RSN: 1902240 | PERMIT# 25-2534172 -LT (PLAN REVISION TO PERMIT# 25-2513934 -CM, RSN:1881854)

2 SYMBOLS

W	WATER SERVICE LINE
PRWC	PRIMARY RAIN WATER CONDUCTOR
SRWC	SECONDARY RAIN WATER CONDUCTOR
CDL	CONDENSATE DRAIN LINE
SAN	SANITARY SEWER LINE (SAN)
V	BRANCH VENT LINE (V)
CW	COLD WATER LINE (CW)
HW	HOT WATER LINE (HW)
HWR	HOT WATER RETURN LINE (HWR)
TP	TRAP PRIMER LINE (TP)
PD	PLUMBING DISCHARGE (PD)
	WATER RISER
	SANITARY/WASTE OR VENT STACK
	AUTOMATIC AIR VENT
B P	BACK FLOW PREVENTER
	BALANCING VALVE
	BALL VALVE LEVER
	BALL VALVE SOLENOID
	CHECK VALVE
	CIRCULATING PUMP
	END OF LINE CLEANOUT
	CLEANOUT EXTENDED UP TO FLOOR/GRADE
	DOUBLE CHECK VALVE
	CAP OR PLUG
	FILTER
	FLEX CONNECTION
	FLOOR DRAIN
	FLOW DIRECTION ARROW
	FUNNEL DRAIN
	PRESSURE REGULATOR VALVE
	SOLENOID VALVE
	WATER HAMMER ARRESTER
M	METER
	PIPE ANCHOR
	PIPE BOTTOM CONNECTION
C	PIPE DOWN
	PIPE GUIDE
	PRESSURE GAUGE
	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
	THERMOSTATIC MIXING VALVE (TMV)
	RELIEF VALVE
	ROOF DRAIN (RD)
	STRAINER
	TEMPERATURE GAUGE
	UNION
	VALVE AND VALVE BOX
HB	HOSE BIBB
WH	WALL HYDRANT
X	INDICATES NOTE LOCATED ELSEWHERE ON DRAWING AND NOTE NUMBER
	SQUARE FOOT

DETAIL/PLAN REFERENCE SYMBOL
X — INDICATES DETAIL/PLAN NUMBER
PXXX — INDICATES DRAWING No. FOR WHICH THE DETAIL/PLAN IS LOCATED.

	CONNECT TO EXISTING
	ROOF HYDRANT (HD)

3 GENERAL NOTES

1. EXTEND ALL CLEANOUTS ON SEWER LINES BELOW SLAB ON GRADE TO FINISHED FLOOR LEVEL.
2. COORDINATE LOCATIONS OF ALL LINES AND EQUIPMENT WITH OTHER CONTRACTORS.
3. AT LOCATIONS INDICATED TO CONNECT NEW PLUMBING LINES TO EXISTING LINES; CONTRACTOR TO DETERMINE EXACT SIZE, LOCATION AND ELEVATION OF EXISTING LINES AT SITE BEFORE INSTALLING NEW LINES.
4. THE LOCATIONS, SIZES AND ELEVATIONS OF EXISTING LINES SHOWN ON PLAN ARE RESULTS OF INFORMATION OBTAINED FROM EXISTING DRAWING AND FIELD SURVEYS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, SIZE AND ELEVATIONS OF EXISTING LINES AT THE SITE BEFORE THE START OF NEW WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL UTILITY AUTHORITIES FOR INSTALLATION REQUIREMENTS, REGULATIONS, FEES, PERMITS AND APPROVALS BEFORE THE START OF WORK.
6. ALL INTERIOR STORMWATER PIPING, 4" AND LARGER, SHALL BE SLOPED AT 1/8" PER FOOT, UNLESS NOTED OTHERWISE. ALL INTERIOR STORMWATER PIPING, 3" AND SMALLER, SHALL BE SLOPED AT 1/4" PER FOOT, UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL REFER TO APPLICABLE CODES DRAINAGE SYSTEM FITTINGS.
8. ALL INTERIOR, ABOVE GROUND, HORIZONTAL AND VERTICAL STORM DRAINAGE SYSTEMS SHALL BE INSULATED AS SPECIFIED.
9. DIELECTRIC UNIONS AND FLANGES SHALL BE USED ON ALL CONNECTIONS BETWEEN DISSIMILAR METALS.
10. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW ONLY THE GENERAL ARRANGEMENTS OF ALL PIPING AND EQUIPMENT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO SHOW OR INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED TO AVOID STRUCTURAL FEATURES.
11. ALL PIPE PENETRATIONS THROUGH CHASE, WALLS OR FLOORS WHICH ARE FIRE-RATED, SHALL BE PROPERLY SEALED TO MAINTAIN FIRE PROTECTIONS. CONTRACTOR SHALL SUMMIT PROPOSED UL LISTED SYSTEM FOR REVIEW.
12. REPORT AND DISCREPANCIES FOUND IN THE DRAWINGS AND/OR IN THE SPECIFICATIONS DURING THE BIDDING PROCESS FOR CLARIFICATION BY THE ENGINEER AND/OR ARCHITECT.
13. MEANS OF ACCESS SHALL BE PROVIDED TO CONCEALED TRAPS, VALVES, CLEANOUTS, DRAIN POINTS OR SIMILAR ITEMS. CONTRACTORS SHALL COORDINATE THE LOCATIONS AND QUANTITIES OF ALL ACCESS PANELS DURING BIDDING PHASE. ACCESS PANELS WILL BE FURNISHED AND INSTALLED BY OTHERS.
14. PROVIDE CLEANOUTS IN SANITARY AND STORM PIPING SYSTEMS AT ENDS OF RUNS, AT CHANGES IN DIRECTION, AT BASE OF STACKS, AND AT 50 FOOT INTERVALS IN HORIZONTAL PIPING, AND ELSEWHERE AS INDICATED.
15. ALL PIPING NOTED ABOVE OR AT CEILING, SHALL BE TIGHT TO UNDERSIDE OF FLOOR SLAB WITH THE SPACE FOR INSULATION AND HANGERS AS REQUIRED.
16. WHERE DOMESTIC COLD WATER, DOMESTIC HOT WATER AND DOMESTIC HOT WATER RETURN LINES ARE NOTED TO BE RUN AT CEILING AND/OR ABOVE CEILING, RUN LINES AS HIGH AS POSSIBLE.
17. WHERE SANITARY SEWER, SANITARY AND VENT LINES ARE NOTED TO BE RUN AT CEILING, ABOVE CEILING AND/OR BELOW FLOOR, RUN LINES AS HIGH AS POSSIBLE UNLESS LINES ARE RUN BELOW SLAB ON GRADE.
18. DEEP SEAL TRAPS WITH TRAP PRIMERS, SHALL BE INSTALLED ON ALL FLOOR DRAINS WHICH ARE LOCATED IN ROOMS CONTAINING AIR HANDLING MACHINERY WHEN SUCH ROOM IS USED AS AN AIR PLENUM.
19. DOMESTIC COLD AND HOT WATER PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE AT UNDERSIDE OF STRUCTURE. COORDINATE WITH ALL OTHER TRADES.
20. ALL SANITARY PIPING FOR THIS PROJECT SHALL BE INSTALLED AT 1/8"FT SLOPE, UNLESS NOTED OTHERWISE.
21. CONDENSATE DRAIN LINES SHALL BE INSTALLED AS HIGH AS POSSIBLE AT 1/8" PER FOOT SLOPED, UNLESS OTHERWISE NOTED COORDINATED WITH ALL OTHER TRADES.
22. PROVIDE TRAP PRIMERS OR TRAP SEAL BARRIER DEVICES AT FLOOR DRAINS, PER LOCAL AUTHORITY HAVING JURISDICTION.
23. PLUMBING CONTRACTOR SHALL INSTALL TRAP PRIMERS OR TRAP GUARDS TO SATISFY LOCAL CODE AUTHORITIES.

1 ABBREVIATIONS

ABV	ABOVE	HW	HOT WATER
AFF	ABOVE FINISHED FLOOR	HWR	HOT WATER RETURN
BLW	BELOW	INV ELEV	INVERT ELEVATION
CDL	CONDENSATE DRAIN LINE	L	LAVATORY
CLG	CEILING	PD	PUMP DISCHARGE
CW	COLD WATER	PRWC	PRIMARY RAIN WATER CONDUCTOR
DCVA	DOUBLE CHECK VALVE ASSEMBLY	RD	ROOF DRAIN
DFU	DRAINAGE FIXTURE UNIT	RPZBP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
DN	DOWN	S	SINK
DR	DRAIN	SAN	SANITARY
DWH	DOMESTIC WATER HEATER	SH	SHOWER
EF	EMERGENCY FIXTURE	SQ FT	SQUARE FOOT
EWC	ELECTRIC WATER COOLER	SRWC	SECONDARY RAIN WATER CONDUCTOR
EX	EXISTING	TD	TRENCH DRAIN
FD	FLOOR DRAIN	TYP	TYPICAL
FLR	FLOOR	U	URINAL
FNL	FUNNEL	UOD	UNDERSIDE OF DECK ABOVE
GPF	GALLON PER FLUSH	V	VENT
GPH	GALLON PER HOUR	VTR	VENT THROUGH ROOF
GPM	GALLONS PER MINUTE	WC	WATER CLOSET
HB	HOSE BIBB	WCO	WALL CLEANOUT
HD	HUB DRAIN	WH	WALL HYDRANT
HDL	HUMIDIFIER DRAIN LINE	WS	WASTE STACK
		WSFU	WATER SUPPLY FIXTURE UNIT

4 SHEET LIST

NO.	TITLE	SCALE
P00-00	SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES	NONE
P02-00	PLUMBING FLOOR PLAN - LEVEL ONE UG - OVERALL	1" = 40'-0"
P02-00A	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT A	1" = 40'-0"
P02-00B	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT B	1" = 40'-0"
P02-00C	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT C	1/8" = 1'-0"
P02-00D	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT D	1" = 40'-0"
P02-00F	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT F	1" = 40'-0"
P02-00H	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT H	1" = 40'-0"
P02-00K	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT K	1" = 40'-0"
P02-00M	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT M	1" = 40'-0"
P02-00P	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT P	1/8" = 1'-0"
P02-00R	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT R	1/8" = 1'-0"
P02-00ST	PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT S-T	1/8" = 1'-0"
P05-01	DETAILS	NONE

3 QTS FREEDOM STANDARD - VERSION MATRIX

QTS Freedom Standard - Version Matrix
Project: DEN1-DC2 V3.0-rev3

Design Deliverable:
QTS Design Standards will be utilized as the Basis Of Design for the Data Center Building.
Design Consultant team to notate Version of QTS Design Standards.

Design Discipline	QTS Design Standard		
	Design Narrative	DD Drawing Set	Reference File
Civil	V3.0	N/A	
General	V3.0	V3.0	
Structural	V3.0	V3.0	LC BIM MODEL
Architectural	V3.0	V3.0	LC BIM MODEL
Fire Alarm	V3.0	V3.0	
Fire Protection	V3.0	V3.0	
Plumbing	V3.0	V3.0	
Process (I&C)	See Below	V3.0	LC BIM MODEL
Mechanical	V3.0	V3.0	LC BIM MODEL
Electrical	V3.0	V3.0	LC BIM MODEL
Technology (Telecom)	V3.0	V3.0	
Audio Visual	N/A	V3.0	
Security	V3.0	V3.0	
Interior Standards	V3.0	See Architectural	3.0-rev1
Signage			INTrev4...
SDIs	N/A	N/A	SDI-018(v3.0) thru SDI-25.03.04
OFCI Catalog	V4.0		
SOO Catalog	V2.0		
Design Discipline	**Q-Systems Design Standard BODs Version**		
Data Telecom BOD	Freedom Standard - Data Telecom - 04.14.2024		
Physical Security BOD	Freedom Standard - Security Systems - 05.10.2024		
DCIM - BMS BOD	Freedom Standard - BMS Content Consolidation - 09.16.2024		
DCIM - EPMS BOD	Freedom Standard - EPMS Content Consolidation - 09.16.2024		
Federal BOD	Federal Standard - V1.0		

PLAN REVISION TO PERMIT# 25-2513934 -CM, RSN:1881854

City of Aurora Building Division
Project: *DEN1-DC2 DATA CENTER*
Address: *1140 N GUN CLUB RD*
Occupancy Group: *IBC S-2/B*
Construction Type: *IBC I/B-SPK*
RSN: *1902240*
Permit: *25-2534172 -LT*

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TLD DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1

COLORADO LICENSED WILLIAM B. HODGES 47948 PROFESSIONAL ENGINEER
05.30.25

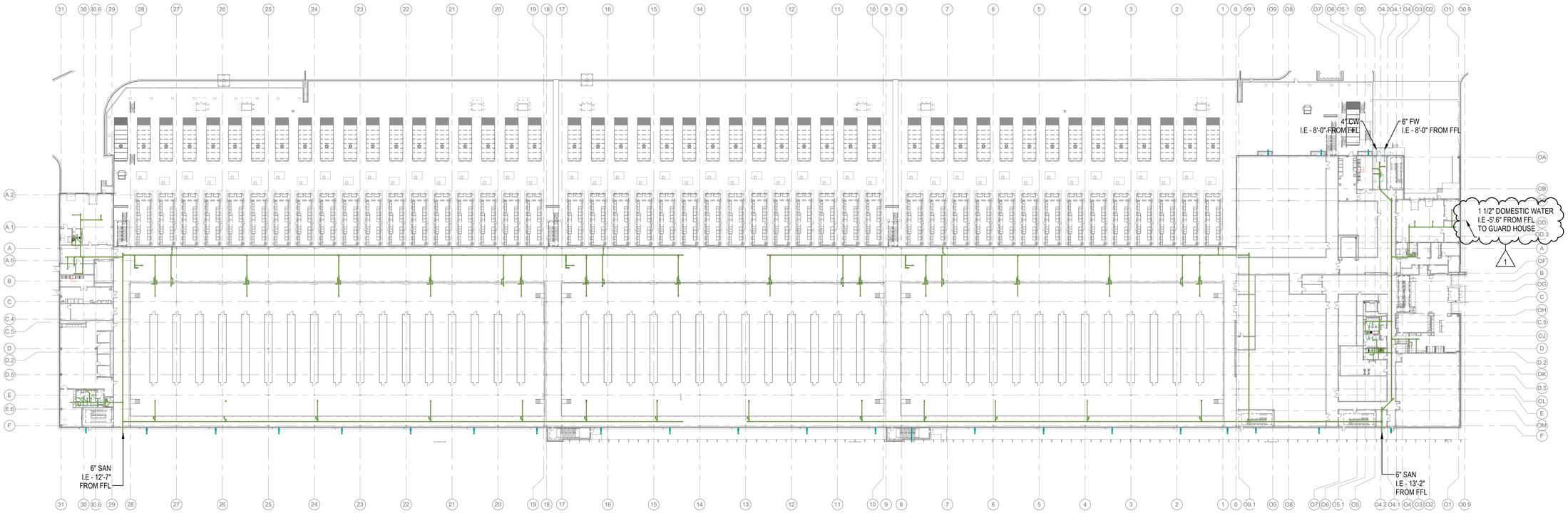
Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

JOB 24464.0000
DATE 05.30.25
SHEET P00-00

5/30/2025 8:50:06 AM P00-00 SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES



1 LEVEL 1 UG PLUMBING PLAN
SCALE: 1" = 40'-0"

SHEET NOTES

SHEET KEYNOTES

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

5/30/2025 8:51:55 AM P02-00 PLUMBING FLOOR PLAN - LEVEL ONE UG - OVERALL

CORGAN
401 N. Houston Street Dallas, TX
75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED
WILLIAM B. HODGES
47948
PROFESSIONAL ENGINEER
05.30.25

Date of issue:
05.30.25

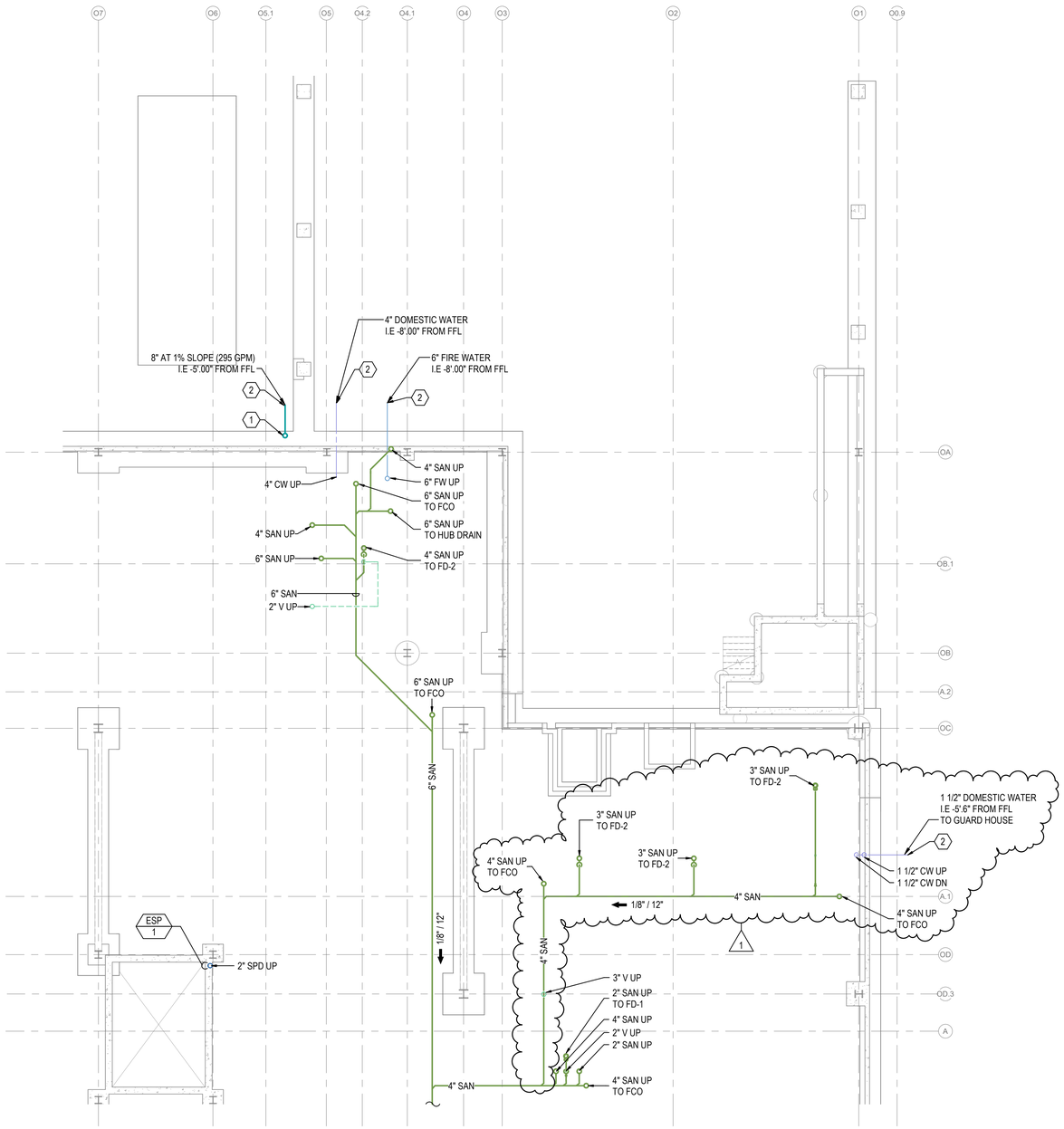
QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S Q N L J G E C A
T R P M K H F D B
N

PLUMBING FLOOR PLAN - LEVEL ONE UG - OVERALL

JOB 24464.0000
DATE 05.30.25
SHEET
P02-00



1 LEVEL 1 UG PLUMBING PLAN - A
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80 PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING TO BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSISTION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.
2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX
75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES		
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS		
A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED
WILLIAM B. HODGES
47948
PROFESSIONAL ENGINEER
05.30.25

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

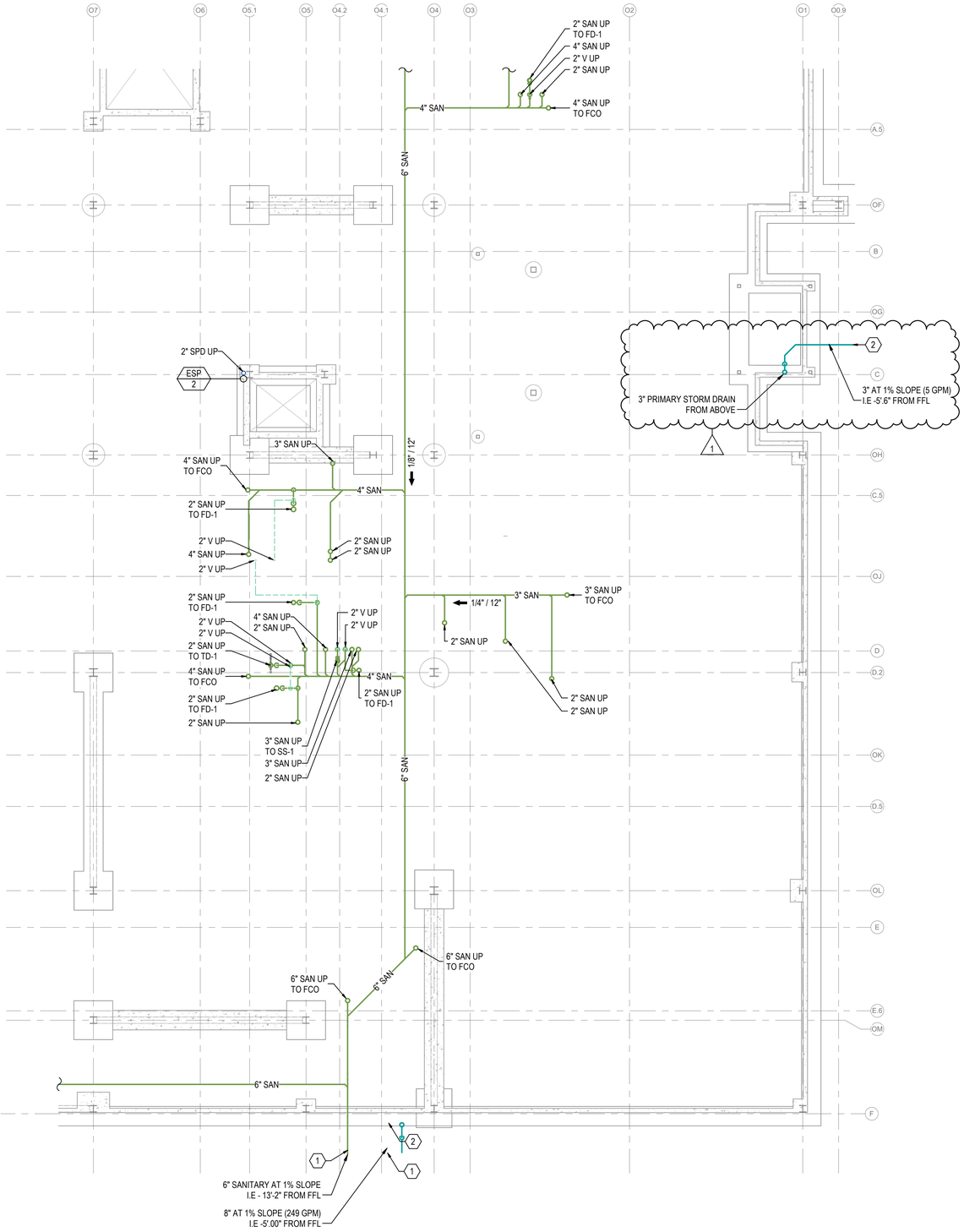
N

PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT A

JOB 24464.0000
DATE 05.30.25
SHEET

P02-00A

5/30/2025 8:51:57 AM P02-00A PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT A



1 LEVEL 1 UG PLUMBING PLAN - B
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80 PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING TO BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSISTION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.
2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED WILLIAM B. HODGES PROFESSIONAL ENGINEER 47948
05.30.25

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

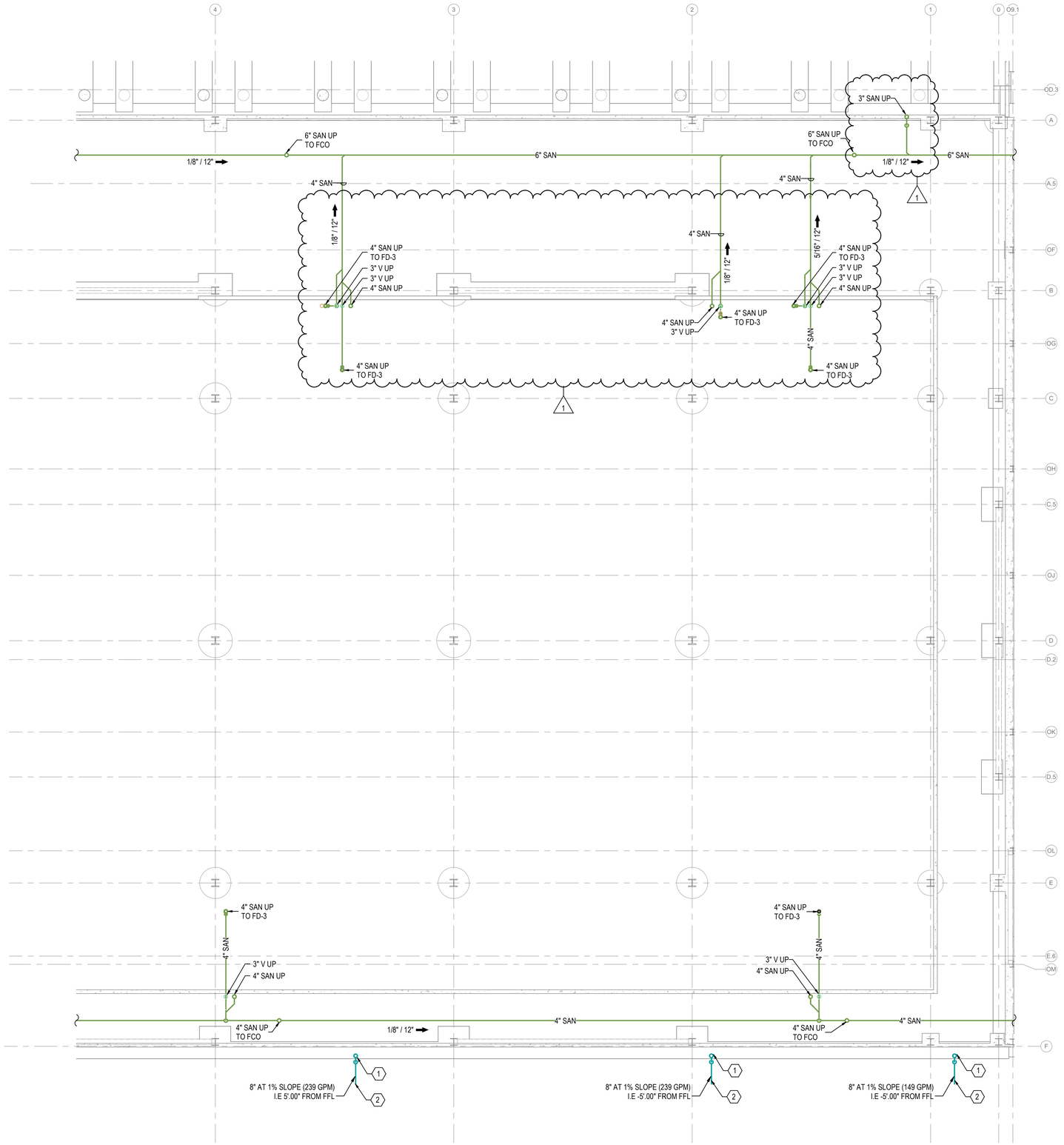
N

PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT B

JOB 24464.0000
DATE 05.30.25
SHEET

P02-00B

5/30/2025 8:51:59 AM P02-00B PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT B



1 LEVEL 1 UG PLUMBING PLAN - F
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSITION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.
2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES		
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS		
A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED
WILLIAM B. HODGES
47948
PROFESSIONAL ENGINEER
05.30.25

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

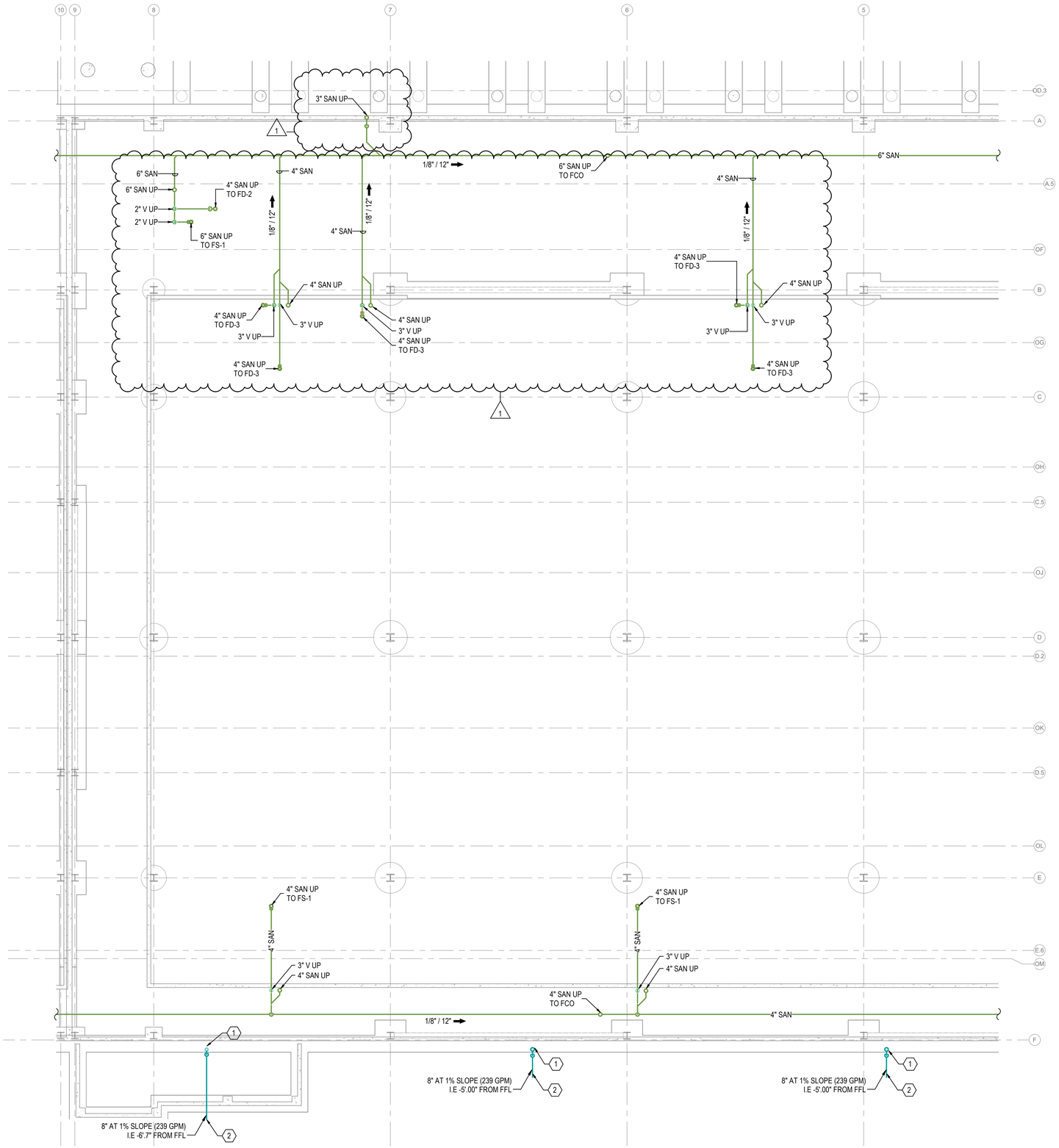
N

PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT F

JOB 24464.0000
DATE 05.30.25
SHEET

P02-00F

5/30/2025 8:52:04 AM P02-00F PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT F



1 LEVEL 1 UG PLUMBING PLAN - H
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSITION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.
2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES		
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS		
A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED PROFESSIONAL ENGINEER WILLIAM B. HODGSON 47948
05.30.25

Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

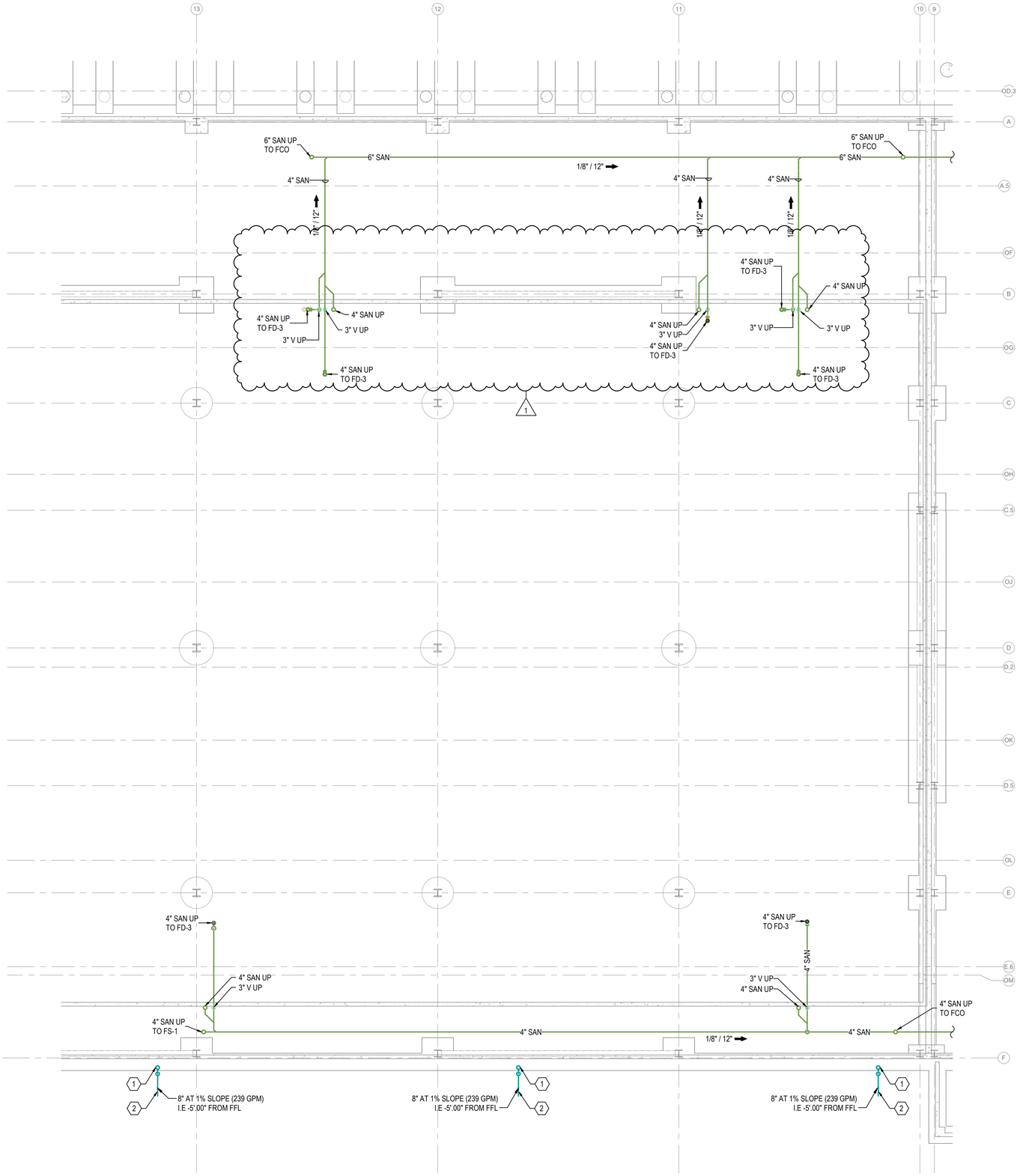
S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

N

PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT H

JOB 24464.0000
DATE 05.30.25
SHEET P02-00H

5/30/2025 8:52:06 AM P02-00H PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT H



1 LEVEL 1 UG PLUMBING PLAN - K
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSITION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.
2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED ARCHITECT WILLIAM B. HODGES 47948 REGISTERED 05.30.25

Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

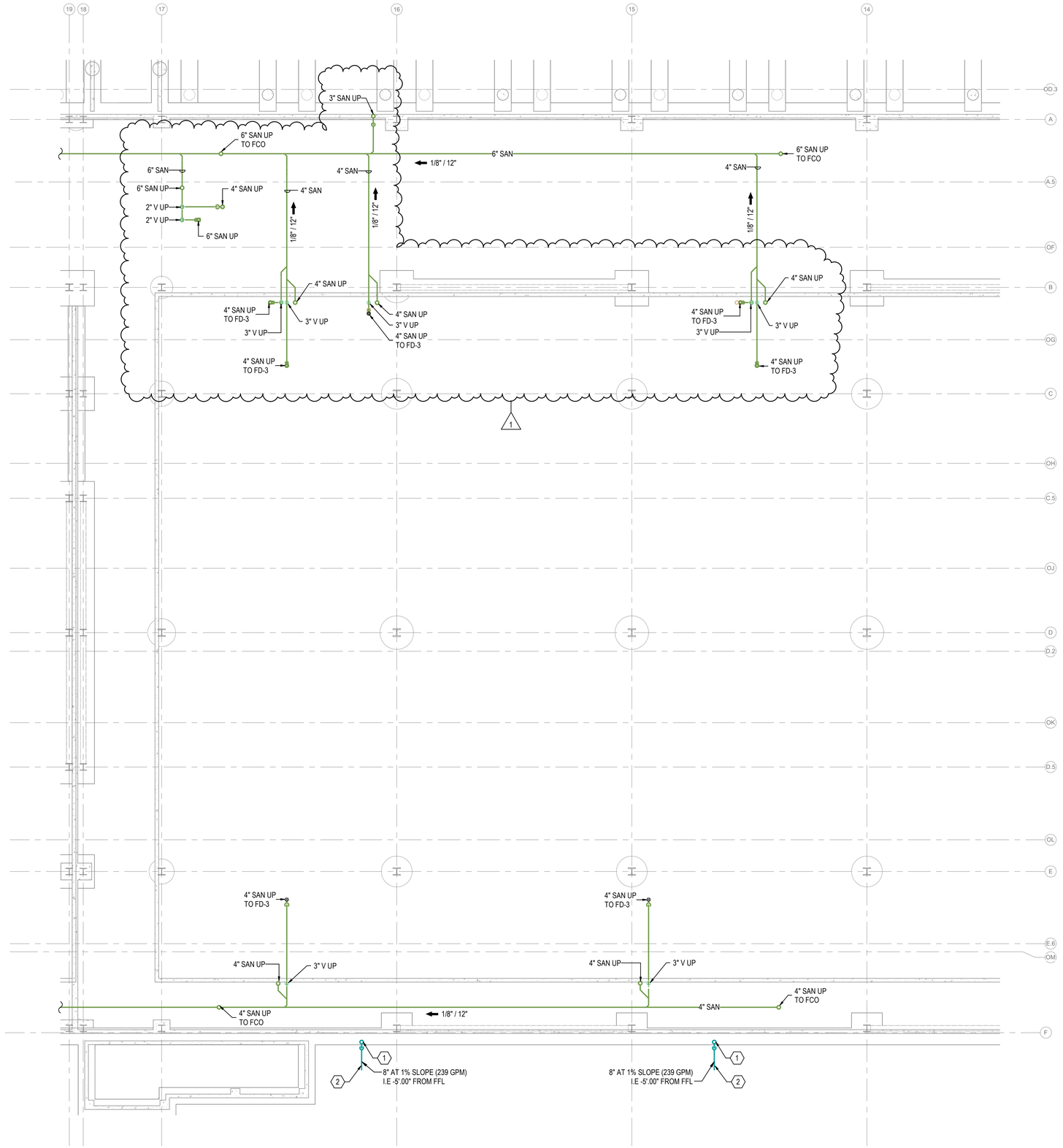
S	Q	N	L	J	G	E	C	A
T	R	P	M	K	H	F	D	B

N

PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT K

JOB 24464.0000
DATE 05.30.25
SHEET P02-00K

5/30/2025 8:52:08 AM P02-00K PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT K



1 LEVEL 1 UG PLUMBING PLAN - M
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSITION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.
2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX
75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED
WILLIAM B. HODGES
47948
PROFESSIONAL ENGINEER
05.30.25

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

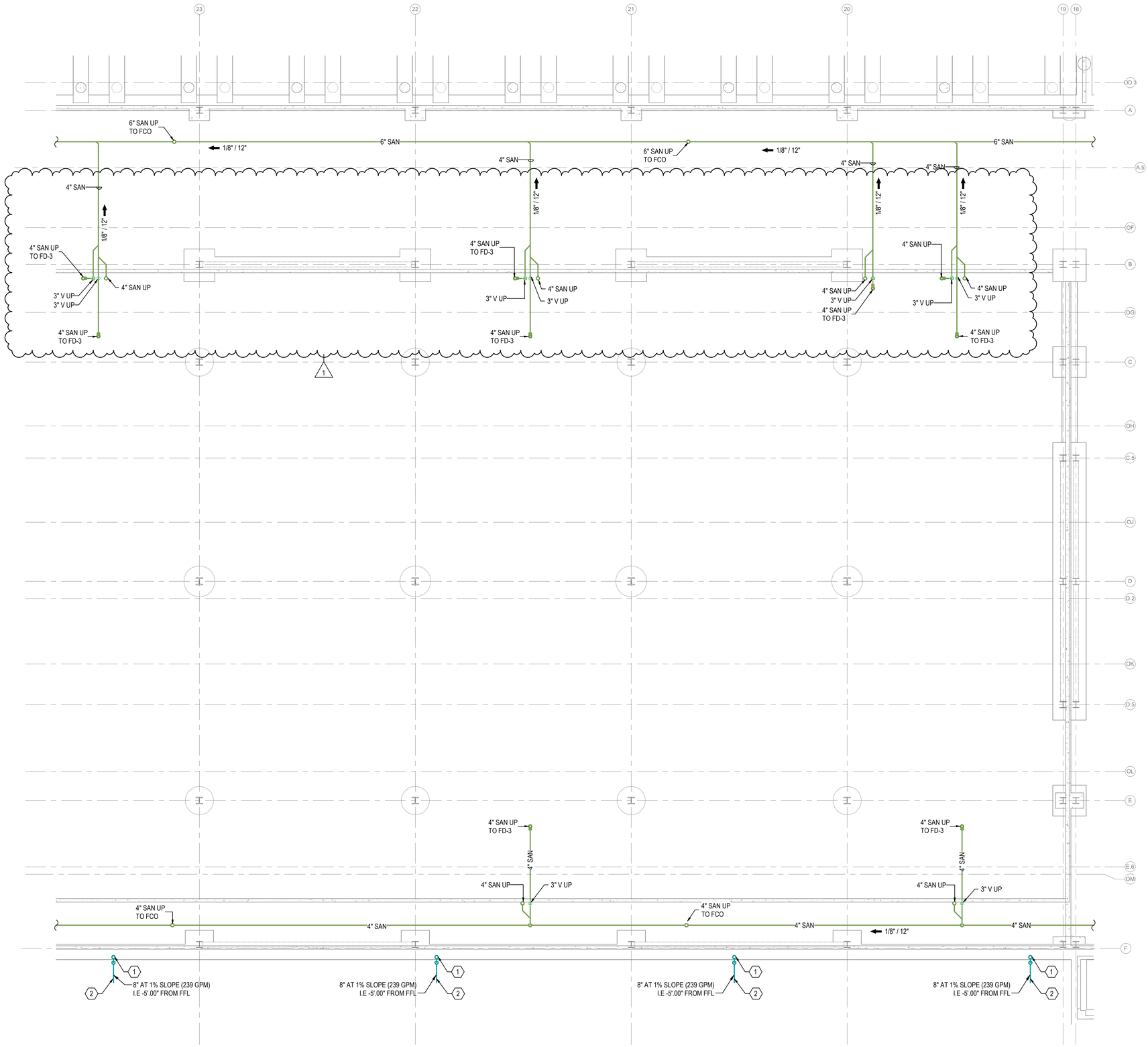
S	Q	N	L	J	G	E	C	A
T	R	P	M	K	H	F	D	B

N

PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT M

JOB 24464.0000
DATE 05.30.25
SHEET

P02-00M



1 LEVEL 1 UG PLUMBING PLAN - P
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSITION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.

2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TCD DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED ARCHITECT WILLIAM B. HODGES 47948 05.30.25

Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S Q N L J G E C A
T R P M K H F D B

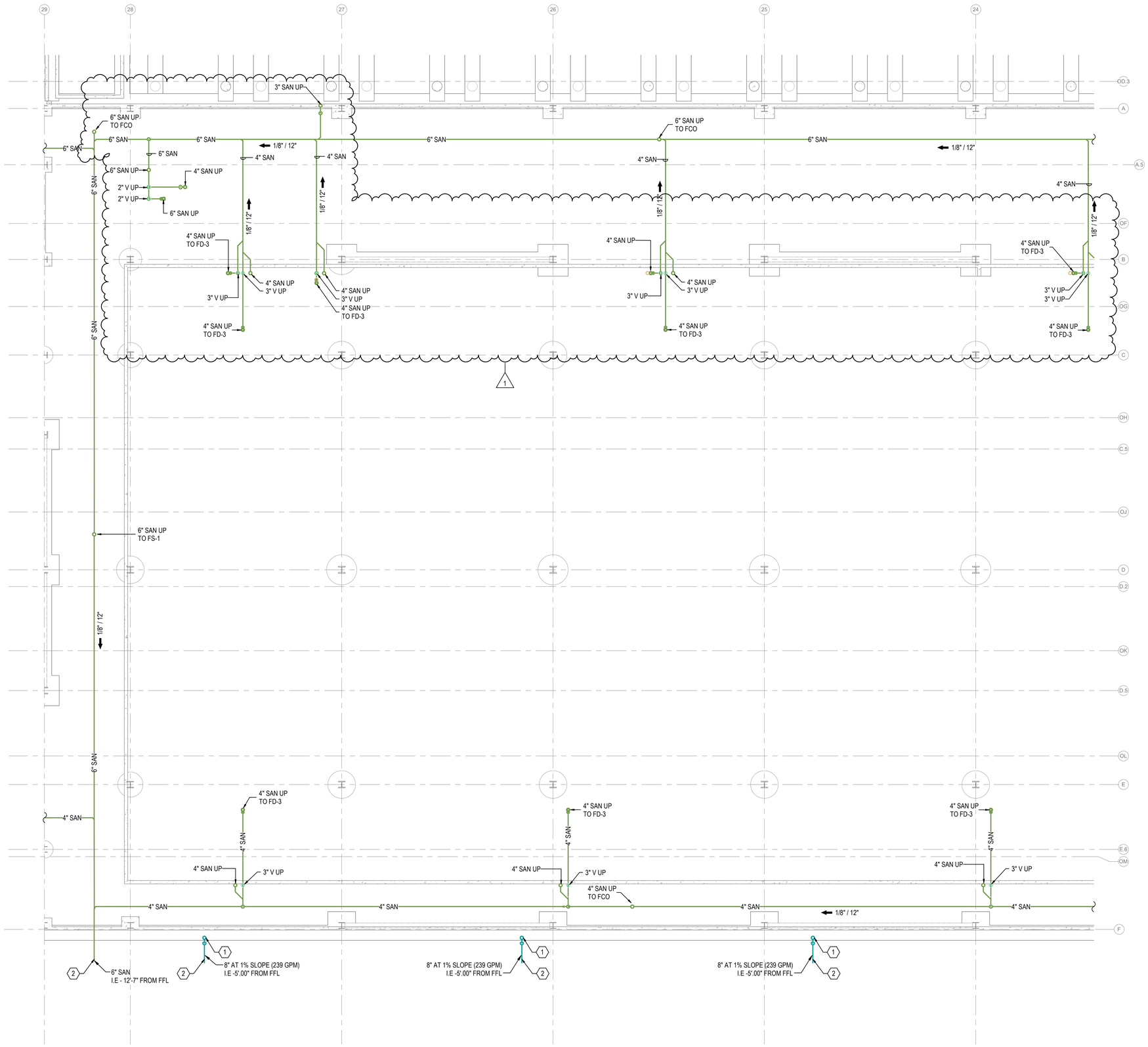
N

PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT P

JOB 24464.0000
DATE 05.30.25
SHEET

P02-00P

5/30/2025 8:52:12 AM P02-00P PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT P



1 LEVEL 1 UG PLUMBING PLAN - R
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSITION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.
2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: ymunoz
Date: Jun 06, 2025
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TCD DESIGN CONSULTING LLC

ISSUES		
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS		
A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED
WILLIAM B. HODGES
47948
PROFESSIONAL ENGINEER
05.30.25

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

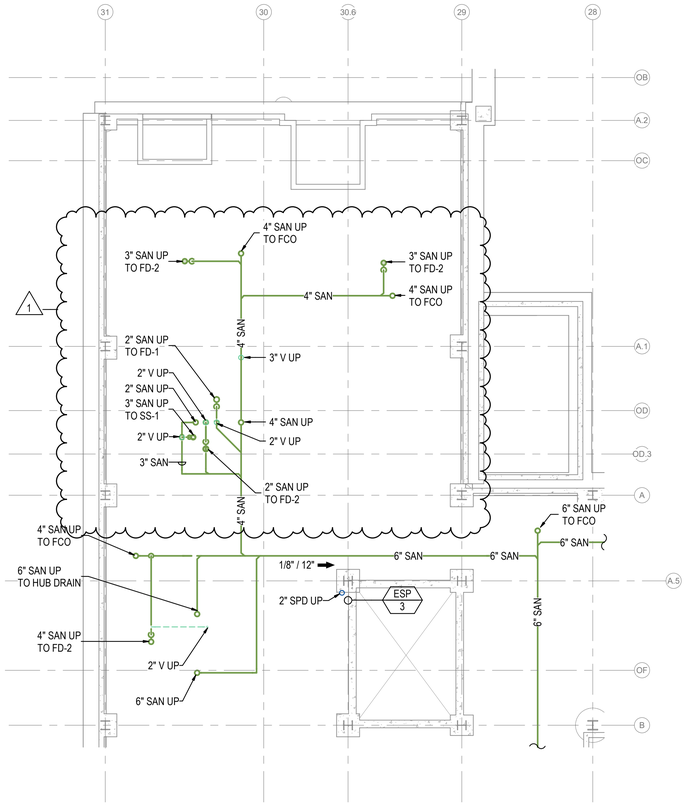
KEYPLAN

S Q N L J G E C A
T R P M K H F D B
N

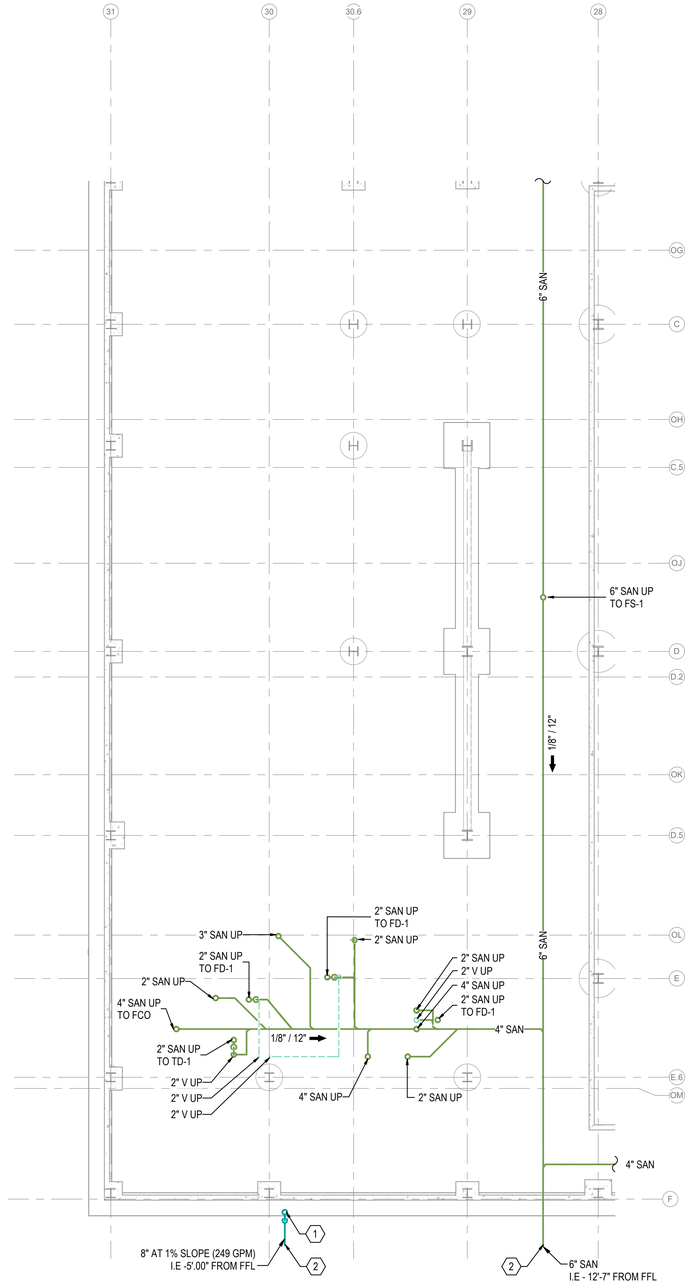
PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT R

JOB 24464.0000
DATE 05.30.25
SHEET P02-00R

5/30/2025 8:52:14 AM P02-00R PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT R



1 LEVEL 1 UG PLUMBING PLAN - S
SCALE: 1/8" = 1'-0"



2 LEVEL 1 UG PLUMBING PLAN - T
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. ALL SANITARY PIPING SHALL BE INSTALLED AT 1/8"/FT SLOPE, UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. PLUMBING CONTRACTOR SHALL CONNECT 8" SCHEDULE 80PVC TO TRANSITION FITTING ON SCUPPER BOX, AND SHALL DROP 8" PRIMARY STORM PIPING BELOW GRADE AND EXTEND 5'-0" OUT FROM BUILDING. INVERT ELEVATION OF PIPING SHALL BE INSTALLED TO RESULT IN PROPER BURIAL DEPTH AND COVER TO COMPLY WITH APPLICABLE CODES. THE CIVIL CONTRACTOR WILL CONNECT TO STORM PIPING AT 5'-0" OUTSIDE OF BUILDING AND EXTEND TO SITE STORM SYSTEMS. INCLUDE ALL NECESSARY HANGERS AND SUPPORTS FOR A COMPLETE INSTALLATION. SCUPPER BOX AND TRANSITION FITTING PROVIDED UNDER GENERAL CONTRACTOR WORK.
2. FOR PIPING CONTINUATIONS OUTSIDE OF BUILDING - REFER TO CIVIL DRAWINGS.

Code violations that are found during inspections are required to be corrected. Permit issuance does not grant approval of a code violation.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *ymunoz*
Date: *Jun 06, 2025*
2015 INTERNATIONAL CODES & 2020 NEC

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TCD DESIGN CONSULTING LLC

ISSUES		
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS		
A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO LICENSED
WILLIAM B. HODGES
47948
PROFESSIONAL ENGINEER
05.30.25

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A
T	R	P	M	K	H	F	D	B

N

PLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT S-T

JOB 24464.0000
DATE 05.30.25
SHEET

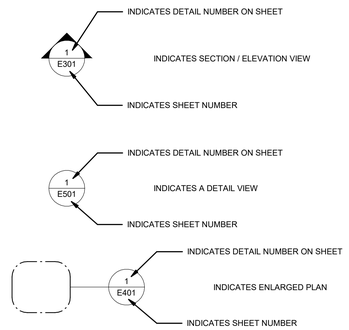
P02-00ST

5/30/2025 8:52:17 AM P02-00STPLUMBING FLOOR PLAN - LEVEL ONE UG - SEGMENT S-T

RSN: 1902240 | PERMIT# 25-2534172 -LT (PLAN REVISION TO PERMIT# 25-2513934 -CM, RSN:1881854)

	QUADRAPLEX RECEPTACLE		DISCONNECT SWITCH - RATING AS NOTED
WC	WATER COOLER - DUPLEX RECEPTACLE		ELECTRICAL PANELBOARD
	DUPLEX RECEPTACLE - MOUNTED 1'-6" ABOVE FINISHED FLOOR	M	MOTOR
2	DOUBLE DUPLEX RECEPTACLE - MOUNTED 1'-6" ABOVE FINISHED FLOOR		MULTI-OUTLET ASSEMBLY (RATING AS NOTED)
USB	DUPLEX RECEPTACLE W/ USB-A & USB-C CONNECTIONS	1	INDICATES NOTES ELSEWHERE
AB	DUPLEX RECEPTACLE ABOVE COUNTER - MOUNTED 1'-6" ABOVE FINISHED FLOOR	∅	PHASE
GFI	DUPLEX GROUND FAULT INTERRUPTER TYPE RECEPTACLE		BUSWAY
TV	TELEVISION POWER OUTLET - 12" BELOW CEILING UNO	T	TRANSFORMER - SIZE AND VOLTAGE AS NOTED
WP	DUPLEX WEATHERPROOF RECEPTACLE		CROSSHATCHING INDICATES EQUIPMENT AND/OR WIRING TO BE RENDERED DEAD AND REMOVED BY EC
T	TWISTLOCK RECEPTACLE - RATING AS SHOWN ON DRAWINGS		SWITCH LEG
IG	DUPLEX ISOLATED GROUND TYPE RECEPTACLE		BRANCH CIRCUIT
	SPECIAL PURPOSE OUTLET - CONFIGURATION TO MATCH EQUIPMENT SUPPLIED		SWITCHED CIRCUIT
	FINAL CONNECTION BY EC TO EQUIPMENT		CONTROL WIRING
J	JUNCTION BOX		HOMERUN TO PANELBOARD - 3 #12-3/4"C UNO
R	RELAY		EXISTING
PP	POWER POLE		FUTURE
M	MANUAL MOTOR SWITCH, ONE POLE FOR EVERY MOTOR PHASE		NEW
	MAGNETIC MOTOR STARTER-RATING AS NOTED		COMBINATION FURNITURE POWER AND TELE/DATA CONNECTION FLOOR BOX (FLUSH IN FLOOR)
VFD	VARIABLE FREQUENCY DRIVE BY EC		DEDICATED COPIER/ PRINTER/ FAX POWER AND TELE/ DATA FLOOR BOX. COORDINATE RECEPTACLE REQUIREMENTS WITH EQUIPMENT SUPPLIER.
	COMBINATION DISCONNECT SWITCH AND STARTER-RATING AS NOTED		

MOD	MOTOR OPERATED DAMPER		GROUNDING - INTERIOR GROUND LOOP
	POWER FLEX CONDUIT FEED TO WORKSTATION - MOUNTED 18" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE		GROUNDING - EQUIPMENT BONDING CONDUCTOR
F	POWER FLEX CONDUIT FEED TO WORKSTATION FROM FLUSH FLOOR BOX		GROUNDING - GROUNDNG CONDUCTOR
P	POWER FLEX CONDUIT FEED TO WORKSTATION - FED FROM FLOOR MOUNTED PEDESTAL		GROUNDING - RF BARRIER
WP	POWER FLEX CONDUIT FEED TO WORKSTATION - FED FROM WALL		
	COMBINATION DUPLEX RECEPTACLE/INFORMATION OUTLET FLUSH IN FLOOR		
	MUSHROOM STYLE HEAD PUSHBUTTON - EMERGENCY FUNCTION AS NOTED		
	GROUND TEST WELL		
	GROUND ROD. 3/4" X 10'-0", COPPER CLAD		
PP	POWER POLE CONNECTION - 8 WIRE CONFIGURATION		
PS	SECURITY OR DOOR HARDWARE POWER SUPPLY CONNECTION. VERIFY TERMINATION WITH VENDOR.		



NO.	TITLE	SCALE
E00-01	SYMBOLS, ABBREVIATIONS AND GENERAL NOTES	NONE
E01-01	POWER SITE PLAN	1" = 40'-0"
E03-11A	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT A	1/8" = 1'-0"
E03-11C	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT C	1/8" = 1'-0"
E03-11D	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT D	1/8" = 1'-0"
E03-11E	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT E	1/8" = 1'-0"
E03-11G	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT G	1/8" = 1'-0"
E03-11J	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT J	1/8" = 1'-0"
E03-11L	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT L	1/8" = 1'-0"
E03-11N	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT N	1/8" = 1'-0"
E03-11Q	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT Q	1/8" = 1'-0"
E03-11ST	ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT ST	1/8" = 1'-0"
E04-01	POWER ENLARGED PLAN - LEVEL ONE	1/8" = 1'-0"
E04-02	POWER ENLARGED PLAN - LEVEL ONE	1/8" = 1'-0"
E05-01	DETAILS	NONE
E06-01	SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (SUBSTATION)	NONE
E06-02	SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (DH1100/2100)	NONE
E06-03	SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (DH1200/2200)	NONE
E06-04	SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (DH1300)	NONE
E06-05	SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (DH2300)	NONE
E07-10	TYPICAL FEEDER SCHEDULE	NONE

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

Code violations that are found during inspection are required to be corrected. Permit issuance does not grant approval of a code violation.

Sheet Number: E00-01
a. Update: Revised sheet list specific to Foundations Permit IFP, minor revisions to
version matrix details, select lighting control symbols

1 POWER SYMBOLS LEGEND

A	AMPERE
AB	ABOVE COUNTER
AC	ALTERNATING CURRENT
AF	AMP FRAME, AMP FUSE
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
AT	AMP TRIP OR AMP TAP
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GAGE
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TV
CKT	CIRCUIT
℄	CENTERLINE
CLG	CEILING
CT	CURRENT TRANSFORMER
CU	COPPER
DIA	DIAMETER
DC	DIRECT CURRENT
EA	EACH
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EX	EXISTING (EXIST)
EWC	ELECTRIC WATER COOLER
FA	FIRE ALARM / FEEDER AMPLIFIER
FDR	FEEDER
FS	FUSIBLE SWITCH
FU	FUSE
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GRD	GROUND
HH	HAND HOLE
HP	HORSEPOWER
HUH	HORIZONTAL UNIT HEATER
HZ	FREQUENCY IN CYCLES PER SECOND
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KVAR	KILOVOLT AMPERES REACTIVE
KW	KILOWATT
KWH	KILOWATT HOURS
MC	METAL CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MCC	MOTOR CONTROL CENTER
MH	MANHOLE
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MOD	MOTOR OPERATED DAMPER
MTD	MOUNTED
NC	NORMALLY CLOSED
NE	NORMAL EMERGENCY
NEC	NATIONAL ELECTRICAL CODE
NEUT	NEUTRAL
NL	NIGHTLIGHT
NF	NON FUSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OCP	OVERCURRENT PROTECTIVE DEVICE
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OL	OVERLOAD ELEMENT
P	POLE(S) OR PILOT
PB	PULLBOX
PF	POWER FACTOR
PL	PILOT LIGHT
PNL	PANELBOARD
PR	PAIR
PRI	PRIMARY
PVC	POLYVINYL CHLORIDE
PT	POTENTIAL TRANSFORMER
R	RELAY
RECP	RECEPTACLE
REV	REVISION
RTU	ROOF TOP UNIT
SEC	SECONDARY
SMR	SURFACE MOUNTED RACEWAY
SPECS	SPECIFICATIONS
STR	STARTER
SW	SWITCH
SWD	SWITCHBOARD
SWR	SWITCHGEAR
TEMP	TEMPORARY
TSP	TWISTED SHIELDED PAIR
TYP	TYPICAL
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT
W	WIRE
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

2 SECTION AND ELEVATION MARKS

	INVERTER
	DISCONNECT SWITCH
	DRAWOUT CIRCUIT BREAKER ABOVE 600V
	DRAWOUT AIR CIRCUIT BREAKER 600V AND LOWER
< >	PROVISIONAL SPACE
	FUSED SWITCH ABOVE 600V
	FUSED SWITCH 600V AND LOWER
	MOLDED CASE AIR CIRCUIT BREAKER 600V & LOWER
	TRANSFORMER
	POTENTIAL TRANSFORMER
	CURRENT TRANSFORMER - SINGLE CONDUCTOR
	LIGHTNING ARRESTER WITH GROUND
S.A.	SURGE ARRESTOR
K	KIRK KEY
SKRU	SOLENOID KEY RELEASE UNIT
F	FREQUENCY METER
V	VOLTMETER
VS	VOLTMETER SWITCH
A	AMMETER
AS	AMMETER SWITCH
51 50	INSTANTANEOUS/TIME OVERCURRENT RELAY
51N 50N	INSTANTANEOUS/TIME GROUND FAULT RELAY RESIDUAL CT CONNECTION
27	UNDERVOLTAGE RELAY
86	LOCKOUT RELAY
G	GENERATOR
XXXX	FEEDER SCHEDULE TAG
	EPMS EQUIPMENT CONNECTION
	BREAKER TRIP UNIT
GW	SERIAL TO ETHERNET GATEWAY
PQM	POWER QUALITY MONITOR
PQMT	POWER QUALITY MONITOR WITH TRANSIENT CAPTURE
VR	VOLTAGE RELAY

4 ELECTRICAL ABBREVIATIONS

FORMAT

GROUP 1 SITE		GROUP 2 BUILDING		GROUP 3 EQUIPMENT		GROUP 4 SYSTEM		GROUP 5 SEQUENCE
XXXX	—	XXX	—	XXXX	—	XXXX	—	XX

XXXX-XXX EXAMPLES

XXXX-XXX-UTL-A (UTILITY FEED A)
XXXX-XXX-UTL-B (UTILITY FEED B)
XXXX-XXX-MVG-01 (MEDIUM VOLTAGE GEAR 01)
XXXX-XXX-SUB-A11 (SUBSTATION A1)
XXXX-XXX-SUB-B11 (SUBSTATION B1)
XXXX-XXX-SUB-A1-2 (SUBSTATION A1 FEEDER BREAKER #2)
XXXX-XXX-UPS-A11 (UPS SYSTEM A11)
XXXX-XXX-UPS-A11-3 (UPS SYSTEM A11 - UNIT #3)
XXXX-XXX-COD-A11 (COD BOARD A11)
XXXX-XXX-COD-A11-1 (COD BOARD A11 - BREAKER #1)
XXXX-XXX-STS-A11R11-03 (3RD STS UNIT FED FROM CODs A11 AND R11)
XXXX-XXX-PDU-A11R11-03 (PDU UNIT FED FROM STS-A11R11-03)
XXXX-XXX-PNL-A11R11-03-A (PANEL A FED FROM PDU-A11R11-03)
XXXX-XXX-CKT-A11R11-03-A-01,03,05 (3-PHASE CIRCUIT)

5 LIGHTING & LIGHTING CONTROL SYMBOLS LEGEND

	LIGHTING FIXTURE - RECESSED MOUNTED
	EMERGENCY LIGHTING FIXTURE - RECESSED MOUNTED
	LIGHTING FIXTURE - SURFACE MOUNTED
	LIGHTING FIXTURE - PENDANT MOUNTED
	LIGHTING FIXTURE - WALL MOUNTED
	LIGHTING FIXTURE STRIP
	EMERGENCY LIGHTING FIXTURE STRIP
	RECESSED DOWN LIGHT
	LIGHTING FIXTURE - WALL MOUNTED
	FLOOD TYPE LIGHTING FIXTURE OR TRACK HEAD
	EMERGENCY BATTERY PACK LIGHTING FIXTURE - WALL MOUNTED
	PENDANT MOUNTED LIGHTING FIXTURE
	PENDANT MOUNTED LIGHTING FIXTURE W/ QUARTZ RESTRIKE
	PENDANT MOUNTED LIGHTING FIXTURE W/ EMERGENCY ONLY QUARTZ SOCKET

NOTE
DESIGNATION INDICATES LIGHTING FIXTURE TYPE.
REFER TO SPECIFICATIONS FOR LIGHTING FIXTURE SCHEDULE.

	EXIT SIGN - WALL MOUNTED - SINGLE FACE
	EXIT SIGN - WALL MOUNTED - DOUBLE FACE
	EXIT SIGN - CEILING MOUNTED - SINGLE FACE
	EXIT SIGN - CEILING MOUNTED - DOUBLE FACE

NOTE
SEE FLOOR PLANS FOR EXIT SIGNS REQUIRING DIRECTIONAL ARROWS.

$	SINGLE POLE SWITCH
$OS	SENSOR SWITCH WSX (PIR LINE VOLTAGE WALL SWITCH OCCUPANCY SENSOR).
$3	3-WAY SWITCH
$4	4-WAY SWITCH
$K	KEY OPERATED SWITCH
$D	IN WALL-TYPE DIMMER
$OSD	PIR LINE VOLTAGE SWITCH VACANCY SENSOR WITH DIMMING CAPABILITY
$VSD	VACANCY SWITCH WITH DIMMING CAPABILITY
$WP	WEATHERPROOF SWITCH
$VS	SENSOR SWITCH WSX (PIR LINE VOLTAGE WALL SWITCH VACANCY SENSOR)
$LV	DATALINE SWITCH
$3LV	DATALINE SWITCH 3 WAY
OS1	SENSOR SWITCH CM-11 (PASSIVE INFRARED LOW VOLTAGE CEILING OCCUPANCY SENSOR FOR HALLWAYS)
OS2	SENSOR SWITCH CM-10 (PASSIVE INFRARED LOW VOLTAGE CEILING OCCUPANCY SENSOR)
OS3	SENSOR SWITCH CM-9 (PIR LOW VOLTAGE CEILING OCCUPANCY SENSOR)
OS4	WATTSTOPPER LMDC-100 (PIR LOW VOLTAGE CEILING OCCUPANCY SENSOR) OR APPROVED EQUAL
PP	SENSOR SWITCH PP-20 (POWER PACK FOR LOW VOLTAGE OCCUPANCY SENSORS)

NOTE: ULTRASONIC SENSING TECHNOLOGY SHALL NOT BE UTILIZED WITHIN 10'-0" OF ANY PROPOSED FUTURE SECURE BOUNDARY. DUAL-TECH SENSORS RECOMMENDED TO BE USED OTHERWISE.

6 ELECTRICAL SINGLE LINE SYMBOLS LEGEND

CODES AND AMENDMENTS

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE
- 2023 NFPA 70, NATIONAL ELECTRICAL CODE (NEC)
- LOCAL FIRE DEPARTMENT REQUIREMENTS
- COLORADO ACCESSIBILITY CODE 2017/ANSI A117.1
- NATIONAL FIRE PROTECTION ASSOCIATION CODES
- ENGINEER OF RECORD SHALL INCLUDE ALL INTERNATIONAL, STATE AND LOCAL CODES APPLICABLE BASED ON LOCATION AND JURISDICTION OF BUILDING SITE. ENGINEER OF RECORD SHALL USE THE LATEST VERSIONS OF CODES ADOPTED BY THE JURISDICTION OF BUILDING SITE.

7 ELECTRICAL DRAWING LIST

1. THIS SCHEDULE IS A STANDARD SCHEDULE. CERTAIN SYMBOLS & ABBREVIATIONS INDICATED ON THIS SCHEDULE MAY NOT APPEAR ON THE DRAWINGS. EQUIPMENT SYMBOLS SHOWN DASHED ON THE DRAWINGS INDICATE EXISTING EQUIPMENT.
2. FOR ADDITIONAL INFORMATION, COORDINATION AND WORK REFER TO TELECOMMUNICATION DRAWINGS.
3. THE EC SHALL COORDINATE EXACT LOCATION OF FLOOR BOXES WITH THE USING AGENCY PRIOR TO INSTALLATION.
4. EQUIPMENT SYMBOLS SHOWN DASHED ON THE DRAWINGS INDICATE EXISTING EQUIPMENT OR FUTURE EQUIPMENT.
5. REFER TO ARCHITECTURAL DETAILS AND REFLECTED CEILING DRAWINGS FOR LOCATION AND COORDINATION OF LIGHTING FIXTURES IN CEILING CONSTRUCTION.

CAUTION NOTICE TO CONTRACTOR:

- THE ENGINEER OF RECORD SHALL REVIEW THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND INCORPORATE INTO THE CONSTRUCTION DOCUMENTS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE ENGINEER OF RECORD SHALL INVESTIGATE THE LOCATION OF THE PROPOSED UTILITIES TO CONFIRM COMPLIANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND ALL APPLICABLE CODES. UTILITY FEEDS TO THE FACILITY SHALL BE DIVERSE PATHS AS REQUIRED AND OUTLINED WITHIN THE OPR DOCUMENT.
- THE CONTRACTOR SHALL CONFIRM ALL FINAL CONNECTION POINTS TO EXISTING UTILITIES.
- THIS SITE CONTAINS BOTH UTILITY AND OWNER UNDERGROUND UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL EXCAVATING ACTIVITIES WITH BOTH OWNER AND UTILITY.

QTS Freedom Standard - Version Matrix
Project: DEN1-DC2 V3.0-rev3

Design Deliverable:
QTS Design Standards will be utilized as the Basis Of Design for the Data Center Building.
Design Consultant team to notate Version of QTS Design Standards.

Design Discipline	QTS Design Standard		
	Design...	DD Drawing Set	Reference File
Civil	V3.0	N/A	
General	V3.0	V3.0	
Structural	V3.0	V3.0	LC BIM MODEL
Architectural	V3.0	V3.0	LC BIM MODEL
Fire Alarm	V3.0	V3.0	
Fire Protection	V3.0	V3.0	
Plumbing	V3.0	V3.0	
Process (I&C)	See Below	V3.0	LC BIM MODEL
Mechanical	V3.0	V3.0	LC BIM MODEL
Electrical	V3.0	V3.0	LC BIM MODEL
Technology (Telecom)	V3.0	V3.0	
Audio Visual	N/A	V3.0	
Security	V3.0	V3.0	
Interior Standards	V3.0	See Architectural	3.0-rev1
Signage			INTrev4...
SDIs	N/A	N/A	SDI-018(v3.0) thru SDI-25.03.04
OFCI Catalog	V4.0		
SOO Catalog	V2.0		

Design Discipline	Q-Systems Design Standard BODs Version
Data Telecom BOD	Freedom Standard - Data Telecom - 04.14.2024
Physical Security BOD	Freedom Standard - Security Systems - 05.10.2024
DCIM - BMS BOD	Freedom Standard - BMS Content Consolidation - 09.16.2024
DCIM - EPMS BOD	Freedom Standard - EPMS Content Consolidation - 09.16.2024
Federal BOD	Federal Standard - V1.0

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

8 ELECTRICAL EQUIPMENT NAMING STANDARD

9 VOLTAGE DROP REQUIREMENTS

VOLTAGE DROP NOTE:

THE FOLLOWING LIST APPLIES TO ALL NEW 20A BRANCH WIRING PROVIDED UNDER THIS CONTRACT. LISTS INDICATED THE NECESSARY GAUGE OF CONDUCTORS NECESSARY FOR BRANCH CIRCUITS ONE WAY FROM PANEL TO LAST OUTLET OR LIGHTING FIXTURE ON THE CIRCUIT:

120/208V CIRCUITS	WIRE SIZE	277V CIRCUITS
• 0-65 FEET	No. 12 AWG	0-150 FEET
• 66-145 FEET	No. 10 AWG	151-250 FEET
• 146-160 FEET	No. 8 AWG	251-375 FEET

10 CODES

11 ELECTRICAL GENERAL NOTES

12 DESIGN STANDARDS

5/30/2025 1:48:03 PM E00-01 SYMBOLS, ABBREVIATIONS AND GENERAL NOTES

CORGAN
401 N. Houston Street Dallas, TX
75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TLD DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

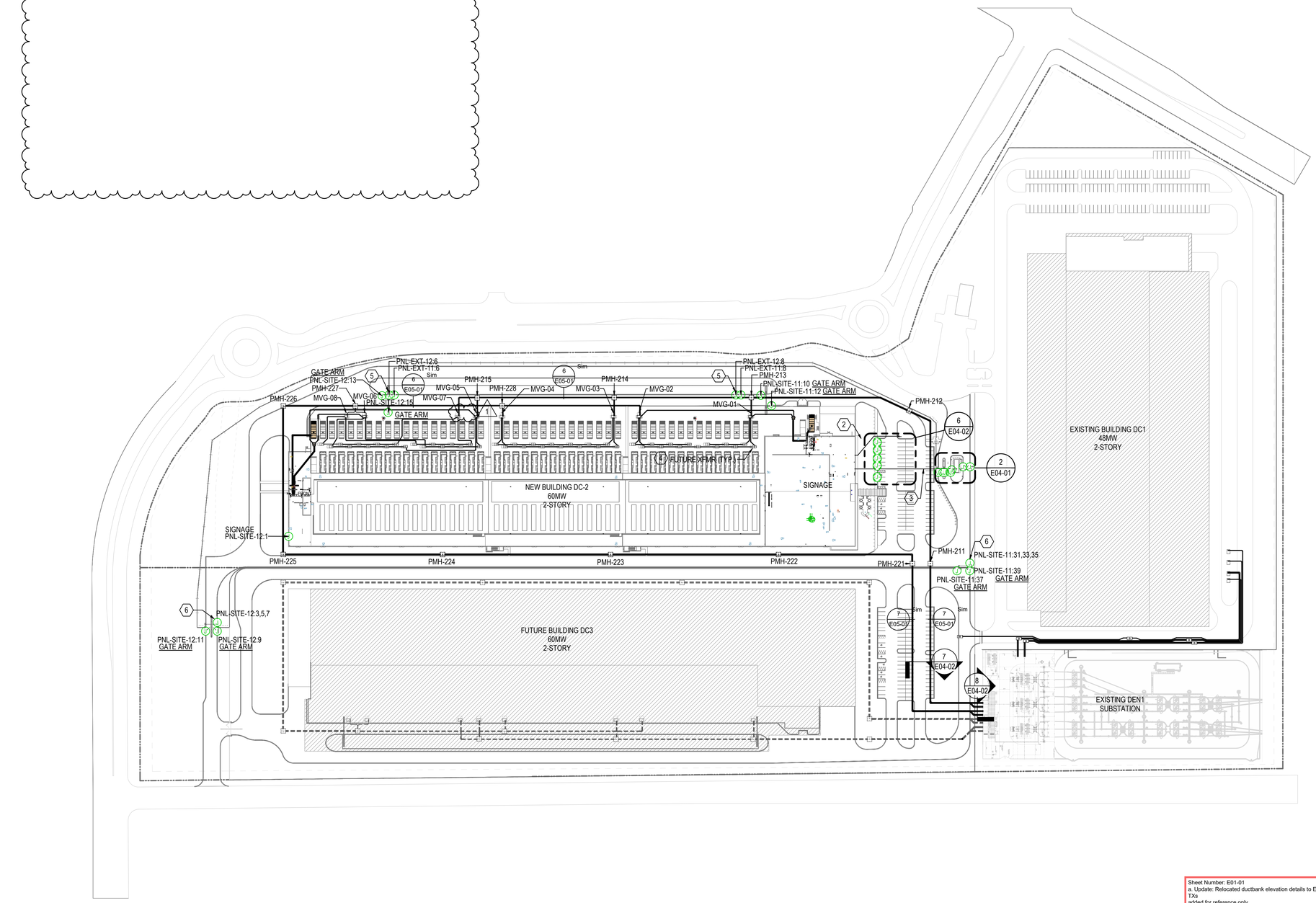
Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

SYMBOLS, ABBREVIATIONS AND GENERAL NOTES

JOB 24464.0000
DATE 05.30.25
SHEET
E00-01

Only highlighted or clouded revisions are approved on this review. All previous comments apply.



1 LEVEL 1 POWER SITE PLAN
SCALE: 1" = 100'-0"

Sheet Number: E01-01
a. Update: Relocated ductbank elevation details to E04-02. Future generators/ TXs
added for reference only.

SHEET NOTES:

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. COORDINATE ALL CONDUIT ROOF PENETRATIONS WITH ROOF DRAWINGS.
C. COORDINATE STUB UP LOCATIONS WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
D. UNDERGROUND DUCT BANKS OUTSIDE OF THE BUILDING SHALL BE INSTALLED AS SHALLOW AS POSSIBLE, MINIMUM 30" COVER. COORDINATE MAXIMUM ALLOWED DEPTHS AND INFILL REQUIREMENTS WITH E5 SERIES.
E. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
F. COORDINATE VAULT QUANTITY AND LOCATIONS WITH CABLING/PULL CALCULATIONS AND CONTRACTOR SUBMITTALS.
G. REFER TO TELECOM DRAWINGS FOR COMMUNICATIONS SITE PLAN.
H. ALL ROUTING OF UNDERGROUND FEEDERS SHALL BE COORDINATED WITH ALL OTHER UTILITIES.
I. ALL LOCATIONS AND ROUTING OF ELECTRICAL UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS, CONDUIT, ROUTING, AND ELEVATIONS WITH ALL TRADES INCLUDING CIVIL DRAWINGS SO THAT OTHER UTILITIES WILL PASS BELOW ELECTRICAL DUCT BANK AND NOTIFY ENGINEER OF ANY DISCREPANCIES ENCOUNTERED.
J. MANHOLES AND DUCTBANK ASSOCIATED WITH BUILDING DC3 IS FUTURE.
K. CABLE BUS ROUTING IS DIAGRAMMATIC AND SHALL BE COORDINATED WITH MANUFACTURER. PROVIDE SHOP DRAWINGS FOR ENGINEERING REVIEW AND APPROVAL PRIOR TO INSTALLATION.
L. MAXIMUM DISTANCE BETWEEN VAULTS FOR UNDERGROUND MEDIUM VOLTAGE FEEDERS SHALL BE 450 FEET.

KEYNOTES:

1. PROVIDE CONNECTION TO DUAL EV CHARGING STATION - (2)1"C.-2#8 & 1#10 GND.
2. PROVIDE (1) 2 1/2"C + (1) SPARE 2 1/2"C FOR POWER TO EV TRANSFORMER. CONDUIT SHALL STUB UP WITHIN THE BUILDING AND ROUTE OVERHEAD BACK TO THE HOUSE ELECTRICAL ROOM.
3. PROVIDE (1) 1"C + (1) SPARE 1"C FOR POWER TO GUARD HOUSE. CONDUIT SHALL STUB UP WITHIN THE BUILDING AND ROUTE OVERHEAD BACK TO THE HOUSE ELECTRICAL ROOM.
4. PROVIDE TRANSFORMER SLAB BOX WITH CONDUIT STUB-UPS AS INDICATED ON SINGLE LINE. PROVIDE VOID SPACE FOR PRIMARY CONDUIT TERMINATION IN ACCORDANCE WITH NEC REQUIREMENTS FOR WIRE BENDING SPACE.
5. PROVIDE DUAL REDUNDANT 120V/20A FEEDS FOR NEW EXTERIOR SECURITY PANEL. COORDINATE FINAL LOCATION WITH SECURITY DRAWINGS AND INSTALLER.
6. PROVIDE POWER CONNECTION TO GATE ARM - 1"C.-3#8 & 1#10 GND.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

	ISSUES	
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

	REVISIONS	
A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

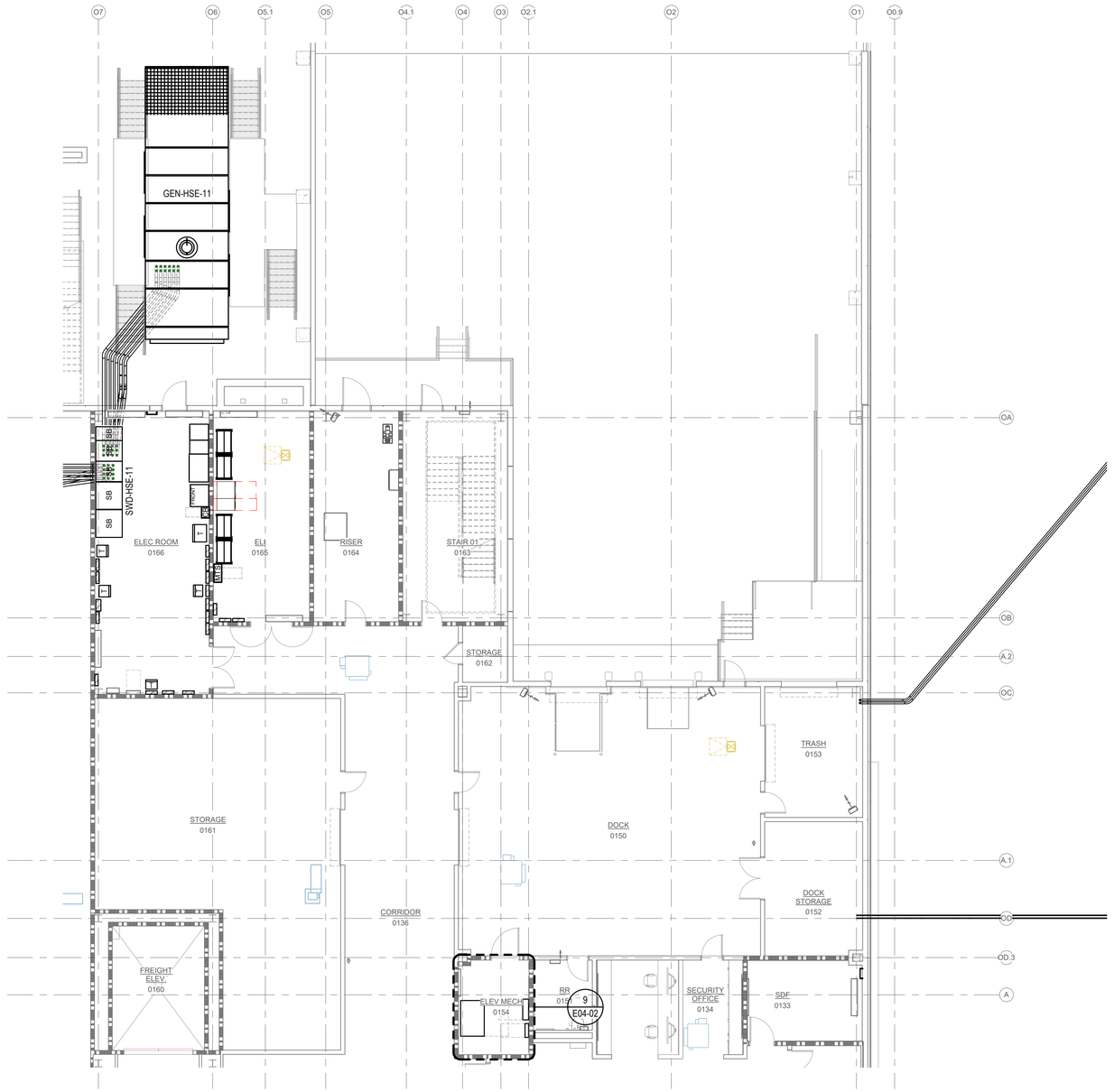
KEYPLAN

S Q N L J G E C A
T R P M K H F D B
N

POWER SITE PLAN

JOB 24464.0000
DATE 05.30.25
SHEET E01-01

5/30/2025 1:48:45 PM E01-01 POWER SITE PLAN



1 LEVEL 1 ROUTING PLAN - A
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TLD DESIGN CONSULTING LLC

ISSUES		
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS		
A	03.28.25	ADDENDUM 1

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT A

JOB 24464.0000
DATE 05.30.25
SHEET

E03-11A

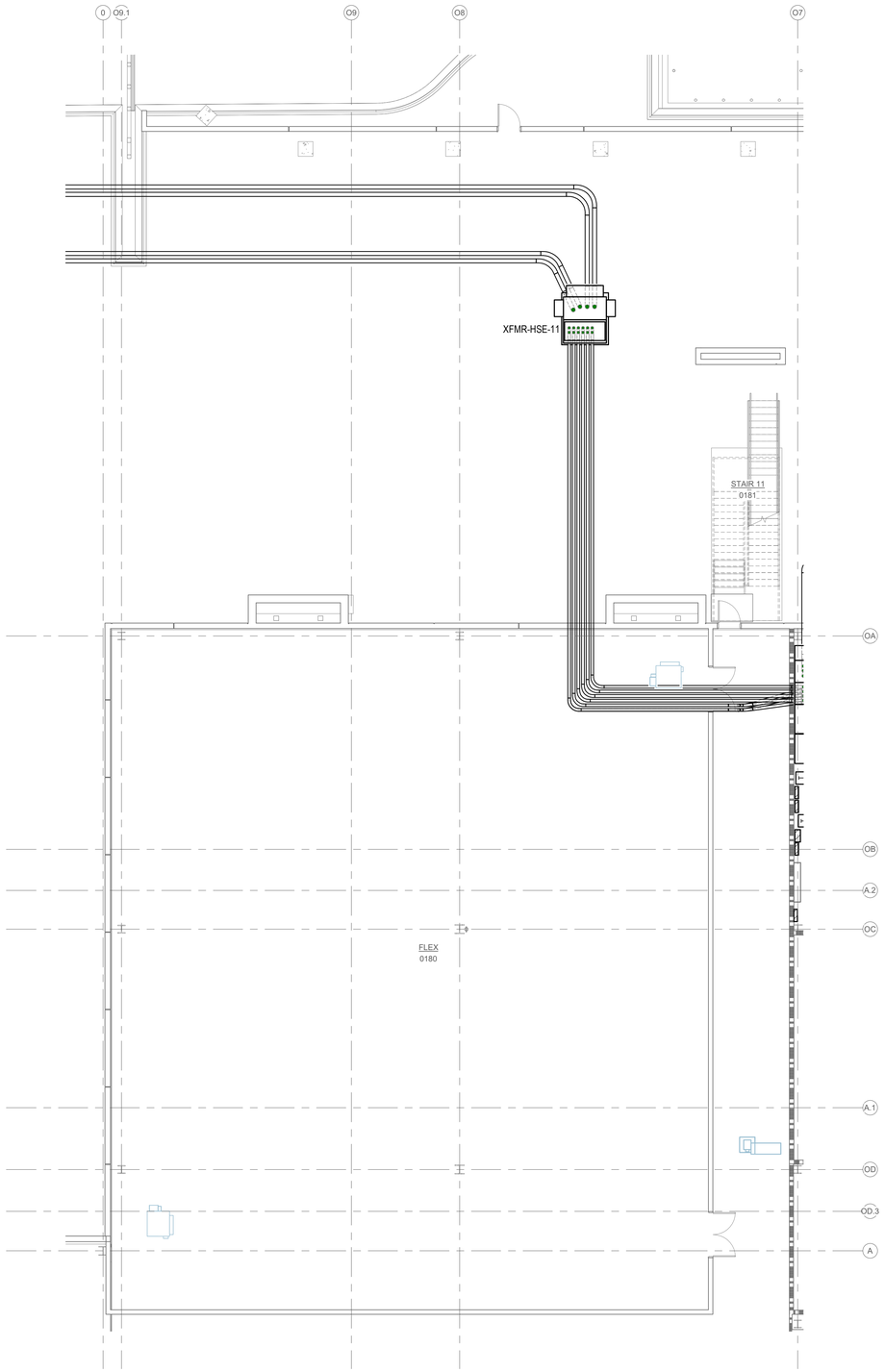
City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*

RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

5/30/2025 1:56:11 PM E03-11A ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT A



1 LEVEL 1 ROUTING PLAN - C
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*

RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

5/30/2025 1:56:17 PM E03-11C ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT C

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TLD DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

COLORADO REGISTERED JAMES SCOTT CORE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

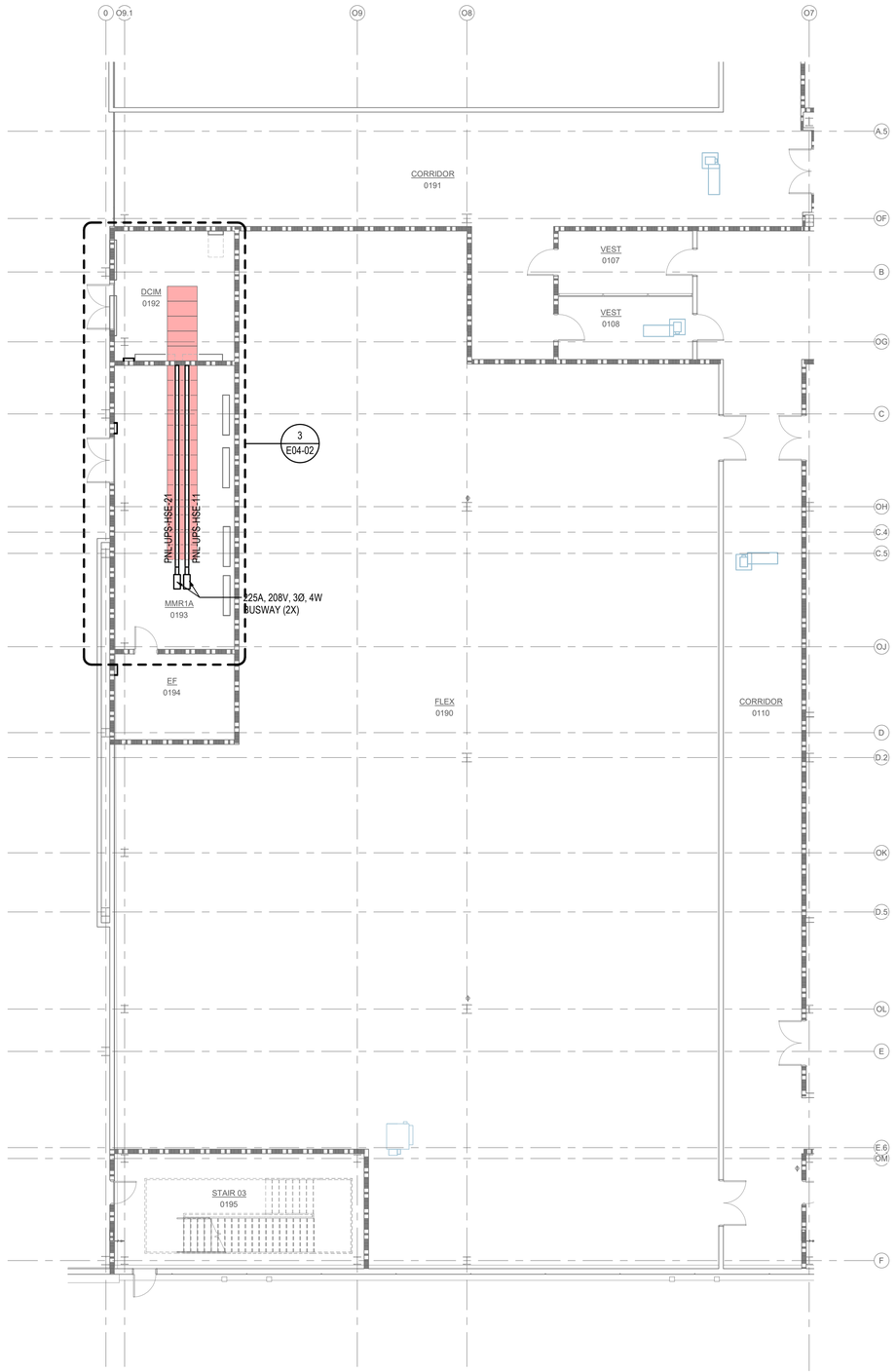
S	Q	N	L	J	G	E	C	A
T	R	P	M	K	H	F	D	B

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT C

JOB 24464.0000
DATE 05.30.25
SHEET

E03-11C



1 LEVEL 1 ROUTING PLAN - D
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

CORGAN
401 N. Houston Street Dallas, TX
75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT D

JOB 24464.0000
DATE 05.30.25
SHEET E03-11D

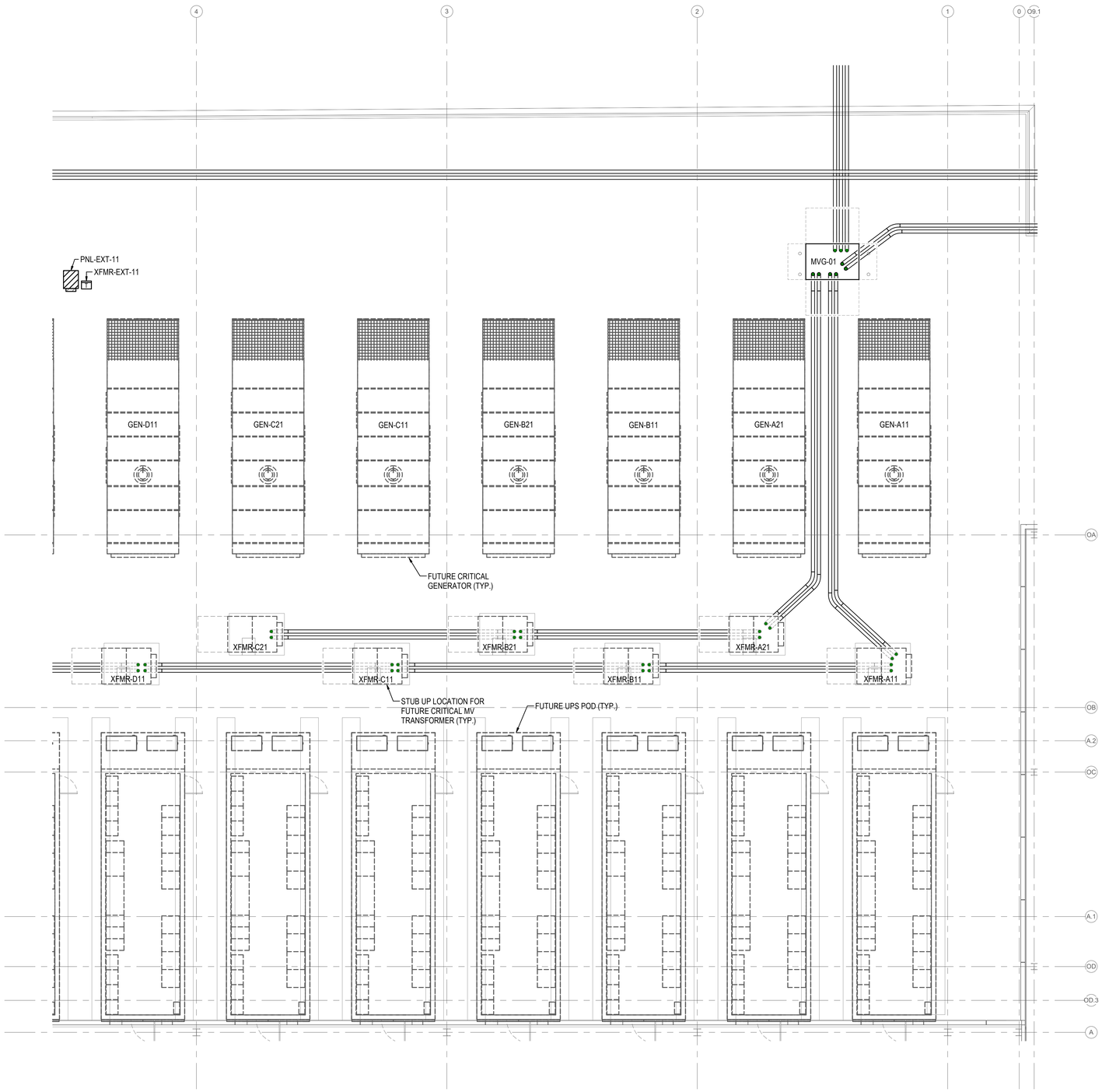
City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

5/30/2025 1:56:24 PM E03-11D ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT D



1 LEVEL 1 ROUTING PLAN - E
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*

RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TLD DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

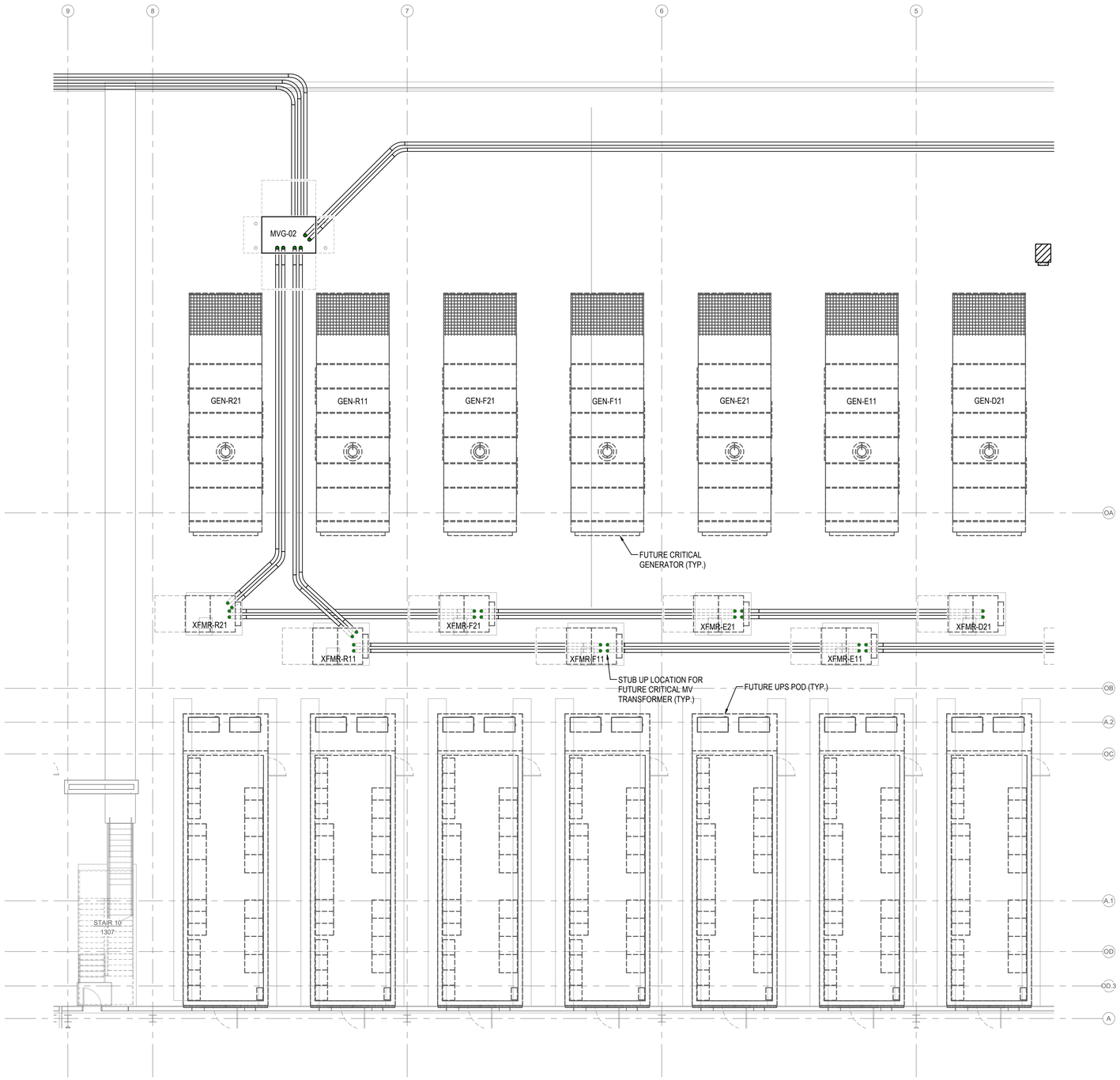
S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT E

JOB 24464.0000
DATE 05.30.25
SHEET E03-11E

5/30/2025 1:56:32 PM E03-11E ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT E



1 LEVEL 1 ROUTING PLAN - G
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT G

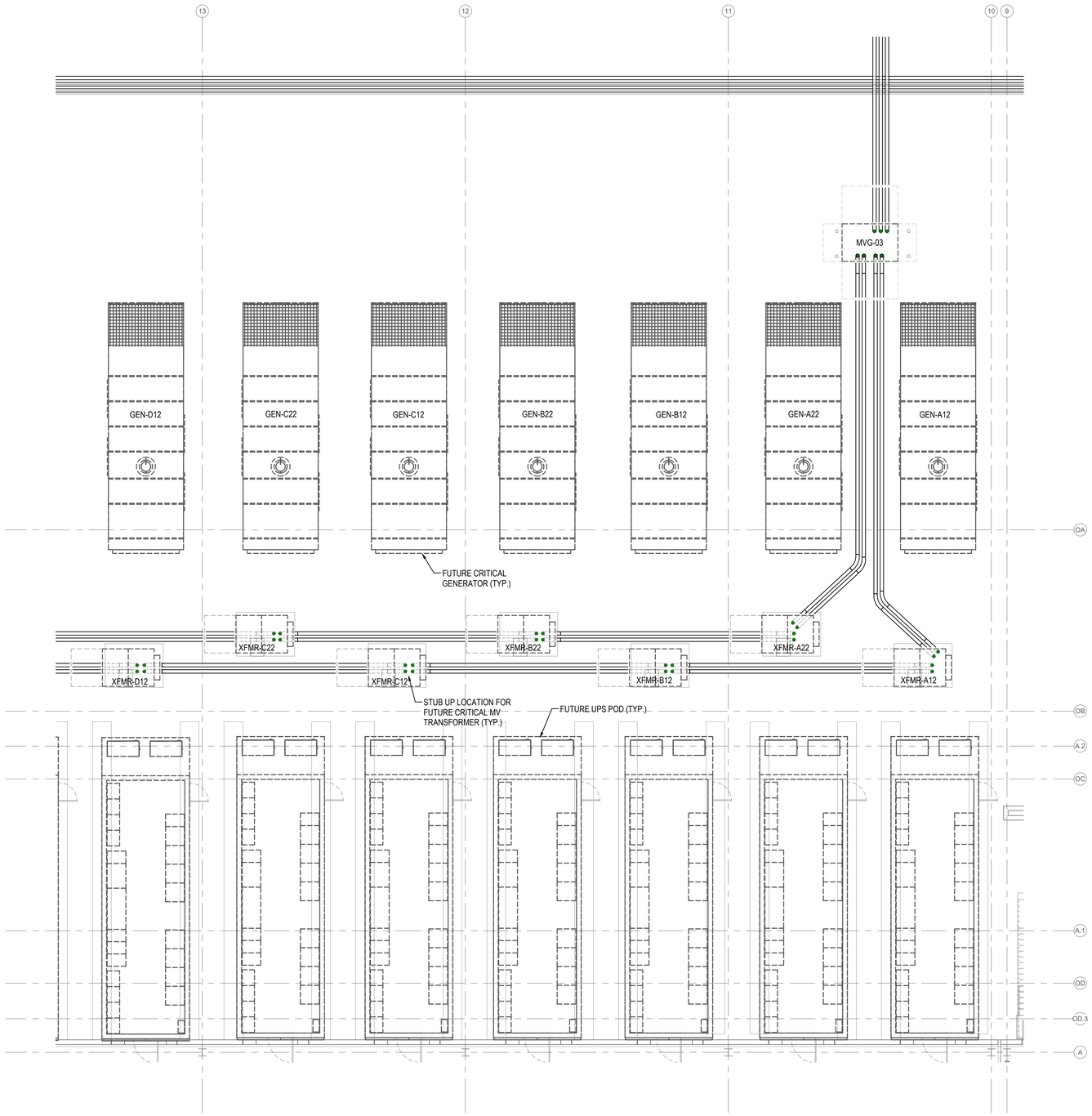
JOB 24464.0000
DATE 05.30.25
SHEET E03-11G

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*
RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

5/30/2025 1:56:40 PM E03-11G ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT G



1 LEVEL 1 ROUTING PLAN - J
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S Q N L J G E C A
T R P M K H F D B
N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT J

JOB 24464.0000
DATE 05.30.25
SHEET

E03-11J

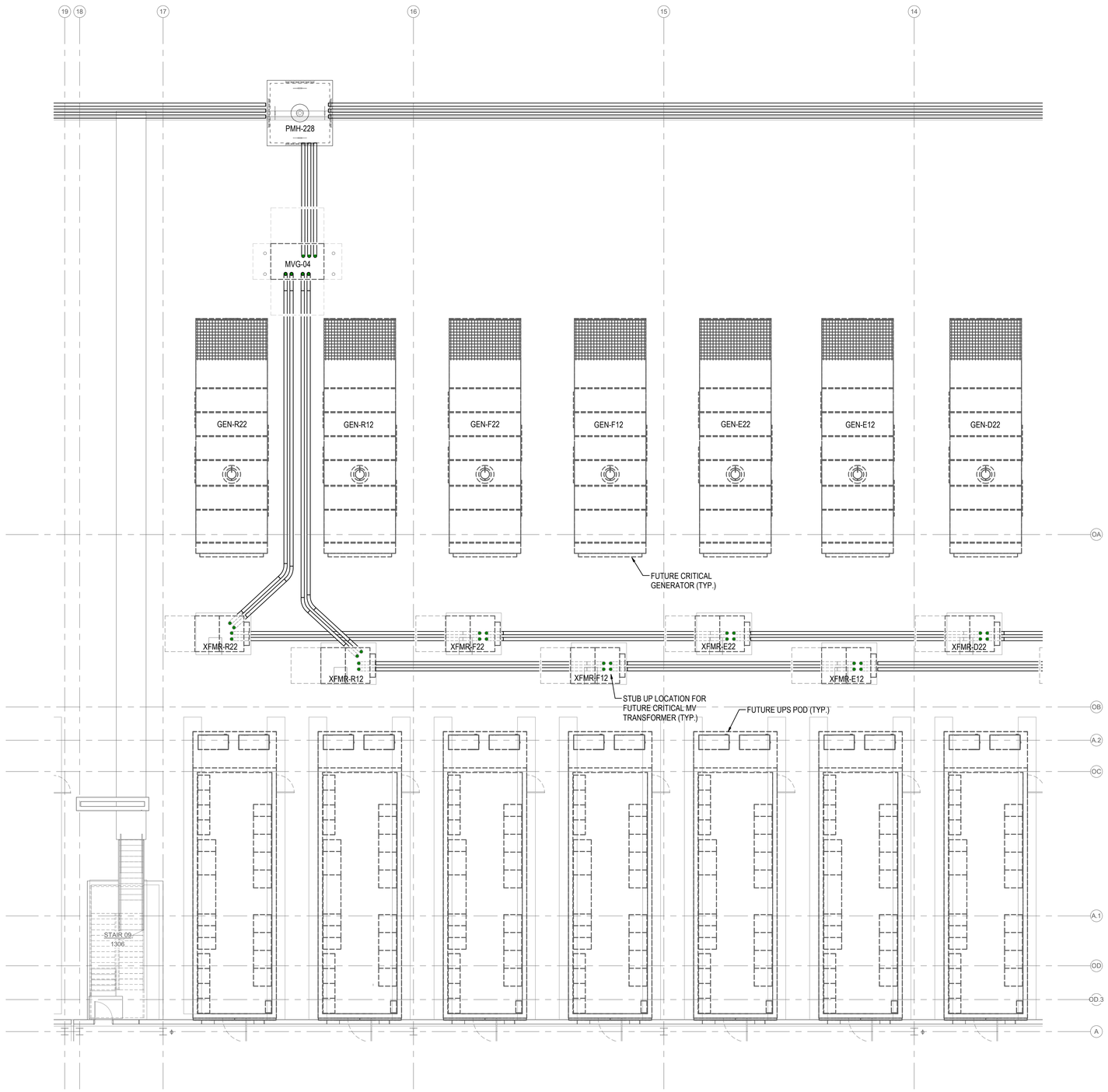
City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

5/30/2025 1:56:47 PM E03-11J ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT J



1 LEVEL 1 ROUTING PLAN - L
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES		
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS		

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A
T	R	P	M	K	H	F	D	B

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT L

JOB 24464.0000
DATE 05.30.25
SHEET

E03-11L

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

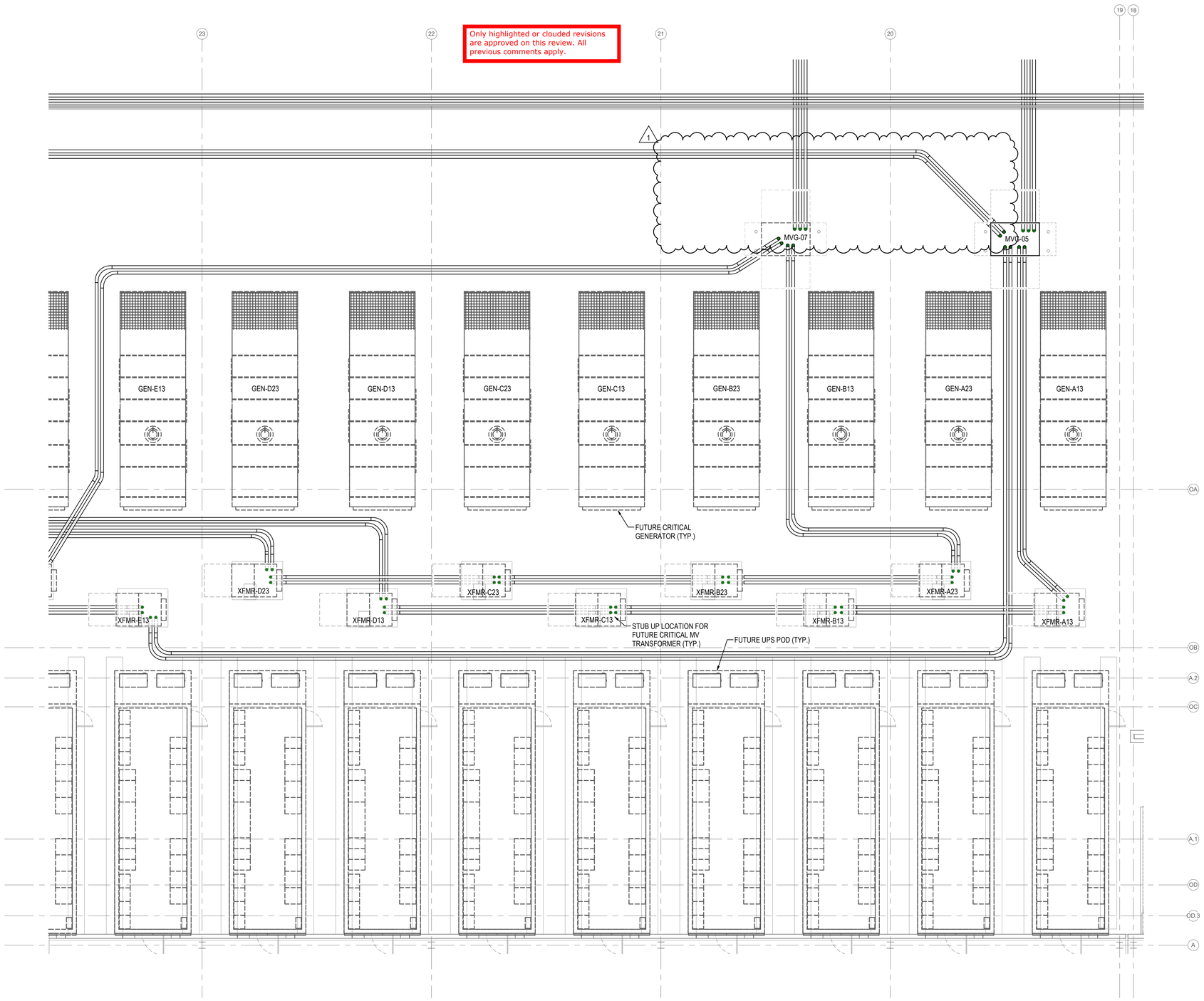
RSN: *1902240*
Permit #: *25-2534172-REV*

RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

5/30/2025 1:56:54 PM E03-11L ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT L

Only highlighted or clouded revisions are approved on this review. All previous comments apply.



1 LEVEL 1 ROUTING PLAN - N
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES		
1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS		
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT N

JOB 24464.0000
DATE 05.30.25
SHEET E03-11N

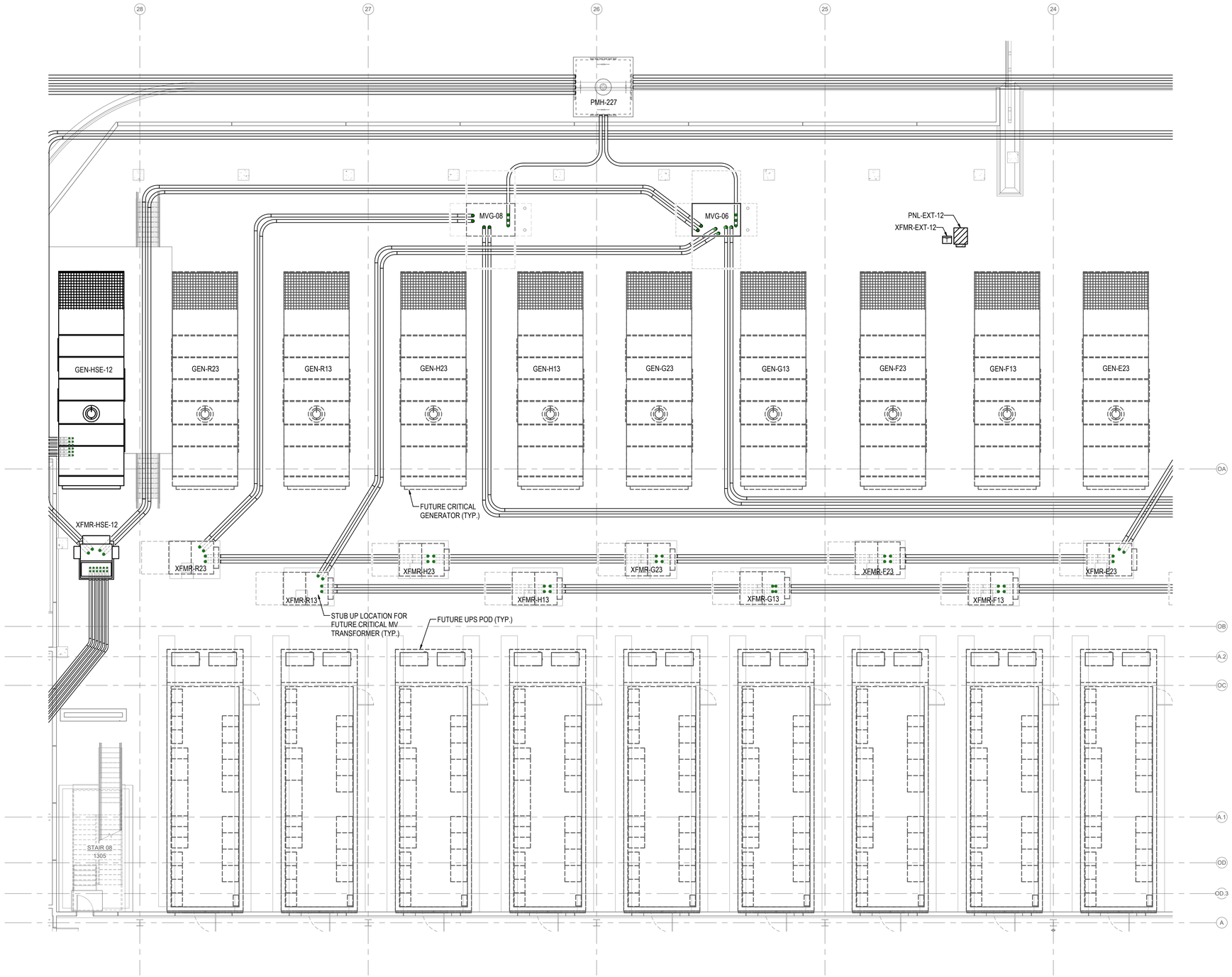
City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*

RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

5/30/2025 1:57:00 PM E03-11N ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT N



1 LEVEL 1 ROUTING PLAN - Q
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A
T	R	P	M	K	H	F	D	B

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT Q

JOB 24464.0000
DATE 05.30.25
SHEET

E03-11Q

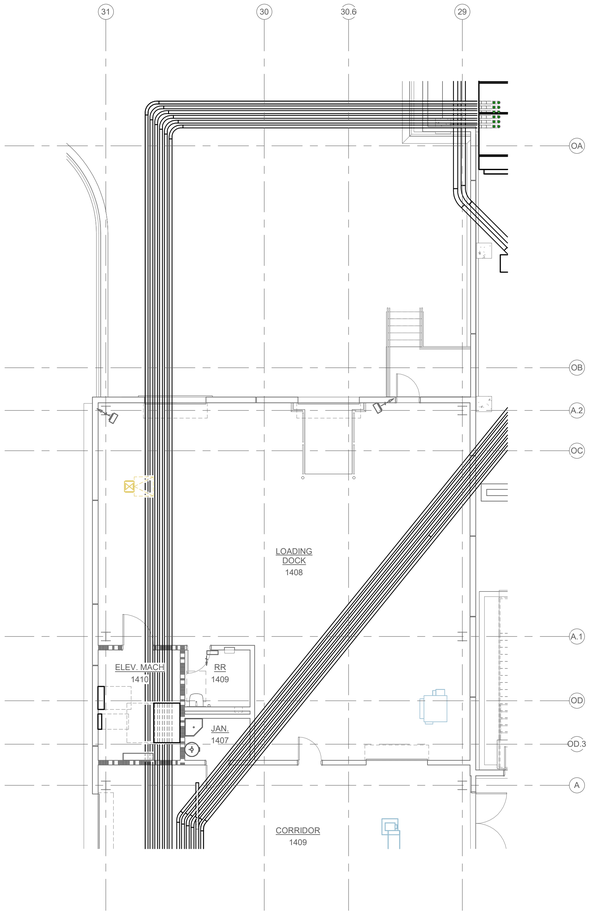
City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*

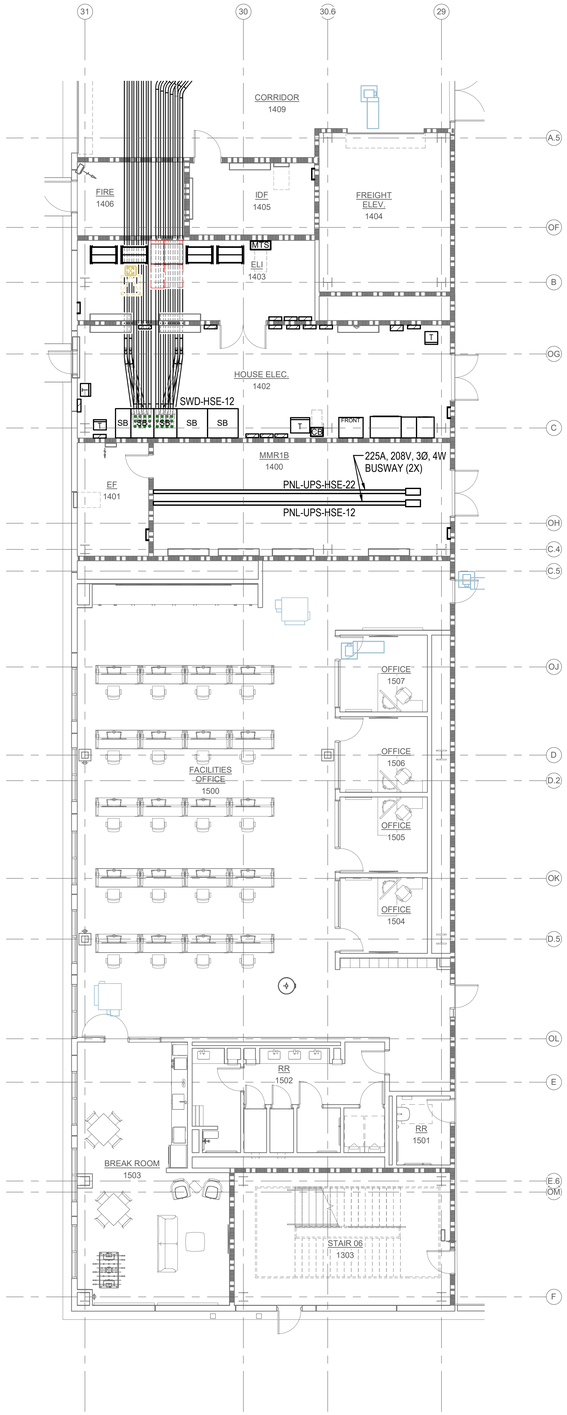
RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

5/30/2025 1:57:07 PM E03-11Q ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT Q



1 LEVEL 1 ROUTING PLAN - S
SCALE: 1/8" = 1'-0"



2 LEVEL 1 ROUTING PLAN - T
SCALE: 1/8" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE E6 DRAWING SERIES AND E07-10 FOR ADDITIONAL INFORMATION ON CONDUCTOR SIZES AND TERMINATION POINTS. REFER TO E05-01 FOR UNDERGROUND DUCTBANK DETAILS.
C. CONTRACTOR SHALL BE REPONSIBLE FOR CONFIRMING WIDTH OF CABLE TRAY BASED ON INSTALLED CONDUCTOR(S).
D. PROVIDE BONDING OF CABLE TRAYS PER NEC 250.92, 250.96, AND GROUNDING PER 250.120, 250.122 AND PER NEC 392.
E. COORDINATE STUB-UP LOCATION WITH EQUIPMENT MANUFACTURER SITE SPECIFIC SHOP DRAWINGS PRIOR TO INSTALLATION.
F. COORDINATE UNDERGROUND CONDUITS WITH OTHER TRADES PRIOR TO INSTALLATION.
G. COORDINATE WITH OWNER THE EXTENT OF WORK TO BE CONSTRUCTED. STUB CONDUITS FOR FUTURE PHASES AT LIMIT OF WORK AND CAP FOR FUTURE EXTENSION.
H. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ALL FINAL ROUTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL RUN PULL CALCULATIONS PRIOR TO INSTALL.
I. REFER TO NEHER-MCGRATH REPORT FOR ADDITIONAL DETAILS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RECALCULATING ANY ROUTING THAT DEVIATES FROM THE ENGINEER PROVIDED CALCUALTIONS AND LIMITATIONS.

SHEET KEYNOTES

SHEET KEYNOTES

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN

S	Q	N	L	J	G	E	C	A	
T	R	P	M	K	H	F	D	B	

N

ROUTING FLOOR PLAN - LEVEL ONE - SEGMENT ST

JOB 24464.0000
DATE 05.30.25
SHEET

E03-11ST

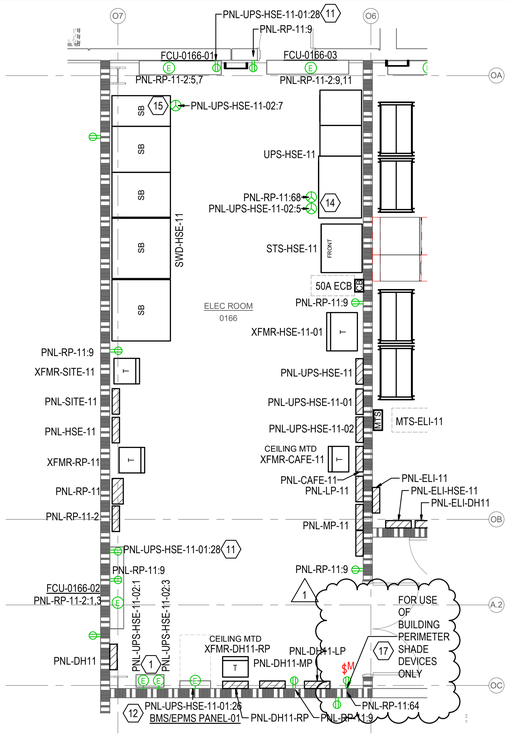
City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*

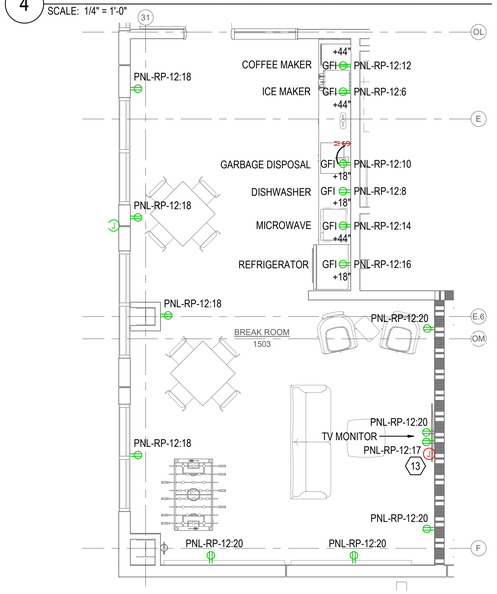
RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E03-11A, E03-11C, E03-11D, E03-11E, E03-11G, E03-11J, E03-11L, E03-11N, E03-11Q, E03-11ST
a. Update: Sheets added for underground routing clarity.

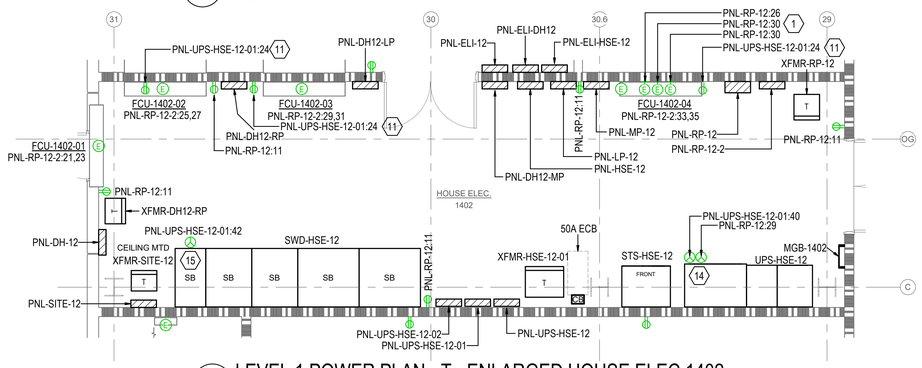
5/30/2025 1:57:14 PM E03-11STROUTING FLOOR PLAN - LEVEL ONE - SEGMENT ST



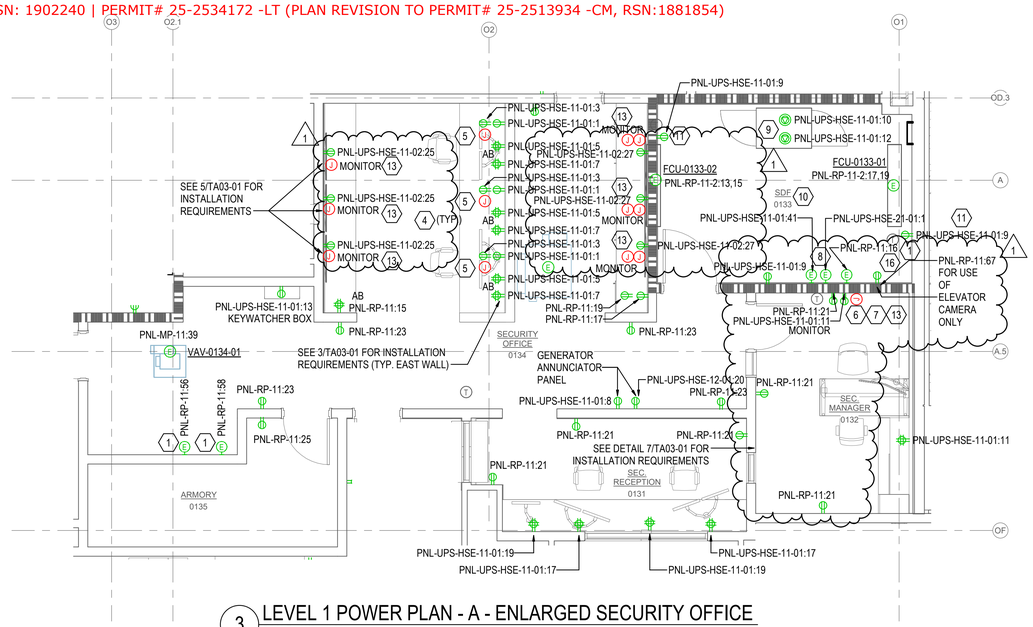
4 LEVEL 1 POWER PLAN - A - ENLARGED ELEC
SCALE: 1/4" = 1'-0"



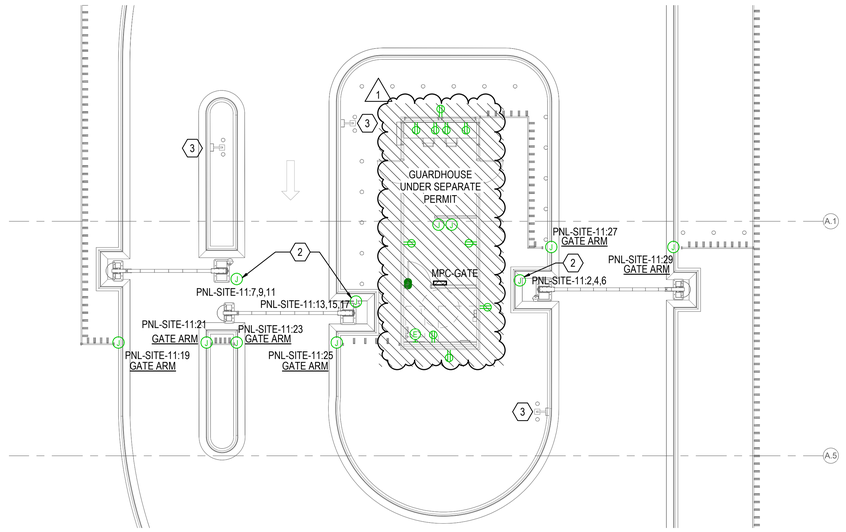
5 LEVEL 1 POWER PLAN - T - ENLARGED BREAK ROOM 1503
SCALE: 1/4" = 1'-0"



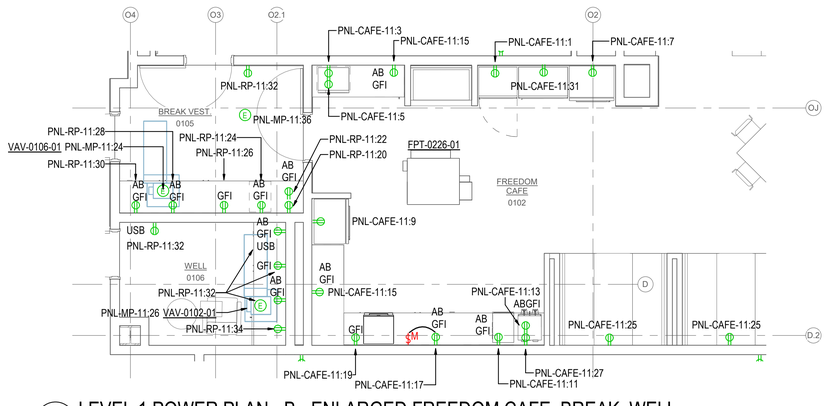
6 LEVEL 1 POWER PLAN - T - ENLARGED HOUSE ELEC 1402
SCALE: 1/4" = 1'-0"



3 LEVEL 1 POWER PLAN - A - ENLARGED SECURITY OFFICE
SCALE: 1/4" = 1'-0"



2 LEVEL 1 POWER SITE PLAN - GATE HOUSE
SCALE: 1/8" = 1'-0"



1 LEVEL 1 POWER PLAN - B - ENLARGED FREEDOM CAFE, BREAK, WELL.
SCALE: 1/4" = 1'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE DRAWING E01-01 FOR UNDERGROUND CONDUIT REQUIREMENTS.
C. COORDINATE ALL CONDUIT ROOF PENETRATIONS WITH ROOF DRAINS.
D. SEE DRAWING E05-21 FOR ELECTRICAL SEQUENCE OF OPERATIONS.
E. SEE DETAIL 2/E05-18 FOR ANY CONDUITS PASSING THROUGH A SECURE BOUNDARY.
F. FOR ALL 277V MOTOR LOADS SERVED FROM 480Y/277V PANELS, CONTRACTOR SHALL PROVIDE/VERIFY DIVERSIFICATION. CONTRACTOR SHALL ADJUST POLE LOCATIONS TO ENSURE THAT 277V LOADS ARE BALANCED ACROSS PHASES.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

SHEET KEYNOTES

1 PROVIDE ELECTRICAL CONNECTION FOR FIRE ALARM PANEL. CIRCUIT BREAKER SERVING FIRE ALARM PANEL SHALL BE LOCKABLE AND PROVIDED WITH A RED LABEL INDICATING "FIRE ALARM CIRCUIT". REFER TO FIRE ALARM DRAWINGS FOR ADDITIONAL REQUIREMENTS.
2 PROVIDE POWER CONNECTION TO GATE ARM - 1°C.-3#8 & 1#10 GND.
3 PROVIDE POWER CONNECTION TO GATE CARD READER - 3/4"C.-2#12 & 1#12 GND.
4 COORDINATE EXACT QUANTITY AND LOCATION OF MONITORS, RECEPTACLES AND TV'S WITH TC AND AV DESIGNER.
5 CONTRACTOR SHALL PROVIDE LEGRAND EFSB4 AT A HEIGHT COORDINATED WITH ARCHITECT FOR EACH WALL MOUNTED MONITOR. PROVIDE 120V RECEPTACLE, (1) DATA CABLE, AND (1) 1 1/4" CONDUIT (EMPTY) FOR HDMI CABLE FROM EACH MONITOR LOCATION.
6 PROVIDE AND INSTALL POWER AND LOW VOLTAGE ROUGH-IN FOR WALL MOUNTED DISPLAY. ROUTE CONDUIT FROM TV TO THE TABLE WALL PLATE DEVICE FOR A/V. REFER TO THE IT AND A/V DRAWINGS FOR ADDITIONAL INFORMATION.
7 COORDINATE A/V REQUIREMENTS WITH THE A/V DRAWINGS, A/V INSTALLER, AND ARCHITECT. PROVIDE ALL CONDUIT AND BACK-BOXES FOR A COMPLETE INSTALLATION.
8 PROVIDE DUAL REDUNDANT 120V/20A CIRCUITS FOR SECURITY ACP. COORDINATE FINAL LOCATION WITH SECURITY INSTALLER.
9 PROVIDE (2) L5-30R PER CABINET MOUNTED ON RACK ABOVE. REFER TO T-SERIES DRAWINGS FOR ADDITIONAL INFORMATION.
10 COORDINATE ADDITIONAL CONDUIT AND BACKBOX REQUIRMENTS WITH TELECOM DRAWINGS.
11 CONTRACTOR SHALL INSTALL RECEPTACLE AT 150" AFF FOR SPLIT SYSTEM LEAK DETECTION.
12 PROVIDE ELECTRICAL CONNECTION FOR BMS/EPMS PANEL. REFER TO INSTRUMENTATION AND CONTROL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
13 PROVIDE AND INSTALL BACKBOX TYPE PAC526F BY CHIEF FOR WALL MOUNTED SCREEN SYSTEM. PROVIDE AND 1-1/4" CONDUIT TO ABOVE CEILING NON-PLENUM AREA. COORDINATE ADDITIONAL CONDUIT REQUIREMENTS WITH AV DRAWINGS.
14 LITHIUM BATTERY CABINET CONTROL POWER SOURCES. ONE POWER SOURCE SHALL BE PROVIDED FROM HOUSE POWER AND THE ALTERNATE POWER SOURCE SHALL BE PROVIDED FROM HOUSE UPS POWER.
15 AUTOMATIC TRANSFER CONTROL POWER SOURCE. COORDINATE LOCATION OF 120V SOURCE WITH EQUIPMENT MANUFACTURER.
16 LOCATE POWER FOR ELEVATOR CAMERA,COORDINATE EXACT LOCATION WITH ARCHITECT PLAN.
17 LOCATE POWER FOR LUTRON QUANTUM BOX,COORDINATE EXACT LOCATION WITH ARCHITECT PLAN.

Sheet Number: E04-01, E04-02
a. Update: Added/updated enlarged plans House Elec 1402, Enlarged Elec A, and
Enlarged Security Office A, Enlarged Elev. Room A, Enlarged Elev. Room B.
Relocated ductbank section views from sheet E01-01.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

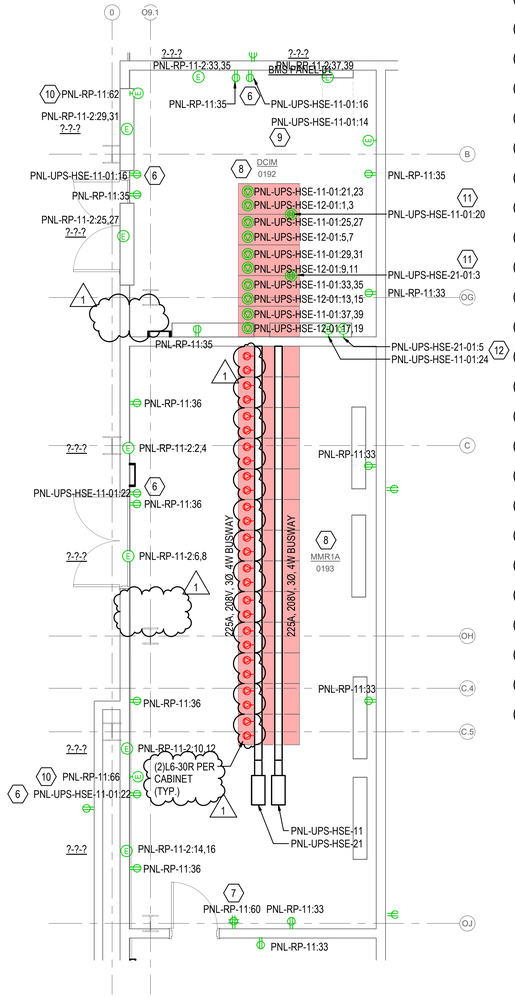
KEYPLAN

S Q N L J G E C A
T R P M K H F D B
N

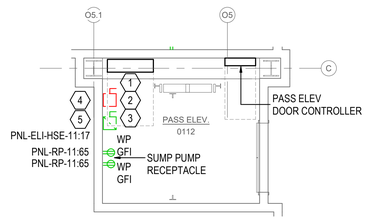
POWER ENLARGED PLAN - LEVEL ONE

JOB 24464.0000
DATE 05.30.25
SHEET E04-01

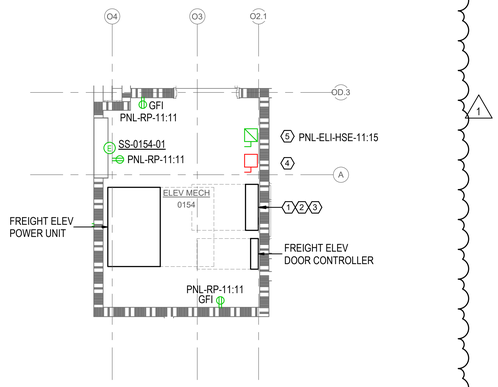
5/30/2025 1:59:34 PM E04-01 POWER ENLARGED PLAN - LEVEL ONE

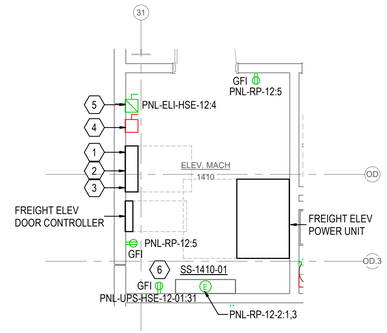


2 LEVEL 1 POWER PLAN - B - ENLARGED ELEV. ROOM
SCALE: 1/4" = 1'-0"

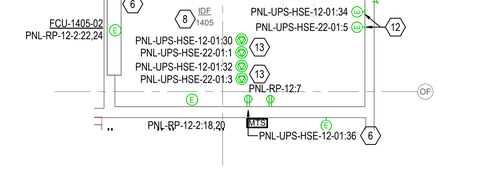


9 LEVEL 1 POWER PLAN - A - ENLARGED ELEV. ROOM
SCALE: 1/4" = 1'-0"

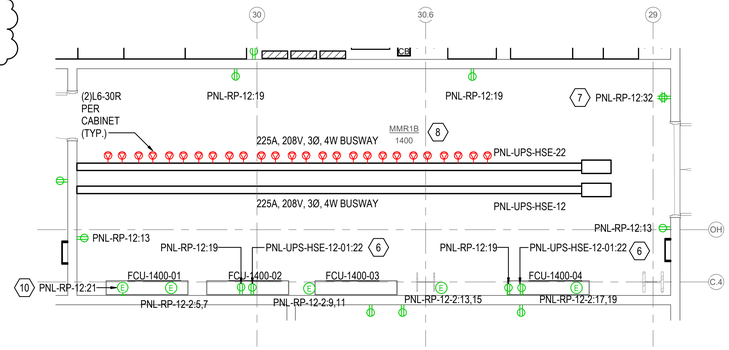




1 LEVEL 1 POWER PLAN - S - ENLARGED ELEV. ROOM
SCALE: 1/4" = 1'-0"

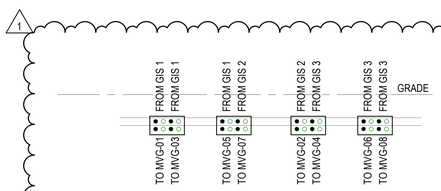


4 LEVEL 1 POWER PLAN - T - ENLARGED IDF ROOM
SCALE: 1/4" = 1'-0"



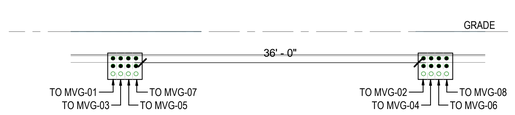
5 LEVEL 1 POWER PLAN - T - ENLARGED MMR
SCALE: 1/4" = 1'-0"

3 LEVEL 1 POWER PLAN - D - ENLARGED MMR
SCALE: 1/4" = 1'-0"



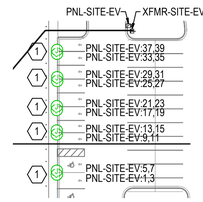
COORDINATE DUCTBANK DEPTH AND FINAL DEMARCATION POINT WITH SUBSTATION INSTALLER.

8 DUCTBANK SECTION - SUBSTATION ENTRY
SCALE: 1/8" = 1'-0"



SEE DETAIL 7/E05-01 FOR FURTHER INFORMATION ON DUCTBANK REQUIREMENTS.

7 DUCTBANK SECTION - 34.5KV 3X4 LAYOUT
SCALE: 1/8" = 1'-0"



6 LEVEL 1 POWER SITE PLAN - EVC PLAN
SCALE: 1" = 40'-0"

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES AND ABBREVIATIONS.
B. SEE DRAWING E01-01 FOR UNDERGROUND CONDUIT REQUIREMENTS.
C. COORDINATE ALL CONDUIT ROOF PENETRATIONS WITH ROOF DRAINS.
D. SEE DRAWING E05-21 FOR ELECTRICAL SEQUENCE OF OPERATIONS.
E. SEE DETAIL 2/E05-18 FOR ANY CONDUITS PASSING THROUGH A SECURE BOUNDARY.
F. FOR ALL 277V MOTOR LOADS SERVED FROM 480Y/277V PANELS, CONTRACTOR SHALL PROVIDE/VERIFY DIVERSIFICATION. CONTRACTOR SHALL ADJUST POLE LOCATIONS TO ENSURE THAT 277V LOADS ARE BALANCED ACROSS PHASES.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

RECEPTACLE LEGEND

L5-30R 1#10 HOT, 1#10 NEUTRAL, 1#10 GROUND
L6-30R 2#10 HOT, 1#10 GROUND

SHEET KEYNOTES

1 POINT OF CONNECTION FOR ELEVATOR CONTROLLER. BASIS OF DESIGN: 480V, 3PH, 75HP FREIGHT ELEVATOR MOTOR OR 15HP PASSENGER ELEVATOR MOTOR. PROVIDE ONE (1) 100VA RATED CONTROL POWER TRANSFORMER WITH PRIMARY AND SECONDARY FUSES, ONE (1) NORMALLY OPEN DRY CONTACT TO ENERGIZE THE ISOLATION RELAY AND ACTIVATE THE SHUNT TRIP SOLENOID, ONE (1) 120V KEY TO TEST SWITCH ONE (1) 1-NO/1-NC MECHANICALLY INTERLOCED AUXILIARY CONTACT. PROVIDE NEW FIRE ALARM RELAY AND INTERFACE TO THE NEW ELEVATOR CONTROLLER FOR RECALL. COORDINATE REQUIREMENTS WITH MANUFACTURER.
2 REFER TO SINGLE LINE DIAGRAMS FOR CIRCUITING INFORMATION.
3 PROVIDE TELEPHONE CABLES TO ELEVATOR CONTROLLER FOR ELEVATOR CAB PHONE.
4 PROVIDE LOCKABLE MAIN LINE DISCONNECT SWITCH FOR ELEVATOR MOTOR, SIZED PER SINGLE LINE DIAGRAMS.
5 PROVIDE NEW ENCLOSED, LOCKABLE FUSED DISCONNECT SWITCH FOR ELEVATOR CAB LIGHT, CAPABLE OF BEING LOCKED IN THE OPEN POSITION ONLY. PROVIDE 20A FUSES AS REQUIRED.
6 CONTRACTOR SHALL INSTALL RECEPTACLE AT 150" AFF FOR SPLIT SYSTEM LEAK DETECTION.
7 PROVIDE 120V DEDICATED RECEPTACLE FOR POTS LINE PANEL. COORDINATE FINAL LOCATION AND ELEVATION ABOVE FINISHED FLOOR WITH INSTALLING CONTRACTOR.
8 COORDINATE ADDITIONAL CONDUIT AND BACKBOX REQUIRMENTS WITH TELECOM DRAWINGS.
9 PROVIDE ELECTRICAL CONNECTION FOR BMS/EPMS PANEL. REFER TO INSTRUMENTATION AND CONTROL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
10 PROVIDE ELECTRICAL CONNECTION FOR FIRE ALARM PANEL. CIRCUIT BREAKER SERVING FIRE ALARM PANEL SHALL BE LOCKABLE AND PROVIDED WITH A RED LABEL INDICATING "FIRE ALARM CIRCUIT". REFER TO FIRE ALARM DRAWINGS FOR ADDITIONAL REQUIREMENTS.
11 PROVIDE (1) 5-20 QUAD RECEPTACLE PER CABINET MOUNTED ON RACK ABOVE. REFER TO T-SERIES DRAWINGS FOR ADDITIONAL INFORMATION.
12 PROVIDE DUAL REDUNDANT 120V/20A CIRCUITS FOR SECURITY ACP. COORDINATE FINAL LOCATION WITH SECURITY INSTALLER.
13 PROVIDE (2) L5-30R PER CABINET MOUNTED ON RACK ABOVE. REFER TO T-SERIES DRAWINGS FOR ADDITIONAL INFORMATION.

Sheet Number: E04-01, E04-02
a. Update: Added/updated enlarged plans House Elec 1402, Enlarged Elec A, and
Enlarged Security Office A, Enlarged Elev. Room A, Enlarged Elev. Room B.
Relocated ductbank section views from sheet E01-01.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: 1902240
Permit #: 25-2534172-REV
RSN: 1881854
Permit #: 25-2513934-CM

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000
AG/E
SYSKA HENNESSY GROUP
DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP

REVISIONS

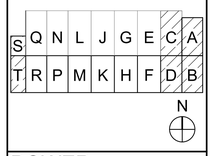
A	03.28.25	ADDENDUM 1
1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

KEYPLAN



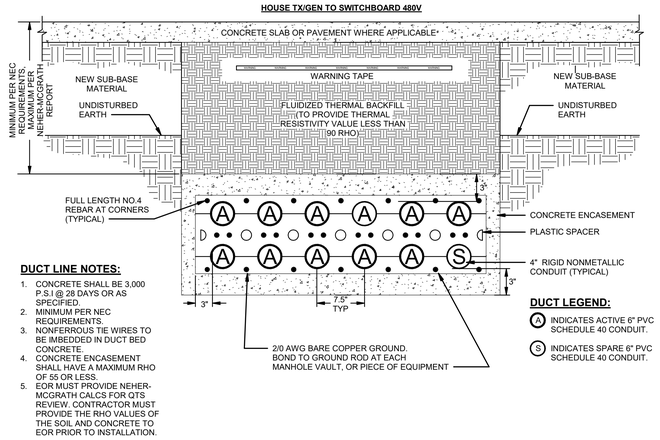
POWER ENLARGED PLAN - LEVEL ONE

JOB 24464.0000
DATE 05.30.25
SHEET E04-02

5/30/2025 1:59:52 PM E04-02 POWER ENLARGED PLAN - LEVEL ONE

RSN: 1902240 | PERMIT# 25-2534172 -LT (PLAN REVISION TO PERMIT# 25-2513934 -CM, RSN:1881854)

HOUSE TX/GEN TO SWITCHBOARD 480V



DUCT LINE NOTES:

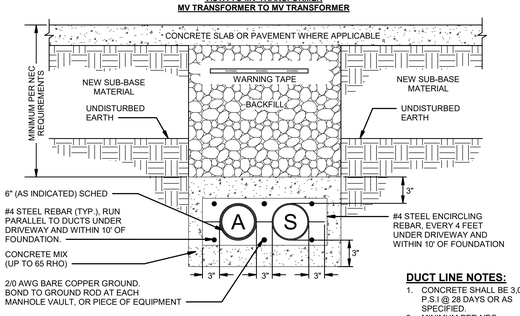
1. CONCRETE SHALL BE 3,000 P.S.I @ 28 DAYS OR AS SPECIFIED.
2. MINIMUM PER NEC REQUIREMENTS.
3. NONFERROUS TIE WIRES TO BE IMBEDDED IN DUCT BED CONCRETE.
4. CONCRETE ENCASEMENT SHALL HAVE A MAXIMUM RHO OF 55 OR LESS.
5. EOR MUST PROVIDE NEHER-MCGRATH CALCS FOR QTS REVIEW. CONTRACTOR MUST PROVIDE THE RHO VALUES OF THE SOIL AND CONCRETE TO EOR PRIOR TO INSTALLATION.

DUCT LEGEND:

- (A) INDICATES ACTIVE 6" PVC SCHEDULE 40 CONDUIT.
- (S) INDICATES SPARE 6" PVC SCHEDULE 40 CONDUIT.

1 DUCTBANK DETAIL - MV XFMR/GEN TO HOUSE - 2 x 6 DUCT

VISTA TO MV TRANSFORMER
MV TRANSFORMER TO MV TRANSFORMER



DUCT LINE NOTES:

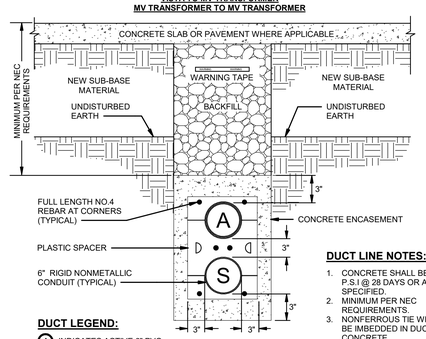
1. CONCRETE SHALL BE 3,000 P.S.I @ 28 DAYS OR AS SPECIFIED.
2. MINIMUM PER NEC REQUIREMENTS.
3. NONFERROUS TIE WIRES TO BE IMBEDDED IN DUCT BED CONCRETE.
4. CONCRETE ENCASEMENT SHALL HAVE A MAXIMUM RHO OF 55 OR LESS.
5. EOR MUST PROVIDE NEHER-MCGRATH CALCS FOR QTS REVIEW. CONTRACTOR MUST PROVIDE THE RHO VALUES OF THE SOIL AND CONCRETE TO EOR PRIOR TO INSTALLATION.

DUCT LEGEND:

- (A) INDICATES ACTIVE 6" PVC SCHEDULE 40 CONDUIT.
- (S) INDICATES SPARE 6" PVC SCHEDULE 40 CONDUIT.

2 DUCTBANK DETAIL - MV SWGR TO MV XFMR - 1 x 2 DUCT

VISTA TO MV TRANSFORMER
MV TRANSFORMER TO MV TRANSFORMER



DUCT LINE NOTES:

1. CONCRETE SHALL BE 3,000 P.S.I @ 28 DAYS OR AS SPECIFIED.
2. MINIMUM PER NEC REQUIREMENTS.
3. NONFERROUS TIE WIRES TO BE IMBEDDED IN DUCT BED CONCRETE.
4. CONCRETE ENCASEMENT SHALL HAVE A MAXIMUM RHO OF 55 OR LESS.
5. EOR MUST PROVIDE NEHER-MCGRATH CALCS FOR QTS REVIEW. CONTRACTOR MUST PROVIDE THE RHO VALUES OF THE SOIL AND CONCRETE TO EOR PRIOR TO INSTALLATION.

DUCT LEGEND:

- (A) INDICATES ACTIVE 6" PVC SCHEDULE 40 CONDUIT.
- (S) INDICATES SPARE 6" PVC SCHEDULE 40 CONDUIT.

3 DUCTBANK DETAIL - MV SWGR TO MV XFMR - 2 x 1 DUCT

VISTA TO MV TRANSFORMER

DUCT LINE NOTES:

1. CONCRETE SHALL BE 3,000 P.S.I @ 28 DAYS OR AS SPECIFIED.
2. MINIMUM PER NEC REQUIREMENTS.
3. NONFERROUS TIE WIRES TO BE IMBEDDED IN DUCT BED CONCRETE.
4. CONCRETE ENCASEMENT SHALL HAVE A MAXIMUM RHO OF 55 OR LESS.
5. EOR MUST PROVIDE NEHER-MCGRATH CALCS FOR QTS REVIEW. CONTRACTOR MUST PROVIDE THE RHO VALUES OF THE SOIL AND CONCRETE TO EOR PRIOR TO INSTALLATION.

DUCT LEGEND:

- (A) INDICATES ACTIVE 6" PVC SCHEDULE 40 CONDUIT.
- (S) INDICATES SPARE 6" PVC SCHEDULE 40 CONDUIT.

4 DUCTBANK DETAIL - MV SWGR TO MV XFMR - 2 x 2 DUCT

MV CAMPUS LOOP: SUBSTATION TO VISTA

DUCT LINE NOTES:

1. CONCRETE SHALL BE 3,000 P.S.I @ 28 DAYS OR AS SPECIFIED.
2. MINIMUM PER NEC REQUIREMENTS.
3. NONFERROUS TIE WIRES TO BE IMBEDDED IN DUCT BED CONCRETE.
4. CONCRETE ENCASEMENT SHALL HAVE A MAXIMUM RHO OF 55 OR LESS.
5. EOR MUST PROVIDE NEHER-MCGRATH CALCS FOR QTS REVIEW. CONTRACTOR MUST PROVIDE THE RHO VALUES OF THE SOIL AND CONCRETE TO EOR PRIOR TO INSTALLATION.

DUCT LEGEND:

- (A) INDICATES ACTIVE 6" PVC SCHEDULE 40 CONDUIT.
- (S) INDICATES SPARE 6" PVC SCHEDULE 40 CONDUIT.

5 DUCTBANK DETAIL - SUBSTATION TO MVG - 1 x 3 DUCT

MV CAMPUS LOOP: SUBSTATION TO VISTA

DUCT LINE NOTES:

1. CONCRETE SHALL BE 3,000 P.S.I @ 28 DAYS OR AS SPECIFIED.
2. MINIMUM PER NEC REQUIREMENTS.
3. NONFERROUS TIE WIRES TO BE IMBEDDED IN DUCT BED CONCRETE.
4. CONCRETE ENCASEMENT SHALL HAVE A MAXIMUM RHO OF 55 OR LESS.
5. EOR MUST PROVIDE NEHER-MCGRATH CALCS FOR QTS REVIEW. CONTRACTOR MUST PROVIDE THE RHO VALUES OF THE SOIL AND CONCRETE TO EOR PRIOR TO INSTALLATION.

DUCT LEGEND:

- (A) INDICATES ACTIVE 6" PVC SCHEDULE 40 CONDUIT.
- (S) INDICATES SPARE 6" PVC SCHEDULE 40 CONDUIT.

FOR REFERENCE ONLY

6 DUCTBANK DETAIL - SUBSTATION TO MVG - 2 x 3 DUCT

MV CAMPUS LOOP: SUBSTATION TO VISTA

DUCT LINE NOTES:

1. CONCRETE SHALL BE 3,000 P.S.I @ 28 DAYS OR AS SPECIFIED.
2. MINIMUM PER NEC REQUIREMENTS.
3. NONFERROUS TIE WIRES TO BE IMBEDDED IN DUCT BED CONCRETE.
4. CONCRETE ENCASEMENT SHALL HAVE A MAXIMUM RHO OF 55 OR LESS.
5. EOR MUST PROVIDE NEHER-MCGRATH CALCS FOR QTS REVIEW. CONTRACTOR MUST PROVIDE THE RHO VALUES OF THE SOIL AND CONCRETE TO EOR PRIOR TO INSTALLATION.

DUCT LEGEND:

- (A) INDICATES ACTIVE 6" PVC SCHEDULE 40 CONDUIT.
- (S) INDICATES SPARE 6" PVC SCHEDULE 40 CONDUIT.

FOR REFERENCE ONLY. ACTIVE CONDUIT POSITIONS MAY VARY BY LOCATION.

7 DUCTBANK DETAIL - SUBSTATION TO MVG - 3 x 4 DUCT

NOTES:

1. CONDUIT STUBS SHALL BE ADJACENT TO WALL (< 3") WHEN SHOWN NEAR WALL (TYPICAL)
2. EMPTY CONDUITS SHALL BE CAPPED, OCCUPIED CONDUITS SHALL BE APPROPRIATELY SEALED.

8 UNDERSLAB ELECTRICAL CONDUIT DETAIL

3000A 600V 3 PHASE 4 WIRE SYSTEM WITH GROUND
(MAX OPERATING TEMP 75°C W/ 40°C AMBIENT)
APPROXIMATE WEIGHT: 45 LBS/FT
NEC 110.14(C) COMPLIANT

9 CABLE BUS CROSS SECTION

Sheet Number: E05-01
a. Update: Revised underground ductbank details to align with latest Neher-McGrath report.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

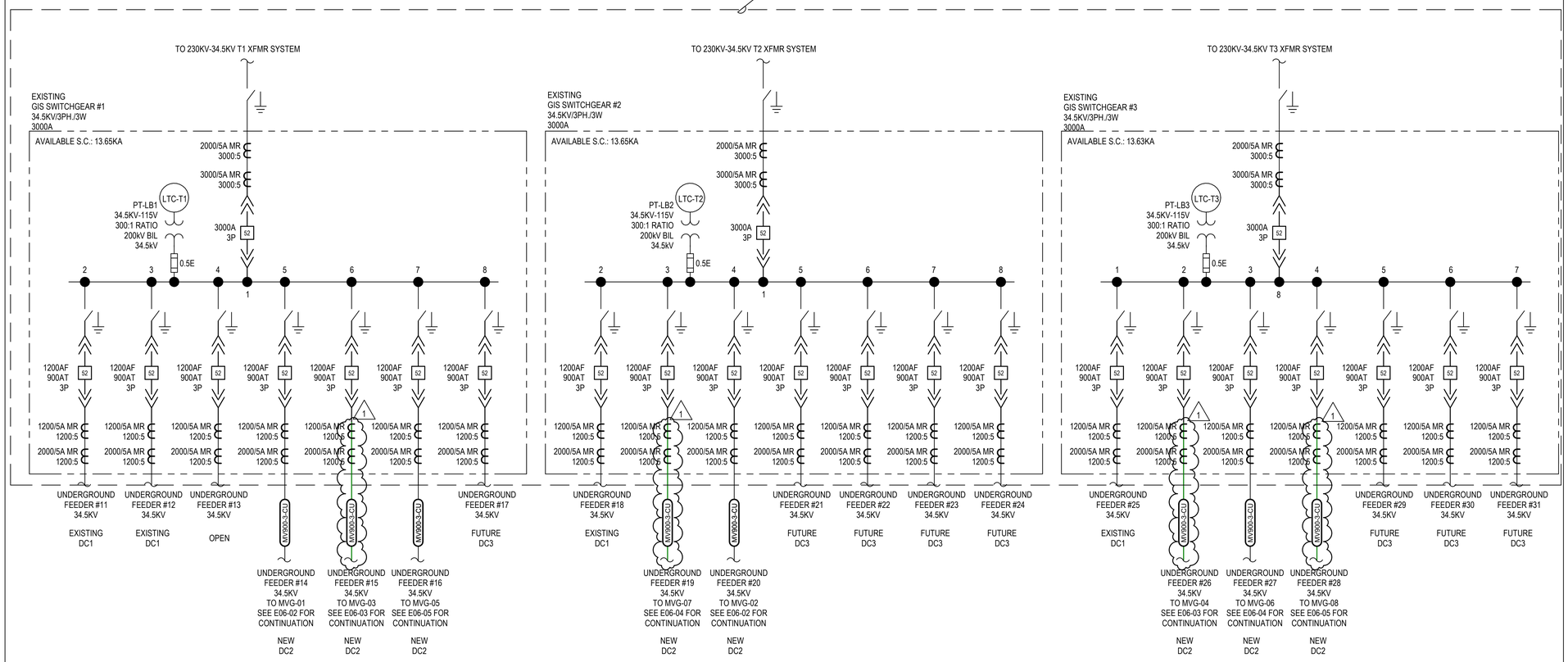
DETAILS

JOB 24464.0000
DATE 05.30.25
SHEET E05-01

5/30/2025 2:00:04 PM E05-01 DETAILS

RSN: 1902240 | PERMIT# 25-2534172 -LT (PLAN REVISION TO PERMIT# 25-2513934 -CM, RSN:1881854)

N.I.C.



FINAL PLANNED CAMPUS LOAD - NORMAL OPERATION

Failed Block		(T1, T2, T3)				
Peak PUE	1.5					
Campus Power Factor	0.95					
				3N/2 DR FAILOVER		
	Load (MW)	Source 1	Source 2	T1	T2	T3
DEN1-DC1.1/DEN1-DC1.2	36	T1	T2	18	18	
DEN1-DC1.3/DEN1-DC1.4	36	T1	T3	18		18
DEN1-DC2.1/DEN1-DC2.2	27	T1	T2	13.5	13.5	
DEN1-DC2.3/DEN1-DC2.4	27	T1	T3	13.5		13.5
DEN1-DC2.5/DEN1-DC2.6	18	T1	T3	9		9
DEN1-DC2.7/DEN1-DC2.8	18	T2	T3		9	9
DEN1-DC3.1/DEN1-DC3.2	27	T2	T1	13.5	13.5	
DEN1-DC3.3/DEN1-DC3.4	27	T3	T2		13.5	13.5
DEN1-DC3.5/DEN1-DC3.6	18	T3	T2		9	9
DEN1-DC3.7/DEN1-DC3.8	18	T3	T2			
Total Campus Load (MW)				85.5	85.5	81
Total Campus Load (MVA)				90	90	85.263...
Total Campus Load (Amps @ 34.5kV)				1506.1...	1506.1...	1426.9...

FINAL PLANNED CAMPUS LOAD - FAILOVER OPERATION

Failed Block	T1	(T1, T2, T3)				
Peak PUE	1.5					
Campus Power Factor	0.95					
				3N/2 DR FAILOVER		
	Load (MW)	Source 1	Source 2	T1	T2	T3
DEN1-DC1.1/DEN1-DC1.2	36	T1	T2	0	36	
DEN1-DC1.3/DEN1-DC1.4	36	T1	T3	0		36
DEN1-DC2.1/DEN1-DC2.2	27	T1	T2	0	27	
DEN1-DC2.3/DEN1-DC2.4	27	T1	T3	0		27
DEN1-DC2.5/DEN1-DC2.6	18	T1	T3	0		18
DEN1-DC2.7/DEN1-DC2.8	18	T2	T3		9	9
DEN1-DC3.1/DEN1-DC3.2	27	T2	T1	0	27	
DEN1-DC3.3/DEN1-DC3.4	27	T3	T2		13.5	13.5
DEN1-DC3.5/DEN1-DC3.6	18	T3	T2		9	9
DEN1-DC3.7/DEN1-DC3.8	18	T3	T2		9	9
Total Campus Load (MW)				0	130.5	121.5
Total Campus Load (MVA)				0	137.36...	127.89...
Total Campus Load (Amps @ 34.5kV)				0	2298.8...	2140.3...

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES (2023 NEC)
Page 2 of 32

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

Sheet Number: E06-01, E06-02, E06-03, E06-04, E06-05
a. Update: Added sheet note D clarifying paid requirements. Clarified where conduit
and wire vs. Conduit only is to be installed.

SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES, ABBREVIATIONS. SEE DRAWING E07-10 FOR FEEDER SCHEDULES.

B. REFER TO E03 SERIES DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS.

C. SERVICE EQUIPMENT IS TO BE LEGIBLY MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AS PROVIDED BY THE SERVING UTILITY. THE CONTRACTOR SHALL COORDINATE WITH THE SERVING UTILITY TO OBTAIN THE MAXIMUM AVAILABLE FAULT CURRENT. CONTRACTOR SHALL PROVIDE LABELING NOTING AVAILABLE FAULT CURRENT AND DATE OF CALCULATION IN ACCORDANCE WITH COLORADO ELECTRICAL CODE, LATEST EDITION.

D. FOUNDATIONS SHALL BE PROVIDED FOR ALL MVG GEAR, DAY 1 HOUSE AND DH1100/2100 TRANSFORMERS IN THE CORE & SHELL PHASE. THE REMAINDER OF THE ELECTRICAL YARD WILL CONSIST OF CONDUIT STUB UPS, SEALED WITH PULL STRINGS. COORDINATE FINAL PAD LOCATIONS WITH STRUCTURAL.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

SHEET KEYNOTES

LINETYPE LEGEND

- NEW FEEDER
- EXISTING FEEDER
- FUTURE FEEDER
- CONDUIT ONLY
- EXISTING CONDUIT, NEW WIRE

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TCD DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

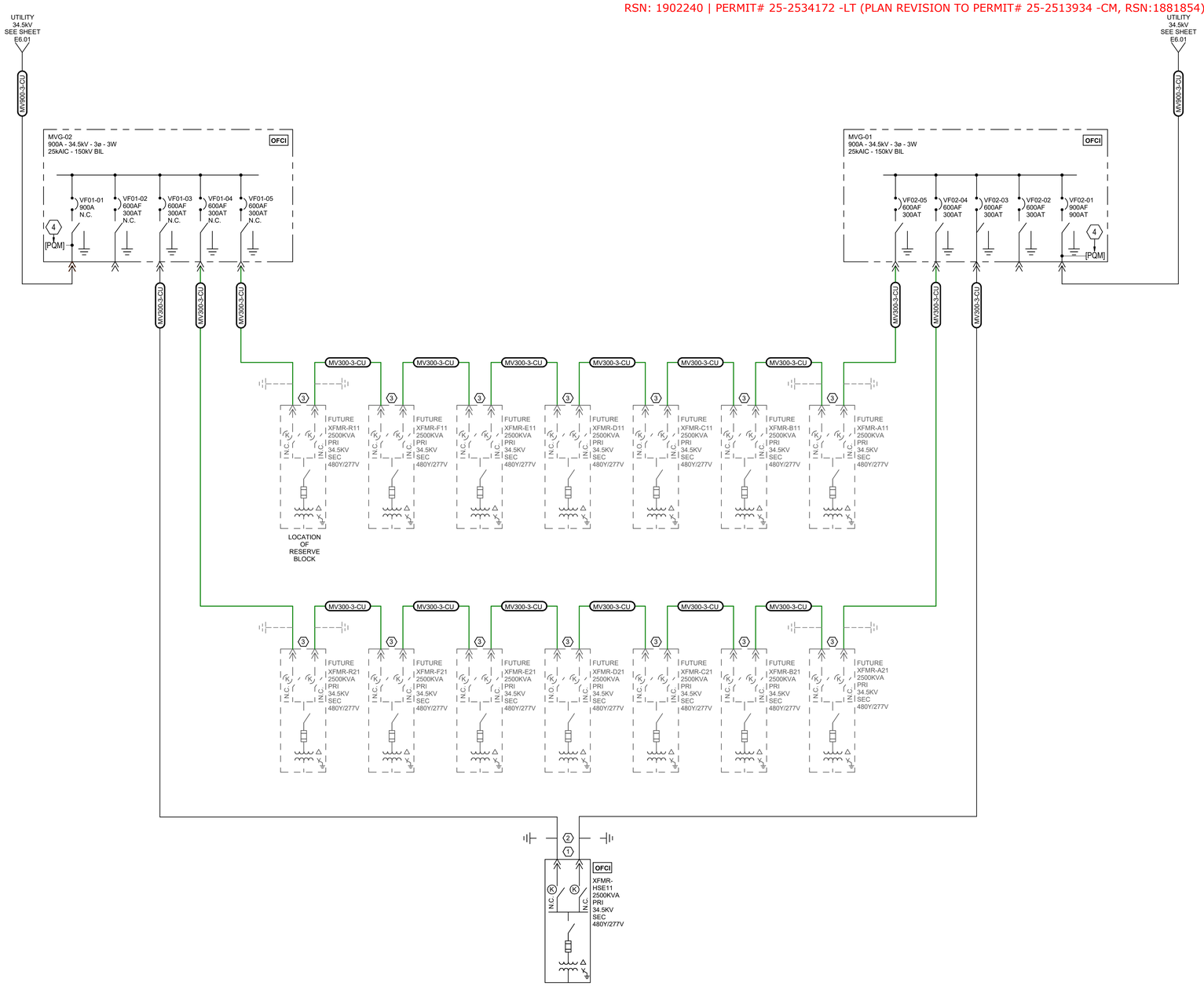
Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (SUBSTATION)

JOB 24464.0000
DATE 05.30.25
SHEET E06-01

6/2/2025 5:40:11 PM E06-01 SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (SUBSTATION)



SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES, ABBREVIATIONS. SEE DRAWING E07-10 FOR FEEDER SCHEDULES.

B. REFER TO E03 SERIES DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS.

C. SERVICE EQUIPMENT IS TO BE LEGIBLY MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AS PROVIDED BY THE SERVING UTILITY. THE CONTRACTOR SHALL COORDINATE WITH THE SERVING UTILITY TO OBTAIN THE MAXIMUM AVAILABLE FAULT CURRENT. CONTRACTOR SHALL PROVIDE LABELING NOTING AVAILABLE FAULT CURRENT AND DATE OF CALCULATION IN ACCORDANCE WITH COLORADO ELECTRICAL CODE, LATEST EDITION.

1 D. FOUNDATIONS SHALL BE PROVIDED FOR ALL MVG GEAR, DAY 1 HOUSE AND DH1100/2100 TRANSFORMERS IN THE CORE & SHELL PHASE. THE REMAINDER OF THE ELECTRICAL YARD WILL CONSIST OF CONDUIT STUB UPS, SEALED WITH PULL STRINGS. COORDINATE FINAL PAD LOCATIONS WITH STRUCTURAL.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

SHEET KEYNOTES

1. MEDIUM VOLTAGE TRANSFORMER LOOP SHALL BE MECHANICALLY INTERLOCKED TO PREVENT ALL SWITCHES IN THE LOOPS FROM BEING CLOSED AT THE SAME TIME. PROVIDE A LOCK CFCI KEY SYSTEM SUCH THAT UNDER NORMAL OPERATING CONDITIONS ONE SWITCH SHALL REMAIN LOCKED IN THE OPEN POSITION. TO CLOSE THE LOCKED OPEN SWITCH, THE OPERATOR MUST OPEN ANY OTHER SWITCH WITHIN THE SAME LOOP, RELEASING ITS KEY AND RENDERING THAT SWITCH LOCKED IN THE OPEN POSITION. THAT KEY CAN THEN BE USED TO CLOSE THE PREVIOUSLY LOCKED OPEN SWITCH.
2. TYPICAL SURGE ARRESTER. PROVIDE ELBOW TYPE SURGE ARRESTER AS PART OF MEDIUM VOLTAGE FEEDER TERMINATION.
3. STUB UP AND CAP CONDUIT AT TRANSFORMER PAD FOR FUTURE USE.
4. PROVIDE SEL-735 OR EQUAL REVENUE GRADE METER AT INCOMING SWITCH POSITION WITH 2" CONDUIT FROM BASE BUILDING TO SUBSTATION FOR FIBER CONNECTIVITY. REFERENCE POWER PLANS FOR 120V SOURCE(S).

LINETYPE LEGEND

- NEW FEEDER
- EXISTING FEEDER
- FUTURE FEEDER
- CONDUIT ONLY
- EXISTING CONDUIT, NEW WIRE

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
Jurisdiction: City of Aurora, CO - 2021 IECC & 2021 IRC

RSN: 1902240
Permit #: 25-2534172-REV
RSN: 1881854
Permit #: 25-2513934-CM

Sheet Number: E06-01, E06-02, E06-03, E06-04, E06-05
a. Update: Added sheet note D clarifying pad requirements. Clarified where conduit
and wire vs. Conduit only is to be installed.

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000
AG/E
SYSKA HENNESSY GROUP
DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

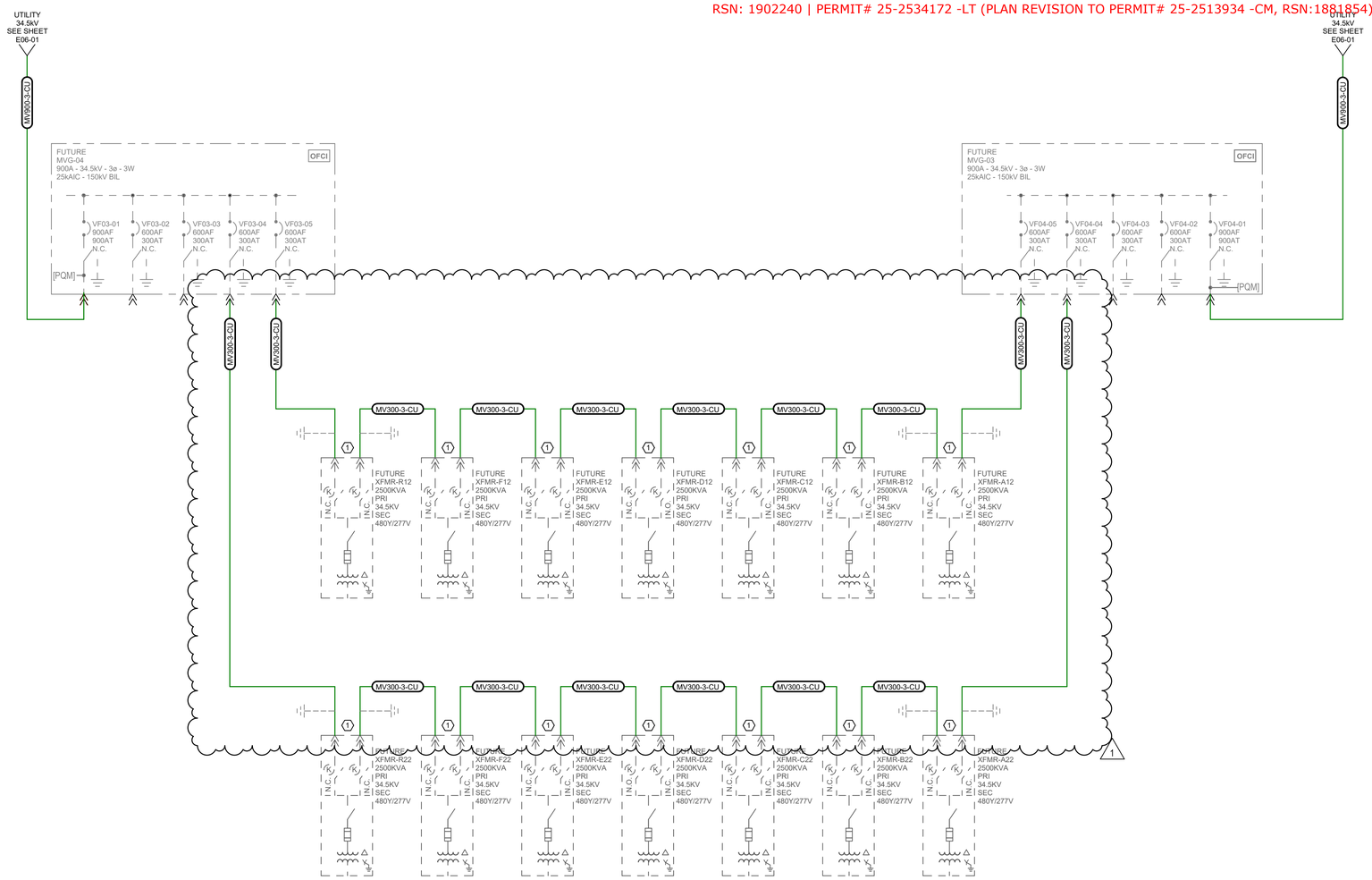
Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (DH1100/2100)

JOB 24464.0000
DATE 05.30.25
SHEET E06-02

RSN: 1902240 | PERMIT# 25-2534172 -LT (PLAN REVISION TO PERMIT# 25-2513934 -CM, RSN:1881854)



SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES, ABBREVIATIONS. SEE DRAWING E07-10 FOR FEEDER SCHEDULES.

B. REFER TO E03 SERIES DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS.

C. SERVICE EQUIPMENT IS TO BE LEGIBLY MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AS PROVIDED BY THE SERVING UTILITY. THE CONTRACTOR SHALL COORDINATE WITH THE SERVING UTILITY TO OBTAIN THE MAXIMUM AVAILABLE FAULT CURRENT. CONTRACTOR SHALL PROVIDE LABELING NOTING AVAILABLE FAULT CURRENT AND DATE OF CALCULATION IN ACCORDANCE WITH COLORADO ELECTRICAL CODE, LATEST EDITION.

1 D. FOUNDATIONS SHALL BE PROVIDED FOR ALL MVG GEAR, DAY 1 HOUSE AND DH1100/2100 TRANSFORMERS IN THE CORE & SHELL PHASE. THE REMAINDER OF THE ELECTRICAL YARD WILL CONSIST OF CONDUIT STUB UPS, SEALED WITH PULL STRINGS. COORDINATE FINAL PAD LOCATIONS WITH STRUCTURAL.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

SHEET KEYNOTES

1. STUB UP AND CAP CONDUIT AT TRANSFORMER PAD FOR FUTURE USE.

LINETYPE LEGEND

- NEW FEEDER
- EXISTING FEEDER
- FUTURE FEEDER
- CONDUIT ONLY
- EXISTING CONDUIT, NEW WIRE

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (DH1200/2200)

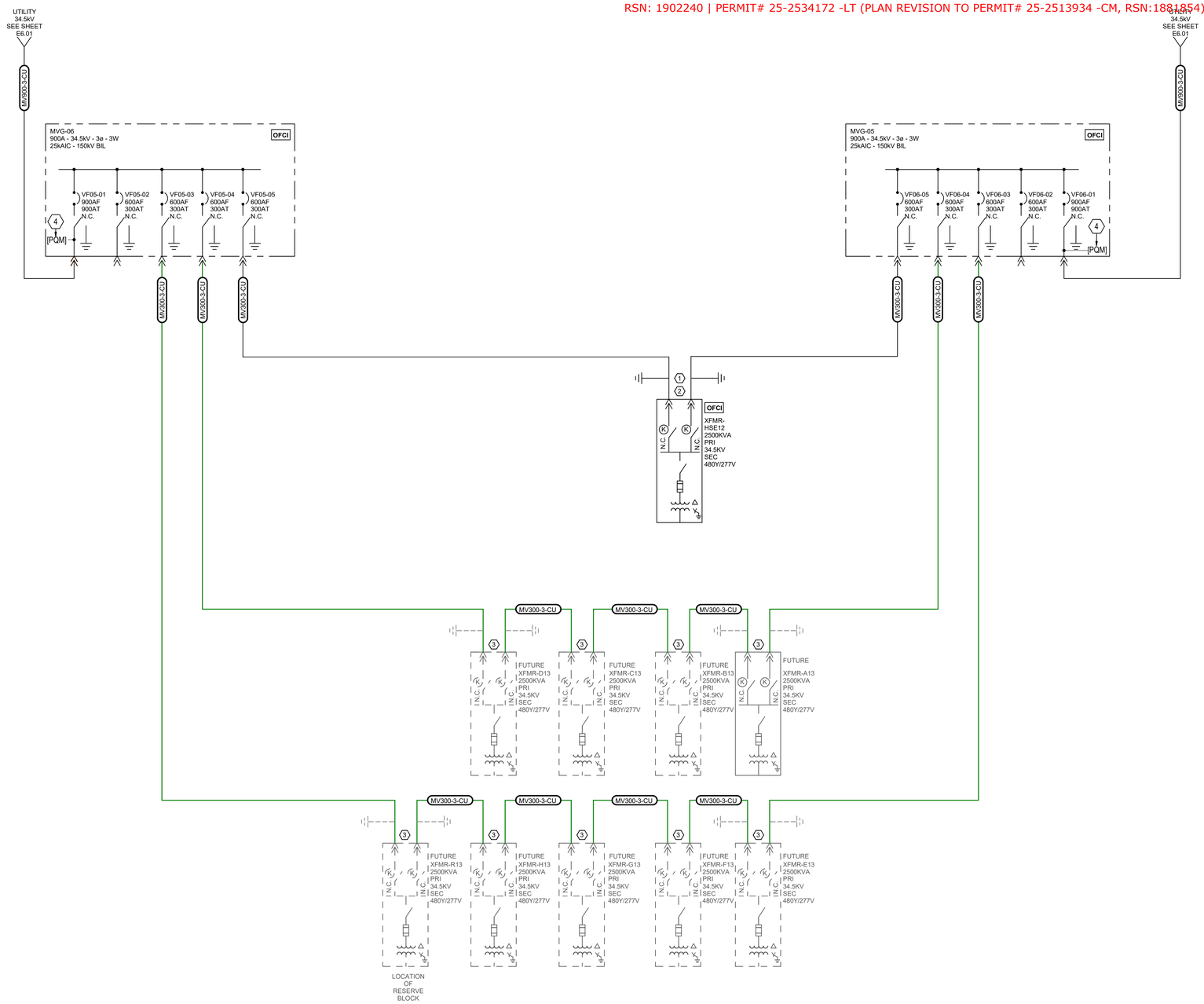
JOB 24464.0000
DATE 05.30.25
SHEET E06-03

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
Page 29 of 32
AURORA, COLORADO 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*

RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E06-01, E06-02, E06-03, E06-04, E06-05
a. Update: Added sheet note D clarifying pad requirements. Clarified where conduit
and wire vs. Conduit only is to be installed.



SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES, ABBREVIATIONS. SEE DRAWING E07-10 FOR FEEDER SCHEDULES.

B. REFER TO E03 SERIES DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS.

C. SERVICE EQUIPMENT IS TO BE LEGIBLY MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AS PROVIDED BY THE SERVING UTILITY. THE CONTRACTOR SHALL COORDINATE WITH THE SERVING UTILITY TO OBTAIN THE MAXIMUM AVAILABLE FAULT CURRENT. CONTRACTOR SHALL PROVIDE LABELING NOTING AVAILABLE FAULT CURRENT AND DATE OF CALCULATION IN ACCORDANCE WITH COLORADO ELECTRICAL CODE, LATEST EDITION.

D. FOUNDATIONS SHALL BE PROVIDED FOR ALL MVG GEAR, DAY 1 HOUSE AND DH1100/2100 TRANSFORMERS IN THE CORE & SHELL PHASE. THE REMAINDER OF THE ELECTRICAL YARD WILL CONSIST OF CONDUIT STUB UPS, SEALED WITH PULL STRINGS. COORDINATE FINAL PAD LOCATIONS WITH STRUCTURAL.

SHEET KEYNOTES

1. MEDIUM VOLTAGE TRANSFORMER LOOP SHALL BE MECHANICALLY INTERLOCKED TO PREVENT ALL SWITCHES IN THE LOOPS FROM BEING CLOSED AT THE SAME TIME. PROVIDE A LOCK CFCI KEY SYSTEM SUCH THAT UNDER NORMAL OPERATING CONDITIONS ONE SWITCH SHALL REMAIN LOCKED IN THE OPEN POSITION. TO CLOSE THE LOCKED OPEN SWITCH, THE OPERATOR MUST OPEN ANY OTHER SWITCH WITHIN THE SAME LOOP, RELEASING ITS KEY AND RENDERING THAT SWITCH LOCKED IN THE OPEN POSITION. THAT KEY CAN THEN BE USED TO CLOSE THE PREVIOUSLY LOCKED OPEN SWITCH.
2. TYPICAL SURGE ARRESTER. PROVIDE ELBOW TYPE SURGE ARRESTER AS PART OF MEDIUM VOLTAGE FEEDER TERMINATION.
3. STUB UP AND CAP CONDUIT AT TRANSFORMER PAD FOR FUTURE USE.
4. PROVIDE SEL-735 OR EQUAL REVENUE GRADE METER AT INCOMING SWITCH POSITION WITH 2" CONDUIT FROM BASE BUILDING TO SUBSTATION FOR FIBER CONNECTIVITY. REFERENCE POWER PLANS FOR 120V SOURCE(S).

LINETYPE LEGEND

- NEW FEEDER
- EXISTING FEEDER
- FUTURE FEEDER
- CONDUIT ONLY
- EXISTING CONDUIT, NEW WIRE

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: *1902240*
Permit #: *25-2534172-REV*

RSN: *1881854*
Permit #: *25-2513934-CM*

Sheet Number: E06-01, E06-02, E06-03, E06-04, E06-05
a. Update: Added sheet note D clarifying pad requirements. Clarified where conduit and wire vs. Conduit only is to be installed.

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000
AG/E
SYSKA HENNESSY GROUP
DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

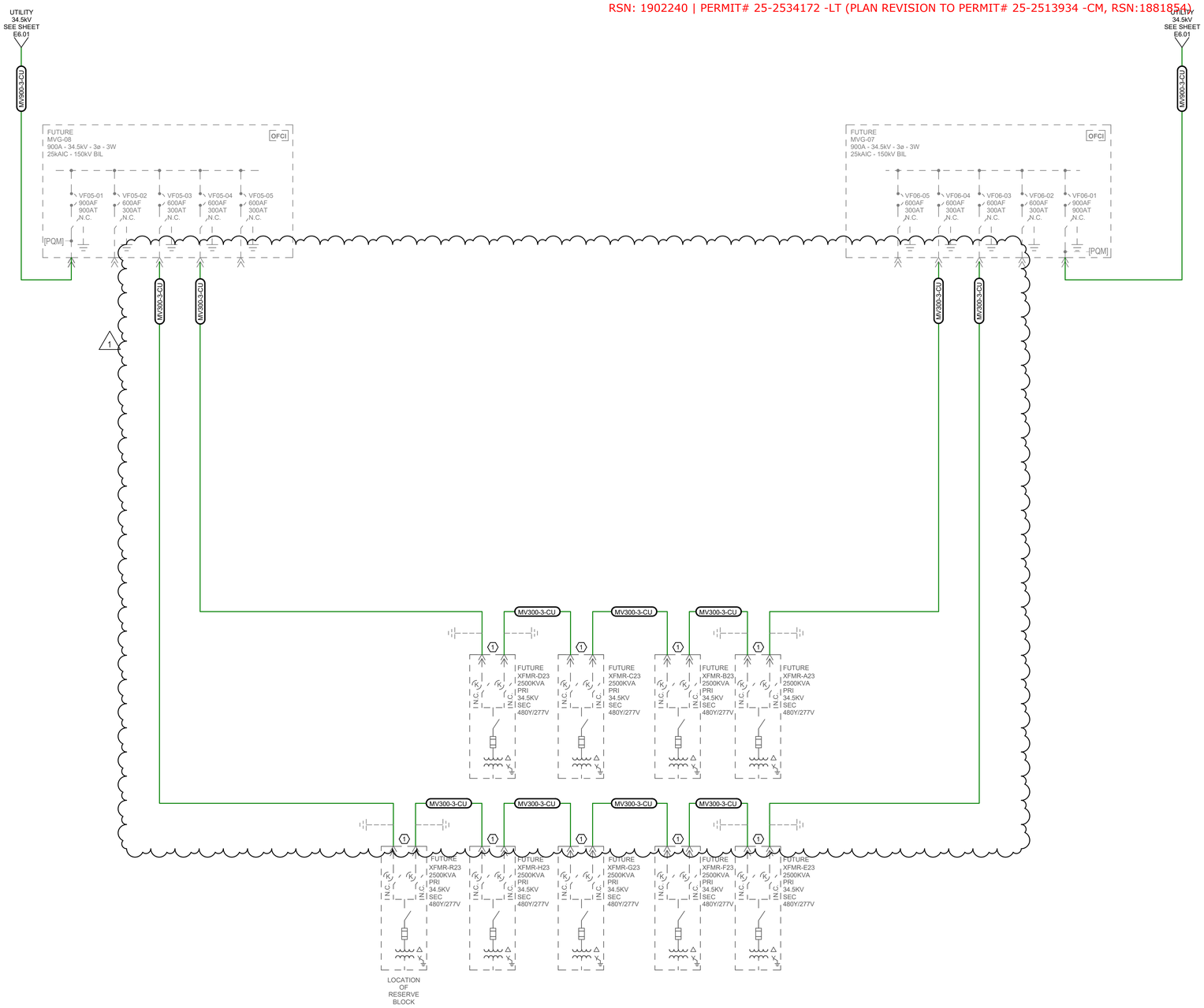
Date of issue:
05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (DH1300)

JOB 24464.0000
DATE 05.30.25
SHEET

E06-04



SHEET NOTES

A. SEE DRAWING E00-01 FOR LEGENDS, NOTES, ABBREVIATIONS. SEE DRAWING E07-10 FOR FEEDER SCHEDULES.

B. REFER TO E03 SERIES DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS.

C. SERVICE EQUIPMENT IS TO BE LEGIBLY MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AS PROVIDED BY THE SERVING UTILITY. THE CONTRACTOR SHALL COORDINATE WITH THE SERVING UTILITY TO OBTAIN THE MAXIMUM AVAILABLE FAULT CURRENT. CONTRACTOR SHALL PROVIDE LABELING NOTING AVAILABLE FAULT CURRENT AND DATE OF CALCULATION IN ACCORDANCE WITH COLORADO ELECTRICAL CODE, LATEST EDITION.

D. FOUNDATIONS SHALL BE PROVIDED FOR ALL MVG GEAR, DAY 1 HOUSE AND DH1100/2100 TRANSFORMERS IN THE CORE & SHELL PHASE. THE REMAINDER OF THE ELECTRICAL YARD WILL CONSIST OF CONDUIT STUB UPS, SEALED WITH PULL STRINGS. COORDINATE FINAL PAD LOCATIONS WITH STRUCTURAL.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

SHEET KEYNOTES

1. STUB UP AND CAP CONDUIT AT TRANSFORMER PAD FOR FUTURE USE.

LINETYPE LEGEND

- NEW FEEDER
- EXISTING FEEDER
- FUTURE FEEDER
- CONDUIT ONLY
- EXISTING CONDUIT, NEW WIRE

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TLD DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

1	05.30.25	ISSUE FOR CONSTRUCTION

COLORADO REGISTERED JAMES SCOTT COPE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue: 05.30.25

QTS DEN1 DC2

1140 N. GUN CLUB ROAD

SINGLE LINE DIAGRAM - MEDIUM VOLTAGE (DH2300)

JOB 24464.0000
DATE 05.30.25
SHEET E06-05

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2020 NEC

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

Sheet Number: E06-01, E06-02, E06-03, E06-04, E06-05
a. Update: Added sheet note D clarifying pad requirements. Clarified where conduit
and wire vs. Conduit only is to be installed.

FEEDER SCHEDULE - CONDUIT AND MC CABLE

NAME	# OF SETS	FEEDER AMPACITY	CONDUCTOR TYPE	PHASE CONDUCTORS		NEUTRAL CONDUCTORS		GROUND SIZE (CU)	CONDUIT SIZE
		GROSS		SIZE	QTY PER...	SIZE	QTY PER...		
20-3-CU	1	20 A	CU-THWN-2	#12 AWG	3	NA	NA	#12 AWG	3/4"
25-3-CU	1	30 A	CU-THWN-2	#10 AWG	3	NA	NA	#10 AWG	3/4"
30-3-CU	1	30 A	CU-THWN-2	#10 AWG	3	NA	NA	#10 AWG	3/4"
50-3-CU	1	55 A	CU-THWN-2	#6 AWG	3	NA	NA	#10 AWG	3/4"
50-4-CU	1	55 A	CU-THWN-2	#6 AWG	3	#6 AWG	1	#10 AWG	3/4"
60-3-CU	1	70 A	CU-THWN-2	#4 AWG	3	NA	NA	#10 AWG	1"
60-4-CU	1	70 A	CU-THWN-2	#4 AWG	3	#4 AWG	1	#10 AWG	1"
70-4-CU	1	70 A	CU-THWN-2	#4 AWG	3	#4 AWG	1	#8 AWG	1"
100-3-CU	1	110 A	CU-THWN-2	#1 AWG	3	NA	NA	#8 AWG	1 1/2"
100-4-CU	1	110 A	CU-THWN-2	#1 AWG	3	#1 AWG	1	#8 AWG	1 1/2"
100T-4-CU	1	110 A	CU-THWN-2	#1 AWG	3	#1 AWG	1	#6 AWG	1 1/2"
125-3-AL	1	135 A	AL-THWN-2	#2/0 AWG	3	NA	NA	#4 AWG	2"
150-3-AL	1	155 A	AL-THWN-2	#3/0 AWG	3	NA	NA	#4 AWG	2"
150-4-AL	1	155 A	AL-THWN-2	#3/0 AWG	3	#3/0 AWG	1	#4 AWG	2"
225-3-AL	1	230 A	AL-THWN-2	300 kCMIL	3	NA	NA	#2 AWG	2 1/2"
250-3-AL	1	250 A	AL-THWN-2	350 kCMIL	3	NA	NA	#2 AWG	2 1/2"
250-4-AL	1	250 A	AL-THWN-2	350 kCMIL	3	350 kCMIL	1	#2 AWG	3"
300-4-AL	1	310 A	AL-THWN-2	500 kCMIL	3	500 kCMIL	1	#2 AWG	3"
400-3-AL	2	410 A	AL-THWN-2	250 kCMIL	3	NA	NA	#1 AWG	2 1/2"
400-4-AL	2	410 A	AL-THWN-2	250 kCMIL	3	250 kCMIL	1	#1 AWG	2 1/2"
400T-4-AL	2	410 A	AL-THWN-2	250 kCMIL	3	250 kCMIL	1	#1/0 AWG	2 1/2"
600-3-AL	2	620 A	AL-THWN-2	500 kCMIL	3	NA	NA	#2/0 AWG	3"
800-3-AL	3	810 A	AL-THWN-2	400 kCMIL	3	NA	NA	#3/0 AWG	3"
800-4-AL	3	810 A	AL-THWN-2	400 kCMIL	3	400 kCMIL	1	#3/0 AWG	3"
1000-3-AL	3	1020 A	AL-THWN-2	600 kCMIL	3	NA	NA	#4/0 AWG	3"
1200-3-AL	4	1240 A	AL-THWN-2	500 kCMIL	3	NA	NA	250 kCMIL	3"
1200-3-CU	3	1260 A	CU-THWN-2	600 kCMIL	3	NA	NA	#3/0 AWG	3"
2000-3-AL	6	2040 A	AL-THWN-2	600 kCMIL	3	NA	NA	400 kCMIL	3"
2000-4-AL	6	2040 A	AL-THWN-2	600 kCMIL	3	600 kCMIL	1	400 kCMIL	3 1/2"
3000-3-AL	8	3080 A	AL-THWN-2	750 kCMIL	3	NA	NA	600 kCMIL	3 1/2"
3000-4-AL	11*	3080 A	AL-THWN-2	750 kCMIL	3	750 kCMIL	1	750 kCMIL	4"

* UPSIZED PER UNDERGROUND NEHER-MCGRATH HEAT CALCULATIONS.

NOTES:
1. CONDUIT SIZES ARE BASED ON ELECTRIC METALLIC TUBING, FOR OTHER RACEWAY TYPES REFER TO APPROPRIATE CONDUIT AND TUBING FILL TABLES IN ANNEX C OF NEC.
2. TABLE DOES NOT TAKE INTO ACCOUNT VOLTAGE DROP. CONTRACTOR IS RESPONSIBLE FOR PERFORMING VOLTAGE DROP CALCULATIONS AND UPSIZING FEEDERS AND GROUND CONDUCTORS TO COMPENSATE FOR VOLTAGE DROP BASED ON THE FINAL INSTALLED LENGTH OF THE FEEDER.
3. DO NOT USE THIS TABLE FOR SERVICE ENTRANCE CONDUCTORS, REFER TO NEC 230.42.
4. CONTRACTOR SHALL VALIDATE SIZING BASED ON INSTALLED CONDITIONS TO VERIFY COMPLIANCE WITH NEHER-MCGRATH AND VOLTAGE DROP CALCULATIONS. FEEDERS SHALL BE DE-RATED UNDER THE FOLLOWING CONDITIONS, AND OTHER APPLICABLE NEC REQUIREMENTS:
   A. VOLTAGE DROP
   B. NEHER-MCGRATH CALCULATIONS
   C. SYSTEMS WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS (NEUTRAL CONDUCTOR SHALL BE CONSIDERED ACCORDING TO NEC REQUIREMENTS)
   D. GROUND CONDUCTOR SIZES INDICATED ARE BASED ON COPPER GROUND.
   E. CONTRACTOR SHALL PROVIDE FINAL CALCULATIONS BASED ON INSTALLED CONDITIONS AND SHALL SUBMIT ALL SUCH CALCULATIONS FOR VERIFICATION BY THE ENGINEER OF RECORD.

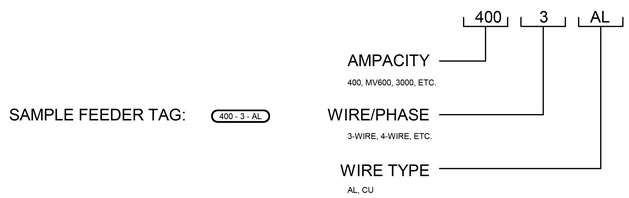
MV FEEDER SCHEDULE - CONDUIT (C)

NAME	# OF SETS	FEEDER AMPACITY	CONDUCTOR TYPE	PHASE CONDUCTORS		NEUTRAL CONDUCTORS		GROUND SIZE (CU)	CONDUIT SIZE
		GROSS		SIZE	QTY PER CONDUIT	SIZE	QTY PER CONDUIT		
MV200 - 3 - CU	1	215 A	CU-MV-105	#1/0 AWG	3	NA	NA	#4 AWG	6"
MV300 - 3 - CU	1	315 A	CU-MV-105	#4/0 AWG	3	NA	NA	#2 AWG	6"
MV400 - 3 - CU	1	415 A	CU-MV-105	350 KCMIL	3	NA	NA	#1 AWG	6"
MV600 - 3 - CU	1	610 A	CU-MV-105	750 kCMIL	3	NA	NA	#2/0 AWG	6"
MV900 - 3 - CU	2	1000 A	CU-MV-105	500 KCMIL	3	NA	NA	#4/0 AWG	6"
MV1200 - 3 - CU	2	1220 A	CU-MV-105	750 KCMIL	3	NA	NA	250 KCMIL	6"

FEEDER SCHEDULE - CABLE BUS (CB)

NAME	# OF SETS	FEEDER AMPACITY	CONDUCTOR TYPE	PHASE CONDUCTORS	NEUTRAL CONDUCTORS		GROUND SIZE (CU)	TRAY SIZE
		GROSS		SIZE	SIZE	QTY PER CONDUIT		
3000 - 3 - AL	9	3000 A	AL-XHHW-2	750 KCMIL	NA	NA	SEE NOTE	10" X 23.5"
3000 - 4 - AL	9	3000 A	AL-XHHW-2	750 KCMIL	750KCMIL	1	SEE NOTE	10" X 23.5"

NOTE:
1. GROUND CONDUCTOR WILL DIFFER FOR GENERATOR CABLE BUS FEEDERS AND TRANSFORMER CABLE BUS FEEDERS. THE GROUND CONDUCTOR FOR GENERATORS SHALL BE A 600KCMIL COPPER GROUND, THE TRANSFORMER GROUND CONDUCTOR SHALL BE 2-500KCMIL COPPER GROUNDS.
2. CONTRACTOR SHALL PROVIDE ENGINEER OF RECORD WITH SUBMITTAL FOR REVIEW TO CONFIRM SUFFICIENT AMPACITY OF CABLE BUS.



FEEDER TAG LEGEND

TRANSFORMER SCHEDULE (CFCI)

TRANSFORMER DESIGNATION	KVA	PRIMARY WINDING			SECONDARY WINDING			GROUNDING	INSUL CLASS	INSUL RISE	PHASE	DB	K RATING	REMARKS
		TYPE	VOLTS	CONDUIT & WIRE	TYPE	VOLTS	CONDUIT & WIRE	ELECTRODE (CU)						
XFMR-SITE-11	75	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	480/277	SEE ONE-LINE DIAGRAM	1#6	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-CAFÉ-11	30	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#6	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-SITE-EV	150	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#1/0	220	150	3	NEMA ST 20	-	AL WINDINGS, NEMA 3R
XFMR-RP-11	150	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#1/0	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-RP-21	150	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#1/0	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-DH11-RP	30	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#6	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-DH21-RP	30	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#6	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-EXT-11	30	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#6	220	150	3	NEMA ST 20	-	AL WINDINGS
XFRM-HSE-11-01	112.5	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#1/0	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-HSE-12-01	112.5	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#1/0	220	150	3	NEMA ST 20	-	AL WINDINGS
XFRM-HSE-21-01	112.5	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#1/0	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-HSE-22-01	112.5	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#1/0	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-EXT-12	30	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#6	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-SITE-12	75	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#2	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-RP-11	75	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#2	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-RP-21	75	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#2	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-DH11-RP	30	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#6	220	150	3	NEMA ST 20	-	AL WINDINGS
XFMR-DH21-RP	30	DELTA	480	SEE ONE-LINE DIAGRAM	WYE	208/120	SEE ONE-LINE DIAGRAM	1#6	220	150	3	NEMA ST 20	-	AL WINDINGS

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: Robert Lowman
Date: Jun 06, 2025
2021 INTERNATIONAL CODES & 2023 NEC

RSN: 1902240
Permit #: 25-2534172-REV

RSN: 1881854
Permit #: 25-2513934-CM

Sheet Number: E07-10
a. Update: Added Transformer Schedule, minor revisions on the feeder schedule to capture any new feeder types.

5/30/2025 2:01:01 PM E07-10 TYPICAL FEEDER SCHEDULE

CORGAN
401 N. Houston Street Dallas, TX 75202
T: 214.748.2000

AG/E

SYSKA HENNESSY GROUP

TLD DESIGN CONSULTING LLC

ISSUES

1	12.20.24	DESIGN DEVELOPMENT
2	01.31.25	ISSUE FOR PERMIT
3	05.30.25	FOUNDATIONS ONLY IFP
4		
5		
6		
7		
8		
9		
10		

REVISIONS

A	03.28.25	ADDENDUM 1

COLORADO REGISTERED JAMES SCOTT CORE 34544 PROFESSIONAL ENGINEER
5/30/2025

Date of issue: 05.30.25

QTS DEN1 DC2
1140 N. GUN CLUB ROAD
QTS

TYPICAL FEEDER SCHEDULE

JOB 24464.0000
DATE 05.30.25
SHEET E07-10