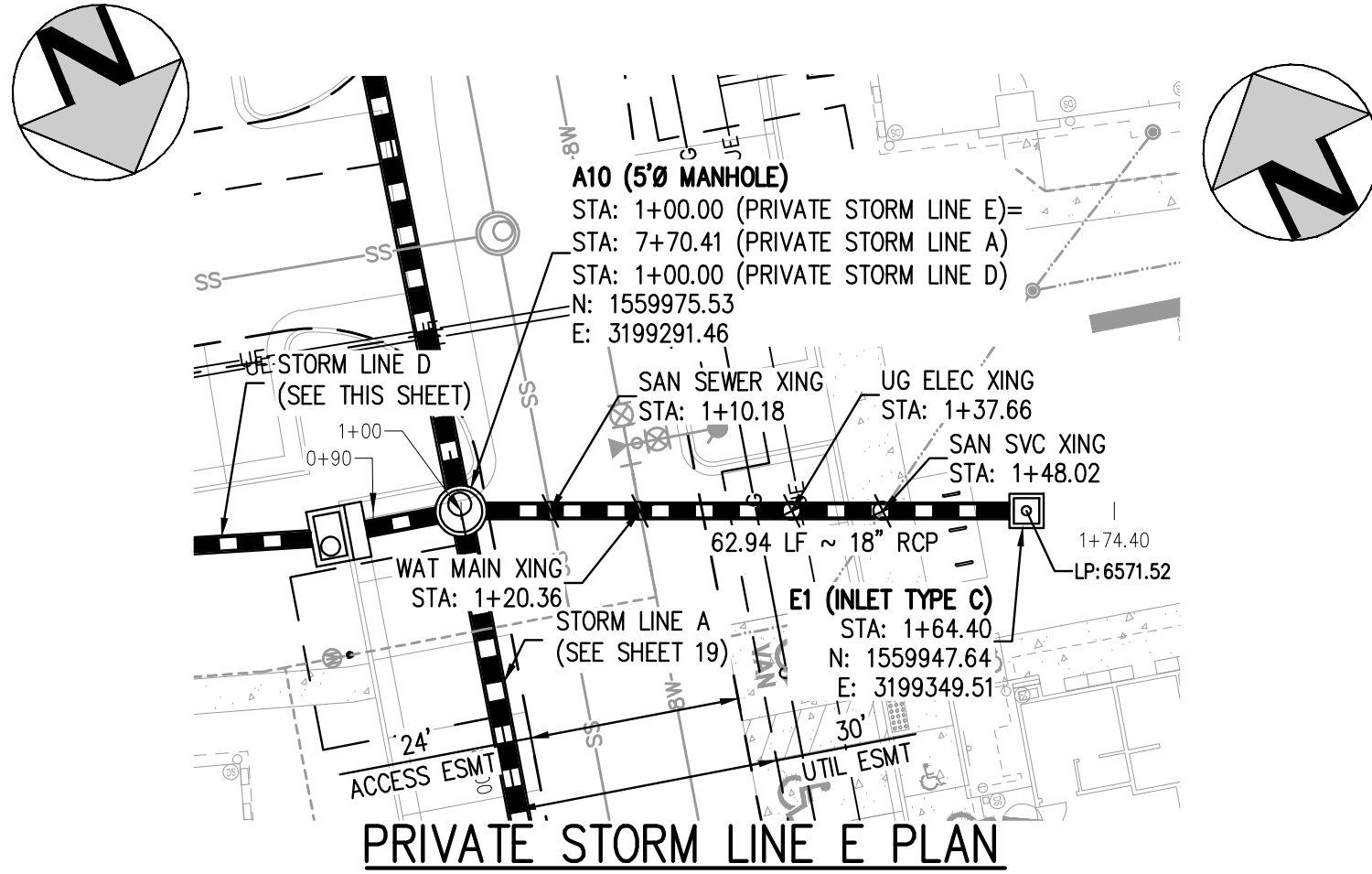
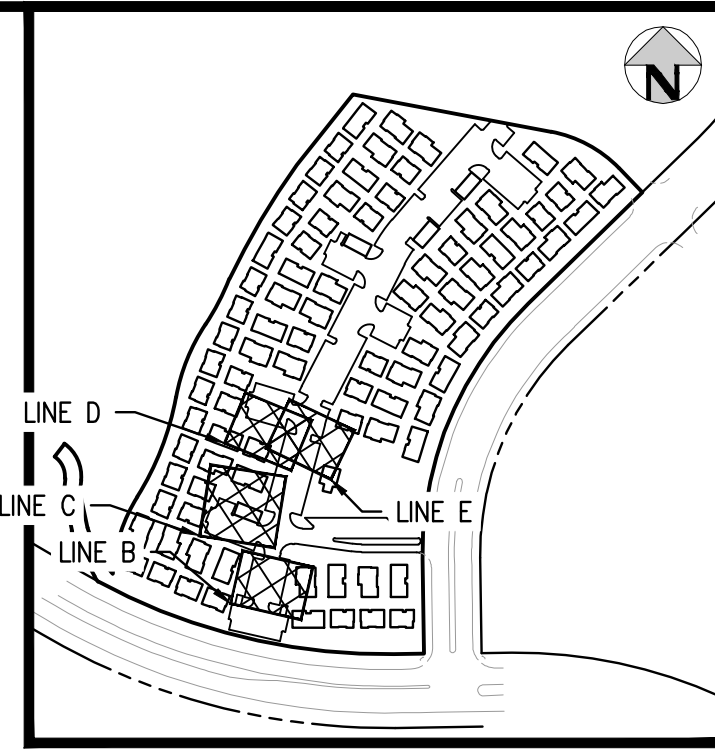
AVILLA FOUNDERS VILLAGE
STORM LINE A PLAN & PROFILE

PROJECT # 210431
SHEET NUMBER

20

20 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



LEGEND

EXISTING	PROPOSED
UTILITY EASEMENT	STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE AND FLOW DIRECTION	SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE	WATER SERVICE
FIRE HYDRANT	WATER FITTINGS AND APPURTENANCES
GATE VALVE	STREET LIGHT
STREET LIGHT	ELECTRICAL TRANSFORMER
A/C UNIT	RETAINING WALL
HANDICAP RAMP	HANDICAP PARKING
SIGN	

GENERAL STORM NOTES:

- THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
- PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
- STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
- ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
- CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
- FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
- ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
- ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
- CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
- CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING Baffles, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
- ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN VOLUMES AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PROPRIETARY AND/OR PRE-MANUFACTURED DETENTION AND/OR WATER QUALITY SYSTEM, THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S REPRESENTATIVE SHOULD BE CORRECTED IMMEDIATELY.
- CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING CR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656", NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By:

Development Services Date

PROJECT #:

SHEET NUMBER

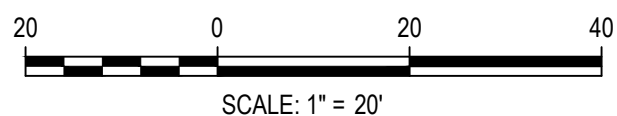
21

21 OF 87

FILE PATH: K:\210431\ENGINEERING\UTILITIES\STORM\CD - STORM LATERAL P&P'S DWG LAYOUT LAYOUT1
DRAWN BY: JLS
PLOTTED: MON 04/10/23 8:40:14A BY: MILES SUSTAD



Know what's below.
Call before you dig.



DESIGNED BY: <DESIGNER>
CHECKED BY: <REVIEWER>
DRAWN BY: <DRAWN>

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

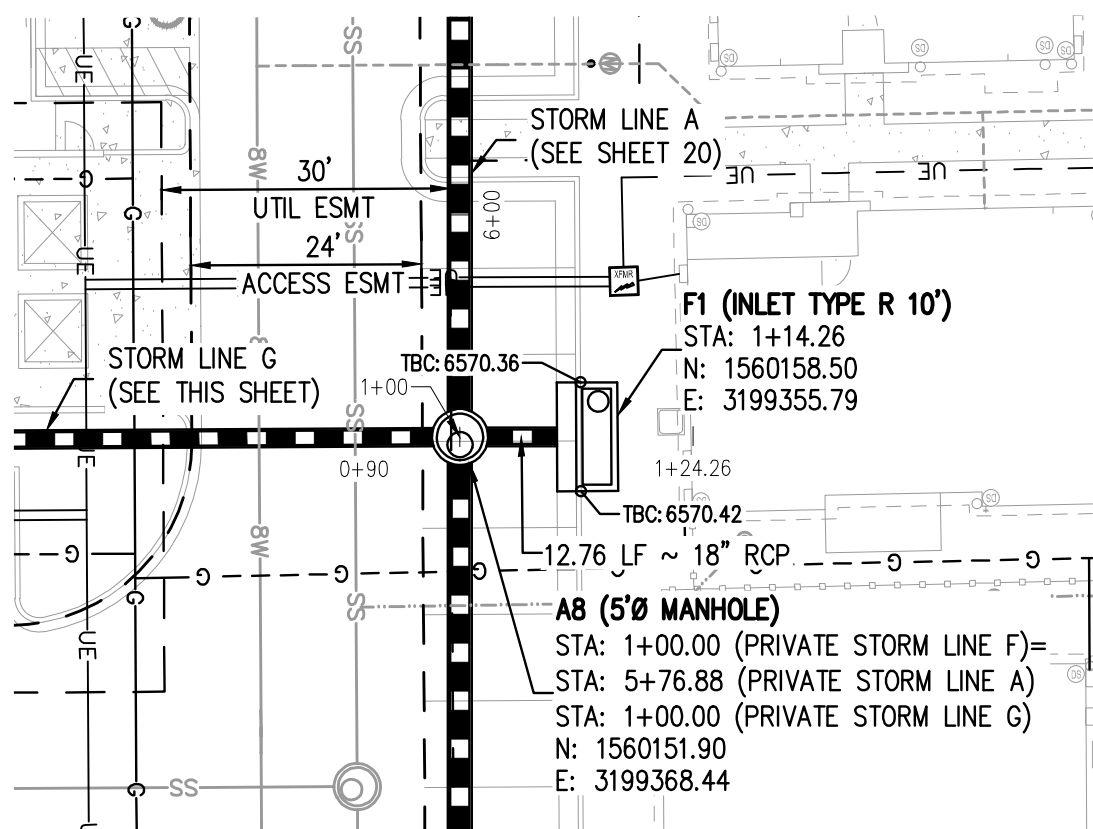


1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

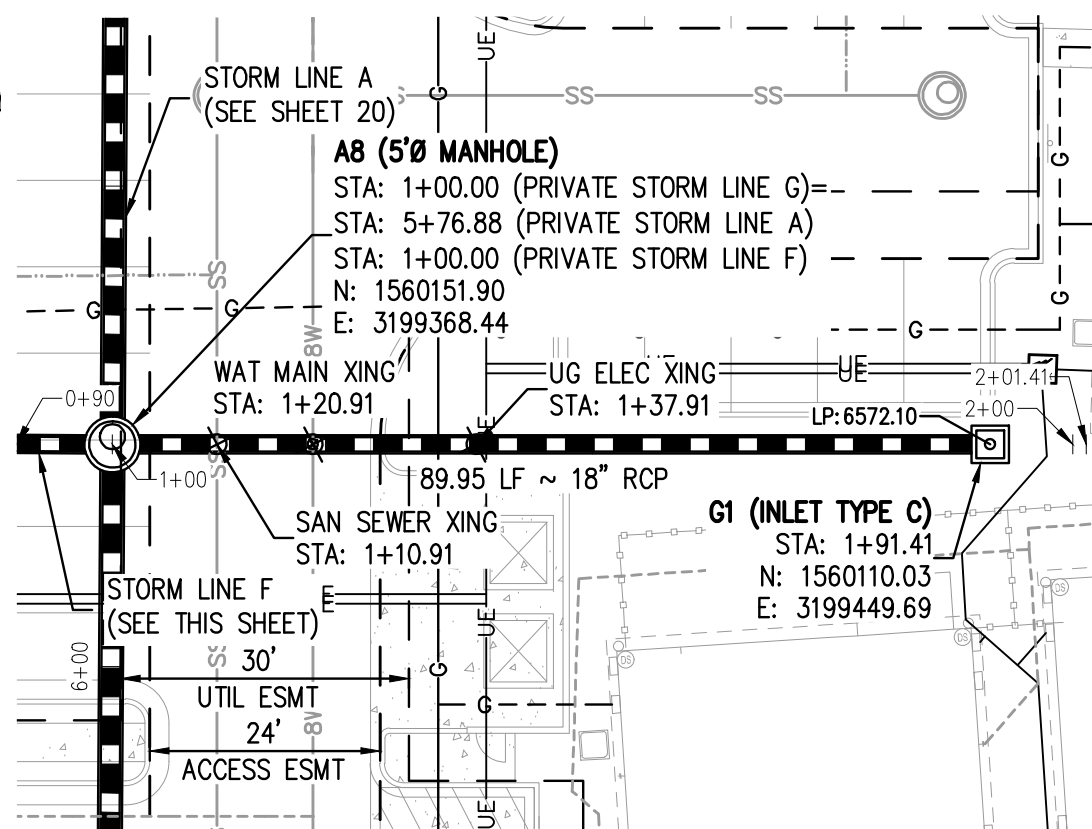


AVILLA FOUNDERS VILLAGE
STORM LINES B, C, D, & E PLANS & PROFILES

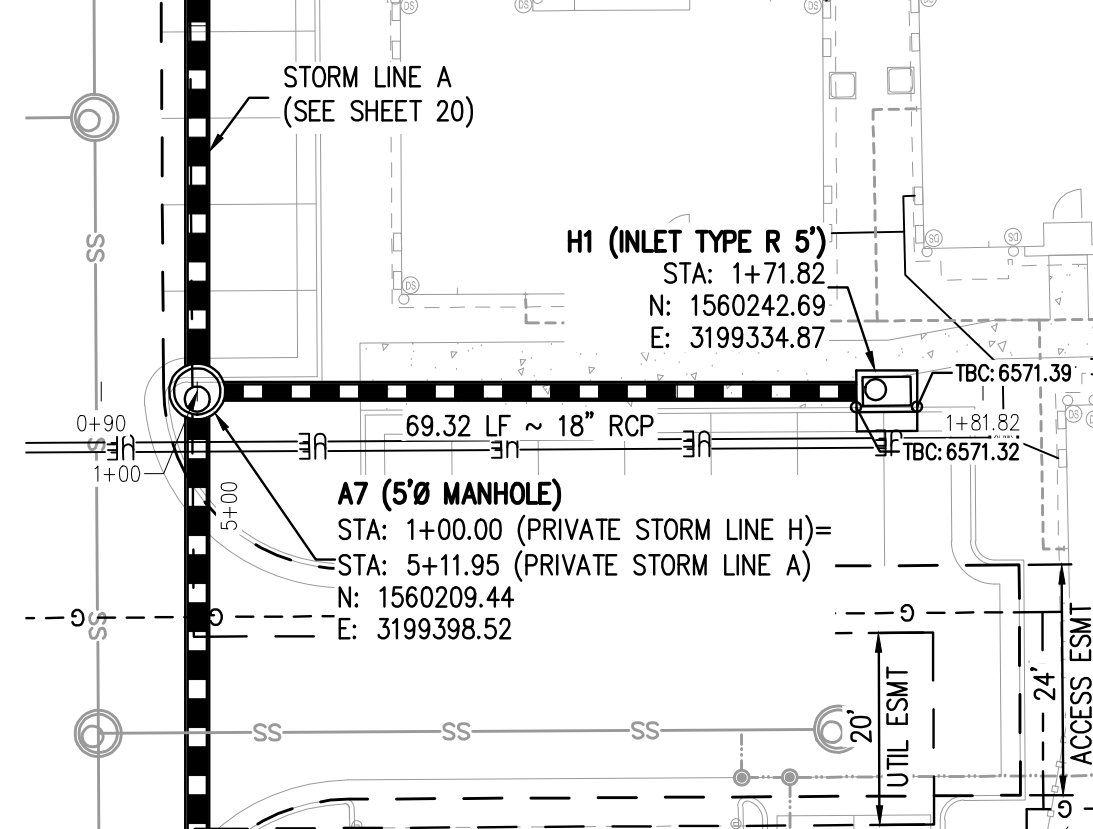
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



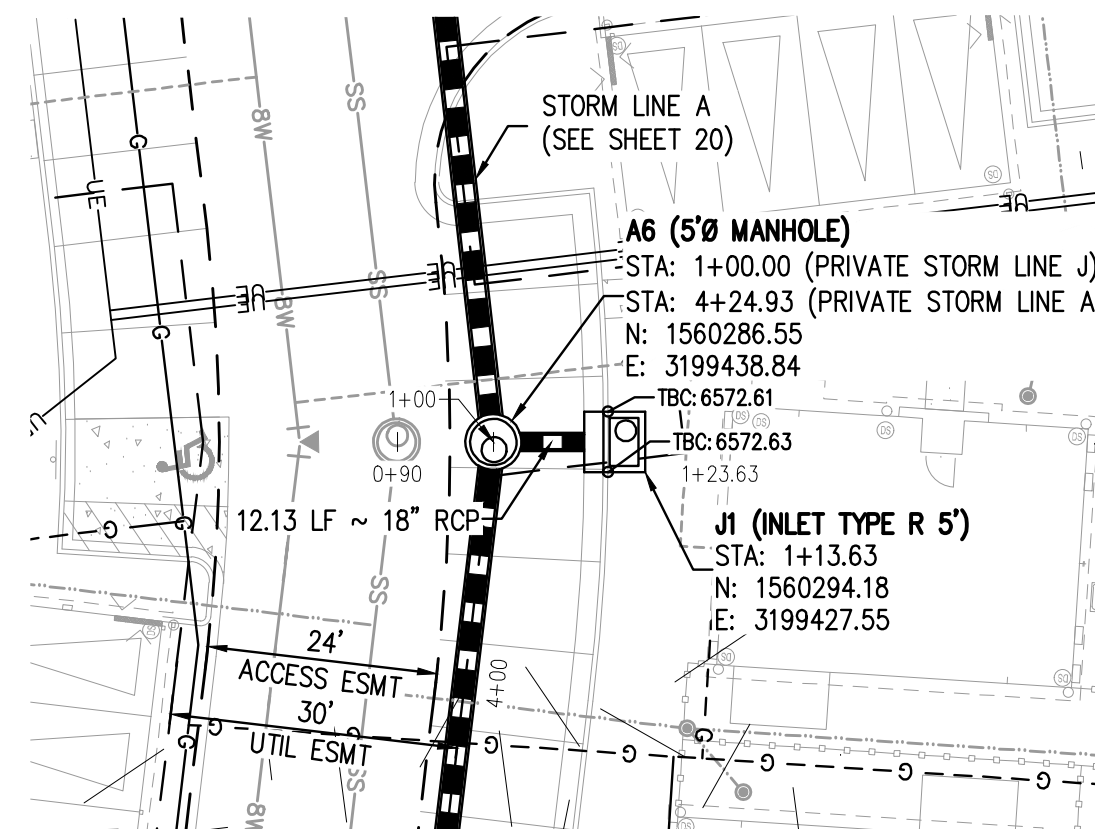
PRIVATE STORM LINE F PLAN
SCALE: 1" = 20'



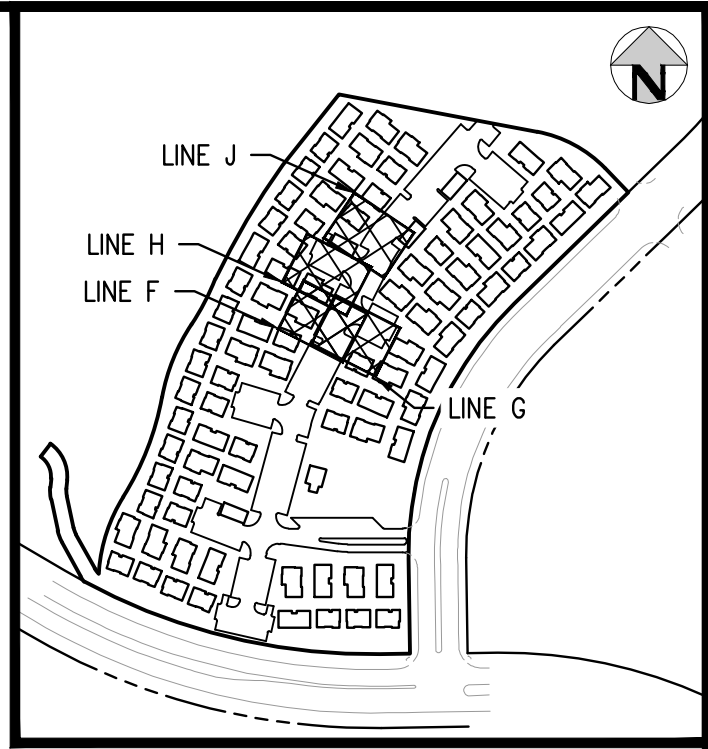
PRIVATE STORM LINE G PLAN
SCALE: 1" = 20'



PRIVATE STORM LINE H PLAN
SCALE: 1" = 20'



PRIVATE STORM LINE J PLAN
SCALE: 1" = 20'



LEGEND

EXISTING	PROPOSED
UTILITY EASEMENT	STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE AND FLOW DIRECTION	SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE	WATER SERVICE
FIRE HYDRANT	WATER FITTINGS AND APPURTENANCES
GATE VALVE	STREET LIGHT
ELECTRICAL TRANSFORMER	A/C UNIT
RETAINING WALL	HANDICAP RAMP
HANDICAP PARKING	SIGN

GENERAL STORM NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
4. STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
5. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
6. CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
9. ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
10. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
11. CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
12. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING Baffles, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
13. ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN DESIGN AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PROPRIETARY AND/OR PRE-MANUFACTURED DETENTION AND/OR WATER QUALITY SYSTEM, THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
14. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR OR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY OR WATER PRIOR TO COMMENCING WORK.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date

PROJECT #: 210431

SHEET NUMBER

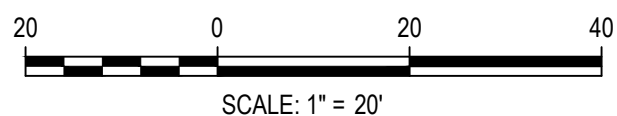
22

22 OF 87

FILE PATH: K:\210431\ENGINEERING\UTILITIES\STORM\CD - STORM LATERAL P&P'S DWG LAYOUT LAYOUT2.DWG
DATE: 10-31-2022
PLOTTER: MON 04/10/23 8:40:38A BY: MILES SUSTAD



DESIGNED BY: <DESIGNER>
CHECKED BY: <REVIEWER>
DRAWN BY: <DRAWN>



ISSUE DATE: 08-11-2022	REVISION COMMENTS
DATE	
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

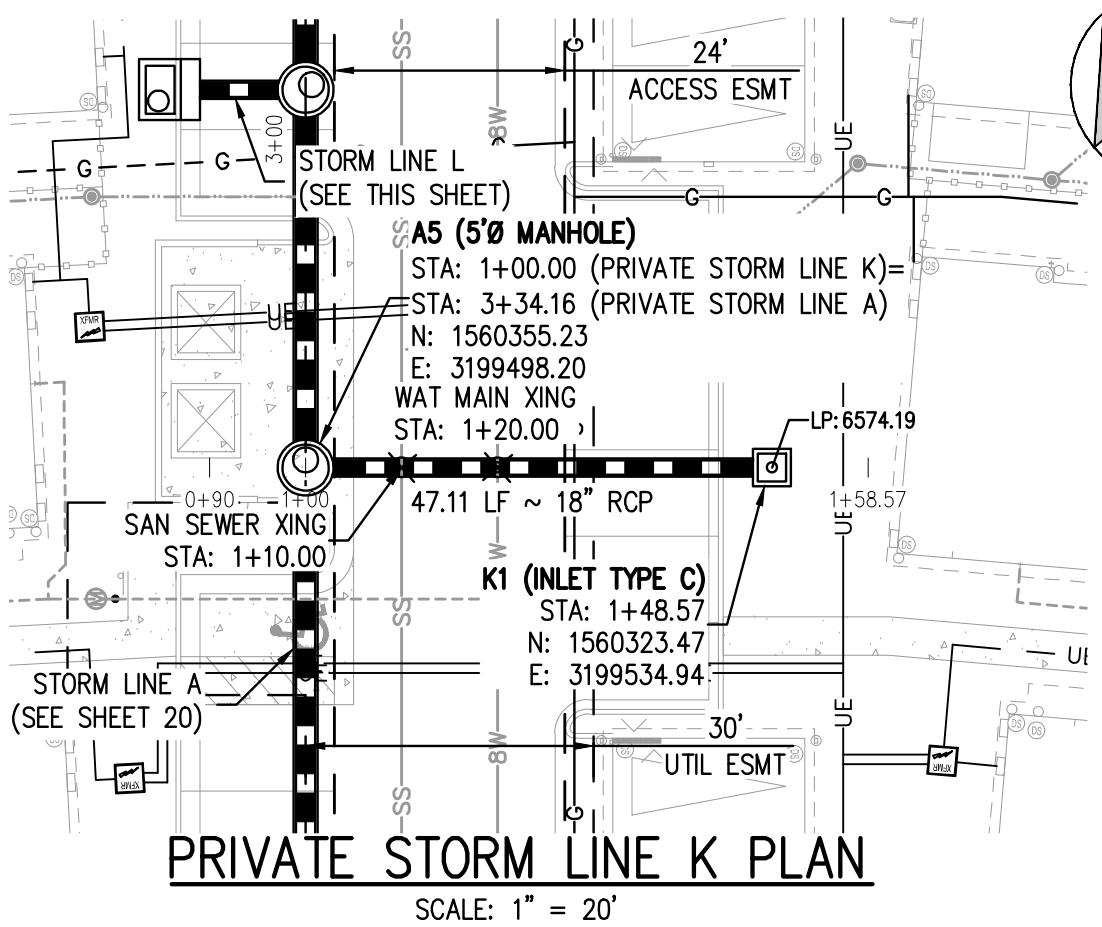
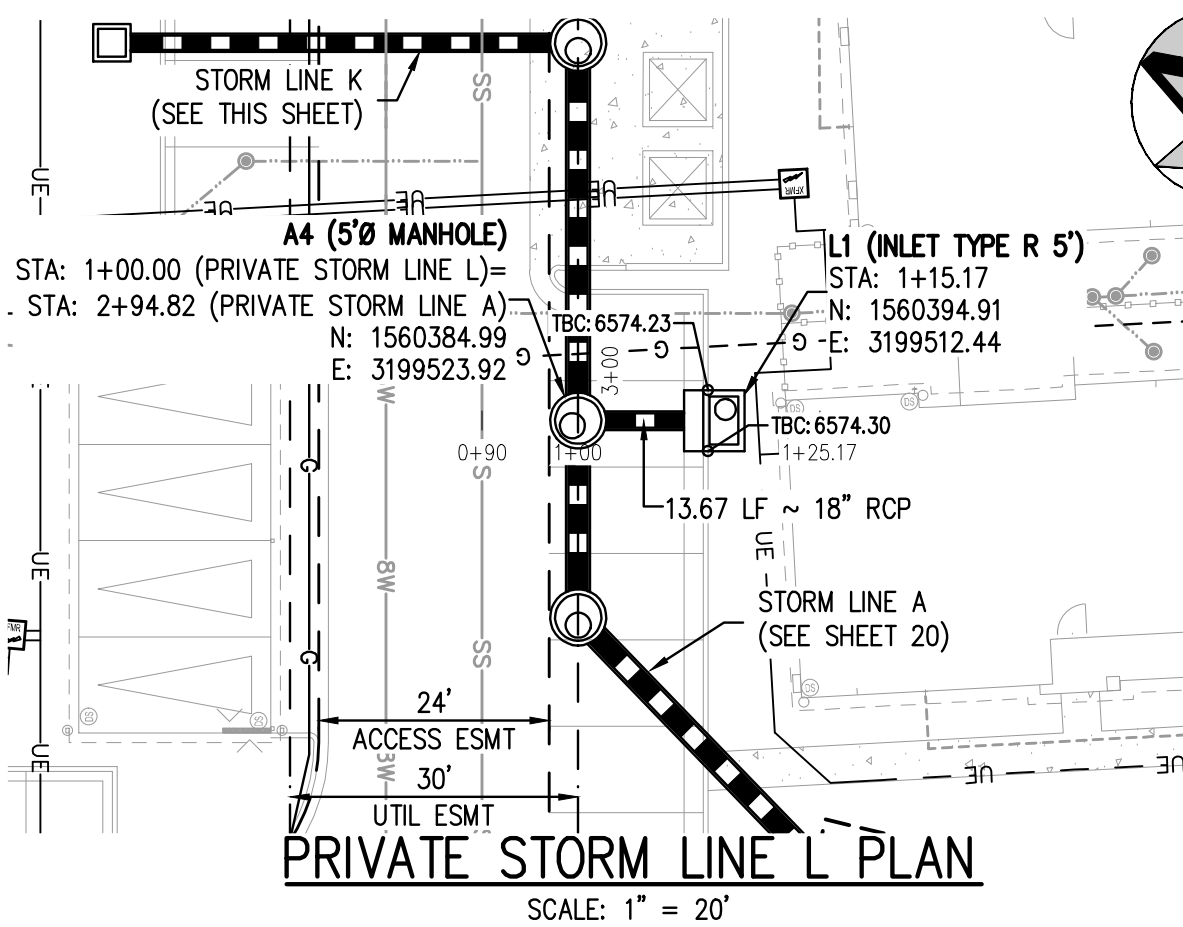
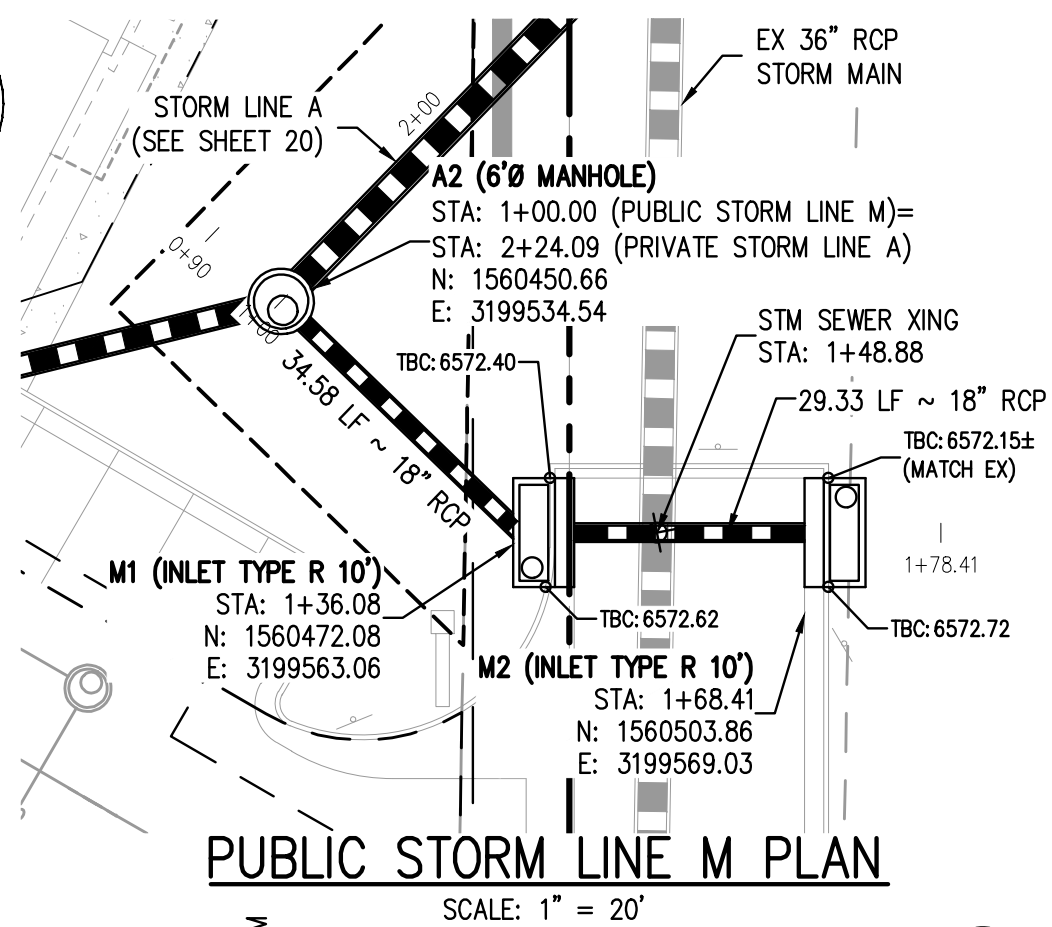
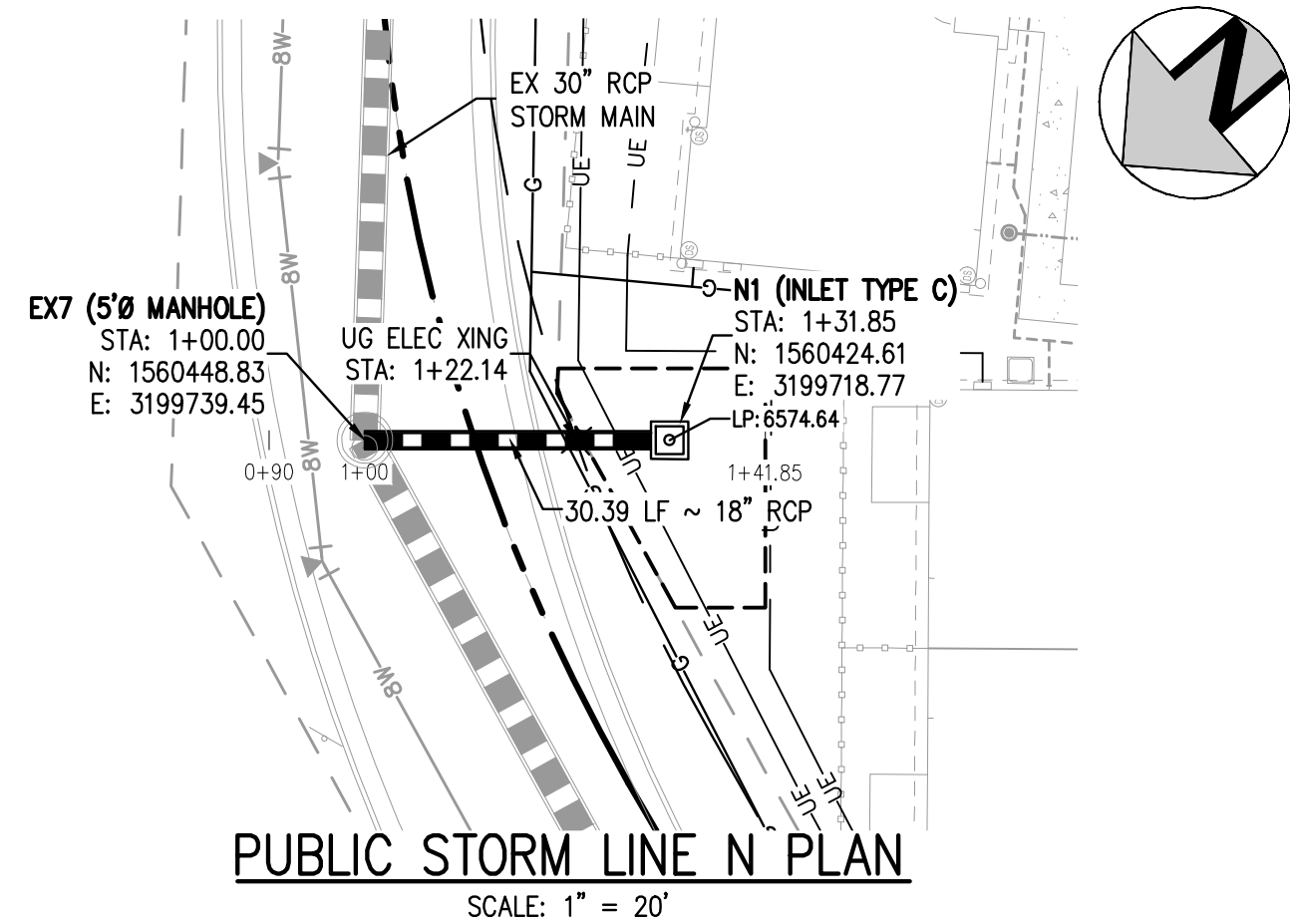
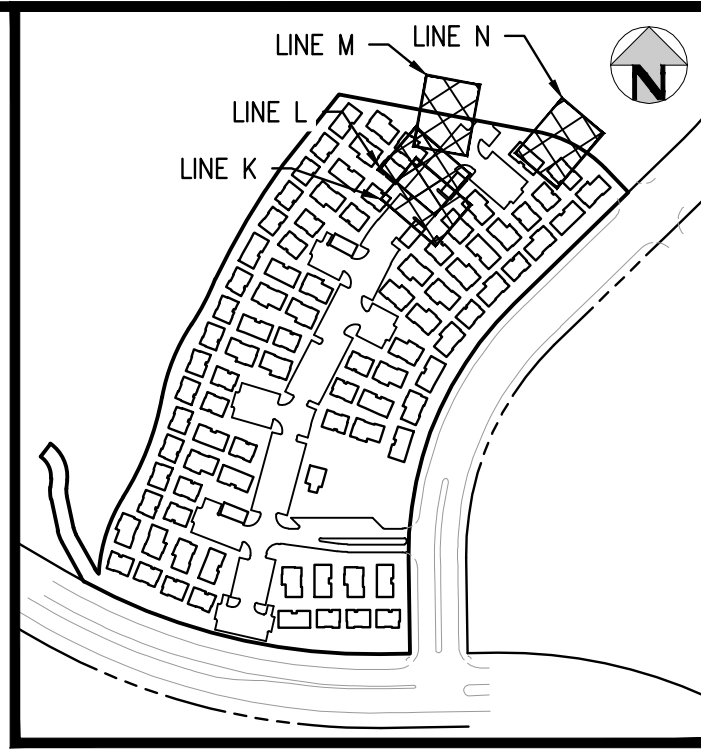


1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
STORM LINES F, G, H, & J PLANS & PROFILES

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



LEGEND

EXISTING	PROPOSED
UTILITY EASEMENT	STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE AND FLOW DIRECTION	SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE	WATER SERVICE
FIRE HYDRANT	WATER FITTINGS AND APPURTENANCES
GATE VALVE	STREET LIGHT
ELECTRICAL TRANSFORMER	A/C UNIT
RETAINING WALL	HANDICAP RAMP
HANDICAP PARKING	SIGN

GENERAL STORM NOTES:

- THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
- PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
- STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
- ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
- CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
- FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
- ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
- ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
- CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
- CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING Baffles, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
- ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN VOLUMES AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PROPRIETARY AND/OR PRE-MANUFACTURED DETENTION AND/OR WATER QUALITY SYSTEM, THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
- CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date

PROJECT #: 210431
SHEET NUMBER

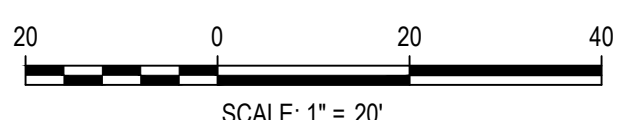
23

23 OF 87

FILE PATH: K:\210431\ENGINEERING\UTILITIES\STORM\CD - STORM LATERAL P&P'S DWG LAYOUT LAYOUT3
NO SCALE: 1" = 20'
PLOTTED: MON 04/10/23 8:40:56A BY: MILES SUSTAD



Know what's below.
Call before you dig.



DESIGNED BY: <DESIGNER>
CHECKED BY: <REVIEWER>
DRAWN BY: <DRAWN>

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

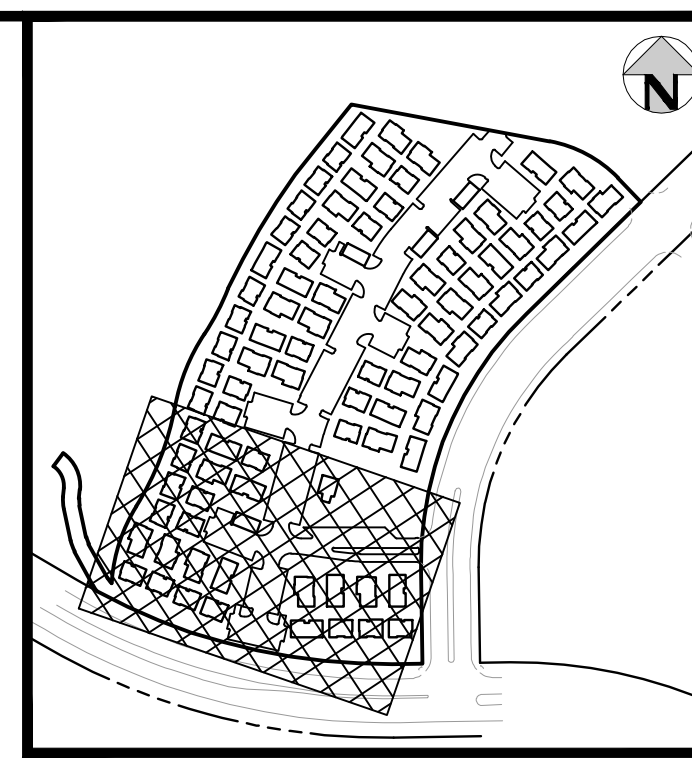


1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
STORM LINES K, L, M, & N PLANS & PROFILES

MATCHLINE - SEE SHEET 25



LEGEND

UTILITY EASEMENT
LANDSCAPE DRAIN

STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN

HANDICAP PARKING

GENERAL STORM NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
4. STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
5. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
6. CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
9. ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
10. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
11. CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
12. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING Baffles, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
13. ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN VOLUMES AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PROPRIETARY AND/OR PRE-MANUFACTURED DETENTION AND/OR WATER QUALITY SYSTEM, THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
14. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING CR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

RACHEL C. PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date _____

Development Services

Project #:

210431

SHEET NUMBER

24

24 OF 87



DESIGNED BY: CLH
CHECKED BY: RCP
DRAWN BY: CLH

ISSUE DATE: 08-11-2022

DATE REVISION COMMENTS

10-31-2022 PER TOWN OF CASTLE ROCK COMMENTS

04-10-2023 PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



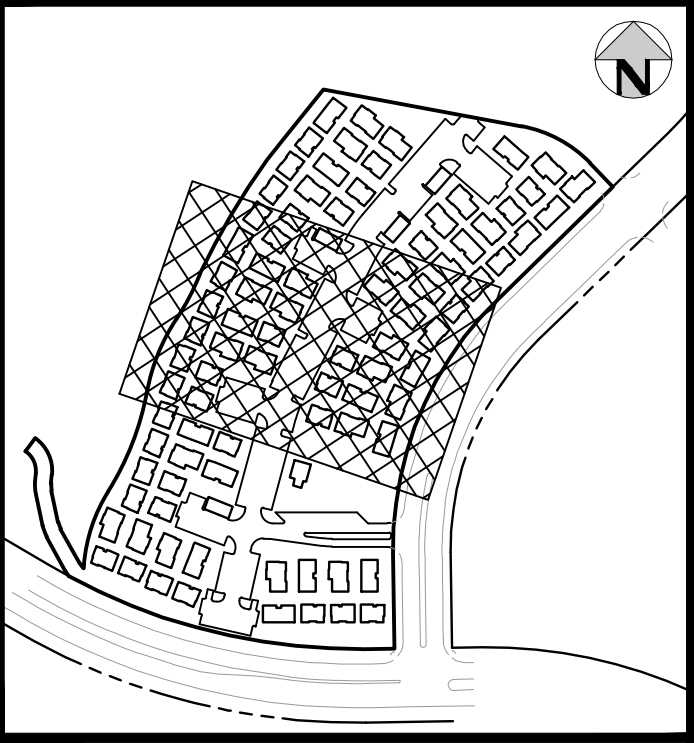
AVILLA FOUNDERS VILLAGE
LANDSCAPE DRAIN PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILEPATH: K:\2024\ENGINEERING\UTILITIES\STORM\CD - LANDSCAPE DRAIN PLAN\DWG LAYOUT LAYOUT2
15 REVISIONS: 1. 04/10/23 8:41:58A BY: MILES SUSTAD
PLOTTED: MON 04/10/23 8:41:58A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 26

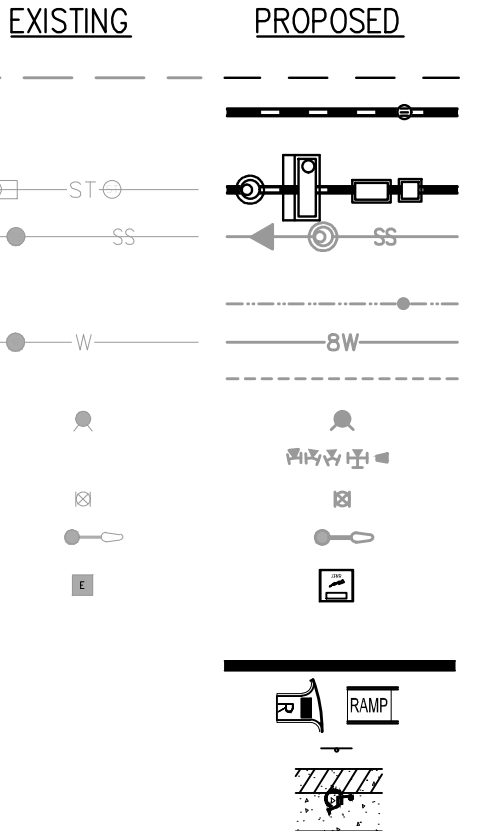
MITCHELL GULCH
TRACT S
FOUNDERS VILLAGE FILING NO. 24
REC NO. 2006064806
OWNER: TOWN OF CASTLE ROCK



LEGEND

UTILITY EASEMENT
LANDSCAPE DRAIN

STORM SEWER W/ MANHOLE AND INLET
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING



GENERAL STORM NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
4. STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
5. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
6. CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
9. ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
10. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
11. CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
12. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING Baffles, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
13. ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN DESIGN AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PROPRIETARY AND/OR PRE-MANUFACTURED DETENTION AND/OR WATER QUALITY SYSTEM, THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
14. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING CR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

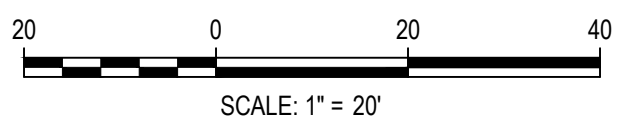
RACHEL C. PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date

PROJECT # 210431
SHEET NUMBER

25

25 OF 87

MATCHLINE - SEE SHEET 24



ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

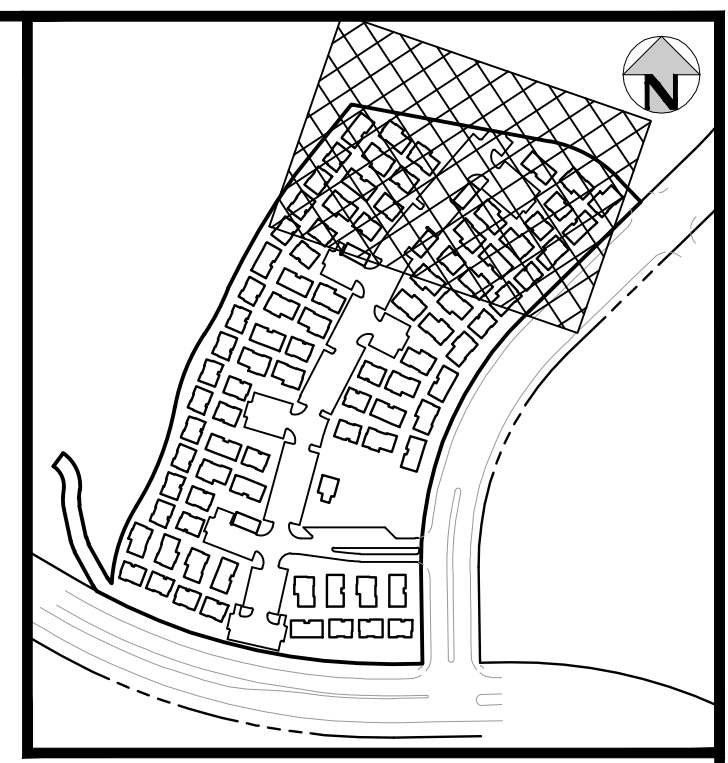
AVILLA FOUNDERS VILLAGE
LANDSCAPE DRAIN PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\2024\ENGINEERING\UTILITIES\STORM\CD - LANDSCAPE DRAIN PLAN\DWG LAYOUT LAYOUT3
15 REVISIONS: 1. 04/10/23 8:42:12A BY: MILES SUSTAD
PLOTTED: MON 04/10/23 8:42:12A BY: MILES SUSTAD

MITCHELL GULCH
TRACT S
FOUNDERS VILLAGE FILING NO. 24
REC NO. 2006064806
OWNER: TOWN OF CASTLE ROCK

TRACT B
FOUNDERS VILLAGE
FILING NO. 24
AMENDMENT NO. 1
REC NO. 2021132396
OWNER: TOWN OF
CASTLE ROCK



LEGEND

UTILITY EASEMENT
LANDSCAPE DRAIN

STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING

EXISTING **PROPOSED**

STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING

- GENERAL STORM NOTES:**
1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
 2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
 3. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR CYLINDRICAL MANHOLES AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
 4. STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
 5. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
 6. CONTRACTOR SHALL USE RCP, PVC, PP, OR HDPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
 7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
 8. ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
 9. ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
 10. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
 11. CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
 12. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING Baffles, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
 13. ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN DESIGN AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), DEWATERING, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PROPRIETARY AND/OR PRE-MANUFACTURED DETENTION AND/OR WATER QUALITY SYSTEM, THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
 14. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.

HORIZONTAL CONTROL
BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

PROFESSIONAL ENGINEER CERTIFICATION
I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

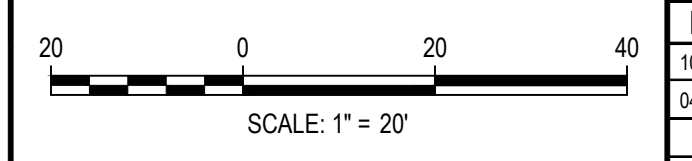
VERTICAL DATUM
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date: _____

Development Services Date

PROJECT # 210431
SHEET NUMBER
26
26 OF 87



ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
LANDSCAPE DRAIN PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILEPATH: K:\210431\ENGINEERING\UTILITIES\STORM\CD - LANDSCAPE DRAIN PLANNING LAYOUT.LAYOUT1
15:56:55 - 4/10/23 8:42:23A
PLOTTED: MON 04/10/23 8:42:23A BY: MILES SUSTAD

10-31-2022
04-10-2023

DESIGNED BY: CLH
CHECKED BY: RCP
DRAWN BY: CLH

PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	INV. UP	INV. DOWN
A-1	6"	15.74'	0.50%	6572.14	6572.06
A-1-1	6"	20.35'	0.50%	6572.24	6572.14
A-1-2	6"	20.81'	0.50%	6572.34	6572.24
A-1-3	6"	36.56'	0.50%	6572.52	6572.34
A-2	6"	12.92'	5.03%	6572.79	6572.14
A-2-1	6"	17.93'	0.70%	6572.92	6572.79
A-2-2	6"	12.56'	0.70%	6573.01	6572.92
A-2-3	6"	38.45'	0.70%	6573.28	6573.01
A-3	6"	11.24'	4.13%	6573.25	6572.79
A-4	6"	6.19'	4.13%	6573.51	6573.25
A-5	6"	7.87'	0.50%	6573.55	6573.51
A-5-1	6"	48.17'	0.50%	6573.79	6573.55
A-5-1-1	6"	6.57'	14.92%	6574.77	6573.79
A-5-1-2	6"	11.55'	9.09%	6574.84	6573.79
A-5-2	6"	2.79'	0.50%	6573.80	6573.79
A-5-3	6"	8.61'	0.50%	6573.85	6573.80
A-5-4	6"	23.70'	0.50%	6573.97	6573.85
A-5-5	6"	10.24'	0.50%	6574.02	6573.97
A-5-5-1	6"	1.72'	2.50%	6574.06	6574.02
A-5-5-2	6"	6.80'	2.50%	6574.23	6574.06
A-5-6	6"	4.68'	0.50%	6574.04	6574.02
A-5-7	6"	33.32'	2.50%	6575.06	6574.23
A-6	6"	8.25'	0.50%	6573.59	6573.55
A-6-1	6"	5.50'	12.55%	6574.28	6573.59
A-7	6"	26.40'	0.50%	6573.72	6573.59
A-8	6"	13.29'	0.50%	6573.79	6573.72
A-9	6"	25.14'	0.50%	6573.91	6573.79
A-10	6"	10.64'	0.50%	6573.97	6573.91
A-11	6"	10.60'	0.50%	6574.02	6573.97
A-12	6"	6.74'	0.50%	6574.05	6574.02
A-13	6"	32.68'	0.50%	6574.22	6574.05
B-1	6"	24.26'	18.92%	6566.56	6561.97
B-2	6"	3.03'	18.92%	6567.13	6566.56
B-3	6"	4.88'	18.92%	6568.06	6567.13
B-4	6"	5.74'	18.92%	6569.14	6568.06
B-5	6"	22.29'	1.19%	6569.41	6569.14
B-5-1	6"	16.06'	4.05%	6570.06	6569.41
B-6	6"	17.01'	1.19%	6569.61	6569.41
B-7	6"	7.16'	1.03%	6569.68	6569.61
B-8	6"	30.98'	1.03%	6570.00	6569.68
B-9	6"	19.74'	1.03%	6570.21	6570.00
B-9-1	6"	4.54'	10.35%	6570.68	6570.21
B-10	6"	8.26'	1.03%	6570.29	6570.21
B-11	6"	6.32'	1.03%	6570.36	6570.29
B-12	6"	8.05'	1.03%	6570.44	6570.36
C-1	6"	6.27'	9.33%	6562.55	6561.97
C-2	6"	3.94'	9.33%	6562.92	6562.55
C-2-1	6"	4.04'	78.69%	6566.10	6562.92
C-2-2	6"	5.11'	78.69%	6570.12	6566.10
C-3	6"	39.67'	9.33%	6566.62	6562.92

PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	INV. UP	INV. DOWN
C-4	6"	15.27'	1.99%	6566.93	6566.62
C-5	6"	33.62'	2.01%	6567.60	6566.93
C-6	6"	20.40'	2.01%	6568.01	6567.60
C-7	6"	29.56'	6.70%	6569.99	6568.01
C-8	6"	9.00'	6.70%	6570.60	6569.99
C-9	6"	13.02'	6.70%	6571.47	6570.60
D-1	6"	18.51'	1.24%	6564.60	6564.37
D-1-1	6"	5.07'	100.00%	6569.67	6564.60
D-2	6"	8.37'	1.24%	6564.70	6564.60
D-3	6"	8.39'	1.24%	6564.81	6564.70
D-4	6"	33.06'	1.24%	6565.22	6564.81
D-4-1	6"	11.13'	42.26%	6569.92	6565.22
D-5	6"	11.27'	1.24%	6565.36	6565.22
D-6	6"	7.66'	1.24%	6565.46	6565.36
D-7	6"	18.52'	1.24%	6565.69	6565.46
D-7-1	6"	8.38'	93.90%	6573.56	6565.69
D-8	6"	17.92'	0.52%	6565.78	6565.69
D-9	6"	5.99'	0.52%	6565.81	6565.78
D-9-1	6"	4.40'	3.94%	6565.98	6565.81
D-9-2	6"	6.49'	3.94%	6566.24	6565.98
D-9-3	6"	8.35'	3.94%	6566.57	6566.24
D-9-4	6"	12.99'	3.94%	6567.08	6566.57
D-9-4-1	6"	38.68'	14.04%	6572.51	6567.08
D-9-5	6"	6.67'	3.41%	6567.31	6567.08
D-9-6	6"	10.70'	3.41%	6567.67	6567.31
D-9-6-1	6"	11.86'	34.26%	6571.73	6567.67
D-9-6-1-1	6"	4.86'	49.84%	6574.15	6571.73
D-9-6-2	6"	24.54'	1.43%	6572.08	6571.73
D-9-6-3	6"	21.59'	1.43%	6572.39	6572.08
D-9-6-4	6"	2.12'	1.43%	6572.42	6572.39
D-9-6-5	6"	8.38'	1.43%	6572.54	6572.42
D-9-6-6	6"	37.36'	1.43%	6573.08	6572.54
D-9-6-7	6"	3.76'	1.43%	6573.13	6573.08
D-9-7	6"	31.82'	3.41%	6568.76	6567.67
D-9-7-1	6"	28.33'	8.00%	6571.03	6568.76
D-9-7-2	6"	2.81'	8.00%	6571.25	6571.03
D-9-7-3	6"	8.52'	8.00%	6571.93	6571.25
D-9-8	6"	3.42'	3.41%	6568.87	6568.76
D-9-9	6"	10.74'	3.41%	6569.24	6568.87
D-9-9-1	6"	9.45'	47.08%	6573.69	6569.24
D-9-10	6"	41.09'	8.06%	6572.55	6569.24
D-9-10-1	6"	9.89'	20.83%	6574.61	6572.55
D-9-11	6"	5.26'	8.06%	6572.97	6572.55
D-9-12	6"	6.84'	8.06%	6573.53	6572.97
D-9-13	6"	32.91'	0.75%	6573.77	6573.53
D-9-14	6"	16.98'	0.75%	6573.90	6573.77
D-9-15	6"	3.90'	0.75%	6573.93	6573.90
D-10	6"	3.81'	0.52%	6565.83	6565.81
D-11	6"	30.72'	0.52%	6565.99	6565.83
D-11-1	6"	7.44'	25.43%	6567.88	6565.99

PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	INV. UP	INV. DOWN
D-12	6"	13.68'	0.52%	6566.06	6565.99
D-13	6"	49.10'	0.53%	6566.32	6566.06
D-14	6"	5.52'	0.50%	6566.35	6566.32
D-14-1	6"	2.73'	0.50%	6566.36	6566.35
D-14-2	6"	4.92'	0.50%	6566.39	6566.36
D-14-3	6"	41.63'	0.50%	6566.60	6566.39
D-15	6"	27.05'	0.89%	6566.59	6566.35
D-16	6"	12.45'	0.89%	6566.70	6566.59
D-16-1	6"	23.04'	14.26%	6569.99	6566.70
D-16-1-1	6"	7.82'	10.99%	6570.85	6569.99
D-16-2	6"	29.26'	0.50%	6570.13	6569.99
D-16-3	6"	7.04'	0.50%	6570.17	6570.13
D-17	6"	5.64'	0.89%	6566.75	6566.70
D-17-1	6"	15.91'	3.62%	6567.33	6566.75
D-17-1-1	6"	7.51'	55.38%	6571.49	6567.33
D-17-2	6"	14.98'	8.96%	6568.67	6567.33
D-17-2-1	6"	8.23'	33.12%	6571.40	6568.67
D-17-3	6"	16.33'	8.96%	6570.13	6568.67
D-17-3-1	6"	8.30'	4.10%	6570.47	6570.13
D-17-3-2	6"	2.36'	4.10%	6570.57	6570.47
D-17-4	6"	5.92'	8.96%	6570.66	6570.13
D-17-5	6"	6.86'	2.36%	6570.82	6570.66
D-17-6	6"	20.16'	2.36%	6571.30	6570.82
D-17-7	6"	1.39'	2.36%	6571.33	6571.30
D-18	6"	7.94'	2.99%	6566.99	6566.75
D-19	6"	34.44'	2.99%	6568.02	6566.99
D-20	6"	7.27'	2.99%	6568.24	6568.02
D-20-1	6"	10.97'	9.75%	6569.31	6568.24
D-21	6"	2.32'	2.99%	6568.30	6568.24
D-22	6"	42.32'	2.99%	6569.57	6568.30
E-1	6"	6.72'	5.16%	6563.42	6563.07
E-1-1	6"	2.31'	100.00%	6565.73	6563.42
E-2	6"	9.38'	5.16%	6563.90	6563.42
E-3	6"	18.34'	5.16%	6564.85	6563.90
E-4	6"	47.43'	1.00%	6565.32	6564.85
E-5	6"	47.95'	1.00%	6565.80	6565.32
E-5-1	6"	27.39'	11.50%	6568.95	6565.80
E-5-2	6"	5.73'	11.50%	6569.61	6568.95
E-6	6"	3.44'	1.00%	6565.83	6565.80
E-7	6"	12.13'	1.00%	6565.96	6565.83
E-8	6"	9.73'	1.00%	6566.05	6565.96
E-8-1	6"	16.19'	7.49%	6567.26	6566.05
E-8-2	6"	3.64'	7.49%	6567.54	6567.26
E-8-3	6"	16.66'	7.49%	6568.79	6567.54
E-8-4	6"	8.60'	7.49%	6569.43	6568.79
E-9	6"	5.16'	1.00%	6566.11	6566.05
E-10	6"	17.34'	1.89%	6566.43	6566.11
E-11	6"	2.55'	0.57%	6566.45	6566.43
E-12	6"	2.20'	0.57%	6566.46	6566.45
E-12-1	6"	8.89'	45.33%	6570.49	6566.46

PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	INV. UP	INV. DOWN
E-13	6"	17.11'	0.57%	6566.56	6566.46
E-13-1	6"	8.91'	43.11%	6570.40	6566.56
E-14	6"	2.46'	0.57%	6566.57	6566.56
E-15	6"	27.13'	0.57%	6566.72	6566.57
E-15-1	6"	12.17'	26.30%	6569.92	6566.72
E-16	6"	3.50'	0.57%	6566.74	6566.72
E-17	6"	17.05'	0.57%	6566.84	6566.74
E-18	6"	15.72'	9.36%	6568.31	6566.84
E-18-1	6"	6.25'	8.92%	6568.87	6568.31
E-18-2	6"	9.77'	8.92%	6569.74	6568.87
E-18-3	6"	5.51'	8.92%	6570.23	6569.74
E-19	6"	16.55'	9.36%	6569.86	6568.31
F-1	6"	2.97'	0.81%	6563.09	6563.07
F-2	6"	10.76'	0.81%	6563.18	6563.09
F-2-1	6"	9.53'	20.22%	6565.11	6563.18
F-2-2	6"	20.33'	20.22%	6565.22	6565.11
F-3	6"	6.96'	0.81%	6563.24	6563.18
F-4	6"	37.41'	0.81%	6563.54	6563.24
F-4-1	6"	15.50'	8.20%	6564.81	6563.54
F-4-2	6"	8.41'	8.20%	6565.50	6564.81
F-4-3	6"	12.06'	39.15%	6570.22	6565.50
F-5	6"	7.18'	0.81%	6563.60	6563.54
F-5-1	6"	7.46'	5.00%	6563.97	6563.60
F-6	6"	34.95'	0.81%	6563.88	6563.60
F-6-1	6"	7.08'	30.00%	6566.00	6563.88
F-7	6"	18.73'	0.81%	6564.03	6563.88
F-8	6"	7.44'	0.81%	6564.09	6564.03
F-9	6"	28.43'	0.81%	6564.32	6564.09
F-9-1	6"	37.01'	9.13%	6567.70	6564.32
F-9-2	6"	7.62'	7.65%	6568.28	6567.70
F-10	6"	2.53'	0.81%	6564.34	6564.32
F-11	6"	10.55'	0.81%	6564.42	6564.34
F-12	6"	5.15'	6.18%	6564.74	6564.42
F-13	6"	8.23'	6.18%	6565.25	6564.74
F-14	6"	4.47'	6.18%	6565.53	6565.25
F-14-1	6"	14.19'	22.30%	6568.69	6565.53
F-14-2	6"	2.97'	32.23%	6569.65	6568.69
F-15	6"	28.20'	6.18%	6567.27	6565.53
G-1	6"	3.22'	6.79%	6565.70	6565.48
G-1-1	6"	41.13'	5.22%	6567.84	6565.69
G-1-2	6"	3.11'	5.22%	6568.00	6567.84
G-2	6"	1.75'	6.79%	6565.82	6565.70
G-2-1	6"	4.20'	45.67%	6567.72	6565.82
G-3	6"	8.90'	6.79%	6566.42	6565.82
G-3-1	6"	3.76'	52.86%	6568.41	6566.42
G-4	6"	15.56'	0.78%	6566.54	6566.42
G-4-1	6"	3.76'	73.57%	6569.31	6566.54
G-5	6"	3.33'	0.78%	6566.57	6566.54
G-5-1	6"	5.67'	39.70%	6568.82	6566.57
G-5-3	6"	5.03'	0.50%	6566.88	6566.85

PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	INV. UP	INV. DOWN
S-11-3	6"	12.74'	0.50%	6568.45	6568.39
S-12	6"	33.18'	0.50%	6568.44	6568.28
S-13	6"	8.80'	0.50%	6568.49	6568.44
S-13-1	6"	3.94'	0.50%	6568.51	6568.49
S-13-2	6"	5.50'	0.50%	6568.54	6568.51
S-13-2-1	6"	1.61'	0.50%	6568.55	6568.54
S-13-3	6"	4.69'	0.50%	6568.56	6568.54
S-13-3-1	6"	6.35'	0.50%	6568.59	6568.56
S-13-4	6"	5.33'	0.50%	6568.59	6568.56
S-13-5	6"	2.28'	0.50%	6568.60	6568.59
S-14	6"	2.69'	0.50%	6568.50	6568.49
S-15	6"	6.94'	0.50%	6568.53	6568.50
S-15-1	6"	5.22'	0.50%	6568.56	6568.53
S-16	6"	36.89'	0.50%	6568.72	6568.53
S-17	6"	7.44'	0.50%	6568.76	6568.72
S-18	6"	6.27'	0.50%	6568.79	6568.76
S-19	6"	15.56'	0.50%	6568.86	6568.79
S-20	6"	20.07'	0.50%	6568.97	6568.86

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF STRUCTURE TO CENTER OF NEXT CIRCULAR MANHOLE AND TO THE INSIDE FACE OF INLETS AND OTHER BOX STRUCTURES. PIPE LENGTHS ARE MEASURED TO THE END OF THE STRUCTURE FOR ALL FLARED END SECTIONS.
4. STATIONING OF INLETS SHOWN IN STORM SEWER PROFILES IS AT CENTER OF STRUCTURE.
5. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
6. CONTRACTOR SHALL USE RCP, PVC, PN, OR HOPE PIPES FOR THE MAIN LINES, BUT SHALL NOTIFY THE JURISDICTIONAL UTILITY PROVIDER AND THE ENGINEER, PRIOR TO INSTALLATION, FOR APPROVAL. REGARDLESS OF PIPE MATERIAL, ALL STORM SEWER SHALL UTILIZE WATER-TIGHT JOINTS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. ALL TYPE C & D INLETS SHALL HAVE CLOSE MESH GRATES.
9. ALL LATERAL PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING KOR-N-TEE CONNECTORS OR ENGINEER APPROVED EQUIVALENT.
10. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
11. CONTRACTOR SHALL MODIFY INLET BASES AS NEEDED IN ORDER TO ENSURE ALL STORM PIPES CONNECT PROPERLY TO THE INLET. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
12. CONTRACTOR SHALL PROVIDE ENGINEERD SHOP DRAWINGS, DESIGNED BY A LICENSED ENGINEER, DETAILING THE STRUCTURAL DESIGN OF ALL POND IMPROVEMENTS (FOREBAY, ENERGY DISSIPATING BAFFLES, OUTLET STRUCTURE, ETC.) FOR REVIEW AND APPROVAL BY ENGINEER, OWNER, AND CITY/COUNTY PRIOR TO INSTALLATION.
13. ANY SUBSURFACE DETENTION AND/OR WATER QUALITY SYSTEM DESIGNS SHOWN ON THESE PLANS (IF APPLICABLE) ARE SPECIFICALLY LIMITED TO ELEVATIONS, GRADES AND STORMWATER DETENTION AND/OR WATER QUALITY DESIGN VOLUMES AND RELEASE RATES. THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES STRUCTURAL DESIGN (INCLUDING, BUT NOT LIMITED TO, BUOYANCY CALCULATIONS AND CONSTRUCTION, TRAFFIC, OR OTHER LOADING), Dewatering, EXCAVATION, SHORING, AND MATERIALS AND BACKFILL SPECIFICATIONS. IF THE PROPOSED SYSTEM UTILIZES A PUMP AND/OR PUMP-OUT, THE DESIGN AND PROFESSIONAL ENGINEER'S SEAL SPECIFICALLY EXCLUDES PUMP AND/OR PUMP-OUT SPECIFICATIONS FOR COORDINATING ALL REQUIRED SYSTEM DESIGN, CALCULATIONS, MATERIALS AND BACKFILL SPECIFICATIONS WITH THE UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEM MANUFACTURER AND/OR SUPPLIER. CONSTRUCTION OBSERVATION BY THE MANUFACTURER'S REPRESENTATIVE IS ESSENTIAL FOR PROPER INSTALLATION OF UNDERGROUND DETENTION AND/OR WATER QUALITY SYSTEMS. AT A MINIMUM, THE INSTALLATION SHOULD BE INSPECTED BY THE MANUFACTURER'S REPRESENTATIVE DURING CONSTRUCTION AND ANY DEFICIENCIES OF THE INSTALLATION IDENTIFIED BY THE MANUFACTURER'S INSPECTION SHOULD BE CORRECTED IMMEDIATELY.
14. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-3333, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS. PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS, IF THE TIE-IN WILL NOT DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR OR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.

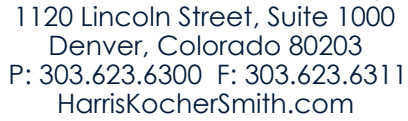
I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

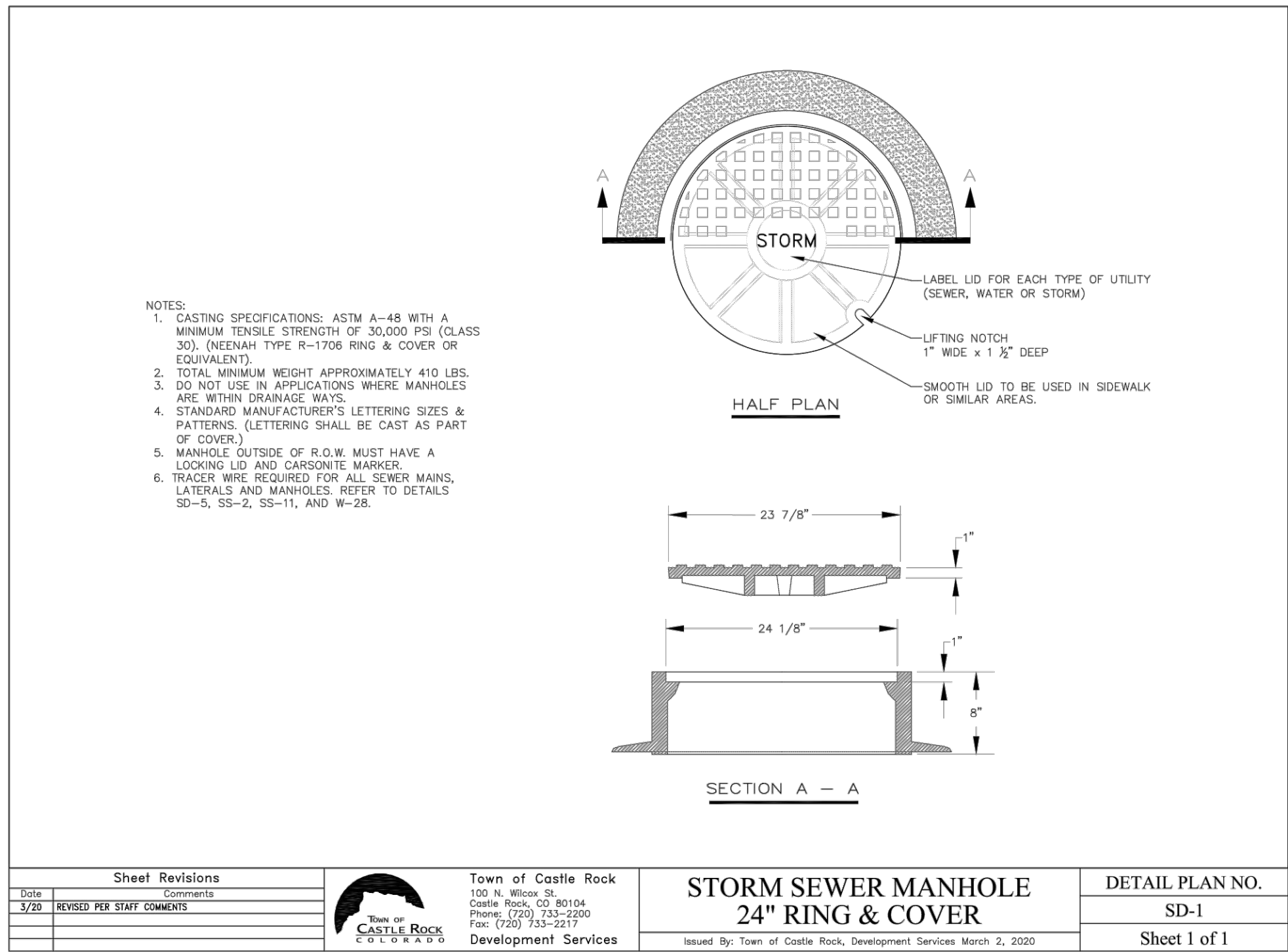
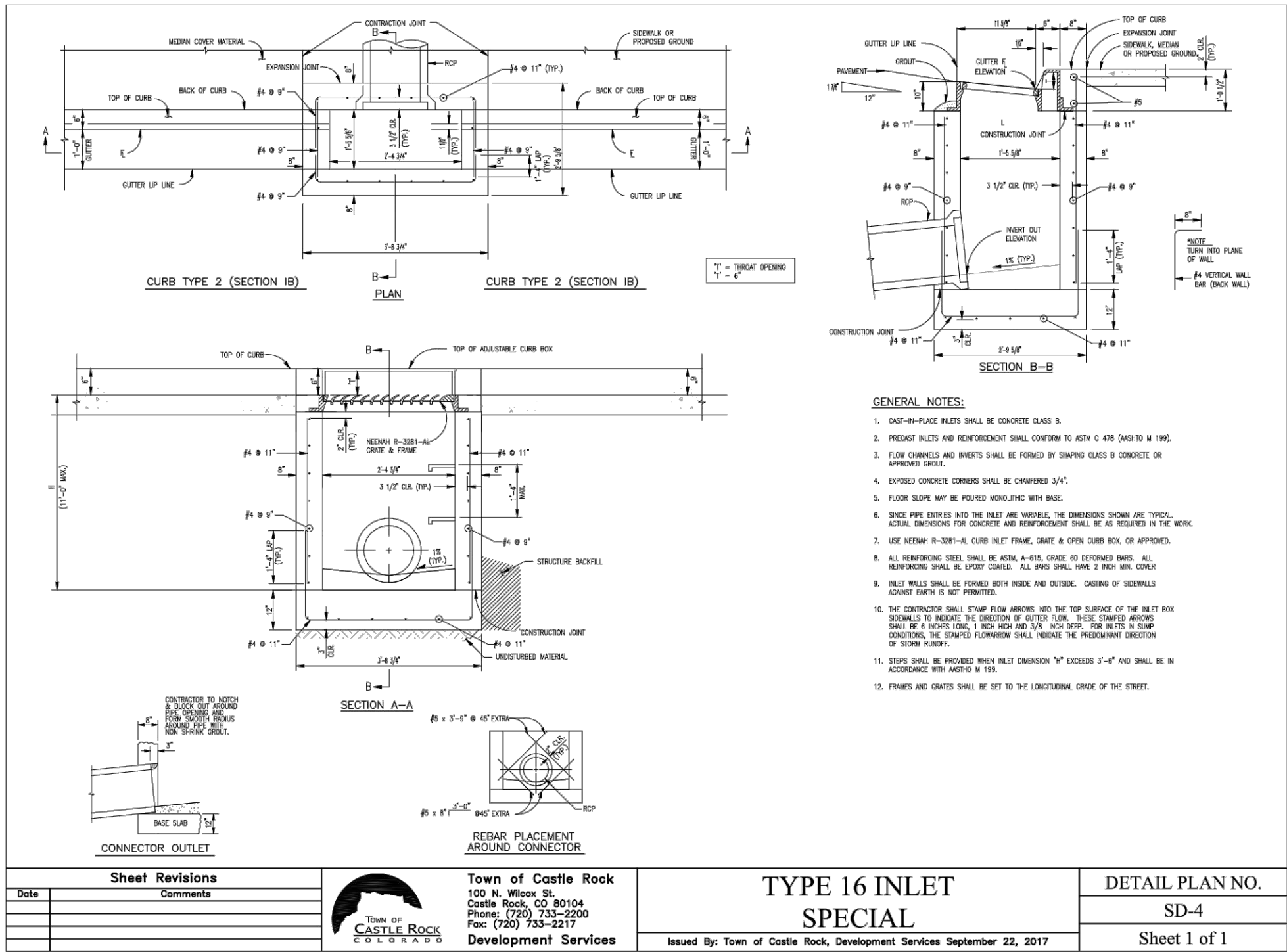
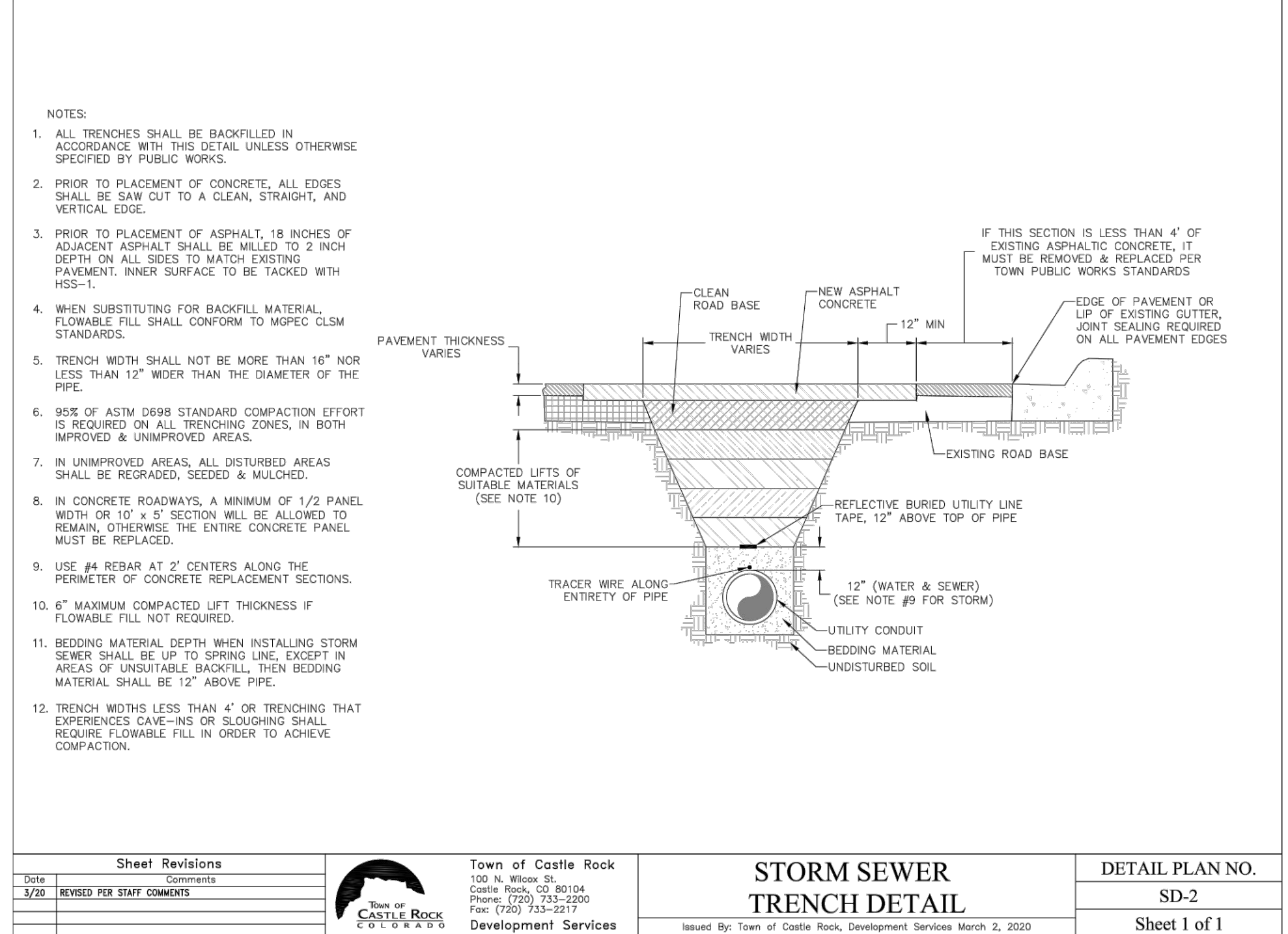
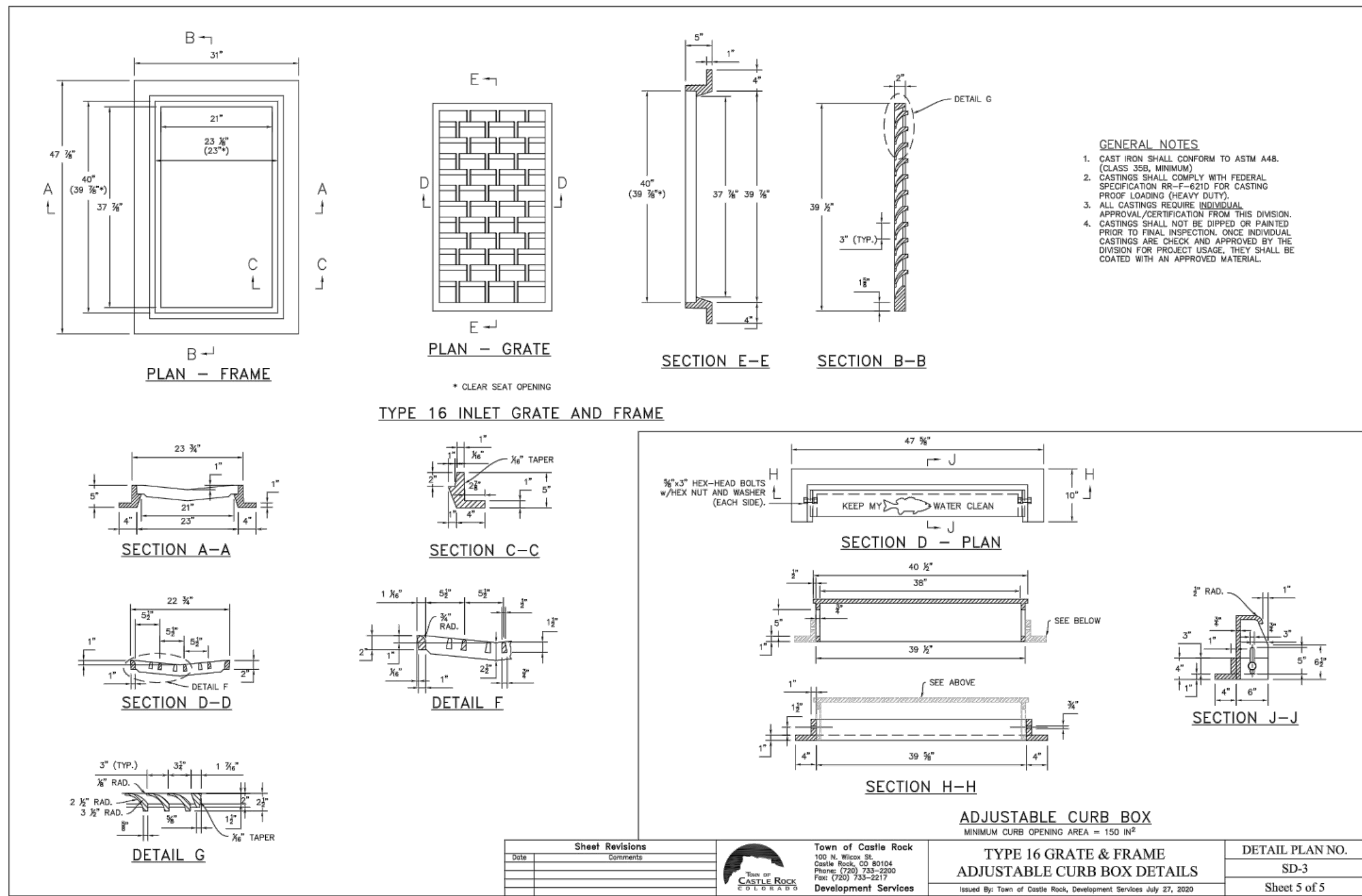
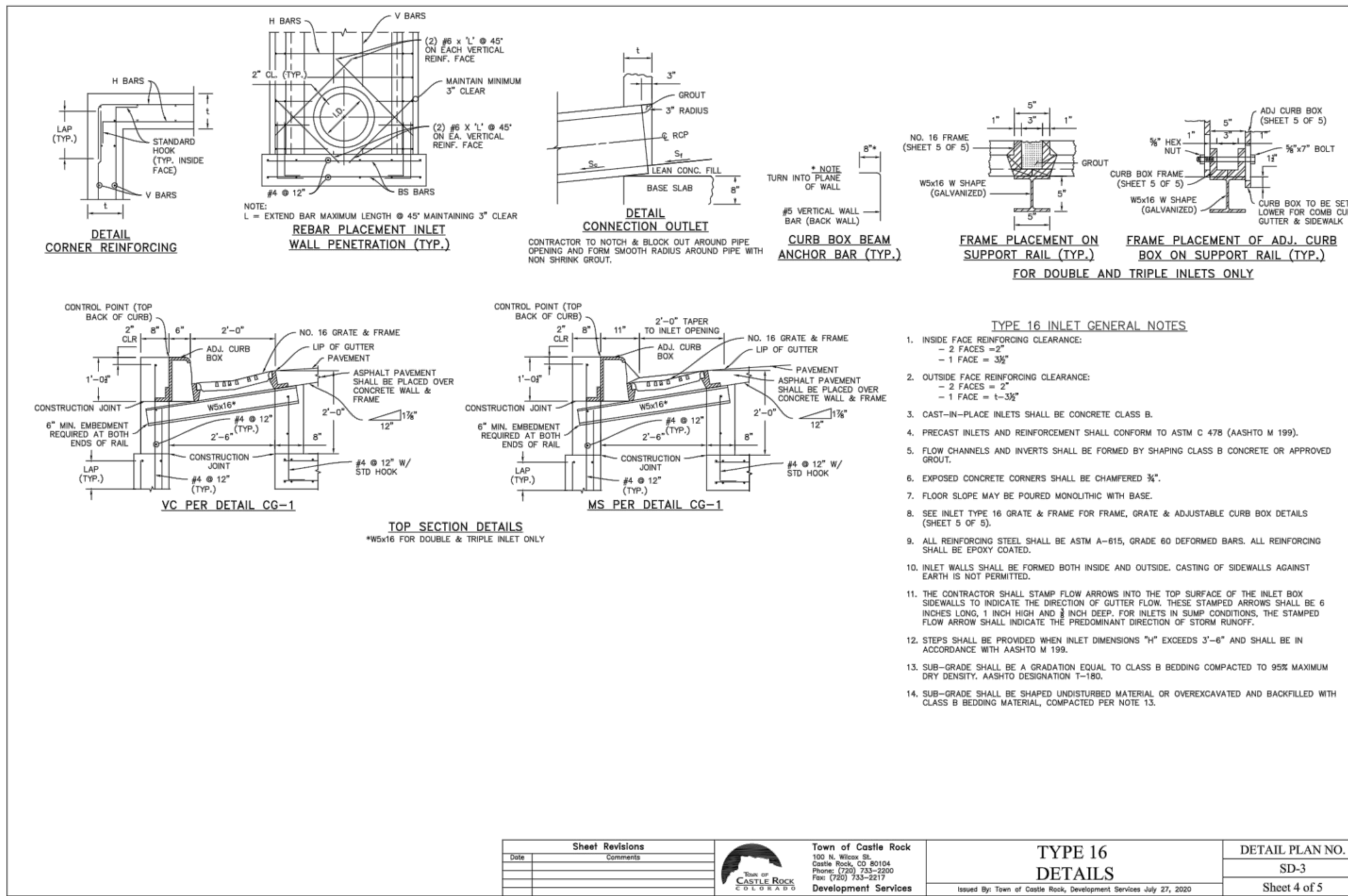
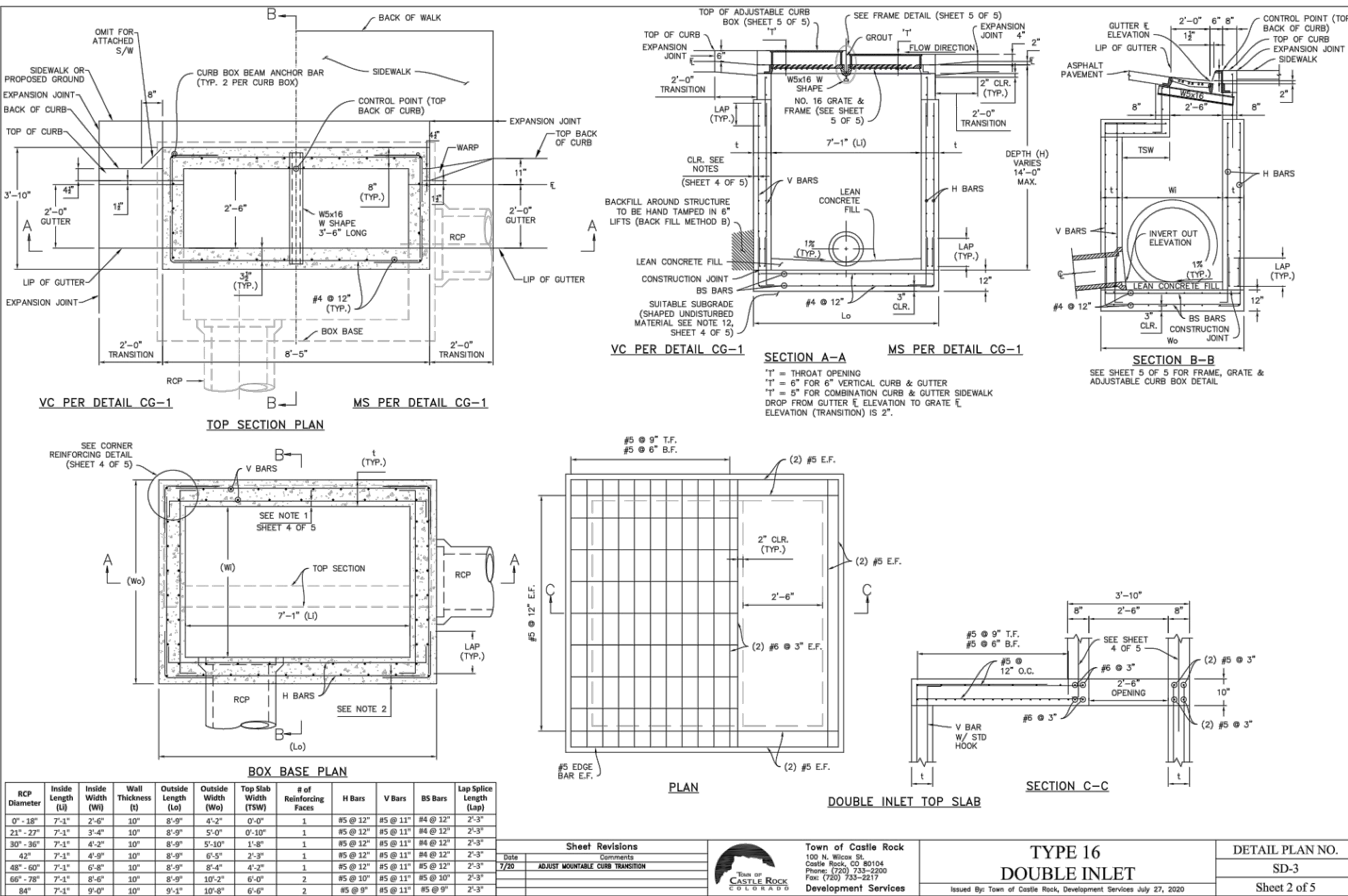
RACHEL C PATTON, P.E. #54450	DATE
<u>TOWN APPROVAL BLOCK</u>	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	
Development Services	Date

28 OF 87





NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS-KOCHER SMITH.



FILE PATH: K:\210431\ENGINEERING\UTILITIES\STORM\CD - STORM DETAILS.DWG LAYOUT: LAYOUT1
DRAWN BY: HKS
PLOTTED: MON 04/10/23 8:42:41A BY: MILES SUSTAD



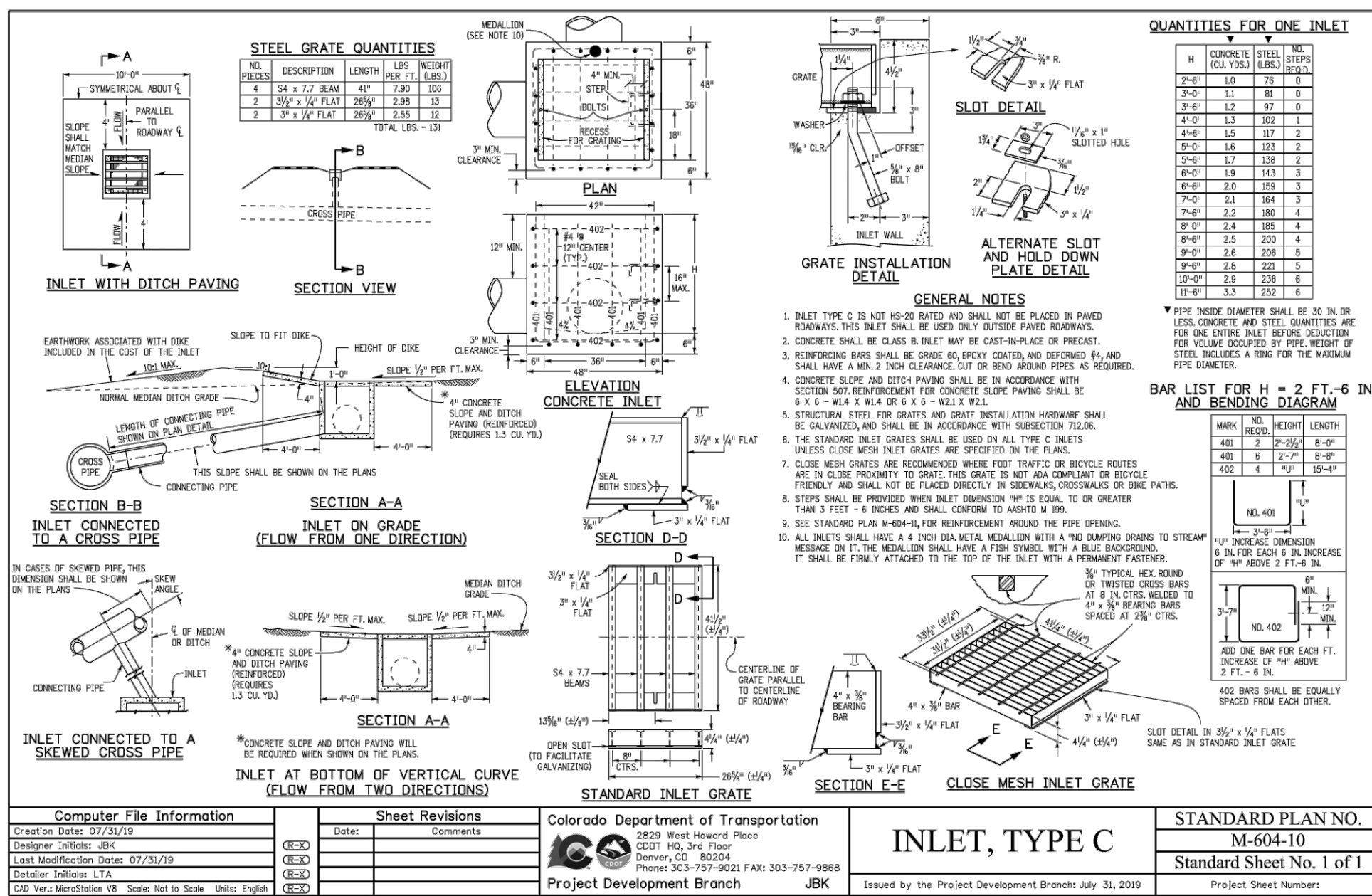
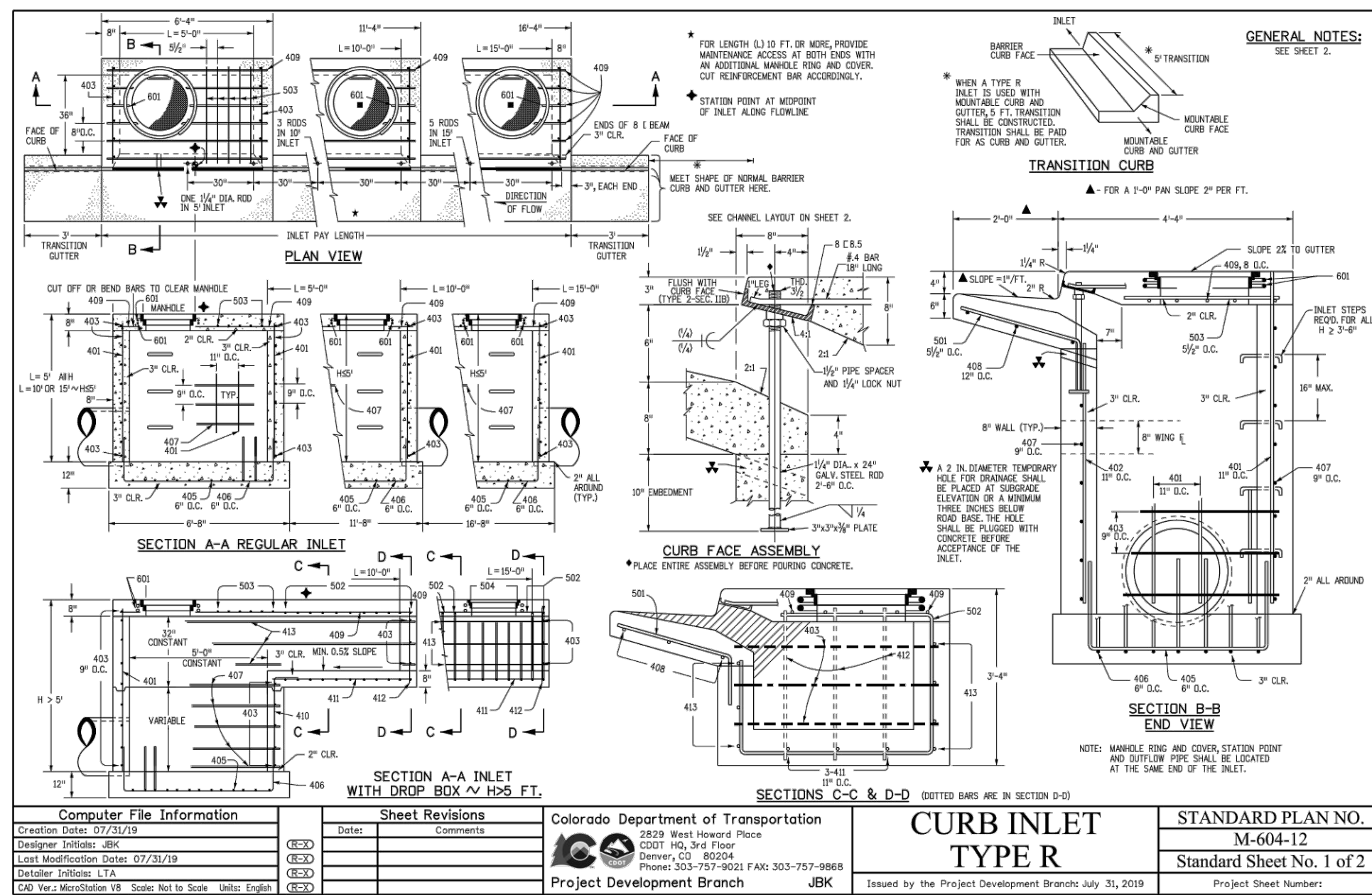
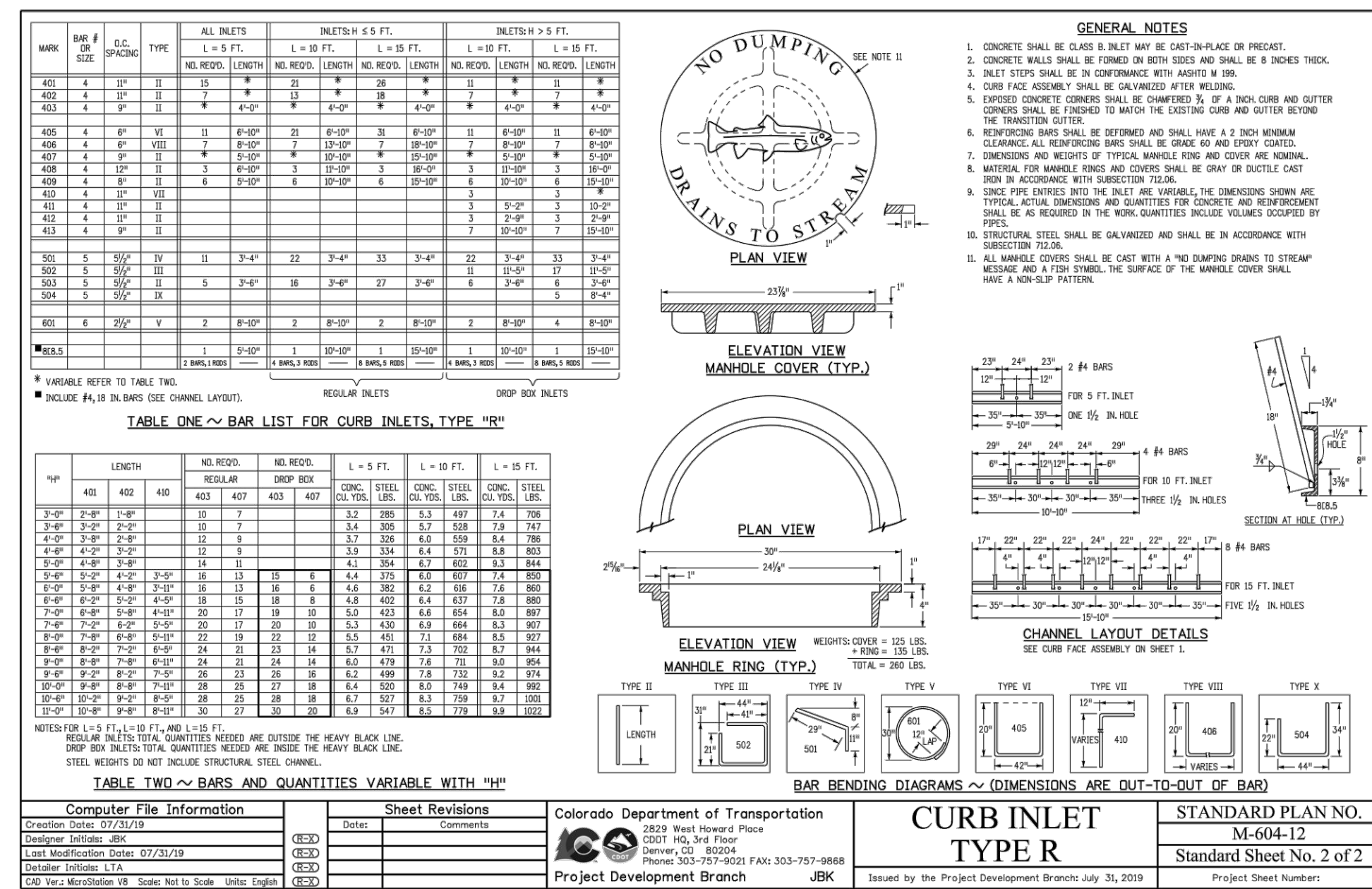
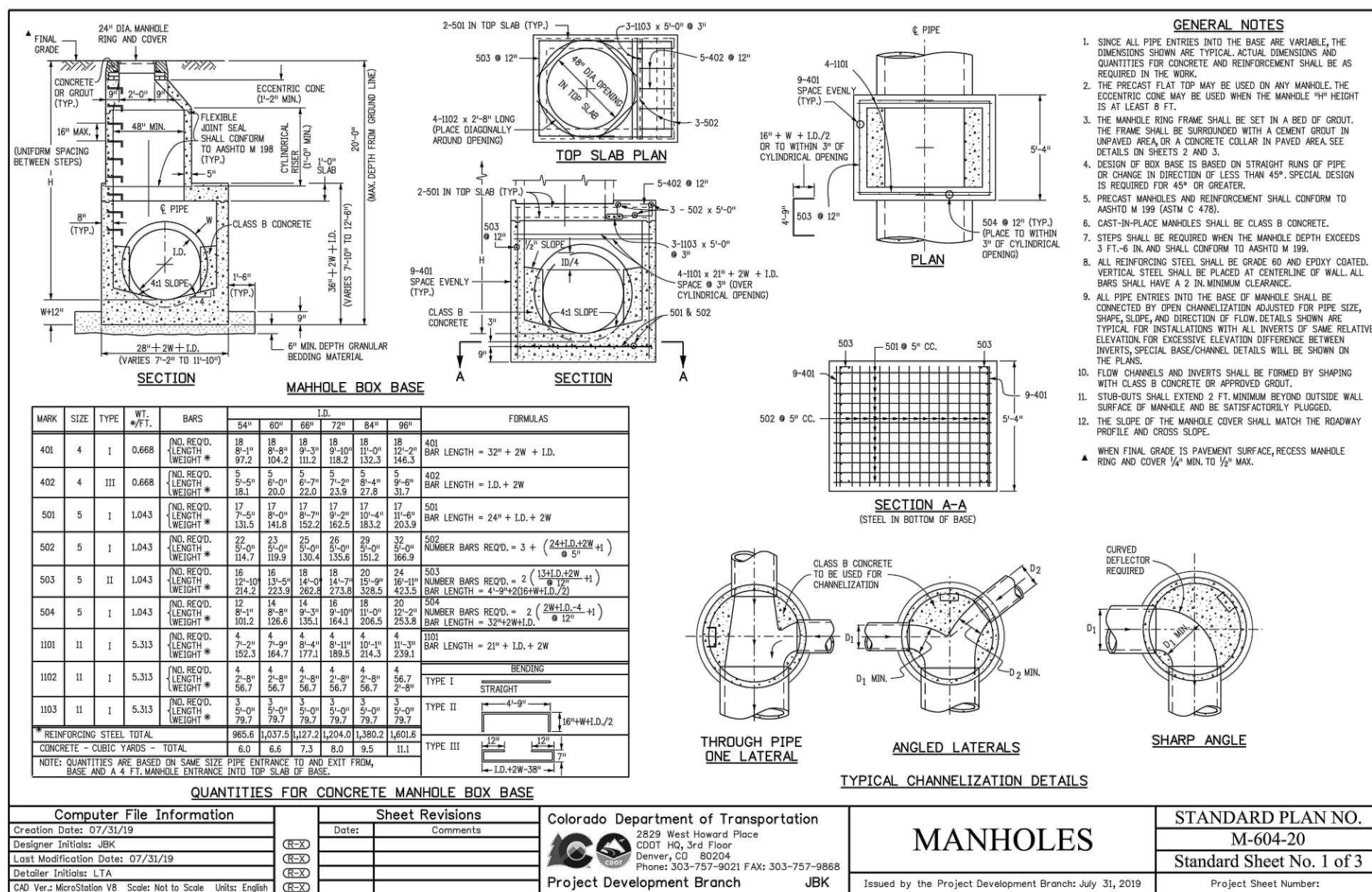
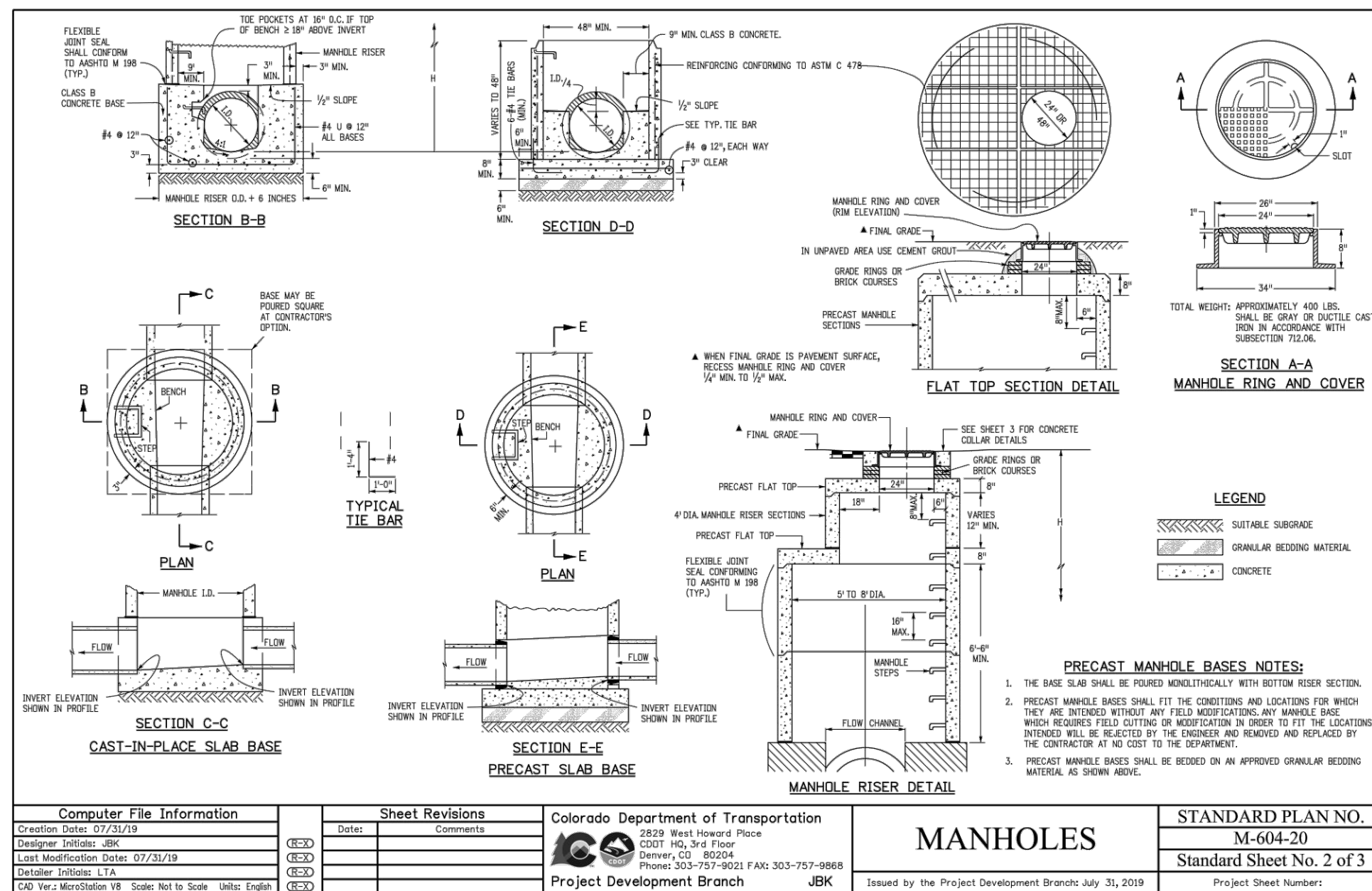
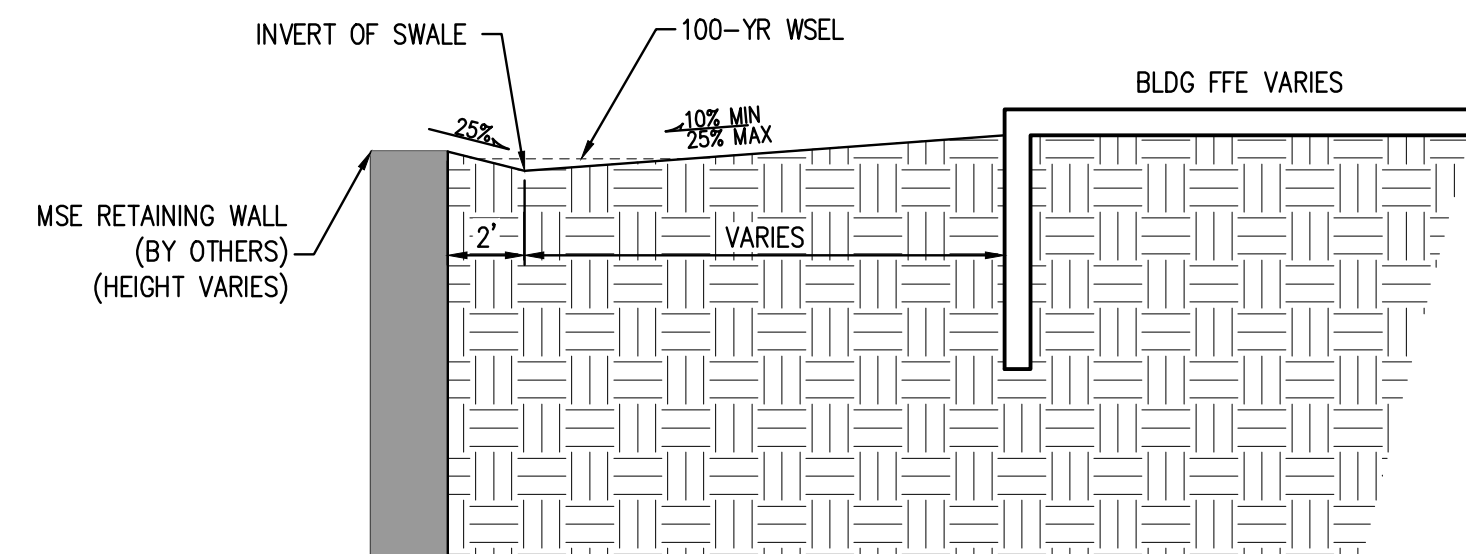
DESIGNED BY: <DESIGNER>
CHECKED BY: <REVIEWER>
DRAWN BY: <DRAWN>

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



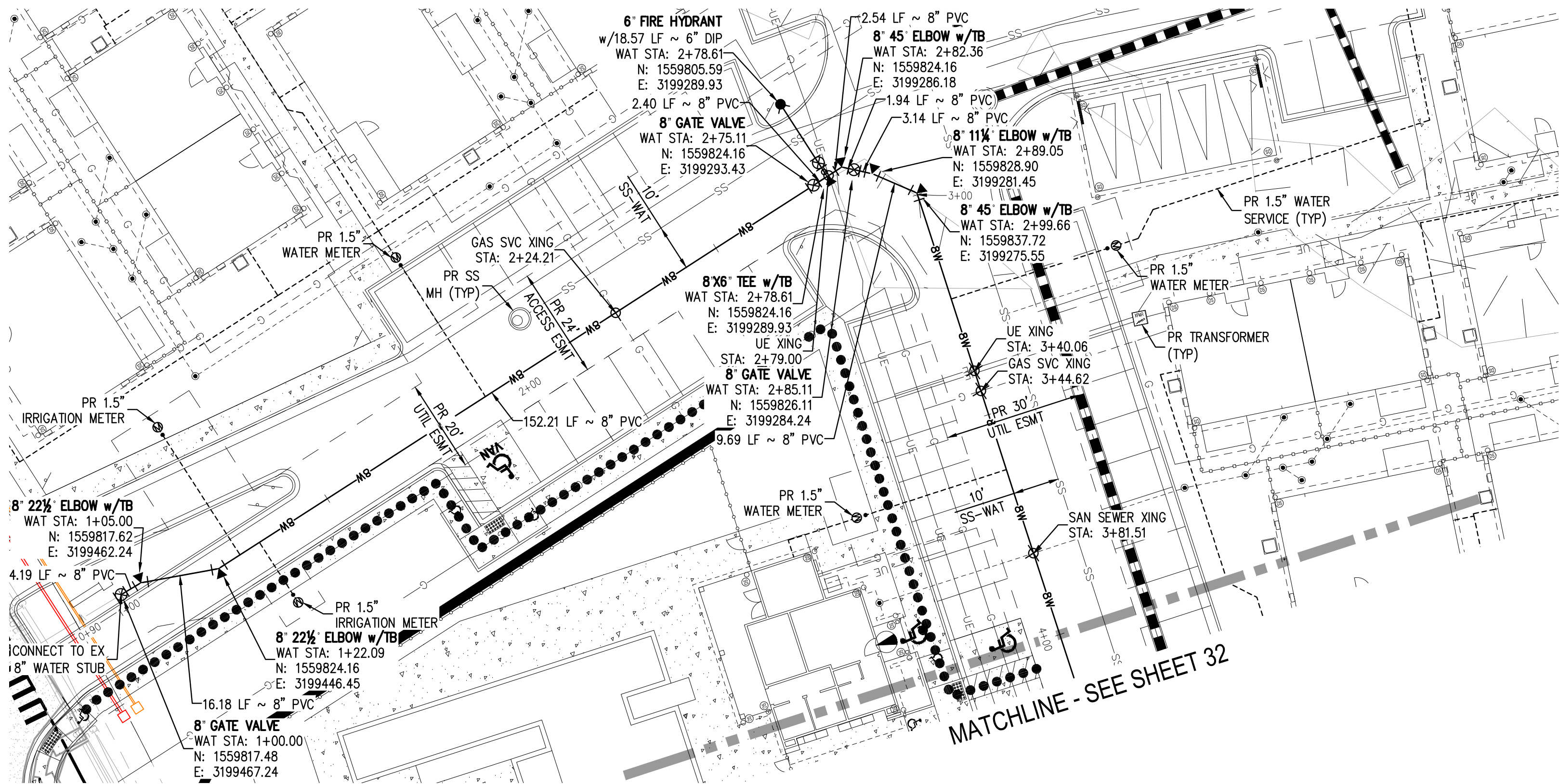
AVILLA FOUNDERS VILLAGE
STORM DETAILS

PROJECT #: 210431
SHEET NUMBER
29
29 OF 87

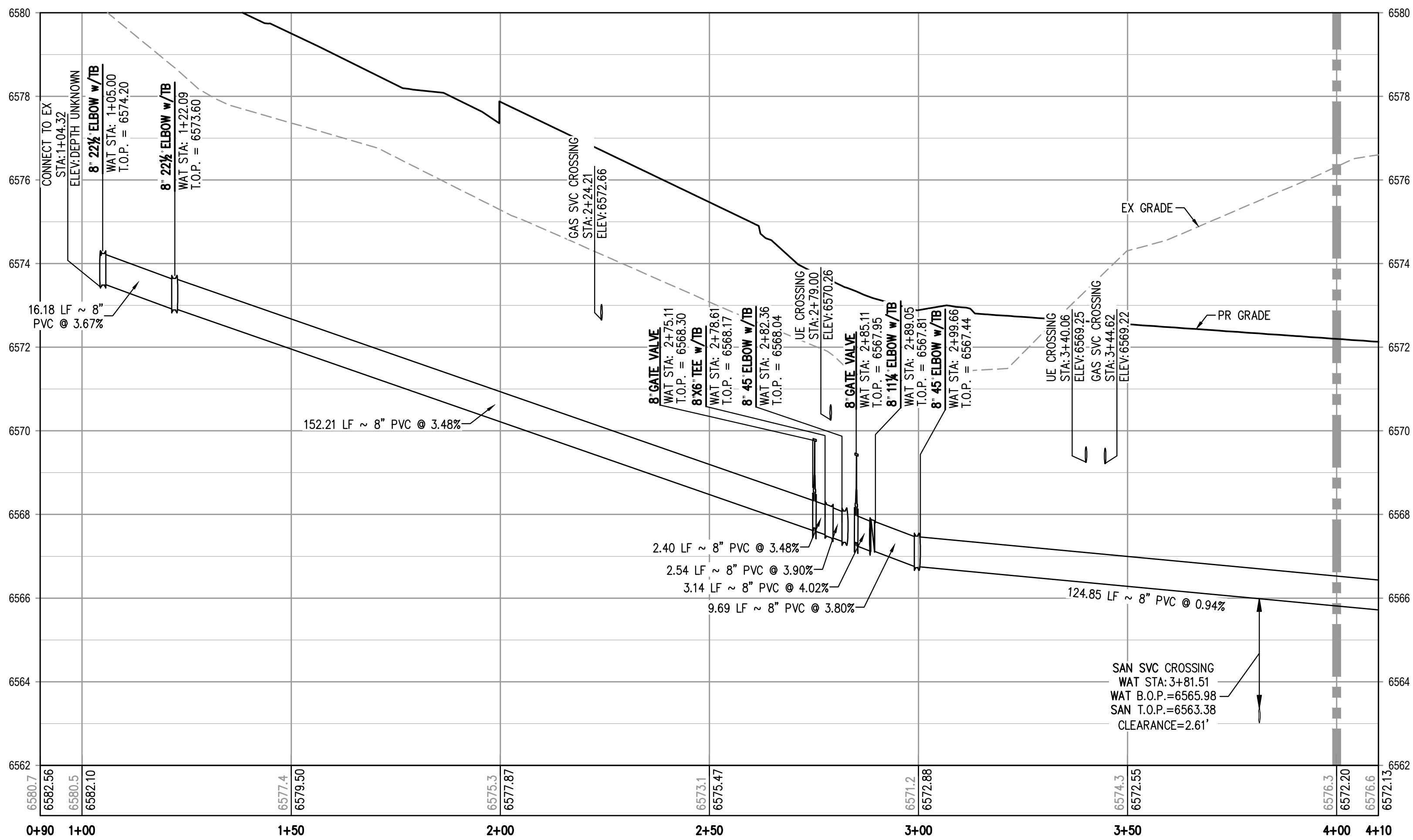


SWALE DETAIL
SECTION A-A
SCALE: NTS

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



WATER LINE A PLAN
STA: 1+00 - 4+00



WATER LINE A PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

MATCHLINE - SEE SHEET 32

LEGEND

	PROPOSED
UTILITY EASEMENT	---
SANITARY SEWER W/ MANHOLE	SS
SANITARY SERVICE W/CLEANOUT	---
WATER LINE AND GATE VALVE	W
WATER SERVICE	---
STORM SEWER W/ MANHOLE & INLETS	---
WATER METER MANHOLE	W-M
FIRE HYDRANT	*

NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS, PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. WHERE WATER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE WATER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. WATER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
4. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR OR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY OR WATER PRIOR TO COMMENCING WORK.
5. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By:

Development Services

Date

PROJECT #: 210431
SHEET NUMBER

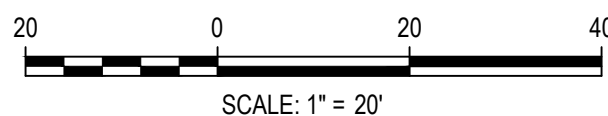
31

31 OF 87

FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATER\CD - WATER PLAN & PROFILE.DWG LAYOUT: LAYOUT1
9:56:55 PM 04/10/23 User: rcp Date: 04/10/23 PLOT: 04/10/23 PLOT: 04/10/23 PLOT: 04/10/23 PLOT: 04/10/23
PLOTTED: MON 04/10/23 8:43:35A BY: MILES SUSTAD



Know what's below.
Call before you dig.



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

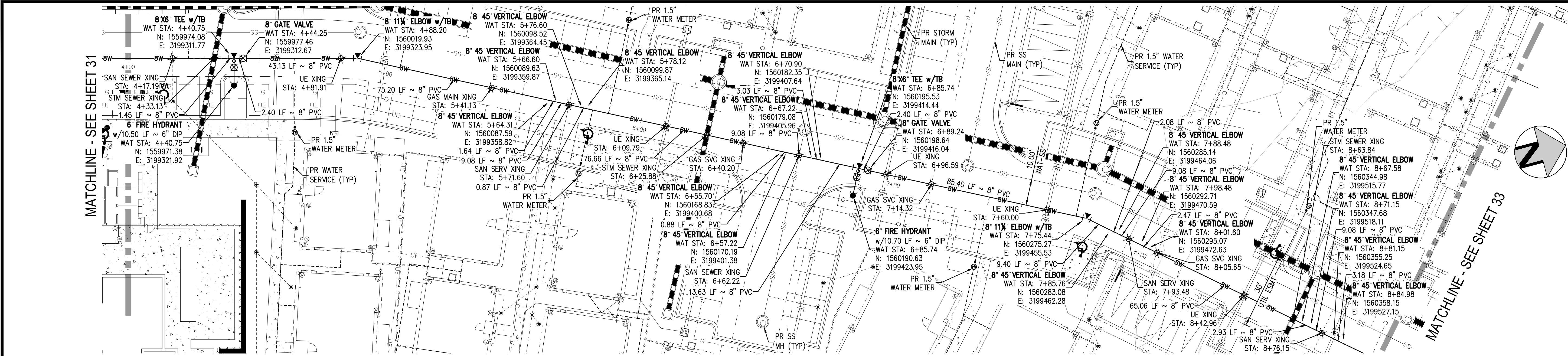
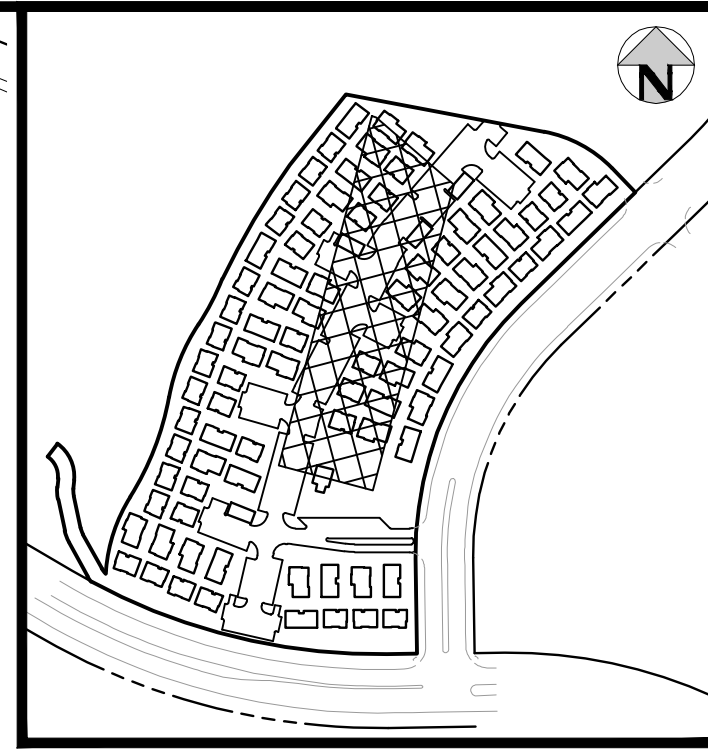
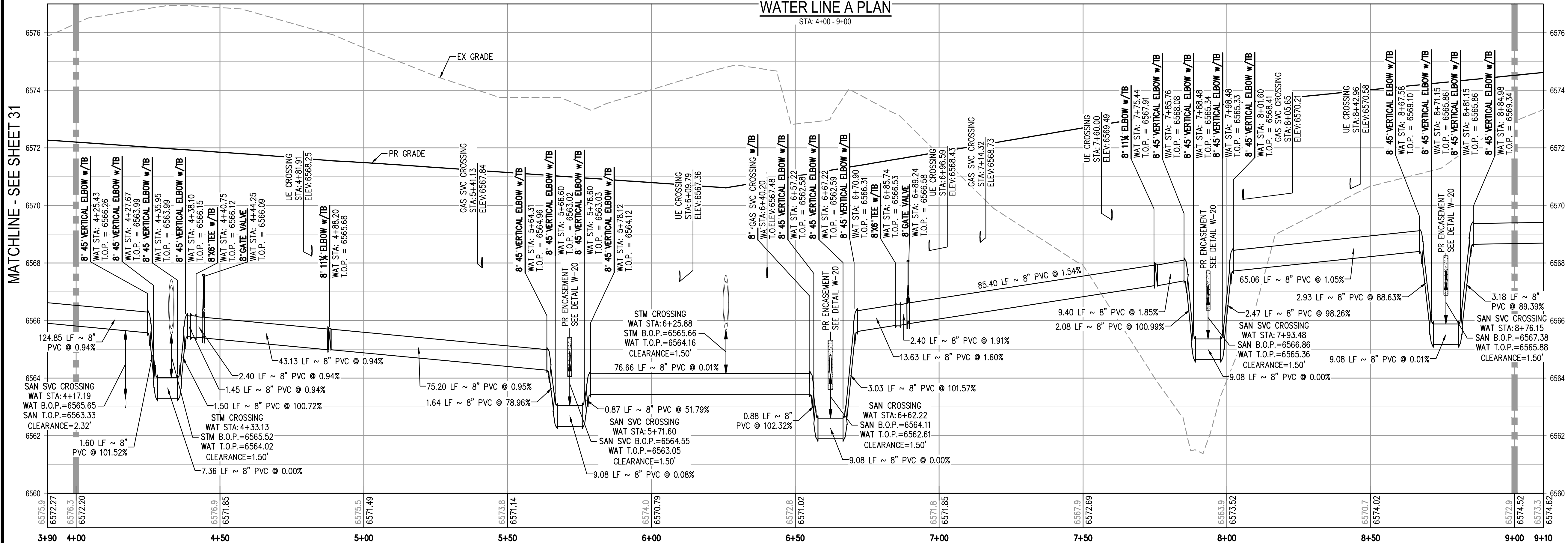


1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
WATER LINE A PLAN & PROFILE

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



LEGEND

- UTILITY EASEMENT
SANITARY SEWER W/ MANHOLE
SANITARY SERVICE W/CLEANOUT
WATER LINE AND GATE VALVE
WATER SERVICE
STORM SEWER W/ MANHOLE & INLETS
WATER METER MANHOLE
FIRE HYDRANT
- PROPOSED
SS
W
W-20
W-18
W-16
W-14
W-12
W-10
W-8
W-6
W-4
W-2
W-0

NOTES:

- THE CONTRACTOR SHALL NOTIFY B11 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
- WHERE WATER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE WATER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. WATER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
- CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

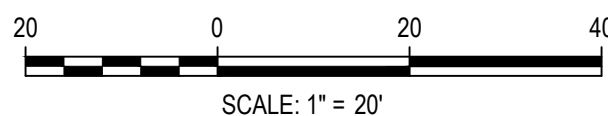
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

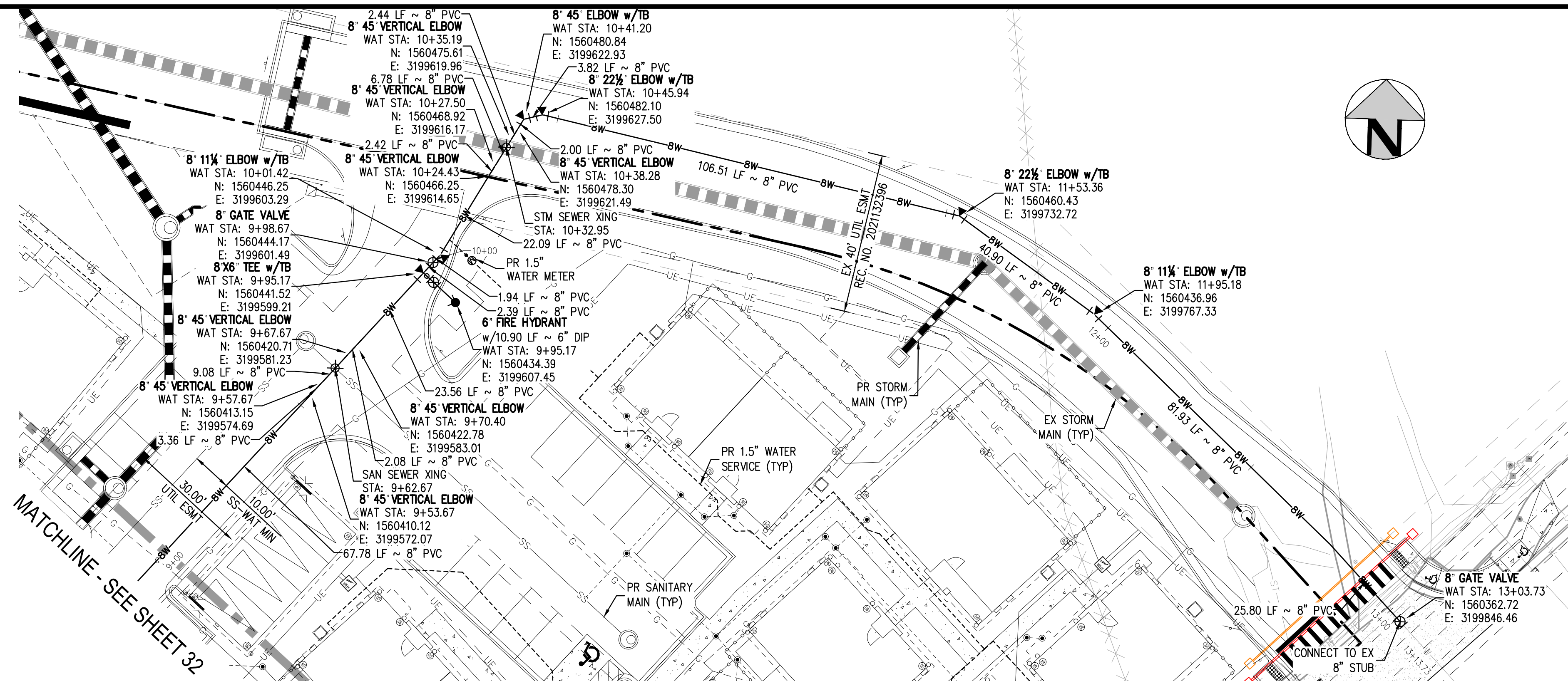
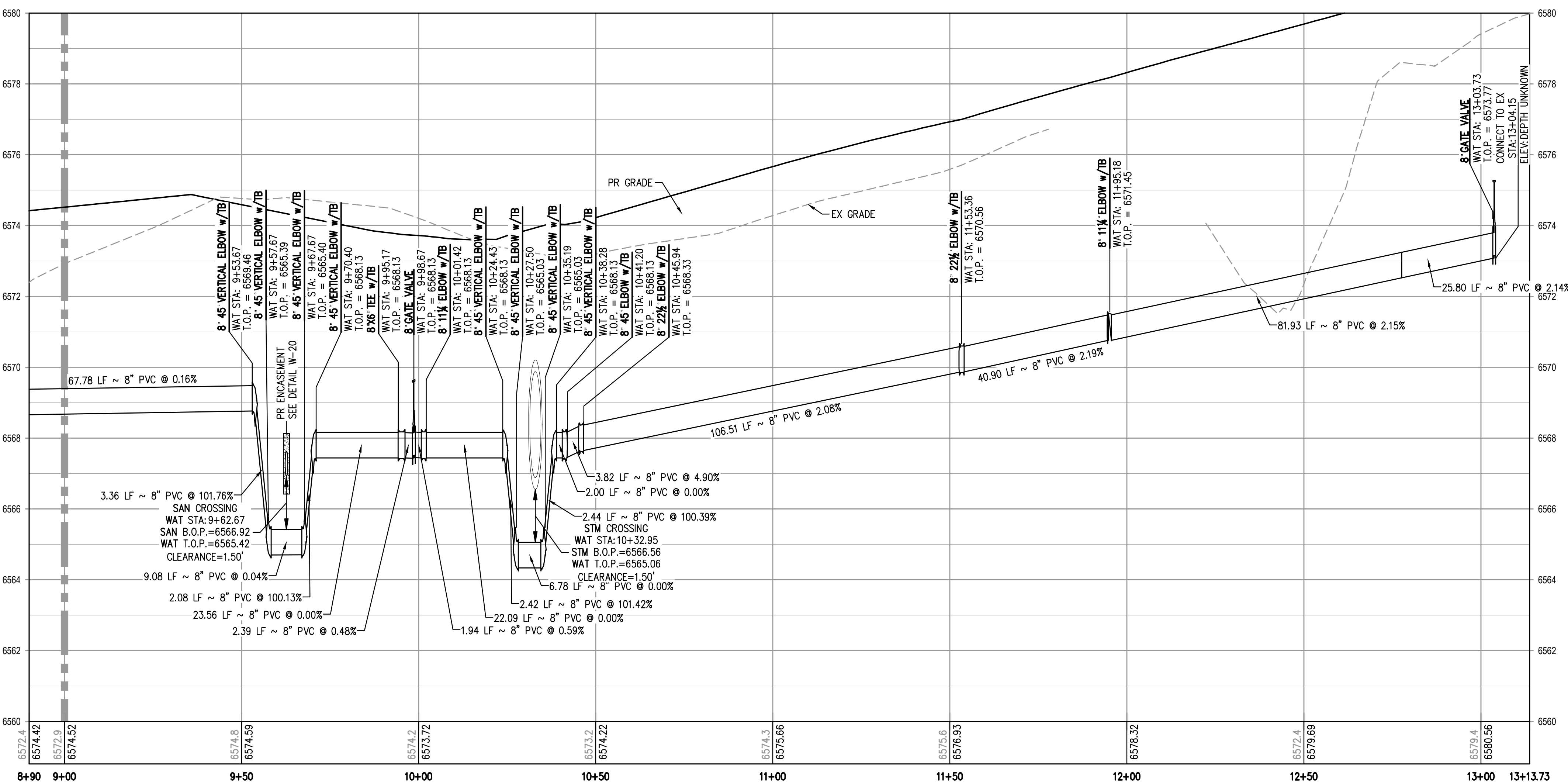


AVILLA FOUNDERS VILLAGE
WATER LINE A PLAN & PROFILE

PROJECT #210431
SHEET NUMBER

32

32 OF 87



- NOTES:**
1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
 2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
 3. WHERE WATER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE WATER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. WATER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
 4. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING CR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO BEGINNING WORK.
 5. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.

HORIZONTAL CONTROL
BEARINGS ARE BASED ON THE NORTH LINE
OF THE NORTHEAST QUARTER OF THE
SOUTHEAST QUARTER OF SECTION 8, AS
MONUMENTED AT THE EAST CORNER BY A
#6 REBAR WITH A 3.25" ALUMINUM CAP
STAMPED: SURVCON 2006 PL3 30289 AND
AT THE CENTER-EAST SIXTEENTH CORNER
BY A 2.5" PIPE WITH A 3.5" ALUMINUM
CAP STAMPED: 1986 PL5 22100, AS
BEARING SOUTH 88°58'05" WEST, PER THE
PLAT OF FOUNDERS VILLAGE FILING NO. 24
AMENDMENT NO. 1.

VERTICAL DATUM
DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4"
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST ¼ CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION
I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

RACHEL C PATTON, P.E. #54450 DATE _____

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

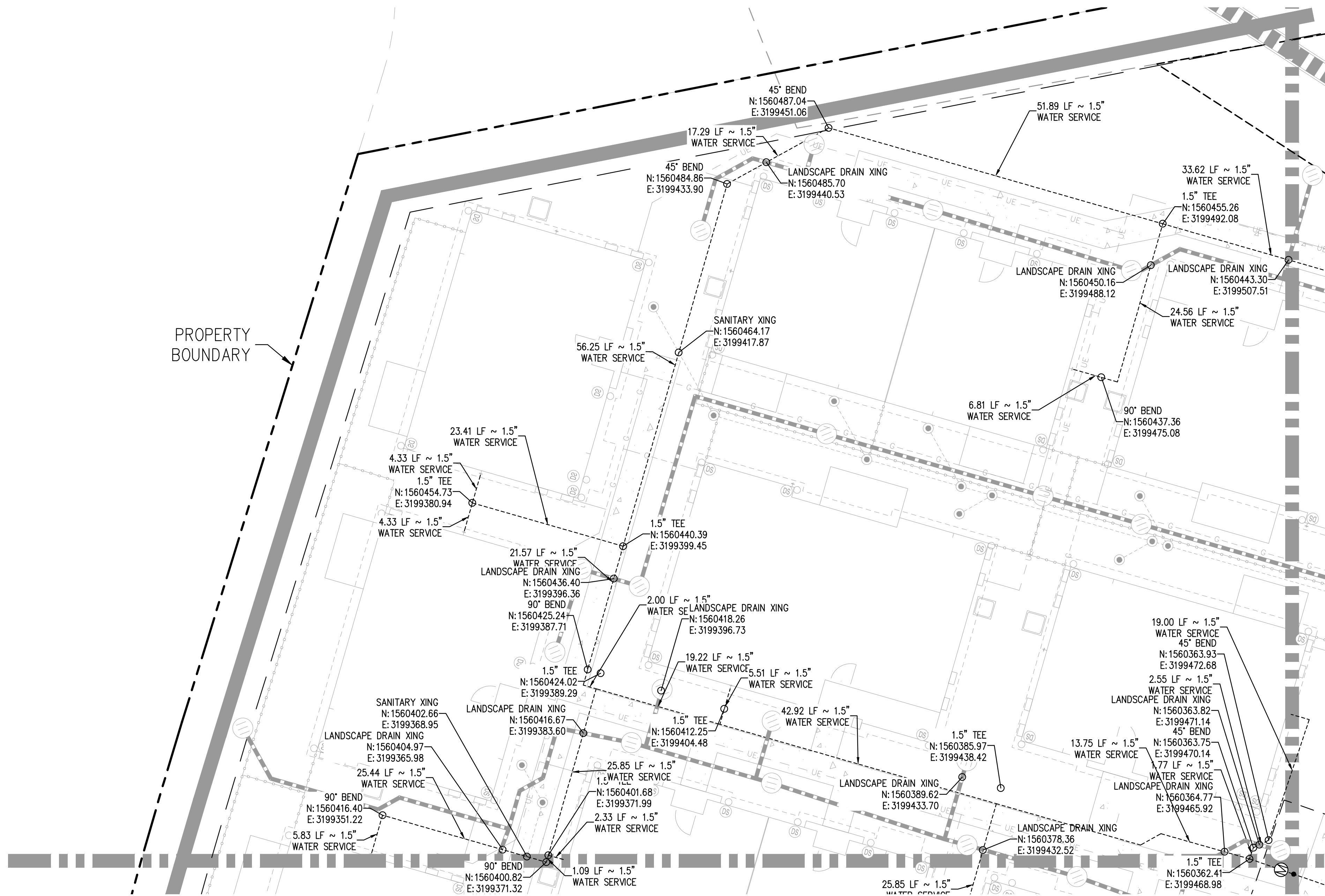
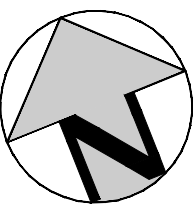
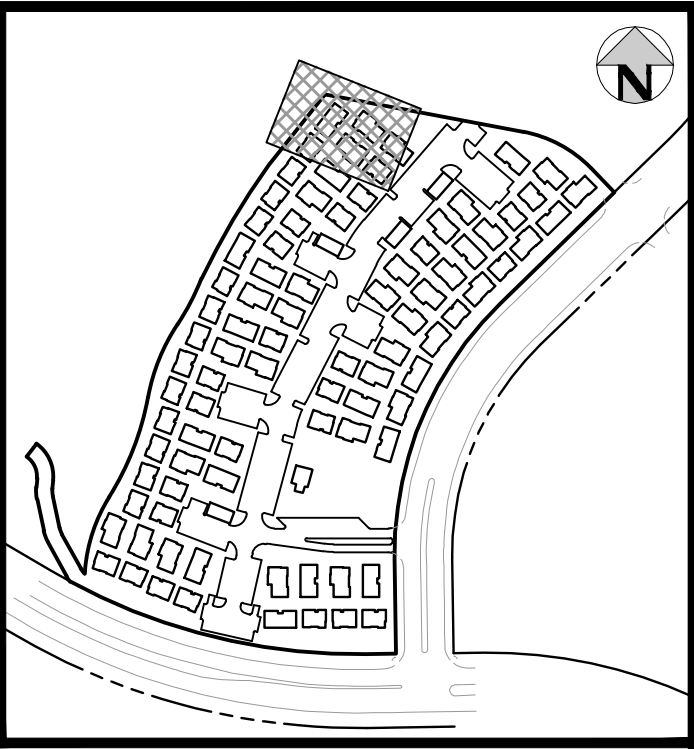
Approved By: _____

Development Services Date _____

PROJECT #: 210431
SHEET NUMBER
33
33 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATERCD - WATER SERVICE PLANDWG LAYOUT- LAYOUT1
PLANTING: MON 04/10/23 8:45:03A BY: MILES SUSTAD



NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

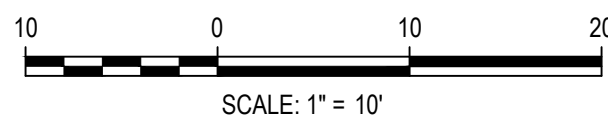
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



**HARRIS
KOCHER
SMITH**

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

PROJECT #: 210431
SHEET NUMBER

34

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

MATCHLINE - SEE SHEET 34

MATCHLINE - SEE SHEET 37

NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'06" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date

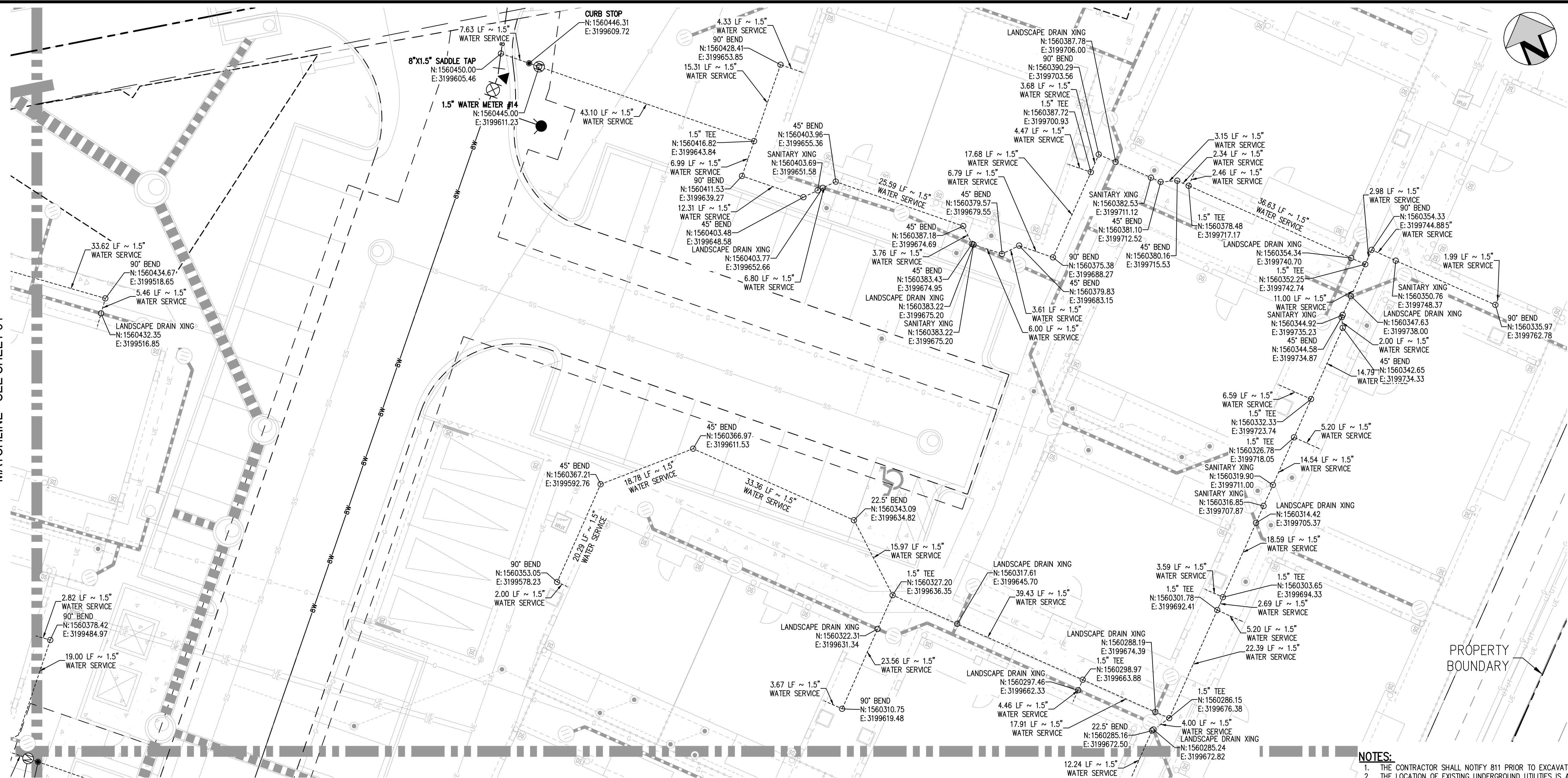
Development Services

Date

PROJECT #: 210431
SHEET NUMBER

35

35 OF 87



MATCHLINE - SEE SHEET 34

MATCHLINE - SEE SHEET 37

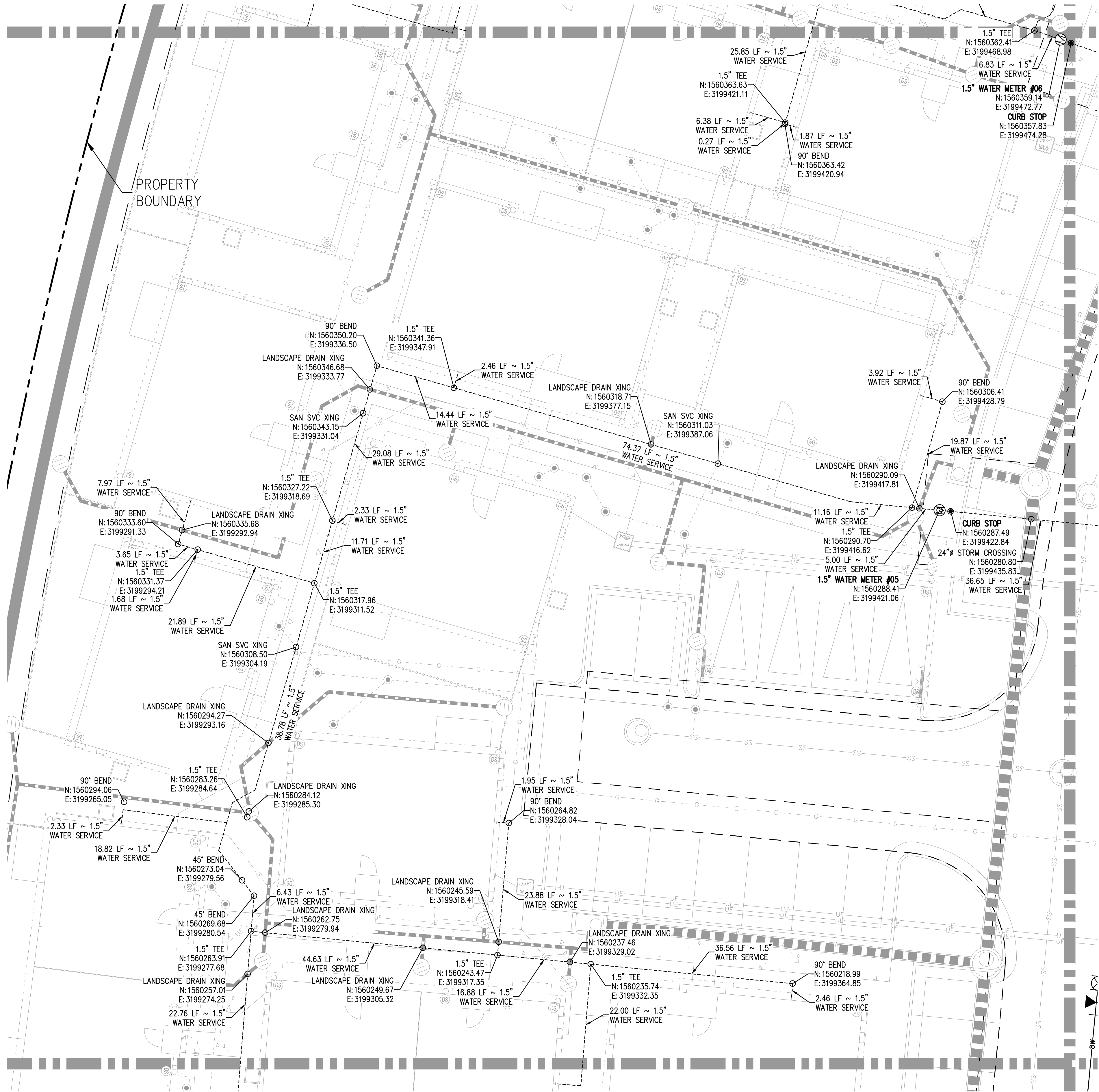
PROPERTY
BOUNDARY

 <p>Know what's below. Call before you dig.</p>	<p>DESIGNED BY: BMW CHECKED BY: RCP DRAWN BY: BMW</p>	<p>ISSUE DATE: 08-11-2022</p> <table><thead><tr><th>DATE</th><th>REVISION COMMENTS</th></tr></thead><tbody><tr><td>10-31-2022</td><td>PER TOWN OF CASTLE ROCK COMMENTS</td></tr><tr><td>04-10-2023</td><td>PER TOWN OF CASTLE ROCK COMMENTS</td></tr></tbody></table>	DATE	REVISION COMMENTS	10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS	04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS	 <p>HARRIS KOCHER SMITH</p> <p>1120 Lincoln Street, Suite 1000 Denver, Colorado 80203 P: 303.623.6300 F: 303.623.6311 HarrisKocherSmith.com</p>		<p>AVILLA FOUNDERS VILLAGE WATER SERVICES PLAN</p>	<p>PROJECT #: 210431 SHEET NUMBER</p> <p>35</p> <p>35 OF 87</p>
DATE	REVISION COMMENTS											
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS											
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS											

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

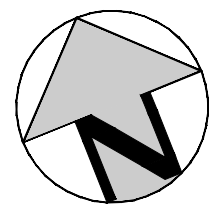
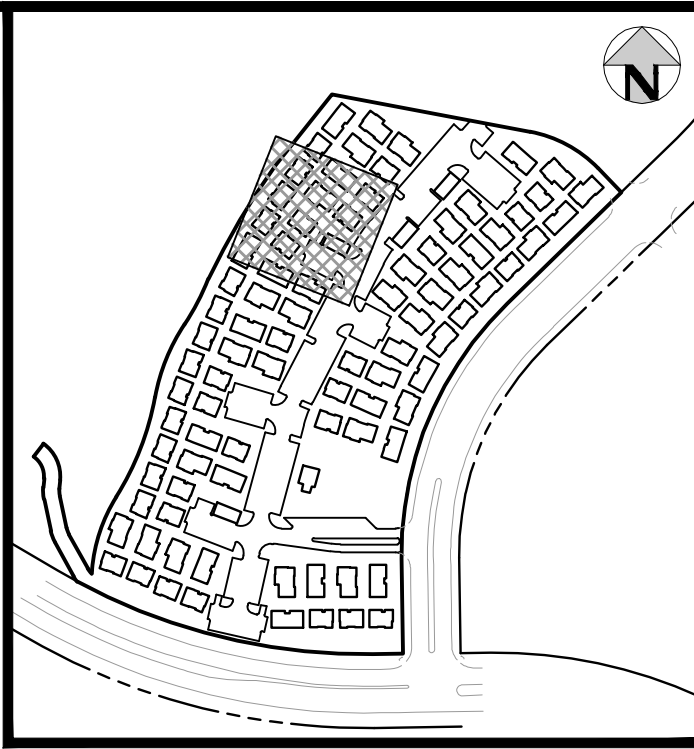
FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATER\CD - WATER SERVICE PLANDWG LAYOUT- LAYOUT3
NO SCALE
PLOTTED: MON 04/10/23 8:45:25A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 34



MATCHLINE - SEE SHEET 39

MATCHLINE - SEE SHEET 37



NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

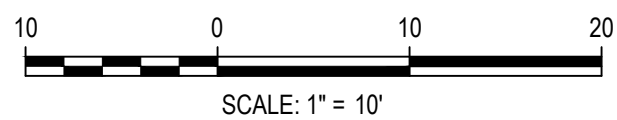
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

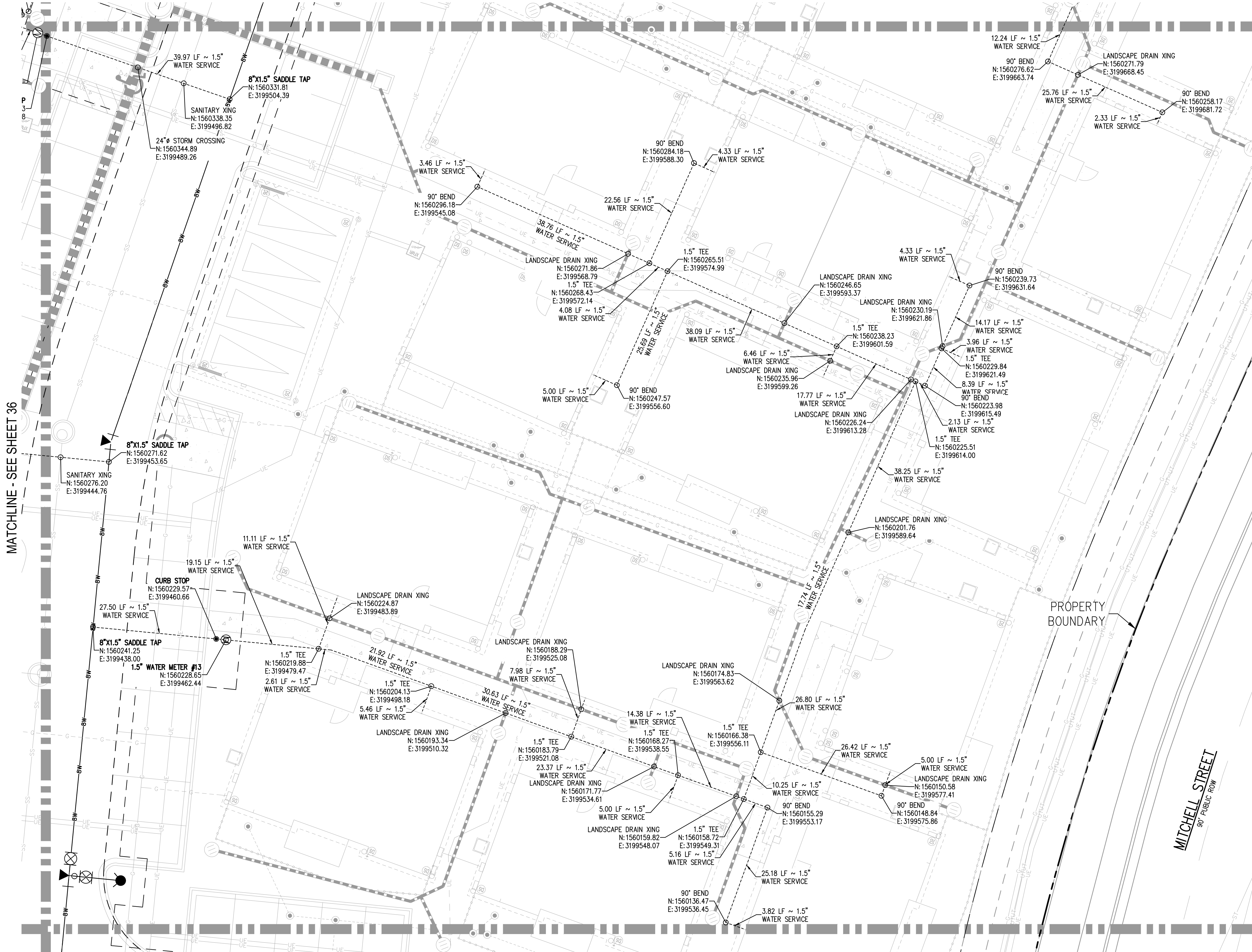
PROJECT #: 210431
SHEET NUMBER
36
36 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

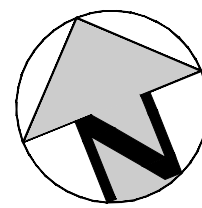
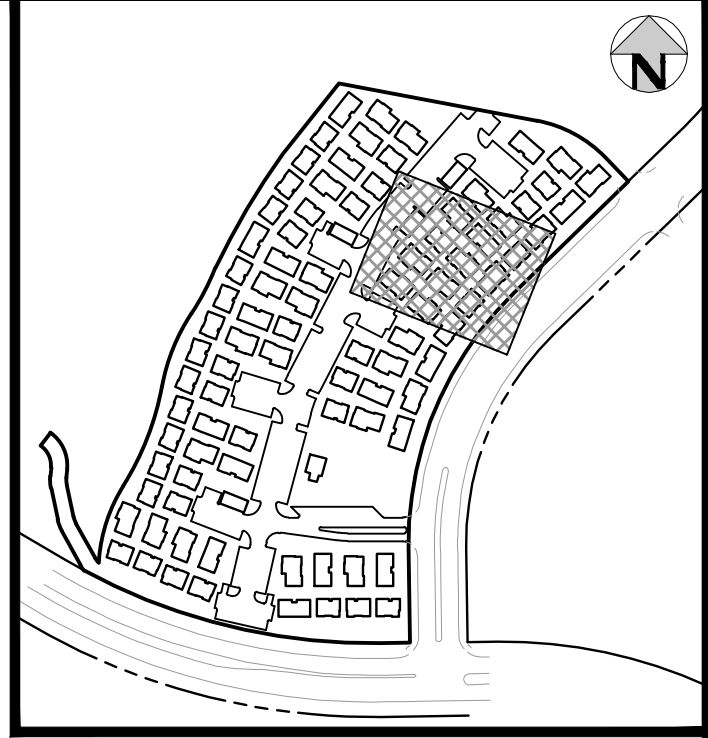
FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATERCD - WATER SERVICE PLANDWG LAYOUT LAYOUT4
NO SCALE
PLOTTED: MON 04/10/23 8:46:35A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 35

MATCHLINE - SEE SHEET 36



MATCHLINE - SEE SHEET 38



NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'06" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

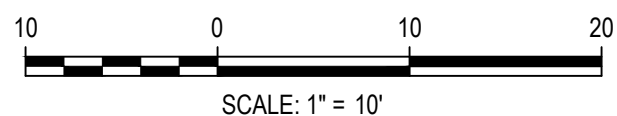
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

PROJECT #: 210431
SHEET NUMBER

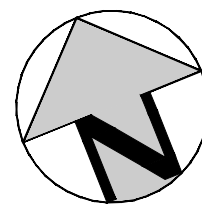
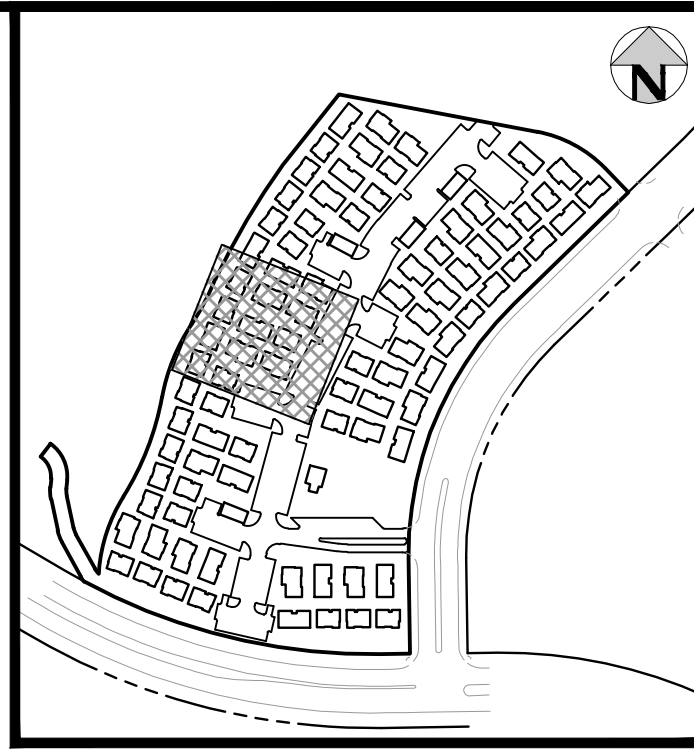
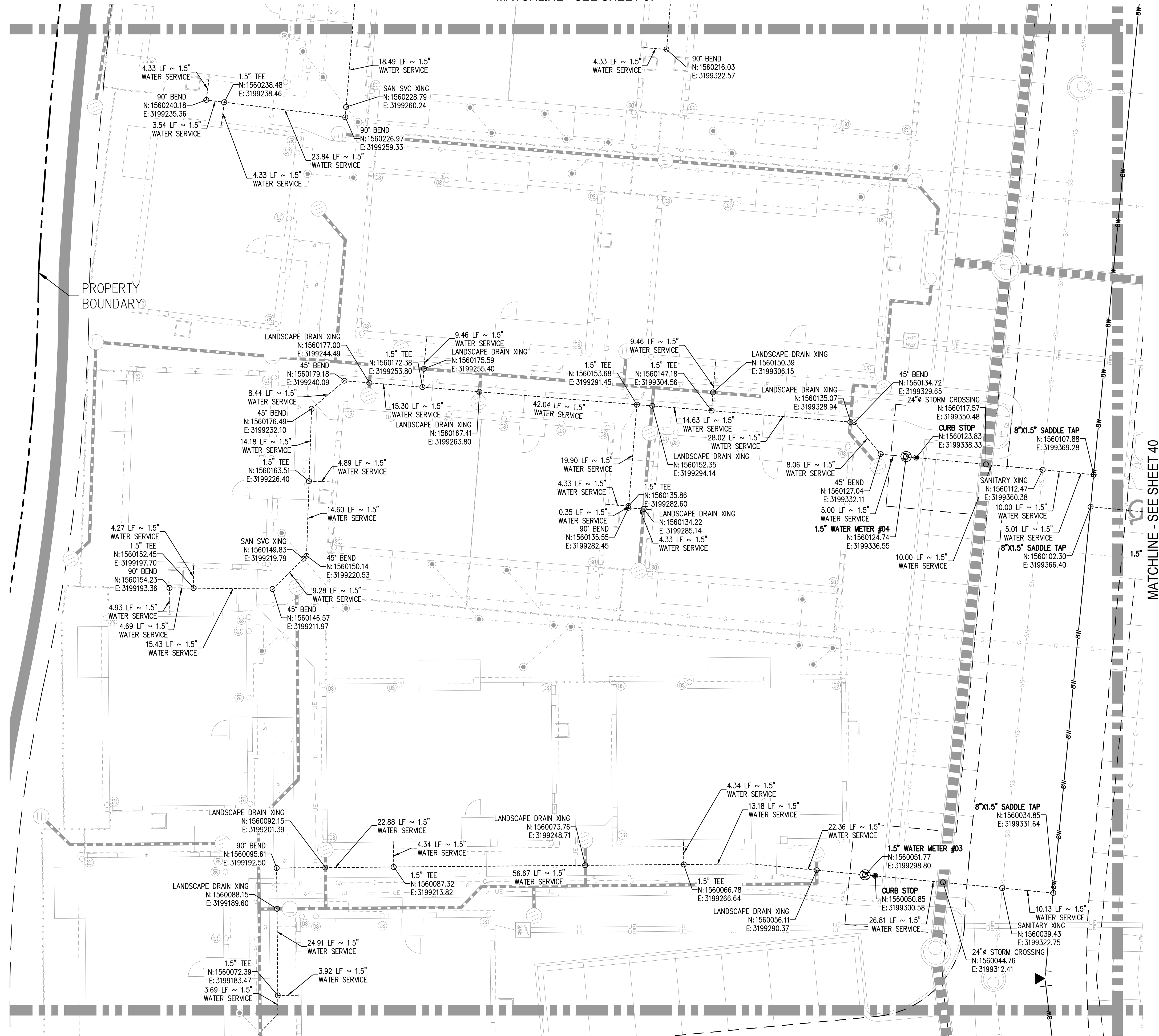
37

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATERCD - WATER SERVICE PLANDWG LAYOUT- LAYOUTS
DRAWN BY: RCP
PLOTTED: MON 04/10/23 8:45:45A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 37

MATCHLINE - SEE SHEET 41



NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date: _____

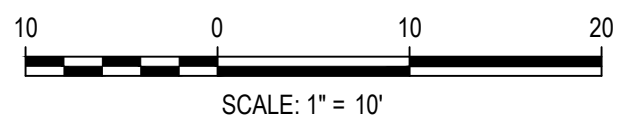
Development Services

PROJECT #: 210431

SHEET NUMBER

38

38 OF 87



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022

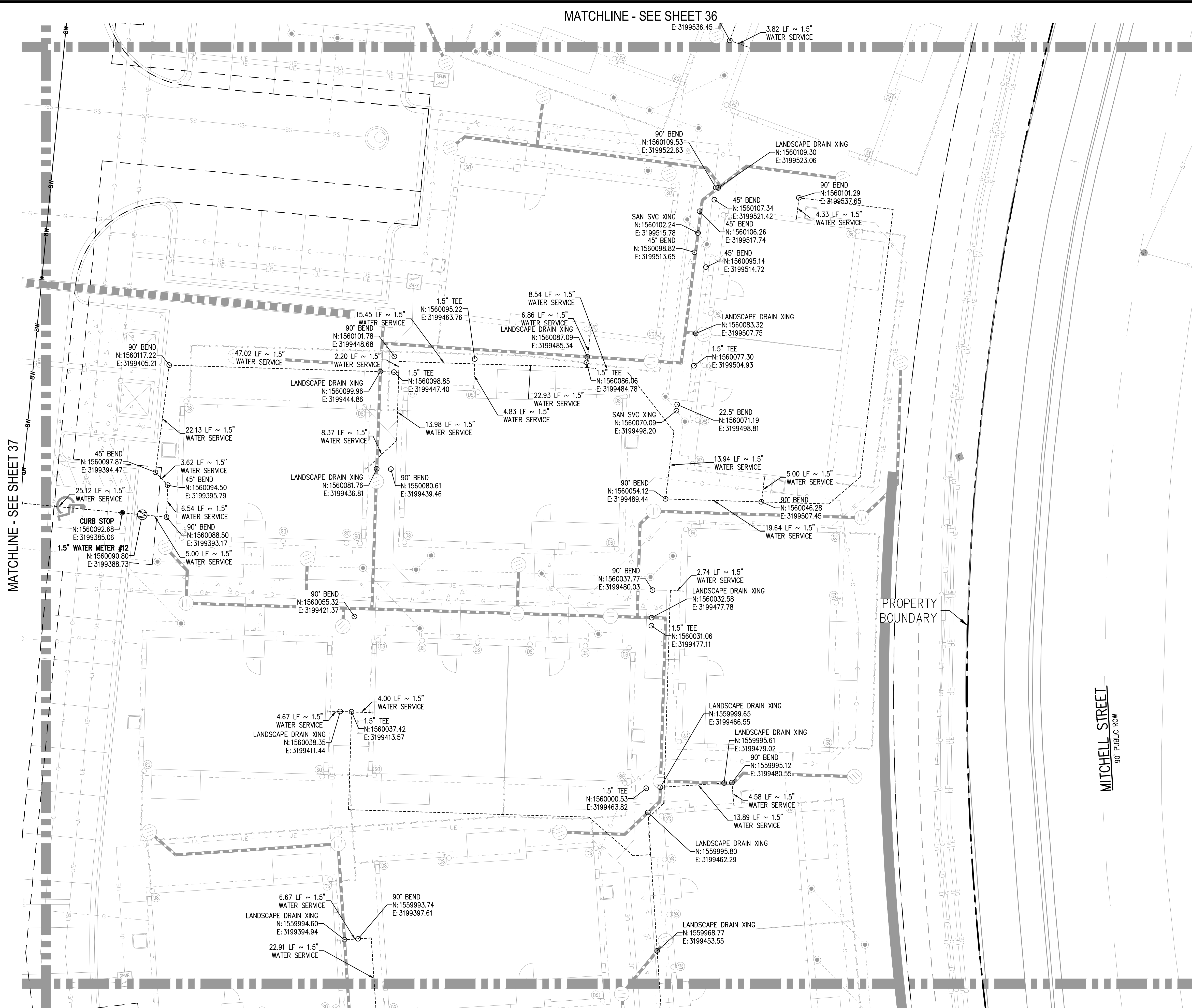
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILES: H:\K12\0431\ENGINEERING\UTILITIES\WATERCD - WATER SERVICE PLANDWG LAYOUT- LAYOUTS
NO SCALE
PLOTTED: MON 04/10/23 8:46:55A BY: MILES SUSTAD



NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date

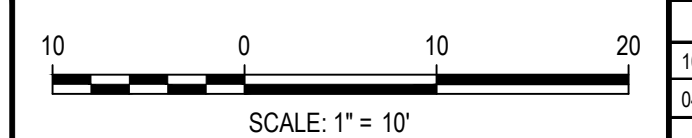
MATCHLINE - SEE SHEET 37

MATCHLINE - SEE SHEET 36

MATCHLINE - SEE SHEET 40



Know what's below.
Call before you dig.



10 0 10 20
SCALE: 1" = 10'

ISSUE DATE: 08-11-2022	REVISION COMMENTS
DATE	PER TOWN OF CASTLE ROCK COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



**HARRIS
KOCHER
SMITH**

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

PROJECT #: 210431
SHEET NUMBER
39
39 OF 87

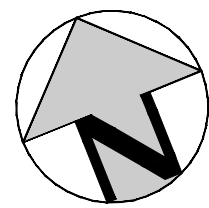
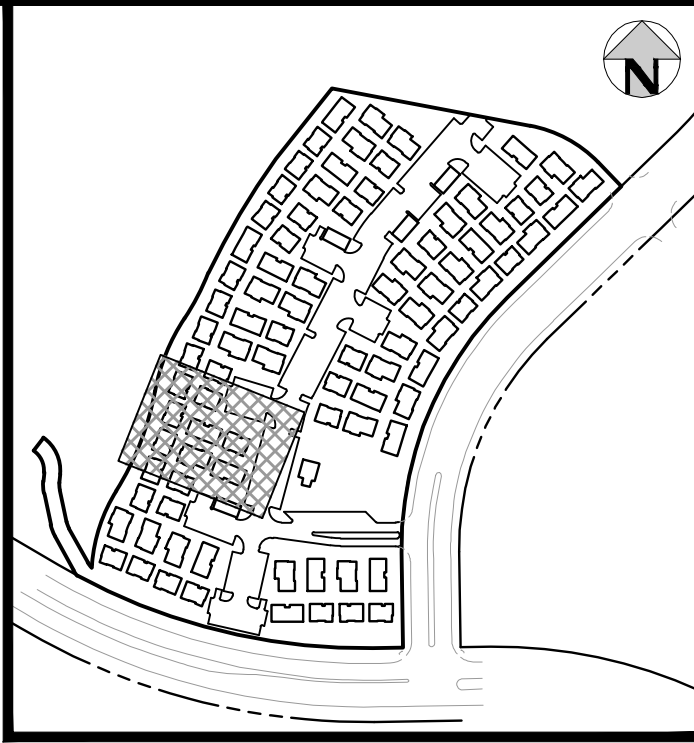
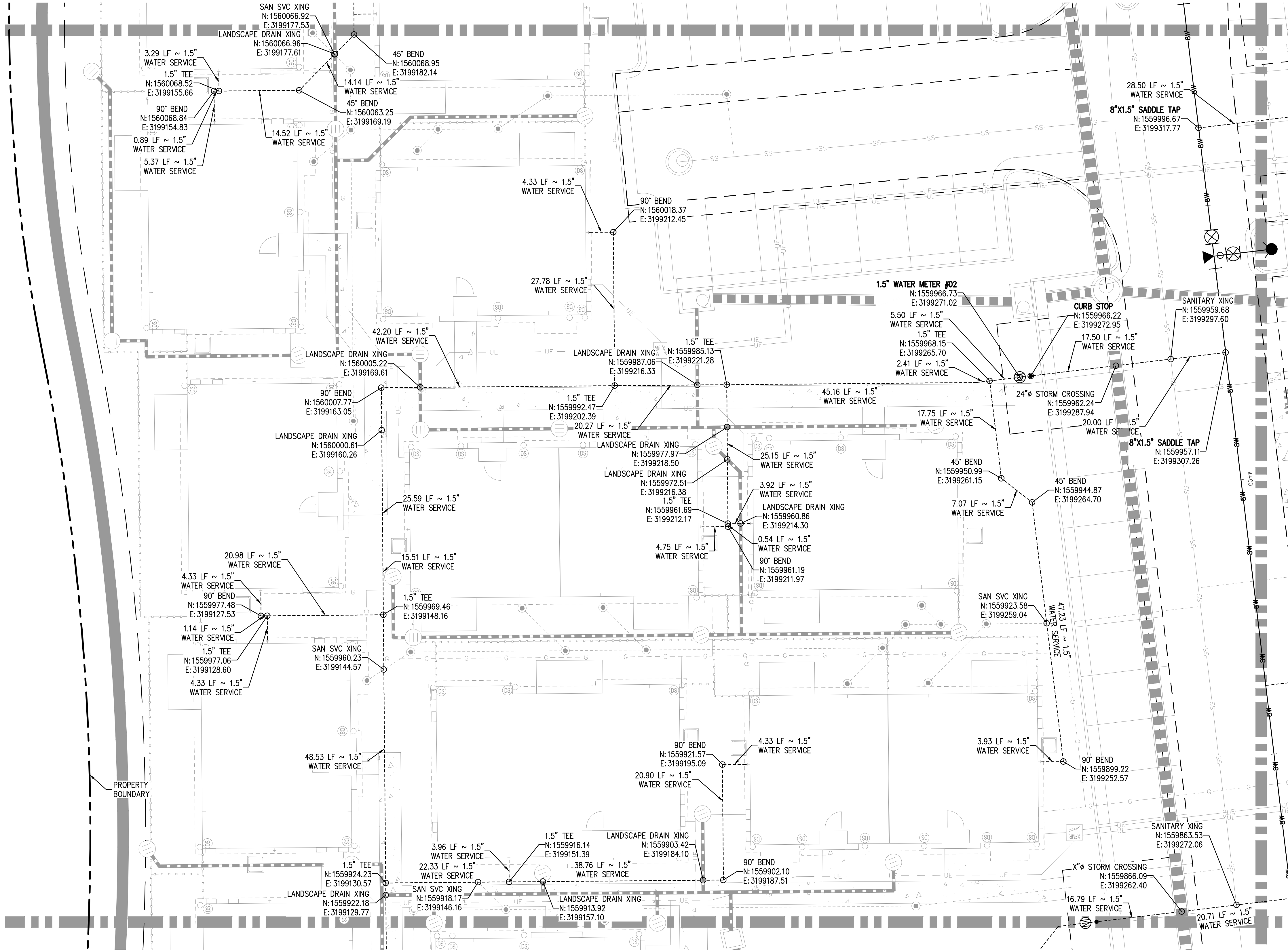
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATERCD - WATER SERVICE PLAN\2.DWG LAYOUT: LAYOUT1
NO SCALE: 1" = 10'
PLOTTED: MON 04/10/23 8:46:42A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 39

MATCHLINE - SEE SHEET 42

MATCHLINE - SEE SHEET 41



NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'06" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

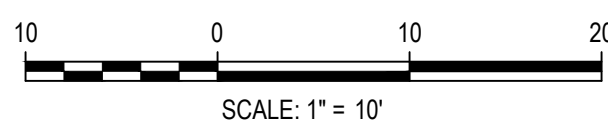
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

PROJECT #: 210431

SHEET NUMBER

40

40 OF 87

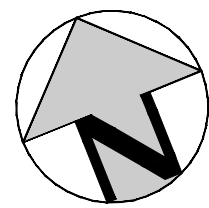
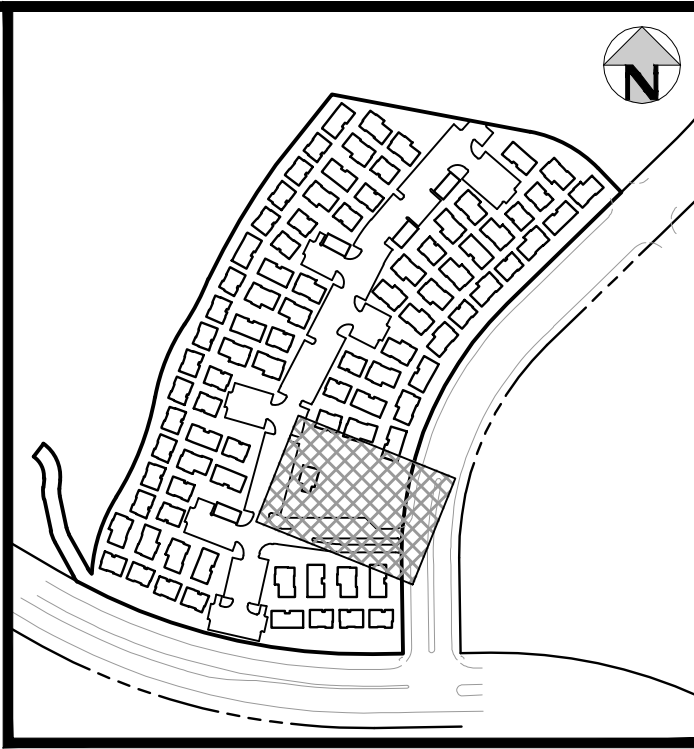
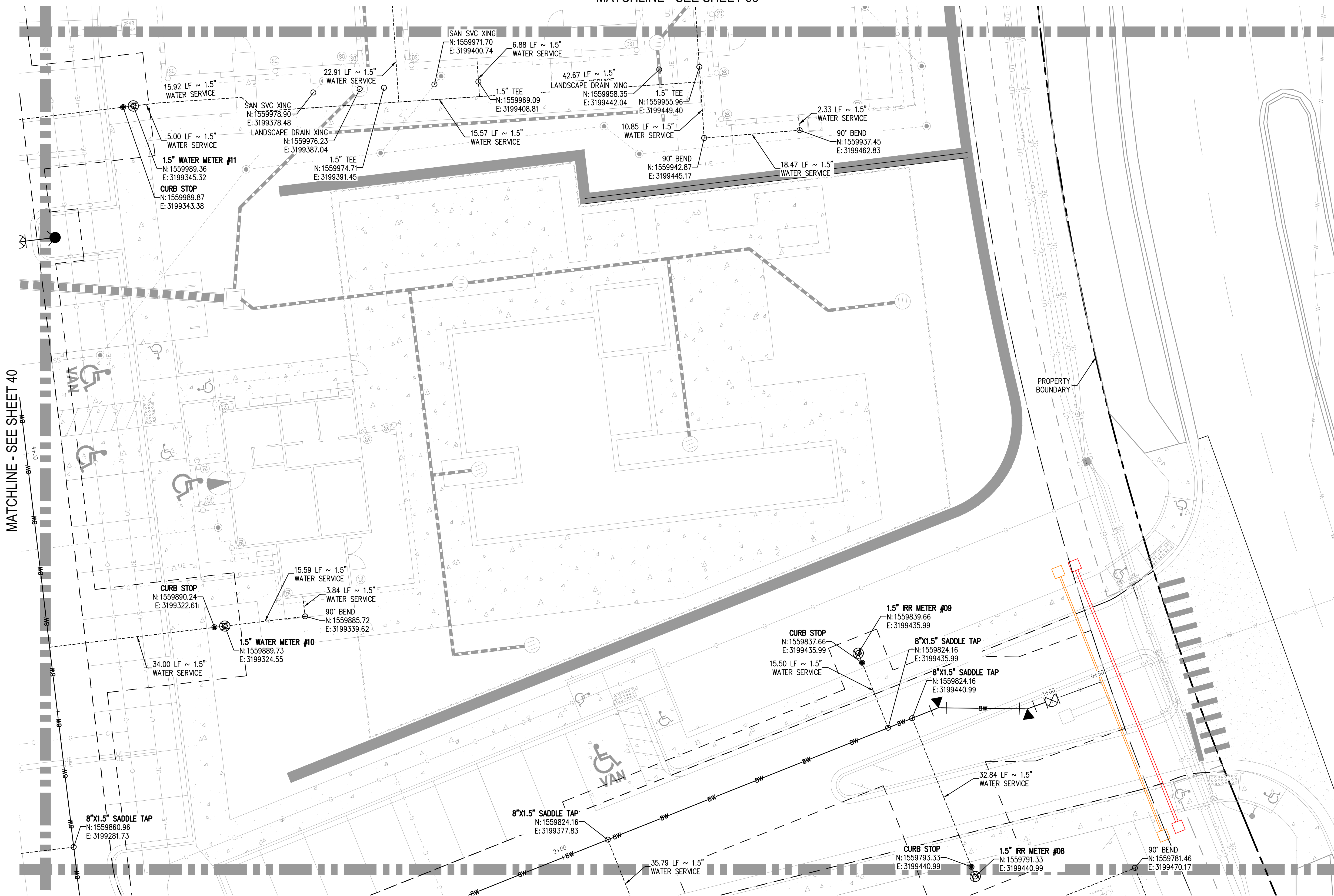
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATERCD - WATER SERVICE PLAN\2.DWG LAYOUT: LAYOUT2
NO SCALE: 1"=10'
PLOTTED: MON 04/10/23 8:46:54A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 40

MATCHLINE - SEE SHEET 38

MATCHLINE - SEE SHEET 43



NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'06" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM

DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By:

Development Services Date

Development Services Date

Development Services Date

Development Services Date

Development Services Date

Development Services Date

Development Services Date

Development Services Date

Development Services Date

Development Services Date

Development Services Date

Development Services Date

10 0 10 20

SCALE: 1" = 10'

DESIGNED BY: BMW

CHECKED BY: RCP

DRAWN BY: BMW

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

HARRIS KOCHER SMITH

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

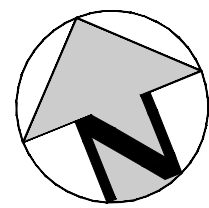
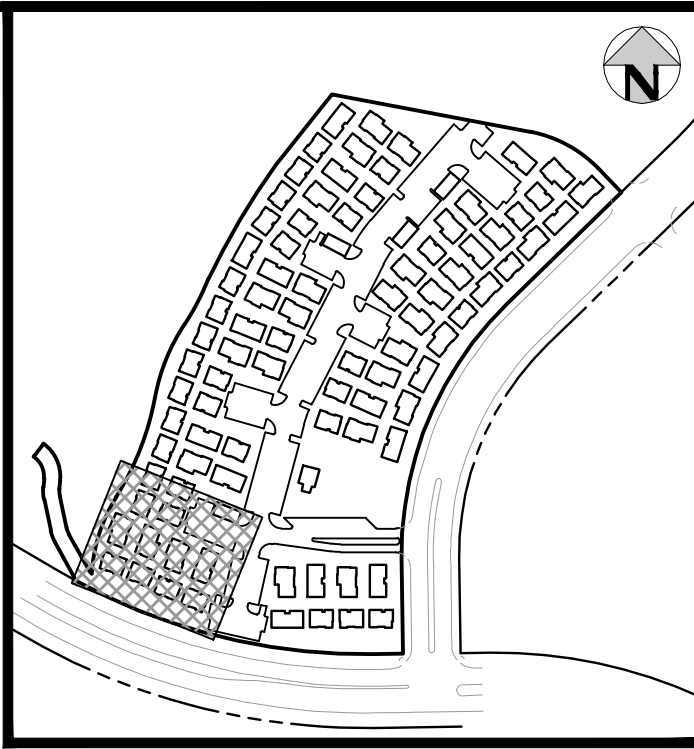
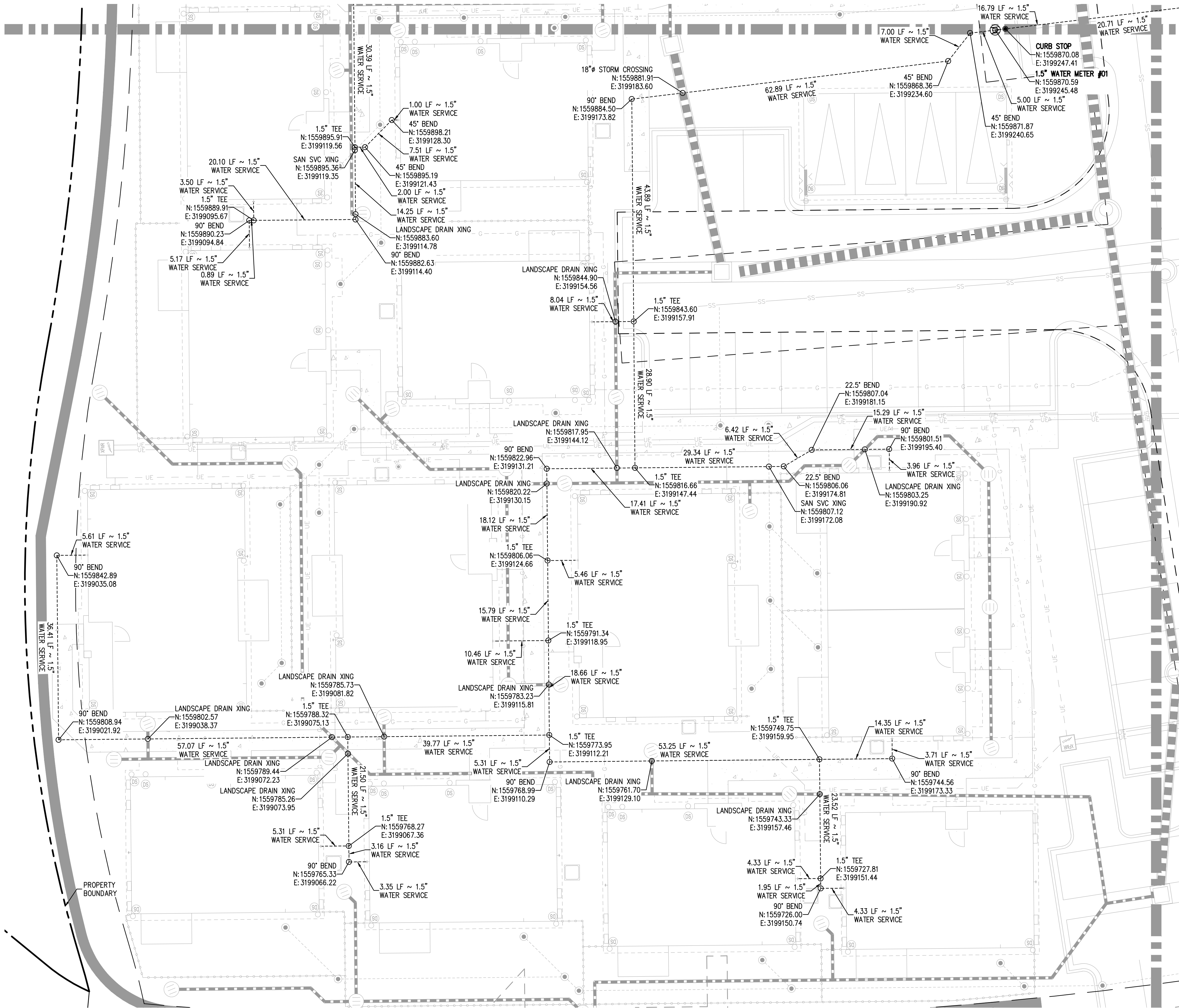
AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

PROJECT #: 210431
SHEET NUMBER
41
41 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATER\CD - WATER SERVICE PLAN\A2.DWG LAYOUT: LAYOUT3
NO SCALE: 1"=10'
PLOTTED: MON 04/10/23 8:47:03A BY: MILES SUSTAD

MATCHLINE - SEE SHEET 40



MATCHLINE - SEE SHEET 43

NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

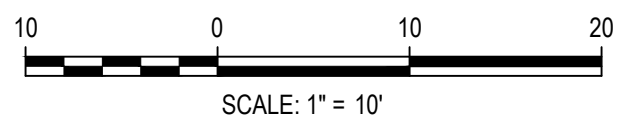
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

PROJECT #: 210431
SHEET NUMBER

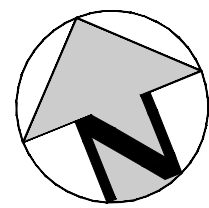
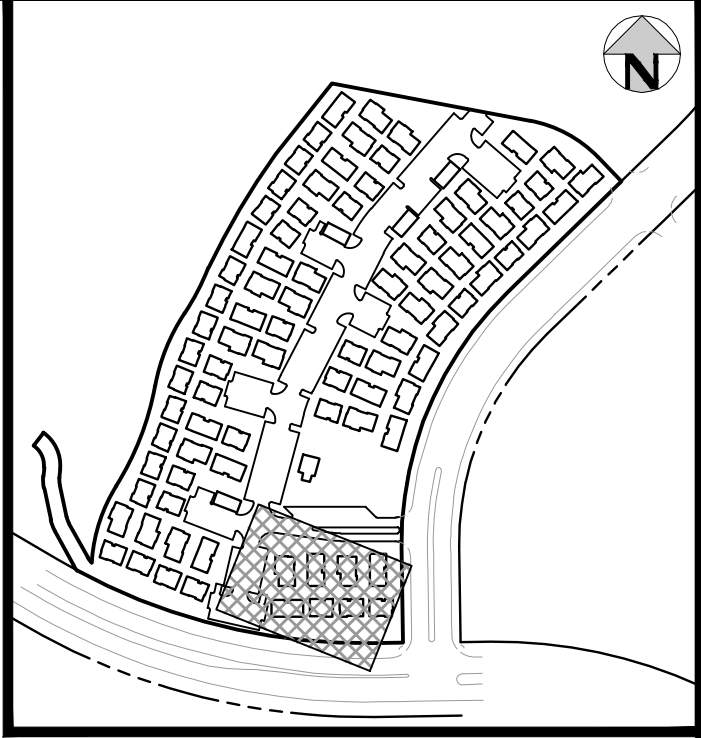
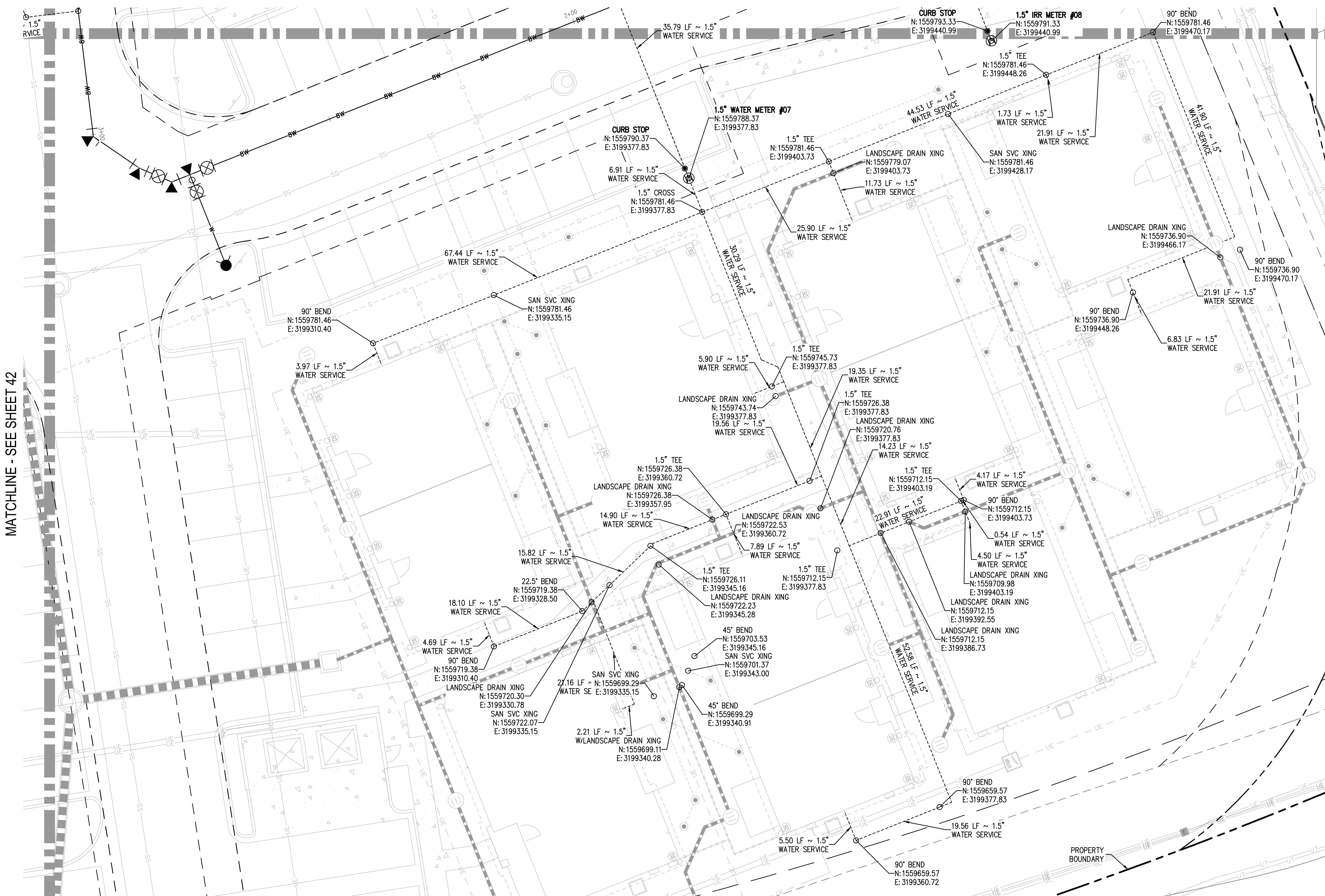
42

42 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

MATCHLINE - SEE SHEET 42

MATCHLINE - SEE SHEET 41



NOTES:

1. THE CONTRACTOR SHALL NOTIFY 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER.
4. ALL UNITS ARE FIRE SPRINKLER PROTECTED WITH NFPA 13-D SYSTEM.
5. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF CASTLE ROCK WATER APPROVED MATERIALS LIST.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'06" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

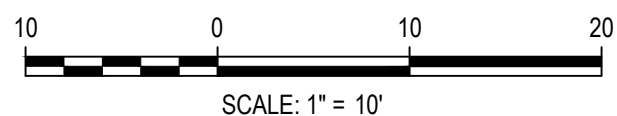
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date



DESIGNED BY: BMW
CHECKED BY: RCP
DRAWN BY: BMW

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



AVILLA FOUNDERS VILLAGE
WATER SERVICES PLAN

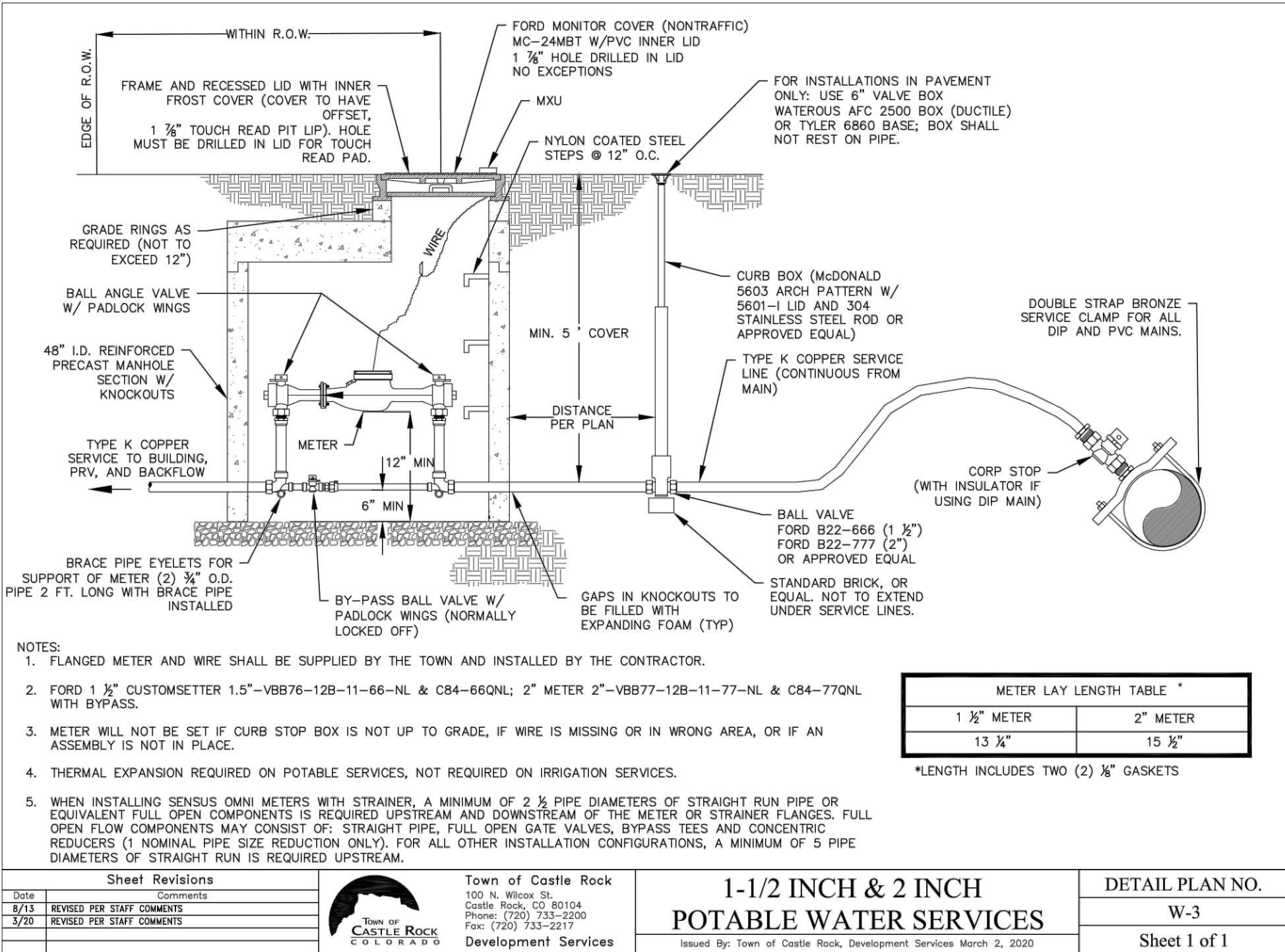
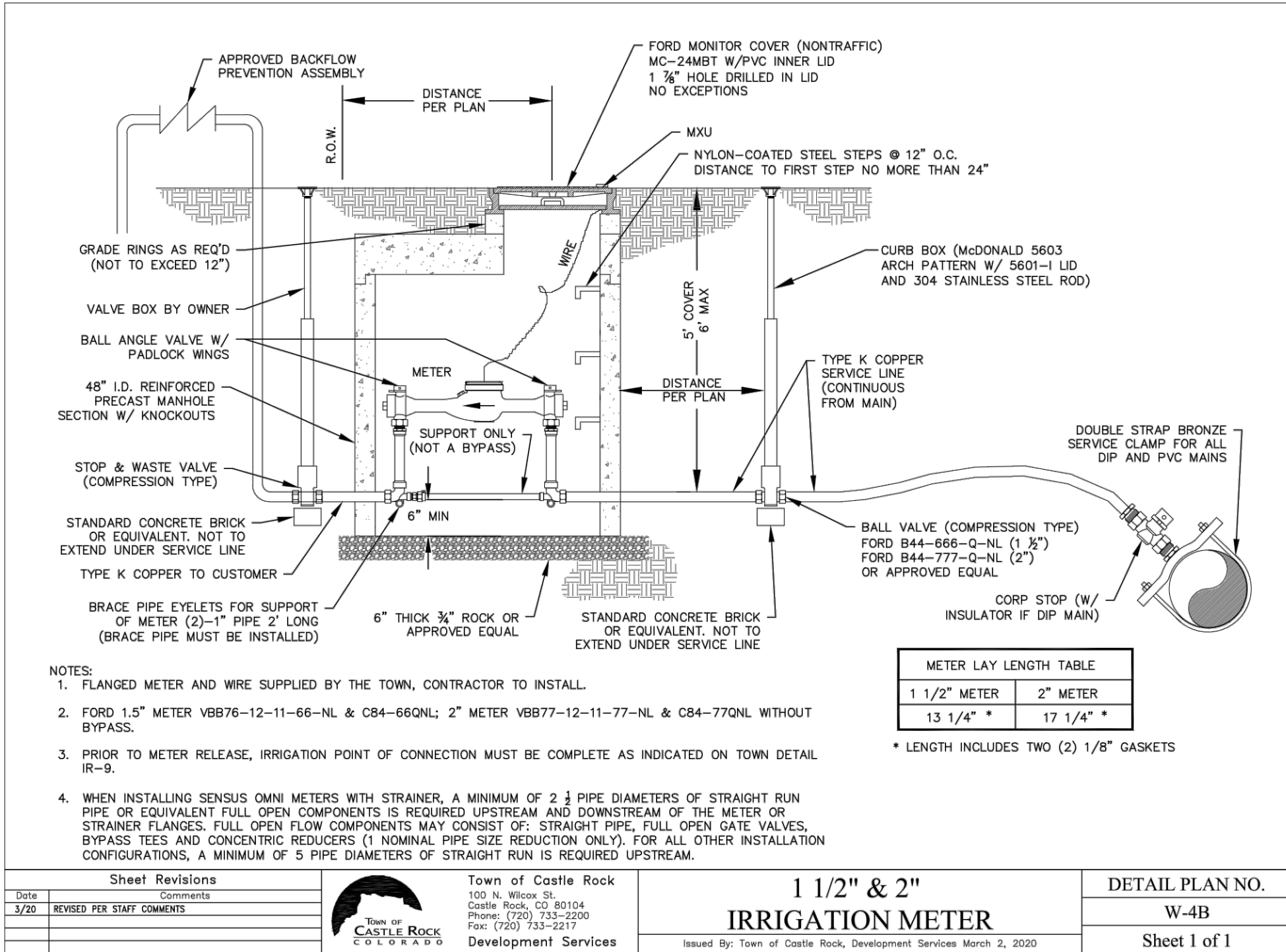
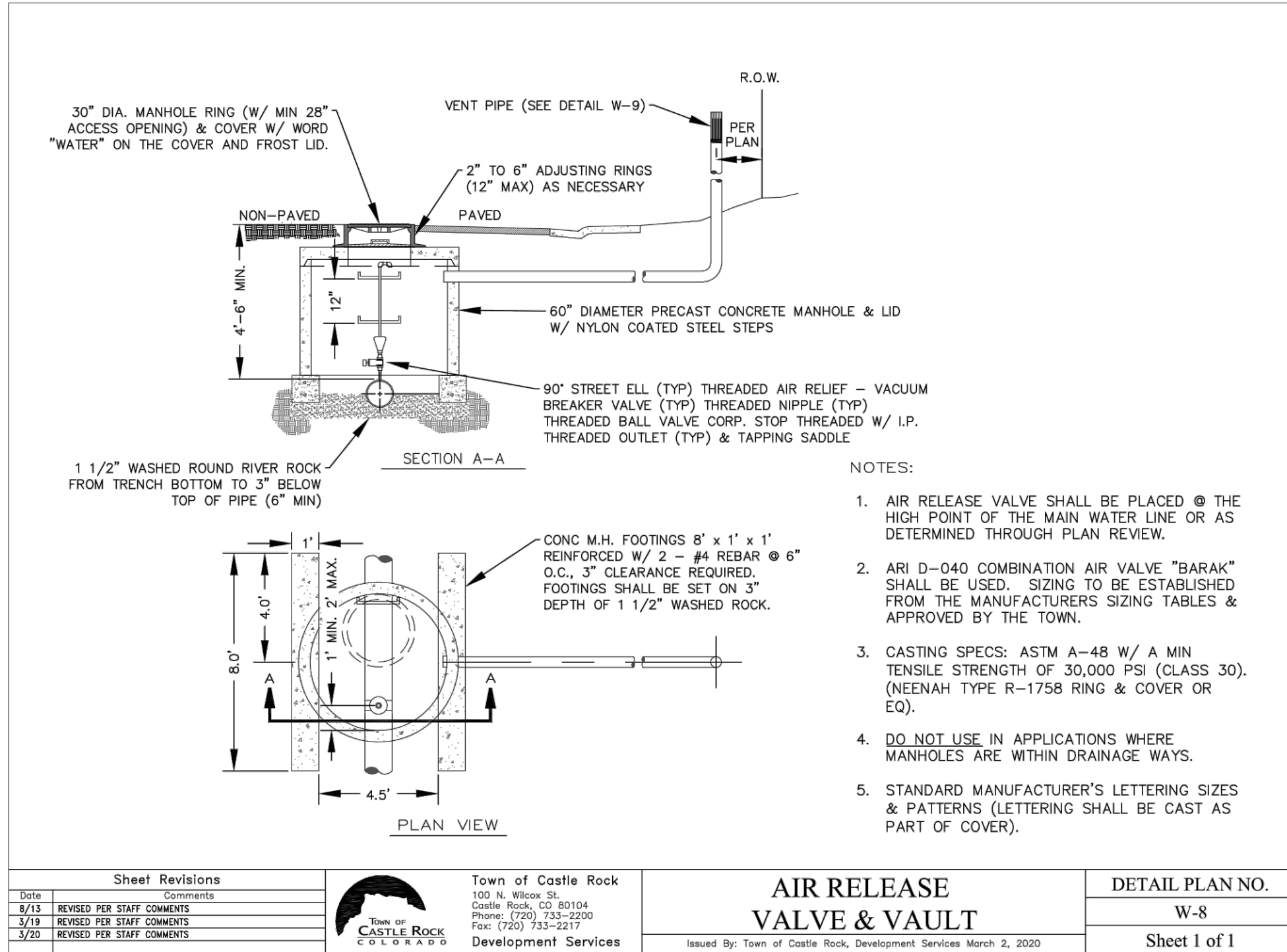
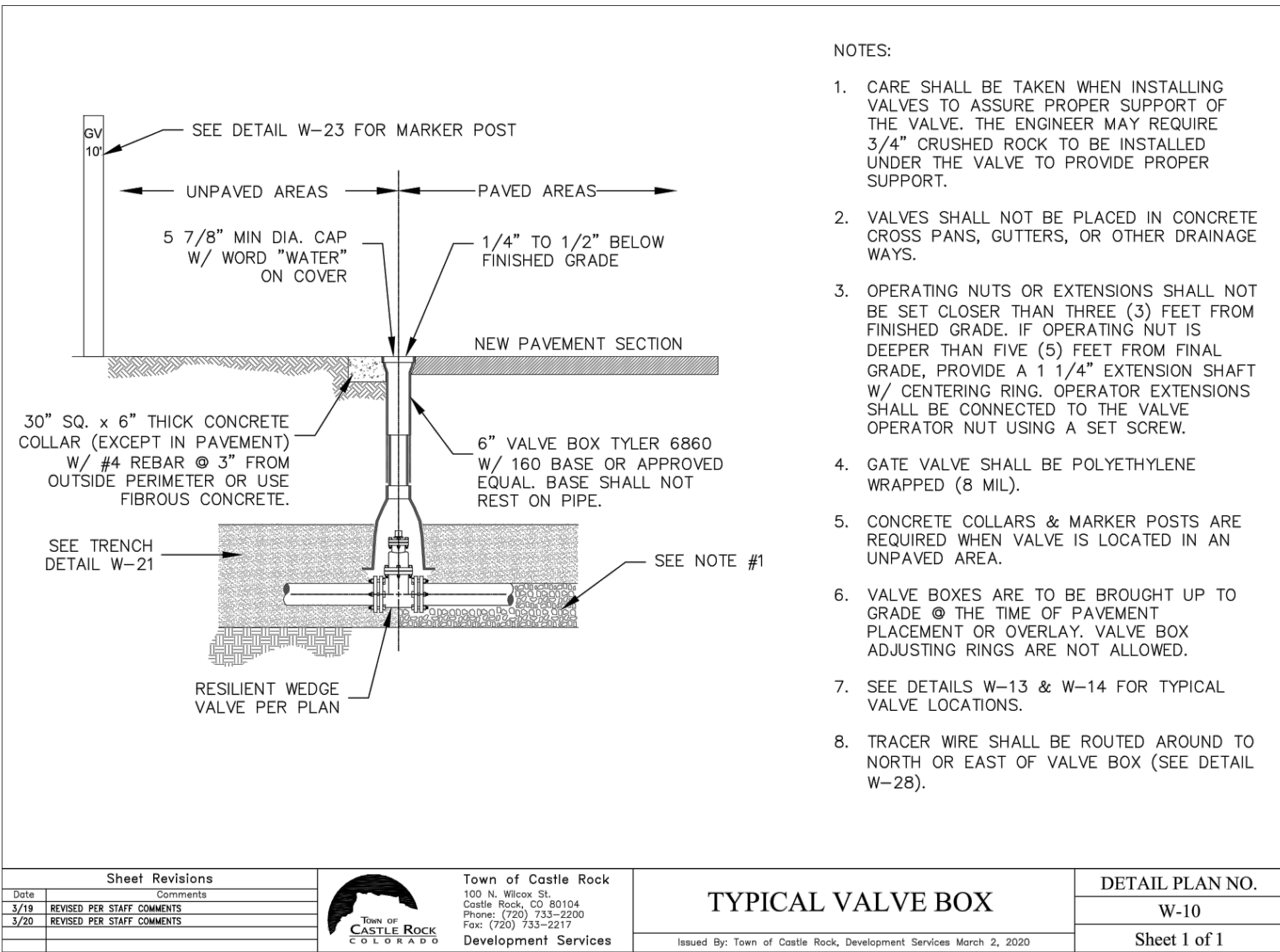
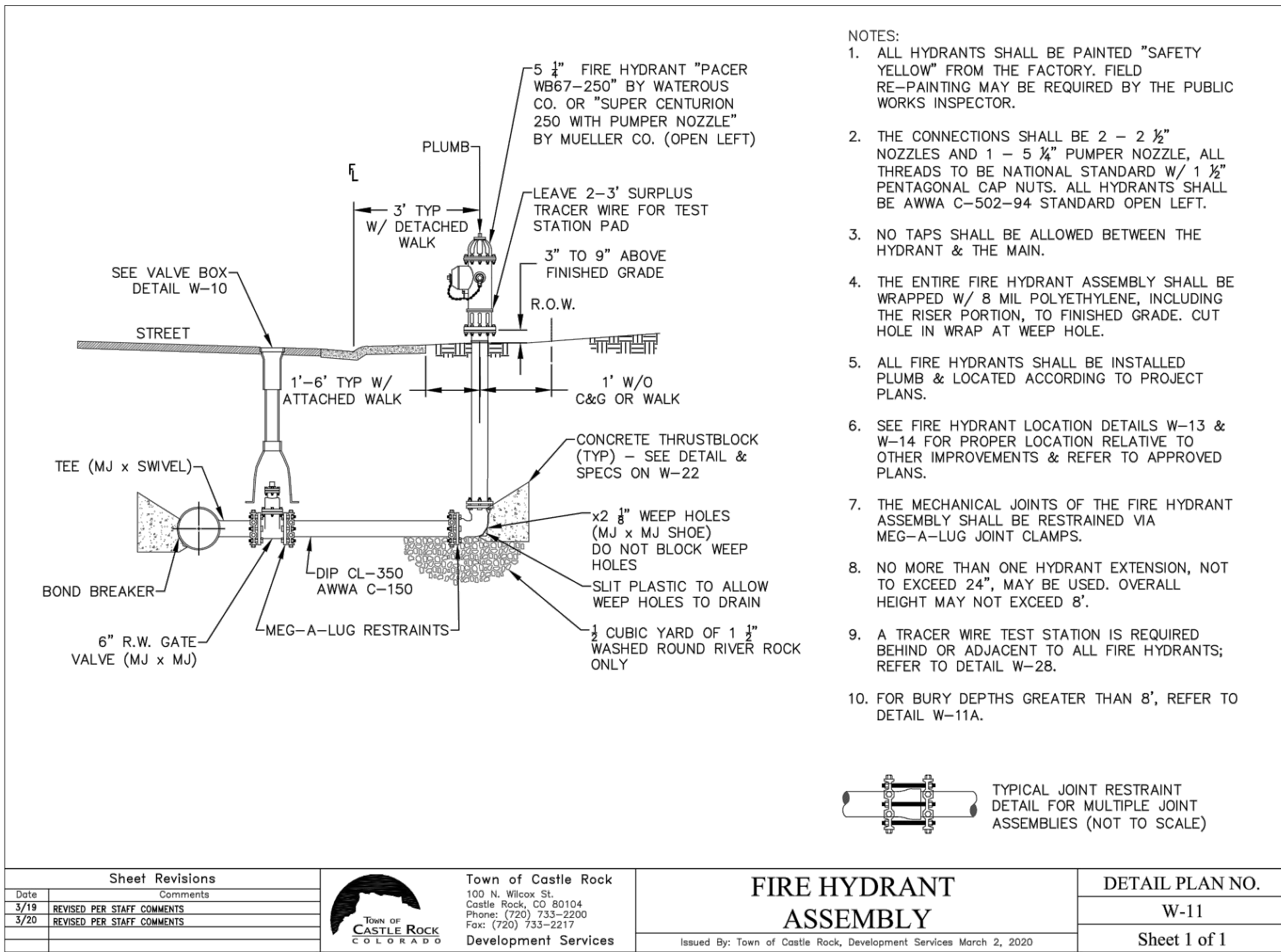
PROJECT #: 210431
SHEET NUMBER

43

43 OF 87

FILE PATH: K:\210431\ENGINEERING\UTILITIES\WATER\CD - WATER SERVICE PLAN\2.DWG LAYOUT LAYOUT4
NO SCALE
PLOTTED: MON 04/10/23 8:47:14A BY: MILES SUSTAD

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date



Know what's below.
Call before you dig.

DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
WATER DETAILS

PROJECT #: 210431
SHEET NUMBER

44

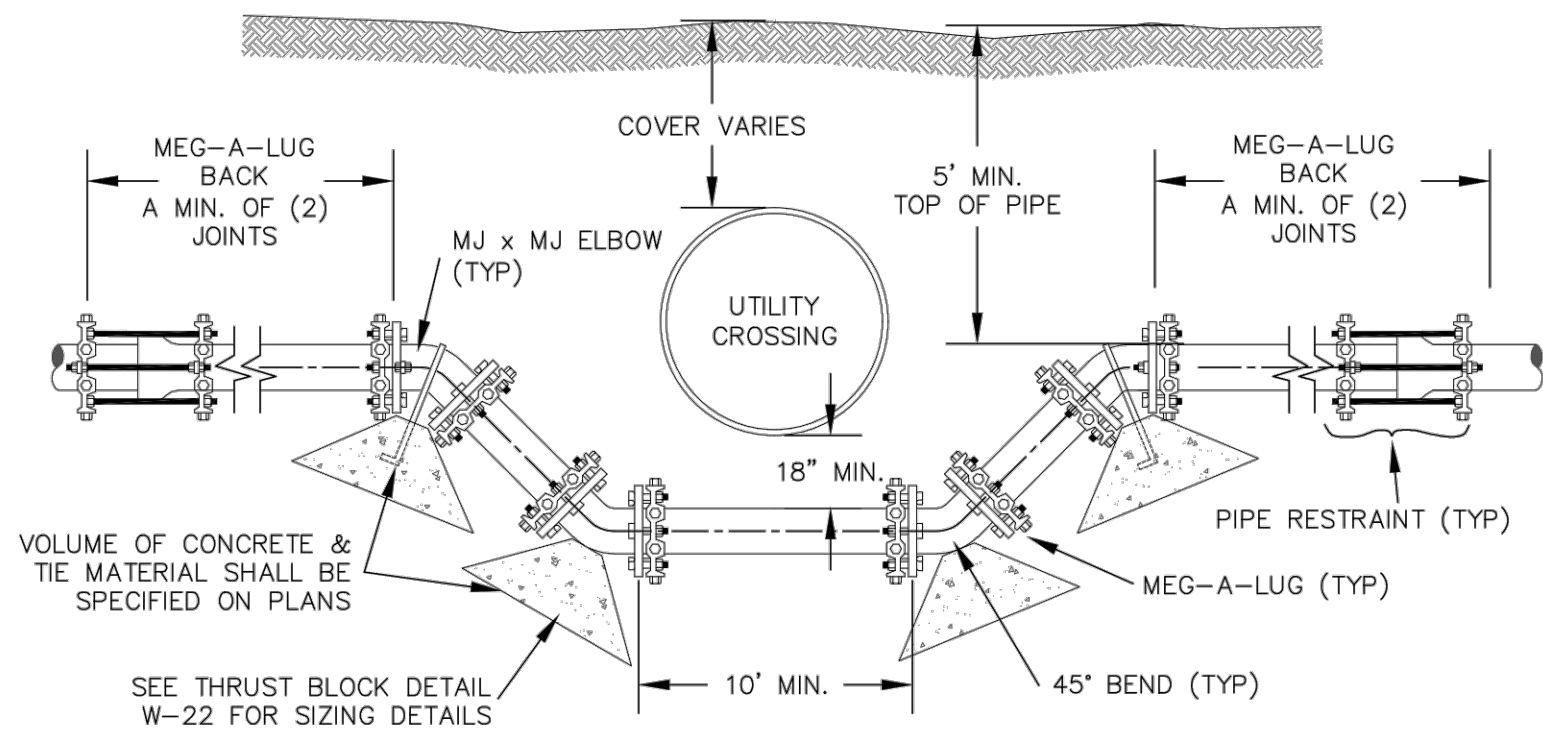
44 OF 87

FILE PATH: K:\210431\ENGINEERING\GUTLITES\WATER\CD - WATER DETAILS.DWG LAYOUT LAYOUT1
PLOTTED: MON 04/10/23 8:47:21A BY: MILES SUSTAD

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

NOTES:

- WHERE WATER LINE COVER EXCEEDS 7'-6" AT THE LOW POINT OF THE CONDUIT CROSSING, VERTICAL BENDS ARE REQUIRED. WHEN COVER IS LESS THAN 7'-6", PIPE JOINTS MAY BE DEFLECTED 1/2 THE MANUFACTURER'S RECOMMENDED DEFLECTION IN LIEU OF VERTICAL BENDS. THE LIMITS OF THE DEPRESSED AREA SHALL BE DOCUMENTED ON THE "AS-BUILT" DRAWINGS.
- IF UTILITY CROSSING IS SANITARY SEWER & IS OVER A RAW OR POTABLE WATER LINE, ALL UTILITY CROSSING JOINTS WITHIN 10' SHALL BE ENCASED 1' BOTH SIDES OF THE JOINT W/ CONCRETE. SEE ENCASEMENT DETAIL W-20.
- MULTIPLE JOINTS BETWEEN MEG-A-LUG FITTINGS SHALL BE RESTRAINED.
- SEE PIPE RESTRAINT TABLE (DETAIL W-18) FOR SPECIFICATIONS.
- NO TEES, SERVICE CONNECTIONS, VALVES, OR FIRE HYDRANT CONNECTIONS ARE ALLOWED IN LOWERING.
- PIPE MATERIAL IN LOWERED SECTION SHALL MATCH THE MAIN LINE.



Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	WATER LOWERING	Issued By: Town of Castle Rock, Development Services March 2, 2020	DETAIL PLAN NO.
Date	Comments					W-17
3/19	REVISED PER STAFF COMMENTS					
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1

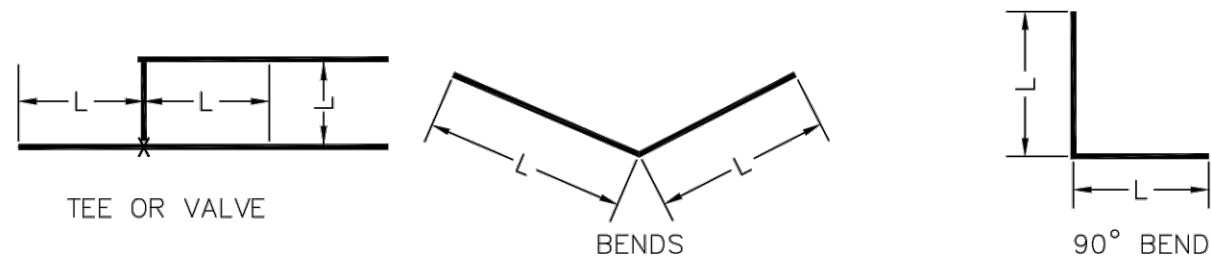
LENGTH OF RESTRAINED PIPE

PIPE SIZE	4"	6"	8"	12"	16"	20"	24"
FITTING	L	L	L	L	L	L	L
90° BEND, TEE, PLUG OR VALVE	30'	45'	60'	86'	108'	132'	155'
45° BEND	M1	13'	18'	25'	32'	39'	45'
22 1/2" BEND	M1	M1	M1	M1	M1	M1	M1
11 1/4" BEND	--	--	M1	M1	M1	M1	M1

LEGEND

L = LENGTH

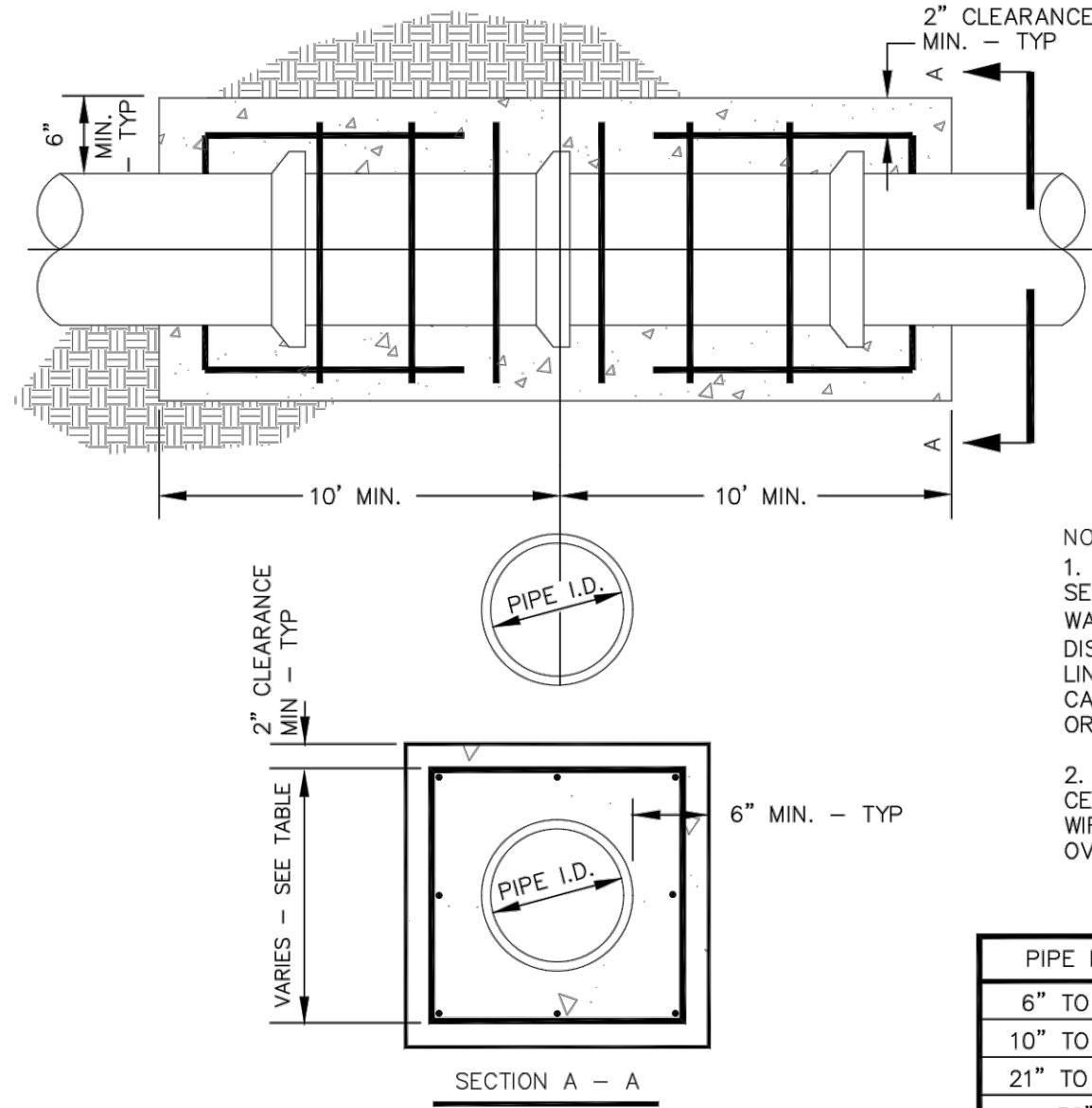
M1 = MINIMUM OF 1 FULL LENGTH OF PIPE



NOTES:

- LENGTH OF RESTRAINED PIPE MEASURED EACH WAY FROM VALVES & BENDS.
- MINIMUM 5' GROUND COVER REQUIRED.
- ALL FITTINGS SHALL BE FITTED WITH MEG-A-LUGS.
- PIPE RESTRAINTS SHALL BE AS FOLLOWS:
 - D.I.P. - RESTRAINTS FOR STD. MECHANICAL JOINTS SHALL BE OF HIGH STRENGTH DUCTILE IRON CONFORMING TO ASTM A536, GRADE 65-45-12. MECH. JOINTS SHALL HAVE A WATER WORKING PRESSURE OF 100 P.S.I. MINIMUM AND SHALL BE EBBA IRON INC., MEG-A-LUG SERIES 1100, FORD METER BOX CO., UNI-FLANGE 1400 OR APPROVED EQUAL.
 - PVC - RESTRAINT DEVICES SHALL BE MANUFACTURED OF HIGH STRENGTH DUCTILE IRON, ASTM A536, GRADE 65-45-12 IN 2" - 24" SIZES, ASTM A36 IN SIZES 30" - 36". FULL RATED PRESSURE OF THE PVC PIPE AND SHALL BE EBBA IRON INC., MEG-A-LUG SERIES 1100 FORD METER BOX, UNI-FLANGE 1400 OR APPROVED EQUAL.

Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	PIPE RESTRAINT TABLE	Issued By: Town of Castle Rock, Development Services March 2, 2020	DETAIL PLAN NO.
Date	Comments					W-18
3/19	REVISED PER STAFF COMMENTS					
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1



NOTES:

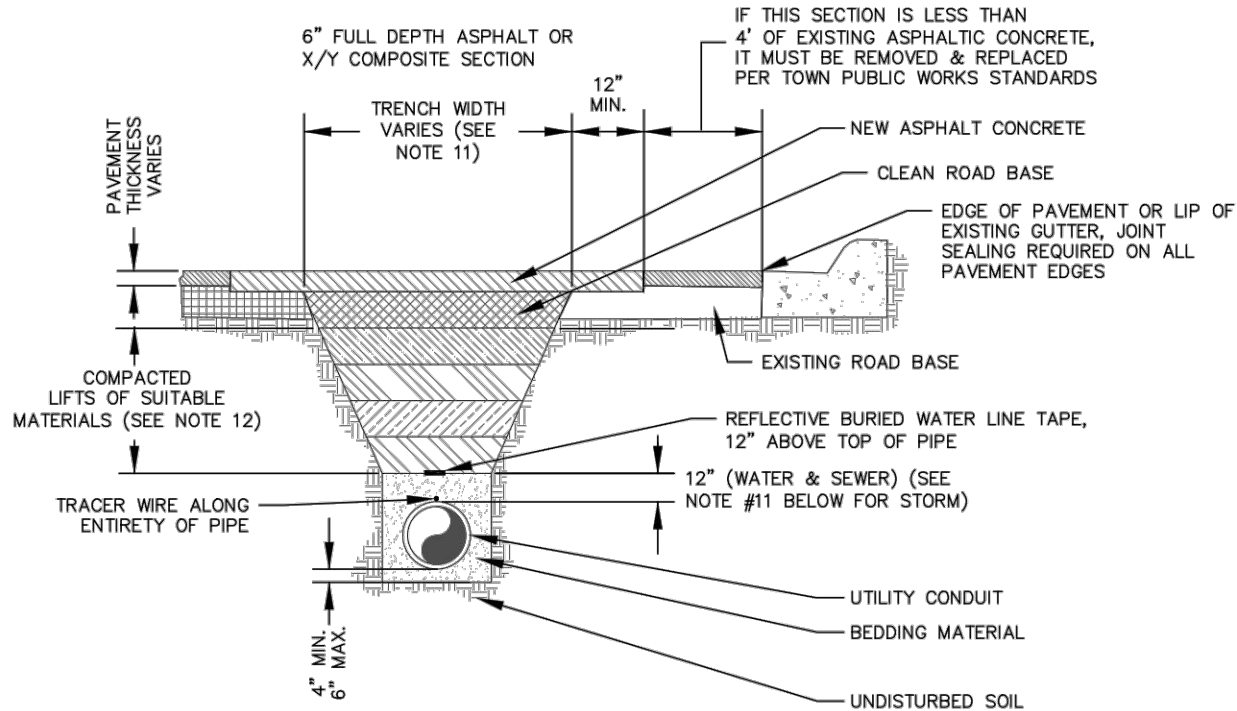
- CONCRETE ENCASEMENT WILL BE REQUIRED ON SEWER LINE WHEN CLEAR VERTICAL DISTANCE FROM WATER LINE IS LESS THAN 1'-6" OR HORIZONTAL DISTANCE IS LESS THAN 10' BETWEEN PARALLEL LINES. CONCRETE ENCASEMENT REQUIRED IN ALL CASES WHERE SEWER LINE IS ABOVE WATER LINE OR IS UNDER A WATERWAY CROSSING.
- TRACER WIRE SHALL BE CONTINUOUS ON TOP CENTER OF WATER AND SEWER MAINS. PER TRACER WIRE GENERAL NOTES. CONCRETE WILL BE POURED OVER TOP OF TRACER WIRE.

PIPE I.D.	NO. OF LONGITUDINAL BARS & LOCATION	
6" TO 8"	4 - #4 BARS	1 EACH CORNER
10" TO 18"	8 - #4 BARS	3 EACH SIDE
21" TO 33"	12 - #4 BARS	4 EACH SIDE
36"	16 - #4 BARS	5 EACH SIDE

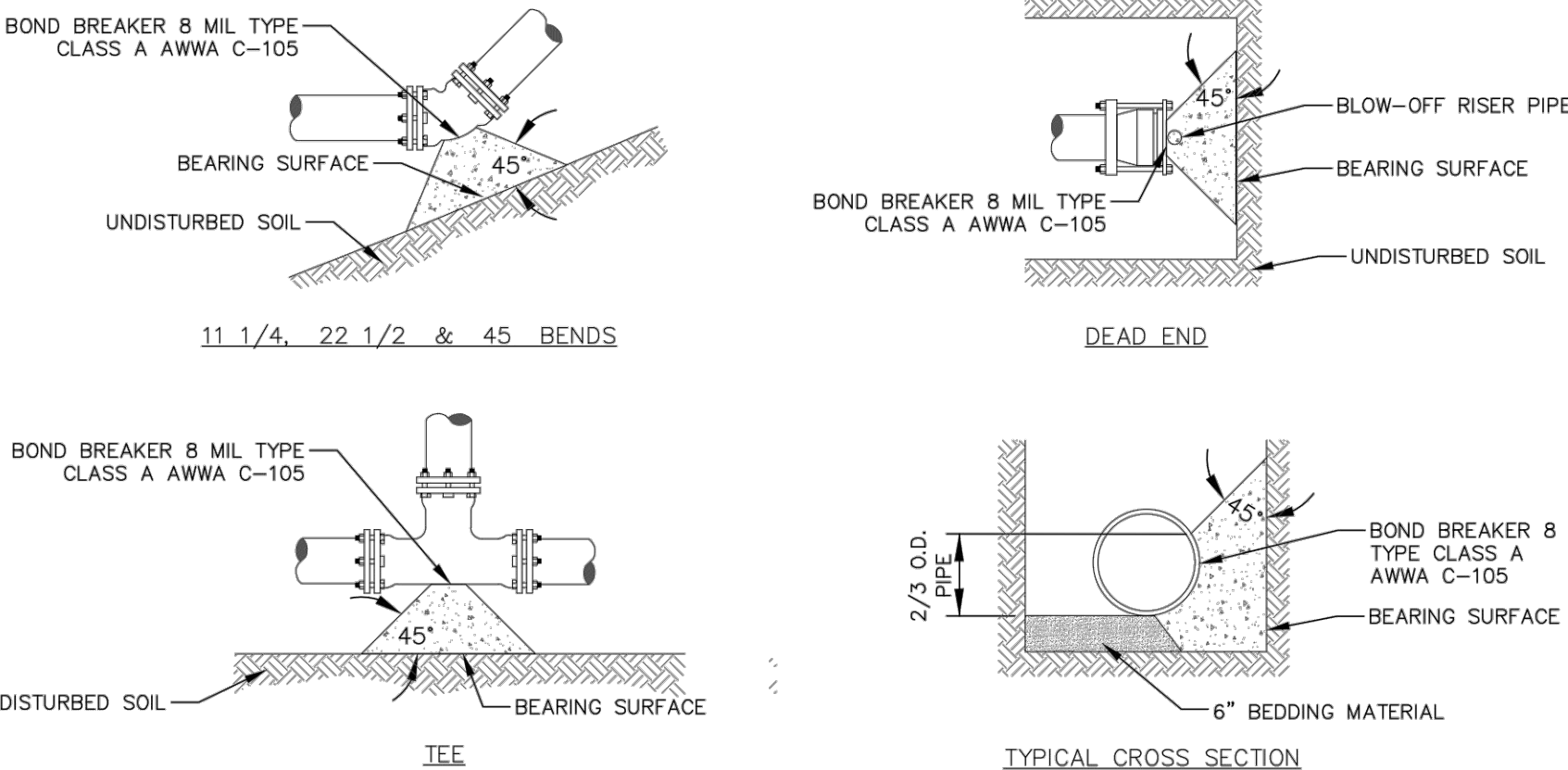
Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	PIPE ENCASEMENT	Issued By: Town of Castle Rock, Development Services March 2, 2020	DETAIL PLAN NO.
Date	Comments					W-20
3/19	REVISED PER STAFF COMMENTS					
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1

NOTES:

- ALL TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THIS DETAIL UNLESS OTHERWISE SPECIFIED BY PUBLIC WORKS.
- PRIOR TO PLACEMENT OF CONCRETE, ALL EDGES SHALL BE SAW CUT TO A CLEAN, STRAIGHT, AND VERTICAL EDGE.
- PRIOR TO PLACEMENT OF ASPHALT, 18 INCHES OF ADJACENT ASPHALT SHALL BE MILLED TO 2 INCH DEPTH ON ALL SIDES TO MATCH EXISTING PAVEMENT. INNER SURFACE TO BE TACKED WITH HSS-1.
- WHEN SUBSTITUTING FOR BACKFILL MATERIAL, FLOWABLE FILL SHALL CONFORM TO MPOEC CLSM STANDARDS.
- TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE DIAMETER OF THE PIPE.
- 95% OF ASTM D698 STANDARD COMPACTION EFFORT IS REQUIRED ON ALL TRENCHING ZONES, IN BOTH IMPROVED & UNIMPROVED AREAS.
- IN UNIMPROVED AREAS, ALL DISTURBED AREAS SHALL BE REGRADING, SEEDING & MULCHED.
- IN CONCRETE ROADWAYS, A MINIMUM OF 1/2 PANEL WIDTH OR 10' x 5' SECTION WILL BE ALLOWED TO REMAIN, OTHERWISE THE ENTIRE CONCRETE PANEL MUST BE REPLACED.
- USE #4 REBAR AT 2' CENTERS ALONG THE PERIMETER OF CONCRETE REPLACEMENT SECTIONS.
- 6" MAXIMUM COMPACTION LIFT THICKNESS IF FLOWABLE FILL NOT REQUIRED.
- BEDDING MATERIAL DEPTH WHEN INSTALLING STORM SEWER SHALL BE UP TO SPRING LINE. EXCEPT IN AREAS OF UNSUITABLE BACKFILL, THEN BEDDING MATERIAL SHALL BE 12" ABOVE PIPE.
- TRENCH WIDTHS LESS THAN 4' OR TRENCHING THAT EXPERIENCES CAVE-INS OR SLOUGHING SHALL REQUIRE FLOWABLE FILL IN ORDER TO ACHIEVE COMPACTION.



Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	WATER TRENCH DETAIL	Issued By: Town of Castle Rock, Development Services March 2, 2020	DETAIL PLAN NO.
Date	Comments					W-21
3/19	REVISED PER STAFF COMMENTS					
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1



NOTES:

- BEARING AREAS SHOWN ON THE CHART ARE MINIMUM AREAS & ARE DESIGNED USING THE FOLLOWING CRITERIA:
 - INTERNAL WORKING PRESSURE OF 150 PSI.
 - TRANSIENT (WATER HAMMER) PRESSURE OF 120 PSI FOR 4", 6" & 8" DIAMETER LINES, 110 PSI FOR 12" LINES, & 70 PSI FOR 20" LINES.
 - THRUSTBLOCK CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI.
- ALL SIZES OF BENDS, TEES & DEAD ENDS SHALL HAVE CONCRETE THRUSTBLOCKS.
- THRUSTBLOCKS ARE NOT A SUBSTITUTE FOR JOINT RESTRAINT.

MINIMUM BEARING SURFACE AREA
(IN SQUARE FEET)

SIZE OF PIPE	11 1/4"	22 1/2"	45"	90"	TEE OR DEAD END
6"	2.00	2.00	2.25	4.25	3.50
8"	2.00	2.00	4.00	8.00	5.25
12"	2.00	4.25	8.25	12.00	11.00
16"	3.50	6.50	12.50	23.00	16.50
20"	5.00	10.00	19.50	35.50	25.00

Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	HORIZONTAL BEND THRUSTBLOCKS	Issued By: Town of Castle Rock, Development Services March 2, 2020	DETAIL PLAN NO.
Date	Comments					W-22
3/19	REVISED PER STAFF COMMENTS					
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

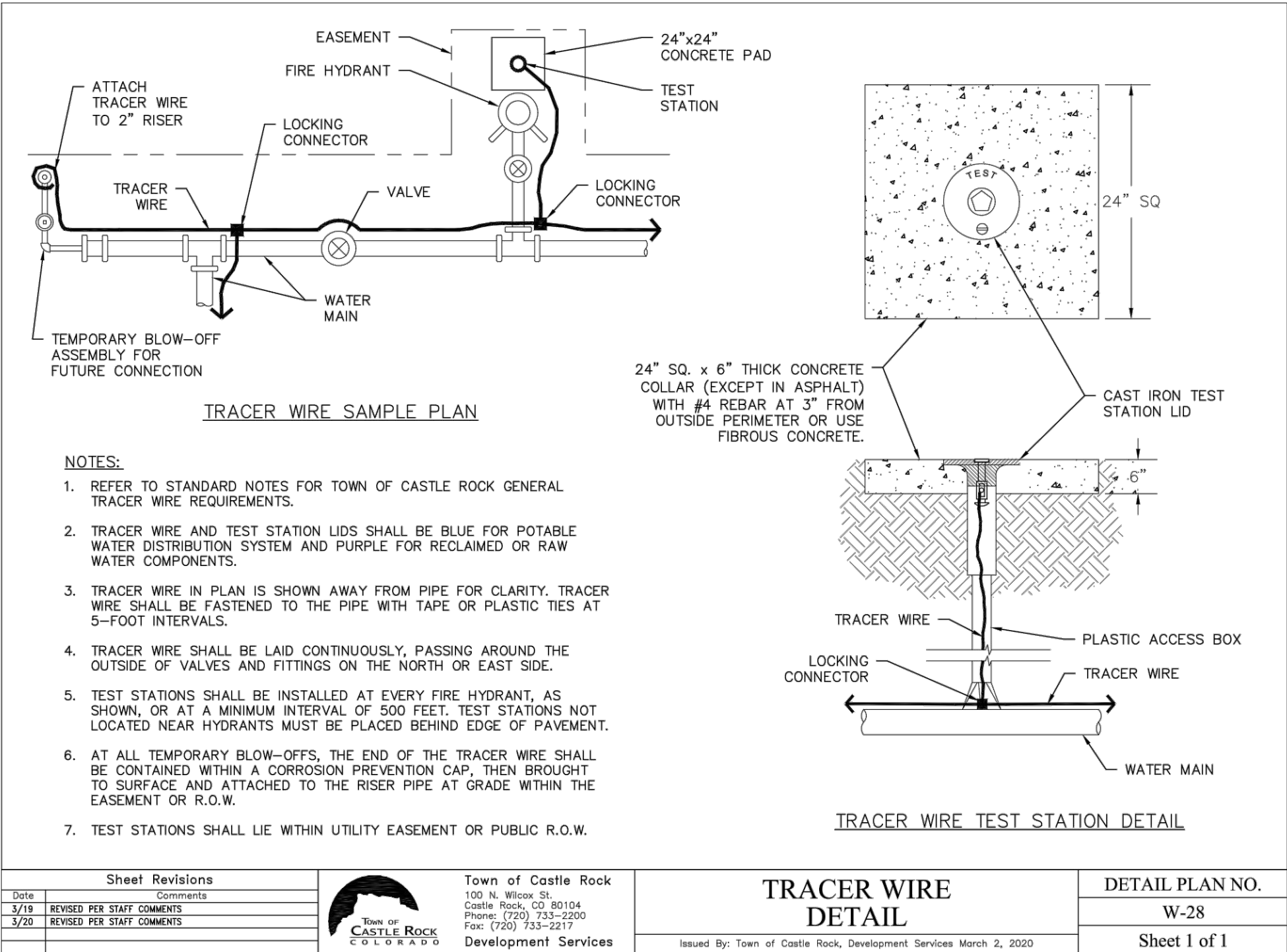
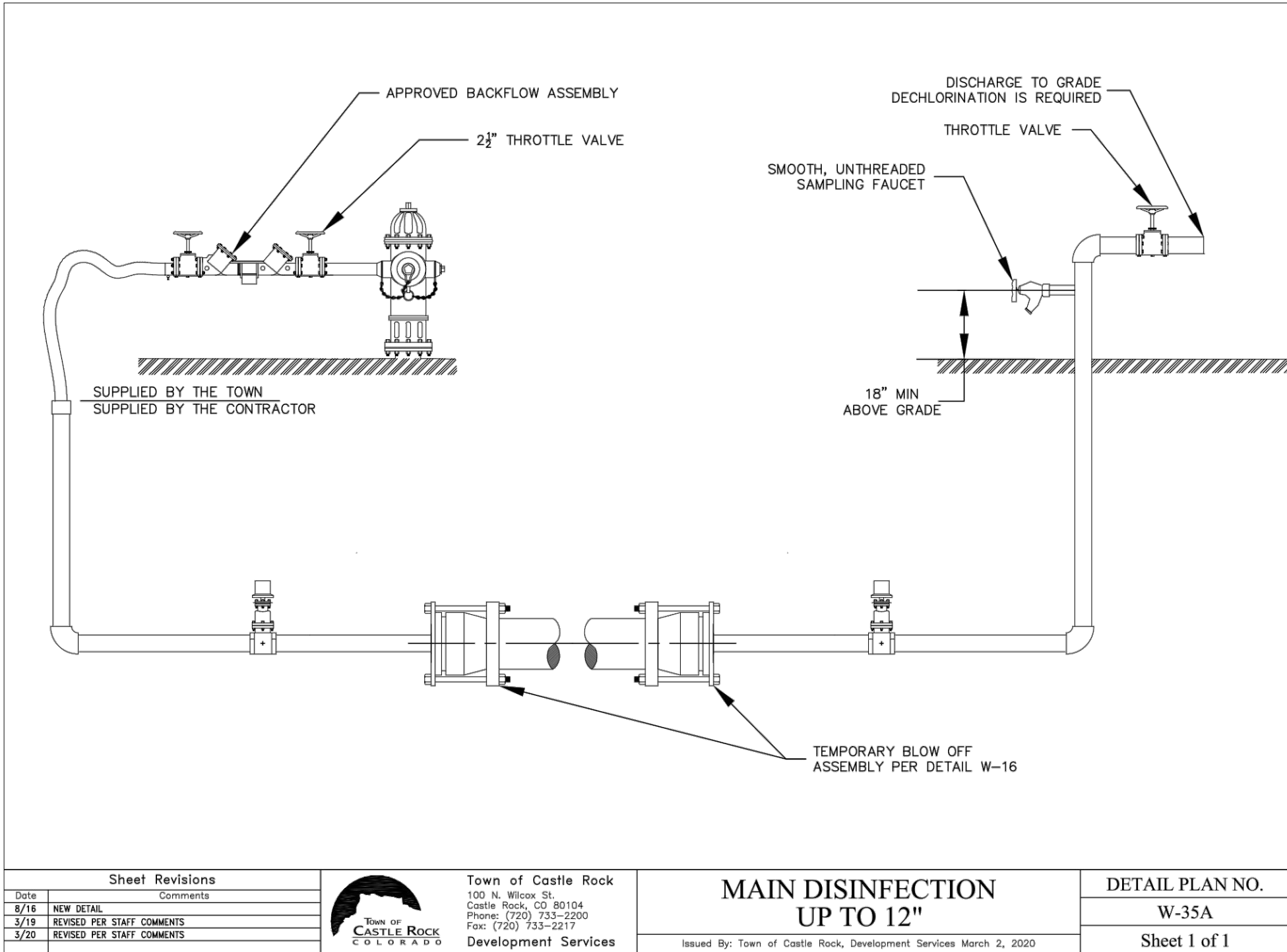
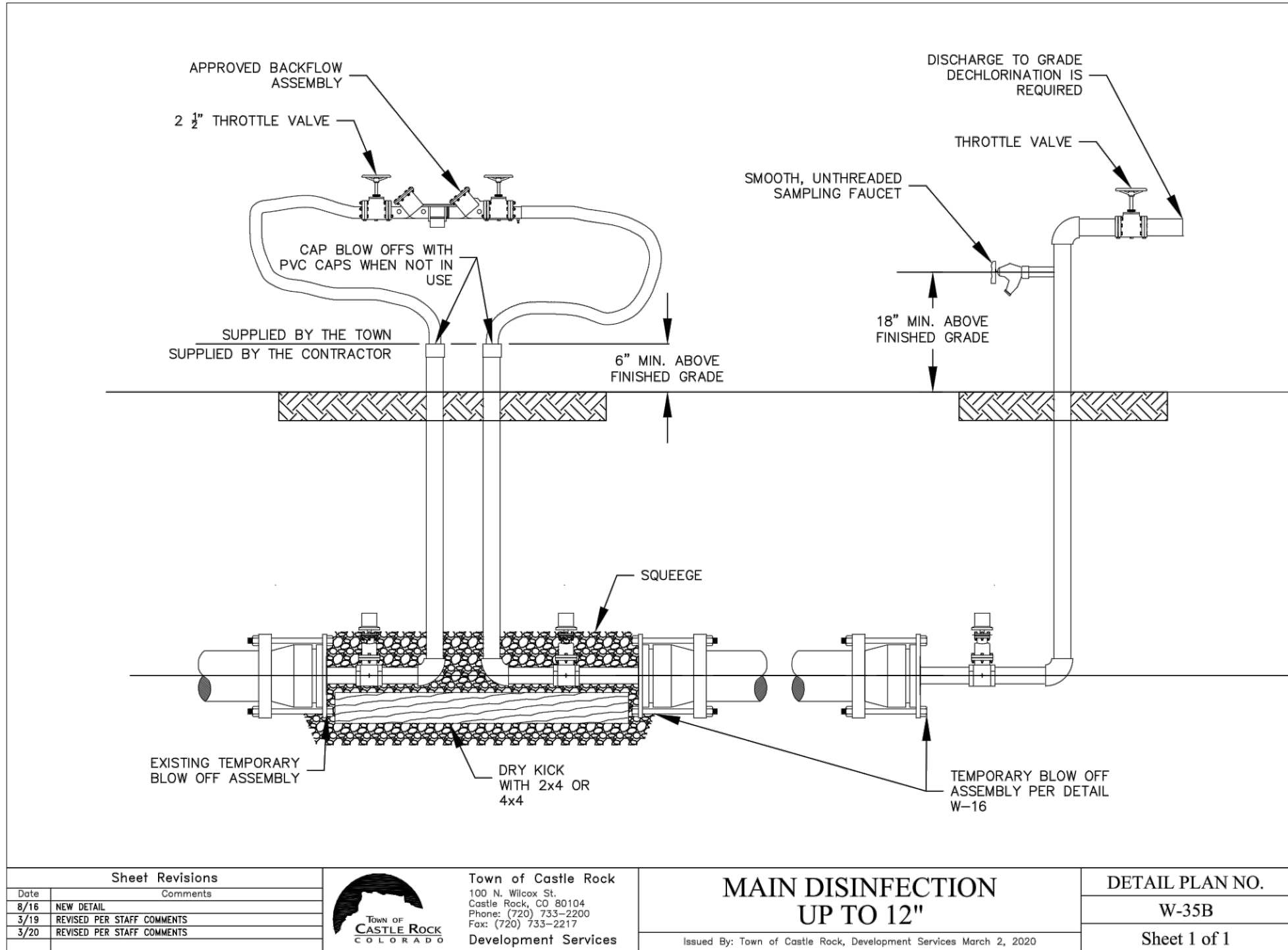
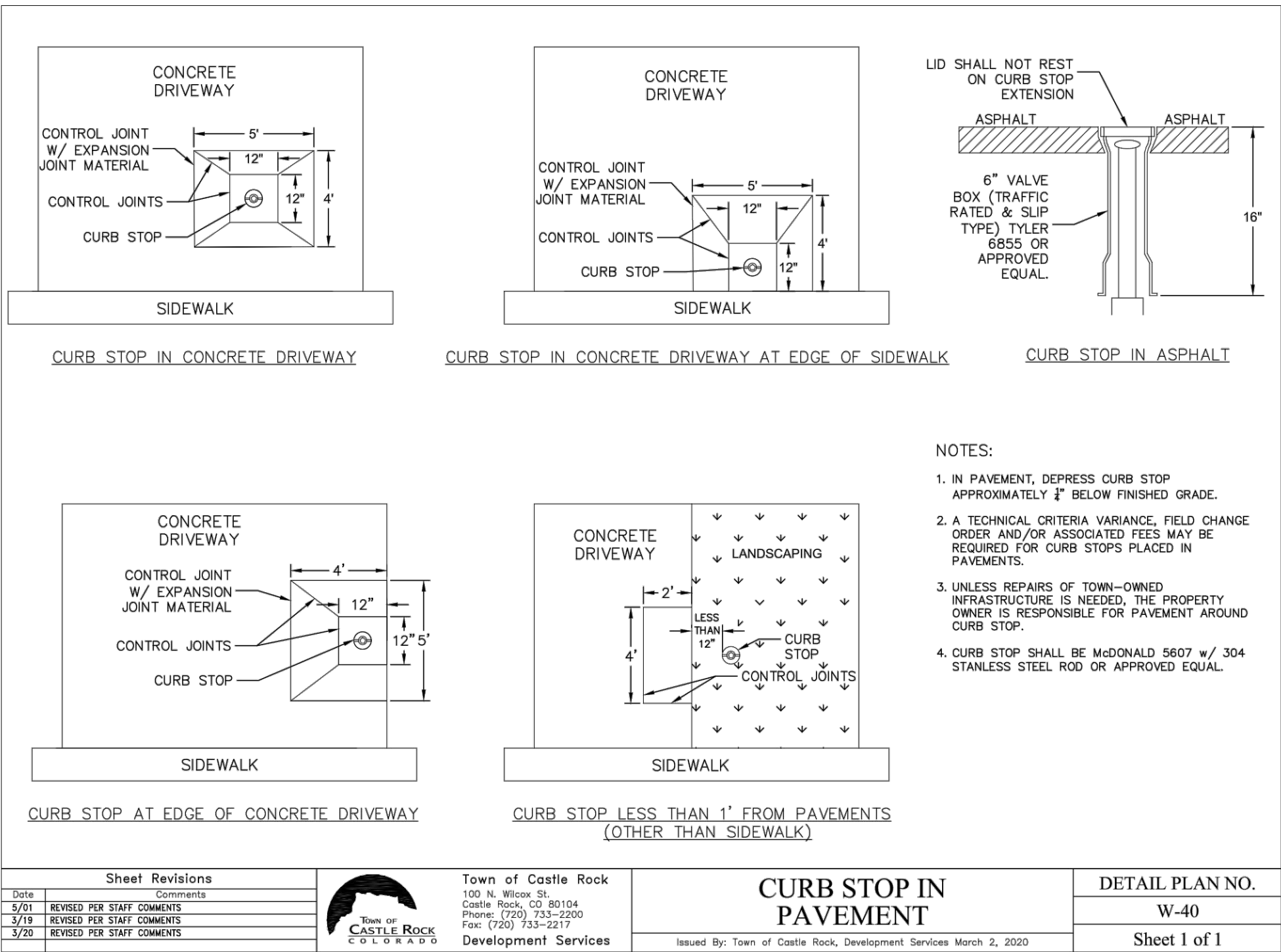
NEXmetro
Communities

AVILLA FOUNDERS VILLAGE
WATER DETAILS

PROJECT #: 210431
SHEET NUMBER

45

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



Know what's below.
Call before you dig.

DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
WATER DETAILS

PROJECT #: 210431
SHEET NUMBER

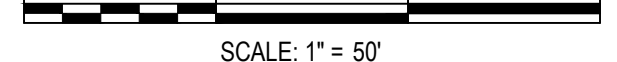
46

46 OF 87

FILEPATH: K:\210431\ENGINEERING\UTILITIES\WATER\CD - WATER DETAILS\DWG LAYOUT LAYOUT (3).DWG
PLOT DATE: 04/10/2023 8:47:33A BY: MILES SUSTAD



Know what's below.
Call before you dig



DESIGNED BY: CLH
CHECKED BY: RCP
DRAWN BY: CLH

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE

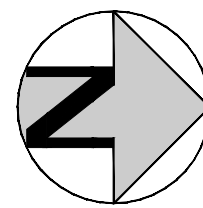
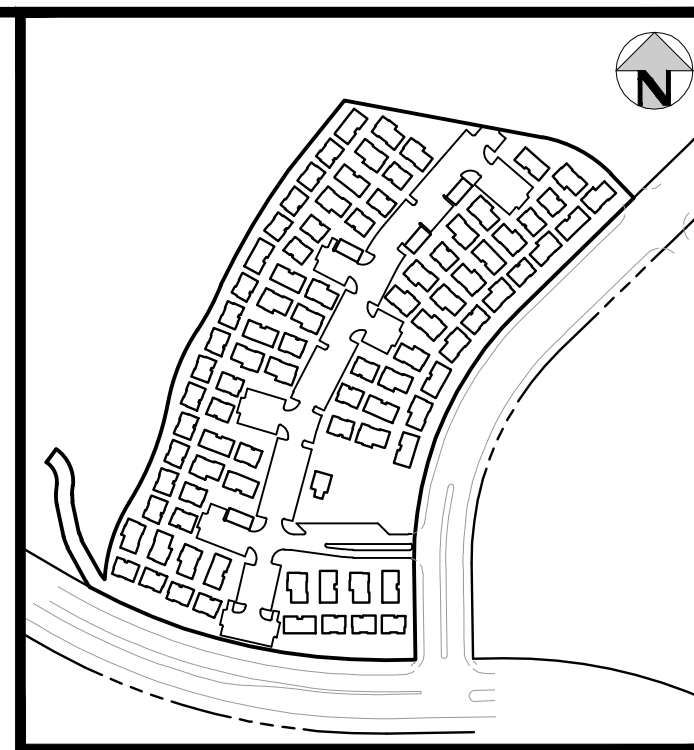
OVERALL SANITARY SYSTEM PLAN

PROJECT #: 210431

SHEET NUMBER

47

47 OF 87



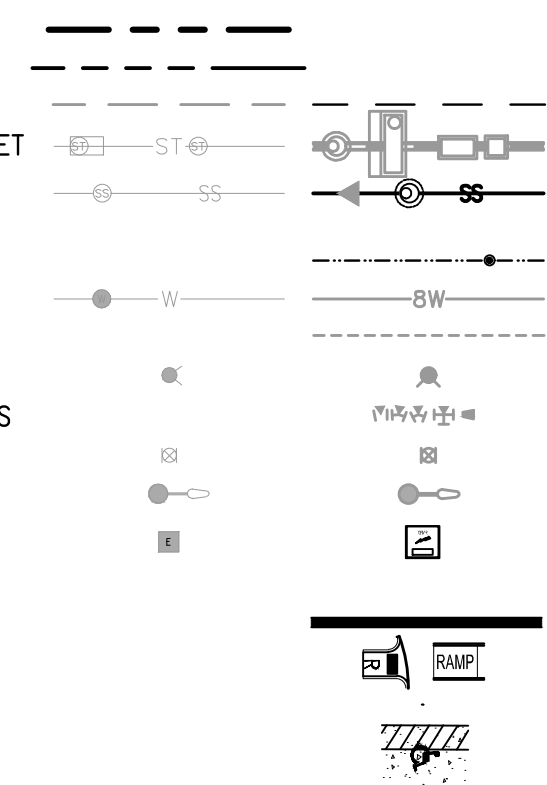
LEGEND

PROPERTY BOUNDARY
RIGHT-OF-WAY
UTILITY EASEMENT
STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN

HANDICAP PARKING

EXISTING

PROPOSED



GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STATE AND CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
 - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
 - d.
11. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (724) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
12. WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
13. CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

RACHEL C PATTON, P.E. #54450

DATE _____

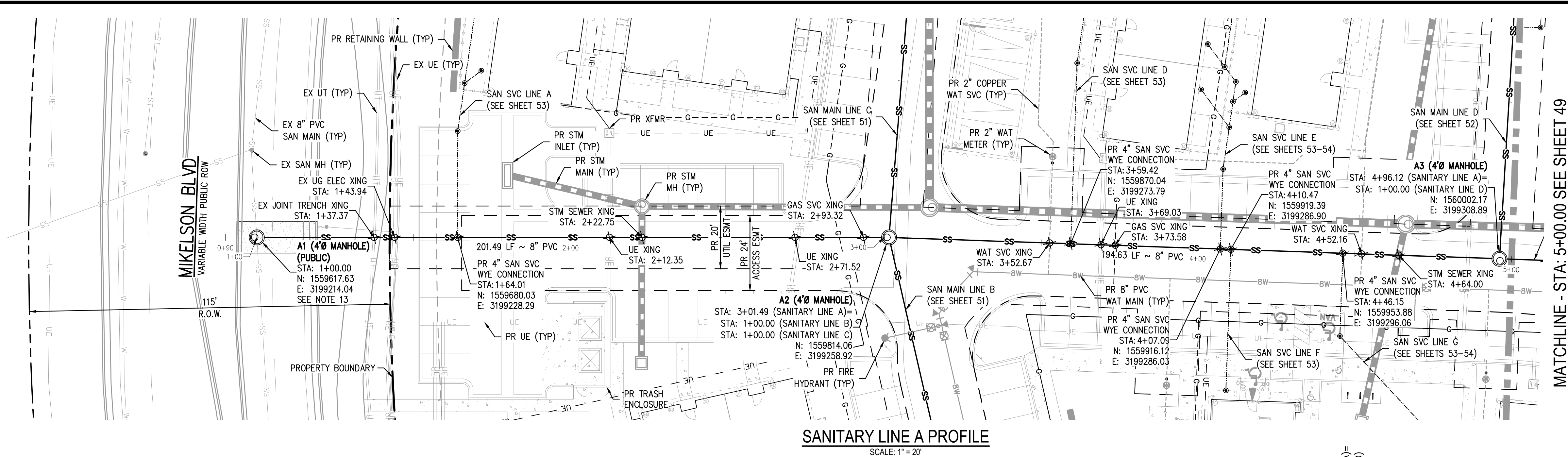
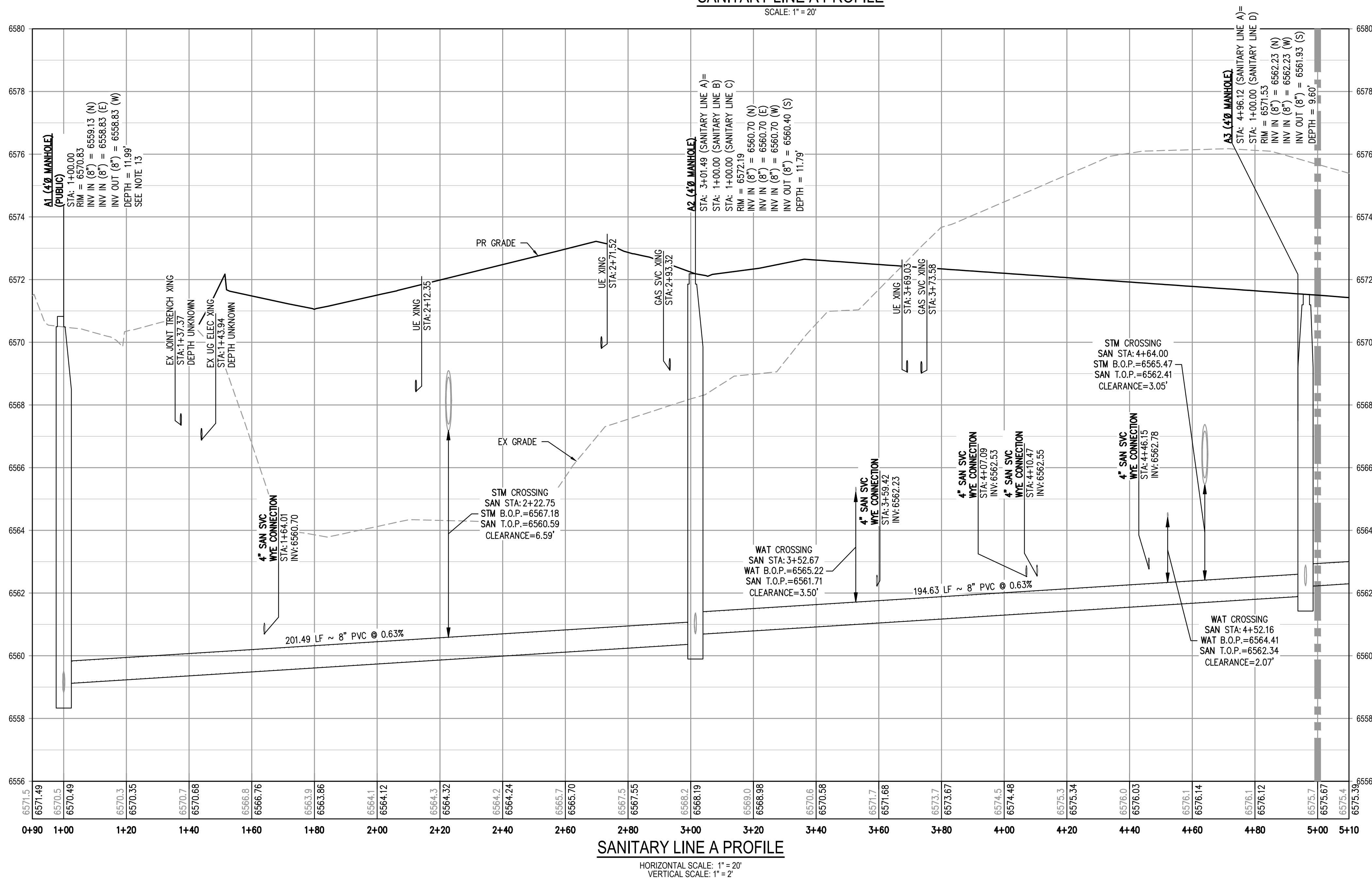
TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____

Approved By

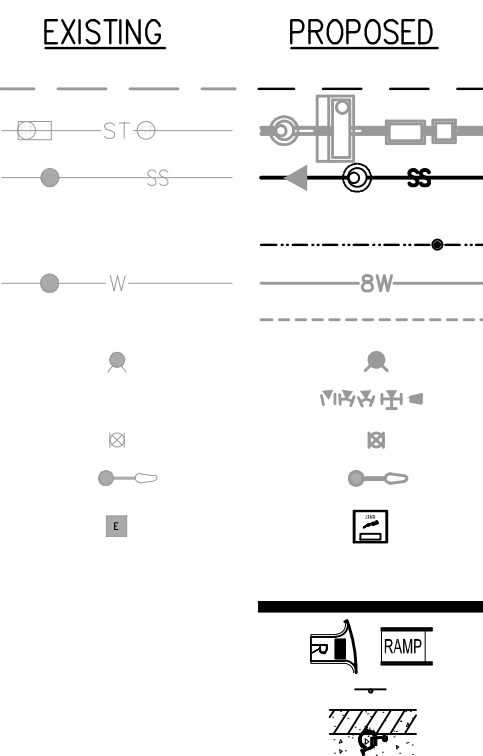
Development Services

Date _____



LEGEND

- UTILITY EASEMENT
STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING



GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RISE ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SEWER SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
 - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
11. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
12. WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES.
13. THE FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
13. CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE
OF THE NORTHEAST QUARTER OF THE
SOUTHEAST QUARTER OF SECTION 8, AS
MONUMENTED AT THE EAST CORNER BY A
#6 REBAR WITH A 3.25" ALUMINUM CAP
STAMPED: SURVCON 2006 PLS 30289 AND
AT THE CENTER-EAST SIXTEENTH CORNER
BY A 2.5" PIPE WITH A 3.5" ALUMINUM
CAP STAMPED: 1986 PLS 22100, AS
BEARING SOUTH 88°58'05" WEST, PER THE
PLAT OF FOUNDERS VILLAGE FILING NO. 24
AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4"
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
<u>TOWN APPROVAL BLOCK</u> TOWN OF CASTLE ROCK APPROVAL PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL Approved By:	

Development Services	Date
----------------------	------

PROJECT #: 210431

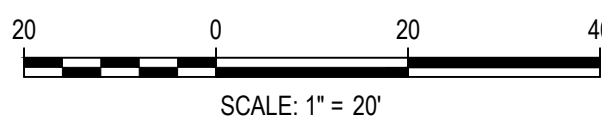
SHEET NUMBER

48

48 OF 87



Know what's below.
Call before you dig



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

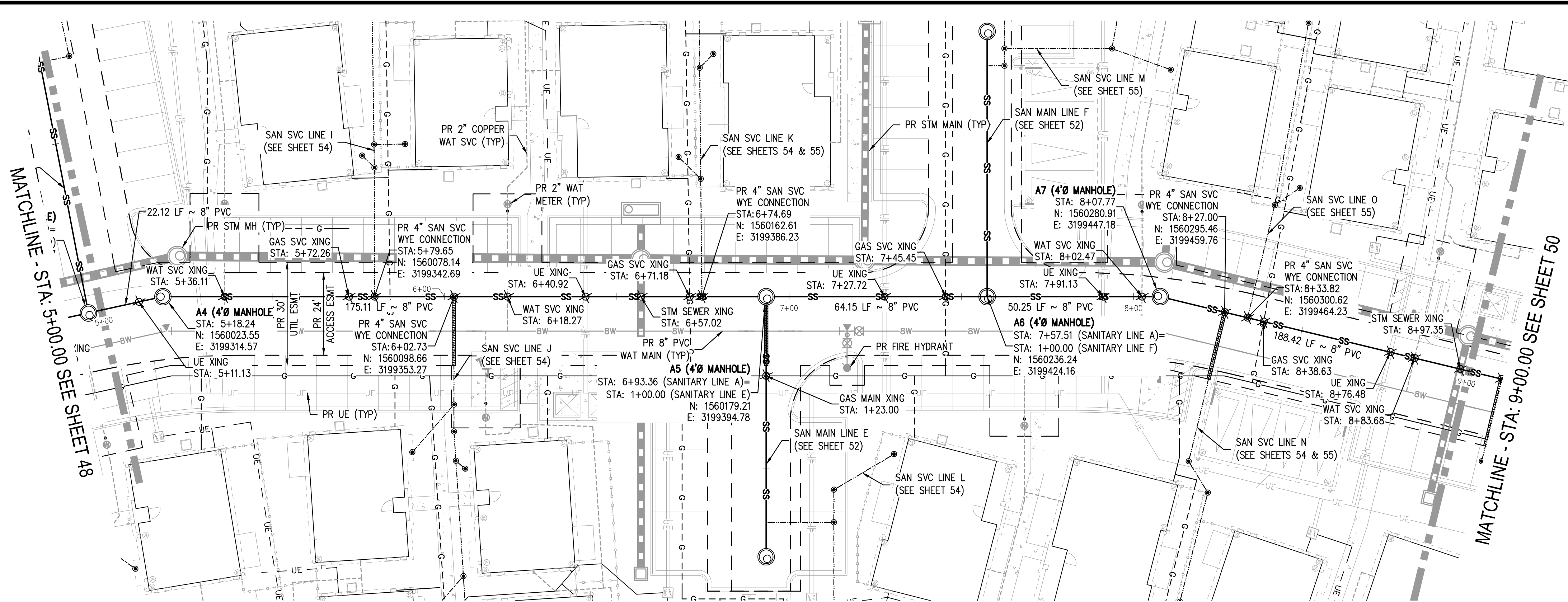
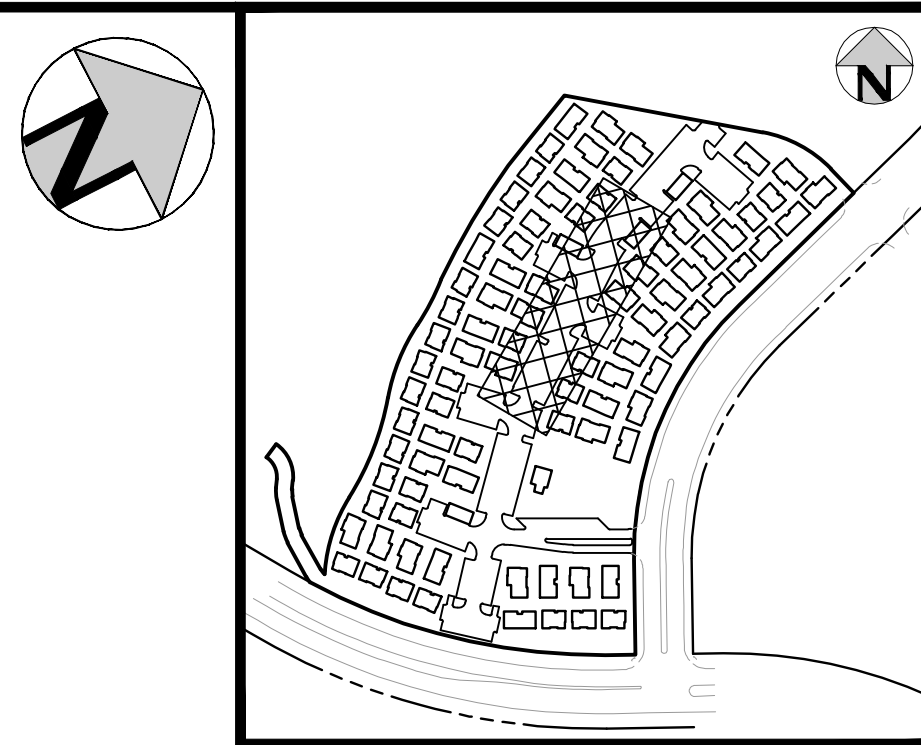


AVILLA FOUNDERS VILLAGE

SANITARY LINE A PLAN & PROFILE

48

48 OF 87



LEGEND

- UTILITY EASEMENT
STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SEWER W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING

-

GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWING ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY ANY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND UTILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SEWER CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
 - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
 - d.
11. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
12. WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
13. CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4"
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By:

Development Services

DATE _____

VAL BLOCK

ROCK APPROVAL
ED FOR ONE YEAR FROM
SERVICES APPROVAL

SERVICES: 7.1 PROVAL

PROJECT #: 210431

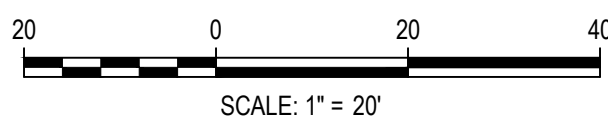
SHEET NUMBER

49

49 OF 87



Know what's below.
Call before you dig



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

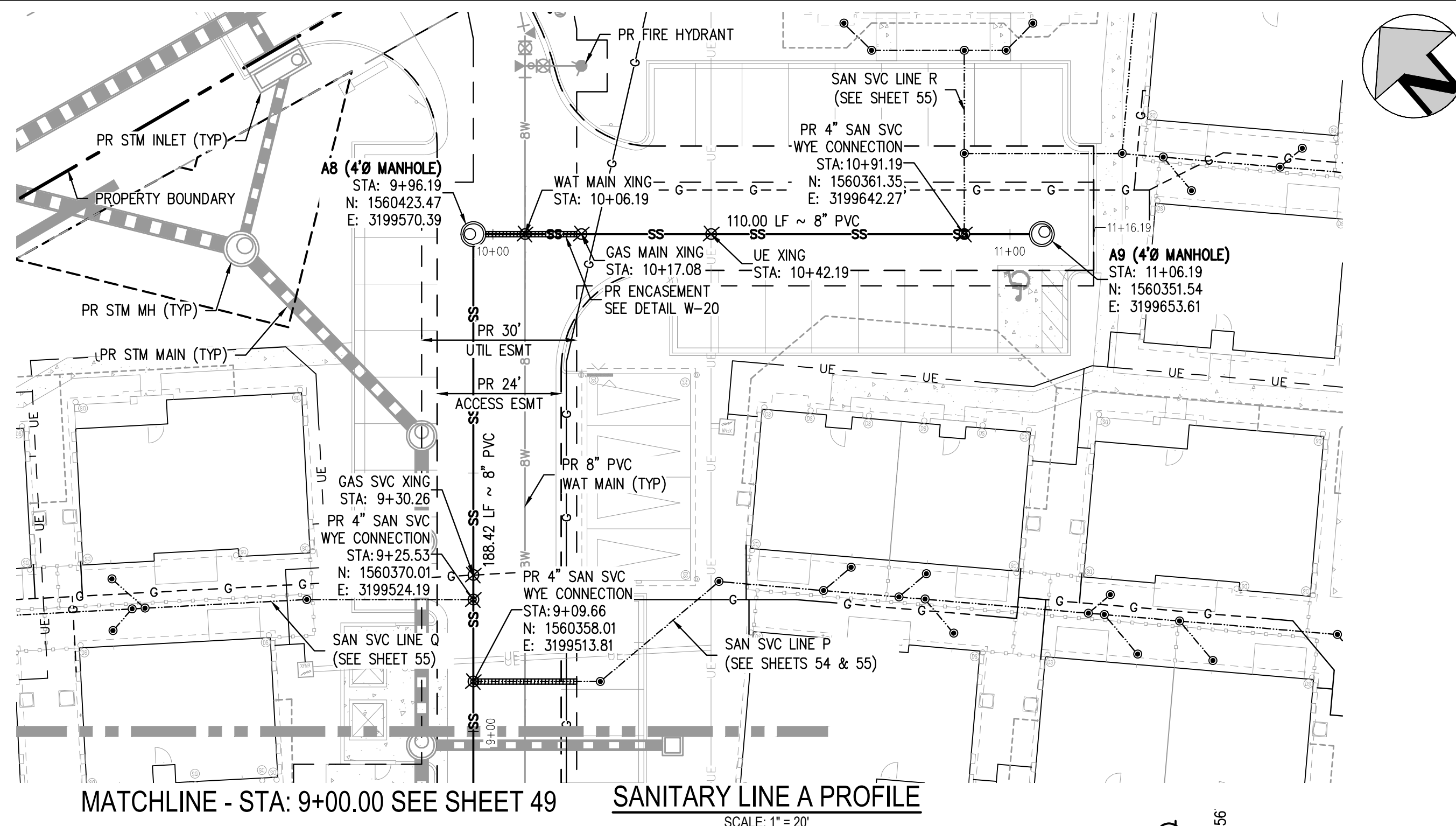
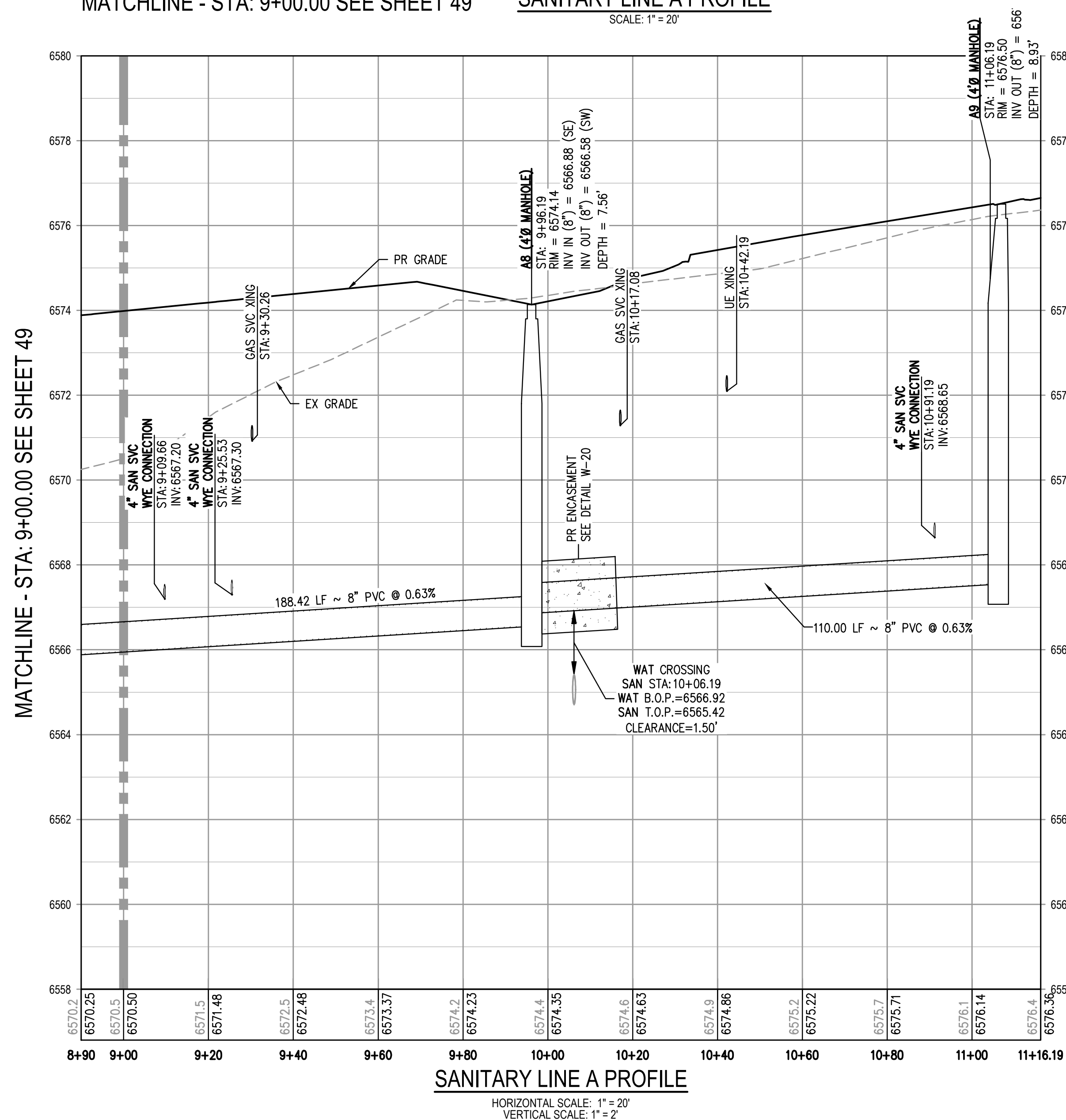
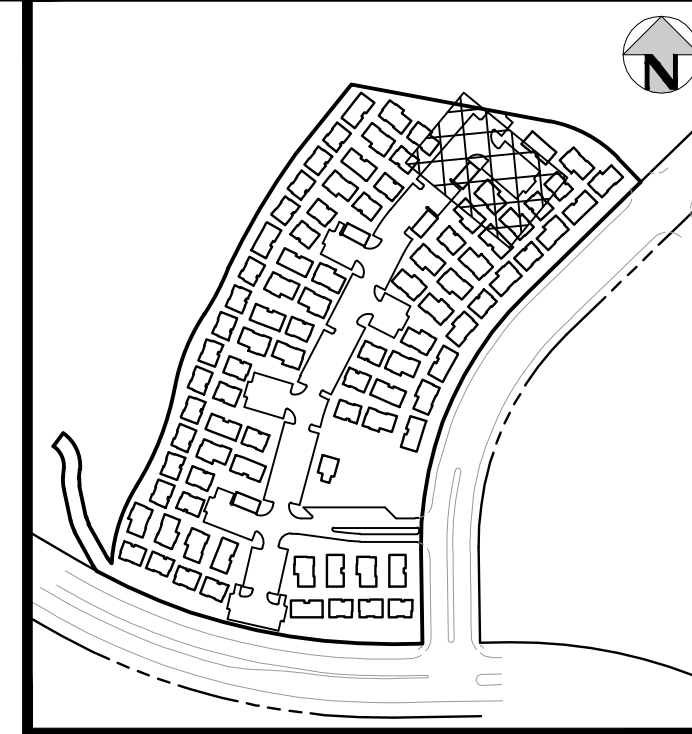
[illegible]

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE

SANITARY LINE A PLAN & PROFILE



LEGEND

UTILITY EASEMENT		
STORM SEWER W/ MANHOLE AND INLET		
SANITARY SEWER W/ MANHOLE AND FLOW DIRECTION		
SANITARY SERVICE W/ CLEANOUT		
WATER LINE W/ MANHOLE		
WATER SERVICE		
FIRE HYDRANT		
WATER FITTINGS AND APPURTENANCES		
GATE VALVE		
STREET LIGHT		
ELECTRICAL TRANSFORMER		
A/C UNIT		
RETAINING WALL		
HANDICAP RAMP		
SIGN		
HANDICAP PARKING		

GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND UTILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RISE ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
 - a. OBTAIN ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
 - d.
11. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE/STREET CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT REQUIRE SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE STORM CONSTRUCTION INSPECTOR TO ALLOW TIME FOR OR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY OR WATER PRIOR TO COMMENCING WORK.
12. WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
13. CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

RACHEL C PATTON, P.E. #54450 DATE _____

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM

DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By: _____

Approved By

Development Services

DATE _____

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

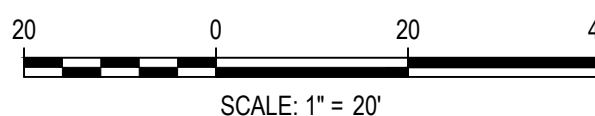
PROJECT #:	210431
SHEET NUMBER	

50

50 OF 87



Know what's below.
Call before you dig



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



AVILLA FOUNDERS VILLAGE SANITARY LINE A PLAN & PROFILE

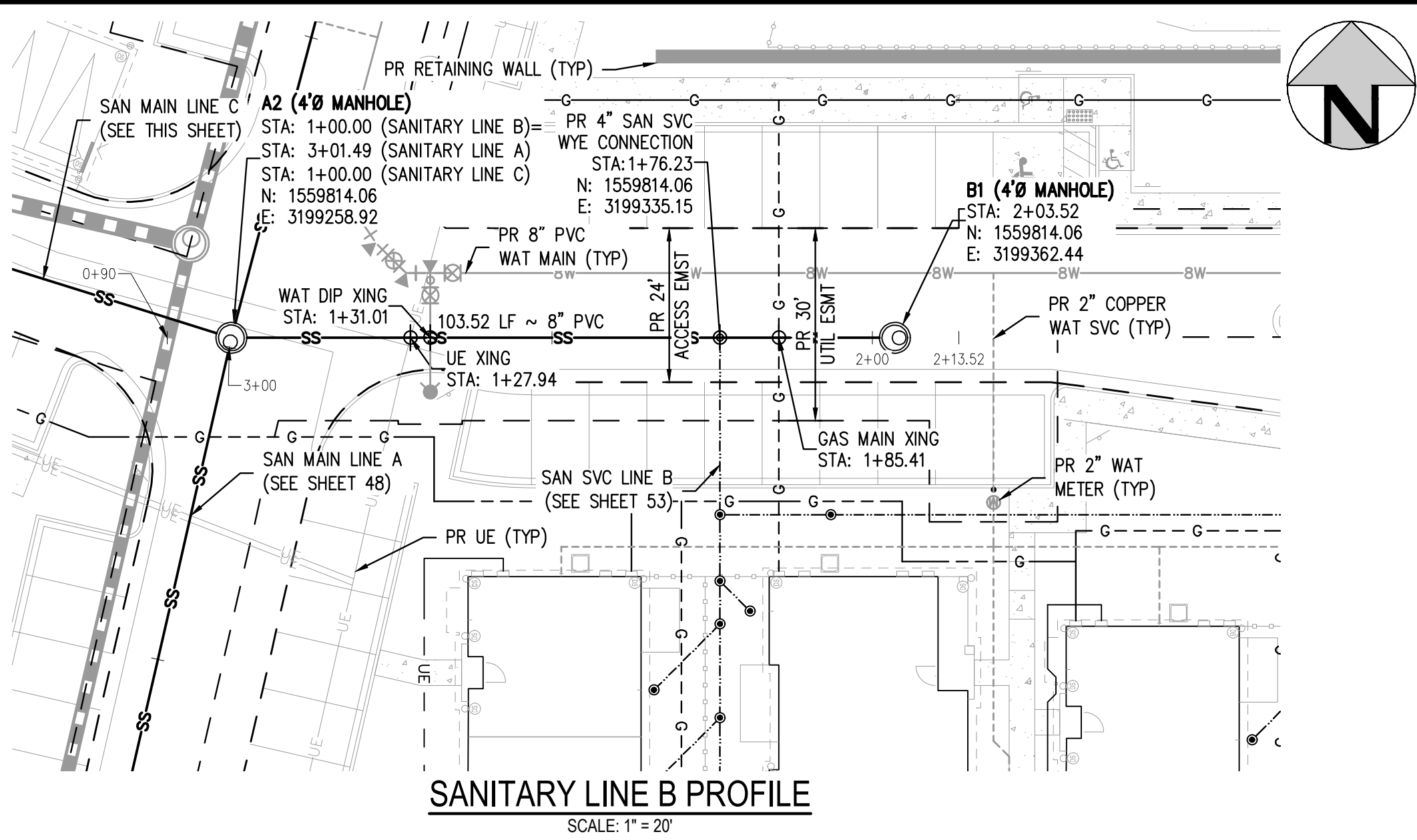
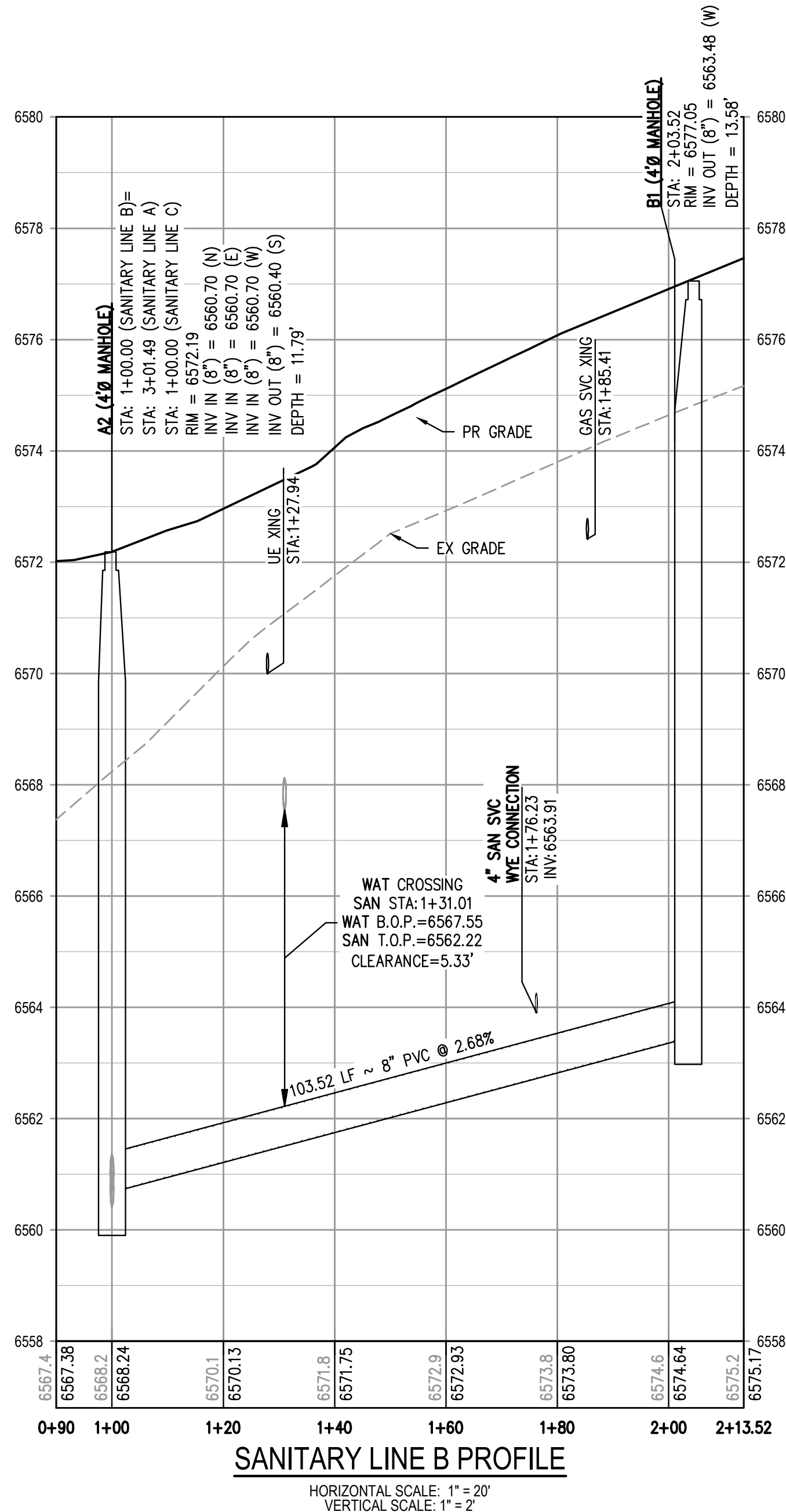
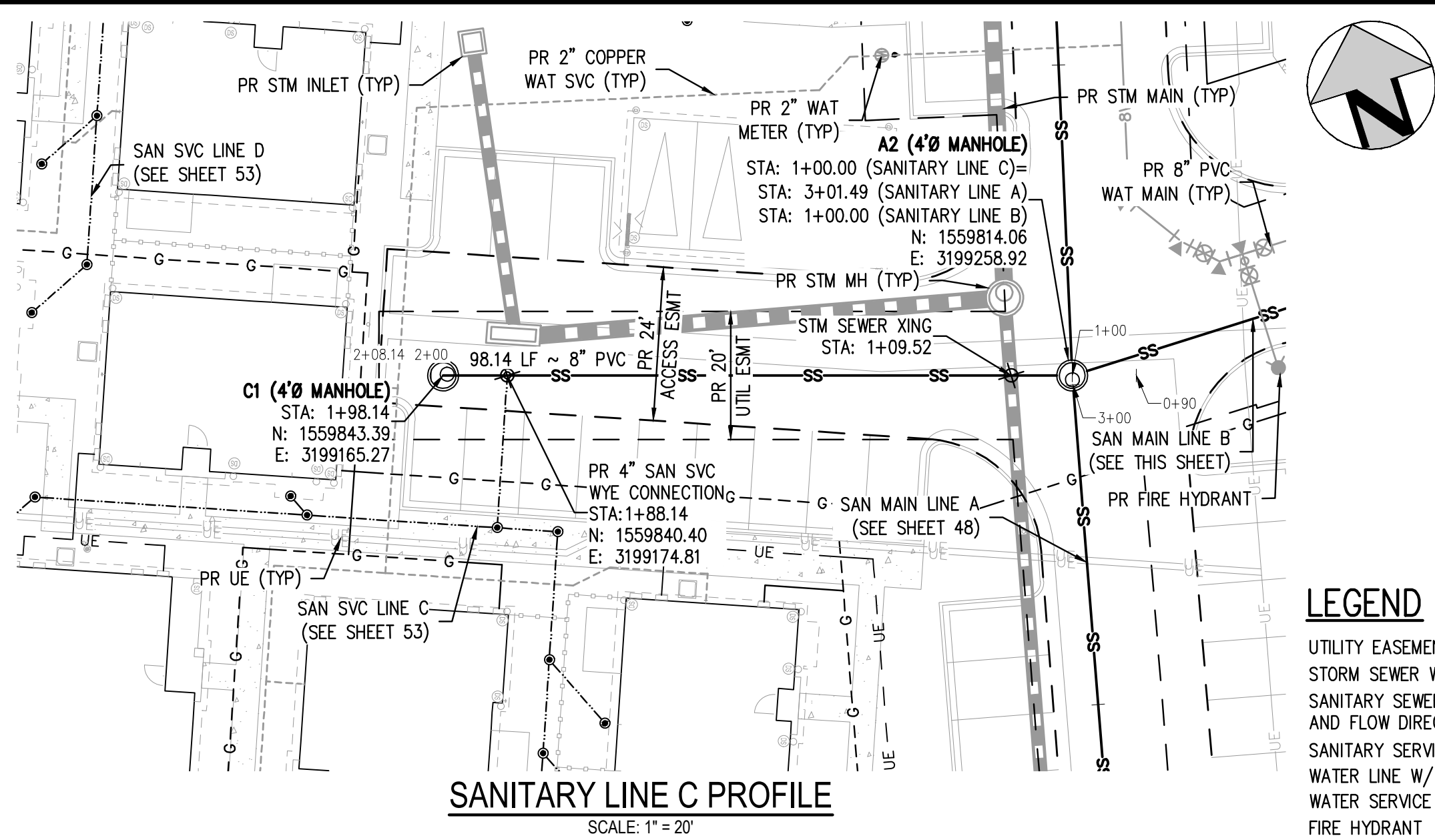
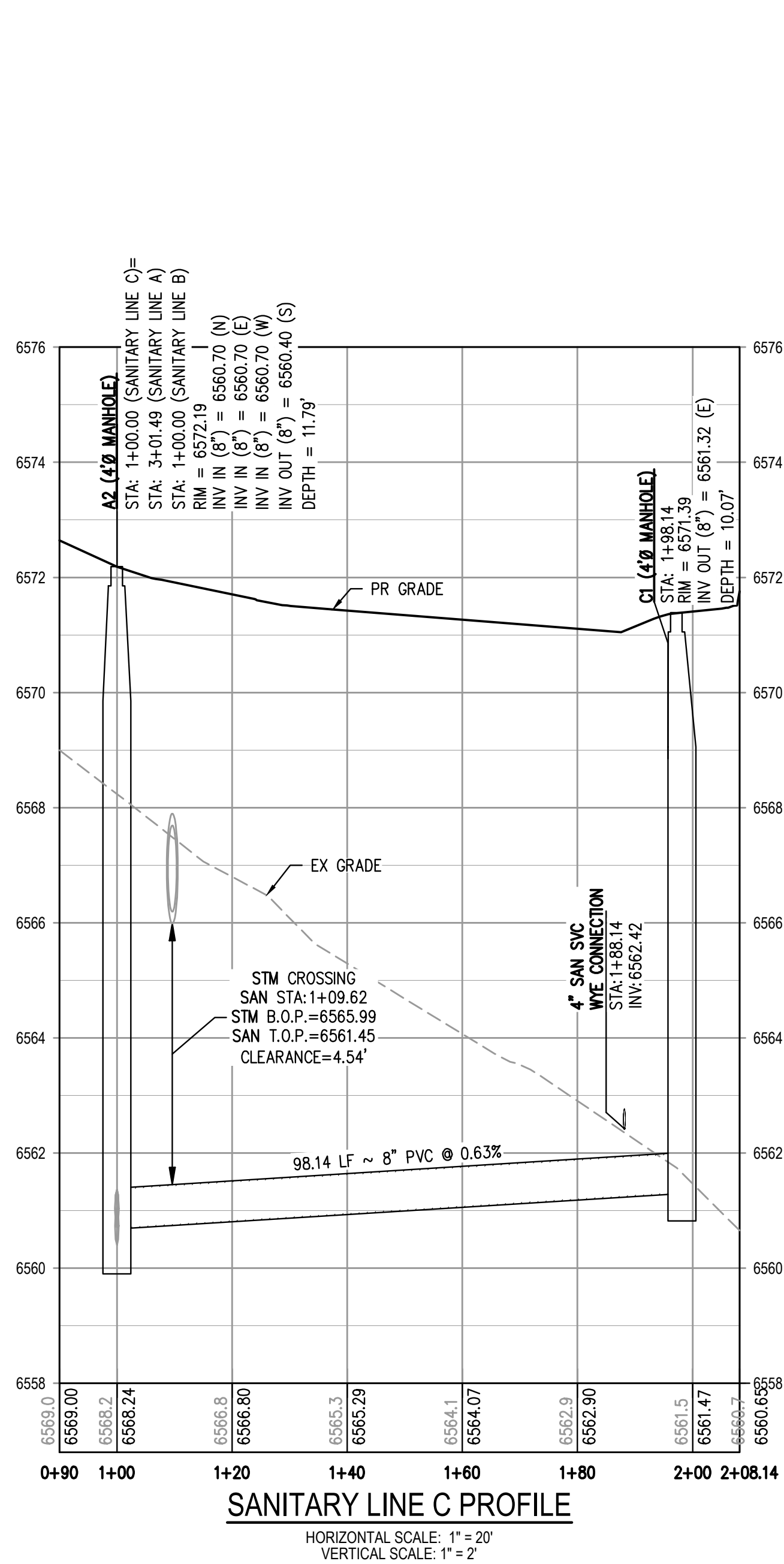
PROJECT #:	210431
SHEET NUMBER	

50

50 OF 87

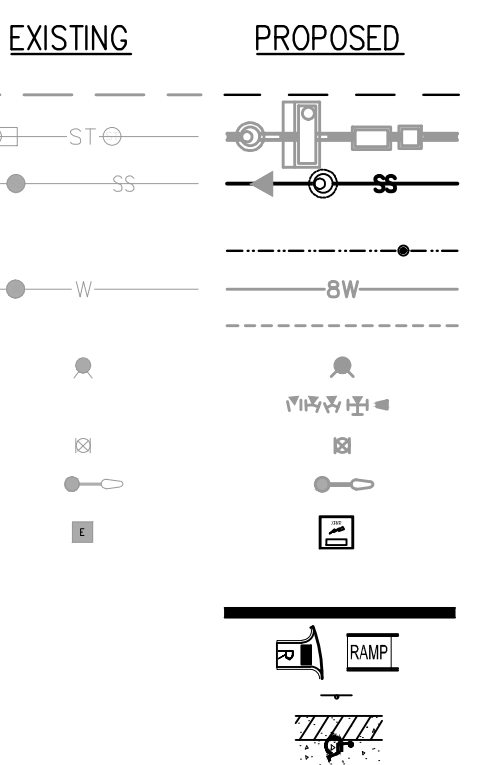
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

FILE PATH: K:\2024\ENGINEERING\UTILITIES\SANITARY\CD - SANITARY P&PS.DWG LAYOUT: LAYOUT14
13 REVISIONS: 1. 04-10-23 8:49:13A BY: MILES SUSTAD
2. 04-10-23 8:49:13A BY: MILES SUSTAD
3. 04-10-23 8:49:13A BY: MILES SUSTAD
4. 04-10-23 8:49:13A BY: MILES SUSTAD
5. 04-10-23 8:49:13A BY: MILES SUSTAD
6. 04-10-23 8:49:13A BY: MILES SUSTAD
7. 04-10-23 8:49:13A BY: MILES SUSTAD
8. 04-10-23 8:49:13A BY: MILES SUSTAD
9. 04-10-23 8:49:13A BY: MILES SUSTAD
10. 04-10-23 8:49:13A BY: MILES SUSTAD
11. 04-10-23 8:49:13A BY: MILES SUSTAD
12. 04-10-23 8:49:13A BY: MILES SUSTAD
13. 04-10-23 8:49:13A BY: MILES SUSTAD



LEGEND

- UTILITY EASEMENT
STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING



GENERAL SANITARY NOTES:

- THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UTILITIES.
- LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
- PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
- ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
- MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
- FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
- CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
- ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
- THE CONTRACTOR IS RESPONSIBLE FOR:
 - OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
- CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
- WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
- CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #64450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



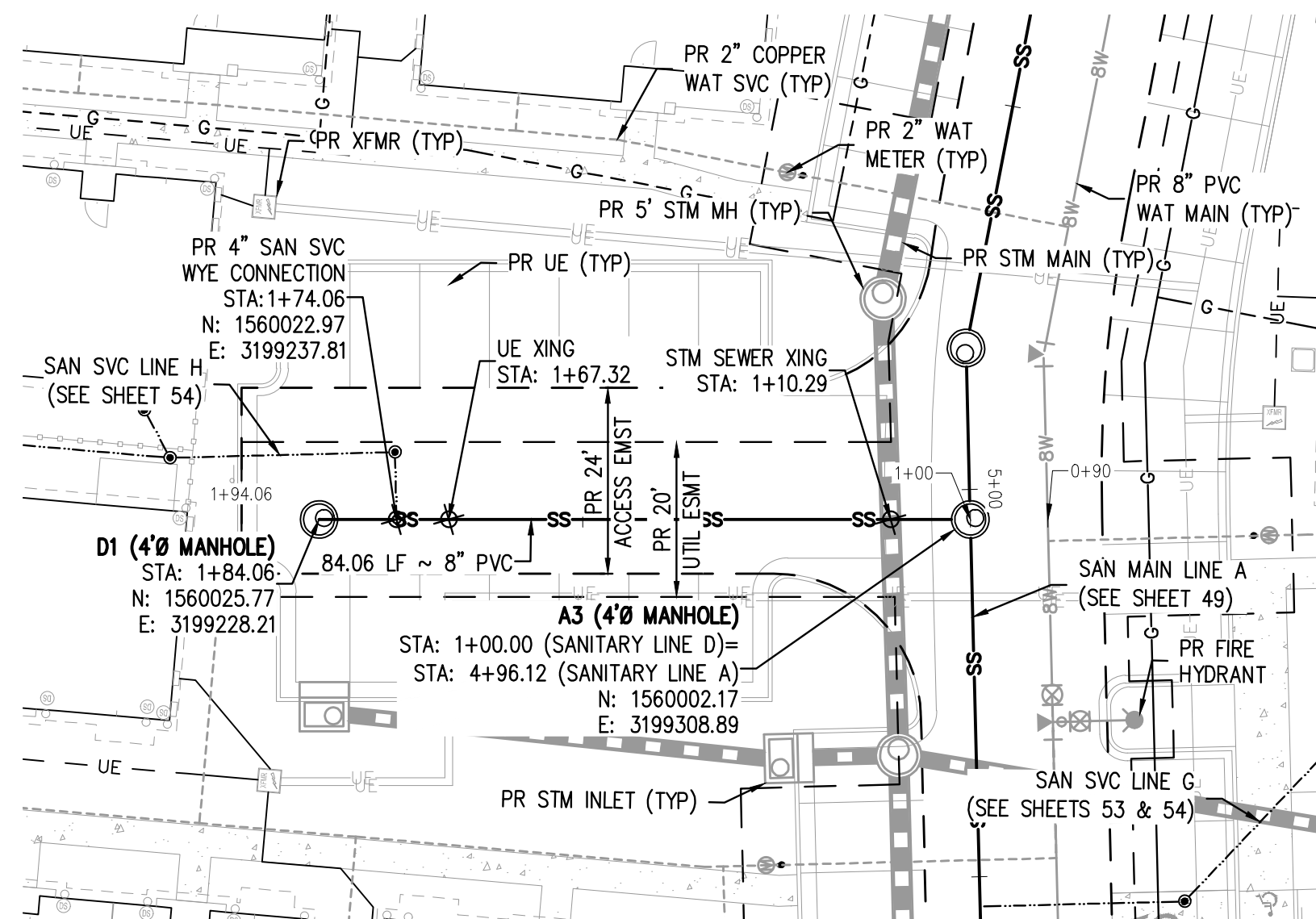
20	0	20	40
SCALE: 1" = 20'			
DESIGNED BY: MJS	CHECKED BY: RCP	DRAWN BY: MJS	

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



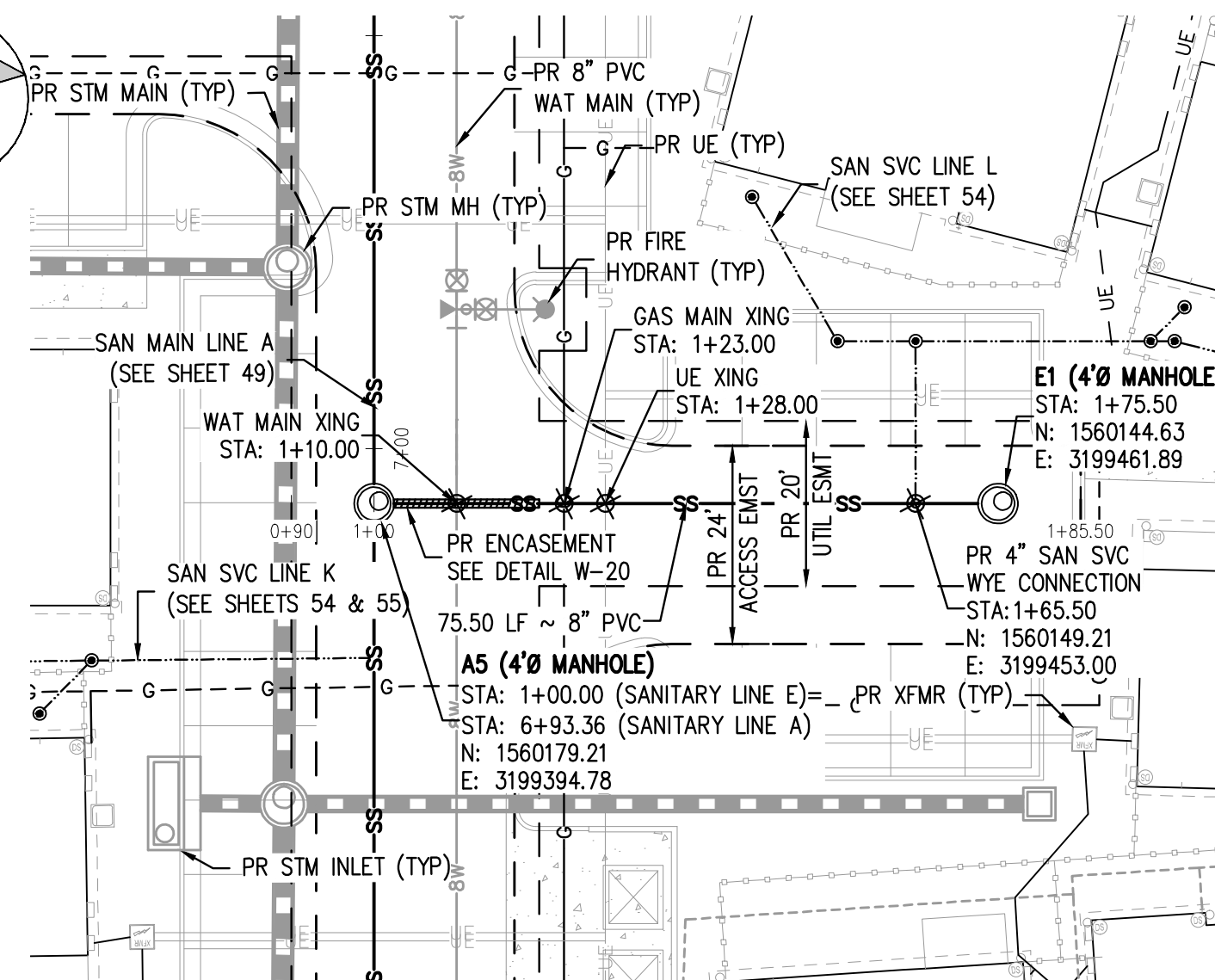
AVILLA FOUNDERS VILLAGE
SANITARY LINES B & C PLAN & PROFILE

PROJECT #: 210431
SHEET NUMBER
51
51 OF 87



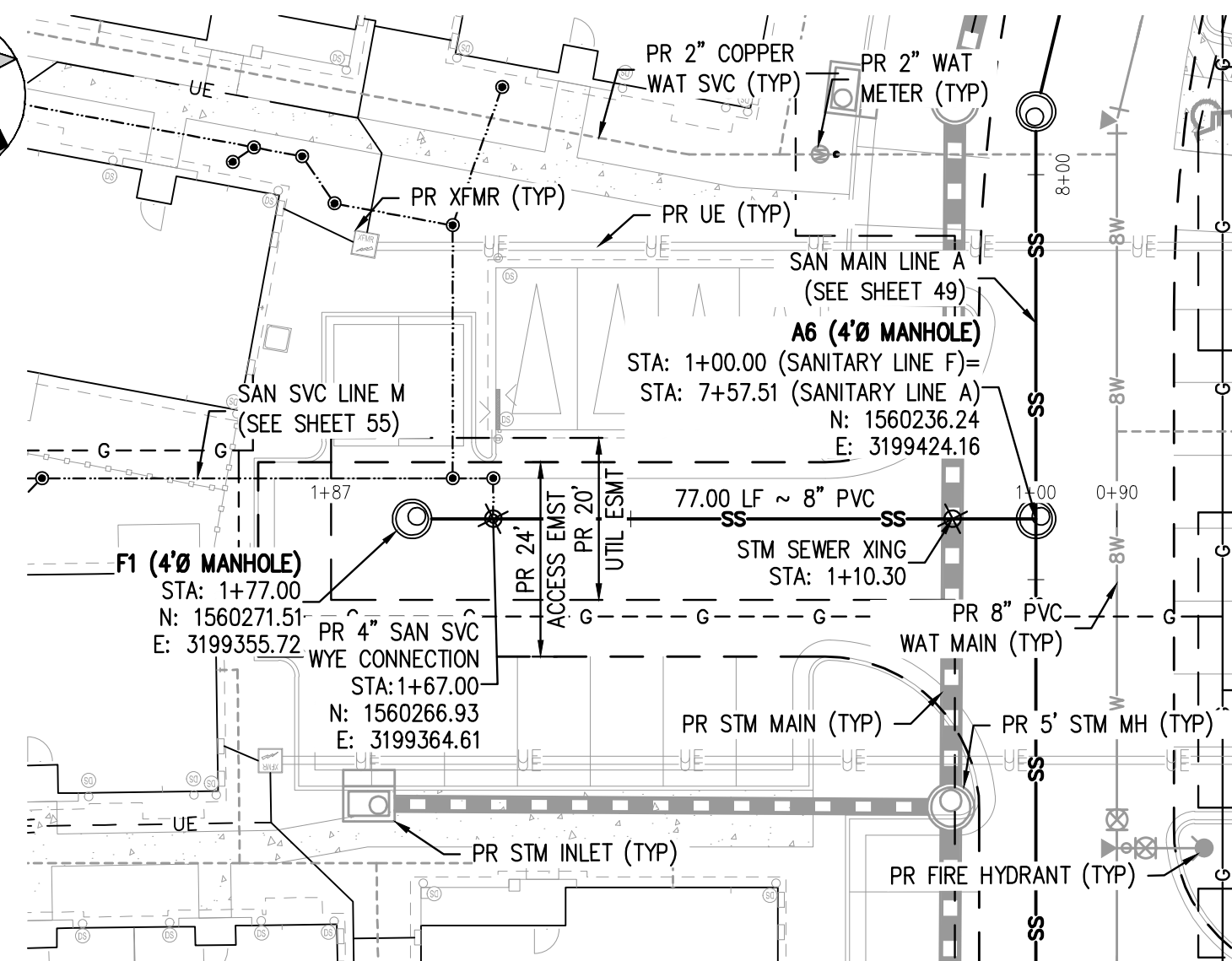
SANITARY LINE D PROFILE

SCALE: 1" = 20'

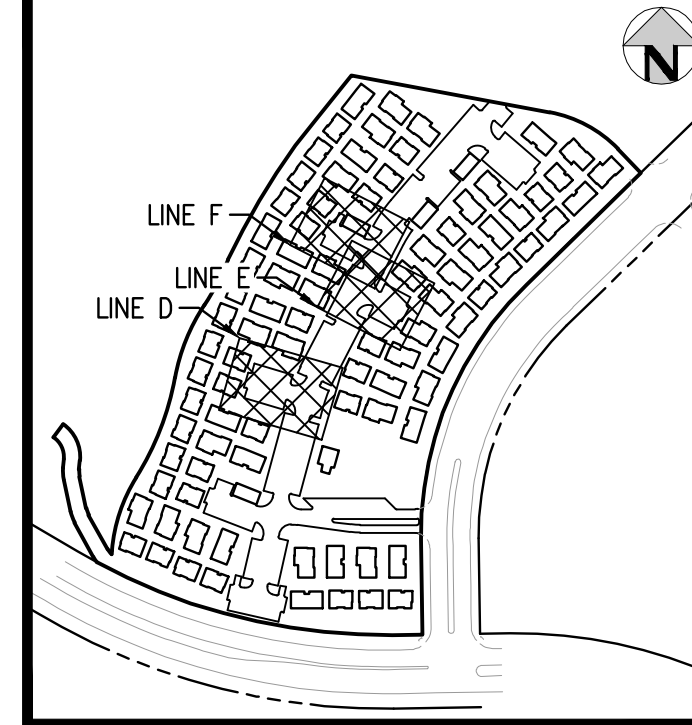


SANITARY LINE E PROFILE

SCALE: 1" = 20'



SANITARY LINE F PROFILE



LEGEND

- UTILITY EASEMENT
STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING

- [illegible]

GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RIR ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
 - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
11. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, OR STORM SEWER SYSTEMS. PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS' AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
12. WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS IN THIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
13. CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

RACHEL C PATTON, P.E. #54450

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____

Development Services	Date
----------------------	------

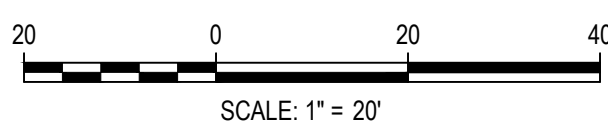
PROJECT #:	210431
SHEET NUMBER	

52

52 OF 87



Know what's below.
Call before you dig



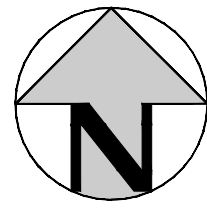
DESIGNED BY: <DESIGNER>
CHECKED BY: <REVIEWER>
DRAWN BY: <DRAWN>

[illegible]

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE SANITARY LINES D, E, & F PLAN & PROFILE



UTILITY EASEMENT
STORM SEWER W/ MANHOLE AND INLET
SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION
SANITARY SERVICE W/ CLEANOUT
WATER LINE W/ MANHOLE
WATER SERVICE
FIRE HYDRANT
WATER FITTINGS AND APPURTENANCES
GATE VALVE
STREET LIGHT
ELECTRICAL TRANSFORMER
A/C UNIT
RETAINING WALL
HANDICAP RAMP
SIGN
HANDICAP PARKING

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER, SMITH & JAY, INC. IF NECESSARY. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES FOR:
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RIR ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SEWER CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR SHALL OBTAIN THE FOLLOWING:
 - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
11. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
12. WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS IN UPRAMP FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
13. CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

RACHEL C PATTON, P.E. #54450 DATE _____

<p><u>TOWN APPROVAL BLOCK</u> TOWN OF CASTLE ROCK APPROVAL PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL</p> <p>Approved By: _____</p>

PRELIMINARY
NOT FOR
CONSTRUCTION

Development Services	Date
----------------------	------

PROJECT #:	210431
SHEET NUMBER	

54

54 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

NUXTER S: p. base; p. regan; c. diti; g. b. g. s. c. d. e. f. g. h. i. j. k. l. m. n. o. p. q. r. s. t. u. v. w. x. y. z. aa. ab. ac. ad. ae. af. ag. ah. ai. aj. ak. al. am. an. ao. ap. aq. ar. as. at. au. av. aw. ax. ay. az. ba. bb. bc. bd. be. bf. bg. bh. bi. bj. bk. bl. bm. bn. bo. bp. bq. br. bs. bt. bu. bv. bw. bx. by. bz. ca. cb. cc. cd. ce. cf. cg. ch. ci. cj. ck. cl. cm. cn. co. cp. cq. cr. cs. ct. cu. cv. cw. cx. cy. cz. da. db. dc. dd. de. df. dg. dh. di. dj. dk. dl. dm. dn. do. dp. dq. dr. ds. dt. du. dv. dw. dx. dy. dz. ea. eb. ec. ed. ee. ef. eg. eh. ei. ej. ek. el. em. en. eo. ep. eq. er. es. et. eu. ev. ew. ex. ey. ez. fa. fb. fc. fd. fe. ff. fg. fh. fi. fj. fk. fl. fm. fn. fo. fp. fq. fr. fs. ft. fu. fv. fw. fx. fy. fz. ga. gb. gc. gd. ge. gf. gh. gi. gj. gk. gl. gm. gn. go. gp. gq. gr. gs. gt. gu. gv. gw. gx. gy. gz. ha. hb. hc. hd. he. hf. hg. hh. hi. hj. hk. hl. hm. hn. ho. hp. hq. hr. hs. ht. hu. hv. hw. hx. hy. hz. ia. ib. ic. id. ie. if. ig. ih. ii. ij. ik. il. im. in. io. ip. iq. ir. is. it. iu. iv. iw. ix. iy. iz. ja. jb. jc. jd. je. jf. jg. jh. ji. jj. jk. jl. jm. jn. jo. jp. jq. jr. js. jt. ju. jv. jw. jx. jy. jz. ka. kb. kc. kd. ke. kf. kg. kh. ki. kj. kk. kl. km. kn. ko. kp. kq. kr. ks. kt. ku. kv. kw. kx. ky. kz. la. lb. lc. ld. le. lf. lg. lh. li. lj. lk. ll. lm. ln. lo. lp. lq. lr. ls. lt. lu. lv. lw. lx. ly. lz. ma. mb. mc. md. me. mf. mg. mh. mi. mj. mk. ml. mm. mn. mo. mp. mq. mr. ms. mt. mu. mv. mw. mx. my. mz. na. nb. nc. nd. ne. nf. ng. nh. ni. nj. nk. nl. nm. no. np. nq. nr. ns. nt. nu. nv. nw. nx. ny. nz. oa. ob. oc. od. oe. of. og. oh. oi. oj. ok. ol. om. on. oo. op. oq. or. os. ot. ou. ov. ow. ox. oy. oz. pa. pb. pc. pd. pe. pf. pg. ph. pi. pj. pk. pl. pm. pn. po. pp. pq. pr. ps. pt. pu. pv. pw. px. py. pz. qa. qb. qc. qd. qe. qf. qg. qh. qi. qj. qk. ql. qm. qn. qo. qp. qq. qr. qs. qt. qu. qv. qw. qx. qy. qz. ra. rb. rc. rd. re. rf. rg. rh. ri. rj. rk. rl. rm. rn. ro. rp. rq. rr. rs. rt. ru. rv. rw. rx. ry. rz. sa. sb. sc. sd. se. sf. sg. sh. si. sj. sk. sl. sm. sn. so. sp. sq. sr. ss. st. su. sv. sw. sx. sy. sz. ta. tb. tc. td. te. tf. tg. th. ti. tj. tk. tl. tm. tn. to. tp. tq. tr. ts. tt. tu. tv. tw. tx. ty. tz. ua. ub. uc. ud. ue. uf. ug. uh. ui. uj. uk. ul. um. un. uo. up. uq. ur. us. ut. uu. uv. uw. ux. uy. uz. va. vb. vc. vd. ve. vf. vg. vh. vi. vj. vk. vl. vm. vn. vo. vp. vq. vr. vs. vt. vu. vv. vw. vx. vy. vz. wa. wb. wc. wd. we. wf. wg. wh. wi. wj. wk. wl. wm. wn. wo. wp. wq. wr. ws. wt. wu. wv. ww. wx. wy. wz. xa. xb. xc. xd. xe. xf. xg. xh. xi. xj. xk. xl. xm. xn. xo. xp. xq. xr. xs. xt. xu. xv. xw. xx. xy. xz. ya. yb. yc. yd. ye. yf. yg. yh. yi. yj. yk. yl. ym. yn. yo. yp. yq. yr. ys. yt. yu. yv. yw. yx. yy. yz. za. zb. zc. zd. ze. zf. zg. zh. zi. zj. zk. zl. zm. zn. zo. zp. zq. zr. zs. zt. zu. zv. zw. zx. zy. zz.

MITCHELL GULCH
TRACT S
FOUNDERS VILLAGE FILING NO. 24
REC NO. 2006064806
OWNER: TOWN OF CASTLE ROCK

MATCHLINE - SEE SHEET 53

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

**HKS HARRIS
KOCHER
SMITH**
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

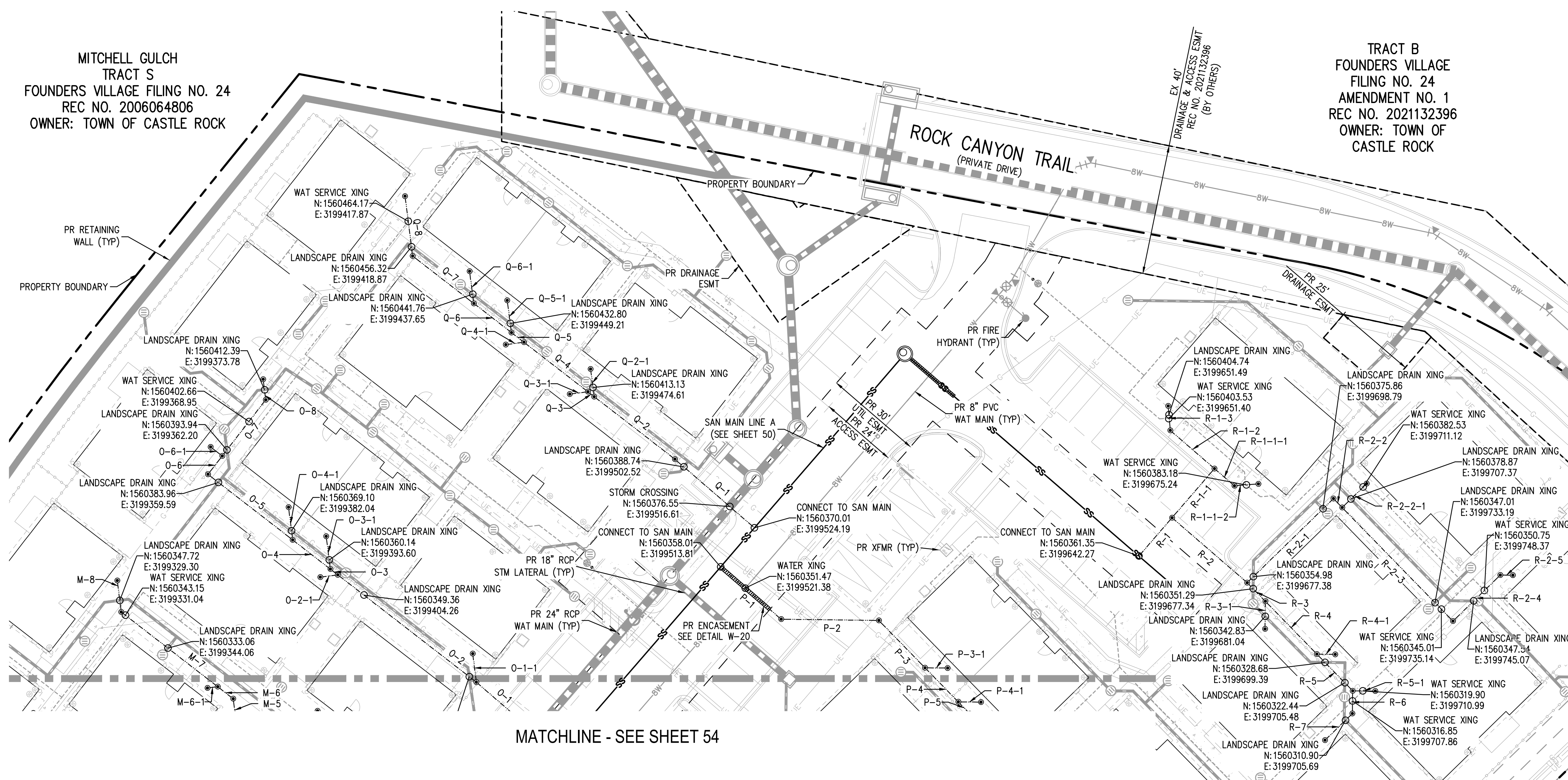
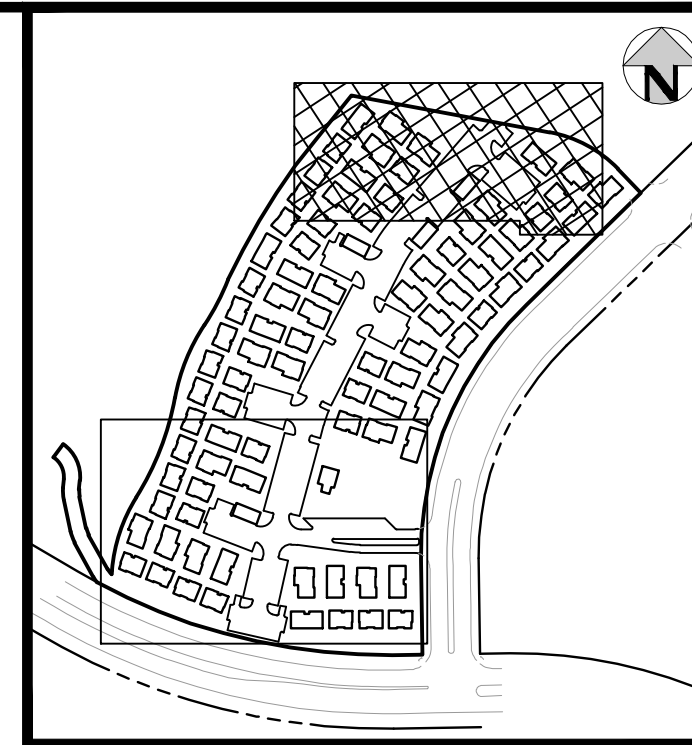
NEXmetro
Communities

AVILLA FOUNDERS VILLAGE SANITARY SERVICES PLAN

PROJECT #:	210431
SHEET NUMBER	

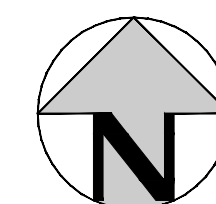
54

54 OF 87



MITCHELL GULCH
TRACT S
FOUNDERS VILLAGE FILING NO. 24
REC NO. 2006064806
OWNER: TOWN OF CASTLE ROCK

TRACT B
FOUNDERS VILLAGE
FILING NO. 24
AMENDMENT NO. 1
REC NO. 2021132396
OWNER: TOWN OF
CASTLE ROCK



LEGEND

UTILITY EASEMENT

STORM SEWER W/ MANHOLE AND INLET

SANITARY SEWER W/ MANHOLE
AND FLOW DIRECTION

SANITARY SERVICE W/ CLEANOUT

WATER LINE W/ MANHOLE

WATER SERVICE

FIRE HYDRANT

WATER FITTINGS AND APPURTENANCES

GATE VALVE

STREET LIGHT

ELECTRICAL TRANSFORMER

A/C UNIT

RETAINING WALL

HANDICAP RAMP

SIGN

HANDICAP PARKING

ST

SS

W

SW

RAMP

PARKING

GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RIR ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
 - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
11. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, OR STORM SEWER SYSTEMS. PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS' AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
12. WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES. ALL FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS IN THIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
13. CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4"
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450 DATE _____

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

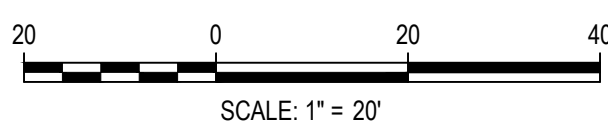
Approved By: _____

Development Services _____ Date _____

Development Services		555
		PROJECT #: 210431
		SHEET NUMBER
		55
		55 OF 87



Know what's below.
Call before you dig



DESIGNED BY: CLH
CHECKED BY: RCP
DRAWN BY: CLH

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE

SANITARY SERVICES PLAN

PROJECT #:	210431
SHEET NUMBER	

55

55 OF 87

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INV. UP	INV. DOWN
A-1	4"	33.87'	2.00%	PVC	6561.38	6560.70
A-2	4"	15.45'	2.00%	PVC	6561.69	6561.38
A-2-1	4"	6.55'	2.00%	PVC	6561.82	6561.69
A-3	4"	45.93'	2.00%	PVC	6562.60	6561.69
A-3-1	4"	8.06'	2.00%	PVC	6562.76	6562.60
A-4	4"	41.94'	2.00%	PVC	6563.44	6562.60
A-5	4"	3.91'	2.00%	PVC	6563.52	6563.44
A-5-1	4"	11.31'	2.00%	PVC	6563.75	6563.52
A-6	4"	44.73'	2.00%	PVC	6564.42	6563.52
A-7	4"	14.53'	2.00%	PVC	6564.71	6564.42
B-1	4"	27.60'	2.00%	PVC	6564.46	6563.91
B-1-1	4"	17.28'	2.00%	PVC	6564.81	6564.46
B-1-2	4"	75.73'	2.00%	PVC	6566.32	6564.81
B-1-3	4"	25.13'	2.00%	PVC	6566.83	6566.32
B-1-3-1	4"	14.14'	2.00%	PVC	6567.11	6566.83
B-1-4	4"	7.60'	2.00%	PVC	6566.98	6566.83
B-1-4-1	4"	7.07'	2.00%	PVC	6567.12	6566.98
B-1-5	4"	7.02'	2.00%	PVC	6567.12	6566.98
B-1-5-1	4"	14.14'	2.00%	PVC	6567.40	6567.12
B-1-6	4"	37.39'	2.00%	PVC	6567.87	6567.12
B-1-6-1	4"	12.73'	2.00%	PVC	6568.12	6567.87
B-1-7	4"	2.59'	2.00%	PVC	6567.92	6567.87
B-1-8	4"	7.07'	2.00%	PVC	6568.06	6567.92
B-2	4"	10.38'	2.00%	PVC	6564.67	6564.46
B-2-1	4"	6.62'	2.00%	PVC	6564.80	6564.67
B-3	4"	6.67'	2.00%	PVC	6564.80	6564.67
B-3-1	4"	14.60'	2.00%	PVC	6565.09	6564.80
B-4	4"	14.63'	2.00%	PVC	6565.10	6564.80
B-4-1	4"	14.60'	2.00%	PVC	6565.39	6565.10
B-5	4"	45.56'	2.00%	PVC	6566.01	6565.10
B-5-1	4"	15.74'	2.00%	PVC	6566.32	6566.01
B-6	4"	14.63'	2.00%	PVC	6566.30	6566.01
B-6-1	4"	15.74'	2.00%	PVC	6566.61	6566.30
B-7	4"	16.57'	2.00%	PVC	6566.63	6566.30
B-8	4"	5.48'	2.00%	PVC	6566.74	6566.63
C-1	4"	23.82'	2.00%	PVC	6562.90	6562.42
C-1-1	4"	9.48'	2.00%	PVC	6563.09	6562.90
C-1-2	4"	20.02'	2.00%	PVC	6563.49	6563.09
C-1-2-1	4"	13.19'	2.00%	PVC	6563.75	6563.49
C-1-3	4"	14.62'	2.00%	PVC	6563.78	6563.49
C-1-3-1	4"	13.20'	2.00%	PVC	6564.04	6563.78
C-1-4	4"	13.53'	2.00%	PVC	6564.05	6563.78
C-1-5	4"	5.42'	2.00%	PVC	6564.16	6564.05
C-2	4"	29.71'	2.00%	PVC	6563.49	6562.90
C-2-1	4"	3.94'	2.00%	PVC	6563.57	6563.49
C-3	4"	42.57'	2.00%	PVC	6564.34	6563.49
C-4	4"	9.86'	2.00%	PVC	6564.54	6564.34
C-4-1	4"	9.47'	2.00%	PVC	6564.73	6564.54
C-5	4"	10.98'	2.00%	PVC	6564.76	6564.54
C-6	4"	31.29'	2.00%	PVC	6565.39	6564.76
C-7	4"	5.67'	2.00%	PVC	6565.50	6565.39
D-1	4"	57.59'	2.00%	PVC	6563.38	6562.23
D-2	4"	54.16'	2.00%	PVC	6564.47	6563.38
D-2-1	4"	3.06'	2.00%	PVC	6564.53	6564.47
D-3	4"	20.01'	2.00%	PVC	6564.87	6564.47

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INV. UP	INV. DOWN
D-3-1	4"	9.19'	2.00%	PVC	6565.05	6564.87
D-4	4"	16.72'	2.00%	PVC	6565.20	6564.87
D-5	4"	20.98'	2.00%	PVC	6565.62	6565.20
D-5-1	4"	11.42'	2.00%	PVC	6565.85	6565.62
D-6	4"	23.28'	2.00%	PVC	6566.09	6565.62
D-7	4"	11.43'	2.00%	PVC	6566.32	6566.09
E-1	4"	25.46'	2.00%	PVC	6563.04	6562.53
E-2	4"	13.47'	2.00%	PVC	6563.31	6563.04
E-2-1	4"	15.00'	2.00%	PVC	6563.61	6563.31
E-3	4"	8.22'	2.00%	PVC	6563.48	6563.31
E-3-1	4"	4.87'	2.00%	PVC	6563.58	6563.48
E-4	4"	6.40'	2.00%	PVC	6563.60	6563.48
E-5	4"	5.93'	2.00%	PVC	6563.72	6563.60
E-5-1	4"	9.07'	2.00%	PVC	6563.90	6563.72
E-6	4"	42.74'	2.00%	PVC	6564.58	6563.72
E-6-1	4"	10.96'	2.00%	PVC	6564.80	6564.58
E-7	4"	14.62'	2.00%	PVC	6564.87	6564.58
E-7-1	4"	10.96'	2.00%	PVC	6565.09	6564.87
E-8	4"	27.98'	2.00%	PVC	6565.43	6564.87
E-9	4"	9.46'	2.00%	PVC	6565.62	6565.43
F-1	4"	45.00'	4.73%	PVC	6564.68	6562.55
G-1	4"	26.41'	2.00%	PVC	6563.31	6562.78
G-2	4"	45.54'	2.00%	PVC	6564.22	6563.31
G-2-1	4"	22.63'	2.00%	PVC	6564.67	6564.22
G-3	4"	26.09'	2.00%	PVC	6564.74	6564.22
G-3-1	4"	18.87'	2.00%	PVC	6565.12	6564.74
G-4	4"	43.38'	2.00%	PVC	6565.61	6564.74
G-5	4"	8.62'	2.00%	PVC	6565.78	6565.61
G-6	4"	55.61'	2.00%	PVC	6566.89	6565.78
G-7	4"	11.61'	2.00%	PVC	6567.12	6566.89
G-7-1	4"	15.88'	2.00%	PVC	6567.44	6567.12
G-8	4"	14.63'	2.00%	PVC	6567.42	6567.12
G-9	4"	15.88'	2.00%	PVC	6567.73	6567.42
H-1	4"	8.69'	2.00%	PVC	6564.04	6563.86
H-2	4"	29.02'	2.00%	PVC	6564.62	6564.04
H-2-1	4"	7.01'	2.00%	PVC	6564.76	6564.62
H-3	4"	23.70'	2.00%	PVC	6565.09	6564.62
H-3-1	4"	5.36'	2.00%	PVC	6565.20	6565.09
H-4	4"	15.77'	2.00%	PVC	6565.41	6565.09
H-4-1	4"	10.88'	2.00%	PVC	6565.63	6565.41
H-4-1-1	4"	8.81'	2.00%	PVC	6565.59	6565.41
H-4-2	4"	9.58'	2.00%	PVC	6565.82	6565.63
H-5	4"	52.64'	2.00%	PVC	6565.46	6565.41
I-1	4"	37.50'	2.00%	PVC	6566.89	6566.14
I-1-1	4"	4.95'	2.00%	PVC	6566.99	6566.89
I-2	4"	6.67'	2.00%	PVC	6567.02	6566.89
I-2-1	4"	9.00'	2.00%	PVC	6567.20	6567.02
I-3	4"	44.67'	2.00%	PVC	6567.92	6567.02
I-3-1	4"	12.16'	2.00%	PVC	6568.16	6567.92
I-4	4"	3.39'	2.00%	PVC	6567.99	6567.92
I-4-1	4"	14.14'	2.00%	PVC	6568.27	6567.99
I-5	4"	14.62'	2.00%	PVC	6568.28	6567.99
I-5-1	4"	14.14'	2.00%	PVC	6568.56	6568.28
I-6	4"	26.11'	2.00%	PVC	6568.80	6568.28
I-6-1	4"	19.34'	2.00%	PVC	6569.19	6568.80

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INV. UP	INV. DOWN
I-7	4"	6.08'	2.00%	PVC	6568.92	6568.80
I-8	4"	13.58'	2.00%	PVC	6569.19	6568.92
J-1	4"	31.33'	2.00%	PVC	6565.00	6564.37
J-1-1	4"	18.40'	2.00%	PVC	6565.37	6565.00
J-2	4"	7.81'	2.00%	PVC	6565.15	6565.00
J-3	4"	8.50'	2.00%	PVC	6565.32	6565.15
J-3-1	4"	3.54'	2.00%	PVC	6565.39	6565.32
J-4	4"	33.59'	2.00%	PVC	6565.99	6565.32
J-4-1	4"	16.97'	2.00%	PVC	6566.33	6565.99
J-5	4"	10.87'	2.00%	PVC	6566.21	6565.99
J-5-1	4"	4.24'	2.00%	PVC	6566.29	6566.21
J-6	4"	25.72'	2.00%	PVC	6566.73	6566.21
J-6-1	4"	16.97'	2.00%	PVC	6567.07	6566.73
J-7	4"	22.31'	2.00%	PVC	6567.17	6566.73
J-8	4"	6.27'	2.00%	PVC	6567.30	6567.17
K-1	4"	34.20'	2.00%	PVC	6566.12	6565.43
K-1-1	4"	9.01'	2.00%	PVC	6566.30	6566.12
K-2	4"	32.22'	2.00%	PVC	6566.76	6566.12
K-2-1	4"	5.66'	2.00%	PVC	6566.87	6566.76
K-3	4"	24.21'	2.00%	PVC	6567.24	6566.76
K-3-1	4"	9.39'	2.00%	PVC	6567.43	6567.24
K-4	4"	8.26'	2.00%	PVC	6567.41	6567.24
K-4-1	4"	6.52'	2.00%	PVC	6567.54	6567.41
K-5	4"	14.63'	2.00%	PVC	6567.70	6567.41
K-5-1	4"	6.52'	2.00%	PVC	6567.83	6567.70
K-6	4"	26.23'	2.00%	PVC	6568.23	6567.70
K-6-1	4"	10.89'	2.00%	PVC	6568.44	6568.23
K-6-2	4"	8.96'	2.00%	PVC	6568.62	6568.44
K-7	4"	11.13'	2.00%	PVC	6568.45	6568.23
K-7-1	4"	6.35'	2.00%	PVC	6568.58	6568.45
K-8	4"	38.25'	2.00%	PVC	6569.21	6568.45
K-9	4"	4.04'	2.00%	PVC	6569.29	6569.21
L-1	4"	19.66'	2.00%	PVC	6566.04	6565.65
L-1-1	4"	9.43'	2.00%	PVC	6566.23	6566.04
L-1-2	4"	20.30'	2.00%	PVC	6566.64	6566.23
L-2	4"	28.44'	2.00%	PVC	6566.61	6566.04
L-2-1	4"	5.78'	2.00%	PVC	6566.73	6566.61
L-3	4"	2.91'	2.00%	PVC	6566.67	6566.61
L-4	4"	26.95'	2.00%	PVC	6567.21	6566.67
L-4-1	4"	16.55'	2.00%	PVC	6567.54	6567.21
L-5	4"	7.81'	2.00%	PVC	6567.36	6567.21
L-5-1	4"	16.91'	2.00%	PVC	6567.70	6567.36
L-6	4"	10.68'	2.00%	PVC	6567.58	6567.36
L-7	4"	18.82'	2.00%	PVC	6567.95	6567.58
L-7-1	4"	6.47'	2.00%	PVC	6568.08	6567.95
L-8	4"	36.59'	2.00%	PVC	6568.69	6567.95
L-9	4"	6.47'	2.00%	PVC	6568.82	6568.69
M-1	4"	5.00'	1.99%	PVC	6566.61	6566.51
M-2	4"	5.00'	2.00%	PVC	6566.71	6566.61
M-2-1	4"	50.68'	2.00%	PVC	6567.72	6566.71
M-2-1-1	4"	12.76'	2.00%	PVC	6567.98	6567.72
M-2-2	4"	12.78'	2.00%	PVC	6567.98	6567.72
M-2-3	4"	10.89'	2.00%	PVC	6568.20	6567.98
M-3	4"	31.21'	2.00%	PVC	6567.33	6566.71
M-3-1	4"	18.15'	2.00%	PVC	6567.69	6567.33

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INV. UP	INV. DOWN
M-4	4"	14.83'	2.00%	PVC	6567.63	6567.33
M-5	4"	7.07'	2.00%	PVC	6567.77	6567.63
M-6	4"	6.04'	2.00%	PVC	6567.89	6567.77
M-6-1	4"	3.18'	2.00%	PVC	6567.95	6567.89
M-7	4"	37.46'	2.00%	PVC	6568.64	6567.89
M-8	4"	9.75'	2.00%	PVC	6568.84	6568.64
N-1	4"	44.52'	2.00%	PVC	6567.57	6566.68
N-2	4"	10.64'	2.00%	PVC	6567.78	6567.57
N-3	4"	32.66'	2.00%	PVC	6568.43	6567.78
N-3-1	4"	8.48'	2.00%	PVC	6568.60	6568.43
N-4	4"	6.16'	2.00%	PVC	6568.56	6568.43
N-4-1	4"	5.23'	2.00%	PVC	6568.66	6568.56
N-5	4"	20.62'	2.00%	PVC	6568.97	6568.56
N-5-1	4"	5.82'	2.00%	PVC	6569.09	6568.97
N-6	4"	25.82'	2.00%	PVC	6569.49	6568.97
N-6-1	4"	12.00'	2.00%	PVC	6569.73	6569.49
N-7	4"	24.56'	2.00%	PVC	6569.98	6569.49
N-7-1	4"	6.37'	2.00%	PVC	6570.11	6569.98
N-8	4"	18.31'	2.00%	PVC	6570.34	6569.98
N-9	4"	24.70'	2.00%	PVC	6570.84	6570.34
N-10	4"	11.55'	2.00%	PVC	6571.07	6570.84
O-1	4"	33.61'	2.00%	PVC	6567.39	6566.72
O-1-1	4"	8.83'	2.00%	PVC	6567.57	6567.39
O-2	4"	53.83'	2.00%	PVC	6568.47	6567.39
O-2-1	4"	5.42'	2.00%	PVC	6568.58	6568.47
O-3	4"	2.89'	2.00%	PVC	6568.53	6568.47
O-3-1	4"	10.14'	2.00%	PVC	6568.73	6568.53
O-4	4"	14.63'	2.00%	PVC	6568.82	6568.53
O-4-1	4"	10.14'	2.00%	PVC	6569.02	6568.82
O-5	4"	32.90'	2.00%	PVC	6569.48	6568.82
O-6	4"	7.14'	2.00%	PVC	6569.62	6569.48
O-6-1	4"	4.53'	2.00%	PVC	6569.71	6569.62
O-7	4"	21.79'	2.00%	PVC	6570.06	6569.62
O-8	4"	6.36'	2.00%	PVC	6570.18	6570.06
P-1	4"	24.56'	2.00%	PVC	6567.69	6567.20
P-2	4"	30.00'	2.00%	PVC	6568.29	6567.69
P-3	4"	20.31'	2.00%	PVC	6568.70	6568.29
P-3-1	4"	6.95'	2.00%	PVC	6568.84	6568.70
P-4	4"	14.63'	2.00%	PVC	6568.99	6568.70
P-4-1	4"	6.95'	2.00%	PVC	6569.13	6568.99
P-5	4"	5.06'	2.00%	PVC	6569.09	6568.99
P-5-1	4"	8.60'	2.00%	PVC	6569.26	6569.09
P-6	4"	31.75'	2.00%	PVC	6569.72	6569.09
P-6-1	4"	5.54'	2.00%	PVC	6569.83	6569.72
P-7	4"	3.06'	2.00%	PVC	6569.79	6569.72
P-7-1	4"	10.02'	2.00%	PVC	6569.99	6569.79
P-8	4"	14.62'	2.00%	PVC	6570.08	6569.79
P-8-1	4"	10.01'	2.00%	PVC	6570.28	6570.08
P-9	4"	30.64'	2.00%	PVC	6570.69	6570.08
P-10	4"	8.36'	2.00%	PVC	6570.86	6570.69
Q-1	4"	32.27'	2.00%	PVC	6567.94	6567.30
Q-2	4"	31.35'	2.00%	PVC	6568.57	6567.94
Q-2-1	4"	8.55'	2.00%	PVC	6568.74	6568.57
Q-3	4"	2.46'	2.00%	PVC	6568.62	6568.57
Q-3-1	4"	5.62'	2.00%	PVC	6568.73	6568.62

PIPE TABLE						
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INV. UP	INV. DOWN
Q-4	4"	24.85'	2.00%	PVC	6569.12	6568.62
Q-4-1	4"	5.61'	2.00%	PVC	6569.23	6569.12
Q-5	4"	4.82'	2.00%	PVC	6569.21	6569.12
Q-5-1	4"	9.97'	2.00%	PVC	6569.41	6569.21
Q-6	4"	14.63'	2.00%	PVC	6569.51	6569.21
Q-6-1	4"	9.97'	2.00%	PVC	6569.71	6569.51
Q-7	4"	23.79'	2.00%	PVC	6569.98	6569.51
Q-8	4"	18.53'	2.00%	PVC	6570.35	6569.98
R-1	4"	15.55'	2.00%	PVC	6568.96	6568.65
R-1-1	4"	19.95'	2.00%	PVC	6569.36	6568.96
R-1-1-1	4"	8.07'	2.00%	PVC	6569.52	6569.36
R-1-1-2	4"	7.37'	2.00%	PVC	6569.67	6569.52
R-1-2	4"	17.95'	2.00%	PVC	6569.72	6569.36
R-1-3	4"	7.51'	2.00%	PVC	6569.87	6569.72
R-2	4"	30.51'	2.00%	PVC	6569.57	6568.96
R-2-1	4"	37.00'	2.00%	PVC	6570.31	6569.57
R-2-2	4"	3.83'	2.00%	PVC	6570.39	6570.31
R-2-2-1	4"	10.50'	2.00%	PVC	6570.60	6570.39
R-2-3	4"	48.75'	2.00%	PVC	6571.36	6570.39
R-2-4	4"	20.27'	2.00%	PVC	6571.77	6571.36
R-2-5	4"	3.87'	2.00%	PVC	6571.84	6571.77
R-3	4"	7.99'	2.00%	PVC	6569.73	6569.57
R-3-1	4"	8.49'	2.00%	PVC	6569.90	6569.73
R-4	4"	22.67'	2.00%	PVC	6570.18	6569.73
R-4-1	4"	5.65'	2.00%	PVC	6570.29	6570.18
R-5	4"	15.74'	2.00%	PVC	6570.49	6570.18
R-5-1	4"	6.96'	2.00%	PVC	6570.63	6570.49
R-6	4"	6.97'	2.00%	PVC	6570.63	6570.49
R-7	4"	11.73'	2.00%	PVC	6570.87	6570.63

GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RISE ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SEWERY SEWER CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
 - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
 - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
 - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
11. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS' NOTICE TO THE ON-SITE TOR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TOR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
12. WHERE SANITARY SEWER MAINS ARE CONSTRUCTED IN FILL AREAS, ALL FILL MATERIALS SHALL BE PLACED AND COMPACTED TO FINAL GRADE PRIOR TO THE INSTALLATION OF THE SEWER MAIN AND APPURTENANCES.
13. THE FILL MATERIAL SHALL MEET THE TOWN'S STANDARDS AND BE APPROVED BY CASTLE ROCK WATER. SEWER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS IN ACCORDANCE WITH STANDARD DETAIL W-18.
14. CONTRACTOR SHALL PROVIDE BYPASS PLAN AND DETAILS TO THE TOWN OF CASTLEROCK AT THE PRE-CONSTRUCTION MEETING FOR THE INSTALLATION OF MANHOLE A1.

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT
NO. 4.015020 MONUMENTED BY A 3-1/4"
DIAMETER ALUMINUM CAPPED MONUMENT
BEING NORTH OF THE EAST 1/4 CORNER OF
SECTION 8 AS MONUMENTED BY 2-1/2"
ALUMINUM CAPPED MONUMENT STAMPED
"LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #5450 DATE _____

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By: _____

Development Services Date



Know what's below.
Call before you dig.

DESIGNED BY: CLH
CHECKED BY: RCP
DRAWN BY: CLH

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



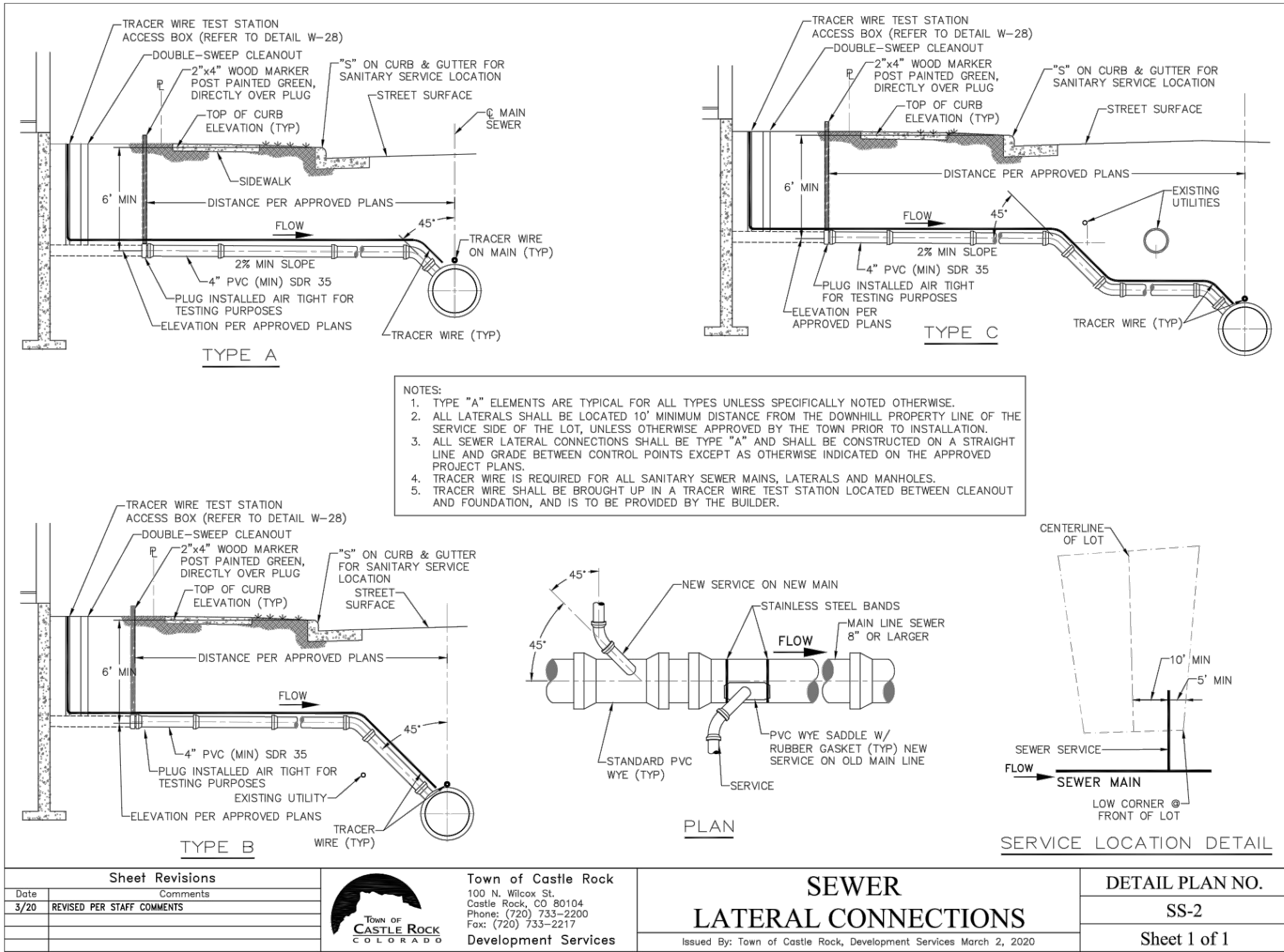
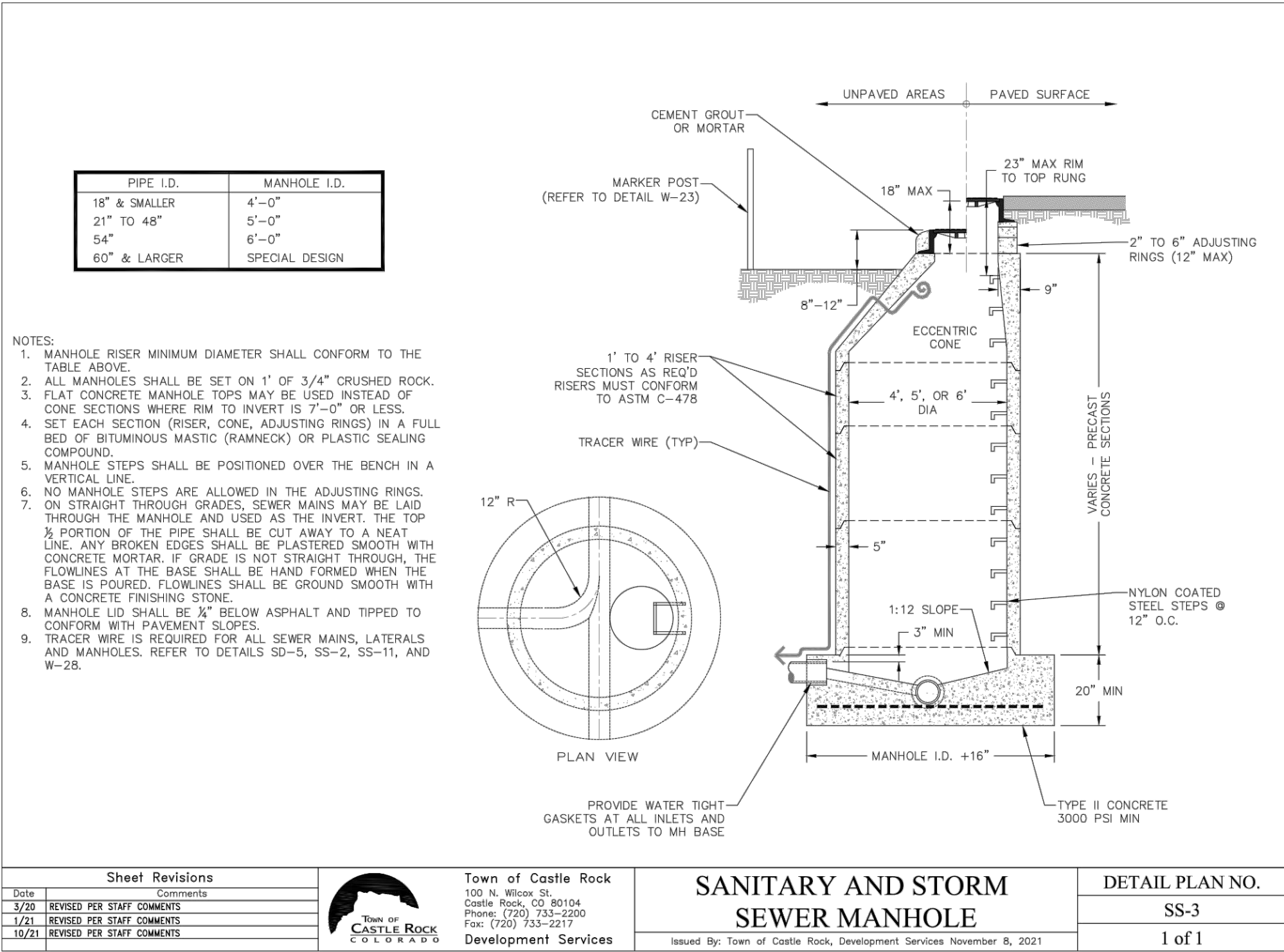
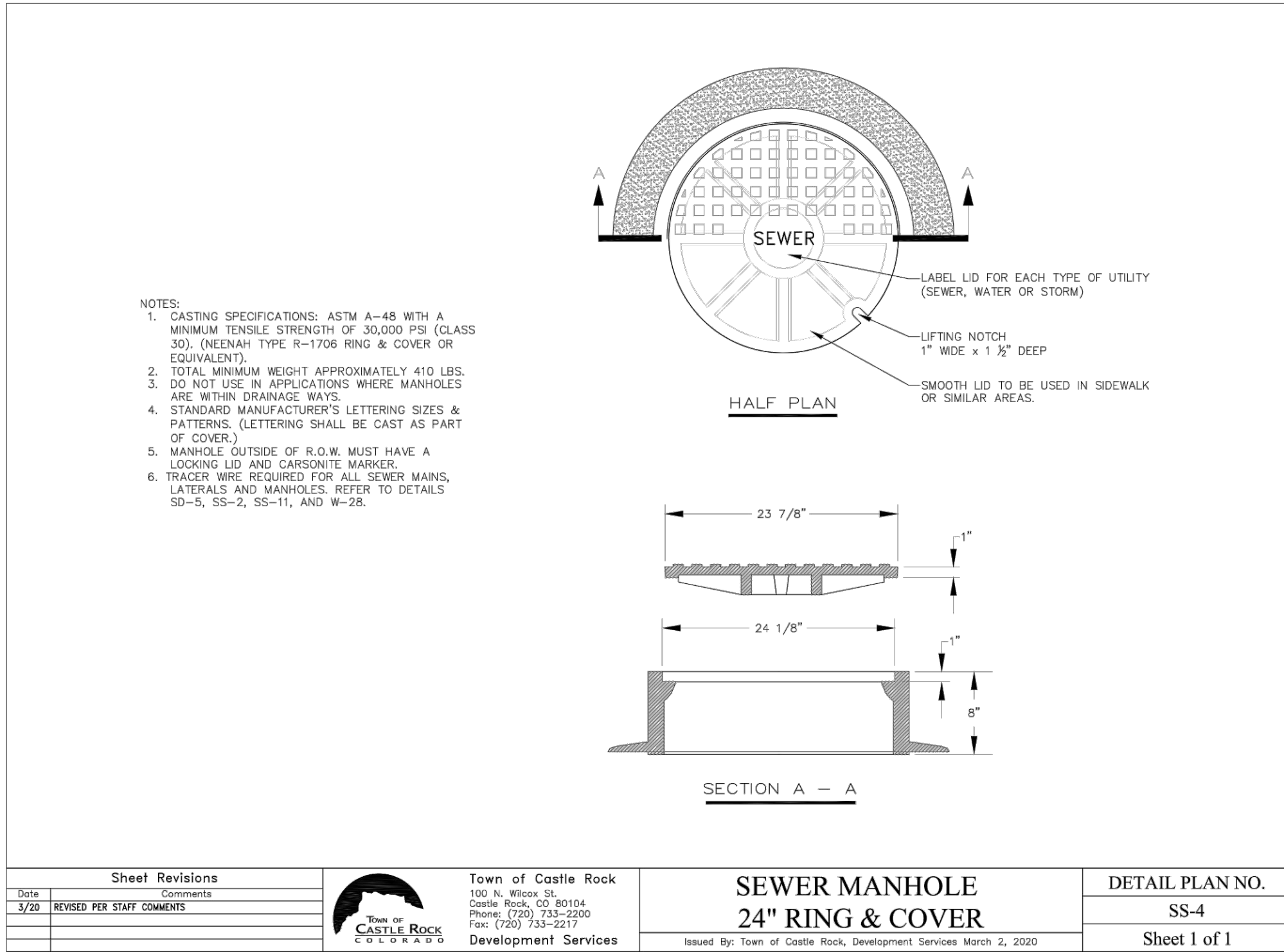
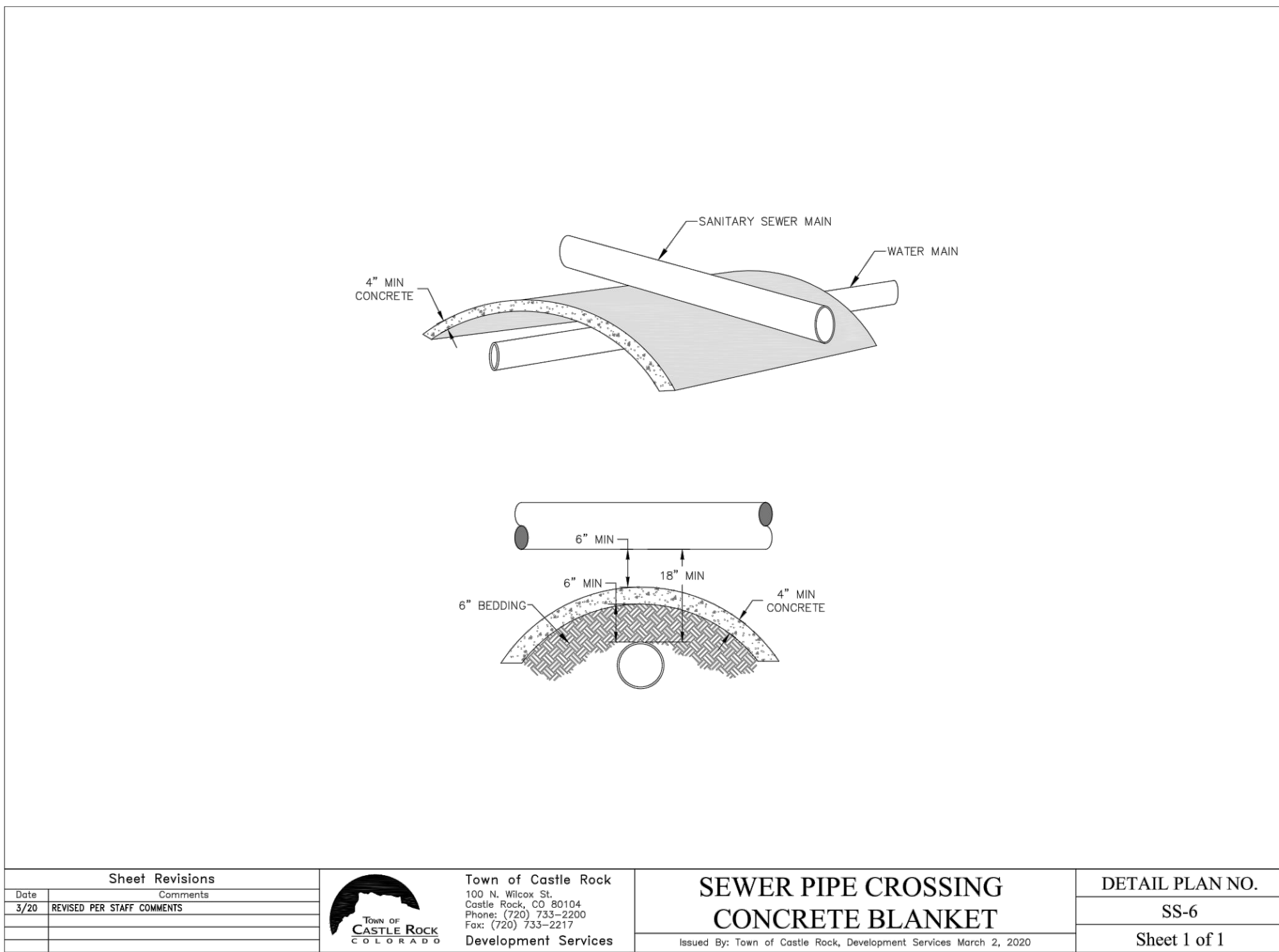
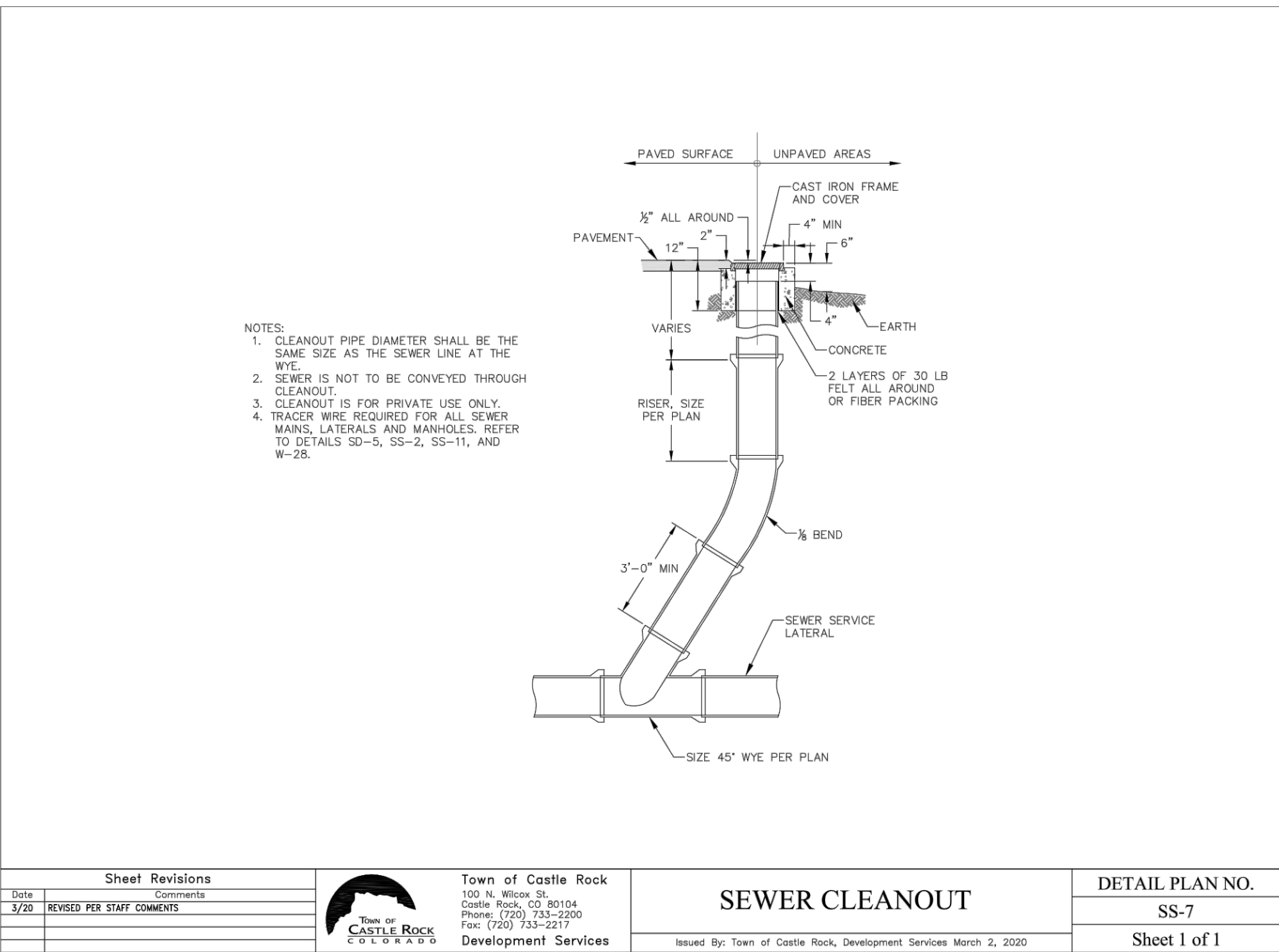
AVILLA FOUNDERS VILLAGE SANITARY SERVICE PIPE TABLES

PROJECT #: 210431

SHEET NUMBER

56

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

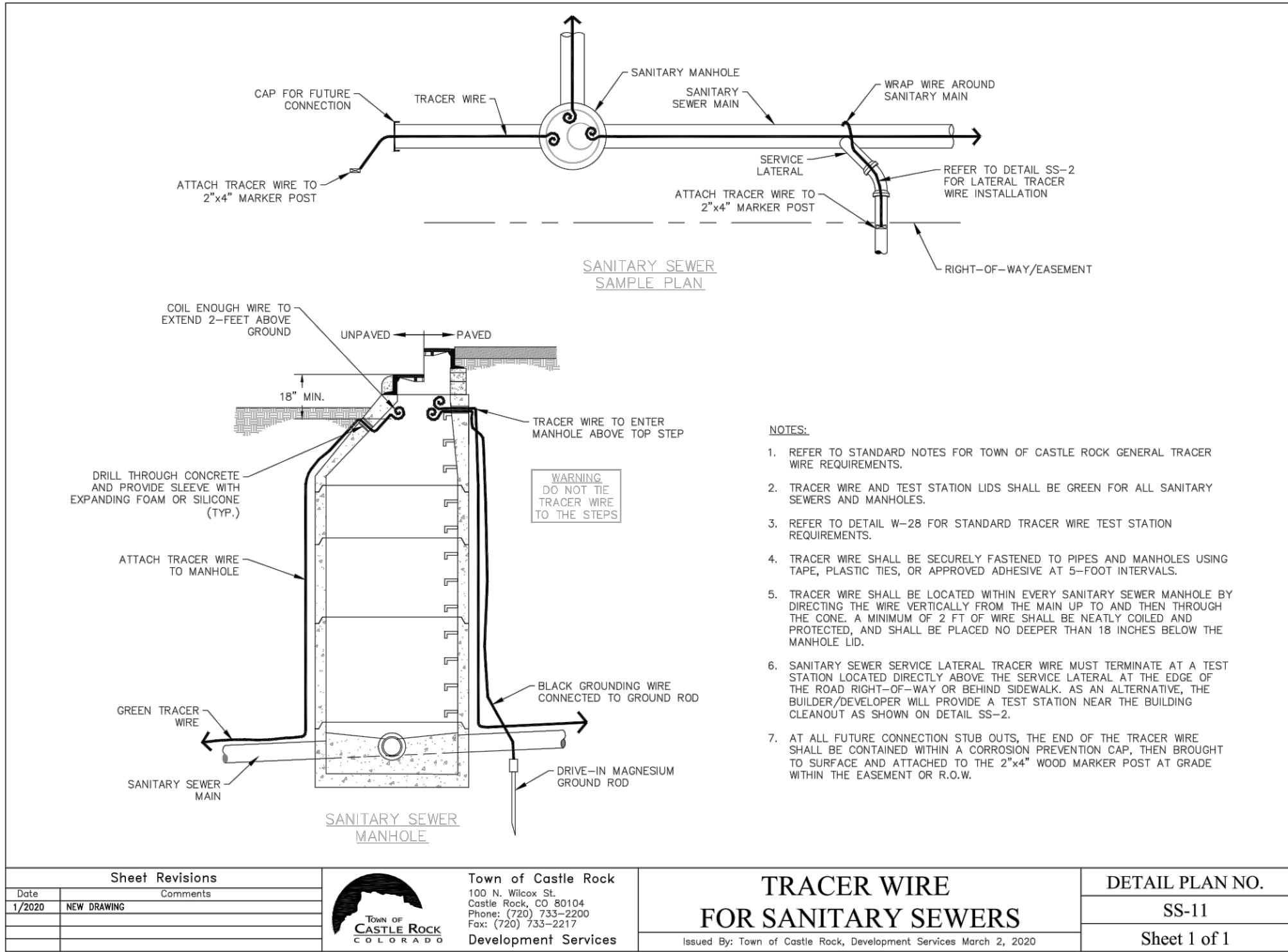
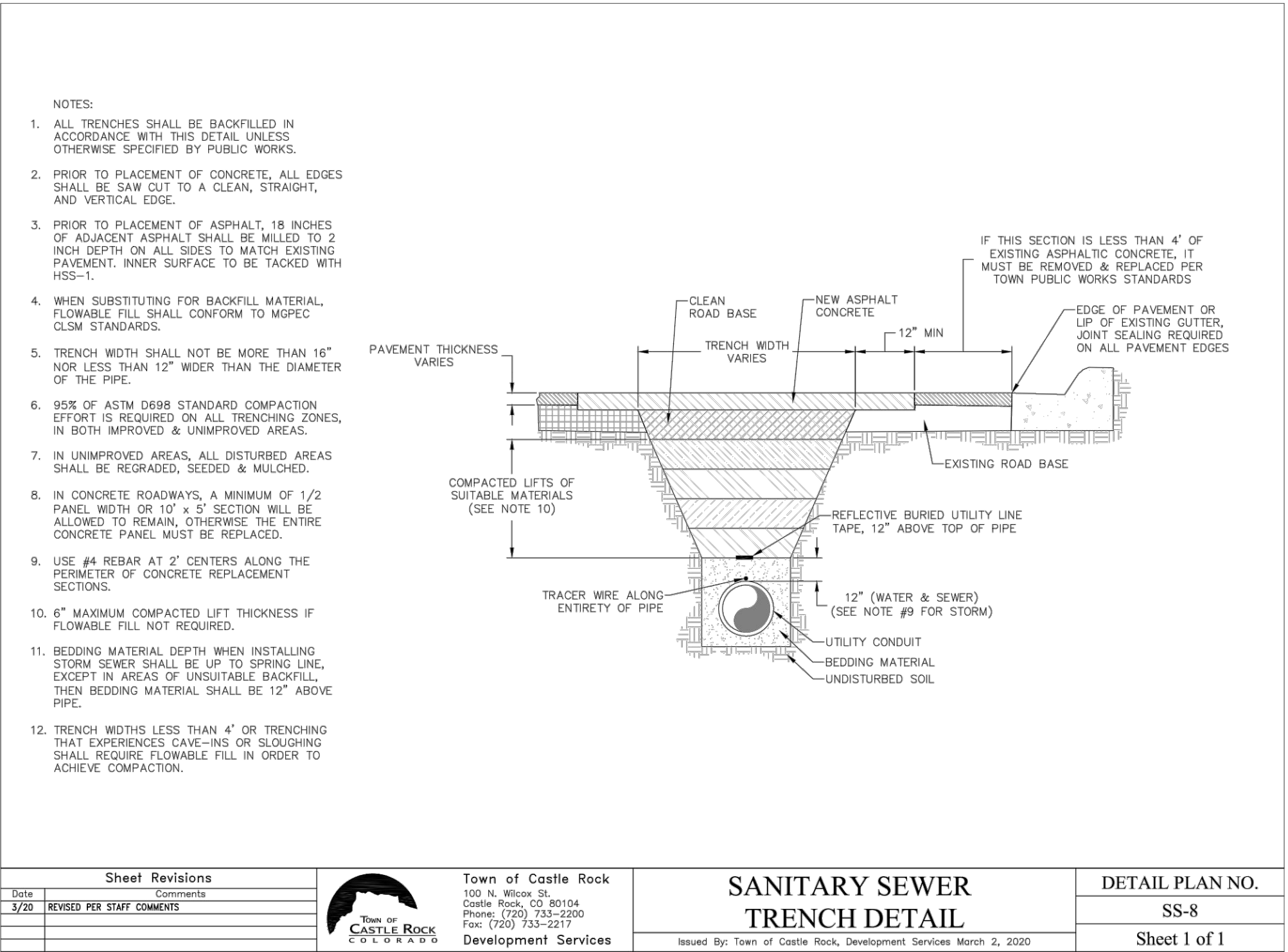
PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #64450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



FILEPATH: K:\0101ENGINEERING\UTILITIES\SANITARY\CD - SANITARY DETAILS.DWG LAYOUT: LAYOUT (2)
3 X REVISIONS
PLOTTED: MON 04/10/23 8:53:07A BY: MILES SUSTAD

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #64450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date



Know what's below.
Call before you dig.

DESIGNED BY: RCP
CHECKED BY: CLH
DRAWN BY: CLH

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



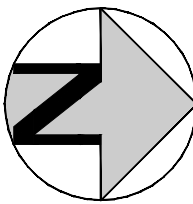
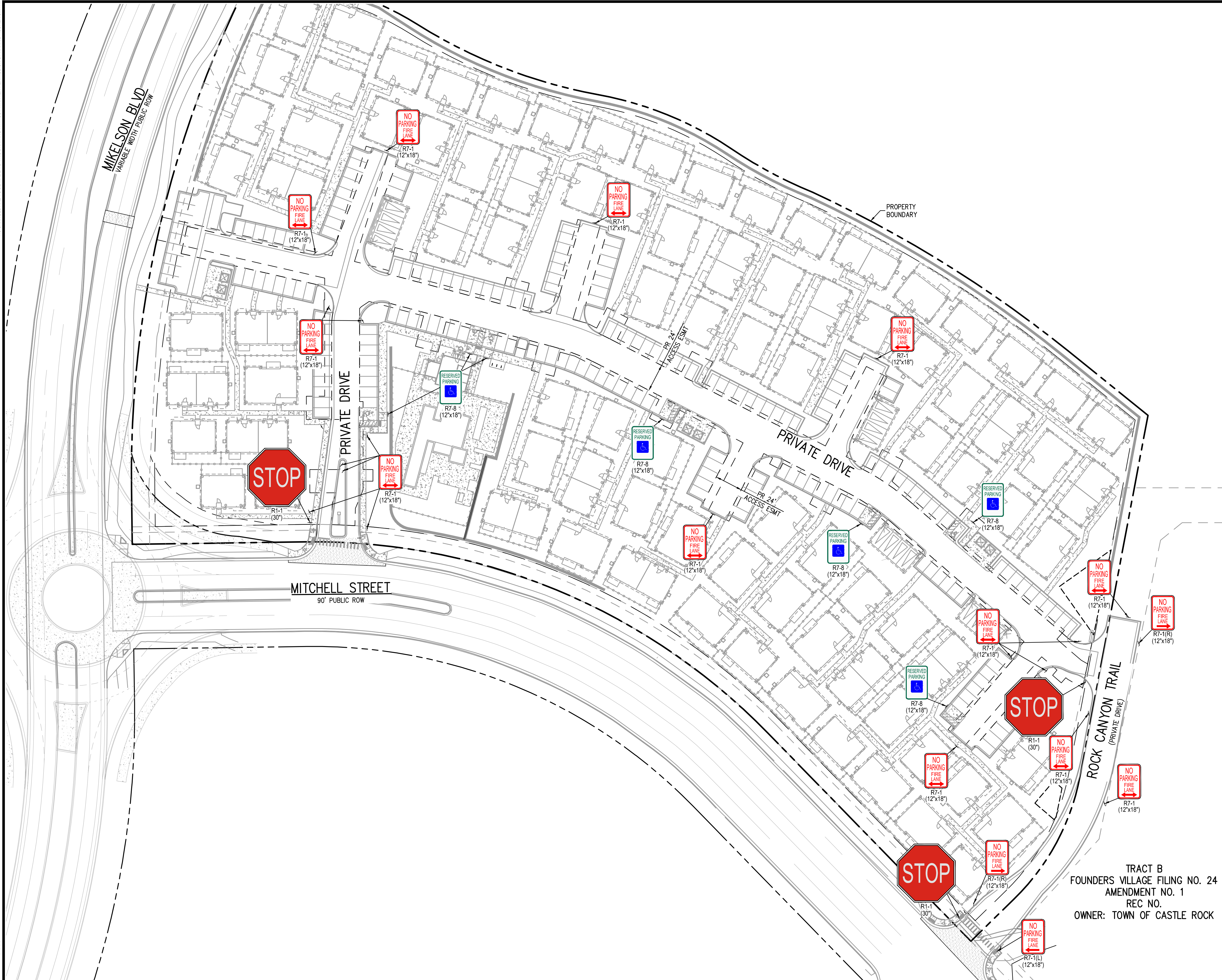
AVILLA FOUNDERS VILLAGE
SANITARY DETAILS

PROJECT #: 210431
SHEET NUMBER

58

58 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



HORIZONTAL CONTROL
BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION
I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C. PATTON, P.E. #54450 DATE: _____

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date: _____

TRACT B
FOUNDERS VILLAGE FILING NO. 24
AMENDMENT NO. 1
REC NO.
OWNER: TOWN OF CASTLE ROCK

FILEPATH: K:\210431\ENGINEERING\ROADWAY\CD - SIGNAGE & STRIPING PLANNING\ LAYOUT LAYOUT 1
DESIGNED BY: MJS
CHECKED BY: RCP
PLOTTED: MON 04/10/23 8:51:56A BY: MILES SUSTAD

811
Know what's below.
Call before you dig.

40 0 40 80 SCALE: 1" = 40'	
DESIGNED BY: MJS	ISSUE DATE: 08-11-2022
CHECKED BY: RCP	DATE: 10-31-2022
DRAWN BY: MJS	REVISION COMMENTS
	10-31-2022 PER TOWN OF CASTLE ROCK COMMENTS
	04-10-2023 PER TOWN OF CASTLE ROCK COMMENTS

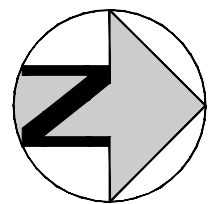
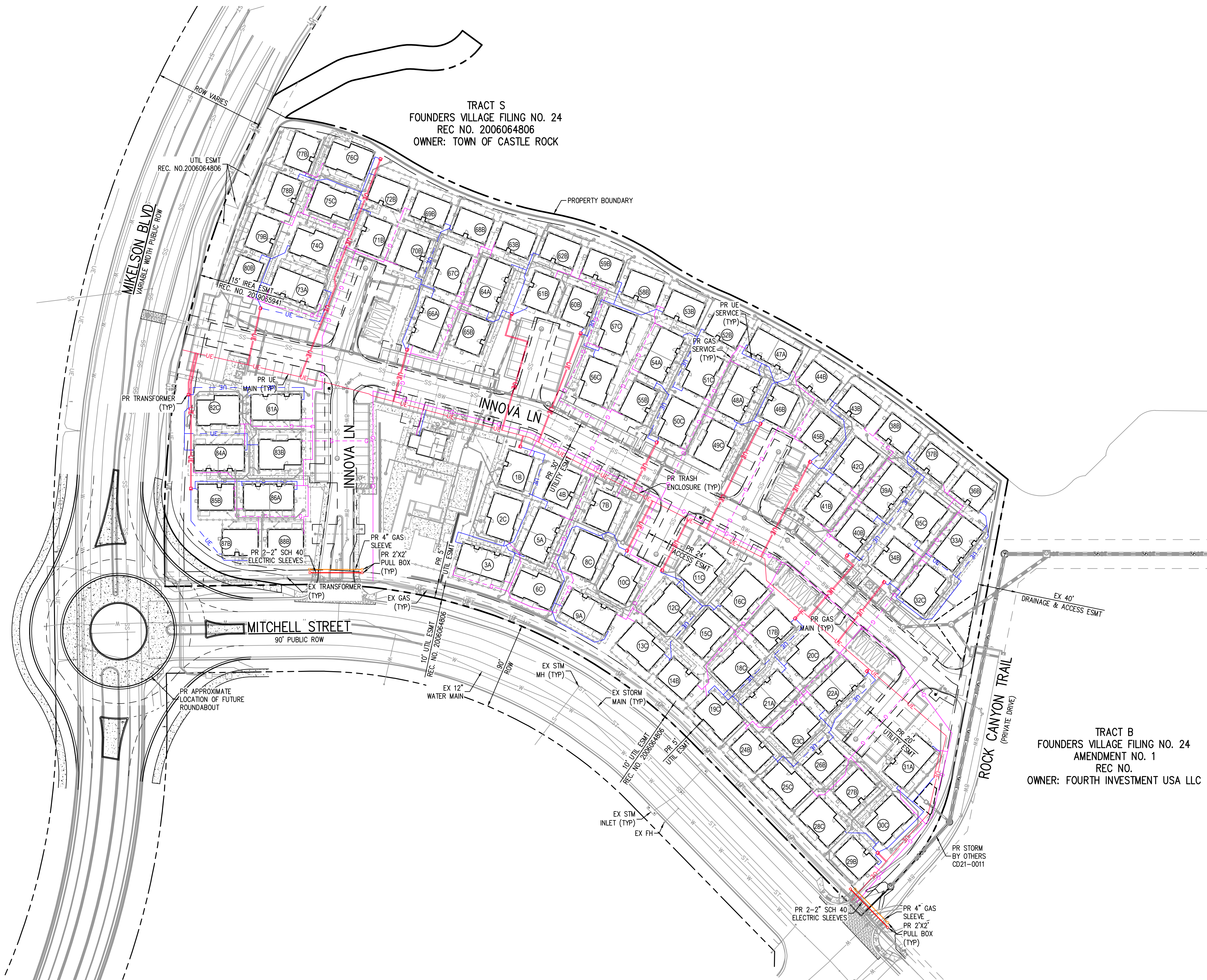
HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

AVILLA FOUNDERS VILLAGE
SIGNAGE & STRIPING PLAN

PROJECT #: 210431
SHEET NUMBER
59
59 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

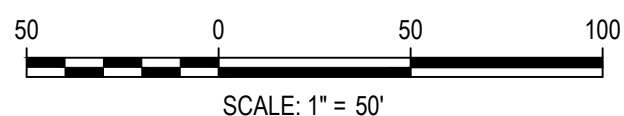
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656", NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C. PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date



DESIGNED BY: TLW
CHECKED BY: RCP
DRAWN BY: TLW

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS

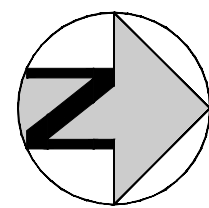
HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
DRY UTILITY PLAN

PROJECT #: 210431
SHEET NUMBER
60
60 OF 87

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



TRACT S
FOUNDERS VILLAGE FILING NO. 24
REC NO. 2006064806
OWNER: TOWN OF CASTLE ROCK

AVILLA FOUNDERS VILLAGE PHASING MATRIX						
UNIT MIX	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	SITE TOTAL
1 BR	6	6	12	4	6	34
2 BR	3	13	10	9	6	41
3 BR	2	4	9	9	6	30
TOTAL	11	23	31	22	18	105
CUMULATIVE TOTAL	11	34	65	87	105	-
PARKING						
GARAGE	0	4	4	4	4	16
HANDICAP	3	0	1	2	1	7
SURFACE	42	51	53	25	26	197
TOTAL BY PHASE	45	55	58	31	31	220
CUMULATIVE TOTAL	45	100	158	189	220	-
PARKING RATIO CUMULATIVE	4.09	2.9	2.4	2.2	2.1	2.1
PARKING RATIO BY PHASE	4.09	2.4	1.9	1.4	1.7	2.1

- NOTES:
- ALL UTILITY MAINS, INCLUDING WATER MAIN, SANITARY SEWER MAIN, AND STORM SEWER MAIN, ARE TO BE COMPLETED IN PHASE 1.
 - PAVING & ROCK CANYON TRAIL TO BE COMPLETED PRIOR TO FIRST PHASE TURN FOR EMERGENCY ACCESS.

LEGEND:

PHASE LINE

TRACT B
FOUNDERS VILLAGE FILING NO. 24
AMENDMENT NO. 1
REC NO.
OWNER: FOURTH INVESTMENT USA LLC

HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

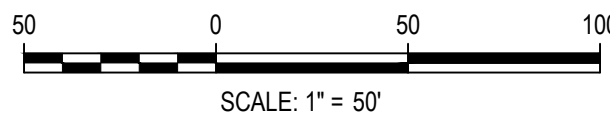
RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM	
DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	
Development Services	Date

REFER TO SIA ARG22-0024 FOR
CONDITIONS AND DETAILS REGARDING
ROUNDBOUT DESIGN AND CONSTRUCTION,
TIMING OF BUILDING PERMITS, AND OTHER
OFFSITE IMPROVEMENTS.

MITCHELL STREET
90' PUBLIC ROW

ROCK CANYON TRAIL
(PRIVATE DRIVE)

FILEPATH: K:\210431\ENGINEERING\GDCD - PHASING PLAN DWG LAYOUT\ LAYOUT1
PLOTTED: MON 04/10/23 8:42:10A BY: MILES SUSTAD



DESIGNED BY: TLW
CHECKED BY: RCP
DRAWN BY: TLW

ISSUE DATE: 08-11-2022

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



HARRIS
KOCHER
SMITH

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

AVILLA FOUNDERS VILLAGE
PHASING PLAN

PROJECT #: 210431
SHEET NUMBER

61

61 OF 87

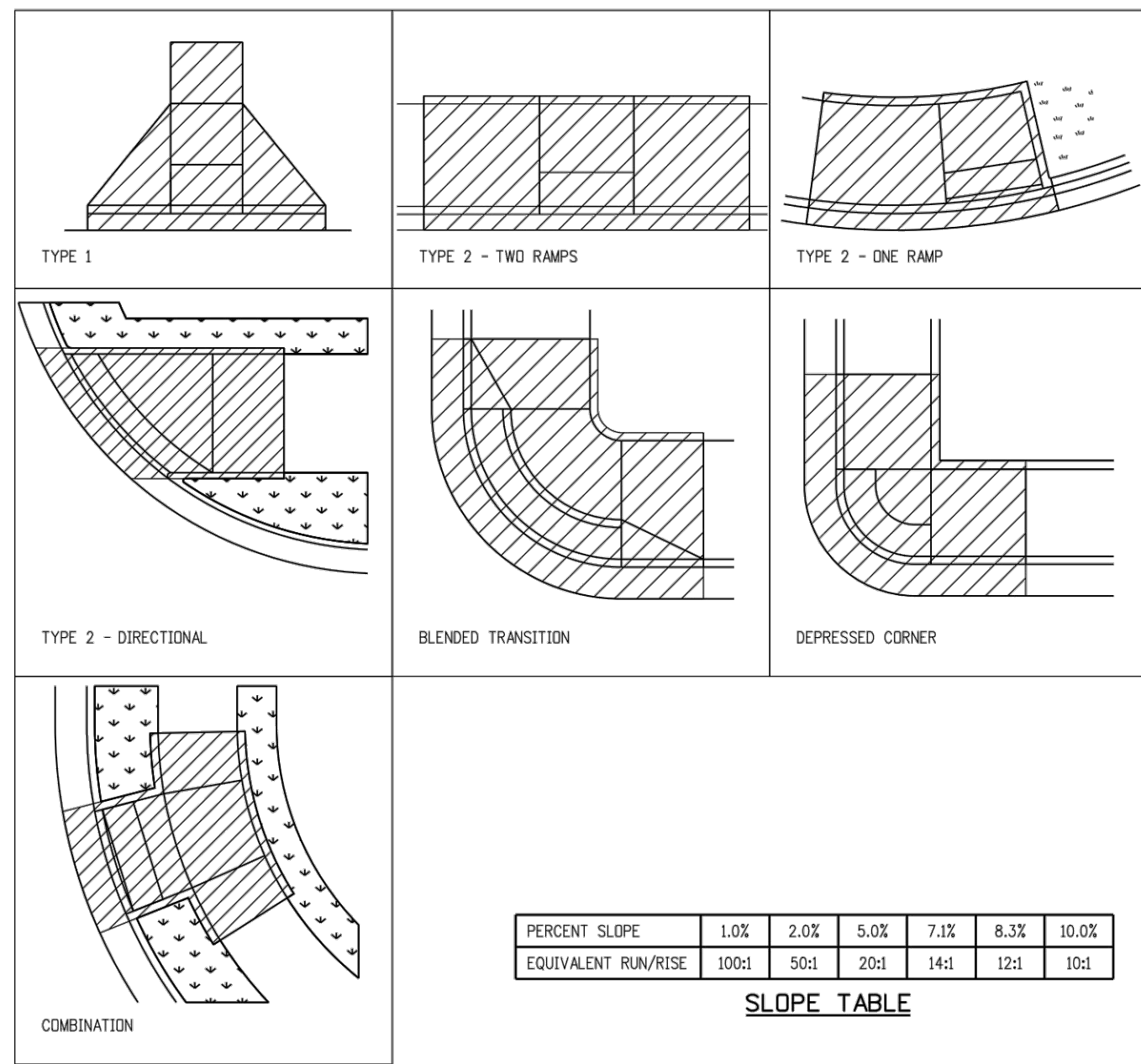
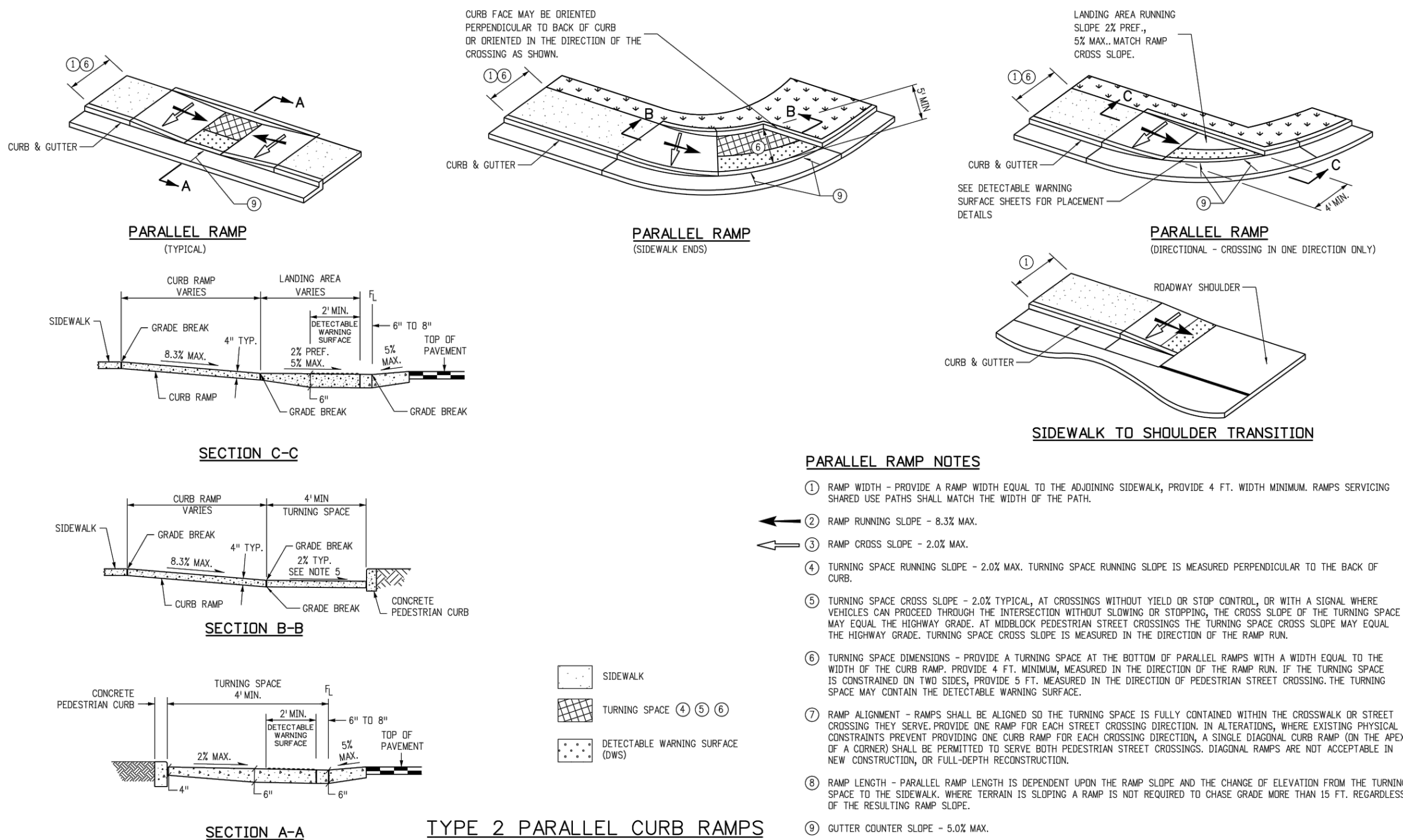
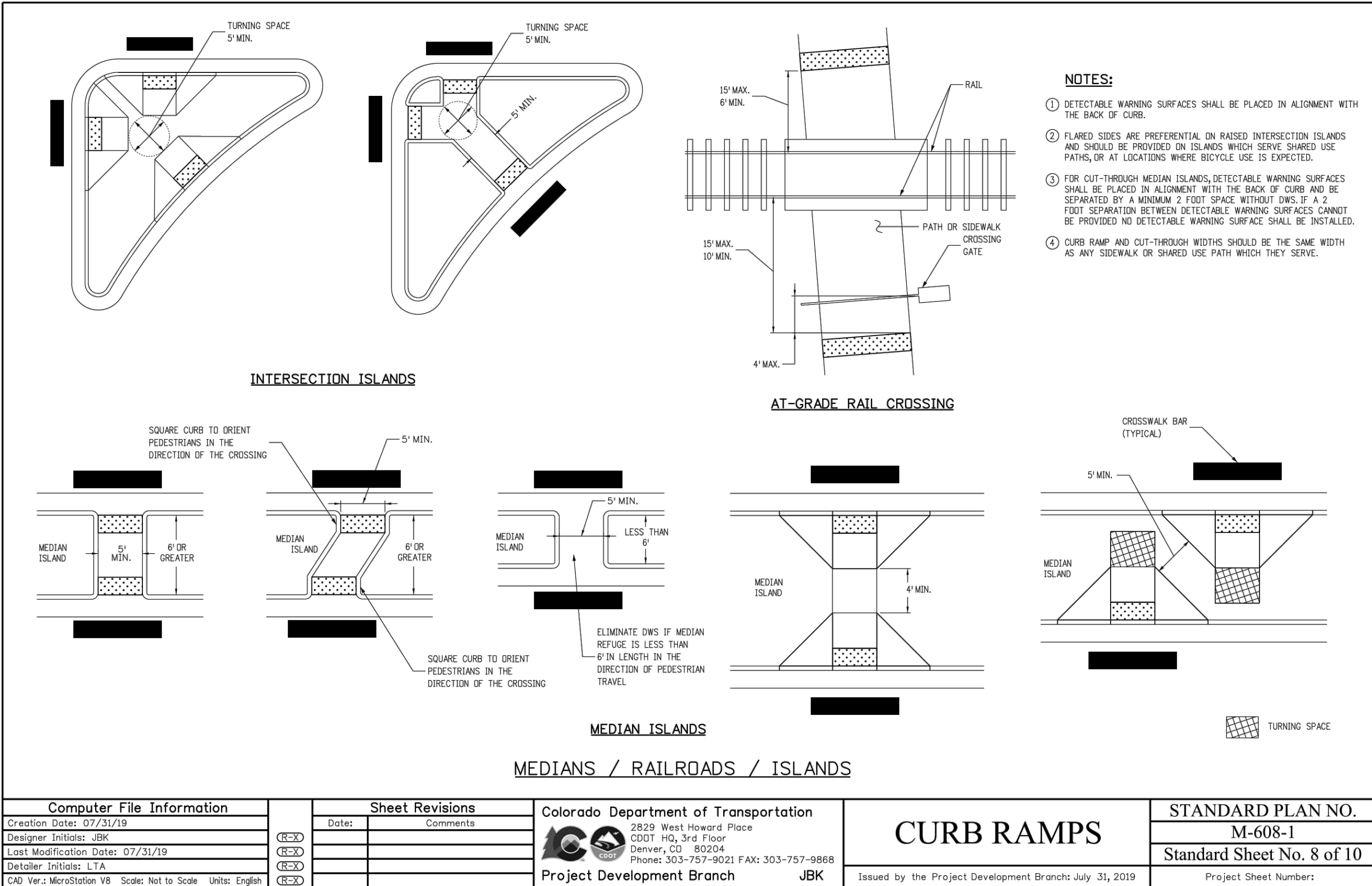
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

CURB RAMP GENERAL NOTES:

- IN NEW CONSTRUCTION OR FULL-DEPTH RECONSTRUCTION, PROVIDE A SEPARATE CURB RAMP FOR EACH MARKED OR UNMARKED PEDESTRIAN STREET CROSSING. CURB RAMP SHALL BE CONTAINED WHOLLY WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING OR CROSSWALK THEY SERVE, OR AS SHOWN ON THE CONTRACT PLANS.
- ALTERATIONS ARE DEFINED AS CHANGES TO AN EXISTING HIGHWAY THAT AFFECT PEDESTRIAN ACCESS, CIRCULATION, OR USE. ALTERATIONS INCLUDE, BUT ARE NOT LIMITED TO, RESURFACING, REHABILITATION, RECONSTRUCTION, CURB RAMP RETROFITS, HISTORIC RESTORATION, OR CHANGES OR REARRANGEMENT TO STRUCTURAL PARTS OR ELEMENTS OF A PEDESTRIAN FACILITY.
- A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP OR TURNING SPACE, WITHOUT RAISED OBSTACLES, THAT COULD BE MISTAKENLY TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.
- IN ALTERATIONS, WHERE AN EXISTING PHYSICAL CONSTRAINT PREVENTS PROVIDING A SEPARATE CURB RAMP FOR EACH PEDESTRIAN STREET CROSSING, A SINGLE DIAGONAL RAMP ON THE WALKER SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS. THE USE OF A SINGLE DIAGONAL RAMP SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. DIAGONAL RAMP IS NOT ACCEPTABLE IN NEW CONSTRUCTION OR FULL-DEPTH RECONSTRUCTION.
- DETECTABLE WARNING SURFACES (DWS) ARE INTENDED TO INDICATE THE BOUNDARY BETWEEN A PEDESTRIAN ROUTE AND VEHICULAR ROUTE WHERE THERE IS A FLUSH RATHER THAN CURBED CONNECTION. DWS ARE NOT INTENDED TO PROVIDE WAYFINDING. DWS SHALL BE PROVIDED AT THE FOLLOWING LOCATIONS:
 - CURB RAMP, BLENDED TRANSITIONS, AND DEPRESSED CORNERS AT PEDESTRIAN STREET CROSSINGS;
 - PEDESTRIAN REFUGE ISLANDS (6 FEET IN WIDTH OR GREATER);
 - BOARDING PLATFORMS AT TRANSIT STOPS WHERE THE EDGE OF THE PLATFORM IS NOT PROTECTED TO PEDESTRIAN CROSS TRAFFIC; AND
 - BOARDING AREAS AT SIDEWALK OR STREET LEVEL TRANSIT STOPS WHERE THE AREA IS NOT PROTECTED TO PEDESTRIAN CROSS TRAFFIC.
- DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH THE ADJACENT GUTTER, HIGHWAY, OR PEDESTRIAN ACCESS ROUTE SURFACE, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. FEDERAL YELLOW COLOR IS PREFERRED, HOWEVER, OTHER COLORS MAY BE USED IF APPROVED BY THE ENGINEER.
- IN ALTERATIONS, TO AVOID CHASING GRADE INDEFINITELY ON STEEP ROADWAYS, A CURB RAMP LENGTH IS NOT REQUIRED TO EXCEED 15 FEET REGARDLESS OF THE RESULTING RAMP RUNNING SLOPE.
- ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE.
- DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, OR OTHER OBSTRUCTIONS SHALL NOT BE INSTALLED ON THE CURB RAMP, OR TURNING SPACE AREAS.
- IN NEW CONSTRUCTION, FULL BODIES, METER BOXES, MAINTENANCE HOLE COVERS, VAULT LIDS, OR SIMILAR, SHALL NOT BE CONSTRUCTED WITHIN ANY PART OF CURB RAMP OR TURNING SPACE. IN ALTERATIONS, WHERE THESE ITEMS CANNOT BE RELOCATED OUTSIDE OF THE CURB RAMP OR TURNING SPACE, THEY MUST NOT CREATE A VERTICAL DISCONTINUITY GREATER THAN 1/2 INCH. ANY VERTICAL DISCONTINUITY BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE REVEALED WITH A SLOPE NOT STEEPER THAN 1:20. THE REVEAL SHALL BE APPLIED ACROSS THE ENTIRE SURFACE DISCONTINUITY.
- CONSTRUCTION OF ANY REQUIRED PEDESTRIAN CURB SHALL BE INCLUDED IN THE BID PRICE OF THE CONCRETE CURB RAMP AND WILL NOT BE PAID FOR SEPARATELY.
- ALL CURB RAMP JOINTS AND GRADE BREAKS SHALL BE FLUSH (0'-1/8"). THE JOINT BETWEEN THE ROADWAY SURFACE AND THE GUTTER PAN SHALL BE FLUSH.
- THE CONTRACTOR SHALL VERIFY REMOVAL LIMITS ARE SUFFICIENT TO PROVIDE POSITIVE DRAINAGE, MAINTAIN EXISTING DRAINAGE PATTERNS, AND AVOID PONDING IN THE FINAL CONFIGURATION.
- FLARED SIDE SLOPES MAY EXCEED 10.0% ONLY WHERE THEY ABUT A NON-WALKABLE SURFACE, OR WHERE THE ADJACENT RAMP SURFACE IS BLOCKED TO PEDESTRIAN TRAFFIC.
- THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.33% THE COUNTER SLOPE OF THE GUTTER AT THE FOOT OF A RAMP, TURNING SPACE, OR BLENDED TRANSITION SHALL NOT EXCEED 5.0%.
- GRADE BREAKS AT THE TOP AND BOTTOM OF RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF THE RAMP RUN OR TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
- A BROOM FINISH WITH SWEEPS PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAFFIC, SHALL BE APPLIED TO ALL RAMP AND TURNING SPACE SURFACES.
- IN ALTERATIONS, WHERE A RAMP OR TURNING SPACE MUST TIE INTO AN EXISTING GRADE THAT CANNOT BE ALTERED, THE RAMP OR TURNING SPACE MAY BE WARPED TO TRANSITION TO THE REQUIRED CROSS SLOPE. THE TRANSITION TO THE REQUIRED CROSS SLOPE SHALL BE SPREAD EVENLY OVER THE LENGTH OF THE RAMP OR TURNING SPACE TO MINIMIZE THE DEGREE OF WARPING. THE RATE OF CHANGE ON A RAMP OR TURNING SPACE SHALL NOT EXCEED 3% PER LINEAR FOOT.
- DESIGN AND CONSTRUCT CURB RAMP, TURNING SPACES, AND FLARE SLOPES WITH THE FLATTEST SLOPES POSSIBLE. THE SLOPES INDICATED IN THESE DETAILS SHOW THE MAXIMUM SLOPES ALLOWABLE. PREFERRED VALUES TO BE USED DURING DESIGN, LAYOUT, AND CONSTRUCTION ARE:
 - RAMP RUNNING SLOPE 7.5%
 - RAMP CROSS SLOPE 1.5%
 - TURNING SPACE RUNNING SLOPE 1.5%
 - TURNING SPACE CROSS SLOPE 1.5%
 - FLARE SLOPE 8.0-9.0%

GENERAL NOTES & PAY AREAS

CURB RAMP PAY AREAS



HORIZONTAL CONTROL

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM

DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS2856". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



Know what's below.
Call before you dig.

DESIGNED BY: TLW
CHECKED BY: RCP
DRAWN BY: TLW

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



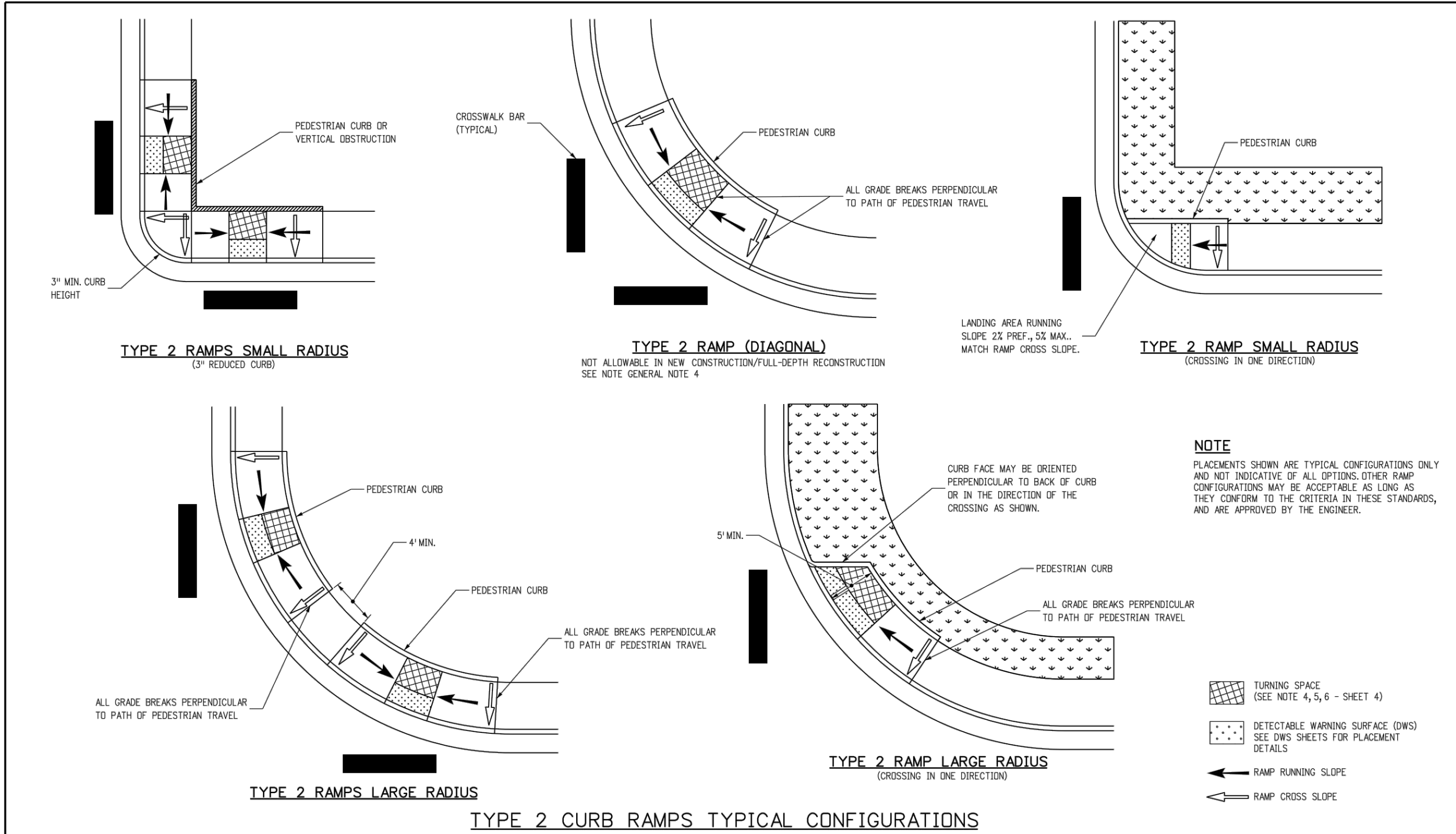
AVILLA FOUNDERS VILLAGE
RAMP DETAILS

PROJECT #: 210431
SHEET NUMBER

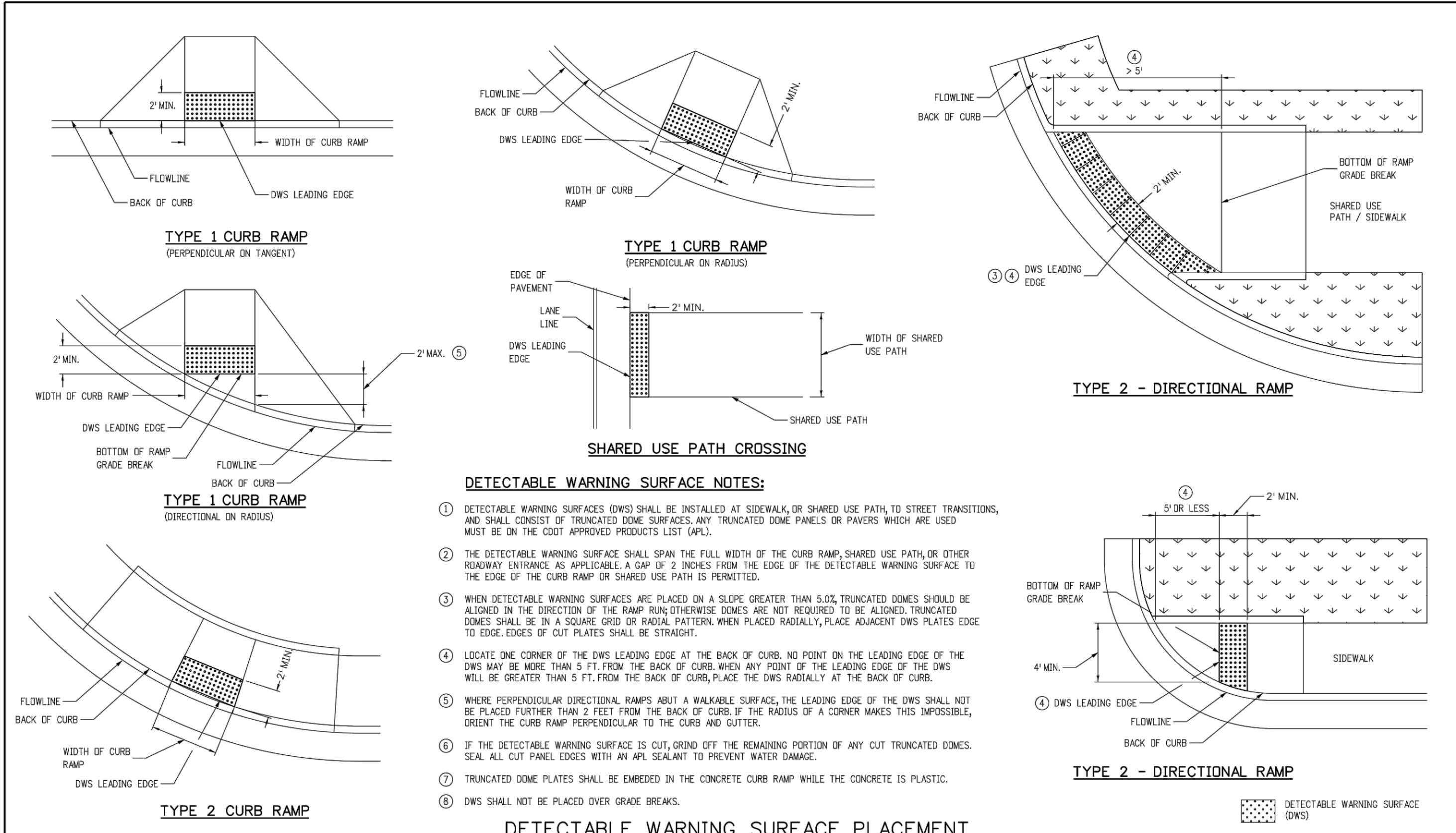
62

62 OF 87

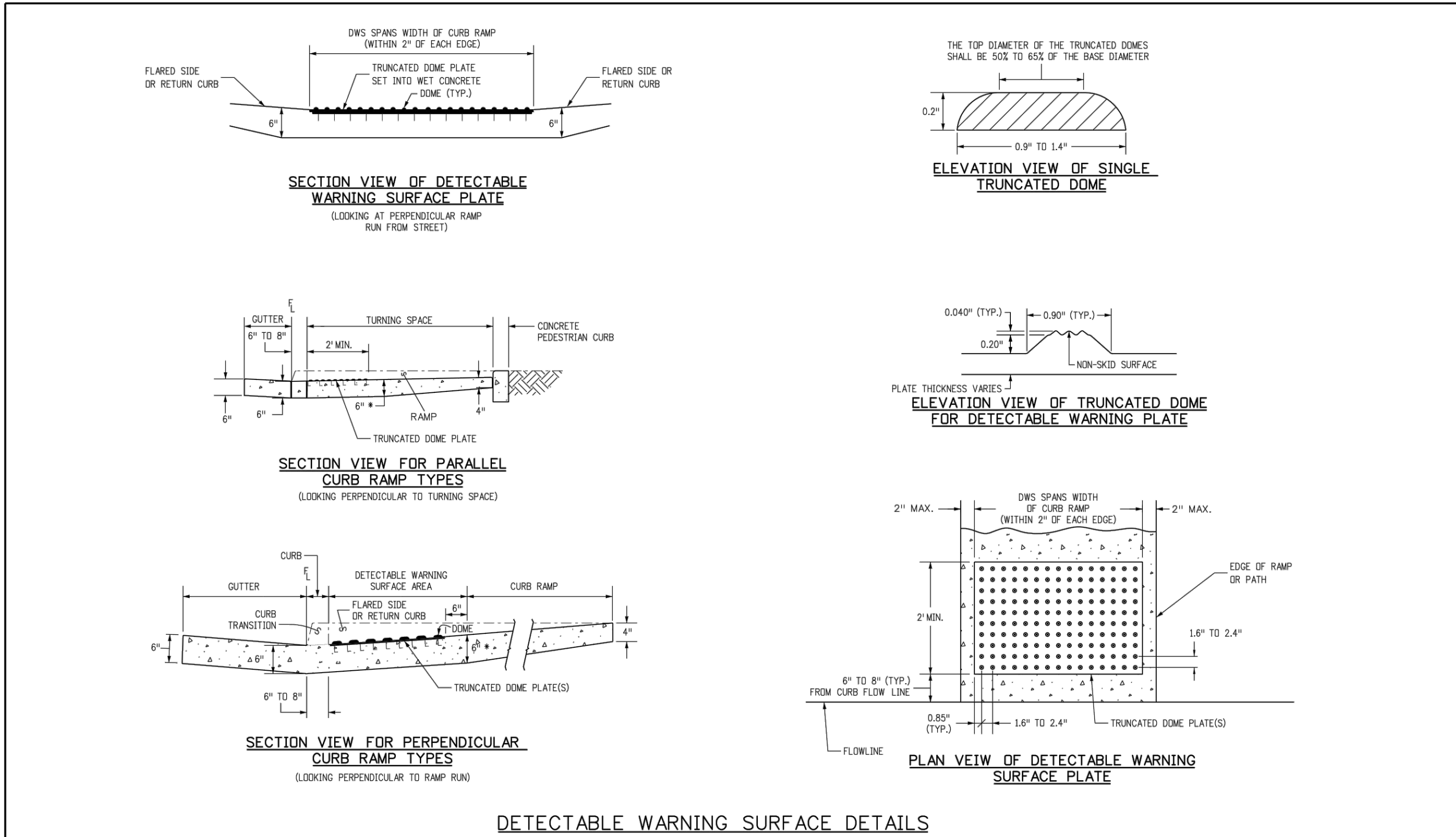
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



Computer File Information		Sheet Revisions		 Colorado Department of Transportation 2829 West Howard Place CDOT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868 Project Development Branch	CURB RAMPS	STANDARD PLAN NO.
Creation Date: 07/31/19		Date:	Comments			M-608-1
Designer Initials: JBK	(R-X)					Standard Sheet No. 5 of 10
Last Modification Date: 07/31/19	(R-X)					Project Sheet Number:
Detailer Initials: LTA	(R-X)					
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)					
				Issued by the Project Development Branch: July 31, 2019		



Computer File Information		Sheet Revisions		 Colorado Department of Transportation 2829 West Howard Place CDOT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868 Project Development Branch JBK	STANDARD PLAN NO.	
Creation Date: 07/31/19	(R-X)	Date:	Comments		CURB RAMPS	
Designer Initials: JBK	(R-X)				M-608-1	
Last Modification Date: 07/31/19	(R-X)				Standard Sheet No. 9 of 10	
Detailer Initials: LTA	(R-X)				Project Sheet Number:	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English		(R-X)				



Computer File Information		Sheet Revisions		Colorado Department of Transportation		STANDARD PLAN NO.	
Creation Date: 07/31/19		Date:	Comments		2829 West Howard Place CDOT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868	CURB RAMPS	
Designer Initials: JBK	(R-X)					M-608-1	
Last Modification Date: 07/31/19	(R-X)					Standard Sheet No. 10 of 10	
Detailer Initials: LTA	(R-X)					Project Sheet Number:	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)						
				Project Development Branch	JBK	Issued by the Project Development Branch July 31, 2019	

HORIZONTAL CONTROL
BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 8, AS MONUMENTED AT THE EAST CORNER BY A #6 REBAR WITH A 3.25" ALUMINUM CAP STAMPED: SURVCON 2006 PLS 30289 AND AT THE CENTER-EAST SIXTEENTH CORNER BY A 2.5" PIPE WITH A 3.5" ALUMINUM CAP STAMPED: 1986 PLS 22100, AS BEARING SOUTH 88°58'05" WEST, PER THE PLAT OF FOUNDERS VILLAGE FILING NO. 24 AMENDMENT NO. 1.

VERTICAL DATUM
DOUGLAS COUNTY GIS CONTROL MONUMENT NO. 4.015020 MONUMENTED BY A 3-1/4" DIAMETER ALUMINUM CAPPED MONUMENT BEING NORTH OF THE EAST 1/4 CORNER OF SECTION 8 AS MONUMENTED BY 2-1/2" ALUMINUM CAPPED MONUMENT STAMPED "LS28656". NAVD 88 ELEVATION=6572.29

PROFESSIONAL ENGINEER CERTIFICATION
I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C PATTON, P.E. #54450	DATE
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL	
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
Approved By:	Date
Development Services	Date



DESIGNED BY: TLW
CHECKED BY: RCP
DRAWN BY: TLW

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS



AVILLA FOUNDERS VILLAGE
RAMP DETAILS

PROJECT #: 210431
SHEET NUMBER
63
63 OF 87

FILEPATH: P:\AVILLA BELLA MESA - 0632-01-0007\DRAWINGS\CONSTRUCTION DOCUMENTS\AVILLA-FV-PLAN-CD.DWG LAYOUT: 7 LANDSCAPE NOTES
PLOTTED: MON 03/27/23 5:38:14P BY: JAMES RYMER

GENERAL LANDSCAPE NOTES

- THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLANS AND SPECIFICATIONS AS CLOSELY AS POSSIBLE. ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE. OVERALL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLANS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. GRAPHIC QUANTITIES TAKES PRECEDENCE OVER WRITTEN QUANTITIES.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES, THE OWNER'S REPRESENTATIVE MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DISEASED, OR DECLINING IN HEALTH AT THE TIME OF ONSITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLANS AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.
- THE OWNER'S REPRESENTATIVE MAY ELECT TO UPSIZE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION, AVAILABILITY, OR TO ENHANCE SPECIFIC AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL SIZES WITH OWNER'S REPRESENTATIVE PRIOR TO PURCHASING, SHIPPING OR STOCKING OF PLANT MATERIALS. SUBMIT CHANGE ORDER REQUEST TO OWNER'S REPRESENTATIVE FOR APPROVAL IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION. RE-STOCKING CHARGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.
- THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION HAS BEEN ISSUED BY THE OWNER'S REPRESENTATIVE FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.
- REFER TO IRRIGATION PLANS FOR LIMITS AND TYPES OF IRRIGATION DESIGNED FOR THE LANDSCAPE. IN NO CASE SHALL IRRIGATION BE EMITTED WITHIN THE MINIMUM DISTANCE FROM BUILDING OR WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT. ALL IRRIGATION DISTRIBUTION LINES, HEADS AND EMITTERS SHALL BE KEPT OUTSIDE THE MINIMUM DISTANCE AWAY FROM ALL BUILDING AND WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT.
- LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE ON LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MAINTAIN SLOPE AWAY FROM FOUNDATIONS PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. ALL LANDSCAPE AREAS BETWEEN WALKS AND CURBS SHALL DRAIN FREELY TO THE CURB UNLESS OTHERWISE IDENTIFIED ON THE GRADING PLAN. IN NO CASE SHALL THE GRADE, TURF THATCH, OR OTHER LANDSCAPE MATERIALS DAM WATER AGAINST WALKS. MINIMUM SLOPES ON LANDSCAPE AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE 25% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- PRIOR TO INSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN COMPACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE THOROUGHLY LOOSENEED TO A DEPTH OF 8" - 12" AND AMENDED PER SPECIFICATIONS.
- TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EASEMENTS. CONTACT OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS PRIOR TO INSTALLATION.
- THE CENTER OF EVERGREEN TREES SHALL NOT BE PLACED CLOSER THAN 8' AND THE CENTER OF ORNAMENTAL TREES CLOSER THAN 6' FROM A SIDEWALK, STREET OR DRIVE LANE. EVERGREEN TREES SHALL NOT BE LOCATED ANY CLOSER THAN 15' FROM IRRIGATION ROTOR HEADS. NOTIFY OWNER'S REPRESENTATIVE IF TREE LOCATIONS CONFLICT WITH THESE STANDARDS FOR FURTHER DIRECTION.
- ALL EVERGREEN TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT EXHIBIT SIGNS OF ACCELERATED GROWTH AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
- ALL TREES ARE TO BE STAKED AND GUYED PER DETAILS FOR A PERIOD OF 1 YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STAKES AT THE END OF 1 YEAR FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE OWNER'S REPRESENTATIVE. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
- ALL TREES INSTALLED ABOVE RETAINING WALLS UTILIZING GEO-GRID MUST BE HAND DUG TO PROTECT GEO-GRID. IF GEO-GRID MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE PRIOR TO DOING WORK.
- ALL TREES IN SEED OR TURF AREAS SHALL RECEIVE MULCH RINGS. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE FOR ANY TREES THAT WILL NOT BE MULCHED FOR EXCESSIVE MOISTURE REASONS.
- SHRUB, GROUND COVER AND PERENNIAL BEDS ARE TO BE CONTAINED BY 4" x 14 GAUGE GALVANIZED, ROLL TOP, INTERLOCKING TYPE EDGER, RYERSON OR EQUAL. EDGER IS NOT REQUIRED WHEN ADJACENT TO CURBS, WALLS, WALKS OR SOLID FENCES WITHIN 3" OF PRE-MULCHED FINAL GRADE. EDGER SHALL NOT BE REQUIRED TO SEPARATE MULCH TYPES UNLESS SPECIFIED ON THE PLANS.
- ALL SHRUB BEDS ARE TO BE MULCHED WITH MIN. 3" DEPTH, ¾" LOCAL ANGULAR ROCK OR 1 ½" LOCAL RIVER ROCK (REFER TO PLANS FOR LOCATION) LANDSCAPE MULCH OVER SPECIFIED GEOTEXTILE WEED CONTROL FABRIC. ALL GROUND COVER AND PERENNIAL FLOWER BEDS SHALL BE MULCHED WITH 4" DEPTH GORILLA HAIR CEDAR LANDSCAPE MULCH. NO WEED CONTROL FABRIC IS REQUIRED IN GROUND COVER OR PERENNIAL AREAS.
- AT SEED AREA BOUNDARIES ADJACENT TO EXISTING NATIVE AREAS, OVERLAP ABUTTING NATIVE AREAS BY THE FULL WIDTH OF THE SEEDER.
- EXISTING TURF AREAS THAT ARE DISTURBED DURING CONSTRUCTION, ESTABLISHMENT AND THE MAINTENANCE PERIOD SHALL BE RESTORED WITH NEW SOD TO MATCH EXISTING TURF SPECIES. DISTURBED NATIVE AREAS WHICH ARE TO REMAIN SHALL BE OVER SEEDED AND RESTORED WITH SPECIFIED SEED MIX.
- CONTRACTOR SHALL OVER SEED ALL MAINTENANCE OR SERVICE ACCESS BENCHES AND ROADS WITH SPECIFIED SEED MIX UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL SEEDED SLOPES EXCEEDING 25% IN GRADE (4:1) SHALL RECEIVE EROSION CONTROL BLANKETS. PRIOR TO INSTALLATION, NOTIFY OWNER'S REPRESENTATIVE FOR APPROVAL OF LOCATION AND ANY ADDITIONAL COST IF A CHANGE ORDER IS NECESSARY.
- WHEN COMPLETE, ALL GRADES SHALL BE WITHIN +/- 1/8" OF FINISHED GRADES AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL PRUNE ALL DEAD BRANCHES FROM ALL EXISTING TREES TO REMAIN WITHIN THE LIMIT OF WORK SHOWN ON THE LANDSCAPE PLANS. CONTRACTOR SHALL ALSO REMOVE ANY DEAD SHRUBS WITHIN THE SAME LIMITS.
- PER TOWN OF CASTLE ROCK SHRUBS ARE TO BE PLANTED IN SPACE AND QUANTITIES TO PROVIDE SEVENTY FIVE (75) PERCENT GROUND COVERAGE IN FIVE GROWING SEASONS.
- PER TOWN OF CASTLE ROCK PERENNIALS ARE TO BE PLANTED IN SPACING AND QUANTITIES SUCH THAT THEY WILL PROVIDE SEVENTY FIVE (75) PERCENT GROUND COVERAGE IN THREE YEARS.

CASTLE ROCK SPECIFIC LANDSCAPE NOTES

- FINAL LANDSCAPE AREA, COVERAGE AND PLANT QUANTITIES, SHALL MEET OR EXCEED QUANTITIES REPRESENTED IN THIS DRAWING AND SHALL CONFORM TO SUBSEQUENT SUBMITTAL REQUIREMENTS.
- LOCATION OF PLANT MATERIALS ARE APPROXIMATED AND MAY CHANGE SLIGHTLY DUE TO UNFORESEEN FIELD CONSTRAINTS.
- ALL PLANTS ARE TO BE PROPERLY HYDROZONED PER TOWN OF CASTLE ROCK PLANT LIST.
- DISTANCE OF TREES TO WET UTILITY LINES SHOULD BE A MINIMUM OF 10 FEET.
- DESIGN MUST ACCOMMODATE THE WATERING RESTRICTIONS AS OUTLINED IN THE TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN (WUMP).
- IF ANY TRANSFORMERS, GROUND-MOUNTED HVAC UNITS, UTILITY PEDESTALS, OR SIMILAR FEATURES EXISTING ON SITE, BUT NOT SHOWN ON THE SITE DEVELOPMENT PLAN, ADDITIONAL LANDSCAPING AND SCREENING MAY BE REQUIRED BASED UPON FIELD CONDITIONS DETERMINED DURING THE SITE INSPECTION. INSTALLATION WILL BE REQUIRED PRIOR TO THE FINAL INSPECTION AND THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY, AS APPLICABLE.
- NO SOLID OBJECT EXCEEDING 30" IN HEIGHT ABOVE THE FLOWLINE ELEVATION OF THE ADJACENT STREET, INCLUDING, BUT NOT LIMITED TO BUILDING, UTILITY CABINETS, WALLS, FENCES, TREES, LANDSCAPE PLANTINGS, CUT SLOPES AND BERMS SHALL BE PLACED IN SIGHT DISTANCE TRIANGLES OR EASEMENTS AS SHOWN ON THE PLAN.
- NO TREES, LARGE SHRUBS, OR PERMANENT STRUCTURES ARE ALLOWED IN WET UTILITY AND DRAINAGE EASEMENTS.
- LANDSCAPE AND IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.
- DEAD PLANT MATERIALS SHALL BE REMOVED AND REPLACED WITH HEALTHY PLANTING MATERIALS OF COMPARABLE SIZE AND SPECIES THAT MEET THE ORIGINAL INTENT OF THE APPROVED LANDSCAPE DESIGN WITHIN FORTY-FIVE(45) DAYS OR SOONER IN THE EVENT OF A CONTAGIOUS DISEASE OR INVASIVE INSECT SPECIES. TOWN OF CASTLE ROCK IS NOT RESPONSIBLE FOR PLANT REPLACEMENTS.
- SLOPES STEEPER THAN 3:1 ARE NOT PERMITTED ON LANDSCAPE PLANS IN THE TOWN OF CASTLE ROCK.

CASTLE ROCK CONSTRUCTION NOTES:

- INSTALLING CONTRACTOR SHALL CONTACT THE TOWN OF CASTLE ROCK UTILITIES DEPARTMENT AT 720.733.6017 TO SCHEDULE A PRE-CONSTRUCTION MEETING BEFORE BEGINNING THE INSTALLATION OF THE LANDSCAPING.
- LANDSCAPE AND IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.
- INSTALLING CONTRACTOR IS TO PROVIDE SUBMITTAL FROM SUPPLIERS FOR SOD AND NATIVE SEED MIX AT TIME OF LANDSCAPE INSPECTION.
- SOIL INSPECTION IS REQUIRED BEFORE PLANT INSTALLATION AND SHOULD BE DISCUSSED AT THE PRE-CONSTRUCTION MEETING.
- SOIL AMENDMENT SHALL BE A MINIMUM OF FOUR (4) CUBIC YARDS OF ORGANIC MATTER PER ONE-THOUSAND SQUARE FEET. THIS SOIL AMENDMENT SHALL BE ROTOTILLED TO A DEPTH OF SIX (6) INCHES. CLASS I COMPOST IS REQUIRED.
- TREES, LARGE SHRUBS AND PERMANENT OBJECTS ARE NOT PERMITTED IN WATER, SANITARY AND STORM SEWER UTILITY EASEMENTS.
- ALL LANDSCAPE IS TO BE INSTALLED PER TOWN OF CASTLE ROCK PLANTING DETAILS.
- PLANT SPECIES AND LOCATION SHOULD FOLLOW THE APPROVED PLAN. IF SITE CONDITIONS OR PLANT AVAILABILITY REQUIRE CHANGES TO THE PLAN, THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE TOWN OF CASTLE ROCK AND THE OWNER'S REPRESENTATIVE.
- TOWN OF CASTLE ROCK IS NOT RESPONSIBLE FOR REPLACING LANDSCAPE OR IRRIGATION REMOVED IN UTILITY EASEMENTS DUE TO UTILITY LINE MAINTENANCE OR REPAIR (PWR 14.3.13).
- TOWN PERMIT AND TOWN APPROVED LANDSCAPE PLANS ARE REQUIRED ON SITE DURING INSTALLATION OF THE LANDSCAPE AND IRRIGATION.
- TOWN INSPECTORS WILL NOT APPROVE LANDSCAPE AND IRRIGATION ON SLOPES STEEPER THAN 3:1.
- OVERHEAD IRRIGATION IS NOT PERMITTED IN AREAS LESS THAN 10' IN WIDTH.

GRADING NOTES

- ALL AREAS SHALL BE GRADED TO ACHIEVE POSITIVE DRAINAGE. MINIMUM SLOPE ON LANDSCAPED AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE (3:1).
- MAXIMUM ALLOWED FINAL GRADES FOR LONGITUDINAL SLOPE ON WALKS AND PAVED AREAS SHALL BE 5% UNLESS OTHERWISE INDICATED ON THE PLANS.
- ALL SLOPES EQUAL TO 3:1 ARE TO BE CALLED OUT ON THE LANDSCAPE SHEETS

PLANT SCHEDULE NOTES

- ALL GRASSES WITHIN RIGHT OF WAY MUST BE PLANTED IN 5 GALLON CONTAINERS (AFFECTED SPECIES DENOTED WITH ASTERISK IN PLANT SCHEDULE). SEE PLAN FOR LOCATIONS.

PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	WATER USE	HEIGHT
AC CO	15	ACER PLATANOIDES 'COLUMNARE'	COLUMNAR NORWAY MAPLE	B & B	2" CAL	MOD	40'-50'
CA SP	15	CATALPA SPECIOSA	NORTHERN CATALPA	B & B	2" CAL	LOW	40'-50'
CE OC	5	CELTIS OCCIDENTALIS	COMMON HACKBERRY	B & B	2" CAL	LOW	40'-50'
GL SH	10	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' TM	SHADEMASTER LOCUST	B & B	2" CAL	LOW	40'-50'
GY DD	11	GYMNOCLADUS DIOICUS	KENTUCKY COFFEETREE	B & B	2" CAL	LOW	40'-50'
QU BI	10	QUERCUS BICOLOR	SWAMP WHITE OAK	B & B	2" CAL	LOW	40'-50'
QU RU	7	QUERCUS RUBRA	RED OAK	B & B	2" CAL	LOW	50'-80'
SO JA	12	SOPHORA JAPONICA	JAPANESE PAGODA TREE	B & B	2" CAL	LOW	40'-50'
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	WATER USE	HEIGHT
PI AR	5	PINUS ARISTATA	BRISTLECONE PINE	B & B	6" HEIGHT	LOW	25'-35'
PI ED	4	PINUS EDULIS	PINON PINE	B & B	6" HEIGHT	VERY LOW	25'-35'
PI FL	10	PINUS FLEXILIS	LIMBER PINE	B & B	6" HEIGHT	LOW	40'-50'
PI PO	3	PINUS PONDEROSA	PONDEROSA PINE	B & B	6" HEIGHT	LOW	50'-80'
PI ST	7	PINUS STROBIFORMIS	SOUTHWESTERN WHITE PINE	B & B	6" HEIGHT	LOW	50'-80'
ORNAMENTAL TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	WATER USE	HEIGHT
AC GR	20	ACER GINNALA	GINNALA MAPLE	B & B	2" CAL.	LOW	25'-35'
CR CR	15	CRATAEGUS CRUS-GALLI INERMIS 'CRUSADER'	CRUSADER COCKSPUR HAWTHORN	B & B	2" CAL.	LOW	15'-25'
PR AM	9	PRUNUS ARMENIACA	APRICOT	B & B	2" CAL.	LOW	15'-25'
PR SH	7	PRUNUS VIRGINIANA 'SHUBERT'	CANADA RED CHERRY	B & B	2" CAL.	LOW	25'-35'
QU GA	2	QUERCUS GAMBELII	GAMBEL OAK	B & B	2" CAL.	VERY LOW	15'-25'
DECIDUOUS SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	WATER USE	HEIGHT
AM AL	42	AMELANCHIER ALNIFOLIA	SASKATOON SERVICEBERRY	CONT.	#5	LOW	13'-15'
AM NA	95	AMORPHA NANA	DWARF LEADPLANT	CONT.	#5	VERY LOW	1'-2'
AT CA	37	ATRIPLEX CANESCENS	FOUR WING SALTBUSH	CONT.	#5	VERY LOW	7'-8'
BE CP	66	BERBERIS THUNBERGII 'CRIMSON PYGMY'	CRIMSON PYGMY BARBERRY	CONT.	#5	LOW	1'-2'
CA DK	21	CARYOPTERIS X CLANDONENSIS 'DARK KNIGHT'	DARK KNIGHT BLUEBEARD	CONT.	#5	LOW	5'-6'
CH MI	48	CHAMAEBATIARIA MILLEFOLIUM	DESERT SWEET	CONT.	#5	VERY LOW	5'-6'
CH DB	45	CHRYSOETHAMNUS NAUSEOSUS 'DWARF BLUE'	DWARF RABBITBRUSH	CONT.	#5	VERY LOW	3'-4'
EP VI	18	EPHEDRA VIRIDIS	MORMON TEA	CONT.	#5	VERY LOW	3'-4'
HI RH	6	HIPPOPHAE RHAMNOIDES	SEA BUCKHORN	CONT.	#5	VERY LOW	9'-12'
HO DU	14	HOLODISCUS DUMOSUS	ROCK SPIREA	CONT.	#5	VERY LOW	7'-8'
JA AM	22	JAMESIA AMERICANA	WAXFLOWER	CONT.	#5	LOW	5'-6'
LO CD	27	LONICERA X XYLOSTEOIDES 'CLAVEY'S DWARF'	CLAVEY'S DWARF HONEYSUCKLE	CONT.	#5	LOW	7'-8'
PE LS	95	PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' TM	LITTLE SPIRE RUSSIAN SAGE	CONT.	#5	VERY LOW	1'-2'
PH DG	60	PHYDOCARPUS OPULIFOLIUS 'DART'S GOLD'	DART'S GOLD NINEBARK	CONT.	#5	LOW	5'-6'
PR PB	51	PRUNUS BESSEYI PAWNEE BUTTES	CREEPING WESTERN SAND CHERRY	CONT.	#5	LOW	1'-2'
PR TO	26	PRUNUS TOMENTOSA	NANKING CHERRY	CONT.	#5	LOW	9'-12'
RH AU	51	RHUS TRILOBATA 'AUTUMN AMBER'	AUTUMN AMBER SUMAC	CONT.	#5	VERY LOW	1'-2'
RI AU	40	RIBES AUREUM	GOLDEN CURRANT	CONT.	#5	LOW	5'-6'
RO HA	63	ROSA X HARISONII	HARISON'S YELLOW ROSE	CONT.	#5	VERY LOW	5'-6'
SH CA	3	SHEPHERDIA CANADENSIS	RUSSETT BUFFALOBERRY	CONT.	#5	VERY LOW	3'-4'
SP SN	12	SPIRAEA NIPPONICA 'SNOWMOUND'	SNOWMOUND SPIREA	CONT.	#5	LOW	5'-6'
SY AL	16	SYMPHORICARPOS ALBUS	COMMON WHITE SNOWBERRY	CONT.	#5	LOW	3'-4'
SY HA	57	SYMPHORICARPOS X CHENAULTII 'HANCOCK'	HANCOCK CORALBERRY	CONT.	#5	LOW	1'-2'
SY MK	78	SYRINGA PATULA 'MISS KIM'	MISS KIM LILAC	CONT.	#5	LOW	5'-6'
SY MI	2	SYRINGA X PRESTONIAE 'MINUET'	LATE CANADIAN LILAC	CONT.	#5	LOW	5'-6'
EVERGREEN SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	WATER USE	HEIGHT
AR CH	29	ARCTOSTAPHYLOS X COLORADOENSIS 'CHIEFTAIN'	CHIEFTAIN MANZANITA	CONT.	#5	LOW	1'-2'
JU BP	7	JUNIPERUS CHINENSIS 'BLUE POINT'	BLUE POINT JUNIPER	CONT.	#5	VERY LOW	13'-15'
JU SP	56	JUNIPERUS CHINENSIS 'SPARTAN'	SPARTAN JUNIPER	CONT.	#5	VERY LOW	13'-15'
JU BH	54	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR CREEPING JUNIPER	CONT.	#5	LOW	1'-2'
JU BC	45	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP JUNIPER	CONT.	#5	LOW	1'-2'
JU CC	16	JUNIPERUS SABINA 'CALGARY CARPET' TM	CALGARY CARPET JUNIPER	CONT.	#5	LOW	1'-2'
JU WB	48	JUNIPERUS SCOPULORUM 'WICHITA BLUE'	WICHITA BLUE JUNIPER	CONT.	#5	VERY LOW	13'-15'
JU GG	54	JUNIPERUS SCOPULORUM 'GRAY GLEAM'	GRAY GLEAM JUNIPER	CONT.	#5	VERY LOW	13'-15'
JU SK	56	JUNIPERUS VIRGINIANA 'SKYROCKET'	SKYROCKET EASTERN REDCEDAR	CONT.	#5	VERY LOW	1'-2'
TH HO	22	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	CONT.	#5	MOD	9'-12'
ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	WATER USE	HEIGHT
AN WI	142	ANDROPOGON GERARDII 'WINDWALKER'	WINDWALKER BIG BLUE STEM	CONT.	#1*	VERY LOW	5'-6'
BO BA	368	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLOND AMBITION BLUE GRAMA GRASS	CONT.	#1*	VERY LOW	1'-2'
DE TU	180	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS	CONT.	#1*	LOW	3'-4'
FE EB	35	FESTUCA GLAUCA 'ELIJAH BLUE'	BLUE FESCUE	CONT.	#1	LOW	1'-2'
NA TE	51	NASSELLA TENUISSIMA	MEXICAN FEATHER GRASS	CONT.	#1	LOW	1'-2'
OR HY	27	ORYZOPSIS HYMENOIDES	INDIAN RICE GRASS	CONT.	#1	VERY LOW	1'-2'
PA VI	245	PANICUM VIRGATUM	SWITCHGRASS	CONT.	#1	LOW	3'-4'
PE HA	37	PENNISETUM ALOPECUROIDES 'HAMELN'	HAMELN FOUNTAIN GRASS	CONT.	#1	LOW	1'-2'
SC SC	67	SCHIZACHYRIUM SCOPARIUM 'BLAZE'	BLAZE LITTLE BLUESTEM	CONT.	#1	LOW	3'-4'
SO NU	335	SORGHASTRUM NUTANS	INDIAN GRASS	CONT.	#1*	VERY LOW	5'-6'
SP HE	84	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	CONT.	#1	LOW	3'-4'
PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	WATER USE	HEIGHT
AC MO	154	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW	CONT.	#1	VERY LOW	1'-2'
AG RU	65	AGASTACHE RUPESTRIS	THREADLEAF HYSSOP	CONT.	#1	LOW	3'-4'
AS LA	156	ASTER LAEVIS	SMOOTH ASTER	CONT.	#1	LOW	3'-4'
EC PU	187	ECHINACEA PURPUREA	PURPLE CONEFLOWER	CONT.	#1	LOW	3'-4'
GA AR	62	GAILLARDIA ARISTATA	NATIVE BLANKET FLOWER	CONT.	#1	LOW	1'-2'
LI PU	34	LIATRIS PUNCATA	DOTTED GAYFEATHER	CONT.	#1	LOW	1'-2'
PA QU	84	PARTHENOCISSUS QUINQUEFOLIA ENGELMANNII	ENGELMANN VIRGINIA CREEPER	CONT.	#1	LOW	
SE AJ	159	SEDUM X 'AUTUMN JOY'	AUTUMN JOY SEDUM	CONT.	#1	VERY LOW	1'-2'
ST PI	62	STANLEYA PINNATA	PRINCE'S PLUME	CONT.	#1	LOW	3'-4'
TH PS	80	THYMUS PSEUDOLANUGINOSUS	WOOLLY THYME	CONT.	#1	LOW	1'-2'



DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
LANDSCAPE
NOTES

CHECKED BY JARED CARLON, PLA 942

PROJECT #: 210431
SHEET NUMBER

COMPOSITE LANDSCAPE WATER USE RATING CHART

LANDSCAPE ZONE	LWU RATING RANGE
VERY LOW WATER USE	0.0 to 1.5
LOW WATER USE	+1.5 to 3.0
MODERATE WATER USE	+3.0 to 4.5
HIGH WATER USE	+4.5

NOTES:THE LWUR RATING RANGE IS BASED ON POST ESTABLISHMENT WATERING SCHEDULES.

IRRIGATION ZONE	PLANT NAME (COMMON)	APPLICATION RATE (INCHES/MONTH)		LANDSCAPE ZONE	% OF IRRIGATED AREA (TA)	IA (IRRIGATED AREA IN SQ FT FOR EACH ZONE)	LWUR (LANDSCAPE WATER USE RATING)	TOTAL AREA (TA)	CLWUR (LWUR X IA)/TA
SPRAY	IRRIGATED TURF (FESCUE TURF SEED MIX)	3.0	in./mo.	MODERATE	5%	4,556	3.0	123,145	0.11
DRIP	SHRUB BED	2.0	in./mo.	LOW	74%	92,792	2.0	123,145	1.51
SPRAY ROTORS	IRRIGATED NATIVE SEED	2.5	in./mo.	LOW	21%	25,797	2.5	123,145	0.52
TOTALS					100	123,145		123,145	2.14
							TOTAL OF THE CLWUR		2.14

STREETSCAPE REQUIREMENT TABLE

STREET	LINEAR FEET	TREES REQUIRED (1 TREE / 40 LF)	TREES PROVIDED	SHRUBS REQUIRED (4 SHRUBS / 1 REQUIRED TREE)	SHRUBS PROVIDED
MITCHELL ST.	617 LF	15	0	64	382

NOTES:

- DUE TO UTILITY/EASEMENT CONFLICTS AND A FOUR FOOT RIGHT OF WAY WIDTH, TREE PLACEMENT ALONG MITCHELL STREET HAS BEEN OMITTED (TCV22-0077).
- GRASSES HAVE BEEN INCLUDED AT A RATE OF 1 (5 GAL CONT.) GRASS PER 1 SHRUB

LANDSCAPE AREA TOTALS

LANDSCAPE TYPE	SQUARE FOOTAGE	PERCENTAGE
IRRIGATED TURF	4,556	3.5%
IRRIGATED NATIVE SEED	25,797	19.6%
RIPARIAN SEED MIX	8,227	6.3%
IRRIGATED BED	92,792	70.6%
TOTAL AREA LANDSCAPE	131,372	100.0%

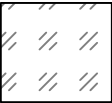
MULTI-FAMILY LANDSCAPE SITE INVENTORY

GROSS SITE AREA (AREA IN SQ.FT.)	LANDSCAPE AREA (AREA IN SQ.FT.)	TURFGRASS (FESCUE SEED MIX) (AREA IN SQ. FT.)	NONLIVING ORNAMENTAL (AREA IN SQ. FT.)	NUMBER OF TREES REQUIRED	NUMBER OF TREES PROVIDED	NUMBER OF SHRUBS REQUIRED	NUMBER OF SHRUBS PROVIDED	SOIL PREP AMOUNT (IN CUBIC YRDS PER 1000 SQ.FT.)	SEPARATE IRRIGATION SERVICE CONNECTIONS
393,281	131,372	4,556	0	157 (85 LARGE DECIDUOUS CANOPY)	167	314	2957	4 CU.YDS PER 1000 SQ.FT.	YES
PARKING LOT (AREA IN SQ.FT.)	PARKING LOT LANDSCAPE AREA (SQ.FT.)	NUMBER OF PARKING SPACES	NONLIVING ORNAMENTAL (AREA IN SQ. FT.)	NUMBER OF INTERIOR LANDSCAPE ISLANDS	MINIMUM WIDTH OF INTERIOR LANDSCAPE ISLANDS	NUMBER OF TREES REQUIRED	NUMBER OF TREES PROVIDED	NUMBER OF SHRUBS REQUIRED	NUMBER OF SHRUBS PROVIDED
30,580	3,058	218	0	16	8'	6	17	12	82

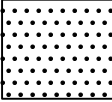
NOTES:

- GROSS AREA MINIMUM LANDSCAPE AREA IS 20%. PARKING AREA MINIMUM LANDSCAPE AREA IS 10%..
- REQUIRED TREES = 2 TREES PER 1,000 SF OF REQUIRED LANDSCAPE AREA.
- REQUIRED SHRUBS = 4 SHRUBS PER 1,000 SF OF REQUIRED LANDSCAPE AREA.
- PROPOSED PARKING LOT PLANT COUNTS ARE INCLUDED WITHIN THE PROPOSED SITE LANDSCAPE PLANT TOTALS.
- 50% OF SITE TREES SHALL BE LARGE DECIDUOUS CANOPY TREES.
- 75% OF SITE SHALL BE COVERED BY SHRUBS WITHIN FIVE GROWING SEASONS
- 75% OF SITE SHALL BE COVERED BY PERENNIALS WITHIN THREE YEARS

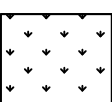
TURF AND SEED MIXES



NATIVE RIPARIAN MIX - NON-IRRIGATED		
SPECIES	% OF MIX	PLS/ACRE
NEBRASKA SEDGE	6.11	1.000
CLUSTERED FIELD SEDGE	3.05	0.500
THICKSPIKE WHEATGRASS	12.22	2.000
BALTIC RUSH	0.76	0.125
TORREY'S RUSH	0.76	0.125
SWITCHGRASS	18.32	3.000
WESTERN WHEATGRASS	36.64	6.000
THREESQUARE BULRUSH	12.22	2.000
SHOWY MILKWEED	6.11	1.000
CANADA GOLDENROD	0.76	0.125
BLUE VERVAIN	3.05	0.500
APPLY AT A RATE OF 16.375 PLS LBS. PER ACRE, DOUBLE FOR BROADCAST		



FESCUE TURF SEED MIX (LOW 2 - HYDROZONE)		
ARKANSAS VALLEY SEED		
SPECIES	% OF MIX	PLS/ ACRE
SR3000 HARD FESCUE	30	6
CHEWINGS FESCUE	30	6
CREEPING RED FESCUE	25	5
SR4000 PERENNIAL RYEGRASS	15	3
APPLY AT A RATE OF 20 PLS LBS. PER ACRE, DOUBLE FOR BROADCAST		



DRYLAND GRASS SEED MIX (LOW 2 - HYDROZONE)			
SPECIES	VARIETY	% OF MIX	PLS/ ACRE
BIG BLUESTEM	KAW	10	1.1
YELLOW INDIANGRASS	CHEYENNE	10	1
SWITCHGRASS	BLACKWELL	10	0.4
SIDEOATS GRAMA	VAUGHN	10	0.9
WESTERN WHEATGRASS	ARRIBA	10	1.6
BLUE GRAMA	HACHITA	10	0.3
THICKSPIKE WHEATGRASS	CRITANA	10	1
PRAIRIE SANDREED	GOSHEN	10	0.7
GREEN NEEDLEGRASS	LODORM	10	1
SLENDER WHEATGRASS	PRYOR	5	0.6
STREAMBANK WHEATGRASS	SODAR	5	0.6
APPLY AT A RATE OF 9.2 PLS LBS. PER ACRE DRILLED			

AMENITY SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER	SIZE / DIMENSION	PRODUCT NAME	COLOR/FINISH	NOTES
1	BENCH	ANOVA	33" H X 25" W X 73" L	AL1980T	THERMORY SLATS, TEXTURED PEWTER FRAME	MOUNT PER MANUFACTURER SPECIFICATIONS
2	PICNIC TABLE	ANOVA	29" H X 64" W X 72" L	RCPWT63A	MAHOGANY PLASTIC SLATS, TEXTURED BLACK FRAME	MOUNT PER MANUFACTURER SPECIFICATIONS
3	BISTRO TABLE	ANOVA	31" H X 41" W X 42" L	T2267T	THERMORY SLATS, TEXTURED PEWTER FRAME	MOUNT PER MANUFACTURER SPECIFICATIONS
4	CHAIR	ANOVA	33" H X 20" W X 24" D	T2235T	THERMORY SLATS, TEXTURED PEWTER FRAME	MOUNT PER MANUFACTURER SPECIFICATIONS
5	TRASH RECEPTACLE	ANOVA	47" H X 26" W X 22" D	AE2645RCT	TEXTURED PEWTER LID, TEXTURED BLACK FRAME	MOUNT PER MANUFACTURER SPECIFICATIONS
6	PET PICK-UP STATION	DOG-ON-IT PARKS	73" H X 18" W X 10" D	7408R	GREEN POWDER-COATED ALUMINUM	MOUNT PER MANUFACTURER SPECIFICATIONS
7	BIKE RACK	ANOVA	33" H X 5" W X 13" L	AL19BR2	TEXTURED PEWTER	MOUNT PER MANUFACTURER SPECIFICATIONS

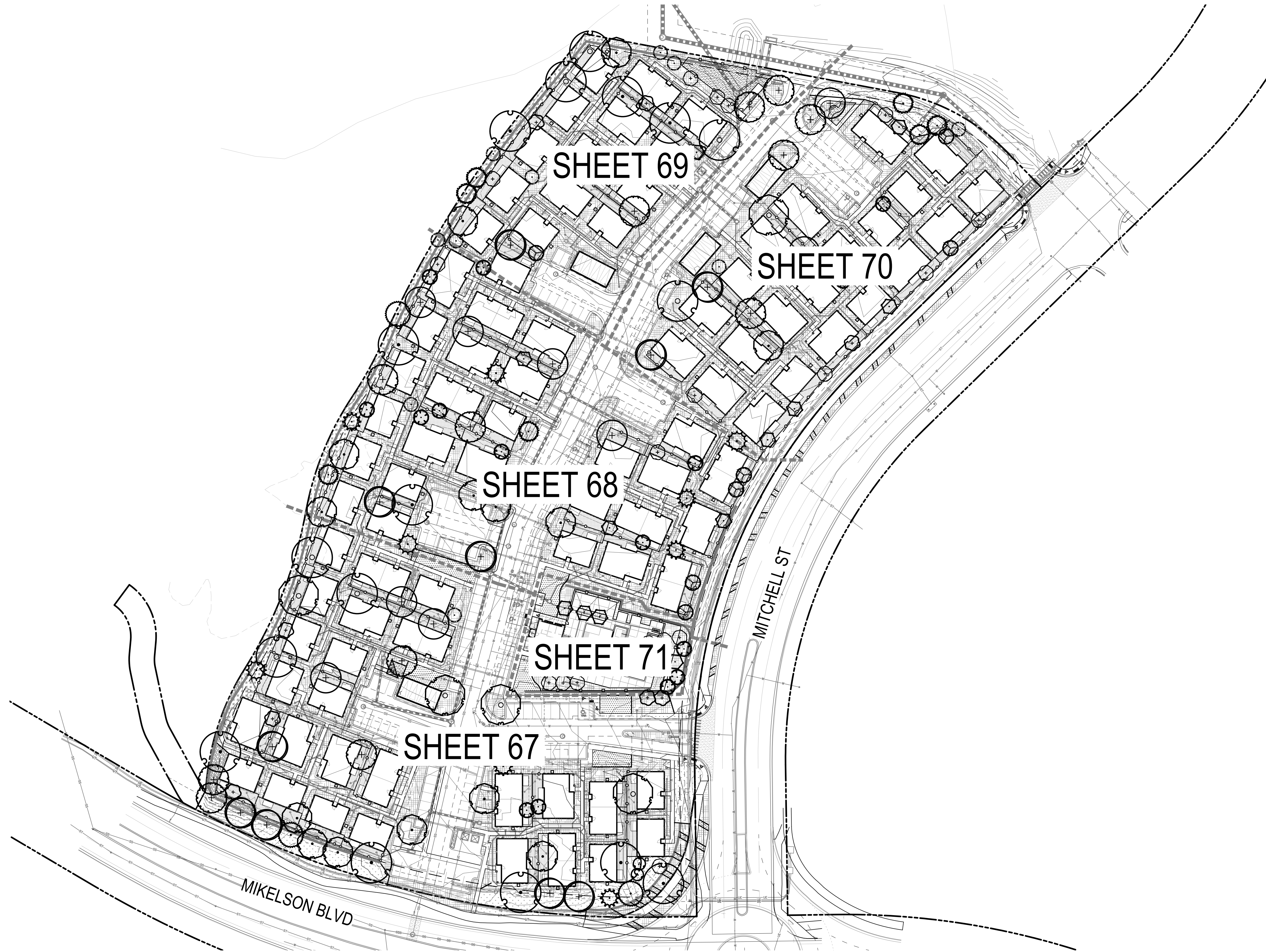
MATERIAL SCHEDULE (CONTRACTOR TO SUBMIT SAMPLES FOR ALL ITEMS IN MATERIAL SCHEDULE FOR OWNER / ARCHITECT REVIEW AND APPROVAL.)

ITEM	DESCRIPTION	MANUFACTURER	SIZE / DIMENSIONS	PRODUCT NAME	COLOR / FINISH	NOTES
A	CONCRETE FLATWORK	N/A	SEE PLANS FOR WALK WIDTHS	STANDARD CONCRETE FLATWORK	STANDARD GRAY, BROOM FINISH	INSTALL PER MANUFACTURER'S SPECIFICATIONS
B	ENHANCED PAVING (POOL DECK)	COLORADO HARDSCAPES OR APPROVED EQUAL	THICKNESS PER GEOTECH	SANDSCAPE TEXTURED COLORED CONCRETE	SANDY PEBBLE COLOR, SANDSCAPE FINISH	APPROVED EQUAL MAY BE USED.
C	COBBLE	PIONEER SAND	6" MINIMUM DEPTH WITH LANDSCAPE FABRIC	4"-6" RIVER COBBLE	RIVER COBBLE	INSTALL PER MANUFACTURER'S SPECIFICATIONS
D	SITE ROCK MULCH	PIONEER SAND	3" DEPTH, ¾ " ROCK	¾" ANGULAR ROCK	LOCAL RIVER ROCK	INSTALL PER MANUFACTURER'S SPECIFICATIONS
E	CRUSHER FINES	PIONEER SAND	4" DEPTH, ¾" MINUS	GREY BREEZE	GREY	INSTALL PER MANUFACTURER'S SPECIFICATIONS
F	BACKYARD ROCK MULCH	PIONEER SAND	3" DEPTH, 1½" ROCK	1½" LOCAL RIVER ROCK	LOCAL RIVER ROCK	INSTALL PER MANUFACTURER'S SPECIFICATIONS
G	POOL COPING	COLORADO HARDSCAPES OR APPROVED EQUAL	SEE DETAILS FOR WIDTH, THICKNESS PER POOL CONTRACTOR	BROMANITE TEXTURED CONCRETE	WORN LIMESTONE INTEGRAL COLOR, COLORADO SANDSTONE PATTERN	APPROVED EQUAL MAY BE USED. MIXED COLOR FOR MANUFACTURER'S SPECIFICATIONS
H	POOL PLASTER	CL INDUSTRIES	THICKNESS PER POOL CONTRACTOR	HYDRAZZO	MEDITERRANEAN BLUE	REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. OR APPROVED EQUAL.
I	POOL TILE	NATIONAL POOL TILE	2" X 4"	RUSHMORE RUS-BLUE2X4	BLUE QUARTZ 2" X 4"	REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. OR APPROVED EQUAL.
J	STONE VENEER	ENVIRONMENTAL STONENETWORKS	SEE DETAILS FOR DIMENSIONS	CULTURED STONE VENEER TO MATCH ARCH.	NANTUCKET COBBLESTONE	REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. OR APPROVED EQUAL.
K	CONCRETE CAP	DAVIS COLOR	SEE DETAILS FOR DIMENSIONS	INTEGRALLY COLORED PRECAST CONCRETE	PEBBLE 641 COLOR, SMOOTH FINISH	APPROVED EQUAL MAY BE USED. MIXED COLOR FOR MANUFACTURER'S SPECIFICATIONS
L	STUCCO	LA HABRA	SEE DETAILS LOCATIONS	ELITE WALL STUCCO SYSTEM	SILVERADO 820 (48) BASE 200 COLOR, ELASTOMETRIC COLOR COAT	APPROVED EQUAL MAY BE USED. MIXED COLOR FOR MANUFACTURER'S SPECIFICATIONS
M	POLISHED CONCRETE COUNTER TOP	COLORADO CONCRETE COUNTER TOPS, INC	2" THICK	COUNTER TOP	DOVE GRAY	REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. OR APPROVED EQUAL.
N	BUILT-IN GAS GRILL	AMERICAN OUTDOOR GRILLS	32" WIDTH, 34" HEIGHT	24NBL	STAINLESS STEEL	REFERENCE GRILL - POOL DECK DETAIL
O	SPILL FEATURE	BOBE WATER & FIRE FEATURES	48" WIDTH	PF-48	STAINLESS STEEL	REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. OR APPROVED EQUAL.
P	ARTIFICIAL TURF AT DOG PARK	FOREVER LAWN	REFER TO PLANS	K9GRASS CLASSIC PLUS	SUMMER GREEN	REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. OR APPROVED EQUAL.

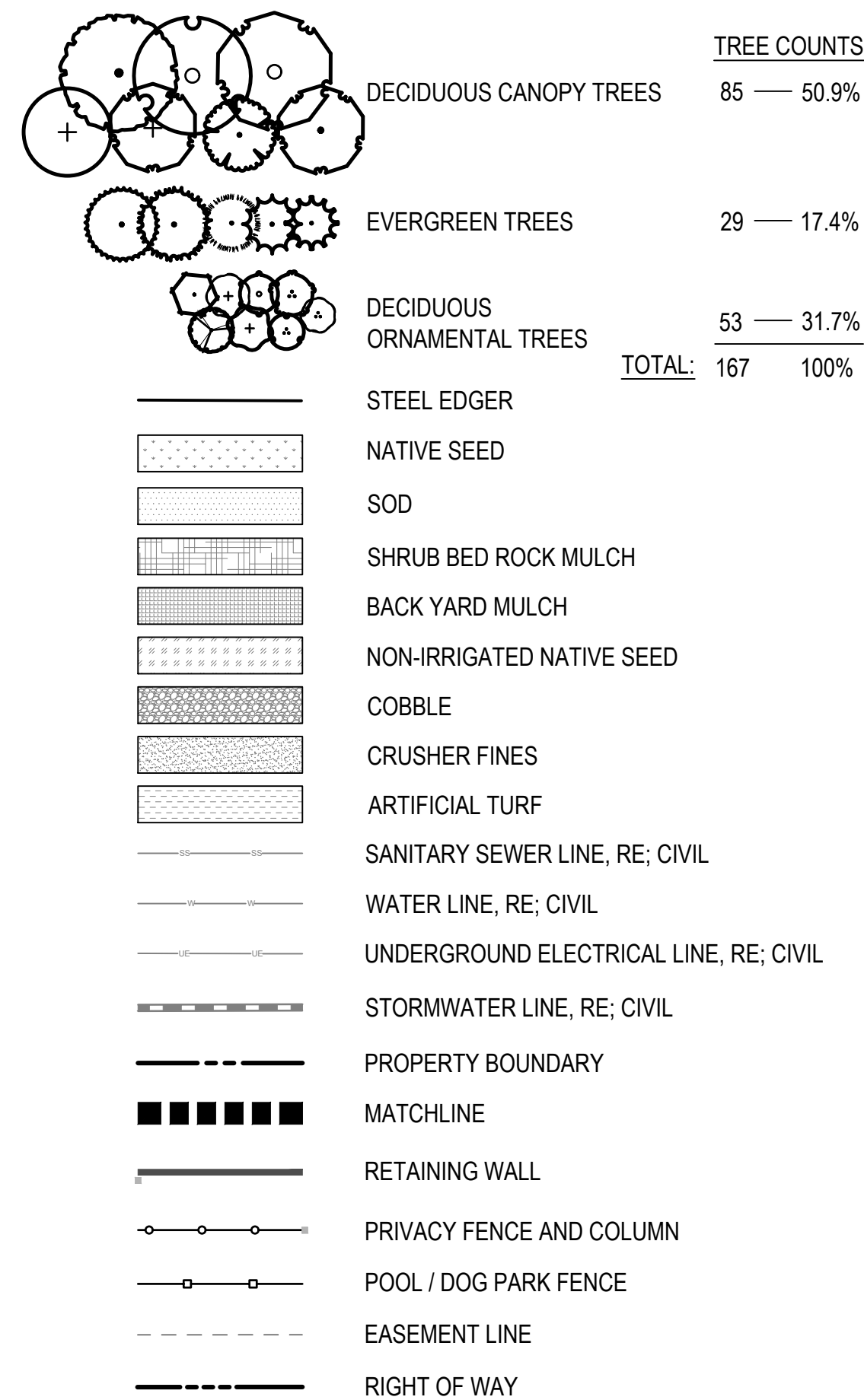


ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

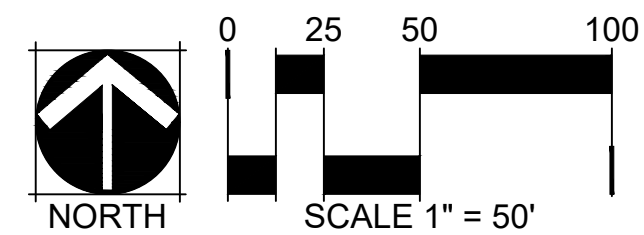
AFV PLAN CDDWG LAYOUT: 9 OVERALL



LEGEND



NORRIS DESIGN
Planning | Landscape Architecture | Branding



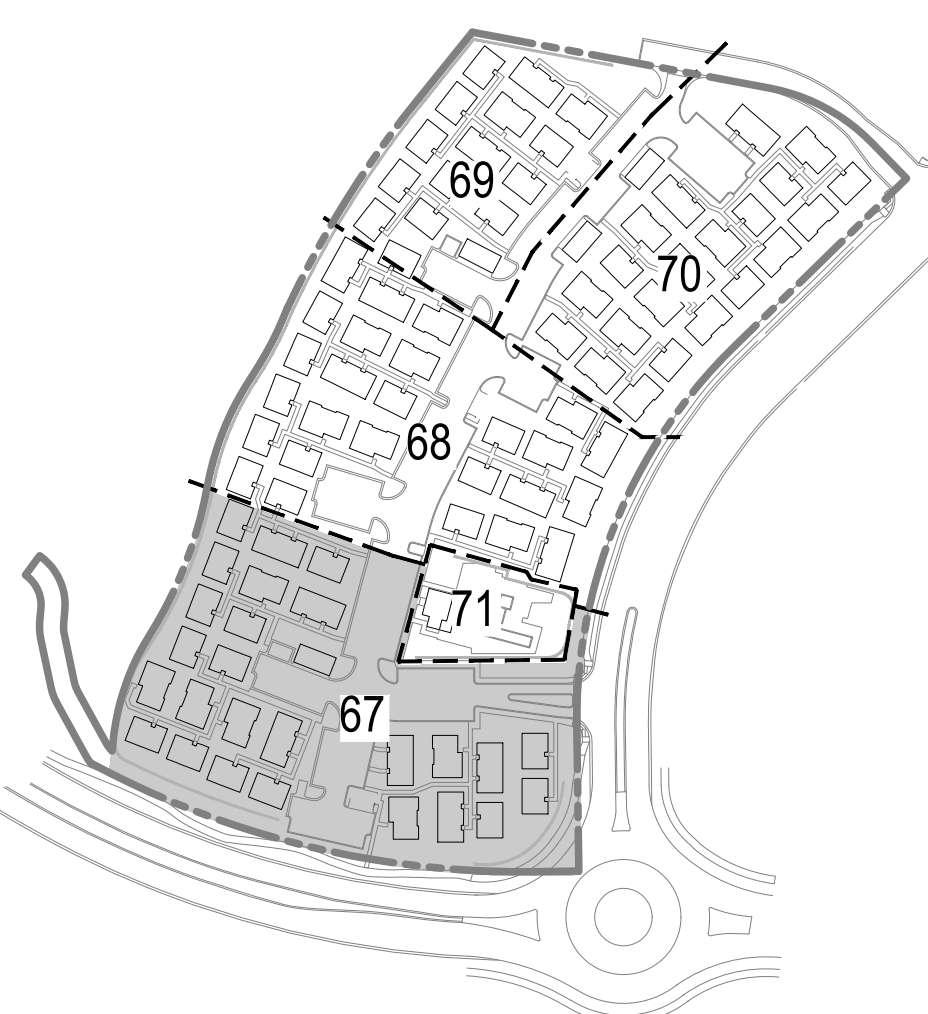
CHECKED BY JARED CARLON, PLA 942

 Know what's below. Call before you dig.	DESIGNED BY: JR, RN CHECKED BY: JR, CM DRAWN BY: JR, RN	ISSUE DATE: 02-24-2023	 1120 Lincoln Street, Suite 1000 Denver, Colorado 80203 P: 303.623.6300 F: 303.623.6311 HarrisKocherSmith.com		AVILLA FOUNDERS VILLAGE OVERALL LANDSCAPE PLAN	PROJECT #: 210431							
		<table><tr><th>DATE</th><th>REVISION COMMENTS</th></tr><tr><td>10-31-2022</td><td>PER TOWN OF CASTLE ROCK COMMENTS</td></tr><tr><td>02-24-2023</td><td>PER TOWN OF CASTLE ROCK COMMENTS</td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>				DATE	REVISION COMMENTS	10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS	02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS		
DATE	REVISION COMMENTS												
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS												
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS												
						66 OF 82							

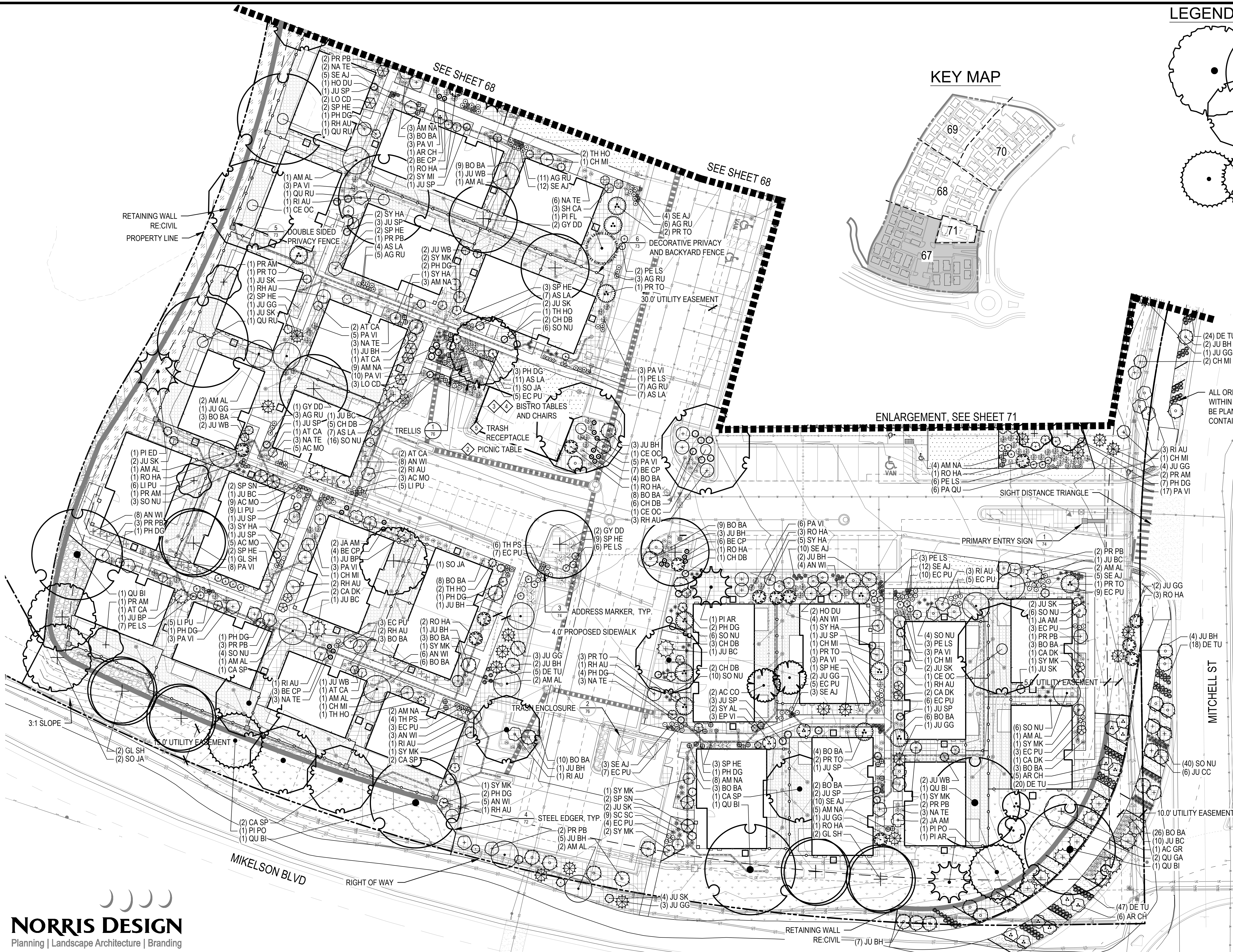
LEGEND

- DECIDUOUS CANOPY TREES, RE: SHEET 72- DETAIL 1
- EVERGREEN TREES, RE: SHEET 72- DETAIL 1
- DECIDUOUS ORNAMENTAL TREES, RE: SHEET 72- DETAIL 1
- EVERGREEN SHRUBS, RE: SHEET 72- DETAIL 2
- DECIDUOUS SHRUBS, RE: SHEET 72- DETAIL 2
- ORNAMENTAL GRASS PERENNIALS, RE: SHEET 72- DETAIL 3
- STEEL EDGER, RE: SHEET 72- DETAIL 4
- NATIVE SEED
- SOD
- SHRUB BED ROCK MULCH
- BACK YARD MULCH
- CRUSHER FINES
- NON-IRRIGATED NATIVE SEED
- COBBLE
- SANITARY SEWER LINE, RE: CIVIL
- WATER LINE, RE: CIVIL
- UNDERGROUND ELECTRICAL LINE, RE: CIVIL
- STORMWATER LINE, RE: CIVIL
- EASTMENT LINE, RE: CIVIL
- PROPERTY BOUNDARY / ROW
- MATCHLINE
- RETAINING WALL
- PRIVACY FENCE AND COLUMN, RE: SHEET 73, DETAILS 5 & 6
- POOL / DOG PARK FENCE, RE: SHEET 73- DETAILS 1 & 2
- ENTRY MONUMENTATION, RE: SHEET 73- DETAILS 1 & 2
- ADDRESS MARKER, RE: SHEET 74- DETAIL 3
- BENCH, RE: AMENITY SCHEDULE
- PICNIC TABLE, RE: AMENITY SCHEDULE
- BISTRO TABLE AND CHAIRS, RE: AMENITY SCHEDULE
- TRASH AND RECYCLING RECEPTACLES, RE: AMENITY SCHEDULE
- PET PICKUP STATION, RE: AMENITY SCHEDULE
- BIKE RACK, RE: AMENITY SCHEDULE

KEY MAP



ENLARGEMENT, SEE SHEET 71



NORRIS DESIGN
Planning | Landscape Architecture | Branding



DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS **HARRIS KOCHER SMITH**
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

AVILLA FOUNDERS VILLAGE
LANDSCAPE
PLAN

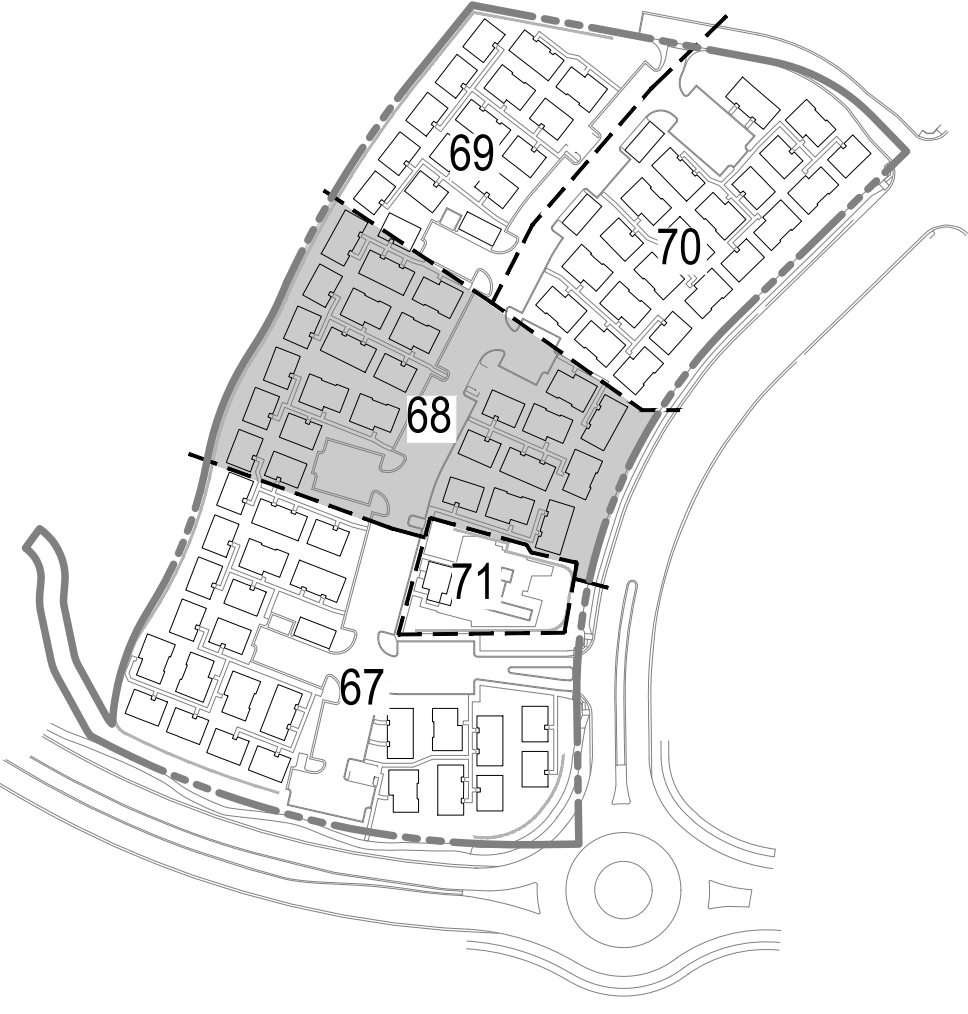
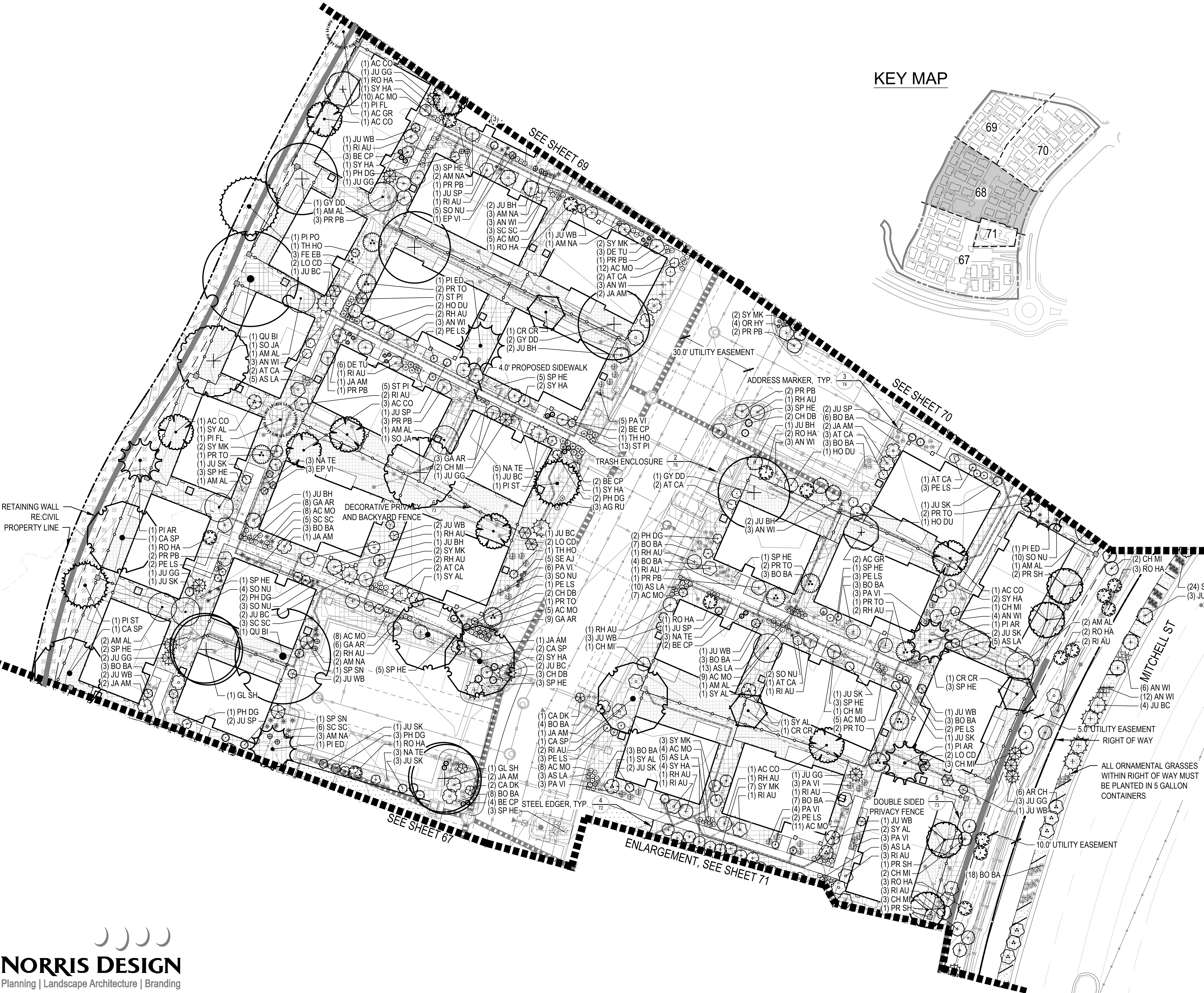
CHECKED BY JARED CARLON, PLA 942

PROJECT #: 210431
SHEET NUMBER

LEGEND

- DECIDUOUS CANOPY TREES, RE: SHEET 72- DETAIL 1
- EVERGREEN TREES, RE: SHEET 72- DETAIL 1
- DECIDUOUS ORNAMENTAL TREES, RE: SHEET 72- DETAIL 1
- EVERGREEN SHRUBS, RE: SHEET 72- DETAIL 2
- DECIDUOUS SHRUBS, RE: SHEET 72- DETAIL 2
- ORNAMENTAL GRASS
- PERENNIALS, RE: SHEET 72- DETAIL 3
- STEEL EDGER, RE: SHEET 72- DETAIL 4
- NATIVE SEED
- SOD
- SHRUB BED ROCK MULCH
- BACK YARD MULCH
- CRUSHER FINES
- NON-IRRIGATED NATIVE SEED
- COBBLE
- SANITARY SEWER LINE, RE: CIVIL
- WATER LINE, RE: CIVIL
- UNDERGROUND ELECTRICAL LINE, RE: CIVIL
- STORMWATER LINE, RE: CIVIL
- EASTMENT LINE, RE: CIVIL
- PROPERTY BOUNDARY / ROW
- MATCHLINE
- RETAINING WALL
- PRIVACY FENCE AND COLUMN, RE: SHEET 73, DETAILS 5 & 6
- POOL / DOG PARK FENCE, RE: SHEET 73- DETAILS 1 & 2
- ENTRY MONUMENTATION, RE: SHEET 73- DETAILS 1 & 2
- ADDRESS MARKER, RE: SHEET 74- DETAIL 3
- BENCH, RE: AMENITY SCHEDULE
- PICNIC TABLE, RE: AMENITY SCHEDULE
- BISTRO TABLE AND CHAIRS, RE: AMENITY SCHEDULE
- TRASH AND RECYCLING RECEPTACLES, RE: AMENITY SCHEDULE
- PET PICKUP STATION, RE: AMENITY SCHEDULE
- BIKE RACK, RE: AMENITY SCHEDULE

KEY MAP



NORRIS DESIGN
Planning | Landscape Architecture | Branding



DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

AVILLA FOUNDERS VILLAGE
LANDSCAPE
PLAN

CHECKED BY JARED CARLON, PLA 942

PROJECT #: 210431
SHEET NUMBER
68 OF 82

NORRIS DESIGN
Planning | Landscape Architecture | Branding



Know what's below.
Call before you dig.

DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS



1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

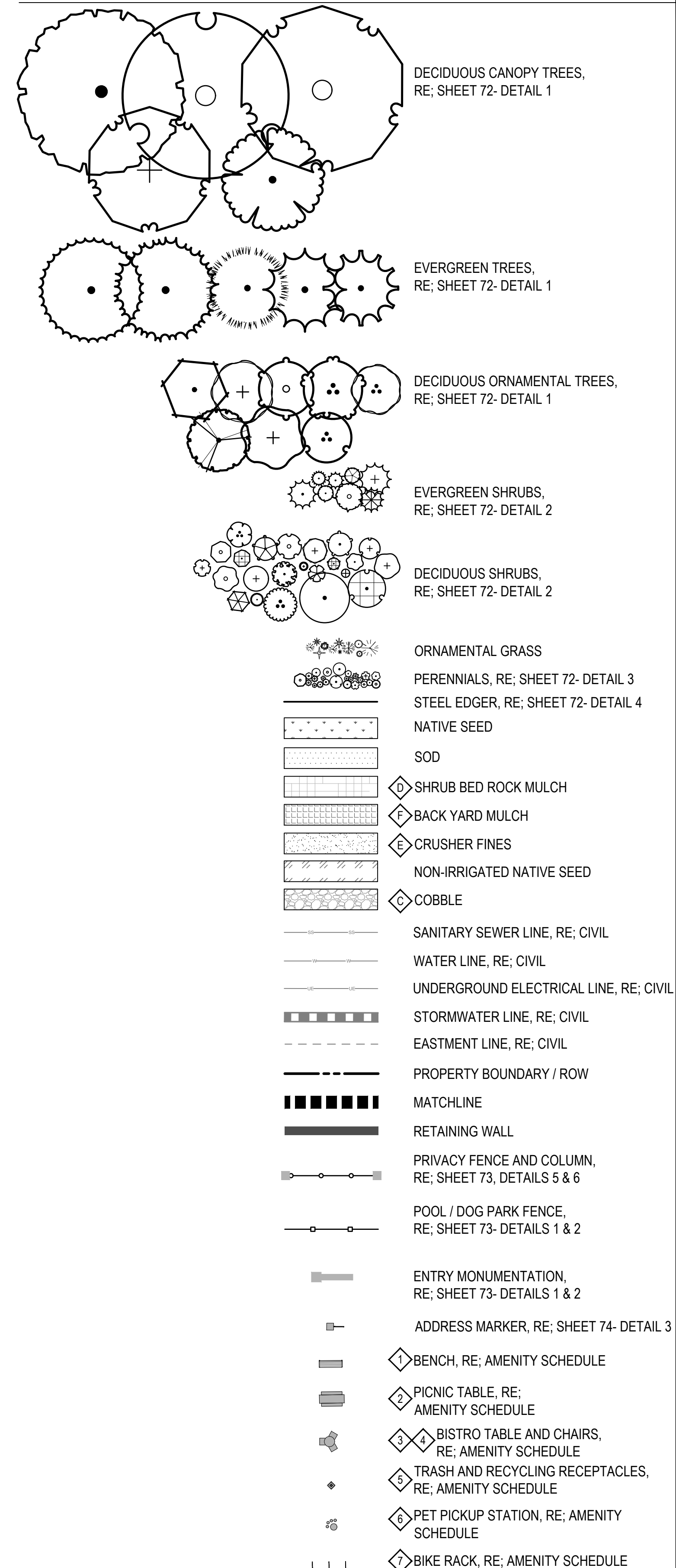
AVILLA FOUNDERS VILLAGE
LANDSCAPE
PLAN

CHECKED BY JARED CARLON, PLA 942

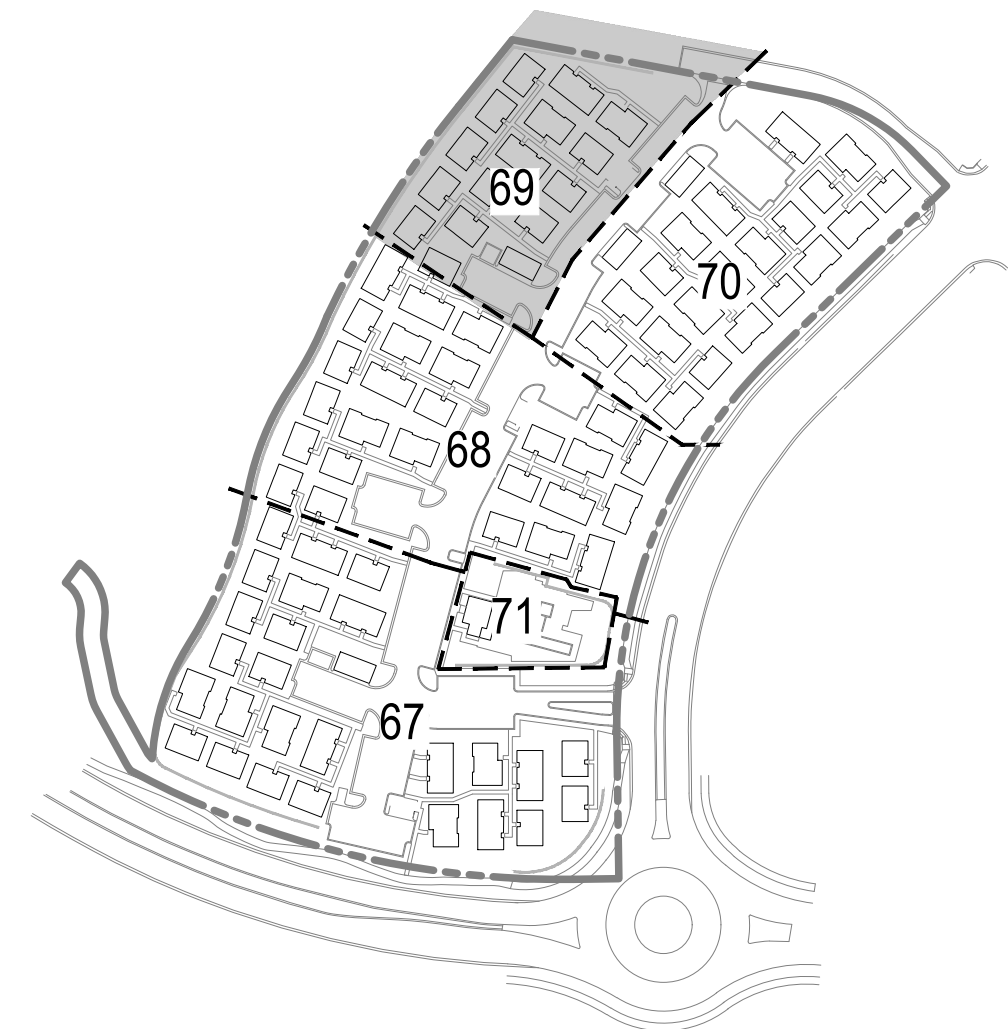
PROJECT #: 210431
SHEET NUMBER

69 OF 82

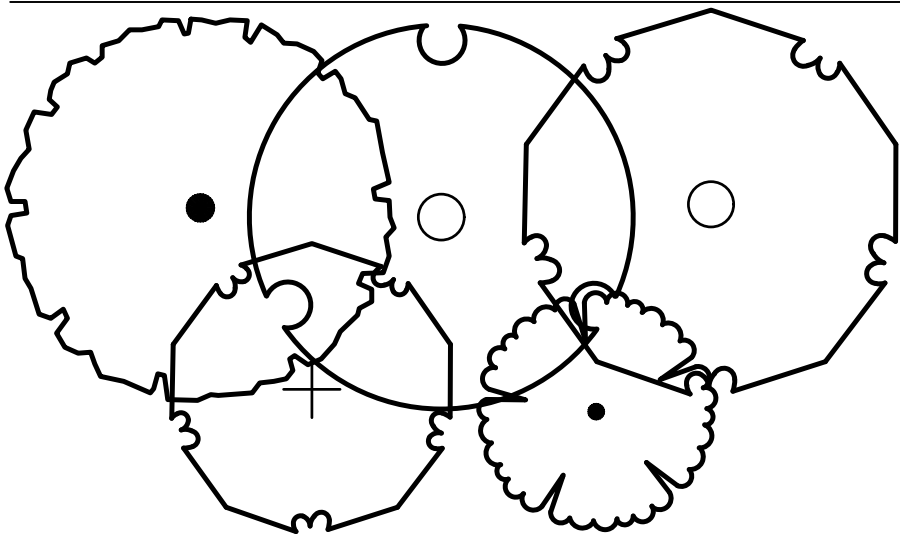
LEGEND

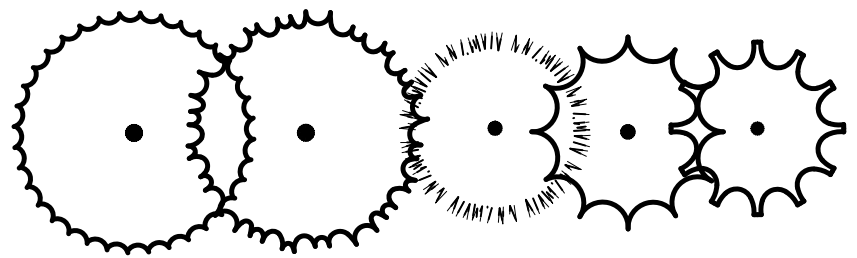


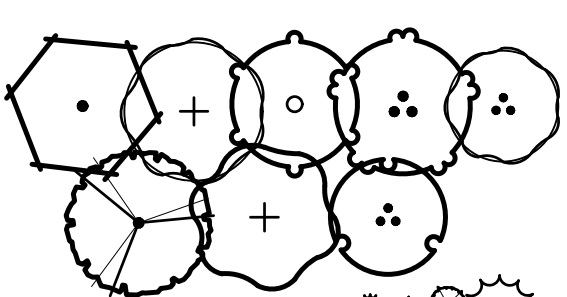
KEY MAP

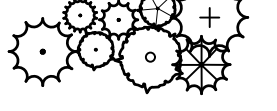


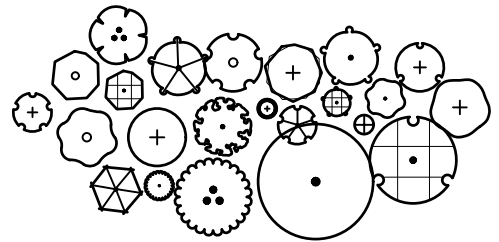
LEGEND

- 

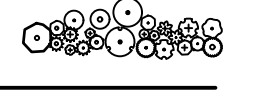
DECIDUOUS CANOPY TREES,
RE: SHEET 72- DETAIL 1
- 

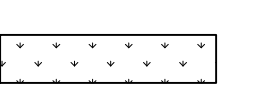
EVERGREEN TREES,
RE: SHEET 72- DETAIL 1
- 

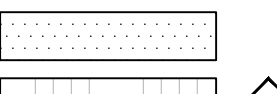
DECIDUOUS ORNAMENTAL TREES,
RE: SHEET 72- DETAIL 1
- 

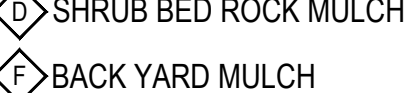
EVERGREEN SHRUBS,
RE: SHEET 72- DETAIL 2
- 

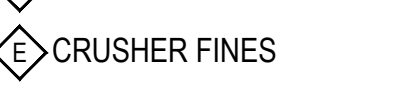
DECIDUOUS SHRUBS,
RE: SHEET 72- DETAIL 2
- 

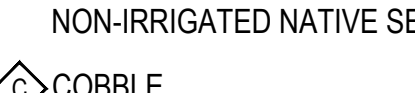
ORNAMENTAL GRASS
PERENNIALS, RE: SHEET 72- DETAIL 3
- 

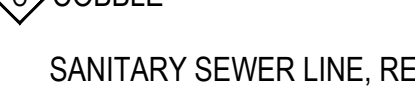
STEEL EDGER, RE: SHEET 72- DETAIL 4
- 

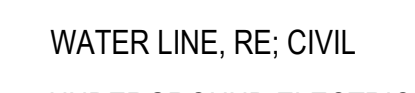
NATIVE SEED
- 

SOD
- 

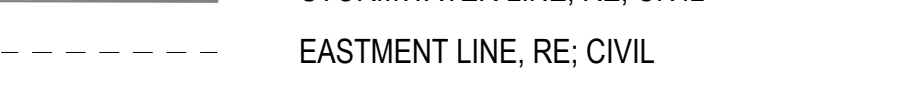
SHRUB BED ROCK MULCH
- 

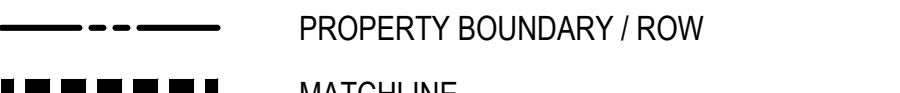
BACK YARD MULCH
- 

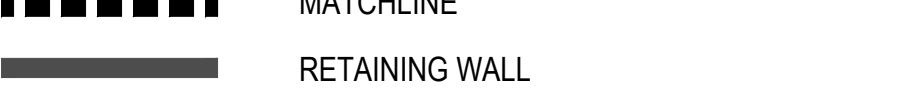
CRUSHER FINES
- 

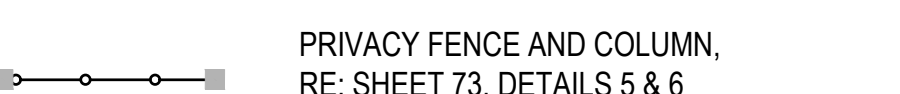
NON-IRRIGATED NATIVE SEED
- 

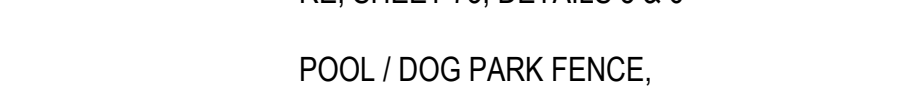
COBBLE
- 

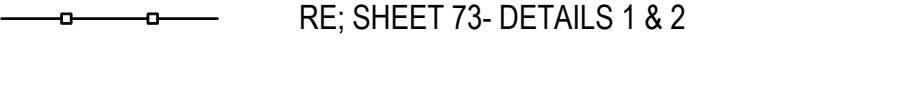
SANITARY SEWER LINE, RE: CIVIL
- 

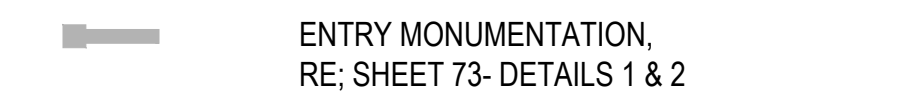
WATER LINE, RE: CIVIL
- 

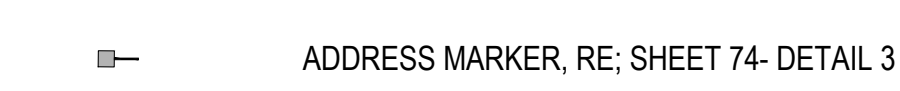
UNDERGROUND ELECTRICAL LINE, RE: CIVIL
- 

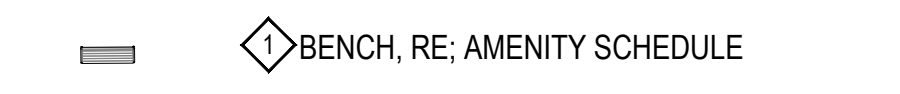
STORMWATER LINE, RE: CIVIL
- 

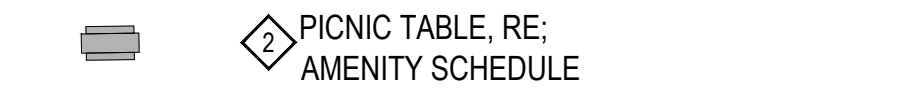
EASTMENT LINE, RE: CIVIL
- 

PROPERTY BOUNDARY / ROW
- 

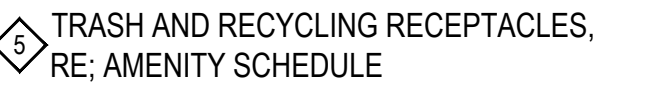
MATCHLINE
- 

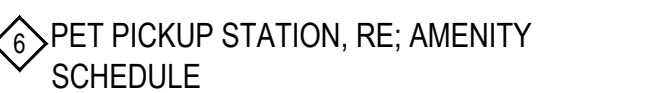
RETAINING WALL
- 

PRIVACY FENCE AND COLUMN,
RE: SHEET 73, DETAILS 5 & 6
- 

POOL / DOG PARK FENCE,
RE: SHEET 73- DETAILS 1 & 2
- 

ENTRY MONUMENTATION,
RE: SHEET 73- DETAILS 1 & 2
- 

ADDRESS MARKER, RE: SHEET 74- DETAIL 3
- 

BENCH, RE: AMENITY SCHEDULE
- 

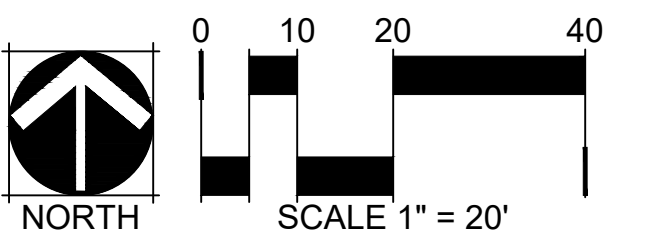
PICNIC TABLE, RE:
AMENITY SCHEDULE
- 

BISTRO TABLE AND CHAIRS,
RE: AMENITY SCHEDULE
- 

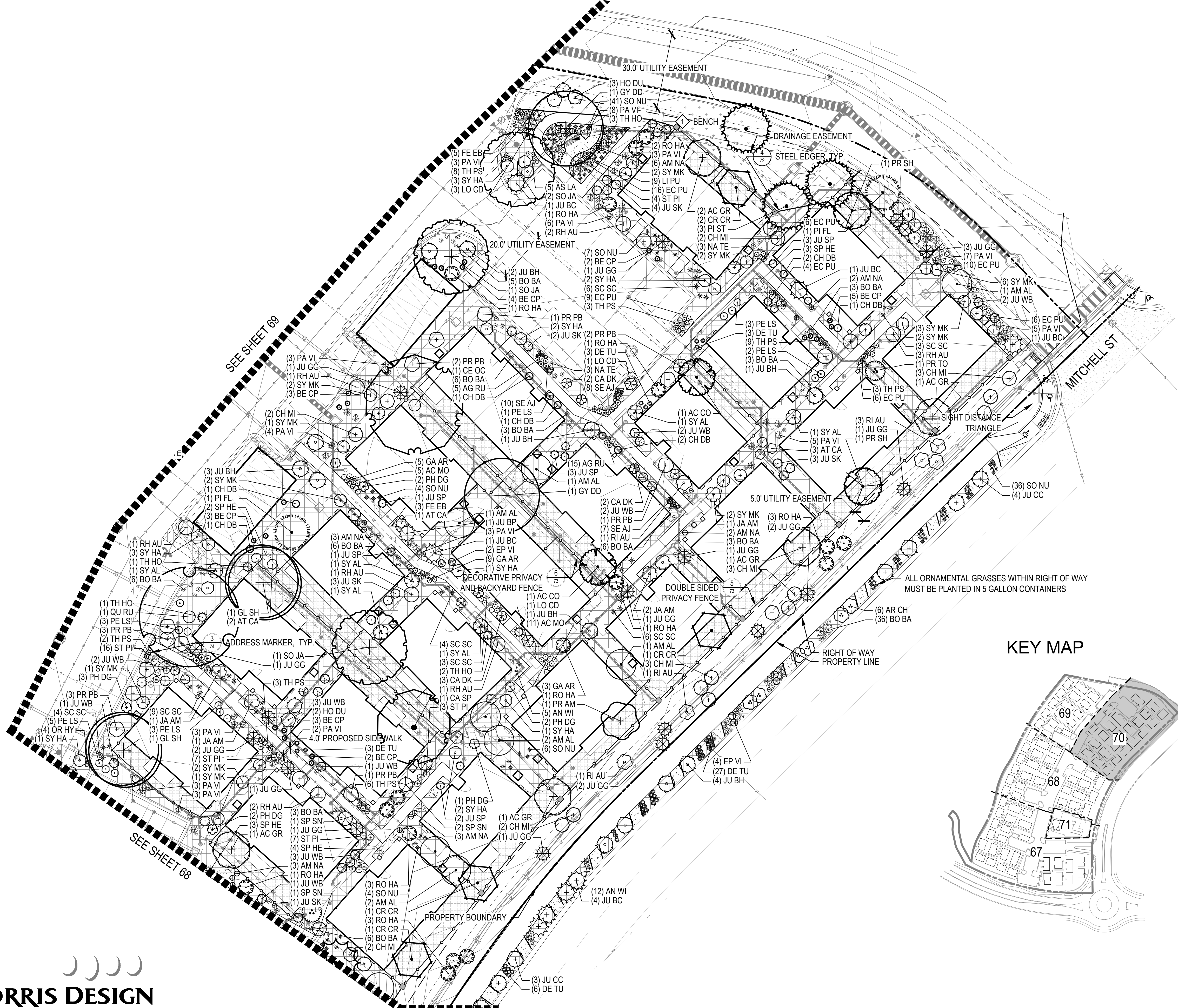
TRASH AND RECYCLING RECEPTACLES,
RE: AMENITY SCHEDULE
- 

PET PICKUP STATION, RE: AMENITY
SCHEDULE
- 

BIKE RACK, RE: AMENITY SCHEDULE



CHECKED BY JARED CARLON, PLA 942



NORRIS DESIGN
Planning | Landscape Architecture | Branding



ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS



HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

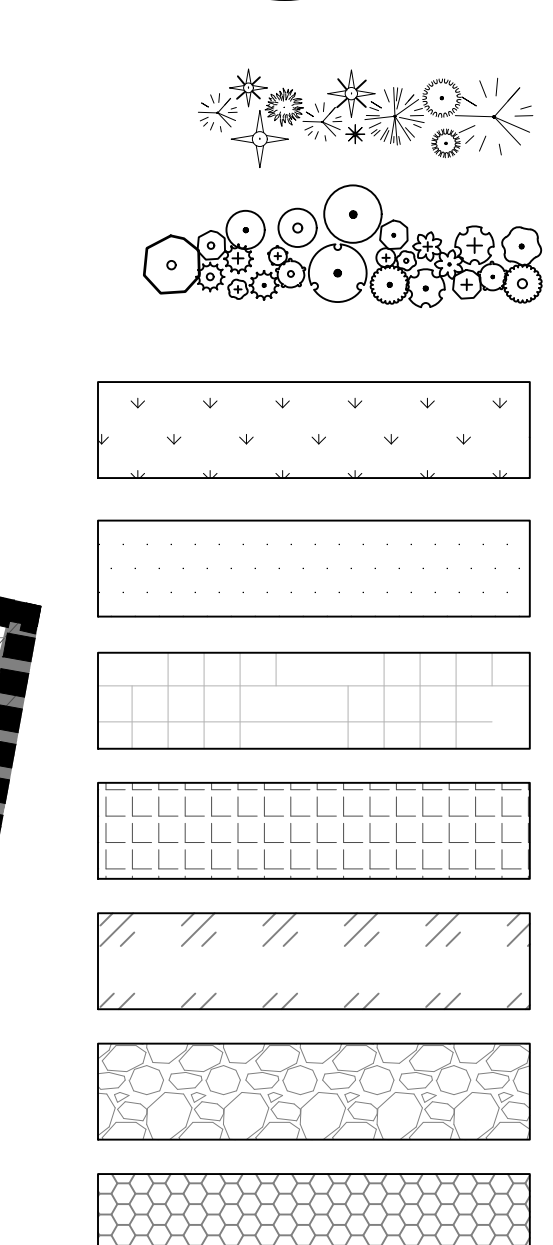
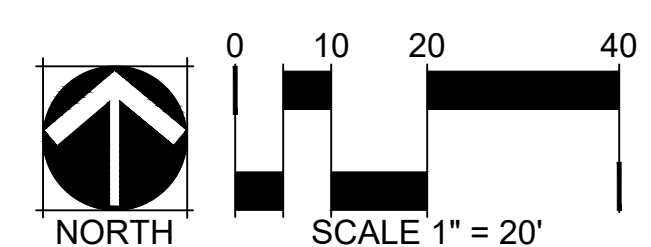


AVILLA FOUNDERS VILLAGE
LANDSCAPE
PLAN

PROJECT #: 210431
SHEET NUMBER
70 OF 82

ENHANCED PAVING

TRASH RECEPTACLES, RE: AMENITY SCHEDULE

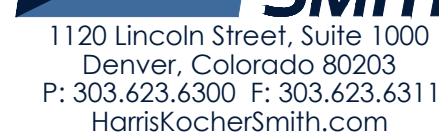


PROJECT #:	210431
SHEET NUMBER	

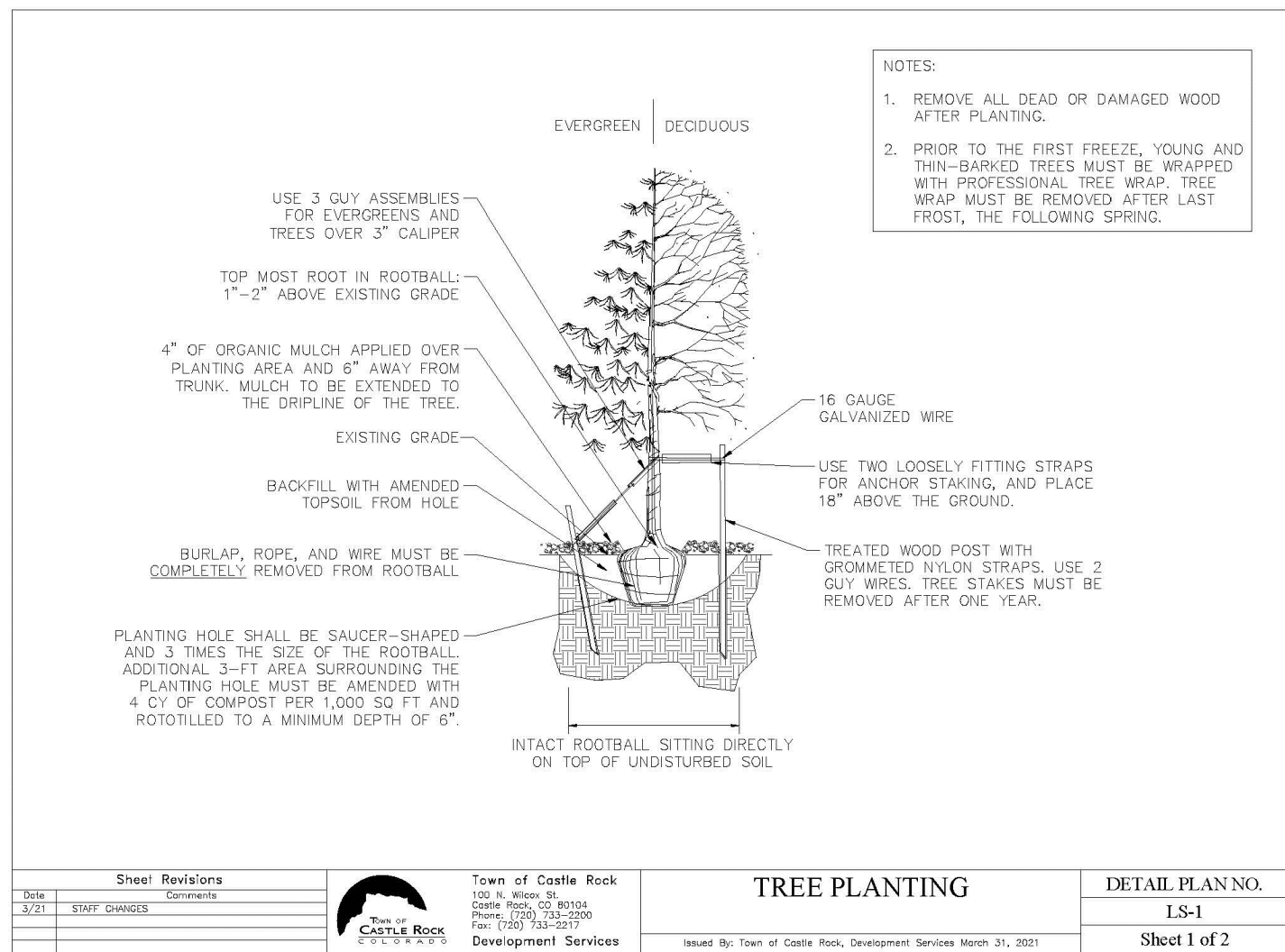
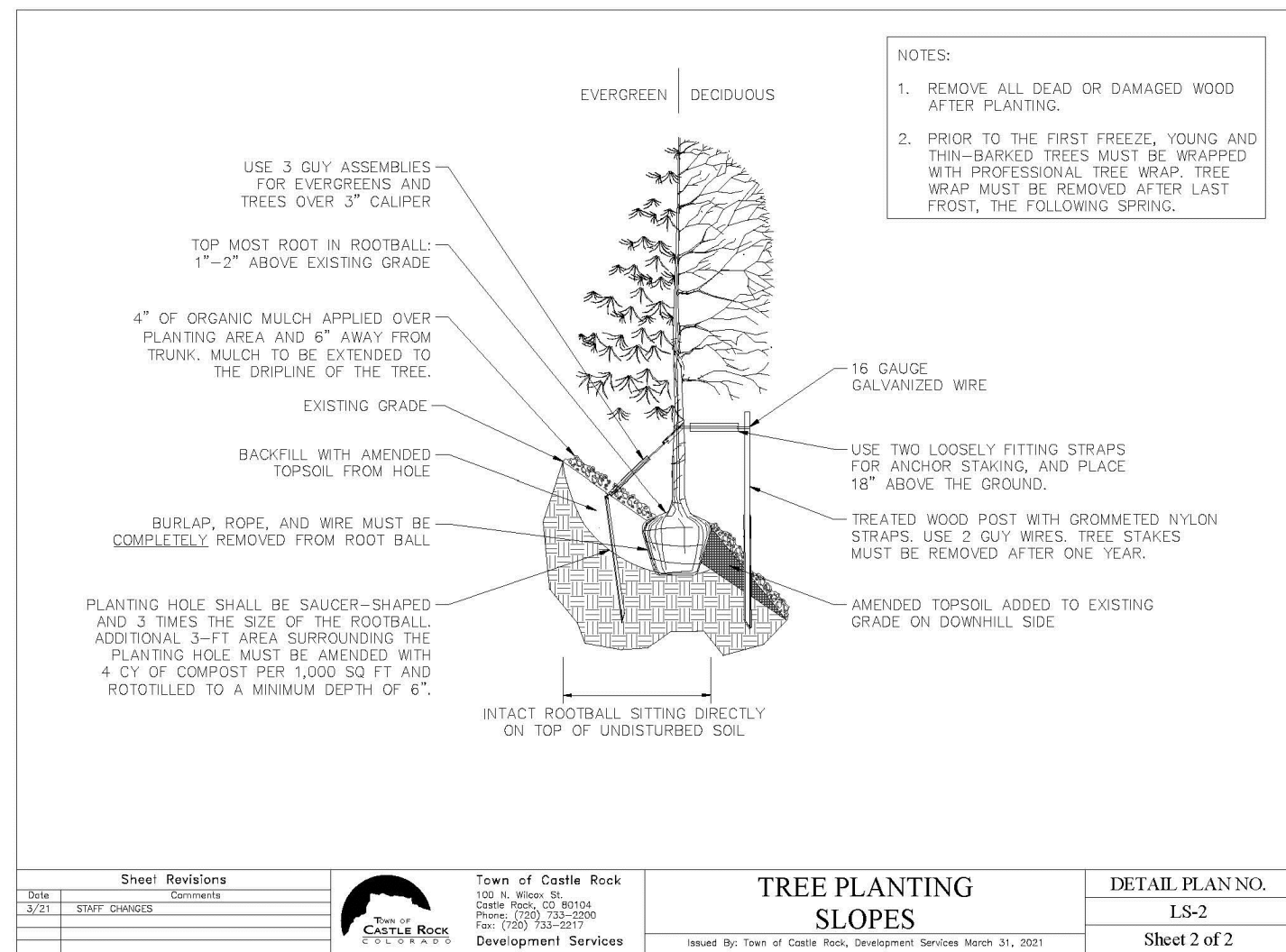
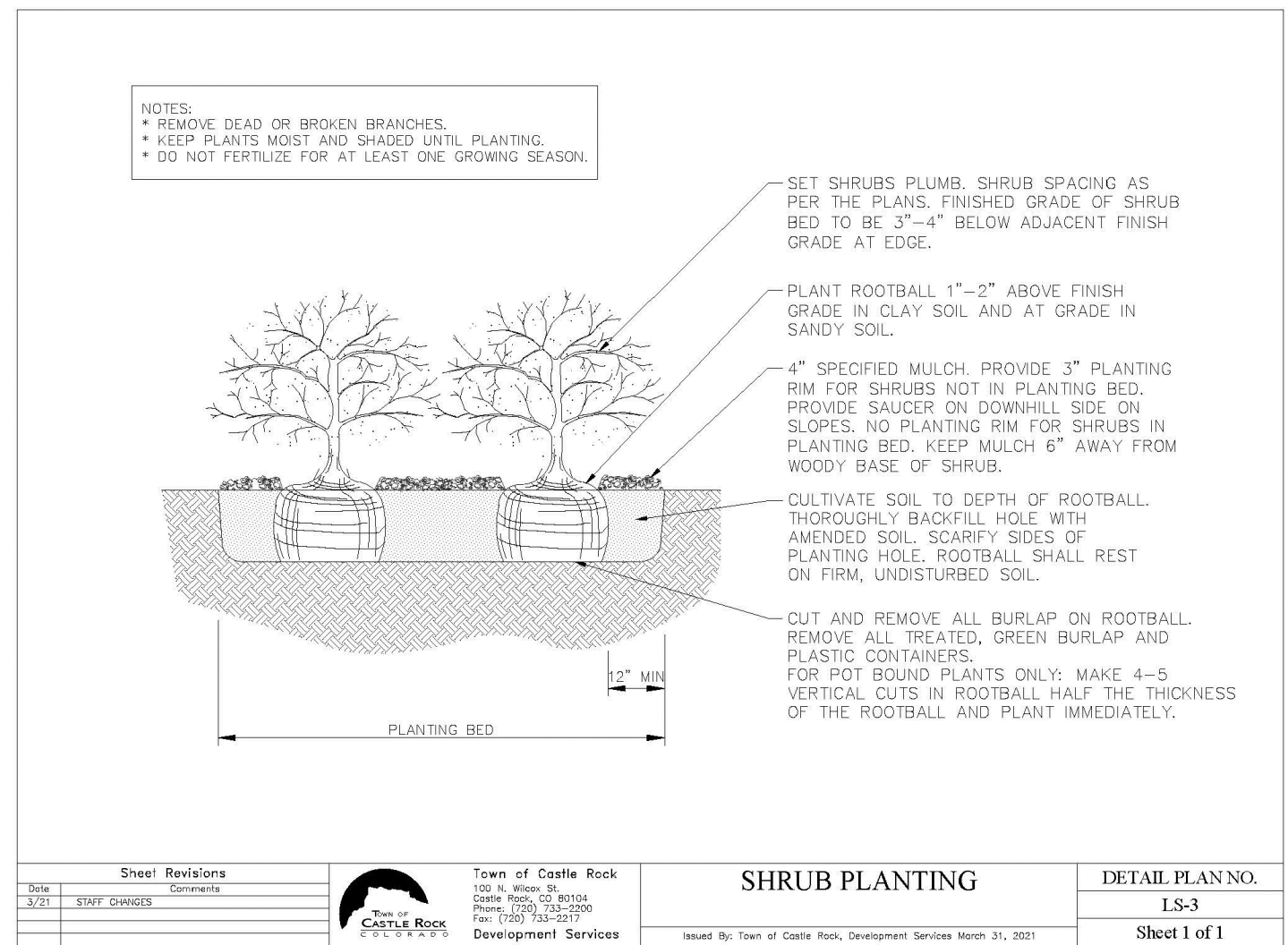


DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

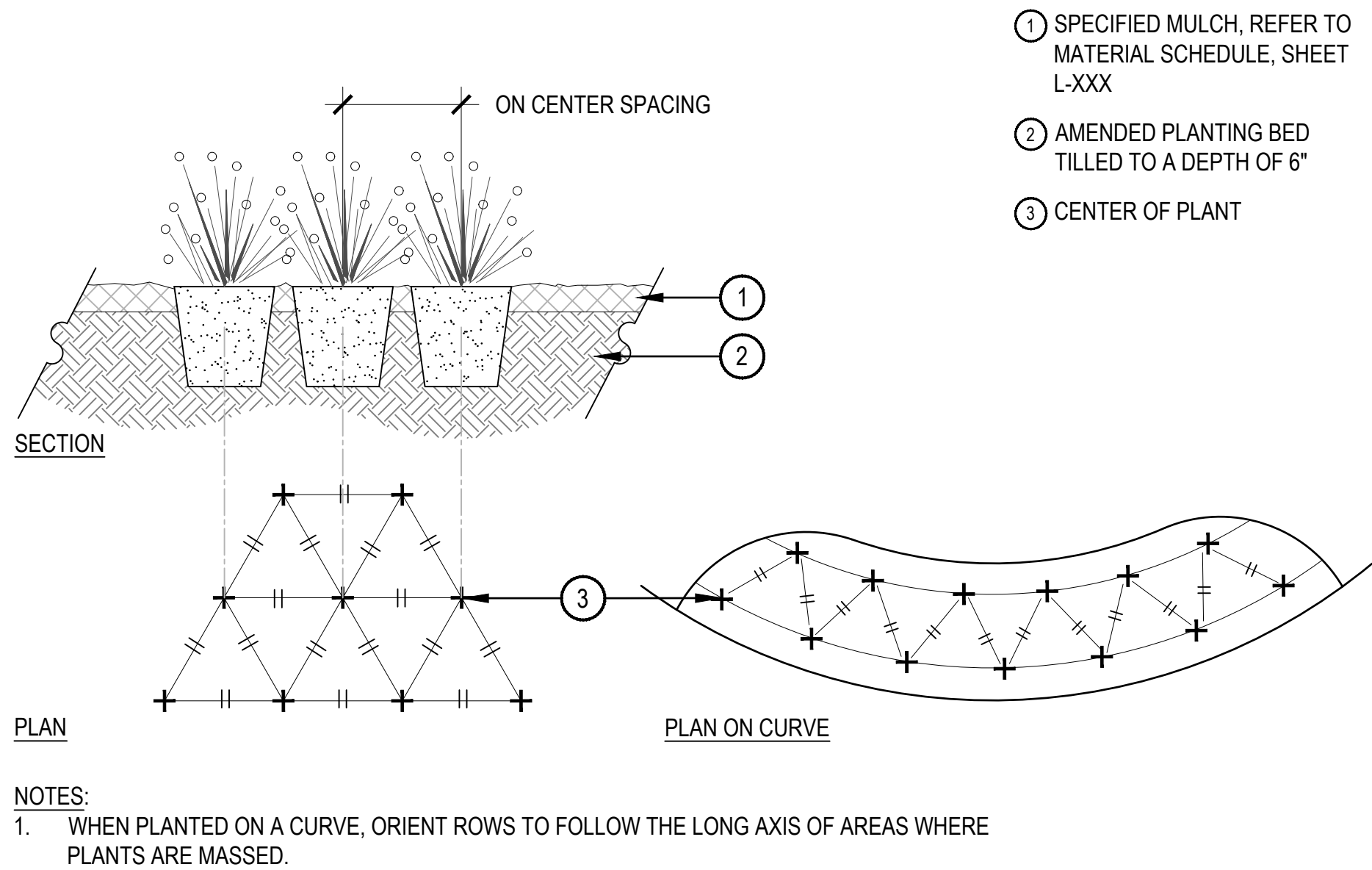
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS
------------	----------------------------------



AVILLA FOUNDERS VILLAGE
LANDSCAPE
ENLARGEMENT

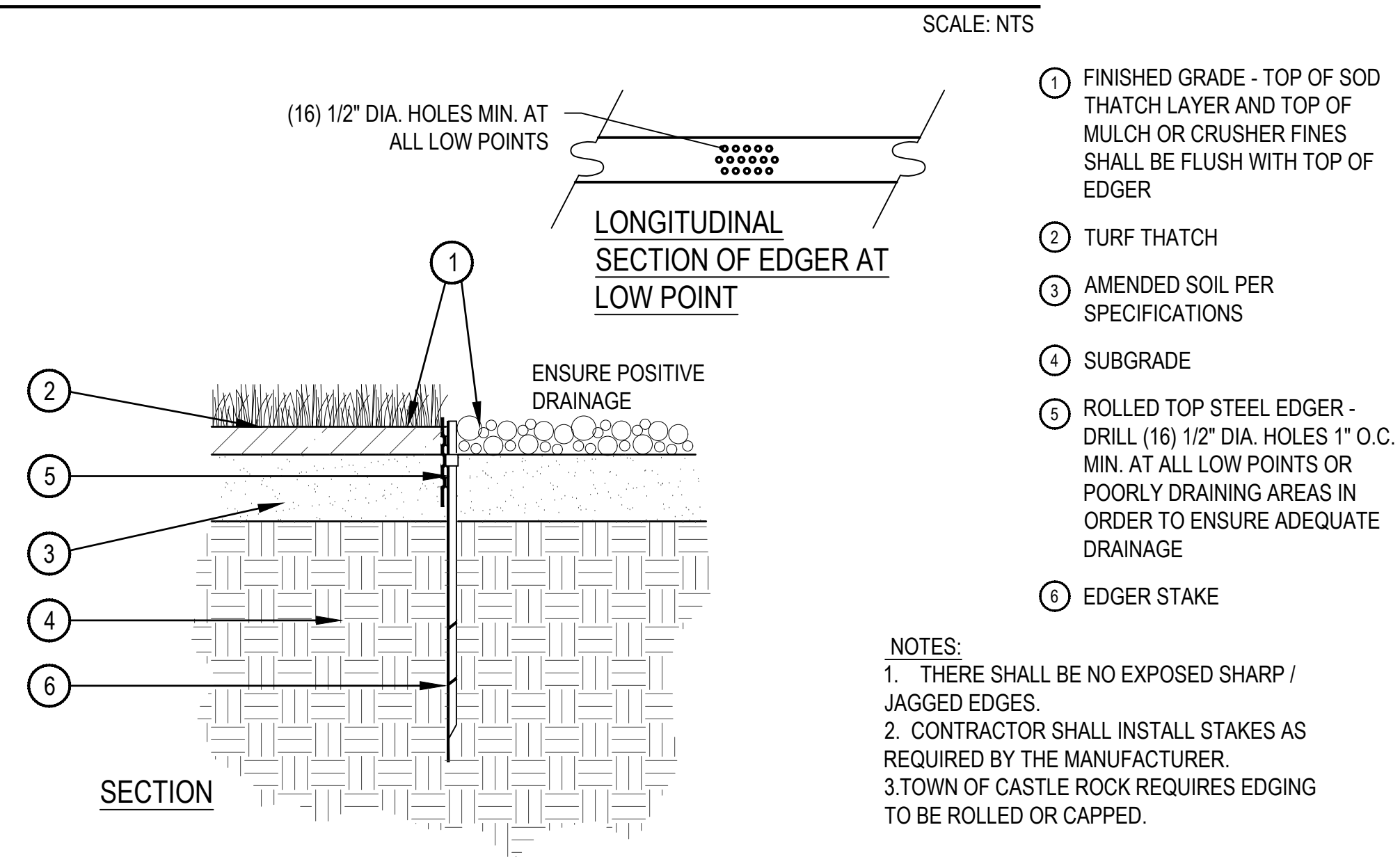


1 TREE PLANTING DETAIL



3 PERENNIAL PLANT LAYOUT

SCALE: 1" = 1'-0"



4 STEEL EDGER

SCALE: 1" = 1'-0"

2 SHRUB PLANTING

SCALE: NTS

NORRIS DESIGN
Planning | Landscape Architecture | Branding



Know what's below.
Call before you dig.

DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS



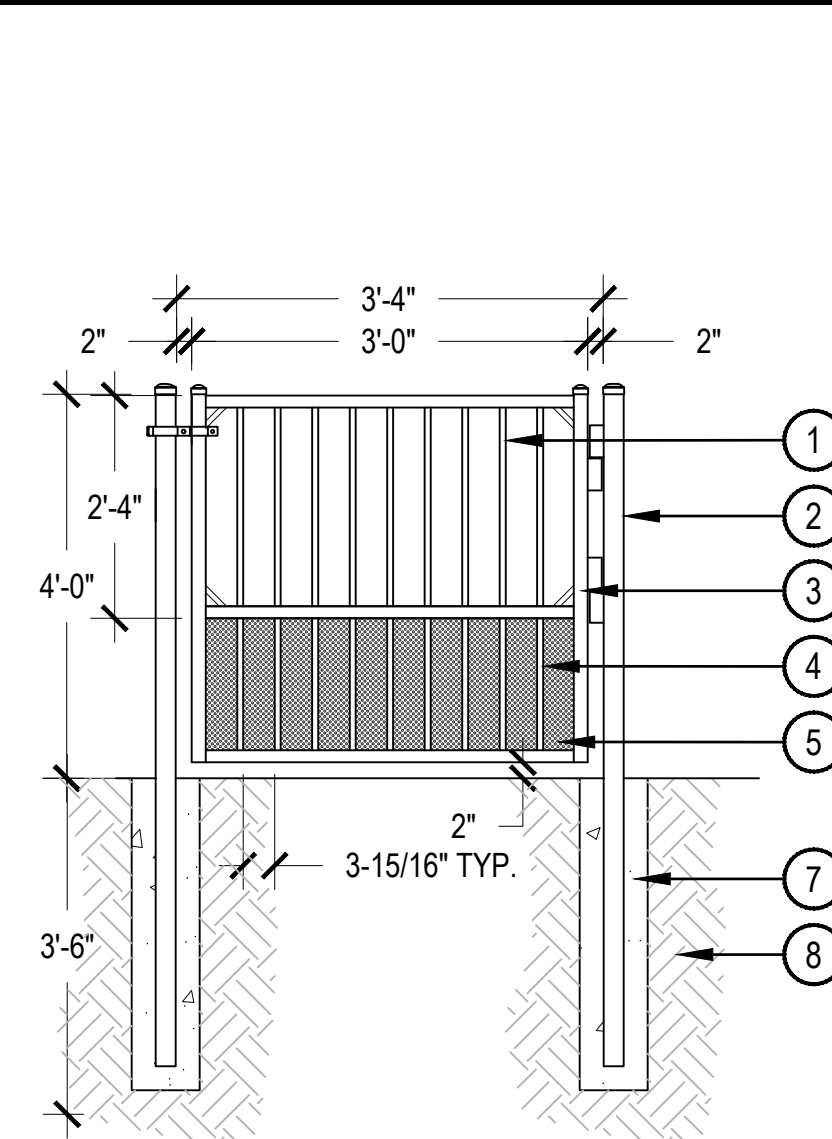
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
LANDSCAPE
DETAILS

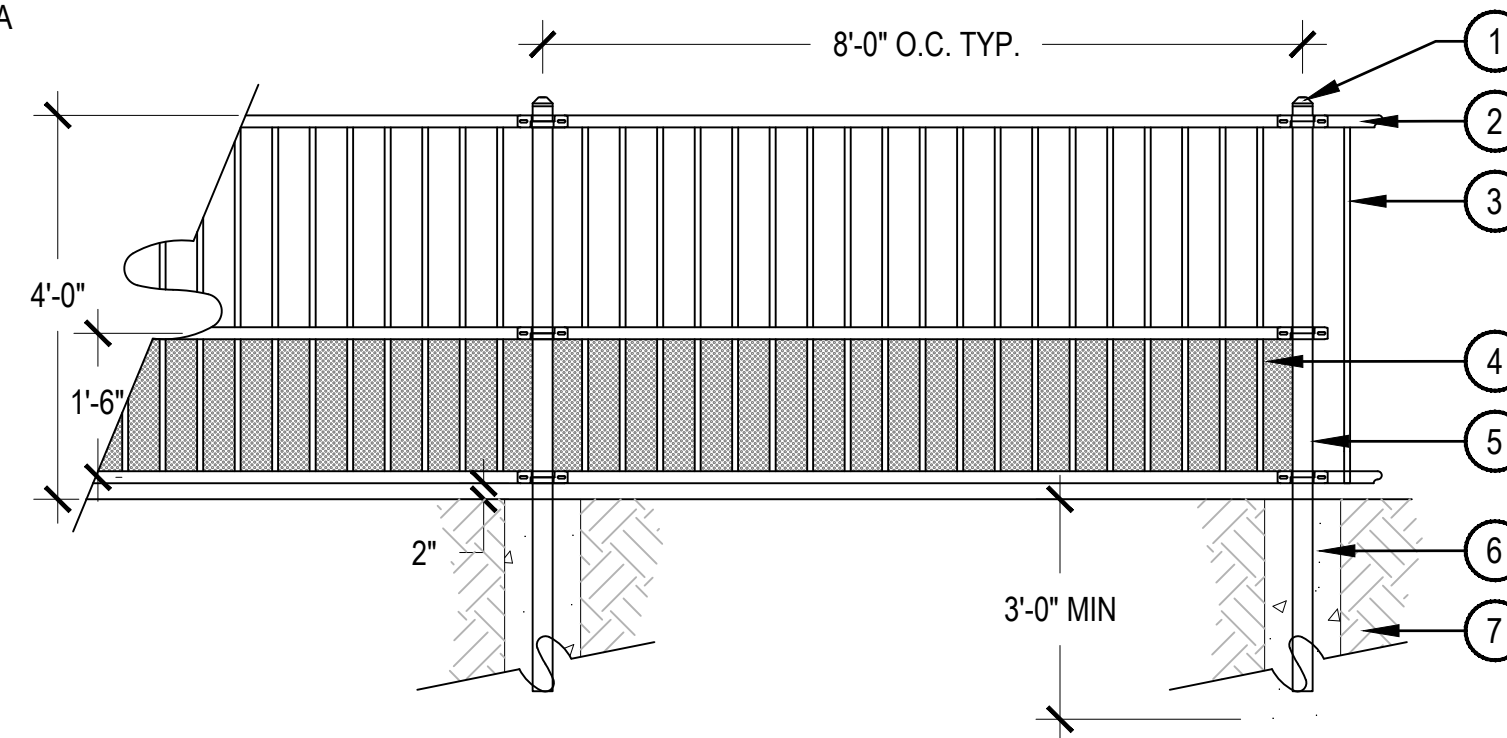
CHECKED BY JARED CARLON, PLA 942

PROJECT #: 210431
SHEET NUMBER



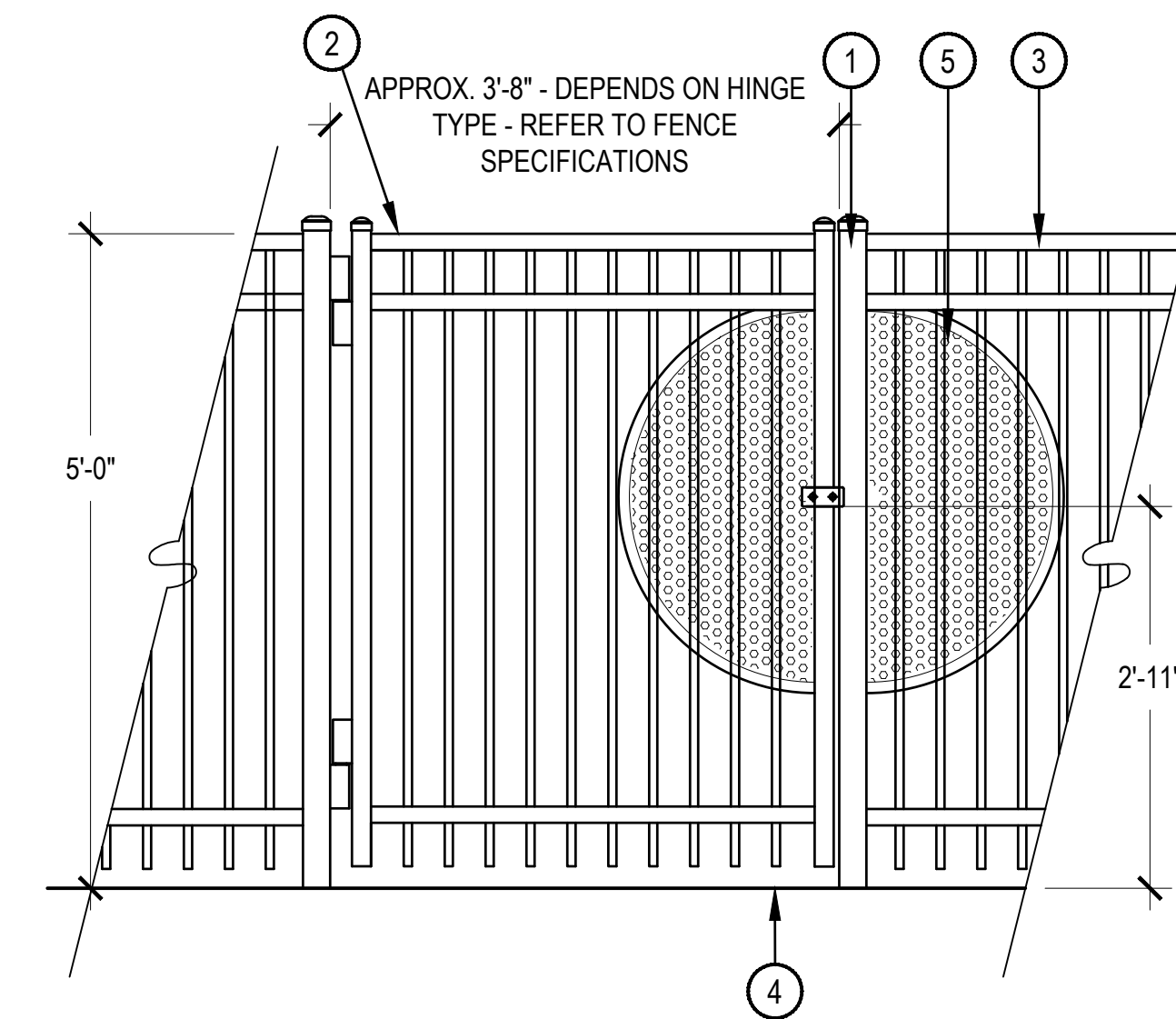
- ① 1-1/2" METAL RAIL
- ② 2-1/2" SQ. METAL POST
- ③ 1-3/4" SQ. METAL GATE END
- ④ 3/4" SQ. METAL PICKET
- ⑤ EXPANDED / PERFORATED METAL SCREEN
- ⑥ ALL GATE HARDWARE TO BE ADA COMPLIANT
- ⑦ CONCRETE FOOTER PER MANUFACTURER, SLOPE CONCRETE AWAY FROM POST FOR POSITIVE DRAINAGE
- ⑧ COMPACTED SUBGRADE

PRODUCT INFORMATION:
MANUFACTURER: AMERISTAR
MODEL: MONTAGE PLUS (CUSTOM)
STYLE: MAJESTIC 3 RAIL
COLOR: BLACK
OR APPROVED EQUAL



- ① 2-1/2" METAL SQ. POST
- ② 1-1/2" X 1-7/16" METAL RAIL
- ③ 3/4" SQ. X 18 GAUGE METAL PICKET, 3" ON CENTER
- ④ EXPANDED / PERFORATED METAL SCREEN
- ⑤ 2 1/2" SQ. X 16 GAUGE METAL POST
- ⑥ CONCRETE FOOTING PER MANUFACTURER, SLOPE CONCRETE AWAY FROM POST FOR POSITIVE DRAINAGE
- ⑦ COMPACTED SUBGRADE

PRODUCT INFORMATION:
MANUFACTURER: AMERISTAR
MODEL: MONTAGE PLUS (CUSTOM
STYLE: MAJESTIC 3 RAIL
COLOR: BLACK
OR APPROVED EQUAL



- ① GATE POST TYP.
- ② GATE: ALL GATES SHALL BE SELF CLOSING W/ GATE LOCK TO BE APPROVED BY OWNER. ALL POOL GATES SHALL MEET CURRENT STATE AND IBC POOL ENCLOSURE CODE REQUIREMENTS. PROVIDE PANIC HARDWARE ON PUSH SIDE OF GATE FOR EGRESS. SPRING HINGES, LEVER HANDLE LOCK SET WITH PUSH BUTTON KEYED ENTRY ON PULL SIDE.
- ③ ORNAMENTAL METAL FENCE
- ④ FINISH GRADE
- ⑤ FOR POOL GATES ONLY: PERFORATED POWDER COATED BRONZE TO MATCH FENCE STEEL PLATING. W/ NO GAPS GREATER THAN $\frac{1}{2}$ " TYPE T.B.D.

NOTES:

1. POOL GATE STYLE SHALL MATCH POOL FENCE STYLE
2. REFER TO MANUFACTURERS FENCE SPECIFICATIONS FOR INFORMATION ON FOOTER DEPTH.

1 DOG PARK GATE

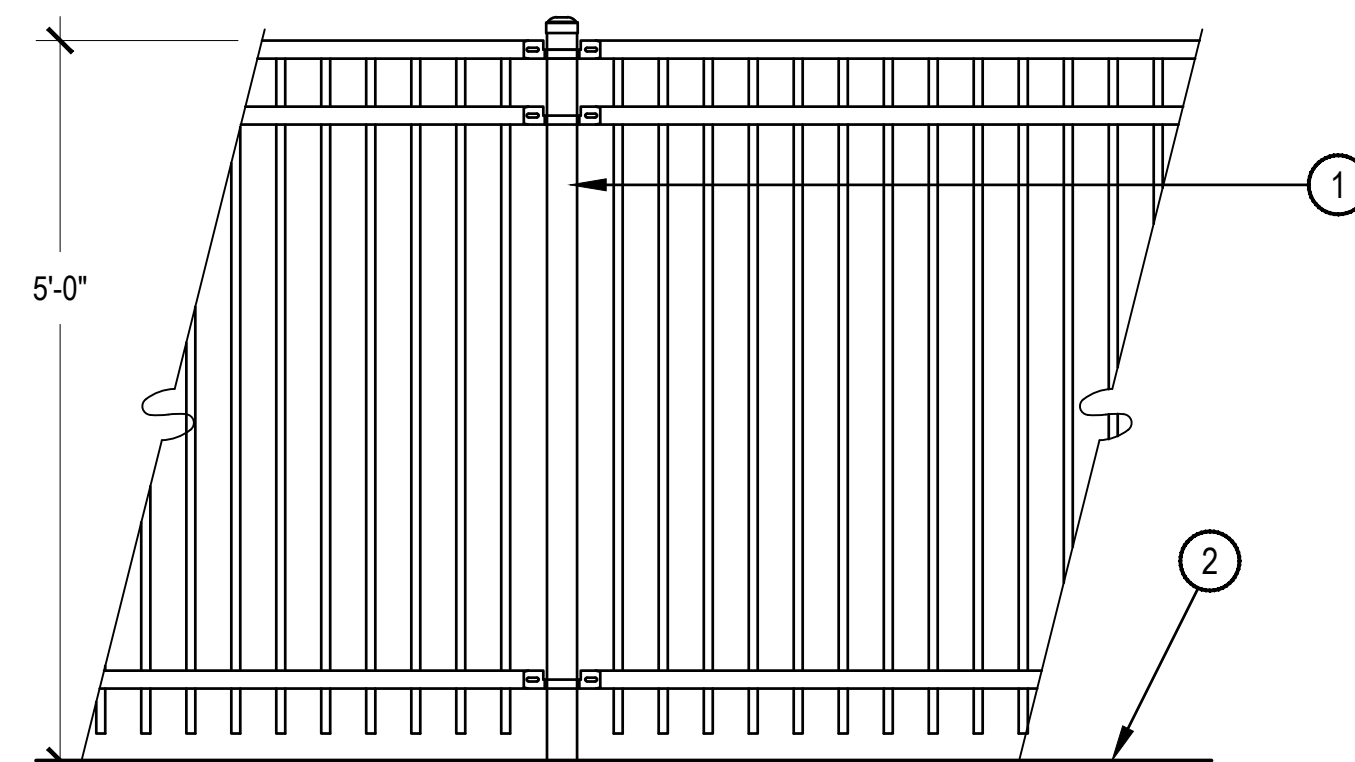
SCALE: 1/2" = 1'-0"

2 DOG PARK FENCE

SCALE: 1/2" = 1'-0"

2 POOL GATE

SCALE: 3/4" = 1'-0"



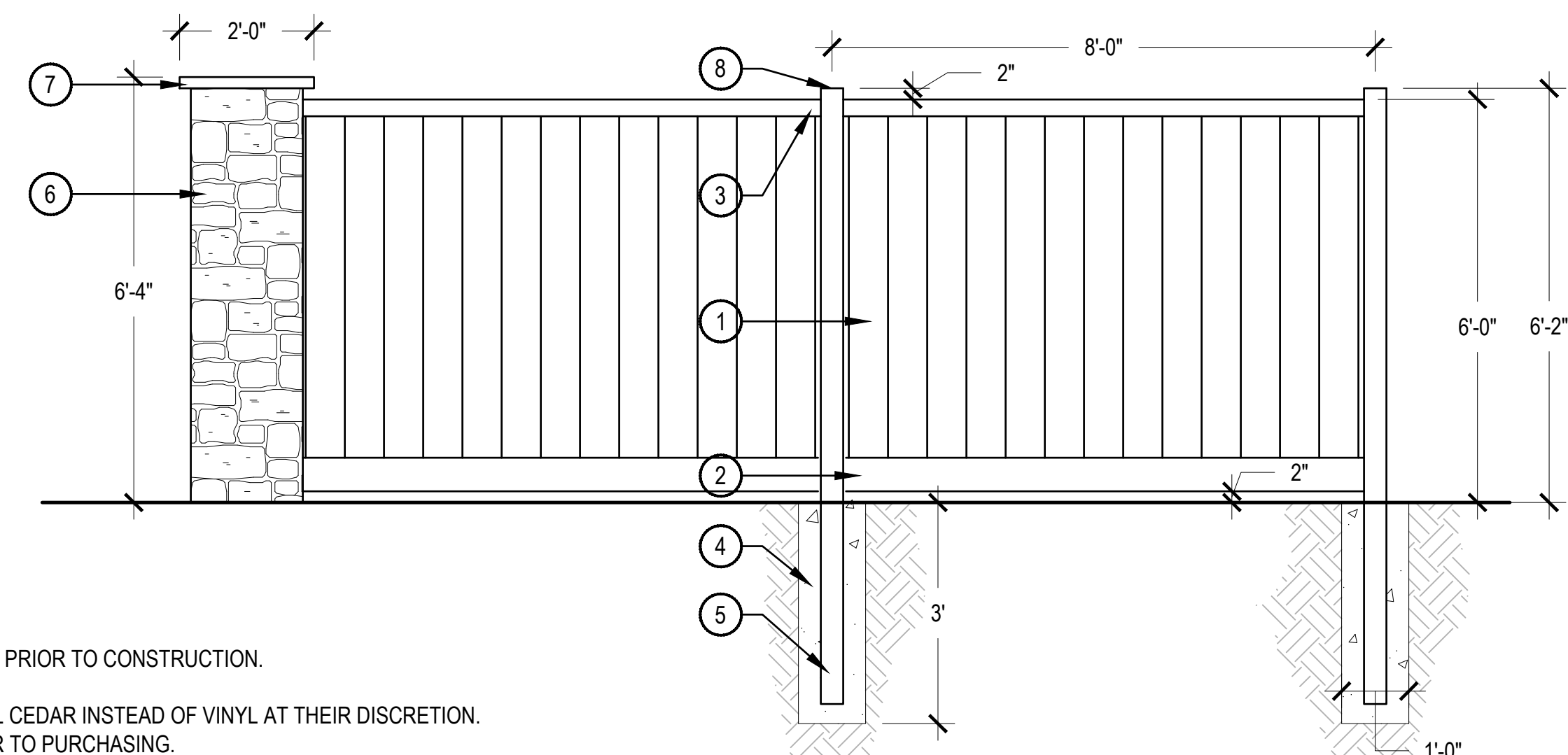
- ① FENCE POST - SET IN CONCRETE
FOOTER, REFER TO FENCE
SPECIFICATIONS FOR FOOTER
INFORMATION
- ② FINISH GRADE

NOTES:

1. FENCE SHALL BE BY AMERISTAR FENCE OR APPROVED EQUAL, CONTACT: AARON COPE 918-879-5884 acope@ameristarfence.com
www.ameristarfence.com
2. FENCE STYLE FOR POOL ENCLOSURE SHALL BE: MONTAGE PLUS (POOL, PET, PLAY FENCING) MAGESTIC - 3 RAIL, NO FLUSH BOTTOM
3. FENCE STYLE FOR ALL OTHER LOCATIONS SHALL BE: MONTAGE PLUS (STANDARD 4" PICKET SPACING) MAGESTIC - 3 RAIL, NO FLUSH BOTTOM
4. COLOR: BRONZE
5. ALL FENCING AROUND POOL AREA SHALL MEET CURRENT STATE AND IBC POOL ENCLOSURE CODE REQUIREMENTS.

4 POOL FENCE

SCALE: 3/4" = 1'-0"



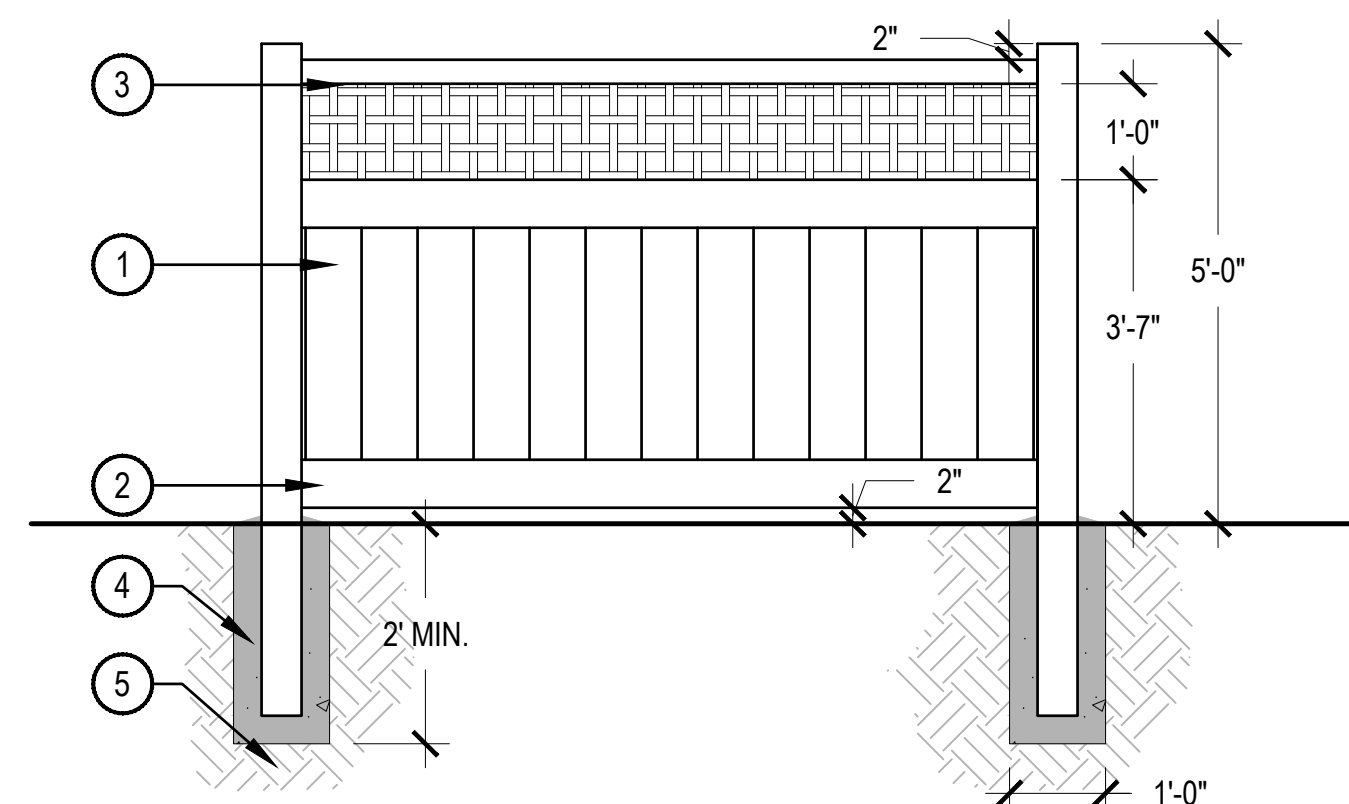
- ① VINYL OR NATURAL CEDAR FENCE
- ② 6" WIDE STEEL REINFORCED BOTTOM RAIL
- ③ 3" WIDE TOP RAIL
- ④ CONCRETE FOOTER PER MANUFACTURER, SLOPE CONCRETE AWAY FROM POSTS FOR POSITIVE DRAINAGE
- ⑤ COMPACTED SUBGRADE
- ⑥ 20" X 20" MASONRY COLUMN, MINIMUM 50° ON CENTER AND AT EVERY PERPENDICULAR INTERSECTING FENCE
- ⑦ PRECAST CONCRETE CAP
- ⑧ 4" X 4" POST

PRODUCT INFORMATION

- MANUFACTURER: BUFFTECH
- MODEL: CHESTERFIELD WITH VINYL CERTAGRAIN TEXTURE
- COLOR: SIERRA BLEND
- APPROVED EQUAL MAY BE USED.

5 DOUBLE SIDED PRIVACY FENCE

SCALE: 1/2" = 1'-0"



- ① DECORATIVE NATURAL CEDAR
PRIVACY FENCE, REFER TO
PLANS FOR LOCATIONS
- ② 6" WIDE BOTTOM RAIL
- ③ CUSTOM DECORATIVE LATTICE
- ④ CONCRETE FOOTER PER
CONTRACTOR. SLOPE CONCRETE
AWAY FROM POSTS FOR
POSITIVE DRAINAGE
- ⑤ COMPACTED SUBGRADE

NOTES

1. CONTRACTOR TO SUBMIT SAMPLES FOR APPROVAL PRIOR TO CONSTRUCTION.
2. ALL CONCRETE SHALL HAVE 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
3. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION.

DECORATIVE PRIVACY AND BACKYARD FENCE

SCALE: 1/2" = 1'-0"



Know what's below.
Call before you dig.

DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS



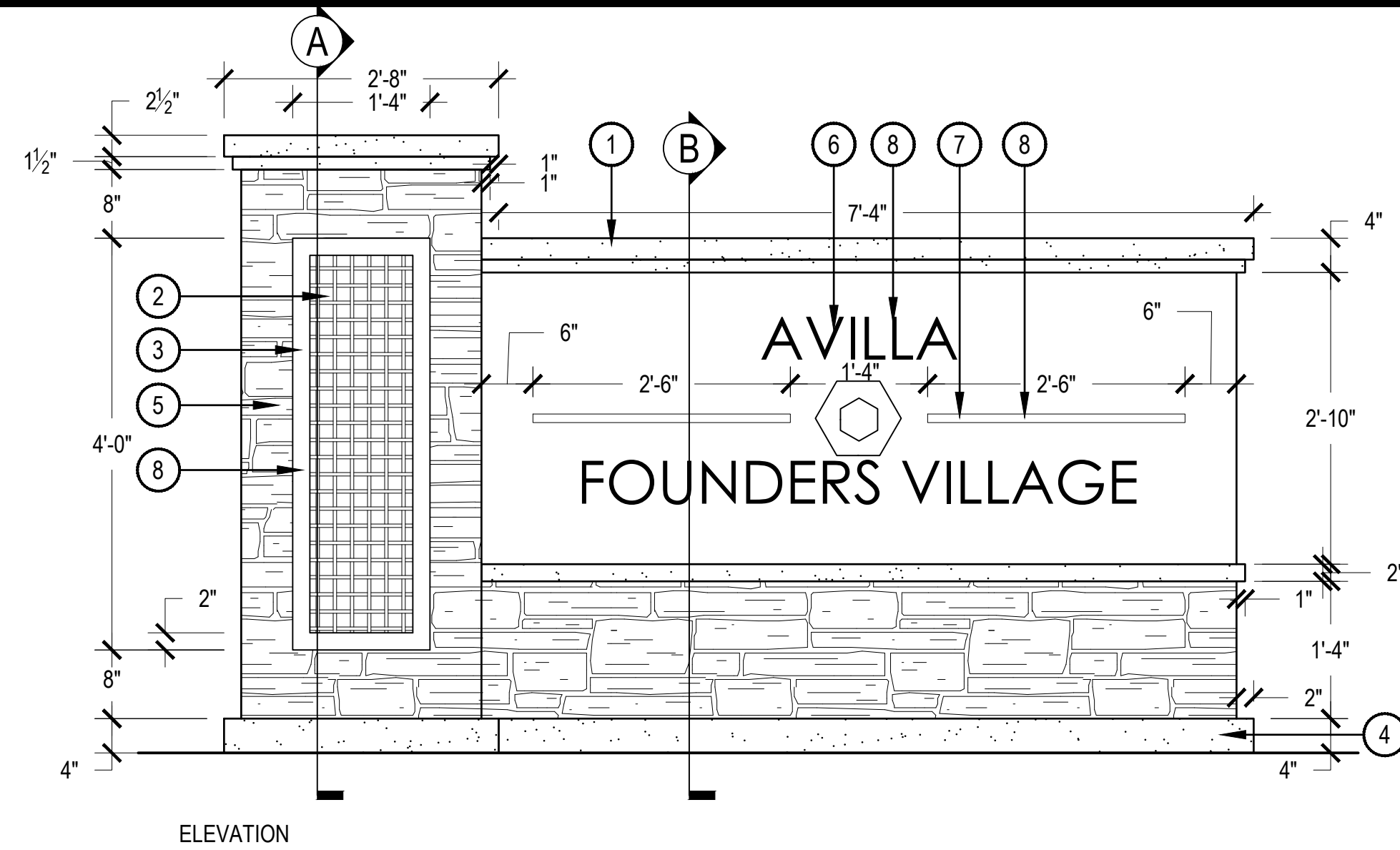
AVILLA FOUNDERS VILLAGE

HARDSCAPE DETAILS

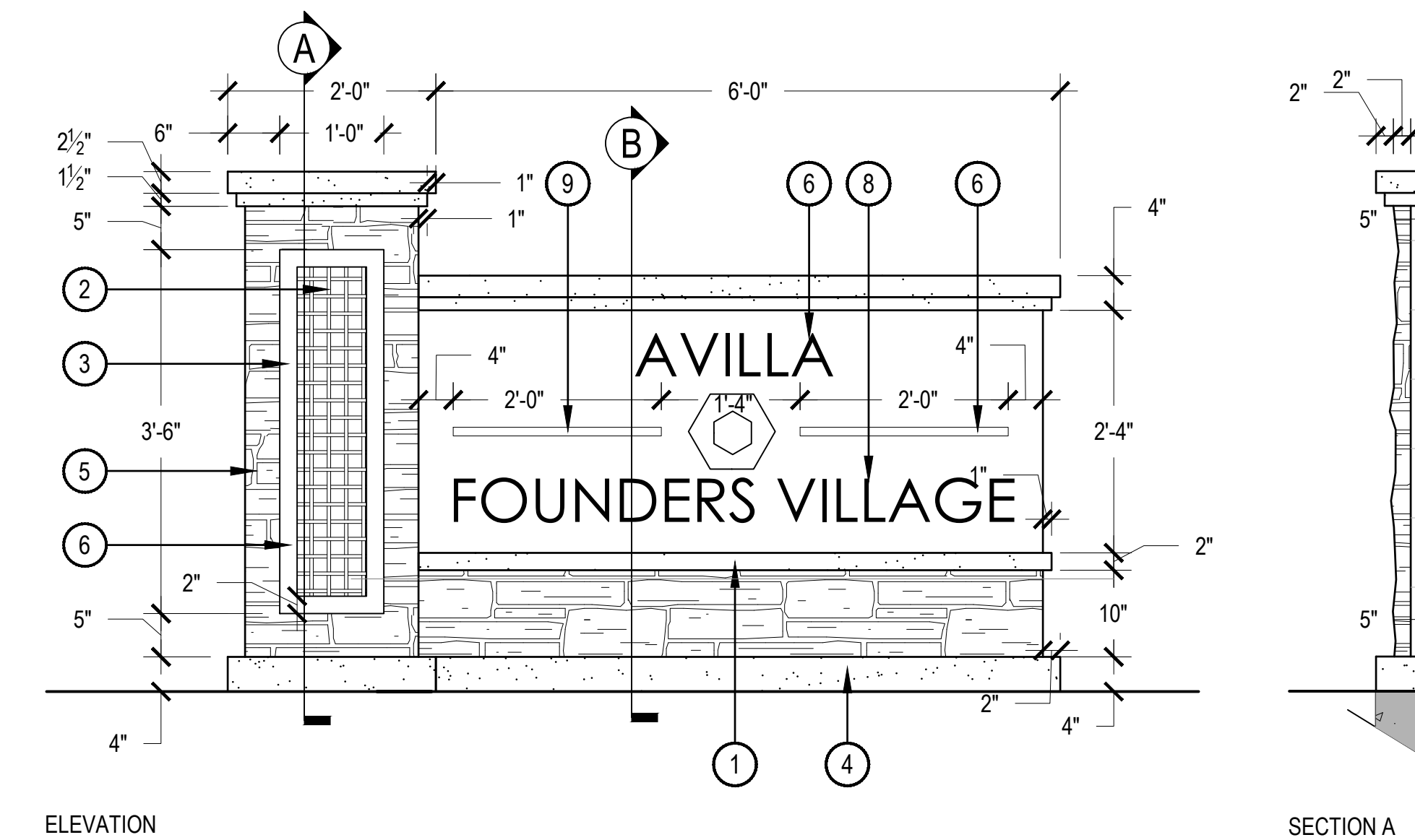
CHECKED BY JARED CARLON, PLA 942

PROJECT #:	210431
SHEET NUMBER	

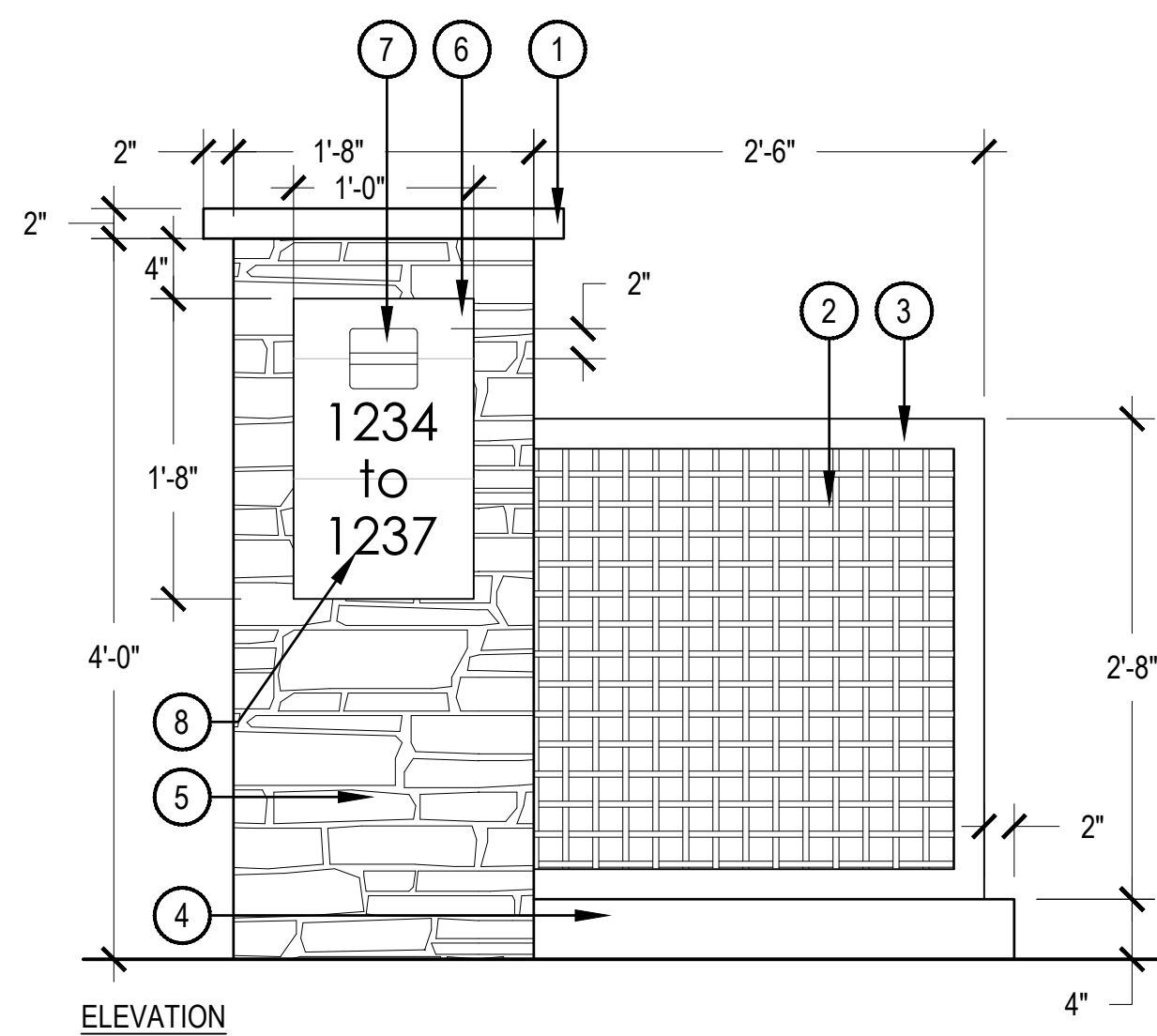
73 OF 82



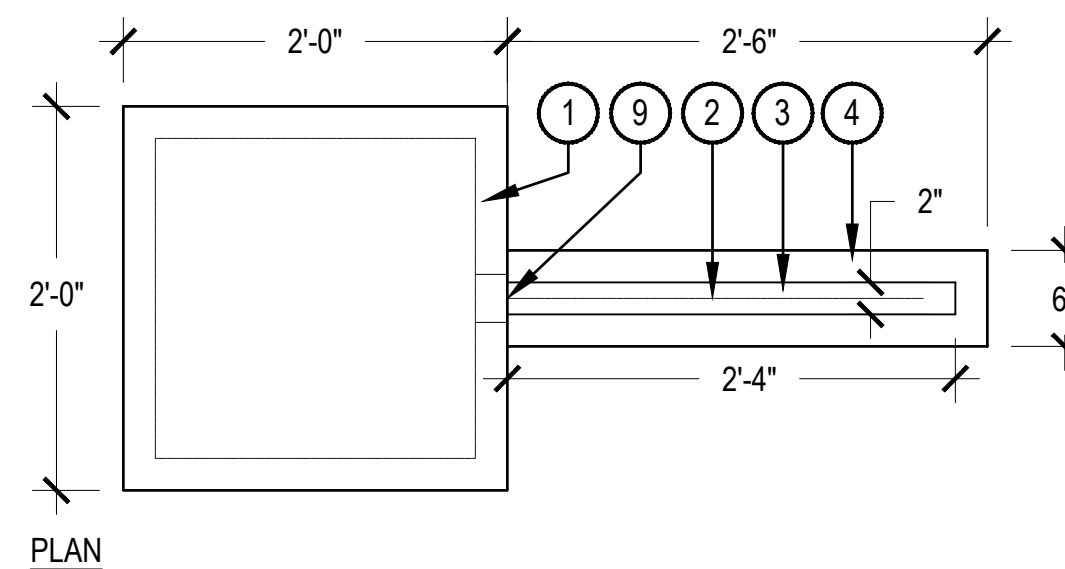
1 PRIMARY ENTRY SIGN



2 SECONDARY ENTRY SIGN



3 ADDRESS MARKER



- NOTES:
1. DETAIL DRAWN FOR DESIGN INTENT ONLY.
 2. STRUCTURAL DESIGN BY OTHERS.
 3. CONTRACTOR TO SUBMIT COLOR SAMPLES OF ALL FINISHES/MATERIALS FOR APPROVAL PRIOR TO CONSTRUCTION.
 4. A SEPARATE SIGN PERMIT WILL BE SUBMITTED PRIOR TO CONSTRUCTION.

SCALE: 1" = 1'-0"

- 1 COLORED CONCRETE CAP AND LEDGE
- 2 DECORATIVE METAL LATTICE, PIN MOUNTED, COLOR: DARK BRONZE
- 3 METAL FRAME, SMOOTH WELDS, COLOR: DARK BRONZE
- 4 COLORED CONCRETE BASE, DAVIS COLOR 641 PEBBLE (OR APPROVED EQUAL)
- 5 CULTURED STONE VENEER, NANTUCKET COBBLE STONE (OR APPROVED EQUAL)
- 6 MOUNTED METAL LETTERS AND LOGO, COLOR DARK BRONZE. DESIGN TO MATCH STANDARD AVILLA BRANDING
- 7 MOUNTED METAL ACCENT BARS, COLOR: DARK BRONZE
- 8 BACKLIGHT LETTERS, LOGO, METAL FRAME, AND ACCENT BARS, REFER TO ELECTRICAL

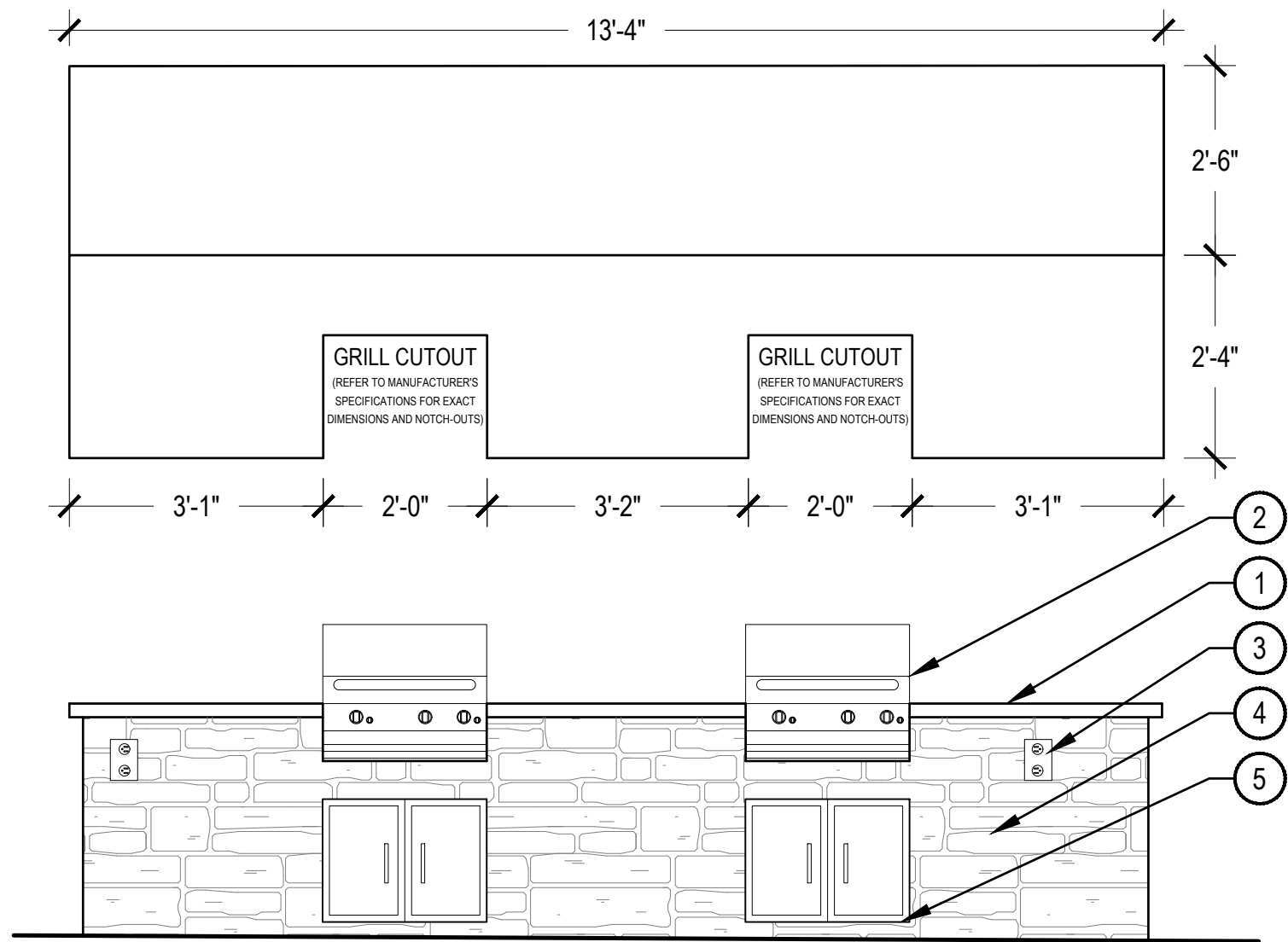
SCALE: 3/4" = 1'-0"

- 1 COLORED CONCRETE CAP AND LEDGE
- 2 DECORATIVE METAL LATTICE, COLOR: DARK BRONZE
- 3 METAL FRAME, SMOOTH WELDS, COLOR: DARK BRONZE
- 4 COLORED CONCRETE BASE, DAVIS COLOR 641 PEBBLE (OR APPROVED EQUAL)
- 5 CULTURED STONE VENEER, NANTUCKET COBBLESTONE (OR APPROVED EQUAL)
- 6 BACKLIGHT LETTERS, LOGO, METAL FRAME, AND ACCENT BARS, REFER TO ELECTRICAL
- 7 STANDARD GREY 6" x 8" x 16" CMU BLOCK, STUCCO FINISH WHERE NO STONE VENEER.
- 8 MOUNTED METAL LETTERS AND LOGO, COLOR: DARK BRONZE. DESIGN TO MATCH STANDARD AVILLA BRANDING
- 9 MOUNTED METAL ACCENT BARS, COLOR: DARK BRONZE

SCALE: 3/4" = 1'-0"

- 1 INTEGRALLY COLORED CONCRETE CAP, DAVIS COLOR 641 PEBBLE OR APPROVED EQUAL
- 2 DECORATIVE METAL LATTICE, COLOR: DARK BRONZE
- 3 WELDED METAL FRAME, COLOR: DARK BRONZE
- 4 STANDARD GRAY CONCRETE BASE
- 5 STONE VENEER TO MATCH ARCHITECTURE (NANTUCKET COBBLESTONE, OR APPROVED EQUAL)
- 6 GROUND FACE CMU, COLOR TO MATCH CONCRETE CAP
- 7 LIGHT TO ILLUMINATE NUMBERS, RE: ELECTRICAL
- 8 METAL MOUNTED NUMBERS/LETTERS, COLOR: DARK BRONZE
- 9 JUNCTION BOX, TO BE FLUSH WITH FACE OF VENEER. GROUT BETWEEN J-BOX & VENEER

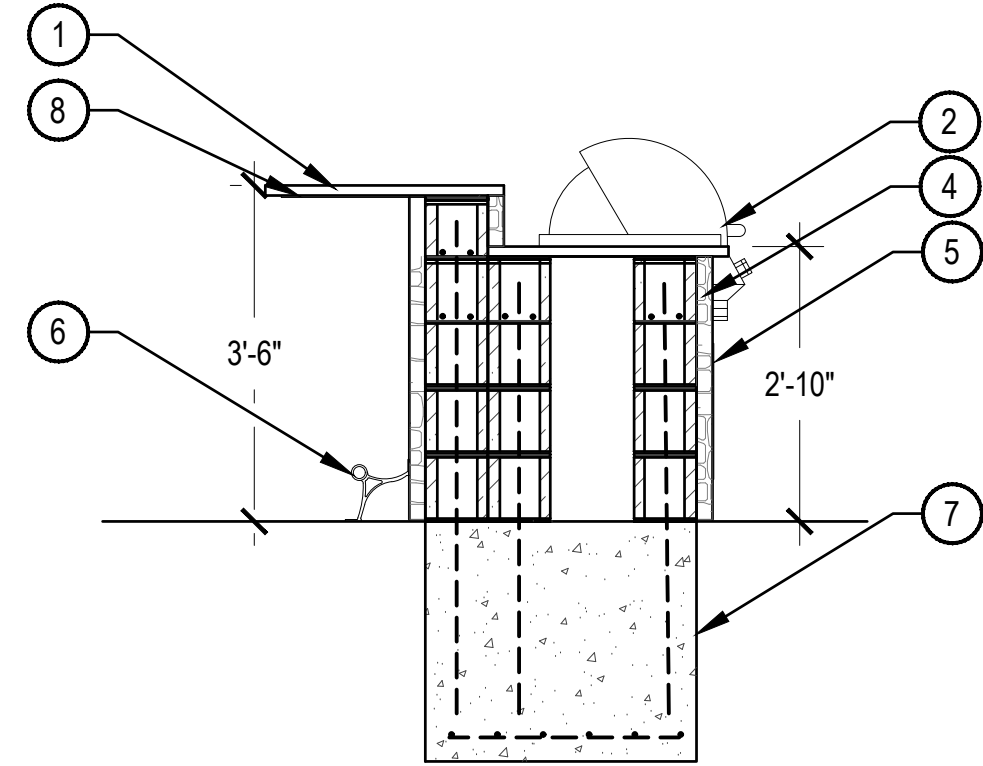
- NOTES:
1. DETAIL DRAWN FOR DESIGN INTENT ONLY.
 2. STRUCTURAL DESIGN BY OTHERS.
 3. CONTRACTOR TO SUBMIT COLOR SAMPLES OF ALL FINISHES/MATERIALS FOR APPROVAL PRIOR TO CONSTRUCTION.
 4. A SEPARATE SIGN PERMIT WILL BE SUBMITTED PRIOR TO CONSTRUCTION.



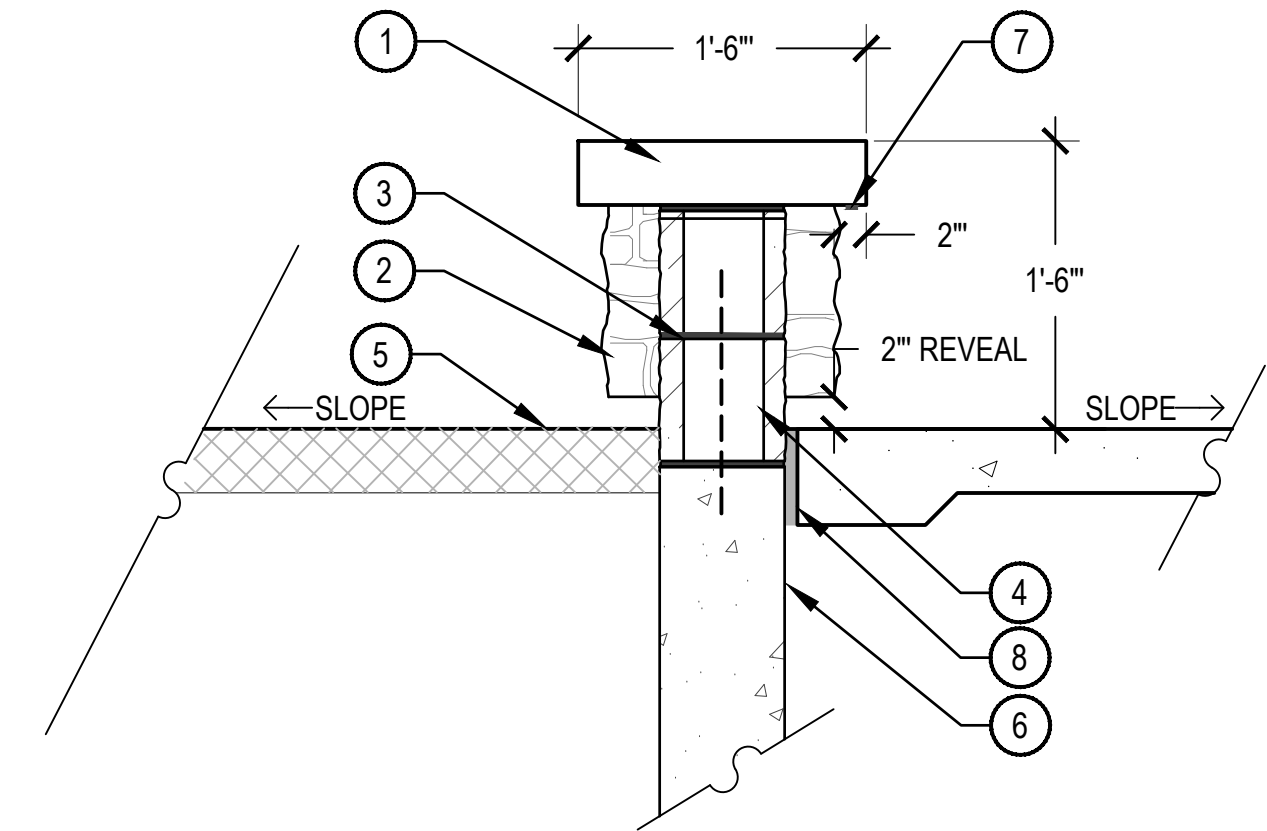
1 POOL DECK GRILL

NOTES:

1. FOR STRUCTURAL INFORMATION AND FOOTINGS REF: STRUCTURAL.
2. THIS DETAIL SHOWS DESIGN INTENT ONLY. CONTRACTOR SHALL MEET ALL APPLICABLE IBC, CITY, STATE AND ADA CODES.
3. DEBURR AND ROUND ALL EXPOSED EDGES FOR ALL METAL WORK.
4. NATURAL GAS LINE WITH AVAILABLE 67,000 BTUs FOR EACH GRILL WITH SHUT-OFF VALVE AND TIMER SHALL BE PROVIDED WITH / FOR THE GRILL.
5. COORDINATE WITH ELECTRICAL TO PROVIDE 1 GFI OUTLETS AND POWER FOR TIMERS AND SHUT-OFF SYSTEM. ALL TIMERS AND SHUT OFF TO BE ADA COMPLIANT.



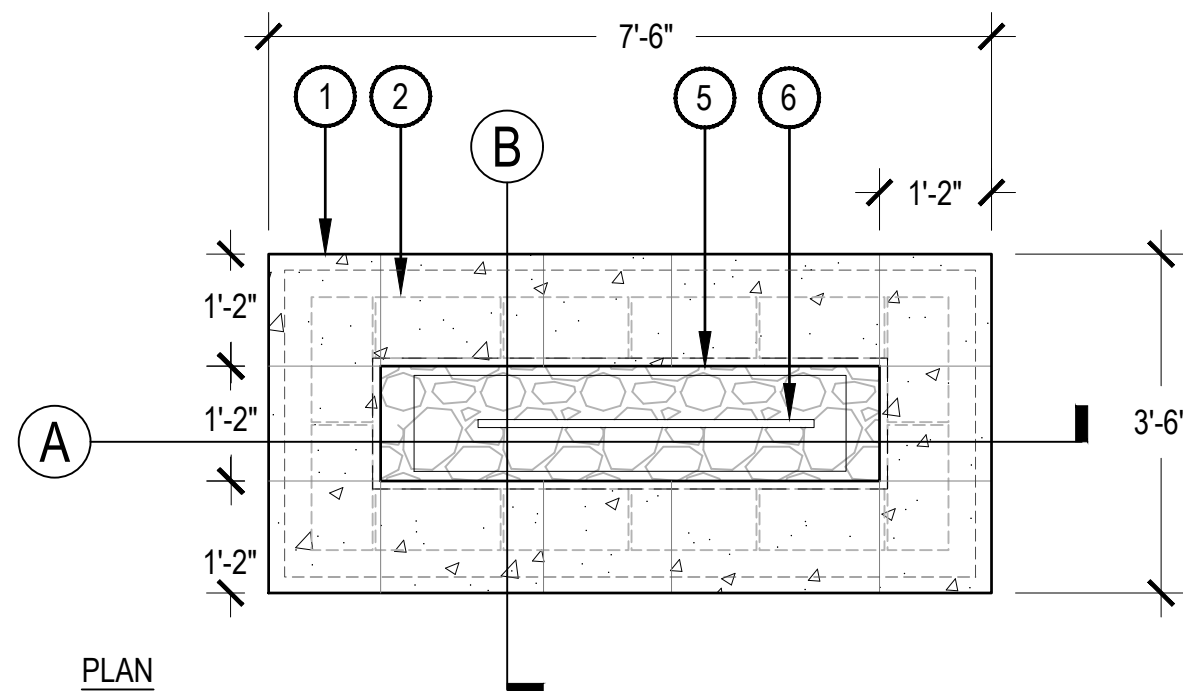
1. 2" THICK POLISHED CONCRETE COUNTER, 2" OVERHANG TOP TO BE SEALED, REFER TO LANDSCAPE SCHEDULES SHEET
2. GAS GRILL (REFER TO MATERIALS SCHEDULE)
3. (1) GFCI ELECTRICAL OUTLET WITH ALL WEATHER COVER RE: ELECTRICAL.
4. STONE VENEER TO MATCH ARCHITECTURE, WRAP ALL SIDES
5. STAINLESS STEEL CABINET DOORS (REFER TO MATERIALS SCHEDULE)
6. KEGWORKS COMBINATION FOOT RAIL BRACKET MATTE BLACK, 2" OD
7. CONCRETE FOOTER (REFER TO STRUCTURAL)
8. STEEL COUNTERTOP BRACKETS, 24" O.C.



NOTES:

1. CONTRACTOR TO SUBMIT SHOP DRAWINGS
2. REFER TO STRUCTURAL DRAWINGS FOR CMU DESIGN.
3. NORRIS DESIGN HAS PROVIDED THIS DETAIL FOR REFERENCE PURPOSE, THIS DETAIL HAS NOT BEEN ENGINEERED.
4. NORRIS DESIGN IS NOT RESPONSIBLE FOR STRUCTURAL DESIGN AND CALCULATIONS.

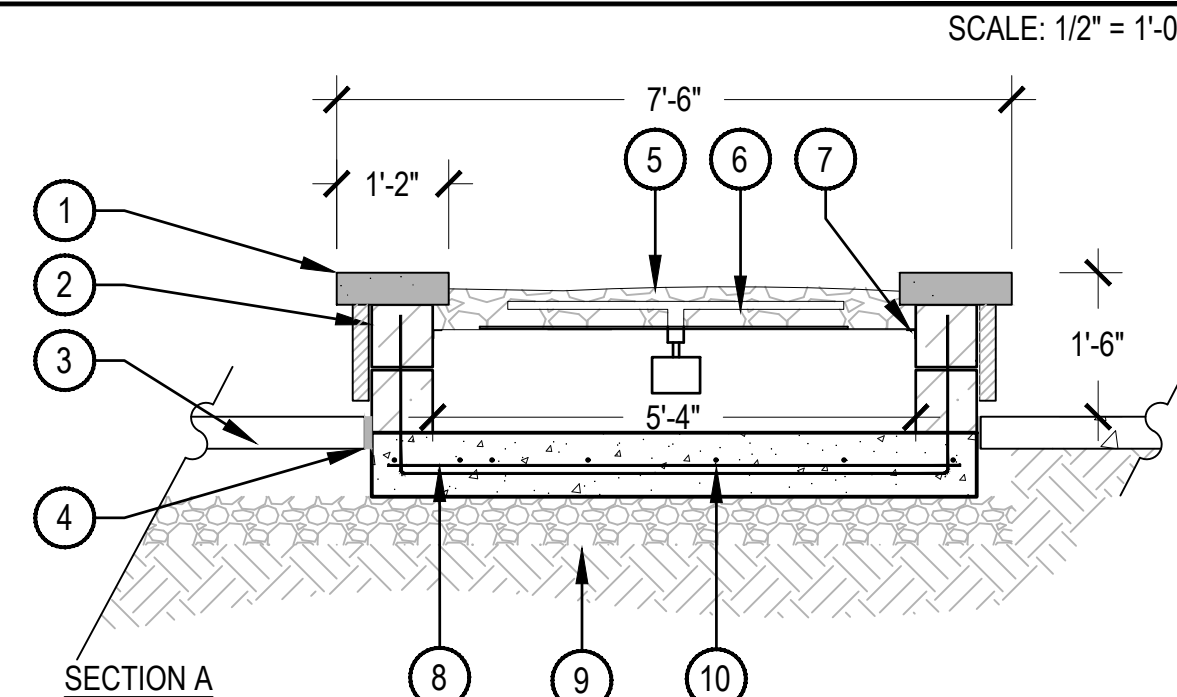
2 FREE STANDING SEATWALL



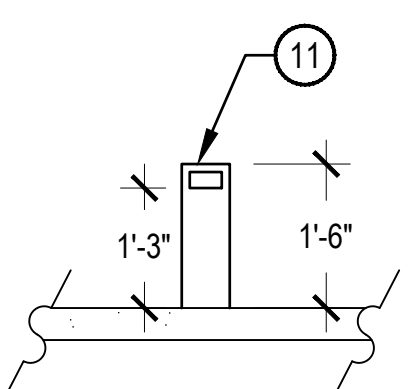
NOTES:

1. CONTRACTOR TO PROVIDE SHOP DRAWINGS & SUBMIT SAMPLES FOR OWNER/ARCHITECT APPROVAL.
2. CONTRACTOR TO COORDINATE AUTOMATED TIMER SYSTEM
3. CONTRACTOR TO PROVIDE TIMER AND AUTO SHUTOFF
4. CONTRACTOR TO PROVIDE SHOP DRAWINGS AND BURNER ASSEMBLY FOR LANDSCAPE ARCHITECT APPROVAL.
5. CONTROLS WILL BE OPERABLE WITH ONE HAND WITHOUT TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AND WILL NOT REQUIRE MORE THAN 5LBS OF FORCE TO OPERATE. CONTROLS WILL BE MOUNTED WITHIN ACCESSIBLE REACH RANGE.

3 FIRE PIT - POOL DECK



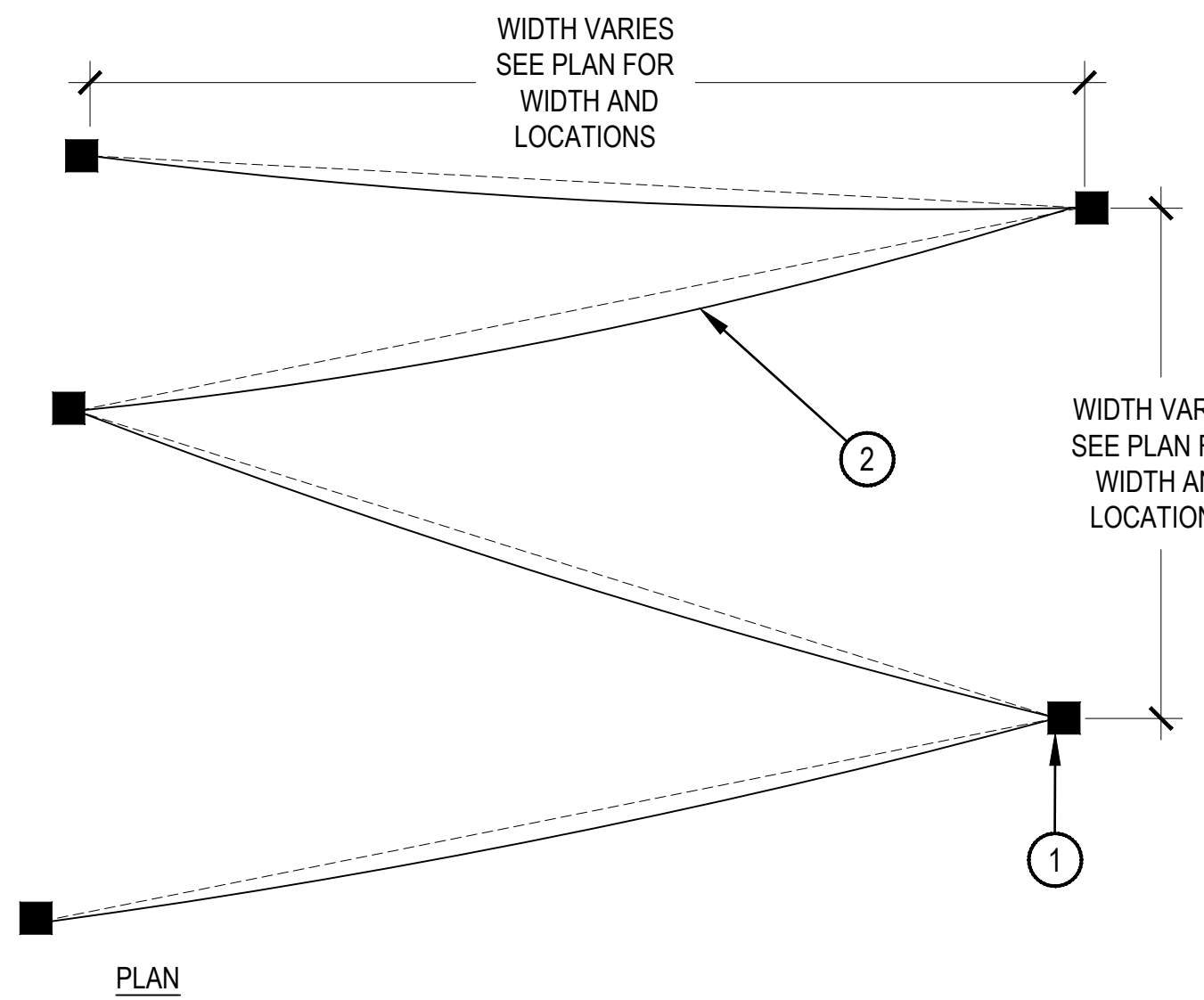
SECTION A



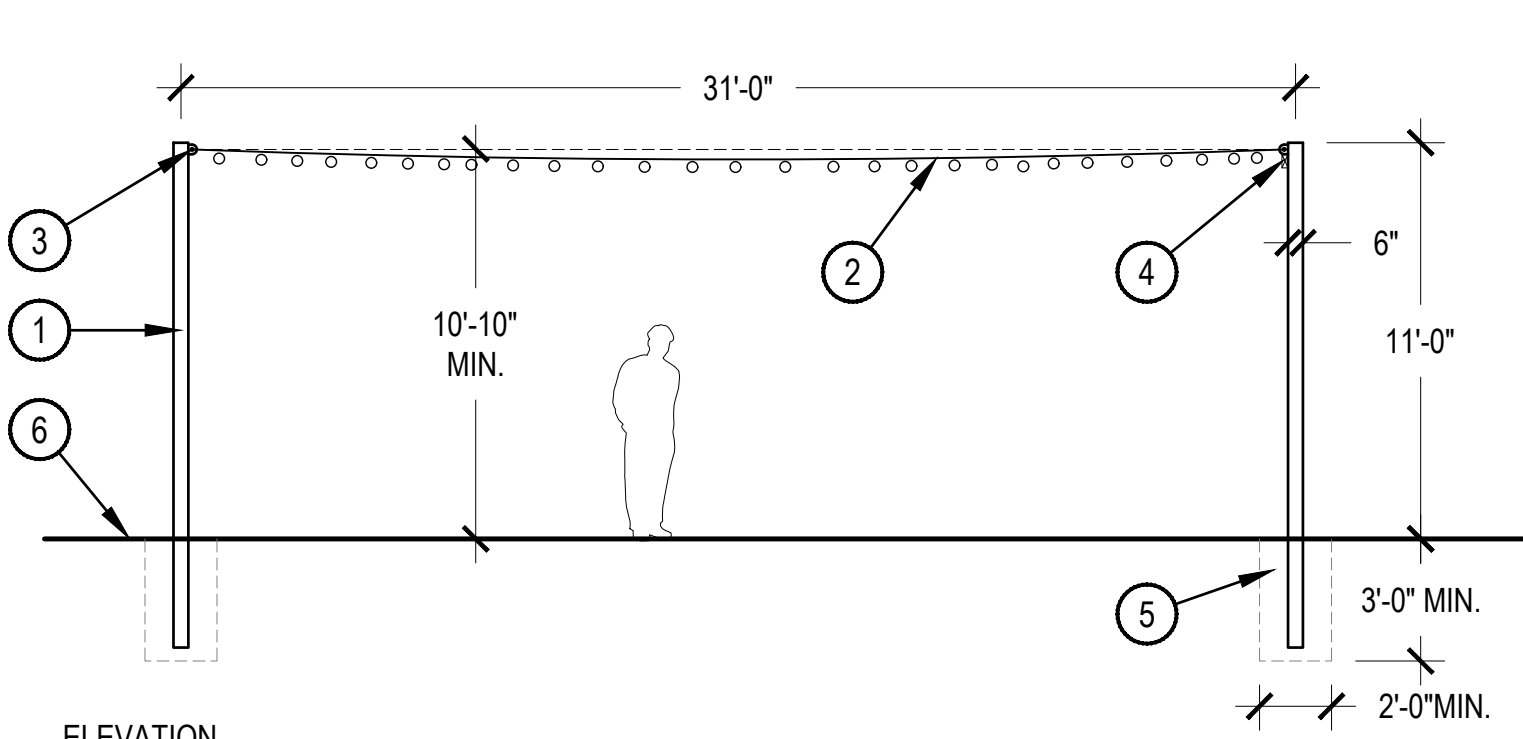
SECTION B

1. 3" THICK SANDSTONE CAP, RE: MATERIAL SCHEDULE, (2" MIN OVERHANG)
2. CMU WALL WITH STONE VENEER RE: MATERIALS SCHEDULE (TO MATCH ARCH.)
3. ADJACENT CONCRETE FLATWORK
4. EXPANSION JOINT
5. WOODLAND DIRECT KRYSTAL FIRE SMOOTH FIR GLASS, 1" OBSIDIAN, OR APPROVED EQUAL
6. 42" WOODLAND DIRECT 210,000 BTU ELECTRONIC LINEAR CROSSFIRE BURNER SYSTEM, OR APPROVED EQUAL CONTRACTOR TO ENSURE FLAME IS AT LEAST 12" HIGH
7. ANGLE IRON AND MESH TO HOLD BURNER SYSTEM
8. 8" CONCRETE FOOTING WITH 16" X 16" #4 REBAR GRID
9. 6" AGGREGATE BASE
10. #4 REBAR AT 16" ON CENTER
11. INSTALL GAS SHUTOFF, TIMER & IGNITION SWITCH IN STAINLESS STEEL BOX POST MOUNTED, SO AS TO BE COMPLIANT WITH ADA GUIDELINES (REFER TO PLANS FOR LOCATIONS)

SCALE: 1/2" = 1'-0"



4 STRING LIGHTING



NOTES:

1. THERE SHALL BE NO EXPOSED CONDUIT OR WIRING. ALL CONDUIT AND WIRING SHALL BE THREAD THROUGH POLES.
2. SEE LANDSCAPE STRUCTURAL & MEP PLANS FOR STRUCTURAL DETAILS OF POLE & STEEL CABLE SYSTEM, AS WELL AS ELECTRICAL SUPPLY FOR LIGHTS
3. STEEL POLES SHALL BE PRIMED AND POWDER BLACK, TO MATCH OTHER POWDER COATED STEEL ON REST OF PROJECT.

SCALE: 3/16" = 1'-0"

NORRIS DESIGN
Planning | Landscape Architecture | Branding



Know what's below.
Call before you dig.

DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

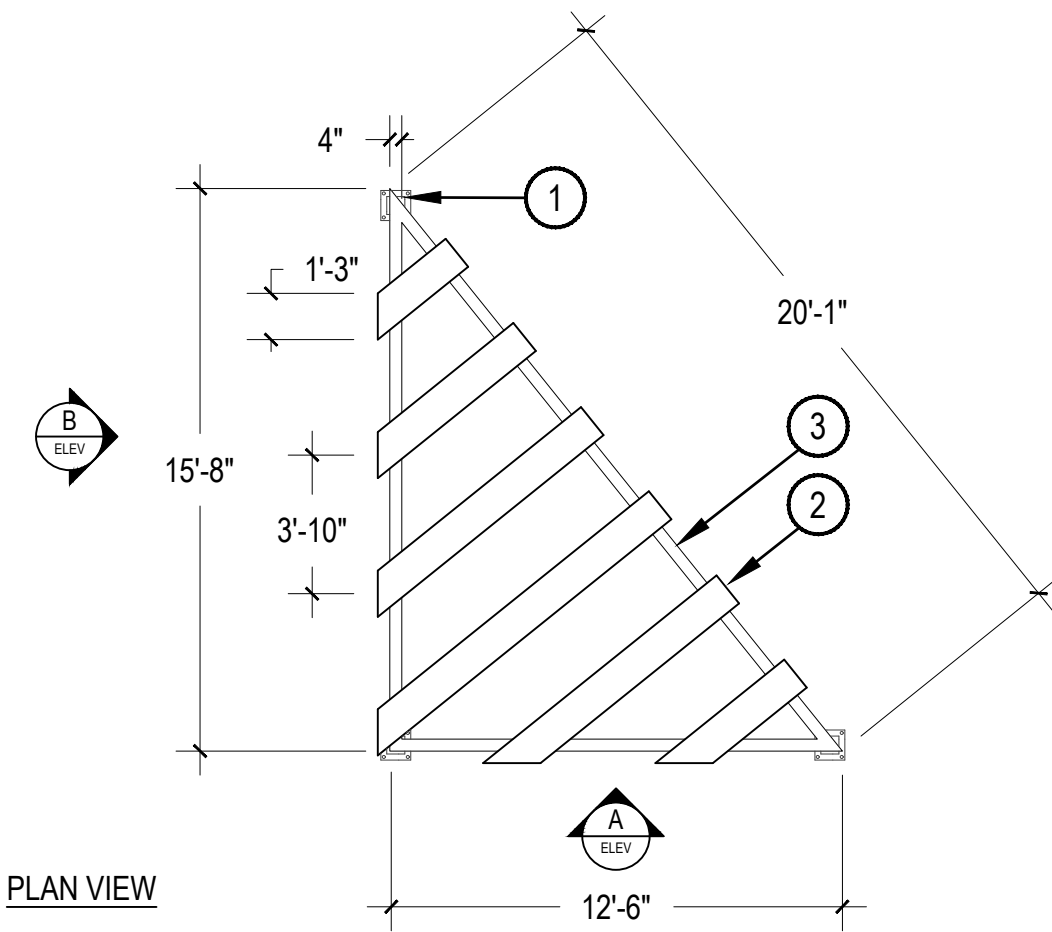


AVILLA FOUNDERS VILLAGE
HARDSCAPE
DETAILS

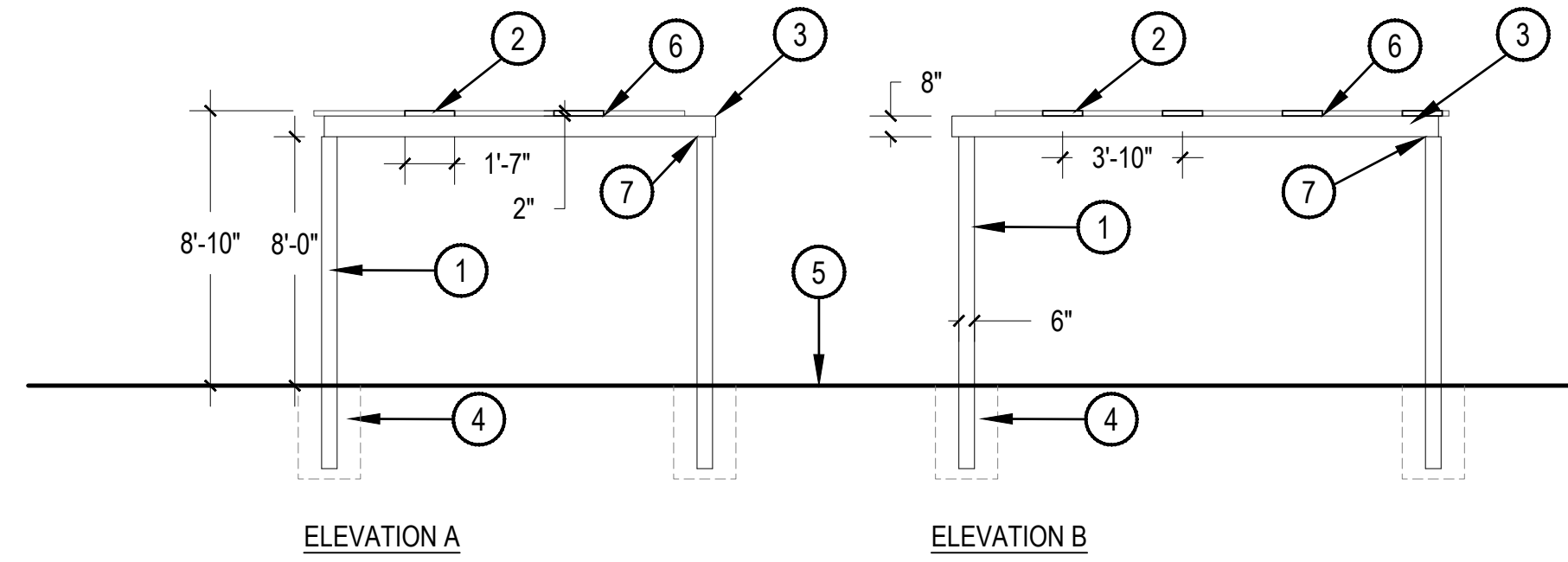
CHECKED BY JARED CARLON, PLA 942

PROJECT #: 210431
SHEET NUMBER

v\PLAN\CDWG LAYOUT: 19- HARDSCAPE DTLS



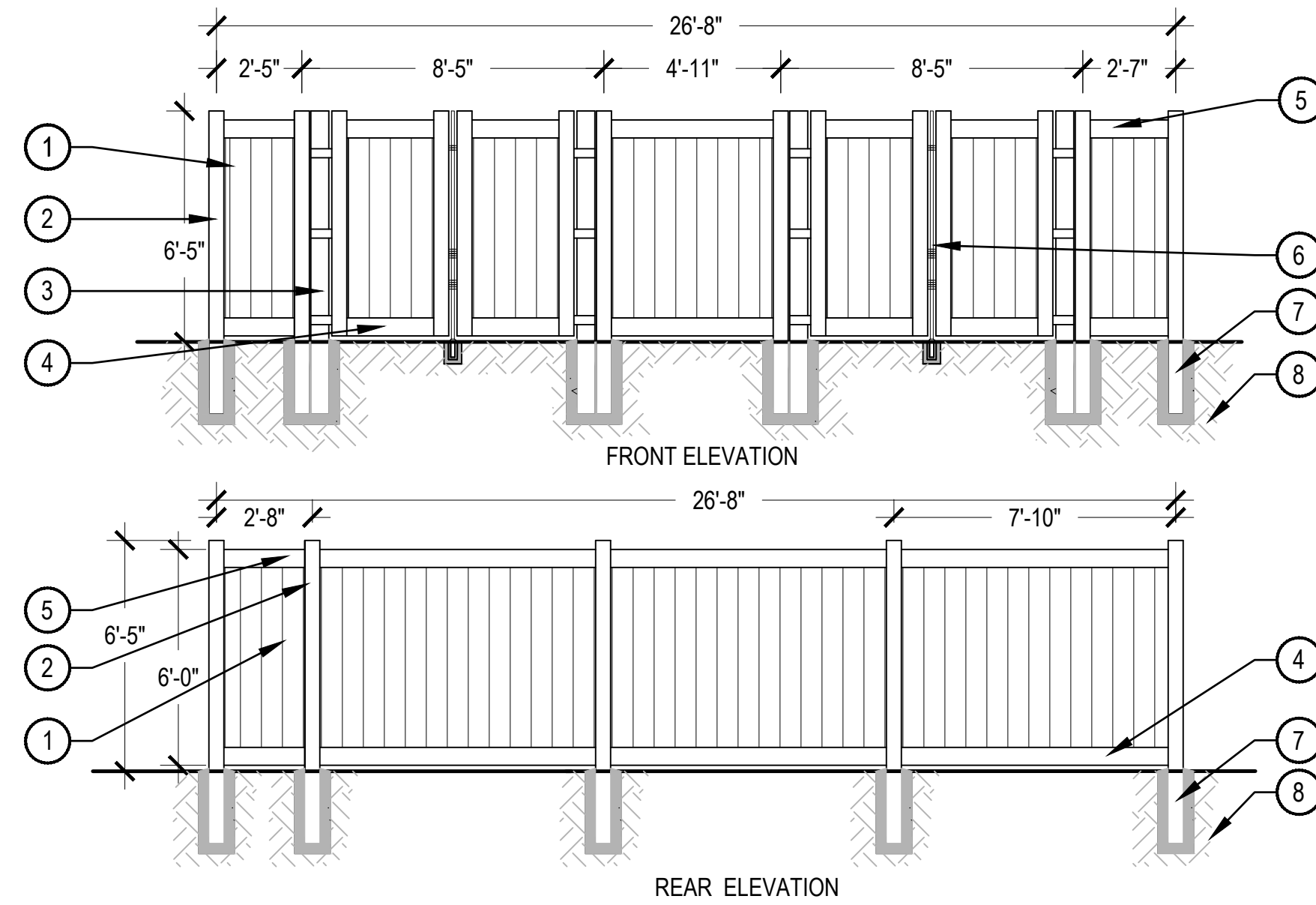
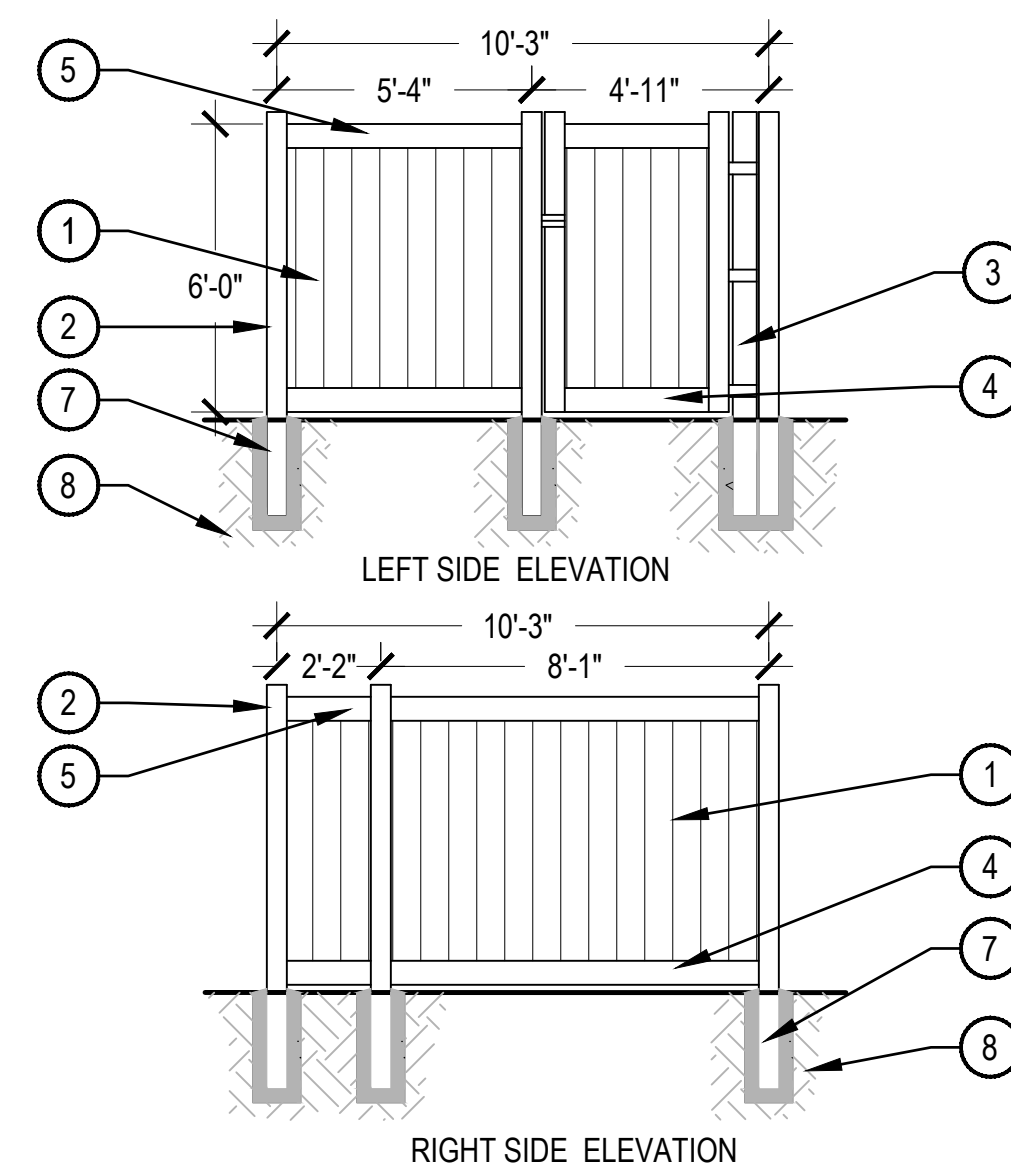
- NOTES:
1. BLACK POWDER COAT FINISH ON ALL STEEL.
 2. THIS DETAIL SHOWS DESIGN INTENT ONLY. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL.
 3. REFER TO STRUCTURAL PLANS FOR ALL STRUCTURAL INFORMATION.
 4. ALL EXPOSED STEEL TUBE ENDINGS WILL NEED TO BE CAPPED



- 1 6" x 6" TUBE STEEL BEAMS
- 2 2" x 12" STEEL SLATS; LENGTHS VARY
- 3 4" x 8" CROSS BEAM
- 4 CONCRETE FOOTING. REF: STRUCTURAL
- 5 FINISH SURFACE
- 6 WELD STEEL SLATS TO STEEL BEAM
- 7 WELD STEEL CROSS BEAM TO ALL SUPPORTS

1 TRELLIS

SCALE: 3/16" = 1'-0"



- 1 1" x 8" NATURAL CEDAR PICKETS
- 2 6"x6" NATURAL CEDAR POST
- 3 6"x6" STEEL GATE POST WITH HINGES
- 4 2"x6" NATURAL CEDAR BOTTOM RAIL
- 5 2"x6" NATURAL CEDAR TOP RAIL
- 6 CENTER DROP ROD ASSEMBLY
- 7 CONCRETE FOOTER PER MANUFACTURER'S SPECIFICATIONS, SLOPE CONCRETE AWAY FROM POST FOR POSITIVE DRAINAGE
- 8 COMPACTED SUBGRADE

- NOTES:
1. BOTTOM OF FENCE SHALL BE 2" ABOVE FINAL GRADE.

2 TRASH ENCLOSURE

SCALE: 1/4" = 1'-0"

NORRIS DESIGN
Planning | Landscape Architecture | Branding



DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023

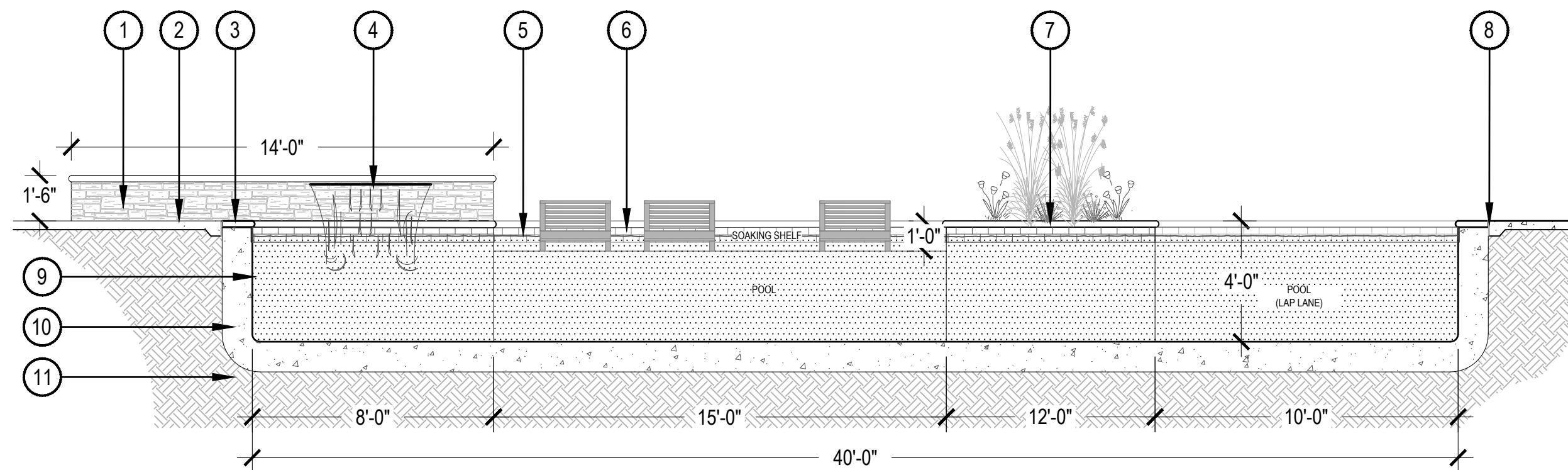
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS



AVILLA FOUNDERS VILLAGE
HARDSCAPE
DETAILS

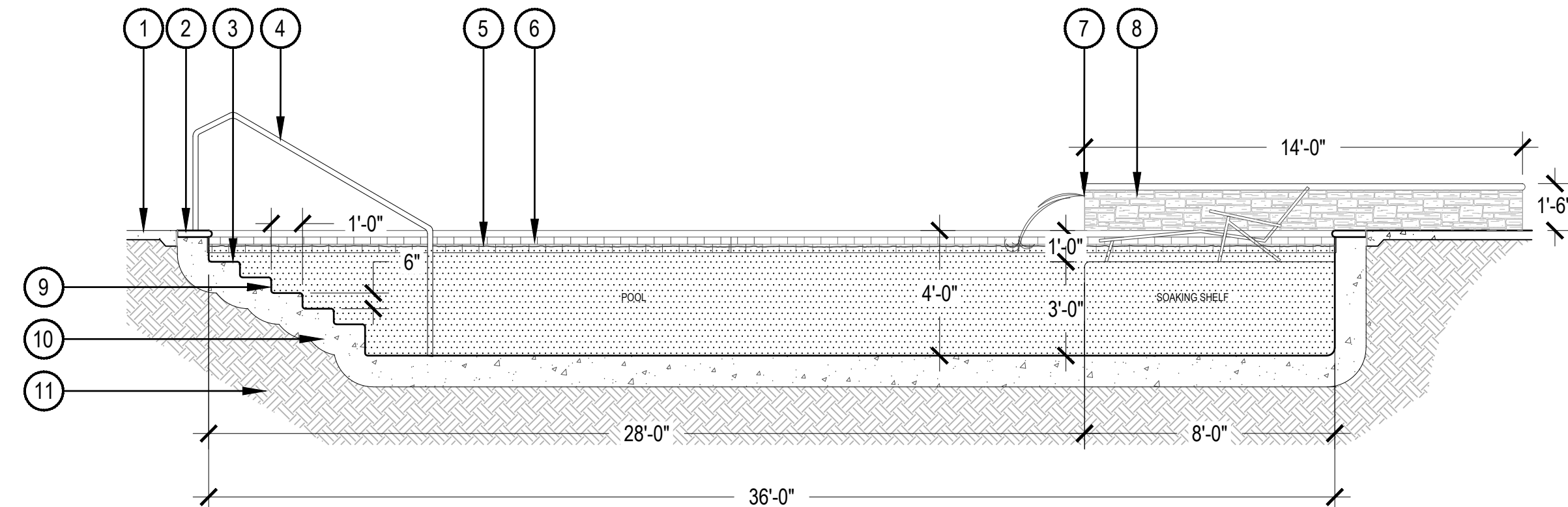
CHECKED BY JARED CARLON, PLA 942

PROJECT #: 210431
SHEET NUMBER



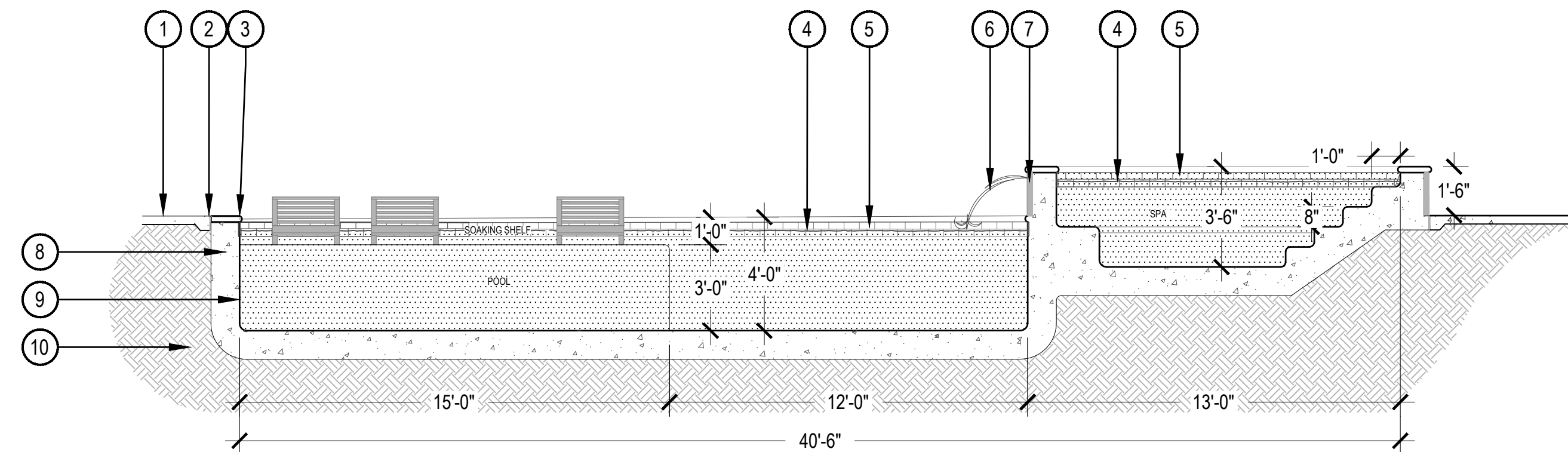
- NOTES:
1. CONTRACTOR TO MEET ALL POOL CODE STANDARDS FOR CITY OF CASTLE ROCK.
 2. THIS DETAIL IS FOR DESIGN PURPOSES ONLY. FINAL CONSTRUCTION DRAWINGS FOR POOL SHALL BE COMPLETED BY OTHERS.
 3. CONTRACTOR TO SUBMIT FINAL SHOP DRAWINGS PRIOR TO CONSTRUCTION.

1 POOL SECTION - A



- NOTES:
1. CONTRACTOR TO MEET ALL POOL CODE STANDARDS FOR CITY OF CASTLE ROCK.
 2. THIS DETAIL IS FOR DESIGN PURPOSES ONLY. FINAL CONSTRUCTION DRAWINGS FOR POOL SHALL BE COMPLETED BY OTHERS.
 3. CONTRACTOR TO SUBMIT FINAL SHOP DRAWINGS PRIOR TO CONSTRUCTION.

2 POOL SECTION - B

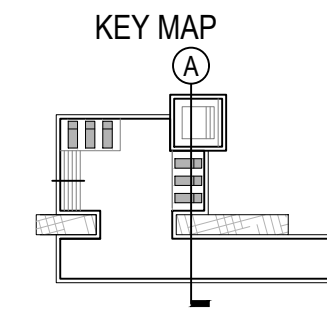


- NOTES:
1. CONTRACTOR TO MEET ALL POOL CODE STANDARDS FOR CITY OF CASTLE ROCK.
 2. THIS DETAIL IS FOR DESIGN PURPOSES ONLY. FINAL CONSTRUCTION DRAWINGS FOR POOL SHALL BE COMPLETED BY OTHERS.
 3. CONTRACTOR TO SUBMIT FINAL SHOP DRAWINGS PRIOR TO CONSTRUCTION.

3 POOL SECTION - C



SPA SPILL FEATURE CHARACTER IMAGE

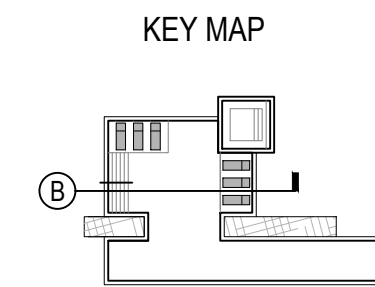


- 1 RAISED SPA, FULLY WRAPPED IN STONE VENEER (REFER TO MATERIALS SCHEDULE)
- 2 POOL DECK WITH ENHANCED PAVING (REFER TO MATERIALS SCHEDULE)
- 3 POOL COPING (REFER TO MATERIALS SCHEDULE)
- 4 SPA SPILL FEATURE (REFER TO MATERIALS SCHEDULE)
- 5 WATER LINE, MAX 4' IN POOL
- 6 POOL TILE (REFER TO MATERIALS SCHEDULE)
- 7 ADJACENT LANDSCAPE PLANTER
- 8 CAULKED EXPANSION JOINT - TO MATCH POOL DECK PAVEMENT
- 9 POOL PLASTER (REFER TO MATERIALS SCHEDULE)
- 10 POOL SHELL REINFORCEMENT AND BONDING BY OTHERS
- 11 COMPACTED SUBGRADE

SCALE: 1/4" = 1'-0"



SPA SPILL FEATURE CHARACTER IMAGE

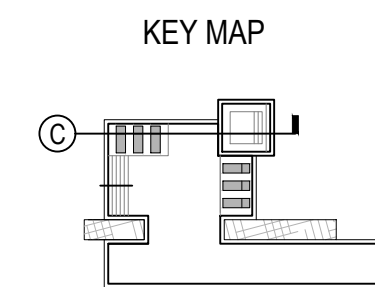


- 1 POOL DECK WITH ENHANCED PAVING (REFER TO MATERIALS SCHEDULE)
- 2 POOL COPING (REFER TO MATERIALS SCHEDULE)
- 3 BLUE STEP TILE, TYPICAL TO CONTRAST WITH POOL PLASTER
- 4 HANDRAIL, STAINLESS STEEL, 1.5" O.D., EMBED MOUNT, BY OTHERS
- 5 WATER LINE, MAX 4' IN POOL
- 6 POOL TILE (REFER TO MATERIALS SCHEDULE)
- 7 SPA SPILL FEATURE (REFER TO MATERIALS SCHEDULE)
- 8 RAISED SPA, FULLY WRAPPED IN STONE VENEER (REFER TO MATERIALS SCHEDULE)
- 9 POOL PLASTER (REFER TO MATERIALS SCHEDULE)
- 10 POOL SHELL REINFORCEMENT AND BONDING BY OTHERS
- 11 COMPACTED SUBGRADE

SCALE: 1/4" = 1'-0"



SPA SPILL FEATURE CHARACTER IMAGE



- 1 POOL DECK WITH ENHANCED PAVING (REFER TO MATERIALS SCHEDULE)
- 2 POOL COPING (REFER TO MATERIALS SCHEDULE)
- 3 CAULKED EXPANSION JOINT - TO MATCH POOL DECK PAVEMENT
- 4 WATER LINE, MAX 4' IN POOL
- 5 POOL TILE (REFER TO MATERIALS SCHEDULE)
- 6 SPA SPILL FEATURE (REFER TO MATERIALS SCHEDULE)
- 7 RAISED SPA, FULLY WRAPPED IN STONE VENEER (REFER TO MATERIALS SCHEDULE)
- 8 POOL SHELL REINFORCEMENT AND BONDING BY OTHERS
- 9 POOL PLASTER (REFER TO MATERIALS SCHEDULE)
- 10 COMPACTED SUBGRADE

SCALE: 1/4" = 1'-0"

IRRIGATION GENERAL NOTES

1.

THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL THE IMPROVEMENTS SHOWN ON THE PLANS.
2.

THE CONTRACTOR SHALL COORDINATE AS NECESSARY WITH THE GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE FOR SUCCESSFUL COMPLETION OF THIS WORK.
3.

ALL IRRIGATION EQUIPMENT IS TO BE AS SPECIFIED OR APPROVED EQUAL PER THE DISCRETION OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR ASSUMES ALL LIABILITY ASSOCIATED WITH THE MODIFICATION OF THE IRRIGATION SYSTEM DESIGN WITHOUT NOTIFYING THE OWNER'S REPRESENTATIVE.
4.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT A THOROUGH SITE INSPECTION AND REVIEW OF THE PROJECT CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO THE FOLLOWING: LANDSCAPE PLAN, UTILITY PLAN, ARCHITECTURE PLAN, GRADING AND DRAINAGE PLAN AND ALL OTHER ASSOCIATED PLANS AND SPECIFICATIONS THAT AFFECT THIS WORK PRIOR TO START OF WORK. IF THE AND CONTRACTOR OBSERVES ANY DISCREPANCIES AMONG THE CONSTRUCTION DOCUMENTS AND THE EXISTING CONDITIONS ON SITE, IT IS THEIR RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY.
5.

THE CONTRACTOR MUST VERIFY THE LOCATION OF ALL PUBLIC AND PRIVATE UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. IF THE CONTRACTOR FAILS TO DO SO AND DAMAGES ANY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL PAY FOR ANY REPAIR WORK ASSOCIATED WITH SAID DAMAGES.
6.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADEQUATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN ALL IRRIGATION DISTRIBUTION LINES AND ALL UTILITIES (EXISTING OR PROPOSED), CONDUIT, STORM WATER COMPONENTS, DRAINS, ETC.
7.

THE CONTRACTOR SHALL CONFORM TO ALL LOCAL AND STATE REGULATIONS AND INSTALL THE IRRIGATION SYSTEM AND ITS COMPONENTS PER MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS REQUIRED BY ANY LOCAL AND STATE AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS SITE.
8.

THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PAYING FOR CERTIFICATION OF THE BACKFLOW PREVENTER BY A STATE CERTIFIED INSPECTOR. THE CONTRACTOR SHALL PROVIDE CERTIFICATES TO OWNER'S REPRESENTATIVE PRIOR TO PROJECT ACCEPTANCE.
9.

IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN LANDSCAPE AREAS AND WITHIN THE PROJECT LIMITS. EQUIPMENT SHOWN OUTSIDE OF THESE LIMITS IS SHOWN FOR GRAPHIC CLARITY ONLY. IF THERE IS A QUESTION REGARDING THE LOCATION OF ANY COMPONENT OF THE IRRIGATION SYSTEM, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE. IF THE CONTRACTOR NEGLECTS TO NOTIFY THE NECESSARY PARTIES, THE CONTRACTOR SHALL PAY FOR ANY REPLACEMENT OR MODIFICATION TO ENSURE PROPER LOCATION AND OPERATION OF THE IRRIGATION SYSTEM AND ITS COMPONENTS.
10.

ALL IRRIGATION DISTRIBUTION LINES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO, MAINLINE, LATERALS, SPRAY HEADS, DRIP EMITTERS SHALL BE KEPT A MINIMUM DISTANCE OF 6' AWAY FROM ALL BUILDING AND WALL FOUNDATIONS, OR AS STIPULATED IN THE GEOTECHNICAL REPORT, WHICHEVER IS GREATER. EQUIPMENT MAY BE SHOWN IN THIS AREA FOR GRAPHIC CLARITY. COORDINATE ALL REQUIRED SETBACKS WITH OWNER'S REPRESENTATIVE PRIOR TO START OF WORK.
11.

EACH VALVE SHALL BE INSTALLED IN A SEPARATE VALVE BOX AS DETAILED. ALL VALVE BOXES AND LIDS SHALL BE COMMERCIAL GRADE, PLASTIC WITH SELF LOCKING COVERS. LID COLOR TO BE GREEN. INSTALL FLUSH TO FINISH GRADE AND PER CONSTRUCTION DETAILS. DO NOT INSTALL IN PAVED AREAS OR IN BOTTOMS OF DRAINAGE SWALES/BASINS.
12.

CONTRACTOR SHALL INSTALL DETECTABLE MARKING TAPE OR #14g DIRECT BURY TRACER WIRE IN ALL PRESSURE MAINLINE TRENCHES. SEE IRRIGATION DETAILS FOR MORE INFORMATION.
13.

PLANT MATERIAL LOCATIONS TAKE PRECEDENCE OVER ROUTING OF IRRIGATION PIPING. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
14.

THE CONTRACTOR SHALL MARK THE LOCATION OF THE MAINLINE, CONTROL VALVES, GATE VALVES AND HEAD LAYOUT OF A REPRESENTATIVE SPRAY ZONE. SCHEDULE A REVIEW WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
15.

INSTALL SCH. 40 BALL WITH OPERATIONAL INDICATOR AT ENDS OF ALL DRIP LATERALS AS DETAILED. FLUSH ALL LATERALS THOROUGHLY BEFORE INSTALLING EMITTERS AND BUBBLERS.
16.

CONTRACTOR SHALL FINE TUNE AND ADJUST NOZZLE DIRECTION AND RADIUS TO REDUCE OVERSPRAY ONTO PAVING OR HARD SURFACES.
17.

CONTRACTOR SHALL INSTALL A QUICK COUPLER IN 10" VALVE BOX AT THE END OF ALL BRANCHES OF THE MAINLINE, OR AS SHOWN ON PLANS, FOR WINTERIZATION AND FLUSHING OF MAINLINE.
18.

THE CONTRACTOR SHALL PERFORM A PRESSURE TEST ON ALL MAINLINES. CONTRACTOR SHALL PRESSURIZE MAINLINES TO 120 PSI AND MAINTAIN PRESSURE AT 120 PSI FOR A MINIMUM CONTINUOUS PERIOD OF TWO (2) HOURS TO ACHIEVE FINAL ACCEPTANCE.
19.

THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE DURING A THREE(3) NIGHT PER WEEK, EIGHT(8) HOURS PER NIGHT WATERING WINDOW. DRIP IRRIGATION ZONES MAY BE ALLOWED TO RUN ON A SEPARATE SCHEDULE FROM THIS WATER WINDOW DEPENDING JURISDICTION. LANDSCAPE ESTABLISHMENT WILL REQUIRE INCREASED IRRIGATION WATER FOR DURATION OF THE ESTABLISHMENT PERIOD AND MAY REQUIRE TWICE THE AMOUNT OF WATER AS ESTABLISHED PLANT MATERIAL. THE CONTRACTOR SHALL COORDINATE WATERING SCHEDULES AND APPLICATION RATES WITH THE OWNER'S REPRESENTATIVE PRIOR TO FINAL ACCEPTANCE.
20.

THE DESIGN IS BASED ON THE FOLLOWING PROJECTED PEAK SEASON WEEKLY APPLICATION RATES AFTER ESTABLISHMENT. THESE FIGURES WILL NEED TO BE ADJUSTED DUE TO SEASONAL CHANGES AND VARIABLE WEATHER CONDITIONS.

•

FESCUE TURF SEED 1.00" PER WEEK PEAK SEASON

•

TREE, SHRUB, AND PERENNIAL PLANT MATERIAL 0.50" PER WEEK PEAK SEASON

•

NATIVE DROUGHT TOLERANT SEED MIX 0.25" PER WEEK PEAK SEASON
23.

THE CONTRACTOR SHALL PROVIDE A SEASONAL MAINTENANCE SCHEDULE WHICH SHALL BEGIN ON APRIL 15TH AND END ON OCTOBER 15TH TO ENSURE THE EFFICIENCY AND LONGEVITY OF THE IRRIGATION SYSTEM. THE MAINTENANCE SCHEDULE SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING LIST OF BEST MANAGEMENT PRACTICES:

•

CHECK HEADS FOR COVERAGE AND LEAKAGE.

•

CHECK CONTROLLER PROGRAMMING AND ADJUST FOR SEASONAL CHANGES AS NECESSARY.

•

VERIFY THAT THE WATER SUPPLY AND PRESSURE ARE AS STATED IN THE DESIGN.

•

CERTIFY THE BACKFLOW PREVENTION DEVICE AND SUBMIT TEST RESULTS TO THE PROPERTY MANAGER.

•

PERIODICALLY VERIFY THE THE SENSORS IN THE IRRIGATION SYSTEM ARE OPERATING CORRECTLY.

•

WINTERIZATION AND SPRING START UP PROCEDURES.

CASTLE ROCK STANDARD IRRIGATION NOTES

1.

INSTALLING CONTRACTOR SHALL CONTACT THE TOWN OF CASTLE ROCK UTILITIES DEPARTMENT AT 720.733.6017 TO SCHEDULE A PRE-CONSTRUCTION MEETING BEFORE BEGINNING THE INSTALLATION OF THE IRRIGATION SYSTEM.
2.

IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.
3.

THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A BACKFLOW PREVENTION ASSEMBLY APPROVED BY THE TOWN OF CASTLE ROCK.
4.

BACKFLOW TO BE TESTED BY A CERTIFIED BACKFLOW TECHNICIAN APPROVED BY THE UTILITY DEPARTMENT WITHIN 10 DAYS OF THE IRRIGATION METER INSTALLATION AND ANNUALLY THEREAFTER.
5.

IRRIGATION TAP, LINE, METER AND BACKFLOW PREVENTION ASSEMBLY MUST BE THE SAME SIZE FROM THE TAP TO A MINIMUM DISTANCE OF 10 PIPE DIAMETERS PAST THE BACKFLOW PREVENTION ASSEMBLY AND WINTERIZATION TEE.
6.

WATER WASTE IS NOT ALLOWED PER THE TOWN OF CASTLE ROCK'S WATER USE MANAGEMENT PLAN. THEREFORE, ALL NOZZLES ARE TO BE FINE TUNE/ADJUSTED SO THAT OVERSPRAY ONTO HARD SURFACES IS ELIMINATED.
7.

OVERHEAD IRRIGATION IS NOT PERMITTED ON SLOPES STEEPER THAN 3:1.
8.

VELOCITY SHALL NOT EXCEED 7.5 FPS THROUGH THE WATER METER.
9.

NO OVERHEAD IRRIGATION IN AREAS LESS THAN 10 FEET WIDE.
10.

THERE IS TO BE NEITHER PLANT MATERIAL NOR IRRIGATION IN AREAS LESS THAN 4 FEET WIDE.
11.

ALL SPRINKLER HEADS TO BE ADJUSTED TO MINIMIZE/ELIMINATE OVER SPRAY ON TO HARD SURFACES OR UNINTENDED AREAS. PER TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN WATER WASTE IS NOT ALLOWED
12.

OVERHEAD IRRIGATION IN AREAS LESS THAN 10' IN WIDTH OR INSTALLED ON SLOPES EQUAL TO OR STEEPER THAN 3:1 WILL NOT BE APPROVED BY TOWN OF CASTLE ROCK INSPECTORS.
13.

ALL IRRIGATION INSTALLATIONS MUST MEET TOWN OF CASTLE ROCK DETAILS
14.

IRRIGATION EXEMPTION MUST BE OBTAINED FROM THE CASTLE ROCK WATER IF IRRIGATING THE NATIVE SEED OR THE SOD ON A DAILY BASIS FOR ESTABLISHMENT DURING THE MONTHS OF MAY, JUNE, AUGUST AND SEPTEMBER.
15.

IRRIGATION EXEMPTIONS WILL NOT BE ISSUED DURING THE MONTH OF JULY. IRRIGATION SYSTEMS MUST BE DESIGNED TO OPERATE WITHIN THE TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN. CURRENT COMMERCIAL HOURS OF OPERATION ARE THREE FIXED DAYS A WEEK FROM 10 PM TO 6 AM.
16.

IRRIGATION SYSTEMS ARE TO BE WINTERIZED ANNUALLY IN THE FALL.
17.

A COPY OF THE STAMPED AND TOWN APPROVED IRRIGATION PLANS IS TO BE AVAILABLE ON-SITE DURING IRRIGATION INSPECTIONS.

IRRIGATION POINT OF CONNECTION NOTES

1.

POINT OF CONNECTION: THERE ARE TWO (2) POINTS OF CONNECTION ON THIS PROJECT.

POC #1 : 1-1/2" DEDICATED IRRIGATION WATER METER LOCATED AT SOUTH SIDE OF MAIN ENTRANCE - SEE PLANS.

POC #2 : 1-1/2" DEDICATED IRRIGATION WATER METER LOCATED AT NORTH SIDE OF MAIN ENTRANCE - SEE PLANS.

•

CONTRACTOR IS TO LOCATE AND CONNECT DOWNSTREAM OF THE DEDICATED POTABLE IRRIGATION WATER METER (PROVIDED BY OTHERS) WITH TYPE K COPPER AT A DEPTH OF 48" OR PER LOCAL CODE, WHICHEVER IS GREATER. EXTEND COPPER TO BACKFLOW PREVENTION UNIT. EXTEND COPPER TUBING MINIMUM 30" HORIZONTAL FROM BACKFLOW PREVENTER AND INSTALL ONE MANUAL DRAIN, TRANSITION TO AND EXTEND CLASS 200 PVC MAINLINE TO THE FLOW SENSOR, GATE VALVE, MASTER VALVE, 1" QUICK COUPLER, AND EXTEND MAINLINE TO VALVES AS SHOWN.

•

ALL PIPING FROM THE DEDICATED IRRIGATION POTABLE METER THROUGH DRAIN VALVE DOWNSTREAM OF THE BACKFLOW PREVENTION UNIT SHALL BE THE SAME SIZE AS THE METER UNLESS OTHERWISE NOTED.

•

THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES, OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS ASSOCIATED WITH THIS WORK. FINAL LOCATION OF BACKFLOW PREVENTION UNIT SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
2.

CONTROLLER LOCATION: THERE ARE TWO (2) CONTROLLERS ON THIS PROJECT.

CONTROLLER A : WALL MOUNTED CONTROLLER LOCATED AT SOUTH SIDE OF MAIN ENTRANCE - SEE PLANS.

CONTROLLER B : WALL MOUNTED CONTROLLER LOCATED NORTH OF POOL AMENITY AREA - SEE PLANS.

•

CONTROLLERS SHALL BE PROGRAMMED TO RUN MULTIPLE VALVES AT ONE TIME WITH A MAXIMUM TOTAL OF 40 GPM .

•

CONTROLLERS, TO BE MOUNTED PER DETAILS AND MANUFACTURER'S SPECIFICATIONS.

•

CONTRACTOR TO COORDINATE WITH OWNER'S REPRESENTATIVE AND ELECTRICAL PLANS FOR POWER SERVICE. ALL ELECTRICAL EQUIPMENT AND POWER CONNECTION INSTALLATION SHALL CONFORM TO ALL LOCAL CODES. INSTALL A LINE VOLTAGE SURGE DEVICE (INTERMATIC AG2401C3/ OR SQUARE D SDSA1175) FOR 120V IN A JUNCTION BOX PRIOR TO CONTROLLER.

•

RAIN/FREEZE SENSOR: MOUNT THE RAIN SENSOR ON BUILDING EAVE IN PROXIMITY TO THE CONTROLLER. THE SENSOR SHALL BE MOUNTED IN A LOCATION IN FULL SUN AND OPEN TO RAINFALL. SENSOR SHALL BE NO MORE THAN 200' FROM WIRELESS RECEIVER. MOUNT WIRELESS RECEIVER ON OR ADJACENT TO THE IRRIGATION CONTROLLER.
2.

SYSTEM PRESSURE: THE SYSTEM HAS BEEN DESIGNED PER THE FOLLOWING SPECIFICATIONS. REQUIRED MINIMUM STATIC PRESSURE OF 70 PSI AND MAXIMUM SAFE VELOCITY OF 5 FPS IN ANY PVC PIPE AND 7.5 FPS IN ANY COPPER PIPE.

•

PER (WATER PURVEYOR/CITY WATER) THE STATIC PRESSURE ON SITE IS APPROXIMATELY 70 PSI.

•

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESSURE IN THE FIELD AT THE POINT OF CONNECTION BEFORE CONSTRUCTION BEGINS AND FOR NOTIFYING THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCY BETWEEN THE DESIGN PRESSURE OF THE SYSTEM AND THE MEASURED PRESSURE IN THE FIELD. IF THE CONTRACTOR FAILS TO NOTIFY OWNER'S REPRESENTATIVE OF SUCH DISCREPANCIES, THEN THE CONTRACTOR ASSUMES ALL LIABILITY AND COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS TO ACCOMMODATE THE ACTUAL PRESSURE.

•

FLOW SENSOR: SENSOR REQUIRES A MINIMUM FLOW FOR PROPER READINGS. MULTIPLE ZONES MAY BE REQUIRED TO RUN SIMULTANEOUSLY TO ACHIEVE THE MINIMUM FLOWS REQUIRED. CONTRACTOR TO SET 'K' VALUES PER MANUFACTURER.
3.

FLOW SENSORS REQUIRE A MINIMUM FLOW OF 0.22 GPM.
4.

COMMUNICATION: IT IS RECOMMENDED THAT THE IRRIGATION CONTROLLER BE CONNECTED TO A WATER MANAGEMENT CONTROL SOFTWARE FOR OPTIMUM FUNCTION OF THE IRRIGATION SYSTEM. COORDINATE WITH OWNER'S REPRESENTATIVE AND CONTACT THE LOCAL CONTROLLER MANUFACTURER REPRESENTATIVE OR AUTHORIZED VENDOR PRIOR TO ORDERING CONTROLLER FOR COMMUNICATION AND CONNECTIVITY OPTIONS.

TWO WIRE NOTES

1.

GROUNDING FOR THE IRRIGATION CONTROLLER AND DECODERS ARE TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND PER THE AMERICAN SOCIETY OF IRRIGATION CONSULTANTS GUIDELINE 100-2002 FOR EARTH GROUNDING ELECTRONIC EQUIPMENT IN IRRIGATION SYSTEMS FOUND AT WWW.ASIC.ORG. FOR ADDITIONAL TECHNICAL SUPPORT REGARDING THE IRRIGATION CONTROLLER OR GROUNDING PLEASE CONTACT THE MANUFACTURER.
2.

DO NOT LOOP TWO WIRE PATH. STAR PATTERN FROM CONTROLLER FOR EACH BRANCH OF MAINLINE.
3.

CONTRACTOR IS RESPONSIBLE FOR GROUNDING THE TWO-WIRE PATH AT THE FOLLOWING LOCATIONS, BUT ARE NOT LIMITED TO:

•

CONTROLLER TO BE GROUNDED INDEPENDENTLY FROM BUILDING.

•

GROUND 1ST DECODER ON WIRE PATH FROM CONTROLLER.

•

GROUND EVERY 8TH DECODER OR EVERY 500 FEET BETWEEN DECODERS, WHICH EVER LENGTH IS SMALLER.

•

GROUND EVERY END OF WIRE PATH.
4.

THE TWO-WIRE CONTROLLER REQUIRES EACH CONTROL VALVE AND SENSOR TO HAVE A DECODER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE PROPER DECODERS, SURGE SUPPRESSION AND GROUNDING. THE RAIN SENSOR AND FLOW SENSOR REQUIRE A SENSOR DECODER.
5.

QTY OF STATIONS (VALVES) PER MANIFOLD REQUIRED DECODER

•

SINGLE STATION HUNTER ICD-100
6.

CONTROLLER TWO-WIRE PATH SHALL BE MANUFACTURER'S APPROVED WIRE OR APPROVED EQUAL.
7.

CONTRACTOR SHALL USE UL APPROVED WIRE STRIPPER AND WATERPROOF CONNECTIONS (DBRY OR APPROVED EQUAL) AT ALL SPLICES AND CONNECTIONS POINTS.
8.

PROVIDE 30" MINIMUM TWO WIRE PATH IN EACH VALVE BOX FOR MAINTENANCE.
9.

CONTRACTOR SHALL INCLUDE TWO-WIRE RUN PATHS ON AS-BUILT DRAWINGS.

SLEEVING COORDINATION NOTES

1.

INSTALLATION OF IRRIGATION SLEEVING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR FOR LOCATION AND SIZING OF SLEEVES PRIOR TO THE START OF CONSTRUCTION.
2.

SLEEVES SHALL BE INSTALLED PRIOR TO THE START OF PAVING OPERATIONS.
3.

THE CONTRACTOR SHALL SLEEVE ALL IRRIGATION DISTRIBUTION LINES, VALVE CONTROL WIRES AND COMMUNICATION WIRES UNDER ALL PAVED SURFACES, WALL FOOTERS, DRAINAGE CHANNELS, INLETS, CATCH BASINS, ETC.
4.

ALL SLEEVES SHALL EXTEND A MINIMUM OF 12" BEYOND EDGE OF ALL OBSTRUCTIONS. NO TEES, ELLS OR OTHER TURNS IN PIPING SHALL BE LOCATED UNDER ANY OBSTRUCTIONS.
5.

EACH PIPE SHALL BE IN A SEPARATE SLEEVE. WIRES SHALL BE IN A SEPARATE PIPE UNDER ALL PAVED SURFACES.
6.

SLEEVING SHALL BE INSTALLED PER THE SIZES AND QUANTITIES SHOWN ON THE PLANS BASED ON THE CHART BELOW.

PIPING

REQUIRED SLEEVE SIZE

MAINLINE PIPING

6" CLASS 200 PVC

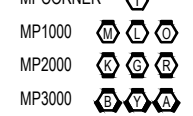
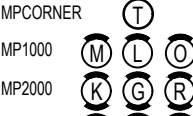
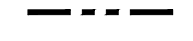
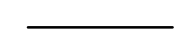
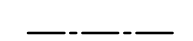
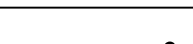
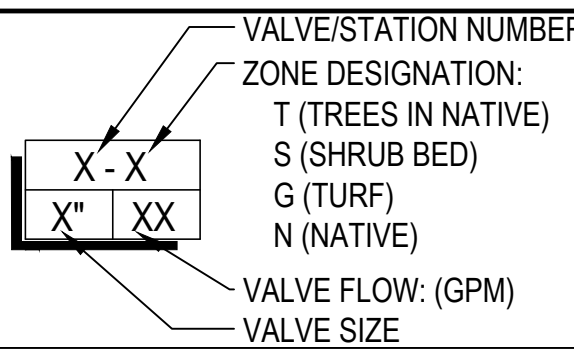
LATERAL PIPING

2X NOMINAL DIAMETER OF LATERAL

CONTROL WIRES

2" CLASS 200 PVC

IRRIGATION SCHEDULE

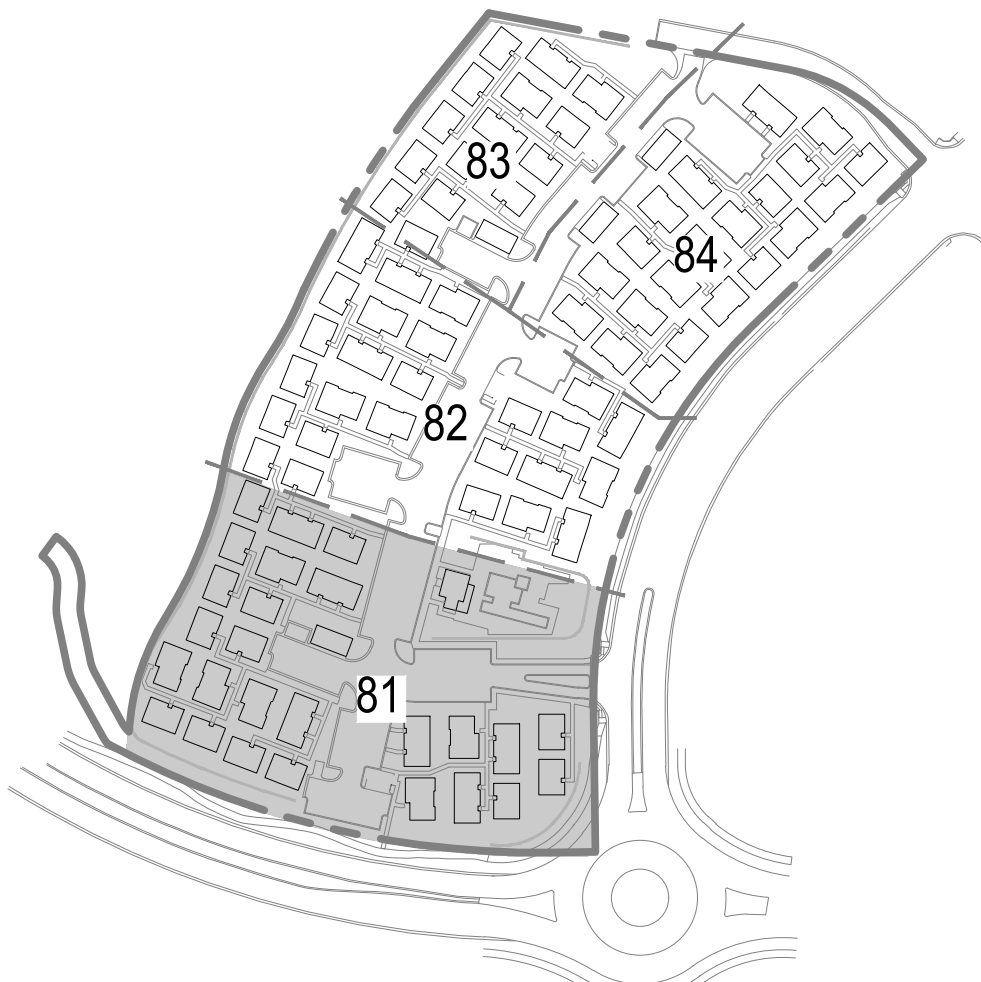
SYMBOL	DESCRIPTION	MODEL NO. DESCRIPTION	DETAIL # AND SHEET		
	IRRIGATION METER	POC #1: 1.5" DEDICATED IRRIGATION METER POC #2: 1.5" DEDICATED IRRIGATION METER REFER TO CIVIL, UTILITY, AND WATER PLANS	1	85	
	IRRIGATION CONTROLLER	CONTROLLER A: HUNTER ACC2-A2C-1200-SS + A2C-LTE CONTROLLER B: HUNTER ACC2-A2C-1200-SS + A2C-LTE 120VAC POWER REQUIRED - SEE PLANS FOR LOCATION(S)	4	85	
	RAIN SENSOR	HUNTER WSS-SEN REFER TO CONTROLLER NOTES	5	85	
	BACKFLOW PREVENTER	FEBCO 1.5" 825YA SEE ENCLOSURE SPECIFICATIONS BELOW	2	85	
NOT SHOWN	SECURITY ENCLOSURE	GUARD SHACK GS-1 LIFT OFF ENCLOSURE WITH FROSTGUARD BLANKET, POWDER COATED DESERT TAN	3	85	
	MANUAL DRAIN VALVE	MATCO-NORCA 3/4" 201X INSTALLED IN AEP 910L-1G2G VALVE BOX	6	85	
	QUICK COUPLER	HUNTER HQ-44LRC INSTALLED IN AEP 910L-1G2G VALVE BOX	1	86	
	MASTER VALVE	HUNTER IBV-150G WITH ICD-100 DECODER, INSTALLED IN AEP 1015-1G2G VALVE BOX, SIZED PER PLAN	7	85	
	FLOW SENSOR	FLOWEC QS-200-15 WITH SHIELDED COMMUNICATION CABLE BACK TO CONTROLLER, INSTALLED IN AEP 1015-1G2G VALVE BOX	8	85	
	ISOLATION GATE VALVE	MATCO-NORCA 514TX MATCH LINE SIZE, INSTALLED IN AEP 910L-1G2G VALVE BOX	2	86	
	TURF VALVE ASSEMBLY	HUNTER ICV-G SERIES WITH SCH 40 BALL VALVE AND ICD-100 DECODER INSTALLED IN AEP 1015-1G2G VALVE BOX, SIZED PER PLAN	4	86	
	DRIP VALVE ASSEMBLY	HUNTER IC2-101-LF WITH SCH 40 BALL VALVE AND ICD-100 DECODER INSTALLED IN AEP 1320-1G2G VALVE BOX, SIZED PER PLAN	5	86	
	GROUNDING / LINE SURGE SUPPRESSION	COPPER-CLAD GROUNDING ROD WITH WATERPROOF WIRE CONNECTORS AND ICD-100 SURGE ARRESTING DECODER, INSTALLED IN AEP 910L-1G2G VALVE BOX.	4	87	
	TURF ROTARY	HUNTER PROS-06-PRS40-CV WITH HUNTER MP SERIES NOZZLE NOZZLE PER PLAN	6	86	
	TURF SPRAY (FIXED)	HUNTER PROS-06-PRS30-CV WITH TORO PRECISION SERIES NOZZLE NOZZLE PER PLAN	6	86	
	NATIVE SEED ROTARY	HUNTER PROS-12-PRS40-CV WITH HUNTER MP SERIES NOZZLE NOZZLE PER PLAN	7	86	
	TREES IN NATIVE	(2) CONCENTRIC RINGS OF RAIN BIRD XFS-09-12-CV DRIPLINE	3	87	
	SLEEVING	CLASS 200 PVC REFER TO SLEEVING NOTES	8	86	
	SERVICE LINE	TYPE K COPPER SIZE: MATCH POC UNLESS OTHERWISE NOTED	NA	NA	
	PVC MAINLINE	CLASS 200 PVC BE SIZE: 2.5" UNLESS OTHERWISE NOTED	3	86	
	PVC TURF LATERAL	CLASS 200 PVC BE SIZE: 1" MINIMUM UNLESS OTHERWISE NOTED	3	86	
	PVC TREE LATERAL	CLASS 200 PVC SIZE: 1" UNLESS OTHERWISE NOTED	3	86	
	DRIP LATERAL	UV RESISTANT POLYETHYLENE SIZE: 3/4" MINIMUM UNLESS OTHERWISE NOTED	3	86	
	FLUSH END CAP	HOSE END FLUSH CAP & OPERATIONAL INDICATOR INSTALLED IN AEP 910L-1G2G VALVE BOX	2	87	
VALVE CALLOUT		EMITTER SCHEDULE			
		PLANT TYPE	EMITTER	QTY.	TOTAL GPH
		PERENNIAL / GRASSES	0.5 GPH	TWO EACH	1.0 GPH
		DECIDUOUS SHRUBS	1.0 GPH	TWO EACH	2.0 GPH
		EVERGREEN SHRUBS	1.0 GPH	TWO EACH	2.0 GPH
		DECIDUOUS TREE	1.0 GPH	EIGHT EACH	8.0 GPH
		EVERGREEN TREE	1.0 GPH	EIGHT EACH	8.0 GPH
		TREES IN NATIVE	TREE RING ASSEMBLY - REFER TO IRRIGATION SCHEDULE		
EMITTER NOTES					
1. ALL PLANT MATERIAL SHALL BE IRRIGATED WITH RAIN BIRD XB SERIES PRESSURE COMPENSATING EMITTERS.					
2. EMITTER SCHEDULE IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL ADJUST EMITTER AND NUMBER OF EMITTERS BASED ON THE NEEDS OF INDIVIDUAL PLANTS OR PLANT HYDROZONES.					
3. 1/4" DISTRIBUTION TUBING NOT TO EXCEED 8' IN LENGTH.					
4. RAIN BIRD DBC-025 DIFFUSER BUG CAP AND TS-025 STAKE ON ALL 1/4" DISTRIBUTION TUBING EMISSION POINTS.					
5. REFER TO DRIP IRRIGATION DETAILS 1-3, SHEET 87					





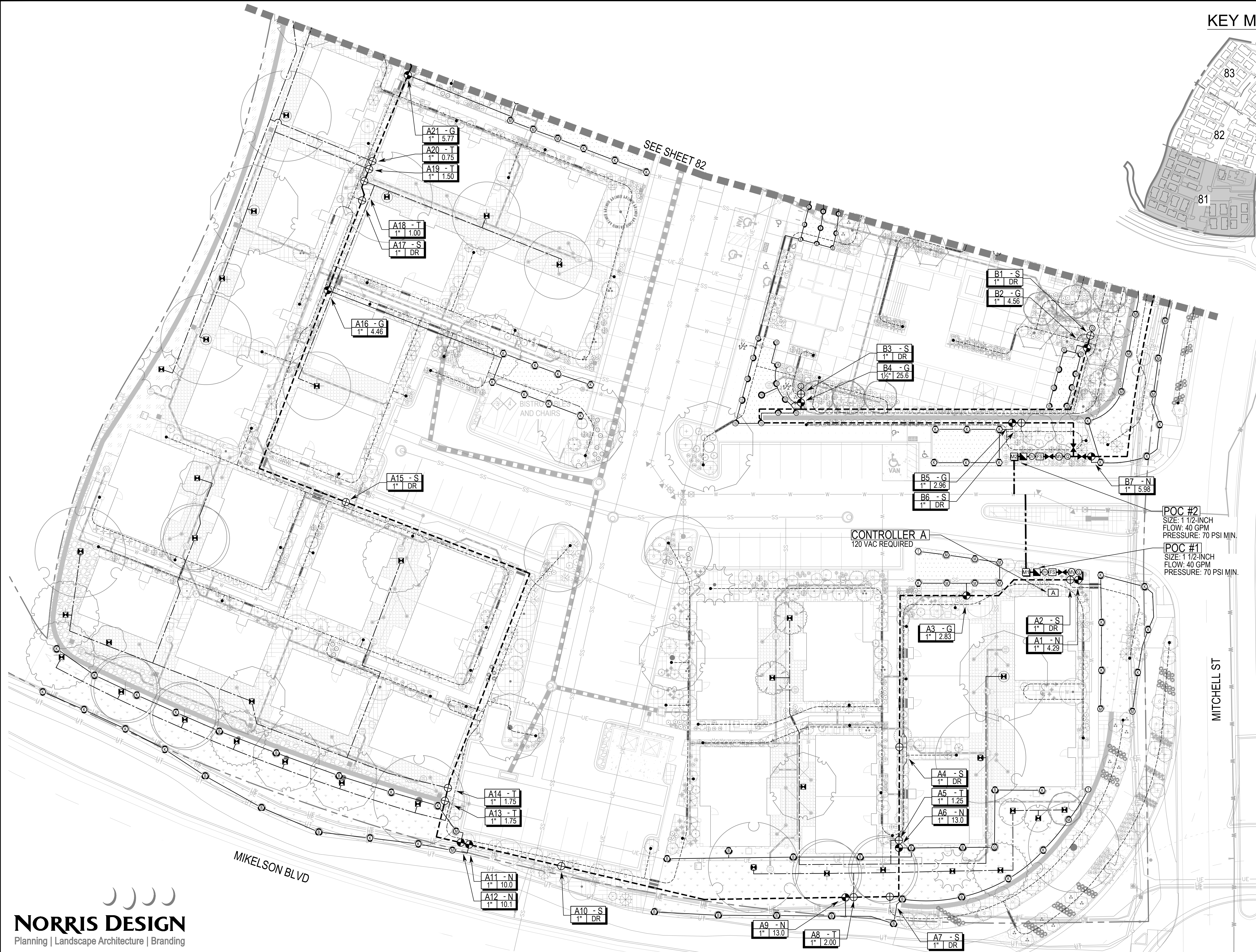
ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

KEY MAP



IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
	IRRIGATION METER
	IRRIGATION CONTROLLER
	RAIN SENSOR
	BACKFLOW PREVENTER
NOT SHOWN	SECURITY ENCLOSURE
	MANUAL DRAIN VALVE
	QUICK COUPLER
	MASTER VALVE
	FLOW SENSOR
	ISOLATION GATE VALVE
	TURF VALVE ASSEMBLY
	DRIP VALVE ASSEMBLY
	GROUNDING / LINE SURGE SUPPRESSION
	TURF ROTARY
	TURF SPRAY (FIXED)
	NATIVE SEED ROTARY
	TREES IN NATIVE
	SLEEVING
	SERVICE LINE
	MAINLINE
	PVC TURF LATERAL
	PVC TREE LATERAL
	DRIP LATERAL
	FLUSH END
	CAP



NORRIS DESIGN
Planning | Landscape Architecture | Branding

811
Know what's below.
Call before you dig.

DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

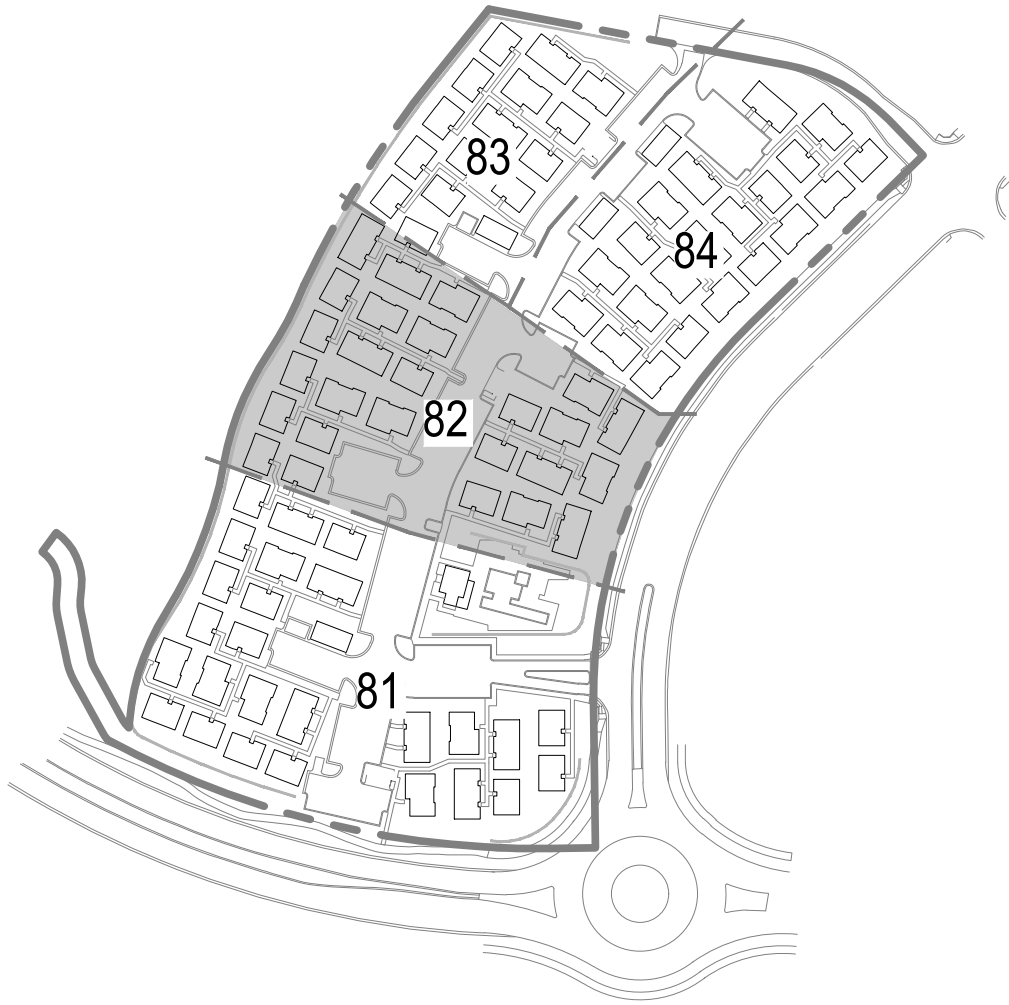
HKS HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

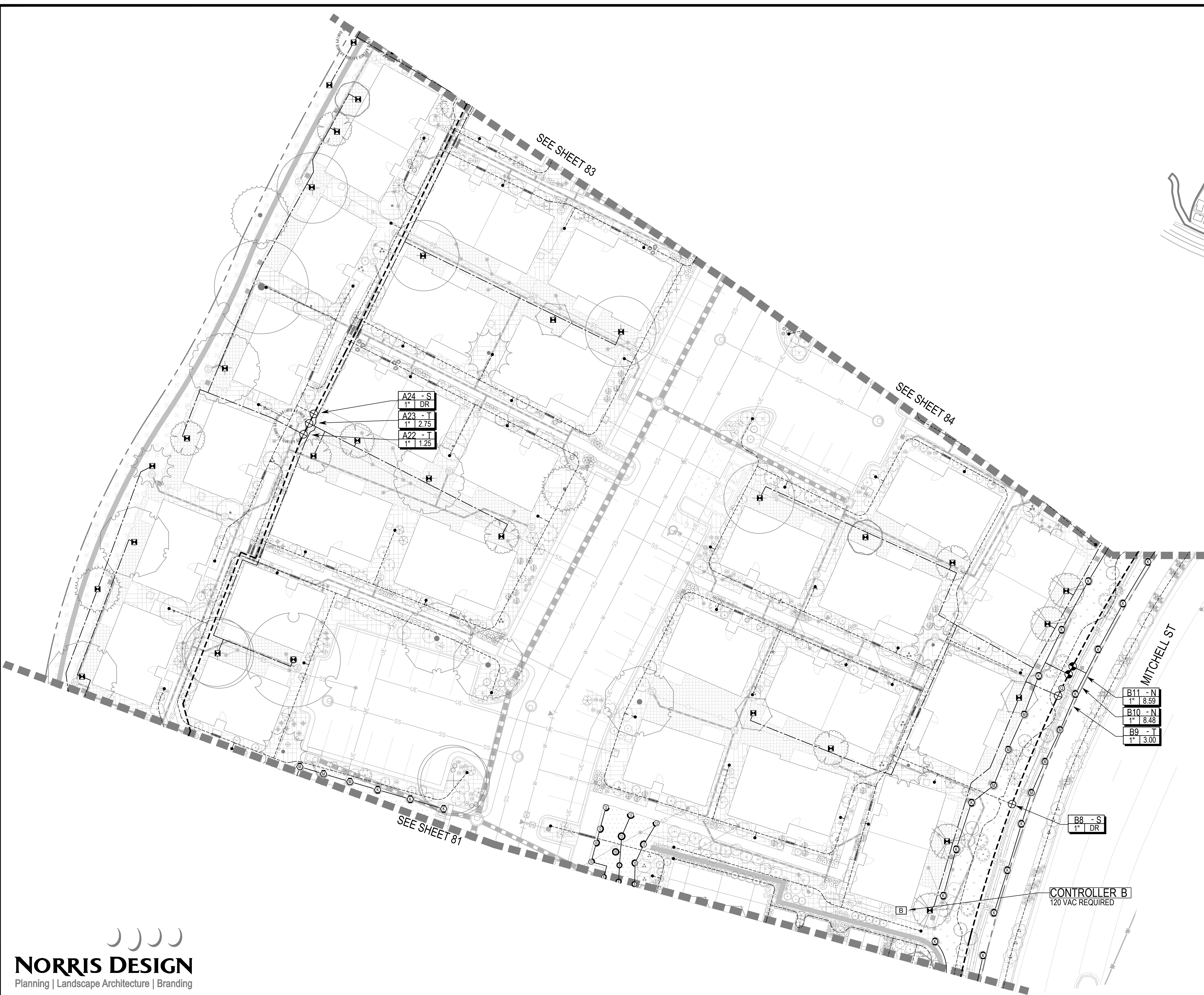
AVILLA FOUNDERS VILLAGE
IRRIGATION PLAN

JASON NAUGHTIN TOCR #19-3239
PROJECT #: 210431
SHEET NUMBER
81 OF 82

KEY MAP



IRRIGATION SCHEDULE	
SYMBOL	DESCRIPTION
	IRRIGATION METER
	IRRIGATION CONTROLLER
	RAIN SENSOR
	BACKFLOW PREVENTER
NOT SHOWN	SECURITY ENCLOSURE
	MANUAL DRAIN VALVE
	QUICK COUPLER
	MASTER VALVE
	FLOW SENSOR
	ISOLATION GATE VALVE
	TURF VALVE ASSEMBLY
	DRIP VALVE ASSEMBLY
	GROUNDING / LINE SURGE SUPPRESSION
	TURF ROTARY
	TURF SPRAY (FIXED)
	NATIVE SEED ROTARY
	TREES IN NATIVE
	SLEEVING
	SERVICE LINE
	PVC MAINLINE
	PVC TURF LATERAL
	PVC TREE LATERAL
	DRIP LATERAL
	FLUSH END
	CAP



NORRIS DESIGN
Planning | Landscape Architecture | Branding

NORTH
SCALE 1" = 20'

JASON NAUGHTIN TOCR #19-3239

Know what's below.
Call before you dig.

DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

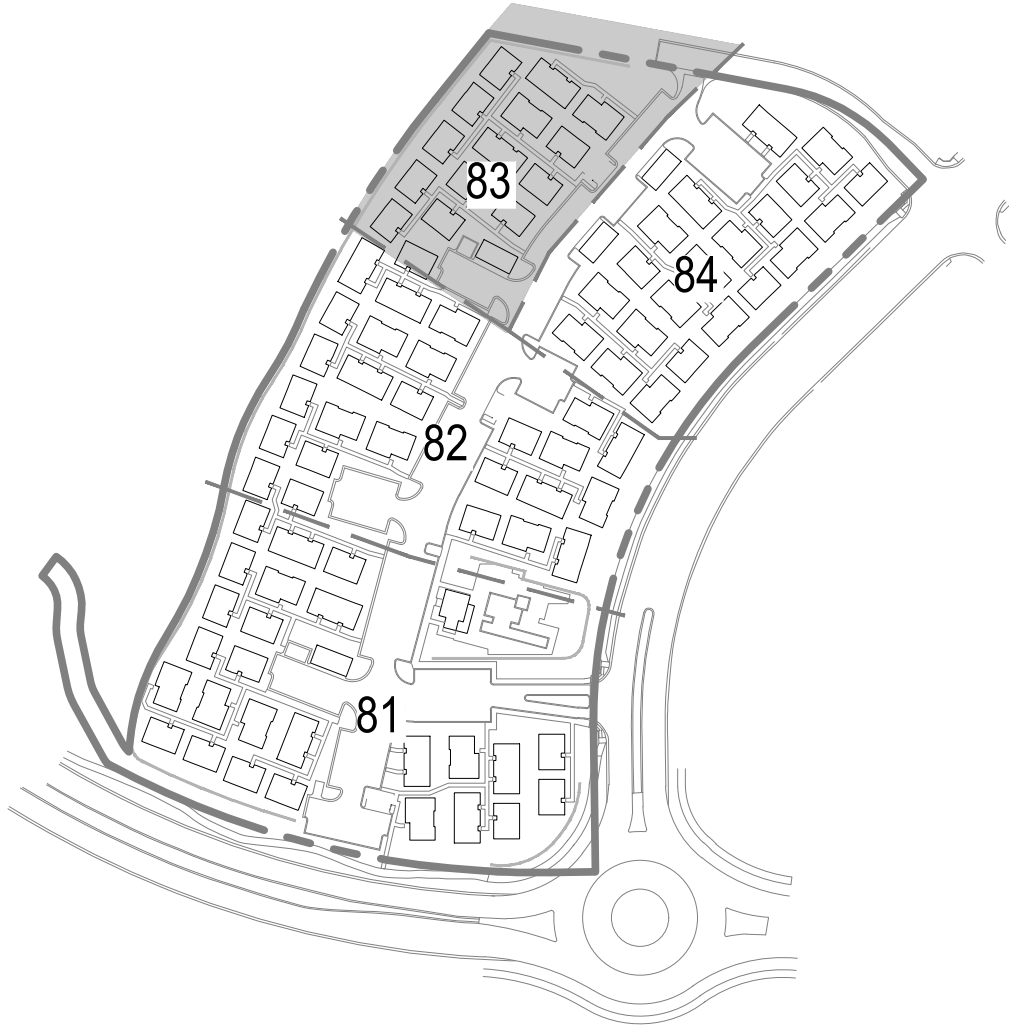
ISSUE DATE: 02-24-2023	REVISION COMMENTS
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

HARRIS KOCHER SMITH
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

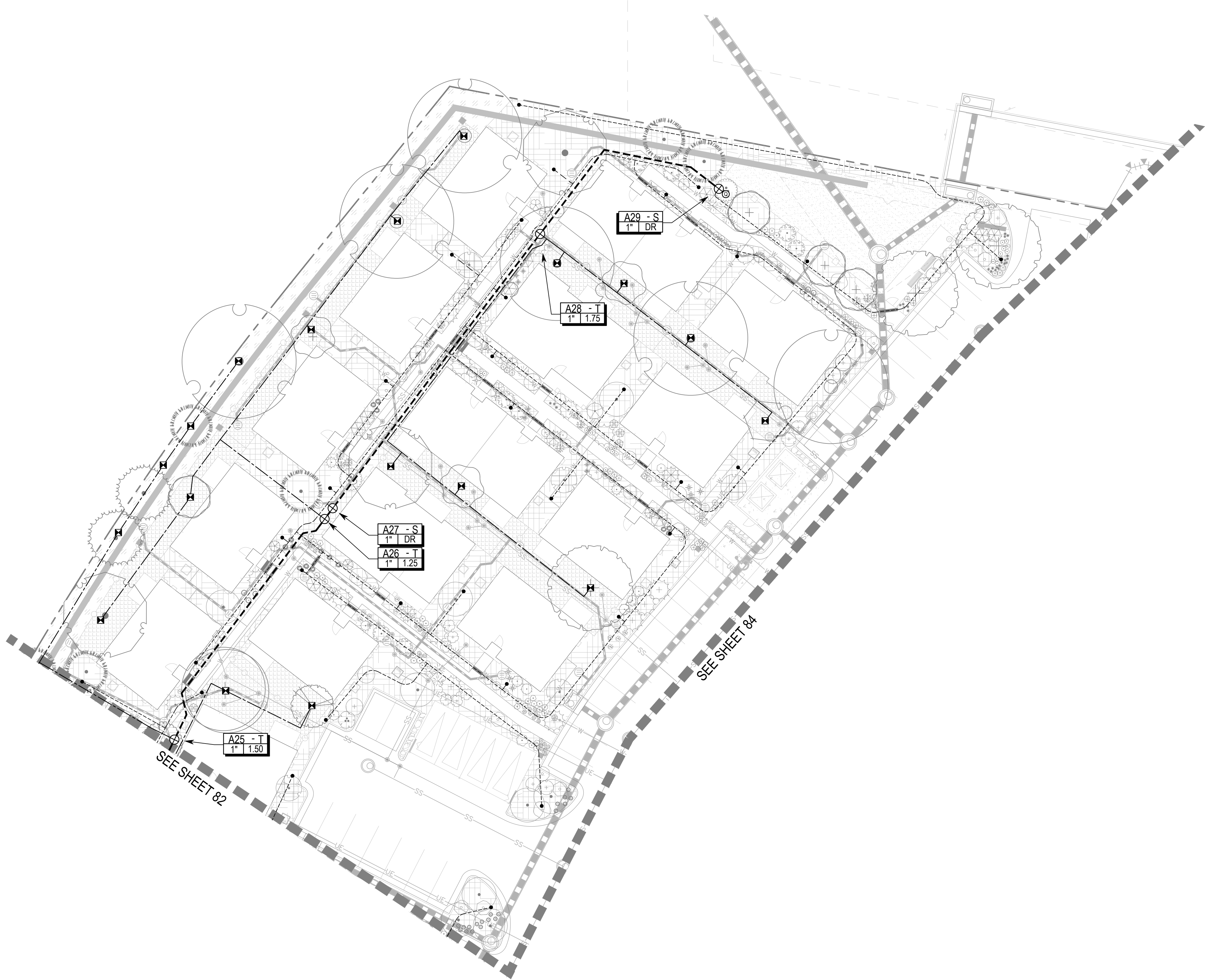
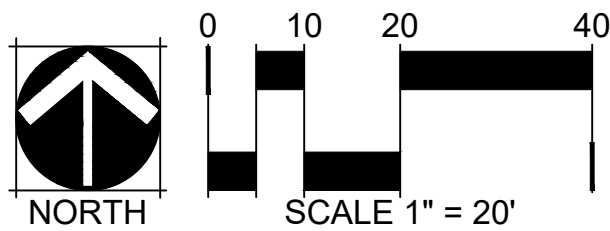
AVILLA FOUNDERS VILLAGE
IRRIGATION PLAN

PROJECT #: 210431
SHEET NUMBER
82 OF 82

KEY MAP



IRRIGATION SCHEDULE	
SYMBOL	DESCRIPTION
	IRRIGATION METER
	IRRIGATION CONTROLLER
	RAIN SENSOR
	BACKFLOW PREVENTER
NOT SHOWN	SECURITY ENCLOSURE
	MANUAL DRAIN VALVE
	QUICK COUPLER
	MASTER VALVE
	FLOW SENSOR
	ISOLATION GATE VALVE
	TURF VALVE ASSEMBLY
	DRIP VALVE ASSEMBLY
	GROUNDING / LINE SURGE SUPPRESSION
	TURF ROTARY
	TURF SPRAY (FIXED)
	NATIVE SEED ROTARY
	TREES IN NATIVE
	SLEEVING
	SERVICE LINE
	PVC MAINLINE
	PVC TURF LATERAL
	PVC TREE LATERAL
	DRIP LATERAL
	FLUSH END CAP



JASON NAUGHTIN TOCR #19-3239



DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS



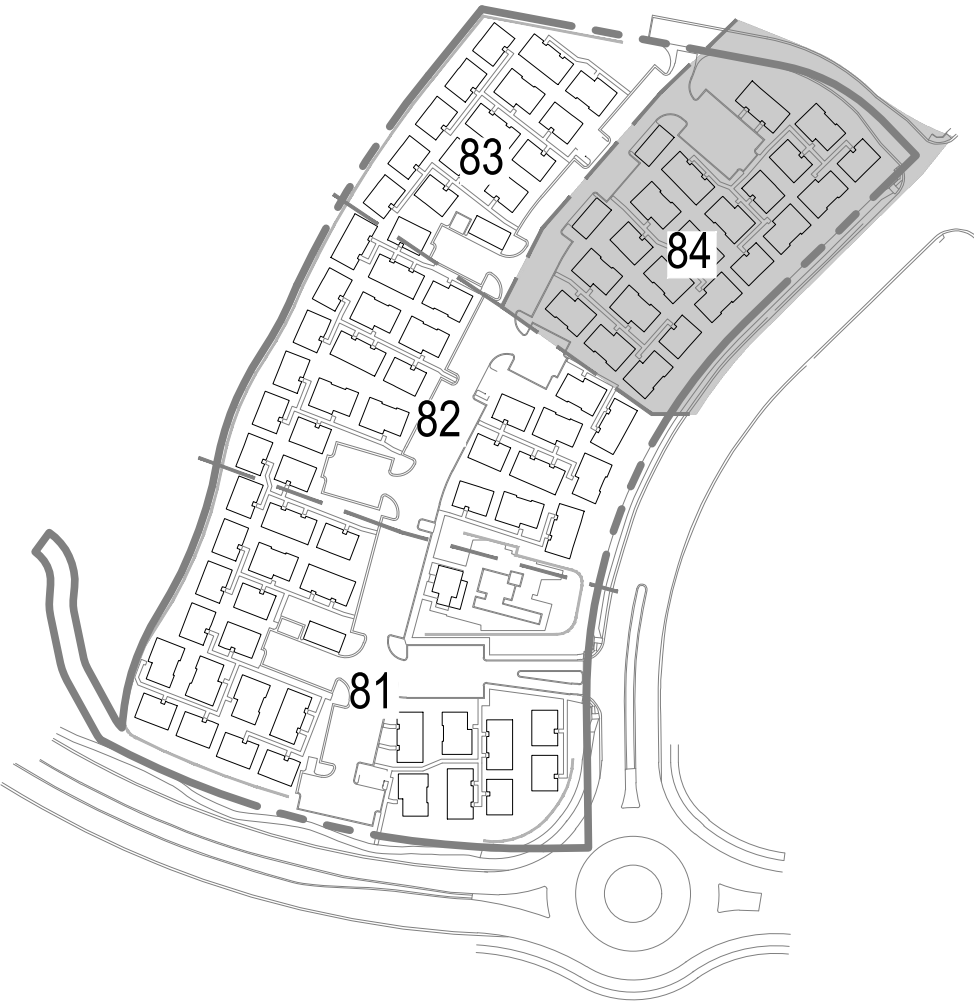
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



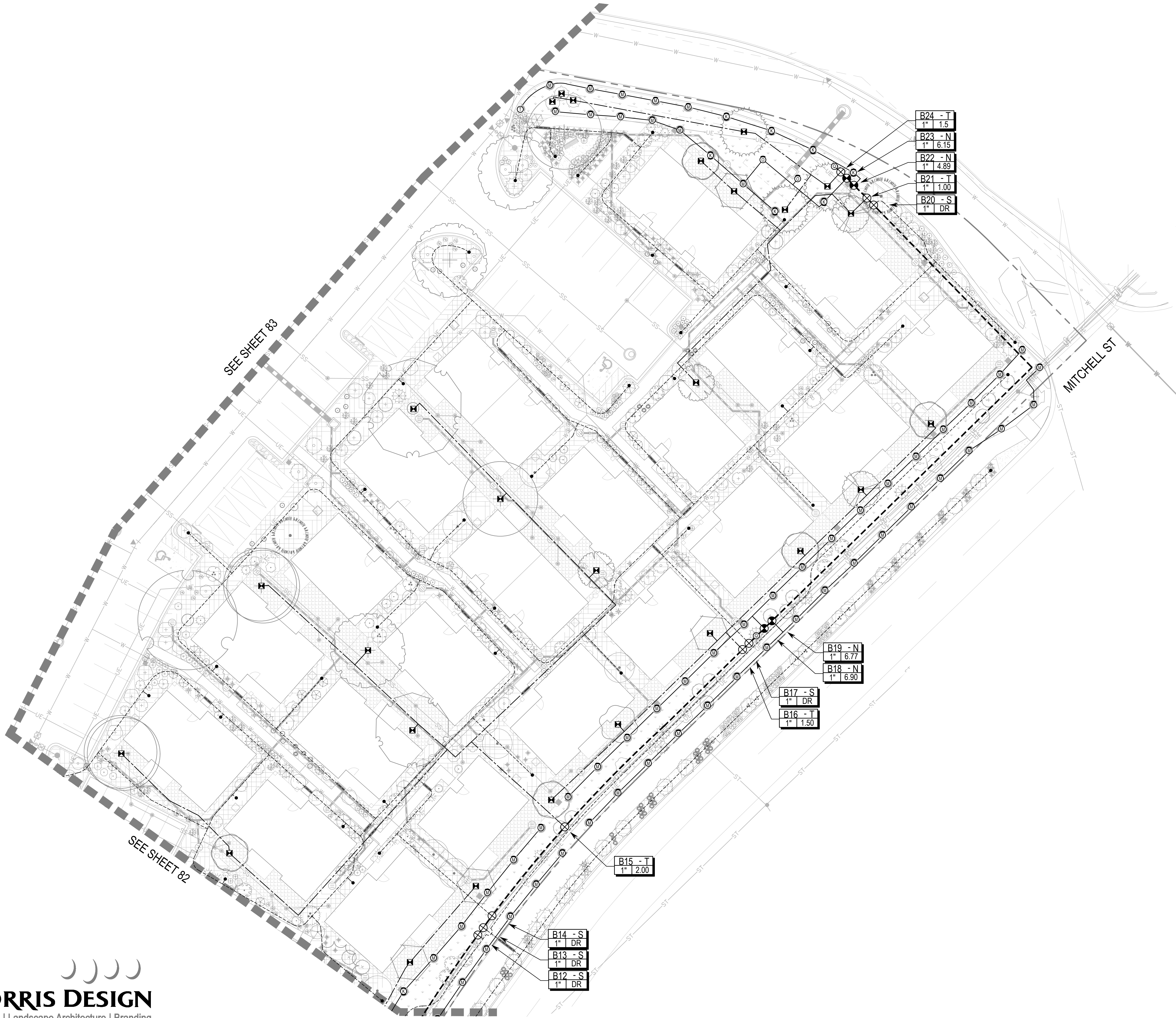
AVILLA FOUNDERS VILLAGE
IRRIGATION PLAN

PROJECT #: 210431
SHEET NUMBER

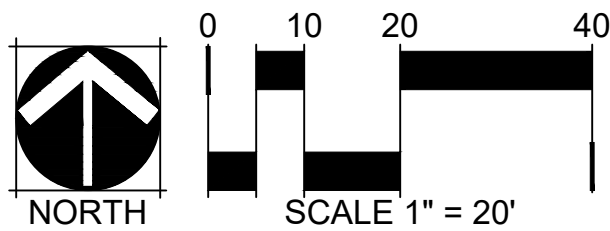
KEY MAP



IRRIGATION SCHEDULE	
SYMBOL	DESCRIPTION
	IRRIGATION METER
	IRRIGATION CONTROLLER
	RAIN SENSOR
	BACKFLOW PREVENTER
NOT SHOWN	SECURITY ENCLOSURE
	MANUAL DRAIN VALVE
	QUICK COUPLER
	MASTER VALVE
	FLOW SENSOR
	ISOLATION GATE VALVE
	TURF VALVE ASSEMBLY
	DRIP VALVE ASSEMBLY
	GROUNDING / LINE SURGE SUPPRESSION
	TURF ROTARY
	TURF SPRAY (FIXED)
	NATIVE SEED ROTARY
	TREES IN NATIVE
	SLEEVING
	SERVICE LINE
	PVC MAINLINE
	PVC TURF LATERAL
	PVC TREE LATERAL
	DRIP LATERAL
	FLUSH END CAP



NORRIS DESIGN
Planning | Landscape Architecture | Branding



JASON NAUGHTIN TOCR #19-3239



DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023

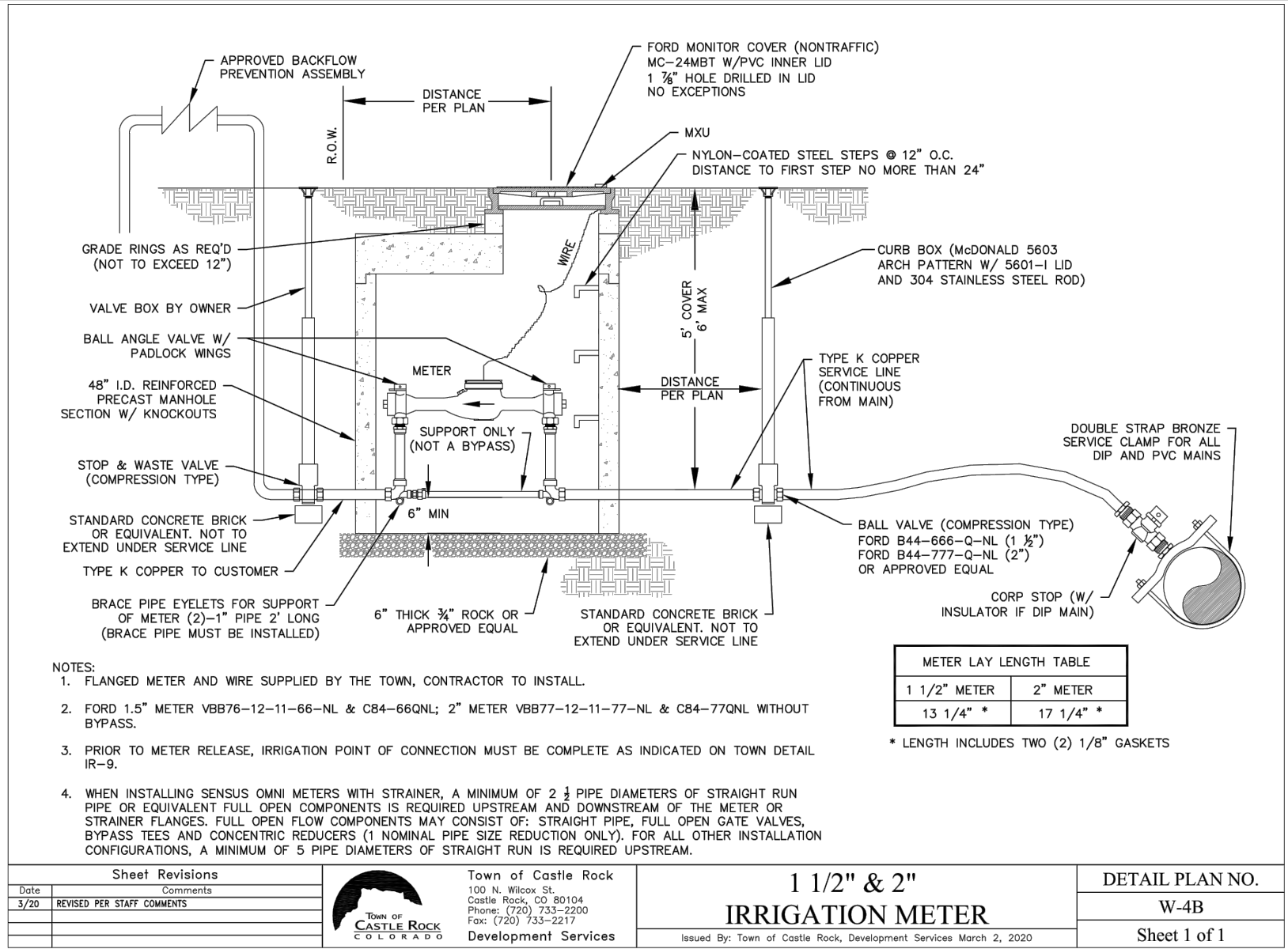
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS **HARRIS KOCHER SMITH**
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

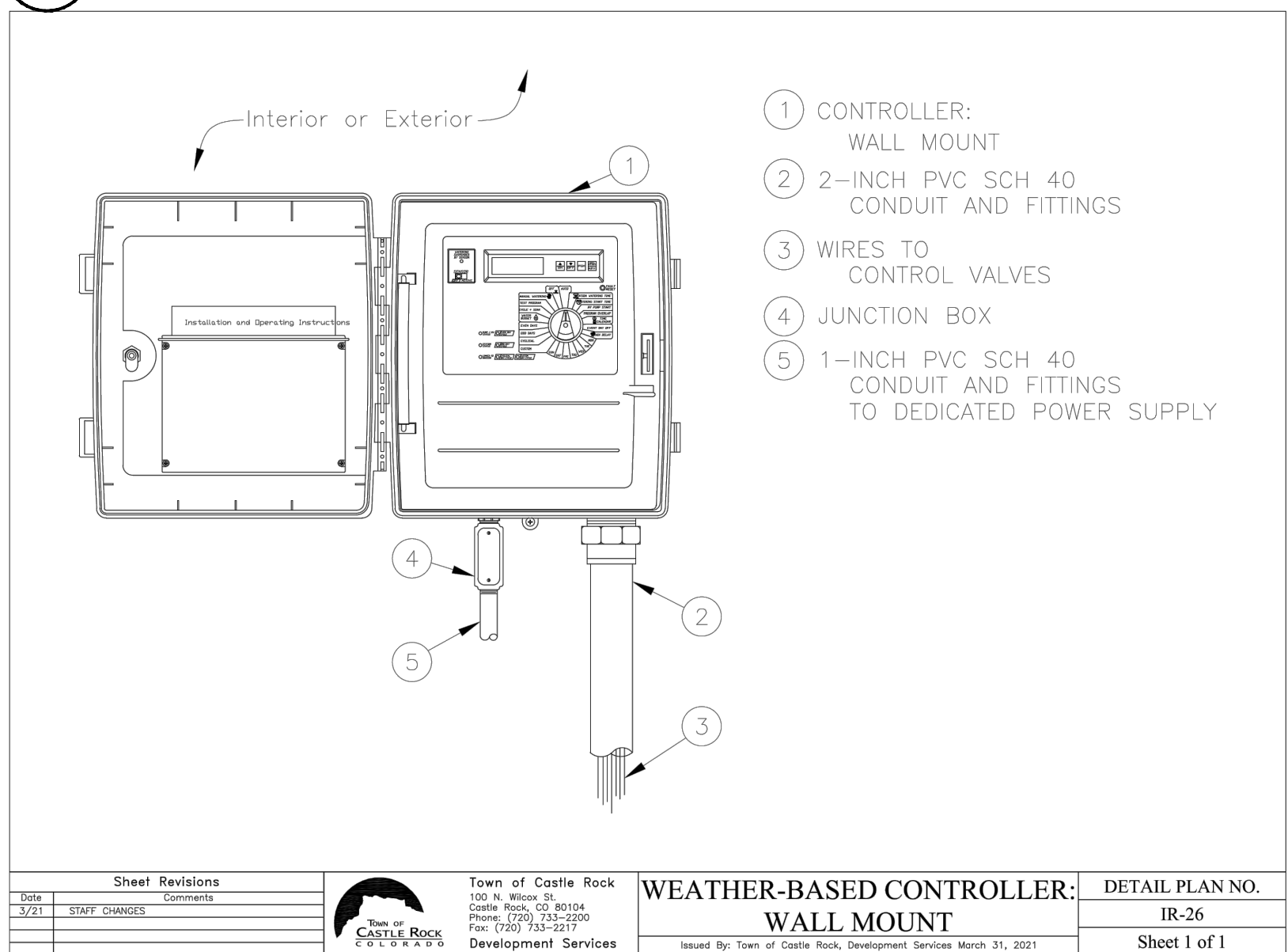
NEXmetro
Communities

AVILLA FOUNDERS VILLAGE
IRRIGATION PLAN

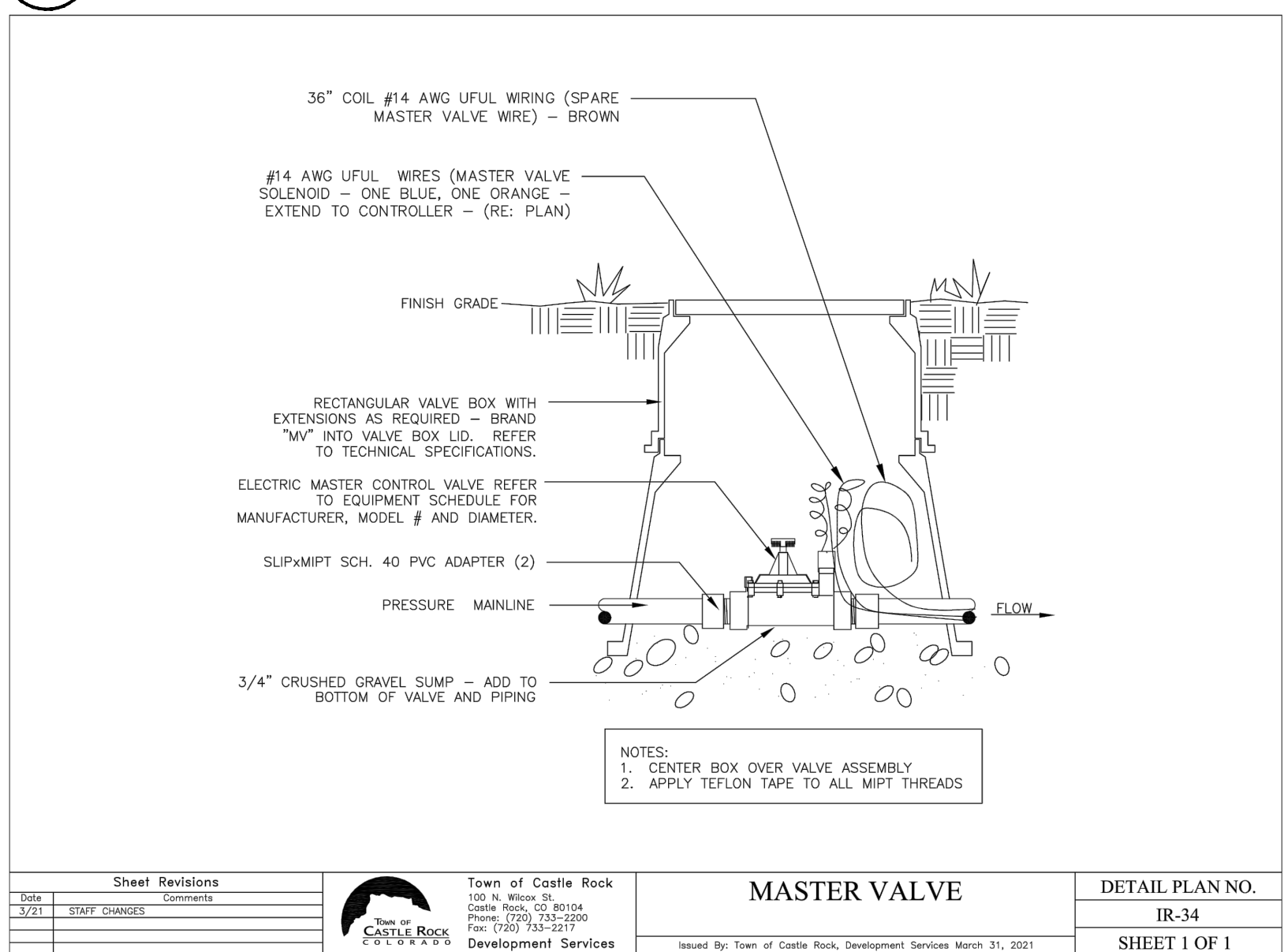
PROJECT #: 210431
SHEET NUMBER



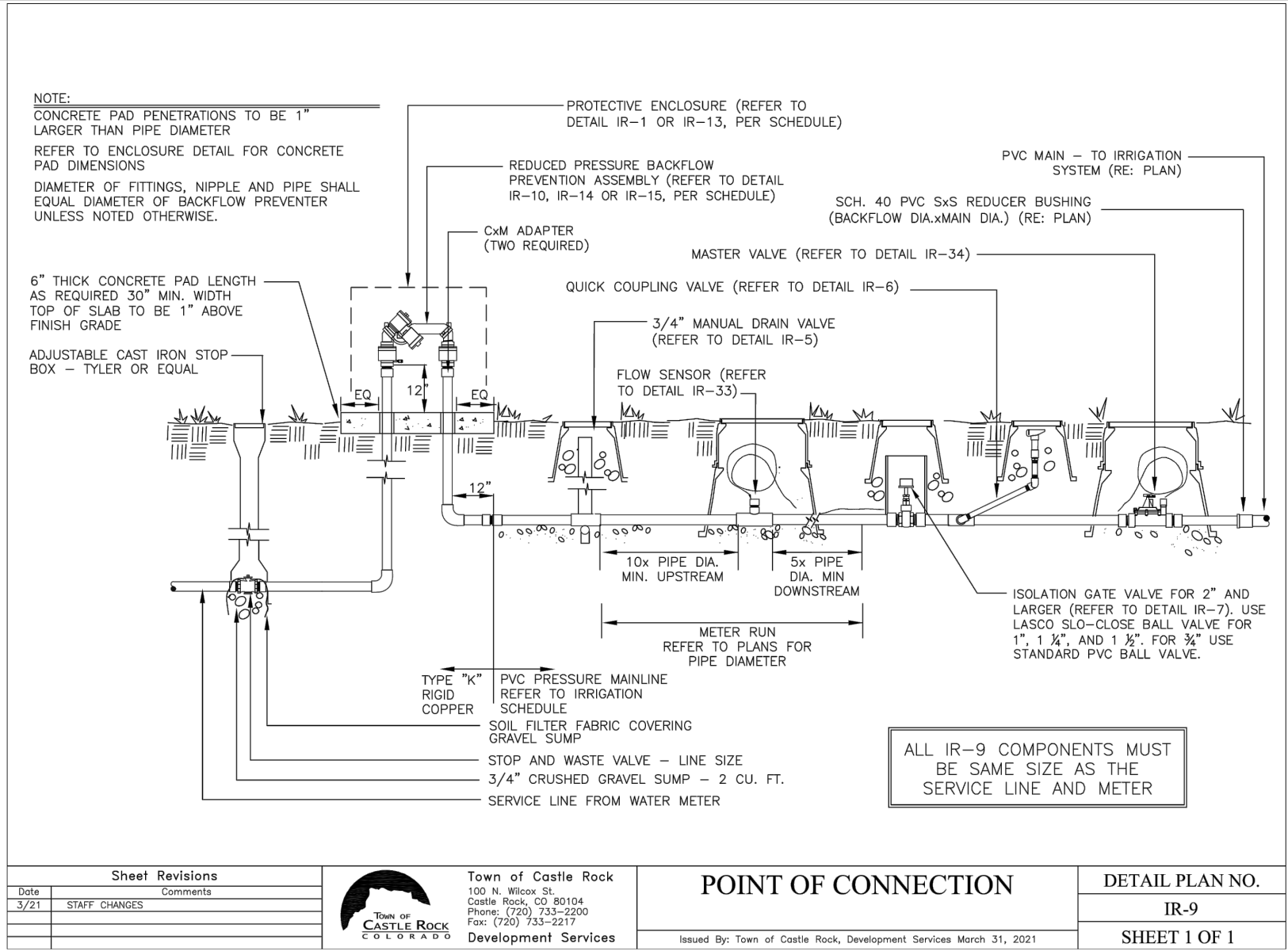
1 IRRIGATION METER - 1 1/2" & 2" SCALE: NTS



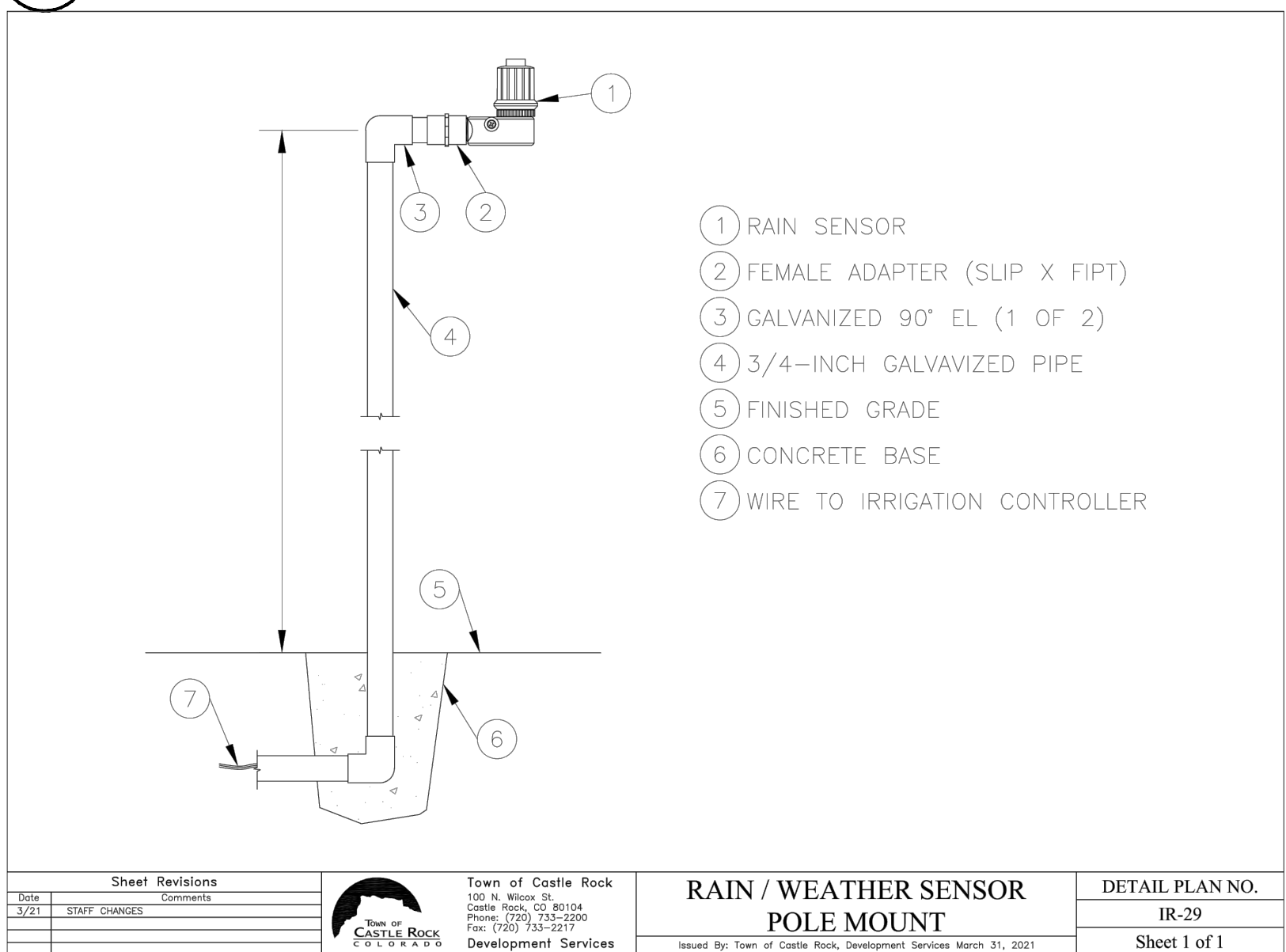
4 WALL MOUNT CONTROLLER SCALE: NTS



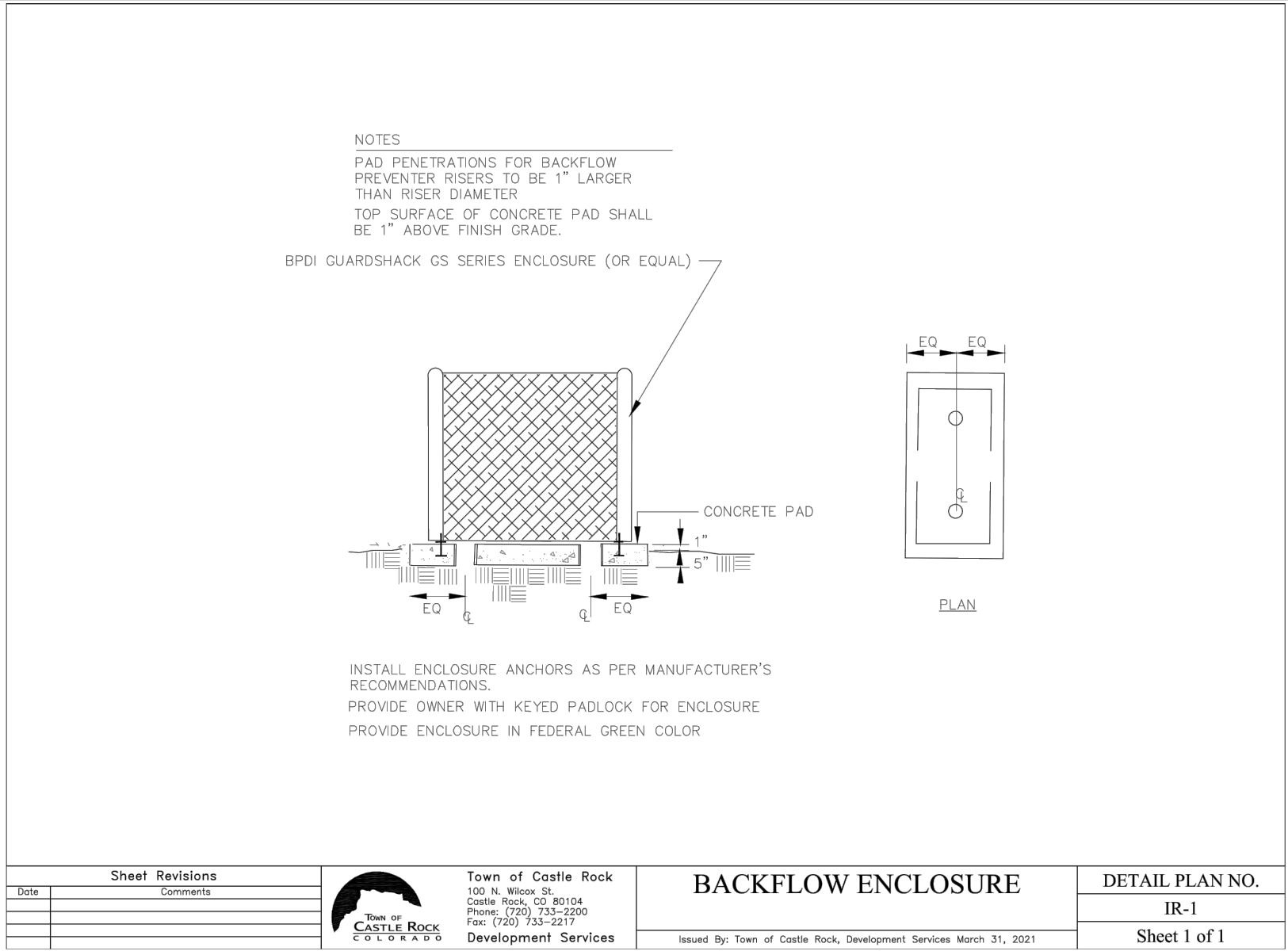
7 MASTER VALVE SCALE: NTS



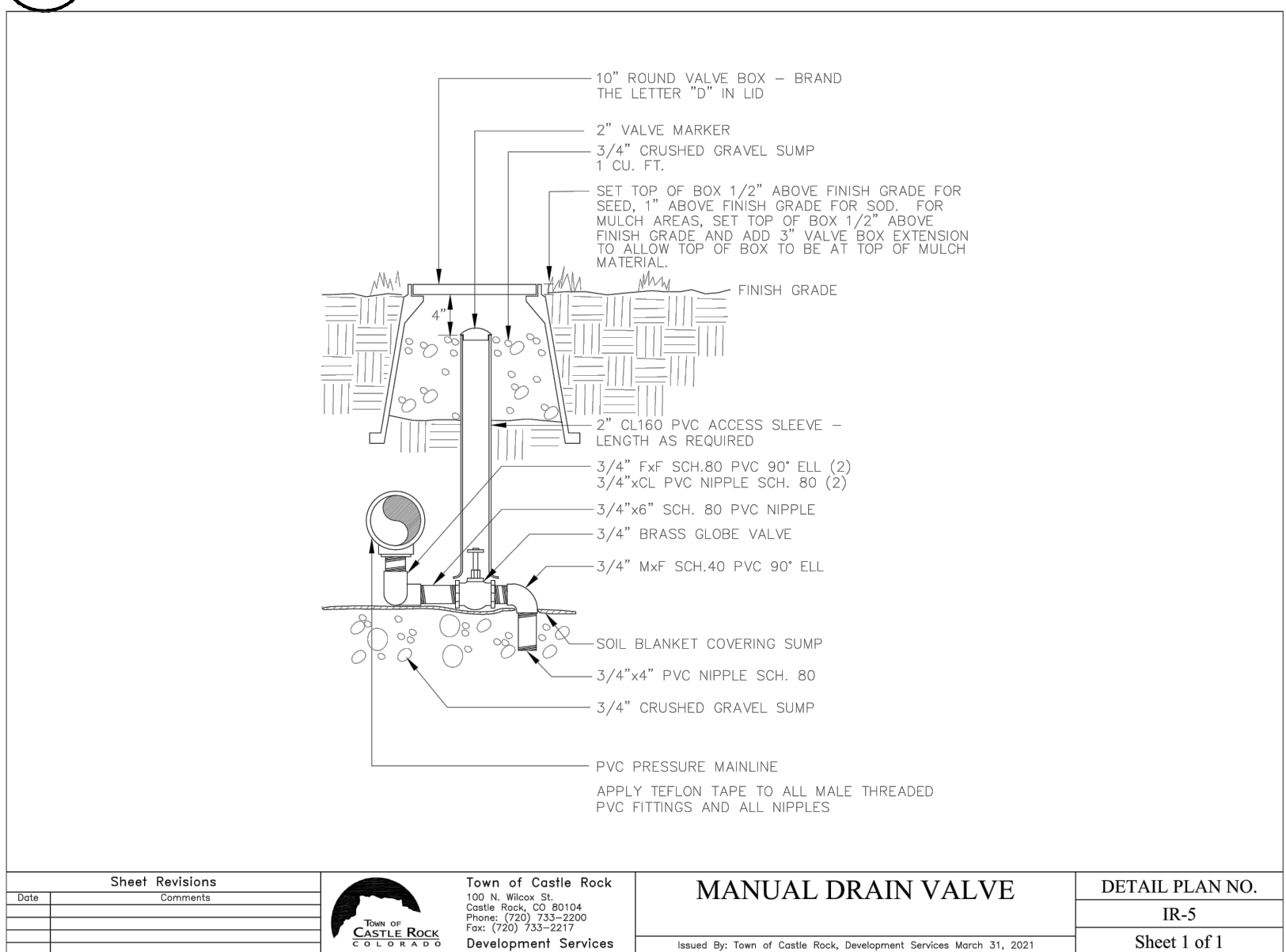
2 BACKFLOW PREVENTION ASSEMBLY SCALE: NTS



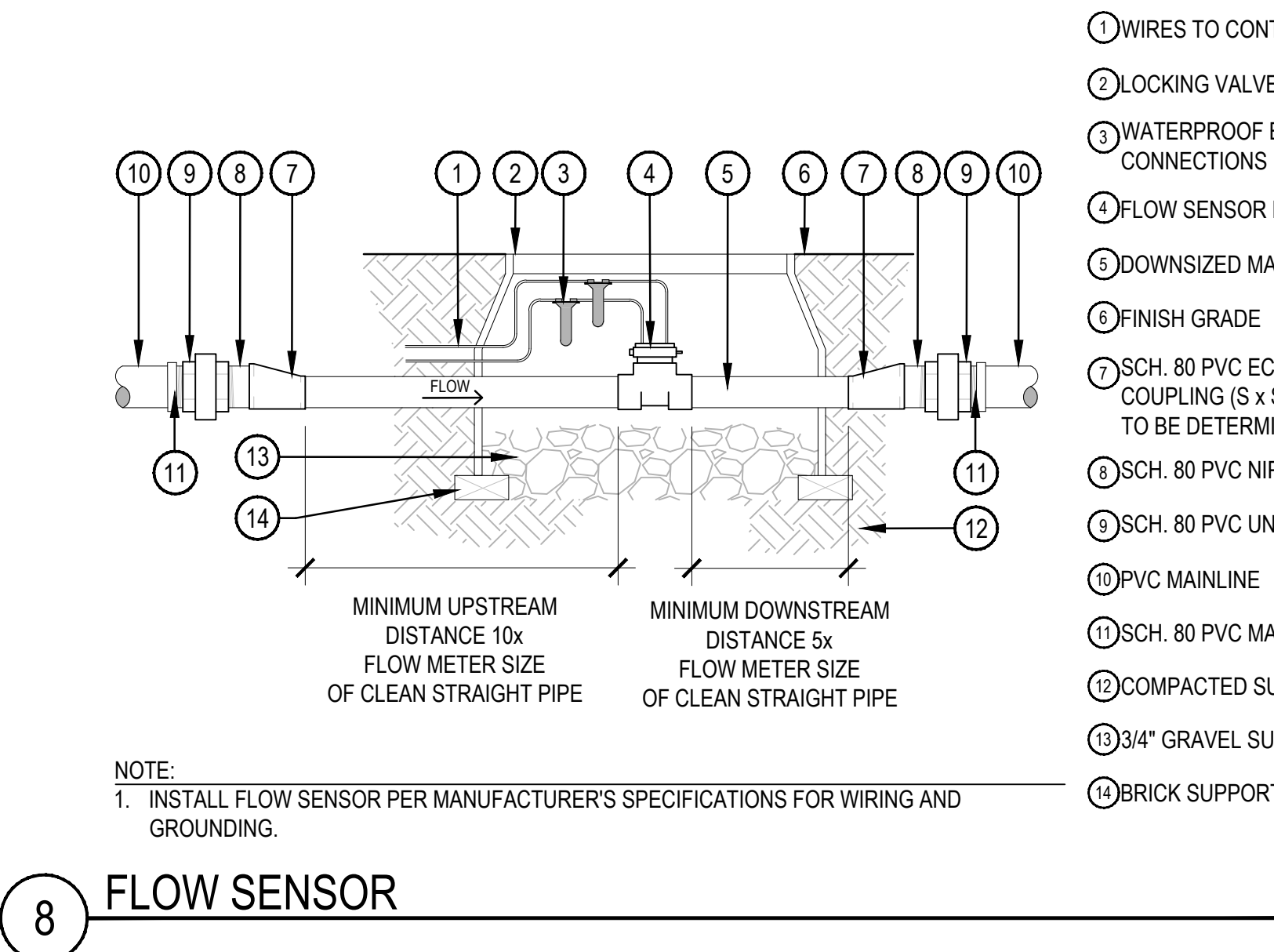
5 POLE MOUNT RAIN SENSOR SCALE: NTS



3 BACKFLOW ENCLOSURE SCALE: NTS



6 DRAIN VALVE SCALE: NTS



8 FLOW SENSOR SCALE: NTS

NORRIS DESIGN
Planning | Landscape Architecture | Branding



Know what's below.
Call before you dig.



DESIGNED BY: JR, RN
CHECKED BY: JR, CM
DRAWN BY: JR, RN

ISSUE DATE: 02-24-2023	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
02-24-2023	PER TOWN OF CASTLE ROCK COMMENTS

HKS HARRIS KOCHER SMITH

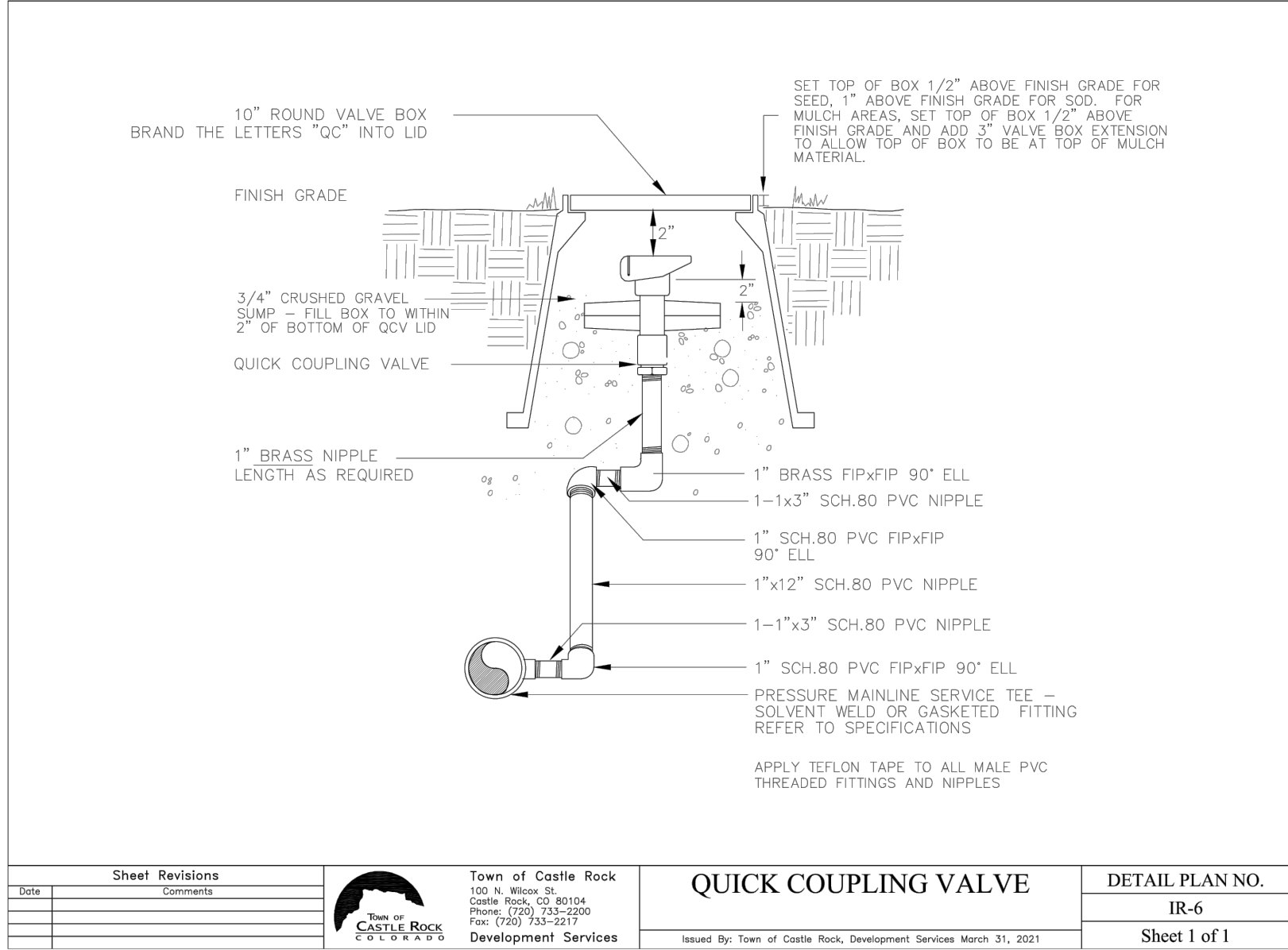
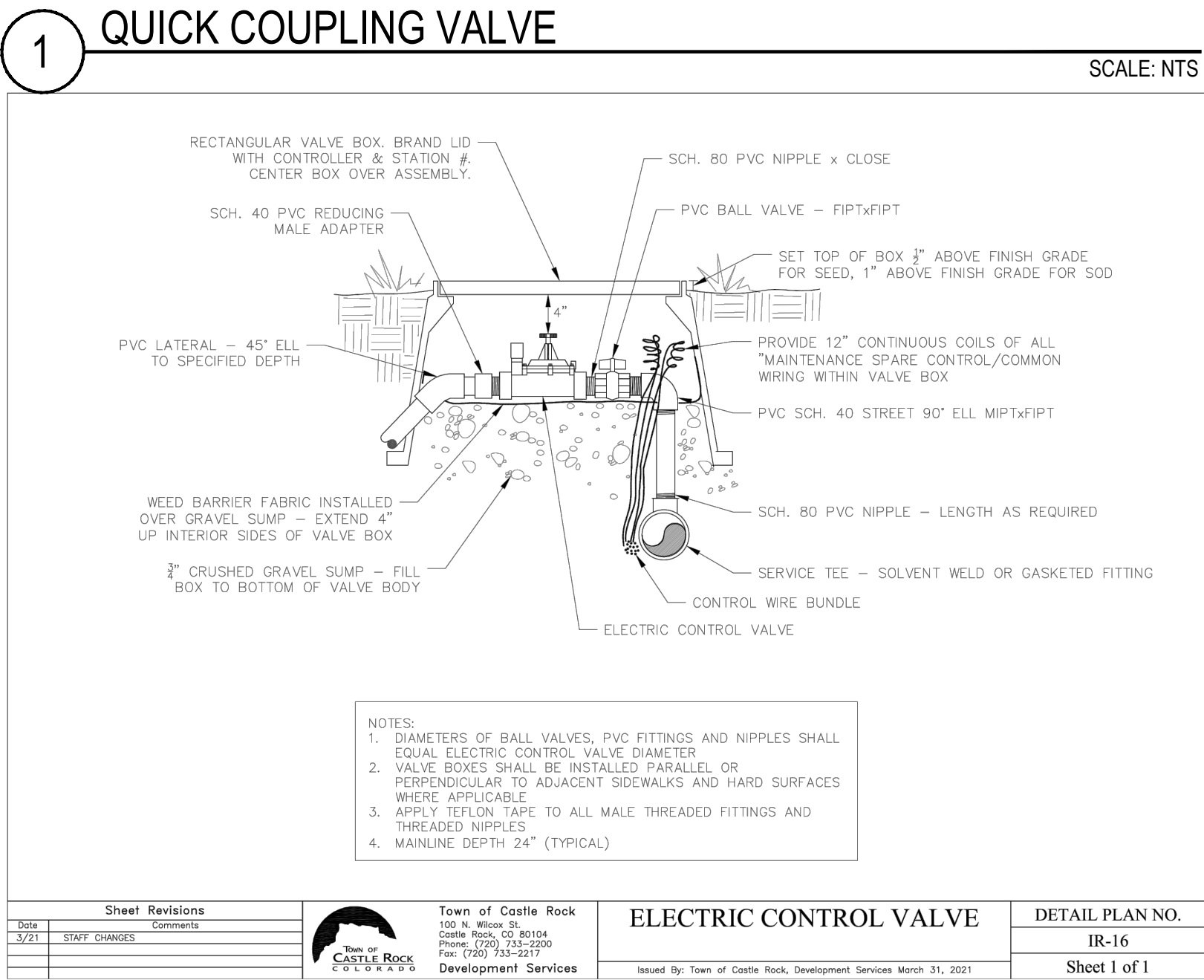
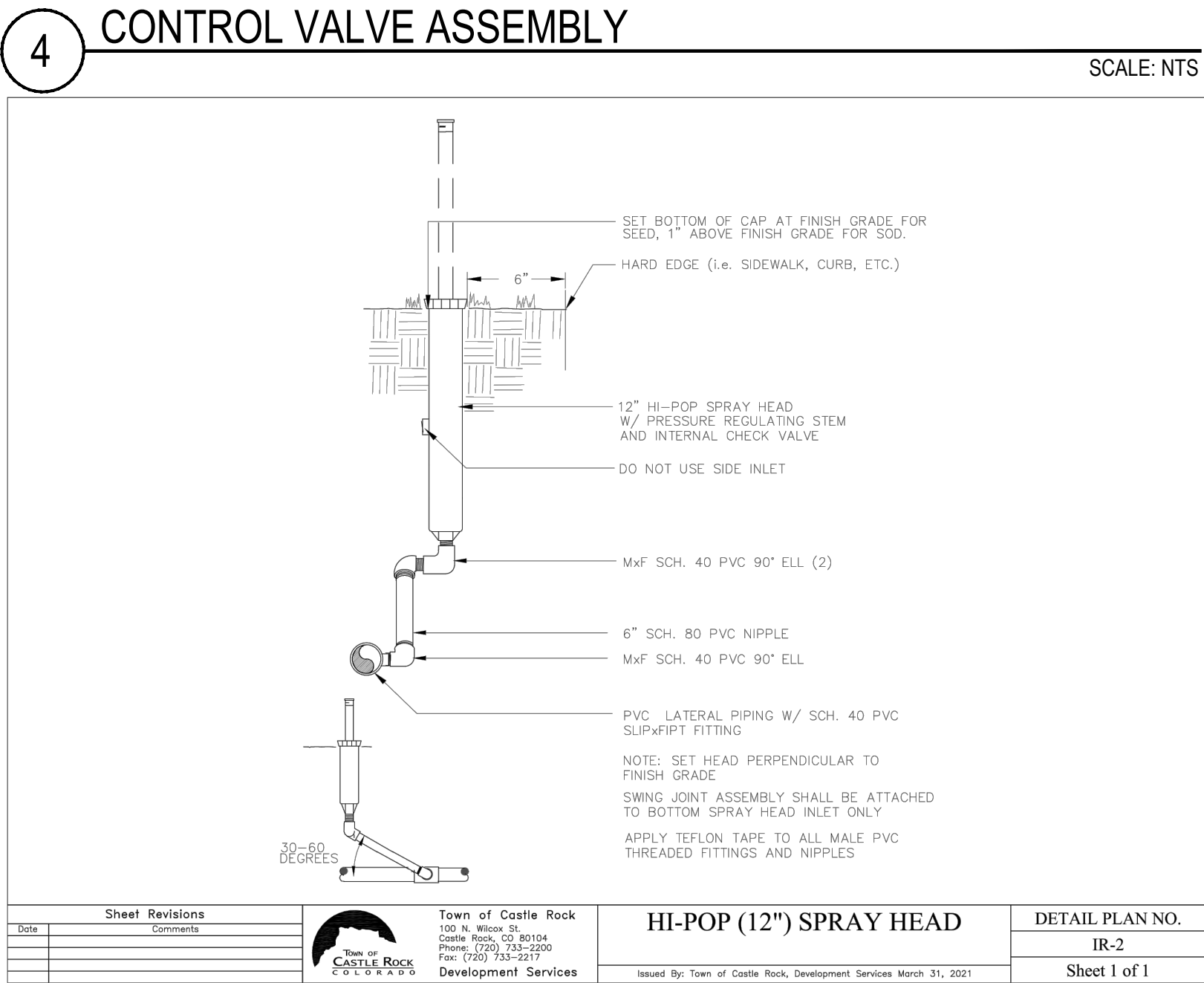
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro Communities

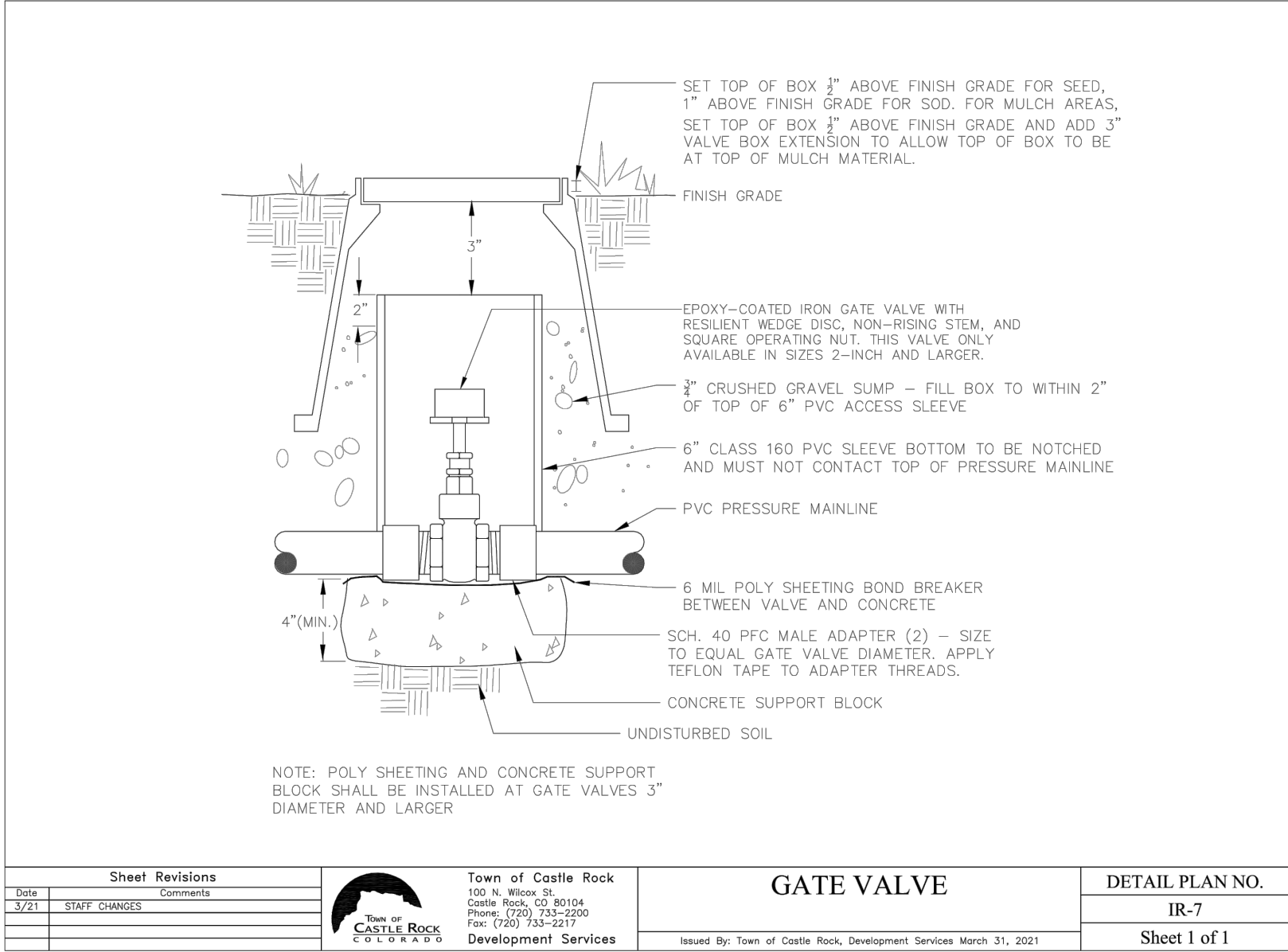
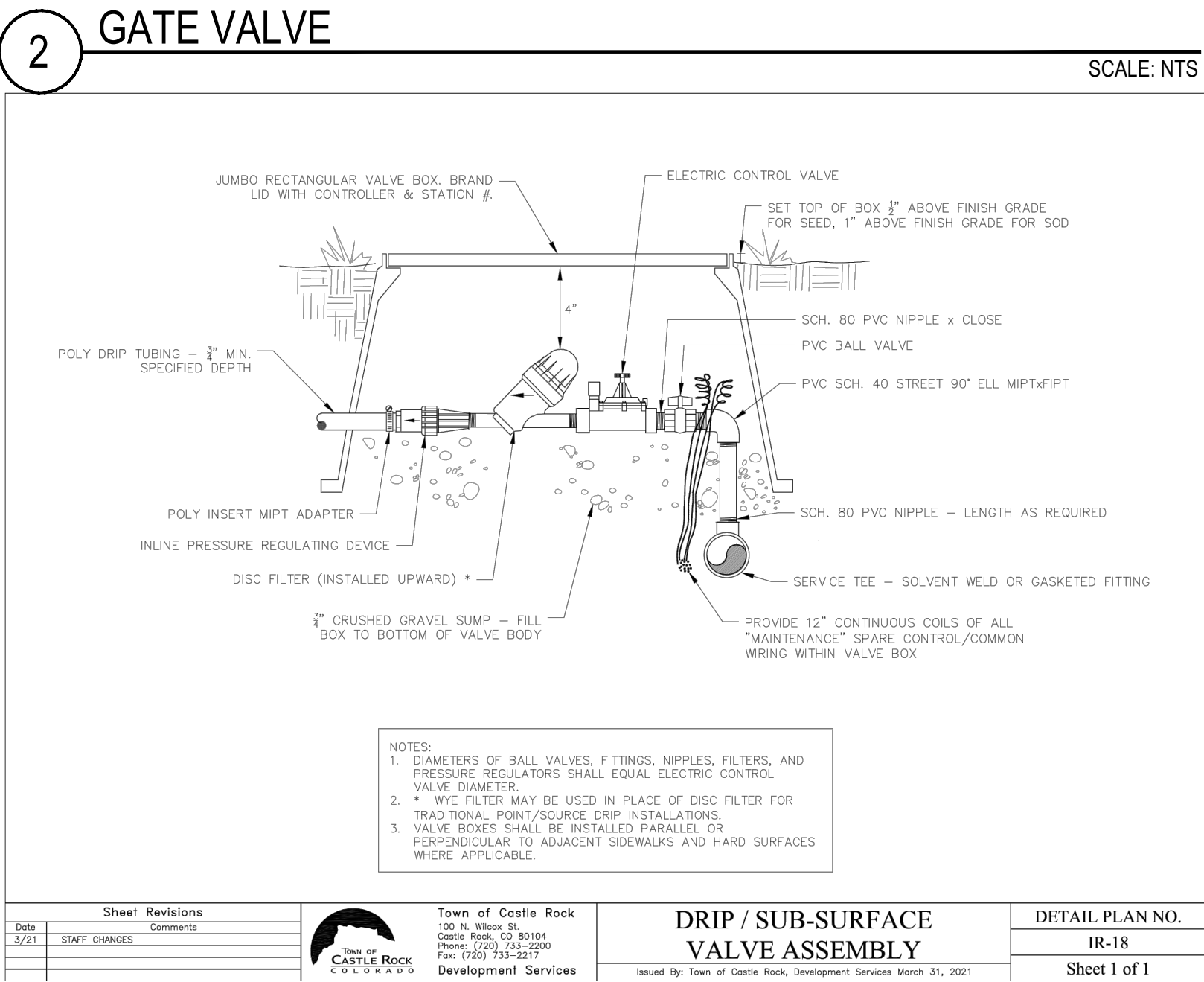
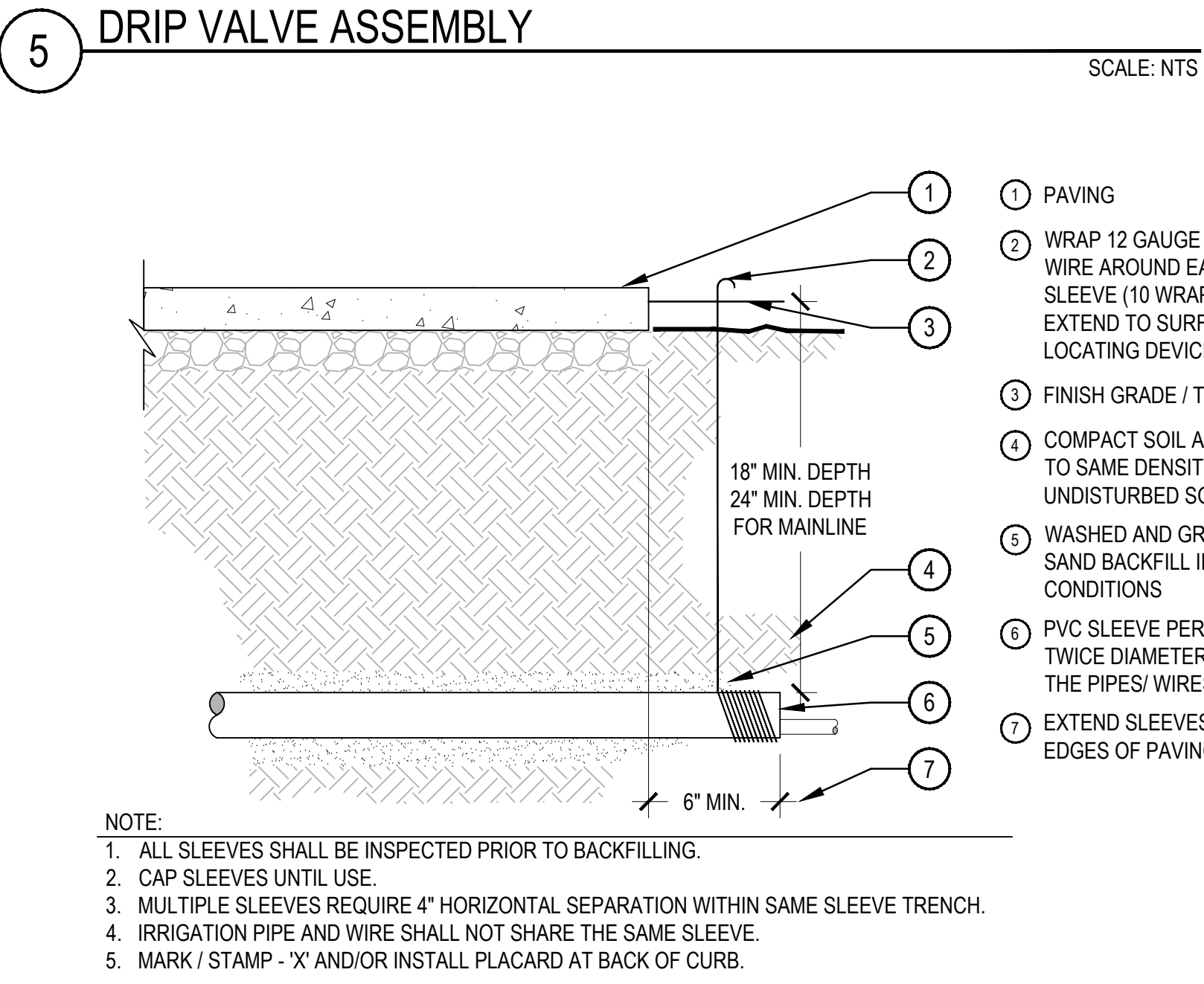
AVILLA FOUNDERS VILLAGE
IRRIGATION
DETAILS

JASON NAUGHTIN TOCR #19-3239

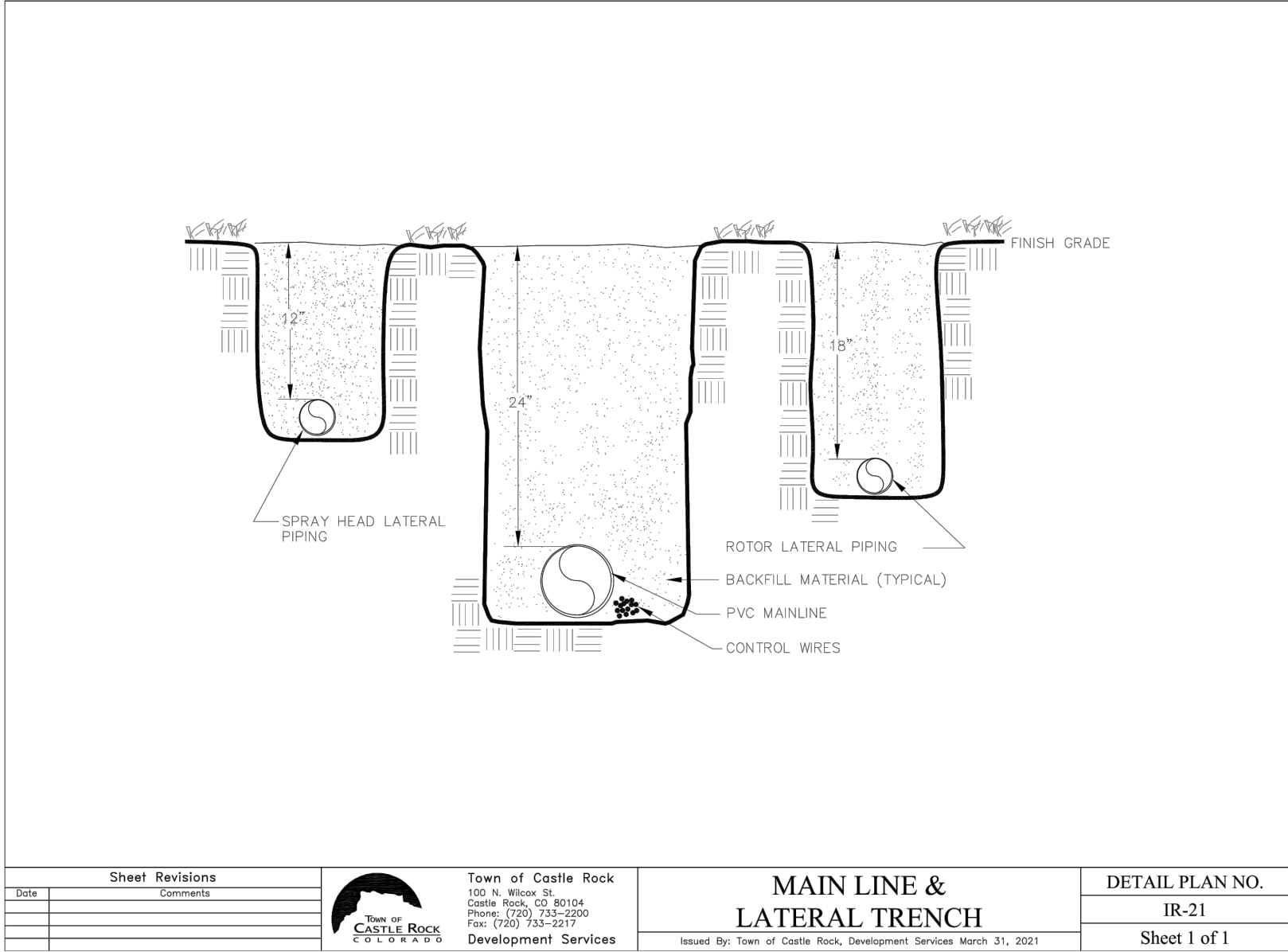
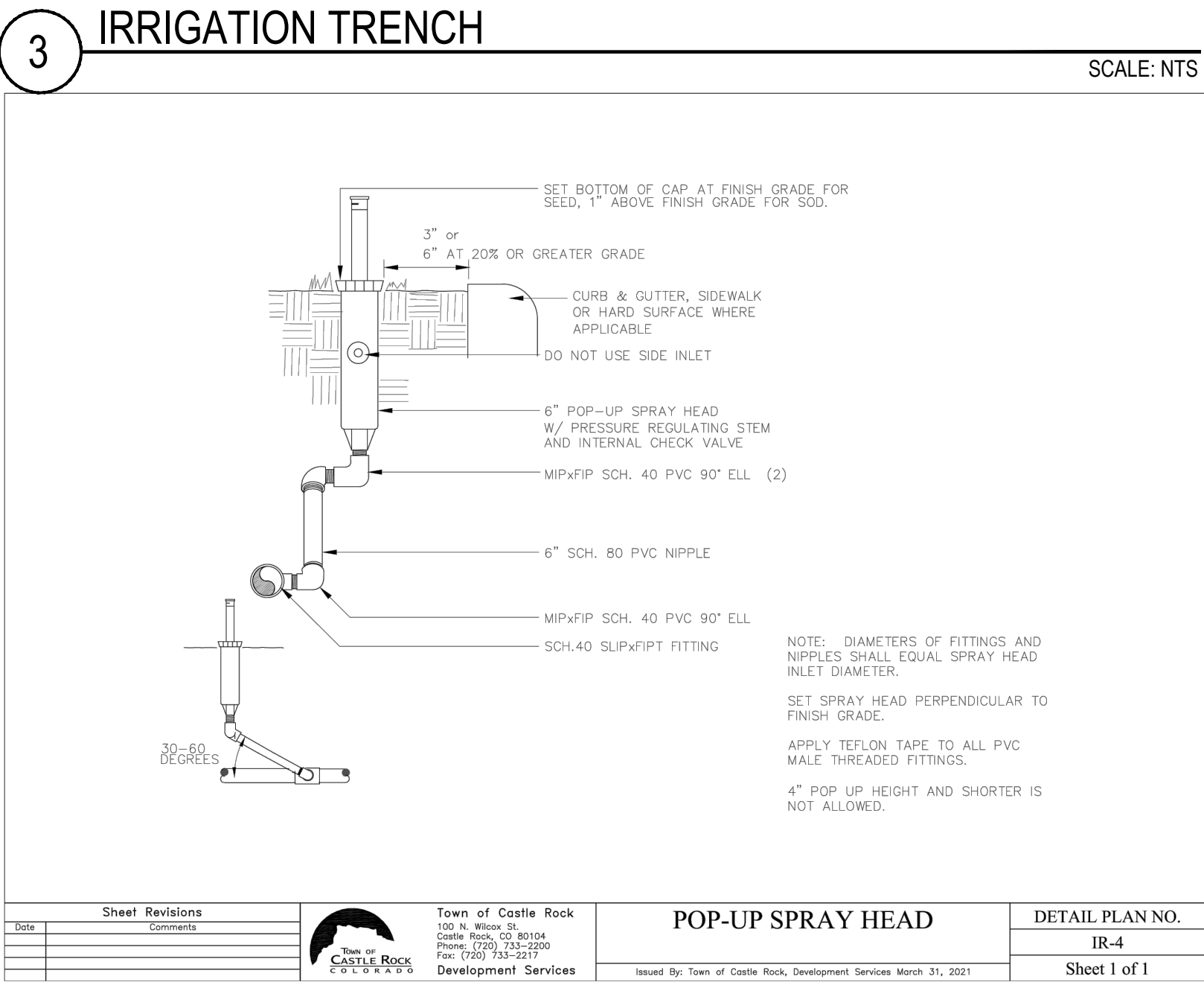
PROJECT #: 210431
SHEET NUMBER



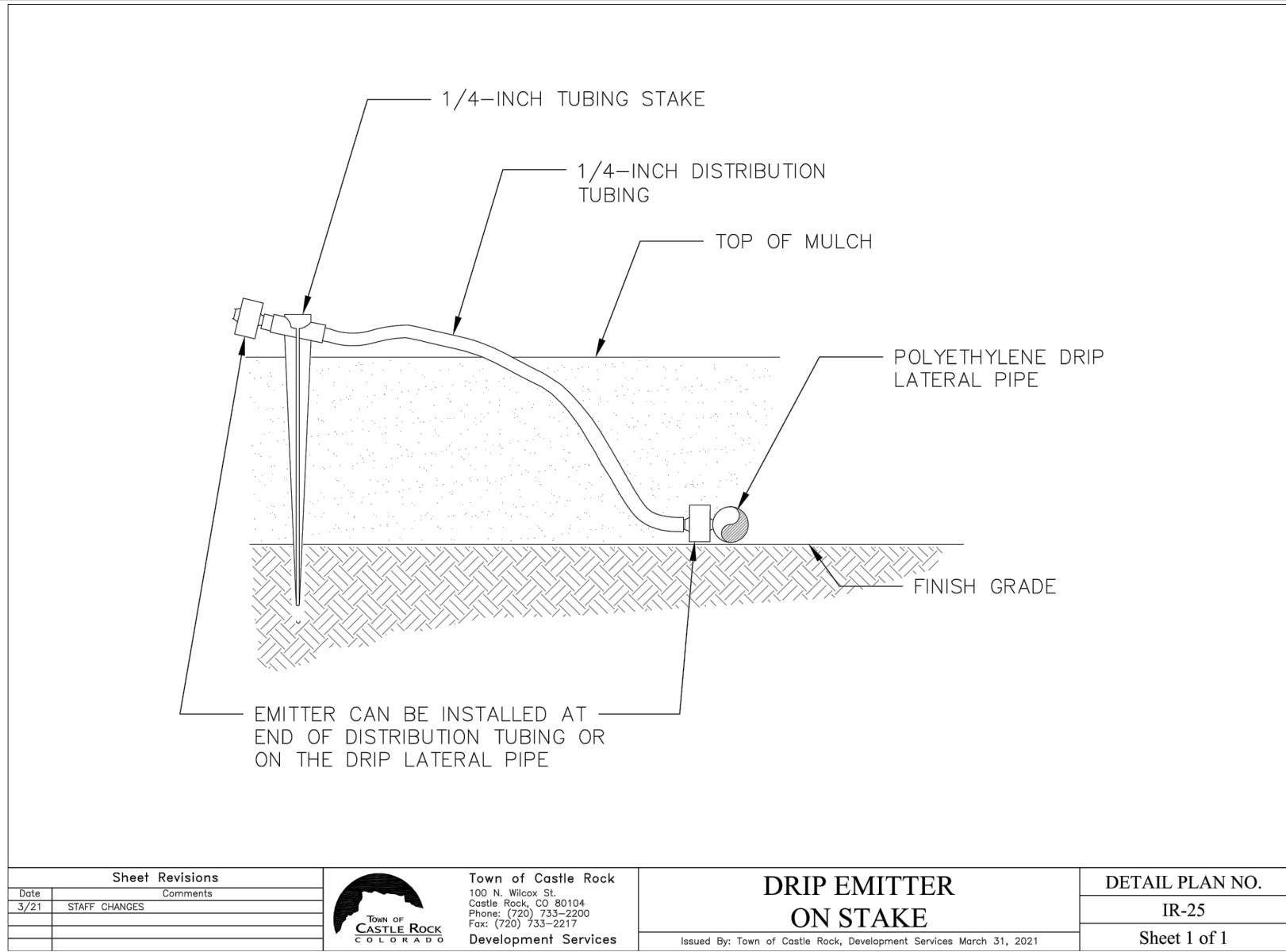
12" SPRAY HEAD SCALE: NTS



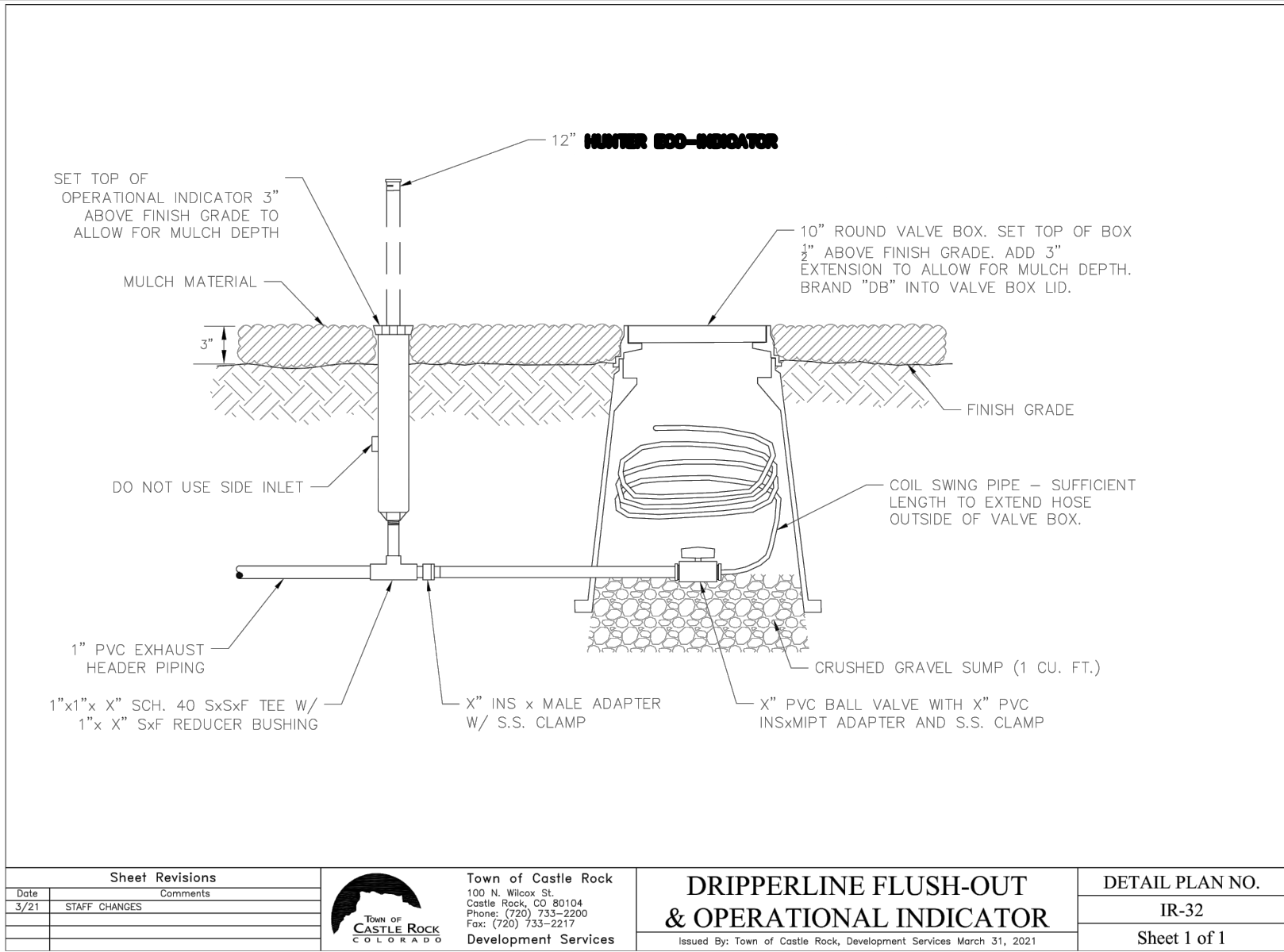
PIPE SLEEVE SCALE: NTS



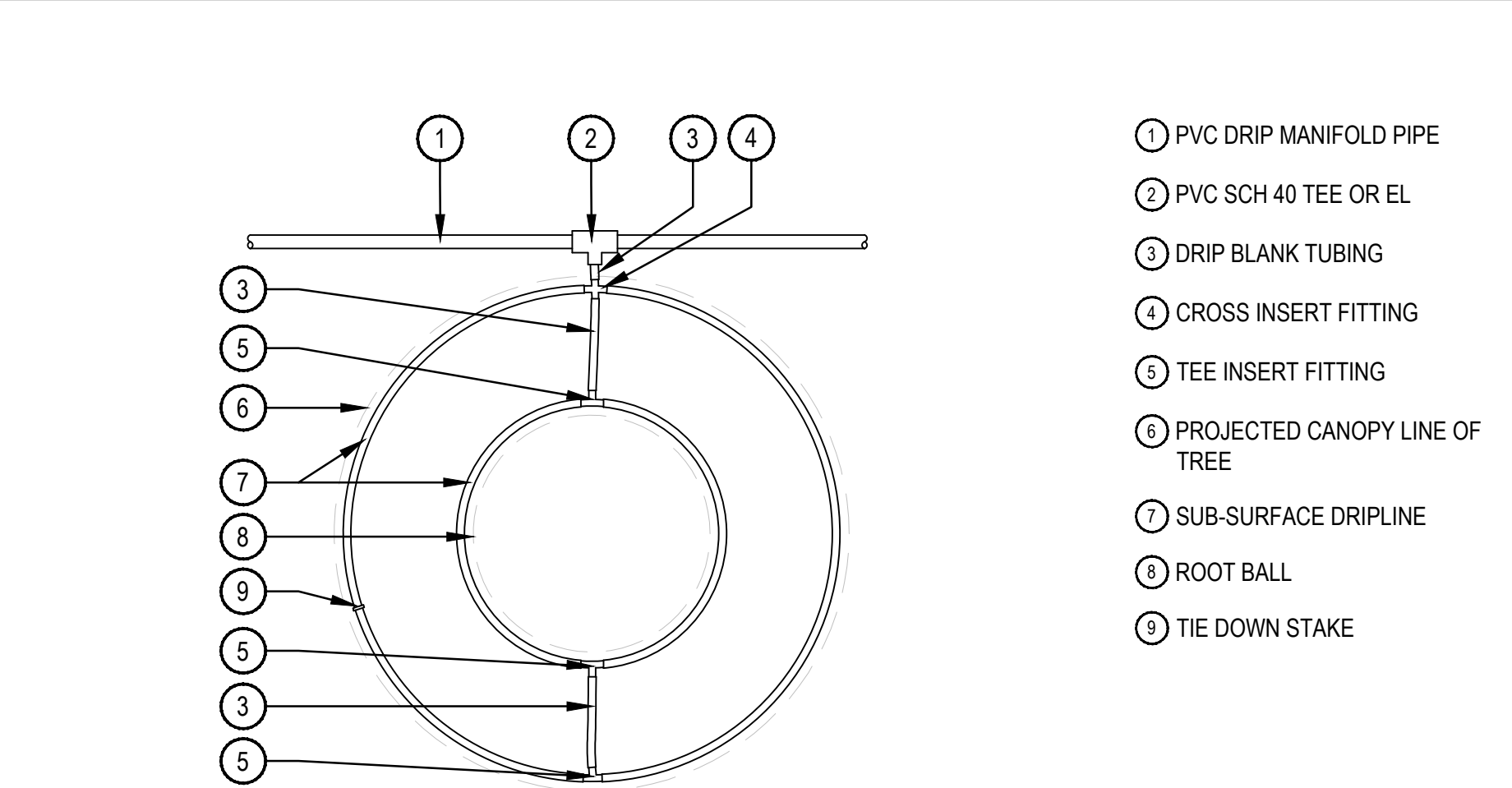
POP-UP SPRAY HEAD SCALE: NTS



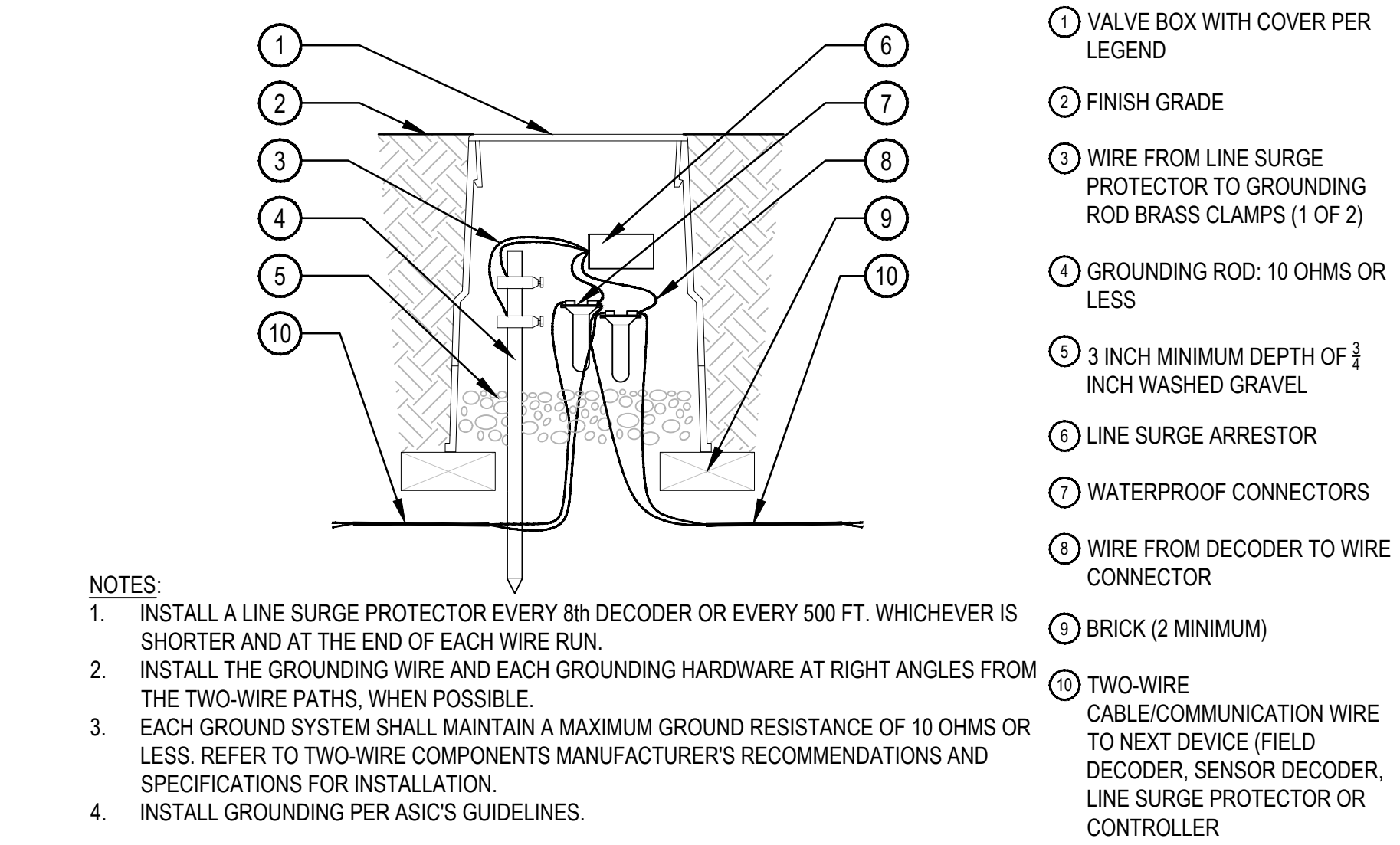
1 DRIP EMITTER SCALE: NTS



FLUSH VALVE W/ OPERATIONAL INDICATOR SCALE: NTS



3 DRIPLINE TREE RING SCALE: NTS



4 LINE SURGE PROTECTION SCALE: NTS



Know what's below.
Call before you dig.



STUDIO LIGHTING
63 SUNSET DR.
BAILEY, CO 80421
303.242.1572

DESIGNED BY: JMB
CHECKED BY: JMB
DRAWN BY: JLK

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS
#	#
#	#
#	#
#	#
#	#



HARRIS
KOCHER
SMITH

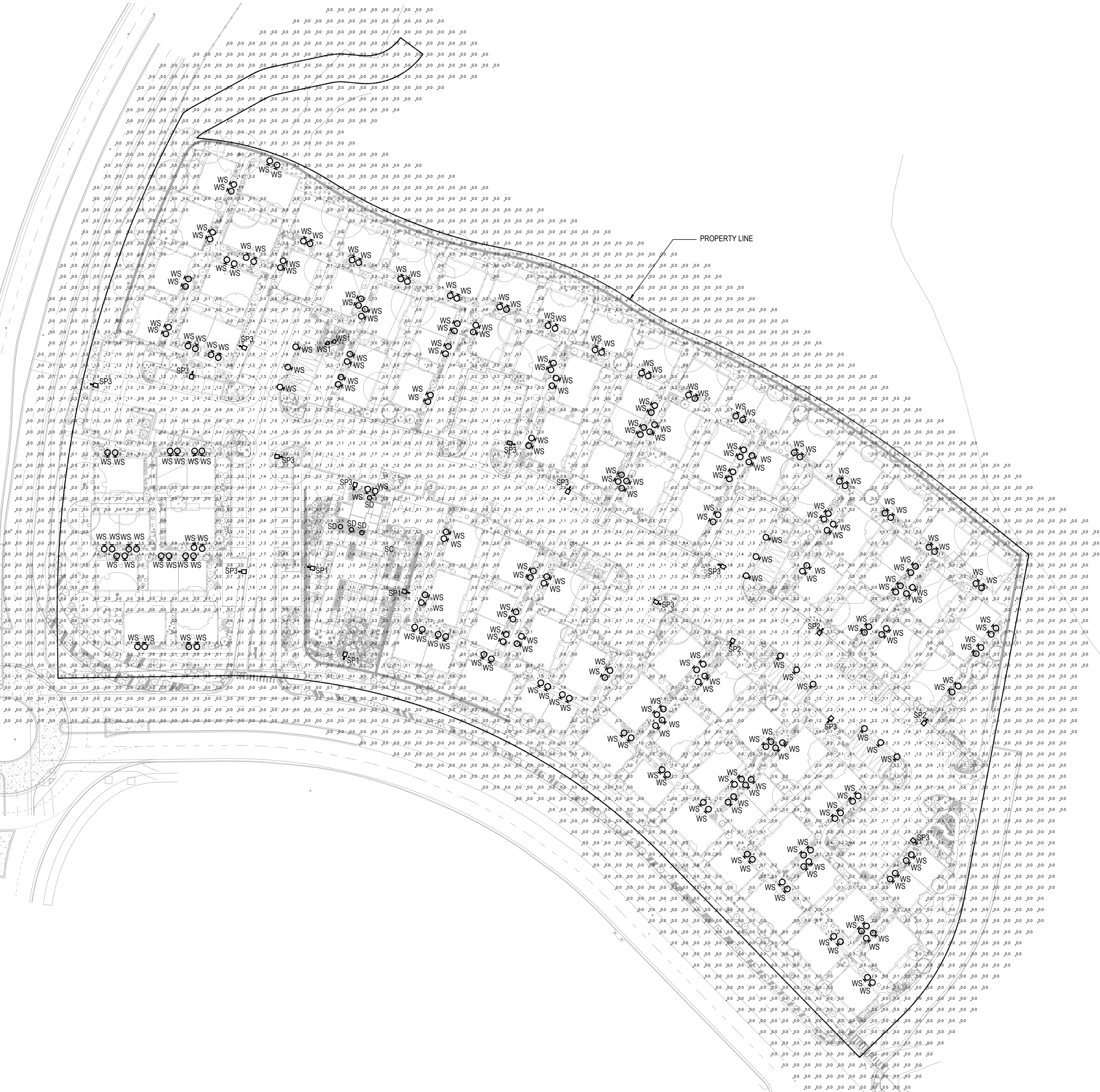
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com



AVILLA FOUNDERS VILLAGE
SITE LIGHTING PHOTOMETRIC

PROJECT #: 210431
SHEET NUMBER

86



GENERAL LIGHTING PLAN STANDARD NOTES:

1. DRIVES ARE ILLUMINATED WITH POLE-MOUNTED LIGHTS. PATHWAYS ARE ILLUMINATED WITH BUILDING-MOUNTED SCONCES. THE POOL COURTYARD IS ILLUMINATED WITH POLE-MOUNTED LIGHTS AND ACCENT CATENARY LIGHTING.
2. ALL SITE LIGHTING EXCEPT FOR THE POOL COURTYARD WILL HAVE OPERATION HOURS FROM DUSK TO DAWN. THE POOL COURTYARD LIGHTING WILL BE SWITCHED OFF AFTER THE CLUBHOUSE'S CLOSE OF BUSINESS.
3. ALL POLE LIGHTING IS EQUIPPED WITH SPILL CONTROL TO MITIGATE LIGHT TRESPASS UNTO ADJACENT PROPERTIES. ALL LIGHTING EXCEPT FOR POOL COURTYARD CATENARY LIGHTING IS FULL CUTOFF.
4. THE FOLLOWING TYPES OF LIGHTING ARE PROHIBITED: FORWARD THROW (TYPE IV) DISTRIBUTION, POLE-MOUNTED LIGHTS AIMED AT A BUILDING'S FACADE, AND UNSHIELDED WALL PACKS.

1

SITE LIGHTING PHOTOMETRIC

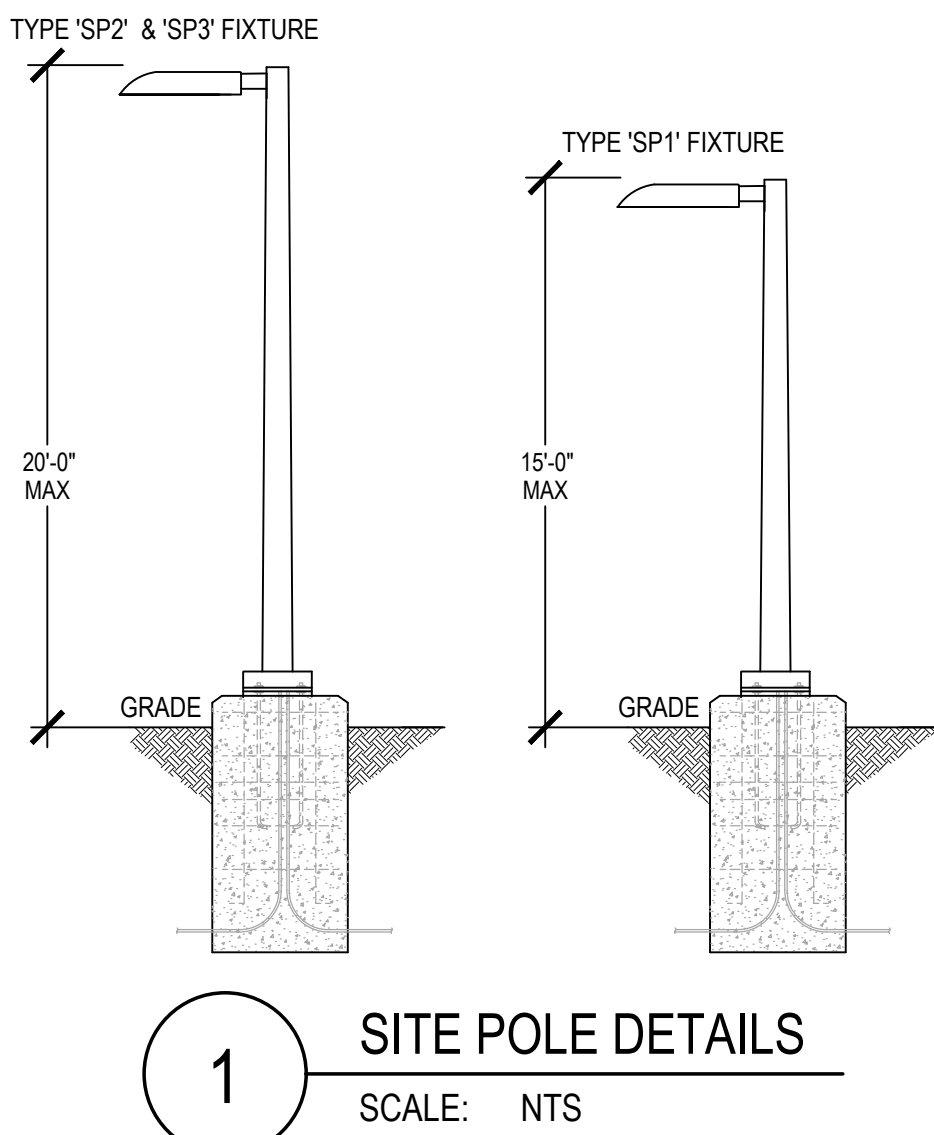
SCALE: 1" = 50'-0"

PHOTOMETRY PLAN GENERAL NOTES:

1. VALUES SHOWN ARE MAINTAINED HORIZONTAL ILLUMINANCE VALUES MEASURED AT GRADE.
2. SITE LIGHTING DESIGN HAS BEEN COMPLETED TO PRODUCE EVEN ILLUMINATION OF PARKING AND PAVED AREAS WITH MINIMAL GLARE ONTO ADJACENT PROPERTIES.
3. ALL LIGHT FIXTURES SHALL BE FULLY SHIELDED AND DIRECT LIGHT DOWNWARDS.
4. THERE WILL BE NO OFF-SITE GLARE ALLOWED.

SITE LIGHTING DESIGN HAS BEEN COMPLETED TO CONFORM TO CITY OF CASTLE ROCK EXTERIOR LIGHTING STANDARDS

MONUMENT ENTRY SIGNS ARE
ANTICIPATED TO BE INTERNALLY LIT.



LUMINAIRE SCHEDULE												
Symbol	Label	General Description	Mounting Height	Color	Catalog Number	Lamp	LLF	Watts	Lumens	IESNA Distribution Type	Controls	Shielding
	SC	CATENARY LIGHTS POOL COURTYARD	12'-0" AFG	N/A	AMERICAN LIGHTING LFS-12V-1.5-LED	LED	1.00	1.5W/FT	117 PER LAMP	SYMMETRICAL	PHOTOCELL ON, TIMECLOCK OFF	N/A
	SD	DOWNLIGHT CANOPIES	10'-0" AFG	WHITE	HALO SMD6R-6-930-WH	LED	1.00	9.5W	788	SYMMETRICAL	PHOTOCELL	FULL CUT-OFF
	SP1	PEDESTRIAN POLE POOL COURTYARD	15'-0" AFG	BLACK	MCGRAW-EDISON GLEON-SA1C-730-U- SL3-BK-DIM	LED	1.00	59W	7,354	Type 3 SPILL LIGHT CONTROL	PHOTOCELL ON, TIMECLOCK OFF	FULL CUT-OFF
	SP2	SITE POLE PARKING & DRIVES	20'-0" AFG	BLACK	MCGRAW-EDISON GLEON-SA1C-730-U- SL2-BK-DIM	LED	1.00	59W	7,254	Type 2 SPILL LIGHT CONTROL	PHOTOCELL	FULL CUT-OFF
	SP3	SITE POLE PARKING & DRIVES	20'-0" AFG	BLACK	MCGRAW-EDISON GLEON-SA1C-730-U- SL3-BK-DIM	LED	1.00	59W	7,408	Type 3 SPILL LIGHT CONTROL	PHOTOCELL	FULL CUT-OFF
	WS	WALL SCONCE ENTRIES	8'-0" AFG	BLACK	LUMIERE 303-W1-LEDB1-3000- UNV-T4-DIM10-BK	LED	1.00	8.4W	541	SYMMETRICAL	PHOTOCELL	FULL CUT-OFF
	WS1	SIDE MOUNTED DOWN LIGHT PERGOLA	12'-0" AFG	BLACK	COOPER 9002-W1-RW-LED3090- F-BK-L1-UNV-RSM	LED	1.00	10W	791	SYMMETRICAL	PHOTOCELL	FULL CUT-OFF

KEYED NOTES

1. ALL LIGHTS ON PROPERTY ADJACENT TO RESIDENTIAL ZONED LAND, EXCEPT THOSE REQUIRED FOR SECURITY AT ENTRANCES, STAIRWAYS, AND LOADING DOCKS SHALL BE CIRCUITED SUCH THAT LIGHTING SHALL BE REDUCED BY 50% WITHIN ONE HOUR AFTER THE END OF BUSINESS HOURS AND BE OPERATED IN SUCH 50% REDUCED MODE UNTIL ONE HOUR PRIOR TO THE COMMENCEMENT OF BUSINESS HOURS. LIGHTING CLOSEST TO THE BUILDING OR STRUCTURES SHALL BE CIRCUITED SEPARATELY FROM LIGHTING ON THE PROPERTY PERIMETER TO ALLOW AFTER HOURS CONTROLS.

Description			Lumière	
<p>The Lumiere Ean LED 303 W/LEDB1 is a compact, low profile, dimmable LED direct/indirect luminaire. The luminaire features full vertical adjustable (180°) for easy aiming and mounts directly to any wall or ceiling surface using a standard 4" square junction box. It is standard with a universal input LED driver (120 - 277V, 50/60 Hz). Dimming is achieved with a standard EIV, reverse phase dimming driver or an optional 0-10V dimming driver. 303 W/LEDB1 may be used indoors or outdoors and carries an IP66 rating.</p>	Catalog #	Type	WS	
	Project			
	Comments			
	Prepared by		Date	

303-W1 LEDB1™

303-W1 LEDB1™ is a high performance, high output LED luminaire designed for industrial and commercial applications. It is available in a variety of sizes and configurations to meet your specific needs. The luminaire is constructed from die-cast aluminum and features a rugged, powder-coated finish. It is designed to be mounted on a wall or ceiling and is suitable for use in environments with high humidity and dust. The luminaire is available in three different sizes: 1' x 4', 2' x 4', and 4' x 4'. Each size is available in either a standard or a high output configuration. The standard configuration is suitable for general industrial and commercial use, while the high output configuration is designed for use in environments with high ceilings and large areas. The luminaire is designed to be easy to install and maintain. It features a simple, modular design that allows for easy replacement of the LED modules. The luminaire is also designed to be energy efficient, with a long life expectancy of up to 50,000 hours. For more information on the 303-W1 LEDB1™, please visit our website at www.dlc.com.

CONSTRUCTION

Head and base plate are precision machined from corrosion-resistant 6061 T6 aluminum. A universal mounting plate and one piece silicone gasket is provided for surface to junction box or adaption. Stainless steel hardware is included.

Mounting

The luminaire mounts directly to a standard 4" square junction box. For further mounting information see technical notes section on page 2.

Optical

LightBatt™ and optical assembly are sealed by a diffused, impact resistant tempered glass lens. The optical assembly is available in three distributions: T2 (lateral

throw), T4 (forward throw) and T6X (Extra Wide Flood). Available in several color temperatures: 2700K, 3000K, 3500K, 4000K and 7500K (Amber). Both color temperature and distribution must be specified when ordering – see catalog logic for details. An edge-lit option is available.

Electrical

The 5-W 303-W1 LEDB1 is standard with an ELV trailing edge phase dimmable driver that accepts a universal input (120-277 VAC/60Hz). It will operate in -40°C to 50°C (-40°F to 122°F). The driver has an over-voltage protection. An optional -40V dimming driver is also available.

Finish

The luminaires are double protected by a RoHS compliant chemical film undercoating and polyester powder coat paint finish, surpassing the rigorous demands of the outdoor environment. A range of standard colors are available. RAL and custom color matches available upon request. Luminaires can also be brushed with a clear coat finish. The LightBatt™ cover plates are standard white and may be specified to match finish of luminaire housing (LCF).

Warranty

Luminaire warrants the EON series of fixtures against defects in material and workmanship for five (5) years. Auxiliary equipment such as LED drivers carries the original manufacturer's warranty.

APPLICATIONS

CEILING / WALL MOUNTING
INDIRECT

CERTIFICATION DATA

UL and ULc Wet Location Listed
LMV (ULcE) Compliant
UL ENEC Compliant
IP68 (Immersed Protection Rated)

TEMPERATURE

50°C Maximum Temperature Rating
External Surface Wiring 90°C Max

DLG

DLG

ORDERING INFORMATION						
Sample Number: 303-W1-EDGE12700-DIMW12-DIMW10-BK-EDGE						
Series *	Color Temperature	Input Voltage	Optics	Dimming	Finish *	Options **
303-W1-EDGE1 Head contains one (1) Mini-LiGAR™	2700-2700K 3000-3000K 3500-3500K 4000-4000K T3A-M: Arctic Silver Ambient (985-5555)	UWV-110V 120-271 50/60Hz	T2-Type II Latent Throw T4-Type IV Forward Throw T5X-Type X Extra Wide Flood	DMELV1: Trailing Edge Phase 0-10V or 0-10V Dimming	Painted BK-Black WH-White CS-City Silver WH-White Premium Finish BA-Bronze NE-Steel Stainless Steel	EDGE-Edge it glows true LCM-Lighting over plate MATCH-Matching over plate

NOTES: 1 Custom andRAL color matching available upon request. Consult factory for further information. 2 Add suffix to the order shown. 3 LCF option not available when W/ (white) finish is selected. 4 DesignLights Consortium™ Qualified and classified for DLC Standard. Refer to www.designlights.org for details on exact qualified (and XDD-W/LED) product as not all configurations are DLC classified.

EAT•N
Powering Business Worldwide

AOL12148
March 15, 2014

DESCRIPTION	<div> <div>Lumiere</div> <div>Type</div> </div>
<p>Lanterra 9002-W1 (Up and Down) and 9002-W2 (Up and Down) are small 2 x 0.9 D line voltage cylinder fixtures with dimmable LED. The luminaire comes in various mountings, surface mount with integral driver in the housing, remote driver mount with round and square wall plates and square wall integral driver, all of which can be mounted over standard 1/2 inch boxes. The luminaire also comes with various field replaceable optics. It also comes with various lens, lenses and colors and diffuser films, which can combine up to two at once to create multiple lighting effects. The fixture may be used indoors or outdoors and carries IP66 rating.</p>	<div> <div> <div>Category</div> <div>Project</div> <div>Comments</div> <div>Prepared by</div> </div> <div> <div>WS1</div> <div>Date</div> </div> </div>

[illegible]

DESCRIPTION The Halo Surface Mount LED Downlight (SMD) is a low profile surface mounting luminaire with a modern look and high performance. SMD6 (6") is designed for installation in many 3-1/2" and 4" square, octagon, or round junction boxes. Supply wire adapter with LED quick wiring connector included. The SMD6 may also retrofit in 5" and 6" aperture (C and Non IC recessed housings.	Catalog #		Type
	Project		SD
	Comments		Date
	Prepared by		

SPECIFICATION FEATURES		
HOUSING	• Non-electrically conductive polycarbonate frame.	DESIGNER KINGS (SOLD SEPARATELY)
• High impact duty polystyrene lens provides shielding to the light guide with no isolation	• Adjustable support plate allows for quick installation into both junction boxes and recessed housings;	• SMD kits are accessory rings in both round and square. These kits attach to the SMD for a permanent finish. Refer to the SMD accessories specification sheet for details.
• Stamped aluminum housing provides thermal conduction achieving L70 at 50,000 hours in AC and non-AC applications	• Torsion springs and friction blades included	• Matte White (Paintable)
GASKETS	ELECTRICAL JUNCTION BOX MOUNTING	• Satin Nickel
• Closed seal gasket achieves resistance airflow and wet location requirements without additional caulking	• The SMD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation.	• Tuscan Bronze
OPTICS	• Suitable for installation in many 3-1/2" and 4" square, octagon, and round electrical junction boxes.	WARRANTY
• Precision acrylic light guide organizes surface area into wide distribution with 12 - 14 spacing criteria valid for general area illumination	Note: SMD 120-27V UNV is only compatible with junction boxes that provide minimum depth of 2-1/8".	• Five year limited warranty, consult website for details. www.cooperlighting.com
LED	• Installer must ensure compatibility of H _v , wiring and power mounting in the electrical junction box. This includes all applicable national and local electrical and building code	COMPLIANCE
• A power LED array provides a uniform source with high efficiency and long life.	RECESSED HOUSING MOUNTING	• cULus Compliance for use with Halo housings and for use with other housings; see instruction sheet for conditions of use.
• Available in 80 CRI minimum, R9 greater than 50 and color accuracy within ±1CM color code accuracy and uniformity	• Note: Not use in recessed housings in direct contact with insulation	• Wet and Damp Location Listed, artwork as NFPA 703
DRIVER	• Note: Not use in recessed housings in direct contact with insulation	• Suitable for use in closets, compliant with ASTM E280
• Integral 120V 50/60Hz constant current driver provides noise free operation	• Refer to NEMA LD5-27/0-13.	• UL Type I, Class II, ALI(0) and ALI(16) (CIS)
• Continuous, flicker-free dimming to 100% brightness select leading or trailing edge 120V phase out dimmers.	• Torison formed torsion spring bracket kit included	• EMF/ELF emissions meet FCC 47CFR Part 15B
• Dimming to 5% is best assured using dimmers with low end adjustment. Consult driver manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wall(s).)	• Torison formed torsion spring adjust on the mounting plate to fit 5" or 6" compatible housings	• Contains no mercury or lead and contains no hazardous materials
• Inline electrical quick connect and EZE adapter (provided) provides simple connection	Friction Blade 5" & 6"	• Photometric testing in accordance with IES LM-79-08
SMD 120-27V	• Friction blade design allows the SMD to be installed in any position within the housing aperture (360 degrees)	• Photometric testing in accordance with IES LM-80-08 and IES LM-79-08
• Constant current driver provides noise free operation.	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	• Can be used for State of Part 15B Class II, high efficacy luminaire compliance, reference the California Energy Commission Title 24 Appliance Efficiency Database for current listings.
• SMD Universal Housing (120-27V) configurations are recommended for use with dimmable 0-10V DC low voltage controllers only	Friction Blade 5" & 6"	• ENERGY STAR® listed, reference database for current listings
SMD Integrated	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	Non-conductive Dead Front
• Constant current driver provides noise free operation.	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	
• SMD Universal Housing (120-27V) configurations are recommended for use with dimmable 0-10V DC low voltage controllers only	Friction Blade 5" & 6"	
• Constant current driver provides noise free operation.	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	
• SMD Universal Housing (120-27V) configurations are recommended for use with dimmable 0-10V DC low voltage controllers only	Friction Blade 5" & 6"	
• Constant current driver provides noise free operation.	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	
• SMD Universal Housing (120-27V) configurations are recommended for use with dimmable 0-10V DC low voltage controllers only	Friction Blade 5" & 6"	
• Constant current driver provides noise free operation.	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	
• SMD Universal Housing (120-27V) configurations are recommended for use with dimmable 0-10V DC low voltage controllers only	Friction Blade 5" & 6"	
• Constant current driver provides noise free operation.	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	
• SMD Universal Housing (120-27V) configurations are recommended for use with dimmable 0-10V DC low voltage controllers only	Friction Blade 5" & 6"	
• Constant current driver provides noise free operation.	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	
• SMD Universal Housing (120-27V) configurations are recommended for use with dimmable 0-10V DC low voltage controllers only	Friction Blade 5" & 6"	
• Constant current driver provides noise free operation.	• Torison springs adjust on the mounting plate to fit 5" or 6" compatible housings	

Project		Catalog #		Type	SP1,2,3,4
Prepared by		Notes		Date	



McGraw-Edison

GLECON Galleon

Area / Site Luminaire

Product Features




Interactive Menu

- Ordering Information [page 2](#)
- Mounting Details [page 3](#)
- Optical Distributions [page 4](#)
- Product Specifications [page 4](#)
- Energy and Performance Data [page 4](#)
- Control Options [page 9](#)

Product Certifications











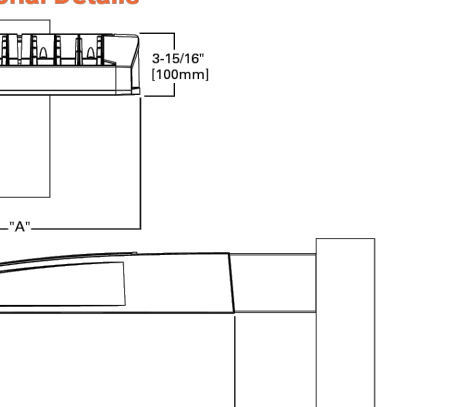

Quick Facts

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt
- Options to meet Buy American and other domestic preference requirements

Connected Systems

- WaveLinx
- Enlighted

Dimensional Details



Top View Dimensions: 3'-10 1/8" (1095mm) width, 1'-0" (305mm) depth.

Side View Dimensions: 21'-3/4" (663mm) height, 1'-0" (305mm) depth.

NOTES
 1. See table dimensions generally to nominal qualifications. Size at product variations are DLC qualified.
 2. DLC Certified for SHANK CCT and warmer only.

Number of Light Squares	"X" Width	"Y" Standard Arm Length	"Y" Extended Arm Length	"Z" Quick Mount Arm Length	"Z" Quick Mount Extended Arm Length
1-4	15-1/2"	7'	10'	10-5/8'	16-9/16'
5-6	21-5/8"	7'	10'	10-5/8'	16-9/16'
7-8	27-5/8"	7'	15'	10-5/8'	--
9-10	33-3/4"	7'	16'	--	--

NOTES
 1. See table selection requirements and additional line art, see Mounting Details section.



PS020020EN page 1

DESIGNED BY:	JMB
CHECKED BY:	JMB
DRAWN BY:	JLK

STUDIO LIGHTNING
63 SUNSET DR.
BAILEY, CO 80421
303.242.1572

ISSUE DATE: 08-11-2022	
DATE	REVISION COMMENTS
10-31-2022	PER TOWN OF CASTLE ROCK COMMENTS
04-10-2023	PER TOWN OF CASTLE ROCK COMMENTS
#	#
#	#
#	#
#	#
#	#

HKS **HARRIS
KOCHER
SMITH**
1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

NEXmetro
Communities

AVILLA FOUNDERS VILLAGE

LIGHTING DETAILS

PROJECT #: 210431
SHEET NUMBER
87
87 OF 87