DCSD - ELEMENTRY SCHOOL 50

CONSTRUCTION DOCUMENTS

LOCATED IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH P.M, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

CITY OF LONE TREE GENERAL NOTES:

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811.
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:
   (EXAMPLES:)
   WATER TIE-IN — SHEET 3
   STORM SEWER CONNECTION — SHEET 6
8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL. IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

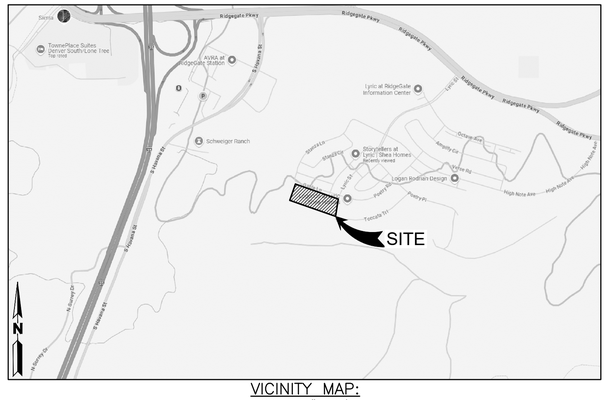
PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES WITH THE PROPOSED ELEVATIONS SHOWN IN THESE PLANS. ENGINEER WILL NOT BE LIABLE FOR ANY COST ASSOCIATED WITH CHANGES TO THE DESIGN WITHOUT PROPER NOTIFICATION.

COLORADO 811 — KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 3-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.



VICINITY MAP:
SCALE: 1"=500'

CIVIL ENGINEER:
MARTIN/MARTIN INC.
12499 W. COLFAX AVE.
LAKEWOOD, COLORADO 80215
ATTN: DAN BEARSE, P.E.
303-431-6100

ABBREVIATIONS:

APPROX	APPROXIMATE
ARCH	ARCHITECT
BLDG	BUILDING
BM	BENCHMARK
BOC	BACK OF CURB
BOW	BACK OF WALK
CL	CENTERLINE
COL	CITY OF LAKEWOOD
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTOUR
DEMO	DEMOLITION
DIA OR ø	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
EL	ELEVATION
ELEC	ELECTRICAL
ENG	ENGINEER
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
ESMT	EASEMENT
EX.	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
F.E.S.	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FGW	FINISHED GRADE AT WALL
FHY	FIRE HYDRANT
FL	FLOW LINE
FT	FOOT
GB	GRADE BREAK
GR	GRATE (AREA OR VALLEY INLETS)
GV	GATE VALVE
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HORZ	HORIZONTAL
HP	HIGH POINT
INV.	INVERT
LF	LINEAL FEET
LP	LOW POINT
MAX	MAXIMUM
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
OHE	OVERHEAD ELECTRICAL
PD	PERIMETER DRAIN
PERF	PERFORATED
PERM	PERIMETER
PERP	PERPENDICULAR
PL	PROPERTY LINE
PLBG	PLUMBING
PROP	PROPOSED
PRV	PRESSURE RELIEF VALVE
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
ROW	RIGHT OF WAY
SSWR	SANITARY SEWER
SF	SQUARE FOOT
STA	STATION
STRC	STRUCTURAL
SW	SIDEWALK
TELE	TELEPHONE
TB	THRUST BLOCK
TEMP	TEMPORARY
TOC	TOP OF CURB
VERT	VERTICAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	SECTION LINE	
	EASEMENT	
	RETAINING WALL	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	ASPHALT	
	CONCRETE/ SIDEWALK	
5750	CONTOURS	5750
	UTILITY CROSSING	#
ST	STORM SEWER	ST
ST	STORM MANHOLE	ST
RD	ROOF DRAIN	RD
	STORM INLET	
	FLARED END SECTION	
	DOWNSPOUT	DS
SS	SANITARY SEWER	SS
SS	SANITARY MANHOLE	SS
	CLEAN OUT	
W	WATER LINE	W
	WATER VALVE	
	FIRE HYDRANT	
WM	WATER METER	W
IR	IRRIGATION LINE	IR
IRR	IRRIGATION CONTROL	
OHE	OVERHEAD ELECTRIC	
E	ELECTRIC LINE	E
	LIGHT POLE	
	POWER POLE	
ELEC	ELECTRIC METER	
T	TELEPHONE LINE	T
TEL	TELEPHONE PEDESTAL	T
CT	CABLE TV	CT
G	GAS LINE	G
FO	FIBER OPTIC	FO
	SIGN	
	DIRECTION OF FLOW	
	GRADING ARROW	
	TREE (RE: LANDSCAPE)	
ELEV.	SPOT ELEVATIONS	ELEV.
DRIVE	DESCRIPTIONS	DRIVE

BURIED UTILITY NOTE:
UTILITY LOCATES AS SHOWN HEREON ARE TO ASSIST IN THE PLANNING/DESIGN PROCESS ONLY. DUE TO THE METHODOLOGY OF ELECTROMAGNETIC LOCATING PROCESSES, LOCATING IS NOT AN EXACT SCIENCE AND IS ONLY ACCURATE TO APPROXIMATELY 18". THEREFORE, TO OBTAIN THE EXACT LOCATION OF ANY/ALL BURIED UTILITIES, THEY WOULD NEED TO BE POTHOLED. SAID MARKS ARE NOT INTENDED FOR CONSTRUCTION USE.

FIRE DEPARTMENT SIGNATURE:
ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDINGLY TO THE PARKER WATER & SANITATION DISTRICT ENGINEERING STANDARDS. THE NUMBER AND LOCATION(S) OF FIRE HYDRANT(S) AS SHOWN ON THIS WATER MAIN INSTALLATION IS CORRECT AS SPECIFIED BY THE SOUTH METRO FIRE RESCUE AUTHORITY.

FIRE PROTECTION DISTRICT — DATE:

FIRE FLOW REQUIREMENTS FOR PROPOSED ADDITION:
CONSTRUCTION TYPE: IIB
GROSS BUILDING AREA: 84,950 GSF
BUILDING IS FULLY SPRINKLERED
FLOW REDUCTION: 50%
SITE FIRE FLOW: 3,125 GPM
NUMBER OF FIRE HYDRANTS: 3
AVERAGE DISTANCE BETWEEN FIRE HYDRANTS: 400FT
MAXIMUM DISTANCE FROM ROAD TO A FIRE HYDRANT: 225FT

FIRE FLOW DATA BLOCK

TOTAL FIRE FLOW REQUIRED FOR THIS SITE IS 3,125 GPM
MINIMUM @ 20 PSI RESIDUAL PRESSURE.

THIS FLOW MUST BE PROVIDED FROM A MINIMUM OF 3 FIRE HYDRANTS.
INDIVIDUALLY, EACH FIRE HYDRANT MUST SUPPLY 1100 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.

CODE USED FOR ANALYSIS: 2021 IFC, WITH 50% REDUCTION
OCCUPANCY GROUP(S): EDUCATIONAL, GROUP E
CONSTRUCTION TYPE(S): IIB
FIRE FLOW CALCULATION AREA: 84,950 GSF
THIS BUILDING IS FULLY SPRINKLERED
AVERAGE HYDRANT SPACING: 400 FT
MAXIMUM DISTANCE FROM HYDRANT TO ANY POINT ON STREET OR ROAD FRONTAGE: 225 FT

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
martinmartin.com
12499 West Colfax Avenue
303.431.6100

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
JURISDICTIONAL NOTES AND LEGEND

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & ALL RIGHTS RESERVED. DUPLICATION OR COMMERCIAL USE, IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C000

PLOT DATE: Thursday, November 20, 2025 11:18 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C000 - COVER SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

MARTIN/MARTIN, INC. GENERAL NOTES:

IN ADDITION TO THE CITY OF LONE TREE STANDARD NOTES, THE FOLLOWING SHALL APPLY:

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF LONE TREE STANDARDS AND SPECIFICATIONS LATEST REVISION. ALL STREETS, WATER MAIN, STORM SEWER AND SANITARY SEWER CONSTRUCTION SHALL BE SUBJECT TO CITY OF LONE TREE INSPECTION.

2. THE CONTRACTOR SHALL HAVE ONE [1] SIGNED COPY OF PLANS APPROVED BY THE CITY OF LONE TREE AND ONE COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.

3. CONTRACTOR SHALL NOTIFY THE ENGINEER, OWNER AND THE CITY OF LONE TREE 48-HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE CITY OF LONE TREE ENGINEERING INSPECTOR 24-HOURS PRIOR TO START OF WORK.

4. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING, BUT NOT LIMITED TO, SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK, TRENCH EXCAVATION AND SHORING, TRAFFIC CONTROL AND SECURITY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

5. THE CITY OF LONE TREE/OWNER/ENGINEER CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON OR NEAR THE CONSTRUCTION SITE.

6. ALL TRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SAFETY OF WORKERS PROVIDED FOR AS REQUIRED BY THE MOST RECENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION OSHA "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION." THESE REGULATIONS ARE DESCRIBED IN SUBPART P, PART 1926 OF THE CODE OF FEDERAL REGULATIONS. SHEETING AND SHORING SHALL BE UTILIZED WHERE NECESSARY TO PREVENT ANY EXCESSIVE WIDENING OR SLOUGHING OF THE TRENCH WHICH MAY BE DETRIMENTAL TO HUMAN SAFETY, TO THE PIPE BEING PLACED, OR TO ANY EXISTING SITE IMPROVEMENTS OR STRUCTURES. THE CONTRACTOR MAY BE REQUIRED TO USE AN APPROVED PILING INSTEAD OF SHEETING AND SHORING.

7. CONTRACTOR SHALL OBTAIN ALL PERMITS FOR STREET CUTS, UTILITY INTERRUPTIONS AND TRAFFIC CONTROL.

8. AT LEAST FIVE 5 WORKING DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION, A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO CITY OF LONE TREE. THE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A CERTIFIED TRAFFIC CONTROL SUPERVISOR AND SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. NO WORK SHALL BEGIN UNTIL ALL TRAFFIC CONTROL DEVICES HAVE BEEN PLACED IN ACCORDANCE WITH THE PLAN. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN THE TRAFFIC CONTROL DEVICES FOR THE ENTIRE DURATION OF THE PROJECT OR UNTIL THE ROADWAY HAS BEEN OPENED AND THE PERMANENT TRAFFIC CONTROL DEVICES HAVE BEEN INSTALLED.

9. ALL TRENCH BACKFILL AND SUBGRADE PREPARATION SHALL BE TESTED TO ENSURE COMPLIANCE WITH CITY OF LONE TREE STANDARDS AND SHALL BE TESTED AT CITY OF LONE TREE REQUIRED FREQUENCIES BY A CITY OF LONE TREE APPROVED PRIVATE SOILS TESTING FIRM. TEST RESULTS SHALL BE SUBMITTED TO, REVIEWED, AND APPROVED BY, THE CITY OF LONE TREE ENGINEERING DIVISION PRIOR TO INSTALLING BASE COURSE, ASPHALT OR CONCRETE ON PREPARED SUBGRADE. ALL BASE COURSE DENSITY SHALL ALSO BE TESTED BY THE PRIVATE SOILS FIRM AT CITY OF LONE TREE REQUIRED FREQUENCIES TO ENSURE COMPLIANCE WITH CITY OF LONE TREE REQUIREMENTS. BASE COURSE TEST RESULTS SHALL ALSO BE APPROVED BY THE CITY OF LONE TREE ENGINEERING DIVISION PRIOR TO INSTALLING PAVEMENT. ALL CONCRETE AND ASPHALT PLACED SHALL BE TESTED IN ACCORDANCE WITH CITY OF LONE TREE MINIMUM MATERIALS TESTING STANDARDS. TEST RESULTS SHALL BE REVIEWED AND APPROVED BY THE CITY OF LONE TREE ENGINEERING DIVISION PRIOR TO INITIATION OF THE REQUIRED [2] YEAR WARRANTY PERIOD.

10. CONTRACTOR SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL HEALTH AND SAFETY RULES AND REGULATIONS.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES DURING CONSTRUCTION AND FOR COORDINATING WITH THE APPROPRIATE UTILITY COMPANY FOR ANY UTILITY CROSSINGS REQUIRED. REPAIR OF DAMAGED UTILITIES SHALL BE AT THE CONTRACTORS EXPENSE, INCLUDING BUT NOT LIMITED TO UNKNOWN UNDERGROUND UTILITIES.

12. EXISTING FENCES, TREES, SIDEWALKS, CURBS AND GUTTERS, LANDSCAPING, STRUCTURES, AND IMPROVEMENTS DESTROYED, DAMAGED OR REMOVED DUE TO CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED OR RESTORED IN LIKE KIND AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE INDICATED ON THESE PLANS.

13. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING REASONABLE ACCESS TO AND FROM ALL OF THE ADJACENT PROPERTIES THROUGHOUT THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE REQUIRED TO MEET (INDIVIDUALLY OR COLLECTIVELY) WITH ALL ADJACENT PROPERTY OWNERS WHO'S DRIVEWAY ACCESS WILL BE AFFECTED BY THE WORK. AS CONSTRUCTION CONDITIONS CHANGE AND THE WORK PROGRESSES, THE CONTRACTOR SHALL BE REQUIRED TO PERIODICALLY UPDATE THOSE PROPERTY OWNERS SO THAT THEY ARE KEPT INFORMED ABOUT THEIR ACCESS.

14. OWNER/DEVELOPER SHALL OBTAIN A STORMWATER CONSTRUCTION PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY CONTROL DIVISION, PRIOR TO CLEARING, GRADING, OR EXCAVATING A SITE OF ONE-HALF ACRE OR MORE, OR LESS THAN ONE-HALF ACRE AND PART OF A LARGER DEVELOPMENT. A COPY OF THE APPROVED PERMIT MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEERING DIVISION PRIOR TO THE START OF CLEARING, GRADING OR EXCAVATING OF THE SITE. A COPY OF THE APPROVED PERMIT MUST ALSO BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.

15. CONTRACTOR SHALL OBTAIN A COLORADO STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT FOR ALL AREAS WHERE DEWATERING IS REQUIRED FROM AN EXCAVATION AND WATER IS DISCHARGED INTO A STORM SEWER, CHANNEL, IRRIGATION DITCH OR ANY WATERS OF THE UNITED STATES. A COPY OF THE APPROVED PERMIT MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEERING DIVISION PRIOR TO THE START OF ANY DEWATERING. A COPY OF THE APPROVED PERMIT MUST ALSO BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STORM RUNOFF AND ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. GROUNDWATER SHALL BE PUMPED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS NOR EROSION ON ABUTTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS. NO CONCRETE SHALL BE PLACED WHERE GROUNDWATER IS VISIBLE OR UNTIL THE GROUNDWATER TABLE HAS BEEN LOWERED BELOW THE PROPOSED IMPROVEMENTS. ANY UNSTABLE AREAS, AS A RESULT OF GROUNDWATER, ENCOUNTERED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE STABILIZED AS AGREED UPON BY THE CONTRACTOR, THE CITY OF LONE TREE, AND THE GEOTECHNICAL ENGINEER AT THE TIME OF OCCURRENCE.

17. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS AND OTHER UTILITIES AT THE POINT OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN.

18. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL UTILITIES TO COORDINATE SCHEDULES.

19. CONTRACTOR SHALL NOTIFY ALL BUSINESSES/RESIDENTS IN WRITING 48 HOURS PRIOR TO ANY SHUT-OFF IN SERVICE. THE NOTICES MUST HAVE CONTRACTOR'S PHONE NUMBER AND NAME OF CONTACT PERSON, AND EMERGENCY PHONE NUMBER FOR AFTER HOURS CALLS. ALL SHUT OFFS MUST BE APPROVED BY THE CITY OF LONE TREE UTILITY DIVISION, AND CITY OF LONE TREE VALVES AND APPURTENANCES SHALL BE OPERATED BY CITY OF LONE TREE PERSONNEL, UNLESS WRITTEN PERMISSION IS GIVEN OTHERWISE.

20. ALL PUBLIC IMPROVEMENT WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY A CITY OF LONE TREE REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN STANDARD CONSTRUCTION PRACTICES ARE NOT BEING ADHERED TO. THE CITY OF LONE TREE RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS ENGINEERING CODE OF STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS. CONTRACTOR IS RESPONSIBLE FOR BEING AWARE OF, NOTIFYING, COORDINATING AND SCHEDULING ALL INSPECTIONS REQUIRED FOR FINAL APPROVALS AND PROJECT ACCEPTANCE.

21. THE CONTRACTOR SHALL NOT OPERATE ANY CONSTRUCTION VEHICLES NOR PERFORM ANY CONSTRUCTION OPERATIONS BEFORE 7 AM OR AFTER 6 PM, MONDAY THROUGH FRIDAY OR BEFORE 8 AM AND AFTER 5 PM ON SATURDAYS. NO WORK WILL BE ALLOWED ON SUNDAYS OR HOLIDAYS. THE CITY OF LONE TREE RESERVES THE RIGHT TO FURTHER RESTRICT OR MODIFY THESE HOURS OF OPERATION IF CONDITIONS WARRANT.

22. REFER TO LANDSCAPE PLANS PREPARED BY TREANOR FOR FINAL LANDSCAPE, SPECIALTY LANDSCAPE FEATURES AND TRAIL LAYOUT/DETAILS/MATERIALS. TRAILS SHOWN ON LANDSCAPE CONSTRUCTION PLANS SHALL BE FIELD FIT TO ATTAIN 4.8% MAX SLOPE AND 2% CROSS SLOPE PER ADA REQUIREMENTS, UNLESS OTHERWISE NOTED.

23. COMPACTION OF ALL TRENCHES MUST BE ATTAINED AND COMPACTION TEST RESULTS SUBMITTED TO THE ENGINEER AND THE CITY OF LONE TREE PRIOR TO FINAL ACCEPTANCE.

24. RECORD DRAWINGS SHOWING ALL CHANGES FROM THE APPROVED CONSTRUCTION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND OWNER PRIOR TO INITIATION OF THE REQUIRED TWO [2]-YEAR WARRANTY PERIOD. THE RECORD DRAWINGS WILL CONSIST OF A MARKED-UP SET OF "ISSUED FOR CONSTRUCTION" DRAWINGS VERIFYING THE FOLLOWING:
    - ALL LENGTHS, SIZES, AND MATERIALS OF INSTALLED PIPE, MANHOLES, AND ANY OTHER IMPROVEMENT.
    - HORIZONTAL LOCATIONS EITHER BY STATION AND OFFSET, OR BY NORTHING AND EASTING COORDINATES OF ALL MANHOLES, BENDS, CLEANOUTS, VALVES, TAPS, WYES, STUBS, PLUGS, TEES, ETC.
    - INVERT ELEVATIONS OF STORM SEWER AND SANITARY SEWER MANHOLES, INLETS, OUTLETS, STUB ENDS, TOP OF PIPE ELEVATIONS OF EACH UTILITY CROSSING, ETC.
    - CONSTRUCTED SLOPE OF STORM AND SANITARY PIPES BETWEEN MANHOLES AND STRUCTURES.
    - TOP OF PIPE ELEVATION AT REGULAR INTERVALS AND/OR FITTINGS FOR WATER LINES.
    - ELEVATIONS AT FLOWLINE OF CURB AND GUTTER AT DESIGN LOCATIONS AND GRADE BREAKS. ELEVATION OF INLET AND TRENCH DRAIN GRATES. TOP OF CURB AT CURB INLETS.
    - ANY OTHER VARIATIONS FROM THE CONSTRUCTION DOCUMENTS MUST BE CLEARLY NOTED AND DETAILED ON THE PLANS.
    - AS-BUILT FIELD NOTES, FROM WHICH THE RECORD DRAWINGS ARE PREPARED, ARE TO BE PROVIDED AND STAMPED/SIGNED AND DATED BY A COLORADO REGISTERED PROFESSIONAL LAND SURVEYOR.

25. THE CONTRACTOR SHALL WARRANT ALL WORK TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF TWO [2]-YEARS FROM THE DATE OF ACCEPTANCE INTO THE WARRANTY PERIOD OF ALL CONSTRUCTION CALLED FOR BY THE PUBLIC IMPROVEMENTS AGREEMENT WITH THE CITY OF LONE TREE.

26. DURING CONSTRUCTION AND UPON COMPLETION OF CONSTRUCTION, THE SITE SHALL BE CLEANED AND RESTORED TO A CONDITION EQUAL TO, OR BETTER THAN, THAT WHICH EXISTED BEFORE CONSTRUCTION.

27. EARTHWORK QUANTITIES ARE RAW NUMBERS AND HAVE NOT BEEN ADJUSTED TO ACCOUNT FOR SHRINK, SWELL, COMPACTION, PAVING, UTILITY SPOILS, BUILDING FOUNDATION/BASEMENT ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EARTHWORK VALUES.

28. CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT TITLED REPORT OF GEOTECHNICAL ENGINEERING EVALUATION – PROPOSED RIDGE GATE ELEMENTARY SCHOOL (ES50), DATED JUNE 13, 2025, AND PREPARED BY INTERTEK PSI FOR PAVEMENT DESIGN AND RECOMMENDATIONS REGARDING EXCAVATION, COMPACTION, MATERIALS, EMBANKMENT, PAVEMENT SUBEXCAVATION, MOISTURE CONTROL, AND TOPSOIL REMOVAL AND REPLACEMENT. FINAL PAVEMENT DESIGN TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER AFTER SUBGRADE IS COMPLETE. CONTRACTOR TO COORDINATE THIS WORK. THE CONSTRUCTION METHODS FOR EXCAVATION/EMBANKMENTS, COMPACTION, AND SUBGRADE PREPARATION SHALL BE IN STRICT CONFORMANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF DISCREPANCIES BETWEEN THE GEOTECHNICAL REPORT RECOMMENDATIONS AND REQUIREMENTS OF THESE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.

29. SEE SHEET C710 FOR PAVEMENT DETAILS.

30. THESE CONSTRUCTION DOCUMENTS ARE INTENDED SOLELY FOR THE CONSTRUCTION OF THE DEVELOPMENT DEPICTED HEREIN. PERIODIC, SYSTEMATIC MAINTENANCE IS NECESSARY FOR THE OWNER TO REALIZE THE DESIGN LIFE AND PERFORMANCE OF THE FACILITIES OF THIS PROJECT. INSPECTION, MAINTENANCE AND REPAIR ARE THE SOLE RESPONSIBILITY OF THE OWNER. THE DESIGN RELIES UPON A RESPONSIBLE EFFORT BY THE OWNER TO MAINTAIN THE FACILITIES, THUS, ANY DAMAGES ARISING OUT OF THE OWNER'S FAILURE TO PERFORM SAID MAINTENANCE ARE BEYOND THE DESIGNERS CONTROL. MARTIN/MARTIN EMPHASIZES THE IMPORTANCE OF A MAINTENANCE PROGRAM AND IF REQUESTED WOULD BE AVAILABLE TO SUBMIT A PROPOSAL FOR ASSISTING THE OWNER IN THE DEVELOPMENT OF A COMPREHENSIVE, SYSTEMATIC MAINTENANCE PROGRAM TO MAINTAIN THE MAJOR INFRASTRUCTURE COMPONENTS OF THIS PROJECT. OWNER SHOULD BE COGNIZANT OF THE IMPORTANCE OF MAINTAINING DRAINAGE PATTERNS AND TO AVOID EXCESSIVE IRRIGATION. THE SOILS TYPICALLY FOUND IN COLORADO ARE SENSITIVE TO EXCESS MOISTURE. THIS COULD POTENTIALLY RESULT IN PAVEMENT/STRUCTURE MOVEMENTS WHICH MAY BE UNACCEPTABLE AND COMPROMISE THE DESIGN INTENT AND FUNCTIONALITY OF THE PROJECT. MARTIN/MARTIN RECOMMENDS THE OWNER MAINTAIN A COMPLETE SET OF SOILS/DRAINAGE REPORTS AND DESIGN PLANS OF THE PROJECT FOR FUTURE REFERENCE.

31. THE PLANS HAVE BEEN PREPARED BY MARTIN/MARTIN IN ACCORDANCE WITH AND IN RELIANCE UPON THE GEOTECHNICAL STUDIES AND RECOMMENDATIONS PER "REPORT OF GEOTECHNICAL ENGINEERING EVALUATION – PROPOSED RIDGE GATE ELEMENTARY SCHOOL (ES50)" DATED JUNE 13, 2025 BY INTERTEK PSI. MARTIN/MARTIN HAS NO RESPONSIBILITY FOR THE FOUNDATION SYSTEMS USED WITHIN THIS DEVELOPMENT. MARTIN/MARTIN SUGGESTS THAT ALL OWNERS, PRESENT AND FUTURE, BECOME AWARE OF THE RISK ASSOCIATED WITH IMPROPER MAINTENANCE OF SLOPES AND DRAINAGE AWAY FROM THE STRUCTURES. MARTIN/MARTIN RECOMMENDS THE FOLLOWING REFERENCE AS A WAY TO BECOME MORE AWARE OF THE UNIQUE SOILS CONDITIONS FOUND WITHIN THIS PROJECT AND WITHIN MUCH OF THE FRONT RANGE AREA.

    "A GUIDE TO SWELLING SOIL FOR HOMEBUYERS AND HOMEOWNERS: PUBLISHED BY THE COLORADO GEOLOGICAL SURVEY, SPECIAL PUBLICATION NO. 43.

30. THE FOLLOWING LIMITED SCOPE OF RESPONSIBILITY NOTE MUST BE LOCATED, OR REFERENCED TO A GENERAL NOTE, ADJACENT TO THE P.E. SEAL PER 5.1.5 OF THE COLORADO BYLAWS AND RULES.

THE DESIGN PLANS SHOWN HEREIN WERE DEVELOPED BASED UPON THE GEOTECHNICAL INVESTIGATIONS/ANALYSIS/ENGINEERING CRITERIA DEVELOPED BY INTERTEK PSI, AS PRESENTED IN THE GEOTECHNICAL REPORT ENTITLED "REPORT OF GEOTECHNICAL ENGINEERING EVALUATION – PROPOSED RIDGE GATE ELEMENTARY SCHOOL (ES50)", DATED JUNE 13, 2025, SIGNED AND SEALED BY KYLE R. DUITSMAN P.E. MARTIN/MARTIN, INC. RELIED UPON THE ENGINEERING ANALYSIS AND CONCLUSIONS OF THIS REPORT IN THE PREPARATION OF THESE CIVIL ENGINEERING PLANS AND DOCUMENTS. NO INDEPENDENT INVESTIGATIONS AND/OR ANALYSIS WAS CONDUCTED BY MARTIN/MARTIN, INC. THESE PLANS WERE PROVIDED TO [THE GEOTECHNICAL ENGINEER] FOR REVIEW AND VERIFICATION THAT THESE PLANS DEVELOPED BY MARTIN/MARTIN PROPERLY INTERPRETED AND APPLIED THE CRITERIA AND RECOMMENDATIONS ESTABLISHED BY THEIR GEOTECHNICAL REPORT FOR THIS PROJECT.

ACCESSIBLE ROUTES:

1. ALL CONSTRUCTION AND VERIFICATION/TESTING SHALL BE IN ACCORDANCE WITH RULES AND REGULATIONS OF LOCAL, STATE AND FEDERAL JURISDICTIONS, AND THE MOST CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT ("ADA"); ARCHITECTURAL BARRIERS ACT ACCESSIBILITY STANDARD – ABAAS AS PROVIDED FOR IN THE REGULATIONS OF THE UNITED STATES ACCESS BOARD, UNIFORM FEDERAL ACCESSIBILITY STANDARDS (UFAS) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) – ANSI A117.1 . ADDITIONALLY, MEET REQUIREMENTS BY THE UNITED STATES DEPARTMENT OF TRANSPORTATION AND FEDERAL HIGHWAY ADMINISTRATION WHICH REQUIREMENTS ARE PRINCIPALLY LISTED IN 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, PROPOSED GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES ("PROWAG") AND LOCAL STANDARDS, FOR ANY ACCESSIBLE ROUTE.

2. NOTES AND REQUIREMENTS WITHIN THE CONSTRUCTION DOCUMENTS ARE A SUPPLEMENT TO, AND NOT A REPLACEMENT FOR THE REFERENCED REGULATIONS.

3. CONTRACTORS ARE TO BE AWARE WHEN REFERRING TO THE ABOVE STANDARDS, RULES AND REGULATIONS THAT PUBLISHED VALUES FOR DIMENSION AND SLOPE ARE FOR FINISHED CONSTRUCTION, NO TOLERANCE IS PERMITTED BELOW MINIMUM AS SHOWN ON DRAWINGS OR ABOVE MAXIMUM VALUES AS INDICATED IN THE APPLICABLE LOCAL, STATE, AND FEDERAL STANDARDS.

4. THE REGULATIONS EXPECT THE CONTRACTORS TO BE KNOWLEDGEABLE OF CONSTRUCTION PRACTICES, AND TO USE APPROPRIATE MEANS AND METHODS TO MEET TOLERANCES AND ENSURE CONSTRUCTION COMPLIES WITH REGULATIONS. ALL CONSTRUCTION OR ALTERATIONS OF ACCESSIBILITY ROUTES (WALKS, RAMPS, ENTRANCES, ETC.) SHALL COMPLY WITH STANDARDS, RULES AND REGULATIONS SET FORTH ABOVE, INCLUDING BUT NOT LIMITED TO 5% MAXIMUM LONGITUDINAL GRADE ON WALKS WITHOUT HANDRAILS, 8.33% MAXIMUM LONGITUDINAL GRADE ON WALKS WITH HANDRAILS, AND LANDINGS 2% MAXIMUM COMPOSITE SLOPE. 2% MAXIMUM CROSS SLOPE ON WALKS, AND 2% MAXIMUM COMPOSITE SLOPE IN ACCESSIBLE PARKING/LOADING AREAS. NO TOLERANCE REGARDING MAXIMUM SLOPE WILL BE ALLOWED.

5. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH OWNER/DEVELOPER, ENGINEER, ARCHITECT OR DESIGNATED OFFICIAL IF RULES AND REGULATIONS OF ACCESSIBILITY ROUTES CANNOT BE MET OR A DISCREPANCY OF REQUIREMENTS ARE INDICATED ON DRAWINGS. IN ADDITION, OWNER/DEVELOPER IS ADVISED THAT REGULAR MAINTENANCE PROGRAMS SHOULD BE IMPLEMENTED AFTER CONSTRUCTION TO KEEP EXISTING ROUTES SAFE, USABLE, AND ACCESSIBLE COMPLIANT.

PWSD WATER SYSTEM NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.

2. ALL WATER MAINS SHALL BE PER PWSD MATERIALS SPECIFICATIONS. ALL MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE SUITABLE FOR CHLORINATED AND CHLORAMINATED WATER.

3. ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RODDED OR MEGA-LUGGED. ALL FITTINGS SHALL BE WRAPPED PER PWSD MATERIALS SPECIFICATIONS.

4. THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.

5. FIRE HYDRANTS SHALL CONFORM TO AWWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE HYDRANT ASSEMBLIES PER PWSD SPECIFICATIONS.

6. ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST WITH CONCRETE THRUST BLOCKS.

7. PRECAUTIONS SHALL BE TAKEN TO PROTECT THE INTERIOR OF PIPES, FITTINGS, AND VALVES AGAINST CONTAMINATION. ALL OPENINGS IN THE PIPELINE SHALL BE CLOSED WITH WATERTIGHT PLUGS WHEN PIPE LAYING IS STOPPED AT THE CLOSE OF THE DAY'S WORK OR FOR OTHER REASONS, SUCH AS REST BREAKS OR MEAL PERIODS.

8. VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES; WHERE AN ADDITIONAL VALVE SHALL BE PLACED ON THE TAPPING TEE. OTHER LOCATIONS SHOWN ON THE PLANS.

9. WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSING, A MINIMUM CLEARANCE OF 1.5 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.

10. THE CONTRACTOR SHALL NOTIFY THE PWSD AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION. IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP, THE CONTRACTOR MUST NOTIFY THE DISTRICT ENGINEER 48 HOURS PRIOR TO RE-START.

11. PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH PWSD STANDARDS AND SPECIFICATIONS, LATEST REVISION.

12. THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.

13. COMPACTION OF ALL TRENCHES MUST BE ATTAINED IN ACCORDANCE WITH THE SOILS REPORTS AND COMPACTION TEST RESULTS SUBMITTED TO THE DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.

14. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR, DESIGN ENGINEER, AND REPRESENTATIVE OF OTHER APPROVING AGENCIES.

15. CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PWSD SPECIFICATIONS. CHLORINATION OF FINISHED PIPELINE COMPLETED BEFORE HYDROSTATIC TESTING.

16. HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PWSD SPECIFICATIONS UP TO MINIMUM OF 150 PSI IN THE PRESENCE OF A PWSD INSPECTOR/ENGINEER.

PWSD SANITARY SEWER SYSTEM NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.

2. ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8" IN DIAMETER UNLESS OTHERWISE NOTED.

3. SEWER LINES SHALL BE INSTALLED 5.0 FEET SOUTH OR WEST OF STREET CENTERLINE, UNLESS OTHERWISE SHOWN ON PLANS. SEWER LINES SHALL BE 10.00 FEET FROM WATER LINES EXCEPT WHEN CROSSING EACH OTHER. SEWER LINES WHICH CROSS LESS THAN 1.50 FEET VERTICALLY FROM THE WATER MAIN SHALL BE ENCASED IN CONCRETE AS PER PWSD SPECIFICATIONS. USE RUBBER GASKETS FOR PVC ENCASEMENT.

4. SEWER RIM ELEVATIONS SHOWN ARE APPROPRIATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. RING AND COVER SHALL BE SET IN CENTERED CONCRETE RINGS WITH RAM-NECK FOR ADJUSTMENT TO MATCH FINAL PAVEMENT ELEVATIONS.

5. THE CONTRACTOR AND SURVEY CREW SHALL VERIFY ELEVATIONS OF EXISTING SEWER LINES AND MANHOLES TO BE TIED TO PRIOR TO CONSTRUCTION OR STAKING OF SANITARY SEWER.

6. NO UNDERDRAIN SYSTEM WILL BE ALLOWED TO BE PLACED IN MAINLINE OR SEWER SERVICE TRENCHES.

7. SEWER SERVICE TEES FOR EACH UNIT SHALL BE STAKED BY A SURVEY CREW AND FURNISHED AND INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER "AS CONSTRUCTED" LOCATION OF TEES. SEWER WYES SHALL BE USED RATHER THAN TEES.

8. ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER, ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED. ALL MANHOLES SHALL HAVE SHAPED INVERTS.

9. PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.

10. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVES OF THE OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER TO SCHEDULE THIS MEETING.

11. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSD AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSD SPECIFICATION MANUAL.

12. ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE PWSD STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.

13. PRIOR TO STARTING WORK WHERE SEWER MAIN IS TO BE CONNECTED TO EXISTING PWSD SEWER SYSTEMS. THE NEAREST MANHOLE TO THE POINT OF TIE-IN SHALL BE PLUGGED WITH A PLUMBER'S PLUG ON THE INLET SIDE BY THE CONTRACTOR. THIS PLUG SHALL REMAIN IN PLACE UNTIL FINAL PROBATIONARY ACCEPTANCE BY PWSD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING AND CLEANING THESE MANHOLES AND REMOVING THE PLUG WHEN INSTRUCTED BY THE DISTRICT.

14. PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CONTRACTOR SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

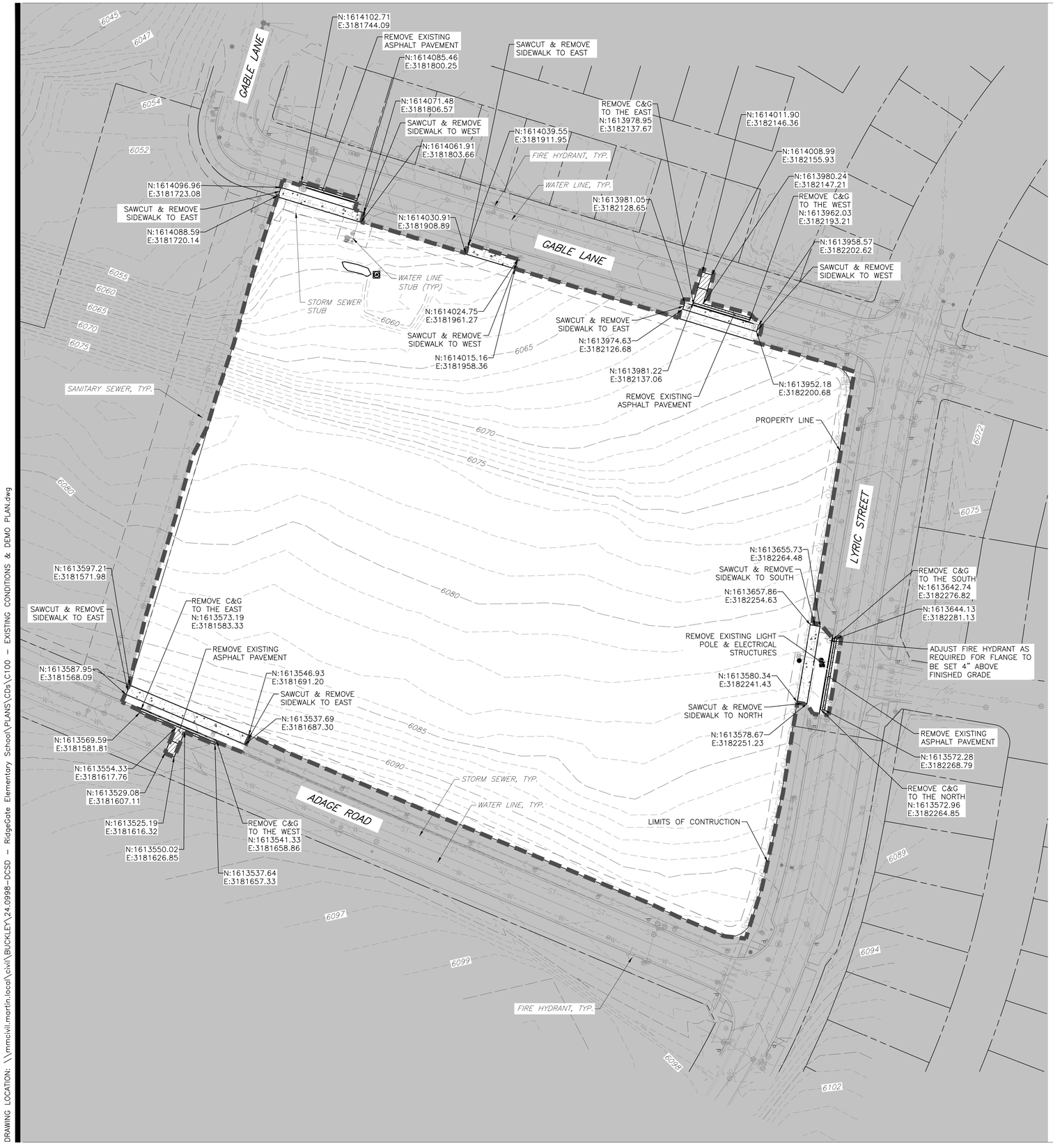
MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE
ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS

GENERAL NOTES SHEET

| No. |



PLOT DATE: Thursday, November 20, 2025 11:18 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.098-DCSD - RidgeGate Elementary School\PLANS\CDs\C100 - EXISTING CONDITIONS & DEMO PLAN.dwg

DEMOLITION NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. LIMITS OF CONSTRUCTION ARE TO BE COORDINATED WITH PROPOSED IMPROVEMENTS. REFER TO APPROVED LAYOUT, GRADING, WATER, STORM, AND SANITARY PLANS.
3. THE CONTRACTOR SHALL COORDINATE ADDITIONAL DEMOLITION REQUIREMENTS AS NECESSARY FOR CONSTRUCTION ACCESS AND STAGING.
4. THE CONTRACTOR SHALL COORDINATE ADDITIONAL DEMOLITION REQUIREMENTS AS SHOWN IN THE ARCHITECTURAL, STRUCTURAL, MEP, IT AND LANDSCAPE PLANS AND SPECIFICATIONS AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCY PRIOR TO CONSTRUCTION.
5. BARRIERS/FENCING SHALL BE PROVIDED PRIOR TO SITE DEMOLITION TO PROVIDE FOR THE SAFETY OF WORKERS AND PASSERSBY. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN EGRESS/ACCESS TO ADJACENT BUILDINGS DURING CONSTRUCTION AND SHALL PROVIDE A BARRIER/FENCING PLAN AND SITE LOGISTICS PLAN TO THE OWNER FOR REVIEW PRIOR TO CONSTRUCTION.
6. PUBLIC ELECTRIC, GAS LINES, AND COMMUNICATION LINES TO BE RELOCATED BY UTILITY PROVIDER. COORDINATE RELOCATION OF PRIVATE UTILITY LINES WITH OWNER.
7. EXISTING UTILITIES NOT SHOWN TO BE REMOVED/RELOCATED ARE TO REMAIN PROTECTED THROUGH OUT CONSTRUCTION. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES. ANY REQUIRED UTILITY OUTAGES SHALL BE COORDINATED WITH THE UTILITY PROVIDER AND OWNER(S) OF AFFECTED PROPERTIES.
8. THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLES, RIMS, VALVE BOXES, ELECTRIC VAULT/BOXES, TELECOM VAULT/BOXES, ETC. TO MATCH FINAL GRADE. ALL MANHOLES COVERS, ELECTRICAL BOX COVERS, TELECOM BOX COVERS, ETC. SHALL BE REPLACED WITH NEW COVERS IF DAMAGED.
9. REFER TO SITE ELECTRICAL PLANS FOR LIGHTPOLES TO BE PROTECTED IN PLACE OR RELOCATED.
10. THE CONTRACTOR SHALL PROVIDE FOR DUST CONTROL DURING DEMOLITION TO INCLUDE COVERING OF ALL TRUCKS HAULING DEBRIS OFFSITE, SWEEPING ADJACENT STREETS, AND APPLYING AN APPROVED DUST PALLIATIVE AS NECESSARY.
11. THE CONTRACTOR SHALL SWEEP ALL SEDIMENT, DIRT, MUD & DEBRIS TRACKED OR DEPOSITED ON PUBLIC OR PRIVATE STREETS IMMEDIATELY AND REMEDY THE SOURCE OF TRACKING.
12. CONTRACTOR SHALL STRAIGHT SAWCUT EXISTING ASPHALT PAVEMENT AT DEMOLITION LIMITS. APPLY TACKCOAT AT EDGE PRIOR TO PLACING NEW ASPHALT. ALL NEW CURB AND GUTTER OR CONCRETE PAVEMENT ABUTTING EXISTING
13. EXISTING CONCRETE PAVEMENT, SIDEWALKS AND CURB AND GUTTER AT DEMOLITION LIMITS SHALL BE CUT AT EXISTING JOINTS WHERE POSSIBLE. ALL CONCRETE PANELS DAMAGED OR PARTIALLY REMOVED FOR CONSTRUCTION SHALL INCLUDE FULL PANEL REPLACEMENT.
14. THE CONTRACTOR SHALL COORDINATE LANDSCAPE DEMOLITION WITH THE OWNER AND LANDSCAPE ARCHITECT AND SALVAGE ITEMS AS DIRECTED BY OWNER. SEE LANDSCAPES PLANS FOR TREE, PLANT, AND IRRIGATION SYSTEM DEMOLITION/RELOCATIONS. CONTRACTOR SHALL COORDINATE REMOVAL OR RELOCATION OF EXISTING IRRIGATION SYSTEM WITH OWNER.
15. TREES, LANDSCAPING AND STRUCTURES NOT DESIGNATED FOR DEMOLITION ARE TO REMAIN PROTECTED THROUGH OUT CONSTRUCTION. CONTRACTOR SHALL FOLLOW TREE PROTECTION SPECIFICATION. THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION OUTSIDE OF THE PROJECT LIMITS.
16. THE CONTRACTOR SHALL COORDINATE SALVAGE OR RELOCATION OF DEMOLITION ITEMS (LIGHTPOLES, SIGNS, FENCES, GATES, ETC.,) WITH THE OWNER AND OTHER DESIGN CONSULTANTS.
17. SEE NOTES SHEET FOR ADDITIONAL NOTES.
18. EXISTING CONDITIONS BASED ON DESIGN DATA PROVIDED BY JR ENGINEERING, INC. DATED MAY 2021. IT IS THE OWNER'S INTENT TO PROVIDE AN UPDATED SURVEY FOR INCORPORATION INTO THE DESIGN PLANS.
19. APPROXIMATE AREA OF DEMOLITION SHOWN ON THIS PLAN = 8.29+/– ACRES.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3–1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I–25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		DEMOLITION
	PROPERTY LINE	
	RIGHT–OF–WAY LINE	
	SECTION LINE	
	EASEMENT	
	RETAINING WALL	
	CURB & GUTTER	
	ASPHALT	
	CONCRETE/ SIDEWALK	
5750	CONTOURS	
ST	STORM SEWER	ST
ST	STORM MANHOLE	ST
	STORM INLET	
	FLARED END SECTION	
SS	SANITARY SEWER	SS
SS	SANITARY MANHOLE	SS
W	WATER LINE	W
	WATER VALVE	
	FIRE HYDRANT	
WM	WATER METER	WM
IR	IRRIGATION LINE	IR
IRR	IRRIGATION CONTROL	IRR
OHE	OVERHEAD ELECTRIC	OHE
E	ELECTRIC LINE	E
	LIGHT POLE	
	POWER POLE	
ELEC	ELECTRIC METER	ELEC
T	TELEPHONE LINE	T
TEL	TELEPHONE PEDESTAL	T
CT	CABLE TV	CT
	SIGN	
	DECIDUOUS TREE	
	EVERGREEN TREE	
	BUSH/SHRUB	
G	GAS LINE	G
DRIVE	DESCRIPTIONS	DRIVE

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2–BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

N

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

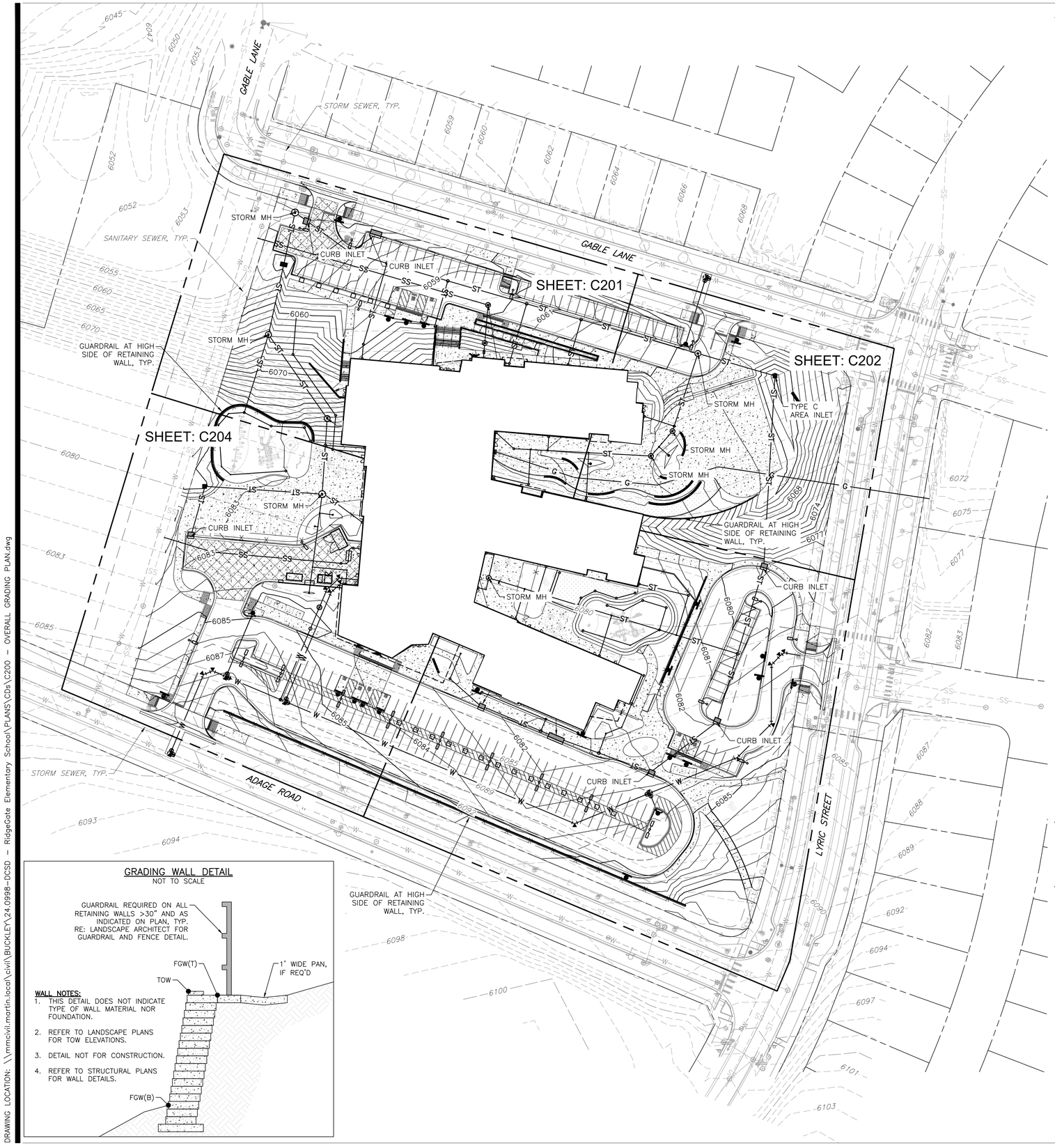
DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
EXISTING CONDITIONS & DEMOLITION PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & ARE THE SOLE PROPERTY OF MARTIN/MARTIN, INC. ALL RIGHTS RESERVED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C100



GRADING NOTES:

1. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS AND NOTIFY OWNER, ARCHITECT, AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
2. SPOT ELEVATIONS ON CURB AND GUTTER ARE TO FLOW LINE UNLESS OTHERWISE NOTED.
3. ALL GRADES SHOWN ARE TO FINAL FINISHED SURFACE GRADE AFTER TOPSOIL, SOD, PAVING ETC.
4. MATCH EXISTING GRADE AT LIMITS OF CONSTRUCTION AND AS NOTED. REPORT ANY DISCREPANCIES TO OWNER, ENGINEER, AND ARCHITECT PRIOR TO CONSTRUCTION.
5. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. CROSS SLOPE ON ALL WALKS SHALL NOT TO EXCEED 2.0%. ALL WALKS SHALL NOT EXCEED 5.0% LONGITUDINAL SLOPE, UNLESS OTHERWISE NOTED AS A RAMP WITH HANDRAILS AND LANDINGS. ADA RAMPS SHALL NOT EXCEED 8.3%.
6. WALKS DIRECTLY ADJACENT TO THE BUILDING SHALL BE SLOPED AT 2% AWAY FROM THE BUILDING TO ACCOUNT FOR ANY SETTLEMENT WITHIN THE FOUNDATION BACKFILL ZONE.
7. SPOT ELEVATIONS FOR LIGHT POLES ARE MEASURED AT FINISH GRADE AT CENTER OF POLE. TOP OF FOUNDATION SHALL BE SET SUFFICIENTLY ABOVE FINISH GRADE.
8. ELEVATIONS FOR TRANSFORMER BOXES/PAD ARE MEASURED AT FINISH LANDSCAPE GRADE AT CENTER OF BOX/PAD. CONTRACTOR SHALL SET BOX/PAD SUFFICIENTLY ABOVE ELEVATION SHOWN ON THESE PLANS IN ORDER TO MAINTAIN THE DRAINAGE AROUND AND AWAY FROM THE BOX/PAD AS SHOWN ON THE DRAWING.
9. ALL TRASH AND RECYCLING ENCLOSURES ARE TO BE ADA ACCESSIBLE AND MUST COMPLY WITH THE MAXIMUM ALLOWABLE SLOPES OF SIDEWALKS AS OUTLINED ABOVE.
10. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY INTERTEK PSI, DATED JUNE 13, 2025.
11. EXISTING GRADES AND SPOT ELEVATIONS SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM BEST AVAILABLE INFORMATION AND ARE SHOWN TO THE EXTENT KNOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING GRADE CONDITIONS AT THE LIMITS OF CONSTRUCTION AND NOTIFY THE CIVIL ENGINEER OF ANY DISCREPANCIES THAT CONTRADICT THE CIVIL ENGINEERS INTENT FOR DRAINAGE PATTERNS AND MAXIMUM AND MINIMUM SLOPES AS SHOWN ON THE PLAN.
12. FINISHED LANDSCAPE GRADE ADJACENT TO EACH BUILDING SHALL BE TYPICALLY 6" BELOW FINISH FLOOR ELEVATION UNLESS OTHERWISE NOTED. REFER TO THE ARCHITECTURAL PLANS FOR ADDITIONAL REQUIREMENTS WHERE THE LANDSCAPE GRADE IS LESS THAN "X" BELOW THE FINISH FLOOR ELEVATION AT THE BUILDING.
13. A MINIMUM SLOPE OF 6" TO 12" IN THE FIRST 10 FEET SHALL BE PROVIDED IN LANDSCAPE AREAS ADJACENT TO THE BUILDING PER THE GEOTECHNICAL RECOMMENDATIONS. SEE GRADING DETAIL ON THIS SHEET.
14. SPOT ELEVATIONS AT BUILDINGS INCLUDING STOOPS, PATIOS AND APRONS ARE TO FINISH LANDSCAPE OR SITE PAVING GRADES. REFER TO ARCHITECTURAL OR STRUCTURAL PLANS FOR BUILDING SLAB ELEVATIONS.
15. REFER TO LANDSCAPE ARCHITECT DRAWINGS FOR HANDRAIL AND/OR GUARDRAIL LOCATIONS & DETAILS.
16. SEE SITE DETAILS SHEETS FOR SITE DETAILS.
17. SEE STORM PLAN SHEETS FOR STORM INFORMATION.
18. SEE COVER SHEET FOR ADDITIONAL NOTES.
19. MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS SHALL BE DESIGN/BUILD MSE WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE AGENCY HAVING JURISDICTION FOR CONSTRUCTION OF THE WALLS.
20. MECHANICALLY STABILIZED EARTH RETAINING WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
21. NO PLANTED LANDSCAPE INCLUDING SOD, SHRUBS OR TREES SHALL BE PLACE WITHIN THE FIRST 10' OF THE BUILDING. NO IRRIGATION LINES, DRIP EMITTERS OR SPRAYERS SHALL BE PLACED, SPRAY OR EMIT WITHIN THE FIRST 10' OF THE BUILDING. ANY LANDSCAPE EDGING WITHIN THE FIRST 10' OF THE BUILDING SHALL BE PERFORATED TO ALLOW DRAINAGE TO PASS THROUGH THE EDGING AND FLOW AWAY FROM THE BUILDING.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

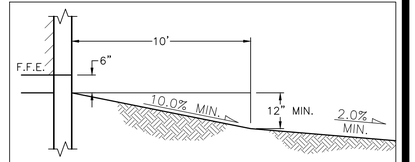
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	SECTION LINE	
	EASEMENT	
	RETAINING WALL	
	CURB & GUTTER	
5750	CONTOURS	5750
ST	STORM SEWER	ST
ST	STORM MANHOLE	
RD	ROOF DRAIN	RD
	INLET	
	FLARED END SECTION	
	SIGN	
	GRADING ARROW	
	DECIDUOUS TREE	
DRIVE	DESCRIPTIONS	DRIVE
+ELEV.	SPOT ELEVATIONS	ELEV.

N

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET



NOTE: REFER TO GEOTECHNICAL REPORT FOR FURTHER INFORMATION.

TYPICAL GRADING SECTION IN LANDSCAPE AREAS AT PERIMETER OF BUILDING
N.T.S.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
OVERALL GRADING PLAN

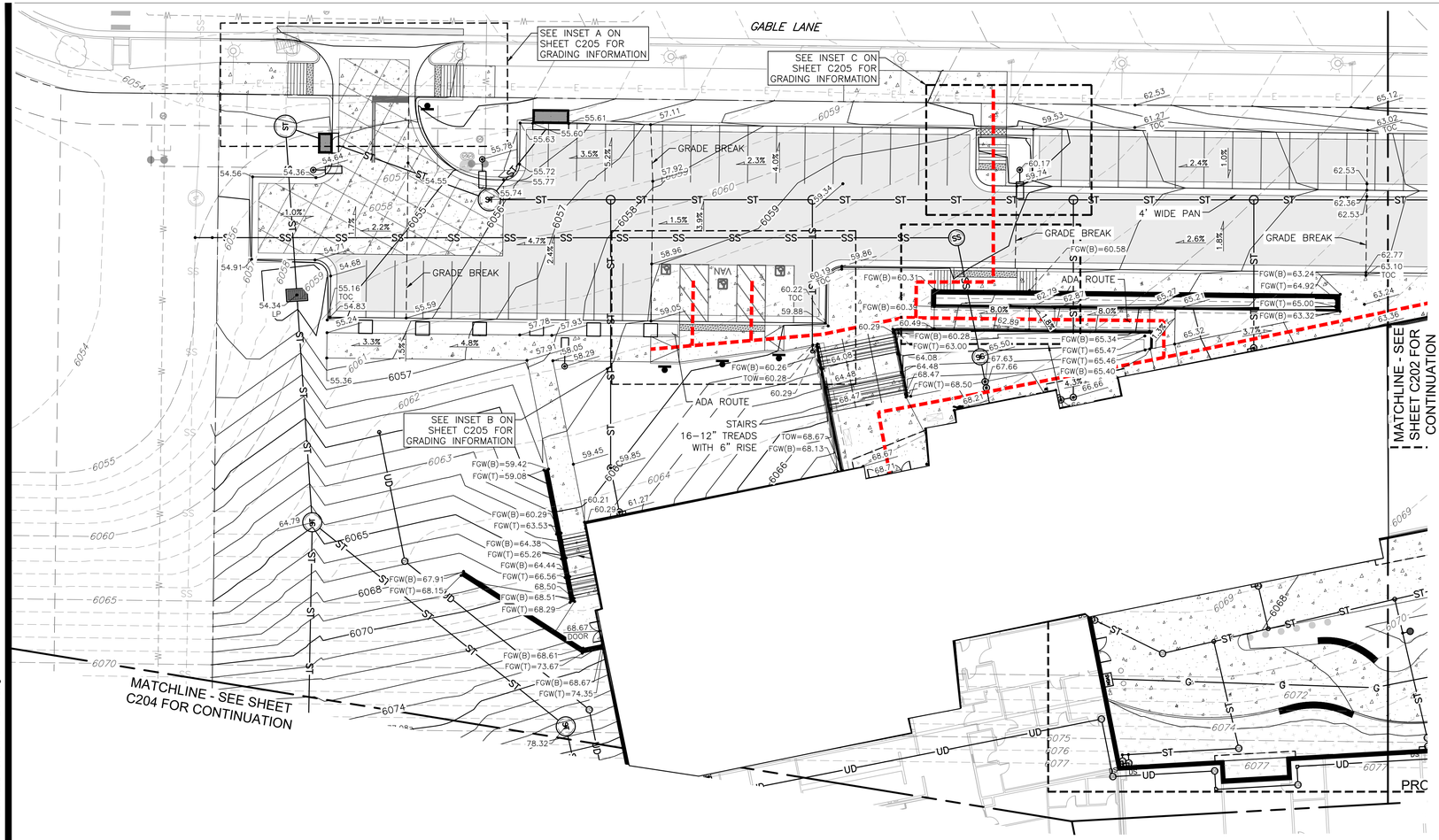
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & ORIGINAL WORKS OF MARTIN/MARTIN, INC. AND SHALL NOT BE COPIED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C200

PLOT DATE: Thursday, November 20, 2025 11:18 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C200 - OVERALL GRADING PLAN.dwg



PLOT DATE: Thursday, November 20, 2025 11:19 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C201 - DETAILED GRADING PLAN.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

GRADING NOTES:

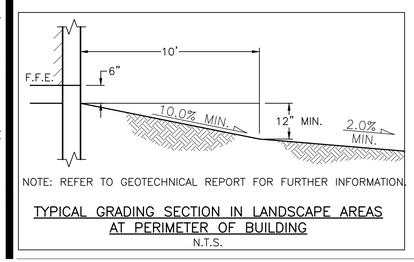
1. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS AND NOTIFY OWNER, ARCHITECT, AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
2. SPOT ELEVATIONS ON CURB AND GUTTER ARE TO FLOW LINE UNLESS OTHERWISE NOTED.
3. ALL GRADES SHOWN ARE TO FINAL FINISHED SURFACE GRADE AFTER TOPSOIL, SOD, PAVING ETC.
4. MATCH EXISTING GRADE AT LIMITS OF CONSTRUCTION AND AS NOTED. REPORT ANY DISCREPANCIES TO OWNER, ENGINEER, AND ARCHITECT PRIOR TO CONSTRUCTION.
5. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. CROSS SLOPE ON ALL WALKS SHALL NOT TO EXCEED 2.0%. ALL WALKS SHALL NOT EXCEED 5.0% LONGITUDINAL SLOPE, UNLESS OTHERWISE NOTED AS A RAMP WITH HANDRAILS AND LANDINGS. ADA RAMPS SHALL NOT EXCEED 8.3%.
6. WALKS DIRECTLY ADJACENT TO THE BUILDING SHALL BE SLOPED AT 2% AWAY FROM THE BUILDING TO ACCOUNT FOR ANY SETTLEMENT WITHIN THE FOUNDATION BACKFILL ZONE.
7. SPOT ELEVATIONS FOR LIGHT POLES ARE MEASURED AT FINISH GRADE AT CENTER OF POLE. TOP OF FOUNDATION SHALL BE SET SUFFICIENTLY ABOVE FINISH GRADE.
8. ELEVATIONS FOR TRANSFORMER BOXES/PAD ARE MEASURED AT FINISH LANDSCAPE GRADE AT CENTER OF BOX/PAD. CONTRACTOR SHALL SET BOX/PAD SUFFICIENTLY ABOVE ELEVATION SHOWN ON THESE PLANS IN ORDER TO MAINTAIN THE DRAINAGE AROUND AND AWAY FROM THE BOX/PAD AS SHOWN ON THE DRAWING.
9. ALL TRASH AND RECYCLING ENCLOSURES ARE TO BE ADA ACCESSIBLE AND MUST COMPLY WITH THE MAXIMUM ALLOWABLE SLOPES OF SIDEWALKS AS OUTLINED ABOVE.
10. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY INTERTEK PSI, DATED JUNE 13, 2025.
11. EXISTING GRADES AND SPOT ELEVATIONS SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM BEST AVAILABLE INFORMATION AND ARE SHOWN TO THE EXTENT KNOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING GRADE CONDITIONS AT THE LIMITS OF CONSTRUCTION AND NOTIFY THE CIVIL ENGINEER OF ANY DISCREPANCIES THAT CONTRADICT THE CIVIL ENGINEERS INTENT FOR DRAINAGE PATTERNS AND MAXIMUM AND MINIMUM SLOPES AS SHOWN ON THE PLAN.
12. FINISHED LANDSCAPE GRADE ADJACENT TO EACH BUILDING SHALL BE TYPICALLY 6" BELOW FINISH FLOOR ELEVATION UNLESS OTHERWISE NOTED. REFER TO THE ARCHITECTURAL PLANS FOR ADDITIONAL REQUIREMENTS WHERE THE LANDSCAPE GRADE IS LESS THAN "X" BELOW THE FINISH FLOOR ELEVATION AT THE BUILDING.
13. A MINIMUM SLOPE OF 6" TO 12" IN THE FIRST 10 FEET SHALL BE PROVIDED IN LANDSCAPE AREAS ADJACENT TO THE BUILDING PER THE GEOTECHNICAL RECOMMENDATIONS. SEE GRADING DETAIL ON THIS SHEET.
14. SPOT ELEVATIONS AT BUILDINGS INCLUDING STOOPS, PATIOS AND APRONS ARE TO FINISH LANDSCAPE OR SITE PAVING GRADES. REFER TO ARCHITECTURAL OR STRUCTURAL PLANS FOR BUILDING SLAB ELEVATIONS.
15. REFER TO LANDSCAPE ARCHITECT DRAWINGS FOR HANDRAIL AND/OR GUARDRAIL LOCATIONS & DETAILS.
16. SEE SITE DETAILS SHEETS FOR SITE DETAILS.
17. SEE STORM PLAN SHEETS FOR STORM INFORMATION.
18. SEE COVER SHEET FOR ADDITIONAL NOTES.
19. MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS SHALL BE DESIGN/BUILD MSE WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE AGENCY HAVING JURISDICTION FOR CONSTRUCTION OF THE WALLS.
20. MECHANICALLY STABILIZED EARTH RETAINING WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
21. NO PLANTED LANDSCAPE INCLUDING SOD, SHRUBS OR TREES SHALL BE PLACE WITHIN THE FIRST 10' OF THE BUILDING. NO IRRIGATION LINES, DRIP EMITTERS OR SPRAYERS SHALL BE PLACED, SPRAY OR EMIT WITHIN THE FIRST 10' OF THE BUILDING. ANY LANDSCAPE EDGING WITHIN THE FIRST 10' OF THE BUILDING SHALL BE PERFORATED TO ALLOW DRAINAGE TO PASS THROUGH THE EDGING AND FLOW AWAY FROM THE BUILDING.
22. SEE OVERALL GRADING PLAN FOR LEGEND.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3–1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I–25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

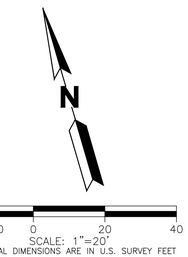


NOTE: REFER TO GEOTECHNICAL REPORT FOR FURTHER INFORMATION.

TYPICAL GRADING SECTION IN LANDSCAPE AREAS AT PERIMETER OF BUILDING
N.T.S.

LEGEND

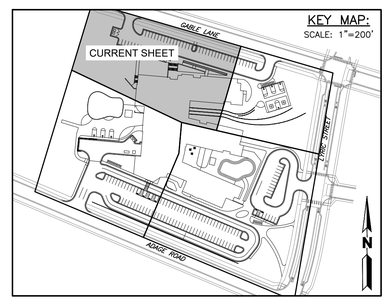
EXISTING		PROPOSED
	RETAINING WALL	
	CURB & GUTTER	
5750	CONTOURS	5750
ST	STORM SEWER	ST
ST	STORM MANHOLE	
RD	ROOF DRAIN	RD
	INLET	
	FLARED END SECTION	
	GRADING ARROW	
DRIVE	DESCRIPTIONS	DRIVE
ELEV.	SPOT ELEVATIONS	ELEV.
	ADA ROUTE	



COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2–BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.



_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

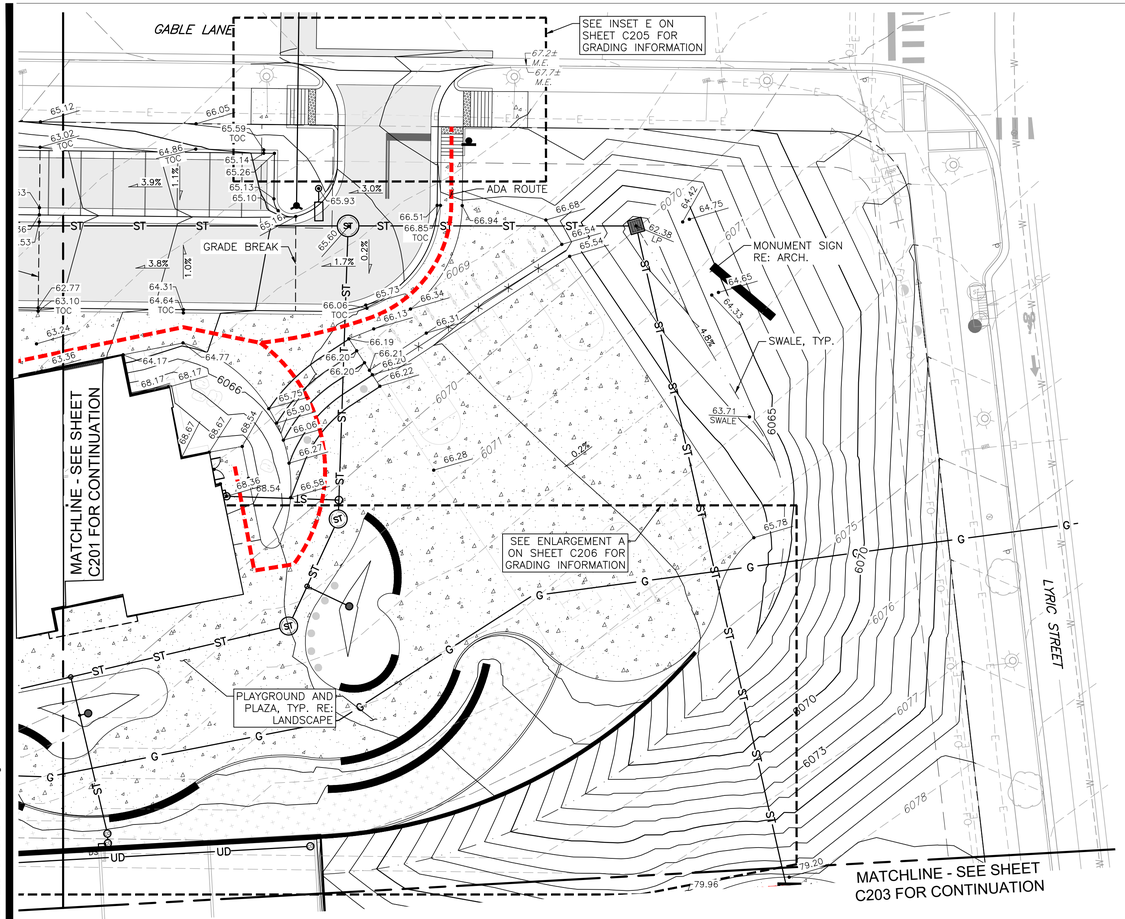
DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
DETAILED GRADING PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

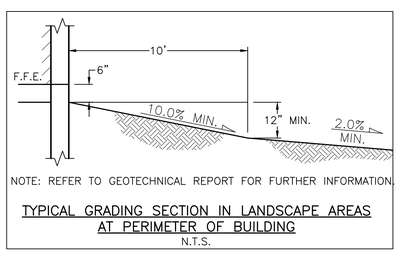
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED BY OR DISCLOSED TO ANY PERSON FOR ANY PURPOSE IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C201



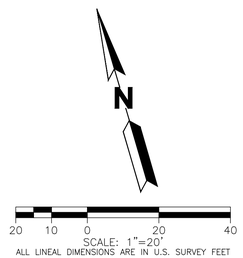
LEGEND

EXISTING		PROPOSED
	RETAINING WALL	
	CURB & GUTTER	
5750	CONTOURS	5750
ST	STORM SEWER	ST
ST	STORM MANHOLE	
RD	ROOF DRAIN	RD
	INLET	
	FLARED END SECTION	
	GRADING ARROW	
DRIVE	DESCRIPTIONS	DRIVE
+ ELEV.	SPOT ELEVATIONS	ELEV.
	ADA ROUTE	



NOTE: REFER TO GEOTECHNICAL REPORT FOR FURTHER INFORMATION.

TYPICAL GRADING SECTION IN LANDSCAPE AREAS AT PERIMETER OF BUILDING
N.T.S.



ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

GRADING NOTES:

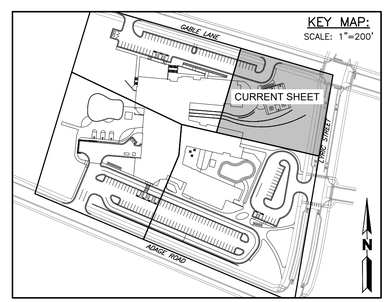
1. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS AND NOTIFY OWNER, ARCHITECT, AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
2. SPOT ELEVATIONS ON CURB AND GUTTER ARE TO FLOW LINE UNLESS OTHERWISE NOTED.
3. ALL GRADES SHOWN ARE TO FINAL FINISHED SURFACE GRADE AFTER TOPSOIL, SOD, PAVING ETC.
4. MATCH EXISTING GRADE AT LIMITS OF CONSTRUCTION AND AS NOTED. REPORT ANY DISCREPANCIES TO OWNER, ENGINEER, AND ARCHITECT PRIOR TO CONSTRUCTION.
5. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. CROSS SLOPE ON ALL WALKS SHALL NOT TO EXCEED 2.0%. ALL WALKS SHALL NOT EXCEED 5.0% LONGITUDINAL SLOPE, UNLESS OTHERWISE NOTED AS A RAMP WITH HANDRAILS AND LANDINGS. ADA RAMPS SHALL NOT EXCEED 8.3%.
6. WALKS DIRECTLY ADJACENT TO THE BUILDING SHALL BE SLOPED AT 2% AWAY FROM THE BUILDING TO ACCOUNT FOR ANY SETTLEMENT WITHIN THE FOUNDATION BACKFILL ZONE.
7. SPOT ELEVATIONS FOR LIGHT POLES ARE MEASURED AT FINISH GRADE AT CENTER OF POLE. TOP OF FOUNDATION SHALL BE SET SUFFICIENTLY ABOVE FINISH GRADE.
8. ELEVATIONS FOR TRANSFORMER BOXES/PAD ARE MEASURED AT FINISH LANDSCAPE GRADE AT CENTER OF BOX/PAD. CONTRACTOR SHALL SET BOX/PAD SUFFICIENTLY ABOVE ELEVATION SHOWN ON THESE PLANS IN ORDER TO MAINTAIN THE DRAINAGE AROUND AND AWAY FROM THE BOX/PAD AS SHOWN ON THE DRAWING.
9. ALL TRASH AND RECYCLING ENCLOSURES ARE TO BE ADA ACCESSIBLE AND MUST COMPLY WITH THE MAXIMUM ALLOWABLE SLOPES OF SIDEWALKS AS OUTLINED ABOVE.
10. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY INTERTEK PSI, DATED JUNE 13, 2035.
11. EXISTING GRADES AND SPOT ELEVATIONS SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM BEST AVAILABLE INFORMATION AND ARE SHOWN TO THE EXTENT KNOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING GRADE CONDITIONS AT THE LIMITS OF CONSTRUCTION AND NOTIFY THE CIVIL ENGINEER OF ANY DISCREPANCIES THAT CONTRADICT THE CIVIL ENGINEERS INTENT FOR DRAINAGE PATTERNS AND MAXIMUM AND MINIMUM SLOPES AS SHOWN ON THE PLAN.
12. FINISHED LANDSCAPE GRADE ADJACENT TO EACH BUILDING SHALL BE TYPICALLY 6" BELOW FINISH FLOOR ELEVATION UNLESS OTHERWISE NOTED. REFER TO THE ARCHITECTURAL PLANS FOR ADDITIONAL REQUIREMENTS WHERE THE LANDSCAPE GRADE IS LESS THAN "X" BELOW THE FINISH FLOOR ELEVATION AT THE BUILDING.
13. A MINIMUM SLOPE OF 6" TO 12" IN THE FIRST 10 FEET SHALL BE PROVIDED IN LANDSCAPE AREAS ADJACENT TO THE BUILDING PER THE GEOTECHNICAL RECOMMENDATIONS. SEE GRADING DETAIL ON THIS SHEET.
14. SPOT ELEVATIONS AT BUILDINGS INCLUDING STOOPS, PATIOS AND APRONS ARE TO FINISH LANDSCAPE OR SITE PAVING GRADES. REFER TO ARCHITECTURAL OR STRUCTURAL PLANS FOR BUILDING SLAB ELEVATIONS.
15. REFER TO LANDSCAPE ARCHITECT DRAWINGS FOR HANDRAIL AND/OR GUARDRAIL LOCATIONS & DETAILS.
16. SEE SITE DETAILS SHEETS FOR SITE DETAILS.
17. SEE STORM PLAN SHEETS FOR STORM INFORMATION.
18. SEE COVER SHEET FOR ADDITIONAL NOTES.
19. MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS SHALL BE DESIGN/BUILD MSE WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE AGENCY HAVING JURISDICTION FOR CONSTRUCTION OF THE WALLS.
20. MECHANICALLY STABILIZED EARTH RETAINING WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
21. NO PLANTED LANDSCAPE INCLUDING SOD, SHRUBS OR TREES SHALL BE PLACE WITHIN THE FIRST 10' OF THE BUILDING. NO IRRIGATION LINES, DRIP EMITTERS OR SPRAYERS SHALL BE PLACED, SPRAY OR EMIT WITHIN THE FIRST 10' OF THE BUILDING. ANY LANDSCAPE EDGING WITHIN THE FIRST 10' OF THE BUILDING SHALL BE PERFORATED TO ALLOW DRAINAGE TO PASS THROUGH THE EDGING AND FLOW AWAY FROM THE BUILDING.
22. SEE OVERALL GRADING PLAN FOR LEGEND.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.



_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
DETAILED GRADING PLAN

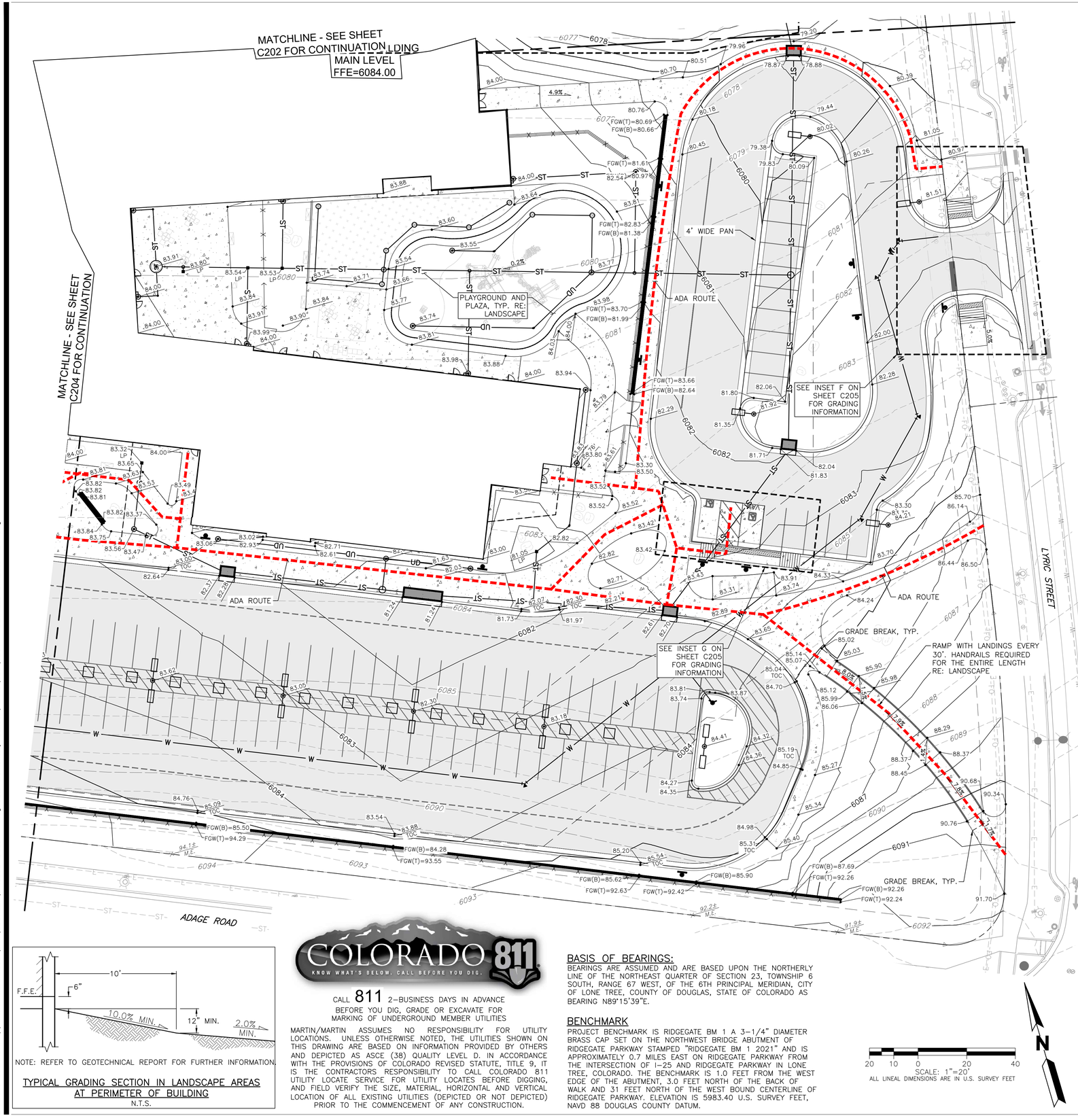
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

Sheet Number:
C202

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & WHILE THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

PLOT DATE: Thursday, November 20, 2025 11:19 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - Ridgegate Elementary School\PLANS\CDs\C201 - DETAILED GRADING PLAN.dwg



SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

GRADING NOTES:

1. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS AND NOTIFY OWNER, ARCHITECT, AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
2. SPOT ELEVATIONS ON CURB AND GUTTER ARE TO FLOW LINE UNLESS OTHERWISE NOTED.
3. ALL GRADES SHOWN ARE TO FINAL FINISHED SURFACE GRADE AFTER TOPSOIL, SOD, PAVING ETC.
4. MATCH EXISTING GRADE AT LIMITS OF CONSTRUCTION AND AS NOTED. REPORT ANY DISCREPANCIES TO OWNER, ENGINEER, AND ARCHITECT PRIOR TO CONSTRUCTION.
5. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. CROSS SLOPE ON ALL WALKS SHALL NOT TO EXCEED 2.0%. ALL WALKS SHALL NOT EXCEED 5.0% LONGITUDINAL SLOPE, UNLESS OTHERWISE NOTED AS A RAMP WITH HANDRAILS AND LANDINGS. ADA RAMPS SHALL NOT EXCEED 8.3%.
6. WALKS DIRECTLY ADJACENT TO THE BUILDING SHALL BE SLOPED AT 2% AWAY FROM THE BUILDING TO ACCOUNT FOR ANY SETTLEMENT WITHIN THE FOUNDATION BACKFILL ZONE.
7. SPOT ELEVATIONS FOR LIGHT POLES ARE MEASURED AT FINISH GRADE AT CENTER OF POLE. TOP OF FOUNDATION SHALL BE SET SUFFICIENTLY ABOVE FINISH GRADE.
8. ELEVATIONS FOR TRANSFORMER BOXES/PAD ARE MEASURED AT FINISH LANDSCAPE GRADE AT CENTER OF BOX/PAD. CONTRACTOR SHALL SET BOX/PAD SUFFICIENTLY ABOVE ELEVATION SHOWN ON THESE PLANS IN ORDER TO MAINTAIN THE DRAINAGE AROUND AND AWAY FROM THE BOX/PAD AS SHOWN ON THE DRAWING.
9. ALL TRASH AND RECYCLING ENCLOSURES ARE TO BE ADA ACCESSIBLE AND MUST COMPLY WITH THE MAXIMUM ALLOWABLE SLOPES OF SIDEWALKS AS OUTLINED ABOVE.
10. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY INTERTEK PSI, DATED JUNE 13, 2025.
11. EXISTING GRADES AND SPOT ELEVATIONS SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM BEST AVAILABLE INFORMATION AND ARE SHOWN TO THE EXTENT KNOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING GRADE CONDITIONS AT THE LIMITS OF CONSTRUCTION AND NOTIFY THE CIVIL ENGINEER OF ANY DISCREPANCIES THAT CONTRADICT THE CIVIL ENGINEERS INTENT FOR DRAINAGE PATTERNS AND MAXIMUM AND MINIMUM SLOPES AS SHOWN ON THE PLAN.
12. FINISHED LANDSCAPE GRADE ADJACENT TO EACH BUILDING SHALL BE TYPICALLY 6" BELOW FINISH FLOOR ELEVATION UNLESS OTHERWISE NOTED. REFER TO THE ARCHITECTURAL PLANS FOR ADDITIONAL REQUIREMENTS WHERE THE LANDSCAPE GRADE IS LESS THAN "X" BELOW THE FINISH FLOOR ELEVATION AT THE BUILDING.
13. A MINIMUM SLOPE OF 6" TO 12" IN THE FIRST 10 FEET SHALL BE PROVIDED IN LANDSCAPE AREAS ADJACENT TO THE BUILDING PER THE GEOTECHNICAL RECOMMENDATIONS. SEE GRADING DETAIL ON THIS SHEET.
14. SPOT ELEVATIONS AT BUILDINGS INCLUDING STOOPS, PATIOS AND APRONS ARE TO FINISH LANDSCAPE OR SITE PAVING GRADES. REFER TO ARCHITECTURAL OR STRUCTURAL PLANS FOR BUILDING SLAB ELEVATIONS.
15. REFER TO LANDSCAPE ARCHITECT DRAWINGS FOR HANDRAIL AND/OR GUARDRAIL LOCATIONS & DETAILS.
16. SEE SITE DETAILS SHEETS FOR SITE DETAILS.
17. SEE STORM PLAN SHEETS FOR STORM INFORMATION.
18. SEE COVER SHEET FOR ADDITIONAL NOTES.
19. MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS SHALL BE DESIGN/BUILD MSE WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE AGENCY HAVING JURISDICTION FOR CONSTRUCTION OF THE WALLS.
20. MECHANICALLY STABILIZED EARTH RETAINING WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
21. NO PLANTED LANDSCAPE INCLUDING SOD, SHRUBS OR TREES SHALL BE PLACE WITHIN THE FIRST 10' OF THE BUILDING. NO IRRIGATION LINES, DRIP EMITTERS OR SPRAYERS SHALL BE PLACED, SPRAY OR EMIT WITHIN THE FIRST 10' OF THE BUILDING. ANY LANDSCAPE EDGING WITHIN THE FIRST 10' OF THE BUILDING SHALL BE PERFORATED TO ALLOW DRAINAGE TO PASS THROUGH THE EDGING AND FLOW AWAY FROM THE BUILDING.
22. SEE OVERALL GRADING PLAN FOR LEGEND.

LEGEND

EXISTING		PROPOSED
	RETAINING WALL	
	CURB & GUTTER	
5750	CONTOURS	5750
ST	STORM SEWER	ST
ST	STORM MANHOLE	
RD	ROOF DRAIN	RD
	INLET	
	FLARED END SECTION	
	GRADING ARROW	
DRIVE	DESCRIPTIONS	DRIVE
ELEV.	SPOT ELEVATIONS	ELEV.
	ADA ROUTE	

NOTE: REFER TO GEOTECHNICAL REPORT FOR FURTHER INFORMATION.

TYPICAL GRADING SECTION IN LANDSCAPE AREAS AT PERIMETER OF BUILDING
N.T.S.

COLORADO 811 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

BASIS OF BEARINGS:

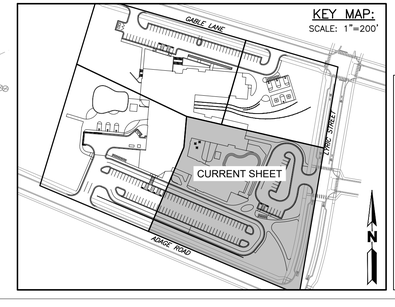
BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

20 10 0 20 40
SCALE: 1"=20'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

KEY MAP:
SCALE: 1"=200'



CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
12499 West Colfax Avenue
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
DETAILED GRADING PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED BY OR DISCLOSED TO ANY PERSON, FIRM OR CORP. IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C203

PLOT DATE: Thursday, November 20, 2025 11:19 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C201 - DETAILED GRADING PLAN.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

MATCHLINE - SEE SHEET C201 FOR CONTINUATION

MATCHLINE - SEE SHEET C203 FOR CONTINUATION

PLAYGROUND AND PLAZA, TYP. RE: LANDSCAPE

ADA ROUTE

TIE INTO BEBOP PARK SIDEWALK

SEE INSET K ON SHEET C205 FOR GRADING INFORMATION

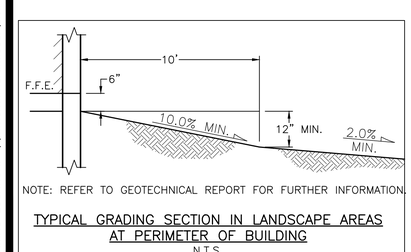
SEE INSET H ON SHEET C205 FOR GRADING INFORMATION

SEE INSET I ON SHEET C205 FOR GRADING INFORMATION

SEE INSET J ON SHEET C205 FOR GRADING INFORMATION

PROPERTY LINE, TYP.

ADAGE ROAD



NOTE: REFER TO GEOTECHNICAL REPORT FOR FURTHER INFORMATION.

TYPICAL GRADING SECTION IN LANDSCAPE AREAS AT PERIMETER OF BUILDING
N.T.S.

N

20 10 0 20 40
SCALE: 1"=20'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

GRADING NOTES:

1. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS AND NOTIFY OWNER, ARCHITECT, AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
2. SPOT ELEVATIONS ON CURB AND GUTTER ARE TO FLOW LINE UNLESS OTHERWISE NOTED.
3. ALL GRADES SHOWN ARE TO FINAL FINISHED SURFACE GRADE AFTER TOPSOIL, SOD, PAVING ETC.
4. MATCH EXISTING GRADE AT LIMITS OF CONSTRUCTION AND AS NOTED. REPORT ANY DISCREPANCIES TO OWNER, ENGINEER, AND ARCHITECT PRIOR TO CONSTRUCTION.
5. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. CROSS SLOPE ON ALL WALKS SHALL NOT TO EXCEED 2.0%. ALL WALKS SHALL NOT EXCEED 5.0% LONGITUDINAL SLOPE, UNLESS OTHERWISE NOTED AS A RAMP WITH HANDRAILS AND LANDINGS. ADA RAMPS SHALL NOT EXCEED 8.3%.
6. WALKS DIRECTLY ADJACENT TO THE BUILDING SHALL BE SLOPED AT 2% AWAY FROM THE BUILDING TO ACCOUNT FOR ANY SETTLEMENT WITHIN THE FOUNDATION BACKFILL ZONE.
7. SPOT ELEVATIONS FOR LIGHT POLES ARE MEASURED AT FINISH GRADE AT CENTER OF POLE. TOP OF FOUNDATION SHALL BE SET SUFFICIENTLY ABOVE FINISH GRADE.
8. ELEVATIONS FOR TRANSFORMER BOXES/PAD ARE MEASURED AT FINISH LANDSCAPE GRADE AT CENTER OF BOX/PAD. CONTRACTOR SHALL SET BOX/PAD SUFFICIENTLY ABOVE ELEVATION SHOWN ON THESE PLANS IN ORDER TO MAINTAIN THE DRAINAGE AROUND AND AWAY FROM THE BOX/PAD AS SHOWN ON THE DRAWING.
9. ALL TRASH AND RECYCLING ENCLOSURES ARE TO BE ADA ACCESSIBLE AND MUST COMPLY WITH THE MAXIMUM ALLOWABLE SLOPES OF SIDEWALKS AS OUTLINED ABOVE.
10. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY INTERTEK PSI, DATED JUNE 13, 2025.
11. EXISTING GRADES AND SPOT ELEVATIONS SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM BEST AVAILABLE INFORMATION AND ARE SHOWN TO THE EXTENT KNOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING GRADE CONDITIONS AT THE LIMITS OF CONSTRUCTION AND NOTIFY THE CIVIL ENGINEER OF ANY DISCREPANCIES THAT CONTRADICT THE CIVIL ENGINEERS INTENT FOR DRAINAGE PATTERNS AND MAXIMUM AND MINIMUM SLOPES AS SHOWN ON THE PLAN.
12. FINISHED LANDSCAPE GRADE ADJACENT TO EACH BUILDING SHALL BE TYPICALLY 6" BELOW FINISH FLOOR ELEVATION UNLESS OTHERWISE NOTED. REFER TO THE ARCHITECTURAL PLANS FOR ADDITIONAL REQUIREMENTS WHERE THE LANDSCAPE GRADE IS LESS THAN "X" BELOW THE FINISH FLOOR ELEVATION AT THE BUILDING.
13. A MINIMUM SLOPE OF 6" TO 12" IN THE FIRST 10 FEET SHALL BE PROVIDED IN LANDSCAPE AREAS ADJACENT TO THE BUILDING PER THE GEOTECHNICAL RECOMMENDATIONS. SEE GRADING DETAIL ON THIS SHEET.
14. SPOT ELEVATIONS AT BUILDINGS INCLUDING STOOPS, PATIOS AND APRONS ARE TO FINISH LANDSCAPE OR SITE PAVING GRADES. REFER TO ARCHITECTURAL OR STRUCTURAL PLANS FOR BUILDING SLAB ELEVATIONS.
15. REFER TO LANDSCAPE ARCHITECT DRAWINGS FOR HANDRAIL AND/OR GUARDRAIL LOCATIONS & DETAILS.
16. SEE SITE DETAILS SHEETS FOR SITE DETAILS.
17. SEE STORM PLAN SHEETS FOR STORM INFORMATION.
18. SEE COVER SHEET FOR ADDITIONAL NOTES.
19. MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS SHALL BE DESIGN/BUILD MSE WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE AGENCY HAVING JURISDICTION FOR CONSTRUCTION OF THE WALLS.
20. MECHANICALLY STABILIZED EARTH RETAINING WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
21. NO PLANTED LANDSCAPE INCLUDING SOD, SHRUBS OR TREES SHALL BE PLACE WITHIN THE FIRST 10' OF THE BUILDING. NO IRRIGATION LINES, DRIP EMITTERS OR SPRAYERS SHALL BE PLACED, SPRAY OR EMIT WITHIN THE FIRST 10' OF THE BUILDING. ANY LANDSCAPE EDGING WITHIN THE FIRST 10' OF THE BUILDING SHALL BE PERFORATED TO ALLOW DRAINAGE TO PASS THROUGH THE EDGING AND FLOW AWAY FROM THE BUILDING.
22. SEE OVERALL GRADING PLAN FOR LEGEND.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

LEGEND

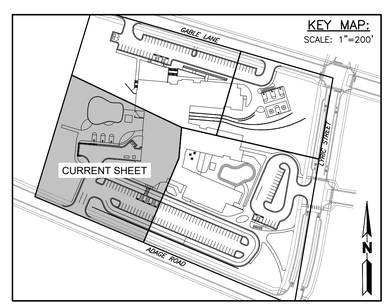
EXISTING		PROPOSED
	RETAINING WALL	
	CURB & GUTTER	
5750	CONTOURS	5750
ST	STORM SEWER	ST
ST	STORM MANHOLE	
RD	ROOF DRAIN	RD
	INLET	
	FLARED END SECTION	
	GRADING ARROW	
DRIVE	DESCRIPTIONS	DRIVE
ELEV.	SPOT ELEVATIONS	ELEV.
	ADA ROUTE	

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

KEY MAP:
SCALE: 1"=200'



CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
DETAILED GRADING PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

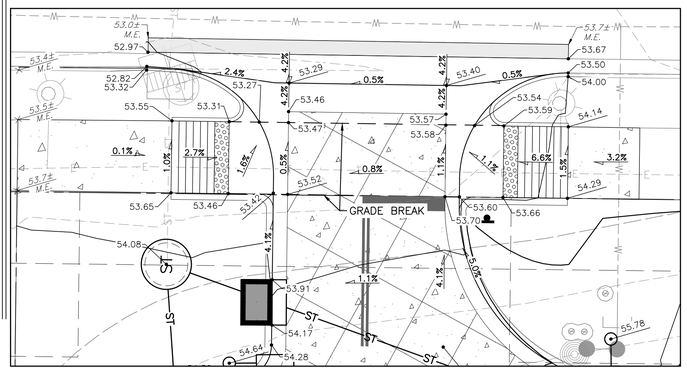
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED, LOANED, COPIED OR REPRODUCED, DIRECTLY OR INDIRECTLY IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

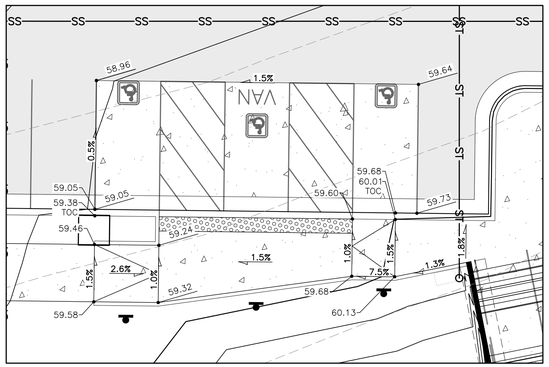
Sheet Number:
C204

PLOT DATE: Thursday, November 20, 2025 11:19 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C201 - DETAILED GRADING PLAN.dwg

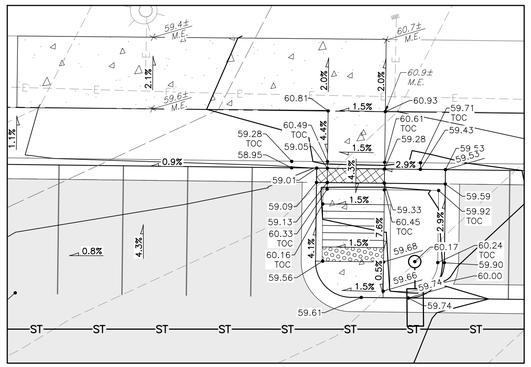
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



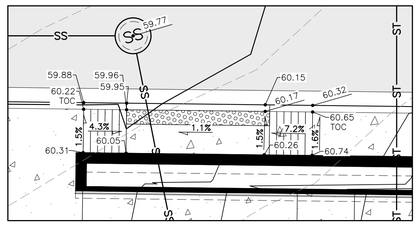
INSET A:
SCALE: 1"=10'



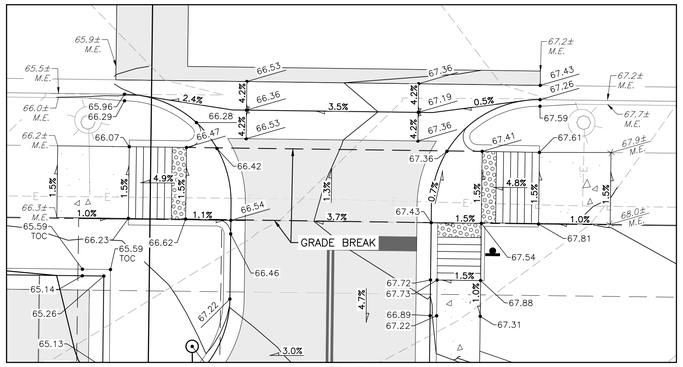
INSET B:
SCALE: 1"=10'



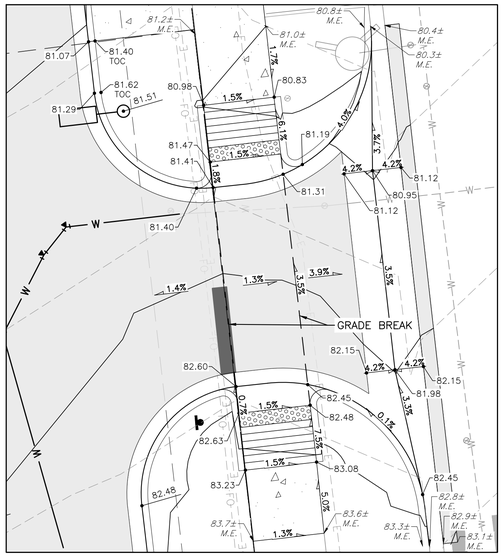
INSET C:
SCALE: 1"=10'



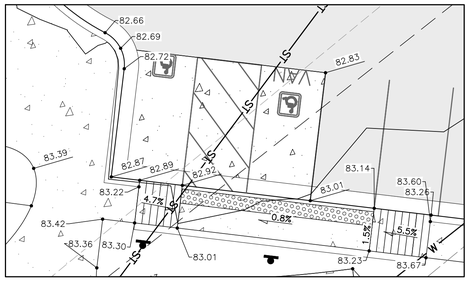
INSET D:
SCALE: 1"=10'



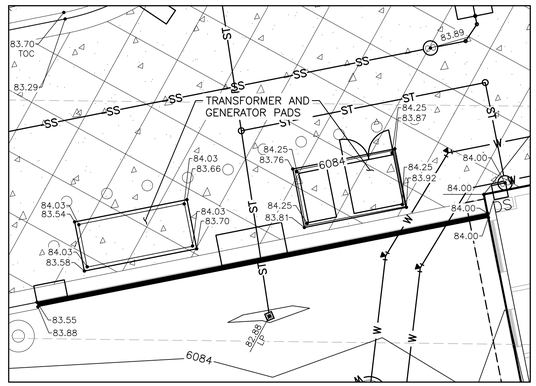
INSET E:
SCALE: 1"=10'



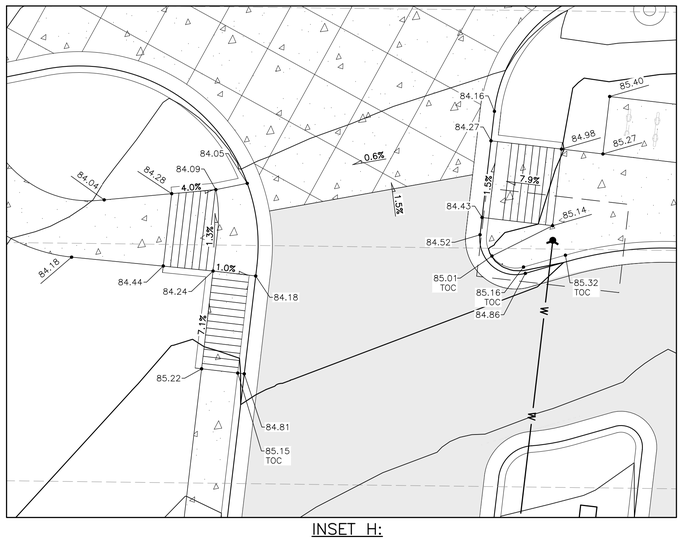
INSET F:
SCALE: 1"=10'



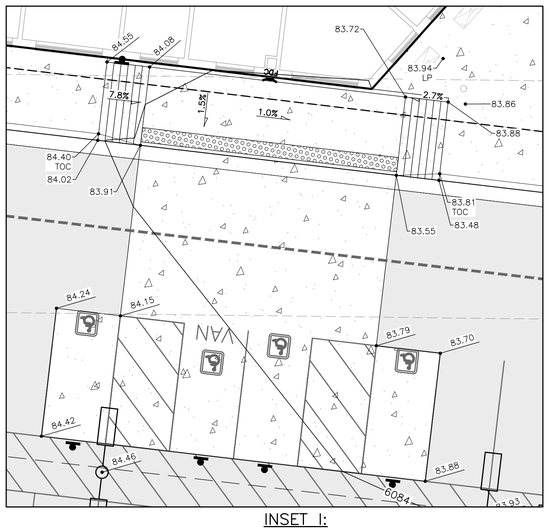
INSET G:
SCALE: 1"=10'



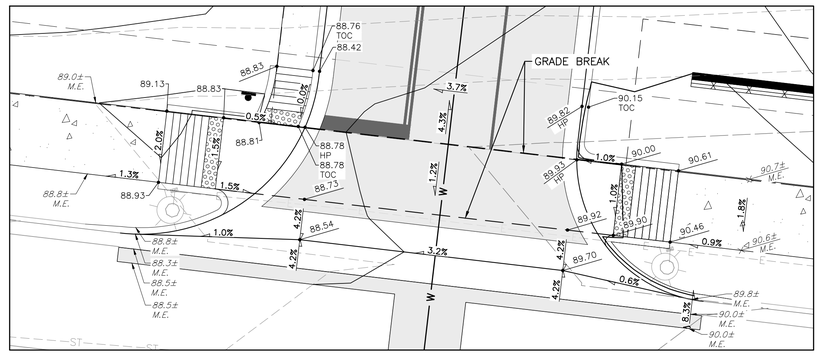
INSET K:
SCALE: 1"=10'



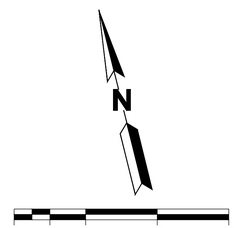
INSET H:
SCALE: 1"=10'



INSET I:
SCALE: 1"=10'

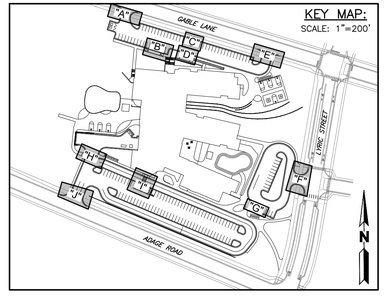


INSET J:
SCALE: 1"=10'



10 5 0 10 20
SCALE: 1"=10'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

KEY MAP:
SCALE: 1"=200'



CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
GRADING ENLARGEMENTS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

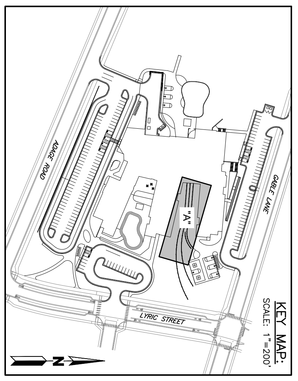
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & COPYRIGHTED INFORMATION OF MARTIN/MARTIN, INC. & SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C205

PLOT DATE: Thursday, November 20, 2025 11:20 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C201 - DETAILED GRADING PLAN.dwg



ENLARGEMENT A:
SCALE: 1"=10'



KEY MAP:
SCALE: 1"=200'

SCALE: 1"=10'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

Sheet Number: C206

Job Number	24.0998
Project Manager	D.BEARSE
Design By	D.BEARSE/K.RICKETSON
Drawn By	J.DIAZ
Principal In Charge	P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY, & CAN NOT BE COPIED, DUPLICATED, OR COMMERCIALLY EXPLOITED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

DCSD - RIDGEGATE ELEMENTARY SCHOOL

CONSTRUCTION DOCUMENTS

GRADING ENLARGEMENTS SHEET

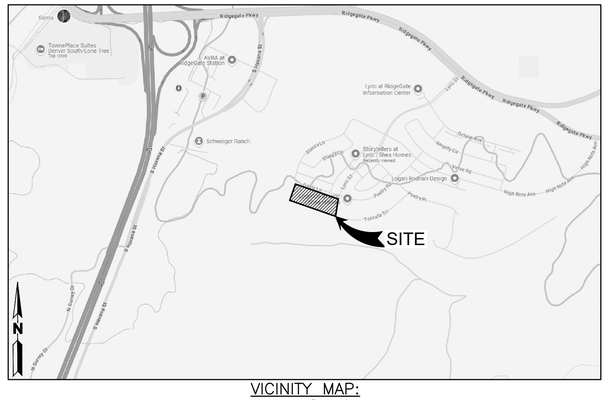
NOT FOR CONSTRUCTION

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

DCSD - ELEMENTRY SCHOOL 50

GRADING, EROSION AND SEDIMENT CONTROL PLANS

LOCATED IN THE NORTHWEST QUARTER OF SECTION 23,
TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH P.M,
CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO



VICINITY MAP:
SCALE: 1"=500'

SHEET INDEX	
SHEET #	SHEET TITLE
C250	GESC COVER SHEET
C251	INITIAL EROSION CONTROL PLAN
C252	INTERIM EROSION CONTROL PLAN
C253	FINAL EROSION CONTROL PLAN
C254	EROSION CONTROL DETAILS SHEET
C255	EROSION CONTROL DETAILS SHEET
C256	EROSION CONTROL DETAILS SHEET

EROSION CONTROL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION TO PREVENT DAMAGING FLOWS ON THE SITE AND IN THE WATERSHED BELOW THE SITE. CONTROL SYSTEMS SHALL BE INSTALLED PRIOR TO STRIPPING OF NATIVE VEGETATIVE COVER AND AS GRADING PROGRESSES. REFER TO TEMPORARY EROSION AND SEDIMENT CONTROL PLANS AND STORM WATER MANAGEMENT PLAN. CONDITIONS IN THE FIELD MAY WARRANT EROSION CONTROL MEASURES IN ADDITION TO WHAT IS SHOWN ON THESE PLANS. THE PLAN MAY BE MODIFIED WITH APPROPRIATE APPROVALS AS FIELD CONDITIONS WARRANT.

2. NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATION AND FOR THE SHORTEST PRACTICAL PERIOD OF TIME.

3. TOPSOIL SHALL BE STOCKPILED TO THE EXTENT PRACTICABLE ON THE SITE FOR USE ON AREAS TO BE REVEGETATED. ANY AND ALL STOCKPILES SHALL BE LOCATED AND PROTECTED FROM EROSIVE ELEMENTS.

4. AT ALL TIMES, THE PROPERTY SHALL BE MAINTAINED AND/OR WATERED TO PREVENT WIND–CAUSED EROSION. EARTHWORK OPERATIONS SHALL BE DISCONTINUED WHEN FUGITIVE DUST SIGNIFICANTLY IMPACTS ADJACENT PROPERTY. IF EARTHWORK IS COMPLETE OR DISCONTINUED AND DUST FROM THE SITE CONTINUES TO CREATE PROBLEMS, THE CONTRACTOR SHALL IMMEDIATELY INSTITUTE MITIGATIVE MEASURES AND SHALL CORRECT DAMAGE TO ADJACENT PROPERTY.

5. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 30 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. UNLESS SPECIFIED OTHERWISE, TEMPORARY VEGETATION SHALL BE INSTALLED ON ALL DISTURBED AREAS WHERE PERMANENT SURFACE IMPROVEMENTS ARE NOT SCHEDULED FOR INSTALLATION WITHIN THREE MONTHS. TEMPORARY VEGETATION SHALL BE A VIGOROUS, DROUGHT TOLERANT, NATIVE SPECIES MIX. PROJECT SCHEDULING SHOULD TAKE ADVANTAGE OF SPRING OR FALL PLANTING SEASONS FOR NATURAL GERMINATION, BUT SEEDED AREAS SHALL BE IRRIGATED, IF CONDITIONS MERIT. REFER TO THE LANDSCAPE PLAN FOR FINAL LANDSCAPING.

6. TEMPORARY FENCES SHALL BE INSTALLED ALONG ALL BOUNDARIES OF THE CONSTRUCTION LIMITS OR PROPERTY LINES AS SHOWN ON THE APPROVED EROSION CONTROL PLAN, TO PREVENT GRADING ON PROPERTY NOT OWNED BY THE OWNER/DEVELOPER. IN ADDITION, THE TOWN OF CASTLE ROCK MAY REQUIRE ADDITIONAL TEMPORARY FENCES IF FIELD CONDITIONS WARRANT.

7. THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION, EXCAVATION, TRENCHING, GRADING OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, ROADWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

8. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN INADVERTENTLY DISCHARGED TO, OR ACCUMULATED IN, THE FLOWLINES AND PUBLIC RIGHT–OF–WAY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT.

9. THE GRADING CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC ROADWAYS.

10. APPROVED EROSION AND SEDIMENT CONTROL "BEST MANAGEMENT PRACTICES" [BMP] SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL BMPS WEEKLY AND AFTER SIGNIFICANT PRECIPITATION EVENTS. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IN A TIMELY MANNER. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM A BMP WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR, AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMP.

11. WATER USED IN THE CLEANING OF CONCRETE TRUCK DELIVERY CHUTES SHALL BE DISCHARGED INTO A PREDEFINED, BERMED CONTAINMENT AREA ON THE JOB SITE. THE REQUIRED CONTAINMENT AREA IS TO BE BERMED SO THAT WASH WATER IS TOTALLY CONTAINED. WASH WATER DISCHARGED INTO THE CONTAINMENT AREA SHALL BE ALLOWED TO INFILTRATE OR EVAPORATE. DRIED CONCRETE WASTE SHALL BE REMOVED FROM THE CONTAINMENT AREA AND PROPERLY DISPOSED OF. SHOULD A PREDEFINED BERMED CONTAINMENT AREA NOT BE AVAILABLE DUE TO THE PROJECT SIZE, OR LACK OF AN AREA WITH A SUITABLE GROUND SURFACE FOR ESTABLISHING A CONTAINMENT AREA, PROPER DISPOSAL OF READY MIX WASHOUT AND RINSE OFF WATER AT THE JOB SITE SHALL CONFORM TO THE APPROVED TECHNIQUES AND PRACTICES IDENTIFIED IN THE COLORADO DEPARTMENT OF PUBLIC HEALTH & ENVIRONMENT'S TRAINING VIDEO ENTITLED "BUILDING FOR A CLEANER ENVIRONMENT, READY MIX WASHOUT TRAINING", AND ITS ACCOMPANYING MANUAL ENTITLED, "READY MIX WASHOUT GUIDEBOOK, VEHICLE AND EQUIPMENT WASHOUT AT CONSTRUCTION SITES." THE DIRECT OR INDIRECT DISCHARGE OF WATER CONTAINING WASTE CONCRETE TO THE STORM SEWER SYSTEM IS PROHIBITED. INFORMATION ABOUT, OR COPIES OF THE VIDEO AND TRAINING MANUAL ARE AVAILABLE FROM THE WATER QUALITY CONTROL DIVISION, COLORADO DEPARTMENT OF PUBLIC HEALTH & ENVIRONMENT, 4300 CHERRY CREEK DRIVE SOUTH, DENVER, COLORADO 80222–1530, 303–692–3555

12. THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS PROHIBITED.

13. PAVED SURFACES WHICH ARE ADJACENT TO CONSTRUCTION SITES SHALL BE SWEPT IN A TIMELY MANNER WHEN SEDIMENT AND OTHER MATERIALS ARE TRACKED OR DISCHARGED ON TO THEM. EITHER SWEEPING BY HAND OR USE OF STREET SWEEPERS IS ACCEPTABLE. STREET SWEEPERS USING WATER WHILE SWEEPING IS PREFERRED IN ORDER TO MINIMIZE DUST. FLUSHING OFF PAVED SURFACES WITH WATER IS PROHIBITED.

CITY OF LONE TREE GESC NOTE:

THE GRADING, EROSION AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PLACED IN THE CITY OF LONE TREE FILE FOR THIS PROJECT AND APPEARS TO FULFILL APPLICABLE LONE TREE GRADING, EROSION AND SEDIMENT CONTROL CRITERIA, AS AMENDED. ADDITIONAL GRADING, EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE PERMITTEES DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE PERMITTEES, UNTIL SUCH TIME AS THE PLAN IS PROPERLY COMPLETED, MODIFIED OR VOIDED.

CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES WITH THE PROPOSED ELEVATIONS SHOWN IN THESE PLANS. ENGINEER WILL NOT BE LIABLE FOR ANY COST ASSOCIATED WITH CHANGES TO THE DESIGN WITHOUT PROPER NOTIFICATION.

COLORADO 811 — KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 3–BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3–1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I–25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

OWNER:
DOUGLAS COUNTY SCHOOL DISTRICT
620 WILCOX STREET
CASTLE ROCK, CO 80104
(303) 387–0100

CIVIL ENGINEER:
MARTIN/MARTIN INC.
12499 W. COLFAX AVE.
LAKEWOOD, COLORADO 80215
ATTN: DAN BEARSE, P.E.
303–431–6100

ABBREVIATIONS:

APPROX	APPROXIMATE
ARCH	ARCHITECT
BLDG	BUILDING
BM	BENCHMARK
BOC	BACK OF CURB
BOW	BACK OF WALK
CL	CENTERLINE
COL	CITY OF LAKEWOOD
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTOUR
DEMO	DEMOLITION
DIA OR ø	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
EL	ELEVATION
ELEC	ELECTRICAL
ENG	ENGINEER
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
ESMT	EASEMENT
EX.	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
F.E.S.	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FGW	FINISHED GRADE AT WALL
FHY	FIRE HYDRANT
FL	FLOW LINE
FT	FOOT
GB	GRADE BREAK
GR	GRATE (AREA OR VALLEY INLETS)
GV	GATE VALVE
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HORZ	HORIZONTAL
HP	HIGH POINT
INV.	INVERT
LF	LINEAL FEET
LP	LOW POINT
MAX	MAXIMUM
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
OHE	OVERHEAD ELECTRICAL
PD	PERIMETER DRAIN
PERF	PERFORATED
PERM	PERIMETER
PERP	PERPENDICULAR
PL	PROPERTY LINE
PLBG	PLUMBING
PROP	PROPOSED
PRV	PRESSURE RELIEF VALVE
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
ROW	RIGHT OF WAY
SSWR	SANITARY SEWER
SF	SQUARE FOOT
STA	STATION
STRC	STRUCTURAL
SW	SIDEWALK
TELE	TELEPHONE
TB	THRUST BLOCK
TEMP	TEMPORARY
TOC	TOP OF CURB
VERT	VERTICAL

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

SF—SF	SILT FENCE	SF
	VEHICLE TRACKING CONTROL	VTC
	INLET PROTECTION	IP
	OUTLET PROTECTION	OP
	CULVERT INLET PROTECTION	CIP
	STABILIZED CONSTRUCTION ROADWAY	SCR
SF SF SF SF	STABILIZED STAGING AREA	SSA
SF SF SF SF SP JS JS JS	STOCKPILE MANAGEMENT W/ PROTECTION	SP
	CONCRETE WASHOUT AREA	CWA
CF—CF	CONSTRUCTION FENCE	CF
	CURB SOCK	CS
	ROCK SOCK	RS
SCL—SCL	SEDIMENT CONTROL LOG	SCL
	STRAW BALE BARRIER	SBB
	CHECK DAM	CD
	TEMP. SLOPE DRAIN	TSD
	ROUGH CUT STREET CONTROL	RCS
	DIVERSION DITCHES/ CHANNEL	DD/DC
	MULCHING	MU
	SURFACE ROUGHENING	SR
	TEMPORARY SEEDING	TS
	PERMANENT SEEDING	PS
	EROSION CONTROL BLANKET	ECB
	SEDIMENT BASIN	SB
	SEDIMENT TRAP	ST
	LIMITS OF CONSTRUCTION	LOC

THE GRADING, EROSION AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE REQUIREMENTS OF THE GRADING, EROSION AND SEDIMENT CONTROL PLAN (GESC) CRITERIA MANUAL OF DOUGLAS COUNTY AS AMENDED.

_____
DAN BEARSE DATE

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE
ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS

GESC COVER SHEET

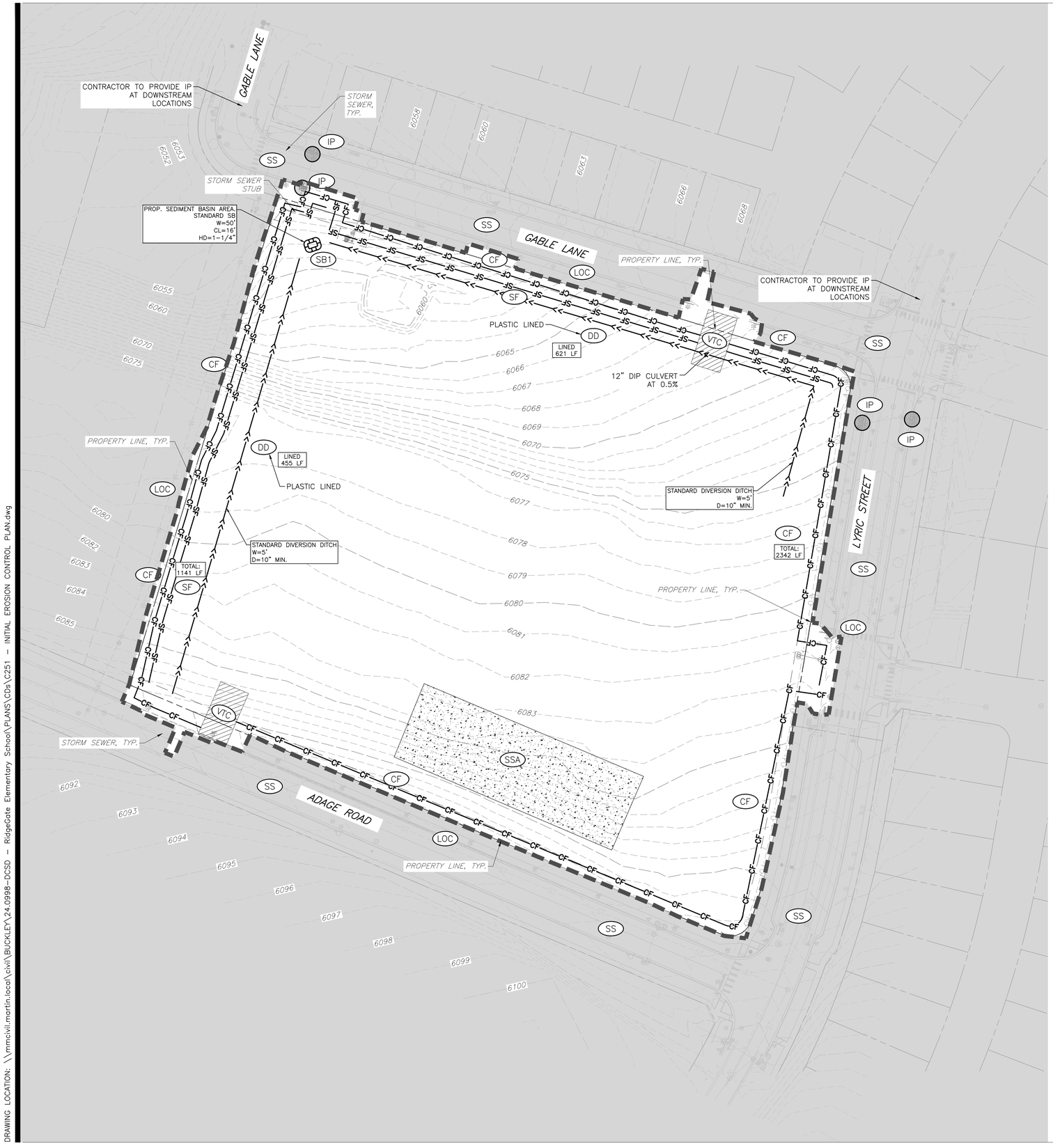
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, DISCLOSED OR USED IN ANY MANNER WHATSOEVER IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C250

PLOT DATE: Thursday, November 20, 2025 11:20 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998–DCSD – RidgeGate Elementary School\PLANS\CDs\C250 – GESC COVER SHEET.dwg



SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

SILT FENCE	SF
VEHICLE TRACKING CONTROL	VTC
INLET PROTECTION	IP
OUTLET PROTECTION	OP
CULVERT INLET PROTECTION	CIP
STABILIZED CONSTRUCTION ROADWAY	SCR
STABILIZED STAGING AREA	SSA
STOCKPILE MANAGEMENT W/ PROTECTION	SP
CONCRETE WASHOUT AREA	CWA
CONSTRUCTION FENCE	CF
CURB SOCK	CS
ROCK SOCK	RS
SEDIMENT CONTROL LOG	SCL
STRAW BALE BARRIER	SBB
CHECK DAM	CD
TEMP. SLOPE DRAIN	TSD
ROUGH CUT STREET CONTROL	RCS
DIVERSION DITCHES/ CHANNEL	DD/DC
MULCHING	MU
SURFACE ROUGHENING	SR
TEMPORARY SEEDING	TS
PERMANENT SEEDING	PS
EROSION CONTROL BLANKET	ECB
SEDIMENT BASIN	SB
SEDIMENT TRAP	ST
LIMITS OF CONSTRUCTION	LOC

NOTE:
1. SEE COVER SHEET OF LONE TREE STANDARD NOTES AND DETAILS (SHEET 1 OF 3) FOR LEGEND OF BMP NAMES & SYMBOLS.

BASIS OF BEARINGS:
BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK
PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.
CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

N

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
Lakewood, Colorado 80215
martinmartin.com
12499 West Colfax Avenue
303.431.6100

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
INITIAL EROSION CONTROL PLAN

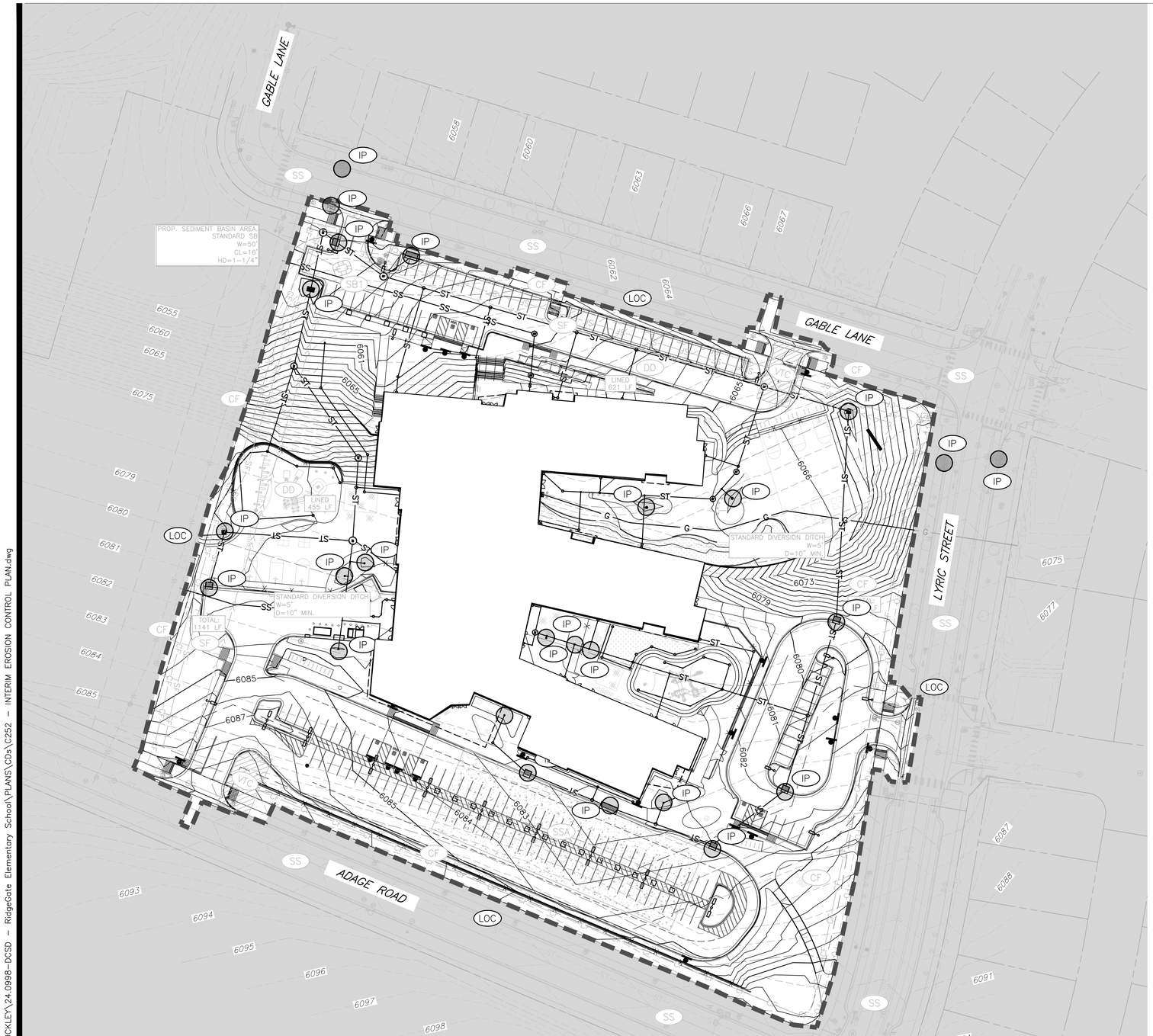
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL BE CONSIDERED AS SUCH. REPRODUCTION OF THIS DOCUMENT IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C251

PLOT DATE: Thursday, November 20, 2025 11:20 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C251 - INITIAL EROSION CONTROL PLAN.dwg



PLOT DATE: Thursday, November 20, 2025 11:20 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\Cds\C252 - INTERIM EROSION CONTROL PLAN.dwg

EARTHWORK:

TOTAL CUT:	17,302	CY	<CUT>
TOTAL FILL:	18,368	CY	<FILL>
PAVEMENT:	2,131	CY	<CUT>
NET EARTHWORK:	3,236±	CY	<CUT/EXPORT>

DISCLAIMER: MARTIN/MARTIN, INC. HAS PERFORMED AN EARTHWORK ESTIMATE OF THE SITE TO ESTIMATE THE AMOUNT OF CUT AND FILL ASSOCIATED WITH THE PROJECT. THE ESTIMATE WAS CONDUCTED TO INFORM THE PROJECT OWNER/DESIGNER OF THE PROJECT'S APPROXIMATE EARTHWORK QUANTITIES. ACTUAL EARTHWORK QUANTITIES ARE SUBJECT TO VARIABLES BEYOND MARTIN/MARTIN'S CONTROL. THIS EARTHWORK ESTIMATE WAS BASED ON EXISTING SITE CONTOURS SURVEYED BY PRECISION SURVEYING, DATED NOVEMBER, 2022.

MARTIN/MARTIN, INC. MAKES NO WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED, AS TO THE ACCURACY OF THE EARTHWORK QUANTITIES. THE OWNER AND GENERAL CONTRACTOR SHOULD WORK WITH AN EARTHWORK CONTRACTOR TO PERFORM A CONTRACTUAL EARTHWORK ANALYSIS AND BUDGET AFTER ALL DESIGN AND CONSTRUCTION ISSUES HAVE BEEN IDENTIFIED.

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

SF SF	SILT FENCE	SF
	VEHICLE TRACKING CONTROL	VTC
	INLET PROTECTION	IP
	OUTLET PROTECTION	OP
	CULVERT INLET PROTECTION	CIP
	STABILIZED CONSTRUCTION ROADWAY	SCR
	STABILIZED STAGING AREA	SSA
SF SF SF SF SS SS SS SS	STOCKPILE MANAGEMENT W/ PROTECTION	SP
	CONCRETE WASHOUT AREA	CWA
CF CF	CONSTRUCTION FENCE	CF
	CURB SOCK	CS
	ROCK SOCK	RS
SCL SCL	SEDIMENT CONTROL LOG	SCL
	STRAW BALE BARRIER	SBB
	CHECK DAM	CD
	TEMP. SLOPE DRAIN	TSD
	ROUGH CUT STREET CONTROL	RCS
	DIVERSION DITCHES/ CHANNEL	DD/DC
	MULCHING	MU
	SURFACE ROUGHENING	SR
	TEMPORARY SEEDING	TS
	PERMANENT SEEDING	PS
	EROSION CONTROL BLANKET	ECB
	SEDIMENT BASIN	SB
	SEDIMENT TRAP	ST
	LIMITS OF CONSTRUCTION	LOC

NOTES:

1. SEE COVER SHEET OF LONE TREE STANDARD NOTES AND DETAILS (SHEET 1 OF 3) FOR LEGEND OF BMP NAMES AND SYMBOLS.
2. SHADED BMPS INSTALLED IN THE INITIAL STAGE SHALL BE LEFT IN PLACE IN THE INTERIM STAGE.
3. ALL INTERIM BMPS, INCLUDING SEEDING AND MULCHING OF DISTURBED AREAS, MUST BE COMPLETED PRIOR TO ISSUANCE OF ANY CURB AND GUTTER PERMITS.
4. SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, CULVERTS, STORM DRAINS, AND INLET AND OUTLET PROTECTION

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

N

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

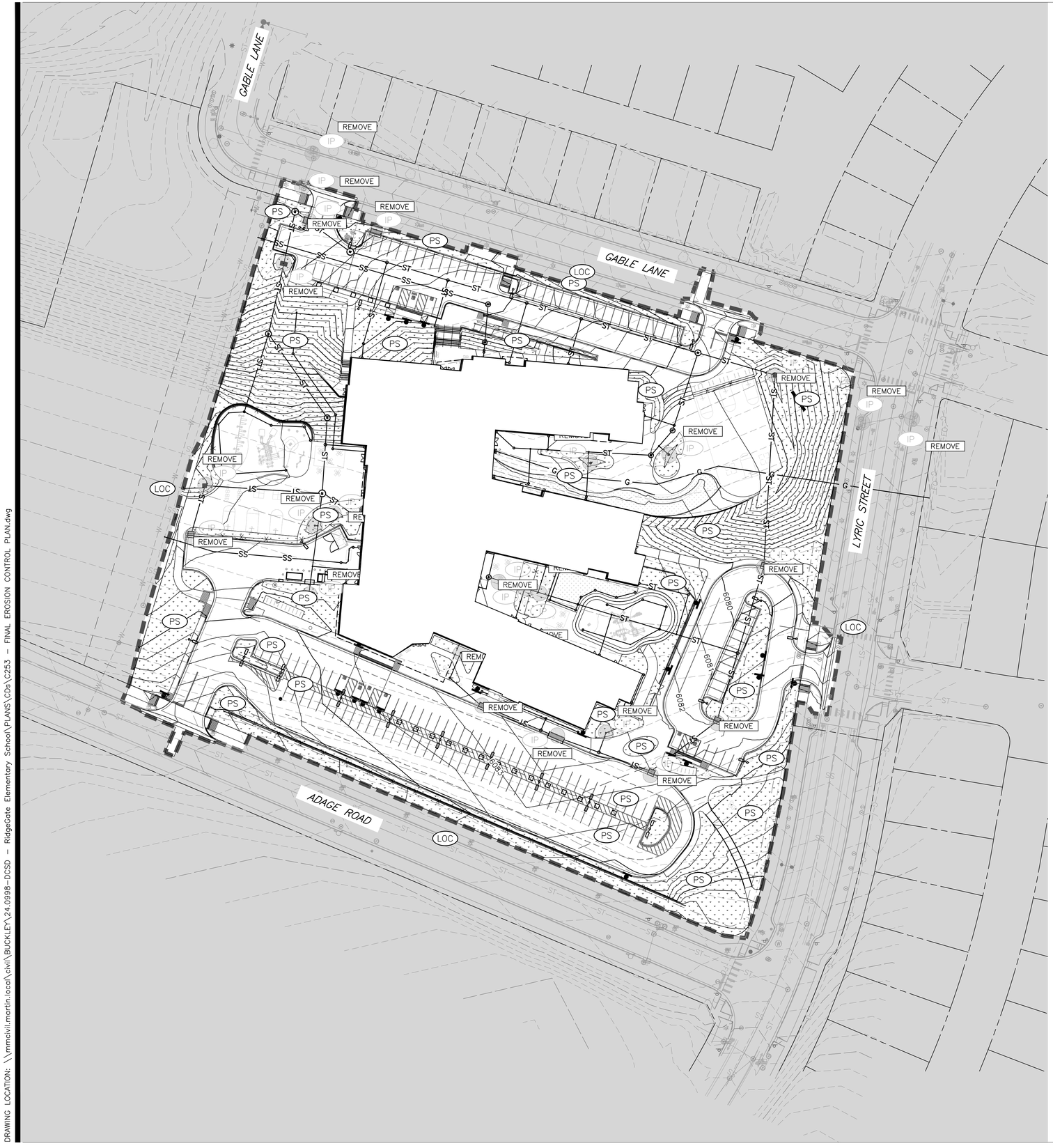
DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
INTERIM EROSION CONTROL PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number	24.0998
Project Manager	D.BEARSE
Design By	D.BEARSE/K.RICKETSON
Drawn By	J.DIAZ
Principal In Charge	P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL BE CONSIDERED AS SUCH. REPRODUCTION OF THIS DRAWING IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C252



SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

SF—SF	SILT FENCE	SF
	VEHICLE TRACKING CONTROL	VTC
	INLET PROTECTION	IP
	OUTLET PROTECTION	OP
	CULVERT INLET PROTECTION	CIP
	STABILIZED CONSTRUCTION ROADWAY	SCR
	STABILIZED STAGING AREA	SSA
	STOCKPILE MANAGEMENT W/ PROTECTION	SP
	CONCRETE WASHOUT AREA	CWA
CF—CF	CONSTRUCTION FENCE	CF
	CURB SOCK	CS
	ROCK SOCK	RS
SCL—SCL	SEDIMENT CONTROL LOG	SCL
	STRAW BALE BARRIER	SBB
	CHECK DAM	CD
	TEMP. SLOPE DRAIN	TSD
	ROUGH CUT STREET CONTROL	RCS
	DIVERSION DITCHES/ CHANNEL	DD/DC
	MULCHING	MU
	SURFACE ROUGHENING	SR
	TEMPORARY SEEDING	TS
	PERMANENT SEEDING	PS
	EROSION CONTROL BLANKET	ECB
	SEDIMENT BASIN	SB
	SEDIMENT TRAP	ST
	LIMITS OF CONSTRUCTION	LOC

NOTE:

1. SEE COVER SHEET OF LONE TREE STANDARD NOTES AND DETAILS (SHEET 1 OF 3) FOR LEGEND OF BMP NAMES AND SYMBOLS.
2. SHADED BMPS INSTALLED IN THE INITIAL AND INTERIM GESC PLANS, UNLESS OTHERWISE INDICATED, SHALL BE LEFT IN PLACE UNTIL REVEGETATION ESTABLISHMENT IS APPROVED BY THE CITY.
3. SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, CULVERTS, STORM DRAINS, AND INLET AND OUTLET PROTECTION.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

N

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
FINAL EROSION CONTROL PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL BE CONSIDERED AS SUCH. REPRODUCTION OF THIS DRAWING IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C253

PLOT DATE: Thursday, November 20, 2025 11:20 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C253 - FINAL EROSION CONTROL PLAN.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

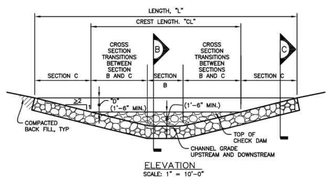
GRADING, EROSION, AND SEDIMENT CONTROL (GESC) GENERAL NOTES ⚠

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, ENGINEERING DIVISION, HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL COMPLIANCE WITH THE CITY OF LONE TREE SUBDIVISION REGULATIONS AND/OR THE GRADING, EROSION AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY (OTHER THAN AS STATED ABOVE) FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS.
2. THE ADEQUACY OF THIS GESC PLAN LIES WITH THE ORIGINAL DESIGN ENGINEER.
3. THE GESC PLAN SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF ACCEPTANCE BY THE CITY OF LONE TREE, AFTER WHICH TIME THE PLAN SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
4. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY OF LONE TREE RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE GESC MANUAL, GESC PLAN OR GESC PERMIT.
5. THE PLACEMENT OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE IN ACCORDANCE WITH THE CITY OF LONE TREE – ACCEPTED GESC PLAN AND THE CITY OF LONE TREE GESC MANUAL.
6. ANY VARIATION IN MATERIAL, TYPE OR LOCATION OF EROSION AND SEDIMENT CONTROL BMPs FROM THE CITY OF LONE TREE – ACCEPTED GESC PLAN WILL REQUIRE APPROVAL FROM AN ACCOUNTABLE REPRESENTATIVE OF THE CITY OF LONE TREE ENGINEERING DIVISION.
7. AFTER THE GESC PLAN HAS BEEN ACCEPTED, THE GESC PERMIT APPLIED FOR, FEES AND FISCAL SECURITY SUBMITTED TO THE CITY AND THE GESC FIELD MANUAL OBTAINED AND REVIEWED, THE CONTRACTOR MAY INSTALL THE INITIAL–STAGE EROSION AND SEDIMENT CONTROL BMPs INDICATED ON THE ACCEPTED GESC PLAN.
8. THE FIRST BMP TO BE INSTALLED ON THE SITE SHALL BE CONSTRUCTION FENCE, MARKERS, OR OTHER APPROVED MEANS OF DEFINING THE LIMITS OF CONSTRUCTION, INCLUDING CONSTRUCTION LIMITS ADJACENT TO STREAM CORRIDORS AND OTHER AREAS TO BE PRESERVED.
9. AFTER INSTALLATION OF THE INITIAL–STAGE EROSION AND SEDIMENT CONTROL BMPs, THE PERMITTEE SHALL CALL THE CITY OF LONE TREE CONSTRUCTION INSPECTOR AT (303) 662-8112 TO SCHEDULE A PRECONSTRUCTION MEETING AT THE PROJECT SITE. THE REQUEST SHALL BE MADE A MINIMUM OF THREE BUSINESS DAYS PRIOR TO THE REQUESTED MEETING TIME. NO CONSTRUCTION ACTIVITIES SHALL BE PLANNED WITHIN 24 HOURS AFTER THE PRECONSTRUCTION MEETING.
10. THE OWNER OR OWNER'S REPRESENTATIVE, THE GESC MANAGER, THE GENERAL CONTRACTOR, AND THE GRADING SUBCONTRACTOR, IF DIFFERENT FROM THE GENERAL CONTRACTOR, MUST ATTEND THE PRECONSTRUCTION MEETING. IF ANY OF THE REQUIRED PARTICIPANTS FAIL TO ATTEND THE PRECONSTRUCTION MEETING, OR IF THE GESC FIELD MANUAL IS NOT ON SITE, OR IF THE INSTALLATION OF THE INITIAL BMPs ARE NOT APPROVED BY THE CITY OF LONE TREE GESC INSPECTOR, THE APPLICANT WILL HAVE TO PAY A REINSPECTION FEE, ADDRESS ANY PROBLEMS WITH BMP INSTALLATION, AND CALL TO RESCHEDULE THE MEETING, WITH A CORRESPONDING DELAY IN THE START OF CONSTRUCTION. THE CITY OF LONE TREE STRONGLY ENCOURAGES THE APPLICANT TO HAVE THE ENGINEER OF RECORD AT THE PRECONSTRUCTION MEETING. FAILURE OF THE ENGINEER OF RECORD TO ATTEND MAY RESULT IN A DELAY OF THE START OF CONSTRUCTION.
11. CONSTRUCTION SHALL NOT BEGIN UNTIL THE CITY OF LONE TREE GESC INSPECTOR APPROVES THE INSTALLATION OF THE INITIAL BMPs AND THE APPROVED GESC PERMIT IS PICKED UP FROM THE CITY AND IS IN–HAND ON THE SITE. THE COMPLETED PERMIT WILL BE AVAILABLE WITHIN 24–HOURS AFTER THE INSTALLATION OF THE INITIAL BMPs ARE APPROVED.
12. THE GESC MANAGER SHALL STRICTLY ADHERE TO THE CITY OF LONE TREE–APPROVED LIMITS OF CONSTRUCTION AT ALL TIMES. THE CITY OF LONE TREE ENGINEERING DIVISION MUST APPROVE ANY CHANGES TO THE LIMITS OF CONSTRUCTION AND, AT THE DISCRETION OF THE ENGINEERING DIVISION, ADDITIONAL EROSION/SEDIMENT CONTROLS MAY BE REQUIRED IN ANY ADDITIONAL AREAS OF CONSTRUCTION.
13. THE MAXIMUM AREA OF CONSTRUCTION SHALL BE LIMITED TO 40 ACRES (70 ACRES IF APPROVED FOR SOIL MITIGATION OPERATIONS) TO REDUCE THE AMOUNT OF LAND DISTURBED AT ANY ONE TIME. LARGER SITES SHALL BE DIVIDED INTO PHASES THAT ARE EACH 40 (OR 70) ACRES OR LESS IN SIZE. THESE PROJECTS SHALL CONDUCT GRADING ACTIVITIES IN ACCORDANCE WITH THE ACCEPTED GESC PLAN. BMP INSTALLATION AND APPROVAL BY THE CITY OF LONE TREE AT THE START AND COMPLETION OF EACH PHASE SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE GESC MANUAL AND/OR GESC FIELD MANUAL.
14. PRIOR TO ACTUAL CONSTRUCTION, THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES. FOR INFORMATION, CONTACT THE DENVER INTER–UTILITY GROUP AT 1–800–922–1987 OR FAX AT (303) 534–6700.
15. NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS.
16. THE GESC PERMIT SHALL BE VALID FOR A PERIOD OF ONE (1) YEAR, UNLESS EXTENDED.
17. A COPY OF THE GESC PERMIT, ACCEPTED GESC PLANS AND THE GESC FIELD MANUAL SHALL BE ON SITE AT ALL TIMES.
18. THE GESC MANAGER SHALL BE RESPONSIBLE FOR ENSURING THAT THE SITE REMAINS IN COMPLIANCE WITH THE GESC PERMIT. THE GESC MANAGER SHALL BE THE PERMITTEE'S CONTACT PERSON WITH THE CITY FOR ALL MATTERS PERTAINING TO THE GESC PERMIT. THE GESC MANAGER SHALL BE PRESENT AT THE SITE THE MAJORITY OF THE TIME AND SHALL BE AVAILABLE THROUGH A 24–HOUR CONTACT NUMBER. IN THE EVENT THAT THE CONTRACTOR'S GESC MANAGER IS NOT ON SITE AND CANNOT BE REACHED DURING A VIOLATION, THE ALTERNATE GESC MANAGER SHALL BE CONTACTED. IF NEITHER THE GESC MANAGER NOR ALTERNATE GESC MANAGER CAN BE CONTACTED DURING ANY VIOLATION, A STOP WORK ORDER SHALL BE ISSUED.
19. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE THROUGH THE CITY OF LONE TREE–APPROVED ACCESS POINT. A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT ALL ACCESS POINTS ON THE SITE. ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES MAY BE ADDED WITH AUTHORIZATION FROM THE CITY OF LONE TREE ENGINEERING DIVISION.
20. THE GESC MANAGER IS RESPONSIBLE FOR CLEANUP OF SEDIMENT OR CONSTRUCTION DEBRIS TRACKED ONTO ADJACENT PAVED AREAS. PAVED AREAS INCLUDING STREETS ARE TO BE KEPT CLEAN THROUGHOUT BUILD–OUT AND SHALL BE CLEANED, WITH A STREET SWEEPER OR SIMILAR DEVICE, AT FIRST NOTICE OF ACCIDENTAL TRACKING OR AT THE DISCRETION OF THE CITY OF LONE TREE GESC INSPECTOR. STREET WASHING IS NOT ALLOWED. THE CITY OF LONE TREE RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO ENSURE AREA STREETS ARE KEPT FREE OF SEDIMENT AND/OR CONSTRUCTION DEBRIS.
21. APPROVED EROSION AND SEDIMENT CONTROL BMPS SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT, AT A MINIMUM. THE GESC MANAGER SHALL INSPECT ALL BMPS IN ACCORDANCE WITH THE ACCEPTED GESC PLAN AND GESC MANUAL. ALL NECESSARY MAINTENANCE AND REPAIR ACTIVITIES SHALL BE COMPLETED WITHIN 48 HOURS FOR LEVEL III VIOLATIONS, AND IMMEDIATELY FOR LEVEL II VIOLATIONS, OR AS DIRECTED BY A CITY OF LONE TREE GESC INSPECTOR. ACCUMULATED SEDIMENT AND CONSTRUCTION DEBRIS SHALL BE REMOVED AND PROPERLY DISPOSED.
22. STRAW BALES ARE NOT A GESC–ACCEPTED SEDIMENT CONTROL BMP.
23. TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN THE LOCATION SHOWN ON THE ACCEPTED GESC PLAN. THE GESC MANAGER SHALL SCHEDULE AN INSPECTION WITH THE CITY OF LONE TREE GESC INSPECTOR AS SOON AS TOPSOIL STRIPPING IS COMPLETED. FAILURE TO SCHEDULE SUCH INSPECTION OR FAILURE TO STOCKPILE TOPSOIL SHALL RESULT IN ISSUANCE OF A STOP WORK ORDER. SHALL REMAIN IN PLACE UNTIL TOPSOIL IS STOCKPILED ON SITE OR APPROPRIATE SOIL AMENDMENTS ARE STOCKPILED ON SITE.
24. THE ACCEPTED GESC PLAN MAY REQUIRE CHANGES OR ALTERATIONS AFTER APPROVAL TO MEET CHANGING SITE OR PROJECT CONDITIONS OR TO ADDRESS INEFFICIENCIES IN DESIGN OR INSTALLATION. THE GESC MANAGER SHALL OBTAIN PRIOR APPROVAL FROM THE DESIGN ENGINEER AND THE CITY OF LONE TREE ENGINEERING FOR ANY PROPOSED CHANGES.
25. LINING OF TEMPORARY SWALES AND DITCHES SHALL BE IN ACCORDANCE WITH THE GESC CRITERIA MANUAL.
26. NO PERMANENT EARTH SLOPES GREATER THAN 3:1 SHALL BE ALLOWED.
27. ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE GESC MANAGER. THE GESC MANAGER SHALL BE HELD RESPONSIBLE FOR OBTAINING ACCESS RIGHTS TO ADJACENT PROPERTY, IF NEEDED, AND REMEDIATING ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC. RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
28. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
29. SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE SEEDED AND MULCHED WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION, NO STOCKPILES SHALL BE PLACED WITHIN ONE HUNDRED (100) FEET OF A DRAINAGE WAY UNLESS APPROVED BY THE CITY OF LONE TREE ENGINEERING DIVISION.
30. ALL CHEMICAL OR HAZARDOUS MATERIAL SPILLS WHICH MAY ENTER WATERS OF THE STATE OF COLORADO, WHICH INCLUDE BUT ARE NOT LIMITED TO, SURFACE WATER, GROUND WATER AND DRY GULLIES OR STORM SEWER LEADING TO SURFACE WATER, SHALL BE IMMEDIATELY REPORTED TO THE COPHE PER CRS 25–8–601, AND THE CITY OF LONE TREE. RELEASES OF PETROLEUM PRODUCTS AND CERTAIN HAZARDOUS SUBSTANCES LISTED UNDER THE FEDERAL CLEAN WATER ACT (40 CFR PART 116) MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER AS WELL AS THE COPHE. THE APPLICABLE CONTACT INFORMATION (SEE APPENDIX A, DOUGLAS COUNTY GESC MANUAL – SUBJECT TO CHANGE) IS: COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT TOLL–FREE 24–HOUR ENVIRONMENTAL EMERGENCY SPILL REPORTING LINE 1–877–518–5608; NATIONAL RESPONSE CENTER (24–HOUR NATIONAL SPILL RESPONSE) 1–800–424–8802; CITY OF LONE TREE PUBLIC WORKS (303) 662–8112. SPILLS THAT POSE AN IMMEDIATE RISK TO HUMAN LIFE SHALL BE REPORTED TO 911. FAILURE TO REPORT AND CLEAN UP ANY SPILL SHALL RESULT IN ISSUANCE OF A STOP WORK ORDER.
31. ALL WORK ON SITE SHALL STAY A MINIMUM OF ONE HUNDRED (100) FEET AWAY FROM ANY DRAINAGE WAY, WETLAND, ETC. UNLESS OTHERWISE NOTED ON AN ACCEPTED CITY OF LONE TREE GESC PLAN.
32. ALL PROJECTS SHALL BALANCE EARTHWORK QUANTITIES ON SITE. IN THE EVENT A VARIANCE IS GRANTED BY THE CITY ENGINEER TO ALLOW IMPORT OR EXPORT OF MATERIAL, THE PERMITTEE SHALL HAVE A GESC PERMIT IN HAND FOR THE IMPORT OR EXPORT SITE PRIOR TO ANY TRANSPORTATION OF EARTH MATERIAL. THE GESC MANAGER SHALL NOTIFY THE CITY OF LONE TREE GESC INSPECTOR OF THE LOCATION AND GESC PERMIT NUMBERS OF BOTH THE EXPORTING AND IMPORTING SITES PRIOR TO ANY IMPORT/EXPORT OPERATIONS.
33. THE USE OF REBAR, STEEL STAKES OR STEEL FENCE POSTS FOR STAKING OR SUPPORT OF ANY EROSION OR SEDIMENT CONTROL BMP IS PROHIBITED (EXCEPT STEEL TEE–POSTS FOR USE IN SUPPORTING CONSTRUCTION FENCE).
34. THE CLEANING OF CONCRETE DELIVERY TRUCK CHUTES IS RESTRICTED TO APPROVED CONCRETE WASH OUT LOCATIONS ON THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE TO THE STORM SEWER SYSTEM IS PROHIBITED. ALL CONCRETE WASTE SHALL BE PROPERLY CLEANED UP AND DISPOSED AT AN APPROPRIATE LOCATION.
35. ALL DEWATERING ON SITE SHALL BE COORDINATED WITH A CITY OF LONE TREE GESC INSPECTOR AND BE FREE OF SEDIMENT IN ACCORDANCE WITH THE GESC CRITERIA MANUAL.
36. ALL PERMANENT INSTALLATIONS OF PIPES FOR STORM SEWERS, SLOPE DRAINS, AND CULVERTS, TOGETHER WITH RIPRAP APRONS OR OTHER INLET AND OUTLET PROTECTION, REQUIRE INSPECTION BY THE CITY OF LONE TREE ENGINEERING (SEPARATE FROM GESC INSPECTIONS).
37. ALL DISTURBED AREAS SHALL BE DRILL SEEDED AND CRIMP MULCHED IN ACCORDANCE WITH THE DOUGLAS COUNTY GESC MANUAL CRITERIA AND THE CITY OF LONE TREE SEEDING AND MULCHING DETAIL (#17) INCLUDED HEREIN WITHIN THIRTY DAYS OF INITIAL EXPOSURE OR WITHIN SEVEN DAYS OF SUBSTANTIAL COMPLETION (AS DEFINED BY THE CITY OF LONE TREE) OF AN AREA, WHICHEVER IS LESS. THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.
38. HYDRAULIC SEEDING AND HYDRAULIC MULCHING ARE NOT AN ACCEPTABLE METHOD OF SEEDING OR MULCHING IN THE CITY OF LONE TREE.
39. NO CURB AND GUTTER PERMITS SHALL BE ISSUED UNTIL ALL DISTURBED AREAS ARE DRILL SEEDED AND CRIMP MULCHED.
40. NO PAVING PERMITS SHALL BE ISSUED UNTIL ALL INTERIM INLET PROTECTION IS INSTALLED AND APPROVED BY THE GESC INSPECTOR.
41. A FINAL GESC INSPECTION SHALL BE CONDUCTED A MINIMUM OF TWO WEEKS PRIOR TO THE ANTICIPATED REQUEST FOR CERTIFICATE OR TEMPORARY CERTIFICATE OF OCCUPANCY OR INITIAL ACCEPTANCE.

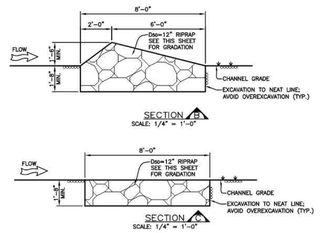
DETAIL SHEET NO. 1

BMP LEGEND

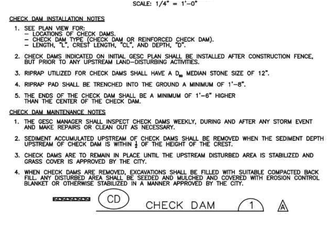
NO.		
1	CD	CHECK DAM
1	CB	COMPOST BLANKET
1	CFB	COMPOST FILTER BERM
1	CWA	CONCRETE WASHOUT AREA
1	CF	CONSTRUCTION FENCE
1	CM	CONSTRUCTION MARKERS
1	DW	DEWATERING
1	DD	DIVERSION DITCH
2	ECB	EROSION CONTROL BLANKET
2	IP	INLET PROTECTION
2	RCD	REINFORCED CHECK DAM
2	RRB	REINFORCED ROCK BERM
2	RRC	RRB FOR CULVERT PROTECTION
2	SB	SEDIMENT BASIN
3	SCL	SEDIMENT CONTROL LOG
3	ST	SEDIMENT TRAP
3	SM	SEEDING AND MULCHING
3	SF	SILT FENCE
3	SSA	STABILIZED STAGING AREA
3	SR	SURFACE ROUGHENING
3	TSD	TEMPORARY SLOPE DRAIN
3	TSC	TEMPORARY STREAM CROSSING
3	TER	TERRACING
3	VTC	VEHICLE TRACKING CONTROL
3	WW	VTC WITH WHEEL WASH
3 ⚠ 26	CS	CURB SOCK
1		ROCK AND RIPRAP GRADATIONS
	LOC	LIMITS OF CONSTRUCTION



ELEVATION
SCALE: 1" = 10'-0"



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



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

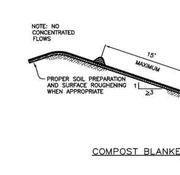
CHECK DAM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - TYPE OF CONSTRUCTION CHECK DAMS:
   - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM),
   - LENGTH, "L", CREST LENGTH, "CL", AND DEPTH, "D".
2. CHECK DAMS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND–DISTURBING ACTIVITIES.
3. RIPRAP UTILIZED FOR CHECK DAMS SHALL HAVE A D_{50} MEDIAN STONE SIZE OF 12".
4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'–0".
5. THE BODY OF THE CHECK DAM SHALL BE A MINIMUM OF 1'–0" HIGHER THAN THE CENTER OF THE CHECK DAM.

CHECK DAM MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT CHECK DAMS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CHECK DAM IS WITHIN ½ OF THE HEIGHT OF THE CREST.
3. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
4. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACK FILL. ANY DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

CD CHECK DAM 1 ⚠



COMPOST FILTER BERM DETAIL

COMPOST BLANKET AND COMPOST FILTER BERM
SCALE: 1" = 10'-0"

COMPOST BLANKET NOTES:

1. SEE PLAN VIEW FOR AREA OF COMPOST BLANKET.
2. MAY BE USED IN PLACE OF STRAW MULCH OR EROSION CONTROL BLANKET IN AREAS WHERE ACCESS IS DIFFICULT DUE TO LANDSCAPING OR OTHER OBJECTS OR IN AREAS WHERE A SMOOTH TURF GRASS FINISH IS DESIRED.
3. SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL; SHALL BE PROHIBITED IN AREAS OF POSSIBLE CONCENTRATED FLOW.
4. SOIL PREPARATION SHALL BE COMPLETE PER THE SPECIFICATIONS OUTLINED IN THESE CRITERIA PRIOR TO APPLICATION.
5. WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO APPLICATION.
6. SHALL BE EVENLY APPLIED AT A DEPTH OF 2 INCH.
7. MAYBE APPLIED UTILIZING PNEUMATIC BLOWER, OR BY HAND.
8. SEEDING SHALL BE DRILLED PRIOR TO THE APPLICATION OF COMPOST OR SEED MAY BE COMBINED AND BLOWN WITH THE PNEUMATIC BLOWER.
9. COMPOST FILTER BERM SHALL BE UTILIZED ON SLOPES WITH A MAXIMUM SPACING OF 15 FEET PER THE REQUIREMENTS FOUND IN THE COMPOST FILTER BERM SECTION.
10. THE GESC MANAGER SHALL INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.
11. COMPOST USED IN THE APPLICATION OF THE COMPOST BLANKET SHALL BE A CLASS I COMPOST AS DEFINED BY THE FOLLOWING PHYSICAL, CHEMICAL, AND BIOLOGICAL PARAMETERS:

PARAMETERS	CLASS I COMPOST FOR COMPOST BLANKET
MINIMUM STABILITY INDICATOR	STABLE TO VERY STABLE
SOLUBLE SALTS	MAXIMUM 5mmhos/cm
PH	6.0 – 8.0
AG INDEX	> 10
MATURITY INDICATOR EXPRESSED AS PERCENTAGE OF GERMINATION/VIGOR	80+/80+
MATURITY INDICATOR EXPRESSED AS AMMONIA N/ NITRATE N RATIO	< 4
MATURITY INDICATOR EXPRESSED AS CARBON TO NITROGEN RATIO	20:1
TESTED FOR CLOPYRALID	YES/NEGATIVE RESULT
MOISTURE CONTENT	30–60 %
ORGANIC MATTER CONTENT	25–45 % OF DRY WEIGHT
PARTICLE SIZE DISTRIBUTION	3" (75mm) 100% PASSING 1" (25mm) 95% TO 100% PASSING 3/4" (19mm) 85% TO 100% PASSING 1/4" (6.5mm) 65% TO 90% PASSING 3/8" (9.5mm) 50% TO 60% PASSING #4 (4.75 mm) 0 TO 35% PASSING
PRIMARY, SECONDARY NUTRIENTS; TRACE ELEMENTS	MUST BE REPORTED
TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA + CLOPYRALID
TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA + CLOPYRALID
ORGANIC MATTER PER CUBIC YARD	MUST REPORT
CHEMICAL CONTAMINANTS	MEET OR EXCEED US EPA CLASS A STANDARD, 40 CFR 503.1 TABLES 1 & 3 LEVELS
MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT	FULLY PERMITTED UNDER COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
RISK FACTOR RELATING TO PLANT GERMINATION AND HEALTH	LOW

NOTE: CLOPYRALID IS THE COMMON NAME OF A HERBICIDE THAT KILLS BROAD–LEAVED WEEDS SUCH AS DANDELIONS, CLOVER AND THISTLE.

CB COMPOST BLANKET 2

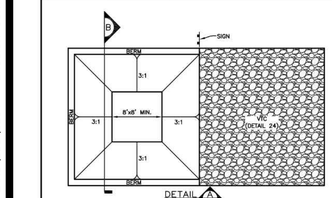
COMPOST FILTER BERM NOTES:

1. SEE PLAN VIEW FOR LENGTH OF COMPOST FILTER BERM.
2. SHALL BE APPLIED TO ALL SLOPES RECEIVING A COMPOST BLANKET AT 15' INCREMENTS.
3. FILTER BERMS SHALL RUN PARALLEL TO THE CONTOUR.
4. FILTER BERMS SHALL BE A MINIMUM OF 1' H x 2' W.
5. FILTER BERMS SHALL BE APPLIED UTILIZING PNEUMATIC BLOWER, OR BY HAND.
6. SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL; SHALL BE PROHIBITED IN AREAS OF POSSIBLE CONCENTRATED FLOW.
7. SOIL PREPARATION SHALL BE COMPLETE PER THE SPECIFICATIONS OUTLINED IN THESE CRITERIA PRIOR TO APPLICATION.
8. WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO APPLICATION.
9. SEEDING SHALL BE DRILLED PRIOR TO THE APPLICATION OF COMPOST OR SEED MAY BE COMBINED AND BLOWN WITH THE PNEUMATIC BLOWER.
10. THE GESC MANAGER SHALL INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.
11. COMPOST USED IN THE APPLICATION OF THE COMPOST FILTER BERM SHALL BE A CLASS I COMPOST AS DEFINED BY THE FOLLOWING PHYSICAL, CHEMICAL, AND BIOLOGICAL PARAMETERS:

PARAMETERS	CLASS I COMPOST FOR COMPOST FILTER BERM
MINIMUM STABILITY INDICATOR	STABLE TO VERY STABLE
SOLUBLE SALTS	MAXIMUM 5mmhos/cm
PH	6.0 – 8.0
AG INDEX	> 10
MATURITY INDICATOR EXPRESSED AS PERCENTAGE OF GERMINATION/VIGOR	80+/80+
MATURITY INDICATOR EXPRESSED AS AMMONIA N/ NITRATE N RATIO	< 4
MATURITY INDICATOR EXPRESSED AS CARBON TO NITROGEN RATIO	20:1
TESTED FOR CLOPYRALID	YES/NEGATIVE RESULT
MOISTURE CONTENT	30–60 %
ORGANIC MATTER CONTENT	25–45 % OF DRY WEIGHT
PARTICLE SIZE DISTRIBUTION	3" (75mm) 100% PASSING 1" (25mm) 95% TO 100% PASSING 1/4" (6.5mm) 65% TO 90% PASSING 3/8" (9.5mm) 50% TO 60% PASSING #4 (4.75 mm) 0 TO 35% PASSING
PRIMARY, SECONDARY NUTRIENTS; TRACE ELEMENTS	MUST BE REPORTED
TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA + CLOPYRALID
ORGANIC MATTER PER CUBIC YARD	MUST REPORT
CHEMICAL CONTAMINANTS	MEET OR EXCEED US EPA CLASS A STANDARD, 40 CFR 503.1 TABLES 1 & 3 LEVELS
MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT	FULLY PERMITTED UNDER COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
RISK FACTOR RELATING TO PLANT GERMINATION AND HEALTH	LOW

NOTE: IF A BIOSOLID COMPOST IS TO BE UTILIZED IT SHALL BE PRODUCED BY A FACILITY IN POSSESSION OF A VALID NOTICE OF AUTHORIZATION (NOA) FOR THE UNRESTRICTED USE AND DISTRIBUTION BY THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT. THE NOA SHALL BE PROVIDED UPON REQUEST TO CITY OF LONE TREE.

CFB COMPOST FILTER BERM 3 ⚠



DETAIL 4 ⚠
SCALE: 1" = 10'-0"

SECTION B
SCALE: 1" = 10'-0"

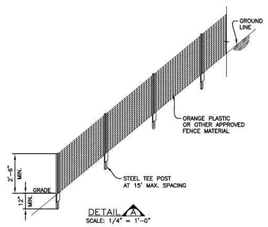
CONCRETE WASHOUT AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF CONCRETE WASHOUT AREA.
2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL (DETAIL 24) IS REQUIRED AT THE ACCESS POINT.
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
2. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.
4. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

CWA CONCRETE WASHOUT AREA 4



DETAIL 5 ⚠
SCALE: 1/4" = 1'-0"

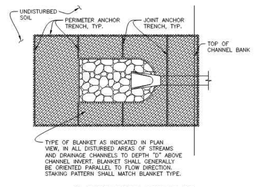
CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - TYPE OF CONSTRUCTION LIMIT INDICATOR (FENCE OR MARKERS).
   - LOCATION AND LENGTH OF FENCE OR LINE OF MARKERS.
2. CONSTRUCTION FENCE OR MARKERS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO OTHER BMPS AND ANY LAND–DISTURBING ACTIVITIES.
3. STEEL TEE POSTS SHALL BE UTILIZED FOR SUPPORT OF CONSTRUCTION FENCE. MAXIMUM SPACING FOR TEE POSTS SHALL BE 15'.

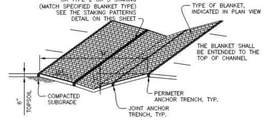
CONSTRUCTION FENCE MAINTENANCE NOTES

1. ANY DAMAGED FENCE OR MARKERS SHALL BE REPAIRED ON A DAILY BASIS.
2. FENCE OR MARKERS SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF ANY DISTURBED AREA

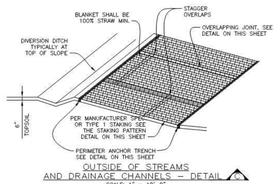
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



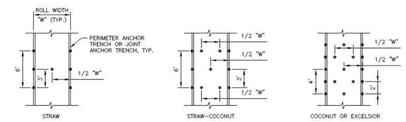
IN DISTURBED AREAS OF STREAMS AND DRAINAGE CHANNELS – DETAIL A
SCALE: 1" = 10'-0"



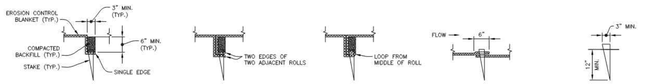
IN DIVERSION DITCH OR SMALL DITCH DRAINAGEWAY – DETAIL B
SCALE: 1" = 10'-0"



OUTSIDE OF STREAMS AND DRAINAGE CHANNELS – DETAIL C
SCALE: 1" = 10'-0"



STAKING PATTERNS
SCALE: 1" = 10'-0"
SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION. IF NO MANUFACTURER'S SPECIFICATION IS AVAILABLE USE THE ACCEPTABLE STAKING PATTERN (AS SHOWN ABOVE).



EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION OF PERIMETER OF EROSION CONTROL BLANKET.
   - TYPE OF BLANKET (STRAW, STRAW–COCONUT, COCONUT, OR EXCELSIOR).
   - AREA "A" IN SQUARE YARDS OF EACH TYPE OF BLANKET.
2. ALL EROSION CONTROL BLANKETS AND NETTING SHALL BE MADE OF 100% NATURAL AND BIODEGRADABLE MATERIAL; NO PLASTIC OR OTHER SYNTHETIC MATERIAL, EVEN IF PHOTO DEGRADABLE, SHALL BE ALLOWED.
3. IN AREAS WHERE EROSION CONTROL BLANKET IS SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING BELOW THE BLANKET IN ACCORDANCE WITH THE REQUIREMENTS OF DETAIL 17. SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO BLANKET INSTALLATION AND THE BLANKET SHALL BE IN FULL CONTACT WITH SUBGRADE; NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
4. PERIMETER ANCHOR TRENCH SHALL BE USED AT OUTSIDE PERIMETER OF ALL BLANKET AREAS.
5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL BLANKETS EXCEPT STRAW, WHICH MAY USE AN OVERLAPPING JOINT.
6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE–HALF THE ROLL LENGTH FOR COCONUT AND EXCELSIOR BLANKETS.
7. THE OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER FOR BLANKETS ON SLOPES.
8. MATERIAL SPECIFICATIONS OF EROSION CONTROL BLANKET SHALL CONFORM TO TABLE 7.1.

EROSION CONTROL BLANKET INSTALLATION NOTES – CONTINUED

9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING EROSION CONTROL BLANKET SHALL BE RESEEDED AND MULCHED IN ACCORDANCE WITH DETAIL 17.
10. SEE DRAINAGE DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION MEASURES THAT MAY EXCEED THE DESIGN CONDITIONS ASSOCIATED WITH THE DETAILS ABOVE.

TABLE 7.1 – EROSION CONTROL BLANKET TYPE

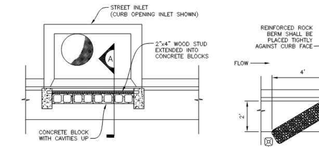
TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	NETTING MIN.
STRAW*	–	100%	–	DOUBLE/NATURAL
STRAW–COCONUT*	30% MIN.	70% MAX.	–	DOUBLE/NATURAL
COCONUT	100%	–	–	DOUBLE/NATURAL
EXCELSIOR	–	–	100%	DOUBLE/NATURAL

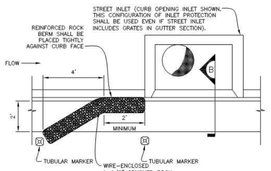
* FOR OUTSIDE OF STREAMS AND DRAINAGE CHANNELS

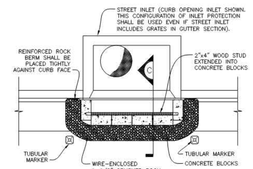
EROSION CONTROL BLANKET MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT EROSION CONTROL BLANKETS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS AS NECESSARY.
2. EROSION CONTROL BLANKET IS TO BE LEFT IN PLACE UNLESS REQUESTED TO BE REMOVED BY THE CITY.
3. ANY EROSION CONTROL BLANKET PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE RE–INSTALLED. ANY SUBGRADE AREAS BELOW THE BLANKET THAT HAVE ERODED TO CREATE A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE EROSION CONTROL BLANKET REINSTALLED.

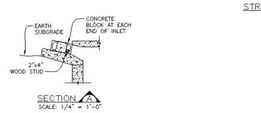
ECB EROSION CONTROL BLANKET 9

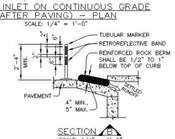


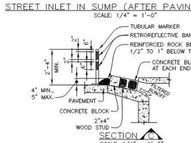


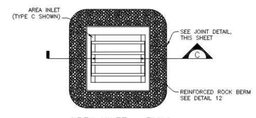


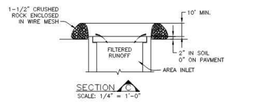












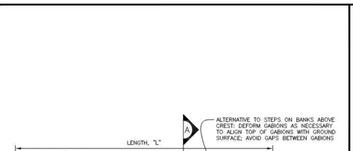
INLET PROTECTION INSTALLATION NOTES

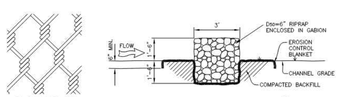
1. INTERIM CONFIGURATION OF INLET PROTECTION IN STREETS SHALL BE INSTALLED WITHIN 48–HOURS OF POURING INLET. INLET PROTECTION (AFTER PAVEMENT) SHALL BE INSTALLED WITHIN 48 HOURS AFTER PAVING IS PLACED.
2. INLET PROTECTION AT AREA INLETS SHALL BE INSTALLED WITHIN 48–HOURS OF POURING INLET.
3. CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON SHEET 1 (1–1/2" MINUS). RECYCLED CONCRETE MEETING THIS GRADATION MAY BE USED.
4. WIRE MESH SHALL BE FABRICATED OF 10 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "HOG RINGS" OR WIRE TIES AT 6–INCH CENTERS ALONG ALL JOINTS AND AT 2–INCH CENTERS ON ENDS OF BERM.
5. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6–INCH CENTERS ALONG ALL JOINTS AND AT 2–INCH CENTERS ON ENDS OF BERM.
6. REINFORCED ROCK BERM SHALL BE CONSTRUCTED IN ONE PIECE OR SHALL BE CONSTRUCTED USING JOINT DETAIL.
7. TUBULAR MARKERS SHALL MEET REQUIREMENTS OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED.
8. THE TOP OF REINFORCED ROCK BERM SHALL BE 1/2"–1" BELOW TOP OF CURB.

INLET PROTECTION MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT INLET PROTECTION WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY. MORE FREQUENT INSPECTIONS AND REPAIRS SHALL BE REQUIRED DURING WINTER CONDITIONS DUE TO FREEZE/THAW PROBLEMS.
2. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF ROCK BERM IS WITHIN 2–1/2 INCHES OF THE CREST.
3. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED, UNLESS THE CITY APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.
4. WHEN INLET PROTECTION AT AREA INLETS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

IP INLET PROTECTION 10





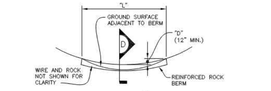
REINFORCED CHECK DAM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF CHECK DAMS.
   - TYPE OF CHECK DAM (ROCK DAM OR REINFORCED CHECK DAM).
   - LENGTH, "L", CREST LENGTH, "CL", AND DEPTH, "D".
2. CHECK DAMS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND–DISTURBING ACTIVITIES.
3. REINFORCED CHECK DAMS: GABIONS SHALL HAVE GALVANIZED TWISTED WIRE NETTING WITH A MAXIMUM OPENING DIMENSION OF 4–1/2" AND A MINIMUM WIRE THICKNESS OF 0.10". WIRE "HOG RINGS" AT 4' SPACING OR OTHER APPROVED MEANS SHALL BE USED AT ALL GABION SEAMS AND TO SECURE THE GABION TO THE ADJACENT GABION.
4. RIPRAP UTILIZED FOR CHECK DAMS SHALL HAVE A D_{50} MEDIAN STONE SIZE OF 6".
5. THE CHECK DAM SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'–6".
6. EROSION BLANKET SHALL BE PLACED IN THE REINFORCED CHECK DAM TRENCH EXTENDING A MINIMUM OF 1'–6" ON BOTH THE UPSTREAM AND DOWNSTREAM SIDES OF THE REINFORCED CHECK DAM.

REINFORCED CHECK DAM MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT CHECK DAMS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CHECK DAM IS WITHIN ½ OF THE HEIGHT OF THE CREST.
3. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
4. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACK FILL, ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

RCD REINFORCED CHECK DAM 11





REINFORCED ROCK BERM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF REINFORCED ROCK BERMS.
   - LENGTH, "L", AND DEPTH, "D" DIMENSIONS.
2. REINFORCED ROCK BERM SECTION APPLIES TO CULVERT INLET FILTER AND INLET PROTECTION.
3. CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON SHEET 1 (1–1/2" MINUS). RECYCLED CONCRETE MEETING THIS GRADATION MAY BE USED.
4. WIRE MESH SHALL BE FABRICATED OF 10 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE"). ROLL WIDTH SHALL BE 48–INCHES.
5. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6–INCH CENTERS ON ENDS OF BERM.
6. FOR CONCENTRATED FLOW AREAS THE ENDS OF THE REINFORCED ROCK BERM SHALL BE 12" HIGHER THAN THE CENTER OF THE BERM.

REINFORCED ROCK BERM MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT REINFORCED ROCK BERM WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF REINFORCED ROCK BERM SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF FILTER IS WITHIN 5 INCHES OF THE CREST.
3. REINFORCED ROCK BERMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED.
4. WHEN REINFORCED ROCK BERMS ARE REMOVED, ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

RRB REINFORCED ROCK BERM 12

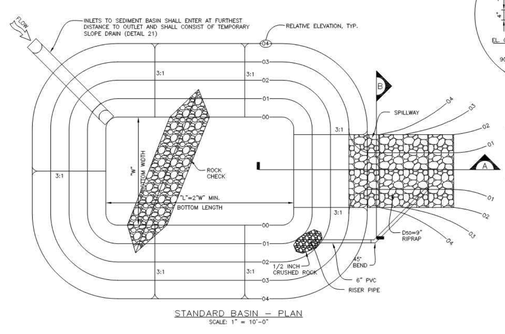
INSTALLATION NOTES

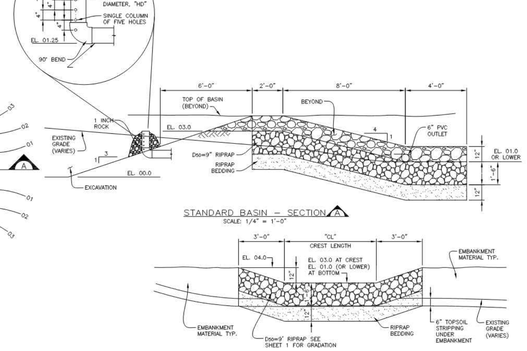
1. SEE PLAN VIEW FOR:
   - LOCATIONS OF CULVERT INLET FILTERS.
   - LENGTH, "L", AND DEPTH, "D".
2. CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON SHEET 1 (1–1/2" MINUS). RECYCLED CONCRETE MEETING THIS GRADATION MAY BE USED.
3. WIRE MESH SHALL BE FABRICATED OF 10 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE").
4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6–INCH CENTERS ALONG ALL JOINTS AND AT 2–INCH CENTERS ON ENDS OF BERM.
5. THE ENDS OF THE REINFORCED ROCK BERM SHALL BE 12" HIGHER THAN THE CENTER OF THE BERM.

MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT CULVERT INLET FILTER WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF CULVERT INLET FILTER SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF FILTER IS ½ THE HEIGHT OF THE REINFORCED ROCK BERM.
3. RRB FOR CULVERT PROTECTION ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
4. WHEN CULVERT INLET FILTERS ARE REMOVED, ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

RRC RRB FOR CULVERT PROTECTION 13





SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION OF SEDIMENT BASIN.
   - TYPE OF BASIN (STANDARD BASIN OR NON–STANDARD BASIN).
   - FOR STANDARD BASIN, CREST LENGTH, "CL", BOTTOM WIDTH, "W", AND HOLE DIAMETER, "HD".
   - FOR NON–STANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT, "H", NUMBER OF COLUMNS, "N", HOLE DIAMETER, "HD", AND PIPE DIAMETER "D".
2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
3. SEDIMENT BASINS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY OTHER LAND–DISTURBING ACTIVITY.
4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY WITHIN 2 PERCENTAGE POINTS OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
6. PIPE SCH 40 OR GREATER SHALL BE USED.
7. THE DETAILS SHOWN ON THIS SHEET PERTAIN TO STANDARD SEDIMENT BASIN(S) IDENTIFIED ON THE GESC PLAN VIEW DRAWINGS USED FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SEDIMENT BASIN MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT SEDIMENT BASIN WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED IN SEDIMENT BASIN SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 2.0 FEET OF THE CREST OF THE SPILLWAY.
3. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
4. IF SEDIMENT BASINS ARE REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

SB SEDIMENT BASIN 14

Sheet Revisions		
6/30/05	ADOPTED FROM DOUGLAS COUNTY GESC PLANS	MLP
5/ /08	EDIT UPDATES A	GAW
11/ /08	ADD CURB SOCK DETAIL B (REF UDFCD, V3 FIGURE C5–23), MISC. NOTE EDITS	GAW

NOTE: SCALES SHOWN ARE FOR 24"x36" SHEETS; ADJUST ACCORDINGLY FOR 11"x17" SHEETS.

CITY OF LONE TREE
DEPARTMENT OF PUBLIC WORKS
Engineering Division

GESC GRADING, EROSION, AND SEDIMENT CONTROL

GESC PLAN STANDARD NOTES AND DETAILS

SHEET 2 OF 3

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
EROSION CONTROL DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

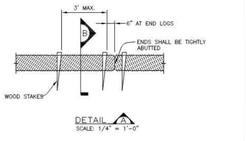
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED BY ANY PERSON FOR ANY PURPOSE, EXCEPT AS AUTHORIZED IN WRITING BY MARTIN/MARTIN, INC. IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C255

PLOT DATE: Thursday, November 20, 2025 11:21 AM LAST SAVED BY: JDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998–DCSD – RidgeGate Elementary School\PLANS\CDs\C254 – EROSION CONTROL DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



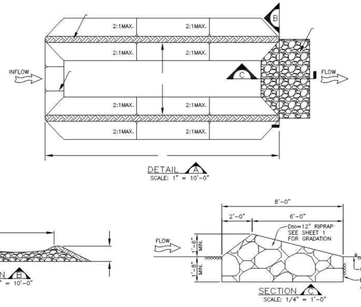
SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION AND LENGTH OF SEDIMENT CONTROL LOG.
2. SEDIMENT CONTROL LOGS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR, OR COCONUT FIBER.
4. NOT FOR USE IN CONCENTRATED FLOW AREAS.
5. THE SEDIMENT CONTROL LOG SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 2".

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT SEDIMENT CONTROL LOGS DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOGS SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN ½ THE HEIGHT OF THE CREST OF LOG.
3. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

SCL SEDIMENT CONTROL LOG 15



SEDIMENT TRAP INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION, LENGTH AND WIDTH OF SEDIMENT TRAP.
2. SEDIMENT TRAPS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
3. SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
4. RIPRAP OUTLET SHALL BE CONSTRUCTED WITH D =12" RIPRAP WITH A MINIMUM OVERFLOW OF 6".
5. THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RIPRAP OUTLET STRUCTURE.
6. THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

SEDIMENT TRAP MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT SEDIMENT TRAPS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF RIPRAP SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN ½ THE HEIGHT OF THE RIPRAP OUTLET STRUCTURE.
3. SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVERAGE IS APPROVED BY THE CITY.
4. WHEN SEDIMENT TRAPS ARE REMOVED THE DISTURBED AREA SHALL BE DRILLED SEEDED AND CRIMP MULCHED OR STABILIZED IN A MANNER APPROVED BY THE CITY.

ST SEDIMENT TRAP 16

SEEDING AND MULCHING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - AREA OF SEEDING AND MULCHING.
   - TYPE OF SEED MIX (PERMANENT, TEMPORARY, OR LOW-GROWTH).
2. ALL BRANDS FURNISHED SHALL BE FREE FROM SUCH NOXIOUS SEEDS AS RUSSIAN OR CANADIAN THISTLE, COARSE FESCUE, EUROPEAN BINDWEED, JOHNSON GRASS, KNAP WEED AND LEAFY SPURGE.
3. THE SEEDER SHALL FURNISH TO THE CONTRACTOR A SIGNED STATEMENT CERTIFYING THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY. SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE WILL NOT BE ACCEPTABLE. SEED TICKETS SHALL BE PROVIDED TO CITY OF LONE TREE UPON REQUEST.
4. DRILL SEEDING MIX SHALL CONFORM TO THE TABLE ON THE RIGHT:
5. IF THE SEED AVAILABLE ON THE MARKET DOES NOT MEET THE MINIMUM PURITY AND GERMINATION PERCENTAGES SPECIFIED, THE SUBCONTRACTOR MUST COMPENSATE FOR A LESSER PERCENTAGE OF PURITY OR GERMINATION BY FURNISHING SUFFICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PRODUCT. THE TAGS FROM THE SEED MIXES MUST BE SUPPLIED TO CONTRACTOR AND FORWARDED TO THE CITY OF LONE TREE GESC INSPECTOR.
6. THE FORMULA USED FOR DETERMINING THE QUANTITY OF PURE LIVE SEED (PLS) SHALL BE (POUNDS OF SEED) X (PURITY) X (GERMINATION) = POUNDS OF PURE LIVE SEED (PLS).
7. PERMANENT SEED MIX SHALL BE USED UNLESS OTHERWISE APPROVED BY THE CITY.
8. ALL AREAS TO BE SEEDED AND MULCHED SHALL HAVE NATIVE TOPSOIL OR APPROVED SOIL AMENDMENTS SPREAD TO A DEPTH OF AT LEAST 6 INCHES (LOOSE DEPTH). HAUL ROADS AND OTHER COMPACTED AREAS SHALL BE LOOSENED TO A DEPTH OF 6 INCHES PRIOR TO SPREADING TOPSOIL.
9. SOIL IS TO BE THOROUGHLY LOOSENED (TILLED) TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO SEEDING. THE TOP 6 INCHES OF THE SEED BED SHALL BE FREE OF ROCKS GREATER THAN 4 INCHES AND SOIL CLODS GREATER THAN 2 INCHES. SEEDING OVER ANY COMPACTED AREAS THAT HAVEN'T BEEN THOROUGHLY LOOSENED SHALL BE REJECTED.
10. SEED IS TO BE APPLIED USING A MECHANICAL DRILL TO A DEPTH OF 1/4 INCH. ROW SPACING SHALL BE NO MORE THAN 6 INCHES. MATERIAL USED FOR MULCH SHALL CONSIST OF LONG-STEMMED STRAW, AT LEAST 50 PERCENT OF THE MULCH, BY WEIGHT, SHALL BE 10 INCHES OR MORE IN LENGTH. MULCH SHALL BE APPLIED AND MECHANICALLY ANCHORED TO A DEPTH OF AT LEAST 2 INCHES. MULCH SHALL BE APPLIED AT A RATE OF 4000 LB. OF STRAW PER ACRE.
11. IF THE PERMITTEE DEMONSTRATES TO THE CITY THAT IT IS NOT POSSIBLE TO DRILL SEED, SEED IS TO BE UNIFORMLY BROADCAST AT TWO TIMES THE DRILLED RATE, THEN LIGHTLY HARROWED TO A DEPTH OF APPROXIMATELY ¼ INCH. THE SEED SHALL BE COVERED WITH APPROXIMATELY 1/4 INCH, THEN ROLLED TO COMPACT, THEN MULCHED AS SPECIFIED ABOVE.
12. SEEDING AND MULCHING SHALL BE COMPLETED WITHIN 30 DAYS OF INITIAL EXPOSURE OR 7 DAYS AFTER GRADING IS SUBSTANTIALLY COMPLETE IN A GIVEN AREA (AS DEFINED BY THE CITY). THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.
13. MULCH SHALL BE APPLIED WITHIN 24-HOURS OF SEEDING.
14. TACKIFIER SHOULD BE UTILIZED TO HELP WITH STRAW DISPLACEMENT.

SEEDING AND MULCHING MAINTENANCE NOTES

1. SEEDED AND MULCHED AREAS SHALL BE INSPECTED FOR REQUIRED COVERAGE MONTHLY FOR A PERIOD OF TWO YEARS FOLLOWING INITIAL SEEDING. REPAIRS AND RE-SEEDING AND MULCHING SHALL BE UNDERTAKEN AFTER THE FIRST GROWING SEASON FOR ANY AREAS FAILING TO MEET THE REQUIRED COVERAGE.
2. REQUIRED COVERAGE FOR STANDARD, OPEN SPACE AND LOW GROWTH SEED MIXES SHALL BE DEFINED AS FOLLOWS:
   1. THREE (3) PLANTS PER SQUARE FOOT WITH A MINIMUM HEIGHT OF 3 INCHES. THE 3 PLANTS PER SQUARE FOOT SHALL BE OF THE VARIETY AND SPECIES FOUND IN THE CITY OF LONE TREE-APPROVED MIX.
   2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR EQUIVALENT).
   3. FREE OF ERODED AREAS.
   4. FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.
3. REQUIRED COVERAGE FOR TURF GRASS AREAS SHALL BE DEFINED AS FOLLOWS:
   1. AT LEAST 80% VEGETATIVE COVER OF GRASS SPECIES PLANTED.
   2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR EQUIVALENT).
   3. FREE OF ERODED AREAS.
   4. FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.
4. RILL AND GULLY EROSION SHALL BE FILLED WITH TOPSOIL PRIOR TO RESEEDING. THE RESEEDING METHOD SHALL BE APPROVED BY THE CITY.

CITY OF LONE TREE PERMANENT DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BIG BLUESTEM	KAW	PNWS	10	1.1
YELLOW INDIANGRASS	CHEYENNE	PNWS	10	1
SWITCHGRASS	BLACKWELL	PNWS	10	0.4
SIDEOATS GRAMA	VAUGHN	PNWB	10	0.9
WESTERN WHEATGRASS	ARRIBA	PNCS	10	1.6
BLUE GRAMA	HACHITA	PNWB	10	0.3
THICKSPIKE WHEATGRASS	CRITANA	PNCS	10	1
PRAIRIE SANDREED	GOSHEN	PNWS	10	0.7
GREEN NEEDLEGRASS	LODORM	PNCB	10	1
SLENDER WHEATGRASS	PRYOR	PNCB	5	0.6
STREAMBANK WHEATGRASS	SODAR	PNCS	5	0.6
		TOTAL		9.2

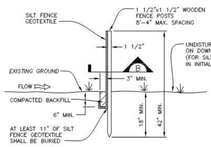
CITY OF LONE TREE TEMPORARY DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
SMOOTH BROMEGRASS	LINCOLN	PICS	30	3.9
INTERMEDIATE WHEATGRASS	OAHE	PICS	30	4.5
PUBESCENT WHEATGRASS	LUNA	PICS	30	4.2
ANNUAL RYEGRASS	N/A	AICB	10	0.8
		TOTAL		13.4

CITY OF LONE TREE LOW-GROWTH DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BUFFALOGRASS	TEXOKA	PNWS	20	3.2
BLUE GRAMA	HACHITA	PNWB	20	0.6
WESTERN WHEATGRASS	ARRIBA	PNCS	20	3.2
SIDEOATS GRAMA	VAUGHN	PNWB	20	1.8
THICKSPIKE WHEATGRASS	CRITANA	PNCS	10	1
STREAMBANK WHEATGRASS	SODAR	PNCS	10	1.2
		TOTAL		11.0

SM SEEDING AND MULCHING 17



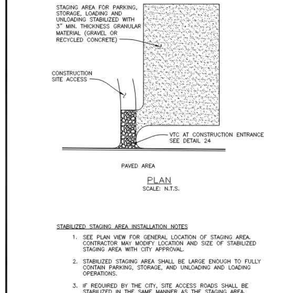
SILT FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION AND LENGTH OF FENCE.
2. ANCHOR TRENCH SHALL BE EXCAVATED WITH TRENCHER, OR WITH SILT FENCE INSTALLATION MACHINE; NO ROAD GRADERS, BACKHOES, ETC. SHALL BE USED. TRENCH SHALL BE COMPACTED BY HAND, WITH "JUMPING JACK", OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
3. SILT FENCE GEOTEXTILE SHALL MEET THE FOLLOWING REQUIREMENTS:
   - 6-TO 12-GALLONS PER MINUTE PER SQUARE FOOT FLOW CAPACITY.
   - 90 LB. TENSILE STRENGTH PER ASTM D4632.
   - UV DESIGN AT 500 HRS MIN. 70% STRENGTH RETAINED PER ASTM D 4355.
4. SILT FENCE INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT SILT FENCE DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SILT FENCE SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT REACHES A DEPTH OF 6-INCHES.
3. SILT FENCE SHALL BE REMOVED WHEN THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

SF SILT FENCE 18



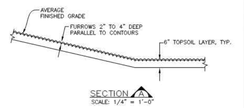
STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR GENERAL LOCATION OF STAGING AREA. CONTRACTOR MAY MODIFY LOCATION AND SIZE OF STABILIZED STAGING AREA WITH CITY APPROVAL.
2. STABILIZED STAGING AREA SHALL BE LARGE ENOUGH TO FULLY CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
3. IF REQUIRED BY THE CITY, SITE ACCESS ROADS SHALL BE STABILIZED IN THE SAME MANNER AS THE STAGING AREA.
4. STAGING AREA SHALL BE STABILIZED PRIOR TO ANY OTHER OPERATIONS ON THE SITE.
5. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM OF 3" OF GRANULAR MATERIAL (GRAVEL OR RECYCLED CONCRETE).

STABILIZED STAGING AREA MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT THE STABILIZED STAGING AREA WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. GESC MANAGER SHALL PROVIDE ADDITIONAL THICKNESS OF GRANULAR MATERIAL IF ANY RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.
3. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
4. ANY ACCUMULATED DIRT OR MUD SHALL BE REMOVED FROM THE SURFACE OF THE STABILIZED STAGING AREA.
5. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE CITY, USED ON SITE, AND THE AREA TOPSOILED, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED.

SSA STABILIZED STAGING AREA 19



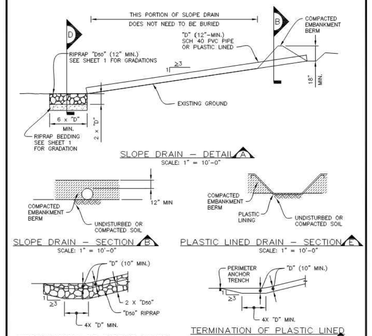
SURFACE ROUGHENING INSTALLATION NOTES

1. SURFACE ROUGHENING SHALL BE PROVIDED ON ALL FINISHED GRADES/ FACILITIES AT SITE THAT ARE WITHIN 2 DAYS OF COMPLETION OF FINISHED GRADE (FOR AREAS NOT RECEIVING TOPSOIL) OR WITHIN 2 DAYS OF TOPSOIL PLACEMENT.
2. AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD IS TO BE PLACED WITHIN 7-DAYS OF FINISHED GRADING DO NOT NEED TO BE SURFACE ROUGHENED.
3. DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPING OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.

SURFACE ROUGHENING MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT THE SURFACE ROUGHENING WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. VEHICLES AND EQUIPMENT SHALL GENERALLY BE CONFINED TO ACCESS DRIVES AND SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.
3. IN NON-TURF GRASS FINISHED AREAS, SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST SMOOTHING OUT THE SURFACE.
4. IN AREAS NOT SEEDED AND MULCHED AFTER SURFACE ROUGHENING, SURFACES SHALL BE RE-ROUGHENED AS NECESSARY TO MAINTAIN GROOVE DEPTH AND SMOOTH OVER ANY RILL EROSION.

SR SURFACE ROUGHENING 20



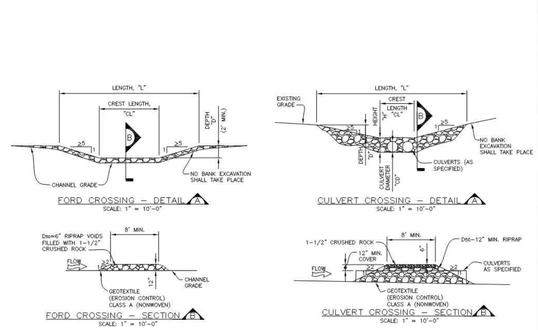
SLOPE DRAIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION AND LENGTH OF SLOPE DRAIN.
   - PIPE DIAMETER, "D", AND RIPRAP SIZE, "Dso".
2. SLOPE DRAIN DIMENSIONS SHALL BE CONSIDERED MINIMUM DIMENSIONS; CONTRACTOR MAY ELECT TO INSTALL LARGER FACILITIES. ANY DAMAGE TO SLOPE OR SLOPE DRAIN DURING RUNOFF EVENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
3. SLOPE DRAINS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY UPSTREAM LAND-DISTURBING ACTIVITIES.
4. FOR TEMPORARY SLOPE DRAINS, PIPE MAY BE INSTALLED ON TOP OF SLOPE; HOWEVER, 12" MIN. COVER AT TOP OF SLOPE SHALL BE PROVIDED.
5. A RIPRAP PAD SHALL BE PLACED AT THE OUTFALL OF THE SLOPE DRAIN.

SLOPE DRAIN MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT SLOPE DRAINS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS AS NECESSARY.
2. TEMPORARY SLOPE DRAINS ARE TO REMAIN IN PLACE UNTIL NO LONGER NEEDED, BUT SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION. WHEN SLOPE DRAINS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

TSD TEMPORARY SLOPE DRAIN 21



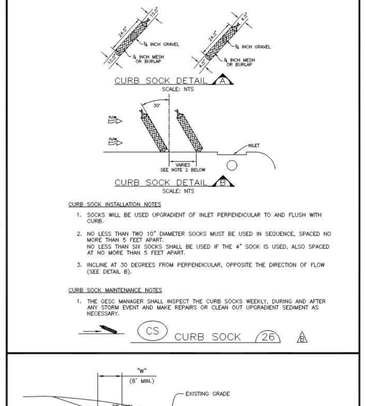
TEMPORARY STREAM CROSSING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF TEMPORARY STREAM CROSSING.
   - STREAM CROSSING TYPE (FORD OR CULVERT).
   - FOR FORD CROSSING: LENGTH, "L"; CREST LENGTH, "CL"; AND DEPTH, "D".
   - FOR CULVERT CROSSING - LENGTH, "L"; CREST LENGTH, "CL"; CROSSING HEIGHT, "H", DEPTH, "D", CULVERT DIAMETER, "CD", AND NUMBER, TYPE AND CLASS OR GAUGE OF CULVERTS.
2. TEMPORARY STREAM CROSSING DIMENSIONS, DSO, AND NUMBER OF CULVERTS INDICATED (FOR CULVERT CROSSING) SHALL BE CONSIDERED MINIMUM DIMENSIONS; ENGINEER MAY ELECT TO INSTALL LARGER FACILITIES. ANY DAMAGE TO STREAM CROSSING OR EXISTING STREAM CHANNEL DURING BASEFLOW OR FLOOD EVENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
3. SEE SHEET 1 FOR RIPRAP AND 1-1/2" CRUSHED ROCK GRADATIONS.
4. FOR A TEMPORARY STREAM CROSSING THAT WILL CARRY LOADS, THE TEMPORARY STREAM CROSSING MUST BE DESIGNED BY THE DESIGN ENGINEER.

TEMPORARY STREAM CROSSING MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT STREAM CROSSINGS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF STREAM CROSSINGS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CROSSING IS WITHIN 6-INCHES OF THE CREST EVEN (FORD CROSSING) OR GREATER THAN AN AVERAGE DEPTH OF 12-INCHES (CULVERT CROSSING).
3. STREAM CROSSINGS ARE TO REMAIN IN PLACE UNTIL NO LONGER NEEDED, BUT SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION.
4. WHEN STREAM CROSSINGS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

TSC TEMPORARY STREAM CROSSING 22



CURB SOCK INSTALLATION NOTES

1. SOCKS WILL BE USED UPGRADIENT OF INLET PERPENDICULAR TO AND FLUSH WITH CURB.
2. NO LESS THAN TWO 10" DIAMETER SOCKS MUST BE USED IN SEQUENCE, SPACED NO MORE THAN 5 FEET APART. NO LESS THAN SIX SOCKS SHALL BE USED IF THE 4" SOCK IS USED, ALSO SPACED AT NO MORE THAN 5 FEET APART.
3. INCLINE AT 30 DEGREES FROM PERPENDICULAR, OPPOSITE THE DIRECTION OF FLOW (SEE DETAIL B).

CURB SOCK MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT THE CURB SOCKS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPGRADIENT SEDIMENT AS NECESSARY.

CS CURB SOCK 26

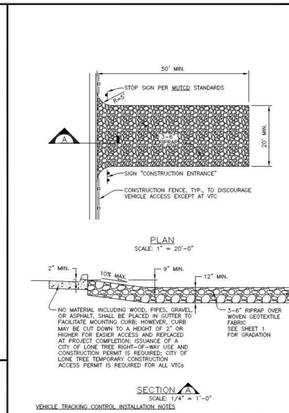
TERRACING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - WIDTH, "W", AND SLOPE, "Z".
2. TERRACING IS NOT REQUIRED FOR SLOPES OF 4 TO 1 OR FLATTER.
3. EARTH (VEGETATED) SLOPES STEEPER THAN 3 TO 1 ARE NOT ALLOWED ON THE SITE.

TERRACING MAINTENANCE NOTES

1. THE GESC MANAGER SHALL INSPECT THE SURFACE ROUGHENING WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. ANY RILL EROSION OCCURRING ON SLOPES SHALL BE REPAIRED AND RESEEDED AND MULCHED IN ACCORDANCE WITH DETAIL 17.

TER TERRACING 23



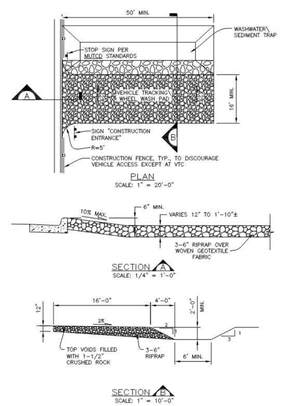
VEHICLE TRACKING CONTROL INSTALLATION NOTES

1. VEHICLE TRACKING CONTROL PADS SHALL BE INSTALLED AT EVERY ACCESS POINT TO SITE.
2. VEHICLE TRACKING CONTROL PADS SHALL CONSIST OF HARD, DENSE, DURABLE STONE, ANGULAR IN SHAPE AND RESISTANT TO WEATHERING. ROUNDED STONE OR BOULDERS WILL NOT BE ACCEPTABLE. THE STONES SHALL BE 3" WITH A MINIMUM SIZE OF 4". THE STONE SHALL HAVE A SPECIFIC GRAVITY OF AT LEAST 2.6. CONTROL OF GRADATION WILL BE BY VISUAL INSPECTIONS.
3. WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE VTC STONE TO HELP MINIMIZE MIGRATION OF THE STONE INTO THE UNDERLYING MATERIAL.
4. ANY CRACKED OR DAMAGED CURB AND GUTTER AND SIDEWALK SHALL BE REPLACED BY PERMITTEE.
5. A CITY OF LONE TREE TEMPORARY CONSTRUCTION ACCESS PERMIT IS REQUIRED FOR EACH ACCESS/EXIT POINT FROM THE SITE.
6. A STOP SIGN INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED, SHALL BE INSTALLED FOR EXISTING TRAFFIC AT THE VTC.

VEHICLE TRACKING CONTROL MAINTENANCE NOTES

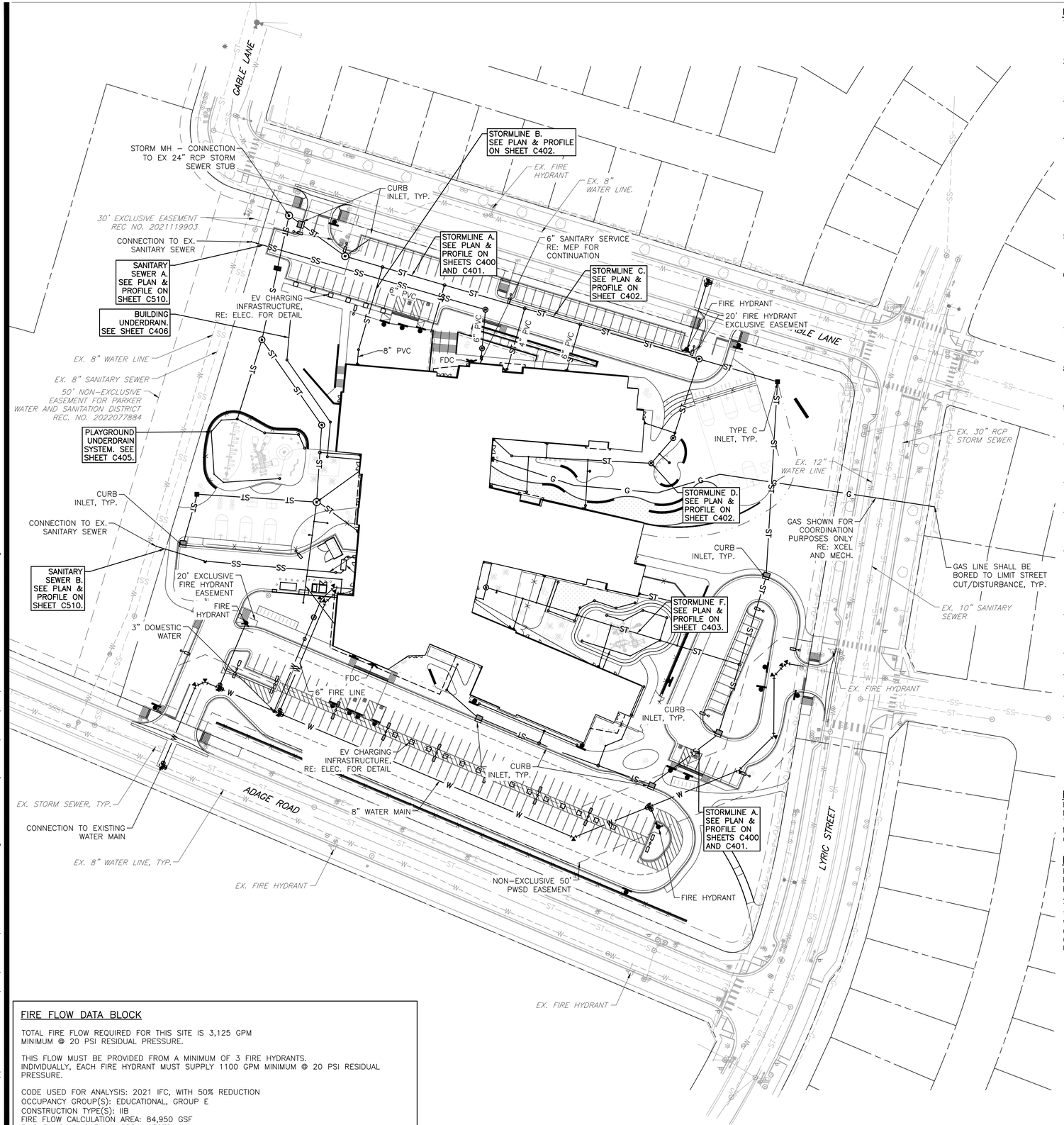
1. GESC MANAGER SHALL INSPECT VEHICLE TRACKING CONTROL PADS DAILY. ACCUMULATED SEDIMENTS SHALL BE REMOVED FROM PAD SURFACE. STONE SURFACE SHALL BE CLEAN AND LOOSE ENOUGH TO RUT SLIGHTLY UNDER WHEEL LOADS SUFFICIENTLY TO CAUSE LOOSE GRAVEL TO DISLODGE MUD/SEDIMENT FROM VEHICLE TIRES. WHEN STONE BECOMES COMPACTED AND/OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONTRACTOR SHALL RIP, TURN OVER, OR OTHERWISE LOOSEN THE STONE, PLACE ADDITIONAL NEW STONE, OR REPLACE STONE AS NECESSARY TO RESTORE EFFECTIVENESS.
2. VEHICLE TRACKING CONTROL SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE STONE MATERIAL AND GEOTEXTILE REMOVED OR, IF APPROVED BY THE CITY, USED ON SITE, AND THE AREA TOPSOILED, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN CONFORMANCE WITH CITY APPROVED PLANS FOR SITE AND THE APPLICABLE GESC PERMIT.

VTC VEHICLE TRACKING CONTROL 24



VEHICLE TRACKING CONTROL WITH WHEEL WASH INSTALLATION NOTES

1. ALTHOUGH NOT NORMALLY USED, THE CITY RESERVES THE RIGHT TO REQUIRE VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES AT SITES WHERE TRACKING ONTO PAVED AREAS BECOMES A SIGNIFICANT PROBLEM.
2. IF VEHICLE TRACKING CONTROL WITH WHEEL W



UTILITY NOTES:

1. THE CONTRACTOR SHALL VERIFY ELEVATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY CONFLICTS.
2. ALL EXISTING AND PROPOSED MANHOLES, VAULTS, VALVE BOXES, HAND–HOLES, ETC., SHALL BE ADJUSTED TO PROPOSED GRADES.
3. THE CONTRACTOR TO COORDINATE UTILITIES AT BUILDING WITH PLUMBING PLANS. NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. RIM ELEVATIONS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS TO ADJUST THE MANHOLE FRAME AND COVER TO THE REQUIRED FINAL GRADE. THE PIPELINE CONTRACTOR MAY NEED TO REMOVE AND REPLACE THE PRECAST CONE SECTION SUCH THAT THERE IS NO MORE THAN EIGHTEEN (18) INCHES FROM FINISHED GRADE TO THE TOP OF THE MANHOLE CONE SECTION.
5. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT BY INTERTEK PSI, DATED JUNE 13, 2025.
6. THE CONTRACTOR SHALL COORDINATE GAS, ELECTRIC AND COMMUNICATIONS SERVICES WITH UTILITY PROVIDERS. LOCATIONS OF GAS, ELECTRIC AND COMMUNICATIONS LINES SHALL BE COORDINATED WITH PROPOSED IMPROVEMENTS.
7. PROVIDE TWO–WAY CLEANOUTS AT BUILDING SANITARY SEWER AND ROOF DRAIN SERVICE CONNECTIONS AS REQUIRED BY PLUMBING CODE.
8. SEE STORM PLANS FOR STORM SEWER DESIGN. SEE WATER PLANS FOR WATER LINE DESIGN. SEE SANITARY SEWER PLANS FOR SANITARY SEWER DESIGN.
9. WATER LINE CONSTRUCTION SHALL BE PER PARKER WATER AND SANITATION DISTRICT STANDARDS & SPECIFICATIONS.
10. SANITARY SEWER CONSTRUCTION SHALL BE PER PARKER WATER AND SANITATION DISTRICT STANDARDS & SPECIFICATIONS.
11. STORM SEWER CONSTRUCTION SHALL BE PER DOUGLAS COUNTY STANDARDS & SPECIFICATIONS.
12. THE CONTRACTOR SHALL ADJUST ALL MANHOLE COVERS, VALVE BOXES, UTILITY BOXES, ETC., TO MATCH FINAL GRADE.
13. THE CONTRACTOR SHALL COORDINATE ALL UTILITY LINE CONNECTIONS AT BUILDING WITH THE MECHANICAL, ELECTRICAL AND PLUMBING PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE PROPERLY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
14. SEE GRADING PLANS FOR GRADES AT LIGHTPOLES AND TRANSFORMERS. SEE HORIZONTAL CONTROL PLANS FOR COORDINATES OF LIGHTPOLES AND TRANSFORMERS.
15. SEE NOTES SHEETS FOR ADDITIONAL NOTES.
16. SEE STORM SEWER PLANS FOR STORM DESIGN.
17. SEE WATER PLANS FOR WATER DESIGN.
18. SEE SANITARY SEWER FOR SANITARY SEWER DESIGN.

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT–OF–WAY LINE	
	EASEMENT	
	RETAINING WALL	
	CURB & GUTTER	
	UTILITY CROSSING	#
ST	STORM SEWER	ST
ST	STORM MANHOLE	
RD	ROOF DRAIN	RD
	STORM INLET	
	FLARED END SECTION	
SS	SANITARY SEWER	SS
SS	SANITARY MANHOLE	
	CLEAN OUT	
W	WATER LINE	W
	WATER VALVE	
	FIRE HYDRANT	
WM	WATER METER	
IR	IRRIGATION LINE	IR
IRR	IRRIGATION CONTROL	IRR
OHE	OVERHEAD ELECTRIC	
E	ELECTRIC LINE	E
	LIGHT POLE	
	POWER POLE	
ELEC	ELECTRIC METER	
T	TELEPHONE LINE	T
TEL	TELEPHONE PEDESTAL	T
CT	CABLE TV	CT
G	GAS LINE	G
DRIVE	DESCRIPTIONS	DRIVE

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3–1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I–25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

FIRE FLOW DATA BLOCK

TOTAL FIRE FLOW REQUIRED FOR THIS SITE IS 3,125 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.

THIS FLOW MUST BE PROVIDED FROM A MINIMUM OF 3 FIRE HYDRANTS. INDIVIDUALLY, EACH FIRE HYDRANT MUST SUPPLY 1100 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.

CODE USED FOR ANALYSIS: 2021 IFC, WITH 50% REDUCTION
OCCUPANCY GROUP(S): EDUCATIONAL, GROUP E
CONSTRUCTION TYPE(S): IIB
FIRE FLOW CALCULATION AREA: 84,950 GSF
THIS BUILDING IS FULLY SPRINKLERED
AVERAGE HYDRANT SPACING: 400 FT
MAXIMUM DISTANCE FROM HYDRANT TO ANY POINT ON STREET OR ROAD FRONTAGE: 225 FT

COLORADO 811 — KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2–BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

N

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
OVERALL UTILITY PLAN

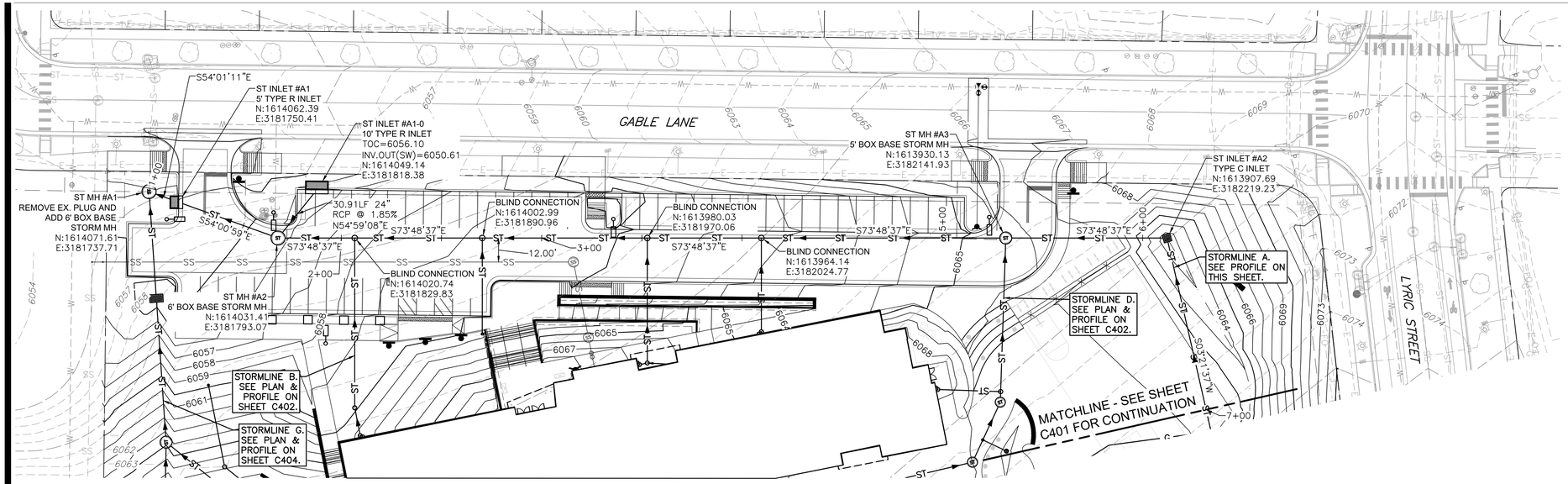
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

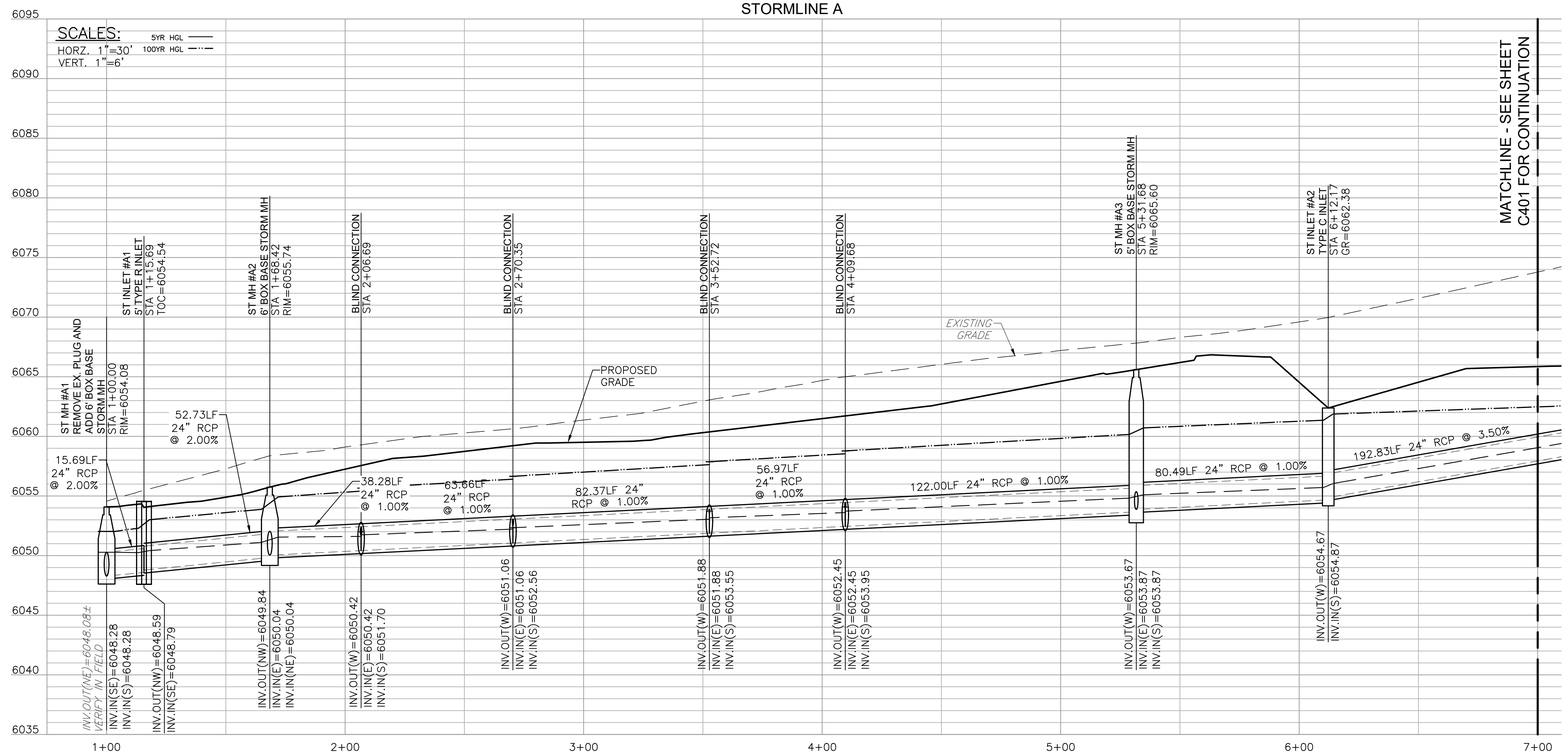
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED BY ANY PERSON FOR ANY PURPOSE EXCEPT AS AUTHORIZED IN WRITING BY MARTIN/MARTIN, INC. IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C300

PLOT DATE: Thursday, November 20, 2025 11:21 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998–DCSD – RidgeGate Elementary School\PLANS\CDs\C300 – OVERALL UTILITY PLAN.dwg



STORMLINE A



STORM SEWER NOTES:

1. STORM SEWER SHALL BE INSTALLED PER CITY OF LONE TREE STANDARDS & SPECIFICATIONS.
2. STATIONING AND COORDINATES ARE BASED ON CENTER OF MANHOLES, CLEANOUTS AND AREA INLET. STATIONING AND COORDINATES FOR CURB INLETS ARE BASED ON CENTER OF CURB INLET AT FLOWLINE. THEREFORE, DISTANCES SHOWN ON PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE WIDTHS.
3. ALL CURB INLETS ARE TYPE R, UNLESS OTHERWISE NOTED.
4. ALL RCP STORM SEWER PIPES TO BE CLASS III WITH WATERTIGHT GASKETED JOINTS.
5. STORM SEWER 12" OR SMALLER SHALL BE SDR-35 PVC WITH WATERTIGHT GASKETED JOINTS.
6. ALL NON-PIPED BUILDING DOWNSPOUT SHALL BE FITTED WITH SPLASH BLOCKS OR ROOF DRAIN EXTENSIONS IN ACCORDANCE WITH THE PROJECT GEOTECH REPORT.
7. ALL ON-GRADE CURB INLETS SHALL BE FITTED WITH VANE GRATES.
8. RIM ELEVATIONS ON MANHOLES ARE APPROXIMATE ONLY. MANHOLE RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING TO MATCH FINAL PAVING GRADES.
9. SEE GRADING PLANS FOR ROOF DRAIN AND LANDSCAPE STORM LINES.
10. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SEWER POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED SEWER.
11. RIM ELEVATIONS ON CLEANOUTS ARE APPROXIMATE ONLY. CLEANOUT RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING AND LANDSCAPING TO MATCH FINAL PAVING AND LANDSCAPE GRADES.
12. MANHOLE CONES SHALL BE ALIGNED TO PROVIDE A MINIMUM OF THREE FEET 3' CLEARANCE BETWEEN THE MANHOLE RING AND THE LIP OF GUTTER. MANHOLE COVERS SHALL BE PLACED ABOVE MANHOLE STEPS.
13. THE PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS TO ADJUST THE MANHOLE FRAME AND COVER TO REQUIRED FINAL GRADE. THE PIPELINE CONTRACTOR MAY NEED TO REMOVE AND REPLACE THE PRECAST MANHOLE CONE SECTION SUCH THAT THERE IS NO MORE THAN EIGHTEEN (18) INCHES FROM FINISHED GRADE TO THE TOP OF THE MANHOLE CONE SECTION.
14. CONTRACTOR SHALL IMMEDIATELY REMOVE DEBRIS DEPOSITED INTO PUBLIC MANHOLES AND OTHER PUBLIC STRUCTURES TO ELIMINATE THE POSSIBILITY OF PROPERTY DAMAGE DUE TO THE DEBRIS CAUSING BACKUP INTO PRIVATE PROPERTIES. IF IT IS DETERMINED THAT DEBRIS CAUSED A BACKUP, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR DAMAGES.
15. NO TREES SHALL BE PLANTED WITHIN TEN 10 FEET OF ANY NEW STORM SEWER PIPES.
16. THE CONTRACTOR SHALL COORDINATE ALL ROOF DRAIN CONNECTIONS AT BUILDING WITH THE PLUMBING PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE PROPERLY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

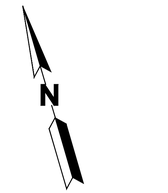
PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

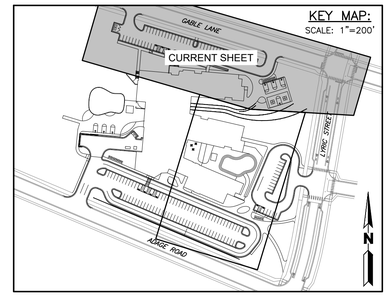
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.





CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
STORMLINE PLAN & PROFILE SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

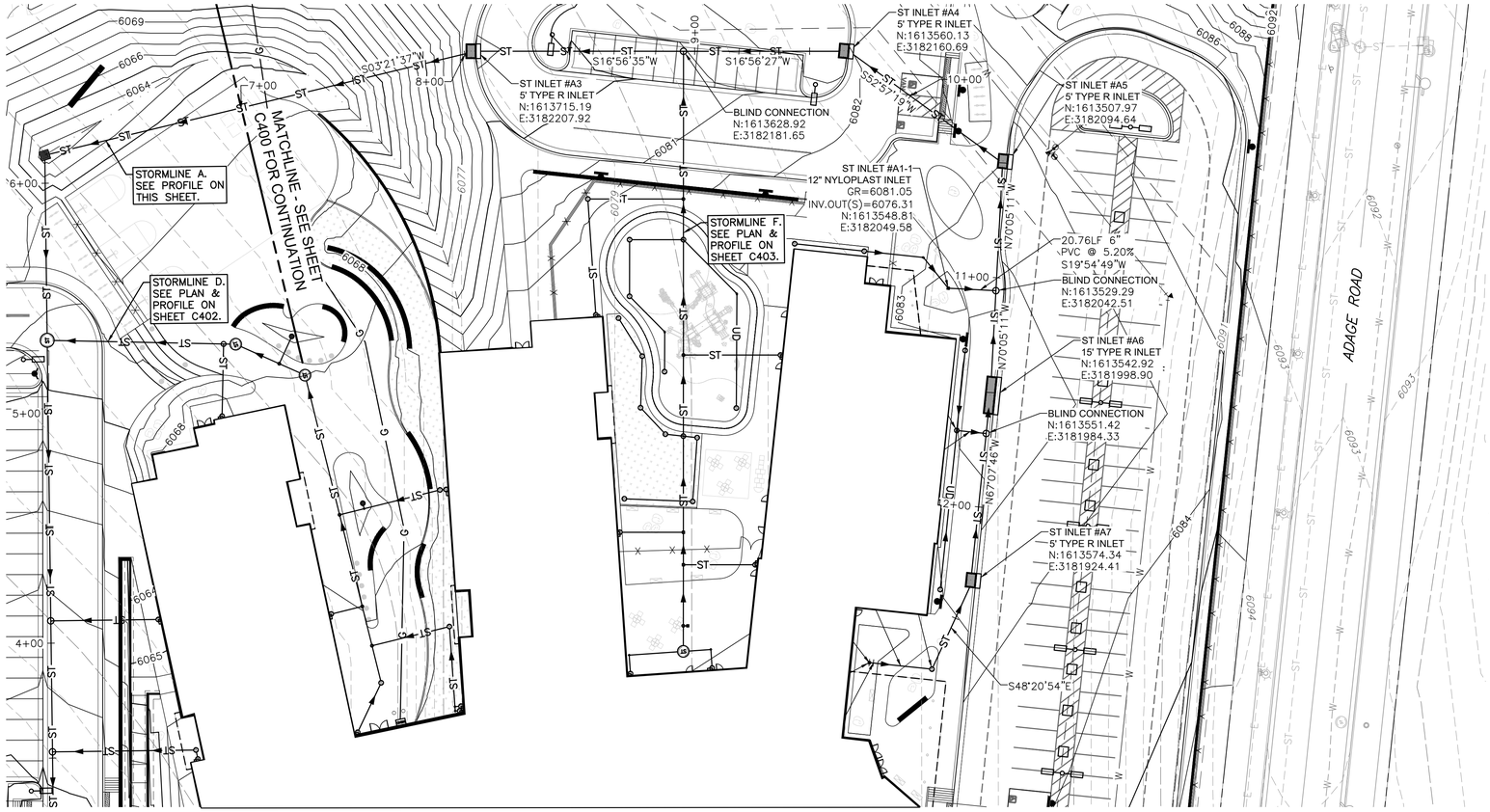
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED BY ANY PERSON FOR ANY PURPOSE WHATSOEVER IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

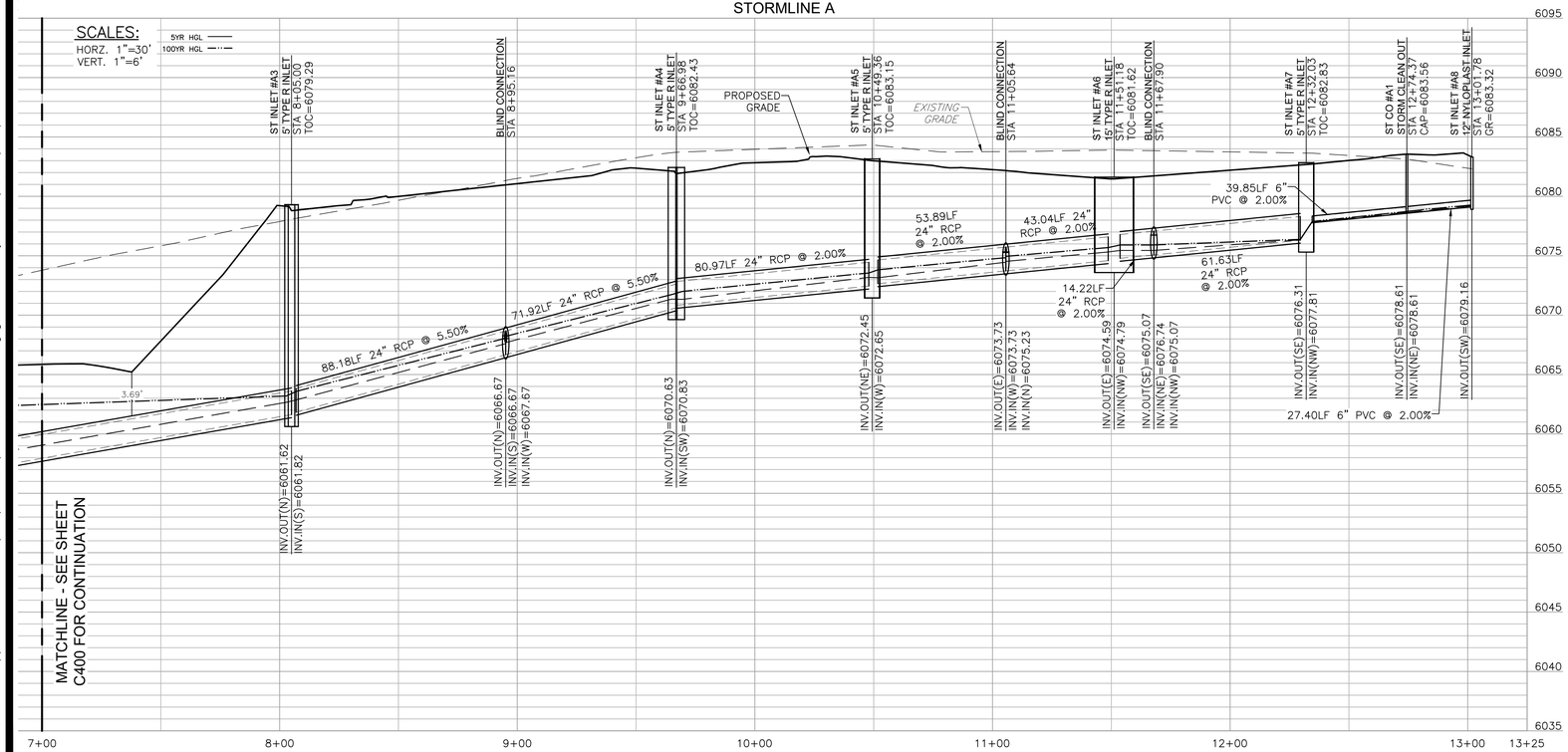
Sheet Number:

C400

PLOT DATE: Thursday, November 20, 2025 11:21 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\CDs\C400 - STORMLINE PLAN & PROFILE SHEET.dwg



STORMLINE A



SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

STORM SEWER NOTES:

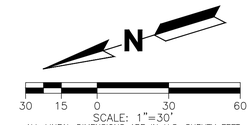
1. STORM SEWER SHALL BE INSTALLED PER CITY OF LONE TREE STANDARDS & SPECIFICATIONS.
2. STATIONING AND COORDINATES ARE BASED ON CENTER OF MANHOLES, CLEANOUTS AND AREA INLET. STATIONING AND COORDINATES FOR CURB INLETS ARE BASED ON CENTER OF CURB INLET AT FLOWLINE. THEREFORE, DISTANCES SHOWN ON PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE WIDTHS.
3. ALL CURB INLETS ARE TYPE R, UNLESS OTHERWISE NOTED.
4. ALL RCP STORM SEWER PIPES TO BE CLASS III WITH WATERTIGHT GASKETED JOINTS.
5. STORM SEWER 12" OR SMALLER SHALL BE SDR-35 PVC WITH WATERTIGHT GASKETED JOINTS.
6. ALL NON-PIPED BUILDING DOWNSPOUT SHALL BE FITTED WITH SPLASH BLOCKS OR ROOF DRAIN EXTENSIONS IN ACCORDANCE WITH THE PROJECT GEOTECH REPORT.
7. ALL ON-GRADE CURB INLETS SHALL BE FITTED WITH VANE GRATES.
8. RIM ELEVATIONS ON MANHOLES ARE APPROXIMATE ONLY. MANHOLE RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING TO MATCH FINAL PAVING GRADES.
9. SEE GRADING PLANS FOR ROOF DRAIN AND LANDSCAPE STORM LINES.
10. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SEWER POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED SEWER.
11. RIM ELEVATIONS ON CLEANOUTS ARE APPROXIMATE ONLY. CLEANOUT RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING AND LANDSCAPING TO MATCH FINAL PAVING AND LANDSCAPE GRADES.
12. MANHOLE CONES SHALL BE ALIGNED TO PROVIDE A MINIMUM OF THREE FEET 3' CLEARANCE BETWEEN THE MANHOLE RING AND THE LIP OF GUTTER. MANHOLE COVERS SHALL BE PLACED ABOVE MANHOLE STEPS.
13. THE PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS TO ADJUST THE MANHOLE FRAME AND COVER TO REQUIRED FINAL GRADE. THE PIPELINE CONTRACTOR MAY NEED TO REMOVE AND REPLACE THE PRECAST MANHOLE CONE SECTION SUCH THAT THERE IS NO MORE THAN EIGHTEEN (18) INCHES FROM FINISHED GRADE TO THE TOP OF THE MANHOLE CONE SECTION.
14. CONTRACTOR SHALL IMMEDIATELY REMOVE DEBRIS DEPOSITED INTO PUBLIC MANHOLES AND OTHER PUBLIC STRUCTURES TO ELIMINATE THE POSSIBILITY OF PROPERTY DAMAGE DUE TO THE DEBRIS CAUSING BACKUP INTO PRIVATE PROPERTIES. IF IT IS DETERMINED THAT DEBRIS CAUSED A BACKUP, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR DAMAGES.
15. NO TREES SHALL BE PLANTED WITHIN TEN 10 FEET OF ANY NEW STORM SEWER PIPES.
16. THE CONTRACTOR SHALL COORDINATE ALL ROOF DRAIN CONNECTIONS AT BUILDING WITH THE PLUMBING PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE PROPERLY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

BASIS OF BEARINGS:

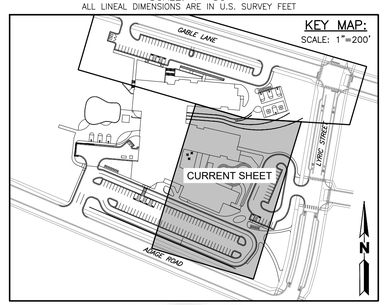
BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.



ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET



COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
STORMLINE PLAN & PROFILE SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

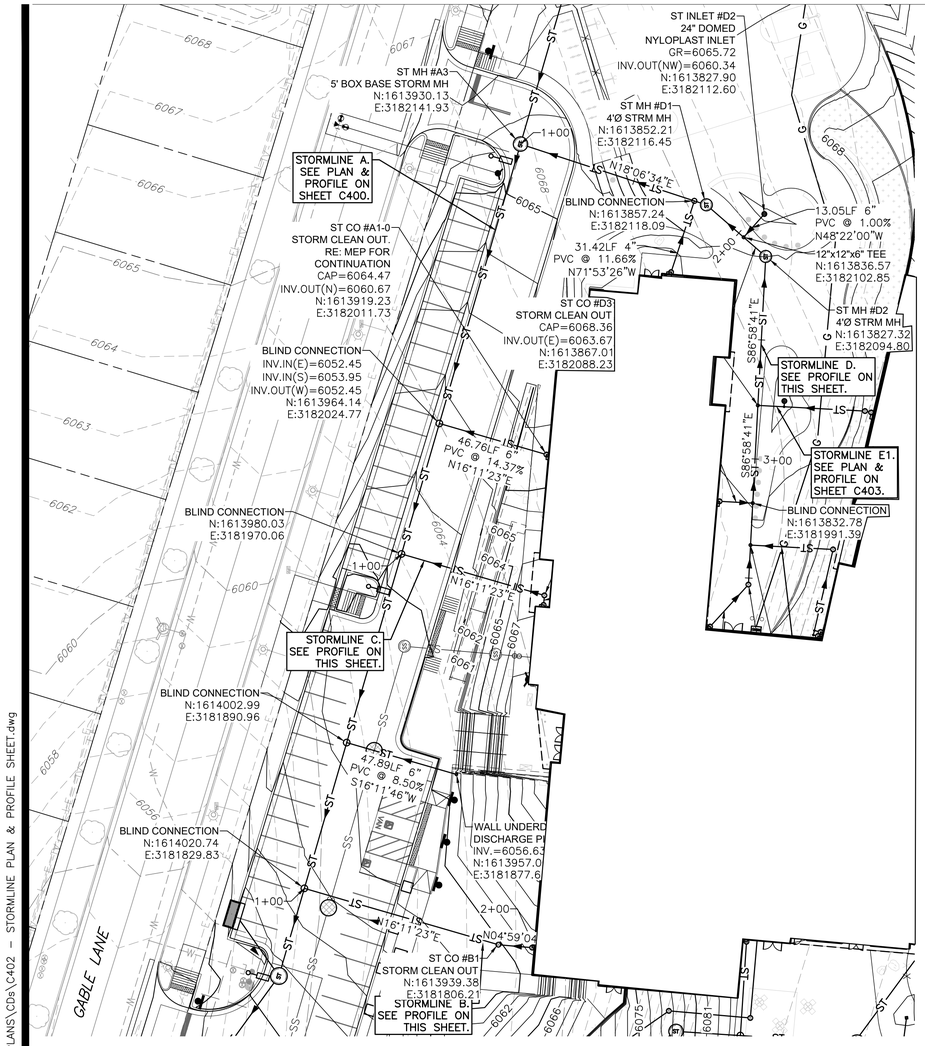
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

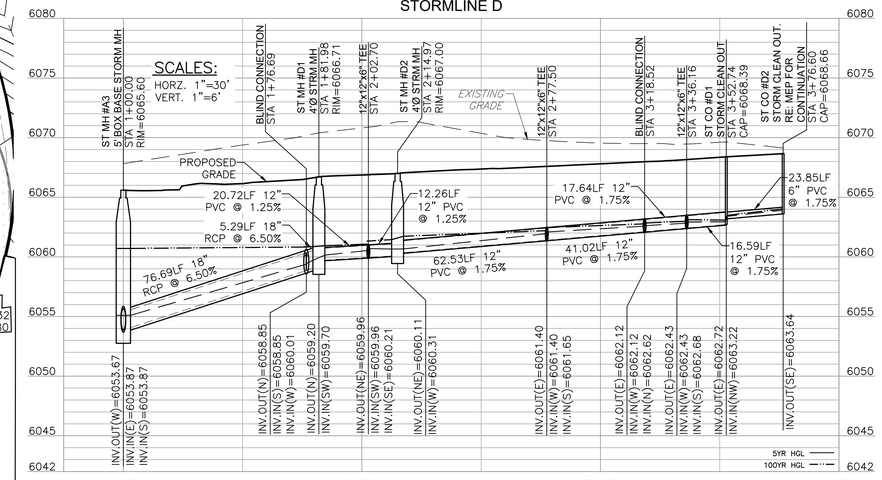
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED, DISCLOSED, REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

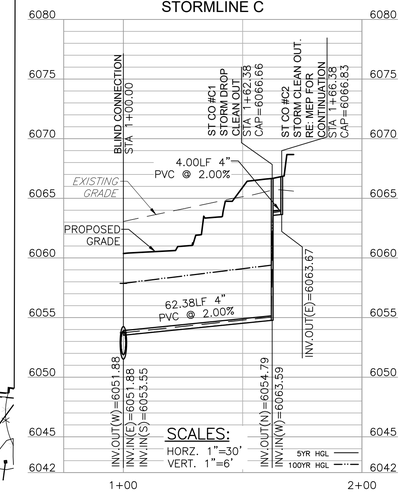
Sheet Number:

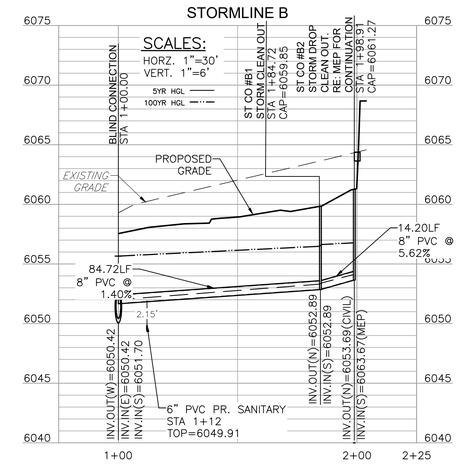
C401

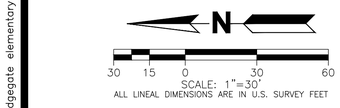
PLOT DATE: Thursday, November 20, 2025 11:21 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\CDs\C400 - STORMLINE PLAN & PROFILE SHEET.dwg







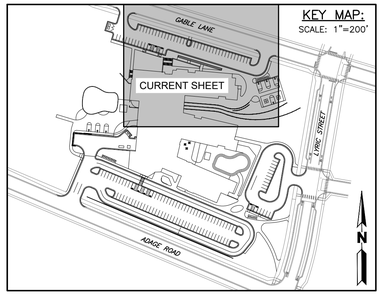






CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.



SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

STORM SEWER NOTES:

1. STORM SEWER SHALL BE INSTALLED PER CITY OF LONE TREE STANDARDS & SPECIFICATIONS.
2. STATIONING AND COORDINATES ARE BASED ON CENTER OF MANHOLES, CLEANOUTS AND AREA INLET. STATIONING AND COORDINATES FOR CURB INLETS ARE BASED ON CENTER OF CURB INLET AT FLOWLINE. THEREFORE, DISTANCES SHOWN ON PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE WIDTHS.
3. ALL CURB INLETS ARE TYPE R, UNLESS OTHERWISE NOTED.
4. ALL RCP STORM SEWER PIPES TO BE CLASS III WITH WATERTIGHT GASKETED JOINTS.
5. STORM SEWER 12" OR SMALLER SHALL BE SDR-35 PVC WITH WATERTIGHT GASKETED JOINTS.
6. ALL NON-PIPED BUILDING DOWNSPOUT SHALL BE FITTED WITH SPLASH BLOCKS OR ROOF DRAIN EXTENSIONS IN ACCORDANCE WITH THE PROJECT GEOTECH REPORT.
7. ALL ON-GRADE CURB INLETS SHALL BE FITTED WITH VANE GRATES.
8. RIM ELEVATIONS ON MANHOLES ARE APPROXIMATE ONLY. MANHOLE RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING TO MATCH FINAL PAVING GRADES.
9. SEE GRADING PLANS FOR ROOF DRAIN AND LANDSCAPE STORM LINES.
10. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SEWER POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED SEWER.
11. RIM ELEVATIONS ON CLEANOUTS ARE APPROXIMATE ONLY. CLEANOUT RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING AND LANDSCAPING TO MATCH FINAL PAVING AND LANDSCAPE GRADES.
12. MANHOLE CONES SHALL BE ALIGNED TO PROVIDE A MINIMUM OF THREE FEET 3' CLEARANCE BETWEEN THE MANHOLE RING AND THE LIP OF GUTTER. MANHOLE COVERS SHALL BE PLACED ABOVE MANHOLE STEPS.
13. THE PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS TO ADJUST THE MANHOLE FRAME AND COVER TO REQUIRED FINAL GRADE. THE PIPELINE CONTRACTOR MAY NEED TO REMOVE AND REPLACE THE PRECAST MANHOLE CONE SECTION SUCH THAT THERE IS NO MORE THAN EIGHTEEN (18) INCHES FROM FINISHED GRADE TO THE TOP OF THE MANHOLE CONE SECTION.
14. CONTRACTOR SHALL IMMEDIATELY REMOVE DEBRIS DEPOSITED INTO PUBLIC MANHOLES AND OTHER PUBLIC STRUCTURES TO ELIMINATE THE POSSIBILITY OF PROPERTY DAMAGE DUE TO THE DEBRIS CAUSING BACKUP INTO PRIVATE PROPERTIES. IF IT IS DETERMINED THAT DEBRIS CAUSED A BACKUP, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR DAMAGES.
15. NO TREES SHALL BE PLANTED WITHIN TEN 10 FEET OF ANY NEW STORM SEWER PIPES.
16. THE CONTRACTOR SHALL COORDINATE ALL ROOF DRAIN CONNECTIONS AT BUILDING WITH THE PLUMBING PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE PROPERLY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
STORMLINE PLAN & PROFILE SHEET

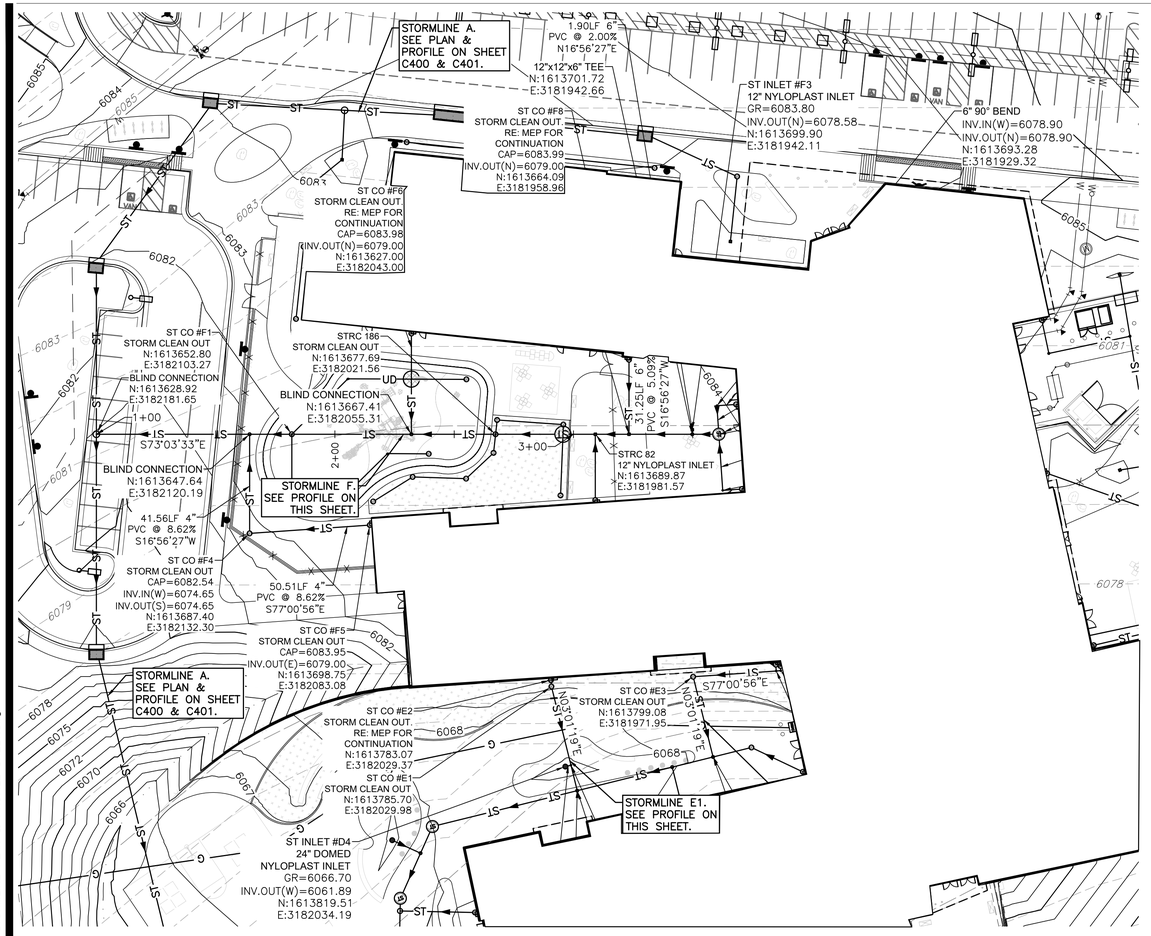
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

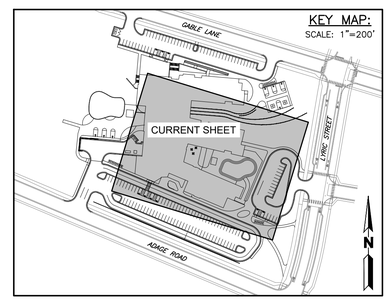
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

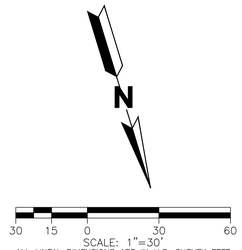
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & ARE NOT TO BE USED BY ANYONE EXCEPT AUTHORIZED EMPLOYEES OF THE OWNER OR AUTHORIZED USERS, OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C402

PLOT DATE: Thursday, November 20, 2025 11:22 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\CDs\C402 - STORMLINE PLAN & PROFILE SHEET.dwg







COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

STORM SEWER NOTES:

1. STORM SEWER SHALL BE INSTALLED PER CITY OF LONE TREE STANDARDS & SPECIFICATIONS.
2. STATIONING AND COORDINATES ARE BASED ON CENTER OF MANHOLES, CLEANOUTS AND AREA INLET. STATIONING AND COORDINATES FOR CURB INLETS ARE BASED ON CENTER OF CURB INLET AT FLOWLINE. THEREFORE, DISTANCES SHOWN ON PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE WIDTHS.
3. ALL CURB INLETS ARE TYPE R, UNLESS OTHERWISE NOTED.
4. ALL RCP STORM SEWER PIPES TO BE CLASS III WITH WATERTIGHT GASKETED JOINTS.
5. STORM SEWER 12" OR SMALLER SHALL BE SDR-35 PVC WITH WATERTIGHT GASKETED JOINTS.
6. ALL NON-PIPED BUILDING DOWNSPOUT SHALL BE FITTED WITH SPLASH BLOCKS OR ROOF DRAIN EXTENSIONS IN ACCORDANCE WITH THE PROJECT GEOTECH REPORT.
7. ALL ON-GRADE CURB INLETS SHALL BE FITTED WITH VANE GRATES.
8. RIM ELEVATIONS ON MANHOLES ARE APPROXIMATE ONLY. MANHOLE RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING TO MATCH FINAL PAVING GRADES.
9. SEE GRADING PLANS FOR ROOF DRAIN AND LANDSCAPE STORM LINES.
10. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SEWER POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED SEWER.
11. RIM ELEVATIONS ON CLEANOUTS ARE APPROXIMATE ONLY. CLEANOUT RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING AND LANDSCAPING TO MATCH FINAL PAVING AND LANDSCAPE GRADES.
12. MANHOLE CONES SHALL BE ALIGNED TO PROVIDE A MINIMUM OF THREE FEET 3' CLEARANCE BETWEEN THE MANHOLE RING AND THE LIP OF GUTTER. MANHOLE COVERS SHALL BE PLACED ABOVE MANHOLE STEPS.
13. THE PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS TO ADJUST THE MANHOLE FRAME AND COVER TO REQUIRED FINAL GRADE. THE PIPELINE CONTRACTOR MAY NEED TO REMOVE AND REPLACE THE PRECAST MANHOLE CONE SECTION SUCH THAT THERE IS NO MORE THAN EIGHTEEN (18) INCHES FROM FINISHED GRADE TO THE TOP OF THE MANHOLE CONE SECTION.
14. CONTRACTOR SHALL IMMEDIATELY REMOVE DEBRIS DEPOSITED INTO PUBLIC MANHOLES AND OTHER PUBLIC STRUCTURES TO ELIMINATE THE POSSIBILITY OF PROPERTY DAMAGE DUE TO THE DEBRIS CAUSING BACKUP INTO PRIVATE PROPERTIES. IF IT IS DETERMINED THAT DEBRIS CAUSED A BACKUP, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR DAMAGES.
15. NO TREES SHALL BE PLANTED WITHIN TEN 10 FEET OF ANY NEW STORM SEWER PIPES.
16. THE CONTRACTOR SHALL COORDINATE ALL ROOF DRAIN CONNECTIONS AT BUILDING WITH THE PLUMBING PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE PROPERLY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

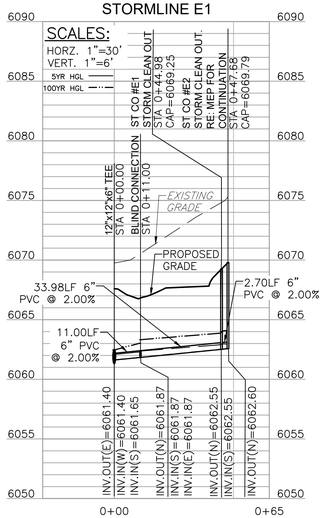
BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

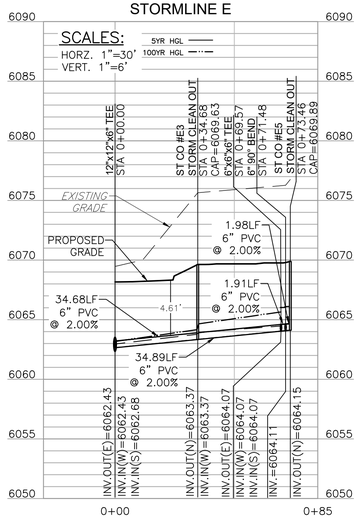
BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

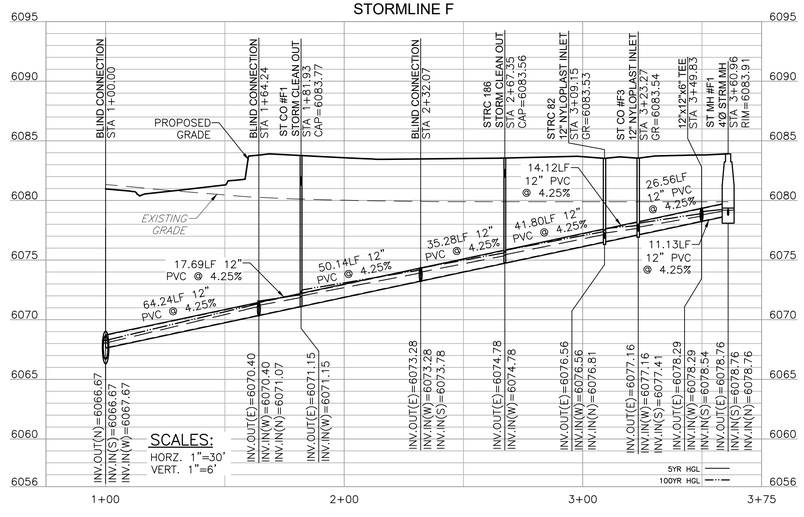
STORMLINE E1



STORMLINE E



STORMLINE F



CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue Lakewood, Colorado 80215
303.431.6100 martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS

STORMLINE PLAN & PROFILE SHEET

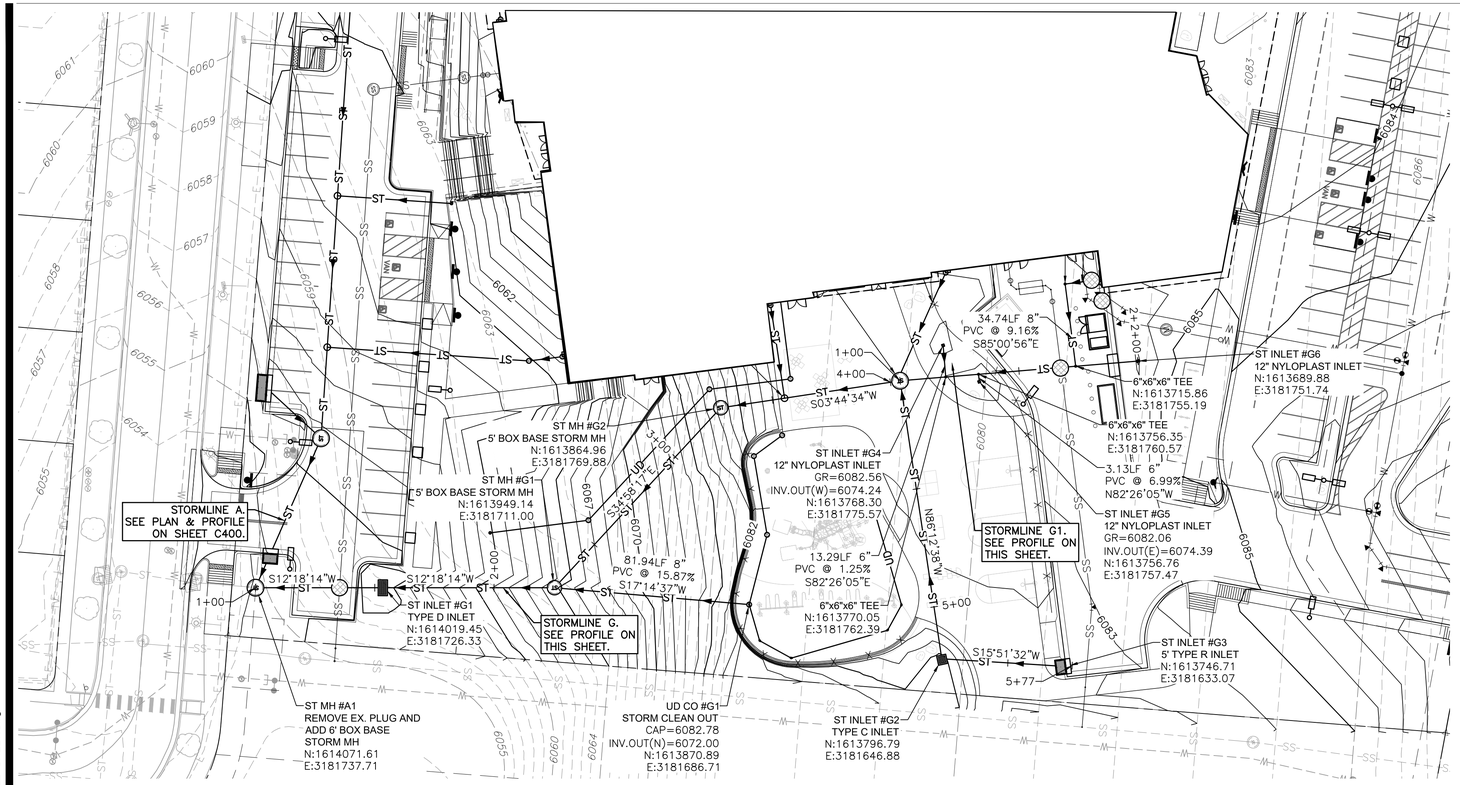
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED BY ANY PERSON FOR ANY PURPOSE WHATSOEVER, IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C403

PLOT DATE: Thursday, November 20, 2025 11:22 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\CDs\C403 - STORMLINE PLAN & PROFILE SHEET.dwg



STORM SEWER NOTES:

1. STORM SEWER SHALL BE INSTALLED PER CITY OF LONE TREE STANDARDS & SPECIFICATIONS.
2. STATIONING AND COORDINATES ARE BASED ON CENTER OF MANHOLES, CLEANOUTS AND AREA INLET. STATIONING AND COORDINATES FOR CURB INLETS ARE BASED ON CENTER OF CURB INLET AT FLOWLINE. THEREFORE, DISTANCES SHOWN ON PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE WIDTHS.
3. ALL CURB INLETS ARE TYPE R, UNLESS OTHERWISE NOTED.
4. ALL RCP STORM SEWER PIPES TO BE CLASS III WITH WATERTIGHT GASKETED JOINTS.
5. STORM SEWER 12" OR SMALLER SHALL BE SDR-35 PVC WITH WATERTIGHT GASKETED JOINTS.
6. ALL NON-PIPED BUILDING DOWNSPOUT SHALL BE FITTED WITH SPLASH BLOCKS OR ROOF DRAIN EXTENSIONS IN ACCORDANCE WITH THE PROJECT GEOTECH REPORT.
7. ALL ON-GRADE CURB INLETS SHALL BE FITTED WITH VANE GRATES.
8. RIM ELEVATIONS ON MANHOLES ARE APPROXIMATE ONLY. MANHOLE RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING TO MATCH FINAL PAVING GRADES.
9. SEE GRADING PLANS FOR ROOF DRAIN AND LANDSCAPE STORM LINES.
10. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SEWER POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED SEWER.
11. RIM ELEVATIONS ON CLEANOUTS ARE APPROXIMATE ONLY. CLEANOUT RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING AND LANDSCAPING TO MATCH FINAL PAVING AND LANDSCAPE GRADES.
12. MANHOLE CONES SHALL BE ALIGNED TO PROVIDE A MINIMUM OF THREE FEET 3' CLEARANCE BETWEEN THE MANHOLE RING AND THE LIP OF GUTTER. MANHOLE COVERS SHALL BE PLACED ABOVE MANHOLE STEPS.
13. THE PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS TO ADJUST THE MANHOLE FRAME AND COVER TO REQUIRED FINAL GRADE. THE PIPELINE CONTRACTOR MAY NEED TO REMOVE AND REPLACE THE PRECAST MANHOLE CONE SECTION SUCH THAT THERE IS NO MORE THAN EIGHTEEN (18) INCHES FROM FINISHED GRADE TO THE TOP OF THE MANHOLE CONE SECTION.
14. CONTRACTOR SHALL IMMEDIATELY REMOVE DEBRIS DEPOSITED INTO PUBLIC MANHOLES AND OTHER PUBLIC STRUCTURES TO ELIMINATE THE POSSIBILITY OF PROPERTY DAMAGE DUE TO THE DEBRIS CAUSING BACKUP INTO PRIVATE PROPERTIES. IF IT IS DETERMINED THAT DEBRIS CAUSED A BACKUP, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR DAMAGES.
15. NO TREES SHALL BE PLANTED WITHIN TEN 10 FEET OF ANY NEW STORM SEWER PIPES.
16. THE CONTRACTOR SHALL COORDINATE ALL ROOF DRAIN CONNECTIONS AT BUILDING WITH THE PLUMBING PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE PROPERLY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

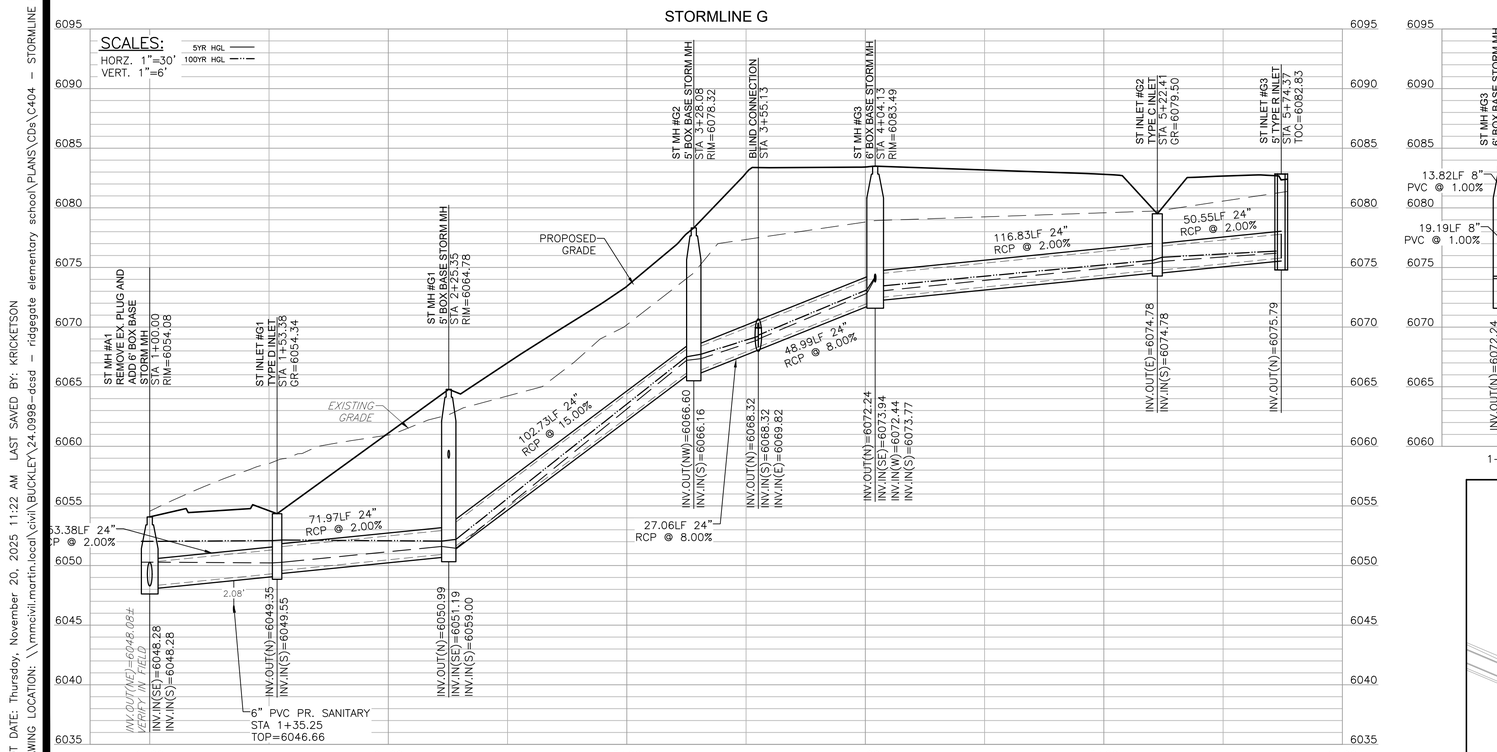
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

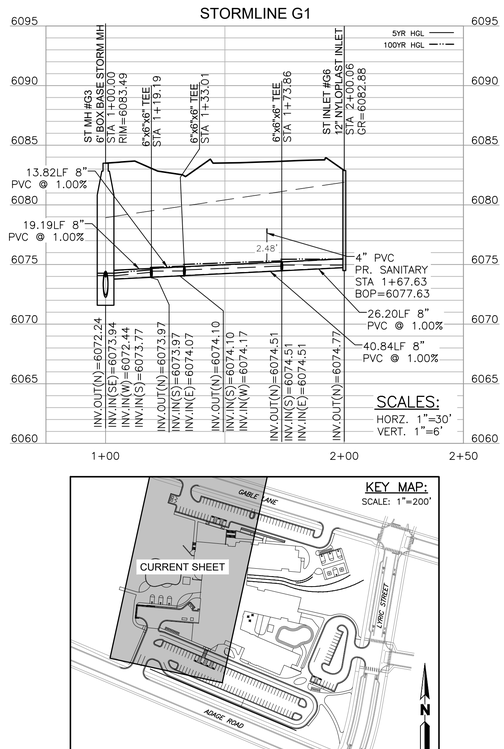
BASIS OF BEARINGS:

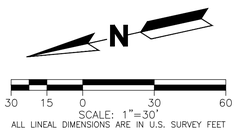
BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.







COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
STORMLINE PLAN & PROFILE SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

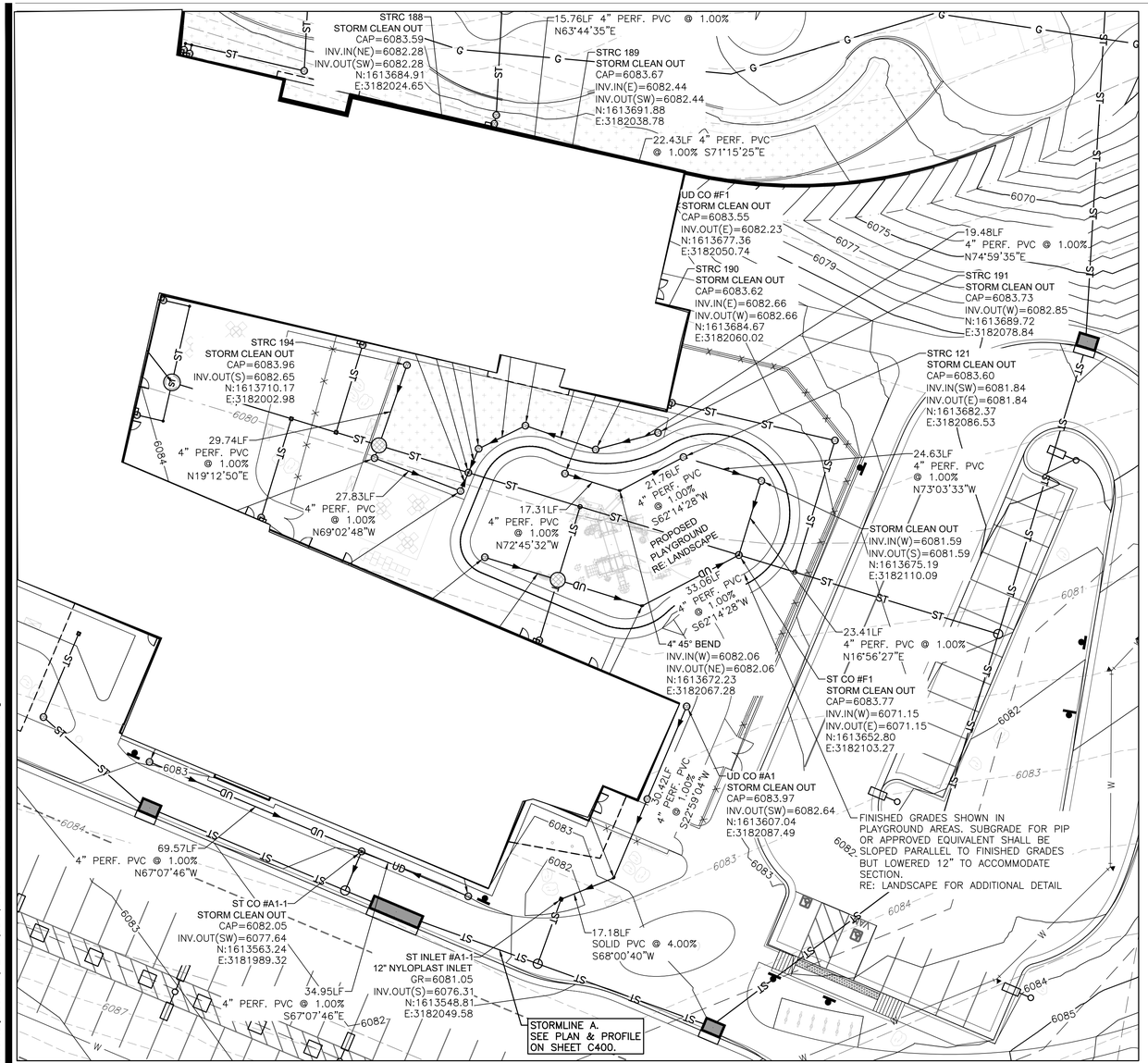
Job Number	24.0998
Project Manager	D.BEARSE
Design By	D.BEARSE/K.RICKETSON
Drawn By	J.DIAZ
Principal In Charge	P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & COPYRIGHTED WORKS OF MARTIN/MARTIN, INC. AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

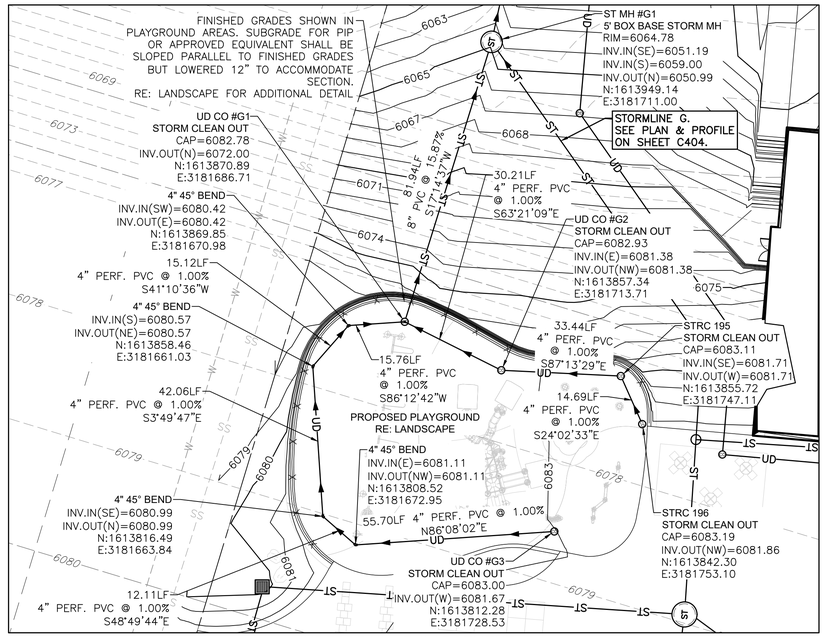
Sheet Number:
C404

PLOT DATE: Thursday, November 20, 2025 11:22 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\CDs\C404 - STORMLINE PLAN & PROFILE SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



UNDERDRAIN ENLARGEMENT A
SCALE: 1"=20'



UNDERDRAIN ENLARGEMENT B
SCALE: 1"=20'

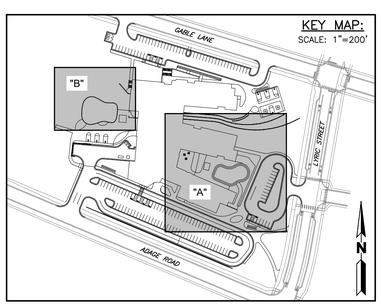
STORM SEWER NOTES:

1. STORM SEWER SHALL BE INSTALLED PER CITY OF LONE TREE STANDARDS & SPECIFICATIONS.
2. STATIONING AND COORDINATES ARE BASED ON CENTER OF MANHOLES, CLEANOUTS AND AREA INLET. STATIONING AND COORDINATES FOR CURB INLETS ARE BASED ON CENTER OF CURB INLET AT FLOWLINE. THEREFORE, DISTANCES SHOWN ON PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE WIDTHS.
3. ALL CURB INLETS ARE TYPE R, UNLESS OTHERWISE NOTED.
4. ALL RCP STORM SEWER PIPES TO BE CLASS III WITH WATERTIGHT GASKETED JOINTS.
5. STORM SEWER 12" OR SMALLER SHALL BE SDR-35 PVC WITH WATERTIGHT GASKETED JOINTS.
6. ALL NON-PIPED BUILDING DOWNSPOUT SHALL BE FITTED WITH SPLASH BLOCKS OR ROOF DRAIN EXTENSIONS IN ACCORDANCE WITH THE PROJECT GEOTECH REPORT.
7. ALL ON-GRADE CURB INLETS SHALL BE FITTED WITH VANE GRATES.
8. RIM ELEVATIONS ON MANHOLES ARE APPROXIMATE ONLY. MANHOLE RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING TO MATCH FINAL PAVING GRADES.
9. SEE GRADING PLANS FOR ROOF DRAIN AND LANDSCAPE STORM LINES.
10. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SEWER POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED SEWER.
11. RIM ELEVATIONS ON CLEANOUTS ARE APPROXIMATE ONLY. CLEANOUT RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING AND LANDSCAPING TO MATCH FINAL PAVING AND LANDSCAPE GRADES.
12. MANHOLE CONES SHALL BE ALIGNED TO PROVIDE A MINIMUM OF THREE FEET 3' CLEARANCE BETWEEN THE MANHOLE RING AND THE LIP OF GUTTER. MANHOLE COVERS SHALL BE PLACED ABOVE MANHOLE STEPS.
13. THE PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS TO ADJUST THE MANHOLE FRAME AND COVER TO REQUIRED FINAL GRADE. THE PIPELINE CONTRACTOR MAY NEED TO REMOVE AND REPLACE THE PRECAST MANHOLE CONE SECTION SUCH THAT THERE IS NO MORE THAN EIGHTEEN (18) INCHES FROM FINISHED GRADE TO THE TOP OF THE MANHOLE CONE SECTION.
14. CONTRACTOR SHALL IMMEDIATELY REMOVE DEBRIS DEPOSITED INTO PUBLIC MANHOLES AND OTHER PUBLIC STRUCTURES TO ELIMINATE THE POSSIBILITY OF PROPERTY DAMAGE DUE TO THE DEBRIS CAUSING BACKUP INTO PRIVATE PROPERTIES. IF IT IS DETERMINED THAT DEBRIS CAUSED A BACKUP, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR DAMAGES.
15. NO TREES SHALL BE PLANTED WITHIN TEN 10 FEET OF ANY NEW STORM SEWER PIPES.
16. THE CONTRACTOR SHALL COORDINATE ALL ROOF DRAIN CONNECTIONS AT BUILDING WITH THE PLUMBING PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE PROPERLY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

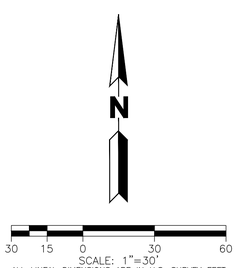


BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.



_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
STORM UNDERDRAIN PLAN

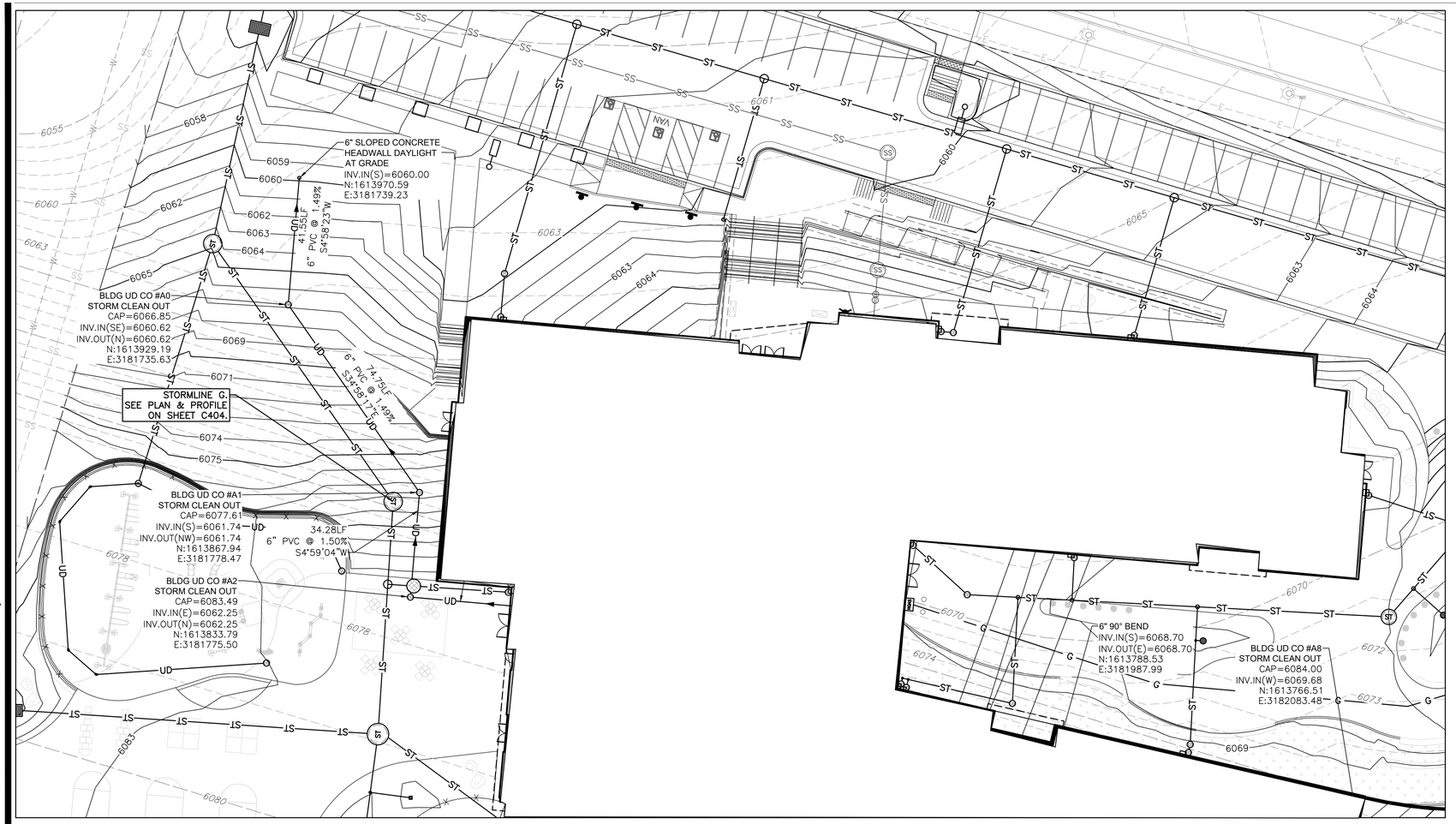
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number	24.0998
Project Manager	D.BEARSE
Design By	D.BEARSE/K.RICKETSON
Drawn By	J.DIAZ
Principal In Charge	P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY AND SHALL NOT BE USED, LOANED, COPIED OR DISCLOSED, NOR DUPLICATED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C405

PLOT DATE: Thursday, November 20, 2025 11:23 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\CDs\C405 - STORM UNDERDRAIN PLAN .dwg



BUILDING UNDERDRAIN ENLARGEMENT A
SCALE: 1"=20'

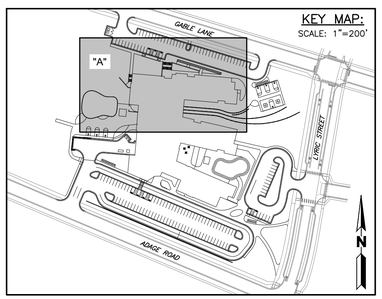
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

PERIMETER DRAIN NOTES:

1. REFER TO THIS SHEET FOR TYPICAL FOUNDATION DRAIN DETAILS.
2. REFER TO STRUCTURAL PLANS FOR FOUNDATION, PIER AND GRADE BEAM LAYOUT.
3. CLEANOUT RIMS SHALL BE SET FLUSH WITH FINISHED GRADE OR BASEMENT SLAB. SEE PLUMBING PLANS OR SPECIFICATIONS FOR TYPICAL CLEANOUT DETAIL IN BASEMENT FLOOR.
4. PERIMETER DRAIN AND UNDERDRAIN DESIGN BASED ON INFORMATION AND RECOMMENDATIONS OF THE GEOTECHNICAL REPORT BY INTERTEK PSI, DATED AUGUST 29, 2025. INSTALLATION OF PERIMETER DRAIN AND UNDERDRAIN TO BE OBSERVED BY THE ON-SITE GEOTECHNICAL ENGINEER. IN ADDITION TO THE GEOTECHNICAL OBSERVATIONS, THE CONTRACTOR SHALL TAKE PICTURES TO DOCUMENT THE PERIMETER DRAIN AND UNDERDRAIN INSTALLATION.
5. DURING FOUNDATION DRAIN INSTALLATION, FULL TIME OBSERVATION IS RECOMMENDED. A GEOTECHNICAL ENGINEER SHOULD OBSERVE INSTALLATION AND ASSURE COMPLIANCE WITH THE DESIGN RECOMMENDATIONS AND THE CONSTRUCTION DOCUMENTS.
6. PERIMETER DRAIN INVERT ELEVATIONS TO BE GRADE STAKED AT 25' INTERVALS MAXIMUM. CONTRACTOR SHALL VERIFY ELEVATIONS WITH A LASER LEVEL AT 25' INTERVALS MAXIMUM AND PROVIDE AS-BUILT ELEVATIONS OF PIPE PRIOR TO BACKFILL. THE SLOPE OF THE PERIMETER DRAIN SHALL BE 1.0% MIN.
7. THE PERIMETER AND UNDERDRAIN SYSTEMS SHALL BE TESTED BY THE CONTRACTOR AFTER INSTALLATION TO VERIFY THAT IT FUNCTIONS PROPERLY. AS-BUILT INFORMATION FOR THE PERIMETER DRAIN SYSTEM WITH HORIZONTAL AND VERTICAL SURVEY INFORMATION SHALL BE PROVIDED UPON COMPLETION OF THE FOUNDATION DRAINS BY THE CONTRACTOR'S SURVEYOR. THE ENGINEER SHALL TO VERIFY GRADES PRIOR TO BACKFILL. AFTER BACKFILL IS COMPLETE, THE CONTRACTOR SHALL COMPLETE A WATER FLOW TEST OF THE SYSTEM TO CONFIRM THAT THE SYSTEM FUNCTIONS PROPERLY. THIS SHALL BE CONDUCTED BY INTRODUCING WATER INTO THE SYSTEM AND NOTING FLOW AT DOWNSTREAM CLEANOUTS OR VAULT. LIMITED WATER SHALL BE USED DURING TESTING TO LIMIT WETTING. IT IS SUGGESTED TO USED NO MORE THAN 5 GALLONS OF WATER PER TEST.
8. AFTER ALL CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL CAMERA THE ENTIRE FOUNDATION DRAIN SYSTEM TO VERIFY PIPE IS FUNCTIONING AND INSTALLED CORRECTLY. THE CONTRACTOR SHALL PROVIDE THE VIDEO TO THE ENGINEER FOR REVIEW.
9. SLOPE EXCAVATION AND TRENCH EMBANKMENT SHALL MEET OR EXCEED OSHA STANDARDS.
10. PERIMETER DRAIN SHALL BE PERFORATED PVC PIPE SDR 35 ASTM D3034. PERFORATIONS SHALL BE (2) 1/2" DIA. HOLES AT 5-INCH ON CENTER ORIENTED AT THE 4 0' CLOCK AND 8 0' CLOCK POSITIONS (120° HOLE ARRAY).
11. PERIMETER DRAIN BEDDING TO BE WASHED, EVENLY GRADED MIXTURE OF CRUSHED STONE, ASTM D 448, COARSE AGGREGATE, SIZE NO. 57, WITH 100 PERCENT PASSING 1-1/2"-INCH (37.5-MM) SIEVE AND NOT MORE THAN 5 PERCENT PASSING NO. 8 (2.36-MM) SIEVE.
12. SPOT ELEVATIONS SHOWN ARE TO INVERT OF FOUNDATION DRAIN PIPE.
13. THE CONTRACTOR SHALL VERIFY AS-CONSTRUCTED GRADE BEAM/PIER ELEVATIONS AGAINST PERIMETER DRAIN ELEVATIONS SHOWN HEREON AND CONFIRM COMPLIANCE WITH GEOTECHNICAL REQUIREMENTS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
14. CONTRACTOR SHALL COORDINATE INTERIOR PIPING WITH PLUMBING AND STRUCTURAL DRAWINGS. COORDINATE ANY WALL PENETRATIONS WITH STRUCTURAL. NOTIFY ENGINEER/ARCHITECT OF ANY DISCREPANCY.
15. CLEANOUTS ARE REQUIRED WHERE INDICATED ON PLAN AND SWEEPING 90° BENDS OR TWO 45° BENDS SHALL BE USED AT ALL HORIZONTAL BENDS.
16. UNDER NO CIRCUMSTANCES SHALL ROOF DRAINS AND PERIMETER DRAINS BE CONNECTED TOGETHER.
17. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PERIMETER DRAIN SYSTEM AND PROVIDE INFORMATION TO ENGINEER FOR REVIEW.
18. ALL 90° BENDS IN PLAN VIEW SHALL BE TWO 45° BENDS.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

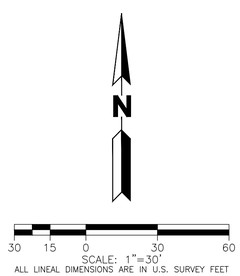


BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.



SCALE: 1"=30'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
BUILDING UNDERDRAIN PLAN

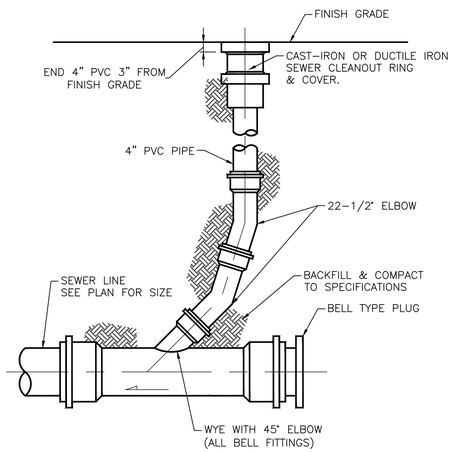
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & CONFIDENTIAL AND MAY NOT BE REPRODUCED, DISCLOSED, OR PUBLISHED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C406

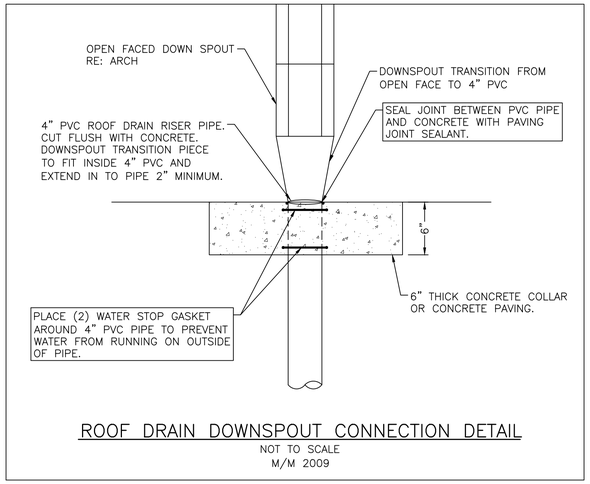
PLOT DATE: Thursday, November 20, 2025 11:23 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C406 - BUILDING STORM UNDERDRAIN PLAN.dwg



SEWER CLEAN-OUT DETAIL

NOT TO SCALE

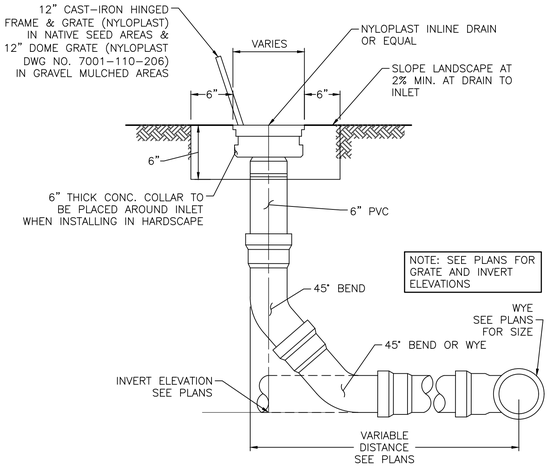
M/M 2009



ROOF DRAIN DOWNSPOUT CONNECTION DETAIL

NOT TO SCALE

M/M 2009

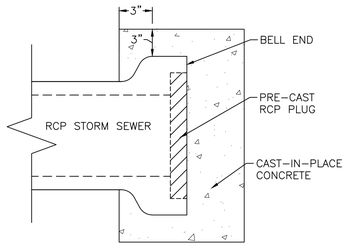


LANDSCAPE AREA INLET

NOT TO SCALE

M/M 2009

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



RCP STORM SEWER STUB-OUT

NOT TO SCALE

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL

CONSTRUCTION DOCUMENTS

STORM SEWER DETAILS SHEET

Job Number	24.0998
Project Manager	D.BEARSE
Design By	D.BEARSE/K.RICKETSON
Drawn By	J.DIAZ
Principal In Charge	P.BUCKLEY

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

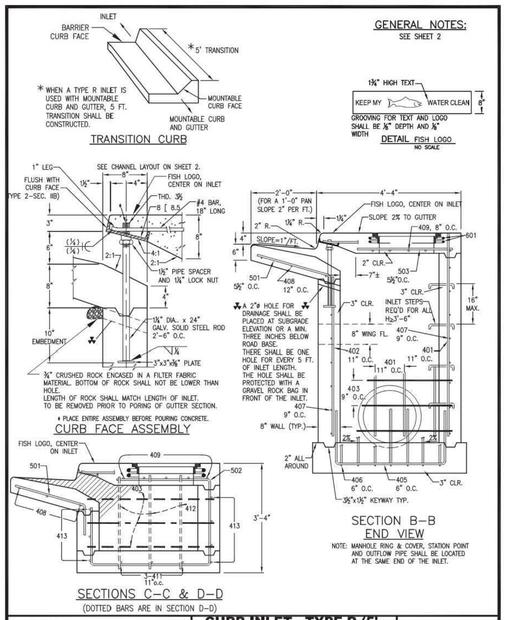
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, DISCLOSED OR CHANGED, AND SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C410

PLOT DATE: Thursday, November 20, 2025 11:23 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C410 - STORM SEWER DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

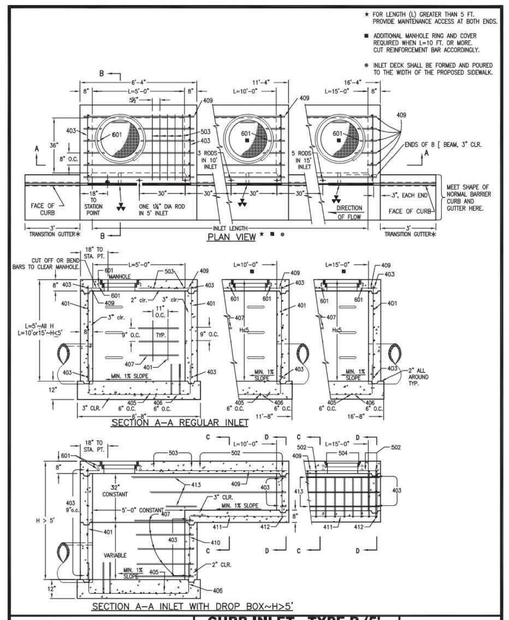


REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34a**



REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34b**

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS	INLETS: H ≤ 5 FT.				INLETS: H > 5 FT.			
				L = 5 FT.	L = 10 FT.		L = 15 FT.		L = 10 FT.		L = 15 FT.	
				NO. REQ'D.	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH
401	4	11"	II	15	*		21	*	28	*	11	*
402	4	11"	II	7	*		13	*	18	*	7	*
403	4	9"	II	*	4'-0"		*	4'-0"	*	4'-0"	*	4'-0"
405	4	6"	VI	11	6'-10"		21	6'-10"	31	6'-10"	11	6'-10
406	4	6"	VIII	7	6'-10"		7	13'-10"	7	18'-10"	7	8'-10"
407	4	9"	II	*	5'-10"		*	10'-10"	*	15'-10"	*	5'-10"
408	4	12"	II	3	6'-10"		3	11'-10"	3	16'-0"	3	11'-10"
409	4	8"	II	6	5'-10"		6	10'-10"	6	15'-10"	6	10'-10"
410	4	11"	VII								3	*
411	4	11"	II								3	5'-2"
412	4	11"	II								3	2'-9"
413	4	9"	II								7	10'-10"
501	5	5½"	IV	11	3'-4"		22	3'-4"	33	3'-4"	22	3'-4"
502	5	5½"	III								11	11'-5"
503	5	5½"	II	5	3'-6"		16	3'-6"	27	3'-6"	6	3'-6"
504	5	5½"	IX								5	8'-4"
601	6	21½"	V	2	8'-10"		2	8'-10"	2	8'-10"	2	8'-10"
■E[8.5				1	5'-10"		1	10'-10"	1	15'-10"	1	10'-10"
				2 BARS, 1 ROD			4 BARS, 3 RODS		6 BARS, 5 RODS		8 BARS, 5 RODS	

* VARIABLE, REFER TO TABLE TWO.
■ INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

REGULAR INLETS | DROP BOX INLETS

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

'H'	LENGTH			NO. REQ'D. REGULAR		NO. REQ'D. DROP BOX		L=5'		L=10'		L=15'	
	401	402	410	403	407	403	407	CONC. CU. YDS.	STEEL LBS.	CONC. CU. YDS.	STEEL LBS.	CONC. CU. YDS.	STEEL LBS.
3'–0"	2'–8"	1'–8"		10	7			3.2	285	5.3	497	7.4	706
3'–6"	3'–2"	2'–2"		10	7			3.4	305	5.7	528	7.9	747
4'–0"	3'–8"	2'–8"		12	9			3.7	326	6.0	559	8.4	788
4'–6"	4'–2"	3'–2"		12	9			3.9	334	6.4	571	8.8	803
5'–0"	4'–8"	3'–8"		14	11			4.1	354	6.7	602	9.3	844
5'–6"	5'–2"	4'–2"	3'–5"	16	13	15	6	4.4	375	6.0	607	7.4	850
6'–0"	5'–8"	4'–8"	3'–11"	16	13	16	6	4.6	392	6.2	616	7.8	860
6'–6"	6'–2"	5'–2"	4'–5"	18	15	18	8	4.8	402	6.4	637	7.8	880
7'–0"	6'–8"	5'–8"	4'–11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'–6"	7'–2"	6'–2"	5'–5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'–0"	7'–8"	6'–8"	5'–11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'–6"	8'–2"	7'–2"	6'–5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'–0"	8'–8"	7'–8"	6'–11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'–6"	9'–2"	8'–2"	7'–5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'–0"	9'–8"	8'–8"	7'–11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'–6"	10'–2"	9'–2"	8'–5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'–0"	10'–8"	9'–8"	8'–11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L=5 FT, L=10 FT., AND L=15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.

STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

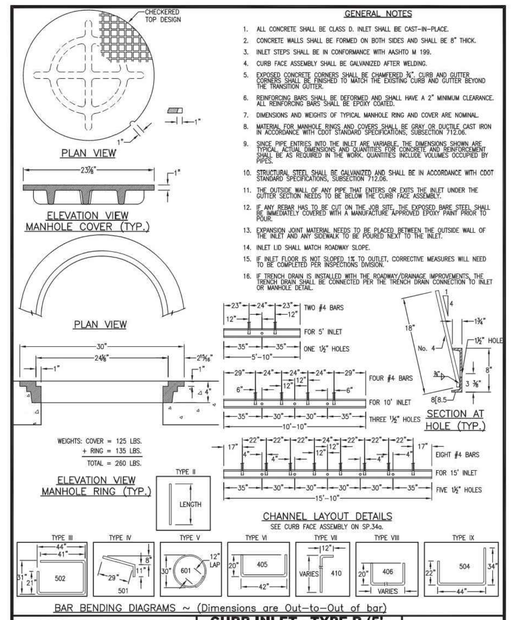
TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34c**

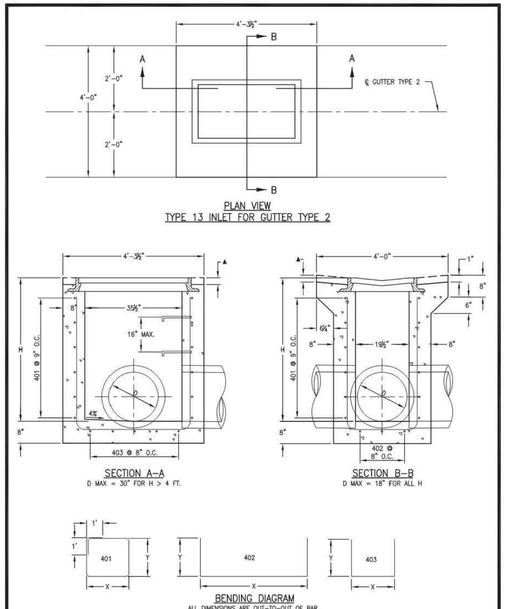


REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34d**

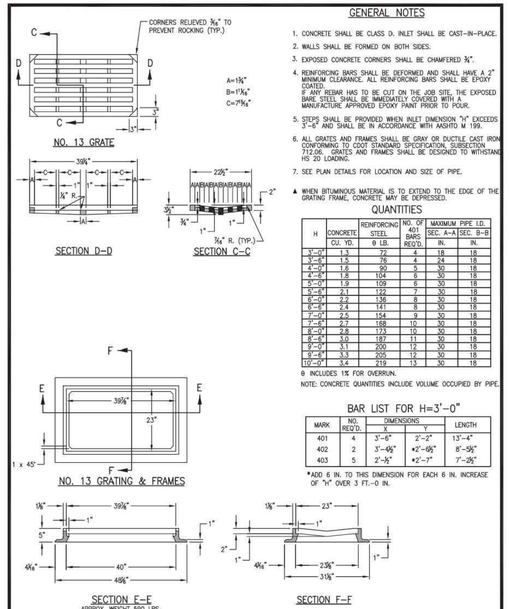


REFERENCE: CDOT M & S STANDARDS M-604-13

GRATED INLET TYPE 13

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.37a**



H	CONCRETE	REINFORCING STEEL	NO. OF 401 BARS REQ'D.	MAXIMUM PIPE I.D. SEC. A–A	SEC. B–B
	CU. YD.	@ LB.		IN.	IN.
3'–0"	1.3	72	4	18	18
3'–6"	1.5	76	4	24	18
4'–0"	1.6	90	5	30	18
4'–6"	1.8	104	6	30	18
5'–0"	1.9	109	6	30	18
5'–6"	2.1	122	7	30	18
6'–0"	2.2	136	8	30	18
6'–6"	2.4	141	8	30	18
7'–0"	2.5	154	9	30	18
7'–6"	2.7	168	10	30	18
8'–0"	2.8	173	10	30	18
8'–6"	3.0	187	11	30	18
9'–0"	3.1	200	12	30	18
9'–6"	3.3	205	12	30	18
10'–0"	3.4	219	13	30	18

@ INCLUDES 1% FOR OVERRUN.
NOTE: CONCRETE QUANTITIES INCLUDE VOLUME OCCUPIED BY PIPE.

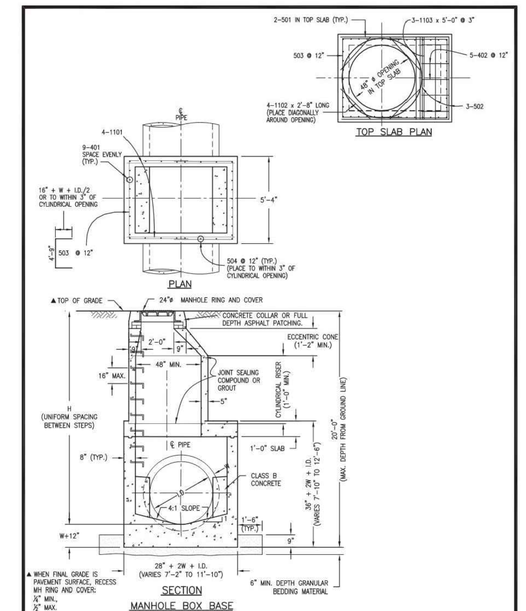
MARK	NO. REQ'D.	DIMENSIONS X	Y	LENGTH
401	4	3'–6"	2'–2"	13'–4"
402	2	3'–6⅝"	*2'–6⅝"	8'–5⅝"
403	5	2'–½"	*2'–7"	7'–2½"

REFERENCE: CDOT M & S STANDARDS M-604-13

GRATED INLET TYPE 13

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.37b**

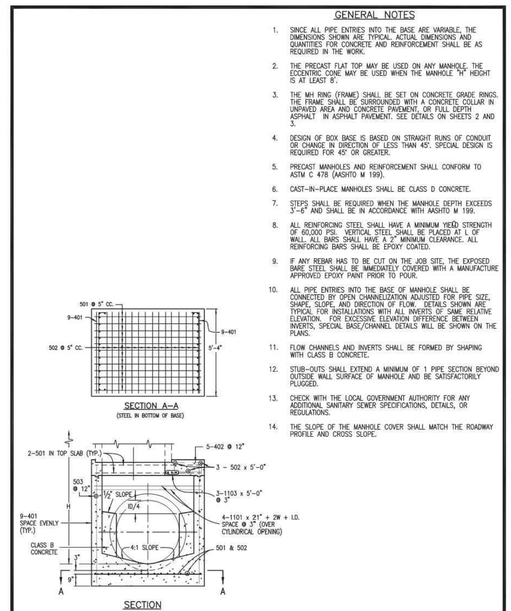


REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43a**



REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43b**

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
STORM SEWER DETAILS SHEET

NOT FOR CONSTRUCTION

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

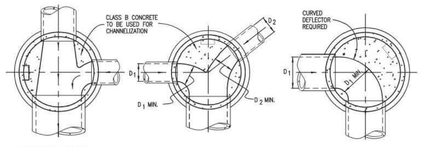
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY AND SHALL NOT BE USED BY ANY PERSON FOR ANY PURPOSE, IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C411

PLOT DATE: Thursday, November 20, 2025 11:23 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\fmnicivil.martin.local\civil\BUCKLEY\24.0998–DCSD – RidgeGate Elementary School\PLANS\CDs\C410 – STORM SEWER DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



THROUGH PIPE ONE LATERAL | ANGLED LATERALS | SHARP ANGLE

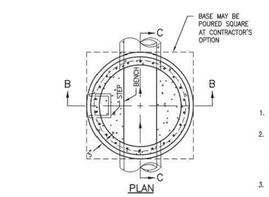
TYPICAL CHANNELIZATION DETAILS

QUANTITIES FOR CONCRETE MANHOLE BOX BASE

MARK	SIZE	TYPE	WT. #/FT.	BARS	I.D. 60"	I.D. 66"	I.D. 72"	I.D. 84"	I.D. 96"	FORMULAS
401	4	I	0.668	NO. REQ'D.	18	18	18	18	18	401
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	BAR LENGTH = 32"+2W+I.D.
				WEIGHT *	104.2	111.2	118.2	132.3	146.3	
402	4	III	0.668	NO. REQ'D.	5	5	5	5	5	402
				LENGTH	6'-0"	6'-7"	7'-2"	8'-4"	9'-6"	BAR LENGTH = I.D. + 2W
				WEIGHT *	20.0	22.0	23.9	27.8	31.7	
501	5	I	1.043	NO. REQ'D.	17	17	17	17	17	501
				LENGTH	8'-0"	8'-7"	9'-2"	10'-4"	11'-6"	BAR LENGTH = 24" + I.D. + 2W
				WEIGHT *	141.8	152.2	162.5	183.2	203.9	
502	5	I	1.043	NO. REQ'D.	23	25	26	29	32	502
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	NUMBER BARS REQ'D. = 3 + $\left(\frac{24+I.D.+2W}{5}+1\right)$
				WEIGHT *	119.9	130.4	135.6	151.2	166.9	
503	5	II	1.043	NO. REQ'D.	16	18	18	20	24	503
				LENGTH	13'-5"	14'-0"	14'-7"	15'-9"	16'-11"	NUMBER BARS REQ'D. = 2 $\left(\frac{13+I.D.+2W}{12}+1\right)$
				WEIGHT *	223.9	262.8	273.8	328.5	423.5	BAR LENGTH = 4'-9"+2(16+W+I.D./2)
504	5	I	1.043	NO. REQ'D.	14	14	16	18	20	504
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	NUMBER BARS REQ'D. = 2 $\left(\frac{2W+I.D.-4}{12}+1\right)$
				WEIGHT *	126.6	130.1	164.1	206.5	253.8	BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	NO. REQ'D.	4	4	4	4	4	1101
				LENGTH	7'-9"	8'-4"	8'-10"	10'-1"	11'-3"	BAR LENGTH = 21" + I.D. + 2W
				WEIGHT *	164.7	177.1	189.5	214.3	239.1	
1102	11	I	5.313	NO. REQ'D.	4	4	4	4	4	TYPE I: BENDING STRAIGHT
				LENGTH	2'-8"	2'-8"	2'-8"	2'-8"	2'-8"	
				WEIGHT *	56.7	56.7	56.7	56.7	56.7	
1103	11	I	5.313	NO. REQ'D.	3	3	3	3	3	TYPE II: 4'-9"
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
				WEIGHT *	79.7	79.7	79.7	79.7	79.7	
REINFORCING STEEL TOTAL *					1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	TYPE III: 12", 12", 7", I.D.+2W-38"
CONCRETE — CUBIC YARDS — TOTAL					6.6	7.3	8.0	9.5	11.1	

NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

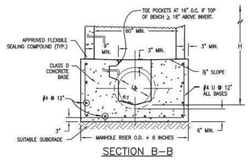
REFERENCE: CDOT M & S STANDARDS M-604-20 | **MANHOLES** | DOUGLAS COUNTY COLORADO | Issued: 05/2013 | Revised: | Drawing No. **SP.43c**



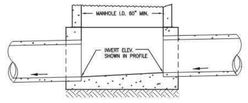
PLAN

LEGEND
- SUITABLE SUBGRADE
- GRANULAR BEDDING MATERIAL
- CONCRETE

MANHOLE BASES:
1. THE BASE SLAB SHALL BE POURED MONOLITHICALLY WITH BOTTOM RISER SECTION.
2. MANHOLE BASES SHALL FIT THE CONDITIONS AND LOCATIONS FOR WHICH THEY ARE INTENDED WITHOUT ANY FIELD MODIFICATIONS. ANY MANHOLE BASE WHICH REQUIRES FIELD CUTTING OR MODIFICATION IN ORDER TO FIT THE LOCATIONS INTENDED WILL BE REJECTED BY THE ENGINEER AND REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE DEPARTMENT.
3. MANHOLE BASES SHALL BE BEDDED ON AN APPROVED GRANULAR BEDDING MATERIAL AS SHOWN ABOVE.



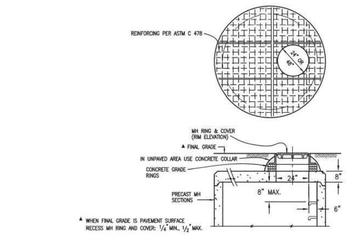
SECTION B–B



SECTION C–C

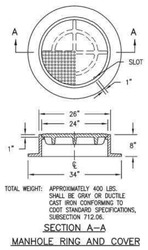
CAST–IN–PLACE SLAB BASE

REFERENCE: CDOT M & S STANDARDS M-604-20 | **MANHOLES** | DOUGLAS COUNTY COLORADO | Issued: 05/2013 | Revised: | Drawing No. **SP.43d**

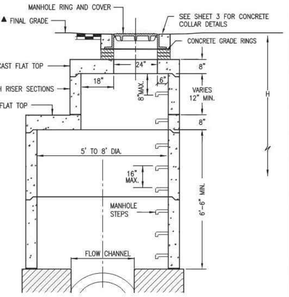


* WHEN FINAL GRADE IS PAVEMENT SURFACE, RECESS MH RING AND COVER: ¼" MIN., ½" MAX.

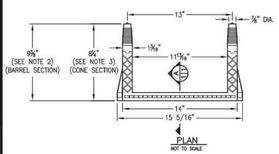
FLAT TOP SECTION DETAIL

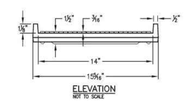


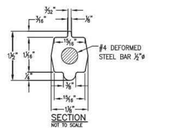
SECTION A–A
MANHOLE RING AND COVER

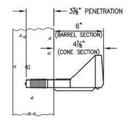


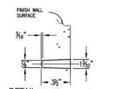
REFERENCE: CDOT M & S STANDARDS M-604-20 | **MANHOLES** | DOUGLAS COUNTY COLORADO | Issued: 05/2013 | Revised: | Drawing No. **SP.43e**







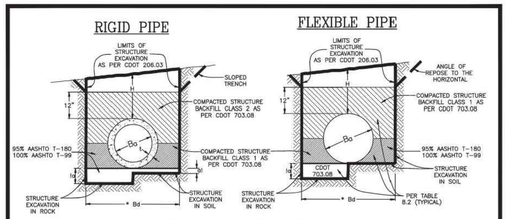




GENERAL NOTES
1. ASTM SPECIFICATIONS:
   A. ASTM C-478
   B. ASTM A-615 GRADE 60 (STEEL REBAR).
   C. ASTM 2146-69, TYPE III, GRADE 16906 (POLYPROPYLENE).
2. STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURES SHALL HAVE A 9¾" LEG AND SHALL PROJECT FROM THE WALL 6".
3. STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8¾" LEG AND SHALL PROJECT FROM THE WALL 4⅜".
4. ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3⅜".
5. STEPS SHALL BE INSTALLED BY THE "PRESS–FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN. FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.
6. INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 LB. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
7. PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED. DIMENSIONS OF THE PIN AND THE INSERTED PORTION OF THE MANHOLE STEP ARE TYPICAL ONLY. DOUGLAS COUNTY INSTALLATIONS REQUIRE A MATCHED COMBINATION OF A TAPERED INSERT PIN AND MANHOLE STEP, AS RECOMMENDED OR REQUIRED BY SPECIFIC MANUFACTURER OF THE STEP TO BE USED.
8. THIS STEP CAN ALSO BE USED IN TOE POCKET INSTALLATIONS PROVIDED 5" TOE CLEARANCE IS ALLOWED.

POLYPROPYLENE REINFORCED PLASTIC STEP

REFERENCE: CITY AND COUNTY OF DENVER DRAWING NUMBER S-750 | **MANHOLE AND INLET STEPS** | DOUGLAS COUNTY COLORADO | Issued: 05/2013 | Revised: | Drawing No. **SP.45**



MAXIMUM HEIGHT OF FILL OVER TOP OF PIPE IN FEET

REINFORCED CONCRETE

Ba in.	Bd in.	D1 INCH CRACK 0–LOAD 1350	2000	3000 PIPE CLASS	** B	S	V
18	35	19	28	43			
24	42	18	28	42			
30	50	18	28	42			
36	59	18	27	41			
42	66	18	27	41			
48	76	18	27	41			
54	85	17	26	40			
60	96	17	26	40			
66	108	17	26	40			
72	117	17	26	40			
78	125	17	26	40			
84	135	17	26	40			
90	134	17	26	40			
96	163	17	26	40			
108	173	17	26	40			
120	191	17	26	40			
132	208	17	26	40			
144	224	17	26	40			

** Based on Bd=1.33(Ba+2I). Wall thickness can vary between manufacturers.

STEEL – 2 2/3" x 1/2" CORRUGATIONS

Ba in.	Bd ft.	H ABOVE TOP OF PIPE IN FEET 1–15	16–20	21–25	26–30	31–35	36–40
		THICKNESS IN INCHES					
18–48	4–7	.064	.064	.064	.064	.064	.064
54	7.50	.079	.079	.079	.079	.079	.079
60	8.00	.079	.079	.079	.079	.109	.109
66	8.50	.079	.079	.105	.109	.138	.138
72	9.00	.079	.109	.109	.138	.168	.168
78	9.50	.109	.138	.138	.168		
84	10.00	.109	.138	.168			

LEGEND
H = Height of fill over top of pipe
Ba = Inside diameter (I.D.) of pipe
* Bd = Trench Width
t = Wall thickness of pipe
CLSM = Controlled Low Strength Material
a = Loose granular bedding, as follows:
  a=0" for Flexible Culverts in Soil.
  a=4" for Rigid Pipe in Soil.
  a=12" for Culverts in Rock.

* TRENCH WIDTH:
  RCP: Bd = Min. of 1.33(Ba+2I), or (Ba+20)+12" (Per AASHTO Section 17)
  CSP: Bd = Min. of Ba+4 (Per AASHTO Section 12)

1 Bedding material for SOIL shall be Structural Backfill Class 1 or 2.
2 Bedding material for ROCK shall be Structural Backfill Class 1.

GENERAL NOTES
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS APPLICABLE TO THE PROJECT.
2. ALL TRENCH INSTALLATIONS SHALL BE IN ACCORDANCE WITH OSHA AND COLORADO DEPARTMENT OF TRANSPORTATION REGULATIONS.
3. THE USE OF NON–REINFORCED CONCRETE PIPE WILL NOT BE ALLOWED IN DOUGLAS COUNTY.

RCP DESIGN CRITERIA

Safety Factor = Per ASTM C76
Soil Weight = 120 lb. per cu. ft.
Bedding = Type 2

CSP DESIGN CRITERIA

3"x1" CORRUGATIONS: 60 TO 84 Pipe shall be .064" thick (16 gauge) to H=40 ft.

Soil Weight = 120 lb. per cu. ft.
Safety Factor for Seam Strength = 2.00
Buckling Stress Level = 1/2 Yield Strength
Load Factor (Backfill) = 95% Standard Density, AASHTO–T 99 (K=0.86)

ALL UTILITY REPAIRS MUST BE BACKFILLED WITH CLSM. SEE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS MANUAL FOR SPECIFIC DETAILS.

NOTE: All trenching shall comply with all State, Federal and O.S.H.A. safety requirements. It will be the responsibility of the Contractor to meet all safety requirements.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

APPROVED BY DOUGLAS COUNTY
Janet Herman
JANET HERMAN, P.E.
DIRECTOR OF PUBLIC WORKS
ENGINEERING
DATE 06/18/2021

PIPE INSTALLATION IN TRENCH | DOUGLAS COUNTY COLORADO | Issued: 05/2013 | Revised: 05/2021 | Drawing No. **SP.46a**

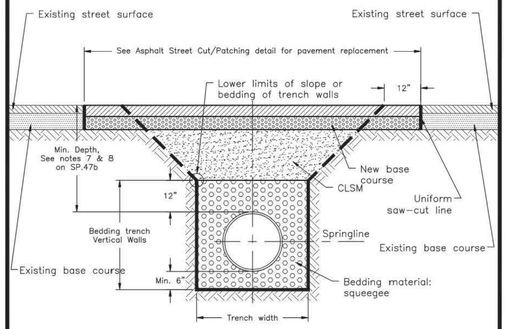
NOTES:
1. This trench backfill detail specifies requirements in addition to those specified in the latest edition of the Colorado Department of Transportation's Standard Specifications for Road and Bridge Construction.
2. A construction traffic control plan shall be submitted to and approved by Douglas County prior to issuance of construction permits in the County right–of–way.
3. Trench shall be braced or shored as necessary for the safety of the workers and protection of other utilities or structures in accordance with applicable local, state and federal safety regulations.
4. The trench width shall be confined to those minimum dimensions, which will permit proper installation and acceptable pipe loading, as established by current local, state and federal Safety regulations.
5. Backfill compaction requirements: Minimum density will be determined in accordance with AASHTO T 99 or T 180 as defined by CDOT Standard Specifications Section 203.07 and CDOT 703.03. Except for CLSM.
6. Pavement edges shall be saw–cut. Edges shall be tack coated prior to patching.
7. All storm sewers shall be constructed so that a minimum cover is maintained to withstand AASHTO HS–20 loading on the pipe. The minimum cover to withstand live loading depends upon the pipe size, type and class, and soil bedding condition, but shall be not less than 1–foot at any point along the pipe. Other factors that affect the depth of the pipe are hydraulic grade line elevations, inlet depths, adjacent utilities or utility crossings, including water and sewer services lines along residential streets, and connections to existing storm sewer systems. The roadway subgrade, which supports the pavement section is typically plowed to a certain depth, moisture treated and compacted prior to the placement of the sub–base, base course, and surfacing. There are also instances where the subgrade material must be excavated and replaced or treated to a certain depth to mitigate swelling soils. These efforts can impact the storm sewer system if it has not been designed with adequate depth. The design engineer shall use the best information available, including pavement design or soils reports (if available) to ensure that storm sewer pipes have adequate depth.
8. Changes in design criteria will require compensating change in pipe design.
9. When pipe sewer is to be extended or replaced with pipe of different material, the connections shall conform to the detail shown on plans or be approved through Douglas County Engineering.
10. When two or more conduits are laid side–by–side, they shall be placed so that they are ½ outside diameter, or ½ outside span, or 3' apart, whichever is less. However, if end sections are used, the minimum spacing shall be 1' between the outside edge of end sections.
11. TRENCH INSTALLATION (per OSHA Standards):
    a. Trenches over 5 feet in depth shall be either shored or the trench walls shall be sloped no steeper than 3:1 to the angle of repose. If sloped, the bottom of the slope shall be a minimum of 1 foot above the top of the pipe.
    b. Shoring will be required when the bottom of the slope is more than 3 feet above the bottom of the trench.
    c. All sheeting or shoring to be removed.
12. CLSM may be used in place of Structural Backfill.
13. CLSM shall not exceed a strength over 100 p.s.i.

REFERENCE: Douglas County Drainage Manual and Colorado Department of Transportation "M" Standards.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

APPROVED BY DOUGLAS COUNTY
Janet Herman
JANET HERMAN, P.E.
DIRECTOR OF PUBLIC WORKS
ENGINEERING
DATE 06/18/2021

PIPE INSTALLATION IN TRENCH NOTES | DOUGLAS COUNTY COLORADO | Issued: 05/2013 | Revised: 05/2021 | Drawing No. **SP.46b**



NOTE: SEE NOTES ON SP.47b

TO BE USED FOR STREET CUT ONLY

APPROVED BY DOUGLAS COUNTY
Janet Herman
JANET HERMAN, P.E.
DIRECTOR OF PUBLIC WORKS
ENGINEERING
DATE 06/18/2021

PIPE INSTALLATION IN TRENCH FOR STREET CUT | DOUGLAS COUNTY COLORADO | Issued: 05/2013 | Revised: 05/2021 | Drawing No. **SP.47a**

NOTES:
1. This Pipe Installation detail specifies requirements in addition to those specified in the latest edition of the Colorado Department of Transportation's Standard Specifications for Road and Bridge Construction.
2. A Construction Traffic Control Plan shall be submitted to and approved by Douglas County prior to issuance of Construction Permits in the County Right–Of–Way.
3. Pipe shall be bedded from 6" below the bottom of the pipe to 12" above the top of pipe.
4. Trench width shall not be more than 16" and not less than 12" wider than the largest Outside Diameter of the pipe.
5. All storm sewers shall be constructed so that a minimum cover is maintained to withstand AASHTO HS–20 loading on the pipe. The minimum cover to withstand live loading depends upon the pipe size, type and class, and soil bedding condition, but shall be not less than 2–foot at any point along the pipe.
6. For water and sanitary sewer pipes, refer to the maintaining district standards for pipe bedding materials.
7. Pavement edges shall be saw–cut and kept to a neat vertical edge prior to paving.
8. Edges shall be tack coated prior to patching.
9. When storm sewer pipe is to be extended or replaced with pipe of different material, the connections shall conform to the detail shown on plans or be approved through Douglas County Engineering.
10. When two or more conduits are laid side–by–side, they shall be placed so that they are ½ outside diameter, or ½ outside span, or 3' apart, whichever is less. However, if end sections are used, the minimum spacing shall be 1' between the outside edge of end sections.
11. Trench installation per OSHA Standards.

TO BE USED FOR STREET CUT ONLY

APPROVED BY DOUGLAS COUNTY
Janet Herman
JANET HERMAN, P.E.
DIRECTOR OF PUBLIC WORKS
ENGINEERING
DATE 06/18/2021

PIPE INSTALLATION IN TRENCH FOR STREET CUT NOTES | DOUGLAS COUNTY COLORADO | Issued: 05/2013 | Revised: 05/2021 | Drawing No. **SP.47b**

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
STORM SEWER DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

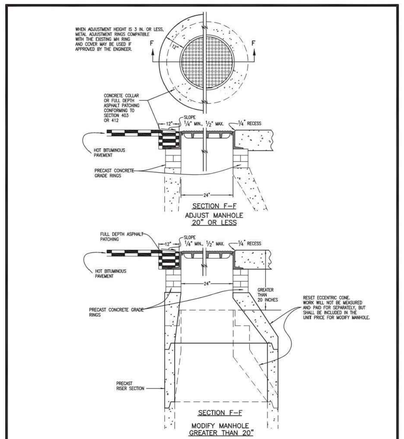
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & COPYRIGHTED INFORMATION OF MARTIN/MARTIN, INC. AND SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C412

PLOT DATE: Thursday, November 20, 2025 11:23 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998–DCSD – Ridgegate Elementary School\PLANS\CDs\C410 – STORM SEWER DETAILS SHEET.dwg

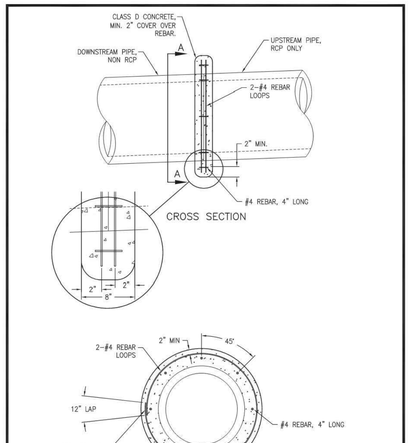
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



MANHOLE RING AND COVER ADJUSTMENT

DOUGLAS COUNTY COLORADO

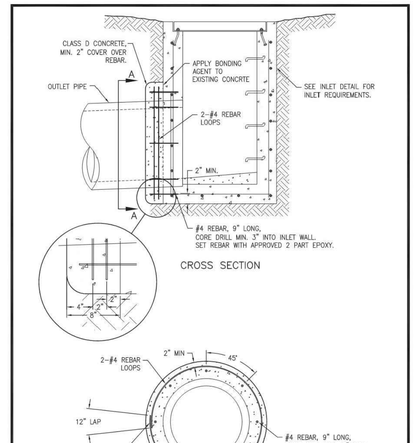
Issued: 05/2013
Revised:
Drawing No. **SP.57**



PIPE CONNECTION DETAIL TO EXISTING PIPE

DOUGLAS COUNTY COLORADO

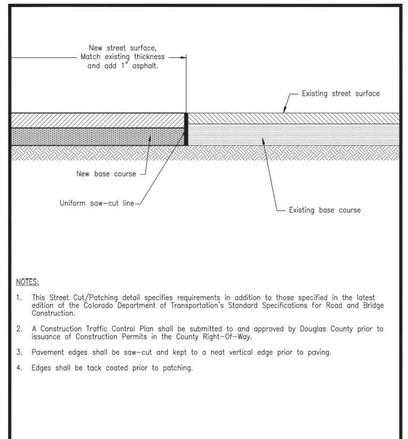
Issued: 05/2013
Revised:
Drawing No. **SP.60a**



PIPE CONNECTION DETAIL TO EXISTING INLET

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.60b**



NOTES:

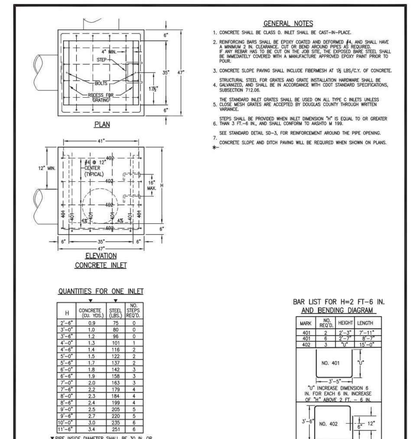
1. This Street Cut/Patching detail specifies requirements in addition to those specified in the latest edition of the Colorado Department of Transportation's Standard Specifications for Road and Bridge Construction.
2. A Construction Traffic Control Plan shall be submitted to and approved by Douglas County prior to issuance of Construction Permits in the County Right-Of-Way.
3. Pavement edges shall be saw-cut and kept to a neat vertical edge prior to paving.
4. Edges shall be tack coated prior to patching.

APPROVED BY: DOUGLAS COUNTY
Janet Herman
JANET HERMAN, P.E.
DIRECTOR OF PUBLIC WORKS ENGINEERING
DATE 06/18/2021

ASPHALT STREET CUT/PATCHING

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised: 05/2021
Drawing No. **SP.62**



GENERAL NOTES

1. CONCRETE SHALL BE CLASS D. INLET SHALL BE CAST–IN–PLACE.
2. REINFORCING BARS SHALL BE EPOXY COATED AND DEFORMED #4, AND SHALL HAVE A MIN. 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. ALL BENDS IN #4 REBAR SHALL BE MADE IN THE SHOP AND THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
3. CONCRETE SLOPE PAVING SHALL INCLUDE FIBERMESH AT 1½ LBS/C.Y. OF CONCRETE.
4. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED, AND SHALL BE IN ACCORDANCE WITH CDOT STANDARD SPECIFICATIONS, SUBSECTION 712.05.
5. THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS ALTERNATE GRATES ARE ACCEPTED BY DOUGLAS COUNTY THROUGH WRITTEN VARIANCE.
6. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FT–6 IN., AND SHALL CONFORM TO ASSHTO M 199.
7. SEE STANDARD DETAIL SD–3, FOR REINFORCEMENT AROUND THE PIPE OPENING.
8. CONCRETE SLOPE AND DITCH PAVING WILL BE REQUIRED WHEN SHOWN ON PLANS.

QUANTITIES FOR ONE INLET

H	CONCRETE (CU. YDS.)	STEEL (LBS.)	NO. STEPS (PROV.)
2'–6"	0.9	75	0
2'–9"	1.0	80	0
3'–0"	1.2	96	0
3'–3"	1.3	101	0
3'–6"	1.4	116	0
3'–9"	1.5	122	0
4'–0"	1.7	137	0
4'–3"	1.8	143	0
4'–6"	1.9	156	0
4'–9"	2.0	163	0
5'–0"	2.2	174	4
5'–3"	2.3	184	4
5'–6"	2.4	195	4
5'–9"	2.5	205	5
6'–0"	2.7	220	5
6'–3"	2.8	230	5
6'–6"	2.9	243	5
6'–9"	3.1	254	5
7'–0"	3.2	265	5
7'–3"	3.3	276	5
7'–6"	3.5	288	6
7'–9"	3.6	299	6
8'–0"	3.8	310	6
8'–3"	3.9	322	6

▼PIPE INSIDE DIAMETER SHALL BE 30 IN. OR LESS. CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

BAR LIST FOR H=2 FT–6 IN. AND BENDING DIAGRAM

MARK	NO. REQ'D.	HEIGHT	LENGTH
401	2	2'–2"	7'–11"
401	6	2'–2"	8'–3"
402	3	"V"	13'–0"

NO. 401
"V" INCREASE DIMENSION 6 IN. FOR EACH 6 IN. INCREASE IN "H" ABOVE 2 FT. – 6 IN.
NO. 402
ADD ONE BAR FOR EACH FT. INCREASE OF "H" ABOVE 2 FT. – 6 IN.
402 BARS WILL BE EQUALLY SPACED FROM EACH OTHER.

REFERENCE:
CDOT M & S STANDARDS M–604–10

INLET TYPE C

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.35a**

INLET CONNECTED TO A CROSS CULVERT

INLET TYPE C

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.35b**

INLET TYPE C

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.35c**

INLET TYPE D

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.36a**

QUANTITIES FOR ONE INLET

H FT.	CONCRETE CU. YD.	STEEL LB.	CIRCULAR PIPE RANGE INSIDE DIA. IN. – "D"
3.0	1.5	127	18
3.5	1.7	149	18–24
4.0	1.9	157	18–30
4.5	2.0	179	18–36
5.0	2.2	187	18–42
5.5	2.4	208	18–42
6.0	2.5	215	18–42
6.5	2.8	238	18–42
7.0	2.9	243	18–42
7.5	3.1	264	18–42
8.0	3.3	271	18–42
8.5	3.5	292	18–42
9.0	3.6	299	18–42
9.5	3.8	320	18–42
10.0	3.9	327	18–42

▼CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

REFERENCE:
CDOT M & S STANDARDS M–604–11

INLET TYPE D

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.36b**

QUANTITIES: 2 STEEL GRATES PER INLET

NO. PIECES	DESCRIPTION	LENGTH EA. PIECE FT	WEIGHT (LBS.)
8	54x7.7 BEAM	40"	7.70
4	30"x¾" FLAT	30⅝"	2.66
4	3"x⅜" FLAT	23⅝"	2.55
			24
			TOTAL DSR GRL

REFERENCE:
CDOT M & S STANDARDS M–604–11

INLET TYPE D

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.36c**

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
STORM SEWER DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY AND/OR THE PROPERTY OF MARTIN/MARTIN, INC. AND SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C413

PLOT DATE: Thursday, November 20, 2025 11:23 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998–DCSD – Ridgegate Elementary School\PLANS\CDs\C410 – STORM SEWER DETAILS SHEET.dwg

DCSD - ELEMENTRY SCHOOL 50

PWSD CONSTRUCTION DOCUMENTS

LOCATED IN THE NORTHWEST QUARTER OF SECTION 23,
TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH P.M,
CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

AGENCY LISTING:

OWNER:
DOUGLAS COUNTY SCHOOL DISTRICT
620 WILCOX STREET
CASTLE ROCK, CO 80104
(303) 387-0100

OWNER'S REPRESENTATIVE:
WEMBER
7350 EAST PROGRESS PLACE #100
GREENWOOD VILLAGE, CO 80211
(303) 378-4130

ARCHITECT:
TREANOR
1755 BLAKE STREET, SUITE 400
DENVER, CO 80202
(303) 298-4700

CIVIL ENGINEER:
MARTIN/MARTIN INC.
12499 W. COLFAX AVE.
LAKEWOOD, COLORADO 80215
ATTN: DAN BEARSE, P.E.
303-431-6100

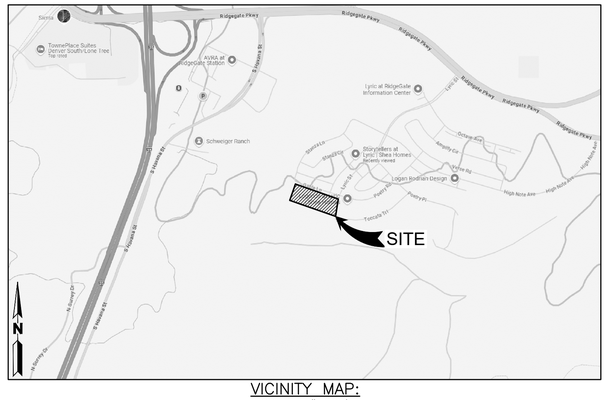
STRUCTURAL ENGINEER:
HCDA ENGINEERING
9 SOUTH WEBER STREET
COLORADO SPRINGS, CO 80903
(719) 633-7784

LANDSCAPE ARCHITECT:
TREANOR
1755 BLAKE STREET, SUITE 400
DENVER, CO 80202
(303) 298-4700

FOOD SERVICE:
KITCHEN TECH
356 MONTE VISTA STREET
BRIGHTON, CO 80601
(303) 835-2018

MEPT ENGINEER:
ME ENGINEERS
14143 DENVER WEST PARKWAY, SUITE 300
GOLDEN, COLORADO 80401
(303) 421-6655

FIRE ALARM:
TLH FIRE
6901 SOUTH PIERCE STREET
LITTLETON, CO 80128
(303) 517-1775



VICINITY MAP:
SCALE: 1"=500'

SHEET INDEX

SHEET #	SHEET TITLE
C500	PWSD COVER SHEET
C510	SANITARY SEWER PLAN & PROFILE SHEET
C520	SANITARY SEWER DETAILS SHEET
C521	SANITARY SEWER DETAILS SHEET
C522	SANITARY SEWER DETAILS SHEET
C600	OVERALL WATER PLAN
C601	WATER PLAN & PROFILE SHEET
C602	WATER PLAN & PROFILE SHEET
C610	WATER DETAILS SHEET
C611	WATER DETAILS SHEET
C612	WATER DETAILS SHEET

PWSD GENERAL NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
2. THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE TOWN OF PARKER, DOUGLAS COUNTY AND OTHER NEIGHBORING CITIES AND TOWNS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
3. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS CONTACT THE PWSD IMMEDIATELY.
4. PWSD ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS NECESSARY TO PERFORM THE PROPOSED WORK.
6. ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000-POUND COMPRESSION STRENGTH.
7. THE DESIGN ENGINEER SHALL SUBMIT ONE (1) SET OF "AS-BUILT" DRAWINGS AND ELECTRONIC FILES TO THE DISTRICT ENGINEER FOR APPROVAL BY DISTRICT. AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT ENGINEER, FULL SIZE PRINTS SHALL BE TRANSMITTED TO THE PWSD OFFICE.
8. NO WORK SHALL BE BACKFILLED UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE DISTRICT ENGINEER OR REPRESENTATIVE OF THE DISTRICT ENGINEER. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY. COMPACTION TESTS MUST BE SUBMITTED TO DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
9. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
10. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF LINES (WATER AND SEWER) FOR UP TO TWO (2) YEARS FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
11. SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
    "X" FOR SANITARY SERVICE SEWERS
    "V" FOR WATER SERVICES
14. NO TREES ALLOWED IN EASEMENTS OR WITHIN 8' OF WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
15. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSD AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSD SPECIFICATION MANUAL.

PWSD WATER SYSTEM NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.
2. ALL WATER MAINS SHALL BE PER PWSD MATERIALS SPECIFICATIONS. ALL MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE SUITABLE FOR CHLORINATED AND CHLORAMINATED WATER.
3. ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RODDED OR MEGA-LUGGED. ALL FITTINGS SHALL BE WRAPPED PER PWSD MATERIALS SPECIFICATIONS.
4. THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
5. FIRE HYDRANTS SHALL CONFORM TO AWWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE HYDRANT ASSEMBLIES PER PWSD SPECIFICATIONS.
6. ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST WITH CONCRETE THRUST BLOCKS.
7. PRECAUTIONS SHALL BE TAKEN TO PROTECT THE INTERIOR OF PIPES, FITTINGS, AND VALVES AGAINST CONTAMINATION. ALL OPENINGS IN THE PIPELINE SHALL BE CLOSED WITH WATERTIGHT PLUGS WHEN PIPE LAYING IS STOPPED AT THE CLOSE OF THE DAY'S WORK OR FOR OTHER REASONS, SUCH AS REST BREAKS OR MEAL PERIODS.
8. VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES; WHERE AN ADDITIONAL VALVE SHALL BE PLACED ON THE TAPPING TEE. OTHER LOCATIONS SHOWN ON THE PLANS.
9. WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSING, A MINIMUM CLEARANCE OF 1.5 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.
10. THE CONTRACTOR SHALL NOTIFY THE PWSD AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION. IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP, THE CONTRACTOR MUST NOTIFY THE DISTRICT ENGINEER 48 HOURS PRIOR TO RE-START.
11. PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH PWSD STANDARDS AND SPECIFICATIONS, LATEST REVISION.
12. THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.
13. COMPACTION OF ALL TRENCHES MUST BE ATTAINED IN ACCORDANCE WITH THE SOILS REPORTS AND COMPACTION TEST RESULTS SUBMITTED TO THE DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
14. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR, DESIGN ENGINEER, AND REPRESENTATIVE OF OTHER APPROVING AGENCIES.
15. CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PWSD SPECIFICATIONS. CHLORINATION OF FINISHED PIPELINE COMPLETED BEFORE HYDROSTATIC TESTING.
16. HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PWSD SPECIFICATIONS UP TO MINIMUM OF 150 PSI IN THE PRESENCE OF A PWSD INSPECTOR/ENGINEER.

PWSD SANITARY SEWER SYSTEM NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
2. ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8" IN DIAMETER UNLESS OTHERWISE NOTED.
3. SEWER LINES SHALL BE INSTALLED 5.0 FEET SOUTH OR WEST OF STREET CENTERLINE, UNLESS OTHERWISE SHOWN ON PLANS. SEWER LINES SHALL BE 10.00 FEET FROM WATER LINES EXCEPT WHEN CROSSING EACH OTHER. SEWER LINES WHICH CROSS LESS THAN 1.50 FEET VERTICALLY FROM THE WATER MAIN SHALL BE ENCASED IN CONCRETE AS PER PWSD SPECIFICATIONS. USE RUBBER GASKETS FOR PVC ENCASEMENT.
4. SEWER RIM ELEVATIONS SHOWN ARE APPROPRIATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. RING AND COVER SHALL BE SET IN CENTERED CONCRETE RINGS WITH RAM-NECK FOR ADJUSTMENT TO MATCH FINAL PAVEMENT ELEVATIONS.
5. THE CONTRACTOR AND SURVEY CREW SHALL VERIFY ELEVATIONS OF EXISTING SEWER LINES AND MANHOLES TO BE TIED TO PRIOR TO CONSTRUCTION OR STAKING OF SANITARY SEWER.
6. NO UNDERDRAIN SYSTEM WILL BE ALLOWED TO BE PLACED IN MAINLINE OR SEWER SERVICE TRENCHES.
7. SEWER SERVICE TEES FOR EACH UNIT SHALL BE STAKED BY A SURVEY CREW AND FURNISHED AND INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER "AS CONSTRUCTED" LOCATION OF TEES. SEWER WYES SHALL BE USED RATHER THAN TEES.
8. ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER, ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED. ALL MANHOLES SHALL HAVE SHAPED INVERTS.
9. PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.
10. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVES OF THE OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER TO SCHEDULE THIS MEETING.
11. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSD AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSD SPECIFICATION MANUAL.
12. ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE PWSD STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.
13. PRIOR TO STARTING WORK WHERE SEWER MAIN IS TO BE CONNECTED TO EXISTING PWSD SEWER SYSTEMS. THE NEAREST MANHOLE TO THE POINT OF TIE-IN SHALL BE PLUGGED WITH A PLUMBER'S PLUG ON THE INLET SIDE BY THE CONTRACTOR. THIS PLUG SHALL REMAIN IN PLACE UNTIL FINAL PROBATIONARY ACCEPTANCE BY PWSD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING AND CLEANING THESE MANHOLES AND REMOVING THE PLUG WHEN INSTRUCTED BY THE DISTRICT.
14. PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CONTRACTOR SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

ABBREVIATIONS:

APPROX	APPROXIMATE
ARCH	ARCHITECT
BLDG	BUILDING
BM	BENCHMARK
BOC	BACK OF CURB
BOW	BACK OF WALK
CL	CENTERLINE
COL	CITY OF LAKEWOOD
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTOUR
DEMO	DEMOLITION
DIA OR Ø	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
EL	ELEVATION
ELEC	ELECTRICAL
ENG	ENGINEER
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
ESMT	EASEMENT
EX.	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
F.E.S.	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FGW	FINISHED GRADE AT WALL
FHY	FIRE HYDRANT
FL	FLOW LINE
FT	FOOT
GB	GRADE BREAK
GR	GRATE (AREA OR VALLEY INLETS)
GV	GATE VALVE
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HORZ	HORIZONTAL
HP	HIGH POINT
INV.	INVERT
LF	LINEAL FEET
LP	LOW POINT
MAX	MAXIMUM
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
OHE	OVERHEAD ELECTRICAL
PD	PERIMETER DRAIN
PERF	PERFORATED
PERM	PERIMETER
PERP	PERPENDICULAR
PL	PROPERTY LINE
PLBG	PLUMBING
PROP	PROPOSED
PRV	PRESSURE RELIEF VALVE
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
ROW	RIGHT OF WAY
SSWR	SANITARY SEWER
SF	SQUARE FOOT
STA	STATION
STRC	STRUCTURAL
SW	SIDEWALK
TELE	TELEPHONE
TB	THRUST BLOCK
TEMP	TEMPORARY
TOC	TOP OF CURB
VERT	VERTICAL

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES WITH THE PROPOSED ELEVATIONS SHOWN IN THESE PLANS. ENGINEER WILL NOT BE LIABLE FOR ANY COST ASSOCIATED WITH CHANGES TO THE DESIGN WITHOUT PROPER NOTIFICATION.

SANITARY MATERIALS LIST

DESCRIPTION	QUANTITY	UNIT
4" PVC	213	LF
6" PVC	294	LF
CLEANOUT	4	EA
4' DIAMETER MANHOLE	2	EA
4" 45° BEND	5	EA
6" 11.25° BEND	1	EA
6" 45° BEND	1	EA
GREASE INTERCEPTOR	1	EA

WATER MATERIALS LIST

DESCRIPTION	QUANTITY	UNIT
3" TYPE K COPPER	156	LF
6" DIP	310	LF
8" PVC	796	LF
FIRE DEPARTMENT CONNECTION	2	EA
6" GATE VALVE	4	EA
8" GATE VALVE	6	EA
3" 22.50° BEND W/T.B.	1	EA
3" 45° BEND W/T.B.	1	EA
6" 22.50° BEND W/T.B.	1	EA
6" 45° BEND W/T.B.	1	EA
8"X8"X6" SWIVEL TEE W/T.B.	3	EA
8"X8"X8" SWIVEL TEE W/T.B.	2	EA
8" 11.25° BEND W/T.B.	1	EA
8" 22.50° BEND W/T.B.	1	EA
8" 45° BEND W/T.B.	6	EA
3" DOMESTIC WATER METER	1	EA
FIRE HYDRANT ASSEMBLY	3	EA
3" CURB STOP	1	EA

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO DISTRICT STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE SOUTH METRO FIRE PROTECTION DISTRICT.

(SIGNATURE OF FIRE CHIEF OR DESIGNATED REPRESENTATIVE)

DATE SIGNED:_____

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY:_____
(DISTRICT ENGINEER)

DATE:_____

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULING INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY:_____
(DISTRICT REPRESENTATIVE)

DATE:_____

CALL 811 3-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE
ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
PWSD COVER SHEET

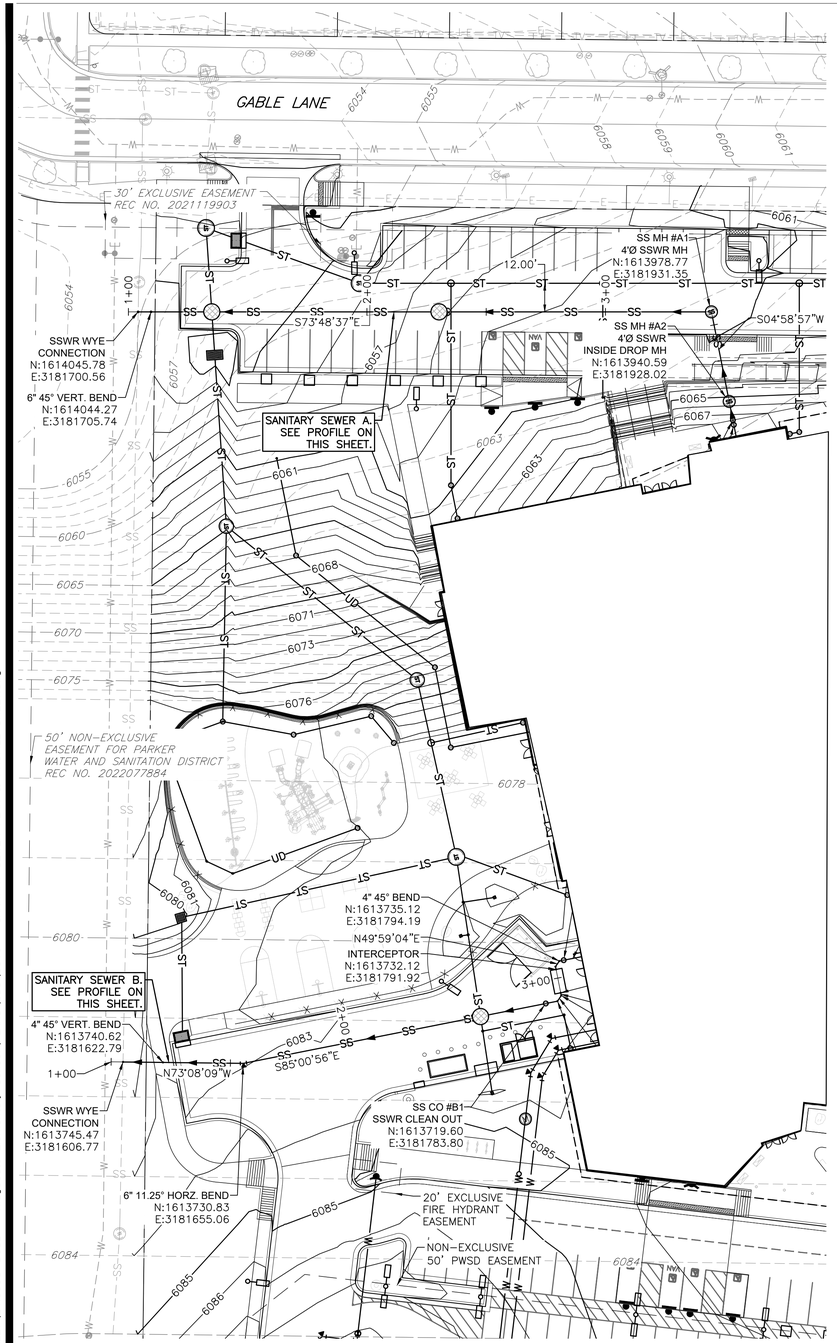
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

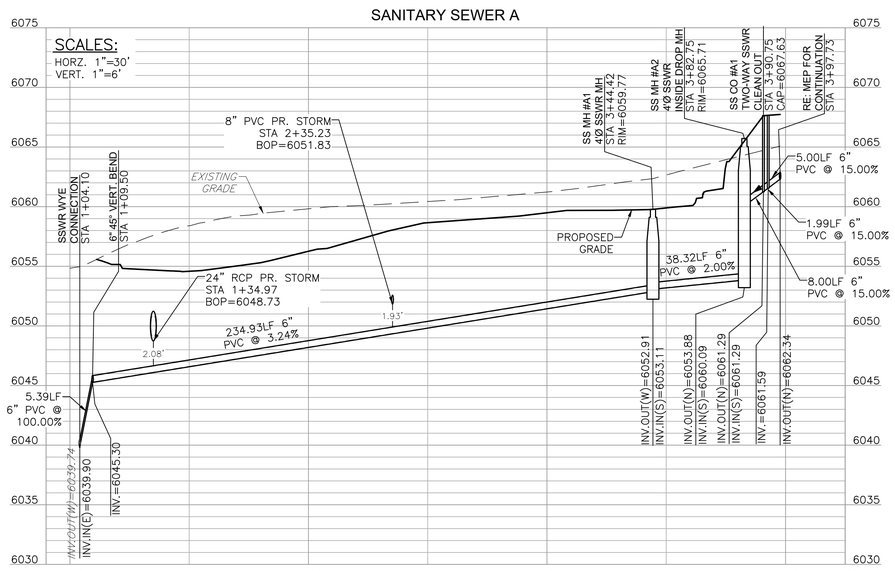
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

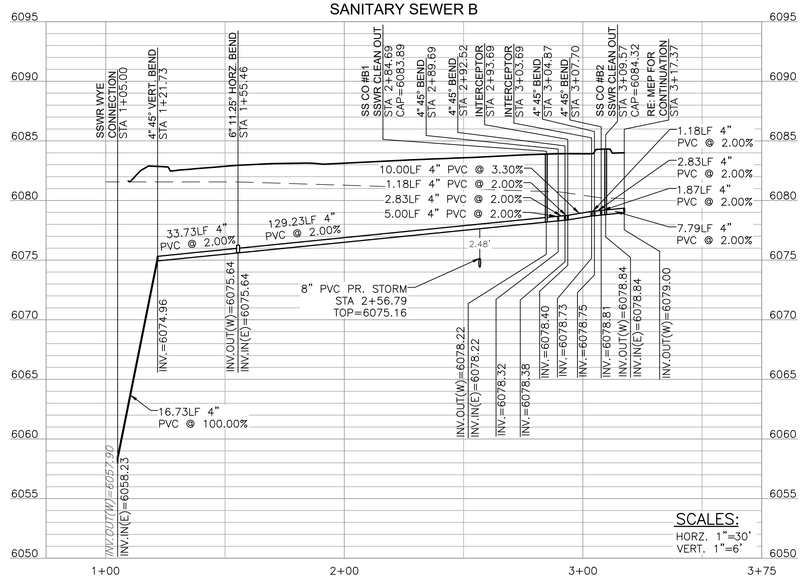
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & COPYRIGHTED INFORMATION OF MARTIN/MARTIN, INC. AND SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

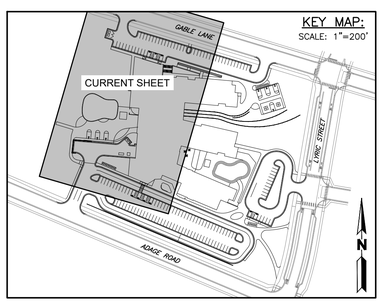
Sheet Number:
C500

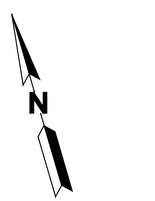
PLOT DATE: Thursday, November 20, 2025 11:23 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - Ridgegate Elementary School\PLANS\CDs\C500 - PWSD COVER SHEET.dwg











30 15 0 30 60
SCALE: 1"=30'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

SANITARY SEWER NOTES:

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AHJ STANDARDS AND SPECIFICATIONS.
2. ALL SANITARY SEWER LINES SHALL BE PVC PIPE, ASTM D-3034 SDR 35.
3. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SEWER POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED SEWER.
4. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF TEN FEET (10') HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND WATER MAINS AND SERVICES.
5. SANITARY SEWER LINES SHALL HAVE A MINIMUM COVER OF 4.5', AND A MAXIMUM COVER OF 5.5' UNLESS OTHERWISE NOTED, AND A MINIMUM CLEARANCE BETWEEN PIPES OF 1.5'.
6. STATIONING AND COORDINATES ARE BASED ON CENTER OF MANHOLES AND CLEANOUTS. THEREFORE, DISTANCES SHOWN ON PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE WIDTHS.
7. RIM ELEVATIONS ON CLEANOUTS ARE APPROXIMATE ONLY. CLEANOUT RIMS SHALL BE SET TO FINAL GRADE AT TIME OF PAVING AND LANDSCAPING TO MATCH FINAL PAVING AND LANDSCAPE GRADES.
8. MANHOLE CONES SHALL BE ALIGNED TO PROVIDE A MINIMUM OF THREE FEET 3' CLEARANCE BETWEEN THE MANHOLE RING AND THE LIP OF GUTTER. MANHOLE COVERS SHALL BE PLACED ABOVE MANHOLE STEPS.
9. THE PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS TO ADJUST THE MANHOLE FRAME AND COVER TO REQUIRED FINAL GRADE. THE PIPELINE CONTRACTOR MAY NEED TO REMOVE AND REPLACE THE PRECAST MANHOLE CONE SECTION SUCH THAT THERE IS NO MORE THAN EIGHTEEN (18) INCHES FROM FINISHED GRADE TO THE TOP OF THE MANHOLE CONE SECTION.
10. CONTRACTOR TO COORDINATE HORIZONTAL AND VERTICAL LOCATIONS OF UTILITY SERVICE CONNECTIONS TO BUILDING WITH MECHANICAL/PLUMBING PLANS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
11. CONTRACTOR SHALL IMMEDIATELY REMOVE DEBRIS DEPOSITED INTO PUBLIC MANHOLES AND OTHER PUBLIC STRUCTURES TO ELIMINATE THE POSSIBILITY OF PROPERTY DAMAGE DUE TO THE DEBRIS CAUSING BACKUP INTO PRIVATE PROPERTIES. IF IT IS DETERMINED THAT DEBRIS CAUSED A BACKUP, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR DAMAGES.
12. NO TREES SHALL BE PLANTED WITHIN TEN 10 FEET OF ANY NEW SANITARY SEWER PIPES.
13. THE CONTRACTOR SHALL COORDINATE ALL SEWER CONNECTIONS AT BUILDING WITH THE PLUMBING PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE PROPERLY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE. (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SANITARY SEWER PLAN & PROFILE SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE LOANED, COPIED OR REPRODUCED, DISCLOSED OR USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C510

PLOT DATE: Thursday, November 20, 2025 11:23 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C510 - SANITARY SEWER PLAN & PROFILE SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTE 1 ABOVE AND A RE-INSPECTION FEE CHARGED.
3. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
4. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
5. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
6. LOTS WITHOUT BULDING ADDRESSES OR LOT AND BLOCK NUMBERS BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
7. CONTRACTOR MUST BE PRESSENT AT TIME OF INSPECTION UNLESS COORDINATED WITH DISTRICT INSPECTOR.

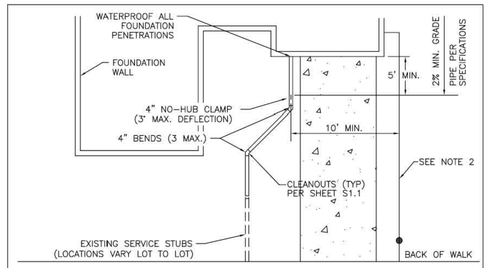
INSTALLATION NOTES:

SEWER

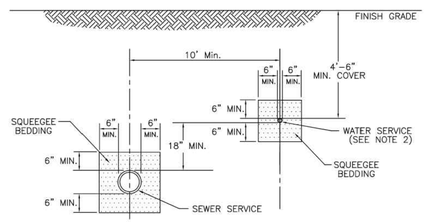
1. ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHD 40 PIPE. APPROVED BEDDING IS TO BE SQUEEGEE.
2. NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3°.
3. MINIMUM GRADE SHALL BE 2%.
4. INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
5. CLEAN-OUTS SHALL BE INSTALLED AT 100' INTERVALS AND EVERY CHANGE IN DIRECTION. CLEAN-OUTS ARE NOT REQUIRED FOR SERVICES LESS THAN 100' UNLESS THERE ARE CHANGES IN DIRECTION. PROVIDE DUAL CLEAN-OUT WITHIN 5 FEET OF FOUNDATION.
6. STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
7. SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
8. ALL SERVICES WILL BE PERMANANTELY MARKED ON CURB FACE AS FOLLOWS:
   "X" FOR SANITARY SEWER SERVICE
   "V" FOR WATER SERVICES

PARKER WATER & SANITATION DISTRICT	
DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 10/16 1/08 1/16
DIRECTOR OF ENGINEERING	

2016 REVISION — SHEET S1.1



TYPICAL SERVICES PLAN VIEW
NTS



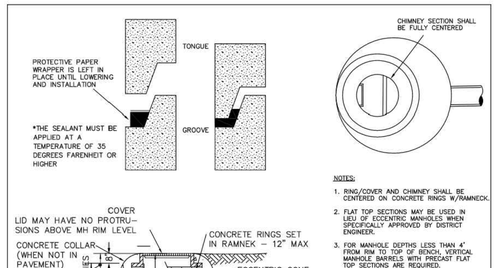
TYPICAL SERVICES SECTION
NTS

NOTE

1. SEE SHEET S1.1 FOR DISTRICT POLICIES AND INSTALLATION NOTES.
2. TYPICAL WATER SERVICES SHOWN ON SHEET W1.2 IN WATER DETAILS.

PARKER WATER & SANITATION DISTRICT	
TYPICAL SEWER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	2/00 01/02 01/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION — SHEET S1.2



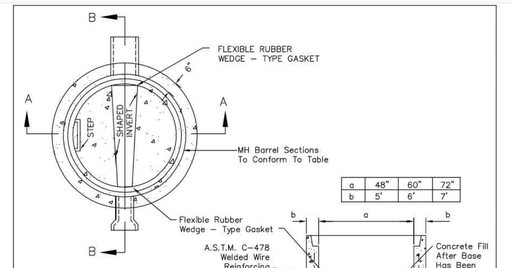
NOTES:

1. RING/COVER AND CHIMNEY SHALL BE CENTERED ON CONCRETE RINGS W/RAMNECK.
2. FLAT TOP SECTIONS MAY BE USED IN LIEU OF ECCENTRIC MANHOLES WHEN SPECIFICALLY APPROVED BY DISTRICT ENGINEER.
3. FOR MANHOLE DEPTHS LESS THAN 4' FROM RIM TO TOP OF BENCH, VERTICAL MANHOLE BARRELS WITH PRECAST FLAT TOP SECTIONS ARE REQUIRED.
4. ALL PRECAST MANHOLE SECTIONS, FLAT TOPS, BARRELS, REDUCERS, ETC. SHALL CONFORM TO ASTM C-478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED MANHOLE SECTIONS.
5. FLAT TOPS SHALL BE CAPABLE OF WITHSTANDING H-20 LIVE LOADS.
6. ALL INTERIOR SEAMS AND PIN HOLES SHALL BE GROUTED WITH TYPE II CEMENT MIX.
7. SHAPING FOR SMOOTH MANHOLE INVERTS MUST BE DONE BY FORMING OR SHAPING CONCRETE BASE.
8. FLAT TOP SECTIONS WITH CONCENTRIC OPENINGS ARE NOT ALLOWED.
9. MANHOLE STEPS SHALL NOT BE INSTALLED OVER THE FLOW CHANNEL. THEY SHALL BE PLACED 12" APART IN A VERTICAL ALIGNMENT WITH THE BOTTOM STEP 8" ABOVE THE BENCH MINIMUM.
10. FLEXIBLE PLASTIC SEALANT, (RAMNECK ETC.) IS REQUIRED IN SHIPLAP JOINTS AND IN JOINTS BETWEEN BASE, BARREL SECTIONS, CONE SECTIONS, FLAT TOPS, ETC.
11. DESIGN ENGINEER OR DISTRICT ENGINEER MAY INCREASE MANHOLE SIZE FOR SPECIAL DESIGN CONSIDERATIONS.
12. SLIP-RING FRAME RISERS MAY NOT BE USED.

PIPE I.D.	MANHOLE I.D.
18" & SMALLER	4'-0"
21" TO 48"	5'-0"
54"	6'-0"
60" & LARGER	SPECIAL DESIGN

PARKER WATER & SANITATION DISTRICT	
PARKER MANHOLE ECCENTRIC CONE	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01 10/16 01/02 1/08 1/16
DIRECTOR OF ENGINEERING	

2016 REVISION — SHEET S3.1



a	48"	60"	72"
b	5'	6'	7'

SANITARY SEWER MH
PLAN (TYPE A)

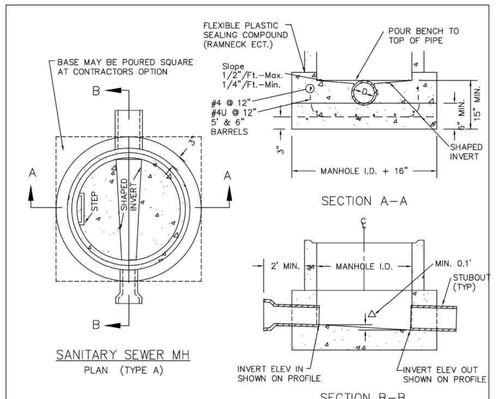
NOTES:

1 Base slab shall be cast monolithic with the bottom riser section.
2 All pipe openings shall be formed with an approved flexible rubber wedge - type gasket conforming to A.S.T.M. C-443 which shall be capable of providing a water - tight joint with zero leakage around the installed pipe(s).
3 Manhole steps installed in bottom riser section shall conform to PWSD Standards and Specifications.
4 Shiplap joint on manhole barrel riser shall conform to PWSD Standards and Specifications; however as an alternate a special adapter section may be provided at the first joint in the bottom riser section which will adapt the precast base section to PWSD standard manhole riser sections.
5 Grouted flow channels and inverts shall conform to PWSD Standards and Specifications. Manhole barrel min. diameter shall conform to table. Precast barrel sections to conform to A.S.T.M. C-478. All dead-end manholes shall be stubbed thru at 0.40% minimum slope.
9 Stub outs shall extend 2'-0" min past manhole O.D. and be satisfactorily plugged.
10 Slope of bench = 1/2"/Ft.-Max 1/4"/Ft.-Min.
11 △= Invert drop thru Manhole (if > 18", outside drop MH req'd)

ATTENTION:
NOT TO BE USED WITHOUT EXPRESS PERMISSION OF DISTRICT ENGINEER.

PARKER WATER & SANITATION DISTRICT	
PRECAST MANHOLE BASE DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION — SHEET S3.4



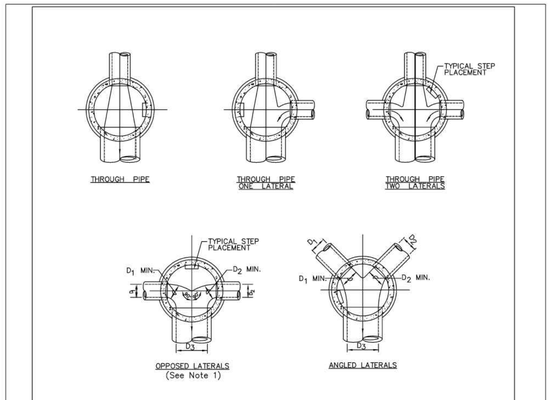
SANITARY SEWER MH
PLAN (TYPE A)

NOTES:

1. Manhole barrel min. thickness to be 5".
2. Shaping for smooth manhole inverts may be done by forming or shaping with cement mortar (San. Sewer).
3. The manhole steps shall conform to District Standards and Specifications.
4. Precast sections to conform to A.S.T.M C-478.
5. All dead-end manholes, that call out a stub out, shall be thru at 0.40% minimum slope.
6. Stub outs shall extend 2'-0" minimum past manhole O.D. and be satisfactorily plugged.
7. Reinforcing in base required for manhole.
8. Slope of bench = 1/2"/Ft.-Max. 1/4"/Ft.-Min.
9. △ = invert drop thru MH (If △ > 18", outside drop MH required). Min. 0.1' for all straight through MH and 0.2' for all angled MH.

PARKER WATER & SANITATION DISTRICT	
CAST-IN-PLACE MANHOLE BASE DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 01/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION — SHEET S3.5

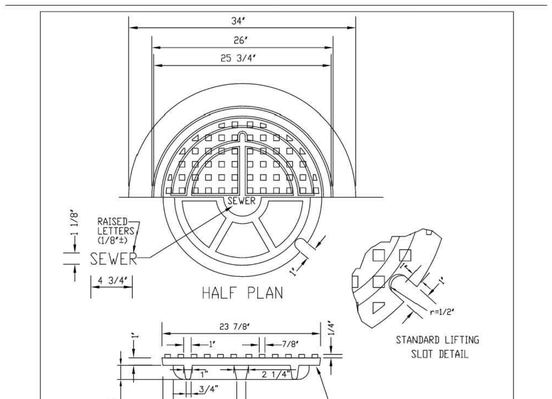


NOTES:

1. Manhole shall be coated using bituminous mastic (ramneck) or plastic sealing compound.

PARKER WATER & SANITATION DISTRICT	
TYPICAL BASE CHANNELIZATION DETAILS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION — SHEET S3.7

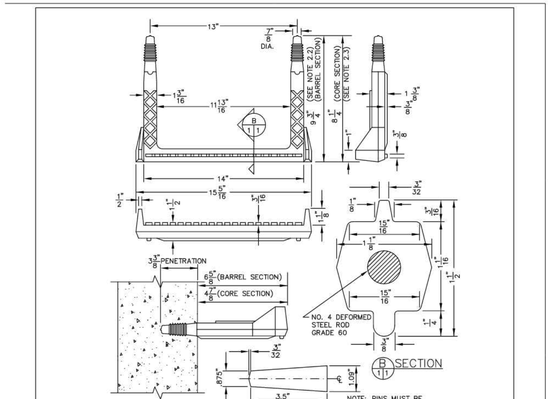


NOTE:

1. Casting Specifications: ASTM A-48 With A Minimum Tensile Strength Of 25 KSI (Class 25)
2. All Casting To Be Dipped In Asphalt Base Paint (Or Approved Equal).
3. No other manhole lids will be accepted without prior approval from the District Engineer.

PARKER WATER & SANITATION DISTRICT	
24" DIAMETER RING AND COVER	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION — SHEET S3.9



NOTES:

2.1 ASTM SPECIFICATIONS:
a) ASTM C-478
b) ASTM A-615 GRADE 60 (STEEL ROD)
c) ASTM 2146-69, TYPE II, GRADE 16906 (POLYPROPYLENE)
2.2 STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURE SHALL HAVE A 9-3/4 INCH LEG AND SHALL PROJECT FROM THE WALL 6-5/8 INCHES.
2.3 STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8-1/4 INCH LEG AND SHALL PROJECT FROM THE WALL 4-7/8 INCHES.
2.4 ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3-3/8 INCHES.
2.5 STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN.
2.6 INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 P.S.I. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
2.7 STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD EXCLUSIVELY FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.

NOTE: PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED.

POLYPROPYLENE REINFORCED PLASTIC STEP

PARKER WATER & SANITATION DISTRICT	
POLYPROPYLENE REINFORCED PLASTIC MANHOLE STEP	
SCALE: NONE	DATE: 2/00
APPROVED: PVR	01/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION — SHEET S3.11

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SANITARY SEWER DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

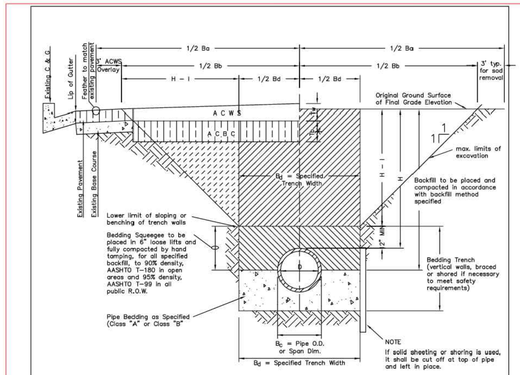
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY AND SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER, EXCEPT WITH THE WRITTEN PERMISSION OF MARTIN/MARTIN, INC.

Sheet Number:
C520

PLOT DATE: Thursday, November 20, 2025 11:24 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C520 - SANITARY SEWER DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



TYPICAL TRENCH DETAIL

T_b = Thickness of Asphaltic Concrete Base Course (A C B C)

T_w = Thickness of Asphaltic Concrete Wearing Surface (A C W S)

T_o = Total Asphalt Thickness ($T_b + T_w$)

B_c = Outside Pipe or Conduit Span Dimension

B_d = Specified Bedding Trench Width and Max Bedding Trench Width at a point 12" above Top of Pipe (See Note 2)

B_b = Max. Pay Width of Asphaltic Concrete Base Course (or Asphaltic Concrete Cold Mix) (See Note 3)

B_a = Max. Pay Width of Asphaltic Concrete Wearing Surface or Sod Replacement (See Note 3)

H = Depth of Surface to Top of Pipe

H-I= Depth from Surface to 1 ft. above Top of Pipe

NOTES

1. *Sloping or benching of trench side walls, where permitted shall be in accordance with applicable Federal, State and Local safety regulations.*
2. *Trench shall be braced and shored as necessary to afford safe working conditions or to protect adjacent utilities, structures, etc. Unless otherwise specified on the plans, no pavement will be made or removal, replacement or relocation of curb & gutter, utilities, sidewalk, structures, etc. outside the maximum limits of excavation as shown and the contractor shall be responsible for protection of same.*
3. *If dimension "B_b" or "B_a" shall then be based upon this actual width.*

TABLE II
ASPHALT AMD. BASE COURSE REPLACEMENT SCHEDULE

STREET WIDTH	ASPHALTIC BASE COURSE (T_b)	ASPHALTIC WEARING SURFACE (T_w)	TOTAL THICKNESS (T_o)
UP TO 36'	4"	2"	6"
36' TO 44'	4"	3"	7"
44' TO 48'	5"	3"	8"
WIDER THAN 48'	6"	3"	9"

PARKER WATER & SANITATION DISTRICT

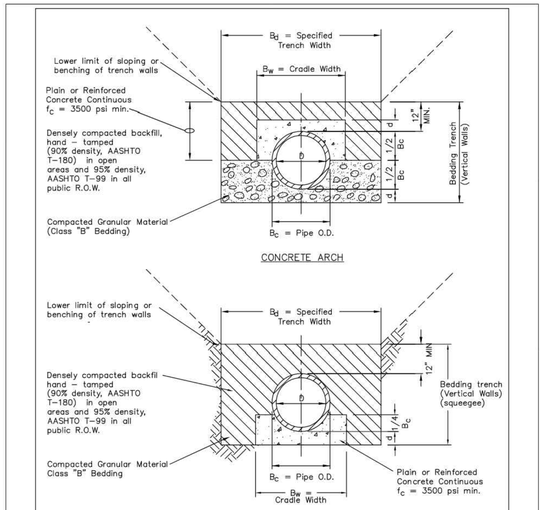
SEWER TRENCHING AND BEDDING DETAIL

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98, 1/16, 10/16

DIRECTOR OF ENGINEERING

2016 REVISION SHEET S4.1



NOTE:
The Design Engineer shall be responsible for structural design of the concrete cradle and/or concrete arch.

TABLE III

NOMINAL DIAMETER (D)	MINIMUM THICKNESS (d)	MIN. WIDTH OF CRADLE (B_w)
18" & smaller	6"	B_c + 8"
21" to 24"	6"	B_c + 8"
27" to 33"	8"	B_c + 8"
36" to 42"	10"	1.25 B_c
48" & larger	1/4 D	1.25 B_c

PARKER WATER & SANITATION DISTRICT

TRENCHING AND BEDDING DETAIL – CLASS "A"

SCALE: NONE DATE: 2/96

APPROVED: PVR 1/16, 10/16

DIRECTOR OF ENGINEERING

2016 REVISION SHEET S4.2

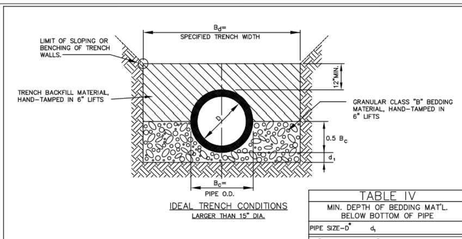


TABLE IV
MIN. DEPTH OF BEDDING MAT'L. BELOW BOTTOM OF PIPE

PIPE SIZE-D*	d_1
18" & SMALLER	6"
21" TO 36"	6"
42" TO 60"	6"
66" TO 96"	9"
104" & LARGER	12"

*FOR ARCH OR ELLIPTICAL PIPE, D=SPAN DIMENSION

B_d=SPECIFIED TRENCH WIDTH AT A POINT 12" ABOVE CROWN (MAX. ALLOWANCE)
B_c=PIPE O.D.
D =PIPE I.D. (OR SPAN DIMENSION FOR ARCH OR ELLIPTICAL PIPE.)
d =DEPTH OF BEDDING MATERIAL BELOW BOTTOM OF PIPE.

NOTES:
3.1 BELL HOLES SHALL BE EXCAVATED AT ALL BELL AND SPIGOT JOINTS.
3.2 BEDDING TRENCH BACKFILL TO BE COMPACTED TO 90% DENSITY, AASHTO T-180 IN OPEN AREAS AND 95% DENSITY AASHTO T-99 IN ALL PUBLIC R.O.W.

CLASS 'B' BEDDING

GENERAL NOTES:
G-1 THESE DETAILS ARE TYPICAL FOR NORMAL TRENCH CONDITIONS. FOR INSTALLATIONS OTHER THAN THESE (SUCH AS EMBANKMENT OR TUNNEL INSTALLATIONS, ETC.) EXCAVATION, BEDDING AND BACKFILL REQUIREMENTS SHALL BE DETAILED ON THE CONSTRUCTION DRAWINGS. FOR UNUSUAL OR UNSTABLE SOIL CONDITIONS, TRENCH AND BEDDING DETAILS SHALL BE A SPECIAL DESIGN.

PARKER WATER & SANITATION DISTRICT

TRENCHING AND BEDDING CLASS "B"

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98, 2/00, 1/16, 10/16

DIRECTOR OF ENGINEERING

2016 REVISION SHEET S4.3

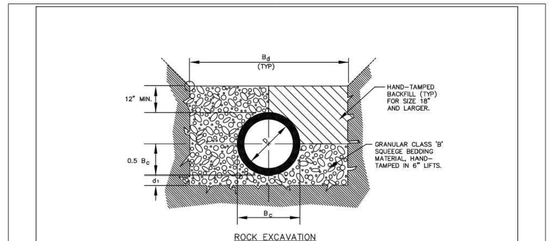


TABLE IV
MIN. DEPTH OF BEDDING MAT'L. BELOW BOTTOM OF PIPE

PIPE SIZE-D*	d_1
18" & SMALLER	6"
21" TO 36"	6"
42" TO 60"	6"
66" TO 96"	9"
104" & LARGER	12"

*FOR ARCH OR ELLIPTICAL PIPE, D=SPAN DIMENSION

B_d=SPECIFIED TRENCH WIDTH AT A POINT 12" ABOVE CROWN (MAX. ALLOWANCE)
B_c=PIPE O.D.
D =PIPE I.D. (OR SPAN DIMENSION FOR ARCH OR ELLIPTICAL PIPE.)
d =DEPTH OF BEDDING MATERIAL BELOW BOTTOM OF PIPE.

NOTES:
3.1 BELL HOLES SHALL BE EXCAVATED AT ALL BELL AND SPIGOT JOINTS.
3.2 BEDDING TRENCH BACKFILL TO BE COMPACTED TO 90% DENSITY, AASHTO T-180 IN OPEN AREAS AND 95% DENSITY AASHTO T-99 IN ALL PUBLIC R.O.W.

CLASS 'B' BEDDING

GENERAL NOTES:
G-1 THESE DETAILS ARE TYPICAL FOR NORMAL TRENCH CONDITIONS. FOR INSTALLATIONS OTHER THAN THESE (SUCH AS EMBANKMENT OR TUNNEL INSTALLATIONS, ETC.) EXCAVATION, BEDDING AND BACKFILL REQUIREMENTS SHALL BE DETAILED ON THE CONSTRUCTION DRAWINGS. FOR UNUSUAL OR UNSTABLE SOIL CONDITIONS, TRENCH AND BEDDING DETAILS SHALL BE A SPECIAL DESIGN.

PARKER WATER & SANITATION DISTRICT

TRENCHING AND BEDDING CLASS "B"

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98, 2/00, 1/16, 10/16

DIRECTOR OF ENGINEERING

2016 REVISION SHEET S4.4

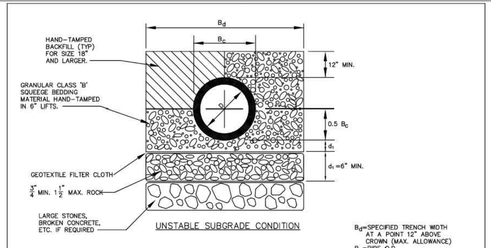


TABLE IV
MIN. DEPTH OF BEDDING MAT'L. BELOW BOTTOM OF PIPE.

PIPE SIZE-D*	d_1
18" & SMALLER	6"
21" TO 36"	6"
42" TO 60"	6"
66" TO 96"	9"
104" & LARGER	12"

*FOR ARCH OR ELLIPTICAL PIPE, D=SPAN DIMENSION

B_d=SPECIFIED TRENCH WIDTH AT A POINT 12" ABOVE CROWN (MAX. ALLOWANCE)
B_c=PIPE O.D.
D =PIPE I.D. (OR SPAN DIMENSION FOR ARCH OR ELLIPTICAL PIPE.)
d =DEPTH OF BEDDING MATERIAL BELOW BOTTOM OF PIPE.

NOTES:
3.1 BELL HOLES SHALL BE EXCAVATED AT ALL BELL AND SPIGOT JOINTS.
3.2 BEDDING TRENCH BACKFILL TO BE COMPACTED TO 90% DENSITY, AASHTO T-180 IN OPEN AREAS AND 95% DENSITY AASHTO T-99 IN ALL PUBLIC R.O.W.

CLASS 'B' BEDDING

GENERAL NOTES:
G-1 THESE DETAILS ARE TYPICAL FOR NORMAL TRENCH CONDITIONS. FOR INSTALLATIONS OTHER THAN THESE (SUCH AS EMBANKMENT OR TUNNEL INSTALLATIONS, ETC.) EXCAVATION, BEDDING AND BACKFILL REQUIREMENTS SHALL BE DETAILED ON THE CONSTRUCTION DRAWINGS. FOR UNUSUAL OR UNSTABLE SOIL CONDITIONS, TRENCH AND BEDDING DETAILS SHALL BE A SPECIAL DESIGN.

PARKER WATER & SANITATION DISTRICT

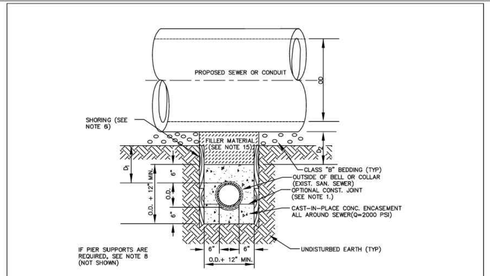
TRECHING AND BEDDING CLASS "B"

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98, 2/00, 1/16, 10/16

DIRECTOR OF ENGINEERING

2016 REVISION SHEET S4.5



TYPE III
CONCRETE ENCASEMENT FOR SANITARY SEWERS

(FULL ENCASEMENT) NO SCALE

GENERAL NOTES FOR TYPE I,II& III ENCASEMENT

1. CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED & BOTTOM HALF OF ENCASEMENT IS POURED SEPARATELY, A ONE INCH LAYER OF SAND OR MORTAR SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
2. LENGTH OF ENCASEMENT FOR:
   (a) TYPE I & TYPE II ENCASEMENT SHALL EXTEND FULL TRENCH WIDTH EXCAVATED FOR PROPOSED SEWER OR CONDUIT.
   (b) TYPE II ENCASEMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
3. UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I,II & III ENCASEMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, TO BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
4. TYPE I, II OR III ENCASEMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
   (a) TYPE I OR TYPE III IF $D_s \leq 18"$ ($D_s \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
   (b) TYPE IIa IS REQUIRED FOR SANITARY SEWERS CROSSING UNDER WATER MAINS WATER MAINS AND $D_s \leq 24"$ ($D_s \leq 18"$)
   (c) TYPE IIb IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION "D_s".
   (d) EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS, OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASEMENT WILL NORMALLY BE SATISFACTORY.
   (e) IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASEMENT MAY NOT BE REQUIRED.
5. FILLER MATERIAL BETWEEN CONDUITS TO BE:
   (a) APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC IF D_s & $D_b \leq 6"$
   (b) COMPACTED CLASS "B" BEDDING IF D_s & $D_b > 6"$ (IF $D_b > 6"$ FOR TYPE IIb ENCASEMENT POUR CONCRETE ON UNDISTURBED SOIL)
6. SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASEMENT.
7. THESE ENCASEMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
8. IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIER SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN AND PROFILE DRAWINGS.
9. CONCRETE ENCASED PIPING SHALL BE LINED WITH FELT LAYER.

PARKER WATER & SANITATION DISTRICT

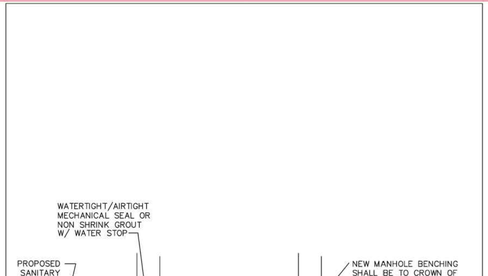
CONCRETE ENCASEMENT TYPE III

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98, 1/16, 10/16

DIRECTOR OF ENGINEERING

2016 REVISION SHEET S4.8



MANHOLE INVERT TIE–IN

NOTES

1 – NEW BENCH SHALL INCLUDE REINFORCEMENT TO CONTROL CONCRETE CRACKING.

PARKER WATER & SANITATION DISTRICT

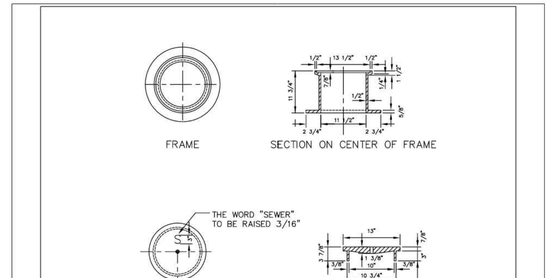
MANHOLE INVERT TIE–IN DETAIL

SCALE: NONE DATE: 2/96

APPROVED: PVR 1/16, 10/16

DIRECTOR OF ENGINEERING

2016 REVISION SHEET S4.9



PARKER WATER & SANITATION DISTRICT

IN–LINE CLEANOUT SECTIONS

SCALE: NONE DATE: 2/96

APPROVED: PVR 2/00, 1/16, 10/16

DIRECTOR OF ENGINEERING

2016 REVISION SHEET S4.12

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
12499 West Colfax Avenue
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SANITARY SEWER DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0098
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

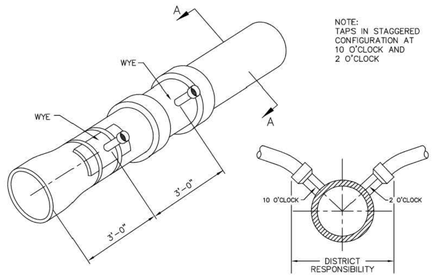
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY AND SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY MARTIN/MARTIN, INC. IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C521

PLOT DATE: Thursday, November 20, 2025 11:24 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C520 - SANITARY SEWER DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



NOTE:
TAPS IN STAGGERED CONFIGURATION AT 10 O'CLOCK AND 2 O'CLOCK

SECTION A – A

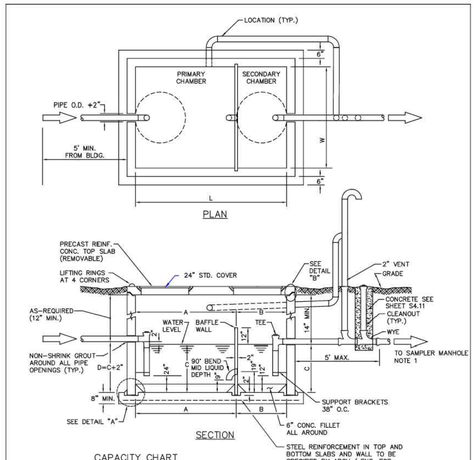
Sewer service connections shall be positioned at either the 2 o'clock or the 10 o'clock postion on the circumference of the sewer main. On new installations, tee or wye fittings shall be used.When tapping into existing sewer main, a saddle connection and approved coring method shall be used. The minimum distance between service connections made along the pipe shall be 3 feet. The minimum distance from either the bell or spigot end of a pipe shall be 3 feet. The minimum distance from the center of a manhole to a service connection shall be either 7 feet or the transition point from the manhole trench to the normal pipe trench, whichever is greater. A maximum of 4 sewer service connections shall be allowed per 20 foot length of pipe. In all cases, a specific soils investigation should be conducted to assure that the external loading will be within allowable limits regardless of the number of taps involved.

DOMESTIC SEWER TAPPING DETAIL

PARKER WATER & SANITATION DISTRICT		
DOMESTIC SEWER TAPPING DETAIL		
SCALE: NONE	DATE: 2/96	
APPROVED: PVR	4/01 1/08 1/16 10/16	
DIRECTOR OF ENGINEERING		

2016 REVISION

SHEET S4.13



CAPACITY CHART

TOTAL WATER CAP. APPROX. (GALLONS)	GREASE CAP. APPROX. (CU. FT.)	DIMENSIONS (INCHES)					
		W	L	A	B	C	D
1190	61	72	96	64	32	40	42
1600	84	72	144	96	48	40	42
1840	103	72	144	96	48	46	48
2080	117	72	144	96	48	52	54
2560	150	72	144	96	48	64	68
3040	183	72	144	96	48	76	78
3280	202	72	144	96	48	82	84
3520	216	72	144	96	48	88	90

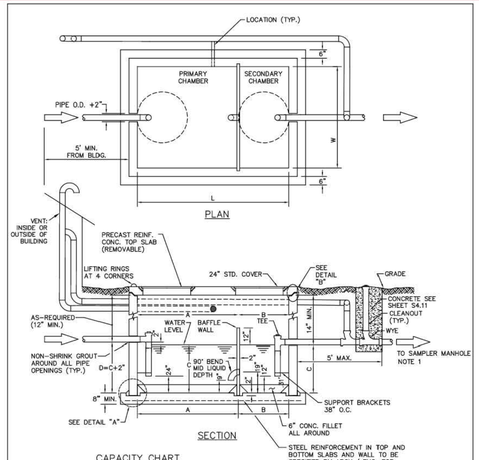
1. SAMPLE MANHOLE SHALL BE LESS THAN 20 FEET FROM CLEANOUT.

TOP OF VAULT BELOW FINISHED GRADE OR AT GRADE. IF BELOW GRADE, RING AND COVER SHALL BE ADJUSTED TO FINAL GRADE USING A MINIMUM OF 4" GRADE RING(S) AND A MAXIMUM OF 12" GRADE RING(S). FOR DEPTHS OVER 12" A MAN HOLE BARREL SECTION WILL BE REQUIRED, WITH A FLAT TOP FOR DEPTHS OF 4' OR LESS AND AN ECCENTRIC CONE TOP FOR DEPTHS GREATER THAN 4'

PARKER WATER & SANITATION DISTRICT		
COMMERCIAL GREASE INTERCEPTOR SHEET 1 OF 2		
SCALE: NONE	DATE: 2/96	
APPROVED: PVR	2/00 01/02 01/16 10/16	
DIRECTOR OF ENGINEERING		

2016 REVISION

SHEET S5.1



CAPACITY CHART

TOTAL WATER CAP. APPROX. (GALLONS)	GREASE CAP. APPROX. (CU. FT.)	DIMENSIONS (INCHES)					
		W	L	A	B	C	D
1190	61	72	96	64	32	40	42
1600	84	72	144	96	48	40	42
1840	103	72	144	96	48	46	48
2080	117	72	144	96	48	52	54
2560	150	72	144	96	48	64	68
3040	183	72	144	96	48	76	78
3280	202	72	144	96	48	82	84
3520	216	72	144	96	48	88	90

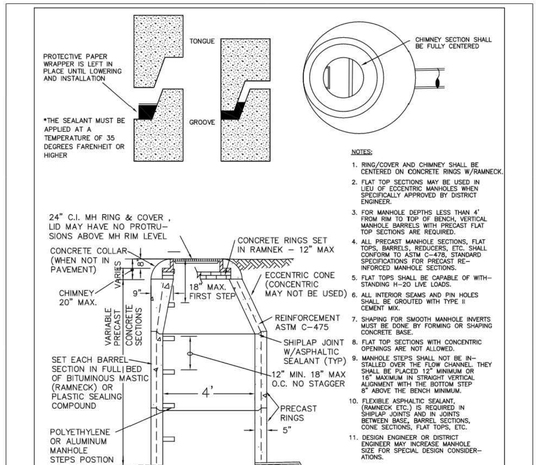
1. SAMPLE MANHOLE SHALL BE LESS THAN 20 FEET FROM CLEANOUT.

TOP OF VAULT BELOW FINISHED GRADE OR AT GRADE. IF BELOW GRADE, RING AND COVER SHALL BE ADJUSTED TO FINAL GRADE USING A MINIMUM OF 4" GRADE RING(S) AND A MAXIMUM OF 12" GRADE RING(S). FOR DEPTHS OVER 12" A MAN HOLE BARREL SECTION WILL BE REQUIRED, WITH A FLAT TOP FOR DEPTHS OF 4' OR LESS AND AN ECCENTRIC CONE TOP FOR DEPTHS GREATER THAN 4'

PARKER WATER & SANITATION DISTRICT		
COMMERCIAL GREASE INTERCEPTOR SHEET 2 OF 2		
SCALE: NONE	DATE: 2/96	
APPROVED: PVR	01/02 01/16 10/16	
DIRECTOR OF ENGINEERING		

2016 REVISION

SHEET S5.2



NOTES:
1. RING/COVER AND CHIMNEY SHALL BE CENTERED ON CONCRETE RINGS W/RAMNECK.
2. FLAT TOP SECTIONS MAY BE USED IN LIEU OF ECCENTRIC MANHOLES WHEN SPECIFICALLY APPROVED BY DISTRICT ENGINEER.
3. FOR MANHOLE DEPTHS LESS THAN 4' FROM RIM TO TOP OF BENCH, VERTICAL MANHOLE BARRELS WITH PRECAST FLAT TOP SECTIONS ARE REQUIRED.
4. ALL PRECAST MANHOLE SECTIONS, FLAT TOPS, BARRELS, REDUCERS, ETC. SHALL CONFORM TO ASTM C-478, STANDARD SPECIFICATIONS FOR PRECAST RE-INFORCED MANHOLE SECTIONS.
5. FLAT TOPS SHALL BE CAPABLE OF WITH-STANDING H-20 LIVE LOADS.
6. ALL INTERIOR SEAMS AND PIN HOLES SHALL BE GROUTED WITH TYPE II CEMENT MIX.
7. SHAPING FOR SMOOTH MANHOLE INVERTS MUST BE DONE BY FORMING OR SHAPING CONCRETE BASE.
8. FLAT TOP SECTIONS WITH CONCENTRIC OPENINGS ARE NOT ALLOWED.
9. MANHOLE STEPS SHALL NOT BE IN-STALLED OVER THE FLOW CHANNEL, THEY SHALL BE PLACED 12" MINIMUM OR 16" MAXIMUM IN STRAIGHT VERTICAL ALIGNMENT WITH THE BOTTOM STEP 8" ABOVE THE BENCH MINIMUM.
10. FLEXIBLE ASPHALTIC SEALANT, (RAMNECK ETC.) IS REQUIRED IN SHIPLAP JOINTS AND IN JOINTS BETWEEN BASE, BARREL SECTIONS, CONE SECTIONS, FLAT TOPS, ETC.
11. DESIGN ENGINEER OR DISTRICT ENGINEER MAY INCREASE MANHOLE SIZE FOR SPECIAL DESIGN CONSIDER-ATIONS.
12. SLIP-RING FRAME RISERS MAY NOT BE USED.
13. STEPS TO DESCEND TO BENCH NOT CHANNEL.

PARKER WATER & SANITATION DISTRICT		
SAMPLING MANHOLE		
SCALE: NONE	DATE: 2/99	
APPROVED: PVR	2/00 10/16 4/01 1/08 1/16	
DIRECTOR OF ENGINEERING		

2016 REVISION

SHEET S5.3

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE
ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SANITARY SEWER DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

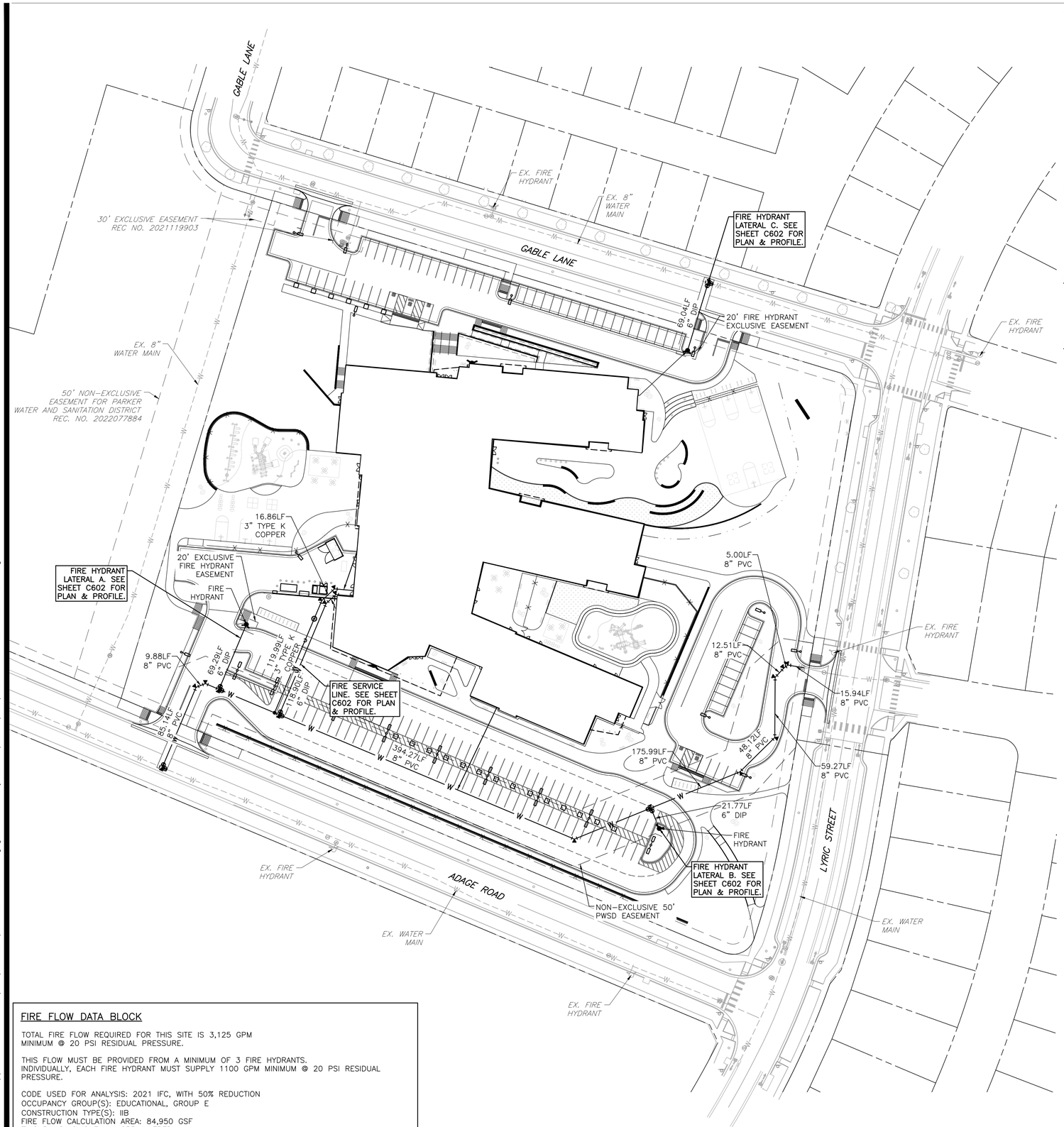
Job Number	24.0998
Project Manager	D.BEARSE
Design By	D.BEARSE/K.RICKETSON
Drawn By	J.DIAZ
Principal In Charge	P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, LOANED, DISCLOSED OR CHANGED, ALL RIGHTS RESERVED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C522

PLOT DATE: Thursday, November 20, 2025 11:24 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C520 - SANITARY SEWER DETAILS SHEET.dwg



FIRE FLOW DATA BLOCK

TOTAL FIRE FLOW REQUIRED FOR THIS SITE IS 3,125 GPM
MINIMUM @ 20 PSI RESIDUAL PRESSURE.

THIS FLOW MUST BE PROVIDED FROM A MINIMUM OF 3 FIRE HYDRANTS.
INDIVIDUALLY, EACH FIRE HYDRANT MUST SUPPLY 1100 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.

CODE USED FOR ANALYSIS: 2021 IFC, WITH 50% REDUCTION
OCCUPANCY GROUP(S): EDUCATIONAL, GROUP E
CONSTRUCTION TYPE(S): IIB
FIRE FLOW CALCULATION AREA: 84,950 GSF
THIS BUILDING IS FULLY SPRINKLERED
AVERAGE HYDRANT SPACING: 400 FT
MAXIMUM DISTANCE FROM HYDRANT TO ANY POINT ON STREET OR ROAD FRONTAGE: 225 FT

WATER LINE NOTES:

1. ALL WATER LINE INSTALLATION SHALL BE PER THE AHJ STANDARDS AND SPECIFICATIONS.
2. WATER LINES SHALL HAVE A MINIMUM COVER OF 4.5', AND A MAXIMUM COVER OF 5.5' UNLESS OTHERWISE NOTED, AND A MINIMUM CLEARANCE BETWEEN PIPES OF 1.5'
3. ALL DIP PIPE FITTINGS, VALVES, FIRE HYDRANTS, RESTRAINT, ETC. SHALL BE POLYETHYLENE ENCASED (POLY-WRAPPED) FOR CORROSION PROTECTION.
4. FIRE SERVICE LINES SHALL BE DIP AND FULLY RESTRAINED FROM MAIN TO BUILDING. FIRE HYDRANT LATERALS SHALL BE DIP AND FULLY RESTRAINED FROM THE MAIN TO THE FIRE HYDRANT.
5. FIRE HYDRANT ASSEMBLY INCLUDES: 6" GATE VALVE, 6" DIP, AND FIRE HYDRANT.
6. THRUST BLOCKS ARE REQUIRED ON ALL BENDS, TEES AND FIRE HYDRANTS PER THE AHJ DETAILS.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

COLORADO 811 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

N

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
OVERALL WATER PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

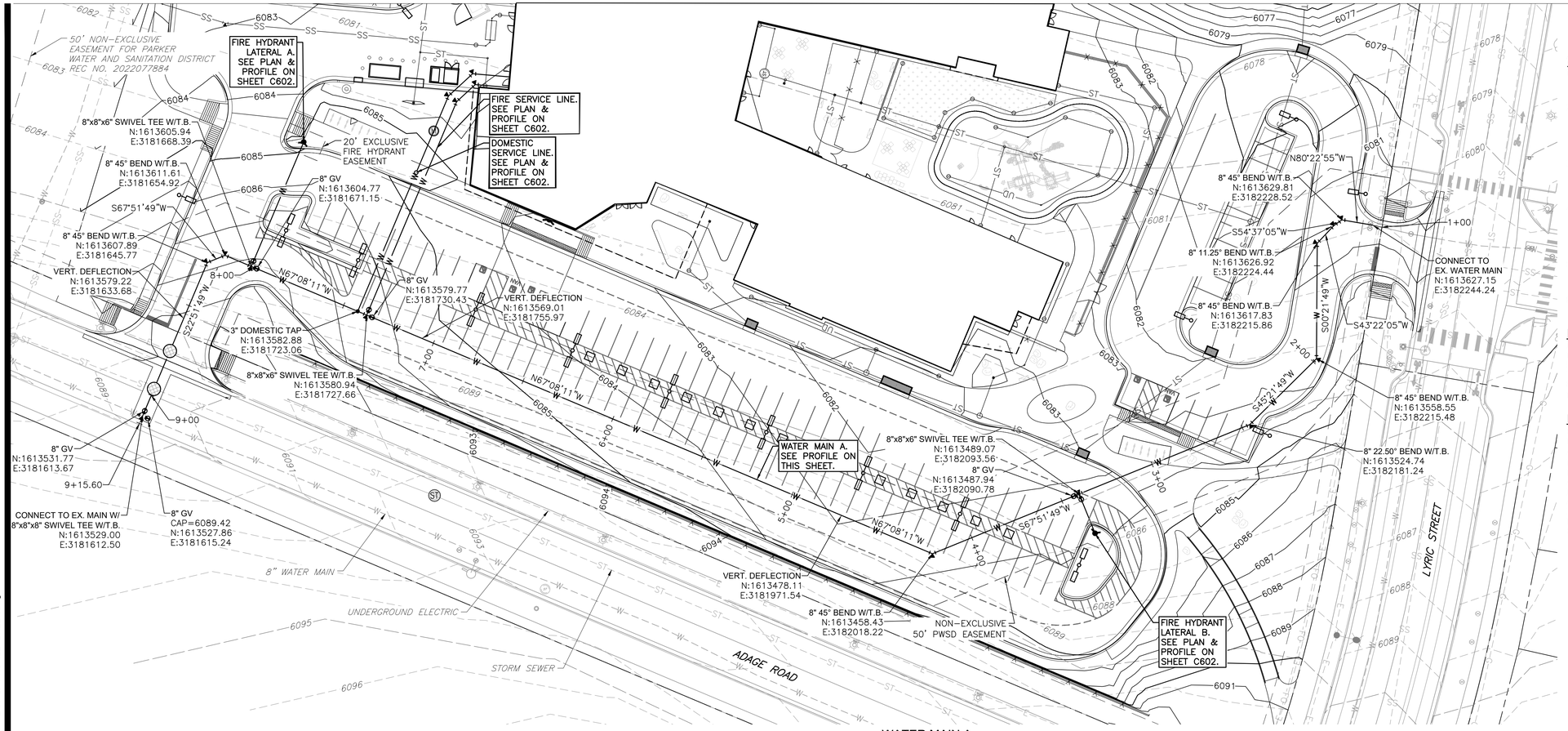
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & CANNOT BE COPIED, DISCLOSED OR CHANGED ALL RIGHTS RESERVED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C600

PLOT DATE: Thursday, November 20, 2025 11:24 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\CDs\C600 - OVERALL WATER PLAN.dwg



SUBJECT TO CHANGE PENDING JURISDICTIONAL APPROVAL

WATER LINE NOTES:

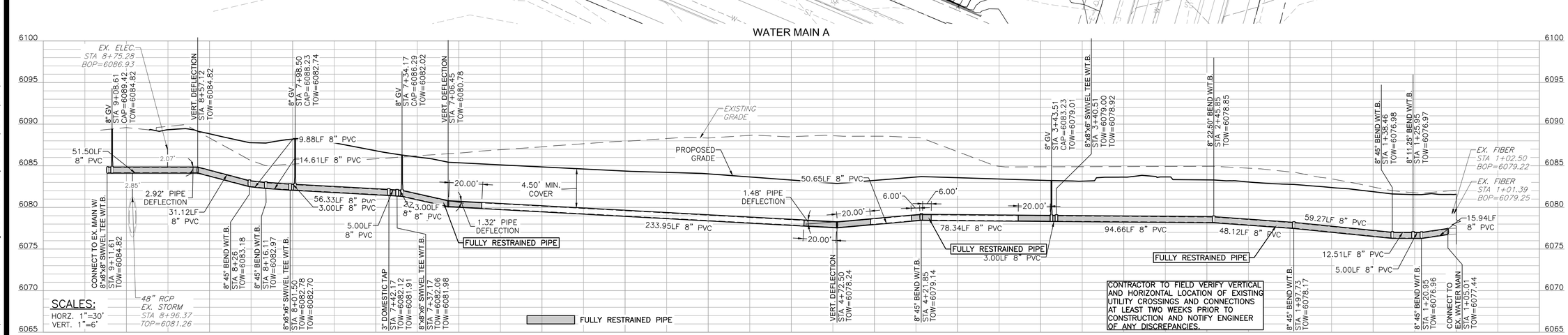
1. ALL WATER LINE INSTALLATION SHALL BE PER THE AHJ STANDARDS AND SPECIFICATIONS.
2. WATER LINES SHALL HAVE A MINIMUM COVER OF 4.5', AND A MAXIMUM COVER OF 5.5' UNLESS OTHERWISE NOTED, AND A MINIMUM CLEARANCE BETWEEN PIPES OF 1.5'.
3. ALL DIP PIPE FITTINGS, VALVES, FIRE HYDRANTS, RESTRAINT, ETC. SHALL BE POLYETHYLENE ENCASED (POLY-WRAPPED) FOR CORROSION PROTECTION.
4. FIRE SERVICE LINES SHALL BE DIP AND FULLY RESTRAINED FROM MAIN TO BUILDING. FIRE HYDRANT LATERALS SHALL BE DIP AND FULLY RESTRAINED FROM THE MAIN TO THE FIRE HYDRANT.
5. FIRE HYDRANT ASSEMBLY INCLUDES: 6" GATE VALVE, 6" DIP, AND FIRE HYDRANT.
6. THRUST BLOCKS ARE REQUIRED ON ALL BENDS, TEES AND FIRE HYDRANTS PER THE AHJ DETAILS.

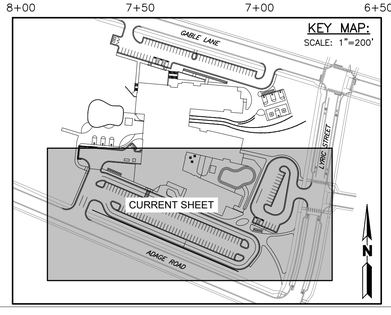
BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.





COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

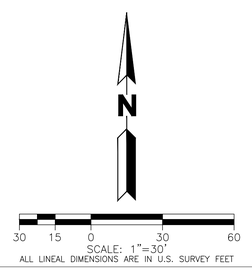
MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

FIRE FLOW DATA BLOCK

TOTAL FIRE FLOW REQUIRED FOR THIS SITE IS 3,125 GPM
MINIMUM @ 20 PSI RESIDUAL PRESSURE.

THIS FLOW MUST BE PROVIDED FROM A MINIMUM OF 3 FIRE HYDRANTS. INDIVIDUALLY, EACH FIRE HYDRANT MUST SUPPLY 1100 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.

CODE USED FOR ANALYSIS: 2021 IFC, WITH 50% REDUCTION
OCCUPANCY GROUP(S): EDUCATIONAL, GROUP E
CONSTRUCTION TYPE(S): IIB
FIRE FLOW CALCULATION AREA: 84,950 GSF
THIS BUILDING IS FULLY SPRINKLERED
AVERAGE HYDRANT SPACING: 400 FT
MAXIMUM DISTANCE FROM HYDRANT TO ANY POINT ON STREET OR ROAD FRONTAGE: 225 FT



CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
12499 West Colfax Avenue
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
WATER PLAN & PROFILE SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

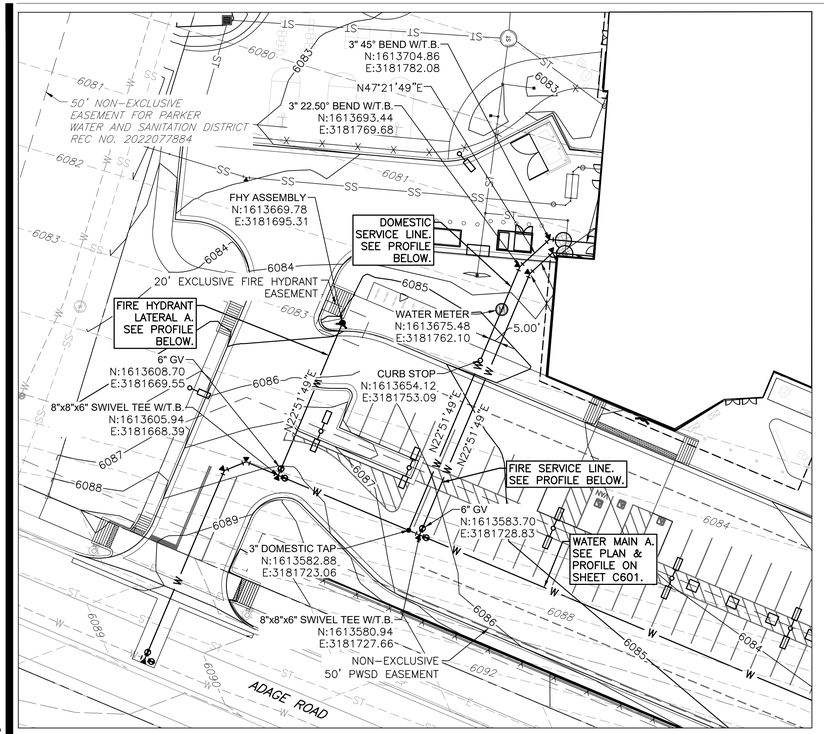
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL REMAIN THE PROPERTY OF MARTIN/MARTIN. ALL RIGHTS RESERVED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C601

PLOT DATE: Thursday, November 20, 2025 11:24 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - Ridgegate Elementary School\PLANS\CDs\C601 - WATER PLAN & PROFILE SHEET.dwg



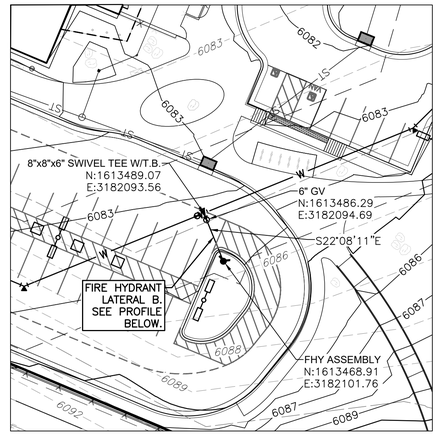
INSET A:
SCALE: 1"=30'

FIRE FLOW DATA BLOCK

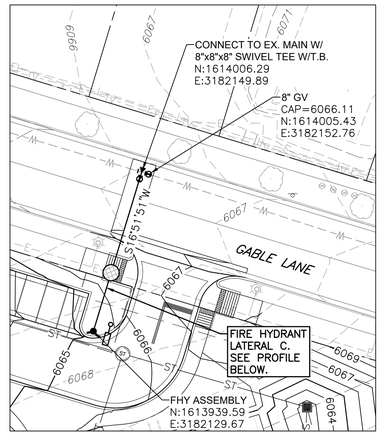
TOTAL FIRE FLOW REQUIRED FOR THIS SITE IS 3,125 GPM
MINIMUM @ 20 PSI RESIDUAL PRESSURE.

THIS FLOW MUST BE PROVIDED FROM A MINIMUM OF 3 FIRE HYDRANTS.
INDIVIDUALLY, EACH FIRE HYDRANT MUST SUPPLY 1100 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.

CODE USED FOR ANALYSIS: 2021 IFC, WITH 50% REDUCTION
OCCUPANCY GROUP(S): EDUCATIONAL, GROUP E
CONSTRUCTION TYPE(S): IIB
FIRE FLOW CALCULATION AREA: 84,950 GSF
THIS BUILDING IS FULLY SPRINKLERED
AVERAGE HYDRANT SPACING: 400 FT
MAXIMUM DISTANCE FROM HYDRANT TO ANY POINT ON STREET OR ROAD FRONTAGE: 225 FT



INSET B:
SCALE: 1"=30'



INSET C:
SCALE: 1"=30'

WATER LINE NOTES:

1. ALL WATER LINE INSTALLATION SHALL BE PER THE AHJ STANDARDS AND SPECIFICATIONS.
2. WATER LINES SHALL HAVE A MINIMUM COVER OF 4.5', AND A MAXIMUM COVER OF 5.5' UNLESS OTHERWISE NOTED, AND A MINIMUM CLEARANCE BETWEEN PIPES OF 1.5'.
3. ALL DIP PIPE FITTINGS, VALVES, FIRE HYDRANTS, RESTRAINT, ETC. SHALL BE POLYETHYLENE ENCASED (POLY-WRAPPED) FOR CORROSION PROTECTION.
4. FIRE SERVICE LINES SHALL BE DIP AND FULLY RESTRAINED FROM MAIN TO BUILDING. FIRE HYDRANT LATERALS SHALL BE DIP AND FULLY RESTRAINED FROM THE MAIN TO THE FIRE HYDRANT.
5. FIRE HYDRANT ASSEMBLY INCLUDES: 6" GATE VALVE, 6" DIP, AND FIRE HYDRANT.
6. THRUST BLOCKS ARE REQUIRED ON ALL BENDS, TEES AND FIRE HYDRANTS PER THE AHJ DETAILS.

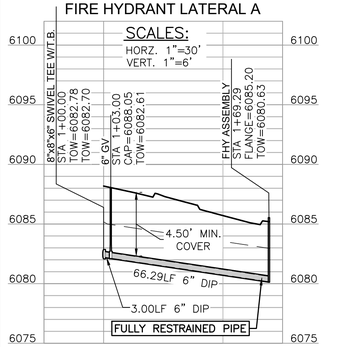
BASIS OF BEARINGS:

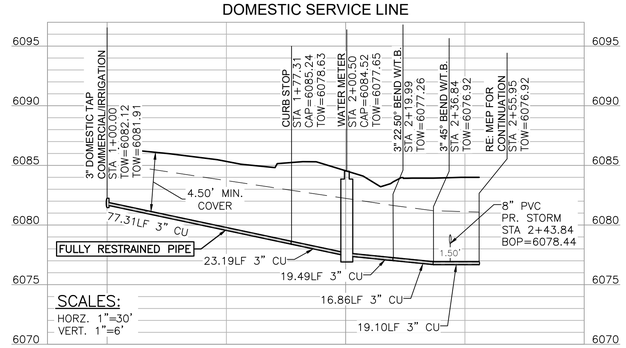
BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

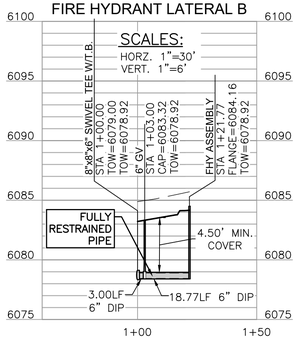
BENCHMARK

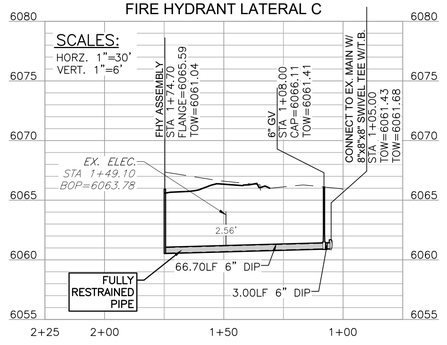
PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

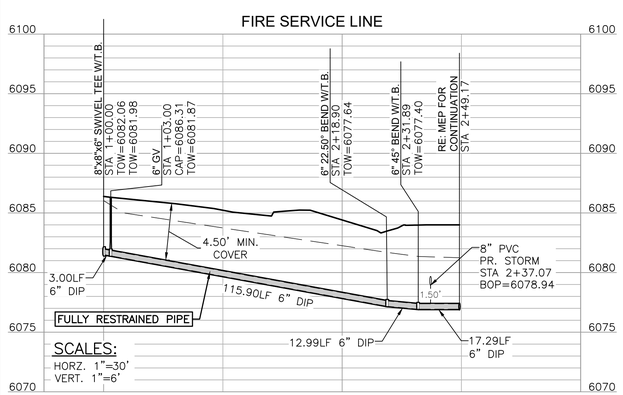
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

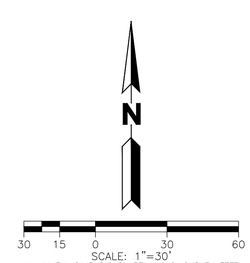








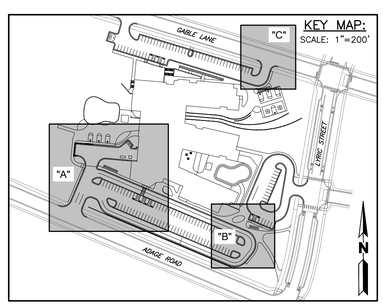




COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.



CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
WATER PLAN & PROFILE SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY AND SHALL NOT BE USED BY ANY PERSON FOR ANY PURPOSE WHATSOEVER, IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C602

PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\C0s\C602 - WATER PLAN & PROFILE SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
3. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE OR SERVICE FAILS, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE AND A RE-INSPECTION FEE CHARGED.
4. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
5. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
7. LOTS WITHOUT BUILDING ADDRESSES BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
8. CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION. UNLESS COORDINATED WITH DISTRICT INSPECTOR.

INSTALLATION NOTES:

WATER

1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN.)
2. APPROVED BEDDING TO BE SQUEEGEE.
3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STUB-IN AND BUILDING. COMPRESSION COUPLINGS WILL NOT BE ALLOWED ON NEW CONSTRUCTION. SILVER SOLDERED JOINTS MUST BE USED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSD PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.
4. A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 45-90° ANGLE. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD, CRAWL SPACE REQUIRES CONTINOUS COPPER WITH A 1' BURY.
6. CURB STOP MUST BE PLUMB AND CENTERED OVER THE NUT. IT SHOULD BE STRAPPED TO THE METER PIT (RESIDENTIAL INSTALLATIONS) OR CENTERED OVER THE EASEMENT LINE (COMMERCIAL INSTALLATIONS). THE ASSEMBLY MUST BE AT OR SLIGHTLY ABOVE FINISHED GRADE.
7. MOVED CURB BOXES MUST BE INSPECTED BY PWSD PRIOR TO BURIAL.
8. WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
9. NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
10. CURBSTOP BOXES AND METER PITS CANNOT BE IN DRIVEWAYS.
11. ONLY 3/4" (JUMPER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
    "X" FOR SANITARY SEWER SERVICE
    "V" FOR WATER SERVICES
13. NO SPLICES OR FLARED COUPLINGS ALLOWED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE USED IN MOVING STOPBOXES ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSD PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.

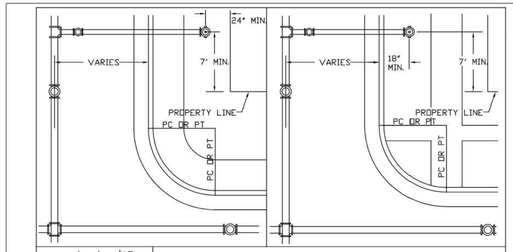
PARKER WATER & SANITATION DISTRICT

DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES

SCALE: NONE | DATE: 2/96

APPROVED: PVR, DIRECTOR OF ENGINEERING | 1/04, 1/16, 10/16

2016 REVISION — SHEET W1.1



NOTES:
1. ALTERNATE TO THE ABOVE). FASTEN M.J. VALVE DIRECTLY TO A M.J. ANCHOR TEE (ALSO CALLED SWIVEL TEE)
2. NO HORIZONTAL OR VERTICAL BENDS ARE ALLOWED IN FIRE HYDRANT BRANCH
3. NO PORTION OF FIRE HYDRANT MAY BE WITHIN THE SIDEWALK AREA.
4. FIRE HYDRANT EXTENSIONS MAY NOT BE USED.

PARKER WATER & SANITATION DISTRICT

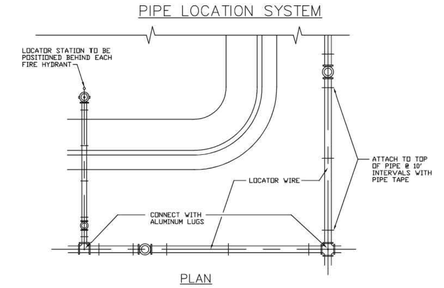
FIRE HYDRANTS LOCATION & INSTALLATION

SCALE: NONE | DATE: 2/96

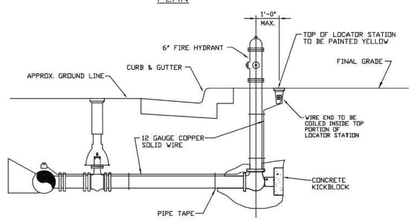
APPROVED: PVR, DIRECTOR OF ENGINEERING | 4/01, 10/16, 01/02, 12/07, 1/16

2016 REVISION — SHEET W2.5

PIPE LOCATION SYSTEM



PLAN



SECTION VIEW @ FIRE HYDRANT

NOTES:
1. FOR USE ON ALL DUCTILE IRON AND PVC WATER MAINS.
2. LOCATOR STATION POSITION MAY BE MODIFIED AT THE DIRECTION OF THE DISTRICT ENGINEER.
3. A CONTINUITY TEST WILL BE REQUIRED PRIOR TO PROBATIONARY ACCEPTANCE.

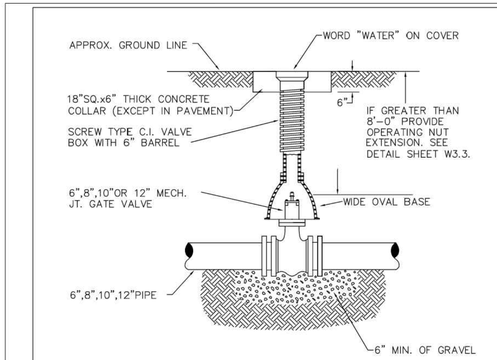
PARKER WATER & SANITATION DISTRICT

LOCATOR WIRE DETAILS

SCALE: NONE | DATE: 2/96

APPROVED: PVR, DIRECTOR OF ENGINEERING | 4/01, 01/02, 01/16, 10/16

2016 REVISION — SHEET W2.6



6-INCH VALVE BOXES

CHECK MATERIAL SPECIFICATIONS

NOTES:
1. ALL C.I. SHALL BE WRAPPED WITH 8 MIL. MIN. THICKNESS POLYETHYLENE.
2. VALVE NUT SHALL BE CENTERED.
3. VALVE BOX SHALL BE PLUMB.
4. SEE MATERIAL SPECIFICATIONS FOR VALVE BOX WITH GREATER THAN BURIED DEPTH OF 4.5 FT.

PARKER WATER & SANITATION DISTRICT

VALVE BOX DETAIL

SCALE: NONE | DATE: 2/96

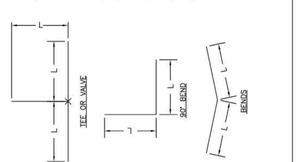
APPROVED: PVR, DIRECTOR OF ENGINEERING | 5/98, 10/16, 6/99, 12/07, 1/16

2016 REVISION — SHEET W3.10

LENGTH OF TIED PIPE

PIPE SIZE	4" D	4" L	4" G	6" D	6" L	6" G	8" D	8" L	8" G	12" D	12" L	12" G	16" D	16" L	16" G	20" D	20" L	20" G	24" D	24" L	24" G
TEE OR VALVE	3/4"	8.0'	M.S.	3/4"	13.0'	M.S.	3/4"	20.0'	M.S.	3/4"	40.0'	M.S.	3/4"	60.0'	M.S.	1"	80.0'	M.S.	–	155.0'	–
PLUGGED TEE	3/4"	8.0'	M.S.	3/4"	13.0'	M.S.	3/4"	20.0'	M.S.	3/4"	40.0'	M.S.	3/4"	60.0'	M.S.	1"	80.0'	M.S.	–	155.0'	–
90° BEND	3/4"	2.0'	M.S.	3/4"	4.0'	M.S.	3/4"	6.0'	M.S.	3/4"	11.0'	M.S.	1"	18.0'	M.S.	3/4"	24.0'	M.S.	–	45.0'	–
22-1/2° BEND	3/4"	1.0'	M.S.	3/4"	1.0'	M.S.	3/4"	2.0'	M.S.	3/4"	3.0'	M.S.	3/4"	5.0'	M.S.	3/4"	6.0'	M.S.	–	12.0'	–
11-1/4° BEND	3/4"	0.0'	M.S.	3/4"	0.0'	M.S.	3/4"	1.0'	M.S.	3/4"	1.0'	M.S.	3/4"	1.0'	M.S.	3/4"	1.0'	M.S.	–	3.0'	–

NOTES:
1. LENGTH OF TIED PIPE MEASURED EACH WAY FROM VALVES AND BENDS.
2. CLAMPS AND RODS NOT ALLOWED FOR 24" AND LARGER PIPES.
3. P.E. = DIAMETER, L = LENGTH, G = GRADE, M.S. = MILD STEEL, H.S. = HIGH STRENGTH.
4. MINIMUM 4.5' GROUND COVER REQUIRED.
5. BASED ON 150 PSI INTERNAL PRESSURE.
6. M.S. MEANS MILD STEEL ROD A.S.T.M. STANDARD DESIGNATION A-36.
7. H.S. MEANS HIGH STRENGTH ROD A.S.T.M. STANDARD DESIGNATION A-193 GRADE B7.
8. NUTS SHALL BE A.S.T.M. STANDARD DESIGNATION A-307 GRADE A OR B HEXAGON HEAVY SERIES.
9. SEE TIE ROD DETAIL DRAWING. ALSO, TIE ROD COUPLING DETAILS, CLAMP DETAILS AND SET CLAMP DETAILS.
10. CLAMPS ARE TO BE PLACED AT EACH JOINT WHICH MUST BE TIED TOGETHER AND IS NOT NECESSARILY THE LENGTH OF THE RODS.
11. STAR BOLTS NOT ALLOWED ON PIPE LARGER THAN 16".
12. MINIMUM OF 4 RODS REQUIRED ON 16" PIPE IF STAR BOLTS ANE USED.
13. TEES ARE TO BE RODDED ON BRANCH ONLY.



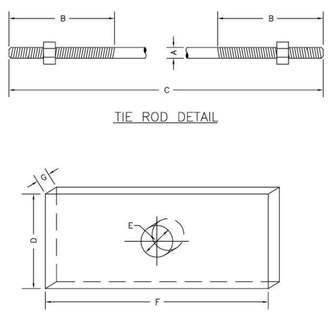
PARKER WATER & SANITATION DISTRICT

LENGTH OF TIED PIPE

SCALE: NONE | DATE: 2/96

APPROVED: PVR, DIRECTOR OF ENGINEERING | 4/01, 1/16, 10/16

2016 REVISION — SHEET W3.11



TIE RODS		
A ROD DIAMETER	B THREAD LENGTH	C ROD LENGTH
3/4"	6"	1' TO 11' & 20'
1"	6"	1' TO 11' & 20'
1-1/4"	ALL THREAD	1' TO 11' & 20'

WASHERS			
D WIDTH	E HOLE DIAMETER	F LENGTH	G THICKNESS
3"	7/8"	6"	3/8"
4"	1-1/8"	7"	1/2"
4"	1-1/8"	7"	5/8"

NOTES:
1. SEE TIED JOINTS ROD DIMENSIONS SHEET.
2. SEE CLAMP DETAILS AND DIMENSIONS (SHEET W3.15) FOR PROPER PLACEMENT OF WASHERS.

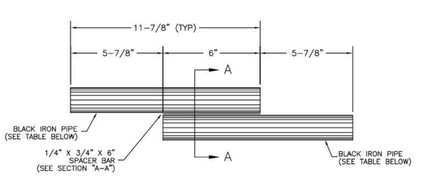
PARKER WATER & SANITATION DISTRICT

TIE ROD AND WASHER DETAILS

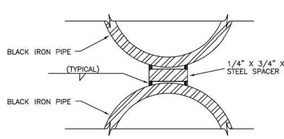
SCALE: NONE | DATE: 2/96

APPROVED: PVR, DIRECTOR OF ENGINEERING | 1/16, 10/16

2016 REVISION — SHEET W3.12



TIE ROD COUPLING DETAIL



SECTION "A-A"

NOTE:
BLACK IRON PIPE = SCHEDULE 40.

ROD SIZE	PIPE DIAMETER
3/4"	1"
1"	1-1/4"
1-1/4"	1-1/2"

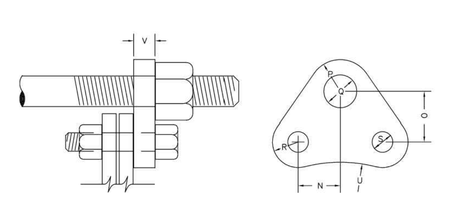
PARKER WATER & SANITATION DISTRICT

TIE ROD COUPLING

SCALE: NONE | DATE: 2/96

APPROVED: PVR, DIRECTOR OF ENGINEERING | 1/16, 10/16

2016 REVISION — SHEET W3.13



FLANGE LUG DETAIL

DIMENSIONS (IN INCHES)

PIPE DIA.	N	O	H.S. ROD P	H.S. ROD Q	H.S. ROD ROD DIA.	M.S. ROD P	M.S. ROD Q	M.S. ROD ROD DIA.	R	S	U	V	PIPE DIA.
4	1-7/16	2	1	7/8	3/4	1	7/8	3/4	7/8	3/4	2-1/8	3/4	4
6	1-13/16	2-3/4	1	7/8	3/4	1	7/8	3/4	7/8	3/4	3-1/4	3/4	6
8	2-1/16	2-3/4	1	7/8	3/4	1	7/8	3/4	7/8	7/8	4-1/8	3/4	8
10	2-1/16	2-3/4	1-1/8	7/8	3/4	1-1/4	1-1/8	7/8	1	7/8	4-1/8	7/8	10
12	2-7/16	2-3/4	1-1/8	7/8	3/4	1-1/2	1-3/8	1-1/4	1-1/4	1-1/8	6-1/8	1-1/8	12
20	1-31/32	2-3/4	1-1/8	1-1/8	1	1-1/16	1-1/4	11-1/16	1-1/4	1-1/8	9-1/8	1-1/8	20
24	RODS AND CLAMPS NOT ALLOWED												24

NOTES:
1. M.S. MEANS MILD STEEL ROD A.S.T.M. STANDARD DESIGNATION A-36. (NUTS SHALL BE A.S.T.M. STANDARD DESIGNATION A-307 GRADE A OR B HEXAGON HEAVY SERIES).
2. H.S. MEANS HIGH STRENGTH STEEL ROD A.S.T.M. STANDARD DESIGNATION A-193 GRADE B7. (NUTS SHALL BE A.S.T.M. STANDARD DESIGNATION A-194 GRADE 2H).
3. FLANGE LUGS SHALL NOT BE USED ON VALVES.

PARKER WATER & SANITATION DISTRICT

FLANGE LUG DETAIL

SCALE: NONE | DATE: 2/96

APPROVED: PVR, DIRECTOR OF ENGINEERING | 1/16, 10/16

2016 REVISION — SHEET W3.14

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
WATER DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

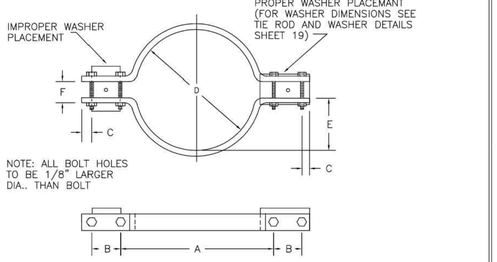
THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED BY ANY PERSON FOR ANY PURPOSE WHATSOEVER IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C610

PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\C0s\C610 - WATER DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



CLAMP DETAILS

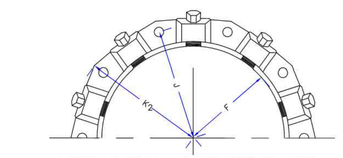
DIMENSIONS

TABLE OF DIMENSIONS FOR CLAMPS

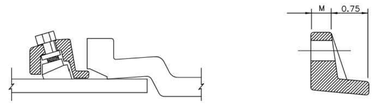
PIPE DIA.	BAR SIZE	A BELL CLAMP	A BODY CLAMP	B BELL CLAMP	B BODY CLAMP	C BELL CLAMP	C BODY CLAMP	D BELL CLAMP	D BODY CLAMP	E BELL CLAMP	E BODY CLAMP	F BELL CLAMP	F BODY CLAMP	BOLT SIZES BELL CLAMP	BOLT SIZES BODY CLAMP	PIPE DIA.
4	1-1/2X1/2	9-3/4	7-1/2	3-1/2	3-1/2	1	1	6-3/4	4-7/8	2-3/4	1-13/16	1-1/4	1-1/4	3X1/2	2-1/2X3/8	4
6	2X1/2	13	9-1/2	4	4-1/2	2	2	10-1/4	7-1/8	4-1/8	2-15/16	2	1-1/4	3-1/2X1/2	3-1/2X1/2	6
8	2-1/2X1/2	15	12-3/4	4-3/4	4-1/2	1-1/4	1-1/2	12-1/4	9-1/4	5-1/8	4	2	1-1/4	4-1/2X1/2	4X1/2	8
12	2-1/2X5/8	17-1/2	16-5/8	4-5/8	4-3/4	1	1-1/4	14-1/2	13-1/2	6	5-1/2	2-1/2	2-1/2	4-1/2X5/8	4-1/2X5/8	12
16	3X3/4	24-1/2	21-7/8	4-1/2	4-3/4	1-1/2	1-1/2	19-3/4	17-1/2	8-3/8	7-1/2	3	2-1/2	5-1/2X5/8	5-1/2X5/8	16
20	3X3/4	30-1/2	25-5/8	4-1/2	4-3/4	1-1/2	1-1/2	24-3/4	21-3/4	10-7/8	9-1/2	3	2-3/4	5-1/2X5/8	5-1/2X5/8	20
24	RODS AND CLAMPS NOT ALLOWED															24

NOTE: ALL DIMENSIONS IN INCHES
CLAMPS MAY NOT BE USED ON PVC PIPE.

PARKER WATER & SANITATION DISTRICT
CLAMP DETAILS AND DIMENSIONS
SCALE: NONE | DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING | 12/07, 1/16, 10/16
2016 REVISION | SHEET W3.15



MECHANICAL JOINT RESTRAINT



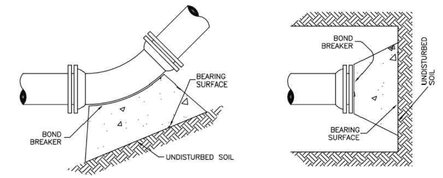
WEDGE DETAIL

BOLT HOLE DETAIL

	NOMINAL PIPE SIZE	NO. OF BOLTS	NO. OF WEDGES	K2 INCHES	J INCHES	F INCHES	M INCHES	
P	4"	2	2					P
V	6"	6	3	11.12	9.5	7.00	0.88	V
C	8"	6	4	13.37	11.75	9.15	1.00	C
	10"	8	6	15.62	14.00	11.20	1.00	
	12"	8	8	17.88	16.25	13.30	1.25	
D	4"	4	2					D
I	6"	6	3	11.12	9.5	7.00	0.88	I
	8"	6	4	13.37	11.75	9.15	1.00	
	10"	8	6	15.62	14.00	11.20	1.00	
	12"	8	8	17.88	16.25	13.30	1.25	

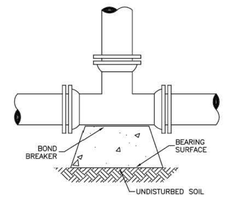
NOTES:
1. DIMENSIONS FOR 16" AND 20" D.I. PIPE NOT SHOWN.

PARKER WATER & SANITATION DISTRICT
MECHANICAL JOINT RESTRAINT DETAILS
SCALE: NONE | DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING | 2/00, 12/07, 1/16, 10/16
2016 REVISION | SHEET W3.17

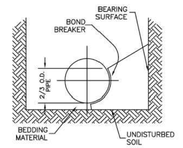


11-1/4",22-1/2",45° & 90° BENDS

DEAD END



TEE



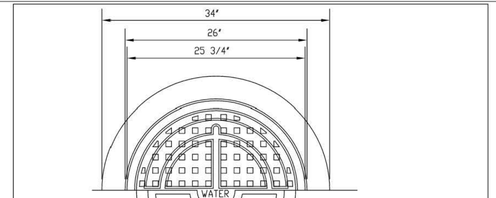
TYPICAL CROSS SECTION

NOTES:
1. ALL VALVES, TEES, BENDS AND PLUGS SHALL BE RESTRAINED AND KICKBLOCKED.
2. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.
3. BASED ON 150 PSI PIPE PRESSURE PLUS WATER HAMMER:
   4", 6" AND 8" WATER HAMMER = 120 PSI.
   12" WATER HAMMER = 110 PSI
   16", 20" AND 24" WATER HAMMER = 70 PSI.
4. SOIL BEARING CAPACITY = 3,000 LBS./SQ. FT.

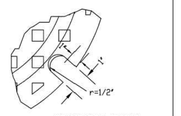
MINIMUM BEARING SURFACE AREA (IN SQUARE FEET)

SIZE OF PIPE	BENDS 11-1/4°	22-1/2°	45°	90°	TEE OR DEAD END
4"	1.00	1.00	1.00	1.80	1.50
6"	1.00	1.25	2.25	4.00	3.00
8"	1.00	2.00	4.00	7.50	5.25
12"	2.00	4.25	8.25	15.25	11.00
16"	3.50	6.50	12.50	23.00	16.50
20"	5.00	10.00	19.50	35.50	25.00
24"	6.50	13.00	26.00	47.00	33.00

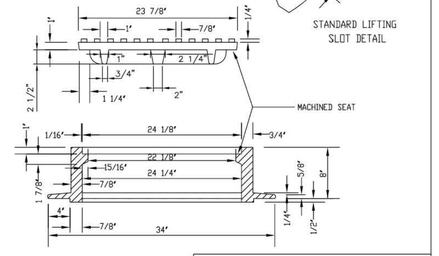
PARKER WATER & SANITATION DISTRICT
CONCRETE KICKBLOCKS
BEARING SURFACES AND INSTALLATION
SCALE: NONE | DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING | 4/01, 1/16, 10/16
2016 REVISION | SHEET W3.18



HALF PLAN

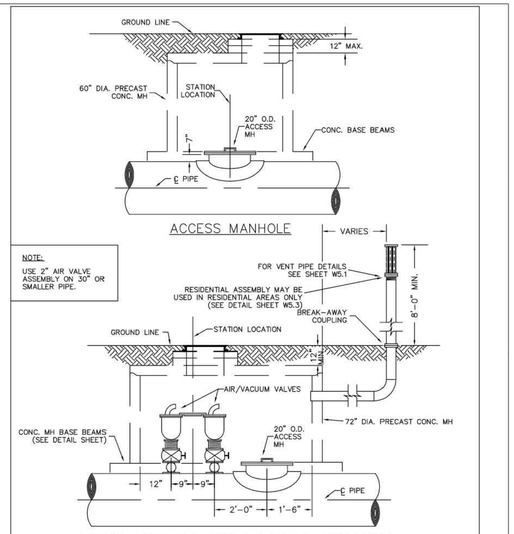


STANDARD LIFTING SLOT DETAIL



NOTE:
1. Casting Specifications: ASTM A-48 With A Minimum Tensile Strength Of 25 KSI (Class 25)
2. All Casting To Be Dipped In Asphalt Base Paint (Or Approved Equal).

PARKER WATER & SANITATION DISTRICT
24" DIAMETER RING AND COVER
SCALE: NONE | DATE: 6/05
APPROVED: PVR, DIRECTOR OF ENGINEERING | 12/07, 1/16, 10/16
2016 REVISION | SHEET W3.19

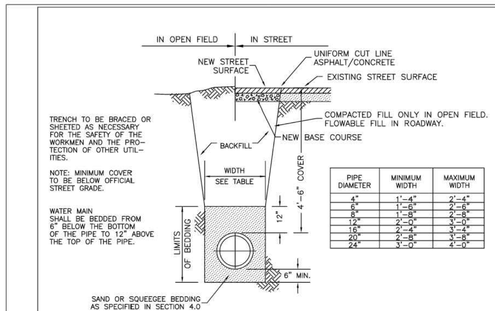


ACCESS MANHOLE

ACCESS MANHOLE AND AIR VALVE ASSEMBLY

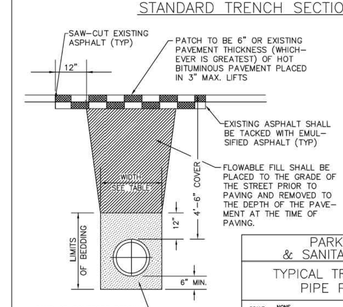
NOTE:
SEE SHEET W3.6 FOR CONCRETE MANHOLE BASE BEANS AND AIR/VACUUM VALVE DETAILS.

PARKER WATER & SANITATION DISTRICT
ACCESS MANHOLE ASSEMBLY
SCALE: NONE | DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING | 4/01, 1/16, 10/16
2016 REVISION | SHEET W3.20



PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
16"	2'-4"	3'-4"
20"	2'-8"	3'-8"
24"	3'-0"	4'-0"

STANDARD TRENCH SECTION



STREET CUT PATCH

PARKER WATER & SANITATION DISTRICT
TYPICAL TRENCH SECTION PIPE PROTECTION
SCALE: NONE | DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING | 1/16, 10/16
2016 REVISION | SHEET W4.1

PIPE BEDDING:

(a) Installation of Bedding and Pipe: After completion of the trench excavation and proper preparation of the foundation, six inches (6") of bedding material shall be placed on the trench bottom for support under the pipe. Bell holes shall be dug deep enough to provide a mimimum of two inches (2") of clearance between the bell and bedding material. All pipe shall be installed in such a manner as to insure full support of the pipe barrel over its entire length. After the pipe is adjusted for line and grade, and the joint is made, the bedding material shall be carefully placed and tamped under the haunches of the pipe and in the previously dug bell holes.

Tamping is herein defined as the act of placing approved bedding material under the haunches of the pipe, paying particular attention to voids, bell holes, and sling holes. The purpose of tamping is to ensure uniform support for the pipe.

The limits of bedding shall be from six inches (6") below the bottom of the pipe to twelve inches (12") above the top of the pipe. Approved backfill may then be installed to the groundline. See Chapter 2 of these Standards for backfill and compaction of backfill.

Compaction of bedding is not required. The only requirement is sufficient tamping to achieve uniform support under the pipe. See Sheet W4.1 of the Standard Details for a typical trench cross section.

(b) Bedding Material: The bedding material shall be a clean well-graded sand or squeegee sand and shall conform to the following limits when tested by means of laboratory sieves:

Well-Graded Sand for (24-inch or large diameter)

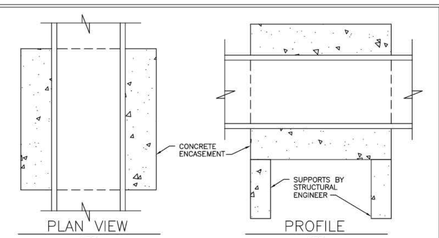
Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 4	70-100
No. 8	36-93
No. 16	20-80
No. 30	8-65
No. 50	2-30
No. 100	1-10
No. 200	0-3

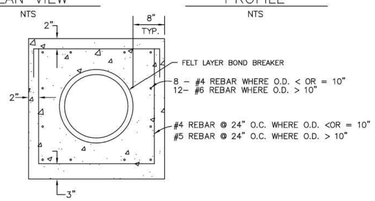
Squeegee Sand
for use with 20-inch or smaller

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 200	0-3

If approved by the District, fines form the trench walls and spoils pile may be used to provide uniform support for the pipe. No rock or stone larger than that allowed by the sieve analysis, or any other detrimental substance, shall be placed closer to the pipe than six inches (6"). Approved bedding materials shall be stockpiled on the jobsite to be used in the event natural materials become unsatisfactory. The District reserves the right to require the use of the specified bedding material at any time.

PARKER WATER & SANITATION DISTRICT
PIPE BEDDING
SCALE: NONE | DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING | 5/98, 7/00, 1/16, 10/16
2016 REVISION | SHEET W4.2





TYPICAL SECTION
NTS

NOTES:
1. ALL CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3,000 PSI USING TYPE I PORTLAND CEMENT AND 3/4" AGGREGATE. ALL CONCRETE SHALL HAVE 5-7% ENTRAINED AIR CONTENT AND A MAXIMUM SLUMP OF 4".
2. ALL REINFORCEMENT SHALL CONFORM TO ASTM A615,GRADE 60.
3. ALL REINFORCEMENT SHALL HAVE 2" MIN. CONCRETE COVER.
4. THE SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY PRIOR TO FORMING THE STRUCTURE.
5. PIPE SHALL BE WRAPPED WITH FELT LAYER BEFORE ENCASING.

PARKER WATER & SANITATION DISTRICT
WATERLINE ENCASEMENT
SCALE: NONE | DATE: 5/98
APPROVED: PVR, DIRECTOR OF ENGINEERING | 1/16, 10/16
2016 REVISION | SHEET W4.3

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
WATER DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

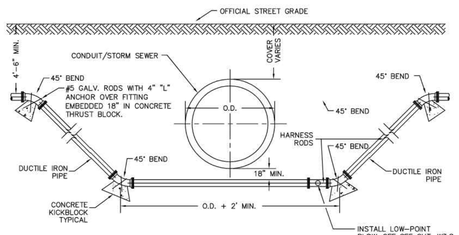
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL BE CONSIDERED COPYRIGHTED BY MARTIN/MARTIN, INC. IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C611

PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\C0s\C610 - WATER DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



NOTES:

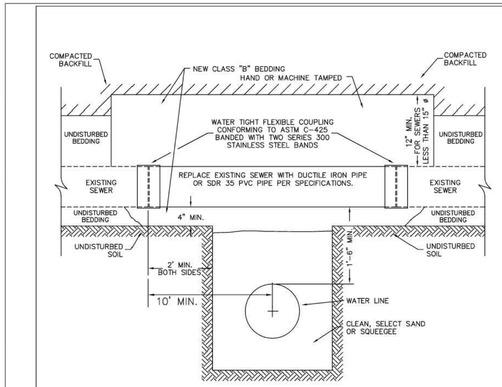
1. LENGTH OF EXTENSION OF PIPE AND HARNESS RODS SHALL BE IN ACCORDANCE WITH THESE ENGINEERING STANDARDS.
2. ALL WATER MAINS TWELVE (12") INCHES OR SMALLER, WHICH CROSS UNDER CONDUITS/STORM SEWER SHALL BE DUCTILE IRON OR PVC PER SPECIFICATIONS.
3. A BORED CROSSING MAY BE REQUIRED BY THE ENGINEER.
4. CONCRETE KICKBLOCKS PER SHEET W3.18.

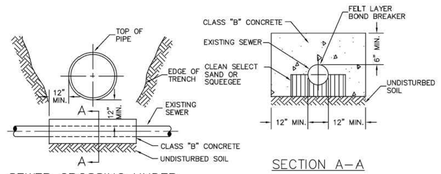
PARKER WATER & SANITATION DISTRICT

CONDUIT OR STORM SEWER CROSSING

SCALE: NONE	DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING	5/98 10/16 2/00 12/07 1/16

2016 REVISION — SHEET W4.6





SECTION A-A

SEWER CROSSING UNDER LESS THAN 18" BETWEEN PIPES

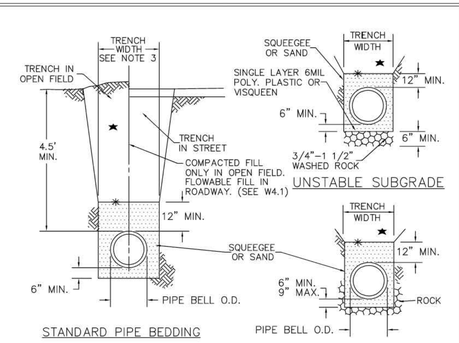
1. PIPE SHALL BE WRAPPED WITH FELT LAYER BEFORE ENCASING.

PARKER WATER & SANITATION DISTRICT

CROSSING STORM & SANITARY SEWERS

SCALE: NONE	DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING	1/16 10/16

2016 REVISION — SHEET W4.7



NOTES:

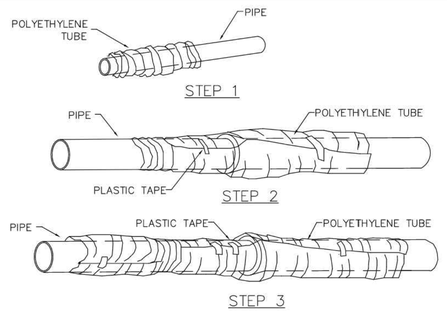
1. MIN.COVER TO BE BELOW FINAL STREET GRADE CONSTRUCTION OF WATER MAIN MAY NOT START UNTIL FINAL GRADE WITHIN 1 FOOT.
2. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE PROTECTION OF OTHER UTILITIES AND TO MEET OSHA SAFETY REQUIREMENT.
3. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE LAID THEREIN (BELL OR COUPLING O.D. IF APPLICABLE). REFER TO SHEET W4.1 FOR DIMENSIONS.

PARKER WATER & SANITATION DISTRICT

BEDDING DETAILS

SCALE: NONE	DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING	1/16 10/16

2016 REVISION — SHEET W4.8



FIELD INSTALLATION – POLYETHYLENE WRAP

STEP 1 – PLACE TUBE OF POLYETHYLENE MATERIAL ON PIPE PRIOR TO LOWERING IT INTO TRENCH.

STEP 2 – PULL THE TUBE OVER THE LENGTH OF THE PIPE. TAPE TUBE TO PIPE AT JOINT. FOLD MATERIAL AROUND THE ADJACENT SPIGOT END AND WRAP WITH TAPE TO HOLD THE PLASTIC TUBE IN PLACE.

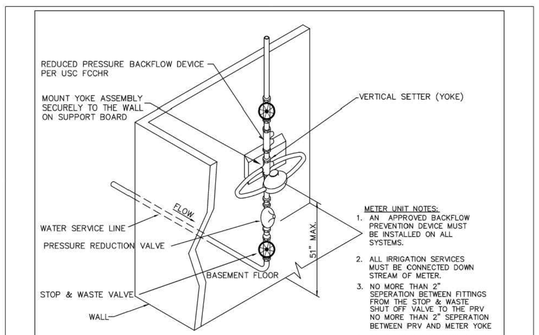
STEP 3 – OVERLAP FIRST TUBE WITH ADJACENT TUBE AND SECURE WITH PLASTIC ADHESIVE TAPE. THE POLYETHYLENE TUBE MATERIAL COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP OF PIPE AND TAPED IN PLACE.

PARKER WATER & SANITATION DISTRICT

POLYETHYLENE WRAP

SCALE: NONE	DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING	1/16 10/16

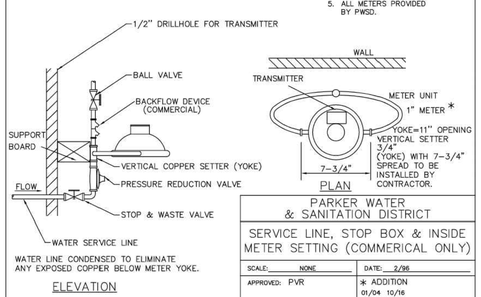
2016 REVISION — SHEET W4.11



ISOMETRIC VIEW

METER UNIT NOTES:

1. AN APPROVED BACKFLOW PREVENTION DEVICE MUST BE INSTALLED ON ALL SYSTEMS.
2. ALL IRRIGATION SERVICES MUST BE CONNECTED DOWN STREAM OF METER.
3. NO MORE THAN 2" SEPERATION BETWEEN FITTINGS FROM THE STOP & WASTE SHUT OFF VALVE TO THE PRV NO MORE THAN 2" SEPERATION BETWEEN PRV AND METER YOKE
4. IF SERVICE FAILS INSPECTION A RE-INSPECTION FEE WILL BE ASSIGNED.
5. ALL METERS PROVIDED BY PWSD.



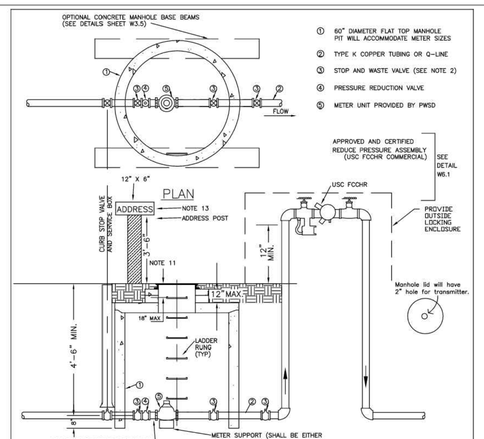
ELEVATION — PLAN

PARKER WATER & SANITATION DISTRICT

SERVICE LINE, STOP BOX & INSIDE METER SETTING (COMMERICAL ONLY)

SCALE: NONE	DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING	* ADDITION 01/04 10/16 06/05 1/16

2016 REVISION — SHEET W5.9



ELEVATION

NOTES:

1 – MANHOLE BASE BEAMS SHALL BE REQUIRED FOR INSTALLATIONS IN DRIVEWAYS, OR PARKING AREAS.
2 – STOP AND WASTE VALVE TO BE INSTALLED.
3 – JOINTS INSIDE METER VAULT SHALL BE EITHER THREADED OR SOLDERED.
4 – SEE WATER SYSTEM SPECIFICATIONS FOR GENERAL METER NOTES.
5 – NO CONCRETE TO BE LAID IN FLOOR OF METER M.H.
6 – METER SHALL BE FLANGED WITH BRASS COMPANION FLANGES.
7 – NO CONNECTIONS OR CHANGES IN PIPE DIAMETER SHALL BE MADE IN THE METER PIT OR IN THE DISTANCE OF FIVE FEET BEYOND THE METER PIT ON THE OUTLET SIDE.
8 – RAIN SENSOR AND ET CONTROLLER MUST BE PRESENT.
9 – VALVE MUST BE CENTERED IN STOP BOX. NO DEBRIS OR STANDING WATER IN STOP BOX.
10 – PLACEMENT OF STOP BOX MUST BE TOUCHING FRONT OF METER PIT.
11 – SEE SHEET W3.19 FOR MANHOLE RING AND COVER DETAIL
12 – BACKFLOW MUST BE INSTALLED PRIOR TO SETTING METER
13 – LETTERS ON POST OR BACKFLOW ENCLOSURE 2" OR GREATER.
14 – RAIN SENSOR AND ET CONTROLLER MUST BE PROVIDED AND INSTALLED PER MANUFACTURER'S REQUIREMENTS.

METER	YOKE DISTANCE
1.5"	13.25" WITH ADJUSTABLE FLANGE FOR GASKET
2"	17.25" WITH ADJUSTABLE FLANGE FOR GASKET

IRRIGATION ONLY

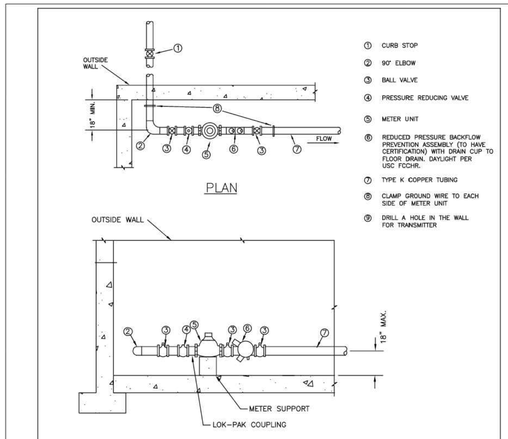
NOT TO BE USED IN COMMERCIAL OR NON-SINGLE FAMILY RESIDENTIAL WITHOUT EXPRESS PERMISSION OF THE PWSD ENGINEER.

PARKER WATER & SANITATION DISTRICT

OUTSIDE SETTING FOR 1 1/2" & 2" METER FOR IRRIGATION

SCALE: NONE	DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING	1/04 06/05 1/16 10/16

2016 REVISION — SHEET W5.12



ELEVATION

NOTES

1 – PIPE JOINT SHALL BE THREADED OR SOLDERED WITH SILVER SOLDER.
2 – INSTALLATION MUST ALLOW ACCESS FOR MAINTENANCE AND BE PROTECTED FROM FREEZING.
3 – SEE WATER SYSTEM SPECIFICATIONS FOR GENERAL METER NOTES.
4 – COMPANION FLANGES SHALL BE BRASS.
5 – METER SUPPORT SHALL BE EITHER CONCRETE OR ADJ. STEEL PIPE (SEE SHEET W3.10)
6 – 1.0" MINIMUM CLEARANCE AROUND BACKFLOW DEVICE
7 – FLOOR DRAIN TO BE 2X PIPE SIZE
8 – FOR IRRIGATION USES, ADD RAIN SENSOR AND SMART E.T. CONTROLLER

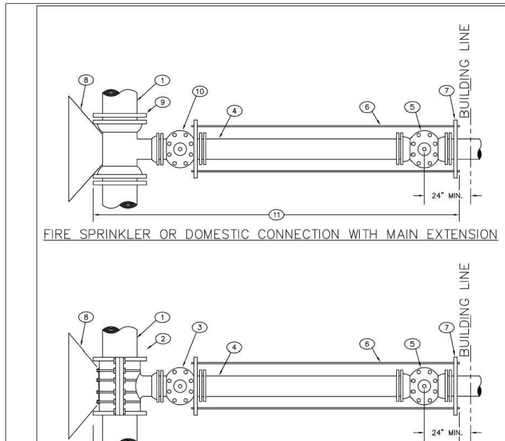
METER	YOKE DISTANCE
1.5"	13.25" WITH ADJUSTABLE FLANGE FOR GASKET
2"	17.25" WITH ADJUSTABLE FLANGE FOR GASKET

PARKER WATER & SANITATION DISTRICT

INSIDE SETTING FOR 1 1/2 & 2" METER

SCALE: NONE	DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING	8/99 01/02 01/16 2/00 06/05 10/16 4/01 07/06

2016 REVISION — SHEET W5.14



1 EXISTING MAIN
2 TAPPING SLEEVE
3 TAPPING VALVE
4 DOUBLE SPIGOT PIPE
5 PROPERTY LINE VALVE
6 TIE RODS
7 PIPE CLAMP
8 CONCRETE KICKBLOCK
9 M.J. ANCHORING TEE (SWIVEL TEE)
10 M.J. VALVE
11 POLYETHYLENE WRAPPED

PARKER WATER & SANITATION DISTRICT

3" AND LARGER DOMESTIC AND FIRE SPRINKLER CONNECTIONS

SCALE: NONE	DATE: 2/96
APPROVED: PVR, DIRECTOR OF ENGINEERING	1/16 10/16

2016 REVISION — SHEET W5.18

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
WATER DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

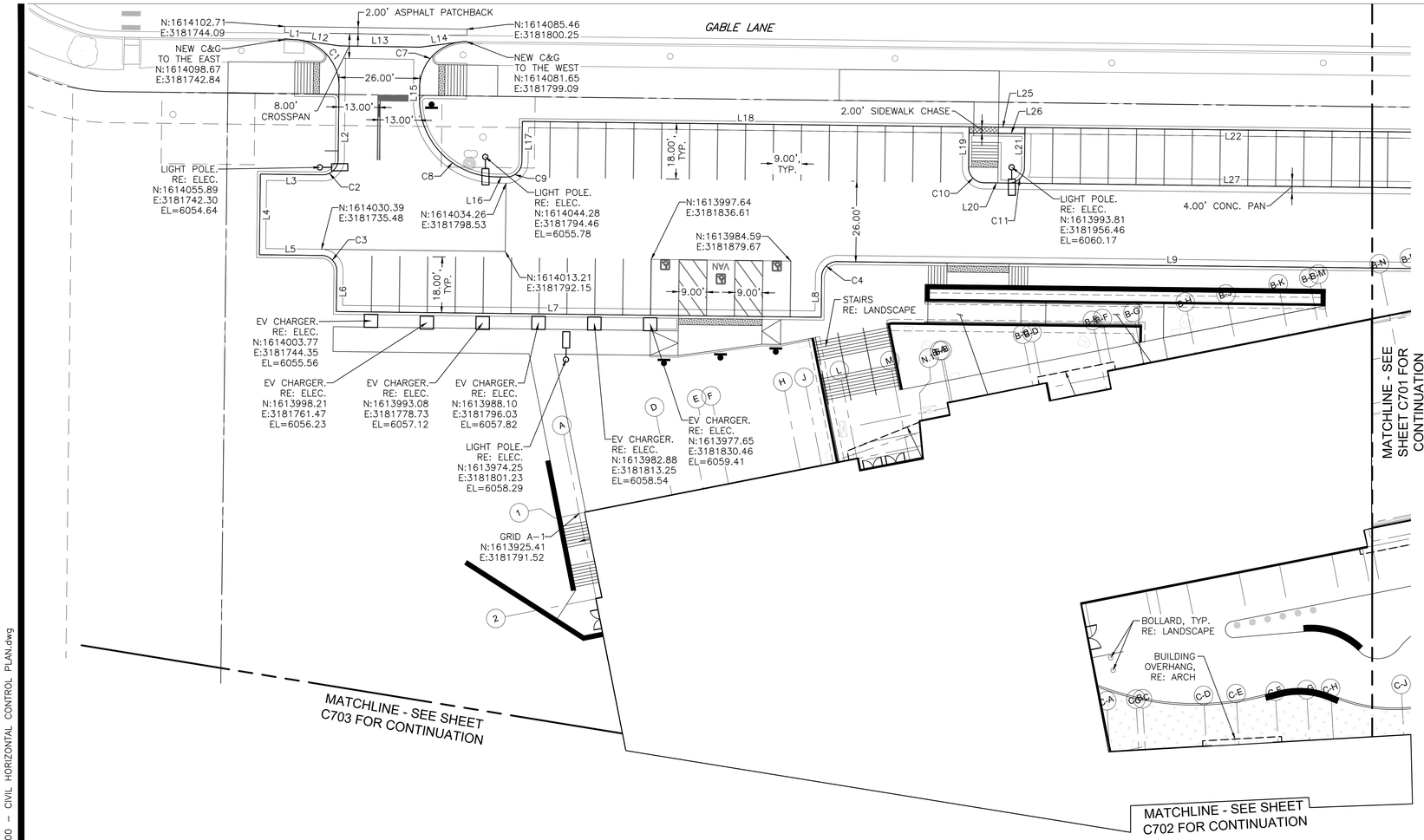
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY AND SHALL NOT BE USED BY ANY PERSON FOR ANY PURPOSE, IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C612

PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\C0s\C610 - WATER DETAILS SHEET.dwg

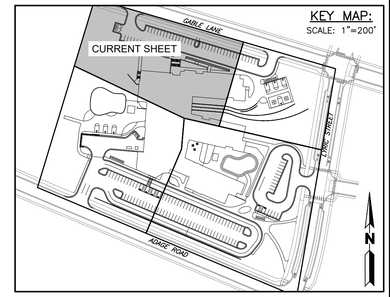


SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE

KEY MAP:
SCALE: 1"=200'



HORIZONTAL CONTROL NOTES:

1. ALL DIMENSIONS AND COORDINATES ARE GIVEN TO CENTER LINE, FLOWLINE OF CURB, OR FACE OF WALL UNLESS NOTED OTHERWISE.
2. SEE DETAILS ON SITE DETAILS SHEET.
3. REGULAR PARKING STALLS WILL BE 9' WIDE X 18' LONG.
4. BUILDING GRID & LAYOUT PROVIDED BY TREANOR ON 10/16/2025.
5. COORDINATES FOR TRANSFORMERS ARE GIVEN TO CENTER OF TRANSFORMER. CONTRACTOR TO COORDINATE FINAL LOCATION OF TRANSFORMER AND ROUTING OF ELECTRIC LINES WITH SERVICE PROVIDER.
6. MSE RETAINING WALLS SHALL BE DESIGN/BUILD MECHANICALLY STABILIZED EARTH RETAINING (MSE) WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE *AHJ FOR CONSTRUCTION OF THE WALLS.
7. REFER TO LANDSCAPE PLANS FOR WALKS, RAILS, FENCE, LANDSCAPE STRUCTURES, LANDSCAPING, ETC.
8. MSE WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
9. SEE SHEET C704 FOR CIVIL LINE & CURVE TABLE DATA.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

N

20 10 0 20 40
SCALE: 1"=20'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
CIVIL HORIZONTAL CONTROL PLAN

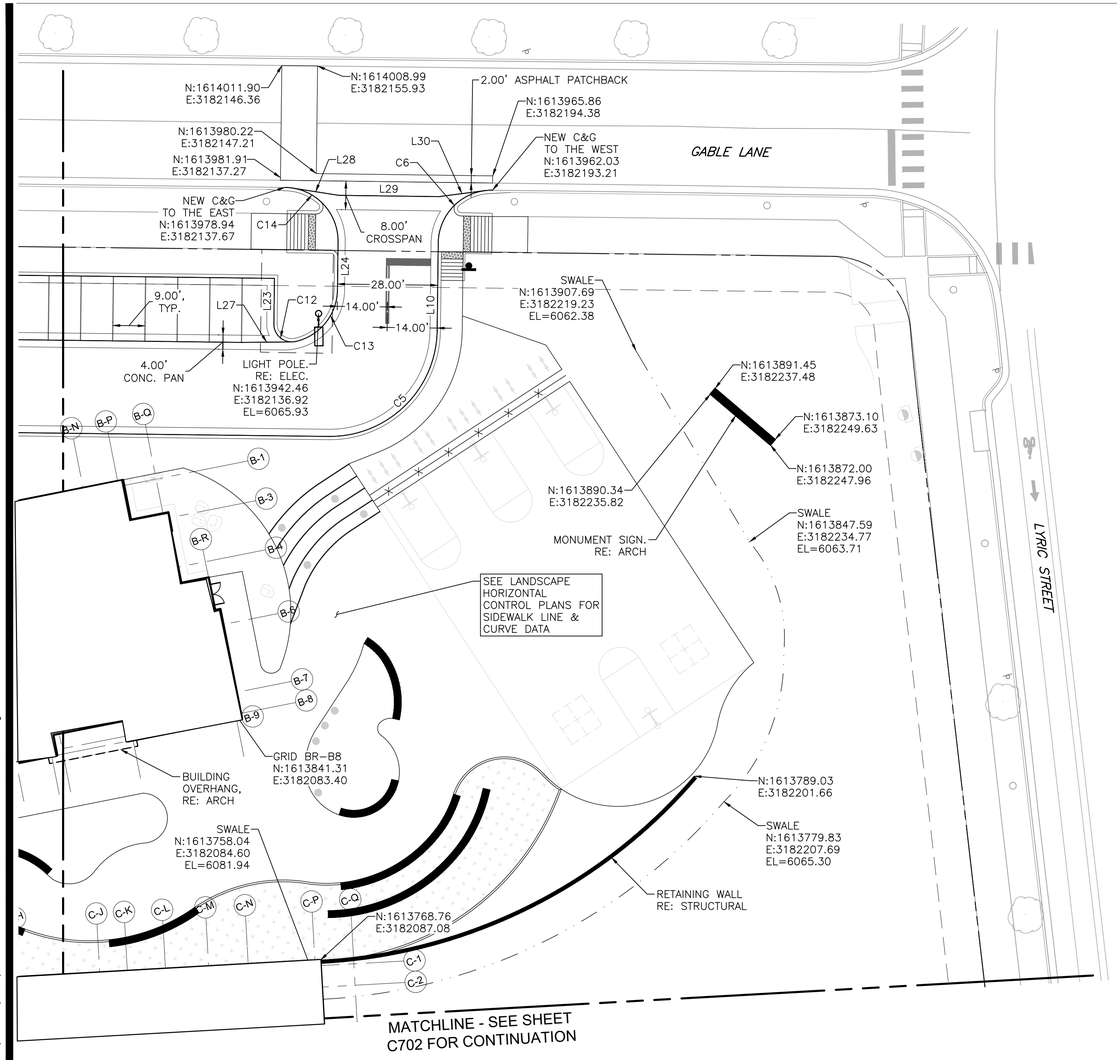
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, DISCLOSED TO OTHERS, OR USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C700

PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-dcsd - ridgegate elementary school\PLANS\CDs\C700 - CIVIL HORIZONTAL CONTROL PLAN.dwg



PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C700 - CIVIL HORIZONTAL CONTROL PLAN.dwg

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

N

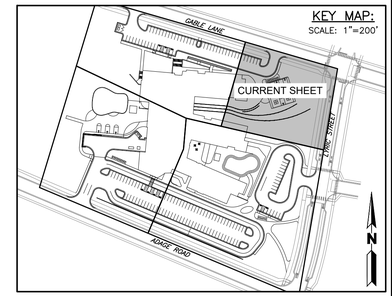
20 10 0 20 40
SCALE: 1"=20'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE

KEY MAP:
SCALE: 1"=200'



HORIZONTAL CONTROL NOTES:

1. ALL DIMENSIONS AND COORDINATES ARE GIVEN TO CENTER LINE, FLOWLINE OF CURB, OR FACE OF WALL UNLESS NOTED OTHERWISE.
2. SEE DETAILS ON SITE DETAILS SHEET.
3. REGULAR PARKING STALLS WILL BE 9' WIDE X 18' LONG.
4. BUILDING GRID & LAYOUT PROVIDED BY TREANOR ON 10/16/2025.
5. COORDINATES FOR TRANSFORMERS ARE GIVEN TO CENTER OF TRANSFORMER. CONTRACTOR TO COORDINATE FINAL LOCATION OF TRANSFORMER AND ROUTING OF ELECTRIC LINES WITH SERVICE PROVIDER.
6. MSE RETAINING WALLS SHALL BE DESIGN/BUILD MECHANICALLY STABILIZED EARTH RETAINING (MSE) WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE *AHJ FOR CONSTRUCTION OF THE WALLS.
7. REFER TO LANDSCAPE PLANS FOR WALKS, RAILS, FENCE, LANDSCAPE STRUCTURES, LANDSCAPING, ETC.
8. MSE WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
9. SEE SHEET C704 FOR CIVIL LINE & CURVE TABLE DATA.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
CIVIL HORIZONTAL CONTROL PLAN

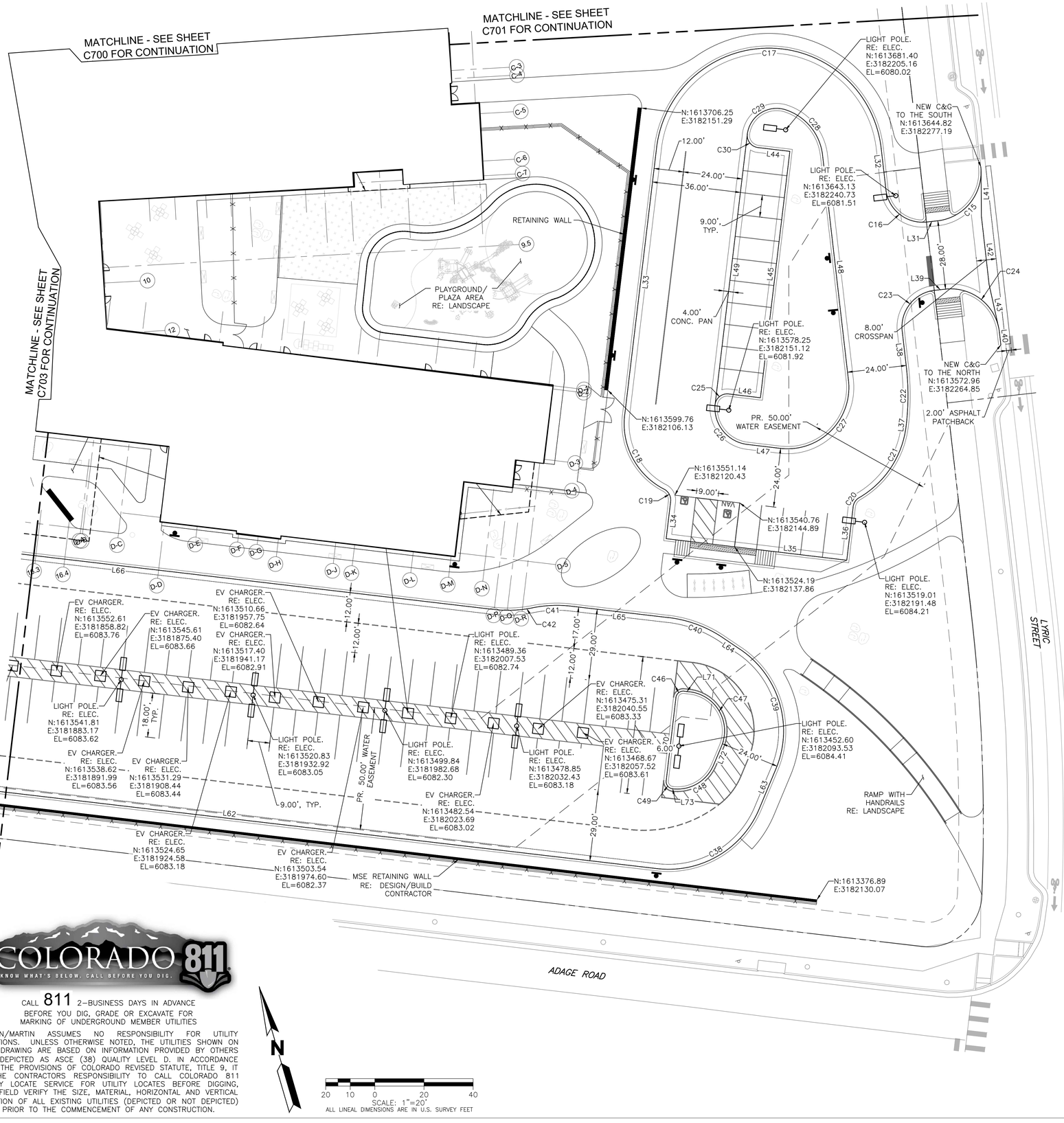
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, LOANED, DISCLOSED, OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C701

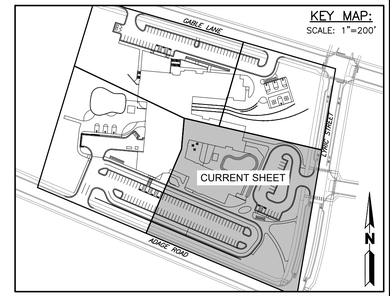


SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE

KEY MAP:
SCALE: 1"=200'



HORIZONTAL CONTROL NOTES:

1. ALL DIMENSIONS AND COORDINATES ARE GIVEN TO CENTER LINE, FLOWLINE OF CURB, OR FACE OF WALL UNLESS NOTED OTHERWISE.
2. SEE DETAILS ON SITE DETAILS SHEET.
3. REGULAR PARKING STALLS WILL BE 9' WIDE X 18' LONG.
4. BUILDING GRID & LAYOUT PROVIDED BY TREANOR ON 10/16/2025.
5. COORDINATES FOR TRANSFORMERS ARE GIVEN TO CENTER OF TRANSFORMER. CONTRACTOR TO COORDINATE FINAL LOCATION OF TRANSFORMER AND ROUTING OF ELECTRIC LINES WITH SERVICE PROVIDER.
6. MSE RETAINING WALLS SHALL BE DESIGN/BUILD MECHANICALLY STABILIZED EARTH RETAINING (MSE) WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE *AHJ FOR CONSTRUCTION OF THE WALLS.
7. REFER TO LANDSCAPE PLANS FOR WALKS, RAILS, FENCE, LANDSCAPE STRUCTURES, LANDSCAPING, ETC.
8. MSE WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
9. SEE SHEET C704 FOR CIVIL LINE & CURVE TABLE DATA.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
12499 West Colfax Avenue
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
CIVIL HORIZONTAL CONTROL PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & COPYRIGHTED INFORMATION OF MARTIN/MARTIN, INC. AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C702

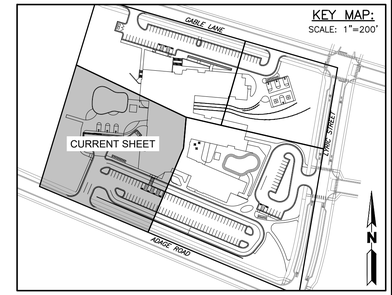
PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C700 - CIVIL HORIZONTAL CONTROL PLAN.dwg



SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE



HORIZONTAL CONTROL NOTES:

1. ALL DIMENSIONS AND COORDINATES ARE GIVEN TO CENTER LINE, FLOWLINE OF CURB, OR FACE OF WALL UNLESS NOTED OTHERWISE.
2. SEE DETAILS ON SITE DETAILS SHEET.
3. REGULAR PARKING STALLS WILL BE 9' WIDE X 18' LONG.
4. BUILDING GRID & LAYOUT PROVIDED BY TREANOR ON 10/16/2025.
5. COORDINATES FOR TRANSFORMERS ARE GIVEN TO CENTER OF TRANSFORMER. CONTRACTOR TO COORDINATE FINAL LOCATION OF TRANSFORMER AND ROUTING OF ELECTRIC LINES WITH SERVICE PROVIDER.
6. MSE RETAINING WALLS SHALL BE DESIGN/BUILD MECHANICALLY STABILIZED EARTH RETAINING (MSE) WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE *AHJ FOR CONSTRUCTION OF THE WALLS.
7. REFER TO LANDSCAPE PLANS FOR WALKS, RAILS, FENCE, LANDSCAPE STRUCTURES, LANDSCAPING, ETC.
8. MSE WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
9. SEE SHEET C704 FOR CIVIL LINE & CURVE TABLE DATA.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

N

20 10 0 20 40
SCALE: 1"=20'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
CIVIL HORIZONTAL CONTROL PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL REMAIN THE PROPERTY OF MARTIN/MARTIN. ALL RIGHTS RESERVED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C703

PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C700 - CIVIL HORIZONTAL CONTROL PLAN.dwg

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L1	S69°25'06"E	3.86'
L2	S16°51'51"W	23.50'
L3	N73°08'09"W	20.00'
L4	S16°51'51"W	26.00'
L5	S73°08'09"E	20.00'
L6	S16°51'51"W	13.00'
L7	S73°08'09"E	156.28'
L8	N16°51'51"E	13.00'
L9	S73°08'09"E	246.59'
L10	N16°51'59"E	24.38'
L12	S65°38'07"E	13.20'
L13	S72°55'23"E	26.00'
L14	S81°09'35"E	12.98'
L15	S16°51'51"W	3.51'
L16	S73°08'09"E	3.22'
L17	N16°52'08"E	13.00'
L18	S73°08'09"E	144.00'
L19	S16°52'08"W	13.00'
L20	S73°08'09"E	8.00'
L21	N16°52'08"E	13.00'
L22	S73°08'09"E	171.00'
L23	S16°52'08"W	12.72'
L24	N16°51'54"E	13.44'
L25	S73°08'09"E	18.00'
L26	S73°08'09"E	18.00'
L27	S74°19'27"E	14.09'
L27	S73°07'54"E	167.00'
L28	S64°53'58"E	13.00'
L29	S73°04'18"E	28.00'
L30	S81°14'35"E	13.00'
L31	N79°53'18"W	4.36'
L32	N09°37'01"E	16.91'
L33	S22°59'04"W	109.51'
L34	S22°59'04"W	15.22'
L35	S67°00'56"E	74.00'
L36	N22°59'04"E	21.88'
L37	N22°59'04"E	0.65'
L38	N09°37'01"E	14.89'
L39	S79°53'18"E	4.30'
L40	S09°44'44"W	5.04'
L41	S15°44'03"W	18.13'
L42	S09°44'44"W	28.00'
L43	S03°40'53"W	17.87'
L44	N67°00'56"W	13.00'
L45	N22°59'04"E	101.00'
L46	S67°00'56"E	12.99'
L47	N67°00'56"W	13.42'
L48	S09°37'01"W	92.31'
L49	S22°58'40"W	110.80'
L50	N22°51'49"E	99.18'
L51	N85°00'56"W	8.59'
L52	N05°59'54"E	34.01'
L53	S85°00'56"E	107.56'
L54	N62°41'21"E	34.73'
L55	S27°18'05"E	16.25'
L56	S85°00'56"E	13.91'
L57	N71°54'11"W	23.00'
L58	N67°07'52"W	37.00'
L59	N61°06'20"W	18.00'
L60	N22°51'49"E	21.62'
L61	S44°37'46"E	41.93'
L62	S67°07'46"E	380.26'
L63	N38°52'16"E	17.69'
L64	N39°51'48"W	8.49'
L65	N67°07'46"W	39.82'

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L66	N67°07'46"W	348.52'
L67	N89°37'46"W	6.08'
L68	N22°49'33"E	17.37'
L69	S85°00'56"E	72.63'
L70	S22°52'14"W	34.00'
L71	N67°07'46"W	2.34'
L72	N38°52'16"E	8.32'
L73	S67°07'46"E	0.05'
L74	N22°51'49"E	10.12'
L75	S89°37'46"E	6.25'
L76	S22°52'14"W	13.31'
L77	S67°07'46"E	36.00'
L78	S22°52'14"W	8.00'
L79	N67°07'46"W	50.47'

CURVE TABLE					
NUMBER	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD LENGTH
C1	86°16'57"	15.00'	22.59'	S26°16'38"E	20.51'
C2	90°00'00"	5.00'	7.85'	S61°51'51"W	7.07'
C3	90°00'00"	5.00'	7.85'	S28°08'09"E	7.07'
C4	90°00'00"	5.00'	7.85'	N61°51'51"E	7.07'
C5	89°59'52"	30.00'	47.12'	N61°51'55"E	42.43'
C6	90°01'26"	15.00'	23.57'	N61°52'42"E	21.22'
C7	90°01'05"	15.00'	23.57'	S61°52'23"W	21.22'
C8	90°00'00"	25.00'	39.27'	S28°08'09"E	35.36'
C9	89°59'42"	5.00'	7.85'	N61°52'00"E	7.07'
C10	90°00'18"	5.00'	7.85'	S28°08'00"E	7.07'
C11	89°59'42"	5.00'	7.85'	N61°52'00"E	7.07'
C12	103°33'50"	5.00'	9.04'	S34°54'47"E	7.86'
C13	76°26'20"	15.00'	20.01'	N55°05'09"E	18.56'
C14	90°13'12"	15.00'	23.62'	N28°14'45"W	21.25'
C15	90°00'33"	20.00'	31.42'	S55°06'26"W	28.29'
C16	89°30'18"	15.00'	23.43'	N35°08'09"W	21.12'
C17	166°37'57"	46.00'	133.78'	N73°41'58"W	91.37'
C18	69°28'17"	30.00'	36.38'	S11°45'05"E	34.19'
C19	69°28'17"	5.00'	6.06'	S11°45'05"E	5.70'
C20	52°58'02"	5.00'	4.62'	N49°28'05"E	4.46'
C21	52°58'01"	39.00'	36.05'	N49°28'05"E	34.78'
C22	13°22'03"	100.00'	23.33'	N16°18'02"E	23.28'
C23	90°29'42"	15.00'	23.69'	N54°51'51"E	21.30'
C24	89°38'02"	20.00'	31.29'	S35°04'17"E	28.19'
C25	92°51'58"	5.00'	8.10'	N66°33'05"E	7.25'
C26	87°08'02"	15.00'	22.81'	N23°26'55"W	20.68'
C27	103°22'03"	25.00'	45.10'	S61°18'02"W	39.23'
C28	65°05'43"	22.00'	24.99'	S22°55'52"E	23.67'
C29	100°57'38"	12.00'	21.15'	N74°02'28"E	18.51'
C30	89°07'49"	5.00'	7.78'	N22°27'02"W	7.02'
C31	90°00'20"	25.00'	39.27'	N67°51'58"E	35.36'
C32	107°52'45"	25.00'	47.07'	N31°04'34"W	40.42'
C33	32°17'43"	30.00'	16.91'	N78°50'12"E	16.69'
C34	89°59'40"	20.00'	31.41'	N22°08'02"W	28.28'
C35	76°06'41"	15.00'	19.93'	N60°55'09"E	18.49'
C36	36°23'45"	10.00'	6.35'	S62°49'38"E	6.25'
C37	22°30'00"	40.00'	15.71'	S55°52'46"E	15.61'
C38	73°59'58"	40.00'	51.66'	N75°52'15"E	48.14'
C39	78°44'05"	40.00'	54.97'	N00°29'46"W	50.74'
C40	27°15'58"	50.00'	23.79'	N53°29'47"W	23.57'
C41	18°11'42"	50.00'	15.88'	N76°13'37"W	15.81'
C42	18°11'42"	50.00'	15.88'	N76°13'37"W	15.81'
C43	22°30'00"	50.00'	19.63'	N78°22'46"W	19.51'
C44	112°27'19"	5.00'	9.81'	N33°24'07"W	8.31'
C45	72°09'31"	20.00'	25.19'	N58°54'19"E	23.56'
C46	90°00'00"	3.00'	4.71'	S67°52'14"W	4.24'
C47	106°00'02"	16.00'	29.60'	N14°07'45"W	25.56'
C48	73°59'58"	16.00'	20.66'	N75°52'15"E	19.26'
C49	90°00'00"	3.00'	4.71'	S22°07'46"E	4.24'
C50	78°54'51"	5.00'	6.89'	N62°19'14"E	6.35'
C51	11°24'25"	29.00'	5.77'	S83°55'33"E	5.76'
C52	112°30'00"	3.00'	5.89'	S33°22'46"E	4.99'
C53	89°59'35"	5.00'	7.85'	N22°07'59"W	7.07'

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
CIVIL LINE & CURVE TABLES SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

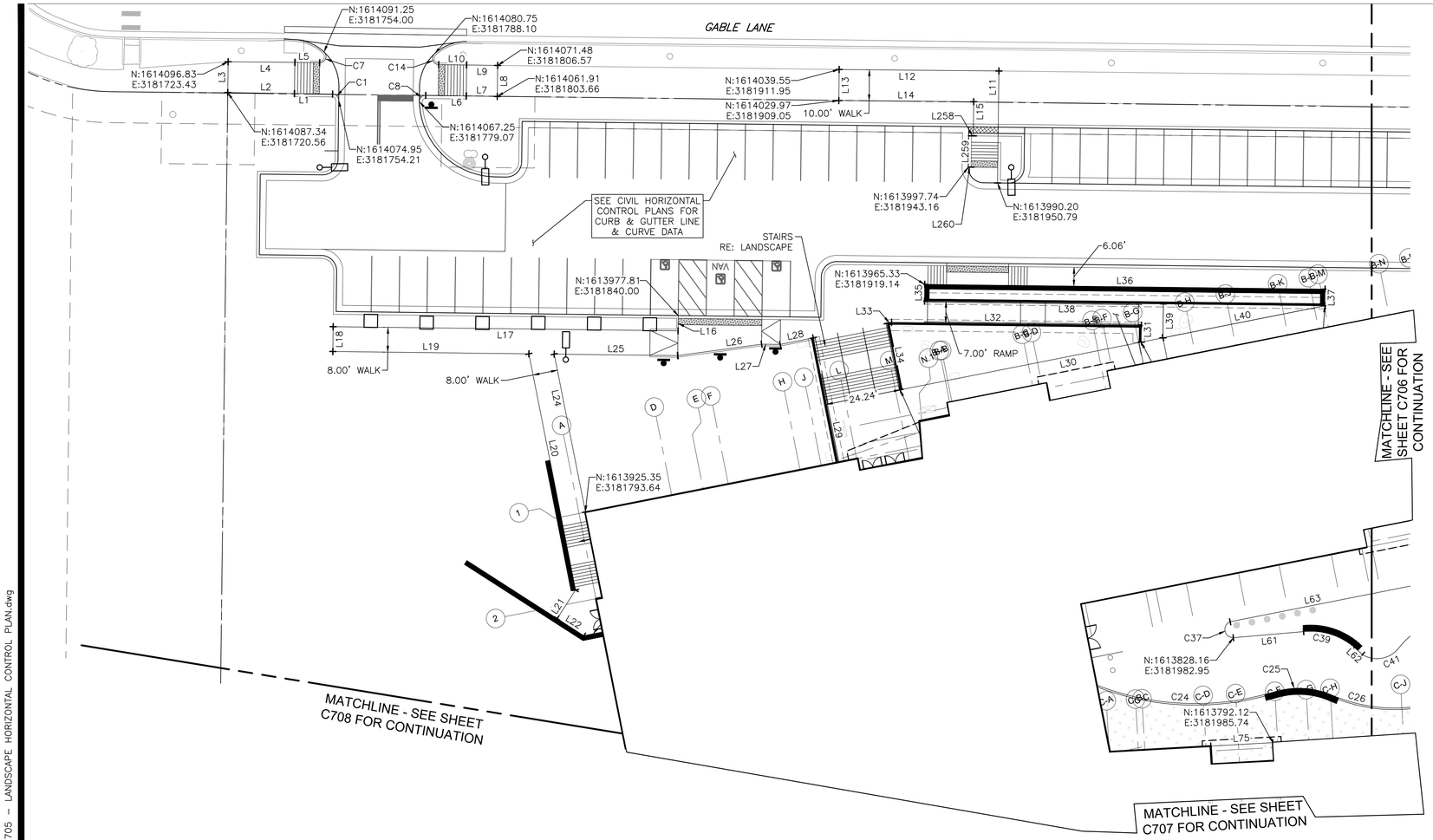
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & ARE NOT TO BE COPIED, ALTERED, OR CHANGED, EXISTING OR IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C704

PLOT DATE: Thursday, November 20, 2025 11:25 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C700 - CIVIL HORIZONTAL CONTROL PLAN.dwg

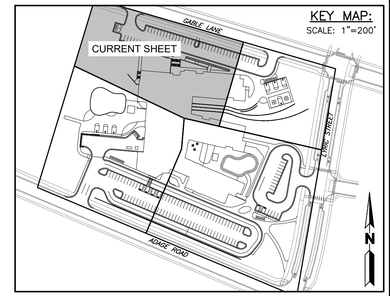


SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE

KEY MAP:
SCALE: 1"=200'



HORIZONTAL CONTROL NOTES:

1. ALL DIMENSIONS AND COORDINATES ARE GIVEN TO CENTER LINE, FLOWLINE OF CURB, OR FACE OF WALL UNLESS NOTED OTHERWISE.
2. SEE DETAILS ON SITE DETAILS SHEET.
3. REGULAR PARKING STALLS WILL BE 9' WIDE X 18' LONG.
4. BUILDING GRID & LAYOUT PROVIDED BY TREANOR ON 10/16/2025.
5. COORDINATES FOR TRANSFORMERS ARE GIVEN TO CENTER OF TRANSFORMER. CONTRACTOR TO COORDINATE FINAL LOCATION OF TRANSFORMER AND ROUTING OF ELECTRIC LINES WITH SERVICE PROVIDER.
6. MSE RETAINING WALLS SHALL BE DESIGN/BUILD MECHANICALLY STABILIZED EARTH RETAINING (MSE) WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE *AHJ FOR CONSTRUCTION OF THE WALLS.
7. REFER TO LANDSCAPE PLANS FOR WALKS, RAILS, FENCE, LANDSCAPE STRUCTURES, LANDSCAPING, ETC.
8. MSE WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
9. SEE SHEET C709 FOR LANDSCAPE LINE & CURVE TABLE DATA.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

N

20 10 0 20 40
SCALE: 1"=20'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS

LANDSCAPE HORIZONTAL CONTROL PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

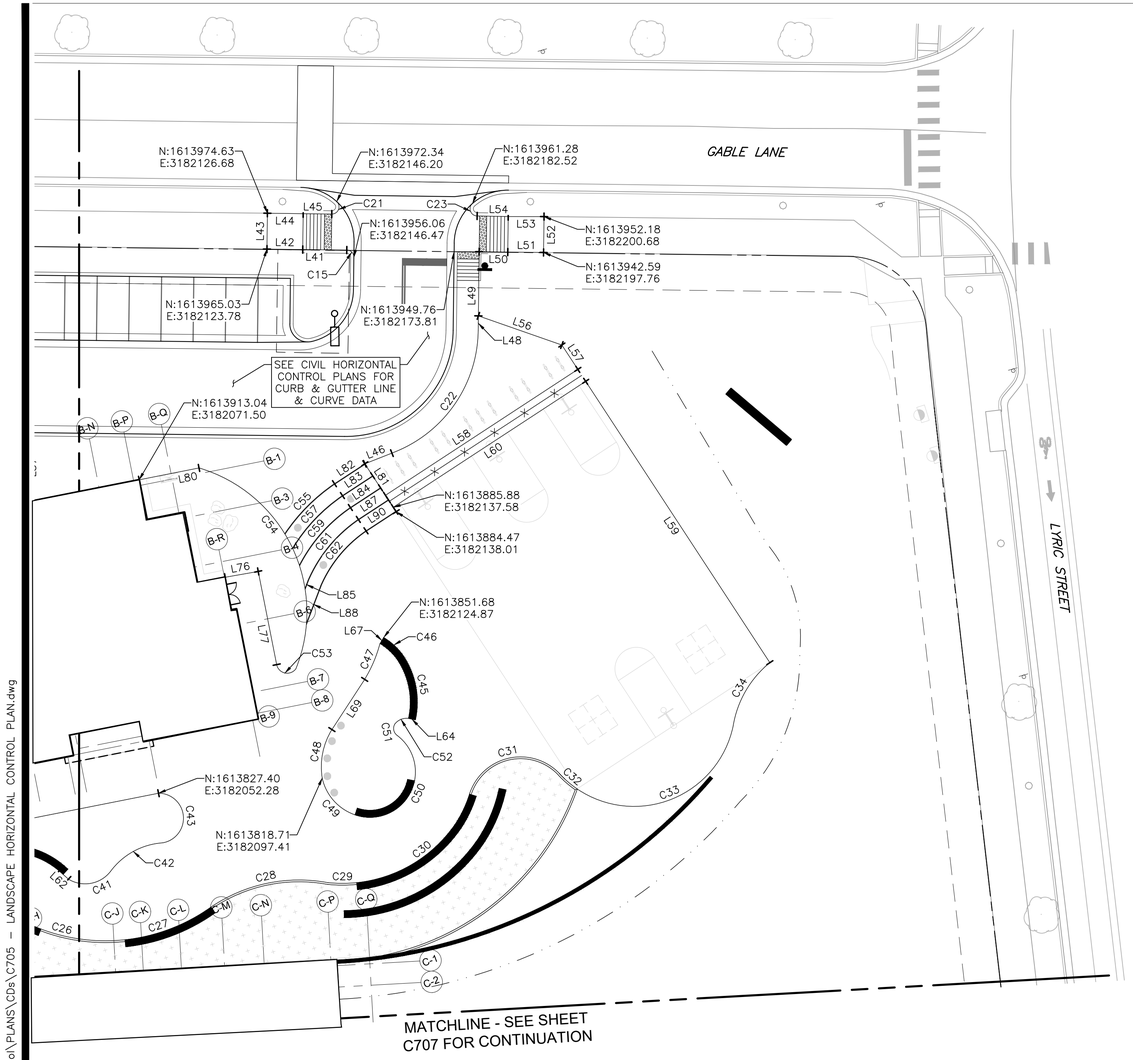
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, DISCLOSED TO OTHERS, OR USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C705

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C705 - LANDSCAPE HORIZONTAL CONTROL PLAN.dwg

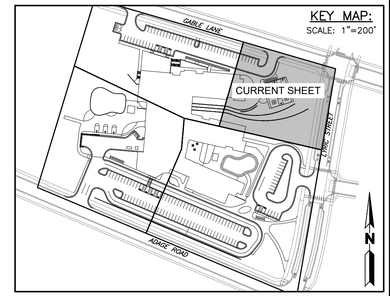


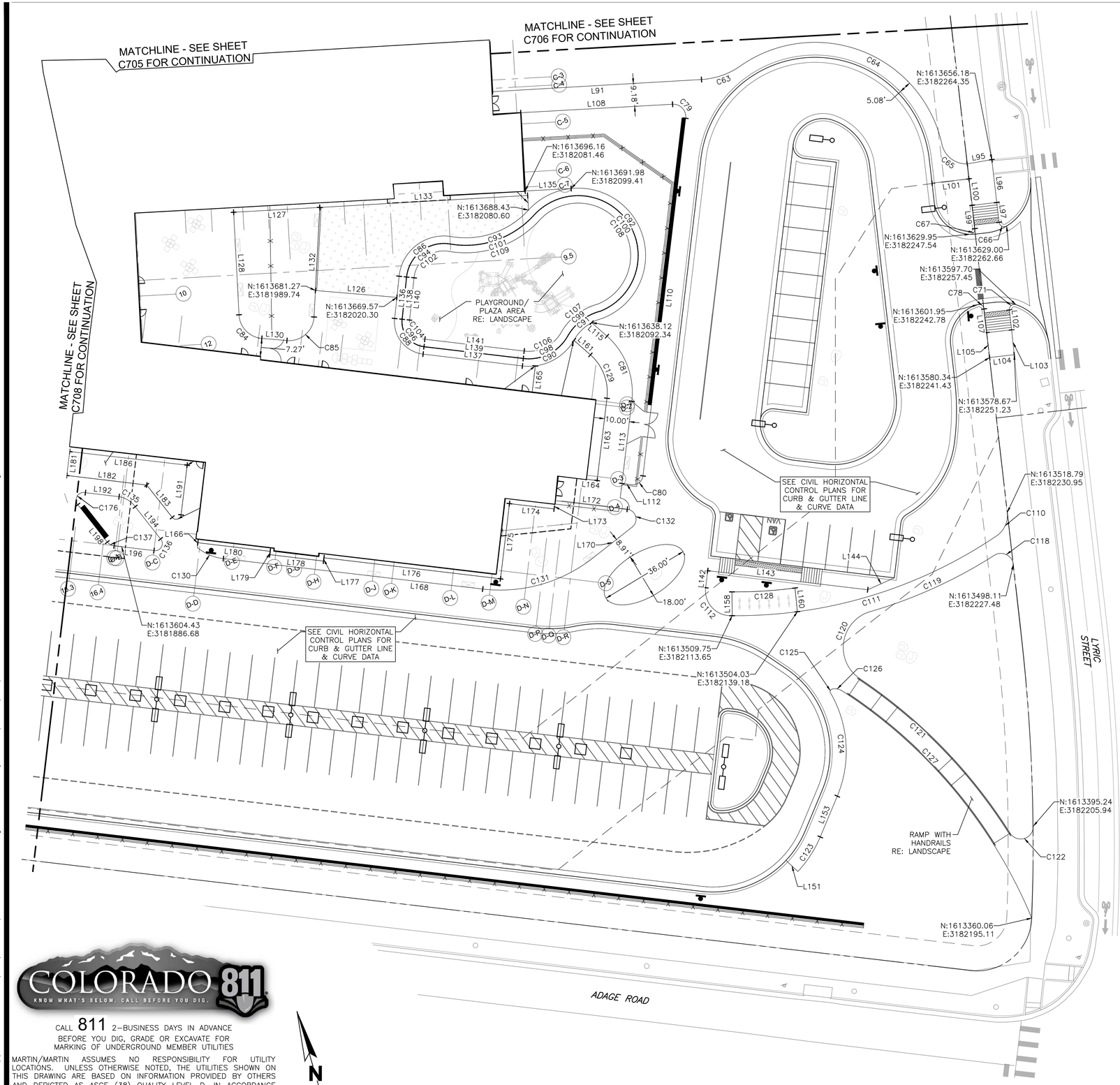
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE

KEY MAP:
SCALE: 1"=200'


GABLE LANE
CURRENT SHEET
LYRIC STREET
KINGS CREEK
KINGS CREEK
KINGS CREEK

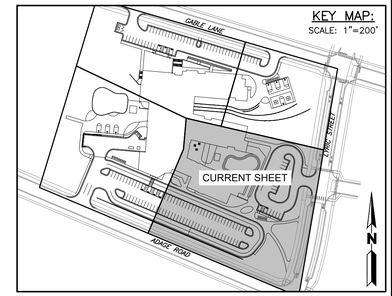


SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE

KEY MAP:
SCALE: 1"=200'



HORIZONTAL CONTROL NOTES:

1. ALL DIMENSIONS AND COORDINATES ARE GIVEN TO CENTER LINE, FLOWLINE OF CURB, OR FACE OF WALL UNLESS NOTED OTHERWISE.
2. SEE DETAILS ON SITE DETAILS SHEET.
3. REGULAR PARKING STALLS WILL BE 9' WIDE X 18' LONG.
4. BUILDING GRID & LAYOUT PROVIDED BY TREANOR ON 10/16/2025.
5. COORDINATES FOR TRANSFORMERS ARE GIVEN TO CENTER OF TRANSFORMER. CONTRACTOR TO COORDINATE FINAL LOCATION OF TRANSFORMER AND ROUTING OF ELECTRIC LINES WITH SERVICE PROVIDER.
6. MSE RETAINING WALLS SHALL BE DESIGN/BUILD MECHANICALLY STABILIZED EARTH RETAINING (MSE) WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE *AHJ FOR CONSTRUCTION OF THE WALLS.
7. REFER TO LANDSCAPE PLANS FOR WALKS, RAILS, FENCE, LANDSCAPE STRUCTURES, LANDSCAPING, ETC.
8. MSE WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
9. SEE SHEET C709 FOR LANDSCAPE LINE & CURVE TABLE DATA.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR
MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

N

20 10 0 20 40
SCALE: 1"=20'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
LANDSCAPE HORIZONTAL CONTROL PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

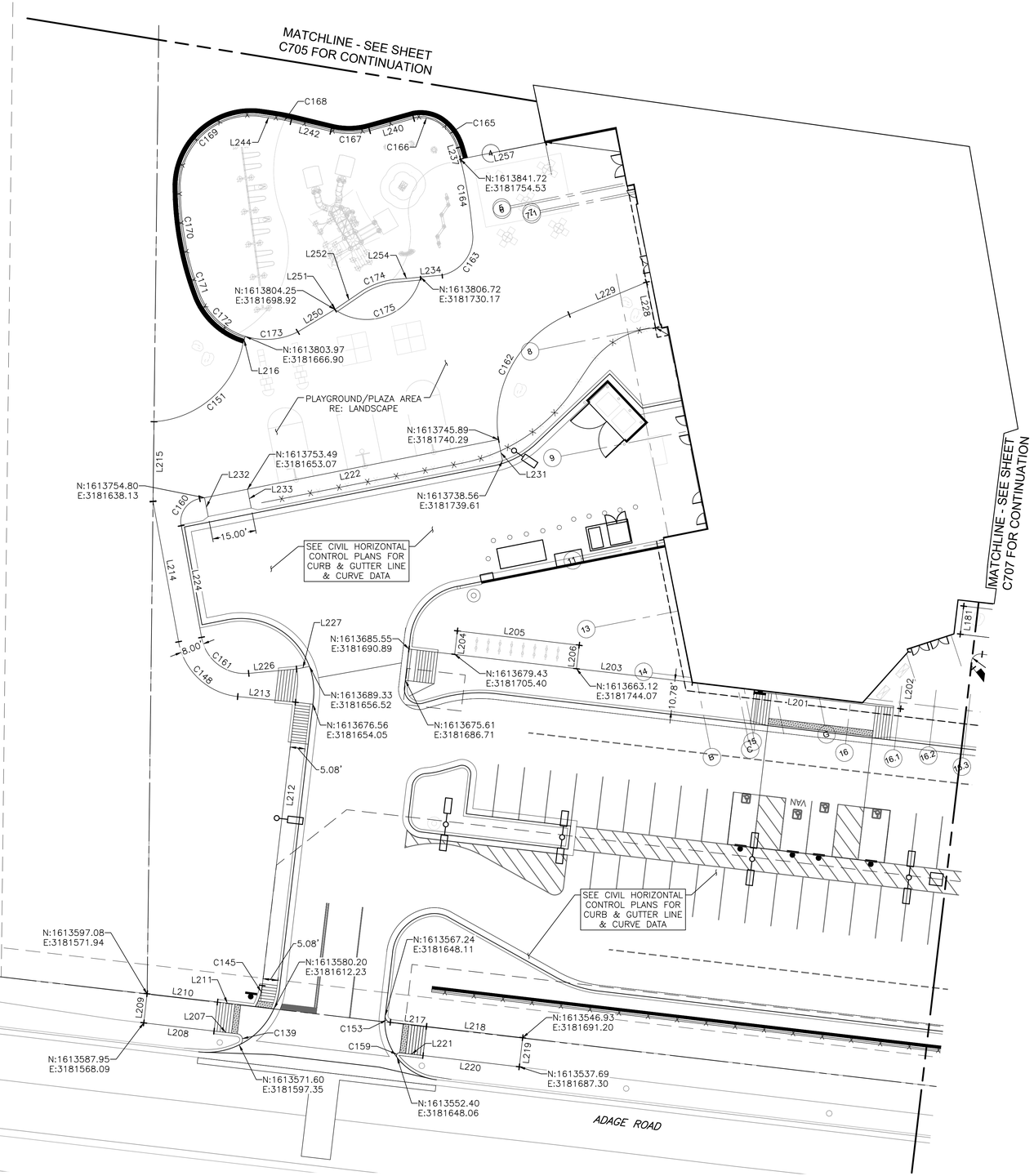
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & ARE THE PROPERTY OF MARTIN/MARTIN. THEY SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C707

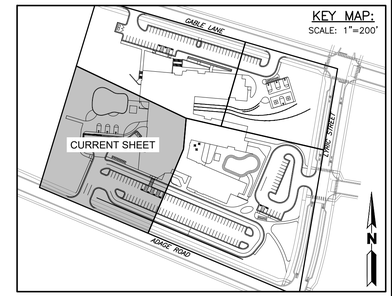
PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C705 - LANDSCAPE HORIZONTAL CONTROL PLAN.dwg



SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	CURB & GUTTER (SPILL)	
	CURB & GUTTER (CATCH)	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE



HORIZONTAL CONTROL NOTES:

1. ALL DIMENSIONS AND COORDINATES ARE GIVEN TO CENTER LINE, FLOWLINE OF CURB, OR FACE OF WALL UNLESS NOTED OTHERWISE.
2. SEE DETAILS ON SITE DETAILS SHEET.
3. REGULAR PARKING STALLS WILL BE 9' WIDE X 18' LONG.
4. BUILDING GRID & LAYOUT PROVIDED BY TREANOR ON 10/16/2025.
5. COORDINATES FOR TRANSFORMERS ARE GIVEN TO CENTER OF TRANSFORMER. CONTRACTOR TO COORDINATE FINAL LOCATION OF TRANSFORMER AND ROUTING OF ELECTRIC LINES WITH SERVICE PROVIDER.
6. MSE RETAINING WALLS SHALL BE DESIGN/BUILD MECHANICALLY STABILIZED EARTH RETAINING (MSE) WALLS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY BUILDING PERMITS FROM THE *AHJ FOR CONSTRUCTION OF THE WALLS.
7. REFER TO LANDSCAPE PLANS FOR WALKS, RAILS, FENCE, LANDSCAPE STRUCTURES, LANDSCAPING, ETC.
8. MSE WALL BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 4,500 PSI MINIMUM. THE MINIMUM OVEN DRY WEIGHT OF THE CONCRETE BLOCK SHALL BE 125 PCF WITH A MAXIMUM WATER ABSORPTION RATE BY WEIGHT OF 6 PERCENT. THE BLOCK WEIGHT (EXCLUDING CORE FILL) SHALL BE A MINIMUM OF 72 POUNDS PER SQUARE FOOT OF WALL FACE.
9. SEE SHEET C709 FOR LANDSCAPE LINE & CURVE TABLE DATA.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

N

20 10 0 20 40
SCALE: 1"=20'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
LANDSCAPE HORIZONTAL CONTROL PLAN

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C708

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C705 - LANDSCAPE HORIZONTAL CONTROL PLAN.dwg

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L1	N73°03'23"W	12.29'
L2	N72°55'51"W	21.51'
L3	N16°51'46"E	9.91'
L4	S73°18'36"E	21.52'
L5	S73°00'08"E	8.00'
L6	S73°05'29"E	13.08'
L7	S72°50'52"E	10.00'
L8	N16°51'51"E	10.00'
L9	N72°54'59"W	10.00'
L10	N73°03'24"W	9.00'
L11	N16°51'51"E	36.10'
L12	N73°17'21"W	51.49'
L13	S16°50'07"W	10.02'
L14	S73°18'43"E	43.49'
L15	S16°51'50"W	11.01'
L16	S16°51'51"W	4.92'
L17	N73°08'09"W	111.20'
L18	S16°51'51"W	8.00'
L19	S73°08'09"E	63.20'
L20	S04°59'04"W	77.62'
L21	S48°54'30"W	10.97'
L22	S41°05'30"E	10.22'
L23	S85°00'56"E	6.13'
L24	N04°59'04"E	51.85'
L25	S73°08'09"E	39.82'
L26	S81°33'47"E	27.29'
L27	S73°08'09"E	6.00'
L28	S85°07'09"E	10.88'
L29	S04°59'04"W	40.91'
L30	S85°01'03"E	79.19'
L31	N16°51'51"E	5.42'
L32	N73°08'09"W	80.53'
L33	N84°53'53"W	1.50'
L34	S04°59'04"W	21.89'
L35	N16°51'51"E	5.39'
L36	S73°08'09"E	129.08'
L37	S16°51'51"W	5.39'
L38	N73°08'09"W	129.08'
L39	S16°51'51"W	10.95'
L40	S85°00'52"E	53.21'
L41	N73°07'52"W	12.32'
L42	N73°07'52"W	10.00'
L43	N16°52'08"E	10.03'
L44	S73°02'40"E	10.00'
L45	S73°07'52"E	8.00'
L46	N84°37'44"E	8.14'
L48	N16°51'59"E	4.12'
L49	N16°51'59"E	17.94'
L50	S73°07'40"E	8.00'
L51	S73°11'21"E	10.00'
L52	N16°54'26"E	10.02'
L53	N73°45'58"W	10.01'
L54	N72°43'36"W	8.69'
L56	S54°34'06"E	24.72'
L57	S17°02'00"E	8.13'
L58	S72°58'01"W	64.27'
L59	N17°01'59"W	94.00'
L60	S72°58'01"W	64.27'
L61	S78°48'56"E	22.72'
L62	S31°58'06"E	3.48'
L63	N85°01'28"W	69.15'
L64	S61°28'01"E	2.00'
L67	S47°21'13"W	2.00'
L69	S49°19'06"W	16.75'
L75	S77°00'56"E	20.00'

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L76	S83°47'07"E	9.36'
L77	S04°59'04"W	26.55'
L80	N85°04'39"W	17.05'
L81	S17°02'07"E	16.00'
L82	N72°58'00"E	10.14'
L83	N72°58'00"E	10.10'
L84	N72°58'00"E	10.07'
L85	N37°00'22"E	2.18'
L87	N72°58'00"E	10.03'
L88	N37°00'22"E	10.94'
L90	N72°58'00"E	9.99'
L91	S77°09'06"E	83.81'
L95	S83°41'52"E	9.99'
L96	S09°34'17"W	17.27'
L97	S09°23'35"W	8.00'
L99	N09°35'59"E	9.42'
L100	N09°05'00"E	10.66'
L101	N80°22'59"W	14.87'
L102	S09°43'07"W	8.00'
L103	S10°06'50"W	10.00'
L104	N80°16'53"W	9.93'
L105	N09°43'07"E	10.00'
L107	N09°43'07"E	9.55'
L108	S77°00'56"E	60.86'
L110	S22°59'04"W	144.25'
L112	N67°00'56"W	4.00'
L113	N22°59'04"E	33.18'
L115	N32°22'08"W	8.17'
L126	S69°02'48"E	32.72'
L127	N77°00'56"W	34.54'
L128	S13°10'34"W	41.12'
L130	S68°52'16"E	10.10'
L132	N19°10'33"E	43.92'
L133	S77°07'48"E	83.35'
L134	S13°06'35"W	5.89'
L135	S76°53'25"E	18.43'
L136	S22°12'49"W	17.01'
L137	S67°00'56"E	40.03'
L138	S22°12'49"W	17.01'
L139	S67°00'56"E	40.03'
L140	S22°12'49"W	17.01'
L141	S67°00'56"E	40.03'
L142	N22°59'04"E	6.86'
L143	S67°00'56"E	64.50'
L144	N82°01'14"E	11.66'
L151	S30°42'16"E	6.50'
L153	N38°52'16"E	17.69'
L158	N15°48'42"E	9.55'
L160	S10°23'56"W	9.52'
L161	S32°22'08"E	8.80'
L163	S22°59'04"W	33.18'
L164	N67°00'56"W	4.41'
L165	N22°59'04"E	10.64'
L166	S22°59'04"W	3.41'
L168	S67°07'46"E	104.52'
L170	N67°59'04"E	20.05'
L172	N67°00'56"W	29.08'
L173	S22°59'04"W	2.00'
L174	N67°00'56"W	18.00'
L175	S22°59'04"W	30.33'
L176	N67°00'56"W	71.17'
L177	S22°59'04"W	1.33'
L178	N67°00'56"W	21.67'
L179	N22°59'04"E	1.33'
L180	N67°00'56"W	29.17'

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L181	S22°59'04"W	9.66'
L182	S67°00'56"E	32.23'
L183	S22°00'56"E	16.48'
L185	N23°07'04"E	20.05'
L186	N67°11'42"W	47.35'
L191	N23°07'04"E	20.05'
L192	S67°00'56"E	13.57'
L194	S21°59'46"E	16.43'
L196	N67°00'56"W	16.06'
L198	N22°00'56"W	19.06'
L200	S22°59'04"W	0.64'
L201	S67°07'46"E	50.43'
L202	N23°24'36"E	19.65'
L203	S67°07'37"E	97.66'
L204	N22°52'14"E	8.09'
L205	S67°07'46"E	41.97'
L206	N22°52'14"E	8.09'
L207	N67°07'06"W	8.01'
L208	N67°07'02"W	24.22'
L209	N22°44'42"E	10.04'
L210	S67°03'32"E	24.25'
L211	S67°08'27"E	13.04'
L212	N22°51'49"E	97.64'
L213	N68°13'42"W	19.86'
L214	N05°51'55"E	48.83'
L215	N16°51'51"E	27.28'
L216	N33°18'34"E	2.50'
L217	S67°07'56"E	12.43'
L218	S67°08'08"E	33.16'
L219	S22°51'49"W	10.03'
L220	N67°08'06"W	33.16'
L221	N67°07'02"W	8.00'
L222	N85°00'56"W	104.26'
L224	S05°48'09"W	38.83'
L226	S79°02'36"E	16.46'
L227	S85°12'04"E	4.47'
L228	N04°29'05"E	15.94'
L229	S83°32'34"W	28.68'
L231	S04°59'04"W	5.48'
L232	S04°59'04"W	6.58'
L233	S04°59'04"W	6.58'
L234	S79°06'18"E	7.44'
L237	N00°11'29"W	4.08'
L240	N89°19'05"W	15.62'
L242	N60°10'49"W	14.02'
L244	N65°18'16"W	6.85'
L250	N74°58'19"E	14.81'
L251	N74°58'19"E	0.39'
L252	N71°55'43"E	10.86'
L254	S79°06'18"E	9.68'
L257	N85°00'56"W	29.86'
L258	N73°08'09"W	0.58'
L259	S16°52'08"W	10.08'
L260	N73°07'52"W	0.92'

CURVE TABLE					
NUMBER	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD LENGTH
C1	89°55'18"	2.00'	3.14'	N28°05'44"W	2.83'
C7	137°57'30"	2.00'	4.82'	N38°01'07"E	3.73'
C8	92°30'40"	2.00'	3.23'	N60°39'11"E	2.89'
C14	136°37'34"	2.00'	4.77'	N04°33'11"W	3.72'
C15	89°59'45"	2.00'	3.14'	N28°07'59"W	2.83'
C21	138°09'15"	2.00'	4.82'	N37°52'26"E	3.74'
C22	68°56'25"	37.01'	44.53'	N51°20'31"E	41.89'
C23	137°45'23"	2.00'	4.81'	N03°50'55"W	3.73'
C24	36°18'09"	86.97'	55.10'	S70°36'06"E	54.18'
C25	47°44'39"	29.53'	24.60'	S71°15'01"E	23.90'
C26	26°54'16"	50.88'	23.89'	S66°31'28"E	23.67'
C27	29°19'37"	50.88'	26.04'	N85°21'35"E	25.76'
C28	44°50'34"	43.80'	34.28'	S85°33'37"E	33.41'
C29	11°56'10"	38.31'	7.98'	S73°50'00"E	7.97'
C30	65°21'03"	37.16'	42.39'	N68°01'24"E	40.13'
C31	118°18'03"	15.00'	30.97'	S86°41'15"E	25.76'
C32	13°28'35"	28.30'	6.66'	S32°59'44"E	6.64'
C33	112°05'19"	28.30'	55.37'	N84°13'19"E	46.95'
C34	41°45'07"	28.78'	20.97'	N46°11'46"E	20.51'
C37	160°08'01"	2.67'	7.45'	S04°50'15"W	5.25'
C39	46°35'43"	21.72'	17.66'	S56°32'58"E	17.18'
C41	83°39'59"	8.96'	13.08'	S84°10'24"E	11.95'
C42	49°28'32"	19.81'	17.11'	N77°20'12"E	16.58'
C43	170°40'41"	6.98'	20.81'	N11°38'26"E	13.92'
C45	47°18'19"	23.31'	19.24'	N04°52'50"E	18.70'
C46	21°54'24"	18.51'	7.08'	N31°41'35"W	7.04'
C47	16°53'47"	37.08'	10.93'	S39°19'19"W	10.89'
C48	40°50'16"	19.81'	14.12'	S27°28'03"W	13.83'
C49	66°00'26"	14.06'	16.19'	S29°09'45"E	15.31'
C50	154°02'32"	12.73'	34.22'	N40°12'18"E	24.80'
C51	88°06'18"	2.39'	3.68'	N04°34'44"E	3.33'
C52	59°43'22"	4.10'	4.27'	N84°12'44"E	4.08'
C53	133°26'31"	3.01'	7.01'	S61°44'12"E	5.53'
C54	95°35'02"	42.08'	70.20'	N09°35'59"W	62.34'
C55	21°55'55"	51.79'	19.82'	N60°59'25"E	19.70'
C57	24°26'51"	47.79'	20.39'	N59°41'28"E	20.24'
C59	28°26'56"	43.79'	21.74'	N57°38'36"E	21.52'
C61	32°28'46"	39.79'	22.56'	N55°34'27"E	22.25'
C62	32°17'54"	35.95'	20.26'	N55°36'17"E	20.00'
C63	31°54'29"	30.00'	16.71'	N87°01'49"E	16.49'
C64	112°40'55"	52.00'	102.27'	S52°34'58"E	86.56'
C65	79°29'23"	10.00'	13.87'	S35°59'12"E	12.79'
C66	114°20'06"	2.00'	3.99'	S47°46'28"E	3.36'
C67	99°00'49"	2.00'	3.46'	N59°06'23"E	3.04'
C71	115°13'45"	2.00'	4.02'	S67°20'00"W	3.38'
C78	99°09'20"	2.00'	3.46'	N39°51'33"W	3.05'
C79	100°00'00"	5.00'	8.73'	S27°00'56"E	7.66'
C80	90°00'00"	4.00'	6.28'	S67°59'04"W	5.66'
C81	55°21'12"	30.00'	28.98'	N04°41'32"W	27.87'
C84	82°02'50"	10.00'	14.32'	S27°50'51"E	13.13'
C85	91°57'11"	10.00'	16.05'	N65°09'08"E	14.38'
C86	93°38'13"	18.00'	29.42'	S69°01'55"W	26.25'
C88	89°13'45"	13.00'	20.25'	S22°24'04"E	18.26'
C90	65°43'04"	21.00'	24.09'	N80°07'32"E	22.79'
C91	47°55'11"	18.22'	15.24'	N68°20'59"E	14.80'
C92	206°19'19"	26.98'	97.15'	N18°18'17"W	52.54'
C93	57°18'58"	34.00'	34.01'	S87°11'33"W	32.61'
C94	93°38'13"	15.00'	24.51'	S69°01'55"W	21.88'
C96	89°13'45"	10.00'	15.57'	S22°24'04"E	14.05'
C98	65°29'47"	18.00'	20.58'	N80°14'11"E	19.47'
C99	47°08'16"	21.22'	17.46'	N68°10'39"E	16.97'
C100	205°53'12"	23.98'	86.16'	N18°31'20"W	46.74'
C101	57°18'58"	37.00'	37.01'	S87°11'33"W	35.49'
C102	93°38'13"	12.00'	19.61'	S69°01'55"W	17.50'
C104	89°13'45"	7.00'	10.90'	S22°24'04"E	9.83'

CURVE TABLE					
NUMBER	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD LENGTH
C106	65°13'51"	15.00'	17.08'	N80°22'08"E	16.17'
C107	46°27'40"	24.22'	19.64'	N68°01'54"E	19.11'
C108	205°23'49"	20.98'	75.20'	N18°46'02"W	40.93'
C109	57°18'58"	40.00'	40.01'	S87°11'33"W	38.37'
C110	62°32'56"	10.00'	10.92'	S40°53'27"W	10.38'
C111	34°56'09"	185.35'	113.02'	S89°31'18"W	111.27'
C112	95°57'09"	10.00'	16.75'	N24°59'30"W	14.86'
C118	115°51'30"	5.00'	10.11'	N48°29'34"W	8.47'
C119	16°21'55"	191.35'	54.65'	S81°45'38"W	54.47'
C120	129°57'40"	15.00'	34.02'	S24°57'46"W	27.18'
C121	23°59'06"	207.53'	86.88'	S28°01'31"E	86.24'
C122	149°59'34"	5.00'	13.09'	N89°27'10"E	9.66'
C123	20°25'28"	46.50'	16.58'	N49°05'00"E	16.49'
C124	52°56'14"	46.50'	42.96'	N12°24'09"E	41.45'
C125	105°33'26"	1.00'	1.84'	N38°42'45"E	1.59'
C126	47°32'35"	5.00'	4.15'	S64°44'14"E	4.03'
C127	34°34'04"	199.53'	120.38'	S23°40'54"E	118.56'
C128	8°14'25"	175.83'	25.29'	S77°19'51"E	25.27'
C129	55°21'12"	20.00'	19.32'	S04°41'32"E	18.58'
C130	33°02'05"	20.00'	11.53'	S50°36'44"E	11.37'
C131	44°53'10"	60.00'	47.00'	S89°34'21"E	45.81'
C132	135°00'00"	4.00'	9.42'	N00°29'04"E	7.39'
C134	134°52'00"	2.00'	4.71'	S89°26'56"E	3.69'
C135	44°28'09"	10.03'	7.79'	S41°54'26"E	7.59'
C136	139°41'28"	2.85'	6.95'	S45°36'18"W	5.35'
C137	39°39'51"	4.61'	3.19'	N45°22'04"W	3.13'
C138	142°34'12"	3.01'	7.49'	N48°23'29"E	5.70'
C139	147°14'50"	2.00'	5.14'	N06°27'08"E	3.84'
C145	22°56'38"	19.00'	7.61'	N34°20'07"E	7.56'
C148	73°40'56"	23.00'	29.58'	N30°58'33"W	27.58'
C151	75°42'27"	33.09'	43.72'	N64°48'25"E	40.61'
C153	89°07'35"	2.00'	3.11'	S22°34'08"E	2.81'
C159	134°32'50"	1.00'	2.35'	S45°42'20"W	1.84'
C160	88°59'10"	8.00'	12.42'	S50°29'29"W	11.21'
C161	85°14'03"	15.00'	22.31'	S36°25'34"E	20.31'
C162	78°33'30"	40.00'	54.84'	S44°15'49"W	50.65'
C163	87°12'40"	13.26'	20.18'	N50°34'16"E	18.29'
C164	9°34'10"	149.13'	24.91'	N06°45'46"E	24.88'
C165	40°54'18"	15.47'	11.04'	N20°27'09"W	10.81'
C166	42°31'21"	11.77'	8.73'	N64°27'52"W	8.53'
C167	29°10'34"	26.44'	13.47'	N74°43'45"W	13.32'
C168	5°07'28"	49.00'	4.38'	N62°44'32"W	4.38'
C169	94°08'50"	24.27'	39.87'	S65°09'59"W	35.54'
C170	16°27'21"	105.37'	30.26'	S08°15'15"W	30.16'
C171	4°54'03"	101.93'	8.72'	S02°27'01"E	8.72'
C172	50°00'23"	24.45'	21.34'	S31°33'51"E	20.67'
C173	43°40'42"	24.30'	18.52'	S78°39'53"E	18.08'
C174	24°08'45"	26.44'	11.14'	N85°42'03"E	11.06'
C175	111°38'48"	18.94'	36.91'	N85°28'54"E	31.34'
C176	142°34'12"	3.01'	7.49'	N48°23'29"E	5.70'

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
LANDSCAPE LINE & CURVE TABLES SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

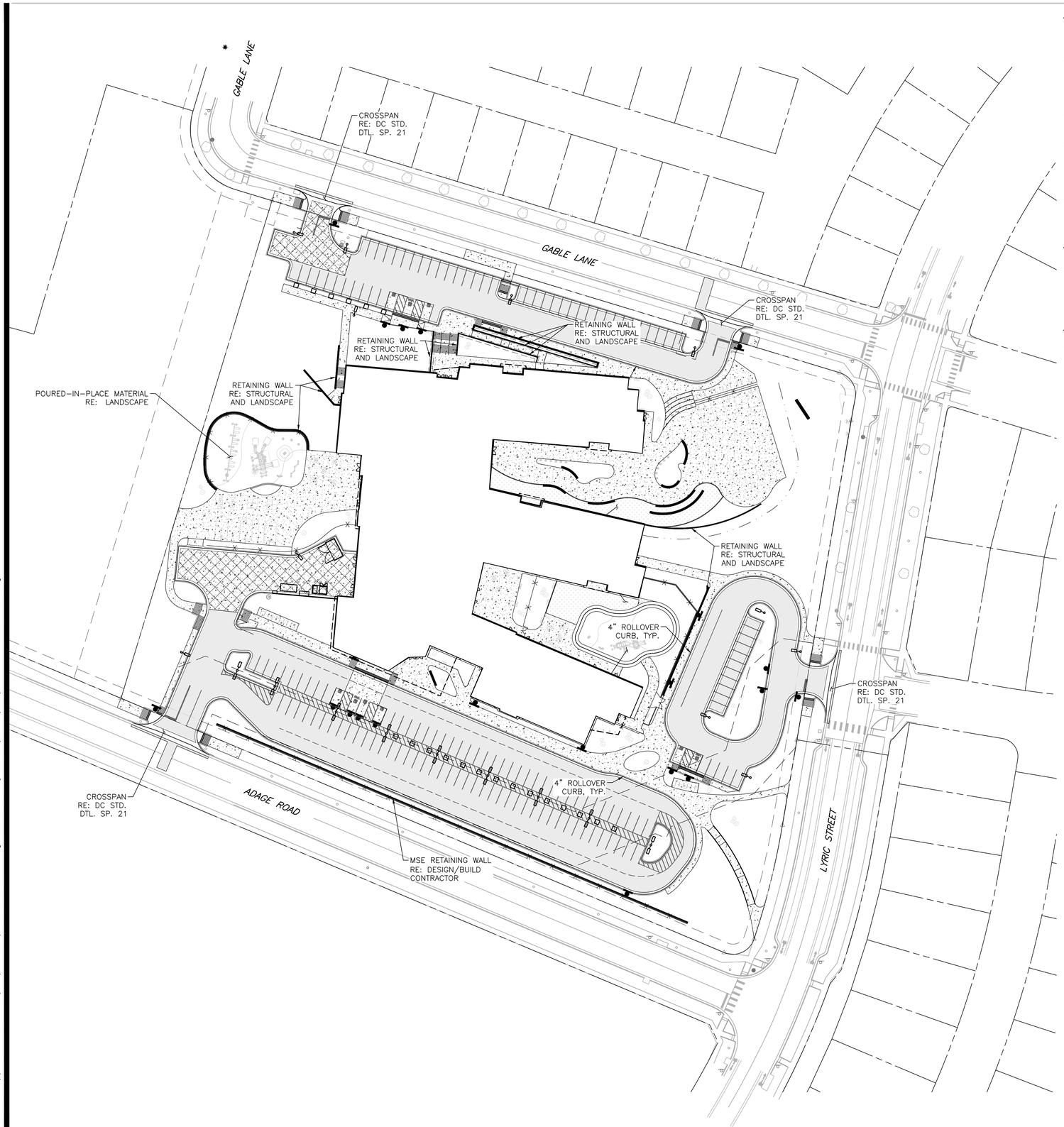
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, DISCLOSED TO OTHERS, OR USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C709

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: JEDIAZ
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C705 - LANDSCAPE HORIZONTAL CONTROL PLAN.dwg



PAVING NOTES:

1. ALL PROPOSED WALKS SHALL CONNECT TO EXISTING WALK WITH DRILL/DOWEL DETAIL SHOWN ON DETAIL SHEET.
2. SEE DETAIL SHEET FOR HANDICAP RAMP TYPES AND DETAILS.
3. SEE DETAIL SHEETS FOR SITE DETAILS.
4. ASPHALT MIX SHALL BE PG 64-22 WITH 3.5% - 5.0% AIR VOIDS.
5. CONCRETE MIX SHALL BE 4,500 PSI MIN WITH WATER TO CEMENT RATIO OF 0.45 AND AN AIR ENTRAINMENT OF 5 PERCENT (+/- 1.5 PERCENT). EXPANSION JOINTS SHALL BE SEALED WITH A POLYURETHANE SEALANT.
6. REFER TO GEOTECHNICAL ENGINEERING REPORT BY INTERTEK PSI DATED JUNE 13, 2025 FOR ADDITIONAL PAVEMENT DETAIL.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE

PAVEMENT LEGEND

ASPHALT DRIVE LANES
5" THICK ASPHALT OVER 6.0" AGGREGATE BASE COURSE OVER 36" OF SCARIFIED, MOISTURE TREATED, AND RECOMPACTED SUBGRADE.

CONCRETE BUS DROP-OFF, DUMPSTER PADS, LOADING ZONES
8" THICK CONCRETE REINFORCED WITH #4 REBAR 24" E.W.O.C. OVER 36" OF SCARIFIED, MOISTURE TREATED, AND RECOMPACTED SUBGRADE.

PARKING STALLS
4" THICK ASPHALT OVER 6.0" AGGREGATE BASE COURSE OVER 36" OF SCARIFIED, MOISTURE TREATED, AND RECOMPACTED SUBGRADE.

SIDEWALKS
6" THICK CONCRETE WITH #3 REBAR 24" E.W.O.C. OVER 36" OF SCARIFIED, MOISTURE TREATED, AND RECOMPACTED SUBGRADE. IF SIDEWALK WIDTH IS LESS THAN 6', 4" THICK CONCRETE CAN BE UTILIZED.

COLORADO 811 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

N

CITY OF LONE TREE

DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
12499 West Colfax Avenue
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
PAVEMENT PLAN

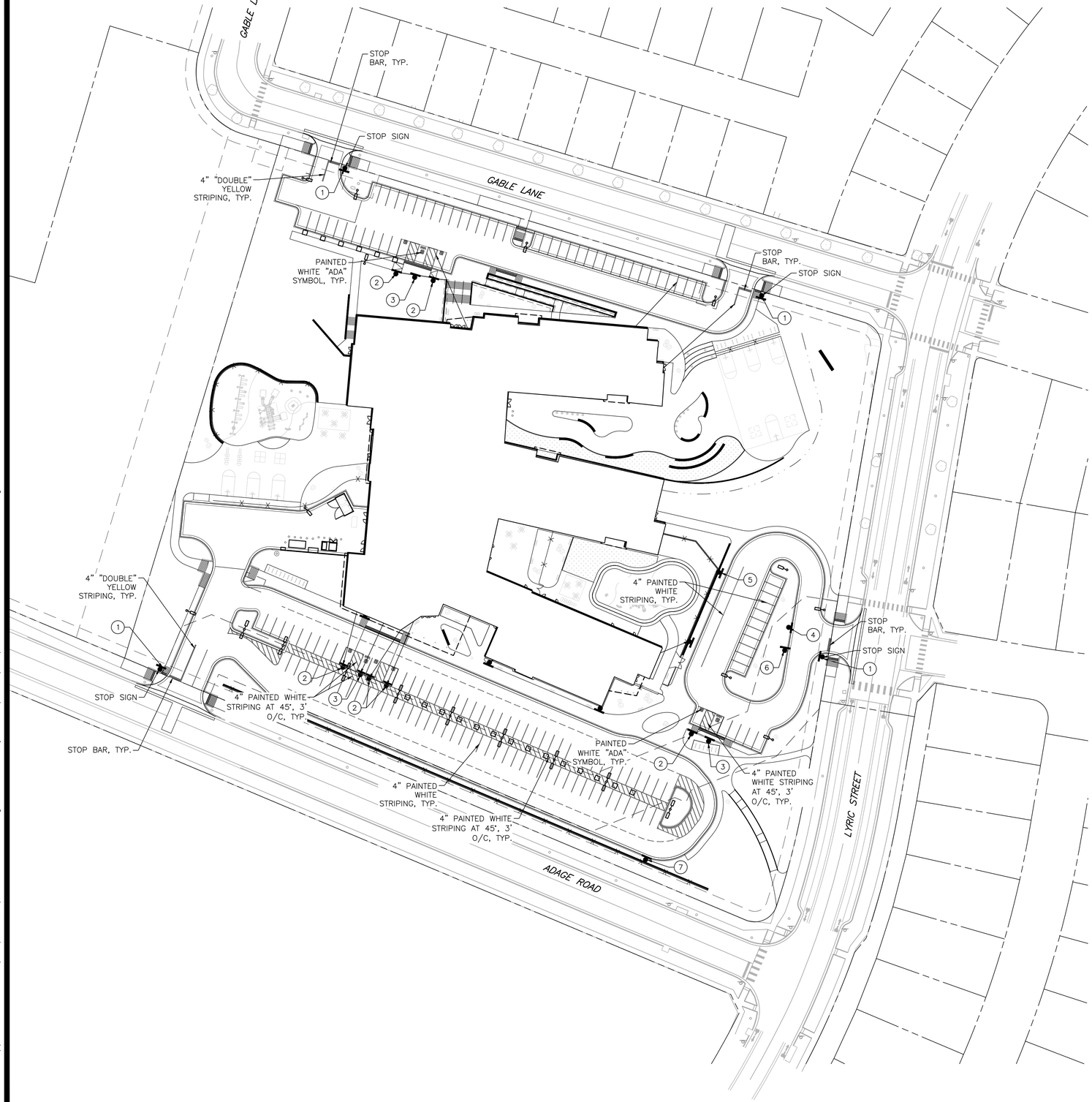
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & CONFIDENTIAL DOCUMENTS OWNED BY MARTIN/MARTIN, INC. & CANNOT BE REUSED, COPIED OR ALTERED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C710

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C710 - PAVEMENT PLAN.dwg



SIGNAGE & STRIPING NOTES:

1. ALL SIGNING AND STRIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST ADDITION.
2. ALL PRIVATE STRIPING SHOWN IS STANDARD TRAFFIC MARKING PAINT (WHITE COLOR), UNLESS OTHERWISE NOTED.
3. ALL SIGNS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 7' FROM GROUND TO BOTTOM OF SIGN.
4. TRAFFIC SIGN MATERIAL SHALL BE REFLECTIVE ALUMINUM.
5. SEE DETAIL SHEET FOR HANDICAP RAMP TYPES AND DETAILS.
6. SEE DETAIL SHEETS FOR SITE DETAILS.
7. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL PROPOSED SITE SIGNAGE.

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE NORTHERLY LINE OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO AS BEARING N89°15'39"E.

BENCHMARK

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3-1/4" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	EASEMENT	
	CURB & GUTTER	
	SIGN	
DRIVE	DESCRIPTIONS	DRIVE

SIGNAGE LEGEND

1. STOP — R1-1, 30 X 30
2. RESERVED PARKING — R7-8, 12 X 18
3. RESERVED PARKING — R7-8, 12 X 18; VAN ACCESSIBLE — R7-8B, 18 X 9
4. ONE WAY — R6-1R, 36 X 12
5. NO IDLING ALLOWED
6. DO NOT ENTER — R5-1, 30 X 30
7. DROPOFF/PICKUP MERGE TO FORM ONE LANE — (CUSTOM SIGN) 30 X 30

N

50 25 0 50 100
SCALE: 1"=50'
ALL LINEAL DIMENSIONS ARE IN U.S. SURVEY FEET

COLORADO 811 — KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR MARKING OF UNDERGROUND MEMBER UTILITIES

MARTIN/MARTIN ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. UNLESS OTHERWISE NOTED, THE UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY OTHERS AND DEPICTED AS ASCE (38) QUALITY LEVEL D. IN ACCORDANCE WITH THE PROVISIONS OF COLORADO REVISED STATUTE, TITLE 9, IT IS THE CONTRACTORS RESPONSIBILITY TO CALL COLORADO 811 UTILITY LOCATE SERVICE FOR UTILITY LOCATES BEFORE DIGGING, AND FIELD VERIFY THE SIZE, MATERIAL, HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES (DEPICTED OR NOT DEPICTED) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

_____
CITY OF LONE TREE

_____
DATE

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

ENGINEERING DIVISION ACCEPTANCE BLOCK

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SIGNAGE & STRIPING PLAN

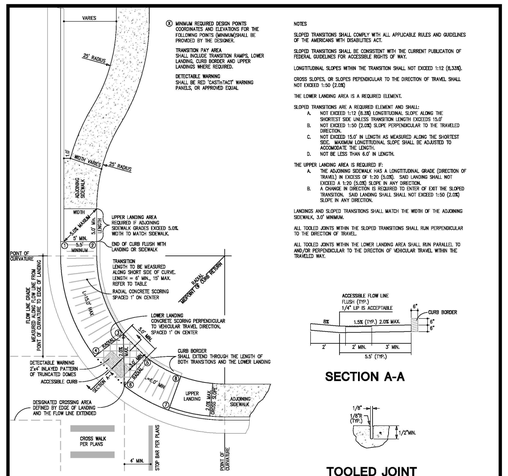
No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED, DISCLOSED, REPRODUCED OR PUBLISHED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C720

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C720 - SIGNAGE & STRIPING PLAN.dwg



SECTION A-A

TOOLED JOINT

NOTES

SLOPED TRANSITIONS SHALL COMPLY WITH ALL APPLICABLE RULES AND GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

SLOPED TRANSITIONS SHALL BE CONSISTENT WITH THE CURRENT PUBLICATION OF FEDERAL GUIDELINES FOR ACCESSIBLE RIGHTS OF WAY.

LONGITUDINAL SLOPES WITHIN THE TRANSITION SHALL NOT EXCEED 1:12 (8.33%).

CROSS SLOPES, OR SLOPES PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:50 (2.0%)

THE LOWER LANDING AREA IS A REQUIRED ELEMENT.

SLOPED TRANSITIONS ARE A REQUIRED ELEMENT AND SHALL:
- A. NOT EXCEED 1:12 (8.33%) LONGITUDINAL SLOPE ALONG THE SHORTEST SIDE UNLESS TRANSITION LENGTH EXCEEDS 15.0'
- B. NOT EXCEED 1:50 (2.0%) SLOPE PERPENDICULAR TO THE TRAVELED WAY.
- C. NOT EXCEED 15.0' IN LENGTH AS MEASURED ALONG THE SHORTEST SIDE. MAXIMUM LONGITUDINAL SLOPE SHALL BE ADJUSTED TO ACCOMODATE THE LENGTH.
- D. NOT BE LESS THAN 4.0' IN LENGTH.

THE UPPER LANDING AREA IS REQUIRED IF:
- A. THE ADJOINING SIDEWALK HAS A LONGITUDINAL GRADE (DIRECTION OF TRAVEL) IN EXCESS OF 5.0% (1:20). SAID LANDING SHALL NOT EXCEED A 5.0% (1:20) SLOPE IN ANY DIRECTION.
- B. A CHANGE IN DIRECTION IS REQUIRED TO ENTER OF EXIT THE SLOPED TRANSITION. SAID LANDING SHALL SHALL NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION.

LANDINGS AND SLOPED TRANSITIONS SHALL MATCH THE WIDTH OF THE ADJOINING SIDEWALK, 5.0' MINIMUM.

ALL TOOLED JOINTS WITHIN THE SLOPED TRANSITIONS SHALL RUN PERPENDICULAR TO THE DIRECTION OF TRAVEL.

ALL TOOLED JOINTS WITHIN THE LOWER LANDING AREA SHALL RUN PARALLEL TO AND/OR PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL WITHIN THE TRAVELED WAY.

CITY OF LONE TREE Department of Public Works	CURB TRANSITION	
	SCALE: NTS	DETAIL 1
	DATE: 3/05	

CITY OF LONE TREE
PAVEMENT UTILITY CUT AND PATCH SPECIFICATIONS

1. General

These specifications are intended to provide guidelines for the removal and replacement of pavement in order to permit placement and repair of utilities in existing roadways, sidewalks, bike paths, driveways, curbs, gutters and other surfaces.

Any improvements in the right-of-way or on private property damaged during construction shall be repaired prior to placement of the permanent pavement patch. Damaged sections of concrete sidewalk curb and/or gutter shall be removed and replaced to the nearest control joint. Replacement of less than a 10-foot length of curb and gutter or sidewalk will not be permitted. Integral curb, gutters, and/or sidewalk shall be replaced in their entirety. Private improvements shall be replaced to equal or better standards.

Cuts over twelve feet (12') in width and two-hundred feet (200') in length shall require the use of a self-propelled paver. All other cuts in asphalt streets shall require the use of a paving box.

Cuts will not be allowed on streets that have been paved, overlaid or sealcoated within 2 years, except for emergency repair of existing facilities or when approved by the City Engineer. When reviewing a request for a street cut on a recently resurfaced street, the City Engineer shall consider factors such as:

a. Whether the applicant considered the City's anticipated resurfacing schedule prior to planning the proposed street cut,

b. Alternatives that eliminate the need for the street cut,

c. Whether the proposed street cut is needed to provide new service to a new customer, and

d. Additional restoration requirements, beyond the permanent patch requirements of these regulations, may be required to restore ride quality and anticipated pavement life. Additional requirements may include resurfacing an area larger than the street cut, replacing or using paving fabric or other materials, a longer warranty, payment to the City equal to the anticipated restoration remedy, or a reasonable combination thereof.

Cuts of over two-hundred feet (200') in length on streets that have been overlaid within 8 years will require milling and a minimum three inch (3") H.B.P. grading SX overlay (and use of

reinforcement mat per the Asphalt Pavement Patchback Detail) placed with a self propelled paver from the gutter or edge of asphalt to the center line of the street on residential streets, and to adjacent lane lines on collector and arterial streets.

Cuts of over two-hundred feet (200') in length on streets that have been sealcoated within 3 years will require re-sealcoating of the entire street width for the length of the cut.

In lieu of performing the overlaying or sealcoating described above, the Permittee may be allowed to pay the City the cost of overlay or sealcoat of the required street sections using contract unit prices from the City's current year overlay and sealcoating programs, plus an administrative fee of 10% of the cost. The work will then be completed by the City as part of the following year's overlay and sealcoating programs.

Upon completion of the permanent patch, the surface shall be thoroughly compacted, smooth, and free from ruts, humps, depressions, or irregularities and shall not separate from pre-existing adjacent pavement. When a straightedge ten feet (10') long is laid across the permanent patch both parallel to the centerline of the street and in a direction perpendicular to the centerline, the surface shall not vary more than 3/16 inch from the lower edge of the straight edge. Patches exhibiting deviations greater than 3/16 inch shall be replaced prior to acceptance of the patch. Patches separating from pre-existing adjacent pavement more than 3/16 inch shall be replaced or sealed as directed by the City. Patches shall have a cross slope consistent with the design of the existing roadway.

2. Cutting Streets

The Public Works Department shall be notified 24 hours in advance and shall inspect utility cuts whenever they are made in the public rights-of-way. All cuts within the City's right-of-way require a ROW/Construction Permit and approved Traffic Control Plan.

All streets shall be kept open to traffic by the Permittee unless otherwise approved by the City Engineer. Prior to beginning work, a traffic control plan must be submitted to and approved by the Engineering Division. All barricading and traffic control devices shall be in compliance with the approved traffic control plan.

Existing pavements may be removed by jack hammering, line cutting, or saw cutting to straight lines parallel and perpendicular to the flow of traffic. Prior to final patching, asphalt and concrete pavements shall be cut to clean, straight lines. Angled and irregular shaped patches will not be allowed and the edges of patches shall not fall within two feet (2') of existing wheelpaths. Patches shall not leave strips of existing pavement less than three feet (3') in width from the edge of the new patch to the lip of the gutter, edge of paved roadway surface, or edges of existing patches. Patches on all streets shall be four sided, with sides either parallel or perpendicular to the direction of traffic.

Patches on concrete streets shall not be less then five feet (5') in any dimension, and patches shall not leave strips of existing concrete pavement of less then five feet (5') in width from the edge of the new patch to the lip of the gutter, edge of paved roadway surface or adjacent concrete construction joints. Patches within existing patches will not be accepted. Boundaries of the

patches will coincide.

Asphalt and concrete pavements shall be removed by saw cutting prior to final patching (asphalt pavements may also be rotomilled). Care shall be taken to avoid breaking away the edges of the existing pavement or damaging the remaining pavement with heavy construction equipment. Any overbreak or separation outside the original cut shall be re-cut and squared off.

3. Trench Backfill

Excavation, including the manner of supporting excavation and provisions for access to trenches, shall comply with current OSHA regulations for trench safety.

Trench backfill shall consist of a flowable backfill. On-site structural excavated material or approved imported fill may only be used with the approval of the City Engineer and if the trench width is greater than eight feet (8') and a full-size, self-propelled compactor can be utilized to achieve the required compaction.

In areas where lime treated sub-base, cement modified sub-base, soil cement, or similar materials have been used, the Permittee shall replace the material in kind, or provide flowable backfill up to sixteen inches (16") below finished grade.

Flowable backfill shall consist of a controlled low strength, self-leveling concrete material composed of a mixture of cement, fly ash, aggregate, water, and chemical admixtures. Flowable backfill shall have a design compressive strength of between 50 and 150 psi at 28 days when tested in accordance with ASTM D 4832. The mix should have a design slump between 6 and 10 inches.

Flowable backfill shall be discharged directly from the truck into the space to be filled, or by other methods approved by the City. The mix may be placed partial or full depth. When used as backfill in the pipe zone, care should be taken to prevent flotation or misalignment of the pipe by means of straps, soil anchors or other approved means of restraint. Material may be placed in stages with initially less flowability, to prevent movement or flotation of pipe. Compaction of flowable backfill will not be required.

Placement of pavement materials or vehicle traffic shall not be allowed until the flowable backfill has achieved a penetration resistance of at least 600 psi using a hand-held penetrometer, in accordance with ASTM C 403. This penetration resistance shall be considered achieved when a person weighing at least 150 pounds, using their body weight, cannot penetrate the flowable backfill with the square cut end of a No. 4 steel reinforcing bar. A traffic plate or barricading of the patch area will be required until temporary or permanent patching is completed, as per the approved traffic control plan. Traffic will not be allowed directly on the flowable backfill material.

The alternative to the use of flowable backfill is the use of structural on-site excavated material or approved imported fill. On-site excavated material or imported fill used for backfill shall be compacted to the density and moisture content outlined below:

Backfill Compaction and Moisture Requirements

AASHTO CLASSIFICATION	REQUIRED COMPACTION	MOISTURE CONTENT TOLERANCE FROM OPTIMUM
A-1, A-2-5, A-2-7, A-3 A-4, A-5	Min. 95% of AASHTO T180	-3 to +3
A-2-4, A-2-6, A-6, A-7	Min 95% of AASHTO T 99	0 to +3

Backfill material must be placed and compacted in maximum eight inch (8") loose lifts, unless compaction equipment is used that allows larger lift thickness, as approved by the inspector.

The Permittee shall be responsible for testing of trench backfill. Testing shall be done under the direction of a professional engineer licensed in the State of Colorado and practicing in this field. Minimum testing frequency shall be one density test for each two vertical feet of backfill for each one-hundred lineal-feet (100 l.f.) or five-hundred square-feet (500 s.f.) In no case shall there be less than three tests in any trench with the tests distributed from two feet above the utility line to the subgrade. Test results shall be provided to the City prior to placement of the asphalt or concrete pavement. Failure to provide timely documentation of testing will result in removal and replacement of the backfill and pavement at the Permittee's expense or in-place testing at the Permittee's expense.

4. Temporary Patch

Temporary patches will not be allowed without prior approval by the City Engineer.

Whenever permanent pavement patches are not constructed immediately following utility cut backfilling operations, temporary pavement patches consisting of minimum of three inches (3") of hot or cold mix asphalt may be utilized to provide the required number of paved travel lanes. Temporary pavement patches may be left in place for a maximum of 14 calendar days, unless otherwise required by the City Engineer, following completion of backfilling operations. Temporary patches must be inspected daily by the Permittee and maintained by the Permittee to the following tolerances at all times.

When a ten foot (10') straight edge is laid across the temporary patch both parallel to the centerline of the street and in a direction perpendicular to the centerline, a rut, hump, or depression of more than one-half inch (1/2") shall not be present. Deteriorated temporary patches exhibiting ruts, humps, or depressions in excess of one-half inch (1/2") shall be repaired or replaced immediately by the Permittee upon notification from the City.

5. Permanent Patch

The Engineering Division shall be notified 24 hours in advance of placement of a permanent patch.

Prior to placing a permanent patch, the existing pavement shall be sawcut or rotomilled to a neat straight line.

Asphalt pavement shall be sawcut or rotomilled as indicated in the Asphalt Pavement Patchback Detail.

Concrete pavement must be sawcut full depth.

Pavement shall be replaced at the minimum thickness shown below.

Minimum Pavement Patch Thickness

Roadway Classification	Asphalt Pavement	Concrete Pavement
Arterial	9"	9"
Collector	7"	7"
Local	5"	5"
In no case shall the patch thickness be less than existing adjacent pavement.		

6. Asphalt Streets

Asphalt pavement shall be neatly sawn or rotomilled and removed as indicated in the Asphalt Pavement Patchback Detail.. Asphalt pavement shall meet CDOT specifications for grading S or SX hot bituminous pavement. Binder material shall be PG 58-28 or 64-22. Compaction shall be between 92 and 96 percent of the maximum specific gravity, CP-51. Average compaction of less than 92 percent will be cause for rejection. A tack coat shall be applied to all edges of the existing pavement prior to final patching. Maximum lift thickness on asphalt patches is three inches (3"). The Permittee shall be responsible for compaction testing on asphalt patching for trenches. A minimum testing frequency shall be one compaction test on each lift placed, for each two-hundred lineal-feet (200 l.f.) or five-hundred square-feet (500 s.f.) of patch. In all cases there shall be at least one test on each lift for any patch that exceeds the size limits shown above.

7. Concrete Streets

Concrete pavement shall be neatly sawn and removed five feet (5') back from each side of the excavation. If a construction, contraction, or expansion joint is less than five feet (5') from the edge of the saw cut, the surface shall be removed back to the joint. All cuts shall be four sided.

All concrete patches shall be doweled into the existing pavement with #5 rebar at 18" O.C. around the perimeter of the patch. The dowels shall be 24" in length with 12" doweled and epoxied into the existing pavement.

Concrete for patching shall meet the specifications for CDOT Class P concrete.

The Permittee shall be responsible for testing of all concrete patching. Testing shall include air content, temperature, slump and 7, 14, and 28 day compressive strength testing on every concrete delivery truck.

Where concrete improvements are removed and replaced adjacent to an asphalt paved surface, a minimum width of two feet (2') of the asphalt paved surface shall be removed and replaced in a manner meeting the permanent patch requirements.

8. Concrete Sidewalks, Bikepaths, Driveway, Curbs and Gutters, and Other Structures

Whenever an excavation cuts a concrete sidewalk, bikepath, driveway, curb and gutter, or other structure, a neat saw cut shall be made one foot (1') back from each side of the excavation to undisturbed soil; the concrete shall be removed to the nearest joint. All broken material shall be removed. Once the excavation is backfilled and subgrade compacted to 95% compaction, the structure shall be replaced with concrete meeting CDOT specifications for Class B concrete.

9. Pavement Markings and Loop Detectors

All traffic control devices removed or disturbed during construction must be replaced upon completion of the permanent patch including but not limited to signs, paint, thermoplastic or pre-formed plastic pavement markings, and traffic signal detector loops. Temporary lane lines and other markings used during construction shall be permanently removed, to the satisfaction of the Engineering Division, prior to placing the new traffic stripes or markings.

10. Other Unpaved Surfaces

If a permit for work in the public way creates any excavations that lie within unpaved areas, the excavated soil shall be carefully deposited and satisfactorily tamped in uniform layers not greater than eight inches (8") in thickness until the backfill reaches the top of the substructure. The remainder of the excavation shall be backfilled in uniform layers not exceeding twelve inches (12") in thickness, and satisfactorily tamped to within one foot (1') of the surface. The backfilling operation shall continue with soil until the backfill remains slightly above the ground level. Excess material shall be disposed of. Granular backfill may also be used; however, topsoil shall be used for the final one foot (1') of backfill.

Excavations will require restoration of the area to original condition, including irrigation system repair, topsoil placement, seeding, sodding and/or replacement of plant materials. It is the responsibility of the Permittee to establish a good stand of grass. The area shall be left free from debris and clods. On steep embankments or upon request of the City Engineer, sod or other erosion control techniques shall be used for restoration. (Erosion control blankets per City GESC requirements shall be installed on all slopes greater that 4:1).

11. Gravel Streets

Excavations in gravel streets and alleys shall be backfilled in the same manner as excavations in paved streets. The final surface shall be six inches (6") of compacted CDOT Class 6 aggregate base course material. Recycled concrete or asphalt will be considered on a case-by-case basis.

12. Warranty

All cuts shall be warranted for two years. During the warranty period, the Permittee shall be required to repair any defects in the final asphalt or concrete patch including, but not limited to:

Asphalt
- Alligator cracking of the asphalt surface
- Excessive stripping of the asphalt surface
- Potholes in the asphalt surface
- Settlement of the asphalt surface greater than or equal to one-half of an inch (1/2")
- Separation of the patch from the existing pavement of more than one-quarter of an inch (1/4")

Concrete
- Any cracking outside of a control joint
- Any scaling or spalling
- Surface damage
- Settlement of the concrete surface greater than or equal to one-quarter of an inch (1/4")

Gravel Streets and Other Unpaved Surfaces
- Settlement of the surface greater than or equal to one-half of an inch (1/2")

13. Erosion and Sedimentation Control

Appropriate erosion and sedimentation control best management practices meeting or exceeding City GESC requirements shall be installed and maintained. In most cases, a full City GESC Permit will not be required for utility repair/street cut work, however, the proposed on-site specific GESC management must be approved by the City Engineering/Public Works GESC Inspector or City Engineer.

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
martinmartin.com
12499 West Colfax Avenue
303.431.6100

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SITE DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

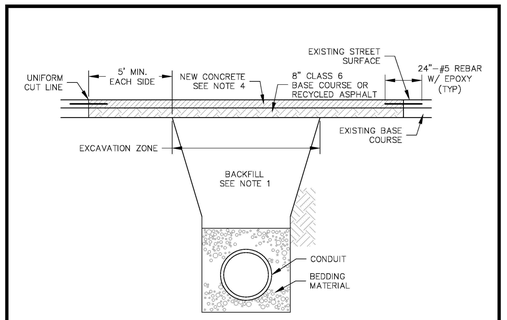
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & CANNOT BE COPIED, DUPLICATED OR COMMERCIALLY EXPLOITED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C730

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C730 - SITE DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



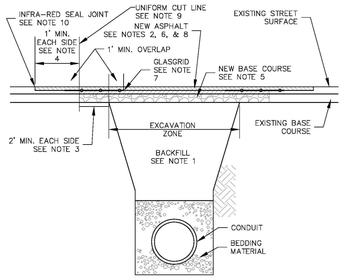
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL–SIZED, SELF–PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE 5' BACK FROM EXCAVATION ZONE.
4. 8" OF COMPACTED CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT SHALL BE INSTALLED PRIOR TO PAVING.
5. CONCRETE STREET PAVEMENT TO BE MINIMUM 7 SACK MIX, 5000 PSI AT 28 DAYS.
6. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL FULL DEPTH.
7. CONCRETE PATCHES SHALL BE DOWELED INTO EXISTING CONCERTE WITH 24"–#5 REBAR AT 18" O.C. AROUND THE PERIMETER OF THE PATCH.
8. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS APPROVED BY THE ENGINEERING DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS		CONCRETE PAVEMENT PATCHBACK	DETAIL NUMBER 2
DATE: 12/9/11	BY: GAW	DRAWING NO.: ST–02	



TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL–SIZED, SELF–PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE A MINIMUM OF 2' BACK FROM EXCAVATION ZONE OR LIMITS OF UNDISTURBED SUB–BASE, WHICHEVER IS GREATER.
4. ROTOMILL ASPHALT (2" DEPTH MINIMUM) A MINIMUM OF 1' BEYOND THE FULL DEPTH SAW CUT AND REMOVAL.
5. INSTALL 8 INCHES OF CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT, COMPACTED IN PLACE TO MINIMUM 95% MODIFIED PROCTOR MAXIMUM DENSITY (ASTM D 1557).
6. INSTALL AND PROPERLY COMPACT REQUIRED DEPTH OF BASE COURSE ASPHALTIC CONCRETE (CDOT GRADING S).
7. INSTALL REINFOREMENT MAT (TENSAR GLASGRID 8511, OR APPROVED EQUAL) PER MANUFACTURERS RECOMMENDATIONS. (MINIMUM 5 FOOT WIDTH)
8. INSTALL AND PROPERLY COMPACT ASPHALTIC CONCRETE TOP COURSE (CDOT GRADING SX).
9. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL.
10. THE JOINT BETWEEN THE NEW TOP COURSE ASPHALT AND THE EXISTING ASPHALT SHALL BE SEALED USING INFRARED JOINTING PROCESS.
11. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.
12. ANY PAVEMENT MARKING (LANE LINES, TURN ARROWS, ETC.) DAMAGED BY THE STREET CUT AND REPAIR OPERATIONS SHALL BE REPLACED IN CONFORMANCE WITH CITY SIGNAGE AND STRIPING STANDARDS, AS DIRECTED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS		ASPHALT PAVEMENT PATCHBACK	DETAIL NUMBER 1
DATE: 9/24/13	BY: GAW	DRAWING NO.: ST–01	

III. Location of Facilities

A. General

1. The location of all facilities within the public right-of-way shall comply with the details and specifications shown on the construction plans approved by the City.

2. It is City policy to discourage the placement of utility lines and other facilities within landscaped median areas unless there is no other reasonable location for the placement of such lines and facilities. No applicant shall receive a permit for work in a landscaped median within the public right-of-way unless the applicant provides the City with evidence that, prior to commencing construction, it has submitted plans and specifications and a proposed schedule of its work to the special district or other entity which owns and maintains the median landscaping for its review and approval.

3. The utility alignment shall not vary greater than eighteen inches (18") plus ½ of the diameter of the proposed conduit from the approved design horizontal alignment or thirty-six inches (36") plus ½ of the diameter of the proposed conduit from the approved design vertical alignment without prior City approval.

4. If the designed alignment conflicts with other facilities not shown on the approved plans, the permittee shall submit an alignment modification request and the change shall be approved by the City prior to proceeding.

5. All underground cables and wires, excluding electrical, shall be placed within a conduit sleeve, with a locator tracer.

6. All underground installations shall have a minimum of thirty inches (30") of cover below the roadway surface.

B. Above-ground Structures

1. A detailed plan shall be required for all above-ground structures placed in the public right-of-way. The plan shall show dimensions of the cabinet, base, and proposed location.

2. A permittee shall use its best efforts to place new above-ground structures outside the public right-of-way within a private easement on the property being served.

3. All above ground-structures shall be screened with landscaping, with the exception of electrical clearance requirements, as approved by the City. Existing above-ground structures shall be exempt from this requirement.

4. The location of above-ground structures shall not interfere with sight distance requirements for intersecting streets and access drives.

5. Above-ground structures shall be located to minimize the aesthetic impact to the landscaping within the public right-of-way.

C. Underground Access Structures (Vaults and Hand-Holes)

1. Underground access structures shall be placed in line with the utility alignment. Horizontal adjustments to accommodate underground access structures are discouraged and shall only be permitted when conditions warrant at the City's sole discretion. The placement of each access structure shall require field approval prior to placement.

2. The minimum separation between access structures shall be five hundred feet (500'). An exemption to this provision shall be granted by the City if the following criteria are met:

a) The access structure is required to provide service to a building or a customer within a building;

b) The width of the property frontage does not allow the permittee to meet the minimum separation requirement while still providing service at a reasonable cost;

c) The permittee has no access structure already located within one hundred feet (100') of the boundaries of the property to be served;

d) There needs to be an access structure on either side of a roadway or driveway crossing;

e) Other conduit owned or leased by the permittee is not available for the permittee's use; and

f) Options to provide service to the building from other directions are not reasonably available to the permittee. In no case shall an exemption granted pursuant to this section authorize access structures to be separated by less than two hundred fifty feet (250').

3. Access structures shall be placed a minimum of one hundred fifty feet (150') from any intersection, unless otherwise approved by the City.

4. The maximum size of an access structure and access lid shall be the minimum necessary for the facilities being installed, as determined by the City. In making its determination, the City shall consider any information submitted by the permittee to justify the size of the access structure or access lid.

5. Access lids located in landscaped areas shall be buried in mulch, rock beds, or sod, unless otherwise approved by the City.

6. Access lids placed in sidewalks shall be flush with the existing surface and capable of being filled with like material.

7. All access lids within travel lanes shall be placed outside of the wheel track as defined in Exhibit "B".

8. Access lids shall be placed at an elevation of +0 inch to –3/8 inch relative to the surrounding pavement surface.

IV. Construction Standards

A. General

1. Testing, in compliance with the City's testing schedule, which is attached hereto as Exhibit "A", shall be performed by an independent testing company acceptable to the City, and results shall be provided to the City within two (2) working days of completion of testing and prior to the next phase of construction. For example, a subgrade test is required prior to asphalt placement.

2. Any damage not documented during the pre-construction inspection shall be repaired by the permittee at the permittee's sole expense.

3. Utility markings shall be limited to the boundaries of the construction area and shall be removed by a method approved by the City within forty-five (45) days of the completion of work, pursuant to Chapter 11 – Division 2 of the City of Lone Tree Code.

4. A permittee shall advise the City at least forty-eight (48) hours in advance of the date work will be started and shall notify the City at least twenty-four (24) hours in advance if this date is changed or cancelled. Inspections required on the permit shall be scheduled by permittee at least twenty-four (24) hours in advance.

5. For blanket maintenance permits, a permittee shall notify the City at least twenty-four (24) hours prior to commencing any maintenance operations under the blanket maintenance permit. The notice shall include the location and duration of the maintenance operations, and the name of the person(s) performing the maintenance operations.

6. Each permittee shall utilize erosion control measures to prevent erosion and degradation of water quality.

7. The City may restrict any work that causes pavement disturbance from November 1 to April 1.

8. Each permittee shall maintain its work site so that:

RIGHT-OF-WAY USE AND/OR CONSTRUCTION FEES

Category	Permit Item	Fee $	Unit	Quantity	Minimum $	Total $
Telecom/CATV						
	Wireless/Antenna/WCFs*	$100.00	EA		$100.00	
	CATV/Fiber Optics	$0.30	LF		$75.00	
Utilities						
	Water, < = 16"	$0.35	LF		$75.00	
	Water, > 16"	$0.45	LF		$75.00	
	Sanitary Sewer	$0.45	LF		$75.00	
	Gas	$0.30	LF		$75.00	
	Electric	$0.30	LF		$75.00	
	Phone	$0.30	LF		$75.00	
	Fire Hydrant	$50.00	EA		$75.00	
	Vaults	$100.00	EA		$100.00	
	Handhole/Splice Box	$50.00	EA		$50.00	
	Pedestal/Cabinet	$50.00	EA		$50.00	
	Manhole	$55.00	EA		$50.00	
Concrete Structures						
	Sidewalk-Detached/Path	$0.25	LF		$75.00	
	Curb & Gutter	$0.25	LF		$75.00	
	Sidewalk, Curb & Gutter	$0.30	LF		$75.00	
	Sidewalk Chase	$100.00	EA		$100.00	
	Cross Pan	$100.00	EA		$100.00	
	Curb Cut/Driveway	$100.00	EA		$100.00	
	ADA Compliant Curb Ramp	$75.00	EA		$75.00	
	Box Culvert (per tube)	$15.00	LF		$400.00	
Roads/Streets						
	Pothole/Bore Pit/Jacking/Tunneling	$75.00	EA		$75.00	
	Street Cut	$5.00	SF		$75.00	
	Pavement Design Review	$150.00	EA		$150.00	
	Subgrade Preparation	$0.20	SY		$75.00	
	Paving	$0.15	SY		$75.00	
	Milling	$0.07	SY		$30.00	
	Traffic Signal (or modification to existing*)	$500.00	EA		$500.00	
Storm Drainage						
	Storm Sewer	$0.30	LF		$75.00	
	Inlet/Outlet	$100.00	EA		$100.00	
	Manhole/Vault	$65.00	EA		$65.00	
	Detention Pond	$0.02	SF		$200.00	
	Trickle Channel	$0.20	LF		$75.00	
	Culvert	$0.30	LF		$75.00	

RIGHT-OF-WAY USE AND/OR CONSTRUCTION FEES (continued)

Category	Permit Item	Fee $	Unit	Quantity	Minimum $	Total $
Erosion/Grading						
	Grading	$25.00	AC		$250.00	
	Rip Rap	$0.25	CY		$75.00	
	Sediment Stop/Silt Fence	$0.20	LF		$75.00	
	Straw Bales	$0.05	EA		$75.00	
	Seeding	$10.00	AC		$75.00	
	Erosion Control/Other	$ Varies			$75.00	
	Erosion Control Blanket	$0.02	SY		$75.00	
	Inlet Protection	$5.00	EA		$100.00	
	Vehicle Tracking Pad	$75.00	EA		$75.00	
	Concrete Washout	$75.00	EA		$75.00	
Landscape/Retaining Wall						
	Retaining Wall > 4 ft.	$0.20	FF		$60.00	
	Landscaping	$0.25	SF		$60.00	
Miscellaneous						
		$ Varies			TBD	
	License Agreement	$250.00	EA		$250.00	
	Traffic Control Only (No ROW Work)	$65.00	DAY		$65.00	
	Temporary Access Permit (Requires Separate Access Permit Application)	$200.00	EA		$200.00	
	Permanent Access Permit (Requires Separate Access Permit Application)	$200.00	EA		$200.00	
Warranty Work/Repair						
	1st 60 Day Permit	No Cost			TBD	
	Subsequent Permits	$250+each item	EA		$250.00	
Administration						
	Permit Processing	15% of permit fee	EA		$25.00	
	Reinspection (>4 visits/OT)	$85.00	HR		$35.00	
	Penalty Fee (2X original Fee)	$ Varies			TBD	

*Including Wireless Communications Facilities (WCFs) attachments

a) Trash and construction materials are contained and not blown off the work site.

b) Trash is removed from a work site often enough so that it does not become a health, fire, or safety hazard.

c) Trash dumpsters and storage or construction trailers are not placed in the street or public right-of-way without specific prior approval of the City.

9. Each permittee shall utilize its best efforts to eliminate the tracking of mud or debris upon any street or sidewalk. Streets and sidewalks shall be cleaned of mud and debris at the end of each day. All equipment and trucks tracking mud and debris into a public right-of-way shall be cleaned of mud and debris at the end of each day or as otherwise directed by the City.

10. Backhoe equipment outriggers shall be fitted with rubber pads or other like protective material whenever outriggers are placed on any paved surface. Tracked vehicles that may damage pavement surfaces shall not be permitted on paved surfaces unless specific precautions are taken to protect the surface. The permittee shall be responsible for any damage caused to the pavement by the operation of such equipment. Should the permittee fail to make such repairs to the satisfaction of the City, the City may repair any damage and charge the permittee pursuant to Chapter 11 of the City of Lone Tree Code.

11. As the work progresses, all public rights-of-way and other property shall be cleaned of all rubbish, excess dirt, rock, and other debris, at the sole expense of the permittee.

12. No permittee shall disturb any surface monuments, property marks or survey hubs and points found on the line of work unless prior approval is obtained from the City. Any monument, hub, or point which is disturbed by a permittee shall be replaced by a Colorado Registered Land Surveyor at the permittee's sole expense.

13. Each permittee shall provide employee and construction vehicle parking so that there is no parking in the neighborhood adjacent to the work site. There shall be no unauthorized parking.

14. Each permittee shall provide necessary sanitary facilities for workers, the location of which shall be approved by the City and set forth in the permit.

15. For all installations, a permittee shall locate all parallel dry facilities within forty two inches (42") plus ½ of the diameter of the proposed conduit and all parallel wet facilities within seventy eight inches (78") plus ½ of the diameter of the proposed conduit. The location of parallel facilities shall be field verified by locate potholes, unless the locate potholing causes pavement disturbance in an adjacent travel lane that otherwise would be undisturbed. The location of existing facilities, including lateral crossings, which may affect the proposed facility alignment shall also be field verified by

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
martinmartin.com
12499 West Colfax Avenue
303.431.6100

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SITE DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & ARE THE EXCLUSIVE PROPERTY OF MARTIN/MARTIN, INC. AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C731

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998–DCSD – Ridgegate Elementary School\PLANS\CDs\C730 – SITE DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

locate potholes. Wet facilities include water, sewer, and gas; and all other facilities shall be considered dry facilities.

16. For all installations, the permittee shall provide "as-built" information to the inspector on a daily basis or upon completion of every five hundred feet (500') of work, whichever is less frequent. It shall be the permittee's responsibility to immediately notify the City of any variance from the approved alignment.

17. All "as-built" information shall be provided by the permittee to the City in a format acceptable to the City, and approved by the City prior to use of the facility.

18. For any work performed in the public right-of-way between 10:00 p.m. and 6:00 a.m., if the required restoration cannot be performed at night, or if performing the required restoration at night will be a nuisance to surrounding residential properties, the City may allow the restoration to be performed during business hours. The City shall consider the impact of the proposed restoration work on users of the public rights-of-way. The timing of all required restoration work shall be set by the City in the permit.

B. Pavement Removal

1. All asphalt pavement cuts shall be in straight lines. Irregular shaped cuts with more than four (4) sides or cuts within existing patches shall not be allowed. All cuts shall be rectangular in shape, and edges shall be parallel or perpendicular to the flow of traffic.

2. In order to provide straight edges, all asphalt pavement cuts shall be cut by saw cutting, rotomilling, or another approved method which assures a straight edge for the required depth of the cut.

3. Asphalt pavement cuts shall be such that no longitudinal joint lies within the wheel track.

4. Concrete pavement shall be removed and replaced from existing panel joints only.

C. Excavation and Backfill

1. Excavation

a) All trench excavation shall be made by open cut to the depth required to construct the facility and provide adequate bracing of trench walls. All excavation, trenching, shoring, and stockpiling of excavated materials shall be in strict compliance with the applicable Occupational Safety and Health Administration (OSHA) rules and regulations. The permittee shall furnish, place, and maintain all supports and shoring required for the sides of the excavation, as to prevent damage to the work or adjoining

property. If the permittee is not expected to fully complete the work within any excavated area in a reasonable length of time as determined by the City, the City may require the permittee to backfill the excavation and re-excavate when the work can be completed expeditiously.

b) The length of an open trench shall be limited to the amount of pipe or conduit that can be placed and backfilled in a single day. However, in no case shall the length of the open trench exceed three hundred feet (300') unless otherwise approved by the City. No open trench shall be left unprotected overnight.

c) A maximum of two (2) excavations shall be open at any time for access structure installation and conduit splicing, unless otherwise approved by the City.

d) Only material that will be hauled or backfilled within one (1) day shall be stockpiled in the public right-of-way. The City shall approve all proposed construction staging areas.

e) All open excavations shall be properly barricaded to protect vehicles and pedestrians.

f) Current field moisture and density test results (taken within forty-eight (48) hours of the scheduled construction date) for top one foot (1') of subgrade shall be provided to the City prior to placing forms. If any lift of the top one foot (1') of subgrade does not meet moisture or density requirements, then the material shall be scarified, wetted and re-compacted accordingly. If subgrade requires stabilization, the method shall be approved by the City prior to proceeding.

2. Backfilling

a) Controlled Low Strength Material (CLSM)

i. All excavations of less than one hundred cubic yards (100 CY) within the roadway pavement shall be backfilled with controlled low strength material (flowable fill) unless otherwise approved by the City.

ii. Controlled low strength material shall consist of a controlled low strength, selfleveling material composed of various combinations of cement, fly ash, aggregate, water, and chemical admixtures. It shall have a design compressive strength between 50 to 150 psi at twenty-eight (28) days when tested in accordance with ASTM 4832. The mix shall result in a product having a slump in the range of seven inches (7") to ten inches (10") at the time of placement. The permittee shall submit the mix design for approval by the City.

iii. The maximum layer thickness for CLSM shall be three feet (3'). Additional layers shall not be placed until the backfill has lost sufficient moisture to be walked on without indenting more than two inches (2").

b) Native Backfill

i. In cases where CLSM is not required, backfill of suitable material shall be placed in maximum eight-inch (8") loose lifts. Density and moisture control shall be per Colorado Department of Transportation Standard Specifications for Road and Bridge Construction, current edition, ("CDOT Standard Specifications") Section 2.03.

ii. The permittee shall provide compaction testing for all backfill work per the Minimum Testing Requirements table in Exhibit "A". Each lift not tested in accordance with the testing frequency and lifts required may be rejected by the City.

iii. Excavation and backfill shall be accomplished on the same day in order to minimize impact to the public right-of-way. The City may require the permittee to backfill the excavation and re-excavate when the work can be completed expeditiously.

b) The length of an open trench shall be limited to the amount of pipe or conduit that can be placed and backfilled in a single day. However, in no case shall the length of the open trench exceed three hundred feet (300') unless otherwise approved by the City. No open trench shall be left unprotected overnight.

c) A maximum of two (2) excavations shall be open at any time for access structure installation and conduit splicing, unless otherwise approved by the City.

d) Only material that will be hauled or backfilled within one (1) day shall be stockpiled in the public right-of-way. The City shall approve all proposed construction staging areas.

e) All open excavations shall be properly barricaded to protect vehicles and pedestrians.

f) Current field moisture and density test results (taken within forty-eight (48) hours of the scheduled construction date) for top one foot (1') of subgrade shall be provided to the City prior to placing forms. If any lift of the top one foot (1') of subgrade does not meet moisture or density requirements, then the material shall be scarified, wetted and re-compacted accordingly. If subgrade requires stabilization, the method shall be approved by the City prior to proceeding.

c) Bridging Plates

i. Substantial bridging, properly anchored and capable of carrying the

legal limit loading, in addition to adequate trench bracing, shall be used to bridge across trenches at street crossings where trench backfill and temporary patches have not been completed during regular working hours. Safe and convenient passage for pedestrians, vehicles, and access to all properties shall be maintained.

ii. The bridging plate shall be secured to the pavement with anchored pins so that it does not slip. The bridging plate shall extend over supporting pavement by a minimum of one foot (1') on all sides. Cold mixed asphalt shall be ramped a minimum of two feet (2') in the travel direction.

iii. The use of bridging plates shall not be allowed from September through April. Use of bridging plates shall only be allowed with the prior approval of the City.

iv. The permittee's design engineer shall certify in writing the suitability of the plates for the specific use by the permittee.

D. Boring

1. To minimize the impact to traffic and the right-of-way infrastructure, the City encourages boring rather than open trenching.

2. Upon completion of the boring, the permittee shall certify that all storm and sanitary sewer service lines to adjacent properties have not been damaged by the boring in a signed affidavit in a form acceptable to the City.

3. If the permittee's boring results in disturbance to other utilities or facilities in the public right-of-way not described on the approved plan the permittee shall immediately contact the owner of the damaged utility or facility so that the owner may make any necessary repairs. The permittee shall provide the City written notice that the owner of the damaged utility or facility has been informed.

Waste material from boring shall be contained within the work site and shall not be allowed to discharge onto private property, the curb and gutter or the roadway.

E. Repairing Streets

1. Asphalt Pavements

a) The minimum patch dimensions shall be two feet (2') beyond each side of the trench or excavation but shall not extend into an adjacent undisturbed lane.

b) The longitudinal edges of the patch shall not fall within the existing wheel tracks as defined in Exhibit "B".

c) Prior to placing the permanent patch, the existing pavement shall be sawcut to a neat straight-line, square to the travel lane.

d) A tack coat shall be applied to all edges of the existing pavement prior to placing the patch.

e) Asphalt mix shall be CDOT, S mix (3/4 inch) for non-residential streets and SX mix (1/2 inch) for residential streets. Patch back areas greater than one hundred twenty square feet (120 SF) shall require the submittal and approval of a mix design to the City prior to placement.

f) Compaction shall be between 92% and 96% of AASHTO T 209. Average compaction of less than 92% of AASHTO T 209 shall be cause for rejection.

g) Compaction equipment shall be capable of compacting corners and edges of patch.

h) Hot bituminous patches shall be placed in maximum three-inch (3") compacted lifts to a depth of the existing pavement plus two inches (2").

i) Patches shall also have a cross slope section consistent with the design of the existing roadway.

j) A cold mix asphaltic material may only be used as a temporary patch and the cold mix material shall be approved by the City.

k) Whenever permanent patches are not constructed immediately following trench backfilling operations, temporary pavement patches consisting of a minimum of three inches (3") of hot or cold plant mix or steel plates must be utilized to provide the required number of paved travel lanes. Plates may be left for the duration approved by the City. Temporary pavement patches may be left in place for a maximum of five (5) working days following completion of backfilling operations unless otherwise approved by the City.

l) The permittee shall monitor temporary patches on a daily basis and temporary patches exhibiting ruts, humps, or depressions shall be repaired or replaced immediately.

m) A permanent hot patch shall be made within five (5) days after the area is open to traffic, weather permitting.

n) If final patching is not completed within the specified time, no non-emergency permits shall be granted to the permittee until all outstanding work is completed.

o) Upon completion of the permanent patch, the surface shall be thoroughly compacted, smooth, and free from ruts, humps, depressions, or irregularities. When a straightedge ten feet (10') long is laid across the permanent patch parallel to the centerline of the street and in a direction transverse to the centerline, the surface shall not vary more than 3/16 inch from the lower edge of the straight edge. Patches exhibiting deviations greater than 3/16 inch shall be replaced prior to acceptance of the

patch. If the existing street exceeds the above tolerances, then the patch shall be equal or better than the condition of the surrounding pavement.

2. Restoration of Locate Potholes

a) Locate potholes shall not be located within the wheel track of a travel lane as defined in Exhibit "B.

b) All locate potholes in the pavement section shall be cored with a circular coring saw with a maximum diameter of ten inches (10"). The plug shall be carefully removed without causing damage.

c) Excavations for potholes shall be backfilled with squeegee or controlled low strength material (flowable fill) only. Native material removed shall not be used to backfill the hole.

d) The removed pavement shall be replaced by one of the following methods as directed by the City:

i. The full depth section or the top three inches (3") of pavement of the removed original core shall be replaced and grouted with a high strength, quick set epoxy or mortar, as approved by the City such that the surface is flush with the surrounding pavement; or

ii. The pavement shall be patched with hot mix asphalt of similar aggregate size to the surrounding pavement and compacted in maximum three inch (3") lifts with a "pogo stick" compactor capable of fitting into the core hole such that the surface is flush with the surrounding pavement. At the City's discretion, localized infrared treatment may be required to blend the top mat of the asphalt together.

e) A City inspector shall be on site during the repair of all locate potholes. The City may waive this provision if the contractor demonstrates competent performance of the repair.

f) Where possible, locate potholes shall be located under existing pavement marking and such marking replaced in kind at the completion of the repair to camouflage the pavement disturbance. If the permittee requests, City crews may install the new pavement markings at the sole expense of the permittee.

g) Initial locate potholes may be temporarily repaired, meeting all applicable safety requirements, for no more than thirty (30) days unless additional time is authorized by the City in writing. Initial locate potholes may be reused during construction.

3. Concrete Flatwork

a) Concrete material and placement shall be CDOT Class B, with 3000 psi compressive strength for sidewalks and 3500 psi for roadways.

b) Weather protection shall be provided in compliance with CDOT Standard Specifications Section 601.

c) Permittee shall schedule a form inspection and obtain approval prior to pouring.

d) Damaged concrete pavement shall be removed and replaced as a full panel section with dowels set into adjacent panels in compliance with CDOT M&S Standards.

e) Damaged flatwork and curb and gutter shall be replaced in full sections from existing contraction joints. Partial section replacement shall not be permitted.

f) Concrete removed adjacent to asphalt pavements shall be sawcut along the abutting edge prior to removal in order to remove without damage to the pavement. The sawcut edge shall be protected and used as a form for the new concrete. The top edge of the replaced concrete section shall be straight and true without warping or irregularity. Damage caused to the edge of the asphalt pavement shall result in the assessment of a restoration for asphalt resurfacing per Section II.

g) Subgrade elevation shall be brought up to +/- 0.1 foot of final grade per plans, with approved materials prior to placing forms.

h) No water shall be placed on concrete surface to assist finishing.

i) Variations of concrete surface shall not exceed 1/8 inch in ten feet (10').

j) Liquid membrane curing compound shall be placed in compliance with CDOT Standard Specifications Section 412 at a rate to completely coat all exposed concrete surfaces.

F. Landscape Areas

1. Excessive, unnecessary disturbance to landscaping and other existing improvements may result in a stop work order until repairs are made to the satisfaction of the City.

2. Landscape restoration shall be completed within two (2) weeks of completion of work at each site, weather permitting.

3. Irrigation shall be maintained throughout construction to ensure that no landscaping is affected during the construction phase.

4. A permittee shall work with adjacent property owners to coordinate any construction activity that disrupts adjacent property owners' landscaping.

5. Prior to probationary acceptance by the City, the permittee shall provide a letter or an existing agreement from each property owner adjacent to the work site stating that all landscaping has been restored.

6. Any additional landscaping required for screening above-ground structures shall be coordinated with and approved by the adjacent property owner responsible for landscape maintenance.

G. Traffic Control

1. When it is necessary to obstruct roadways or pedestrian ways, the permittee shall submit traffic control plans, in compliance with the Manual of Uniform Traffic Control Devices (MUTCD), showing all work and including the following information:

a) Each lane closure scenario, including work zones for locate pothole work.

b) Lane configurations and access locations specific to the actual work zone.

c) Any upstream intersections within five hundred feet (500') of the work zone, showing all impacted inbound lanes to the intersection.

d) Pedestrian route detours showing the nearest crossing intersections at each end of the work zone.

e) Proposed hours of operation of each traffic control setup.

2. All traffic control plans shall be prepared under the supervision of a certified Work Site Traffic Control Supervisor. Documentation of certification shall be submitted with the traffic control plan(s).

3. Lane closures shall be permitted only between 8:30 a.m. and 3:30 p.m. on weekdays, 8:00 a.m. to 6:00 p.m. on Saturdays, and 8:00 a.m. to 6:00 p.m. on Sundays, unless otherwise noted on the permit.

4. When conditions warrant, in order to minimize impact to the motoring public, the City may require that the permittee perform work between the hours of 7:00 p.m. and 6:00 a.m. or on weekends.

5. When planning construction phasing and developing traffic control plans, the permittee shall make every effort to minimize the impact to the motoring public and maintain the capacity of the roadway system. The City may require that a traffic control plan be modified to comply with this requirement.

MARTIN/MARTIN
CONSULTING ENGINEERS
Lakewood, Colorado 80215
martinmartin.com
12499 West Colfax Avenue
303.431.6100

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE
ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SITE DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, DISCLOSED TO OTHERS OR USED IN CONNECTION WITH ANY WORK OR PROJECT OTHER THAN THE ONE FOR WHICH THEY ARE SPECIFICALLY PREPARED AND DEVELOPED WITHOUT THE PRIOR WRITTEN CONSENT OF MARTIN/MARTIN, INC. © 2025 MARTIN/MARTIN, INC.
IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:

C732

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - Ridgegate Elementary School\PLANS\CDs\C730 - SITE DETAILS SHEET.dwg

6. When the traffic control plan requires the modification of any traffic signal timing plans, the permittee shall notify the City's signal maintenance contractor to coordinate the retiming of the signal. All costs associated with such work shall be borne by the permittee.

7. Lane closures within three hundred feet (300') of signalized intersections shall not be allowed on weekdays unless authorized by the City.

8. All signs and devices shall conform to the Manual on Uniform Traffic Control Devices. The devices and signs shall be clean, legible, properly mounted and meet a quality standard rating of "acceptable" per the requirements of American Traffic Safety Services Association (ATSSA) Quality Standard for Work Zone Traffic Control Devices (copies available from the City). All signs and devices used for night operation shall meet the retroreflective requirements of CDOT Standard Specifications Section 713.04.

9. For all installations, the City may require that a permittee place Variable Message Boards in advance of the work to notify the travelling public of the upcoming construction impacts. All costs for this work shall be borne by the permittee.

10. If the closure of a street is required for completion of the work, the permittee shall provide all notifications to emergency agencies, government entities, school and bus districts, newspapers, adjacent businesses and homeowner's associations in a format approved by the City.

11. No permittee shall block access to any private property, fire hydrant, fire station, utility structure, or any other emergency response equipment unless the permittee provides the City with written approval from the affected agency and/or property owner.

12. When necessary for public safety and when required by the City, the permittee shall employ flag persons to control traffic around or through the work site.

13. The permittee shall be responsible for maintaining all work area signing and barricading required throughout the duration of work. During non-work hours, all signs that are not appropriate shall be removed, covered or turned around so that they do not face traffic.

14. Any deficiencies noted by the City shall be corrected immediately by the permittee. If the permittee is not available or cannot be found, the City may make the required corrections and charge the cost thereof to the permittee pursuant to Chapter 11 of the City of Lone Tree Municipal Code.

15. The proposed phasing of construction and length of the active work zone shall be submitted by the permittee to the City for review and approval. Permittees shall make every effort to minimize the impact to the use of the public right-of-way and adjacent

properties. The City may require that the permittee modify the proposed construction phasing in order to minimize the impact during construction.

16. Unless authorized in the right-of-way permit, no vehicles larger than one (1) ton pickups with 10,000 pound gross vehicle weight shall be allowed on sidewalks. Permittees shall be responsible for all damage to sidewalks unless such damage was pre-existing and documented with a pre-construction inspection. Pedestrian access shall be maintained throughout the period of work.

17. Per Chapter 11 of the City of Lone Tree Code, the following traffic control requirements shall apply to blanket maintenance permits:

a) If the maintenance operations cause sidewalk or travel lane closures on streets not classified as principal arterial streets in the City of Lone Tree Transportation Plan, and the maintenance operations are located more than three hundred feet (300') from any non-residential intersection, the permittee shall provide traffic control plans that cover each typical work zone scenario to the City for approval. The traffic control plans shall be approved prior to issuance of the blanket maintenance permit. On roadways that have two or more lanes in each direction, only one lane per direction may be closed at any time.

b) If the maintenance operations cause sidewalk or travel lane closures on principal arterial streets as defined in the City of Lone Tree Transportation Plan and/or are located within three hundred feet (300') from a non-residential intersection, the permittee shall provide site specific traffic control plans to the City for approval. The traffic control plans shall be approved prior to issuance of the blanket maintenance permit. Hours of work shall be restricted to nights and/or weekends, unless otherwise approved by the City.

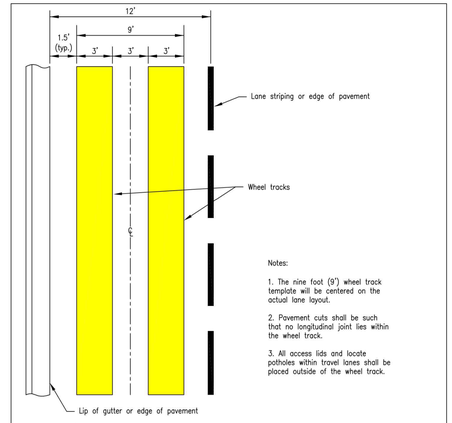
EXHIBIT A

ALL TESTING TO BE PERFORMED PER CURRENT CDOT STANDARDS

ITEM	TYPE OF TEST	MINIMUM FREQUENCY
All excavation backfill	Moisture/Density (Compaction Test)	1 test per 150 l.f. per vertical foot of fill and within 2 ft. of all structures; minimum 2 tests per lift
Inlets/Structures		
Concrete testing	Rebar Inspection Air and Slump Cylinders	Visual/Documentation 1st three loads, every fifth load thereafter 1 set of four per 100 c.y. or fraction thereof
Soil testing	Moisture/Density (Compaction Test)	1 test per vertical foot, min. 2 tests per lift
Sidewalk, Curb & Gutter		
Soil testing	Moisture/Density (Compaction Test)	1 test per 150 l.f. per two vertical feet of fill
	Proofroll	Minimum of 2 tests per lift All subgrade
Concrete testing	Air and Slump	1 per day min. – machine placed 2 per day min. – hand placed plus 1 per 500 s.y.
	Cylinders	1 set of four per 100 c.y. or fraction thereof
Roadway		
Subgrade testing	Moisture/Density (Compaction Test) Proofroll	1 test per 300 lane feet, min. 2 tests per lift All subgrade
Base Course testing	Moisture/Density (Compaction Test) Gradation/Atterberg limits Proofroll	1 test per 300 lane feet, min. 2 tests per lift 1 test per 500 tons All base course
Concrete testing – full time	Air and Slump Slump Cylinders	First 3 loads, if pass, 1 test per 100 c.y. Every load 1 set of four per 100 c.y. or fraction thereof
Asphalt testing – full time	Density Extraction/Graduation, Marshall	1 test per 300 lane feet, min. 2 tests per lift 1 test per 500 tons

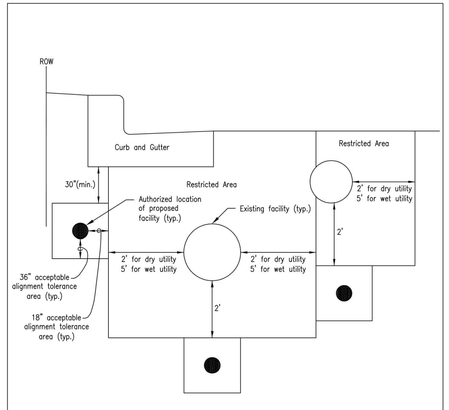
City of Lone Tree
Minimum Testing Requirements

EXHIBIT B

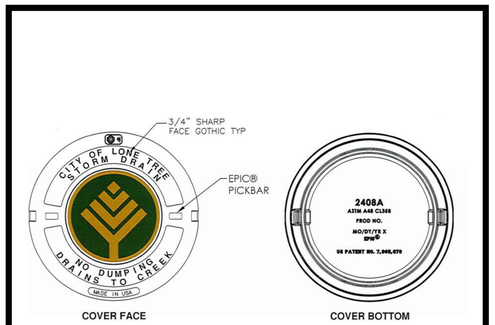


City of Lone Tree
Wheel Track Diagram

EXHIBIT C

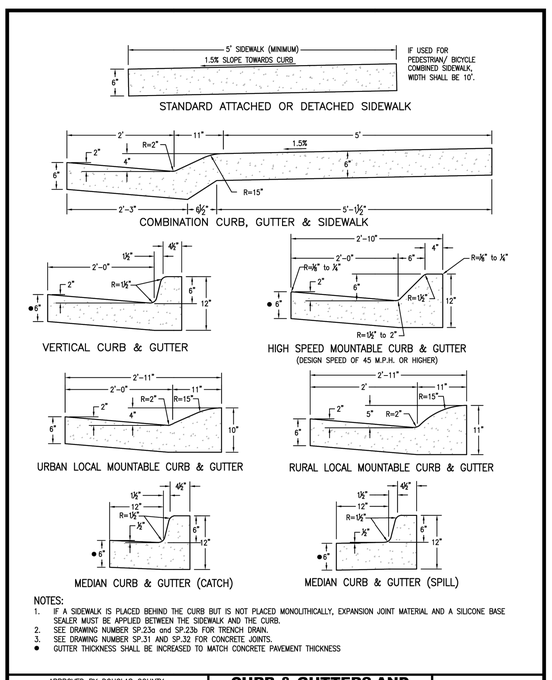


City of Lone Tree
Utility Boundary Area
Cross Section



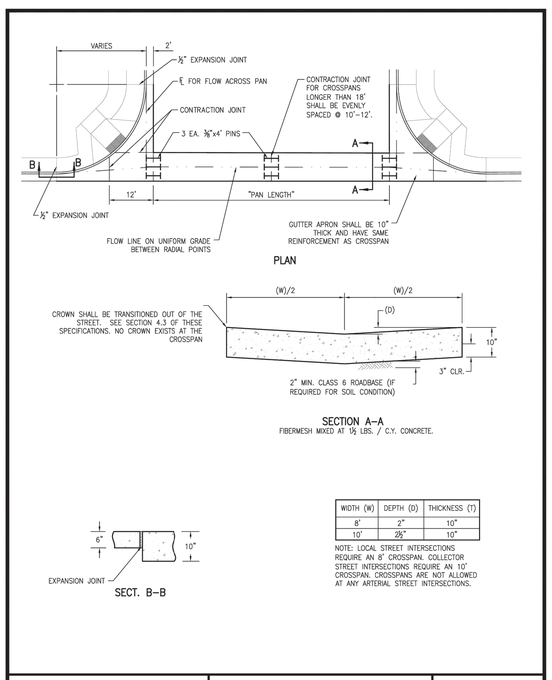
Design Features
-Materials
Gray Iron (CL35B)
-Load Rating
Heavy Duty
-Open Area
n/a
-Coating
Undipped
-√ Designates Machined Surface

CITY OF LONE TREE PUBLIC WORKS	MANHOLE LID COVER	DETAIL NUMBER MH-1
DATE: 06/05/2020	BY: J. KRELL	DRAWING NO.:



NOTES:
1. IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND THE CURB.
2. SEE DRAWING NUMBER SP.23a and SP.23b FOR TRENCH DRAIN.
3. SEE DRAWING NUMBER SP.31 AND SP.32 FOR CONCRETE JOINTS.
- GUTTER THICKNESS SHALL BE INCREASED TO MATCH CONCRETE PAVEMENT THICKNESS

APPROVED BY DOUGLAS COUNTY	CURB & GUTTERS AND SIDEWALKS	Issued: 05/2013
Janet Herman	DOUGLAS COUNTY COLORADO	Revised: 10/2021
JANET HERMAN, P.E. DIRECTOR OF PUBLIC WORKS ENGINEERING		Drawing No. SP.17
DATE 10/1/2021		



WIDTH (W)	DEPTH (D)	THICKNESS (T)
8'	2"	10"
10'	2½"	10"

NOTE: LOCAL STREET INTERSECTIONS REQUIRE AN 8' CROSSPAN. COLLECTOR STREET INTERSECTIONS REQUIRE AN 10' CROSSPAN. CROSSPANS ARE NOT ALLOWED AT ANY ARTERIAL STREET INTERSECTIONS.

	CROSSPAN	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.21

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL

MARTIN/MARTIN CONSULTING ENGINEERS
Lakewood, Colorado 80215
martinmartin.com
12499 West Colfax Avenue
303.431.6100

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SITE DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

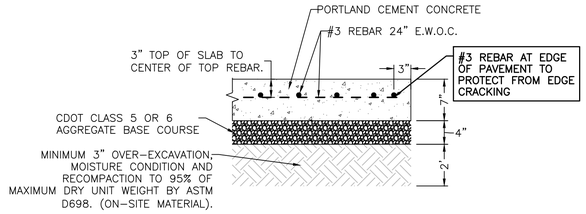
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY AND ARE THE PROPERTY OF MARTIN/MARTIN, INC. ALL RIGHTS RESERVED. NO PART OF THESE DESIGNS SHALL BE USED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C733

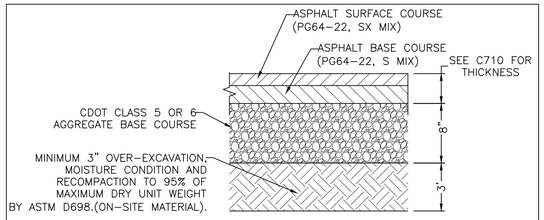
PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998–DCSD – Ridgegate Elementary School\PLANS\CDs\C730 – SITE DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



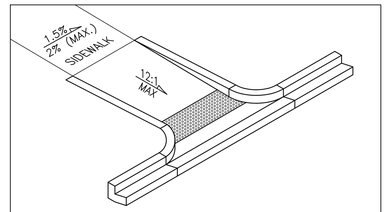
NOTE:
1. REFER TO GEOTECHNICAL EVALUATION BY INTERTEK PSI. DATED JUNE 13, 2025 FOR GEOTECHNICAL RECOMMENDATIONS.
2. INSTALL EXPANSION JOINT MATERIAL BETWEEN NEW PAVEMENT AND EXISTING CONCRETE SLABS, POLES, FIRE HYDRANTS, BUILDINGS, COLUMNS, ETC. SET EXPANSION JOINT MATERIAL VERTICAL AND WITH THE TOP EDGE BELOW FINISHED SURFACE OF CONCRETE.

DETAIL 1 – TYPICAL CONCRETE PAVEMENT SECTION
NOT TO SCALE

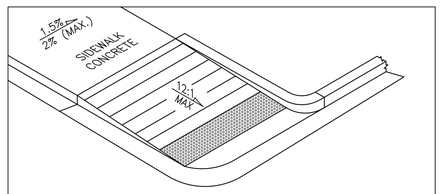


NOTE:
1. REFER TO GEOTECHNICAL EVALUATION BY INTERTEK PSI. DATED JUNE 13, 2025 FOR GEOTECHNICAL RECOMMENDATIONS.

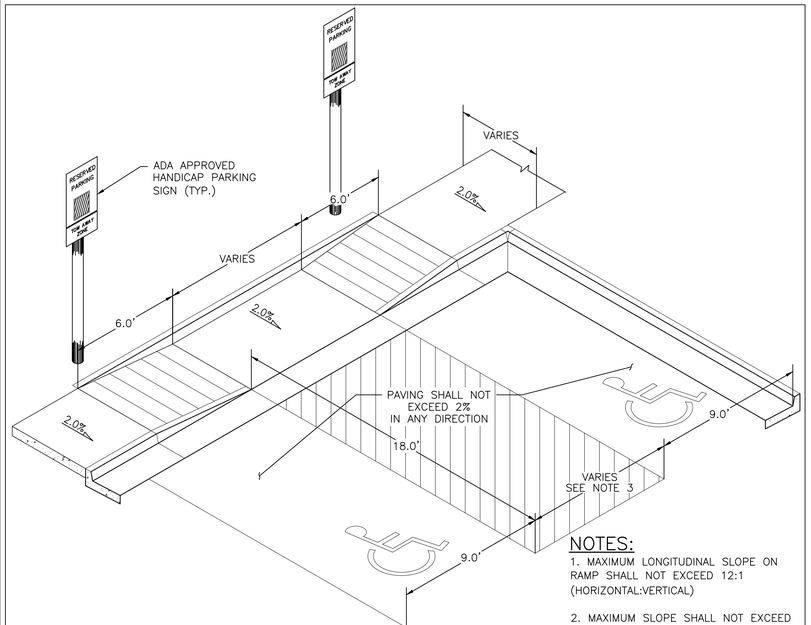
DETAIL 2 – TYPICAL ASPHALT PAVEMENT SECTION
NOT TO SCALE



DETAIL 3 –DIRECTIONAL CURB RAMP TYPE A
NOT TO SCALE

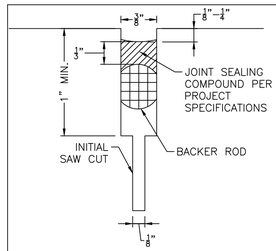


DETAIL 4 – DIRECTIONAL CURB RAMP TYPE B
NOT TO SCALE

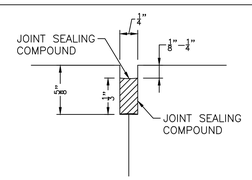


NOTES:
1. MAXIMUM LONGITUDINAL SLOPE ON RAMP SHALL NOT EXCEED 12:1 (HORIZONTAL:VERTICAL)
2. MAXIMUM SLOPE SHALL NOT EXCEED 2% WITHIN PARKING AREA.
3. MINIMUM 5' FOR STANDARD ACCESSIBLE SPACE.
MINIMUM 8' FOR VAN ACCESSIBLE SPACE

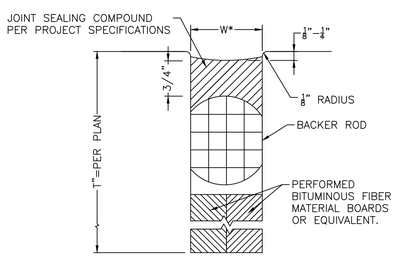
DETAIL 5 – ADA ACCESSIBLE RAMP AND PARKING DETAIL
NOT TO SCALE



SAWED CONTRACTION JOINT
NOT TO SCALE



CONSTRUCTION JOINT – JOINT SEALANT
NOT TO SCALE



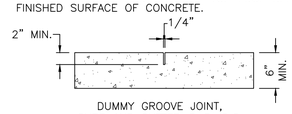
*NOTE: WIDTH (W) OF PREFORMED JOINT MATERIAL IS ½" FOR ISOLATION JOINTS AND ¾" FOR EXPANSION JOINTS.

FORMED EXPANSION OR ISOLATION JOINT
NOT TO SCALE

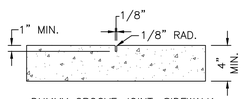
DETAIL 6 – JOINT SEALING DETAILS

CONCRETE JOINT NOTES:
1. DOWEL BARS ARE 1" Ø, 18" LONG SPACED @ 15" O.C. AND ARE TO BE 12" (MIN.) TO 16" (MAX.) FROM A PANEL CORNER.
2. REBAR IS TO STOP 4"±1" FROM CONSTRUCTION JOINTS AND EXPANSION JOINTS.
3. STRUCTURE EXPANSION JOINTS SHALL BE CONSTRUCTED AROUND THE COMPLETE PERIMETER OF MISCELLANEOUS STRUCTURES OR AS DIRECTED BY THE ENGINEER.
4. MISCELLANEOUS STRUCTURES INCLUDE, BUT ARE NOT LIMITED TO, BUILDINGS, GARAGES, MANHOLES, VAULTS, CATCH BASINS, WALLS, BOLLARDS AND OTHER CONCRETE.
5. TIE BAR TO BE #4 DEFORMED BAR WITH 24" LONG LAP LENGTH PLACED 30" ON CENTER AND ARE TO BE 12" MIN. FROM PANEL CORNER.

NOTES:
1. UNLESS OTHERWISE APPROVED, CONSTRUCT COMBINATION CURB, GUTTER, AND SIDEWALK IN 10' MONOLITHIC SECTIONS WITH CONTRACTION JOINTS BETWEEN SECTIONS.
2. CONSTRUCT SIDEWALK IN 100' TO 120' MONOLITHIC SECTIONS. PROVIDE EXPANSION JOINTS EVERY 100' TO 120'. INSTALL EXPANSION JOINT MATERIAL BETWEEN NEW SIDEWALK AND EXISTING CONCRETE SLABS, POLES, FIRE HYDRANTS, BUILDINGS, ETC. SET EXPANSION JOINT MATERIAL VERTICAL AND WITH THE TOP EDGE BELOW FINISHED SURFACE OF CONCRETE.

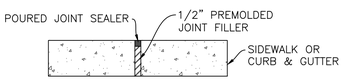


DUMMY GROOVE JOINT, CURB AND GUTTER @ 5' O.C.



DUMMY GROOVE JOINT, SIDEWALK @ 5' O.C.

CONTRACTION JOINTS



EXPANSION JOINTS

SIDEWALK AND CURB & GUTTER JOINTS
NOT TO SCALE
M/M 2009

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SITE DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

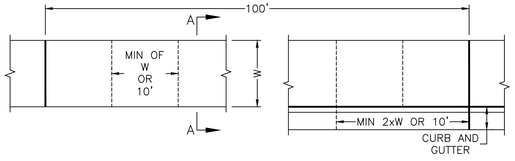
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION, & MODELS THEREOF, ARE PROPRIETARY & SHALL BE CONSIDERED COPYRIGHTED BY MARTIN/MARTIN, INC. AND SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

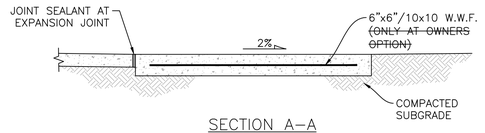
Sheet Number:
C734

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C730 - SITE DETAILS SHEET.dwg

SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



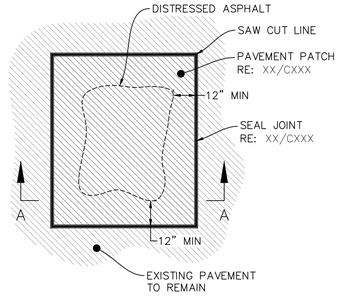
PLAN VIEW



SECTION A–A

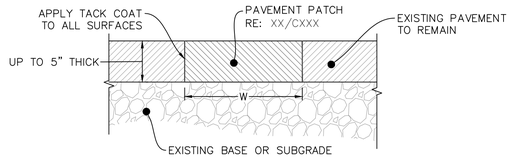
NOTES:
1. CONSTRUCT SIDEWALK IN 100' MONOLITHIC SECTIONS WITH EXPANSION JOINTS EVERY 100'
2. CONTRACTION JOINTS ARE TO BE SPACED IN A MANNER THAN CREATED SQUARE SECTIONS, OR AS SPECIFIED ON PLANS
3. INSTALL EXPANSION JOINT MATERIAL BETWEEN NEW SIDEWALKS AND EXISTING CONCRETE SLABS, POLES, FIRE HYDRANTS, BUILDINGS, ETC. SET EXPANSION JOINT MATERIAL VERTICAL AND WITH THE TOP EDGE BELOW FINISHED SURFACE OF CONCRETE.
4. THICKNESS SHALL BE 6" MINIMUM FOR COMBINATION CURB, GUTTER AND SIDEWALK AND 4" MINIMUM FOR NON–MONOLITHIC SIDEWALK
5. COORDINATE WITH LANDSCAPING PLAN FOR SPECIALTY CONCRETE FINISHES

TYPICAL SIDEWALK
NOT TO SCALE
02–0042

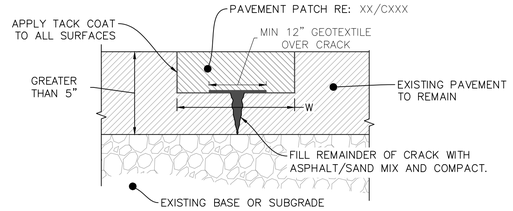


PATCHING PLAN VIEW

NOTES:
1. PROTECT ALL SURFACES FROM MOISTURE, ENSURE PAVEMENT IS THOROUGHLY DRY PRIOR TO APPLYING TACK COAT OR PLACING PAVING MATERIALS.
2. MILL OR PLANE ASPHALT FOR PARTIAL DEPTH PAVEMENT REMOVAL.
3. ENSURE ALL SAW CUTS ARE VERTICAL AND CLEAR. REPAIR AREA MY NEED TO BE EXPANDED IF UNSTABLE PAVEMENT IS ENCOUNTERED. NOTIFY ENGINEER PRIOR TO EXPANDING PATCHING AREA.
4. COMPACTED ASPHALT PATCH SHOULD BE FLUSH WITH ADJACENT PAVEMENT

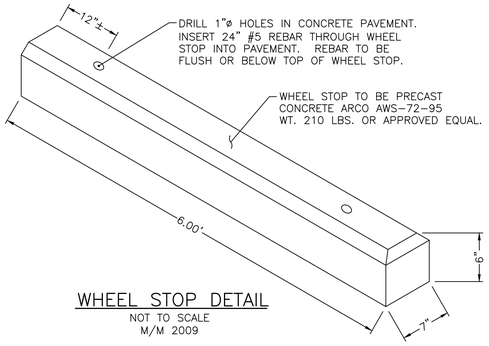


SECTION A
FOR PAVEMENT SECTIONS UP TO 5" THICK

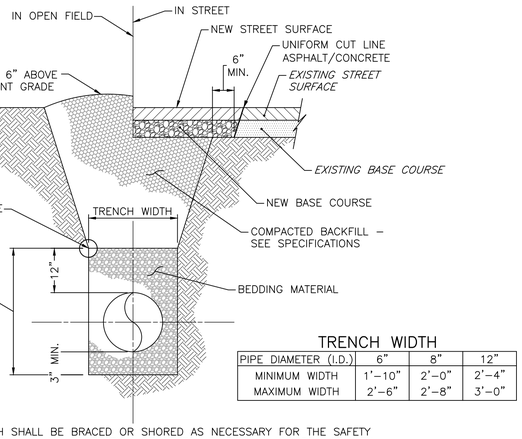


SECTION A
FOR PAVEMENT SECTIONS OVER 5" THICK

ASPHALT PAVEMENT PATCHING
NOT TO SCALE
07–0350
M/M WYO 2019



WHEEL STOP DETAIL
NOT TO SCALE
M/M 2009

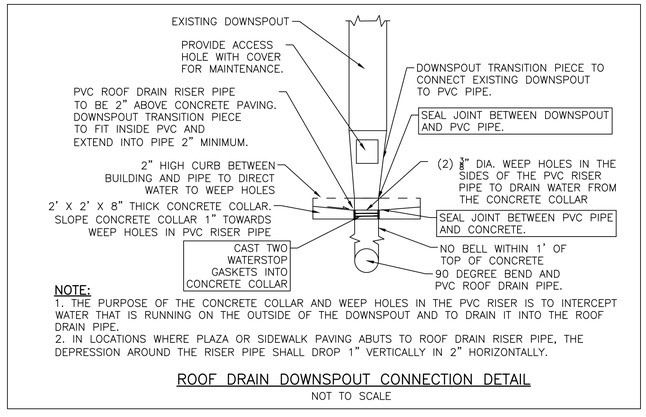


TRENCH WIDTH

PIPE DIAMETER (I.D.)	6"	8"	12"
MINIMUM WIDTH	1'–10"	2'–0"	2'–4"
MAXIMUM WIDTH	2'–6"	2'–8"	3'–0"

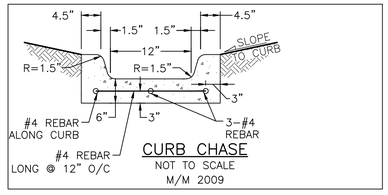
NOTES:
1. THE TRENCH SHALL BE BRACED OR SHORED AS NECESSARY FOR THE SAFETY OF THE WORKMAN AND PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OSHA, AND FEDERAL REGULATIONS.
2. PIPE SHALL BE BEDDED FROM 3" MIN. BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.
3. SHOULD THE TRENCH BE EXCAVATED WIDER THAN ALLOWED, A CONCRETE CRADLE SHALL BE PLACED WITH 2500 psi CONCRETE FROM TRENCH BOTTOM TO PIPE SPRING LINE.
4. COMPACTION SHALL BE AS FOLLOWS: 2.5' OF TRENCH SHALL BE 95% S.P.D., TRENCH ZONE 95% S.P.D. (THIS IS APPLICABLE IN STREET R.O.W. AND UNDER PAVEMENT) OUTSIDE STREET R.O.W. 85% S.P.D..
5. SEE CHART FOR PIPE I.D. AND TRENCH WIDTH.

TRENCH PATCH DETAIL
NOT TO SCALE
M/M 2009

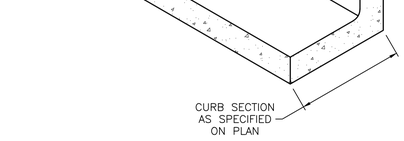


NOTE:
1. THE PURPOSE OF THE CONCRETE COLLAR AND WEEP HOLES IN THE PVC RISER IS TO INTERCEPT WATER THAT IS RUNNING ON THE OUTSIDE OF THE DOWNSPOUT AND TO DRAIN IT INTO THE ROOF DRAIN PIPE.
2. IN LOCATIONS WHERE PLAZA OR SIDEWALK PAVING ABUTS TO ROOF DRAIN RISER PIPE, THE DEPRESSION AROUND THE RISER PIPE SHALL DROP 1" VERTICALLY IN 2" HORIZONTALLY.

ROOF DRAIN DOWNSPOUT CONNECTION DETAIL
NOT TO SCALE

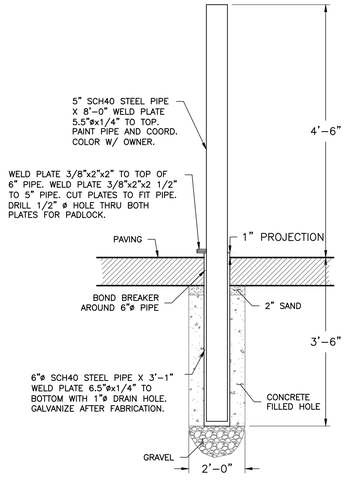


CURB CHASE
NOT TO SCALE
M/M 2009

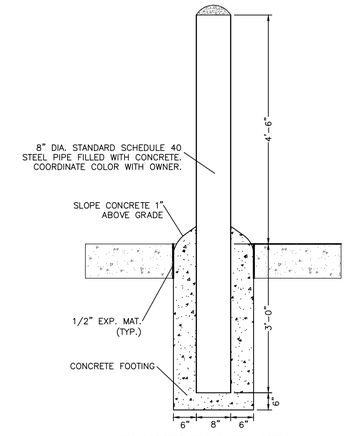


NOTES:
1. FORM CURB CUT INTO SECTION OF STANDARD CURB & GUTTER AT LOCATION DRAWN ON PLANS.
2. SLOPE FOR DRAINAGE.

XX CURB CUT
NOT TO SCALE



REMOVEABLE BOLLARD DETAIL
N.T.S.



CONCRETE BOLLARD DETAIL
N.T.S.

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SITE DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

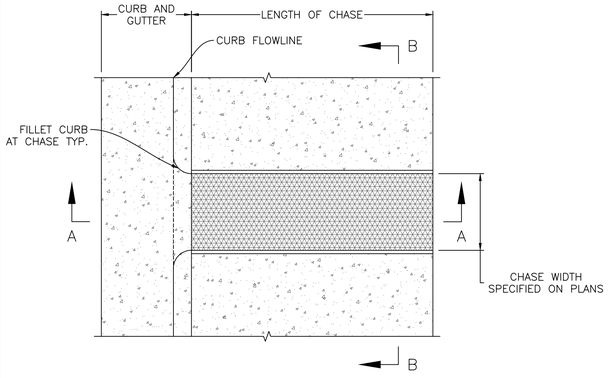
Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE COPIED, ALTERED, OR ASSIGNED TO ANY THIRD PARTY IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

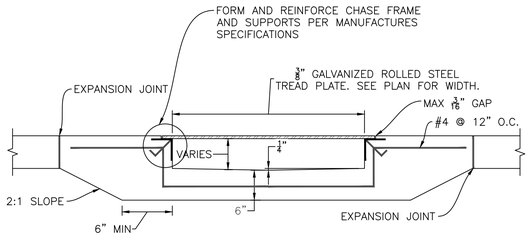
Sheet Number:
C735

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998–DCSD – RidgeGate Elementary School\PLANS\CDs\C730 – SITE DETAILS SHEET.dwg

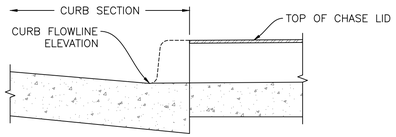
SUBJECT TO CHANGE
PENDING JURISDICTIONAL APPROVAL



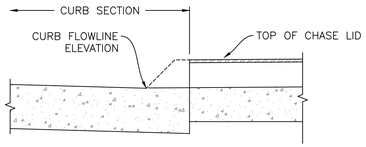
PLAN VIEW



SECTION B–B



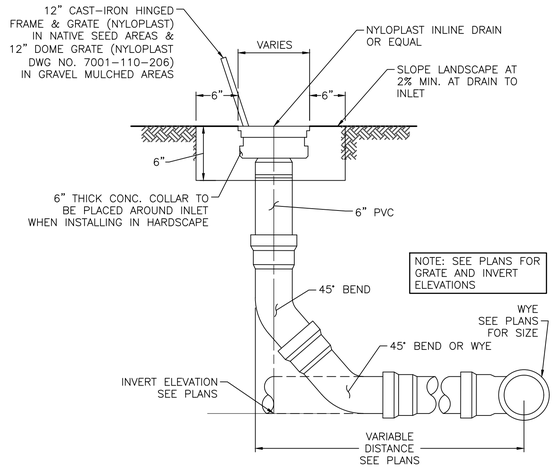
SECTION A–A AT VERTICAL CURB



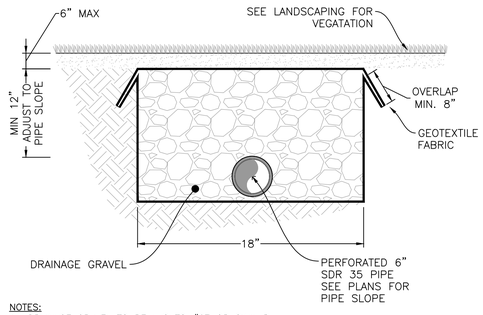
SECTION A–A AT MOUNTABLE CURB

NOTES:
1. CHASE FRAME BE NEENAH R-4999 WITH A SOLID LID OR APPROVED EQUAL MEETING OR EXCEEDING AASHTO DESIGN LIVE LOAD CASE HL-93

XX SIDEWALK CHASE
NOT TO SCALE

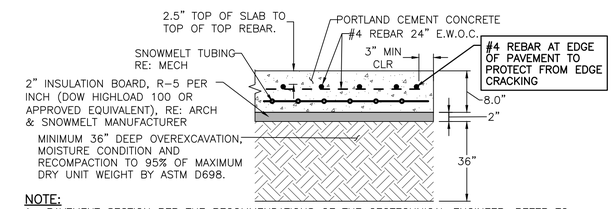


LANDSCAPE AREA INLET
NOT TO SCALE
M/M 2009



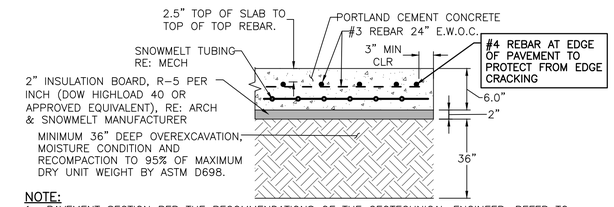
NOTES:
1. DRAINAGE GRAVEL TO BE AASHTO #67 OR SIMILAR
2. GEOTEXTILE FABRIC TO BE MIRAFI '140N' OR APPROVED EQUAL
3. ENSURE TRENCH IS SMOOTH AND FREE OF HUMPS, DEPRESSIONS, AND LARGE ROCKS.
4. OVERLAP UPSTREAM FABRIC OVER DOWNSTREAM FABRIC MINIMUM OF 18"
5. SECURE FABRIC WITH PINS, STAPLES, OR OTHER SUITABLE MEANS TO AVOID SHIFTING
6. DO NOT PLANT TREES OR BUSHES WITHIN 10 FT OF THE PIPE

03-0046
LANDSCAPING UNDERDRAIN
NOT TO SCALE



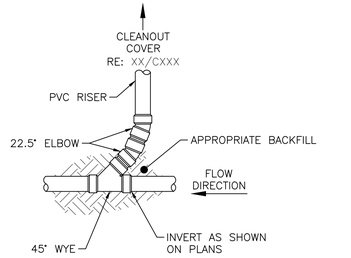
NOTE:
1. PAVEMENT SECTION PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. REFER TO GEOTECHNICAL STUDY BY INTERTEK PSI DATED JUNE 13, 2025.
2. INSTALL EXPANSION JOINT MATERIAL BETWEEN NEW PAVEMENT AND EXISTING CONCRETE SLABS, POLES, FIRE HYDRANTS, BUILDINGS, COLUMNS, ETC. SET EXPANSION JOINT MATERIAL VERTICAL AND WITH THE TOP EDGE BELOW FINISHED SURFACE OF CONCRETE.
3. THICKENED EDGE SHALL BE PROVIDED ALONG OUTSIDE EDGES OF PROPOSED PAVEMENT SECTION AT LOCATIONS WHERE A MONOLITHIC CURB IS NOT PROVIDED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. THICKENED EDGE SHALL BE A MINIMUM 10" THICK AND TAPER TO THE STANDARD 8" PAVEMENT SECTION 36" INWARD FROM THE PAVEMENT EDGE.

TYPICAL CONCRETE SNOWMELT PAVEMENT SECTION (TRAFFIC AREAS)
NOT TO SCALE

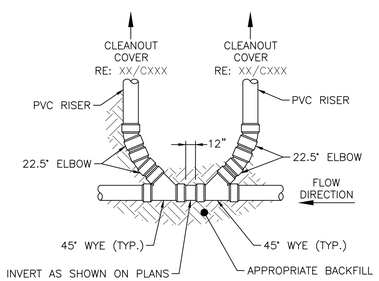


NOTE:
1. PAVEMENT SECTION PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. REFER TO GEOTECHNICAL STUDY BY INTERTEK PSI DATED JUNE 13, 2025.
2. INSTALL EXPANSION JOINT MATERIAL BETWEEN NEW PAVEMENT AND EXISTING CONCRETE SLABS, POLES, FIRE HYDRANTS, BUILDINGS, COLUMNS, ETC. SET EXPANSION JOINT MATERIAL VERTICAL AND WITH THE TOP EDGE BELOW FINISHED SURFACE OF CONCRETE.
3. THICKENED EDGE SHALL BE PROVIDED ALONG OUTSIDE EDGES OF PROPOSED PAVEMENT SECTION AT LOCATIONS WHERE A MONOLITHIC CURB IS NOT PROVIDED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. THICKENED EDGE SHALL BE A MINIMUM 10" THICK AND TAPER TO THE STANDARD 8" PAVEMENT SECTION 36" INWARD FROM THE PAVEMENT EDGE.

TYPICAL CONCRETE SNOWMELT PAVEMENT SECTION (NON-VEHICULAR AREAS)
NOT TO SCALE



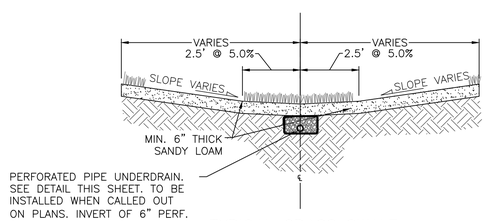
ONE WAY SEWER CLEAN-OUT DETAIL



TWO WAY CLEAN-OUT DETAIL

NOTES:
1. CLEAN OUR RISERS TO BE SAME DIAMETER AS SEWER MAIN.
2. ALL PIPING AND FITTINGS TO BE GASKETED PVC, SDR 35 OR APPROVED EQUAL.

XX SEWER CLEAN-OUT DETAIL
NOT TO SCALE



TYPICAL GRASS SWALE CROSS SECTION
N.T.S.

MARTIN/MARTIN
CONSULTING ENGINEERS
12499 West Colfax Avenue
Lakewood, Colorado 80215
303.431.6100
martinmartin.com

NOT FOR CONSTRUCTION

DCSD - RIDGEGATE ELEMENTARY SCHOOL
CONSTRUCTION DOCUMENTS
SITE DETAILS SHEET

No.	Issue / Revision	Date	Name
1	AHJ SUBMITTAL	10/31/2025	DEB

Job Number 24.0998
Project Manager D.BEARSE
Design By D.BEARSE/K.RICKETSON
Drawn By J.DIAZ
Principal In Charge P.BUCKLEY

THE DESIGNS SHOWN HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & SHALL NOT BE USED, DISCLOSED OR COPIED WHOLLY OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM MARTIN/MARTIN, INC.

Sheet Number:
C736

PLOT DATE: Thursday, November 20, 2025 11:26 AM LAST SAVED BY: KRICKETSON
DRAWING LOCATION: \\mmcivil.martin.local\civil\BUCKLEY\24.0998-DCSD - RidgeGate Elementary School\PLANS\CDs\C730 - SITE DETAILS SHEET.dwg