3/25/2022 9:40:21 AM

SENSAPURE ADDITION

1945 Fremont Dr Salt Lake City, UT 84104

OWNER

sensapure FLAVORS

1945 S, Fremont Dr, Salt Lake City, UT 84104
Phone: (801) 456-4284

ARCHITECT/STRUCTURAL ENGINEER

aeurbia architects and engineers
2875 south decker lake drive, suite 275
salt lake city, utah 84119
phone: 801.746.0456 - fax: 801.575.6456
webpage: aeurbia.com

CIVIL ENGINEER

CIR CIVIL ENGINEERING + SURVEYING
10718 S. BECKSTEAD LANE, STE. 102
SOUTH JORDAN, UT 84095

LANDSCAPE ARCHITECT

PKJ DESIGN GROUP Landscape Architecture // Planning & Visualization
3450 N. TRIUMPH BLVD SUITE 102
LEHI, UT 84043
OFFICE 801.960.2698

MECHANICAL ENGINEER

DAVID L. JENSEN & ASSOCIATES
547 WEST 500 SOUTH, SUITE 140
BOUNTIFUL, UT 84010
PH: (801) 294-9299
WWW.DLJENG.COM

ELECTRICAL ENGINEER

HPE ELECTRICAL ENGINEERING
708 EAST 50 SOUTH
AMERICAN FORK, UTAH 84003
OFFICE 801.642.2051
FAX 801.642.2154

GENERAL CONTRACTOR

GRAMOLL CONSTRUCTION
155 South 750 West, North Salt Lake, Utah 84054
Phone: (801) 295-2341 Fax: (801) 295-2356
Email: info@gramoll.com

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DEFERRED SUBMITTAL REQUIREMENTS

DEFERRED SUBMITTALS ARE THOSE PORTIONS OF DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF THE PERMIT APPLICATION AND HAVE RECEIVED PRIOR APPROVAL FROM THE BUILDING OFFICIAL TO BE DEFERRED. THE DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND GENERAL CONTRACTOR WITHIN SIX WEEKS TO COMMENCEMENT OF CONSTRUCTION TO THIS PORTION OF WORK. DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND GENERAL CONTRACTOR WITHIN FOUR WEEKS OF THE AWARD OF THE CONTRACT TO THE GENERAL CONTRACTOR. THIS PROCESS MAY VARY, BUT SHOULD ALLOW FOR POSSIBLE 4-6 WEEK REVIEW PROCESS. CONTRACTOR IS RESPONSIBLE TO COORDINATE FOR REVIEW TIMES IN CRITICAL PATH OF CONSTRUCTION.

DEFERRED SUBMITTAL PROCESS

1. THE DEFERRED SUBMITTAL SHALL FIRST BE REVIEWED BY THE GENERAL CONTRACTOR FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. THE SUBMITTAL MUST BE REVIEWED, APPROVED, STAMPED AND SIGNED BY THE GENERAL CONTRACTOR BEFORE BEING SUBMITTED TO THE ARCHITECT.
2. THE GENERAL CONTRACTOR SHALL SUBMIT THE DEFERRED SUBMITTAL TO THE ARCHITECT.
3. THE DEFERRED SUBMITTAL ITEMS WILL BE REVIEWED BY THE ENGINEER OR ARCHITECT IN RESPONSIBLE CHARGE. THE ENGINEER OR ARCHITECT WILL ATTACH A LETTER TO THE SUBMITTAL STATING THAT THE DEFERRED ITEM IS IN CONFORMANCE WITH THE DESIGN OF THE STRUCTURE.
4. THE APPROVED SUBMITTALS WILL BE RETURNED TO THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CITY SUBMITTAL AND ALL APPROVALS REQUIRED BY THE CITY.
5. THE GENERAL CONTRACTOR SHALL MAINTAIN ONE SET OF THE APPROVED SUBMITTAL ON SITE FOR REFERENCE BY THE CITY INSPECTOR.
6. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY BUILDING OFFICIAL. ALL WORK COMPLETED PRIOR TO APPROVAL AND REQUIRES CHANGE OR MODIFICATION DUE TO APPROVALS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. SEE STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS FOR STRUCTURAL DEFERRED SUBMITTALS.
8. COORDINATE WITH GENERAL NOTES OF STRUCTURAL, MECHANICAL, AND ELECTRICAL FOR ADDITIONAL INSTRUCTIONS.

DEFERRED SUBMITTAL ITEMS

1. FIRE SPRINKLING DRAWINGS: THESE DRAWINGS SHALL INCLUDE THE DESIGN CALCULATIONS, DESIGN DRAWINGS, APPROVAL FROM THE FIRE MARSHALL PRIOR TO SUBMITTING TO THE DESIGN TEAM FOR FINAL ACCEPTANCE. FIRE SPRINKLER CONTRACTOR/ DESIGN MUST VERIFY W/ P.C.F.D. ALL FIRE SPRINKLERS REQUIREMENTS FOR PLACEMENT OF SPRINKLERS AT DECKS. NO REVIEW WILL BE PERFORMED IF THE SUBMITTAL IS NOT COMPLETE. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR ANY THIRD PARTY REVIEW COSTS REQUIRED BY LOCAL JURISDICTIONS FIRE AUTHORITY.
2. FIRE ALARM DESIGN: THE FIRE ALARM DEVICES SHOWN ON THE DRAWINGS ARE DIAGRAMATIC, IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO PROVIDE A SYSTEM THAT MEETS THE FULL INTENT OF NFPA 72. THE SUB CONTRACTOR WILL BE RESPONSIBLE TO TEST TO VERIFY THE REQUIREMENTS OF NFPA 72 ARE BEING MET. IF ADDITIONAL FIRE ALARM DEVICES ARE REQUIRED, THE DEVICES WILL BE THE REQUIREMENTS OF THE FIRE ALARM CONTRACTOR TO PROVIDE A COMPLETE SYSTEM TO MEET NFPA 72.

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LICENSED ARCHITECT 174600 JAMES MICHAEL GRAMOLL STATE OF UTAH
3/25/2022 9:40:21 AM

SENSAPURE ADDITION
DUSTIN GRAMOLL
1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2021.249

COVER

DATE: PROJECT ISSUE DATE

SHEET #:

G001

3/25/2022 9:40:21 AM PROJECT STATUS

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Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]					
Window 21 copy 3: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Window 21 copy 4: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
WEST					
Exterior Wall 7: Concrete Block:12", Partially Grouted, Cells Empty, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	4442	---	12.0	0.069	0.090
Door 3: Insulated Metal, Non-Swinging, [Bldg. Use 1 - Warehouse]	408	---	---	0.700	0.179

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) 'Other' components require supporting documentation for proposed U-factors.

Envelope PASSES: Design 1% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Allen Hinrichs, Designer — Name - Title
Signature
2022.02.04 — Date

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Use 1 - Warehouse],					
Window 1 copy 8: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Window 1 copy 9: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Window 1 copy 10: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Window 1 copy 11: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Window 1 copy 12: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Window 1 copy 13: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Exterior Wall 6: Concrete Block:12", Partially Grouted, Cells Empty, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	933	---	12.0	0.069	0.090
EAST					
Exterior Wall 2: Solid Concrete:8" Thickness, Normal Density, Furring: Metal, [Bldg. Use 1 - Warehouse]	5366	10.0	12.0	0.058	0.090
Window 15: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Window 15 copy 1: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Window 15 copy 2: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Window 15 copy 3: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Window 15 copy 4: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Window 15 copy 5: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Exterior Wall 4: Concrete Block:12", Partially Grouted, Cells Empty, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	926	---	12.0	0.069	0.090
Door 1: Insulated Metal, Non-Swinging, [Bldg. Use 1 - Warehouse]	192	---	---	0.700	0.179
Door 2: Insulated Metal, Swinging, [Bldg. Use 1 - Warehouse]	120	---	---	0.700	0.370
SOUTH					
Exterior Wall 3: Concrete Block:12", Partially Grouted, Cells Empty, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	2922	---	12.0	0.069	0.090
Exterior Wall 5: Concrete Block:12", Partially Grouted, Cells Empty, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	3026	---	12.0	0.069	0.090
Window 21: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Window 21 copy 1: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	36	---	---	0.800	0.380
Window 21 copy 2: Metal Frame:Fixed, Perf. Type: Energy code	36	---	---	0.800	0.380

COMcheck Software Version 4.1.1.0

Envelope Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: SENSAPURE ADDITION
Location: Salt Lake City, Utah
Climate Zone: 5b
Project Type: Addition
Vertical Glazing / Wall Area: 5%

Construction Site:
1945 Fremont Dr
SALT LAKE CITY, UT 84104

Owner/Agent:
JEFF
SENSAPURE
1945 Fremont Dr
SALT LAKE CITY, UT 84104

Designer/Contractor:
ALLEN HINRICHS
AE URBIA
909 W SOUTH JORDAN PARKWAY
SOUTH JORDAN, UT 84095

Building Area	Floor Area
1-Warehouse : Nonresidential	10373

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Roof 1: Insulation Entirely Above Deck, [Bldg. Use 1 - Warehouse]	10373	---	30.0	0.032	0.032
Floor 1: Other Floor, [Bldg. Use 1 - Warehouse] (b)	10373	---	---	0.001	0.033
NORTH					
Exterior Wall 1: Concrete Block:12", Partially Grouted, Cells Empty, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	3238	---	12.0	0.069	0.090
Window 1: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	100	---	---	0.800	0.380
Window 1 copy 1: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	100	---	---	0.800	0.380
Window 1 copy 2: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	100	---	---	0.800	0.380
Window 1 copy 3: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	100	---	---	0.800	0.380
Window 1 copy 4: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Window 1 copy 5: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Window 1 copy 6: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg. Use 1 - Warehouse]	16	---	---	0.800	0.380
Window 1 copy 7: Metal Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.60, PF 3.00, VT 0.30, [Bldg.	16	---	---	0.800	0.380

SENSAPURE ADDITION
WAREHOUSE ADDITION
2018 IBC CODE ANALYSIS

Code Item Reference	Code Requirement	Actual Building	Comments
Occupancy Chapter 3	B/S-1/S-2/F-1/F-2	B/S-1/S-2/F-1/F-2	Office, Warehouse, Industrial
Construction Type Chapter 6	II-B	II-B	**Existing Building with New Warehouse Addition and Hazardous storage bldg.**
Allowable Height Table 504.3	75'	H<75'	Ok
Allowable Stories Table 504.4	3	2	Ok
Allowable Area Section 507 if unlimited Otherwise table 506.2	46,500 SF per level 93,000 SF total	34,399 SF – level 1 existing 19,168 SF – level 2 existing **10,549 SF – New level 1** 44,948 SF – level 1 total	Ok Ok Ok – New Additions Ok
Frontage Increase 506.3 frontage increase	NA	NA	NA
Mixed Use Section 508	NA	NA	Non-separated use per 508.3
Max. Area of Ext. Wall Unprotected openings Table 705.8	No Limit	No Limit	Ok
Automatic Sprinkler Systems Section 903	Yes	Yes	**NFPA-13 ESFR. Modify as required for new additions**
Max. Floor Area Allowances per Occupant, Table 1004.1.2	Load Factors: 500 Warehouse	Additions: 10,549/500 = 22	Addition: New warehouse
Min. Number of Exits Section 1006	Addition: 1	Addition: 2	Ok
Common Path Table 1006.2.1	B: 100' max S: 100' max F: 100' max	Less than maximum See plan	Ok
Exit Access Travel Table 1017.2	w/ Sprinkler: S-1, F-1: 400' S-2, F-2: 400' B: 300'	Less than maximum See plan	Section 1017.2.2: S-1, F-1 increase Ok
Accessibility	Chapter 11		Ok
Ventilation, Temperature, Lighting	Chapter 12 and Mechanical code		Ok
Min. Roofing Class. Table 1505.1	C	C	Ok
Plumbing Facilities Table 2902.1 Water Closets Lavatories Drinking Fountain Service Sink	New Additions 1M 1W 1M 1W 1 high + 1 low 1	New Additions 1M 1W 1M 1W 1 high + 1 low 1	B/S 1:25 first 50,1:50 / 1:100 1:40 first 80,1:80 / 1:100 1:100 / 1:1,000 1/1
Fire Extinguishers			Per Fire Marshal
Energy Efficiency	Chapter 13	International Energy Conservation Code	Ok

Note: Building area is approximate and portrays gross building area for code compliance only. Additional area plans can be provided at the request of the owner for BOMA calculations, etc. Contractor shall be responsible for determining building areas for bidding purposes.

FIRE-RESISTANCE RATING REQUIREMENTS (hours)

Building Element	Type II-B
Structural Frame Including Columns, Girders, Trusses	0
Bearing Walls Exterior Interior	 0 0
Nonbearing Walls and Partitions Exterior Interior	 0 0
Floor Construction Including supporting Beams and Joists	0
Roof Construction Including supporting Beams and Joists	0

Corridor fire-resistance rating = 0 hr per table 1020.1

Note: The new exterior 180 SF explosion proof room is primarily use for the storage of a class II combustible liquid. The total quantity (approximately 150 gal) is less than the allowable amount of 120 gal x 2 x 2 = 480 gal per table 307.1(1) with footnotes d and e applied. The room needs to be ventilated per 415.9.1.7 and shall include an explosion prevention system / venting (barricade construction is note required). The owners have selected to construct the room to be explosion proof although not required by the building code.

INTERIOR WALL AND CEILING FINISH REQUIREMENTS

Sprinkled	Group S, F	Group B
Exit enclosures and exit passageways	C	B
Corridors	C	C
Rooms and enclosed spaces	C	C

See Table 803.13
Class A flame spread 0-25; Smoke developed 0-450
Class B flame spread 26-75; Smoke developed 0-450
Class C flame spread 76-200; Smoke developed 0-450

BUILDING INSULATION

LOCATION	VALUE	TYPE	COMMENTS
EXTERIOR WALLS	R-12	DOW THERMAX WHITE FINISH INSULATION	
ROOF	R-30	GFR FACED POLYISOCYANURATE	

BUILDING AIR BARRIER

LOCATION	TYPE	COMMENTS
WALLS	12" CMU BLOCKS	
ROOF	GFR FACED POLYISOCYANURATE	SEAMS TO BE TAPED

1. WALL TO ROOF CONNECTION DETAILED AT 10/A402

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LICENSED ARCHITECT 174600 JAMES MICHAEL GRAMOLL STATE OF UTAH
3/25/2022 9:40:30 AM

SENSAPURE ADDITION
DUSTIN GRAMOLL
1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date

AE2021.249

GENERAL NOTES & LEGENDS

DATE: **PROJECT ISSUE DATE**

SHEET #:

G002

3/25/2022 9:40:30 AM **PROJECT STATUS**

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GENERAL PROJECT NOTES

DEFINITIONS

1. PROVIDE:
MEANS TO PROVIDE, FURNISH AND INSTALL, A COMPLETE SYSTEM AND READY FOR OPERATIONS AND USE FOR PURPOSE INTENDED INCLUDES THOSE ITEMS SPECIFIED WITHIN THE DRAWINGS AND SPECIFICATIONS AS WELL AS THOSE ITEMS THAT ARE REQUIRED TO PROVIDE A COMPLETE SYSTEM. THE CONTRACTOR AND SUB CONTRACTORS ARE REQUIRED TO PROVIDE THE FULL AND COMPLETE SYSTEM.

2. FURNISH:
MEANS TO SUPPLY, PURCHASE, PROCURE AND DELIVER COMPLETE WITH RELATED ACCESSORIES, READY FOR ASSEMBLY, APPLICATION, INSTALLATION, AND SIMILAR OPERATIONS, AS APPLICABLE IN EACH INSTANCE.

3. INSTALL:
MEANS TO CONSTRUCT, ASSEMBLE, ERECT, MOUNT, ANCHOR, PLACE, CONNECT, APPLY AND SIMILAR OPERATIONS, COMPLETE WITH RELATED ACCESSORIES, AS APPLICABLE IN EACH INSTANCE.

4. EQUIVALENT:
MEANS "EQUIVALENT AS ACCEPTED BY THE ARCHITECT." WITH RESPECT TO PRODUCTS, EQUIVALENT MEANS A LIKE DEGREE OF FEATURES, ATTRIBUTES, PERFORMANCES, OR QUALITIES DEEMED ESSENTIAL TO THE DESIGN INDICATED INSTEAD, THE TERM INTENDED TO MEAN ARCHITECT WILL CONSIDER SUBSTITUTION PROPOSALS FOR THE PRODUCT. DO NOT ASSUME THAT SUBSTITUTE PRODUCTS ARE ACCEPTABLE. SUBSTITUTIONS MADE BY THE CONTRACTOR WITHOUT FULL AND FINAL APPROVAL, MAY REQUIRE TO BE REMOVED IF NOT DEEMED ACCEPTABLE BY THE ARCHITECT. ALL COSTS ASSOCIATED TO REMOVAL OF SUBSTITUTION NOT APPROVED, AND INSTALLATION OF ACCEPTED PRODUCTS WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

GENERAL NOTES

1. SITE VISITS
VISITS TO THE JOB SITE BY ANY REPRESENTATIVE OF THE ARCHITECT DO NOT CONSTITUTE APPROVAL OF THE WORK PERFORMED BY THE CONTRACTOR OR HIS SUBCONTRACTORS, AND ARE MERELY FOR THE PURPOSE OF OBSERVING THE WORK PERFORMED.

2. DISCREPANCIES IN THE FIELD
CONTRACTOR SHALL NOTIFY ENGINEER / ARCHITECT OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND / OR SPECIFICATIONS BEFORE PROCEEDING WITH ANY WORK INVOLVED. FIELD CONFIRMATION OF DISCREPANCIES SHALL BE RECORDED ON REPRODUCIBLE DOCUMENT AND IMMEDIATELY TRANSMITTED TO ARCHITECT FOR PROJECT RECORD, COORDINATION, AND NECESSARY RESOLUTION PRIOR TO CONTINUING WITH WORK. IN ALL CASES, UNLESS OTHERWISE DIRECTED, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN AND BE PERFORMED.

3. FIELD MEASUREMENTS
VERIFY FIELD MEASUREMENTS BEFORE ORDERING MATERIALS AND PREFABRICATED ITEMS. ANY NECESSARY ADJUSTMENTS BETWEEN FIELD MEASUREMENTS AND DRAWINGS SHALL BE MADE IN CONSULTATION WITH THE ARCHITECT.

4. SCALE OF DRAWINGS
DO NOT SCALE DRAWINGS. ARCHITECT SHALL NOT BE RESPONSIBLE FOR DIMENSIONS, TAKE-OFFS OR CALCULATIONS BASED ON DIGITAL MEDIA. REFER TO PRINTED DIMENSIONS ONLY. DRAWINGS OF A LARGER SCALE TAKE PRECEDENT OVER DRAWINGS OF A SMALLER SCALE.

5. CONTRACT DOCUMENTS AT SITE
THE CONTRACTOR SHALL MAINTAIN CURRENT PERMIT DRAWINGS; SHOP DRAWINGS; REVISED DRAWINGS; CLARIFICATION DRAWINGS, ADDENDA; CHANGE ORDERS; BULLETINS; INSPECTIONS; TEST CERTIFICATIONS AND RECORDS; PRODUCT SUBMITTAL DATA AND SAMPLES. FIELD OFFICE SHALL CONTAIN A CURRENT COPY OF ALL GOVERNING BUILDING CODE(S). MAKE DOCUMENTS AVAILABLE AT ALL TIMES FOR ARCHITECT'S REVIEW. ALL DRAWINGS MUST BE CLEARLY MARKED AS TO THE FINAL APPROVED DRAWINGS.

6. RECORD DRAWINGS (AS BUILTS)
THE CONTRACTOR SHALL MAINTAIN ACCURATELY DIMENSIONED RECORDS OF ALL UNDERGROUND LINES, SERVICES, AND UTILITIES, AS WELL AS ANY DISCREPANCIES OR REQUIRED CHANGES IN THE CONTRACT DOCUMENTS. AT THE END OF THE PROJECT, FORWARD TO ARCHITECT FOR FUTURE RECORDS, ONE DIGITAL COPY OF COMPLETE RECORD DRAWINGS TO OWNER IN PDF FORMAT AFTER COMPLETING FINAL PUNCH LIST.

7. CONFLICTING DIMENSIONS
WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED SIZES; DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES, PRIOR TO CONTINUING WITH WORK.

8. SHOP DRAWING AND SUBMITTAL REVIEW
SHOP DRAWINGS AND SUBMITTALS SHALL BE REVIEWED BY THE ENGINEER / ARCHITECT AND **OWNER** PRIOR TO ORDERING, FABRICATION OR ERECTION FOR ANY PREFABRICATED OR MANUFACTURED - DESIGNED COMPONENTS.

9. SUPPORTING STRUCTURES
SIZES, LOCATIONS, LOADS, AND ANCHORAGE OF EQUIPMENT SHALL BE VERIFIED IN THE FIELD WITH EQUIPMENT MANUFACTURES (SUPPLIERS) PRIOR TO FABRICATION OR INSTALLATION OF SUPPORTING STRUCTURES.

10. TEMPORARY BRACING
TEMPORARY BRACING SHALL BE PROVIDED WHEREVER NECESSARY TO TAKE CARE OF ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING WIND. SUCH BRACING SHALL BE LEFT IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY, OR UNTIL ALL THE STRUCTURAL ELEMENTS ARE COMPLETED. ALL BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

11. DESIGN LOADS
DURING AND AFTER CONSTRCITON THE CONTRACTOR AND/OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOAD.

12. INTENT OF THE DOCUMENTS
DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PROVIDE THE BASIS FOR THE PROPER COMPLETION OF THE PROJECT, SUITABLE FOR THE INTENDED USE OF THE OWNER. ITEMS NOT EXPRESSLY SET FORTH WITHIN THE DRAWINGS AND SPECS, BUT WHICH ARE REASONABLY IMPLIED FOR COMPLETION OF A COMPLETE SYSTEM, OR NECESSARY, FOR THE PROPER PERFORMANCE OF THE WORK SHALL BE INCLUDED.

13. DRAWINGS AND SPECIFICATIONS
SPECIFICATIONS ARE INTENDED TO BE COMPLIMENTARY AND SUPPLEMENTAL TO THE DRAWINGS. NO RELATIVE IMPORTANCE OF DRAWINGS VERSUS SPECIFICATIONS HAS BEEN ESTABLISHED AND NONE SHOULD BE ASSUMED, BUT THE MOST STRINGENT CONDITIONS SHOULD BE ASSUMED FOR ALL BIDDING AND CONSTRUCTION REQUIREMENTS. IN THE EVENT OF DISCREPANCIES OR CONFLICTS, THE ARCHITECT SHALL BE CONSULTED IN ORDER TO RENDER AN INTERPRETATION, BIDDING, PRICING OR CONSTRUCTION DONE PRIOR TO RECEIVING FINAL BUILDING DEPARTMENT PERMITS IS AT THE CONTRACTORS OWN RISK. CHANGES TO THE DRAWINGS MAY BE REQUIRED AS PART OF THE PLAN CHECK AND/ OR OWNER REVIEW PROCESS. J.M. WILLIAMS AND ASSOCIATES/AE URBIA AND ITS CONSULTING ENGINEERS WILL NOT BE HELD LIABLE FOR, NOR COMPENSATE FOR, CHANGES TO THESE DRAWINGS BEFORE FINAL JURISDICTION AND OWNER APPROVAL IS OBTAINED.

14. WORK NOT INCLUDED
ANY ITEM INDICATED ON THE DRAWINGS AS "N.I.C." (NOT IN CONTRACT), OR OTHERWISE DESIGNATED TO BE DONE BY OTHERS IS NOT A PART OF THE CONTRACT. INSTALLATION AND/OR BACKING MAY BE REQUIRED FOR SOME EQUIPMENT FURNISHED BY OWNER OR OWNER'S SUBCONTRACTOR. REFER TO DRAWINGS FOR SPECIFIC REQUIREMENTS.

15. FURNISHINGS BY OWNER
ALL FURNITURE, PLANTS, INTERIOR SIGNAGE, FILES / FILING CABINETS, APPLIANCES, OFFICE EQUIPMENT TO BE FURNISHED, INSTALLED AND PAID FOR BY THE OWNER / TENANT, UNLESS NOTED OTHERWISE.

16. CODE CONFORMANCE
ALL WORK SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF ALL APPLICABLE BUILDING CODES, THE AMERICANS WITH DISABILITIES ACT, AS WELL AS ALL OTHER LOCAL GOVERNING CODES AND ORDINANCES:

a. PLUMBING:
ALL PLUMBING WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE, AND LOCAL ORDINANCES. ALL PLUMBING WORK AND FIXTURES MUST MEET THE APPROVAL OF THE OWNER, CONTRACTOR, ARCHITECT/ENGINEER, TENANT AND THE BUILDING OFFICIAL.

b. HVAC:
ALL HVAC WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL MECHANICAL CODE, AND LOCAL ORDINANCES. HVAC WORK, UNITS, AND CONTROLS, MUST MEET THE APPROVAL OF THE OWNER, CONTRACTOR, ARCHITECT/ENGINEER, TENANT, AND THE BUILDING OFFICIAL.

c. ELECTRICAL:
ALL ELECTRICAL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ICC ELECTRICAL CODE AND LOCAL ORDINANCES. ALL ELECTRICAL WORK, FIXTURES, SWITCHES, ETC.,. MUST MEET APPROVAL OF THE OWNER, CONTRACTOR, ARCHITECT / ENGINEER, TENANT AND BUILDING OFFICIAL.

d. REST ROOMS, ETC., SHALL COMPLY WITH THE LATEST ADA REQUIREMENTS, NATIONAL AND LOCAL.

e. CONSTRUCTION MUST BE IN COMPLIANCE WITH THE INTERNATIONAL ENERGY CONSERVATION CODE.

f. CONSTRUCTION MUST BE IN COMPLIANCE WITH THE CURRENT INTERNATIONAL FIRE CODE.

17. REFERENCE STANDARDS
COMPLY WITH ASSOCIATION, TRADE, FEDERAL, COMMERCIAL, ASTM, AND OTHER SIMILAR STANDARDS REFERENCED WITHIN INDIVIDUAL SECTIONS, EXCEPT WHERE MORE EXPLICIT OR STRINGENT REQUIREMENTS ARE INDICATED, OR REQUIRED BY APPLICABLE CODES. REFERENCE STANDARDS HAVE SAME FORCE AND EFFECT AS IF BOUND INTO CONTRACT DOCUMENTS. SHOULD SPECIFIED REFERENCE STANDARDS CONFLICT WITH CONTACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITECT BEFORE PROCEEDING.

18. APPROVAL
ALL WORK MUST MEET THE APPROVAL OF THE BUILDING OWNERS, THE TENANT (IF APPLICABLE), THE DESIGNER, AND THE BUILDING AND ZONING DEPARTMENTS.

19. CHANGES
ANY AND ALL CHANGES OR VARIATIONS FROM THESE DOCUMENTS MUST BE APPROVED IN WRITING BY THE OWNERSHIP PRIOR TO MAKING THEM.

CONTRACTOR REQUIREMENTS

1 EXISTING CONDITIONS
THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL EXISTING SITE CONDITIONS, UTILITIES, CONNECTIONS, LOCATIONS, ETC, AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

2 EXISTING UTILITIES
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR THE REPAIR OR REPLACEMENT OF UTILITIES AND ALL OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH EXECUTION OF WORK.

3 CODE COMPLIANCE
THE CONTRACTOR SHALL BE REQUIRED TO MEET ALL NATIONAL, STATE AND LOCAL, AND RELATED CODES FOR STANDARD CONSTRUCTION PRACTICES.

4 INSTALLATION STANDARDS
ALL MANUFACTURED MATERIALS AND PRODUCTS SHALL BE APPLIED, INSTALLED, CONNECTED, CLEANED AND CONDITIONED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. ALL REFERENCES TO STANDARDS OR TO MANUFACTURER'S SPECIFICATIONS SHALL BE TO THE LATEST EDITIONS OR LATEST AMENDMENTS.

5 INSPECTIONS
ANY SPECIAL INSPECTIONS, TESTS, AND OTHER SERVICES SPECIFIED OR REQUIRED ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE PAID BY THE OWNER. REFER TO INDIVIDUAL SELECTIONS FOR ADDITIONAL REQUIREMENTS. EMPLOYMENT OF TESTING LABORATORY SHALL IN NO WAY RELIEVE CONTRACTOR OF OBLIGATION TO PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS.

6 PROJECT LOG
MAINTAIN DAILY LOG CONTAINING ALL INFORMATION REGARDING CONSTRUCTION OPERATIONS AND OTHER OCCURRENCES PERTAINING TO THE PROJECT. MAKE LOG AVAILABLE FOR ARCHITECT'S REVIEW.

7 WORK PROGRESS SCHEDULE
MAINTAIN AN UPDATED WORK PROGRESS SCHEDULE POSTED IN A VISIBLE PLACE LOCATED IN FIELD OFFICE. UPDATE SCHEDULE DAILY TO REFLECT WORK PROGRESS.

8 BUILDING PERMITS
THE GENERAL BUILDING PERMITS SHALL BE PAID FOR BY THE OWNER AND SECURED BY THE GENERAL CONTRACTOR. ALL OTHER REQUIRED PERMITS SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR OR SUBCONTRACTOR DIRECTLY RESPONSIBLE.

9 FINAL APPROVALS
CONTRACTOR SHALL ASSIST OWNER IN OBTAINING FINAL APPROVAL OF LOCAL HEALTH DEPARTMENT AND THE TEMPORARY AND FINAL CERTIFICATES OF OCCUPANCY.

10 REQUIRED LICENSES
ADDITIONAL REQUIRED CITY AND COUNTY LICENSES SHALL BE ACQUIRED AND PAID FOR BY THE INDIVIDUAL TRADES.

11 WORKMAN'S COMPENSATION
ALL CONTRACTORS SHALL HAVE VALID CERTIFICATES OF WORKMAN'S COMPENSATION OF FILE WITH THE APPROPRIATE AGENCIES.

12 SAFETY
CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL TIMES, AND SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION WITHIN AND ADJACENT TO THE JOB SITE.

13. CONTRACTOR'S FIELD OFFICE
PROVIDE AND MAINTAIN A FIELD OFFICE ON THE PREMISES WHERE DIRECTED. OFFICE SHALL BE OF NEAT, SUBSTANTIAL CONSTRUCTION, PROVIDE HANGING PLAN FILES AND MAINTAIN WITH ALL CURRENT DRAWINGS.

a. STORAGE STRUCTURE: PROVIDE AND MAINTAIN, WHERE DIRECTED, A WATERTIGHT STORAGE STRUCTURE FOR ALL MATERIALS WHICH MIGHT BE DAMAGED BY WEATHER, INCLUDING STORAGE FACILITIES FOR CONCRETE TEST SAMPLES, OR OTHER MATERIAL SAMPLES REQUIRED FOR WORK.
b. COSTS: PAY COSTS FOR A LOCAL BUSINESS TELEPHONE FOR USE BY CONTRACTOR, OWNER AND ARCHITECT THROUGHOUT CONTRACT PERIOD.
c. COMMUNICATION EQUIPMENT: PROVIDE A TELEPHONE ON SITE. ASSIGN A RESPONSIBLE PERSON TO ANSWER ALL TELEPHONE CALLS IN EVENT THE SUPERINTENDENT IS ABSENT FROM THE PREMISES. PROVIDE APPROVED MEANS TO ESTABLISH URGENT COMMUNICATIONS (CELLULAR TELEPHONE OR PAGER).

14. TEMPORARY FACILITIES
PROVIDE TEMPORARY FACILITIES AND CONNECTIONS AS REQUIRED FOR THE PROPER COMPLETION OF THE PROJECT. PROVIDE AND MAINTAIN TEMPORARY UTILITY SERVICES. PROVIDE SUITABLE WASTE DISPOSAL UNITSAND EMPTY REGULARLY. DO NOT PERMIT ACCUMULATION OF TRASH AND WASTE MATERIALS. PROVIDE TEMPORARY SANITARY FACILITIES AS REQUIRED.

15. STORAGE AND PROTECTION
STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH LABELS INTACT AND LEGIBLE. STORE SENSITIVE PRODUCTS IN WEATHERTIGHT, CLIMATE CONTROLLED ENCLOSURES. PROVIDE OFFSITE STORAGE AND PROTECTION WHEN SITE DOES NOT PERMIT ON SITE STORAGE.

16. FIELD QUALITY CONTROL
EMPLOY ONLY EXPERIENCED INSTALLERS AND FURNISH EVIDENCE OF EXPERIENCE IF REQUESTED. USE OF ANY SUBCONTRACTOR OR INSTALLER IS SUBJECT TO OWNER'S APPROVAL.
EMPLOY FULL-TIME, COMPETENT SUPERINTENDENT AS WELL AS NECESSARY ASSISTANTS. SUPERINTENDENT SHALL REPRESENT THE CONTRACTOR
AND ALL COMMUNICATIONS GIVEN TO THE SUPERINTENDENT SHALL BE AS BINDING AS IF GIVEN TO THE CONTRACTOR.

17. SOURCE QUALITY CONTROL
PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS, UNLESS MORE STRINGENT CRITERIA ARE SPECIFIED IN INDIVIDUAL SECTIONS. USE OF ANY SUPPLIER IS SUBJECT TO OWNER'S APPROVAL.

18. PRODUCT HANDLING
TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DELIVER PRODUCTS IN UNDAMAGED CONDITION, IN MANUFACTURER'S ORIGINAL UNOPENED CONTAINER'S OR PACKING, WITH IDENTIFYING LABELS INTACT AND LEGIBLE. PROMPTLY INSPECT SHIPMENTS TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS OF CONTRACT DOCUMENTS, QUANTITIES ARE CORRECT, AND PRODUCTS ARE UNDAMAGED.

19. COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS
HANDLE, INSTALL, ERECT, CONNECT, CONDITION, USE, ADJUST, AND CLEAN PRODUCTS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTION AND IN CONFORMITY WITH SPECIFIED REQUIREMENTS, INCLUDING EACH STEP IN SEQUENCE. DO NOT OMIT PREPARATORY STEPS OR INSTALLATION PROCEDURES
UNLESS SPECIFICALLY MODIFIED OR EXEMPTED BY CONTRACT DOCUMENTS. SHOULD JOB CONDITIONS OR SPECIFIED REQUIREMENTS CONFLICT WITH MANUFACTURER'S INSTRUCTIONS, REQUEST CLARIFICATION IN WRITING FROM ARCHITECT BEFORE PROCEEDING. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH PROPER APPEARANCE.

20. MANUFACTURER'S FIELD SERVICES
WHEN SPECIFIED IN INDIVIDUAL SECTIONS, REQUIRE MATERIAL OR PRODUCT SUPPLIERS OR MANUFACTURERS TO PROVIDE QUALIFIED STAFF PERSONNEL TO OBSERVE SITE CONDITIONS, CONDITIONS OF SURFACES, QUALITY OF WORKMANSHIP, AND CONDITIONS OF INSTALLATION AS APPLICABLE AND TO INITIATE ADDITIONAL INSTRUCTIONS WHEN NECESSARY.

21. SUBSTITUTIONS
PROPOSALS FOR SUBSTITUTION OF MATERIALS, EQUIPMENT, AND METHODS WILL ONLY BE CONSIDERED WHEN ACCOMPANIED BY FULL AND COMPLETE TECHNICAL DATA AS WELL AS ANY OTHER INFORMATION REQUIRED TO EVALUATE THE PROPOSED SUBSTITUTION. SUBSTITUTIONS ARE UNACCEPTABLE UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT. IN THE EVENT OF SUBSTITUTION PROPOSALS AFTER THE CONTRACT HAS BEEN AWARDED, ALL SUCH PROPOSALS SHALL BE ACCOMPANIED BY SUBSTANTIAL COST SAVINGS FOR THE OWNER.

22. AVAILABILITY OF PRODUCTS
VERIFY PRIOR TO CONSTRUCTION START THAT ALL SPECIFIED ITEMS WILL BE AVAILABLE IN TIME FOR INSTALLATION DURING ORDERLY AND TIMELY PROGRESS OF THE WORK. IN THE EVENT SPECIFIED ITEM OR ITEM WILL NOT BE SO AVAILABLE, NOTIFY THE ARCHITECT PRIOR TO START OF CONSTRUCTION. COST OF DELAYS
BECAUSE OF NON-AVAILABILITY OF SPECIFIED ITEMS OR SUBSTITUTED ITEMS, WHEN THE CONTRACTOR COULD HAVE AVOIDED SUCH DELAYS, WILL BE BORNE BY THE CONTRACTOR.

23. PRODUCTS AND MATERIALS
PROVIDE PRODUCTS AND MATERIALS SPECIFIED. REQUEST ARCHITECTS SELECTION OF COLORS AND ACCESSORIES IN SUFFICIENT TIME TO AVOID DELAYING PROGRESS OF THE WORK.

24. VERIFICATION OF WORK
CONTRACTOR SHALL VERIFY, AND BE RESPONSIBLE FOR, ALL WORK AND MATERIALS - INCLUDING THOSE FURNISHED BY SUBCONTRACTORS. CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND ELEVATIONS, ETC., AT THE SITE AND SHALL COORDINATE WORK PERFORMED BY ALL TRADES.

25. CONFORMANCE WITH DOCUMENTS
ANY AND ALL CHANGES OR VARIATIONS FROM THESE DOCUMENTS MUST BE APPROVED IN WRITING PRIOR TO MAKING THEM.

26. NON-CONFORMING WORK
ANY WORK THAT DOES NOT CONFORM TO THE CONTRACT DOCUMENTS SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.

27. PRODUCT IDENTIFICATIONS
NAMEPLATES, TRADEMARKS, LOGOS, AND OTHER IDENTIFYING MARKS ON PRODUCTS ARE NOT PERMITTED ON SURFACES EXPOSED TO VIEW IN PUBLIC AREAS, INTERIOR OR EXTERIOR. PLUMBING, MECHANICAL, AND ELECTRICAL EQUIPMENT NOT EXPOSED TO PUBLIC VIEW ARE EXCLUDED FROM FOREGOING LIMITATION.
REQUIRED UL OR FM LABELS ARE ALSO EXCLUDED.

28. PROTECTION OF ADJACENT WORK
PROVIDE TEMPORARY PROTECTION FOR ADJACENT AREAS TO PREVENT DAMAGE BY INSTALLATION OF NEW WORK OR DEMOLITION OF EXISTING CONSTRUCTION. PROMPTLY REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE OWNER. PROTECT ADJACENT AREAS FROM CONTAMINATION BY CONSTRUCTION DUST AND
DEBRIS. PROVIDE TEMPORARY BARRICADES AS NECESSARY TO ENSURE PROTECTION OF THE PUBLIC. MAINTAIN EGRESS WITHIN AND AROUND CONSTRUCTION AREAS.

29. DAMAGED PRODUCTS
DO NOT USE PRODUCTS IN WORK, WHICH HAVE DETERIORATED, BECOME DAMAGED, OR ARE OTHERWISE UNFIT FOR USE. RESTORE UNITS DAMAGED DURING INSTALLATION. REPLACE UNITS, WHICH CANNOT BE RESTORED AT NO ADDITIONAL EXPENSE TO THE OWNER.

30. SECURITY
PROVIDE FACILITIES TO PROTECT WORK FROM UNAUTHORIZED ENTRY, VANDALISM, AND THEFT. CONDUCT OPERATIONS IN MANNER TO AVOID RISK OF LOSS, THEFT, OR DAMAGE BY VANDALISM.

31. TEMPORARY CONTROLS

a. HEAT:
PRIOR TO ENCLOSURE, PROVIDE HEATING AS NECESSARY TO PROTECT MATERIALS, PRODUCTS, AND FINISHES FROM DAMAGE DUE TO TEMPERATURE OR HUMIDITY. ENCLOSURE IS DEFINED AS STATE OF CONSTRUCTION WHEN EXTERIOR WALLS ARE ERECTED, DOORS AND WINDOWS ARE INSTALLED AND GLAZED, ROOF DECK AND ROOFING ARE COMPLETE, AND WHEN OTHER OPENINGS IN EXTERIOR ENVELOPE ARE EQUIPPED WITH TEMPORARY CLOSURES, EXCEPT WHERE INDICATED OTHERWISE IN INDIVIDUAL SPECIFICATION SECTIONS, MAINTAIN MINIMUM AMBIENT TEMPERATURE OF 50 DEGREES FIN AREAS WHERE CONSTRUCTION IS IN PROGRESS.

b. VENTILATION:
VENTILATE ENCLOSED AREAS TO ASSIST CURE OF MATERIALS, TO DISSIPATE HUMIDITY, AND TO PREVENACCUMULATION OF DUST, FUMES, VAPORS, OR GASES.

c. BARRIERS AND CLOSURES:
PROVIDE BARRIERS TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE FROM CONSTRUCTION OPERATION

d. FIRE PROTECTION:
COMPLY WITH LOCAL FIRE PROTECTION CODE AND GOVERNING AUTHORITIES. PROVIDE AND MAINTAIN ADEQUATE FIRE PROTECTION INCLUDING, WITHOUT LIMITATION, FIRE EXTINGUISHERS AND OTHER APPROPRIATE EQUIPMENT FOR FIRE EXTINGUISHING READY FOR IMMEDIATE USE. MAINTAIN ANY REQUIRED FIRE ALARM SYSTEMS IN OPERATION DURING CONSTRUCTION. DISTRIBUTE EQUIPMENT AROUND SITE AND PARTICULARLY IN IMMEDIATE VICINITY OF PERFORMANCE OF WELDING OR SIMILAR HAZARDOUS WORK.

32. INTERRUPTION OF SERVICES
INTERRUPTIONS TO ANY SERVICE FOR THE PURPOSE OF MAKING OR BREAKING A CONNECTION SHALL BE MADE ONLY AFTER CONSULTATION WITH THE OWNER AND SHALL BE AT SUCH TIME AND OF SUCH DURATION AS MAY BE DIRECTED.

33. EXCAVATIONS OR TRENCHING
KEEP THE INTERVALS BETWEEN EXCAVATION OR TRENCHING, INSTALLATION OF CONDUIT OR PIPING, AND BACK FILLING OPERATIONS TO AN ABSOLUTE MINIMUM. PROVIDE SUITABLE TEMPORARY COVERS FOR EXCAVATIONS OR TRENCHING CROSSING ROADWAYS, WALKS, OR OTHER TRAFFIC WAYS AS REQUIRED BY GOVERNING AGENCIES.

34. CUTTING AND PATCHING
DO NOT CUT AND PATCH IN A MANNER THAT WOULD RESULT IN A FAILURE OF THE WORK TO PERFORM AS INTENDED, DECREASE FIRE PERFORMANCE, DECREASE ACOUSTICAL PERFORMANCE, DECREASE ENERGY PERFORMANCE, DECREASE OPERATIONAL LIFE, OR DECREASE SAFETY FACTORS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT. CUT WITH TOOLS APPROPRIATE FOR MATERIALS TO BE CUT. PATCH WITH MATERIALS AND METHODS TO PRODUCE PATCH THAT IS NOT VISIBLE FROM A DISTANCE OF THREE FEET.

35. COORDINATION AND CLEARANCES
VERIFY AND COORDINATE CLEARANCES, DIMENSIONS, AND INSTALLATION OF ADJOINING CONSTRUCTION, EQUIPMENT, PIPING, DUCTS, CONDUITS, OR OTHER MECHANICAL OR ELECTRICAL ITEMS OR APPARATUS. VERIFY DIMENSIONS FOR PRODUCTS TO BE FITTED INTO WORK.

a. ATTACHMENTS AND CONNECTIONS:
PROVIDE ATTACHMENT AND CONNECTION DEVICES METHODS FOR SECURING AND ANCHORING WORK. SECURE IN PLACE WITH DEVICES DESIGNATED AND SIZED TO WITHSTAND STRESSES, VIBRATION, PHYSICAL DISTORTION, OR DISFIGUREMENT.

b. EXPANSION AND MOVEMENT:
ALLOW FOR EXPANSION OF MATERIALS AND BUILDING MOVEMENT.

c. ISOLATION OF DISSIMILAR ITEMS:
ISOLATE EACH UNIT OF WORK FROM INCOMPATIBLE WORK AS NECESSARY TO PREVENT DETERIORATION AND ELECTROLYTIC ACTION.

d. MAINTENANCE:
CLEAN AND PERFORM MAINTENANCE ON INSTALLED WORK AS FREQUENTLY AS NECESSARY THROUGH REMAINDER OF CONSTRUCTION PERIOD. LUBRICATE OPERABLE COMPONENTS TO ENSURE OPERABILITY WITHOUT DAMAGING EFFECTS.

e. ADJUSTMENTS: ADJUST OPERATING PRODUCTS AND EQUIPMENT TO ENSURE SMOOTH AND UNHINDERED OPERATION.

36. EXAMINATION OF CONDITIONS
EXAMINE SUBSTRATES AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. DO NOT COMMENCE WORK OVER UNSATISFACTORY CONDITIONS DETRIMENTAL TO PROPER AND TIMELY EXECUTION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. COMMENCEMENT OF INSTALLATION CONSTITUTES ACCEPTANCE OF CONDITIONS AND COSTS OF ANY CORRECTIVE MEASURES ARE RESPONSIBILITY OF CONTRACTOR.

37. BACKING SUPPORT
CONTRACTOR SHALL PROVIDE BACKING SUPPORT OF ALL WALL, CEILING, AND PARTITION MOUNTED ITEMS SUCH AS TABLE BRACKETS, LIGHT FIXTURES, ARTIFACTS, SHELVING, EQUIPMENT, AND TELEVISIONS. COORDINATE LOCATIONS AND REQUIREMENTS WITH THE PLUMBING, MECHANICAL, ELECTRICAL DRAWINGS.

38. SECURE OPENINGS
EXTERIOR OPENINGS SHALL COMPLY WITH ALL SECURITY REQUIREMENTS AS OUTLINED IN ALL LOCAL BUILDING CODES AND ORDINANCES.

39. GLAZING REQUIREMENTS
GLASS AND GLAZING FOR ALL WINDOWS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES. IN ADDITION ALL WINDOWS MUST MEET THE "AAMA" WINDOW STANDARDS FOR INSTALLATION. THE CONTRACTOR SHALL OBTAIN, AND SHALL FOLLOW ALL REQUIREMENTS OF THE "AAMA" STANDARDS IN ADDITION TO THE MANUFACTURER SPECIFICATIONS AND ARCHITECTURAL DETAILS INCLUDED WITHIN THE DRAWINGS.

40. ROOFING REQUIREMENTS
ROOFING WORK SHALL BE PERFORMED AND ALL PENETRATIONS THROUGH THE ROOFING MEMBRANE SHALL BE PATCHED OR FLASHED AS PER THE MANUFACTURER'S STANDARDS.

41. ROOF ACCESS
ROOF OBSTRUCTIONS SUCH AS TELEVISION ANTENNAE, SOLAR PANELS, AND GUY WIRES SHALL NOT BE LOCATED OR INSTALLED IN SUCH A WAY AS TO PREVENT FIRE DEPARTMENT ACCESS OR EGRESS IN THE EVENT OF A FIRE.

42 FINISH FLAME SPREAD REQUIREMENTS
INTERIOR WALL AND CEILING FINISHES SHALL NOT EXCEED FLAME SPREAD CLASSIFICATIONS DICTATED BY ALL APPLICABLE BUILDING CODES.

43. GYPSUM REQUIREMENTS
GYPSUM BOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.

44. EQUIPMENT IN STRUCTURAL SLAB
PIPES, CONDUITS, OR DUCTS EXCEEDING ONE THIRD OF THE SLAB OR MEMBER THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND STRUCTURAL DRAWINGS FOR LOCATION OF SLEEVES AND OTHER ACCESSORIES.

45. FIRE EXTINGUISHERS
VERIFY FIRE EXTINGUISHER REQUIREMENTS AND LOCATIONS WITH FIRE MARSHAL AND OWNER'S REPRESENTATIVE.

46. INSECT CONTROL
CONTRACTOR SHALL SEAL ALL GAPS, HOLES, AND CRACKS IN BUILDING CONSTRUCTION AS REQUIRED TO CONTROL INFILT

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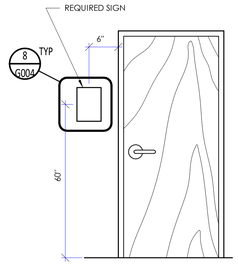
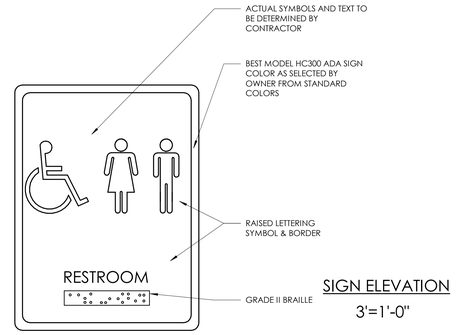


SINGLE DOOR

N.T.S.

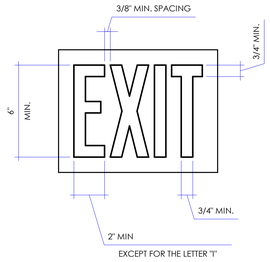
7 G004 RESTROOM SIGN
1/2" = 1'-0"



SIGN ELEVATION

3"=1'-0"

8 G004 REQUIRED SIGN
6" = 1'-0"



NOTES:
1. PROVIDE INTERNALLY LIT SIGN POWERED BY EMERGENCY POWER SYSTEM.
2. SIGN TO REMAIN ILLUMINATED AT ALL TIMES.

9 G004 EXIT SIGN DETAIL
3" = 1'-0"

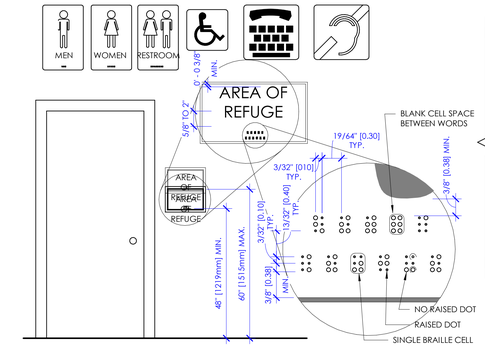
LETTERS AND NUMBER:
1. CHARACTER WIDTH TO BE 55-110% OF THE CHARACTER HEIGHT. STROKE THICKNESS TO BE 10-15% OF CHARACTER HEIGHT.
2. CONTRAST CHARACTERS AND SYMBOLS WITH BACKGROUND. CHARACTERS ARE TO BE SANS SERIF FONT.
3. SEE DETAIL BELOW FOR SIGN LAYOUT.

SIGNS / PICTOGRAMS:
4. PICTOGRAMS / PICTORIAL SYMBOL SIGNS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION SHALL BE 6" MINIMUM HEIGHT.
5. CHARACTERS AND BACKGROUNDS SHALL BE OF NON-GLARE CONTRASTING COLORS.
6. SIGNS / PICTOGRAMS SHALL BE INSTALLED ON THE WALL ADJACENT TO DOOR LEADING TO THE ROOM OR SPACE THEY DESCRIBE AND AT 60" AFF TO SIGN CENTERLINE AND WHERE A PERSON MAY APPROACH WITHIN 3' OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE DOOR SWING AREA.
7. VERTICAL CLEARANCE AT SUSPENDED SIGNS WITH MINIMUM HEADROOM OF 80" REQUIRE MINIMUM 3" CHARACTER HEIGHT MEASURED BY USING UPPERCASE "X". CHARACTERS AND NUMBERS SHALL BE SIZED ACCORDING TO VIEWING DISTANCE FROM WHICH READ. LOWER CASE CHARACTERS PERMITTED.

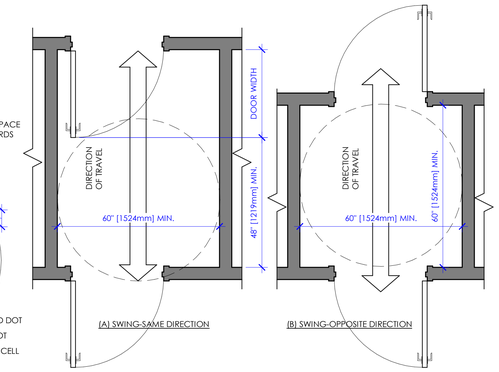
SIGN LOCATIONS:
8. ALL ACCESSIBLE ENTRANCES IDENTIFIED WITH MINIMUM OF ONE STANDARD SIGN.
9. ADDITIONAL DIRECTIONAL SIGNS ALONG ACCESSIBLE PATH OF TRAVEL ARE REQUIRED.
10. BUILDING REMODELED TO PROVIDE ACCESSIBLE SANITARY FACILITIES FOR PUBLIC USE SHALL HAVE INFORMATION POSTED IN THE LOBBY AS PART OF THE BUILDING DIRECTORY.

INTERNATIONAL SYMBOL OF ACCESSIBILITY:
11. STANDARD USED TO IDENTIFY ACCESSIBLE FACILITIES.
12. WHITE FIGURE ON BLUE BACKGROUND, COLOR 15090 ON FEDERAL STANDARD 595A.
13. WHEN ENFORCING AGENCY DETERMINES, IF APPROPRIATE, SPECIAL DESIGNS AND COLORS MAY BE APPROVED.

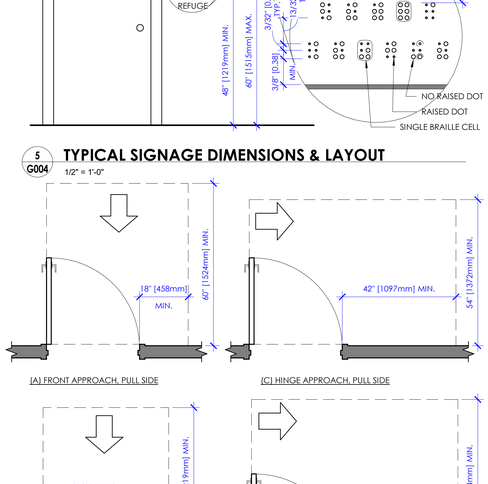
BRAILLE:
14. USE CONTRASTED GRADE 2 BRAILLE.
15. SEE DETAIL BELOW FOR SPACING & SIZE
16. DOTS TO BE RAISED MINIMUM 0.025 INCH ABOVE BACKGROUND.



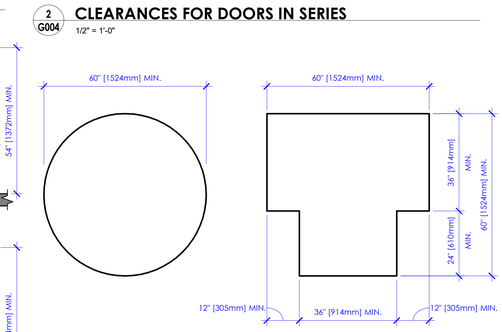
5 G004 TYPICAL SIGNAGE DIMENSIONS & LAYOUT
1/2" = 1'-0"



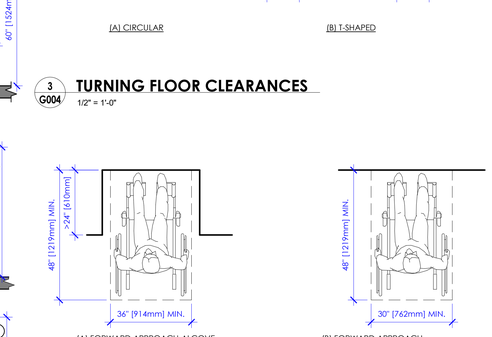
1 G004 ADA DOOR REQUIREMENTS
1/2" = 1'-0"



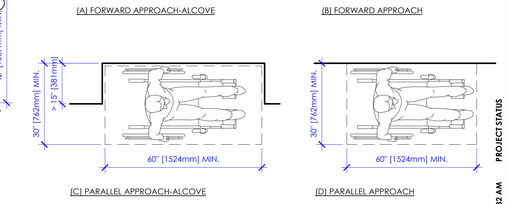
6 G004 MANEUVERING CLEARANCES @ MANUAL SWNG. DR.
1/2" = 1'-0"



2 G004 CLEARANCES FOR DOORS IN SERIES
1/2" = 1'-0"



3 G004 TURNING FLOOR CLEARANCES
1/2" = 1'-0"



4 G004 TYPICAL FLOOR CLEARANCES
1/2" = 1'-0"

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LICENSED ARCHITECT 174600 JAMES MICHAEL WALKER STATE OF UTAH

3/25/2022 9:40:32 AM

SENSAPURE ADDITION
DUSTIN GRAMOLL
1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2021.249

ADA GENERAL NOTES AND DETAILS

DATE: PROJECT ISSUE DATE

SHEET #: G004

PROJECT STATUS

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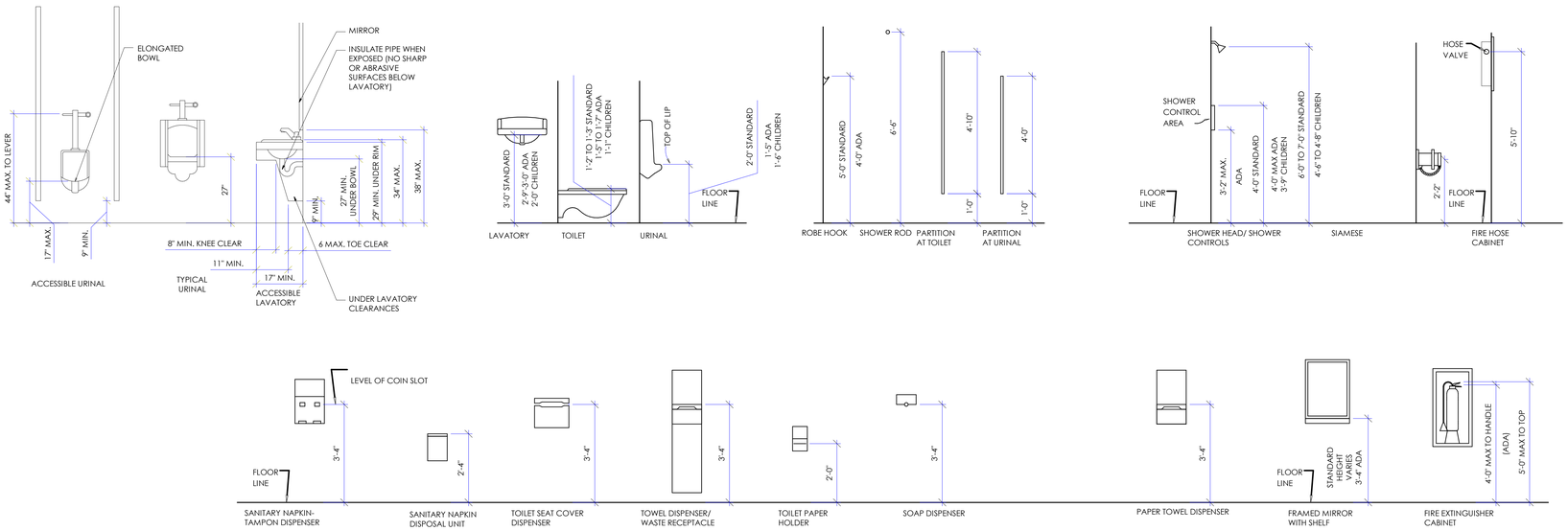
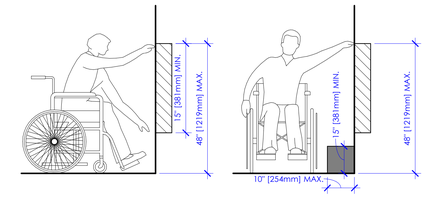
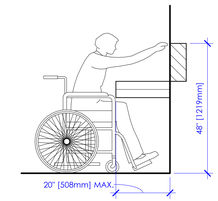


4 G005 **MOUNTING HEIGHTS DETAIL**
1/2" = 1'-0"

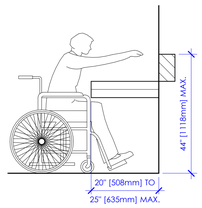


(A) UNOBSTRUCTED FORWARD REACH

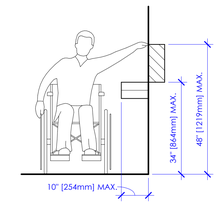
(B) UNOBSTRUCTED SIDE REACH



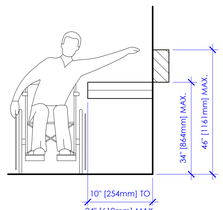
(C) UNOBSTRUCTED HIGH FORWARD REACH



(D) UNOBSTRUCTED HIGH FORWARD REACH

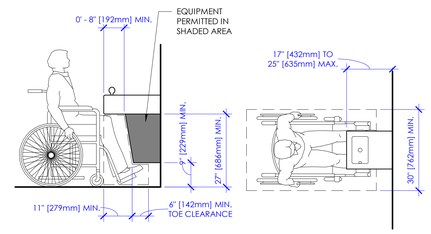


(A) UNOBSTRUCTED FORWARD REACH



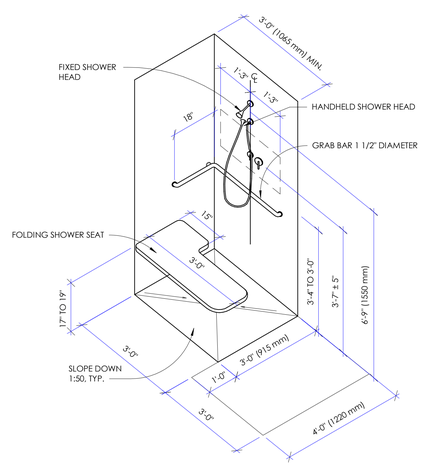
(A) UNOBSTRUCTED FORWARD REACH

1 G005 **REACH REQUIREMENTS FOR WHEEL CHAIR ACCESS**
1/2" = 1'-0"

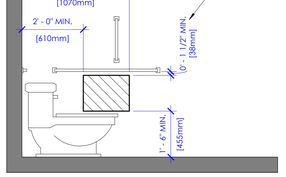


ELEVATION PLAN

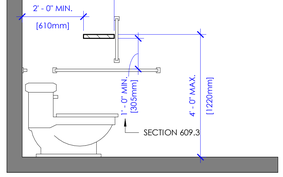
NOTE: DRINKING FOUNTAINS TO BE PROVIDED WITH TENANT IMPROVEMENT.



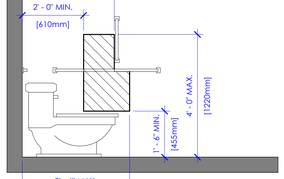
7 G005 **ADA SHOWER**
1/2" = 1'-0"



PROTRUDING DISPENSER BELOW GRAB BAR



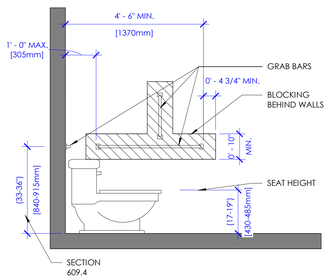
PROTRUDING DISPENSER ABOVE GRAB BAR



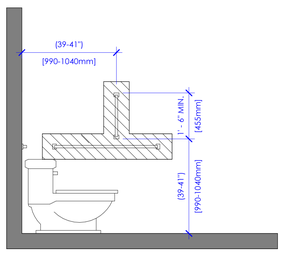
RECESSED DISPENSER

5 G005 **TOILET ROOM GRAB BAR HEIGHTS**
1/2" = 1'-0"

NOTE:
TOILET PAPER DISPENSERS SHALL COMPLY WITH SECTION 309.4. WHERE THE DISPENSER IS LOCATED BELOW THE GRAB BAR, THE OUTLET OF THE DISPENSER SHALL BE LOCATED WITHIN AN AREA 24" (610mm) MINIMUM AND 42" (1065mm) MAXIMUM FROM THE REAR WALL. THE OUTLET OF THE DISPENSER SHALL BE LOCATED 18" (455mm) MINIMUM AND 48" (1220mm) MAXIMUM ABOVE THE FLOOR. DISPENSER SHALL COMPLY WITH SECTION 609.3. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROL DELIVERY, OR DO NOT ALLOW CONTINUOUS PAPER FLOW.

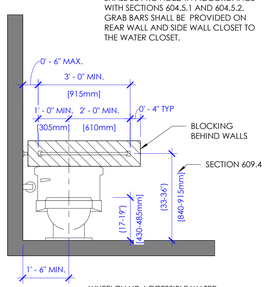


ELEVATION



ELEVATION

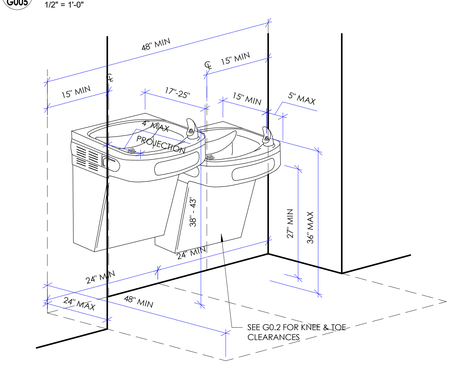
NOTE:
GRAB BARS TO CONFORM WITH ANSI A117.1. GRAB BARS FOR WATER CLOSETS SHALL COMPLY WITH SECTION 609 AND SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 604.5.1 AND 604.5.2. GRAB BARS SHALL BE PROVIDED ON REAR WALL AND SIDE WALL CLOSET TO THE WATER CLOSET.



WHEELCHAIR ACCESSIBLE WATER CLOSET

6 G005 **TOILET ROOM GRAB BAR HEIGHTS**
1/2" = 1'-0"

2 G005 **TOE/KNEE CLEARANCES**
1/2" = 1'-0"



3 G005 **ADA DRINKING FOUNTAIN REQUIREMENTS**
1/2" = 1'-0"

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LICENSED ARCHITECT 174600 JAMES MICHAEL ALLEN STATE OF UTAH
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SENSAPURE ADDITION
DUSTIN GRAMOLL
1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date

AE2021.249

ADA GENERAL NOTES AND DETAILS

DATE: **PROJECT ISSUE DATE**

SHEET #:

G005

PROJECT STATUS
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LEGEND:

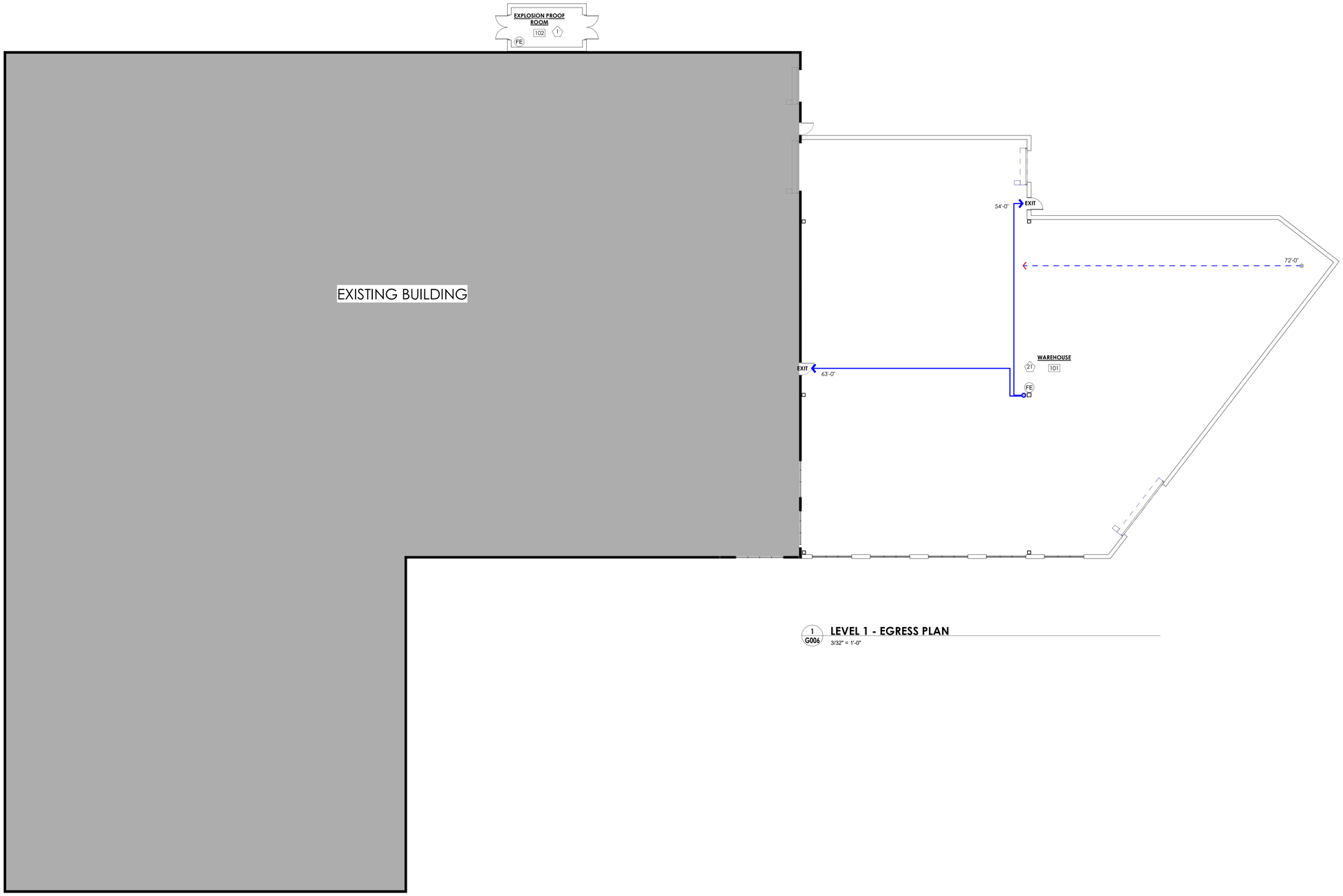
= COMMON PATH OF EGRESS

= EXIT ACCESS TRAVEL

EXIT = EXIT LOCATION
SEE ELECTRICAL PLANS FOR LOCATION OF EXIT SIGNAGE

FE = FIRE EXTINGUISHER

XX = OCCUPANCY TAG



1 G006 **LEVEL 1 - EGRESS PLAN**
3/32" = 1'-0"

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webpage:aeurbia.com

LICENSED ARCHITECT
174600
JAMES MICHAEL
STATE OF UTAH

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SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date

AE2021.249

EGRESS PLAN

DATE: **PROJECT ISSUE DATE**

SHEET #:

G006

PROJECT STATUS

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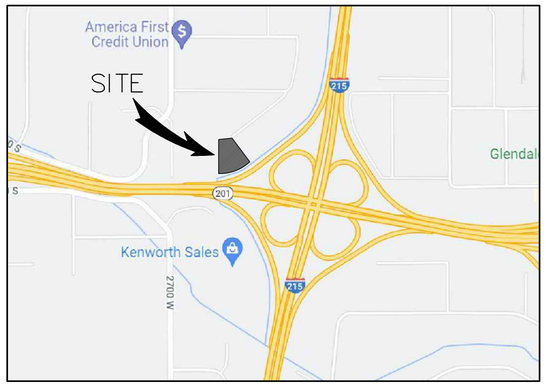
SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE
SALT LAKE CITY, UTAH

MARCH 16, 2022

LEGEND

PROPERTY LINE		EXISTING FIRE HYDRANT	
EASEMENT LINE		PROPOSED FIRE HYDRANT	
4240.0 PROPOSED GRADE CONTOURS		EXISTING STREET LIGHT	
4240.0 EXISTING GRADE CONTOURS		PROPOSED STREET LIGHT	
EXISTING CURB		PROPOSED PARKING LOT LIGHT	
PROPOSED CURB AND GUTTER		EXISTING WATER METER	
PROPOSED CURB WALL		EXISTING WATER VALVE	
REVERSE PAN CURB & GUTTER		EXISTING GATE VALVE	
SS EXISTING SEWER		EXISTING OVERHEAD POWER POLE	
SS PROPOSED SEWER	TBC	TOP BACK CONCRETE	
W EXISTING WATER	FF	FINISHED FLOOR	
W PROPOSED WATER	HW	HIGH WATER	
F EXISTING FIRE LINE	TOG	TOP OF GRATE	
F PROPOSED FIRE LINE	TOL	TOP OF LID	
SD EXSITING STORM DRAIN	IE	INVERT ELEVATION	
SD PROPOSED STORM DRAIN	EX	EXISTING	
RD PROPOSED ROOF DRAIN	NG	NATURAL GROUND	
G EXISTING GAS	TA	TOP OF ASPHALT	
G PROPOSED GAS	TC	TOP OF CONCRETE	
OHP EXISTING OVERHEAD POWER	EC	EDGE OF CONCRETE	
UGP EXISTING UNDERGROUND POWER	EA	EDGE OF ASPHALT	
UGP PROPOSED UNDERGROUND POWER	TOW	TOP OF WALL	
T EXISTING TELEPHONE LINE	TG	TOP OF GRAVEL	
T PROPOSED TELEPHONE LINE	TL	TOP OF LANDSCAPING	
FO EXISTING FIBER OPTIC LINE	TS	TOP OF SIDEWALK	
FO PROPOSED FIBER OPTIC LINE	PROP	PROPOSED	
PROPOSED CONCRETE	39.0	TBC CALLOUT UNLESS OTHERWISE DESIGNATED	
PROPOSED ASPHALT			
PROPOSED LANDSCAPING			



VICINITY MAP
NOT TO SCALE

SHEET INDEX

CV	COVER SHEET
GN	GENERAL NOTES
C0.1	EXISTING CONDITIONS/DEMOLITION PLAN
C1.0	SITE PLAN
C2.0	GRADING & DRAINAGE PLAN
C2.1	DRAINAGE PLAN
C3.0	UTILITY PLAN
C3.1	SEWER PLAN & PROFILE
C4.0	DETAIL SHEET
C5.0	DETAIL SHEET
C6.0	EROSION CONTROL PLAN (SWPPP)
C7.0	EROSION CONTROL DETAIL SHEET

PROJECT CONSTRUCTION NOTES:

1. CONTRACTOR TO NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION, 1-800-662-4111.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. SEE SOILS REPORT FOR PAVEMENT SECTION DETAILS, INSTALLATION SPECIFICATIONS AND ALL SITE EARTHWORK REQUIREMENTS.
4. ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS. IF A CONFLICT BETWEEN THESE PLANS AND THE CITY STANDARDS AND SPECIFICATIONS OCCURS, THE CITY STANDARDS AND SPECIFICATIONS SHALL GOVERN.
5. ALL HANDICAP PARKING STALLS TO BE INSTALLED PER ADA STANDARDS. SLOPE ON ANY ADA STALL IS TO BE LESS THAN 2% IN ALL DIRECTIONS.
6. CONTRACTOR TO VERIFY PRIOR TO ANY CONSTRUCTION THAT THE BUILDING AND BUILDING LOCATION SHOWN ON CIVIL DRAWINGS MATCHES THE ARCHITECTURAL PLANS.
7. CONTRACTOR TO VERIFY, WITH ARCHITECT, THAT F.F. ELEVATION SHOWN ON CIVIL PLANS EQUALS THE ARCHITECTS 100.0' ELEVATION.
8. CONTRACTOR TO REPLACE IN KIND ANY AREAS THAT ARE DAMAGED DURING CONSTRUCTION.
9. INSTALL ALL SIDEWALKS PER CITY STANDARDS OR APWA PLAN NO. 231, 235, AND 236 WHERE APPLICABLE.
10. INSTALL ALL CONCRETE PAVEMENT JOINTS PER CITY STANDARDS OR APWA PLAN NO. 261.
11. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL PER APWA STANDARDS AND SPECIFICATIONS.
12. ALL CATCH BASINS AND MANHOLES TO BE INSTALLED PER CITY STANDARDS.
13. ALL STORM DRAIN PIPING TO BE CUT OFF FLUSH WITH INSIDE WALL OF DRAINAGE BOX. INSIDE WALL TO BE GROUTED SMOOTH WITH A NON-SHRINK GROUT.
14. FOR STORM DRAIN INLET BOXES AND MANHOLES THE I.E. IN AND I.E. OUT ELEVATIONS ARE THE SAME UNLESS OTHERWISE CALLED OUT ON THE PLANS
15. ALL WATER LINES TO HAVE A MINIMUM 5' OF COVER WITH A MINIMUM VERTICAL CLEARANCE OF 1' OF COVER BETWEEN OTHER UTILITY LINES (1.5' VERTICAL SEPARATION WITH SEWER).
16. THRUST BLOCKS TO BE INSTALLED PER APWA PLAN NO'S 561 AND 562. SEE DETAIL SHEET C5.
17. CONTRACTOR SHALL COORDINATE CONSTRUCTION AND INSTALLATION OF ELECTRICAL, TELEPHONE, NATURAL GAS AND CABLE TV SERVICES WITH THE RESPECTIVE UTILITY COMPANY.
18. THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITY PIPES, LINES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED AND SHOWN FROM SURVEYED INFORMATION AND EXISTING UTILITY LOCATIONS PROVIDED BY OTHERS. THERE IS NO GUARANTEE THAT ALL EXISTING UTILITY INFORMATION IS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING BLUE STAKES AND FIELD VERIFYING THE LOCATION AND ELEVATION OF ALL EXISTING UTILITY PIPES, LINES AND STRUCTURES, PRIOR TO CONSTRUCTION.
19. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES TO BE REPLACED IN KIND.
20. PUBLIC WAY IMPROVEMENTS SUCH AS EXISTING CURB, GUTTER, SIDEWALK AND DRIVE APPROACHES REQUIRE INSPECTION BY THE SLC ENGINEERING DEPT. PRIOR TO FINAL INSPECTION AND CERTIFICATION OF OCCUPANCY ISSUANCE, TO DETERMINE REPLACEMENT REQUIREMENTS OF DEFECTIVE AND HAZARDOUS CONDITIONS.
21. ANY EXCAVATION, CONSTRUCTION OR STAGING OF MATERIALS OR EQUIPMENT IN THE PUBLIC RIGHT OF WAY REQUIRE A PUBLIC WAY PERMIT FORM ENGINEERING DIVISION, 349 S 200 E, SUITE 100, 801-535-6248
22. PRIOR TO BEGINNING ANY WORK IN THE PUBLIC WAY, A LICENSED, BONDED AND INSURED CONTRACTOR MUST FIRST OBTAIN A PUBLIC WAY PERMIT FROM THE SLC ENGINEERING PERMITS OFFICE, AND A TRAFFIC CONTROL PERMIT FROM SLC MAY ALSO BE REQUIRED.
23. ALL WORK WITHIN THE SALT LAKE CITY PUBLIC WAY SHALL CONFORM TO APWA 2012 STANDARD PLANS AND SPECIFICATIONS.
24. ALL CURB AND GUTTER DONE WITHIN THE PUBLIC WAY SHALL BE CONSTRUCTED AS PER APWA 205A, AND 251 OR 252.
25. THE DRIVE APPROACHES APRONS MUST BE CONCRETE TO THE PROPERTY LINE.

ALL ACCESSIBLE ROUTES AND ACCESSIBLE MEANS OF EGRESS ROUTES, THE MAXIMUM SLOPE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2% ALL EXTERIOR LANDINGS AT DOORS SHALL NOT EXCEED 2% SLOPE.

FIRE DEPARTMENT NOTES:

1. FIRE HYDRANTS SHALL BE EQUIPPED WITH ONE 4½", AND 2½" OUTLETS, WHICH HAS NATIONAL STANDARD THREADS (NST).
2. FIRE HYDRANTS SHALL BE INSTALLED SO THAT THE CENTER LINE OF THE LOWEST CAP, NUT SHALL NOT BE CLOSER THAN 18" FROM THE FINISHED GRADE.
3. FIRE HYDRANTS SHALL HAVE THE 4½" BUTT FACING THE FIRE ACCESS ROADWAY.
4. UNDERGROUND PIPING SHALL BE TESTED AT 200 PSIA FOR TWO HOURS. TEST CERTIFICATE SHALL BE PROVIDED TO FIRE DEPARTMENT OFFICE.
5. BURNING OF TRASH, SCRAP WOOD OR OTHER MATERIALS IS A VIOLATION OF CITY ORDINANCE.
6. A 3 FOOT CLEARANCE SHALL BE MAINTAINED AT ALL TIMES AROUND FIRE EQUIPMENT TO INCLUDE BUT NOT LIMITED TO HYDRANTS, FIRE DEPARTMENT CONNECTIONS AND FIRE SUPPRESSION CONTROL VALVES.
7. NEW FIRE HYDRANTS SHALL BE COLOR CODED AND BE DIRECTED BY PUBLIC UTILITIES AS TO THE COLOR AND SHADE OF THE HYDRANT BONNET.
8. FIRE HYDRANTS SHALL BE EQUIPPED WITH AN INDEPENDENT LATERAL CONTROL VALVE PLACED AT THE BASE INLET OF THE FIRE HYDRANT.
9. FIRE DEPARTMENT ACCESS ROADS AND FIRE HYDRANTS SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF THE FOOTINGS AND FOUNDATIONS OF ANY STRUCTURE. FIRE HYDRANTS SHALL BE ACCESSIBLE, OPERATIONAL AND MAINTAINED IN THAT CAPACITY.
10. WATER LATERALS WHICH ARE 16 FOOT IN LENGTH OR LONGER SHALL BE PROVIDED WITH CONTROL VALVES AT THE TAP OF THE WATER MAIN AND AT THE FIRE HYDRANT.
11. WATER LATERALS WHICH SUPPLY WATER BASED FIRE PROTECTION SHALL BE FERROUS PIPE WHEN PASSING UNDER OR THROUGH FOOTINGS OR FOUNDATION WALLS.

CIVIL ENGINEER:

CIR | CIVIL ENGINEERING + SURVEYING
10718 S BECKSTEAD LANE, SUITE 102
South Jordan, Utah · 801-949-6296

OWNER:

ARCHITECT:
AE URBIA
909 W SOUTH JORDAN PARKWAY
SOUTH JORDAN, UTAH 84095
CONTACT PERSON: ANDREW BOLLSCHWEILER
PH: (801) 746-0456

CONTRACTOR

CIR | CIVIL ENGINEERING + SURVEYING
10718 S BECKSTEAD LANE, SUITE 102
South Jordan, Utah - 801-949-6296

NO	REVISIONS	BY	DATE
DESIGNER: SDT	PROJECT ENGINEER: SDT		

SENSAPURE ADDITION
1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH
COVER SHEET

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

Blue Stakes of UTAH 811
Bluestakes.org

SHEET NO.	
CV	
PROJECT ID	DATE:
A-1000	03/15/22
FILE NAME: PRJ-SSL	SCALE: 1"=30'

Salt Lake City Public Utilities General Notes

1. COMPLIANCE:
ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS AND THE MOST RECENT EDITIONS OF THE FOLLOWING: THE INTERNATIONAL PLUMBING CODE, UTAH DRINKING WATER REGULATIONS, APWA MANUAL OF STANDARD PLANS AND SPECIFICATIONS, AND SLC PUBLIC UTILITIES MODIFICATIONS TO APWA STANDARD PLANS AND APPROVED MATERIALS AND SLC PUBLIC UTILITIES APWA SPECIFICATIONS MODIFICATIONS. THE CONTRACTOR IS REQUIRED TO ADHERE TO ALL OF THE ABOVE–MENTIONED DOCUMENTS UNLESS OTHERWISE NOTED AND APPROVED IN WRITING BY THE SALT LAKE CITY DIRECTOR OF PUBLIC UTILITIES.

2. COORDINATION:
THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL APPROPRIATE GOVERNMENT AND PRIVATE ENTITIES ASSOCIATED WITH THE PROJECT. THE FOLLOWING MUST BE CONTACTED 48–HOURS PRIOR TO CONSTRUCTION AS APPLICABLE TO THE PROJECT:

PUBLIC UTILITIES:
BACKFLOW PREVENTION – 483–6795
DEVELOPMENT REVIEW ENGINEERING – 483–6781
INSPECTIONS, PERMITS, CONTRACTS & AGREEMENTS – 483–6727
PRETREATMENT – 799–4002
STORM WATER – 483–6721

SLC DEPARTMENTS:
ENGINEERING – PUBLIC WAY PERMITS AND ISSUES – 535–6248
ENGINEERING – SUBDIVISIONS – 535–6159
FIRE DEPARTMENT – 535–6636
PERMITS AND LICENSING (BLDG SERVICES) – 535–7752
PLANNING AND ZONING – 535–7700
TRANSPORTATION – 535–6630

- ALL OTHER POTENTIALLY IMPACTED GOVERNING AGENCIES OR ENTITIES
- ALL WATER USERS INVOLVED IN WATER MAIN SHUTDOWNS
- APPLICABLE SEWER, WATER AND DRAINAGE DISTRICTS
- BLUESTAKES LOCATING SERVICES – 532–5000
- COUNTY FIRE DEPARTMENT – 743–7231
- COUNTY FLOOD CONTROL – 468–2779
- COUNTY HEALTH DEPARTMENT – 385–468–3913
- COUNTY PUBLIC WAY PERMITS – 468–2241
- HOLLADAY CITY – 272–9450
- SALT LAKE COUNTY HIGHWAY DEPARTMENT – 468–3705 OR 468–2156
- THE UTAH TRANSIT AUTHORITY FOR RE–ROUTING SERVICE – 262–5626
- UNION PACIFIC RAILROAD CO., SUPERINTENDENTS OFFICE – 595–3405
- UTAH DEPARTMENT OF TRANSPORTATION, REGION #2 – 975–4800
- UTAH STATE ENGINEER – 538–7240

3. SCHEDULE
PRIOR TO CONSTRUCTION THE CONTRACTOR WILL PROVIDE, AND WILL UPDATE AS CHANGES OCCUR, A CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE SPECIFICATIONS AND SALT LAKE CITY ENGINEERING OR SALT LAKE COUNTY REGULATIONS AS APPLICABLE FOR WORKING WITHIN THE PUBLIC WAY.

4. PERMITS, FEES AND AGREEMENTS
CONTRACTOR MUST OBTAIN ALL THE NECESSARY PERMITS AND AGREEMENTS AND PAY ALL APPLICABLE FEES PRIOR TO ANY CONSTRUCTION ACTIVITIES. CONTACT SALT LAKE CITY ENGINEERING (535–6248) FOR PERMITS AND INSPECTIONS REQUIRED FOR ANY WORK CONDUCTED WITHIN SALT LAKE CITY'S PUBLIC RIGHT–OF–WAY. APPLICABLE UTILITY PERMITS MAY INCLUDE MAINLINE EXTENSION AGREEMENTS AND SERVICE CONNECTION PERMITS. ALL UTILITY WORK MUST BE BONDED. ALL CONTRACTORS MUST BE LICENSED TO WORK ON CITY UTILITY MAINS.

CONSTRUCTION SITES MUST BE IN COMPLIANCE WITH THE UTAH POLLUTION DISCHARGE ELIMINATION SYSTEM (UPDES) STORM WATER PERMIT FOR CONSTRUCTION ACTIVITIES (538–6923). A COPY OF THE PERMIT'S STORM WATER POLLUTION PREVENTION PLAN MUST BE SUBMITTED TO PUBLIC UTILITIES FOR REVIEW AND APPROVAL. ADDITIONAL WATER QUALITY AND EROSION CONTROL MEASURES MAY BE REQUIRED. THE CONTRACTOR MUST ALSO COMPLY WITH SALT LAKE CITY'S CLEAN WHEEL ORDINANCE.

5. ASPHALT AND SOIL TESTING
THE CONTRACTOR IS TO PROVIDE MARSHALL AND PROCTOR TEST DATA 24–HOURS PRIOR TO USE. CONTRACTOR IS TO PROVIDE COMPACTION AND DENSITY TESTING AS REQUIRED BY SALT LAKE CITY ENGINEERING, UDOT, SALT LAKE COUNTY OR OTHER GOVERNING ENTITY. TRENCH BACKFILL MATERIAL AND COMPACTION TESTS ARE TO BE TAKEN PER APWA STANDARD SPECIFICATIONS, SECTION 330520 – BACKFILLING TRENCHES, OR AS REQUIRED BY THE SLC PROJECT ENGINEER IF NATIVE MATERIALS ARE USED. NO NATIVE MATERIALS ARE ALLOWED WITHIN THE PIPE ZONE. THE MAXIMUM LIFTS FOR BACKFILLING EXCAVATIONS IS 8–INCHES. ALL MATERIALS AND COMPACTION TESTING IS TO BE PERFORMED BY A LAB RECOGNIZED AND ACCEPTED BY SALT LAKE COUNTY PUBLIC WORKS AND/OR SALT LAKE CITY ENGINEERING.

6. TRAFFIC CONTROL AND HAUL ROUTES
TRAFFIC CONTROL MUST CONFORM TO THE MOST CURRENT EDITION OF SALT LAKE CITY TRAFFIC CONTROL MANUAL – PART 6 OF 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" FOR SALT LAKE COUNTY AND STATE ROADS. SLC TRANSPORTATION MUST APPROVE ALL PROJECT HAUL ROUTES (535–7129). THE CONTRACTOR MUST ALSO CONFORM TO UDOT, SALT LAKE COUNTY OR OTHER APPLICABLE GOVERNING ENTITIES REQUIREMENTS FOR TRAFFIC CONTROL.

7. SURVEY CONTROL
CONTRACTOR MUST PROVDE A REGISTERED LAND SURVEYOR OR PERSONS UNDER SUPERVISION OF A REGISTERED LAND SURVEYOR TO SET STAKES FOR ALIGNMENT AND GRADE OF EACH MAIN AND/OR FACILITY AS APPROVED. THE STAKES SHALL BE MARKED WITH THE HORIZONTAL LOCATION (STATION) AND VERTICAL LOCATION (GRADE) WITH CUTS AND/OR FILLS TO THE GRADE OF THE MAIN AND/OR FACILITY AS APPROVED. IN ADDITION, THE CONTRACTOR AND/OR SURVEYOR SHALL PROVIDE TO SALT LAKE CITY PUBLIC UTILITIES CUT SHEETS FILLED OUT COMPLETELY AND CLEARLY SHOWING THE PERTINENT GRADES, ELEVATIONS AND CUT/FILLS ASSOCIATED WITH THE FIELD STAKING OF THE MAIN AND/OR FACILITY. THE CUT SHEET FORM IS AVAILABLE AT THE CONTRACTS AND AGREEMENTS OFFICE AT PUBLIC UTILITIES. ALL MAINS AND LATERALS NOT MEETING MINIMUM GRADE REQUIREMENTS AS SPECIFIED BY ORDINANCE OR AS REQUIRED TO MEET THE MINIMUM REQUIRED FLOWS OR AS APPROVED MUST BE REMOVED AND RECONSTRUCTED TO MEET DESIGN GRADE. THE CONTRACTOR SHALL PROTECT ALL STAKES AND MARKERS UNTIL PUBLIC UTILITY SURVEYORS COMPLETE FINAL MEASUREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND REFERENCE MARKS WITHIN THE PROJECT SITE. DEPENDING ON THE LOCATION OF THE PROJECT; CONTACT THE COUNTY SURVEYOR FOR SECTION CORNER MONUMENTS (801–468–2028) AND/OR THE SALT LAKE CITY SURVEYOR (801–535–7973) FOR SALT LAKE CITY MONUMENTS AND CONSTRUCTION REQUIREMENTS. ALL ELEVATIONS SHALL BE REFERENCED TO SALT LAKE CITY DATUM UNLESS NOTED OTHERWISE ON THE PLANS.

8. ASPHALT GUARANTEE
THE CONTRACTOR SHALL REMOVE, DISPOSE OF, FURNISH AND PLACE PERMANENT ASPHALT PER SALT LAKE CITY ENGINEERING, UDOT, COUNTY, OR OTHER GOVERNMENT STANDARDS AS APPLICABLE TO THE PROJECT. THE CONTRACTOR SHALL GUARANTEE THE ASPHALT RESTORATION FOR A PERIOD AS REQUIRED BY THE GOVERNING ENTITY.

9. TEMPORARY ASPHALT
IF THE CONTRACTOR CHOOSES TO WORK WITHIN THE PUBLIC WAY WHEN HOT MIX ASPHALT IS NOT AVAILABLE, THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE APPROPRIATE GOVERNING ENTITY PRIOR TO INSTALLING TEMPORARY ASPHALT SURFACING MATERIAL. WITHIN SALT LAKE CITY, WHEN PERMANENT ASPHALT BECOMES AVAILABLE, THE CONTRACTOR SHALL REMOVE THE TEMPORARY ASPHALT, FURNISH AND INSTALL THE PERMANENT ASPHALT. THE CONTRACTOR SHALL GUARANTEE THE ASPHALT RESTORATION FOR A PERIOD AS REQUIRED BY THE GOVERNING ENTITY FROM THE DATE OF COMPLETION.

10. SAFETY
THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF SAFETY OF THE PROJECT AND SHALL MEET ALL OSHA, STATE, COUNTY AND OTHER GOVERNING ENTITY REQUIREMENTS.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES, AND FOR THE PROTECTION OF WORKERS.

11. DUST CONTROL
THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL ACCORDING TO THE GOVERNING ENTITY STANDARDS. USE OF HYDRANT WATER OR PUMPING FROM CITY–OWNED CANALS OR STORM DRAINAGE FACILITIES IS NOT ALLOWED FOR DUST CONTROL ACTIVITIES WITHOUT WRITTEN APPROVAL OF THE PUBLIC UTILITIES DIRECTOR.

12. DEWATERING
ALL ON–SITE DEWATERING ACTIVITIES MUST BE APPROVED IN WRITING BY PUBLIC UTILITIES. PROPOSED OUTFALL LOCATIONS AND ESTIMATED FLOW VOLUME CALCULATIONS MUST BE SUBMITTED TO PUBLIC UTILITIES FOR REVIEW AND APPROVAL. ADEQUATE MEASURES MUST BE TAKEN TO REMOVE ALL SEDIMENT PRIOR TO DISCHARGE. PUBLIC UTILITIES MAY REQUIRE ADDITIONAL MEASURES FOR SEDIMENT CONTROL AND REMOVAL.

13. PROJECT LIMITS
THE CONTRACTOR IS REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE APPROVED PROJECT LIMITS. THIS INCLUDES, BUT IS NOT LIMITED TO, VEHICLE AND EQUIPMENT STAGING, MATERIAL STORAGE AND LIMITS OF TRENCH EXCAVATION. IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN PERMISSION AND/OR EASEMENTS FROM THE APPROPRIATE GOVERNING ENTITY AND/OR INDIVIDUAL PROPERTY OWNER(S) FOR WORK OR STAGING OUTSIDE OF THE PROJECT LIMITS.

14. WATER, FIRE, SANITARY SEWER AND STORM DRAINAGE UTILITIES

A. INSPECTIONS –
IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE ANY WATER, SEWER, BACKFLOW AND DRAINAGE INSPECTION 48–HOURS IN ADVANCE TO WHEN NEEDED. CONTACT 483–6727 TO SCHEDULE INSPECTIONS.

B. DAMAGE TO EXISTING UTILITIES –
THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE, CAUSED BY ANY CONDITION INCLUDING SETTLEMENT, TO EXISTING UTILITIES FROM WORK PERFORMED AT OR NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT ALL EXISTING PUBLIC AND PRIVATE ROADWAY AND UTILITY FACILITIES. DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR, MUST BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE, TO THE SATISFACTION OF THE OWNER OF SAID FACILITIES.

C. UTILITY LOCATIONS –
CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL UTILITIES AND SERVICE LATERALS, AND FOR REPAIRING ALL DAMAGE THAT OCCURS TO THE UTILITIES DUE TO THE CONTRACTOR'S ACTIVITIES. CONTRACTOR IS TO VERIFY LOCATION, DEPTH, SIZE, MATERIAL AND OUTSIDE DIAMETERS OF UTILITIES IN THE FIELD BY POTHOLING A MINIMUM OF 300–FEET AHEAD OF SCHEDULED CONSTRUCTION IN ORDER TO IDENTIFY POTENTIAL CONFLICTS AND PROBLEMS WITH FUTURE CONSTRUCTION ACTIVITIES. EXISTING UTILITY INFORMATION OBTAINED FROM SLC PUBLIC UTILITIES' MAPS MUST BE ASSUMED AS APPROXIMATE AND REQUIRING FIELD VERIFICATION. CONTACT BLUE STAKES OR APPROPRIATE OWNER FOR COMMUNICATION LINE LOCATIONS.

D. UTILITY RELOCATIONS –
FOR UTILITY CONFLICTS REQUIRING MAINLINE RELOCATIONS, THE CONTRACTOR MUST NOTIFY THE APPLICABLE UTILITY COMPANY OR USER A MINIMUM OF 2–WEEKS IN ADVANCE. A ONE–WEEK MINIMUM NOTIFICATION IS REQUIRED FOR CONFLICTS REQUIRING THE RELOCATION OF SERVICE LATERALS. ALL RELOCATIONS ARE SUBJECT TO APPROVAL FROM THE APPLICABLE UTILITY COMPANY AND/OR USER.

E. FIELD CHANGES –
NO ROADWAY, UTILITY ALIGNMENT OR GRADE CHANGES ARE ALLOWED FROM THE APPROVED CONSTRUCTION PLANS/DOCUMENTS WITHOUT WRITTEN APPROVAL FROM THE SLC PUBLIC UTILITIES DIRECTOR. CHANGES TO HYDRANT LOCATIONS AND/OR FIRE LINES MUST BE REVIEWED AND APPROVED BY THE SALT LAKE CITY OR SALT LAKE COUNTY FIRE DEPARTMENT (AS APPLICABLE TO THE PROJECT) AND PUBLIC UTILITIES.

F. PUBLIC NOTICE TO PROJECTS IN THE PUBLIC WAY –
FOR APPROVED PROJECTS THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND DISTRIBUTE WRITTEN NOTICE TO ALL RESIDENTS LOCATED WITHIN THE PROJECT AREA AT LEAST 72–HOURS PRIOR TO CONSTRUCTION. WORK TO BE CONDUCTED WITHIN COMMERCIAL OR INDUSTRIAL AREAS MAY REQUIRE A LONGER NOTIFICATION PERIOD AND ADDITIONAL CONTRACTOR COORDINATION WITH PROPERTY OWNERS. THE WRITTEN NOTICE IS TO BE APPROVED BY THE SLC PUBLIC UTILITIES PROJECT ENGINEER.

G. PUBLIC NOTICE FOR WATER MAIN SHUT DOWNS –
THROUGH THE SLC PUBLIC UTILITIES INSPECTOR AND WITH THE PUBLIC UTILITIES PROJECT ENGINEER APPROVAL, SLC PUBLIC UTILITIES MUST BE CONTACTED AND APPROVE ALL WATER MAIN SHUTDOWNS. ONCE APPROVED THE CONTRACTOR MUST NOTIFY ALL EFFECTED USERS BY WRITTEN NOTICE A MINIMUM OF 48–HOURS (RESIDENTIAL) AND 72–HOURS (COMMERCIAL/INDUSTRIAL) PRIOR TO THE WATER MAIN SHUT DOWN. PUBLIC UTILITIES MAY REQUIRE LONGER NOTICE PERIODS.

H. WATER AND SEWER SEPARATION –
IN ACCORDANCE WITH UTAH'S DEPARTMENT OF HEALTH REGULATIONS, A MINIMUM TEN–FOOT HORIZONTAL AND 1.5–FOOT VERTICAL (WITH WATER ON TOP) SEPARATION IS REQUIRED. IF THESE CONDITIONS CANNOT BE MET, STATE AND SLC PUBLIC UTILITIES APPROVAL IS REQUIRED. ADDITIONAL CONSTRUCTION MEASURES WILL BE REQUIRED FOR THESE CONDITIONS.

I. SALVAGE –
ALL METERS MUST BE RETURNED TO PUBLIC UTILITIES, AND AT PUBLIC UTILITIES REQUEST ALL SALVAGED PIPE AND/OR FITTINGS MUST BE RETURNED TO SLC PUBLIC UTILTIES (483–6727) LOCATED AT 1530 SOUTH WEST TEMPLE.

J. SEWER MAIN AND LATERAL CONSTRUCTION REQUIREMENTS –
SLC PUBLIC UTILITIES MUST APPROVE ALL SEWER CONNECTIONS. ALL SEWER LATERALS 6–INCHES AND SMALLER MUST WYE INTO THE MAINS PER SLC PUBLIC UTILITIES REQUIREMENTS. ALL 8–INCH AND LARGER SEWER CONNECTIONS MUST BE PETITIONED FOR AT PUBLIC UTILITIES (483–6762) AND CONNECTED AT A MANHOLE. INSIDE DROPS IN MANHOLES ARE NOT ALLOWED. A MINIMUM 4–FOOT BURY DEPTH IS REQUIRED ON ALL SEWER MAINS AND LATERALS. CONTRACTOR SHALL INSTALL INVERT COVERS IN ALL SEWER MANHOLES WITHIN THE PROJECT AREA.

CONTRACTOR TO PROVIDE AIR PRESSURE TESTING OF SEWER MAINS IN ACCORDANCE WITH PIPE MANUFACTURERS RECOMMENDATIONS AND SALT LAKE CITY PUBLIC UTILITIES REQUIREMENTS. ALL PVC SEWER MAIN AND LATERAL TESTING SHALL BE IN ACCORDANCE WITH UNI–BELL UN–B–6–98 RECOMMENDED PRACTICE FOR LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE. CONTRACTOR SHALL PROVIDE SEWER LATERAL WATER TESTING AS REQUIRED BY THE SALT LAKE CITY PUBLIC UTILITIES PROJECT ENGINEER OR INSPECTOR. A MINIMUM OF 9–FEET OF HEAD PRESSURE IS REQUIRED AS MEASURED VERTICALLY FROM THE HIGH POINT OF THE PIPELINE AND AT OTHER LOCATIONS ALONG THE PIPELINE AS DETERMINED BY THE SLC PUBLIC UTILITIES PROJECT ENGINEER OR INSPECTOR. TESTING TIME WILL BE NO LESS THAN AS SPECIFIED FOR THE AIR TEST DURATION IN TABLE I ON PAGE 12 OF UNI–B–6–98. ALL PIPES SUBJECT TO WATER TESTING SHALL BE FULLY VISIBLE TO THE INSPECTOR DURING TESTING. TESTING MUST BE PERFORMED IN THE PRESENCE OF A SLC PUBLIC UTILITIES REPRESENTATIVE. ALL VISIBLE LEAKAGE MUST BE REPAIRED TO THE SATISFACTION OF THE SLC PUBLIC UTILITIES ENGINEER OR INSPECTOR.

K. WATER AND FIRE MAIN AND SERVICE CONSTRUCTION REQUIREMENTS –
SLC PUBLIC UTILITIES MUST APPROVE ALL FIRE AND WATER SERVICE CONNECTIONS. A MINIMUM 3–FOOT SEPARATION IS REQUIRED BETWEEN ALL WATER AND FIRE SERVICE TAPS INTO THE MAIN. ALL CONNECTIONS MUST BE MADE MEETING SLC PUBLIC UTILITIES REQUIREMENTS. A 5–FOOT MINIMUM BURY DEPTH (FINAL GRADE TO TOP OF PIPE) IS REQUIRED ON ALL WATER/FIRE LINES UNLESS OTHERWISE APPROVED BY PUBLIC UTILITIES. WATER LINE THRUST BLOCK AND RESTRAINTS ARE AS PER SLC APPROVED DETAIL DRAWINGS AND SPECIFICATIONS. ALL EXPOSED NUTS AND BOLTS WILL BE COATED WITH CHEVRON FM1 GREASE PLUS MINIMUM 8 MIL THICKNESS PLASTIC. PROVIDE STAINLESS STEEL NUTS, BOLTS AND WASHERS FOR HIGH GROUNDWATER/ SATURATED CONDITIONS AT FLANGE FITTINGS, ETC.

ALL WATERLINES INSTALLATIONS AND TESTING TO BE IN ACCORDANCE WITH AWWA SECTIONS C600, C601, C651, C206, C200, C900, C303 AWWA MANUAL M11 AND ALL OTHER APPLICABLE AWWA, UPWS, ASTM AND ANSI SPECIFICATIONS RELEVANT TO THE INSTALLATION AND COMPLETION OF THE PROJECT. AMENDMENT TO SECTION C600 SECTION 4.1.1; DOCUMENT TO READ MINIMUM TEST PRESSURE SHALL NOT BE LESS THAN 200 P.S.I. GAUGED TO A HIGH POINT OF THE PIPELINE BEING TESTED. ALL MATERIALS USED FOR WATERWORKS PROJECTS TO BE RATED FOR 150 P.S.I. MINIMUM OPERATING PRESSURE.

CONTRACTOR IS TO INSTALL WATER SERVICE LINES, METER YOKES AND/OR ASSEMBLIES AND METER BOXS WITH LIDS LOCATED AS APPROVED ON THE PLANS PER APPLICABLE PUBLIC UTILITIES DETAIL DRAWINGS. METER BOXES ARE TO BE PLACED IN THE PARK STRIPS PERPENDICULAR TO THE WATERMAIN SERVICE TAP CONNECTION. ALL WATER METERS, CATCH BASINS, CLEANOUT BOXES, MANHOLES, DOUBLE CHECK VALVE DETECTOR ASSEMBLIES, REDUCED PRESSURE DETECTOR ASSEMBLIES AND BACKFLOW PREVENTION DEVICES MUST BE LOCATED OUTSIDE OF ALL APPROACHES, DRIVEWAYS, PEDESTRIAN WALKWAYS AND OTHER TRAVELED WAYS UNLESS OTHERWISE APPROVED ON PLANS.

BACKFLOW PREVENTORS ARE REQUIRED ON ALL IRRIGATION AND FIRE SPRINKLING TAPS PER PUBLIC UTILITIES AND SLC FIRE DEPARTMENT REQUIREMENTS. CONTRACTORS SHALL INSTALL BACKFLOW PREVENTION DEVICES ON FIRE SPRINKLER CONNECTIONS. DOUBLE CHECK VALVE ASSEMBLIES SHALL BE INSTALLED ON CLASS 1, 2 AND 3 SYSTEMS. REDUCED PRESSURE PRINCIPLE VALVES SHALL BE INSTALLED ON CLASS 4 SYSTEMS. ALL FIRE SPRINKLING BACKFLOW ASSEMBLIES SHALL CONFORM TO ASSE STANDARD 1048, 1013, 1047 AND 1015. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM BACKFLOW PREVENTION TESTS PER SALT LAKE CITY STANDARDS AND SUBMIT RESULTS TO PUBLIC UTILITIES. ALL TESTS MUST BE PERFORMED AND SUBMITTED TO PUBLIC UTILITIES WITHIN 10 DAYS OF INSTALLATION OR WATER TURN–ON. BACKFLOW TEST FORMS ARE AVAILABLE AT PUBLIC UTILITIES' CONTRACTS AND AGREEMENTS OFFICE.

L. GENERAL WATER, SEWER AND STORM DRAIN REQUIREMENTS –
ALL WATER, FIRE AND SEWER SERVICES STUBBED TO A PROPERTY MUST BE USED OR WATER AND FIRE SERVICES MUST BE KILLED AT THE MAIN AND SEWER LATERALS CAPPED AT THE SEWER MAIN PER PUBLIC UTILITIES REQUIREMENTS. ALLOWABLE SERVICES TO BE KEPT WILL BE AS DETERMINED BY THE PUBLIC UTILITIES PROJECT ENGINEER. ALL WATER AND FIRE SERVICE KILLS AND SEWER LATERAL CAPS ARE TO BE KILLED AND CAPPED AS DETERMINED AND VISUALLY VERIFIED BY THE ON–SITE PUBLIC UTILITIES INSPECTOR.

ALL MANHOLES, HYDRANTS, VALVES, CLEAN–OUT BOXES, CATCH BASINS, METERS, ETC. MUST BE RAISED OR LOWERED TO FINAL GRADE PER PUBLIC UTILITIES STANDARDS AND INSPECTOR REQUIREMENTS. CONCRETE COLLARS MUST BE CONSTRUCTED ON ALL MANHOLES, CLEANOUT BOXES, CATCH BASINS AND VALVES PER PUBLIC UTILITIES STANDARDS. ALL MANHOLE, CATCH BASIN, OR CLEANOUT BOX CONNECTIONS MUST BE MADE WITH THE PIPE CUT FLUSH WITH THE INSIDE OF THE BOX AND GROUTED OR SEALED AS REQUIRED BY THE PUBLIC UTILITIES INSPECTOR. ALL MANHOLE, CLEANOUT BOX OR CATCH BASIN DISCONNECTIONS MUST BE REPAIRED AND GROUTED AS REQUIRED BY THE ON–SITE PUBLIC UTILITIES INSPECTOR.

CONTRACTOR SHALL NOT ALLOW ANY GROUNDWATER OR DEBRIS TO ENTER THE NEW OR EXISTING PIPE DURING CONSTRUCTION. UTILITY TRENCHING, BACKFILL, AND PIPE ZONE AS PER SLC PUBLIC UTILITIES, "UTILITY INSTALLATION DETAIL."

M. STREETLIGHTS
ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT SALT LAKE CITY STANDARDS AND N.E.C. (NATIONAL ELCTRICAL CODE). A STREET LIGHTING PLAN SHOWING WIRING LOCATION, WIRING TYPE, VOLTAGE, POWER SOURCE LOCATION, CONDUIT SIZE AND LOCATION SHALL BE SUBMITTED TO SALT LAKE CITY AND BE APPROVED PRIOR TO CONSTRUCTION. NO DEVIATION OF STREETLIGHT, PULL BOXES, CONDUITS, AND ETC. LOCATIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE STREEGHT LIGHTING PROGRAM MANGER OR HIS/HER REPRESENTATIVE.

STREETLIGHT POLES SHALL NOT BE INSTALLED WITHIN 5 FEET OF A FIRE HYDRANT. THE LOCATION SHALL BE SUCH THAT IT DOES NOT HINDER THE OPERATION OF THE FIRE HYDRANT AND WATER LINE OPERATION VALVES.

STREETLIGHTS AND STREETLIGHT POLES SHALL NOT BE INSTALLED WITHIN 5 FEET FROM ANY TREE, UNLESS WRITTEN APPROVAL IS RECEIVED FROM THE STREET LIGHTING PROGRAM MANAGER. BRANCHES MAY NEED TO BE PRUNED AS DETERMINED BY THI INSPECTOR IN THE FIELD AT THE TIME OF INSTALLATION.

STREETLIGHTS SHALL NOT BE INSTALLED WITHIN 5 FEET FROM THE EDGE OF ANY DRIVEWAY

ANTI–SEIZE LUBRICANT SHALL BE USED ON ALL COVER BOLTS AND GROUND BOX BOLTS.

ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION UNLESS APPROVED IN WRITING BY THE STREET LIGHTIN PROGRAM MANAGER.

IF APPROVED PLANS REQUIRE REMOVAL OF STREETLIGHT POLES DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POLES WHILE THEY ARE DOWN. THE POLES SHALL BE STORED IN A SECURE LOCATION AND RAIED OFF THE GROUND. PICTURES SHALL BE TAKEN BEFORE THE POLES ARE REMOVED TO DOCUMENT THE CONDITION OF THE POLES BEFORE THEY WERE REMOVED. PICTURES SHALL BE SENT TO THE CITY. CONTRACTOR SHALL ENSURE THE POLES ARE IN SIMILAR CONDITION WHEN RESTORED TO THEIR ORIGINAL LCOATIONS

IF THE APPROVED PLANS REQUIRE PERMANENT REMOVAL OF STREETLIGHT POLES THE CONTRACTOR SHALL COORDINATE SALVAGE AND/OR DISPOSAL OF POLES, FIXTURES, AND LIGHTS WITH THE STREET LIGHTING PROGRAM MANAGER.

ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC. SHALL LEAVE A MINIMUM OF EIGHTEEN (18) INCHES TO THE FACE OF THE STREETLIGHT POLE ON ALL SIDES.

ALL SERVICE POINTS SHALL BE COORDINATED WITH ROCKY MOUNTAIN POWER AND WHENEVER POSSIBLE BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE PLANS WITH A SCHEMATIC FROM ROCKY MOUNTAIN POWER. POLE LOCATIONS AS SHOWN ON THE APPROVED PLANS MAY BE ADJUSTED IN THE FIELD BY THE STRET LIGHTING PROGRAM MANAGER A THE TIME OF INSTALLATION AT NO ADDITIONAL COST TO THE CITY.

IT SHALL BE REQUIRED THAT IN THE ABSENCE OF AN EXISTING WORKABLE CIRCUIT TO ATTACH TO, THAT ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUITS. IN THIS CASE THE DEVELOPER AND OR HIS ENGINEER SHALL CONTACT ROCCKY MOUNTAIN POWER FOR INSTALLATION OF NEW SERVICE.

WHENVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION FO THE STREETLIGHT CIRCUITS AND/OR STREETLIGHT POLES, THOSE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED BEFORE THE STREETLIGHT BASES ARE CONSTRUCTED AT NO EXPENSE TO THE CITY OR ROCKY MOUNTAIN POWER. THE RESOLUTION MUST BE APPROVED BY THE CITY AND ROCKY MOUNTAIN POWER.

SLC Notes Updated 06/27/2018

Other General Notes:

* ALL CONSTRUCTION WILL CONFORM WITH APWA MANUAL OF STANDARD PLAN AND MANUAL OF STANDARD SPECIFICATIONS 2017 EDITION, AS AMENDED BY EXHIBIT "B" IN THE SUBDIVISION IMPROVEMENT CONSTRUCTION AGREEMENT. SOME OF THESE AMENDMENTS ARE:

EXHIBIT "B"

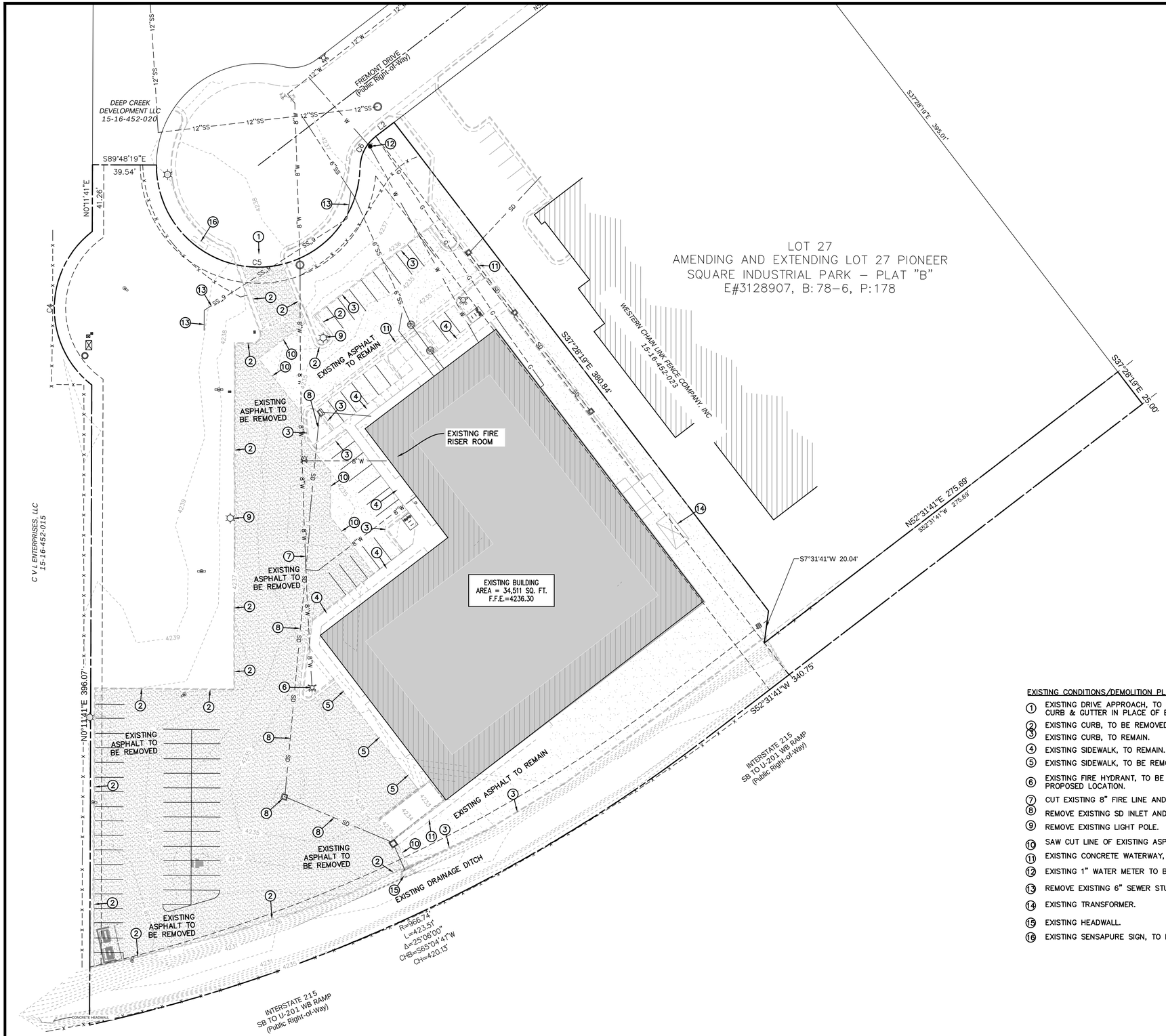
A. MANUAL OF STANDARD PLANS

1. PLAN NO. 110 ARROW DIAGRAM FOR PROJECT CLOSEOUT – DELETE STEP "F"
2. PLAN NO. 231 CONCRETE SIDEWALK – AMEND NOTE 6.A TO READ AS FOLLOWS:
   6. A NEW CONSTRUCTION THICKNESS:
   6" IN RESIDENTIAL ZONE DRIVE APPROACHES,
   8" IN NON–RESIDENTIAL ZONE DRIVE APPROACHES,
   4" IN SIDEWALK NOT PART OF A DRIVE APPROACH.
3. PLAN NO. 256 CONCRETE PAVEMENT PATCH – AMEND NOTE 3. TO READ AS FOLLOWS:
   3. REINFORCEMENT: ASTM A 615, GRADE60, NO.5 EPOXY COATED DEFORMED STEEL 12 INCHES ON CENTER.
4. PLAN NO. 261 DRAWING 1 CONCRETE PAVEMENT JOINTS – AMEND NOTE 1 TO READ AS FOLLOWS:
   1. REINFORCEMENT: ASTM A 615, GRADE 60, NO. 5, 18 INCHES LONG EPOXY COATED DEFORMED STEEL REBAR OR SMOOTH STEEL DOWELS AS INDICATED.
   A. SPACE REBAR AND DOWELS AT 12 INCHES ON CENTER.
   B. GREASE DOWELS TO PROVIDE MOVEMENT IN EXPANSION JOINTS.
   C. KEEP TIE BARS IN THE VERTICAL CENTER OF THE CONCRETE SLAP AND PERPENDICULAR TO THE JOINT DURING CONCRETE PLACEMENT.

B. MANUAL OF STANDARD SPECIFICATIONS

AMEND DIVISION 2 – SITE CONSTRUCTION AS FOLLOWS:

a. SECTION 02055 COMMON FILL – ADD 2.2B AS FOLLOWS:
   2.2B. THE PARTICLE SIZE WILL NOT EXCEED 4" AND THE PERCENT PASSING THE NO. 200 SIEVE WILL NOT BE GREATER THAN 12% UNLESS APPROVED BY THE ENGINEER.
b. SECTION 02060 SELECT FILL – DELETE 1.4 C. AND TABLE 1, AND AMEND 2.1E.3. TABLE 3 TO ADD THE FOLLOWING REQUIREMENT: IN ADDITION TO THESE REQUIREMENTS, THE PERCENT PASSING THE NO. 200 SIEVE WILL NOT BE GREATER THAN 12% UNLESS APPROVED BY THE ENGINEER.
c. SECTION 02705 ASPHALT CONCRETE – DELETE 1.6A & 1.6C AMEND TABLE 1 AS FOLLOWS:
   PAY FACTORS ARE NOT APPLICABLE, IF THE MEAN OF THE DEVIATIONS OF TEST RESULTS FOR ONE DAY'S PRODUCTION IS GREATER THAN THE AMOUNT SHOWN IN TABLE 1 FOR THE 0.85 PAY FACTOR, THE ENGINEER MAY REQUIRE THE REMOVAL OF THE MATERIAL OR INSTALLATION OF SEAL COAT AT NO EXPENSE TO THE OWNER.
d. SECTION 02745 HOT–MIX ASPHALT CONCRETE PAVING – DELETE 17A.2, 1.7A.3, TABLE 1, 1.7C.2., AND AMEND 1.7C.1. TO READ AS FOLLOWS:
   1.7C.1 ACCEPTANCE WILL OCCUR IF THE AVERAGE OF CORE TESTS IS BETWEEN 96% & 98% WITH NO TEST LOWER THAN 92% IF THESE REQUIREMENTS ARE NOT MET, ENGINEER MAY REQUIRE A SEAL COAT OR MAY REJECT THE PAVEMENT AT NO EXPENSE TO THE OWNER.
e. SECTION 02750 CONCRETE PAVING – DELETE TABLE 1 AND AMEND 1.4B.2. TO READ AS FOLLOWS:
   1.4B.2. ACCEPTANCE OF A LOT WILL OCCUR IF THE AVERAGE OF THE 28–DAY COMPRESSIVE STRENGTH TESTS EXCEEDS THE SPECIFIED DESIGN STRENGTH.
f. SECTION 02750 CONCRETE PAVING – DELETE TABLE 2 AND AMEND 1.4D. TO READ AS FOLLOWS:
   1.4D. THICKNESS: LOT SIZE IS 1,000 SQUARE YARDS. ACCEPTANCE OF A LOT WILL OCCUR IF THE AVERAGE THICKNESS IS WITHIN ½" OF THE DESIGN THICKNESS WITH NONE OF THE CONCRETE DEFICIENT FROM THE DESIGN THICKNESS BY MORE THAN 1".
g. SECTION 02770 CONC



0 30 60 90

Scale in Feet

SEE COVER SHEET FOR PROJECT LEGEND

EXISTING CONDITIONS/DEMOLITION PLAN KEYNOTES:

1. EXISTING DRIVE APPROACH, TO BE REMOVED. CONTRACTOR TO INSTALL 30" CURB & GUTTER IN PLACE OF EXISTING DRIVE APPROACH.
2. EXISTING CURB, TO BE REMOVED.
3. EXISTING CURB, TO REMAIN.
4. EXISTING SIDEWALK, TO REMAIN.
5. EXISTING SIDEWALK, TO BE REMOVED.
6. EXISTING FIRE HYDRANT, TO BE RELOCATED. SEE SHEET C3.0 FOR PROPOSED LOCATION.
7. CUT EXISTING 8" FIRE LINE AND REMOVE SECTION SOUTH OF CUT.
8. REMOVE EXISTING SD INLET AND SD PIPE.
9. REMOVE EXISTING LIGHT POLE.
10. SAW CUT LINE OF EXISTING ASPHALT.
11. EXISTING CONCRETE WATERWAY, TO REMAIN.
12. EXISTING 1" WATER METER TO BE REMOVED. KILL LATERAL AT THE MAIN.
13. REMOVE EXISTING 6" SEWER STUB.
14. EXISTING TRANSFORMER.
15. EXISTING HEADWALL.
16. EXISTING SENSAPURE SIGN, TO BE RELOCATED.

NO.	REVISIONS	BY	DATE
DESIGNER: SDT	PROJECT ENGINEER: SDT		

CIVIL ENGINEERING
+SURVEYING
10718 S BECKSTEAD LANE, SUITE 102
South Jordan, Utah - 801-949-6296

SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

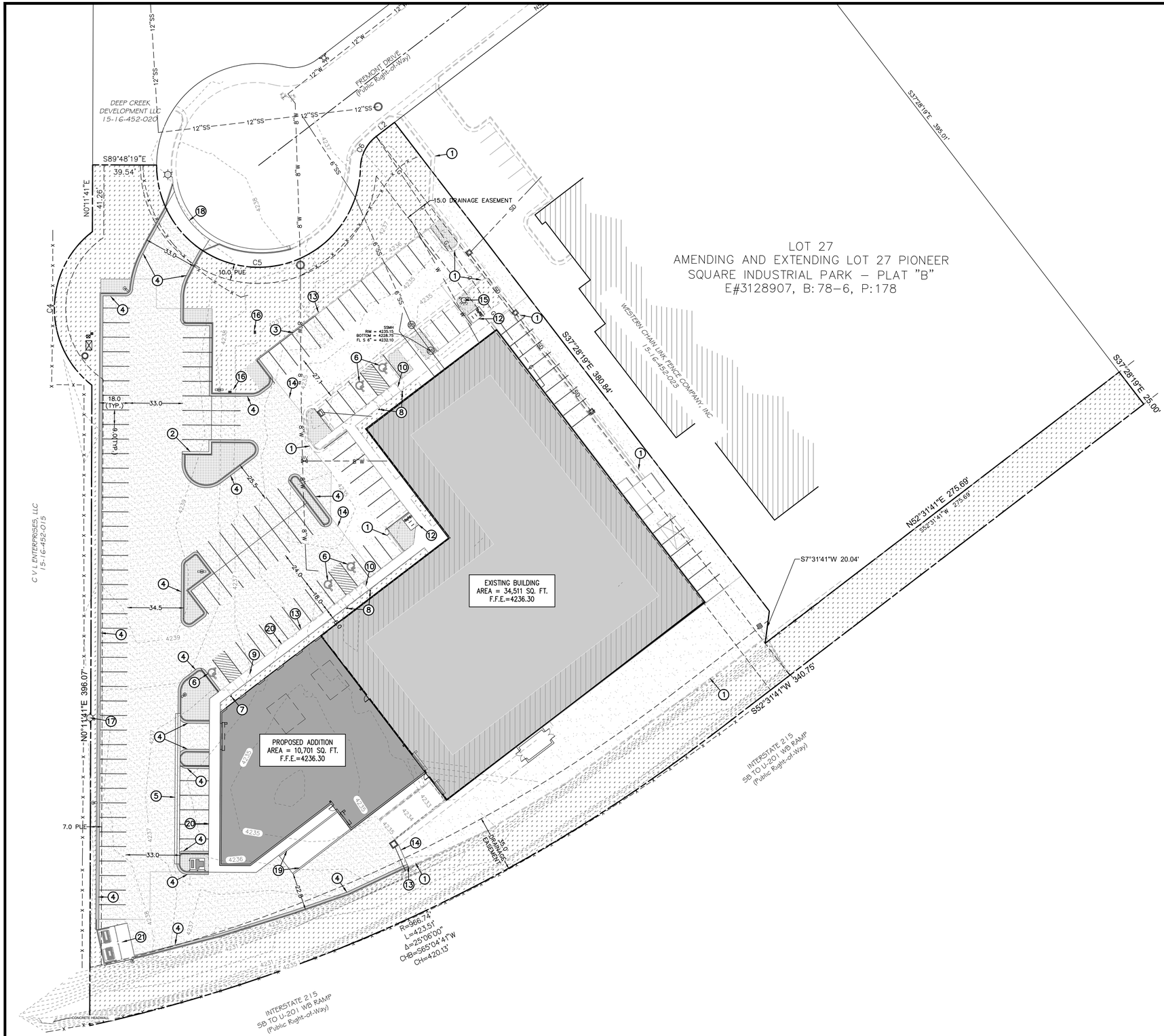
EXISTING CONDITIONS/DEMOLITION PLAN

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

Blue Stakes of UTAH 811
Bluestakes.org

SHEET NO.	
C0.1	
PROJECT ID	DATE:
A-1000	03/15/22
FILE NAME: PRJ-SSL	SCALE: 1"=30'

C-1



N

0 30 60 90

Scale in Feet

SEE COVER SHEET FOR PROJECT LEGEND

LOT AREAS:

	SQ. FT. / ACRES
LOT	162,109 SQ. FT. / 3.72 ACRES
TOTAL BUILDING FOOTPRINT	45,210 SQ. FT. / 1.04 ACRES
EX. BUILDING FOOTPRINT	34,511 SQ. FT. / 0.79 ACRES
PROPOSED BUILDING FOOTPRINT	10,700 SQ. FT. / 0.25 ACRES
TOTAL ASPHALT	64,925 SQ. FT. / 1.49 ACRES
EX. ASPHALT	23,962 SQ. FT. / 0.55 ACRES
PROPOSED ASPHALT	40,964 SQ. FT. / 0.94 ACRES
TOTAL LANDSCAPING	39,939 SQ. FT. / 0.92 ACRES
PARKING LANDSCAPING	3,241 SQ. FT. / 0.07 ACRES
REMAINING LANDSCAPING	36,699 SQ. FT. / 0.84 ACRES
CONCRETE	12,034 SQ. FT. / 0.28 ACRES

NOTE:
1. ALL AREA CALCULATIONS ARE APPROXIMATE AND CAN CHANGE DUE TO CONSTRUCTION TOLERANCES.

LOT LANDSCAPING AREAS:

	SQ. FT.	CITY REQ'T
PARKING AREA:	53,043 SQ. FT.	
PARKING AREA LANDSCAPING	3,241 SQ. FT.	(5% OF PARKING AREA: 2,652 SQ. FT. REQ'D)
TOTAL LANDSCAPING	39,939 SQ. FT.	(24.64% OF SITE)

NOTE:
1. PARKING AREA DOES NOT INCLUDE TRUCK MANUVERING AREA OR LANDSCAPED BUFFER AS DIMENSIONED.
2. LANDSCAPED AREAS DO NOT INCLUDE HARD SURFACE AREAS(WALKWAYS, BIKE RACKS, CURB & GUTTERS).
3. ALL AREA CALCULATIONS ARE APPROXIMATE AND CAN CHANGE DUE TO CONSTRUCTION TOLERANCES.

LOT PARKING REQUIREMENTS:

	SQ. FT.	CITY REQM'T	
TOTAL BLDG AREA	45,210 SQ. FT.		
OFFICE	8,400 SQ. FT.	25	(3/1000)
WAREHOUSE	32,032 SQ. FT.	26	($\frac{3}{1000}$ FIRST 10,000, $\frac{0.5}{1000}$ REST)
TOTAL REQUIRED:		51	
TOTAL PROVIDED:		131	
ACCESSIBLE SPACES		5 (5 REQ'D 101 TO 150)	
BICYCLE SPACES		12 (9.76 REQ'D)	

NOTES:
1. ALL AREA CALCULATIONS ARE APPROXIMATE AND CAN CHANGE DUE TO CONSTRUCTION TOLERANCES.
2. BICYCLE CALCULATIONS – ((25 X 10%)+(25 x 5%)) x ($\frac{131}{50}$) = 9.76

SITE PLAN NOTES:

1. EXISTING CURB & GUTTER
2. PROPOSED 24" CURB & GUTTER. SEE DETAIL 1/C4.0
3. PROPOSED 6" CURB. SEE DETAIL 12/C4.0
4. PROPOSED 24" REV PAN CURB & GUTTER. SEE DETAIL 2/C4.0
5. PROPOSED 4' WATERWAY. SEE DETAIL 3/C4.0
6. ALL HANDICAP STALLS SHALL HAVE SLOPES OF LESS THAN 2% IN ALL DIRECTIONS. SEE DETAIL 10/C4.0
7. PROPOSED ADA SIGN. SEE DETAIL 11/C4.0
8. EXISTING ADA SIGN. TO REMAIN IN PLACE.
9. ADA RAMPS ARE TO BE INSTALLED PER CITY AND ADA STANDARDS AND SPECIFICATIONS. SEE DETAIL 4/C4.0
10. EXISTING ADA RAMPS TO REMAIN.
11. PROPOSED TRASH ENCLOSURE. SEE ARCHITECTURAL DRAWINGS FOR DETAILS.
12. PROPOSED BIKE RACK. SEE DETAIL 5/C4.0
13. PROVIDE A SMOOTH TRANSITION FROM PROPOSED CURB & GUTTER TO EXISTING CURB & GUTTER.
14. SAWCUT EXISTING ASPHALT TO PROVIDE A SMOOTH EDGE FOR PROPOSED ASPHALT TO MATCH INTO.
15. EXISTING FIRE HYDRANT TO REMAIN.
16. EXISTING ELECTRICAL BOX TO REMAIN.
17. EXISTING SITE LIGHT POLE.
18. INSTALL DRIVE APPROACH PER APWA PLAN NO. 221 W/O SIDEWALK. SEE SHEET C5 FOR DETAILS.
19. PROPOSED DOCK WALL, SEE STRUCTURAL PLANS FOR DETAILS
20. PROPOSED 6' WIDE OPEN FACED SIDEWALK. SEE DETAIL 12/C4.0
21. PROPOSED DUMPSTER ENCLOSURE. ONE DUMPSTER TO BE DESIGNATED FOR RECYCLING. SEE DETAIL ON ARCHITECTURAL PLANS.

NO.	REVISIONS	BY	DATE
DESIGNER: SDT	PROJECT ENGINEER: SDT		

CIVIL ENGINEERING +SURVEYING
10718 S BECKSTEAD LANE, SUITE 102
South Jordan, Utah - 801-949-6296

SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

SITE PLAN

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

Blue Stakes of UTAH 811
Bluestakes.org

SHEET NO.
C1.0

PROJECT ID	DATE:
A-1000	03/15/22
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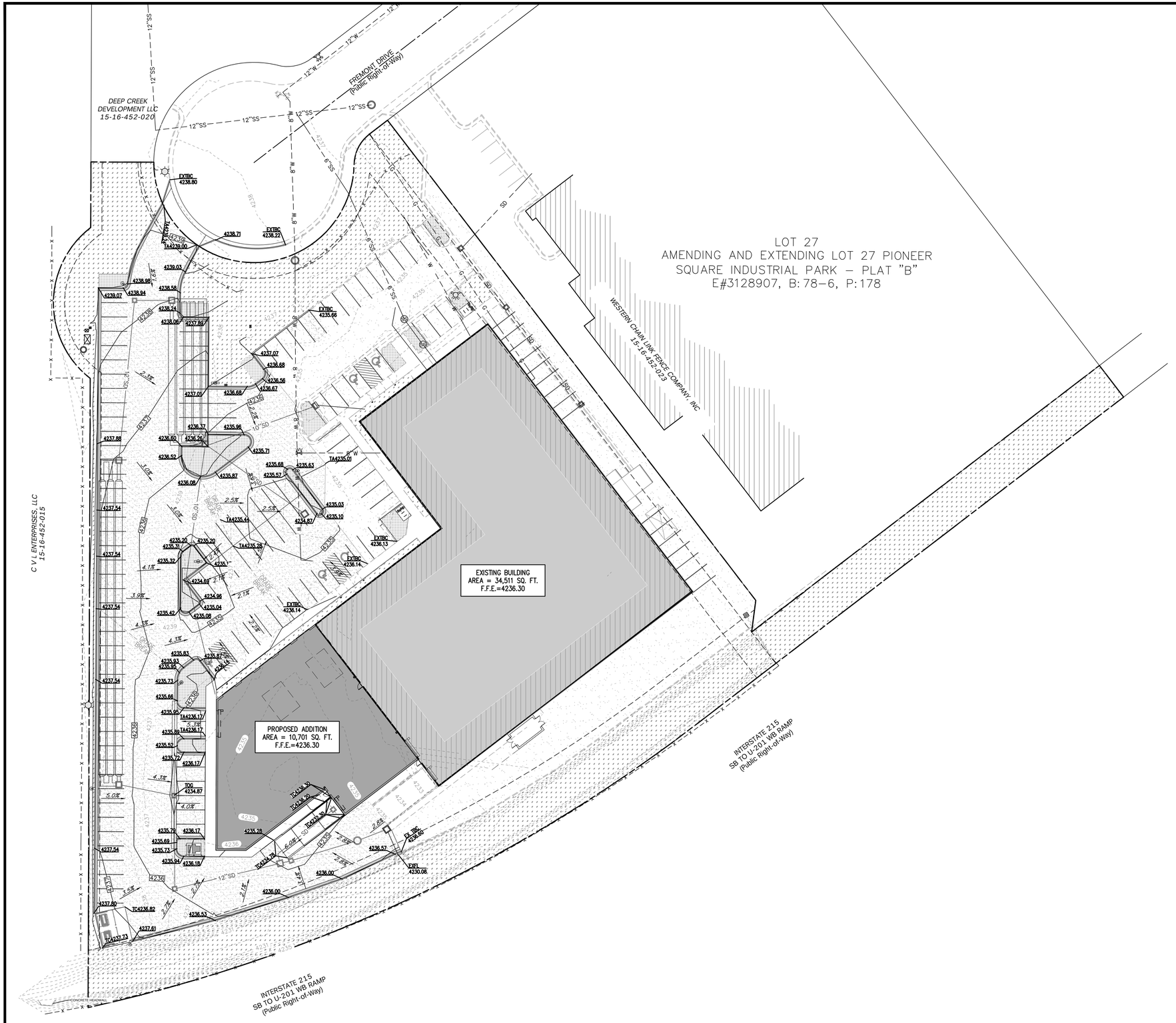

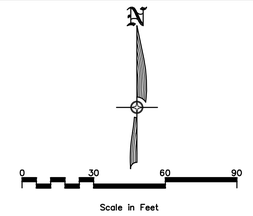

SEE COVER SHEET FOR PROJECT LEGEND

NO	REVISIONS	BY	DATE
DESIGNER: SDT	PROJECT ENGINEER: SDT		

CIVIL ENGINEERING +SURVEYING
10718 S BECKSTEAD LANE, SUITE 102
South Jordan, Utah - 801-949-6296

SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

GRADING PLAN

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

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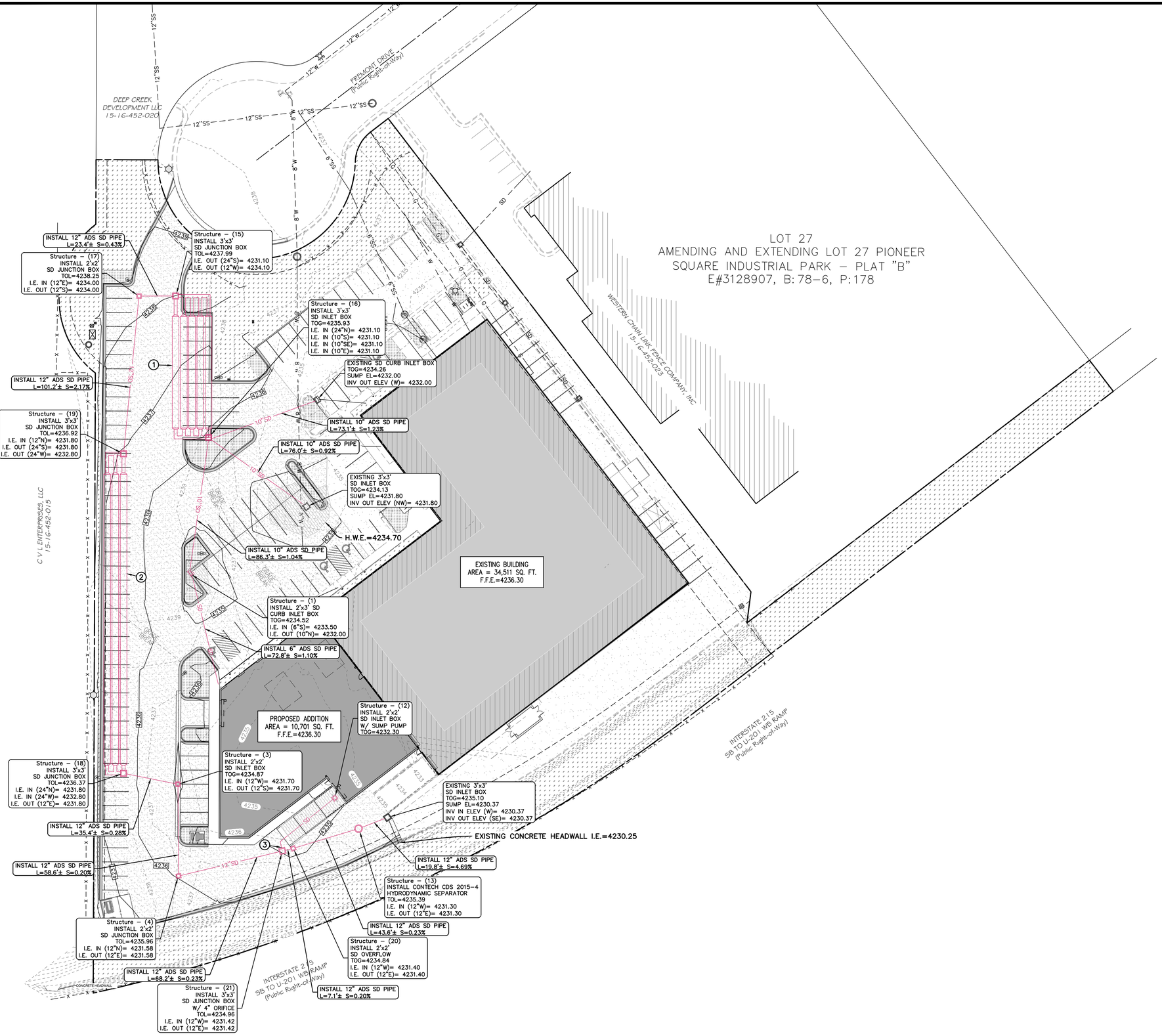
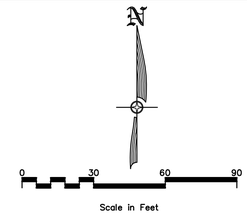
SHEET NO.	
C2.0	
PROJECT ID	DATE:
A-1000	03/15/22
FILE NAME: PRJ-SSL	SCALE: 1"=30'





SEE COVER SHEET FOR PROJECT LEGEND

SHEET LEGEND

DETENTION AREA

DRAINAGE PLAN KEYNOTES:

① INSTALL 5 ROWS OF 10 SC-740 STORMTECH CHAMBERS, 50 CHAMBERS TOTAL. BOTTOM OF CHAMBERS TO BE SET AT 4231.10. INSTALL CHAMBERS PER MANUFACTURES STANDARDS.

② INSTALL 3 ROWS OF 26 SC-740 STORMTECH CHAMBERS, 78 CHAMBERS TOTAL. BOTTOM OF CHAMBERS TO BE SET AT 4231.80. INSTALL CHAMBERS PER MANUFACTURES STANDARDS.

③ CONNECT 2" PRESSURIZED PIPE TO INLET BOX.

NO.	REVISIONS	BY	DATE
DESIGNER: SDT	PROJECT ENGINEER: SDT		

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SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

DRAINAGE PLAN

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

Blue Stakes of UTAH 811
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SHEET NO.	
C2.1	
PROJECT ID: A-1000	DATE: 03/15/22
FILE NAME: PRJ-SSL	SCALE: 1"=30'

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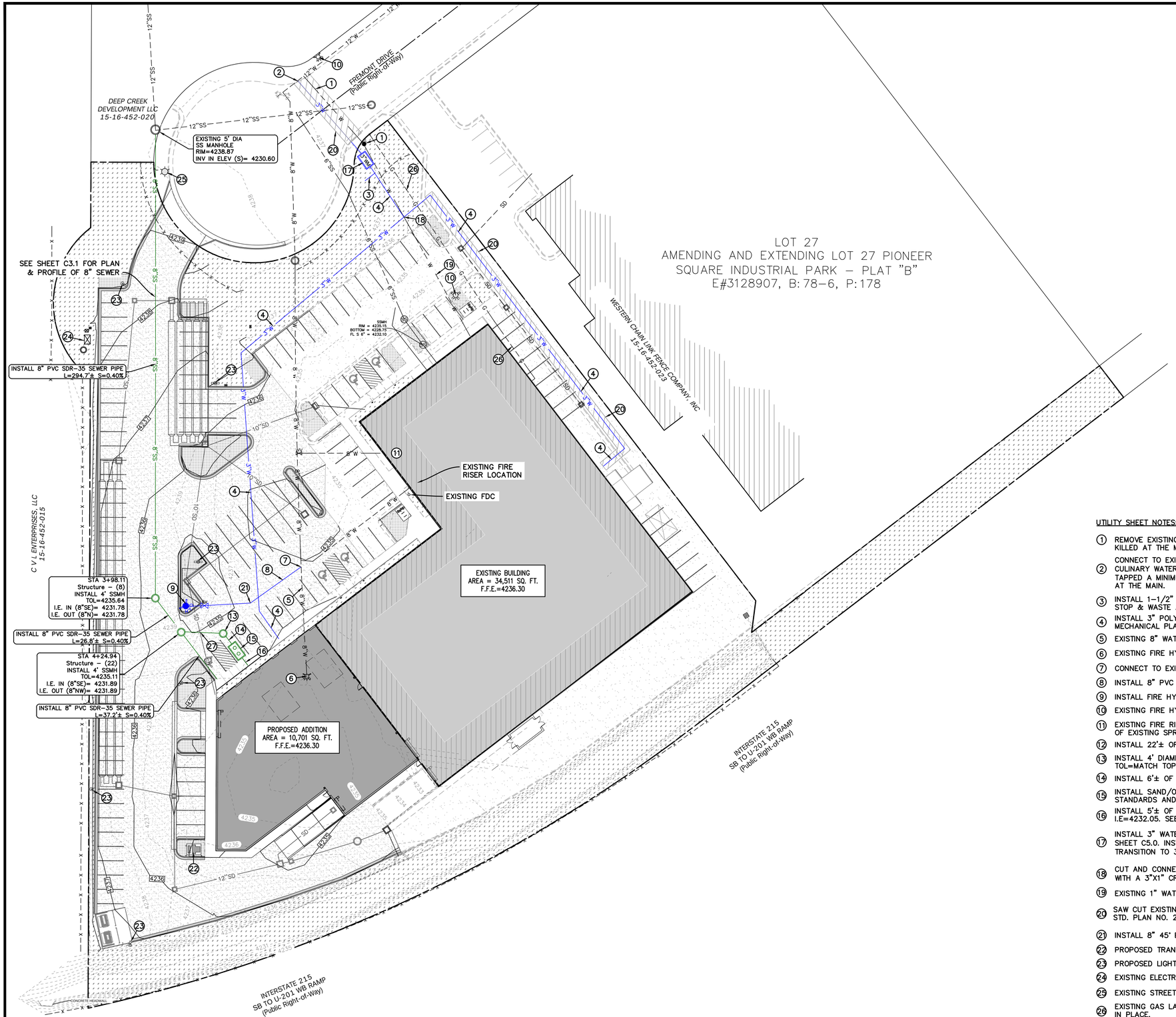

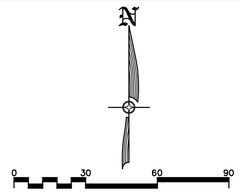

SEE COVER SHEET FOR PROJECT LEGEND

UTILITY SHEET NOTES:

1. REMOVE EXISTING 1" CULINARY WATER METER. EXISTING 1" WATER LATERAL TO BE KILLED AT THE MAIN.
2. CONNECT TO EXISTING 12" WATER MAIN (HOT TAP) AND INSTALL 3" PVC C-900 CULINARY WATER LATERAL PER APWA STANDARDS. PROPOSED 3" LATERAL TO BE TAPPED A MINIMUM OF 3 FEET FROM THE EXISTING 1" LATERAL THAT WILL BE KILLED AT THE MAIN.
3. INSTALL 1-1/2" IRRIGATION LATERAL. SEE IRRIGATION PLANS FOR CONTINUATION TO STOP & WASTE AND BACK FLOW PREVENTER.
4. INSTALL 3" POLY PIPE WATER LINE W/BENDS. END 5' FROM BUILDING AND SEE MECHANICAL PLANS FOR CONTINUATION TO BUILDING.
5. EXISTING 8" WATER LINE TO BE REMOVED.
6. EXISTING FIRE HYDRANT TO BE REMOVED
7. CONNECT TO EXISTING 8" FIRE LINE AND INSTALL 8" 45° BEND W/THRUST BLOCK
8. INSTALL 8" PVC C-900 WATER LINE W/ TRACER WIRE
9. INSTALL FIRE HYDRANT ASSEMBLY W/GATE VALVE PER SALT LAKE CITY STANDARDS
10. EXISTING FIRE HYDRANT TO REMAIN
11. EXISTING FIRE RISER ROOM. SEE MECHANICAL PLANS FOR CONTINUATION OF EXISTING SPRINKLER SYSTEM INTO PROPOSED BUILDING ADDITION
12. INSTALL 22'± OF 8" PVC SEWER PIPE, S=0.4%
13. INSTALL 4' DIAMETER SAMPLING MANHOLE PER SALT LAKE CITY STANDARDS. TOL=MATCH TOP OF PROPOSED ASPHALT, I.E.=4232.00. SEE SHEET C5 FOR DETAILS.
14. INSTALL 6'± OF 8" PVC SEWER PIPE, S=0.4%
15. INSTALL SAND/OIL SEPARATOR W/ SUMP PUMP PER SALT LAKE CITY STANDARDS STANDARDS AND SPECIFICATIONS. TOL=MATCH TOP OF PROPOSED ASPHALT. I.E.=4232.02
16. INSTALL 5'± OF 8" PVC SEWER PIPE, S=0.4% END PIPE 5' FROM BUILDING, I.E=4232.05. SEE MECHANICAL PLANS FOR CONTINUATION INTO BUILDING
17. INSTALL 3" WATER METER PER APWA STD. PLAN NO. 523. SEE DETAIL ON SHEET C5.0. INSTALL 3" PVC C-900 WATER PIPE FOR 5' AFTER METER THAN TRANSITION TO 3" POLY PIPE.
18. CUT AND CONNECT EXISTING 1" WATER LATERAL TO PROPOSED 3" LATERAL WITH A 3"X1" CROSS.
19. EXISTING 1" WATER LATERAL, TO REMAIN.
20. SAW CUT EXISTING ASPHALT AND REPAIR IN KIND PER APWA STD. PLAN NO. 255. SEE DETAIL ON SHEET C5.0.
21. INSTALL 8" 45° BEND W/THRUST BLOCK
22. PROPOSED TRANSFORMER LOCATION. SEE SITE ELECTRICAL PLANS FOR DETAILS.
23. PROPOSED LIGHT POLE. SEE SITE ELECTRICAL PLANS FOR DETAILS.
24. EXISTING ELECTRICAL CABINETS.
25. EXISTING STREET LIGHT POLE.
26. EXISTING GAS LATERAL. CONTRACTOR TO VERIFY EXACT LOCATION AND PROTECT IN PLACE.
27. I.E. (8"SS)=4231.93
    I.E. (6"SD)=4233.86

NO.	REVISIONS	BY	DATE

DESIGNER: SDT PROJECT ENGINEER: SDT

CIVIL ENGINEERING +SURVEYING
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South Jordan, Utah - 801-949-6296

SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

UTILITY PLAN

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

Blue Stakes of UTAH 811
Bluestakes.org

SHEET NO.
C3.0

PROJECT ID	DATE:
A-1000	03/15/22
FILE NAME: PRJ-SSL	SCALE: 1"=30'

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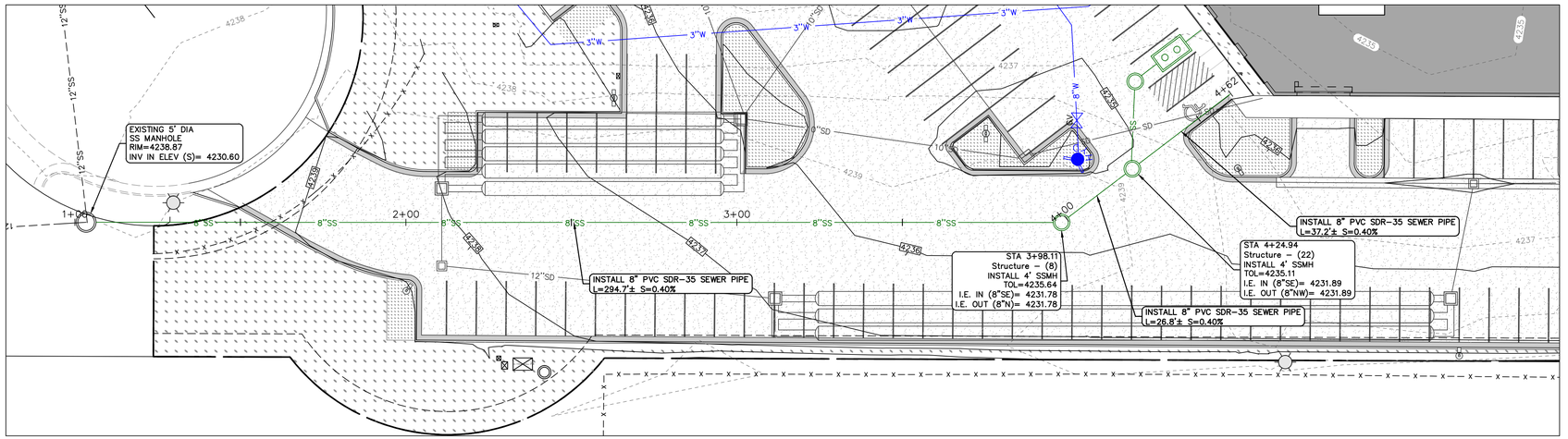

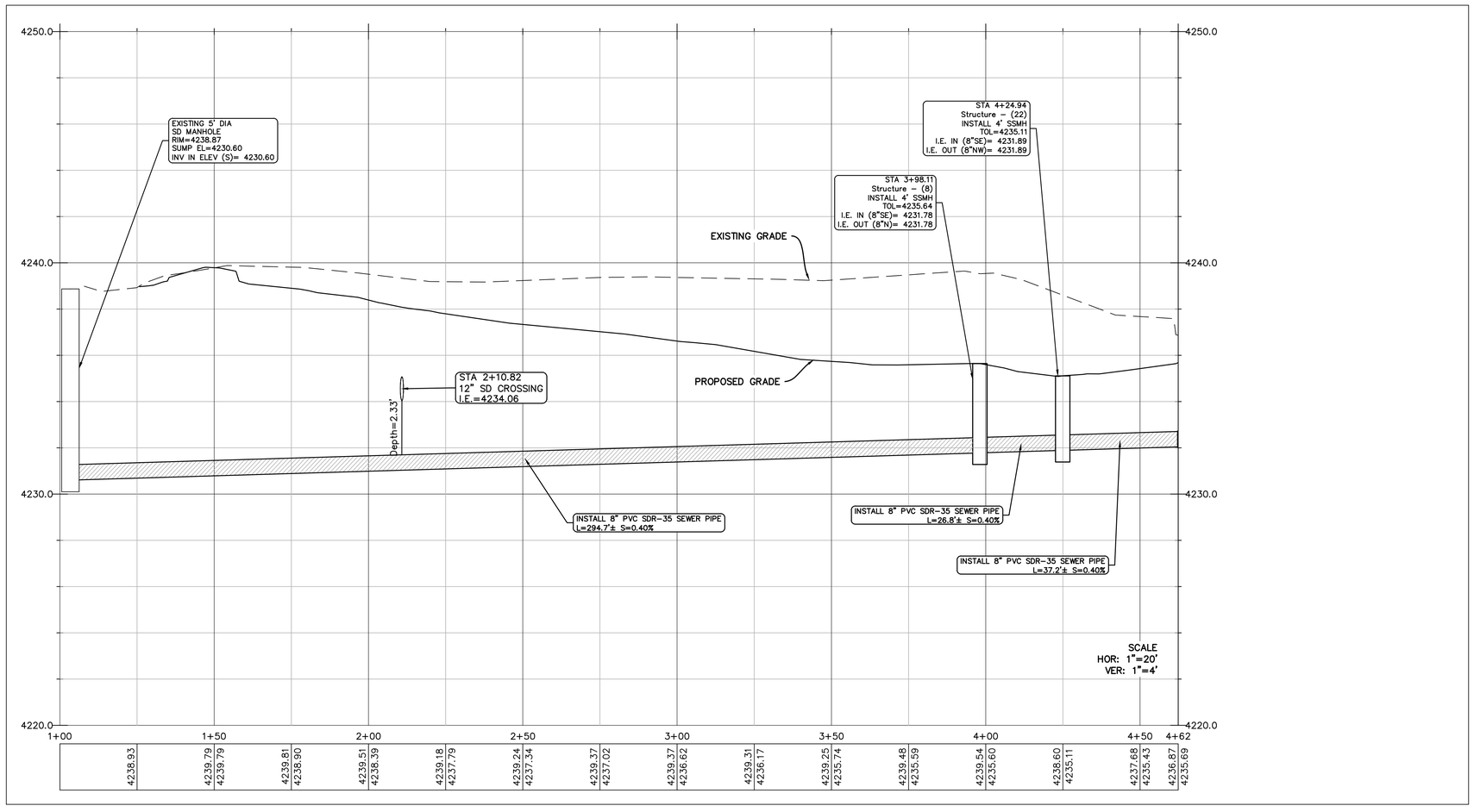

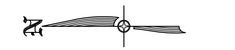

Scale in Feet

SEE COVER SHEET FOR PROJECT LEGEND

NO.	REVISIONS	BY	DATE
DESIGNER: SDT	PROJECT ENGINEER: SDT		

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South Jordan, Utah - 801-949-6296

SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

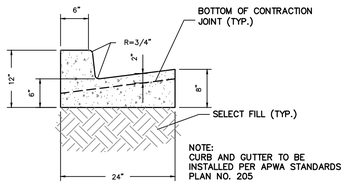
SEWER PLAN & PROFILE

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

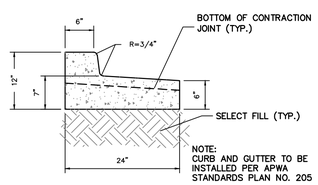
SHEET NO.	
C3.1	
PROJECT ID	DATE:
A-1000	03/15/22
FILE NAME: PRJ-SSL	SCALE: 1"=20'

Blue Stakes of UTAH 811 Bluestakesutah.org

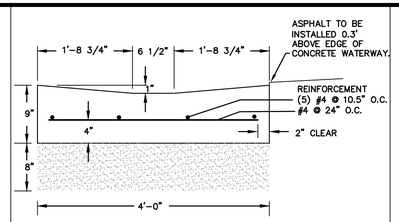
C3.1



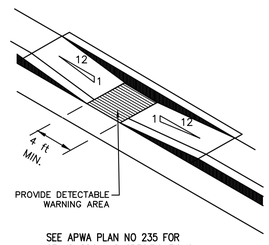
1 | 24" CURB & GUTTER
N.T.S.



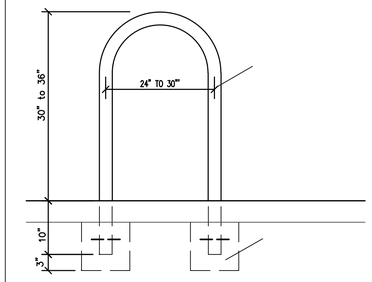
2 | 24" REVERSE PAN CURB & GUTTER
N.T.S.



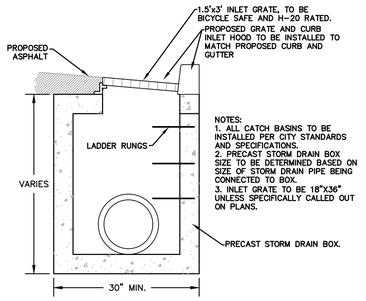
3 | 4'-0" ROLL GUTTER
N.T.S.



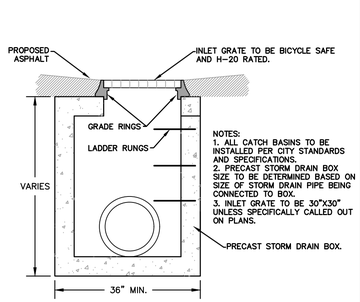
4 | ADA RAMP
N.T.S.



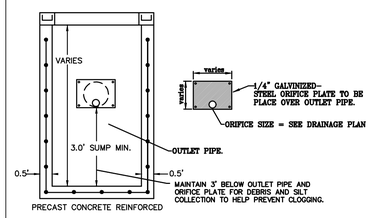
5 | INVERTED "U" BIKE RACK



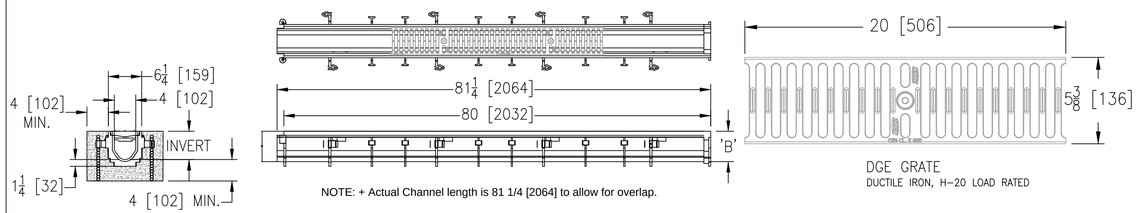
6 | STANDARD STORM DRAIN CURB INLET BOX
N.T.S.



7 | STANDARD STORM DRAIN INLET BOX
N.T.S.

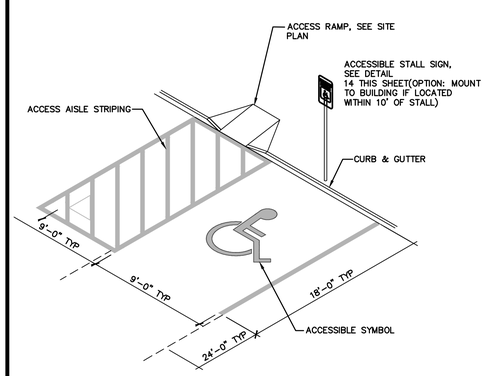


8 | ORIFICE PLATE
N.T.S.

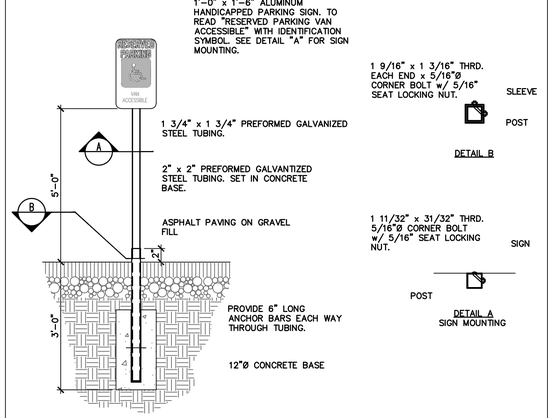


NOTE: + Actual Channel length is 81 1/4 [2064] to allow for overlap.

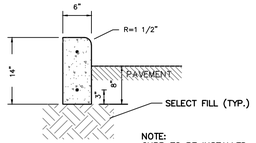
9 | ZURN Z886 TRENCH DRAIN SYSTEM
N.T.S.



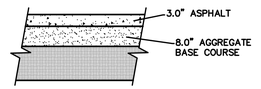
10 | ACCESSIBLE PARKING STALL
N.T.S.



11 | HANDICAPPED PARKING SIGN
N.T.S.



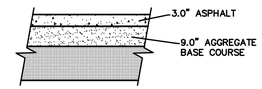
12 | 6" CURB WALL
N.T.S.



OVER PROPERLY PREPARED FILLS, NATURAL SUBGRADE SOILS, AND/OR STRUCTURAL SITE GRADING FILL EXTENDING TO SUITABLE NATURAL SOILS.

PAVEMENT SECTIONS ARE PER THE SEPTEMBER 10, 2018 GEOTECHNICAL STUDY BY AGEC (PROJECT NO. 1180597). CONTRACTOR TO INSTALL ALL PAVEMENT PER THE GEOTECH REPORT.

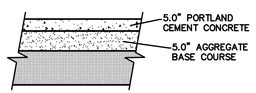
13 | PARKING ASPHALT PAVEMENT SECTION (LIGHT)
N.T.S.



OVER PROPERLY PREPARED FILLS, NATURAL SUBGRADE SOILS, AND/OR STRUCTURAL SITE GRADING FILL EXTENDING TO SUITABLE NATURAL SOILS.

PAVEMENT SECTIONS ARE PER THE SEPTEMBER 10, 2018 GEOTECHNICAL STUDY BY AGEC (PROJECT NO. 1180597). CONTRACTOR TO INSTALL ALL PAVEMENT PER THE GEOTECH REPORT.

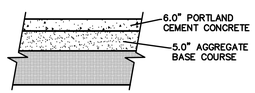
14 | DRIVE LANE ASPHALT PAVEMENT SECTION
N.T.S.



OVER PROPERLY PREPARED NATURAL SUBGRADE SOILS, AND/OR STRUCTURAL SITE GRADING FILL EXTENDING TO SUITABLE NATURAL SOILS.

PAVEMENT SECTIONS ARE PER THE SEPTEMBER 10, 2018 GEOTECHNICAL STUDY BY AGEC (PROJECT NO. 1180597). CONTRACTOR TO INSTALL ALL PAVEMENT PER THE GEOTECH REPORT.

15 | PARKING CONCRETE PAVEMENT SECTION (LIGHT)
N.T.S.



OVER PROPERLY PREPARED NATURAL SUBGRADE SOILS, AND/OR STRUCTURAL SITE GRADING FILL EXTENDING TO SUITABLE NATURAL SOILS.

PAVEMENT SECTIONS ARE PER THE SEPTEMBER 10, 2018 GEOTECHNICAL STUDY BY AGEC (PROJECT NO. 1180597). CONTRACTOR TO INSTALL ALL PAVEMENT PER THE GEOTECH REPORT.

16 | DRIVE LANE CONCRETE PAVEMENT SECTION
N.T.S.

CIVIL ENGINEERING +SURVEYING
10718 S BECKSTEAD LANE, SUITE 102
South Jordan, Utah - 801-949-6296

NO.	REVISIONS	BY	DATE

DESIGNER: SDT PROJECT ENGINEER: SDT

SENSAPURE ADDITION
1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

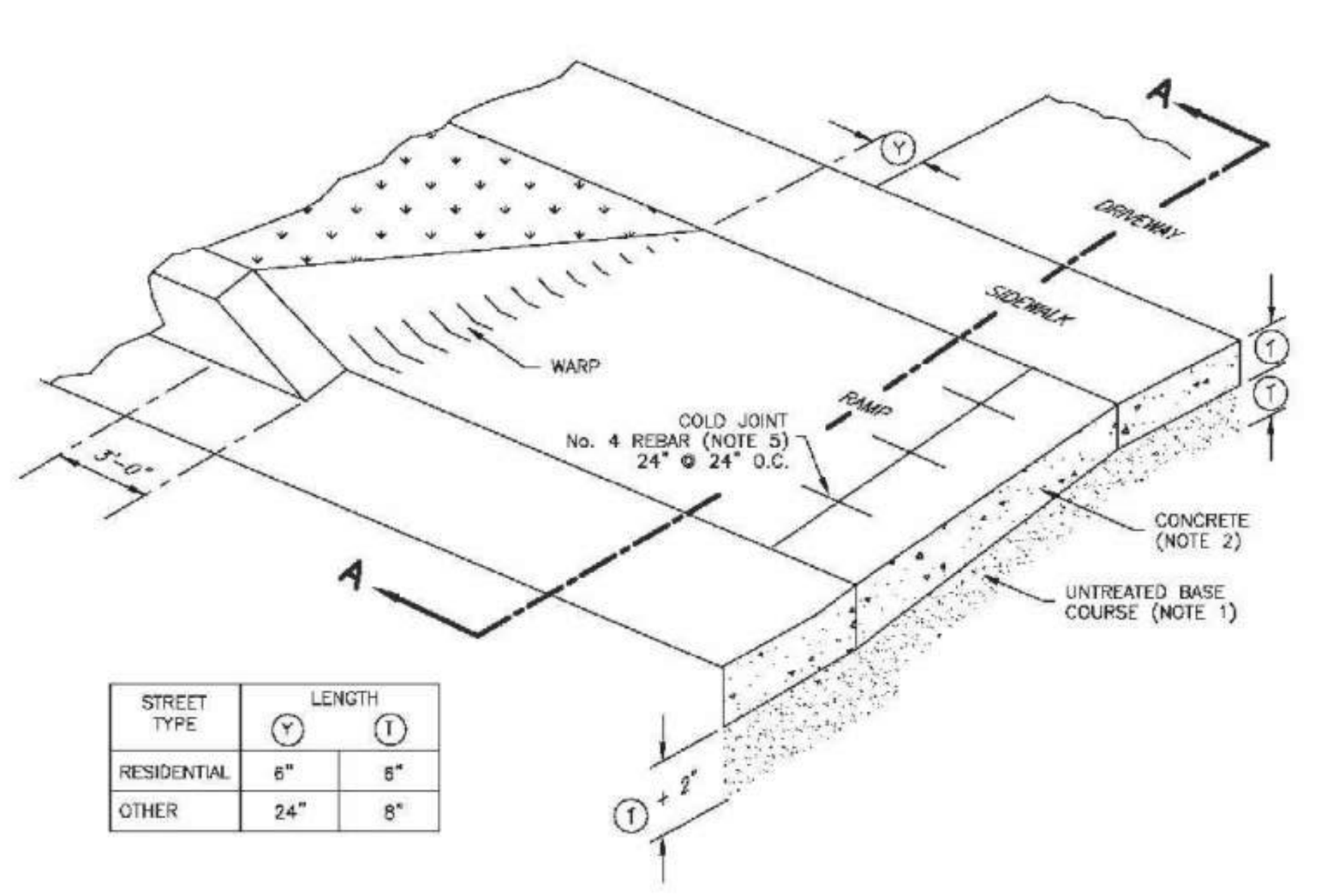
DETAIL SHEET

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

Blue Stakes of UTAH 811
Bluestakes.org

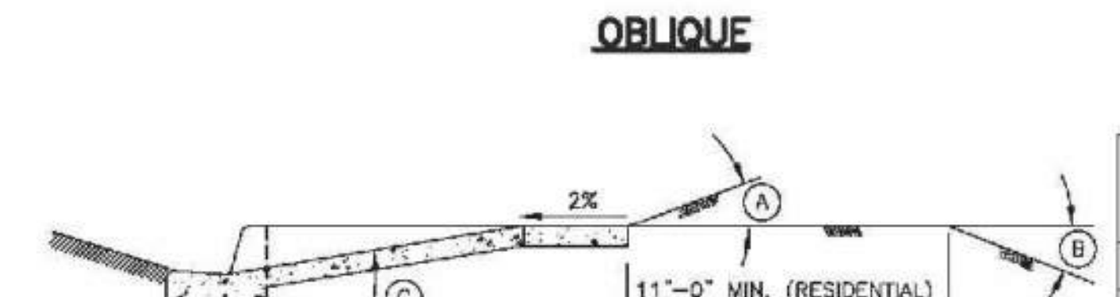
SHEET NO.
C4.0

PROJECT ID	DATE:
A-1000	03/15/22
FILE NAME: PRJ-SSL	SCALE:



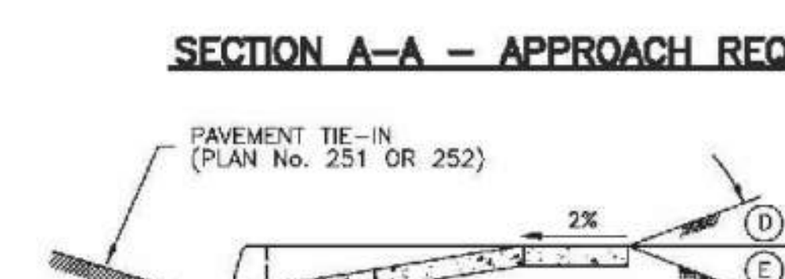
STREET TYPE	LENGTH (Y)	LENGTH (T)
RESIDENTIAL	6"	6"
OTHER	24"	8"

OBLIQUE



STREET TYPE	BREAKOVER ANGLE (MAXIMUM) (A)	(B)	(C)
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

SECTION A–A – APPROACH REQUIRING SERVICE TRUCK ACCESS



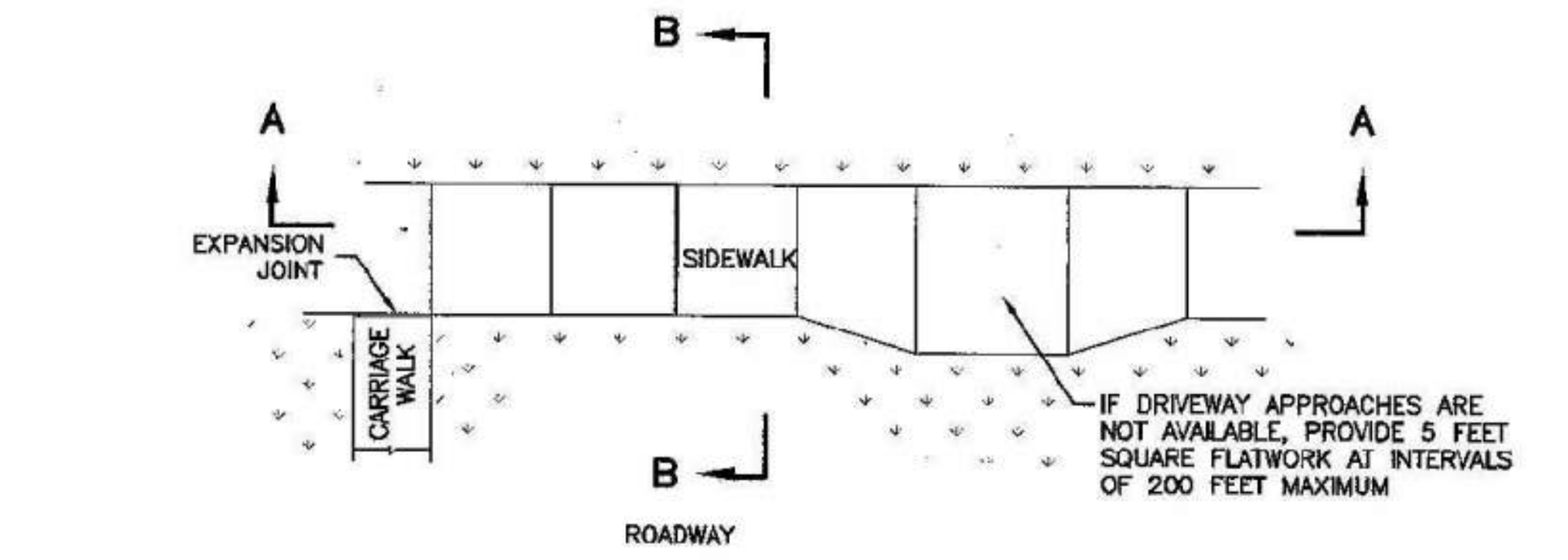
STREET TYPE	BREAKOVER ANGLE (MAXIMUM) (D)	(E)	(F)
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

SECTION A–A – TYPICAL DRIVEWAY APPROACH

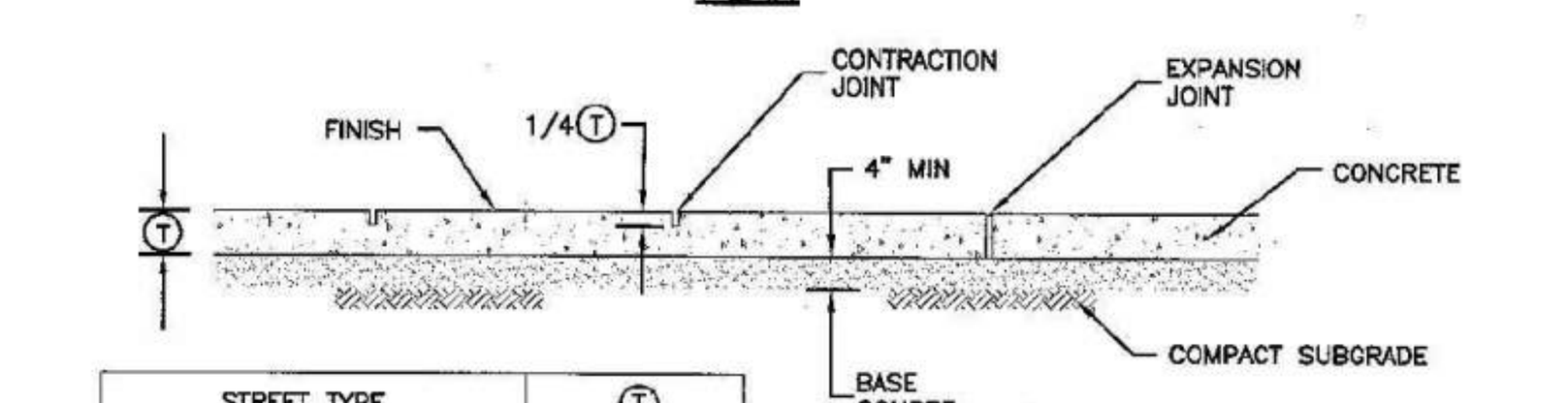
Flare driveway approach - type A

Plan No. **221**
Drawing 1 of 2

December, 2005 39



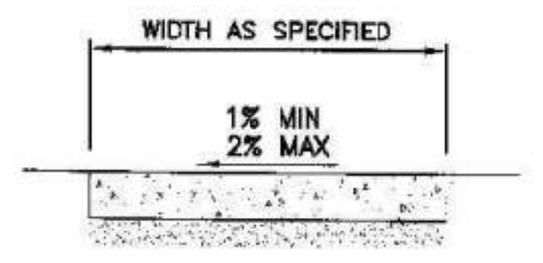
PLAN



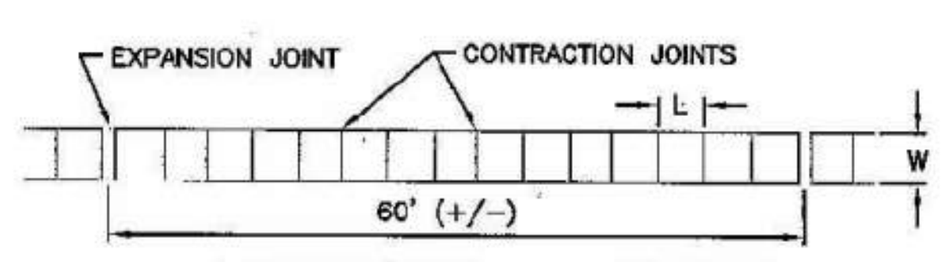
STREET TYPE	(T)
RESIDENTIAL (WITH PARK STRIP)	4"
RESIDENTIAL (NO PARK STRIP) / OTHER	6"
REPLACING EXISTING SIDEWALK	MATCH EXISTING (4" MIN.)

SEE DRIVEWAY APPROACH PLANS FOR SIDEWALK THICKNESS AT DRIVEWAYS

SECTION A–A



SECTION B–B



$L_{MIN} = W$
L_{MAX} (in feet) = 2.5 x(T) (in inches) OR = 15 FEET MAX

SIDEWALK JOINT DETAIL

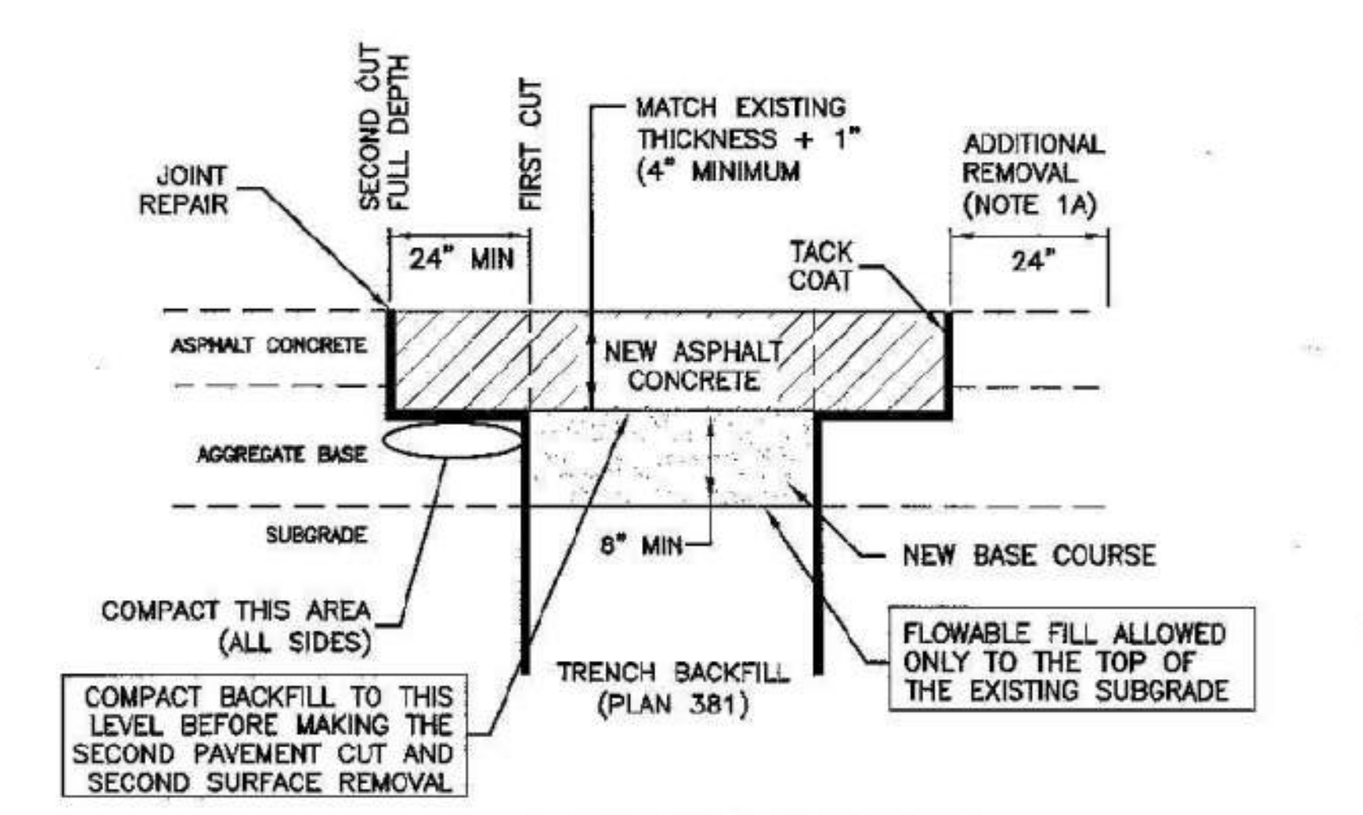
Sidewalk

Plan **231**

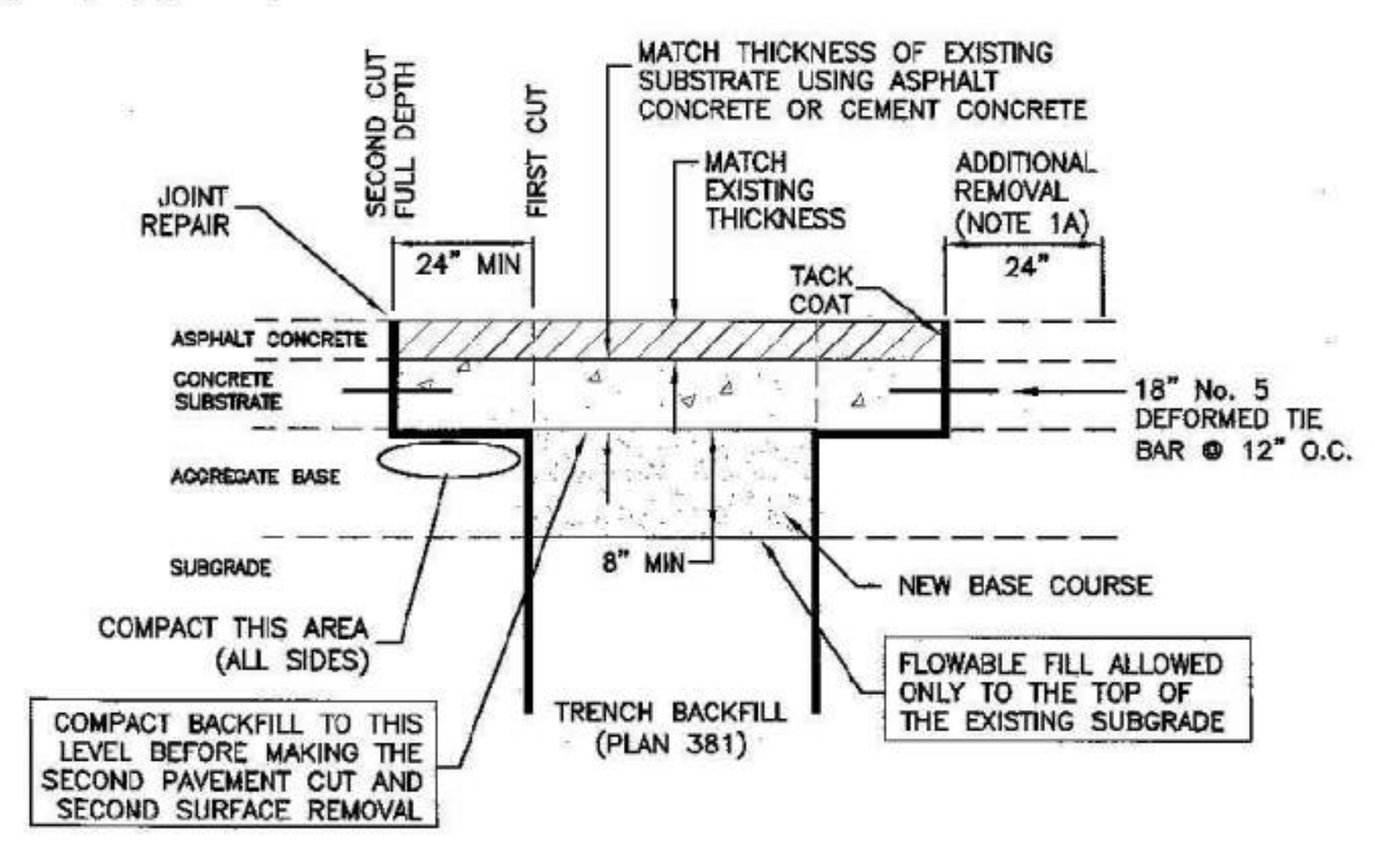
March 2009 57

SHALLOW EXCAVATION

(LESS THAN 48 INCHES FROM PAVEMENT SURFACE TO BOTTOM OF EXCAVATION)



ASPHALT RESTORATION



COMPOSITE RESTORATION

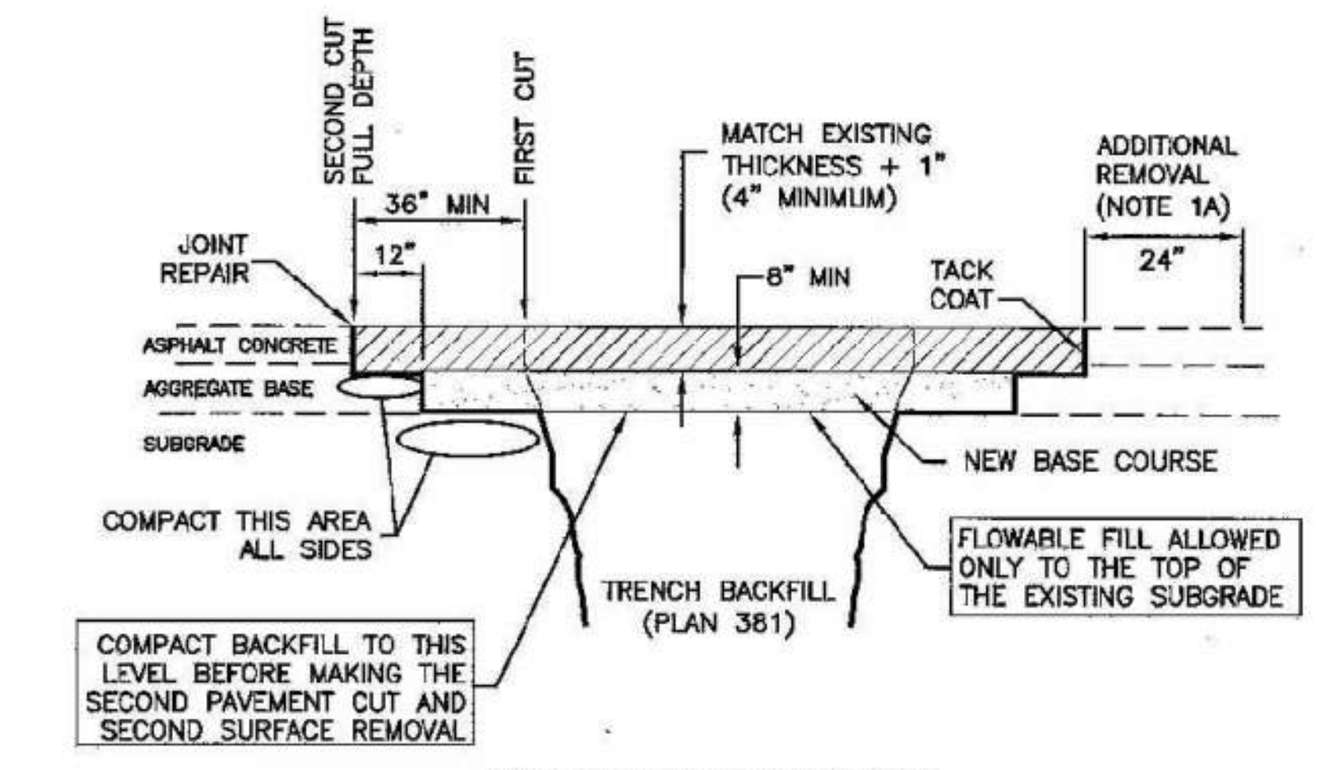
Asphalt concrete T-patch

Plan **255**
Sheet 1 of 2

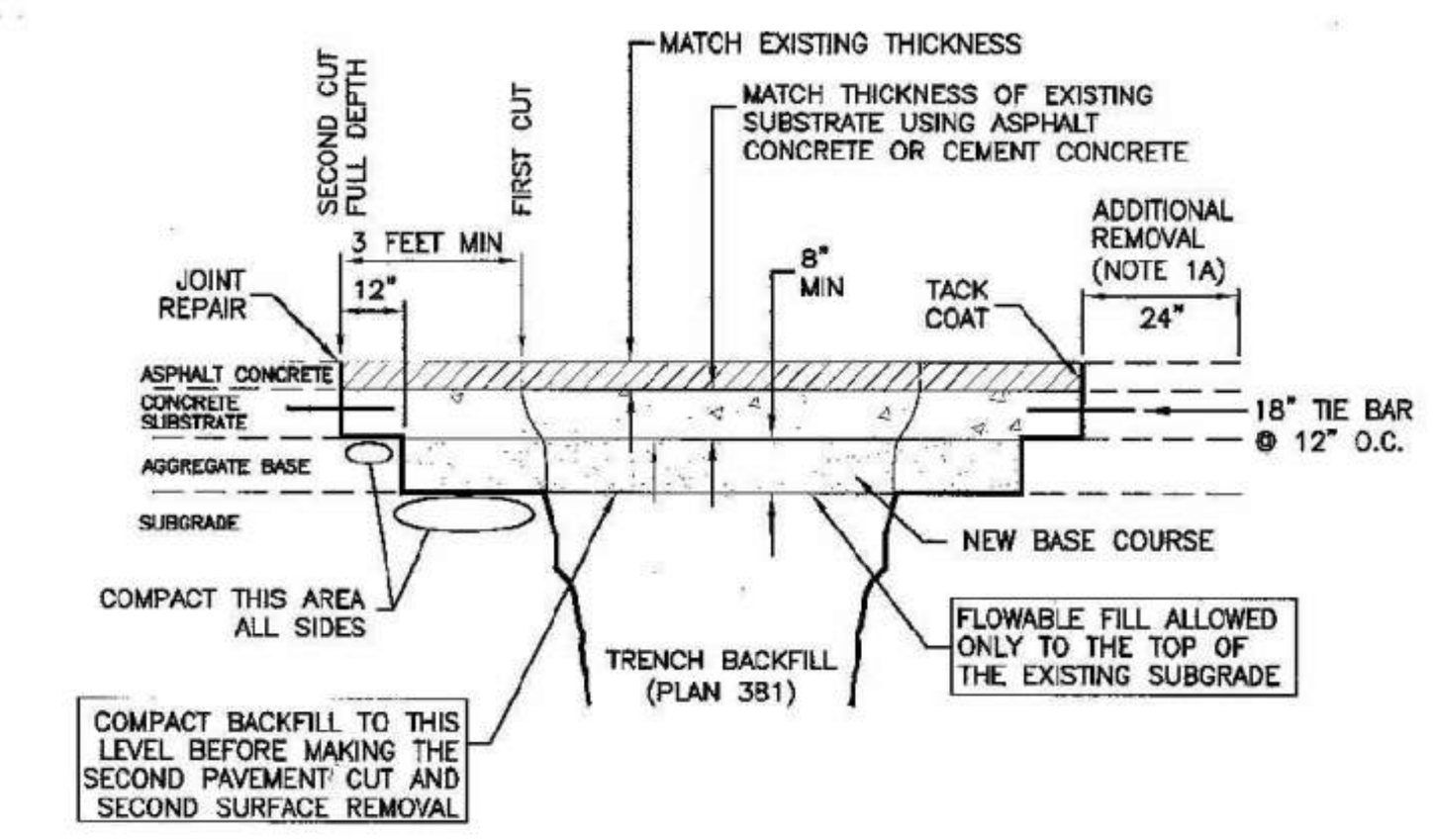
December 2010 97

DEEP EXCAVATION

(MORE THAN 48 INCHES FROM PAVEMENT SURFACE TO BOTTOM OF EXCAVATION)



ASPHALT RESTORATION



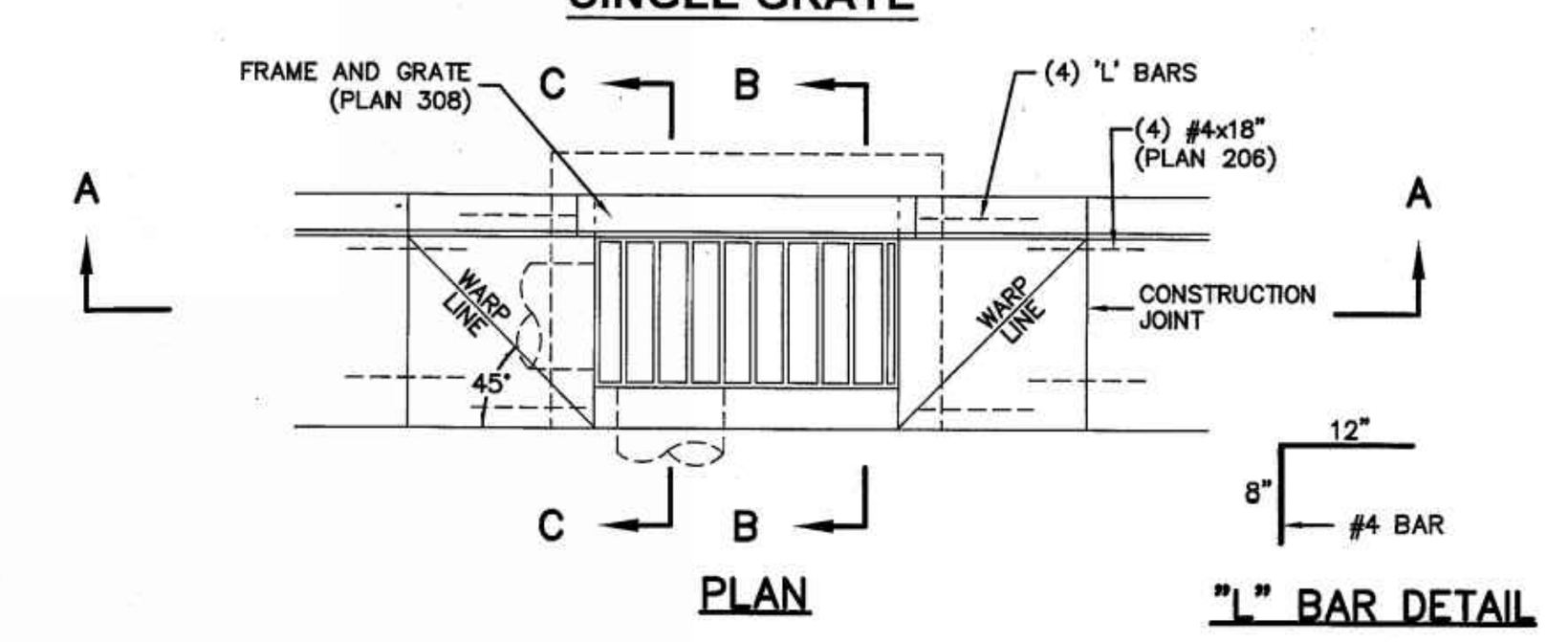
COMPOSITE RESTORATION

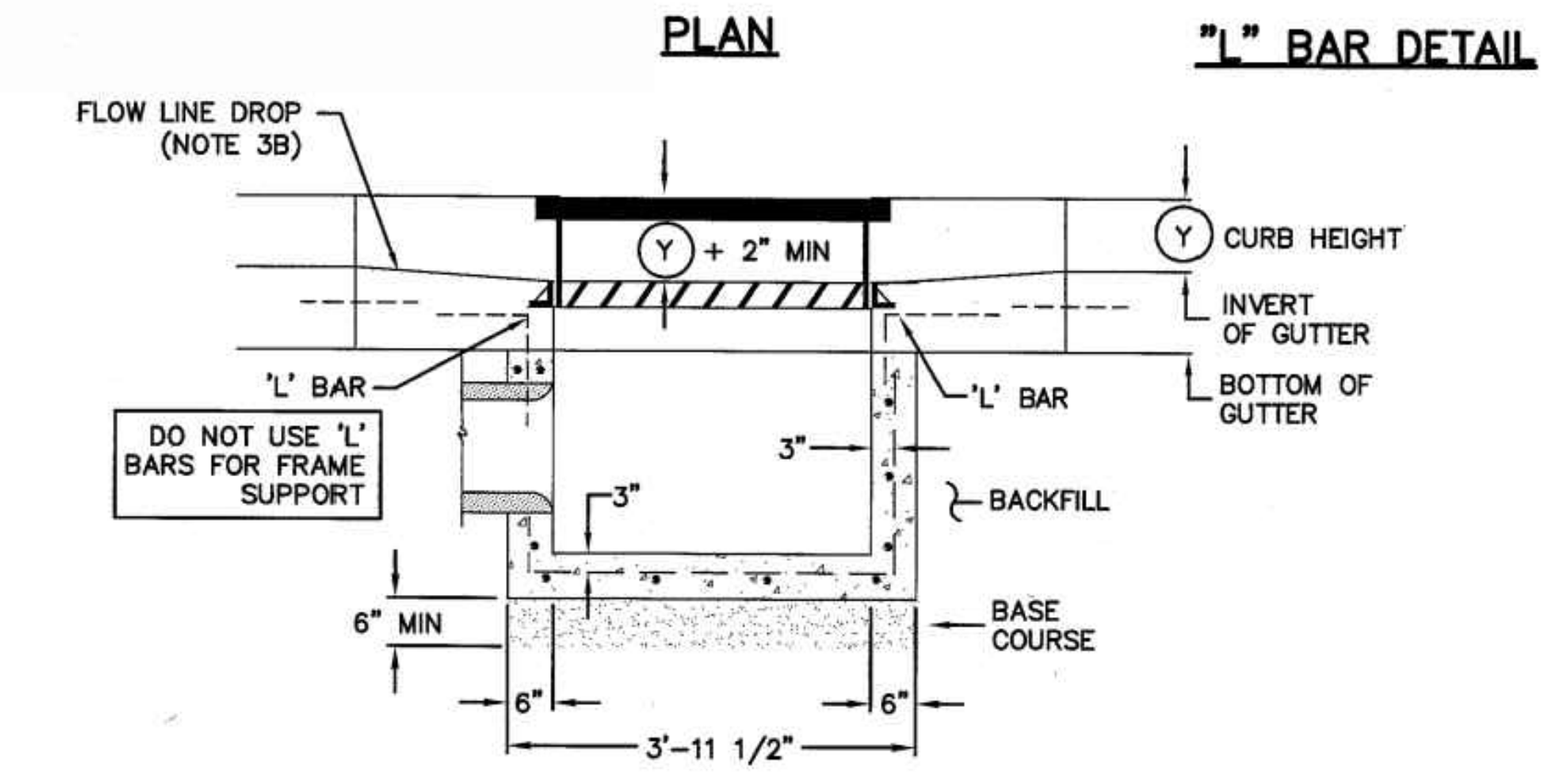
Asphalt concrete T-patch

Plan **255**
Sheet 2 of 2

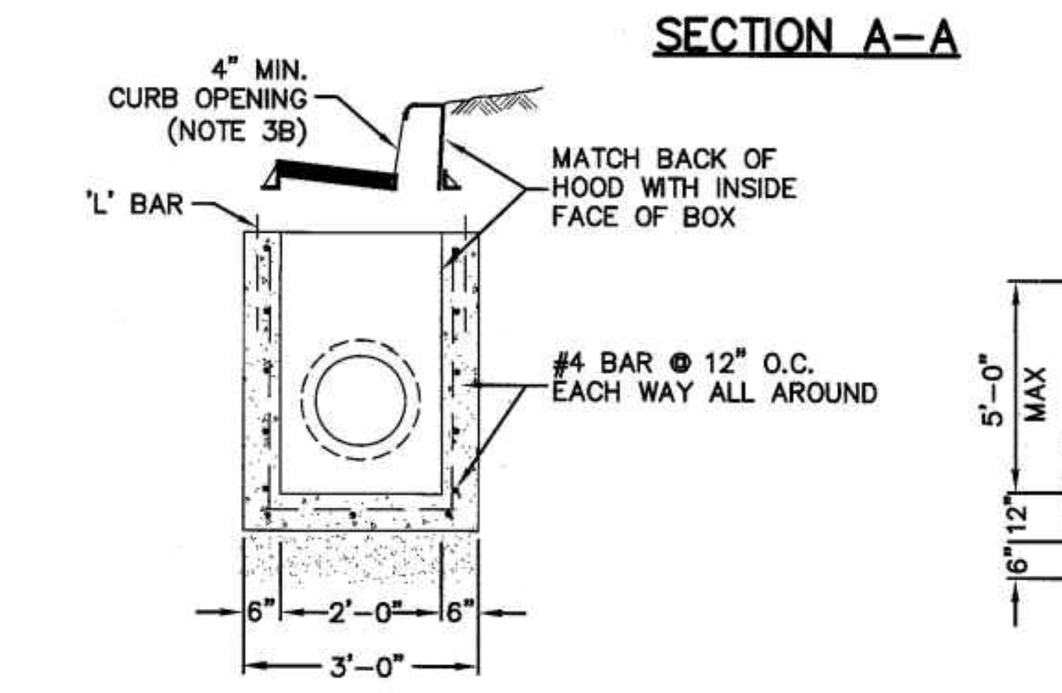
December 2010 99

SINGLE GRATE

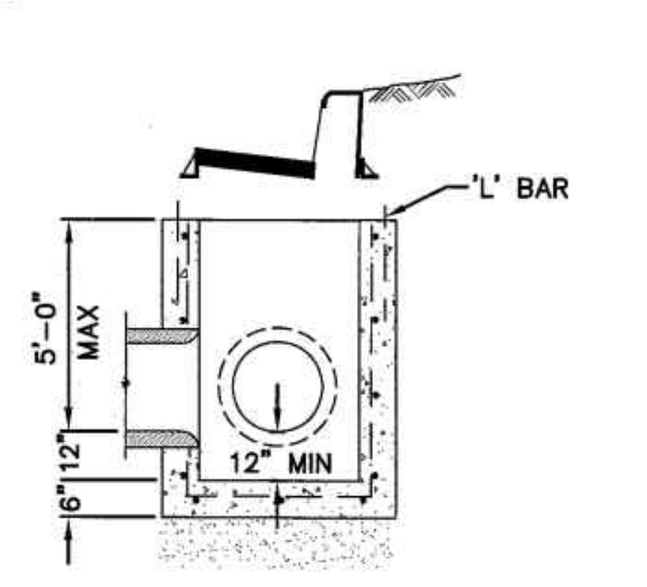




SECTION A–A



SECTION B–B



SECTION C–C

Catch basin

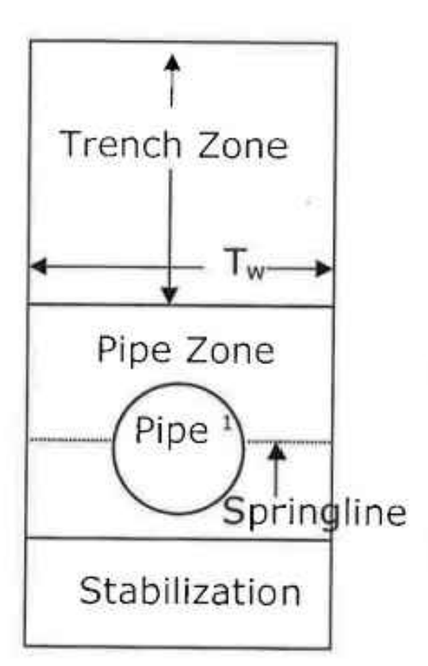
Plan **315**
Sheet 1 of 2

September 2010 155

STANDARD PRACTICE #1

SALT LAKE CITY PUBLIC UTILITY

TO: All contractors doing work for SLCPU
FROM: Charles H. Call, Jr., P.E., Chief Engineer
DATE: January 14, 2010
SUBJECT: Trench Backfill Requirements (APWA Section 33 05 20)



Trench Zone Material
2-inch minus – Granular Backfill Borrow (APWA 31 05 13)
Notes: Material must be free of slag or recycled asphalt.
Material can be 2-inch minus pit run material.

Pipe Zone Material (12" above to 6" below the pipe)
Dry conditions – Grade ¾ UTBC (APWA 32 11 23) [2]
Wet conditions - 2" minus sewer rock (APWA 31 05 13) [3]
Note: Material must be free of slag or recycled asphalt.

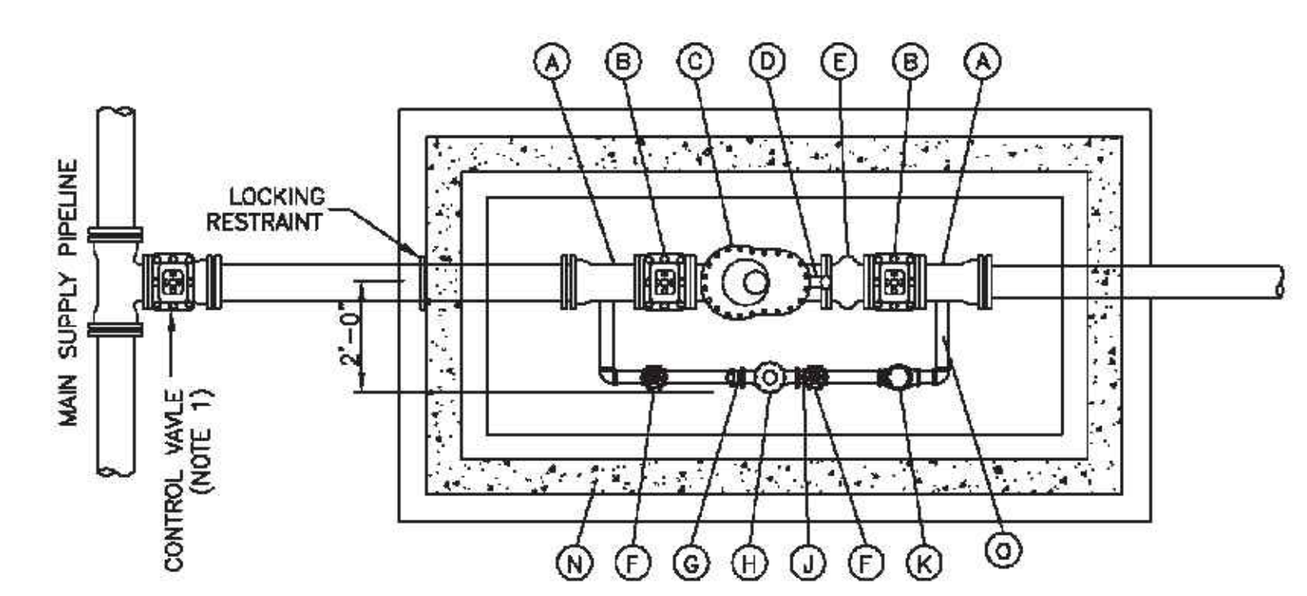
Stabilization Material (starts 6" below pipe)
2" minus sewer rock (APWA 31 05 13)
Note: Material must be free of slag or recycled asphalt

Table 1 – Pipe zone material and minimum pipe zone width.

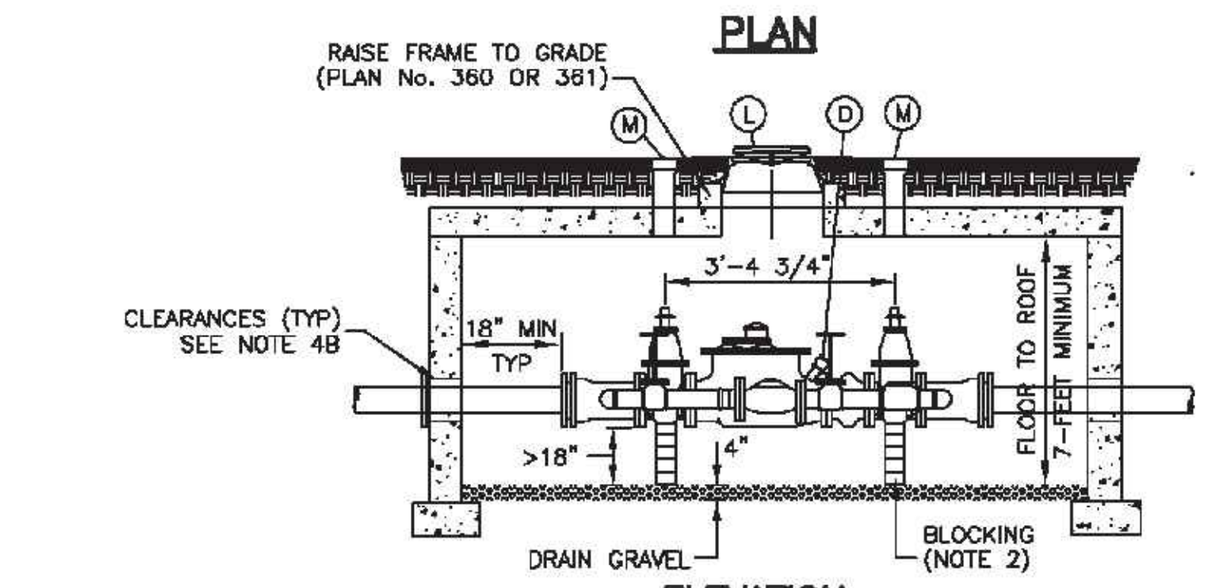
Pipe Material	Pipe Zone Material	Min. Pipe Zone Top Width (T_W)
PVC	3/4" minus well graded [2]	T_W = OD [4] + 24" ≥ 36"
HDPE-N12	3/4" minus well graded [5]	T_W = OD + 24" ≥ 36"
DI	3/4" minus well graded [2]	T_W = OD + 24" ≥ 36"
Concrete	3/4" minus well graded [2]	T_W = OD + 24" ≥ 36"

1. Center pipe in trench.
2. Variations must be approved in advance by Chief Engineer.
3. 2" minus sewer rock can be used in areas below water table when approved in advance by Chief Engineer.
4. Outside diameter of the pipe.
5. 2" minus material not permitted with PVC or HDPE pipe.

SLCPU Standard Practice 1 1/5/2009



PLAN



ELEVATION

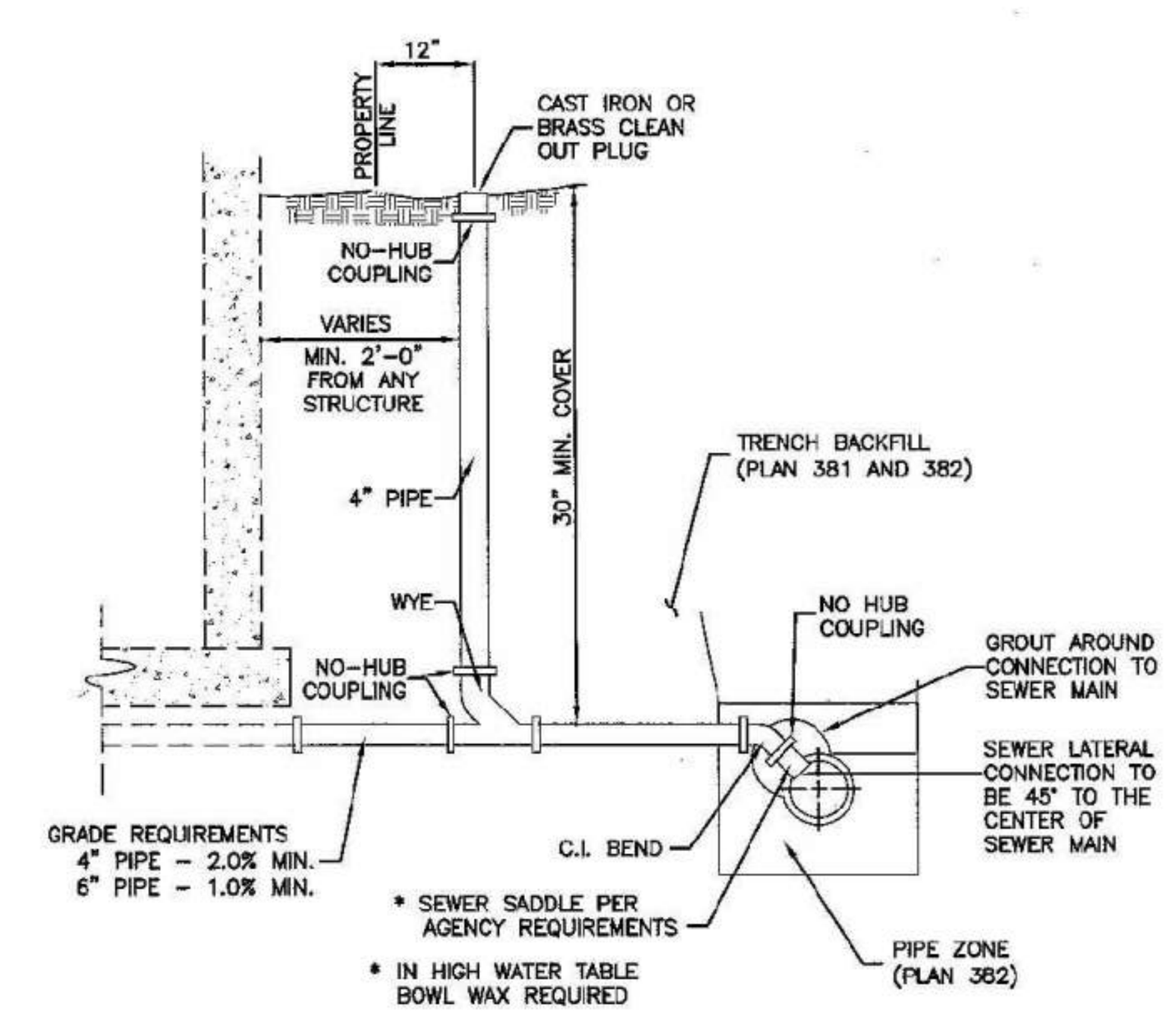
LEGEND			
No.	*	ITEM	DESCRIPTION
(A)		3" OR 4" FLANGE x M.J. ADAPTER	
(B)		3" OR 4" GATE VALVE WITH 2"x2" OPERATING NUT	
(C)		3" OR 4" COMPOUND METER	
(D)		2" TEST ASSEMBLY	
(E)		3" OR 4" CHECK VALVE	
(F)		2" GATE VALVE	
(G)		2" METER FLANGE	
(H)		2" DISPLACEMENT METER	
(J)		2" MALE METER FLANGE	
(K)		2" CHECK VALVE	
(L)		27" FRAME AND COVER	PLAN No. 502
(M)		TOP SECTION OF VALVE BOX WITH LID	PLAN No. 574
(N)		CONCRETE BOX	PLAN No. 505
(O)		COPPER PIPING	

* FURNISHED BY AGENCY

3" and 4" Compound meter with 2" bypass

Plan No. **523**

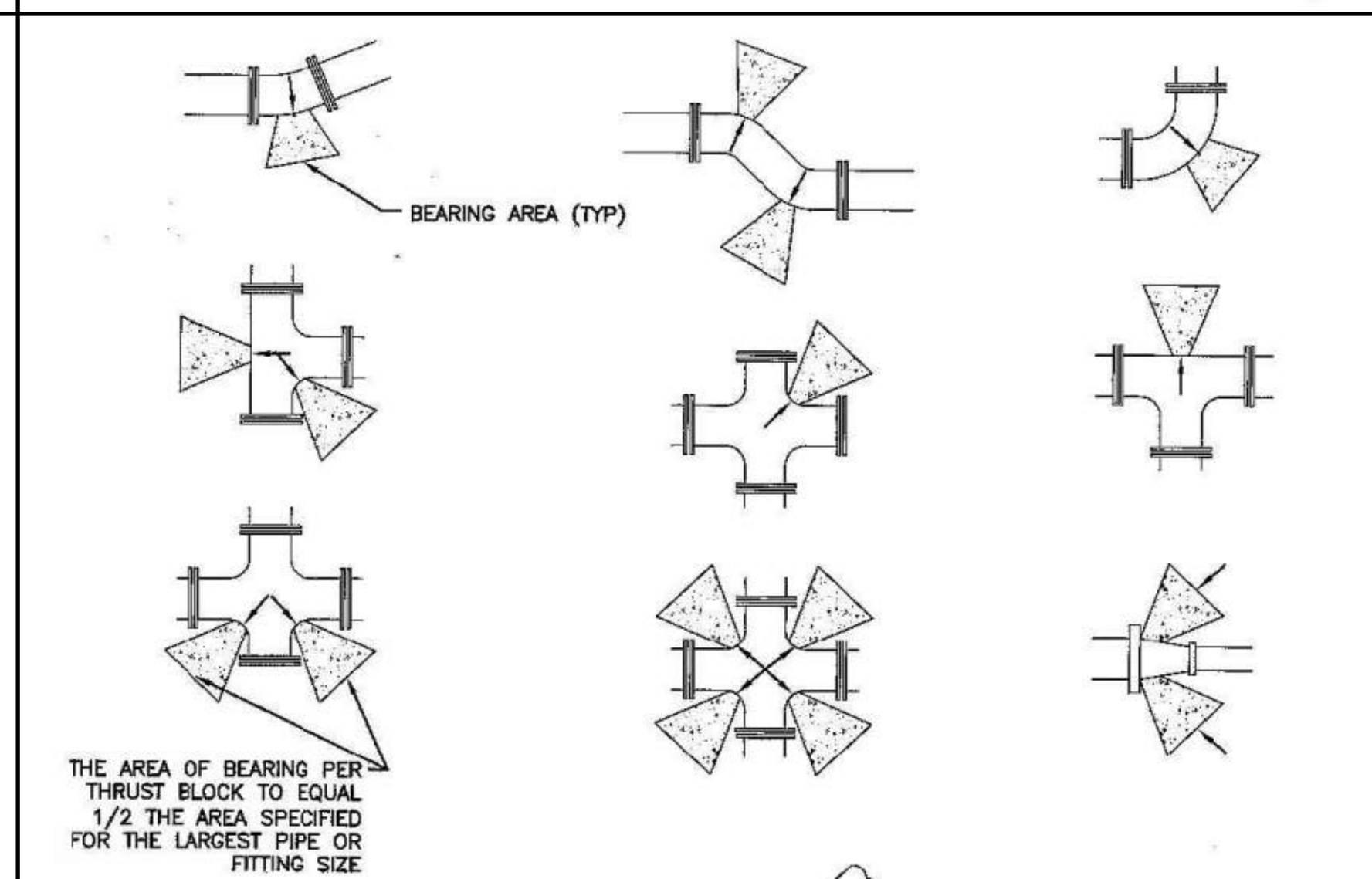
August 2001 219



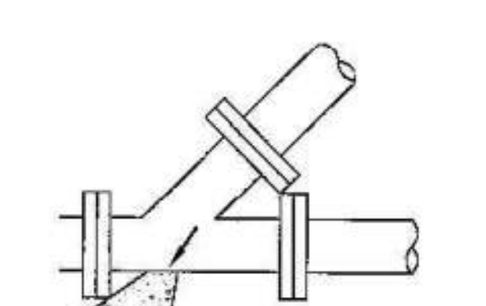
Sewer lateral connection

Plan **431**

January 2011 219



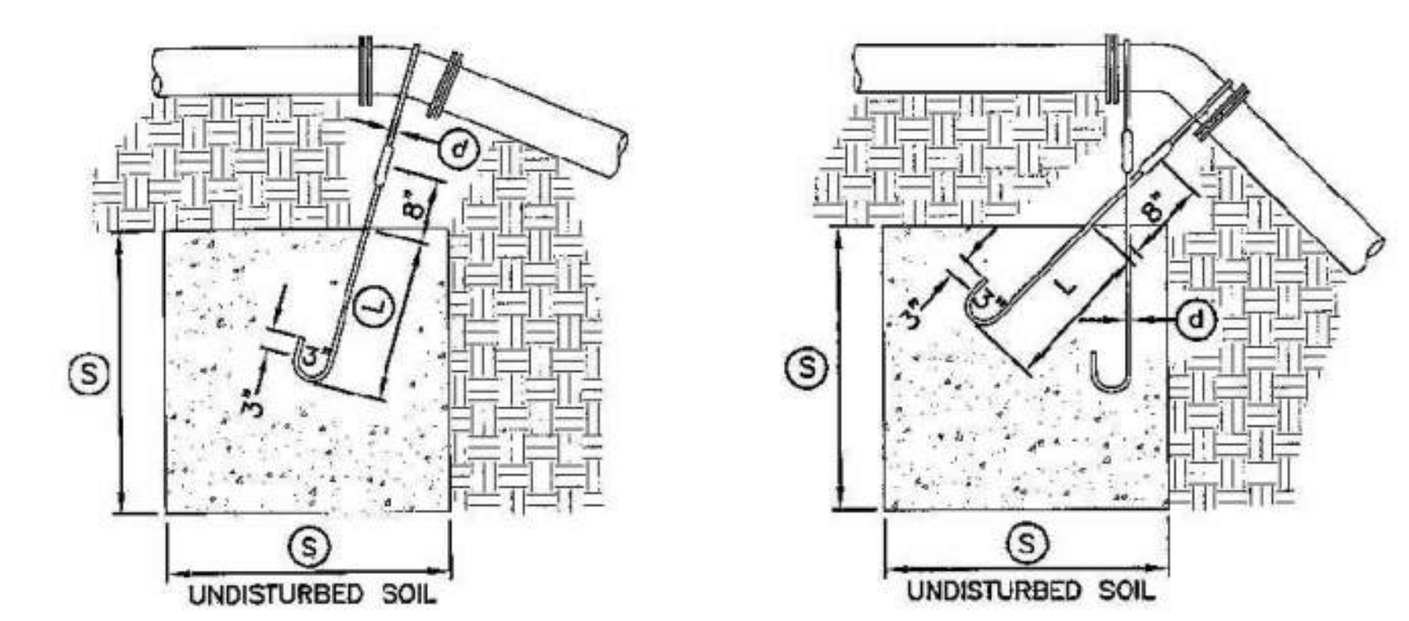
MINIMUM BEARING AREA IN SQ. FT.					
SIZE OF PIPE	TEES, VALVES DEAD ENDS	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4"	2	3	2	2	2
6"	4	5.5	3	1.5	1
8"	6.5	9.5	5	2.75	1.5
12"	14	20	11	5.5	3
14"	19	26.5	14.5	7.5	4
16"	24	34	18.5	9.5	6
20"	27	52	28.5	14.5	16
24"	53	74	41	21	53
30"	81	114	62	32	16



Direct bearing thrust block

Plan **561**

August 2010 267



TYPE A RESTRAINT
FOR 11 1/4° – 22 1/2° VERTICAL BENDS

TYPE B RESTRAINT
FOR 45° VERTICAL BENDS

TABLE OF DIMENSIONS (Type A)

PIPE SIZE NOMINAL DIAMETER – INCH	VERTICAL BEND IN DEGREES	CONCRETE BLOCKING IN CUBIC FEET	(S) SIDE OF CUBE – FEET	(d) DIAMETER OF SHANK OR REBAR RODS – INCH	(L) DEPTH OF ROD CONCRETE – FEET
4"	11 1/4°	8	2.0	5/8"	1.5
	22 1/2°	15.6	2.5	5/8"	2.0
6"	11 1/4°	15.6	2.5	5/8"	2.0
	22 1/2°	34.3	3.25	5/8"	2.0
8"	11 1/4°	27	3.0	5/8"	2.0
	22 1/2°	64	4.0	5/8"	2.0
12"	11 1/4°	64	4.0	5/8"	2.0
	22 1/2°	125	5.0	3/4"	3.0
16"	11 1/4°	107	4.25	7/8"	3.0
	22 1/2°	216	6.0	7/8"	3.0
20"	11 1/4°	138	5.17	1"	3.5
	22 1/2°	334	6.94	1"	4.0
24"	11 1/4°	240	6.22	1"	4.0
	22 1/2°	476	7.81	1"	4.0
30"	11 1/4°	369	7.17	1"	4.0
	22 1/2°	733	9.02	1"	4.0

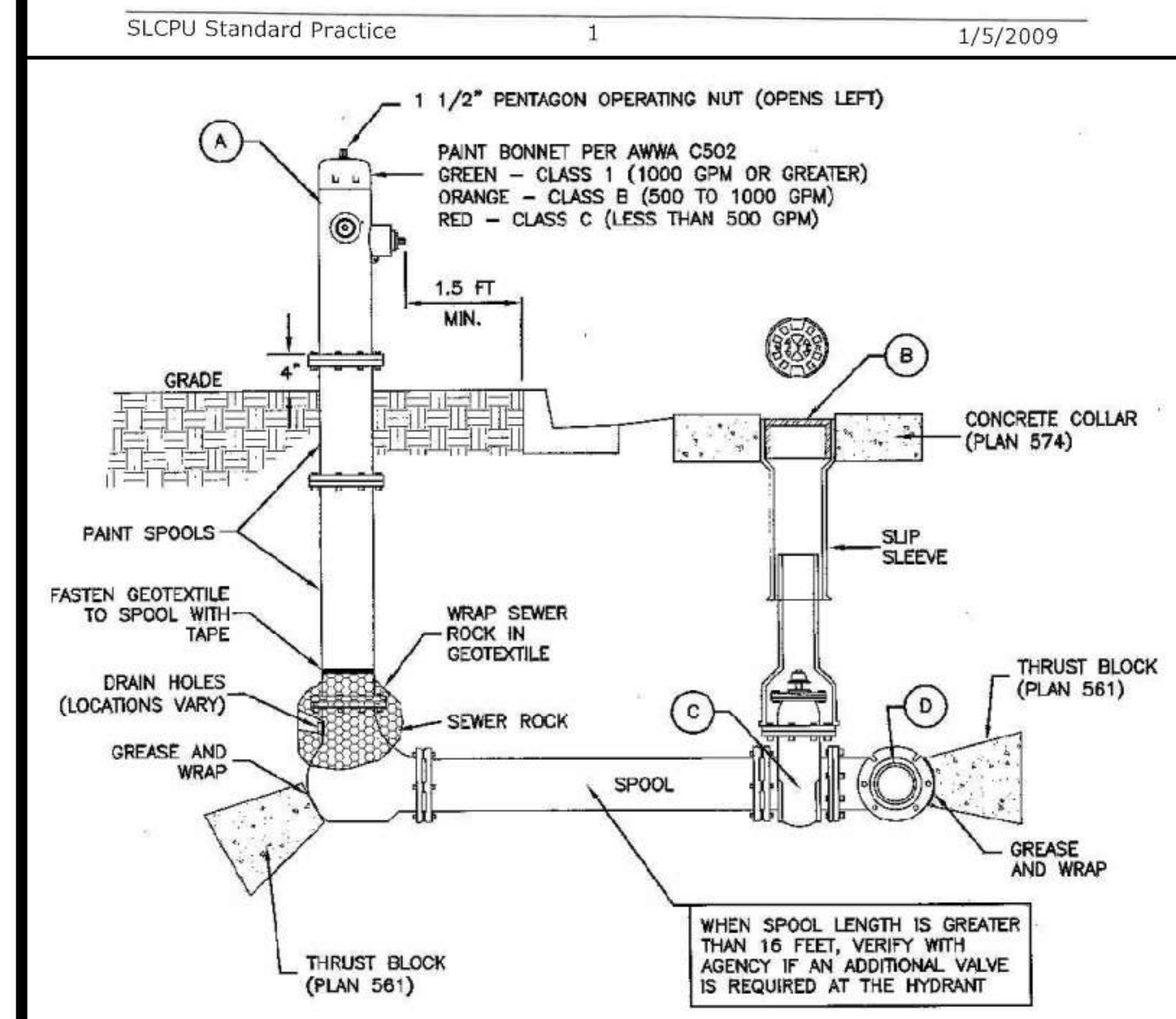
TABLE OF DIMENSIONS (Type B)

PIPE SIZE NOMINAL DIAMETER – INCH	VERTICAL BEND IN DEGREES	CONCRETE BLOCKING IN CUBIC FEET	(S) SIDE OF CUBE – FEET	(d) DIAMETER OF SHANK OR REBAR RODS – INCH	(L) DEPTH OF ROD CONCRETE – FEET
4"	45°	1	3.0	5/8" / 5/8"	2.0
6"		2.37	4.0	5/8" / 5/8"	2.5
8"		3.97	4.75	5/8" / 5/8"	3.0
12"		9.04	6.25	5/8" / 5/8"	4.0
16"		17.24	7.75	3/4" / 3/4"	4.0
20"		26.52	92.17	3/4" / 3/4"	4.0
24"		37.82	10.07	3/4" / 3/4"	4.0
30"		58.26	11.63	3/4" / 3/4"	4.0

Tie-down thrust restraints

Plan **562**

April 1997 269



LEGEND			
No.	*	ITEM	DESCRIPTION
(A)		FIRE HYDRANT	AWWA C502
(B)		VALVE BOX WITH LID	2–PIECE CAST IRON
(C)		GATE VALVE WITH 2" X 2" NUT	AWWA C509
(D)		TEE WITH 125 # FLANGE	AWWA C110

* FURNISHED BY UTILITY AGENCY

SECTION

Fire hydrant with valve

Plan **511**

February 2011 237

NO.	REVISIONS	BY	DATE

DESIGNER: SDT PROJECT ENGINEER: SDT

CIR | CIVIL ENGINEERING +SURVEYING
10718 S BECKSTEAD LANE, SUITE 102
South Jordan, Utah - 801-949-6296

SENSAPURE ADDITION
1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

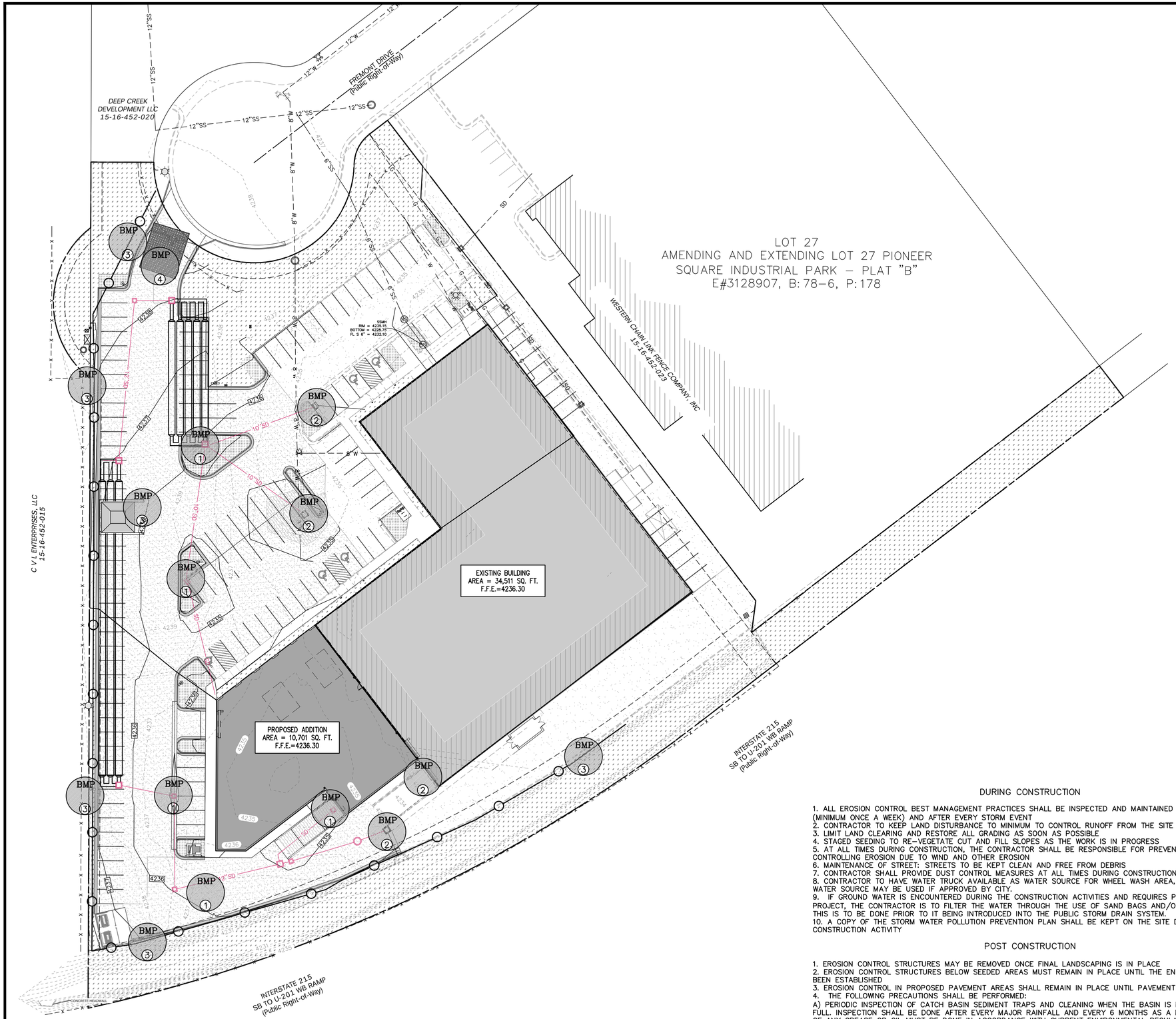
APWA DETAIL SHEET

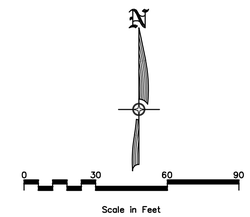
LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

Blue Stakes of UTAH 811 Bluestakes.org

SHEET NO. C5.0

PROJECT ID	DATE:
A–1000	03/15/22
FILE NAME: PRJ–SSL	SCALE:





SHEET LEGEND

- SILT FENCE
- WHEEL WASH AREA
- BMP AREA (BMP / X)
- CONCRETE WASHOUT

BMP CALLOUTS

1. PLACE A SILT FENCE AROUND THE PERIMETER OF THE INLET, ONCE PAVEMENT AND/OR CURB HAS BEEN INSTALLED PLACE GRAVEL BAGS AROUND THE INLET. GRAVEL BAGS TO BE USED ON PAVED OR CONCRETE SURFACES AND SILT FENCE TO BE USED ON UNIMPROVED SURFACES.
   NOTE: IN HIGH TRAFFIC AREAS CONTRACTOR TO USE INSERT FILTER FABRIC. IF INLET HAS CURB OPENING, THE FILTER FABRIC IS TO BE EXTENDED UP TO COVER THE CURB OPENING AND GRAVEL BAGS PLACED IN GUTTER AT EACH SIDE OF OPENING TO KEEP FILTER FABRIC SNUG AGAINST CURB WALL.
2. PLACE GRAVEL BAGS AS NECESSARY TO PREVENT SEDIMENT FROM DRAINING INTO EXISTING CATCH BASINS. ***SEE NOTE IN CALLOUT 1.***
3. INSTALL TYPICAL SILT FENCE, SILT FENCE TO BE INSTALLED PERPENDICULAR TO STORM WATER FLOW. INSTALLATION TO BE DONE SO AS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
   NOTE: CONTRACTOR TO USE VECETATIVE BUFFER AND OR CUT BACK INSTEAD OF SILT FENCE WHERE POSSIBLE.
4. CONTRACTOR TO INSTALL A MIMIMUM OF 6" DEEP GRAVEL (3" TO 6"") OF SUFFICIENT SIZE (MINIMUM OF 50' IN LENGTH AND 20' WIDE) AS TO PROVIDE A WHEEL WASH AREA TO PREVENT THE TRACKING OF MUD OFFISTE. THE LOCATION OF WHEEL WASH MAY VARY FROM LOCATION SHOWN ON PLANS SO AS TO PROVIDE THE BEST PROTECTION AGAINST TRACKING MUD OFFSITE. CONTRACTOR TO MAINTAIN AND CLEAN WHEEL WASH AREA AS NEEDED TO PREVENT THE TRACKING OF MUD OFFSITE.
5. CONTRACTOR TO INSTALL CONCRETE WASHOUT AREA. THE LOCATION MAY VARY FROM LOCATION SHOWN ON PLANS.

DURING CONSTRUCTION

1. ALL EROSION CONTROL BEST MANAGEMENT PRACTICES SHALL BE INSPECTED AND MAINTAINED REGULARLY (MINIMUM ONCE A WEEK) AND AFTER EVERY STORM EVENT
2. CONTRACTOR TO KEEP LAND DISTURBANCE TO MINIMUM TO CONTROL RUNOFF FROM THE SITE
3. LIMIT LAND CLEARING AND RESTORE ALL GRADING AS SOON AS POSSIBLE
4. STAGED SEEDING TO RE-VEGETATE CUT AND FILL SLOPES AS THE WORK IS IN PROGRESS
5. AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DUE TO WIND AND OTHER EROSION
6. MAINTENANCE OF STREET: STREETS TO BE KEPT CLEAN AND FREE FROM DEBRIS
7. CONTRACTOR SHALL PROVIDE DUST CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION.
8. CONTRACTOR TO HAVE WATER TRUCK AVAILABLE AS WATER SOURCE FOR WHEEL WASH AREA, OR ALTERNATE WATER SOURCE MAY BE USED IF APPROVED BY CITY.
9. IF GROUND WATER IS ENCOUNTERED DURING THE CONSTRUCTION ACTIVITIES AND REQUIRES PUMPING OFF THE PROJECT, THE CONTRACTOR IS TO FILTER THE WATER THROUGH THE USE OF SAND BAGS AND/OR GEO FABRIC. THIS IS TO BE DONE PRIOR TO IT BEING INTRODUCED INTO THE PUBLIC STORM DRAIN SYSTEM.
10. A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE KEPT ON THE SITE DURING ALL CONSTRUCTION ACTIVITY

POST CONSTRUCTION

1. EROSION CONTROL STRUCTURES MAY BE REMOVED ONCE FINAL LANDSCAPING IS IN PLACE
2. EROSION CONTROL STRUCTURES BELOW SEEDED AREAS MUST REMAIN IN PLACE UNTIL THE ENTIRE AREA HAS BEEN ESTABLISHED
3. EROSION CONTROL IN PROPOSED PAVEMENT AREAS SHALL REMAIN IN PLACE UNTIL PAVEMENT IS COMPLETE
4. THE FOLLOWING PRECAUTIONS SHALL BE PERFORMED:

A) PERIODIC INSPECTION OF CATCH BASIN SEDIMENT TRAPS AND CLEANING WHEN THE BASIN IS MORE THAN 1/4 FULL. INSPECTION SHALL BE DONE AFTER EVERY MAJOR RAINFALL AND EVERY 6 MONTHS AS A MINIMUM. DISPOSAL OF ANY GREASE OR OIL MUST BE DONE IN ACCORDANCE WITH CURRENT ENVIRONMENTAL REGULATIONS

B) LITTER, DEBRIS AND CHEMICALS MUST BE PICKED UP AND KEPT IN A CONTAINED LOCATION TO PREVENT POLLUTION OF STORM WATER DISCHARGE

C) PARKING AREAS SHALL BE KEPT FREE FROM AUTOMOBILE FLUIDS THAT COULD WASH INTO THE STORM DRAIN SYSTEM

NO.	REVISIONS	BY	DATE
DESIGNER: SDT	PROJECT ENGINEER: SDT		

CIVIL ENGINEERING +SURVEYING
10718 S BECKSTEAD LANE, SUITE 102
South Jordan, Utah - 801-949-6296

SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

EROSION CONTROL PLAN (SWPPP)

LICENSED PROFESSIONAL ENGINEER
SCOTT D. THORSEN
No. 354291
STATE OF UTAH

Blue Stakes of UTAH 811
Bluestakes.org

SHEET NO.	
C6.0	
PROJECT ID	DATE:
A-1000	03/15/22
FILE NAME: PRJ-SSL	SCALE: 1"=30'

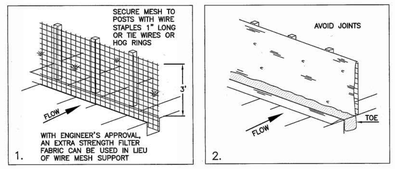
Silt fence

1. **GENERAL**
   - A. Description. A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched.
   - B. Application. To intercept sediment from disturbed areas of limited extent.
   - C. Perimeter Control: Place barrier at down gradient limits of disturbance.
   - D. Sediment Barrier: Place barrier at toe of slope or soil stockpile.
   - E. Protection of Existing Waterways: Place barrier at top of stream bank.
   - F. Inlet Protection.

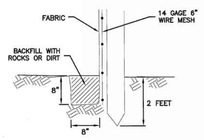
2. **PRODUCTS**
   - A. Fabric. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester, or polyethylene yarn. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 deg F to 120 deg F.
   - B. Burlap. 10 ounces per square yard of fabric.
   - C. Posts. Either 2" x 4" diameter wood, or 1.33 pounds per linear foot steel with a minimum length of 5 feet, or steel posts with projections for fastening wire to them.

3. **EXECUTION**
   - A. Cut the fabric on site to desired width, unroll, and drape over the barrier. Secure the fabric toe with rocks or dirt and secure the fabric to the mesh with twin, staples or similar devices.
   - B. When attaching two silt fences together, place the end post of the second fence inside the end post of the first fence. Rotate both posts at least 180 degrees on a clockwise direction to create a tight seal with the filter fabric. Drive both posts into the ground and bury the flap.
   - C. When used to control sediments from a steep slope, place silt fences away from the toe of the slope for increased holding capacity.
   - D. Maintenance.
     1) Inspect immediately after each rainfall and at least daily during prolonged rainfall.
     2) Should the fabric on a silt fence or filter barrier decompose or become ineffective before the end of the expected usable life and the barrier still be necessary, replace the fabric promptly.
     3) Remove sediment deposits after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
     4) Re-anchor fence as necessary to prevent shortcutting.
     5) Inspect for runoff bypassing ends of barriers or undercutting barriers.

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.



INSTALLATION SEQUENCE



TOE DETAIL

Inlet protection – fence or straw bale

1. **GENERAL**
   - A. Description. A temporary sediment barrier around storm drain inlet.
   - B. Application. At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.

2. **PRODUCT** (Not used)

3. **EXECUTION**
   - A. Installation and application criteria.
     1) Provide up gradient sediment controls, such as silt fence during construction of inlet.
     2) When construction of inlet is complete erect straw bale barrier, silt fence or other approved sediment barrier surrounding perimeter of inlet.
     3) Install filter fabric completely around grate.
   - B. Maintenance.
     1) Inspect inlet protection after every large storm event and at a minimum of once monthly.
     2) Remove sediment accumulated when it reaches 4-inches in depth.
     3) Repair or re-align barrier or fence as needed.
     4) Look for bypassing or undercuttling and re-compact soil around barrier or fence as required.

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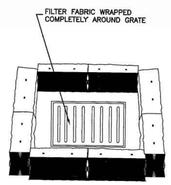
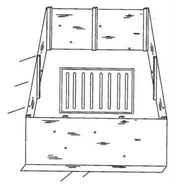


STRAW BALE BARRIER
(PLAN No. 121)



SILT FENCE
(PLAN No. 122)

Stabilized roadway entrance

1. **GENERAL**
   - A. Description. A temporary stabilized pad of gravel for controlling equipment and construction vehicle access to the site.
   - B. Application. At any site where vehicles and equipment enter the public right of way.

2. **PRODUCT** (Not used)

3 **EXECUTION**
   - A. Clear and grub area and grade to provide maximum slope of 1 percent away from paved roadway.
   - B. Compact subgrade.
   - C. Place filter fabric under stone if desired (recommended for entrance area that remains more than 3 months).
   - D. Maintenance.
     1) Prevent tracking or flow of mud into the public right-of-way.
     2) Periodic top dressing with 2-inch stone may be required, as conditions demand, and repair any structures used to trap sediments.
     3) Inspect daily for loss of gravel or sediment buildup.
     4) Inspect adjacent area for sediment deposit and install additional controls as necessary.
     5) Expand stabilized area as required to accommodate activities.

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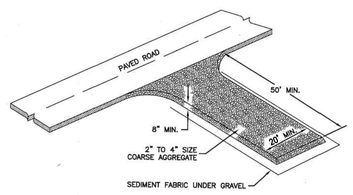

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South Jordan, Utah - 801-949-6296

NO.	REVISIONS	BY	DATE

DESIGNER: SDT PROJECT ENGINEER: SDT

SENSAPURE ADDITION
1945 SOUTH FREMONT DRIVE, SALT LAKE CITY, UTAH

EROSION CONTROL DETAIL SHEET

LICENSED PROFESSIONAL ENGINEER
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C:\

LANDSCAPE PLAN SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes landscape procedures for the Project including all labor, materials, and installation necessary, but not limited to, the following:

1. Site Conditions
2. Guarantees
3. Maintenance
4. Soil Amendments
5. Fine Grading
6. Landscape Edging
7. Furnish and Installing Plant
8. Turf Planting
9. Weed Barrier

1.2 SITE CONDITIONS

A. Examination: Before submitting a Bid, each Contractor shall carefully examine the Contract Documents; shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the Bid the cost of all items required by the Contract Documents are at a variance with the applicable laws, building codes, rules, regulations, or contain obvious erroneous or uncoordinated information, the Contractor shall promptly notify the Project Representative and the necessary changes shall be accomplished by Addendum.

B. Protection: Contractor to conduct the Work in such a manner to protect all existing underground utilities or structures. Contractor to repair or replace any damaged utility or structure using identical materials to match existing at no expense to the Owner.

C. Irrigation System: Do not begin planting until the irrigation system is completely installed, is adjusted for full coverage and is completely operational.

1.3 PERMITS

A. Blue Stake/ Dig Line: When digging is required, "Blue Stake" or "Dig Line" the work site and identify the approximate location of all known underground utilities or structures.

1.4 PLANT DELIVERY, QUALITY, AND AVAILABILITY

A. Unauthorized substitutions will not be accepted. If proof is submitted that specific plants or plant sizes are unobtainable, written substitution requests will be considered for the nearest equivalent plant or size. All substitution requests must be made in writing and preferably before the bid due date.

1.5 FINAL INSPECTION

A. All plants will be inspected at the time of Final Inspection prior to receiving a Landscape Substantial Completion for conformance to specified planting procedures, and for general appearance and vitality. Any plant not approved by the Project Representative will be rejected and replaced immediately.

1.6 LANDSCAPE SUBSTANTIAL COMPLETION

A. A Substantial Completion Cerrificate will only be issued by the Project Representative for "landscape and irrigation" in their entirety. Substantial Completion will not be proportioned to be designated areas of a project.

1.7 MAINTENANCE

A. Plant Material: The Contractor is responsible to maintain all planted materials in a healthy and growing condition for 30 days after receiving a Landscape Substantial Completion at which time the Guarantee period commences. This maintenance is to include mowing, weeding, cultivating, fertilizing, monitoring water schedules, controlling insects and diseases, re-guying and staking, and all other operations of care necessary for the promotion of root growth and plant life so that all plants are in a condition satisfactory at the end of the guarantee period. The Contractor shall be held responsible for failure to monitor watering operations and shall replace any and all plant material that is lost due to improper application of water.

1.8 GUARANTEE

A. Guarantee: A guarantee period of one year shall begin from end of maintenance period and final acceptance for trees, shrubs, and ground covers. All plants shall grow and be healthy for the guarantee period and trees shall live and grow in acceptable upright position. Any plant not alive, in poor health, or in poor condition at the end of the guarantee period will be replaced immediately. Any plant will only need to be replaced once during the guarantee period. Contractor to provide documentation showing where each plant to be replaced is located. Any outside factors, such as vandalism or lack of maintenance on the part of the Owner, shall not be part of the guarantee

PART II - PRODUCTS

2.1 LANDSCAPE MATERIALS

A. Tree Staking: All trees shall be staked for one year warranty period. All trees not plumb shall be replaced. Staked trees shall use vinyl tree ties and tree stakes two (2) inch by two (2) by eight (8) foot common pine stakes used as shown on the details.

B. Tree Wrap: Tree wrap is not to be used.

C. Mulch/Rock: See Plans. All planter beds to receive a minimum 3" layer for trees, shrubs, and perennials and 1" for groundcovers.

D. Weed Barrier: DeWitt 5 oz. weed barrier fabric. Manufactured by DeWitt Company, dewittcompany.com or approved equal.

E. Tree, Shrub, and Grass Backfill Mixture; Backfill mixture to be 75% native soil and 25% topsoil, thoroughly mixed together prior to placement.

F. Topsoil: Required for turf areas, planter beds and Backfill Mixture. Acceptable topsoil shall meet the following standards:

a. PH: 5.5-7.5

b. EC (electrical conductivity): < 2.0 mmhos per centimeter

c. SAR (sodium absorption ration): < 3.0

d. % OM (percent organic matter): >1%

e. Texture (particle size per USDA soil classification): Sand <70%; Clay < 30%; Silt < 70%, Stone fragments (gravel or any soil particle greater than two (2) mm in size) < 5% by volume.

G. Turf Sod: All sod shall be 18 month old as specified on plans (or approved equal) that has been cut fresh the morning of installation. Only sod that has been grown on a commercial sod farm shall be used. Only use sod from a single source.

H. Landscape Curb Edging: six (6) inches by four (4) inches extruded concrete curb made up of the following materials:

a. Washed mortar sand free of organic material.

b. Portland Cement (see concrete spec. below for type)

c. Reinforced fiber - Specifically produced for compatibility with aggressive alkaline environment of Portland cement-based composites.

d. Only potable water for mixing.

I. Landscape Metal Edging: 5.5" steel edging with 18" dowels into the ground for stabilization.

PART III - EXECUTION

3.1 GRADING

A. Topsoil Preparation: Grade planting areas according to the grading plan. Eliminate uneven areas and low spots. Provide for proper grading and drainage.

B. Topsoil Placement: Slope surfaced away from building at two (2) percent slope with no pockets of standing water. Establish finish grades of one (1) inches for planters below grade of adjacent paved surfaced. Provide neat, smooth, and uniform finish grades. Remove surplus sub-soil and topsoil from the site.

C. Compaction: compaction under hard surface areas (asphalt paths and concrete surfaces) shall be ninety-five (95) percent. Compaction under planting areas shall be between eighty-five (85) and ninety (90) percent.

3.2 TURF GRADING

A. The surface on which the sod is to be laid shall be firm and free from footprints, depressions, or undulations of any kind. The surface shall be free of all materials larger than 1/2" in diameter.

B. The finish grade of the topsoil adjacent to all sidewalks, mow-strips, etc. prior to the laying of sod, shall be set such that the crown of the grass shall be at the same level as the adjacent concrete or hard surface. No exceptions.

3.3 PLANTING OPERATIONS

A. Review the exact locations of all trees and shrubs with the Project Representative for approval prior to the digging of any holes. Prepare all holes according to the details on the drawings.

B. Water plants immediately upon arrival at the site. Maintain in moist condition until planted.

C. Before planting, locate all underground utilities prior to digging. Do not place plants on or near utility lines.

D. The tree planting hole should be the same depth as the root ball, and two times the diameter of the root ball.

E. Trees must be placed on undisturbed soil at the bottom of the planting hole.

F. The tree hole depth shall be determined so that the tree may be set slightly high of finish grade, 1" to 2" above the base of the trunk flare, using the top of the root ball as a guide.

G. Plant immediately after removal of container for container plants.

H. Set tree on soil and remove all burlap, wire baskets, twine, wrappings, etc. before beginning and backfilling operations. Do not use planting stock if the ball is cracked or broken before or during planting operation.

I. Apply vitamin B-1 root stimulator at the rate of one (1) tablespoon per gallon.

J. Upon completion of backfilling operation, thoroughly water tree to completely settle the soil and fill any voids that may have occurred. Use a watering hose, not the area irrigation system. If additional prepared topsoil mixture needs to be added. It should be a courser mix as required to establish finish grade as indicated on the drawings.

K. The amount of pruning shall be limited to the minimum necessary to remove dead or injured twigs and branches. All cuts, scars, and bruises shall be properly treated according to the direction of the Project Representative. Proper pruning techniques shall be used. Do not leave stubs and do not cut the leader branch. Improper pruning shall be cause for rejection of the plant material.

L. Prepare a watering circle of 2' diameter around the trunk. For conifers, extend the watering well to the drip line of the tree canopy. Place mulch around the planted trees.

4. TURF - SOD LAYING

A. Top Soil Amendments: Prior to laying sod, commercial fertilizer shall be applied and incorporated into the upper four (4) inches of the topsoil at a rate of four pounds of nitrogen per one thousand (1,000) square feet. Adjust fertilization mixture and rate of application as needed to meet recommendations given by topsoil analysis. Include other amendments as required.

B. Fertilization: Three weeks after sod placement fertilize the turf at a rate of ½ pound of nitrogen per 1000 square feet. Use fertilizer specified above. Adjust fertilization mixture and rates to meet recommendations given by topsoil analysis.

C. Sod Availability and Condition: Sod is to be delivered to the site in good condition. It is to be inspected upon arrival and installed within 24 hours. Sod is to be moist and cool to ensure that decomposition has not begun and is to be free of pests, diseases, or blemishes. The Contractor shall satisfy himself as to the existing conditions prior to any construction. The Contractor shall be fully responsible for furnishing and laying all sod required on the plans. He shall furnish new sod as specified above and lay it so as too completely satisfy the intent and meaning of the plans and specification at no extra cost to the owner. In the case of any discrepancy in the amount of sod to be removed or amount to be used, it shall be the Contractor's responsibility to report such to the Project Representative prior to commencing the work.

D. Sod Laying: The surface upon which the new sod to be laid will be prepared as specified in the detail and be lightly watered before laying. Areas where sod is to be laid shall be cut trimmed, or shaped to receive full width sod (minimum twelve (12) inches). No partial strip or pieces will be accepted.

E. Sod shall be tamped lightly as each piece is set to ensure that good contact is made between edges and also the ground. If voids or holes are discovered, the sod piece(s) is (are) to be raised and topsoil is to be used to fill in the areas until level. Sod laid on any sloped areas shall be anchored with wooden dowels or other materials which are accepted by the grass sod industry.

F. Sod shall be rolled with a roller that is at least 50% full immediately after installation to ensure the full contact with soil is made.

G. Apply water directly after laying sod. Rainfall is not acceptable.

H. Watering of the sod shall be the complete responsibility of the Contractor by whatever means necessary to establish the sod in an acceptable manner to the end of the Maintenance period. If an irrigation system is in place on the site, but for whatever reason, water is not available in the system. It is the responsibility of the Contractor to water the sod by whatever means, until the sod is accepted by the Project Representative.

I. Protection of the newly laid sod shall be the complete responsibility of the Contractor. The Contractor shall provide acceptable visual barriers, to include barricades set appropriate distances with strings or tapes between barriers, as an indication of new work. The Contractor is to restore any damaged areas caused by others (including vehicular traffic), erosion, etc, until such time as the lawn is accepted by the Owner.

J. All sod that has not been laid within 24 hours shall be deemed unacceptable and will be removed from the site.

3.5 WEED BARRIER

A. For the health of the soil and the microorganisms, weed barrier is not recommended. If use is required or requested, do not place in annual or grass areas.

B. Cut weed barrier back to the edge of the plant rootball.

C. Overlap rows of fabric min. 6"

D. Stable fabric edges and overlaps to ground.

END OF SECTION

LANDSCAPE NOTES

INSTALLATION

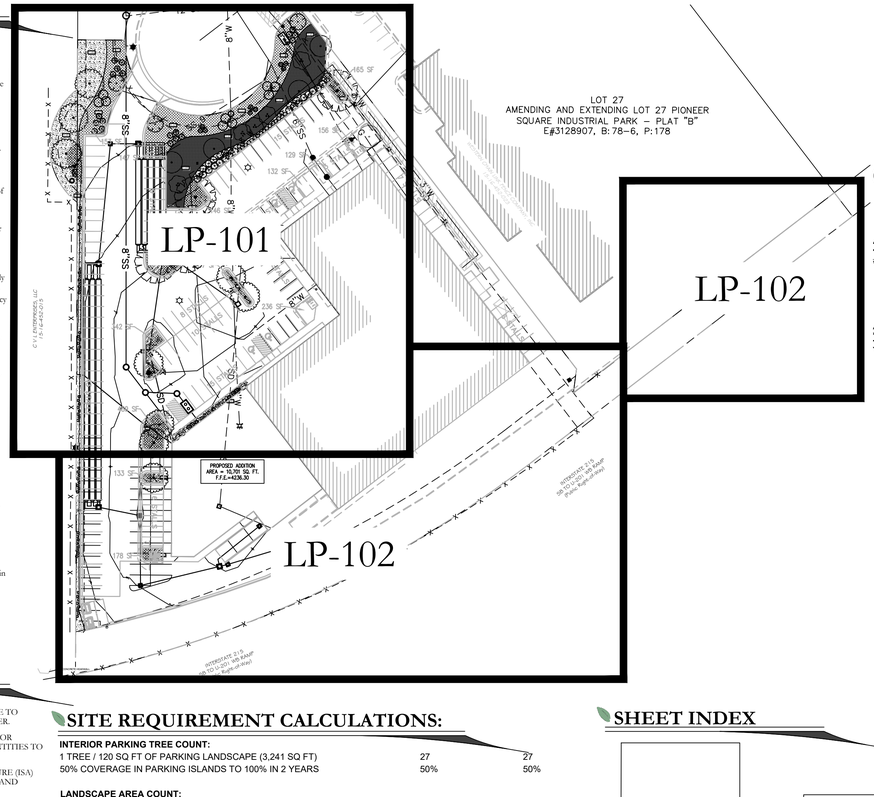
1. LANDSCAPE CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT CONTRACTORS EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. DURING THE BIDDING AND INSTALLATION PROCESS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE QUANTITIES TO BE USED.
3. ALL PLANT MATERIAL SHALL BE PLANTED ACCORDING TO INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) STANDARDS WITH CONSIDERATION TO INDIVIDUAL SOIL AND SITE CONDITIONS, AND NURSERY CARE AND INSTALLATION INSTRUCTIONS.
4. SELECTED PLANTS WILL BE ACCORDING TO THE PLANT LEGEND. IF SUBSTITUTIONS ARE NECESSARY, PROPOSED LANDSCAPE CHANGES MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO LAYING SOD.
5. SHOULD THE SITE REQUIRE ADDITIONAL TOPSOIL, REFER TO SOIL TEST WHEN MATCHING EXISTING SOIL. IF A MATCHING SOIL IS NOT LOCATABLE, A 6" DEPTH OF SANDY LOAM TOPSOIL (MIXED PRIOR TO SPREADING WITH 2-3" OF QUALITY COMPOST) CAN BE INCORPORATED INTO THE EXISTING SOIL USING THE FOLLOWING DIRECTIONS: SCARIFY TOP 6" OF EXISTING SUBSOIL AND INCORPORATE 3" OF NEW COMPOST ENRICHED TOPSOIL. SPREAD REMAINING TOPSOIL TO REACH FINISHED GRADE.
6. SOD FOR NEW LAWN AREAS SHALL BE A DROUGHT TOLERANT VARIETY. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD.
7. EDGING, AS INDICATED ON PLAN, IS TO BE INSTALLED BETWEEN ALL LAWN AND PLANTER AREAS. ANY TREES LOCATED IN LAWN MUST HAVE A 4-6" TREE RING OF THE SAME EDGING.
8. IF REQUIRED BY CITY OR OWNER SPECIFIED, DeWitt 5 OZ WEED BARRIER FABRIC TO BE INSTALLED IN ALL PLANTER AREAS EXCEPT UNDER ANNUAL PLANTING AREAS AS SHOWN ON PLAN. WEED BARRIER SHALL BE CUT BACK FROM EACH PLANT TO THE DIAMETER OF THE ROOTBALL.
9. ROCK MULCH (INORGANIC MULCH) TO BE APPLIED AT THE FOLLOWING DEPTHS: 3" IN ALL TREE, SHRUB, AND PERENNIAL PLANTER AREAS; ANNUAL PLANTING AREAS AS SHOWN ON PLAN TO RECEIVE 4" OF SOIL AID MATERIAL (ORGANIC MULCH). NO MULCH SHALL BE PLACED WITHIN 12" OF BASE OF TREE AND 6" WITHIN BASE OF SHRUBS AND PERENNIALS.
10. A NEW UNDERGROUND, AUTOMATIC IRRIGATION SYSTEM IS TO BE INSTALLED BY CONTRACTOR IN ALL LANDSCAPED AREAS. LAWN AREAS TO RECEIVE AT LEAST 100% HEAD TO HEAD COVERAGE AND PLANTER AREAS TO RECEIVE A FULL DRIP SYSTEM TO EACH TREE AND SHRUB. POINT SOURCE DRIP OR IN-LINE DRIP TUBING TO BE SECURED AT EDGE OF ROOTBALL, NOT AGAINST TRUNK. SEE IRRIGATION PLAN.
11. UPON REQUEST, A PLANT GUIDE IS AVAILABLE WITH OUR RECOMMENDATIONS REGARDING WEED BARRIER, PLANT CARE AND MAINTENANCE

INSTALLER RESPONSIBILITIES AND LIABILITIES

1. THESE PLANS ARE FOR BASIC DESIGN LAYOUT AND INFORMATION. LANDSCAPE CONTRACTOR IS REQUIRED TO USE TRADE KNOWLEDGE FOR IMPLEMENTATION. OWNER ASSUMES NO LIABILITIES FOR INADEQUATE ENGINEERING CALCULATIONS, MANUFACTURER PRODUCT DEFECTS, INSTALLATION OF ANY LANDSCAPING AND COMPONENTS, OR TIME EXECUTION.
2. LANDSCAPE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR INSTALLATION OF ALL LANDSCAPING AND IRRIGATION SYSTEMS INCLUDING CODE REQUIREMENTS, TIME EXECUTIONS, INSTALLED PRODUCTS AND MATERIALS.

GRADING AND DRAINAGE REQUIREMENTS

1. AS PER CODE, ALL GRADING IS TO SLOPE AWAY FROM ANY STRUCTURE. SURFACE OF THE GROUND WITHIN 10' FEET OF THE FOUNDATION SHOULD DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM FALL OF 6"
2. AS PER CODE, FINISHED GRADE WILL NOT DRAIN ON NEIGHBORING PROPERTIES
3. A MINIMUM OF 6" OF FOUNDATION WILL BE LEFT EXPOSED AT ALL CONDITIONS
4. LANDSCAPE CONTRACTOR TO MAINTAIN OR IMPROVE FINAL GRADE AND PROPER DRAINAGE ESTABLISHED BY EXCAVATOR, INCLUDING BUT NOT LIMITED TO ANY MAINTENANCE, PRESERVATION, OR EXAGGERATION OF SLOPES, BERMS, AND SWALES.
5. LANDSCAPE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY DAMAGED OR IMPROPER WATERFLOW OF ALL SWALES, BERMS, OR GRADE
6. DEVICES FOR CHANNELING ROOF RUN-OFF SHOULD BE INSTALLED FOR COLLECTION AND DISCHARGE OF RAINWATER AT A MINIMUM OF 10' FROM THE FOUNDATION, OR BEYOND THE LIMITS OF FOUNDATION WALL BACKFILL; WHICHEVER DISTANCE IS GREATER

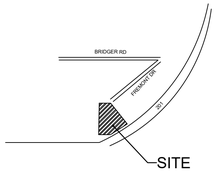


SITE REQUIREMENT CALCULATIONS:

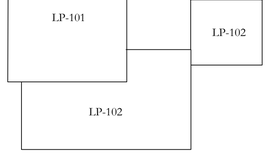
INTERIOR PARKING TREE COUNT:		
1 TREE / 120 SQ FT OF PARKING LANDSCAPE (3,241 SQ FT)	27	27
50% COVERAGE IN PARKING ISLANDS TO 100% IN 2 YEARS	50%	50%
LANDSCAPE AREA COUNT:		
TOTAL LANDSCAPE AREA = 40,476 SQ.FT.		
33% OF LANDSCAPE COVERAGE (13,357 SQ FT)	33%	>33%
TOTAL SQUARE FEET PARKING LOT: 52,385 SQ FT		
TOTAL SQUARE FEET OF INTERNAL PARKING LOT LANDSCAPING	5%(2,619)	3,241 SQ FT (7.8%)
TOTAL PERCENTAGE OF DROUGHT TOLERANT TREES & SHRUBS	80%	80% TREES 100% SHRUBS

FREEWAY SCENIC LANDSCAPE COUNT: RETAIN EXISTING LANDSCAPING

VICINITY MAP



SHEET INDEX



SITE MATERIALS LEGEND

	SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
	1-03	DESERT GREEN SODDED LAWN AREA. LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH DESERT GREEN WATER WISE SOD. SEE CHANSHARE.COM OR APPROVED EQUAL. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	3,971 sf
	1-07	WOOD MULCH: TO MATCH EXISTING PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF SHREDDED WOOD MULCH TOP DRESSING. REPLENISH ON A YEARLY BASIS TO A DEPTH OF 3".	489 sf
	1-09	1" MINUS COPPER CANYON CRUSHED ROCK OR APPROVED EQUAL. STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.KEEP ROCK FROM WITHIN ONE FOOT OF TREE TRUNK, SHRUB OR PERENNIAL BASE OR GRASS ROOT BALL.	7,412 sf
	1-10	1" MINUS WASATCH GREY CRUSHED ROCK OR APPROVED EQUAL. STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.KEEP ROCK FROM WITHIN ONE FOOT OF TREE TRUNK, SHRUB OR PERENNIAL BASE OR GRASS ROOT BALL.	367 sf
	1-11	2-4" TALONS COVE DARK GREY CRUSHED ROCK OR APPROVED EQUAL. PROVIDE 6-8" DEPTH OF ROCK MULCH TOP DRESSING. INSTALL DEWITT 5OZ WEED BARRIER UNDER ALL LARGE ROCK AREAS.	5,085 sf
	1-19	5.5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	913 lf

PLANT LEGEND

CONIFERS	CODE	QTY		BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	JS'B	3	DROUGHT TOLERANT	Juniperus Scopulorum `Blue Arrow' Blue Arrow Juniper Tr2; 15x3; sun; z4; Utah Lake water tolerant	B & B		6'
DECIDUOUS TREES	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**	**CAL**	**SIZE**
	AG'A	5	DROUGHT TOLERANT	Amelanchier x grandiflora `Autumn Brilliance' Autumn Brilliance Serviceberry moderate; 20x15; part sun to shade; z4;Utah Lake water tolerant	B & B	Multi-trunked	
	BP'P	3		Betula platyphylla `Jefpark' Parkland Pillar Birch moderate to high; 40x8; sun; z3	B & B	2"Cal	
	MPR	4	DROUGHT TOLERANT	Malus x `Prairie Rose' Prairie Rose Crabapple low; 20x18; sun; z4; Utah Lake water tolerant	B & B	2"Cal	
	QR'A	3	DROUGHT TOLERANT	Quercus robur x alba `JFS-KW1QX' TM Street Spire Oak Td4; 45x14; AV 176; sun; z4	B & B	2"Cal	
	UX'F	9	DROUGHT TOLERANT	Ulmus x `Frontier' Frontier Elm Td3; 35x25; AV 490; sun; z4; Utah Lake water tolerant	B & B	2"Cal	
	ZS'B	4	DROUGHT TOLERANT	Zelkova serrata `Burgundy Vase' Burgundy Vase Zelkova Td4; 60x40; AV490; sun; z5; Utah Lake water tolerant	B & B	2"Cal	
DECIDUOUS SHRUBS	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**		
	AM'H	20	DROUGHT TOLERANT	Aronia melanocarpa `Low Scape Hedger' Low Scape Hedger Chokeberry Sd3; 4x3; AV 28; sun to part shade; z3; Utah Lake water tolerant	5 gal		
	PB'P	14	DROUGHT TOLERANT	Prunus besseyi `P011S' TM Pawnee Buttes Sand Cherry Sd1; 1.5 x 6; AV19.5; sun; z4;	5 gal		
	VT'A	11	DROUGHT TOLERANT	Viburnum trilobum `Alfredo' Alfredo Cranberrybush Viburnum low; 6x6; sun to part sun; z3;	5 gal		
EVERGREEN SHRUBS	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**		
	JC'D	20	DROUGHT TOLERANT	Juniperus chinensis `Daub`s Frosted' Daub`s Frosted Juniper low; 1.5 x 5; sun to part sun; z4; Utah Lake water tolerant	5 gal		
	PS'H	9	DROUGHT TOLERANT	Pinus sylvestris `Hillside Creeper' Hillside Creeper Scotch Pine moderate; 2x8; sun; z3	5 gal		
GRASSES	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**		
	BG'B	56	DROUGHT TOLERANT	Bouteloua gracilis `Blonde Ambition' Blonde Ambition Blue Grama Tw0; 2.5 x 2.5; AV .75; sun; Z4; Utah Lake water tolerant	1 gal		
	CB'K	6	DROUGHT TOLERANT	Calamagrostis brachytricha Korean Feather Reed Grass	1 gal		
ROSES	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**		
	R'DK	13	DROUGHT TOLERANT	Rosa x `Radtko' Double Knock Out Rose moderate; 3-4 x 3-4; sun; z5; Utah Lake water tolerant	5 gal		
GROUND COVERS	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**				
	931	Festuca mairei 'Greenlee's Form' Greenlee Atlas Fescue	1 gal	DROUGHT TOLERANT			18" o.c
	338	Potentilla fruticosa 'Fargo' TM Fargo Bush Cinquefoil	flat	DROUGHT TOLERANT			18" o.c

ISSUE DATE	PROJECT NUMBER
3/28/2022	UT22044

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811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

0' 30' 60' 120' 240'
GRAPHIC SCALE: 1" = 60'

PLAN INFORMATION

PROJECT INFORMATION

SENSAPURE
1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AE URBIA
909 W. SOUTH JORDAN PARKWAY
SOUTH JORDAN, UT 84095
801-575-6455

CIR CIVIL ENGINEERING
3032 SOUTH 1030 WEST, SUITE 202
SALT LAKE CITY, UT 84119
801-949-6296

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

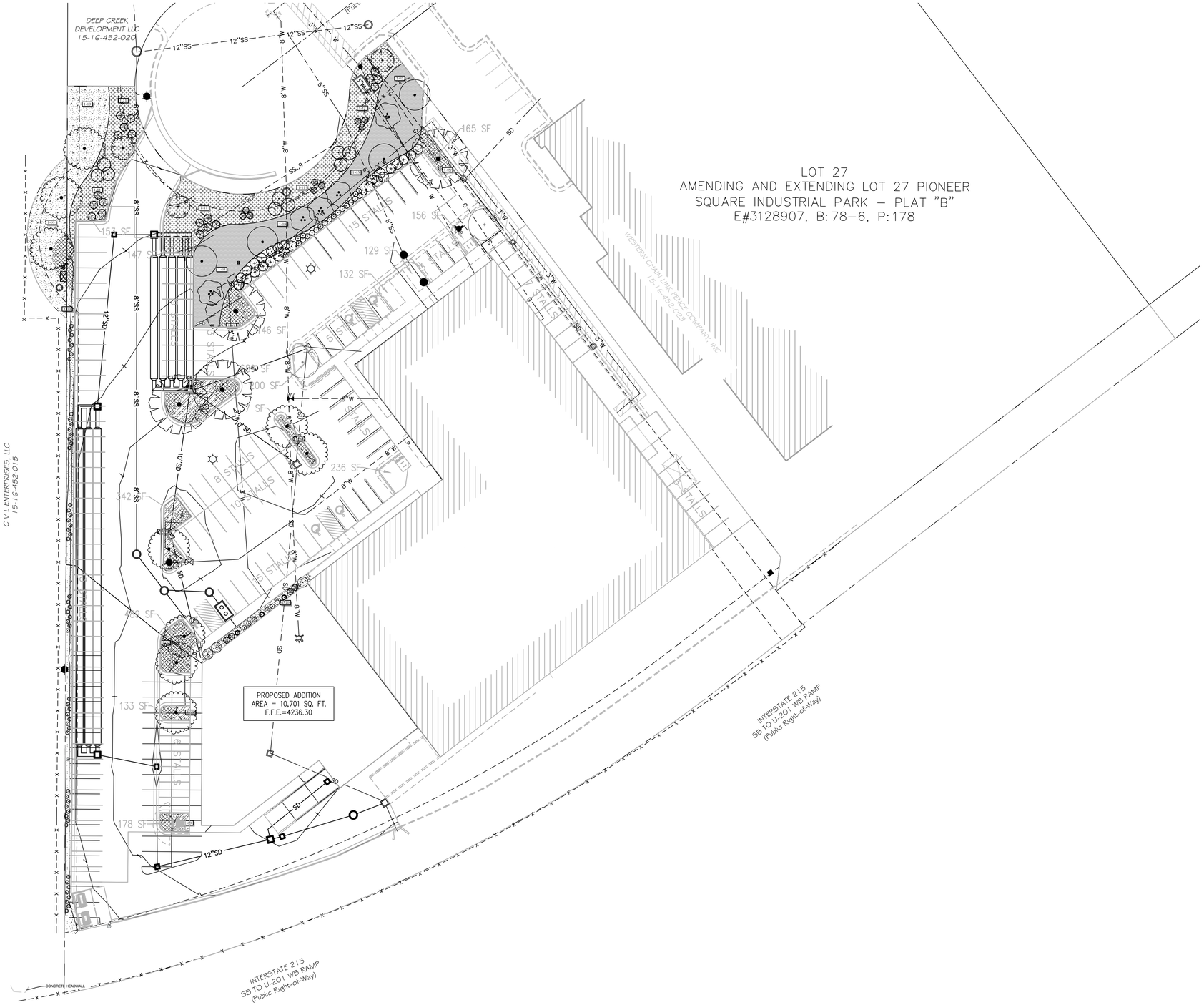
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
03/28/2022
STATE OF UTAH

DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 3/28/2022

LANDSCAPE PLAN COVER

LP-100



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0' 15' 30' 60' 120'
GRAPHIC SCALE: 1" = 30'

PROJECT INFORMATION

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1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

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LICENSE STAMP

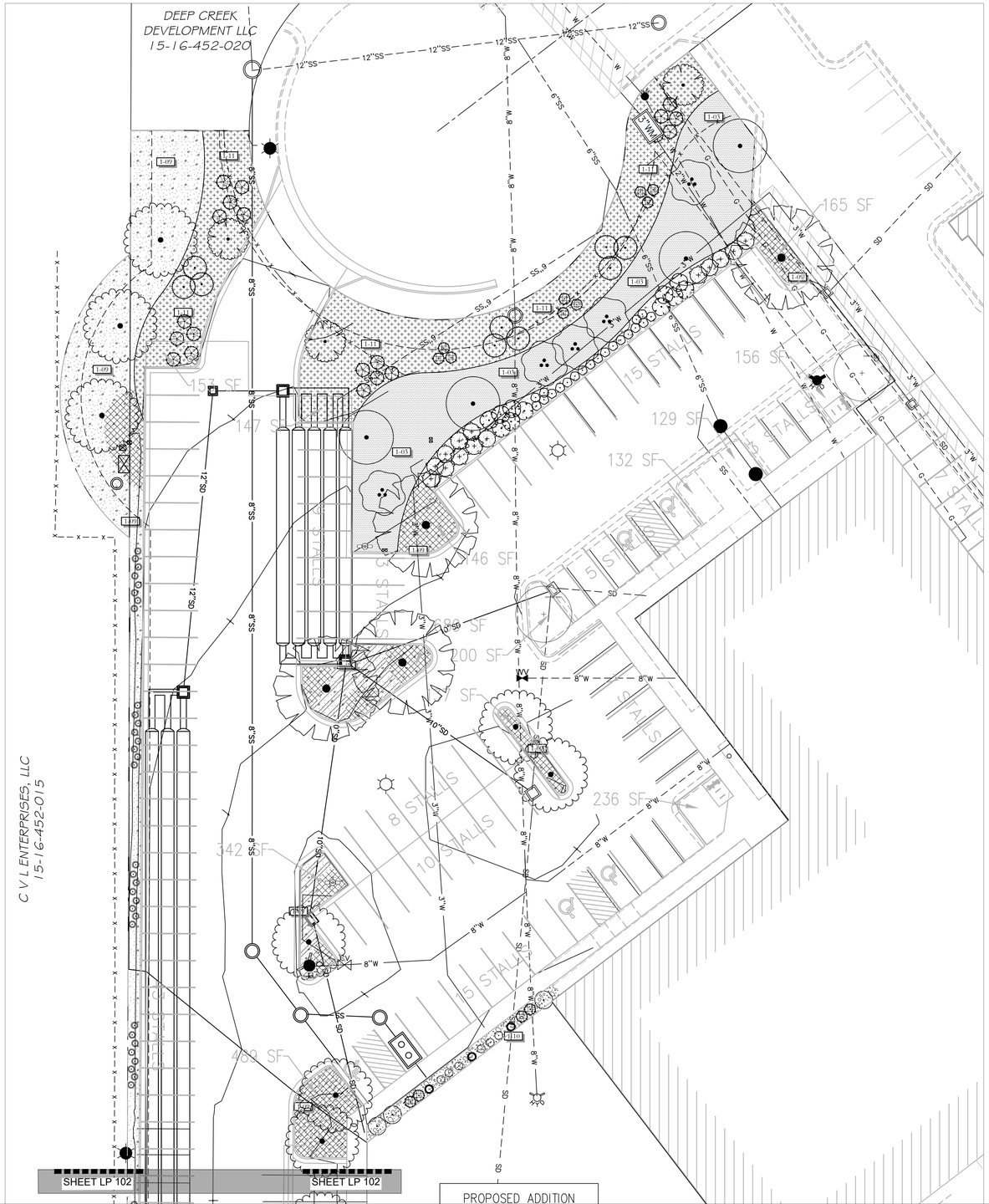
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128125-5301
03/28/2022
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	3/28/2022

LANDSCAPE PLAN OVERALL

LP-O



PLANT LEGEND

CONIFERS	CODE	QTY		BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	JS'B	3	DROUGHT TOLERANT	Juniperus Scopulorum `Blue Arrow` Blue Arrow Juniper Te2; 15x3; sun; z4; Utah Lake water tolerant	B & B		6'
DECIDUOUS TREES	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**	**CAL**	**SIZE**
	AG'A	5	DROUGHT TOLERANT	Amelanchier x grandiflora `Autumn Brilliance` Autumn Brilliance Serviceberry moderate; 20x15; part sun to shade; z4;Utah Lake water tolerant	B & B	Multi-trunked	
	BP'P	3		Betula platyphylla `Jefpark` Parkland Pillar Birch moderate to high; 40x8; sun; z3	B & B	2"Cal	
	M'PR	4	DROUGHT TOLERANT	Malus x `Prairie Rose` Prairie Rose Crabapple low; 20x18; sun; z4; Utah Lake water tolerant	B & B	2"Cal	
	QR'A	3	DROUGHT TOLERANT	Quercus robur x alba `JFS-KW1QX` TM Street Spire Oak Td4; 45x14; AV 176; sun; z4	B & B	2"Cal	
	UX'F	9	DROUGHT TOLERANT	Ulmus x `Frontier` Frontier Elm Td3; 35x25; AV 490; sun; z4; Utah Lake water tolerant	B & B	2"Cal	
	ZS'B	4	DROUGHT TOLERANT	Zelkova serrata `Burgundy Vase` Burgundy Vase Zelkova Td4; 60x40; AV490; sun; z5; Utah Lake water tolerant	B & B	2"Cal	
DECIDUOUS SHRUBS	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**		
	AM'H	20	DROUGHT TOLERANT	Aronia melanocarpa `Low Scape Hedger` Low Scape Hedger Chokeberry Sd3; 4x3; AV 28; sun to part shade; z3; Utah Lake water tolerant	5 gal		
	PB'P	14	DROUGHT TOLERANT	Prunus besseyi `P011S` TM Pawnee Buttes Sand Cherry Sd1; 1.5 x 6; AV19.5; sun; z4;	5 gal		
	VT'A	11	DROUGHT TOLERANT	Viburnum trilobum `Alfredo` Alfredo Cranberrybush Viburnum low; 6x6; sun to part sun; z3;	5 gal		
EVERGREEN SHRUBS	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**		
	JC'D	20	DROUGHT TOLERANT	Juniperus chinensis `Daub`s Frosted` Daub`s Frosted Juniper low; 1.5 x 5; sun to part sun; z4; Utah Lake water tolerant	5 gal		
	PS'H	9	DROUGHT TOLERANT	Pinus sylvestris `Hillside Creeper` Hillside Creeper Scotch Pine moderate; 2x8; sun; z3	5 gal		
GRASSES	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**		
	BG'B	56	DROUGHT TOLERANT	Bouteloua gracilis `Blonde Ambition` Blonde Ambition Blue Grama Tw0; 2.5 x 2.5; AV .75; sun; Z4; Utah Lake water tolerant	1 gal		
	CB'K	6	DROUGHT TOLERANT	Calamagrostis brachytricha Korean Feather Reed Grass	1 gal		
ROSES	**CODE**	**QTY**		**BOTANICAL / COMMON NAME**	**CONT**		
	R'DK	13	DROUGHT TOLERANT	Rosa x `Radtko` Double Knock Out Rose moderate; 3-4 x 3-4; sun; z5; Utah Lake water tolerant	5 gal		

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT		
	931	Festuca mairei 'Greenlee's Form' Greenlee Atlas Fescue	1 gal	DROUGHT TOLERANT	18" o.
	338	Potentilla fruticosa 'Fargo' TM Fargo Bush Cinquefoil	flat	DROUGHT TOLERANT	18" o.

SITE MATERIALS LEGEND

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-03	DESERT GREEN SODDED LAWN AREA. LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH DESERT GREEN WATER-WISE SOD. SEE CHANSHARE.COM OR APPROVED EQUAL. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	3,971 sf
1-07	WOOD MULCH TO MATCH EXISTING PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF SHREDDED WOOD MULCH TOP DRESSING. REPLENISH ON A YEARLY BASIS TO A DEPTH OF 3".	489 sf
1-09	1" MINUS COPPER CANYON CRUSHED ROCK OR APPROVED EQUAL. STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.KEEP ROCK FROM WITHIN ONE FOOT OF TREE TRUNK, SHRUB OR PERENNIAL BASE OR GRASS ROOT BALL.	7,412 sf
1-10	1" MINUS WASATCH GREY CRUSHED ROCK OR APPROVED EQUAL. STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.KEEP ROCK FROM WITHIN ONE FOOT OF TREE TRUNK, SHRUB OR PERENNIAL BASE OR GRASS ROOT BALL.	367 sf
1-11	2-4" TALONS COVE DARK GREY CRUSHED ROCK OR APPROVED EQUAL. PROVIDE 6-8" DEPTH OF ROCK MULCH TOP DRESSING. INSTALL DEWITT 5OZ WEED BARRIER UNDER ALL LARGE ROCK AREAS.	5,085 sf
1-19	5.5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	913 lf

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811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

SENSAPURE
1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AE URBIA
909 W. SOUTH JORDAN PARKWAY
SOUTH JORDAN, UT 84095
801-575-6455

CIR CIVIL ENGINEERING
3032 SOUTH 1030 WEST, SUITE 202
SALT LAKE CITY, UT 84119
801-949-6296

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

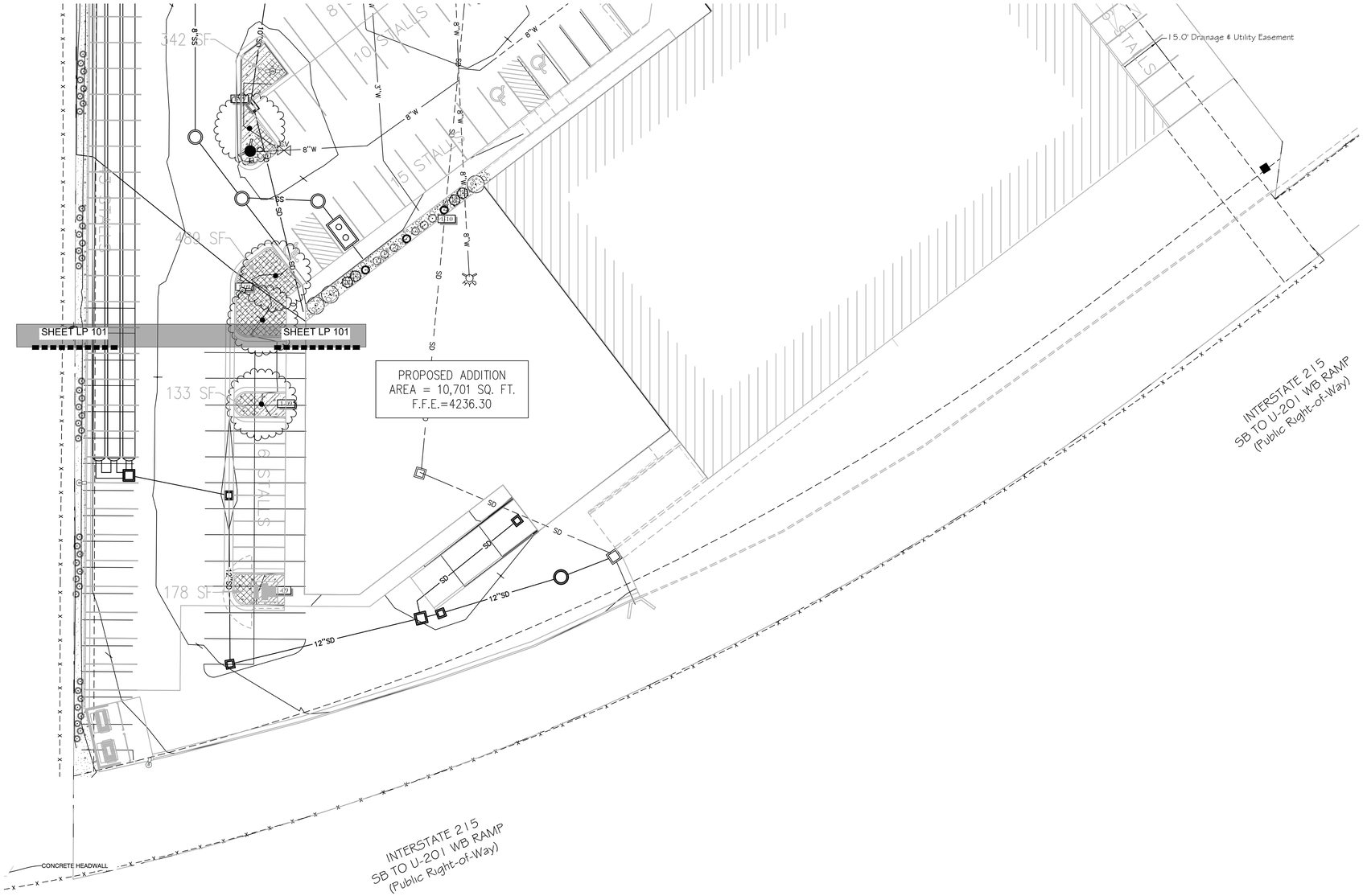
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
03/28/2022
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	3/28/2022

LANDSCAPE PLAN

LP-101



PLANT LEGEND

CONIFERS	CODE	QTY		BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	JS'B	3	DROUGHT TOLERANT	Juniperus Scopulorum `Blue Arrow` Blue Arrow Juniper Te2; 15x3; sun; z4; Utah Lake water tolerant	B & B		6'

DECIDUOUS TREES	CODE	QTY		BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	AG'A	5	DROUGHT TOLERANT	Amelanchier x grandiflora `Autumn Brilliance` Autumn Brilliance Serviceberry moderate; 20x15; part sun to shade; z4;Utah Lake water tolerant	B & B	Multi-trunked	
	BP'P	3		Betula platyphylla `Jefpark` Parkland Pillar Birch moderate to high; 40x8; sun; z3	B & B	2"Cal	
	M'PR	4	DROUGHT TOLERANT	Malus x `Prairie Rose` Prairie Rose Crabapple low; 20x18; sun; z4; Utah Lake water tolerant	B & B	2"Cal	
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	UX'F	9	DROUGHT TOLERANT	Ulmus x `Frontier` Frontier Elm Td3; 35x25; AV 490; sun; z4; Utah Lake water tolerant	B & B	2"Cal	
	ZS'B	4	DROUGHT TOLERANT	Zelkova serrata `Burgundy Vase` Burgundy Vase Zelkova Td4; 60x40; AV490; sun; z5; Utah Lake water tolerant	B & B	2"Cal	

DECIDUOUS SHRUBS	CODE	QTY		BOTANICAL / COMMON NAME	CONT
	AM'H	20	DROUGHT TOLERANT	Aronia melanocarpa `Low Scape Hedger` Low Scape Hedger Chokeberry Sd3; 4x3; AV 28; sun to part shade; z3; Utah Lake water tolerant	5 gal
	PB'P	14	DROUGHT TOLERANT	Prunus besseyi `P011S` TM Pawnee Buttes Sand Cherry Sd1; 1.5 x 6; AV19.5; sun; z4;	5 gal
	VT'A	11	DROUGHT TOLERANT	Viburnum trilobum `Alfredo` Alfredo Cranberrybush Viburnum low; 6x6; sun to part sun; z3;	5 gal

EVERGREEN SHRUBS	CODE	QTY		BOTANICAL / COMMON NAME	CONT
	JC'D	20	DROUGHT TOLERANT	Juniperus chinensis `Daub's Frosted` Daub's Frosted Juniper low; 1.5 x 5; sun to part sun; z4; Utah Lake water tolerant	5 gal
	PS'H	9	DROUGHT TOLERANT	Pinus sylvestris `Hillside Creeper` Hillside Creeper Scotch Pine moderate; 2x8; sun; z3	5 gal

GRASSES	CODE	QTY		BOTANICAL / COMMON NAME	CONT
	BG'B	56	DROUGHT TOLERANT	Bouteloua gracilis `Blonde Ambition` Blonde Ambition Blue Grama Tw0; 2.5 x 2.5; AV .75; sun; Z4; Utah Lake water tolerant	1 gal
	CB'K	6	DROUGHT TOLERANT	Calamagrostis brachytricha Korean Feather Reed Grass	1 gal

ROSES	CODE	QTY		BOTANICAL / COMMON NAME	CONT
	R'DK	13	DROUGHT TOLERANT	Rosa x `Radtko` Double Knock Out Rose moderate; 3-4 x 3-4; sun; z5; Utah Lake water tolerant	5 gal

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT		SIZE
	931	Festuca mairei 'Greenlee's Form' Greenlee Atlas Fescue	1 gal	DROUGHT TOLERANT	18" o.
	338	Potentilla fruticosa 'Fargo' TM Fargo Bush Cinquefoil	flat	DROUGHT TOLERANT	18" o.

SITE MATERIALS LEGEND

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-03	DESERT GREEN SODDED LAWN AREA. LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH DESERT GREEN WATER-WISE SOD. SEE CHANSHARE.COM OR APPROVED EQUAL. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	3,971 sf
1-07	WOOD MULCH TO MATCH EXISTING PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF SHREDDED WOOD MULCH TOP DRESSING. REPLENISH ON A YEARLY BASIS TO A DEPTH OF 3".	489 sf
1-09	1" MINUS COPPER CANYON CRUSHED ROCK OR APPROVED EQUAL. STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.KEEP ROCK FROM WITHIN ONE FOOT OF TREE TRUNK, SHRUB OR PERENNIAL BASE OR GRASS ROOT BALL.	7,412 sf
1-10	1" MINUS WASATCH GREY CRUSHED ROCK OR APPROVED EQUAL. STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.KEEP ROCK FROM WITHIN ONE FOOT OF TREE TRUNK, SHRUB OR PERENNIAL BASE OR GRASS ROOT BALL.	367 sf
1-11	2-4" TALONS COVE DARK GREY CRUSHED ROCK OR APPROVED EQUAL PROVIDE 6-8" DEPTH OF ROCK MULCH TOP DRESSING. INSTALL DEWITT 5OZ WEED BARRIER UNDER ALL LARGE ROCK AREAS.	5,085 sf
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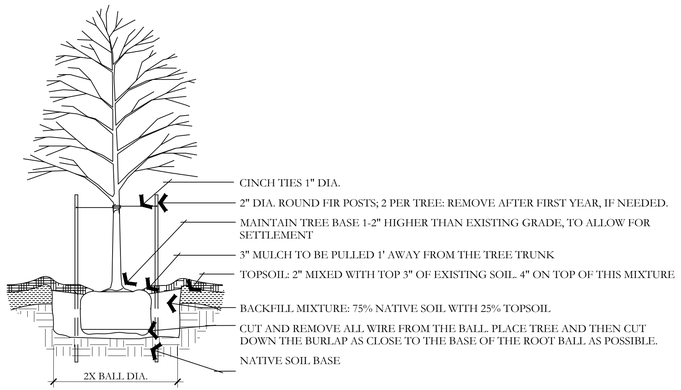
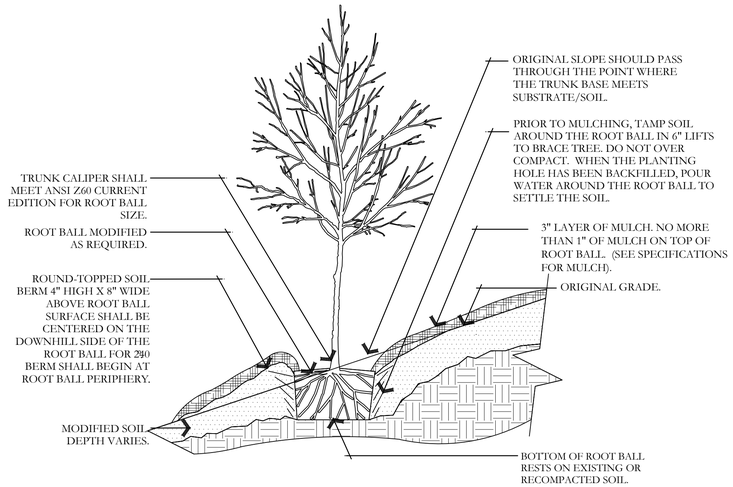
LANDSCAPE PLAN

LP-102



A DECIDUOUS TREE PLANTING
NOT TO SCALE
PKJ DESIGN GROUP



B TREE ON SLOPE 5% (20:1) TO 50% (2:1)
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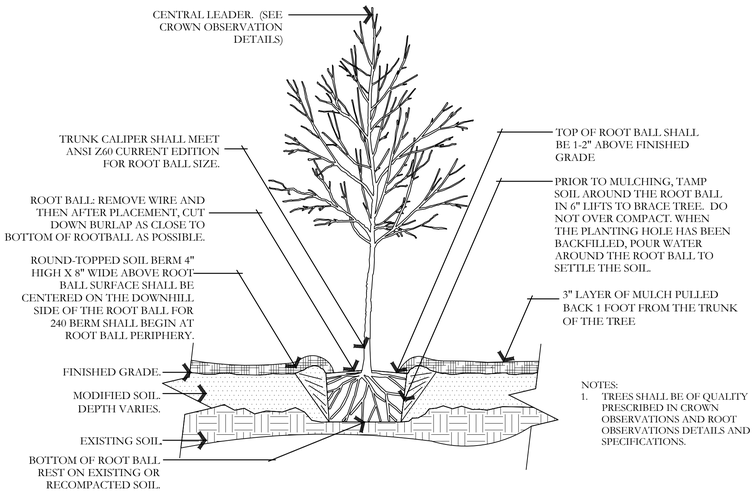

C TREE W/ BERM (EXISTING SOIL MODIFIED)
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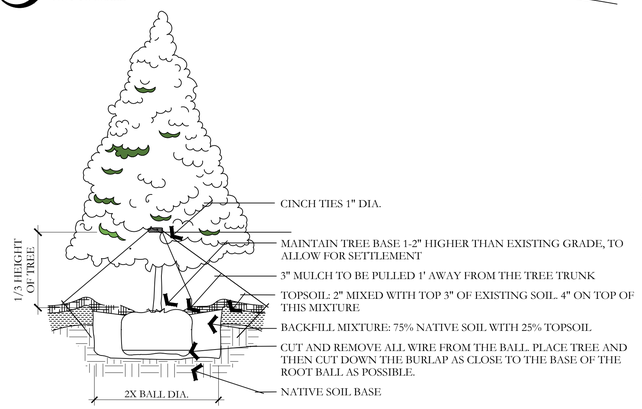

D EVERGREEN TREE PLANTING
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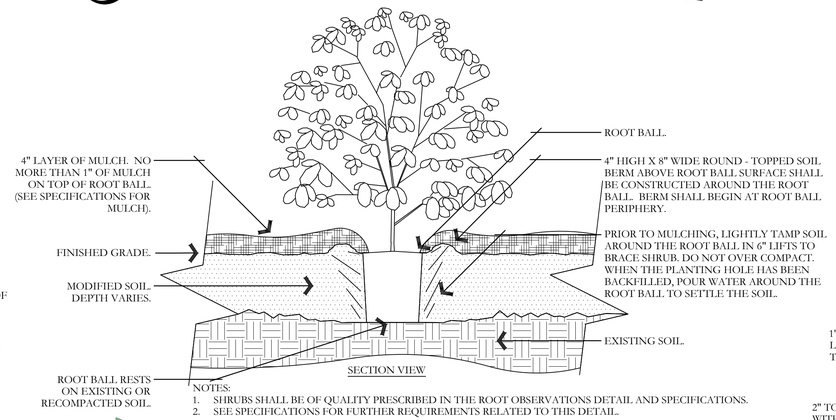

E SHRUB - MODIFIED SOIL
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F PERENNIAL PLANTING
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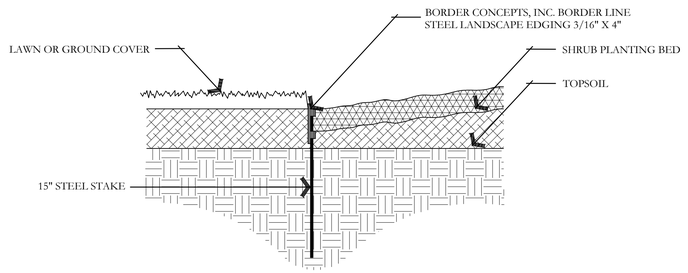
PKJ DESIGN GROUP



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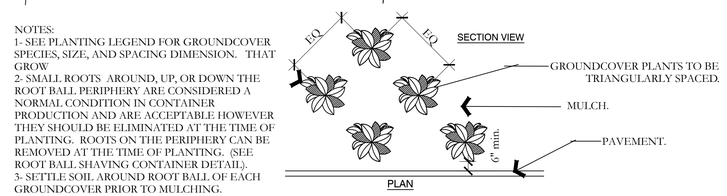

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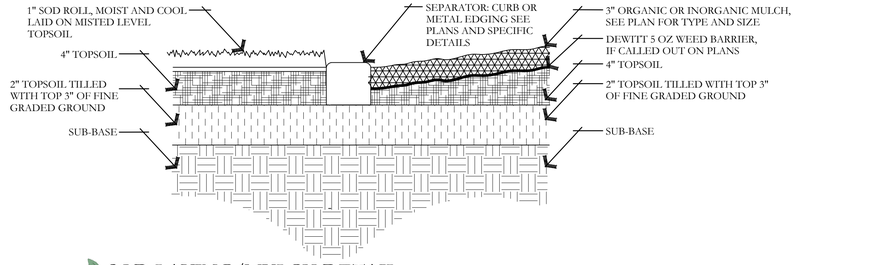

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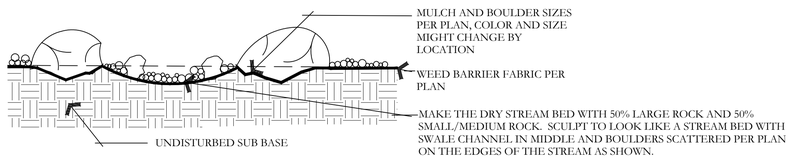

J BOULDER AND DRY STREAM BED DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
3/28/2022	UT22044

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
7		

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

PLAN INFORMATION

PROJECT INFORMATION

SENSAPURE
1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

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801-575-6455

CIR CIVIL ENGINEERING
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SALT LAKE CITY, UT 84119
801-949-6296

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8728121-5301
03/28/2022
REGISTERED
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	3/28/2022

LANDSCAPE DETAILS

LP-501

SENSAPURE

SALT LAKE CITY, UTAH

IRRIGATION PLAN SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

Work to be done includes all labor, materials, equipment and services required to complete the Project irrigation system as indicated on the Construction Drawings, and as specified herein. Includes but is not limited to: Furnishing and installing underground and above ground sprinkler system complete with any accessories necessary for proper function and operation of the system. All plant material on the Project shall be irrigated. Remove and dispose of any existing sprinkler system components which are disturbed during the construction process and are not to be saved. Restoration of any altered or damaged existing landscape to original state and condition.

1.2 SYSTEM DESCRIPTION

A. Design of irrigation components: Locations of irrigation components on Construction Drawings may be approximate. Piping, sleeving and/or other components shown on Construction drawings may be shown schematically for graphic clarity and demonstration of component groupings and separations. All irrigation components shall be placed in landscaped areas, with the exception of pope and wire in sleeving under hardscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.

B. Construction requirements: Actual placement may vary as required to achieve a minimum of 100% coverage without overspray onto hardscape, buildings or other features.

C. Layout of Irrigation Components: During layout and staking, consult with Owner Approved Representative (hereafter referred to as OAR) to verify proper placement of irrigation components, and to provide Contractor recommendations for changes where revisions may be advisable. Small or minor adjustments to system layout are permissible to avoid existing field obstructions such as utility boxes or street light poles. Contractor shall place remote control valves in groups as practical to economize on quantity of manifold isolation valves. Quick coupler valves shall be placed with manifold groups and protected by manifold isolation valves. Quick coupler valves are shown on Construction Documents in approximate locations.

1.3 DEFINITIONS

A. Water Supply: Secondary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to filter, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.

B. Point of Connection: Location where the Contractor shall tie into the water supply. May require filter, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.

C. Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.

D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, drip systems or bubblers.

1.4 REFERENCES

A. The following standards will apply to the work of this Section:

a. ASTM-American Society for Testing and Materials

b. IA - The Irrigation Association: Main BMP Document, Landscape Irrigation Scheduling and Water Management Document.

1.5 SUBMITTALS

A. At least thirty (30) days prior to ordering of any materials, the Contractor shall provide manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system. Submittals shall be in three ring binders or other similar bound form. Provide five copies of submittals to OAR for distribution. Place cover or index sheet indicating order in submittal document. No material shall be ordered, delivered or any work preceded in the field until the required submittals have need reviewed in its entirety and stamped approved. Delivered material shall match the approved samples.

B. Operation and Maintenance Manual:

a. At least thirty (30) days prior to final inspection, the Contractor shall provide Operation and Maintenance manual to OAR, containing:

i. Manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system.

ii. Parts list for each operating element of the system

iii. Manufacturer printed literature on operation and maintenance of operating elements of the system.

iv. Section listing instructions for overall system operation and maintenance. Include directions for Spring Start-up and Winterization.

b. Project Record Copy

i. Maintain at project site one copy of all project documents clearly marked "Project Record Copy". Mark any deviation in material installation on Construction drawings. Maintain and update drawing at least weekly. Project Record Copy to be available to OAR on demand.

ii. Completed Project As-Built Drawings

1. Prior to final inspection, prepare and submit to OAR accurate as-built drawings
2. Show detail and dimension changes made during installation. Show significant details and dimensions that were not shown in original Contract Documents.
3. Field dimension locations of sleeving, points of connection, main line piping, wiring runs not contained in main line pipe trenches, valves and valve boxes, quick coupler valves.
4. Dimensions are to be taken from permanent constructed surfaces, features, or finished edges located at or above finished grade.
5. Controller Map: upon completion of system, place in each controller a color coded copy of the area that controller services: indicating zone number, type of plant material and location on project that zone services. Laminate map with heat shrink clear plastic.

1.6 QUALITY ASSURANCE

A. Acceptance: Do not install work in this section prior to acceptance by OAR.

B. Regulatory Requirements: All work and materials shall be according to any and all rules, regulations or codes, whether they are State or Local laws and ordinances. Contract documents, drawings or specifications may not be construed or interpreted to permit work or materials not conforming to the above codes.

C. Adequate Water Supply: Water supply to this Project exists, installed by others. Connections to these supply lines shall be by this Contractor. Verify that proper connection is available to supply line and is of adequate size. Verify that secondary connection components may be installed if necessary. Perform static pressure test prior to commencement of work. Notify OAR in writing of problems encountered prior to proceeding.

D. Workmanship and Materials:

a. It is the intent of this specification that all material herein specified and shown on the construction documents shall be of the highest quality available and meeting the requirements specified.

b. All work shall be performed in accordance with the best standards of practice relating to the trade.

E. Contractor Qualifications:

a. Contractor shall provide document or resume including at least the following items:

i. That Contractor has been installing sprinklers on commercial projects for five previous consecutive years.

ii. Contractor is licensed to perform Landscape and Irrigation construction in the State of this Project.

iii. Contractor is bondable for the work to be performed.

iv. References of five projects of similar size and scope completed within the last five years. Three of the projects listed shall be local.

v. Listing of suppliers where materials will be obtained for use on this Project.

vi. Project site Foreman or Supervisor has at least five consecutive years of commercial irrigation installation experience. This person shall be a current Certified Irrigation Contractor in good standing as set forth by the Irrigation Association. This person shall be on Project site at least 75% of each working day.

vii. Evidence that Contractor currently employs workers in sufficient quantities to complete Project within time limits that are established by the Contract.

viii. All General laborers or workers on the Project shall be previously trained and familiar with sprinkler installation and have a minimum of one-year experience. Those workers performing tasks related to PVC pipe shall have certificates designated below.

1.7 DELIVERY-STORAGE-HANDLING

A. During delivery, installation and storage of materials for Project, all materials shall be protected from contamination, damage, vandalism, and prolonged exposure to sunlight. All material stored at Project site shall be neatly organized in a compact arrangement and storage shall not disrupt Project Owner or other trades on Project site. All material to be installed shall be handled by Contractor with care to avoid breakage or damage. Damaged materials attributed to Contractor shall be replaced with new at Contractor's expense.

1.8 SEQUENCING

A. Perform site survey, research utility records, contact utility location services. The Contractor shall familiarize himself with all hazards and utilities prior to work commencement. Install sleeving prior to installation of concrete, paving or other permanent site elements. Irrigation system Point of Connection components, backflow prevention and pressure regulation devices shall be installed and operational prior to all downstream components. All main lines shall be thoroughly flushed of all debris prior to installation of any sprinkler heads.

1.9 WARRANTY

A. Contractor shall provide one year Warranty. Warranty shall cover all materials, workmanship and labor. Warranty shall include filling and or repairing depressions or replacing turf or other plantings due to settlement of irrigation trenches or irrigation system elements. Valve boxes, sprinklers or other components settled from original finish grade shall be restored to proper grade. Irrigation system shall have been adjusted to provide proper, adequate coverage of irrigated areas.

1.10 OWNER'S INSTRUCTION

A. After system is installed, inspected, and approved, instruct Owner's Representatives in complete operation and maintenance procedures. Coordinate instruction with references to previously submitted Operation and Maintenance Manual.

1.11 MAINTENANCE

A. Furnish the following items to Owner's Representative:

a. Two quick coupler keys with hose swivels.

b. One of each type or size of quick coupler valve and remote control valve. Five percent of total quantities used of each sprinkler and sprinkler nozzle.

B. Provide the following services:

a. Winterize entire irrigation system installed under this contract. Winterize by 'blow-out' method using compressed air. Compressor shall be capable of minimum of 175 CFM. This operation shall occur at the end of first growing season after need for plant irrigation but prior to freezing. Compressor shall be capable of evacuating system of all water pressure regulation devices. Compressor shall be regulated to not more than 60 PSI. Start up system the following spring after danger of freezing has passed. Contractor shall train Owner's Representative in proper start-up and winterization procedure.

PART 2 - PRODUCTS

2.1 GENERAL NOTES

A. Contractor shall provide materials to be used on this Project. Contractor shall not remove any material purchased for this Project from the Project Site, nor mix Project materials with other Contractor owned materials. Owner retains right to purchase and provide project material.

2.2 POINT OF CONNECTION

A. The Contractor shall connect onto existing irrigation or water main line as needed for Point(s) of Connection. Contractor shall install new main line as indicated.

2.3 CONNECTION ASSEMBLY

A. Secondary water shall be used on this Project. Install filter and RPZ as needed.

2.4 CONTROL SYSTEM

A. Power supply to the irrigation controller shall be provided for by this Contract.

B. Controller shall be as specified in the drawings. Controller shall be surge protected.

a. Installation of wall-mount/ground pedestal timer controllers: Irrigation contractor shall be responsible for this task. Power configuration for wall-mount/ground pedestal timer controllers shall be 120 VAC unless otherwise noted.

b. Locate Controller(s) in general location shown on Construction drawings. Coordinate power supply and breaker allocation with electrical contractor. Contractor shall be responsible for all power connections to Controllers, whether they are wall mount or pedestal mount. Contractor shall coordinate with electrical or other Project trades as needed to facilitate installation of power to controllers.

C. Wires connecting the remote control valves to the irrigation controller are single conductors, type PE. Wire construction shall incorporate a solid copper conductor and polyethylene (PE) insulation with a minimum thickness of 0.045 inches. The wires shall be UL listed for direct burial in irrigation systems and be rated at a minimum of 30 VAC. Paige Electric Co., LP specification number P7079D.

a. A minimum of 24" of additional wire shall be left at each valve, each splice box and at each controller.

b. Common wire shall be white in color, 12 gauge. Control wire shall be red in color, 14 gauge. Spare/extra wire (3 ft.) shall be looped within each valve box of the grouping it is to service.

D. RCV wire splicing connectors shall be 3M brand DBY or DBR. Wire splicing between controller and valves shall be avoided if at all possible. Any wire splices shall be contained within a valve box. Splices within a valve box that contains no control valves shall be stamped 'WIRE SPLICE' or 'WS' on box lid.

2.5 SLEEVING

A. Contractor shall be responsible to protect existing underground utilities and components. Sleeving minimum size shall be 2". Sleeving 2" through 4" in size shall be S/40 PVC solvent weld. Sleeving 6" and larger shall be CL 200 PVC gasketed. Sleeve diameter shall be at least two times the diameter of the pipe within the sleeve. Sleeves shall be extended 6" minimum beyond walk or edge of pavement. Wire or cable shall not be installed in the same sleeve as piping, but shall be installed in separate sleeves. Sleeve ends on sleeve sizes 4" and larger shall be capped with integral corresponding sized PVC slip cap, pressure fit, until used, to prevent contamination. Sleeves shall be installed at appropriate depths for main line pipe or lateral pipe.

2.6 MAIN LINE PIPE

A. All main line pipe 4" and larger shall be Class 200 gasketed bell end. All main line pipe 3" in size and smaller shall be Schedule 40 PVC solvent weld bell end.

a. Maximum flows allowed through main line pipe shall be:

3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

b. Main line pipe shall be buried with 24" cover

2.7 MAIN LINE FITTINGS

A. All main line fittings 3" and larger shall be gasketed ductile iron material. All ductile iron fittings having change of direction shall have proper concrete thrust block installed. All main line fittings smaller than 3" in size shall be Schedule 80 PVC.

2.8 ISOLATION VALVES

A. Isolation valves 3" and larger shall be Waterous brand model 2500 cast iron gate valve, resilient wedge, push on type, with 2" square operating nut. Place sleeve of 6" or larger pipe over top of valve vertically and then extend to grade. Place 10" round valve box over sleeve at grade.

B. Isolation valves 2-1/2" and smaller shall be Apollo brand 70 series brass ball valves, contained in a Carson Standard size valve box. Valves shall be installed with S/80 PVC TOE Nipples on both sides of the valve. Valve shall be placed so that the handle is vertical toward the top of the valve box in the 'off' position.

2.9 MANIFOLDS

A. Action Manifold fittings shall be used to create unions on both sides of each control valve, allowing the valve to be removed from the box without cutting piping. Valves shall be located in boxes with ample space surrounding them to allow access for maintenance and repair. Where practical, group remote control valves in close proximity, and protect each grouping with a manifold isolation valve as shown in details. Manifold Main Line (or Sub-Main Line) and all manifold components and isolation valves shall be at least as large as the largest diameter lateral served by the respective manifold.

2.10 REMOTE CONTROL VALVES

A. Remote control valves shall be as specified on the drawings. Remote control valves shall be located separately and individually in separate control boxes.

2.11 MANUAL CONTROL VALVES

A. Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G17S212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be encased in ¾" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.

2.12 LATERAL LINE PIPE

A. All lateral piping shall be Schedule 40 PVC, solvent weld, and bell end. Lateral pipe shall be buried with 12-18" of cover typically. Lateral pipe shall be ¾", 1", 1 ¼", 1 ½" or 2" in size as indicated on Construction Drawings.

2.13 LATERAL LINE FITTINGS

A. All lateral line fittings shall be S/40 PVC

2.14 Spray Sprinklers

A. Spray head sprinklers shall be as specified on the drawings. Nozzles shall be as specified on the drawings.

2.15 VALVE BOXES

A. Rainbird valve boxes shall be used on this project. Sizes are as directed in these Specifications, detail sheets or plan sheets. Valve boxes shall be centered over the control valve or element they cover. Valve box shall be sized large enough to allow ample room for services access, removal or replacement of valve or element. Valve box shall be set to flush to finish grade of topsoil or barked areas. Contractor shall provide extensions or stack additional valve boxes as necessary to bring valve box pit to proper grade.

2.16 IMPORT BACKFILL

A. All main line pipe, lateral line pipe and other irrigation elements shall be bedded and backfilled with clean soil, free of rocks 1" and larger. Contractor shall furnish and install additional backfill material as necessary due to rocky conditions. Trenches and other elements shall be compacted and/or water settled to eliminate settling. Debris from trenching operations un-usable for fill shall be removed from project and disposed of properly by Contractor.

2.17 OTHER PRODUCTS

A. Substitution of equivalent products is subject to the OAR's approval and must be designated as accepted in writing.

a. The Contractor shall provide materials to make the system complete and operational.

PART 3 - EXECUTION

3.1 PREPARATION

A. Contractor shall repair or replace work damaged by irrigation system installation. If damaged work is new, repair or replacement shall be performed by the original installer of that work. The existing landscape of this Project shall remain in place. Contractor shall protect and work around existing plant material. Coordination of trench and valve locations shall be laid out for the OAR prior to any excavation occurring. Plant material deemed damaged by the OAR shall be replaced with new plant material at Contractor's expense. Contractor shall not cut existing tree roots larger than 2" to install this Project. Route pipe, wire and irrigation elements around tree canopy drip line to minimize damage to tree roots. Contractor shall have no part of existing system used by other portions of site landscape without water for more than 24 hours at a time.

3.2 TRENCHING AND BACKFILLING

A. Pulling of pipe shall not be permitted on this project. Over excavate trenches both in width and depth. Ensure base of trench is rock or debris free to protect pipe and wire. Grade trench base to ensure flat, even support of piping. Backfill with clean soil or import material. Contractor shall backfill no less than 2" around entire pipe with clean, rock free fill. Main line piping and fittings shall not be backfilled until OAR has inspected and pipe has passed pressure testing. Perform balance of backfill operation to eliminate any settling.

3.3 SLEEVING

A. Sleeve all piping and wiring that pass under paving or hardscape features. Wiring shall be placed in separate sleeving from piping. Sleeves shall be positioned relative to structures or obstructions to allow for pipe or wire within to be removed if necessary.

3.4 GRADES AND DRAINAGE

A. Place irrigation pipe and other elements at uniform grades. Winterization shall be by evacuation with compressed air. Automatic drains shall not be installed on this Project. Manual drains shall only be installed at POC where designated on Construction Drawings.

3.5 PVC PIPE

A. Install pipe to allow for expansion and contraction as recommended by pipe manufacturer.

B. Install main line pipes with 18" of cover, lateral line pipes with 12" of cover.

C. Drawings show diagrammatic or conceptual location of piping - Contractor shall install piping to minimize change of direction, avoid placement under large trees or large shrubs, avoid placement under hardscape features.

D. Plastic pipe shall be cut squarely. Burrs shall be removed. Spigot ends of pipes 3" and larger shall be beveled.

E. Pipe shall not be glued unless ambient temperature is at least 50 degress F. Pipe shall not be glued in rainy conditions unless properly tented. All solvent weld joints shall be assembled using IPS 711 glue and P70 primer according to manufacturer's specification, no exceptions. All workers performing glue operations shall provide evidence of certification. Glued main line pipe shall cure a minimum of 24 hours prior to being energized. Lateral lines shall cure a minimum of 2 hours prior to being energized and shall not remain under constant pressure unless cured for 24 hours.

F. Appropriate thrust blocking shall be performed on fittings 3" and larger. All threaded joints shall be wrapped with Teflon tape or paste unless directed by product manufacturer or sealing by o-ring.

3.6 CONTROLLERS

A. All grounding for pedestal controllers shall be as directed by controller manufacturer and ASIC guidelines, not to exceed a resistance reading of 5 OHMs.

B. Locate controllers in protected, inconspicuous places, when possible. Coordinate location of pedestal controllers with Landscape Architect to minimize visibility.

C. Coordinate location of wall mount controllers with building or electrical Contractor to facilitate electrical service and future maintenance needs. Wall mount shall be securely fastened to surface. If exterior mounted, wall mount controllers shall have electrical service wire and field control wire in separate, appropriate sized weatherproof electrical conduit, PVC pipe shall not be used.

D. Wiring under hardscape surfaces shall be placed continuously in conduit. Contractor shall be responsible to coordinate sleeving needs for conduit or sweeps elbows from exterior to interior of building.

E. Pedestal controllers shall be placed upon VIT-Strong Box Quick Pad as per manufacturer's recommendations. Controllers shall be oriented such that Owner's Representative maintenance personnel may access easily and perform field system tests efficiently.

F. Place Standard valve box at base of controller or nearby to allow for three to five feet of slack field control wire to be placed at each controller. This Contractor shall provide conduit access if needed for Electneal Contractor. Electrical supply and installation, as well as hook-up to controller shall be by this Contractor.

3.7 VALVES

A. Isolation valves, remote control valves, and quick coupler valves shall be installed according to manufacturer recommendation and Contract Specifications and Details.

B. Valve boxes shall be set over valves so that all parts of the valve can be reached for service.

C. Valve box and lid shall be set to be flush with finished grade. Only one remote control valve may be installed in a valve box. Place a minimum of 4" of ¾" washed gravel beneath valve box for drainage. Bottom of remote control valve shall be a minimum of 2" above gravel.

3.8 SPRINKLER HEADS

A. No sprinkler shall be located closer than 6" to walls, fences, or buildings.

B. Heads adjacent to walks, curbs, or paths shall be located at grade and 2" away from hardscape.

C. Control valves shall be opened. Then fully flush lateral line pipe and swing joints prior to installation of sprinklers.

D. Spray heads shall be installed and flushed again prior to installation of nozzles.

E. Contractor shall be responsible for adjustment if necessary due to grade changes during landscape construction.

3.9 FIELD QUALITY CONTROL

A. Main line pipes shall not be backfilled or accepted until the system has been tested for 2 hours at 100 psi.

B. Main line pressure test shall include all pipe and components from the point of connection to the upstream side of remote control valves. Test shall include all manifold components under constant pressure. Piping may be tested in sections that can be isolated.

C. Contractor shall provide pressurized water pump to increase or boost pressure where existing static pressure is less than 100 psi.

D. Schedule testing with OAR 48 hours in advance for approval.

E. Leaks or defects shall promptly be repaired or rectified at the Contractors expense and retested until able to pass testing.

F. Grounding resistance at pedestal controller shall also be tested and shall not exceed 5 OHMs.

3.10 ADJUSTMENT

A. Sprinkler heads shall be adjusted to proper height when installed. Changes in grade or adjustment of head height after installation shall be considered a part of the original contract and at Contractor's expense.

B. Adjust all sprinkler heads for arc, radius, proper trim and distribution to cover all landscaped areas that are to be irrigated.

C. Adjust sprinklers so they do not water buildings, structures, or other hardscape features.

D. Adjust run times of station to meet needs of plant material the station services.

3.11 CLEANING

A. Contractor shall be responsible for cleanliness of jobsite. Work areas shall be swept cleanly and picked up daily.

B. Open trenches or hazards shall be protected with yellow caution tape.

C. Contractor is responsible for removal and disposal of offsite trash and debris generated as a result of this Project.

D. OAR shall perform periodic as well as a final cleanliness inspection.

E. Contractor shall leave Project in at least a 'broom clean' condition.

END OF SECTION

90 Day Establishment Period Irrigation Schedule (April, May, June)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min	15 min	15 min	15 min	15 min	15 min	30 psi
Shrubs	Shrubs	25 min	0	25 min	0	25 min	0	25 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

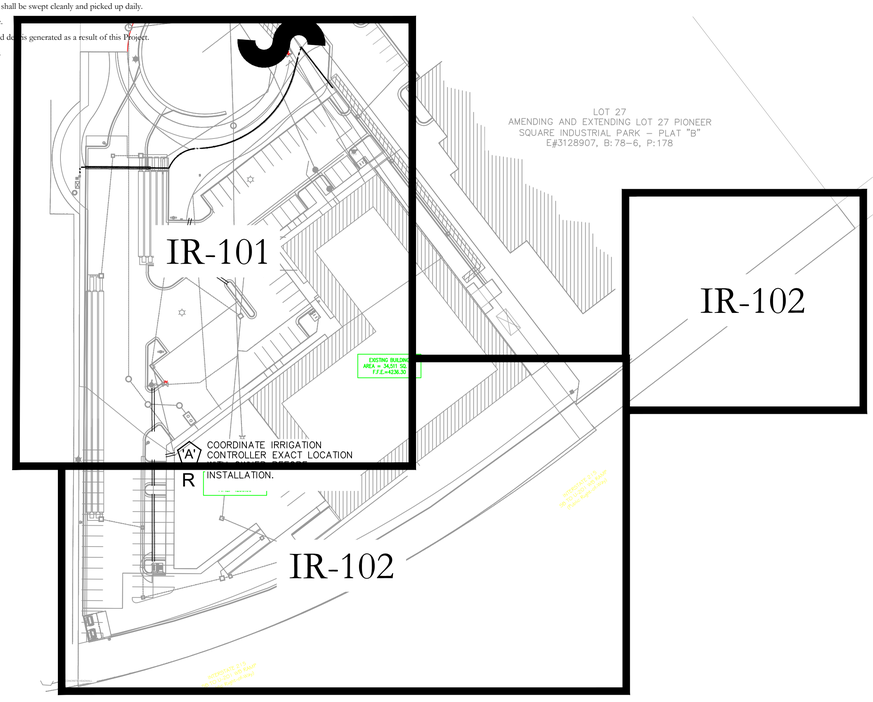
Regular Irrigation Schedule (see Seasonal Differential Chart)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min		15 min		15 min		30 psi
Shrubs	Shrubs	45 min		45 min		45 min		45 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Seasonal Differential

	April	May	June	July	August	Sept.	October
Turf	10 min	10 min	15 min	15 min	15 min	10 min	10 min
Shrubs	30 min	30 min	45 min	45 min	45 min	30 min	30 min



2" MAINLINE ROUTING ,CONTROLLER AND P.O.C. LOCATION OVERVIEW

ISSUE DATE	PROJECT NUMBER
3/28/2022	UT22044

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 30' 60' 120' 240'

GRAPHIC SCALE: 1" = 60'

PROJECT INFORMATION

SENSAPURE
1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AE URBIA
909 W. SOUTH JORDAN PARKWAY
SOUTH JORDAN, UT 84095
801-575-6455

CIR CIVIL ENGINEERING
3032 SOUTH 1030 WEST, SUITE 202
SALT LAKE CITY, UT 84119
801-949-6296

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

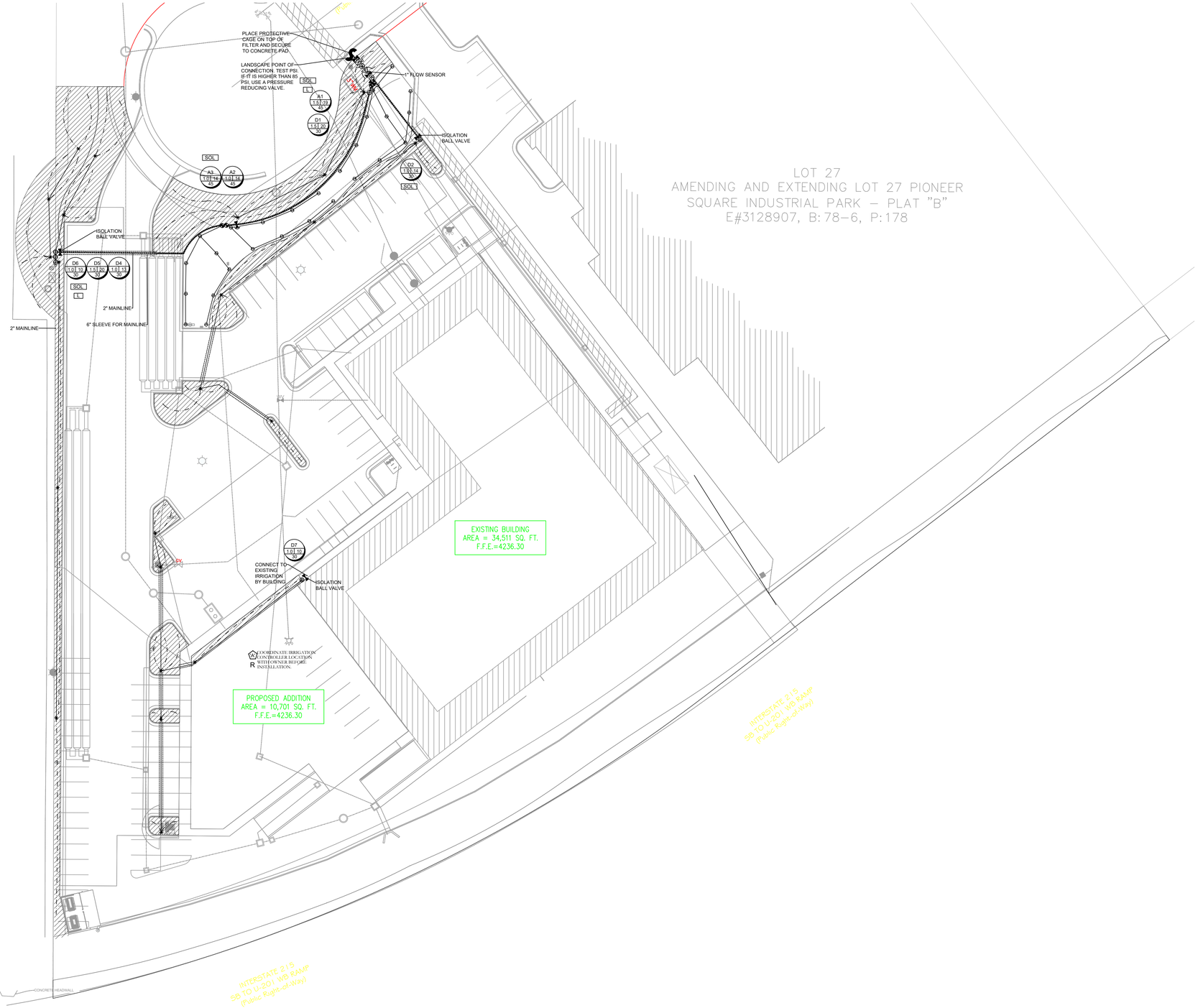
LICENSED LANDSCAPE ARCHITECT
KEVIN AINSWORTH
8128121-5301
03/28/2022
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	3/28/2022

IRRIGATION PLAN COVER

IR-100



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0' 15' 30' 60' 120'

GRAPHIC SCALE: 1" = 30'

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SALT LAKE CITY, UTAH

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JEREMY AINSWORTH
8128121-5301
03/08/2022
ELECTRONIC SEAL
STATE OF UTAH

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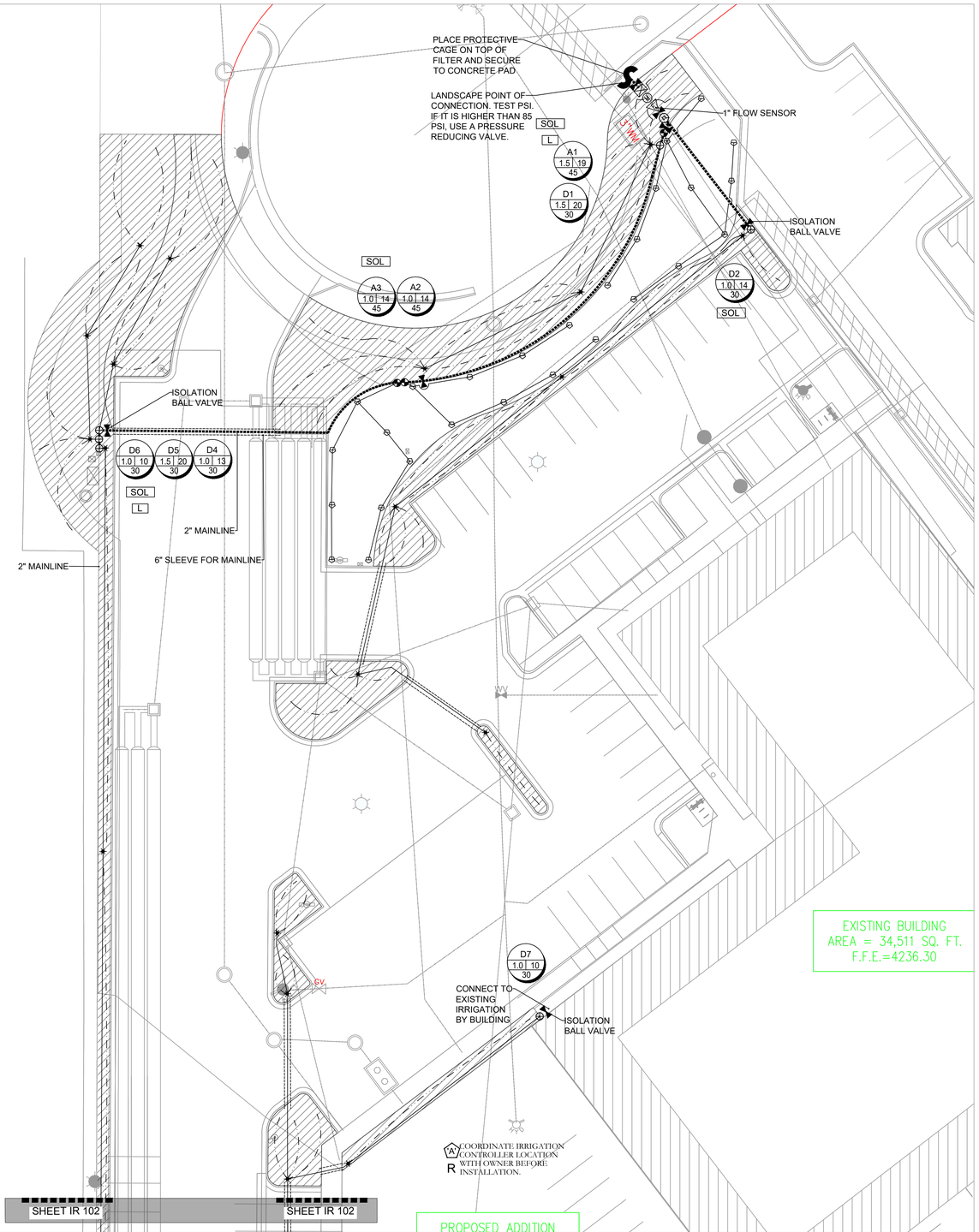
CHECKED:	JMA
PLOT DATE:	3/28/2022

IRRIGATION PLAN OVERALL

IR-O



IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST @ 30 PSI
	RAINBIRD 5004+PCR SERIES W/ MPR NOZZLES @ 45 PSI
	RAINBIRD 8005 SERIES Q#8-6.6 GPM, H#14-12.6 GPM, F#26-24.3 GPM NOZZLES
S	POINT OF CONNECTION (SECONDARY WATER) SEE PLAN FOR SIZE TEST PSI PRESSURE. IF HIGHER THAN 85 PSI USE A PRESSURE REDUCING VALVE.
A	CONTROLLER:RAINBIRD ESP-LXIVM, WITH COMMUNICATION CARTRIDGE (4G/ETHERNET), CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION.
R	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE
	ISOLATION BALL VALVE - LINE SIZED INSTALL PER MANUFACTURER'S SPEC.
	2" T SUPER AMIAD PLASTIC FILTER W/ BRUSHAWAY ASSEMBLY - INSTALL PER MANUFACTURE'S. RECOMMENDATIONS (130 MICRON)
M	MASTER VALVE
F	FLOW SENSOR-SIZE FLOW SENSOR ACCORDING TO MINIMUM GPM ZONE ON SYSTEM TO MAKE SURE THAT THE FLOW SENSOR IS CAPTURING FLOW. (USE SIZING CHARTS)
R	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC.
SOL	SMART VALVE IVMSOL INSTALL PER MANUFACTURER'S SPEC.
L	LIGHTNING ARRESTER INSTALL PER MANUFACTURER'S SPEC. (EVERY 500 FT., OR 15 IVM DEVICES MAXIMUM.)
	REMOTE CONTROL VALVE: RAINBIRD IVMSOL AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN- USE RAINBIRD JUMBO BOX-PURPLE LID) PLACE YELLOW TAGS ON ALL VALVES AND LABEL.
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ100IVM- FLOW INDICATING BASKET FILTER-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)
	MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 2" DIAMETER 24" MIN. COVER
	LATERAL LINE: SCHEDULE 40 PVC WITH SCH. 40 FITTINGS. SEE PIPE SIZING CHART
	DRIP CONNECTION. PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS,AND PERENNIALS IN PLANTER AREAS
	DRIP LINE: RAINBIRD XFS-CV-09-18 OR EQUIVALENT
	CLASS 200 SLEEVE PER PLAN
NO SYMBOL	WIRE CHASE, SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN. 1.1/4" DIAMETER MINIMUM 14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM. ONLY WIRE FROM POC TO CONTROLLER IS DEPICTED ON PLANS. CONTRACTOR TO INSTALL WIRE IN CONDUIT (BLACK 3/4" POLY PIPE) IN MAINLINE TRECNCH FROM POC TO ALL VALVES. THE WIRE TO VALVES IS NOT SHOWN ON PLAN

DRIP ZONE

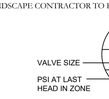
TYPE	PART NUMBER	EMITTER FLOW	SPACING	MAX. LATERAL LENGTH
XF SERIES	XFS-09-18	.9 GPH	18"	400 FT
WITH COPPER SHIELD				
TOTAL DRIP ZONE FLOW	20 GPM	*EACH ZONE NOT TO EXCEED 20 GPM		
NUMBER OF FLUSH POINTS	2	DRIP ZONE TO APPLY 1/4" OF WATER		
*ONLY WATER PLANT SPECIFICALLY. DO NOT WATER ROCK AREA WITH NO PLANTS				
*NUMBERS MAY CHANGE DUE TO SIZE OF DRIP ZONE PER PLAN.				

IRRIGATION NOTES

1. BEFORE WORK IS TO COMMENCE, BLUE STAKES/DIG LINE IS TO BE CALLED AND NOTIFIED. IF ANY DAMAGE TO UTILITIES HAPPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR IT AT THEIR EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS IN ACCORDANCE WITH CITY AND/OR COUNTY CODES AND COMPLY WITH SPECIFICATIONS AND DRAWINGS.
3. INVESTIGATE TO MAKE SURE THAT THE IRRIGATION SYSTEM IS, IN FACT, BEING CONNECTED TO A SECONDARY SYSTEM. IF IT IS NOT CONNECTED TO SECONDARY, CONTACT THE OWNER AND LANDSCAPE ARCHITECT TO COORDINATE A CULINARY SYSTEM AND REQUIRED COMPONENTS. A FUNCTIONING AMIAD FILTER IS TO BE USED AT THE POINT OF CONNECTION.
4. VERIFY THAT THE POINT OF CONNECTION IS IN THE CORRECT LOCATION BEFORE INSTALLATION. ALL CONNECTIONS ON THIS PROJECT ARE TO SECONDARY WATER AND SHOULD BE NOTED AS SUCH; THEREFORE, ALL PARTS MUST MEET WATER STANDARDS THAT PERTAIN TO SECONDARY WATER.USE PURPLE VALVE BOXES FOR SECONDARY WATER SYSTEMS.
5. ON OCCASION AND FOR GRAPHIC PURPOSES ONLY, THE IRRIGATION SYSTEM MIGHT BE SHOWN IN HARDSCAPE AREAS. THIS IRRIGATION IS TO BE PLACED IN LANDSCAPED AREAS ON THE PROPERTY SITE.
6. CONTRACTOR SHALL USE ONLY COMMERCIAL GRADE IRRIGATION PRODUCTS. THIS INCLUDES PIPE TO BE SCHEDULE 40 PVC OR BETTER. NO POLY PIPE IS TO BE USED. FITTINGS UP TO 1-1/2" MUST BE SCHEDULE 40 OR BETTER. FITTINGS LARGER THAN 1-1/2" SHALL BE SCHEDULE 80 OR BETTER. CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION.
7. MAIN LINES SHALL BE A MINIMUM OF 24" DEEP AND LATERAL LINES A MINIMUM OF 12" DEEP. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
8. NO IRRIGATION MAIN LINE MAY BE LOCATED WITHIN 5 FEET OF ANY STRUCTURE.
9. TO AVOID PIPE DAMAGE, ADJUST LOCATION OF PIPE TO NOT BE DIRECTLY UNDER PLANT MATERIALS. VALVE BOXES ARE PREFERRED TO BE IN PLANTER BEDS INSTEAD OF THE LAWN.
10. PLAN INDICATES 100% OR BETTER HEAD TO HEAD COVERAGE. SHOULD CONTRACTOR FIND DISCREPANCIES DUE TO NECESSARY FIELD ADJUSTMENTS, CONTACT LANDSCAPE ARCHITECT FOR IRRIGATION CORRECTION.
11. DRIP IRRIGATION TO BE INSTALLED PER DETAILS. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS. TUBING SHOULD REST TOWARD OUTER EDGE OF ROOTBALL AND NOT AGAINST TRUNK OF PLANT.
12. A QUICK COUPLER SHALL BE INSTALLED AT POINT OF CONNECTION TO ALLOW BLOW OUT OF SYSTEM BY AIR COMPRESSOR AT END OF EACH SEASON.
13. INSTALL SLEEVES FOR ALL PIPES AND WIRE CONDUIT THAT ARE PLACED UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE BEING PLACED INTERNALLY. WIRE CONDUIT SHALL BE INSTALLED IN CLASS 200 PIPE. AT ANY DIRECTIONAL CHANGE THAT OCCURS, A JUNCTION BOX IS TO PLACED.
14. CONDUITS CAN NOT BE SHARED BY WATER AND ELECTRICAL LINES. ALL WIRE TO BE PUT IN PVC CONDUIT. ALL WIRE CONNECTIONS TO BE PLACED IN A VALVE BOX. ALL WIRE CONNECTIONS TO USE WATERPROOF WIRE CONNECTORS WITH AT LEAST 3' OF EXTRA WIRE. PROVIDE PLENTY OF EXTRA WIRE AT EVERY DIRECTIONAL CHANGE. INSULATED 14 GAUGE COPPER TO BE USED FOR ALL CONTROL WIRES AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
15. CONTRACTOR TO INSTALL LIGHTNING ARRESTOR AND GROUNDING RODS ON SITE PER MANUFACTURER'S RECOMMENDATIONS, SEE DETAILS.
16. CONTRACTOR TO SEPARATE SYSTEM (CONTROLLER, VALVES, AND DIFFERENT COLORED WIRE) FROM CITY MAINTAINED PROPERTY AND HOA/OWNER MAINTAINED PROPERTY.
17. DUCT TAPE ALL SLEEVES TO PREVENT SOIL OR OTHER DEBRIS ENTERING PIPE. IDENTIFY ALL SLEEVES BY WOOD OR PVC STAKES AND SPRAY PAINT WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
18. TO PREVENT EROSION AND LOW POINT DRAINAGE CONTRACTOR SHALL INSTALL CHECK VALVES
19. LOCATE SPRAY HEADS NO CLOSER THAN 6" FROM WALLS, FENCES OR BUILDINGS AND 2" AWAY FROM WALKS, PATHS OR CURBS.
20. PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING. CONTACT LANDSCAPE ARCHITECT/OWNER AT THIS TIME FOR COMPLIANCE.
21. CONTRACTOR TO CONSULT WITH OWNER ON EXACT LOCATION OF CONTROLLER. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR AND OWNER FOR THE POWER SUPPLY. INSTALL ALL PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL INSTALL A RAIN SENSOR WITH THE CONTROLLER UNLESS OTHERWISE DIRECTED BY OWNER OR LANDSCAPE ARCHITECT.
22. LATERAL LINES SHALL BE NO SMALLER THAN 3/4". LANDSCAPE CONTRACTOR TO ENSURE THE FOLLOWING PIPE SIZES DO NOT EXCEED THE SUGGESTED GPM LISTED BELOW:

3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

VALVE ID TAG



NOTE:
1. VALVE ID TAGS ARE LOCATED NEAR VALVES IN THE ORDER THE VALVES APPEAR ON THE DRAWING

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811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

SENSAPURE
1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AE URBIA
909 W. SOUTH JORDAN PARKWAY
SOUTH JORDAN, UT 84095
801-575-6455

CIR CIVIL ENGINEERING
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SALT LAKE CITY, UT 84119
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LANDSCAPE ARCHITECT / PLANNER

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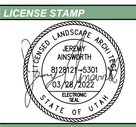
LICENSE STAMP

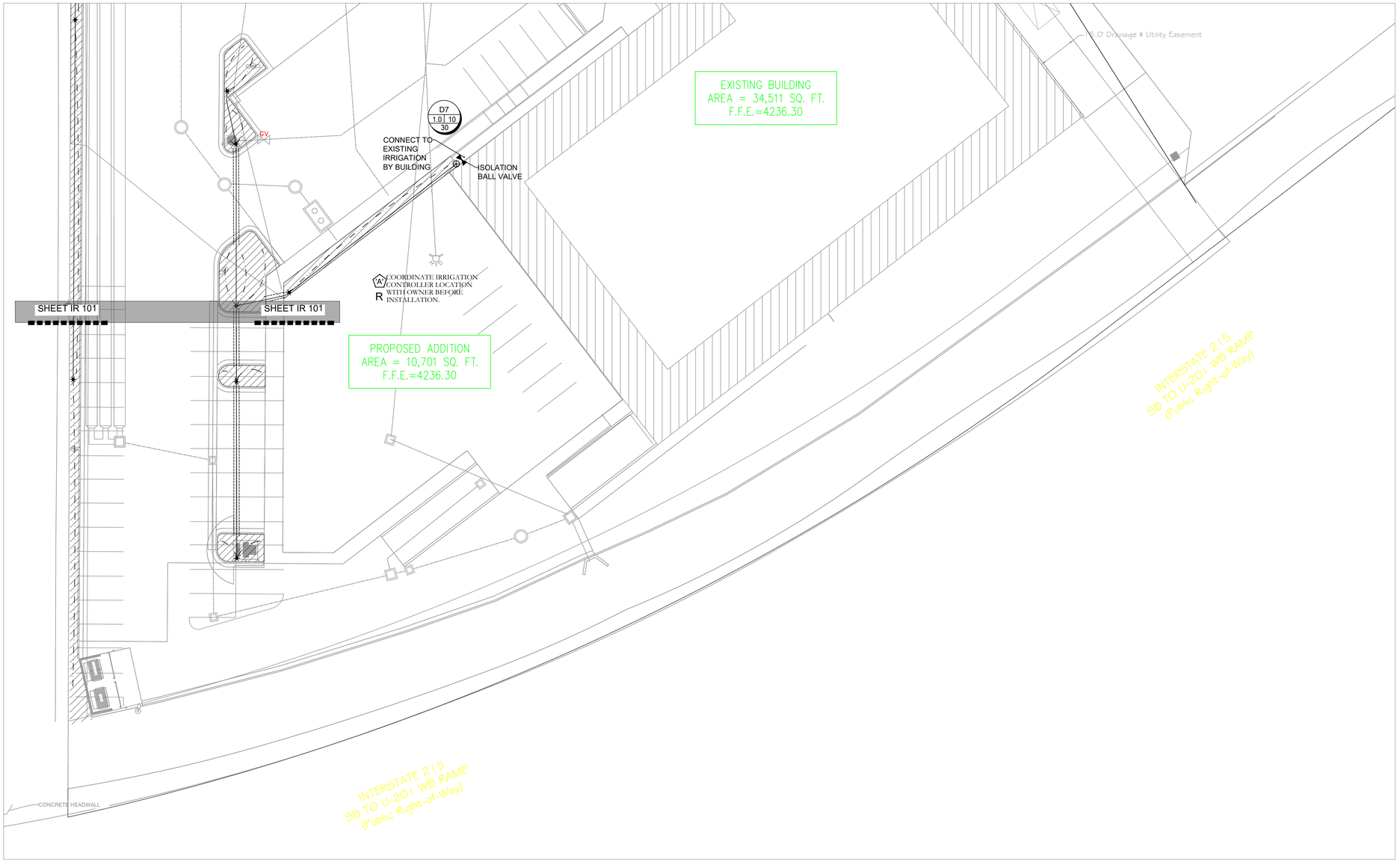


DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 3/28/2022

IRRIGATION PLAN

IR-101



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LICENSED LANDSCAPE ARCHITECT
JEREMY ANDREW AINSWORTH
812121-5301
03/28/2022
ELECTRONIC SEAL
STATE OF UTAH

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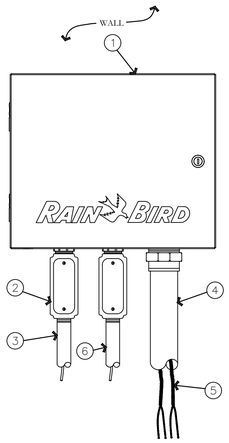
IRRIGATION PLAN

IR-102



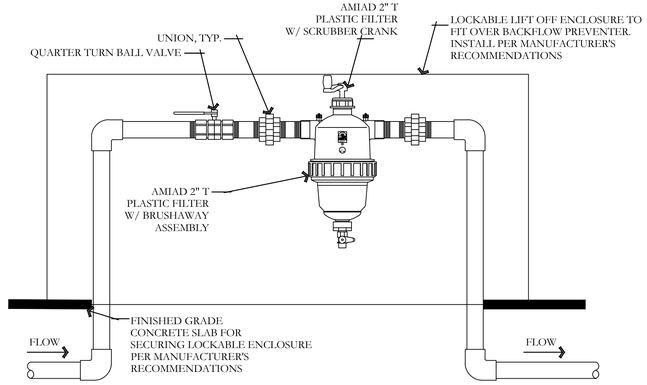
1. TWO-WIRE CONTROLLER: RAIN BIRD ESP-LXIVM/PRO IN LXMM METAL CABINET WITH OUTSIDE WALL MOUNT. INSTALL CONTROLLER AND CABINET ON WALL PER MANUFACTURER'S RECOMMENDATIONS.
2. JUNCTION BOX
3. 1-INCH CONDUIT AND FITTINGS FOR POWER SUPPLY WIRE
4. 2-INCH CONDUIT AND FITTINGS FOR TWO-WIRE CABLE
5. MAXICABLE TWO-WIRE PATH TO FIELD DEVICES, USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH.
6. 1-INCH CONDUIT AND FITTINGS FOR GROUND WIRE. ONLY FOR OUTDOOR INSTALLATIONS.

NOTES:
1. ESP-LXIVM CONTROLLER IS AVAILABLE IN TWO MODELS. THE LXIVM WITH 60 STATIONS AND THE LMIVM-PRO WITH 240 STATIONS. REFER TO THE CHART BELOW FOR DIFFERENCES BETWEEN THE TWO MODELS.
2. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS. IF CONTROLLER IS MOUNTED INDOORS, USE POWER SUPPLY GROUND.

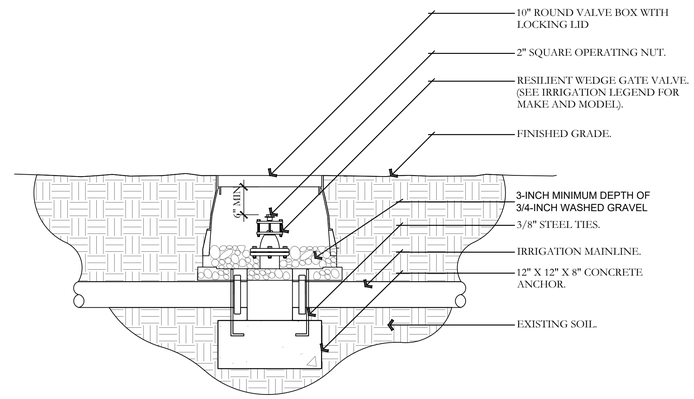
KEY SPECIFICATIONS

FEATURE / MODEL	MAX PROGRAMS	STATIONS	MAX SIMULSTATIONS	MASTER VALVES	FLOW SENSORS	WEATHER SENSORS
LX-IVM	10	60	8	5	5	4
LX-IVM PRO	40	240	16	10	10	8

A ESP-LXIVM/PRO TWO-WIRE CONTROLLER IN METAL CABINET
NOT TO SCALE — PKJ DESIGN GROUP

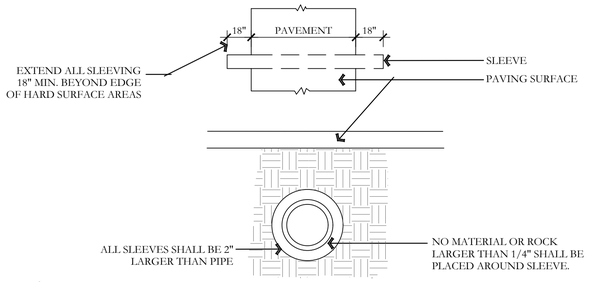


B 2" PLASTIC FILTER W/ BRUSHAWAY ASSEMBLY
NOT TO SCALE — PKJ DESIGN GROUP

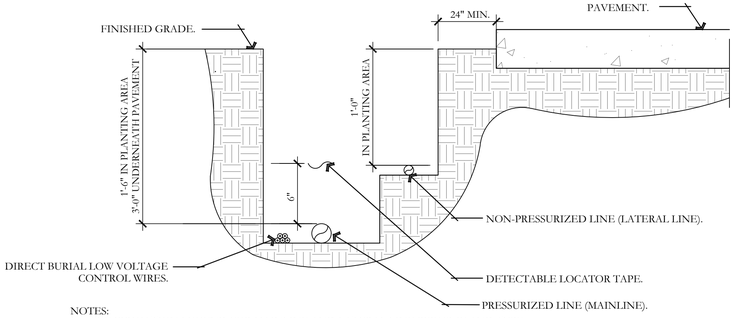


NOTES:
1. INSTALL GATE VALVE PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
2. VALVE BOX SHALL BE WRAPPED WITH MINIMUM 3 MIL. THICK PLASTIC AND SECURE IT TO VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. VALVE BOX SHALL BE LOCATED IN PLANTING AREA.

C GATE VALVE AND ANCHOR DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

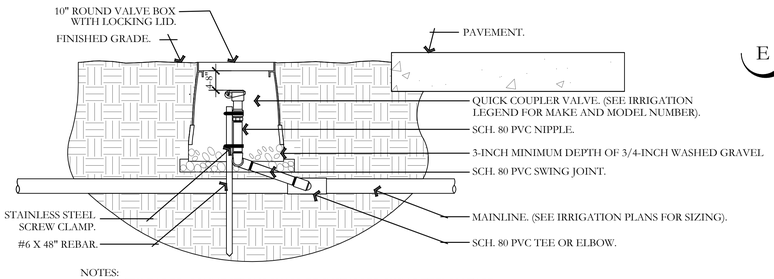


D TYPICAL SLEEVING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



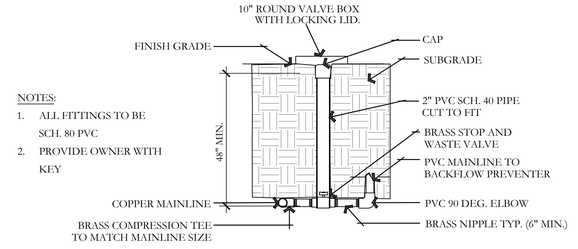
NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

E IRRIGATION TRENCHING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



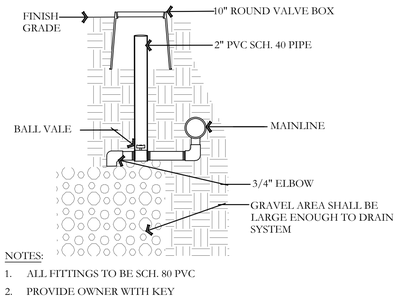
NOTES:
1. ALL THREADED CONNECTIONS SHALL BE INSTALLED USING TEFLON TAPE.
2. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. ALL QUICK COUPLERS SHALL BE INSTALLED A MINIMUM OF 18" OFF OF THE MAINLINE.
4. VALVE BOXES SHALL BE LOCATED IN PLANTING AREAS.

G QUICK COUPLER DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

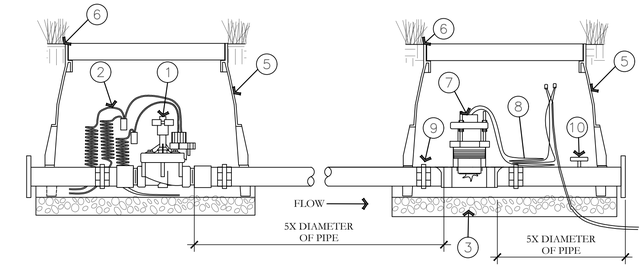
H STOP AND WASTE VALVE ASSEMBLY DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

F MANUAL DRAIN DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

1. NORMALLY CLOSED MASTER VALVE(S)
2. 36-INCH LENGTH OF COILED WIRE TO SATELLITE CONTROLLER SPARE STATION
3. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
5. VALVE BOX WITH COVER - RAINBIRD JUMBO BOX
6. FINISH GRADE
7. RAIN BIRD FS SERIES FLOW SENSOR(S). SEE COVER SHEET FOR SIZE
8. 36-INCH LENGTH OF COILED MAXI-CABLE TO FLOW SENSING
9. PVC PIPE UNION
10. BRASS BALL VALVE



I MASTER VALVE AND FLOW SENSOR DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

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811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

PROJECT INFORMATION

SENSAPURE
1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AE URBIA
909 W. SOUTH JORDAN PARKWAY
SOUTH JORDAN, UT 84095
801-575-6455

CIR CIVIL ENGINEERING
3032 SOUTH 1030 WEST, SUITE 202
SALT LAKE CITY, UT 84119
801-949-6296

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

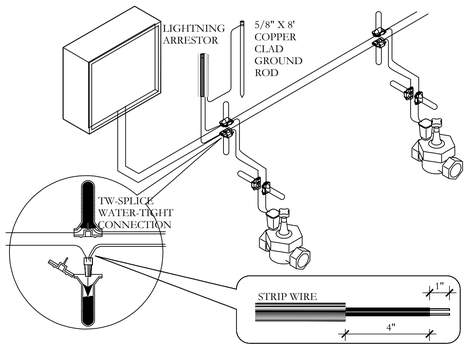
LICENSE STAMP
LICENSED LANDSCAPE ARCHITECT — KEVIN AINSWORTH — 8128121-5301 — 03/28/2022 — ELECTRONIC SEAL — STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	3/28/2022

IRRIGATION DETAILS

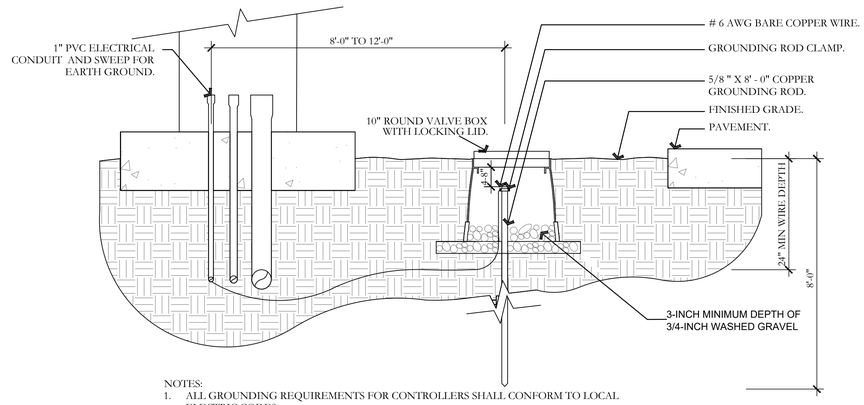
IR-501



J 2-WIRE CONNECTION DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



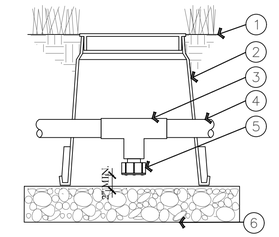
NOTES:

1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS THE IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
4. INSTALL GROUNDING ROD PER THE CONTROLLER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

K GROUNDING ROD DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

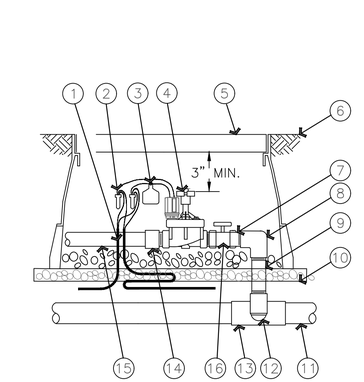


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-6RND
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE: RAIN BIRD 16A-FDV-075
6. 6-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL

L MANUAL LINE DRAIN VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

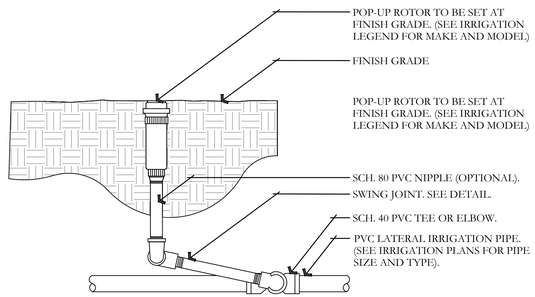


1. 36-INCH LENGTH OF 2-WIRE CABLE
2. WATERPROOF CONNECTION RAIN BIRD WC20 (TWO REQUIRED)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PEB/PESB/PESB-R WITH IVM-SOL
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL `
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
11. PVC MAINLINE PIPE SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
12. PVC SCH 40 TEE OR ELL
13. PVC SCH 40 MALE ADAPTER
14. PVC LATERAL PIPE
15. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
16. BRASS BALL VALVE

M ELECTRIC REMOTE-CONTROL VALVE PEB OR PESB SERIES WITH IVM-SOL

NOT TO SCALE

PKJ DESIGN GROUP



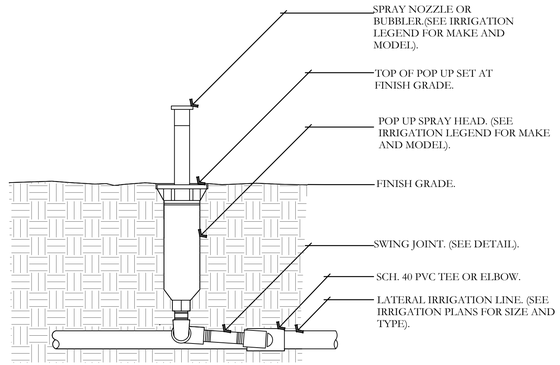
NOTES:

1. ALL THREADED CONNECTION POINTS BETWEEN SCH. 40 PVC AND SCH. 80 PVC FITTING SHALL BE INSTALLED USING TEFLON TAPE.
2. CONTRACTOR SHALL COMPACT SOIL AROUND ROTOR AND RISER PRIOR TO PLANTING, PLUGGING, SEEDING, OR LAYING OF SOD.

N ROTOR HEAD DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



NOTE:

1. 6" POP UPS SHALL BE USED IN TURF AREAS.
2. CONTRACTOR SHALL SETTLE SOIL AROUND THE POP UP AFTER INSTALLATION.
3. ALL POP UP SPRAY HEADS SHALL HAVE CHECK VALVES.
4. ALL SCH. 40 PVC TO SCH. 80 PVC CONNECTIONS SHALL BE MADE USING TEFLON TAPE.

O POP UP-SPRAY HEAD DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
3/28/2022	UT22044

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
7		

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

PLAN INFORMATION

PROJECT INFORMATION

SENSAPURE
1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AE URBIA
909 W. SOUTH JORDAN PARKWAY
SOUTH JORDAN, UT 84095
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CIR CIVIL ENGINEERING
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SALT LAKE CITY, UT 84119
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LANDSCAPE ARCHITECT / PLANNER

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3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

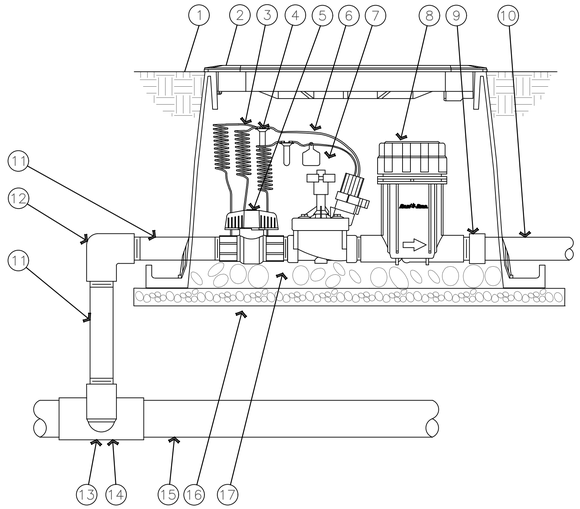
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
812812 - 5301
03/08/2022
ELECTRONIC SIGNATURE
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	3/28/2022

IRRIGATION DETAILS

IR-502

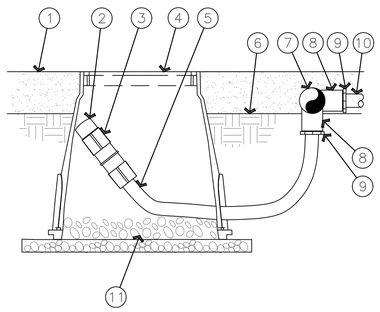


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT)
6. ID TAG
7. REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUCED IN XCZ-PRB-100-COM KIT)
8. PRESSURE REGULATING AND FLOW INDICATING BASKET FILTER: RAIN BIRD XCZ-100-FLOW
9. PVC SCH 40 FEMALE ADAPTOR
10. LATERAL PIPE
11. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
12. PVC SCH 40 ELL
13. PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
14. PVC SCH 40 TEE OR ELL
15. MAINLINE PIPE
16. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
17. PVC SCH 80 NIPPLE, CLOSE (INCLUDED IN XCZ-PRB-100-COM KIT)

P DRIP CONTROL ZONE KIT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



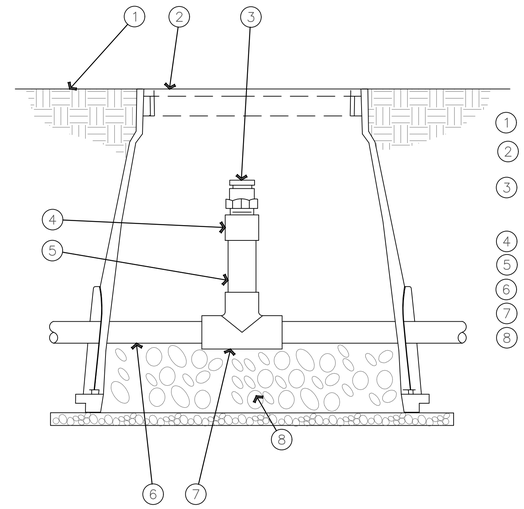
1. MULCH
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
10. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
11. 3-INCH MINIMUM DEPTH OF 3/4 " WASHED GRAVEL

NOTE:
1. ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

Q ON-SURFACE DRIPLINE FLUSH POINT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

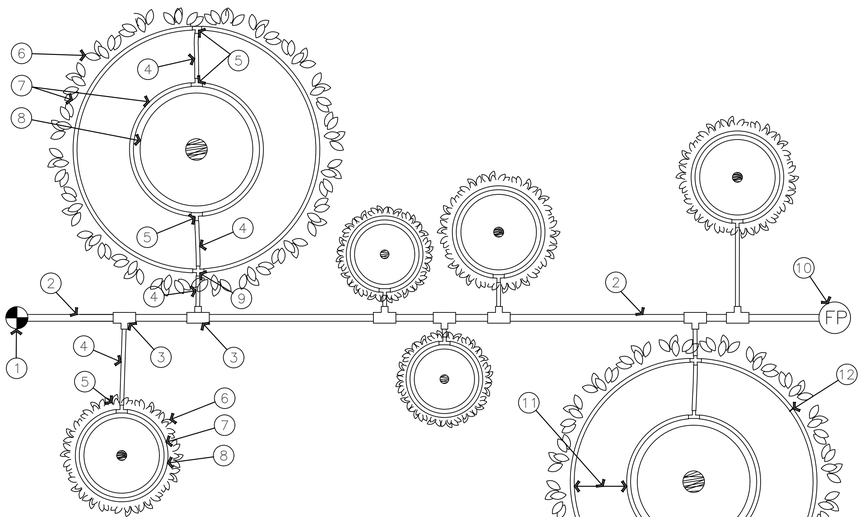


1. FINISH GRADE
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
3. ½" AIR RELIEF VALVE: RAIN BIRD ARV050 TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
4. PVC SCH 40 FEMALE ADAPTER
5. PVC SCH 80 RISER
6. PVC HEADER PIPE
7. PVC SCH 40 TEE
8. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

R AIR RELIEF VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



1. RAIN BIRD CONTROL ZONE KIT (SIZED TO ACCOMIDATE LATERAL FLOW DEMAND)
2. PVC DRIP LATERAL PIPE
3. PVC SCH 40 TEE OR EL (TYPICAL)
4. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES- S FOR COPPER SHEILD (TYPICAL)
5. BARB X BARB INSERT TEE: RAIN BIRD XFF-TEE (TYPICAL)
6. PROJECTED CANOPY LINE OF TREE OR SHRUB (TYPICAL)
7. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV SERIES PLACE AS SHOWN (LENGTH AS REQUIRED, TYPICAL)
8. ROOT BALL (TYPICAL)
9. BARB X BARB INSERT CROSS: RAIN BIRD XFD-CROSS (TYPICAL)
10. DRIPLINE FLUSH POINT (SEE RAIN BIRD DETAIL: "XFCV DRIPLINE FLUSH POINT WITH BALL VALVE")
11. SPACING PER SPECIFICATION
12. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (QUANTITY AS REQUIRED, SEE NOTES 2-3 BELOW)

NOTES:
1. INSTALL MULTIPLE RINGS AS REQUIRED TO PROVIDE IRRIGATION COVERAGE FROM ROOT BALL TO PROJECTED TREE CANOPY. REFER TO RAIN BIRD DESIGN GUIDELINES AND SPECIFICATIONS FOR RECOMMENDED SPACING BETWEEN RINGS.
2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, F0UR FEET IN LOAM, AND FIVE FEET IN CLAY.
3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

S ON-SURFACE DRIPLINE TREE/SHRUB DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE 3/28/2022

PROJECT NUMBER UT22044

PLAN INFORMATION

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
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1-800-662-4111
www.bluestakes.org

PROJECT INFORMATION

SENSAPURE
1945 S. FREMONT DR.
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AE URBIA
909 W. SOUTH JORDAN PARKWAY
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3032 SOUTH 1030 WEST, SUITE 202
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LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
03/08/2022
ELECTRONIC SEAL
STATE OF UTAH

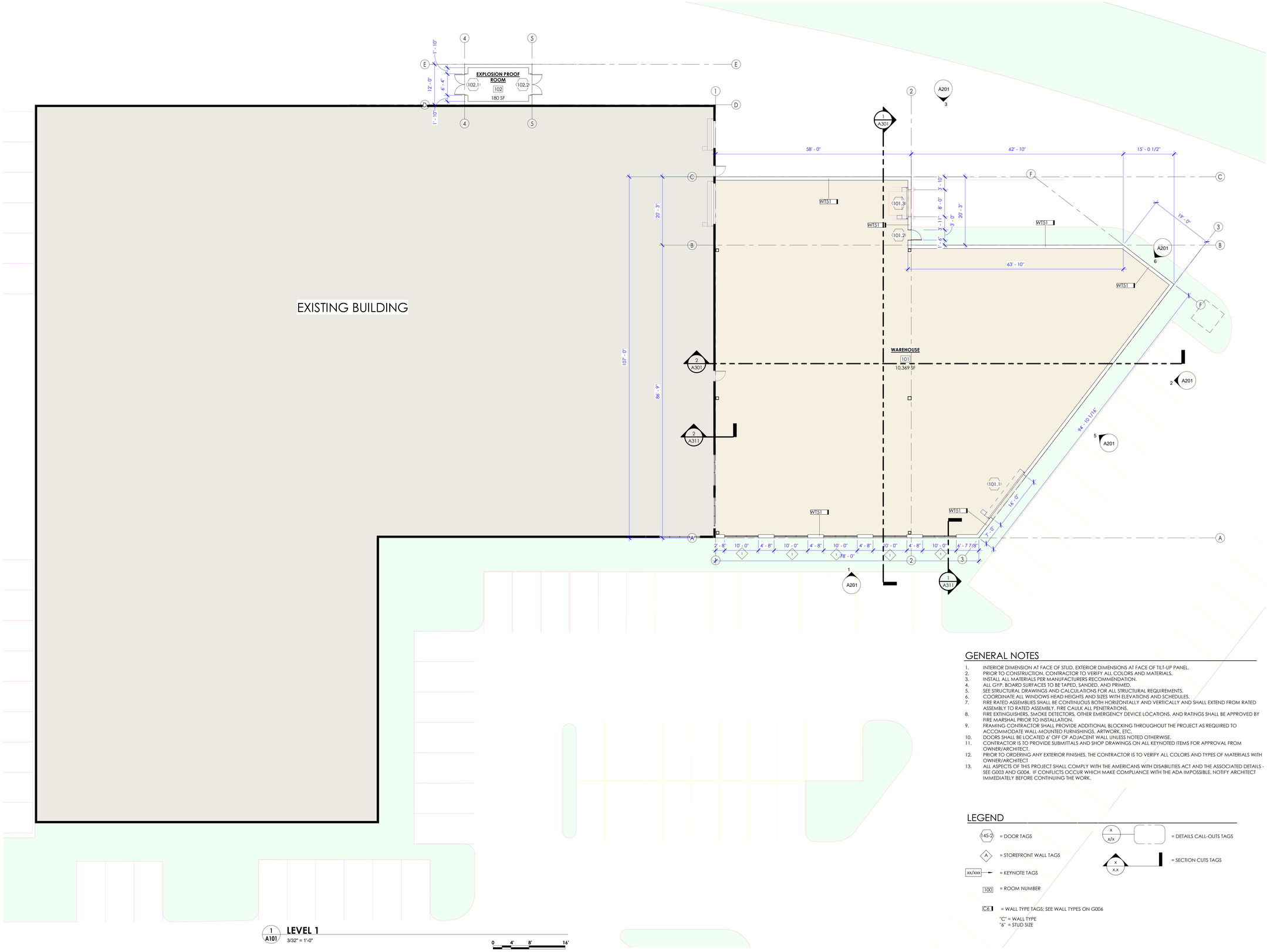
DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 3/28/2022

IRRIGATION DETAILS

IR-503

3/25/2022 9:40:03 AM



GENERAL NOTES

1. INTERIOR DIMENSION AT FACE OF STUD, EXTERIOR DIMENSIONS AT FACE OF TILT-UP PANEL.
2. PRIOR TO CONSTRUCTION, CONTRACTOR TO VERIFY ALL COLORS AND MATERIALS.
3. INSTALL ALL MATERIALS PER MANUFACTURERS RECOMMENDATION.
4. ALL GYP. BOARD SURFACES TO BE TAPED, SANDED, AND PRIMED.
5. SEE STRUCTURAL DRAWINGS AND CALCULATIONS FOR ALL STRUCTURAL REQUIREMENTS.
6. COORDINATE ALL WINDOWS HEAD HEIGHTS AND SIZES WITH ELEVATIONS AND SCHEDULES.
7. FIRE RATED ASSEMBLIES SHALL BE CONTINUOUS BOTH HORIZONTALLY AND VERTICALLY AND SHALL EXTEND FROM RATED ASSEMBLY TO RATED ASSEMBLY. FIRE CAULK ALL PENETRATIONS.
8. FIRE EXTINGUISHERS, SMOKE DETECTORS, OTHER EMERGENCY DEVICE LOCATIONS, AND RATINGS SHALL BE APPROVED BY FIRE MARSHAL PRIOR TO INSTALLATION.
9. FRAMING CONTRACTOR SHALL PROVIDE ADDITIONAL BLOCKING THROUGHOUT THE PROJECT AS REQUIRED TO ACCOMMODATE WALL-MOUNTED FURNISHINGS, ARTWORK, ETC.
10. DOORS SHALL BE LOCATED 6" OFF OF ADJACENT WALL UNLESS NOTED OTHERWISE.
11. CONTRACTOR IS TO PROVIDE SUBMITTALS AND SHOP DRAWINGS ON ALL KEYNOTED ITEMS FOR APPROVAL FROM OWNER/ARCHITECT.
12. PRIOR TO ORDERING ANY EXTERIOR FINISHES, THE CONTRACTOR IS TO VERIFY ALL COLORS AND TYPES OF MATERIALS WITH OWNER/ARCHITECT
13. ALL ASPECTS OF THIS PROJECT SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND THE ASSOCIATED DETAILS - SEE G003 AND G004. IF CONFLICTS OCCUR WHICH MAKE COMPLIANCE WITH THE ADA IMPOSSIBLE, NOTIFY ARCHITECT IMMEDIATELY BEFORE CONTINUING THE WORK.

LEGEND

- 45-2 = DOOR TAGS
- A = STOREFRONT WALL TAGS
- xx/xxx = KEYNOTE TAGS
- 100 = ROOM NUMBER
- C6 = WALL TYPE TAGS; SEE WALL TYPES ON G006
  - "C" = WALL TYPE
  - "6" = STUD SIZE
- x / x/x = DETAILS CALL-OUTS TAGS
- x / x.x = SECTION CUTS TAGS

1 A101 **LEVEL 1**
3/32" = 1'-0"

0 4' 8' 16'
GRAPHIC SCALE

NORTH

aeurbia
architects and engineers
909 West South Jordan Parkway
south jordan, utah 84095
phone:801.746.0436 - fax:801.575.6456
webpage:aeurbia.com

LICENSED ARCHITECT
174600
JAMES MICHAEL
STATE OF UTAH
3/25/2022 9:40:03 AM

SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2021.249

LEVEL 01 FLOOR PLAN

DATE: **PROJECT ISSUE DATE**

SHEET #:

A101

PROJECT STATUS
3/25/2022 9:40:03 AM

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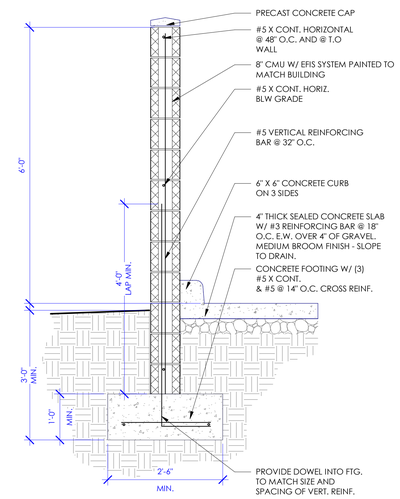
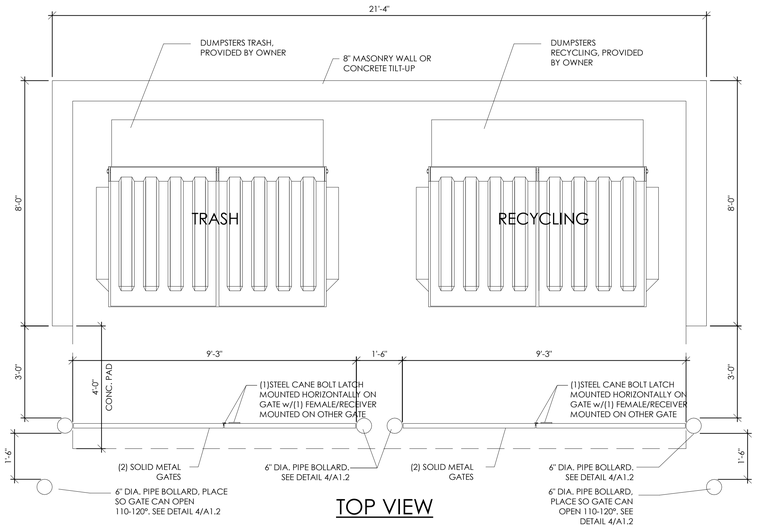
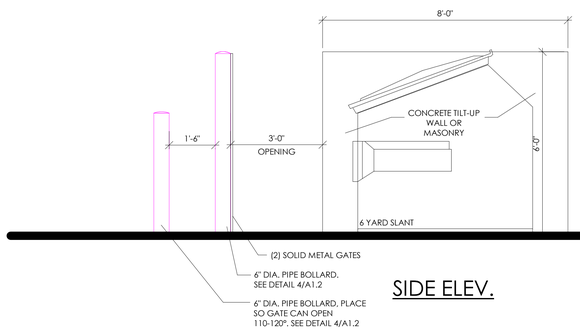


*SOLID GROUTING IN ALL CELLS BELOW GRADE AND IN CELLS CONTAINING REINFORCEMENT.

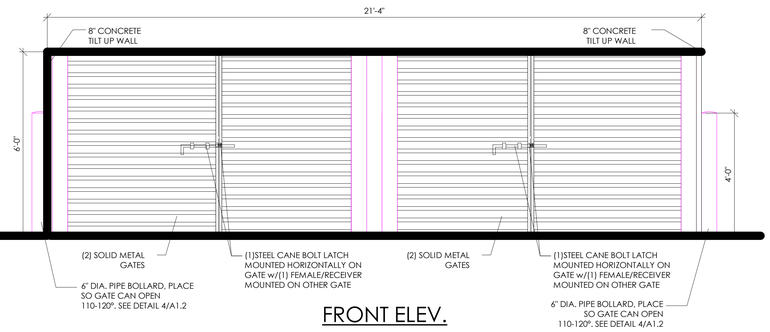
2 A102 **DUMPSTER ENCLOSURE WALL SECTION - CMU**
3/4" = 1'-0"



TOP VIEW



SIDE ELEV.



FRONT ELEV.

1 A102 **DUMPSTER ENCLOSURE PLAN**
1/2" = 1'-0"

aeurbia
architects and engineers
2875 south decker lake drive, suite 275
salt lake city, utah 84119
phone: 801.746.0456 - fax: 801.575.6456
webpage: aeurbia.com

LICENSED ARCHITECT 174600 JAMES MICHAEL STATE OF UTAH
3/25/2022 9:40:04 AM

SENSAPURE ADDITION
DUSTIN GRAMOLL
1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date

AE2021.249

SITE DETAILS

PROJECT STATUS

DATE: PROJECT ISSUE DATE

SHEET #:

A102

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3/25/2022 9:40:04 AM

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LEGEND

- 45-2 = DOOR TAGS
- A = STOREFRONT WALL TAGS
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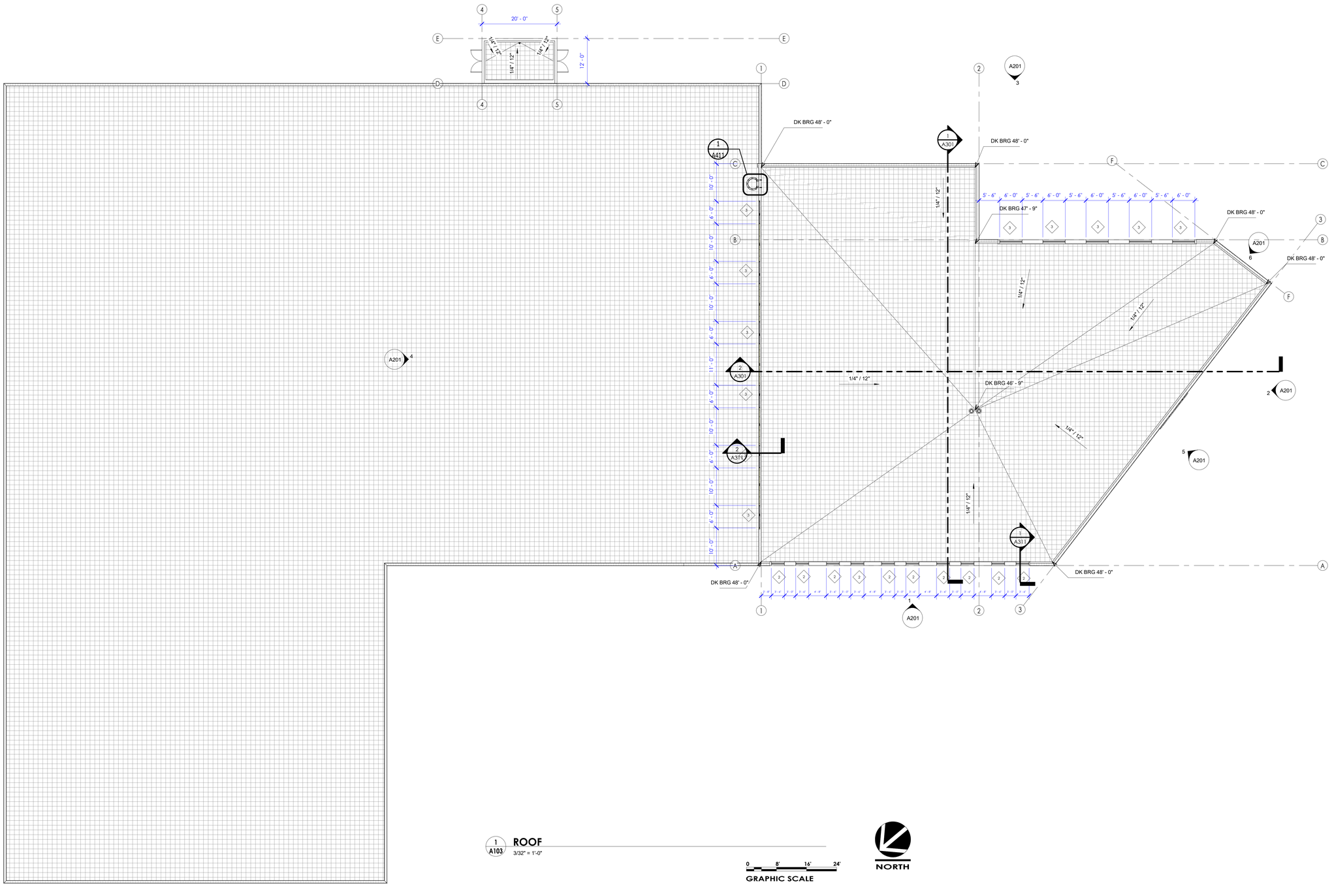
- 100 = ROOM NUMBER
- C6 = WALL TYPE TAGS; SEE WALL TYPES ON G006
  - "C" = WALL TYPE
  - "6" = STUD SIZE
- x / x/x = DETAILS CALL-OUTS TAGS
- x / xx = SECTION CUTS TAGS

ROOFING NOTES (TYPICAL):

1. PROVIDE FULL MANUFACTURERS WARRANTY ON MATERIALS AND 5 YEAR WARRANTY MIN. ON LABOR, U/NO
2. ALL COLORS, ASSEMBLIES AND MATERIALS MUST MEET APPROVAL OF OWNER AND DESIGN PROFESSIONAL.
3. PROVIDE PRODUCT SUBMITTALS FOR PRE APPROVAL PRIOR TO ORDERING AND INSTALLATION
4. FOR TYPICAL ROOF/FLASHING DETAILS, SEE SHEET A402
5. PROVIDE STEP FLASHING COUNTER FLASHING, DRIP EDGES AS REQ'D. CAULK AND SEAL. ROOFING TO EXTEND 18" MIN. UP ADJACENT WALLS AND DISCONTINUITIES TYPICAL.
6. INSTALL ROOF PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. MANUFACTURER TO INSPECT INSTALLATION AS REQ'D FOR WARRANTEE. PROVIDE 1/4" PER FOOT MIN. SLOPE.
7. FOR ALL PLUMBING PENETRATIONS REFER TO DETAILS ON A402 AND PLUMBING DRAWINGS.
8. FOR MISC. ROOF DETAILS SEE A402
9. TYPICAL MINIMUM ROOF SLOPE @ 1/4" MIN. PER FOOT ALL PLACES.
10. SEE MECHANICAL PLAN FOR ROOF MOUNTED EQUIPMENT AND CURBS, ET.



1 A103 **ROOF**
3/32" = 1'-0"

GRAPHIC SCALE 0 8' 16' 24'

NORTH

aeurbia
architects and engineers
909 West South Jordan Parkway
south jordan, utah 84095
phone: 801.746.0436 - fax: 801.575.6456
webpage: aeurbia.com

LICENSED ARCHITECT 174600 JAMES MICHAEL STATE OF UTAH

3/25/2022 9:40:05 AM

SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date

AE2021.249

ROOF PLAN

DATE: PROJECT ISSUE DATE

SHEET #:

A103

PROJECT STATUS

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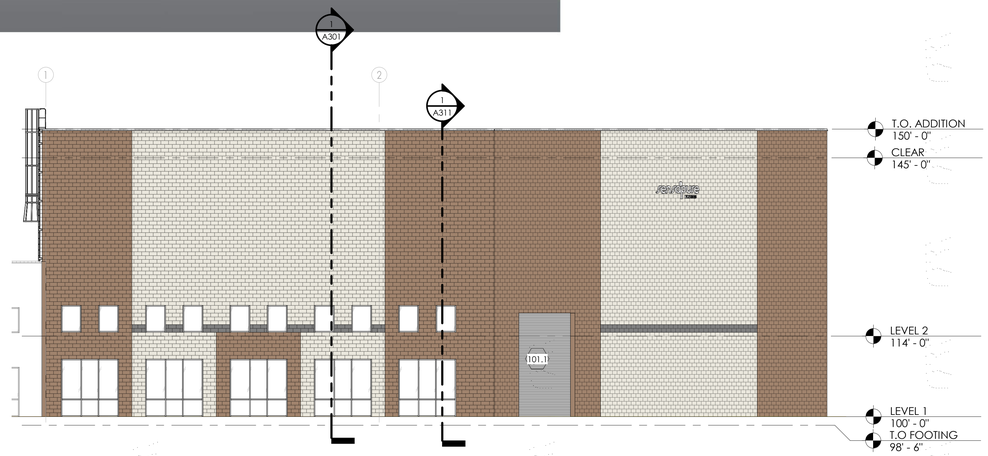
EXTERIOR ELEVATION COLOR:

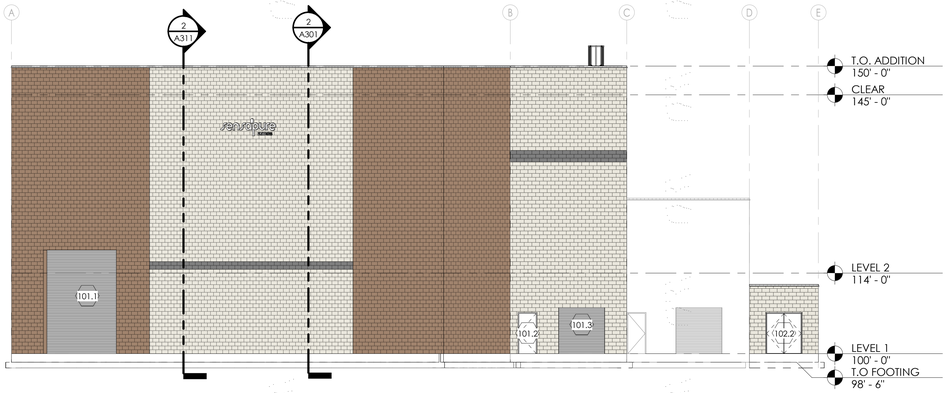
- =SPLIT FACED CMU 12"X16" BLOCK (SUNROC SMOOTH BLACK OR APPROVED EQUAL)
- =SPLIT FACE CMU 12"X16" BLOCK (SUNROC IVORY SMOOTH OR APPROVED EQUAL)
- =SPLIT FACE CMU BROWN COLOR 12"X16" BLOCK (SUNROC CHOCOLATE OR APPROVED EQUAL)
- =GRAY GLASS WITH REFLECTIVE COATING.
- =EIFS SYSTEM FINE TEXTURE OVER FRAMED WALL (PAINT TO MATCH EXISTING)

GENERAL EXTERIOR FINISH NOTES:

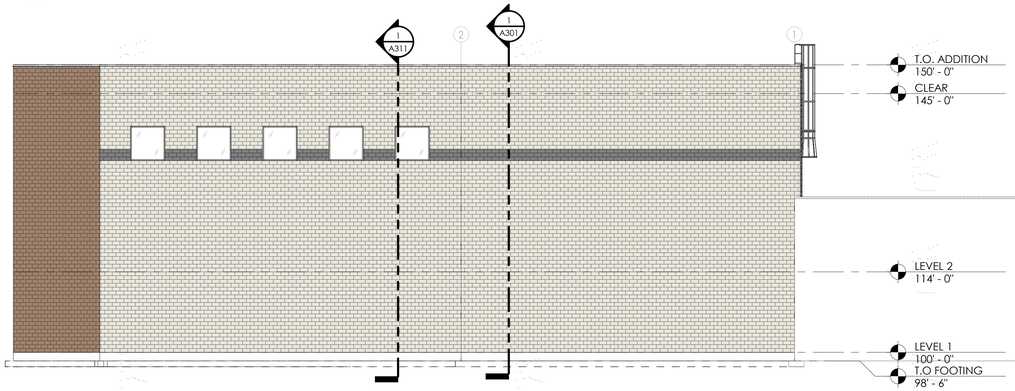
1. REFER TO ELECTRICAL SHEETS FOR ALL EXTERIOR LIGHTING AND COORDINATE ALL NECESSARY POWER LOCATIONS APPROPRIATELY.



1 A201 **NORTH BUILDING ELEVATION**
3/32" = 1'-0"

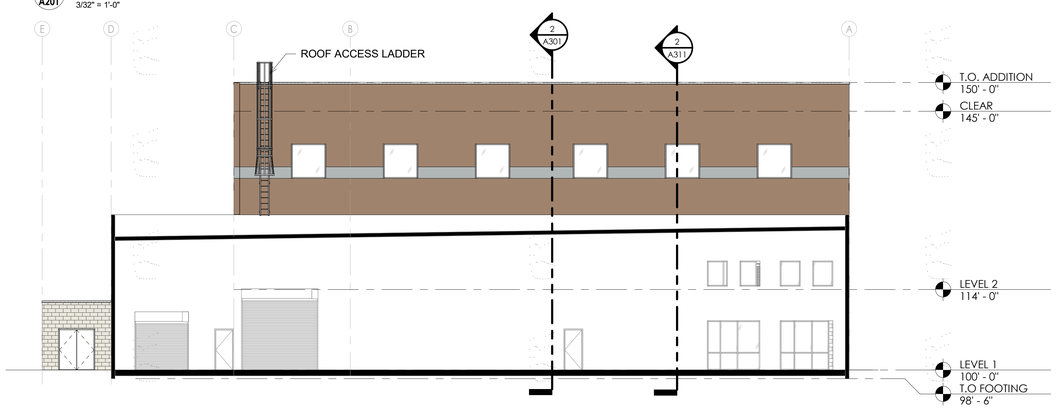


2 A201 **WEST BUILDING ELEVATION**
3/32" = 1'-0"

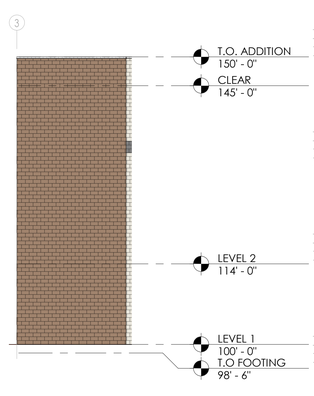


3 A201 **SOUTH BUILDING ELEVATION**
3/32" = 1'-0"

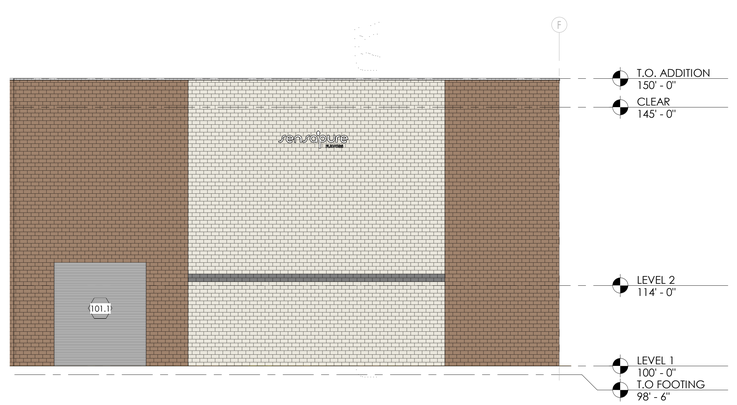




4 A201 **EAST BUILDING ELEVATION**
3/32" = 1'-0"



6 A201 **SOUTH WEST BUILDING ELEVATION**
3/32" = 1'-0"



5 A201 **NORTH WEST BUILDING ELEVATION**
3/32" = 1'-0"

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webpage: aeurbia.com

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STATE OF UTAH
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SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date

AE2021.249

ELEVATIONS

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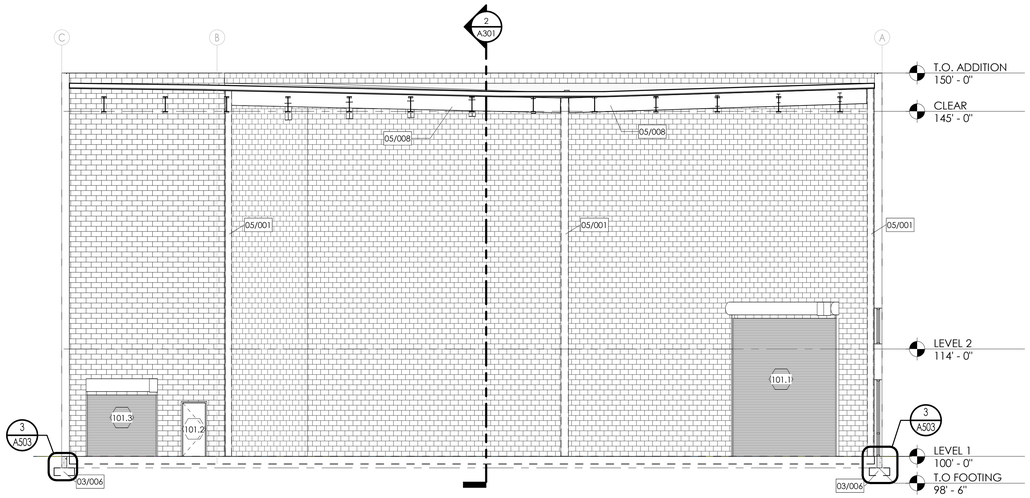
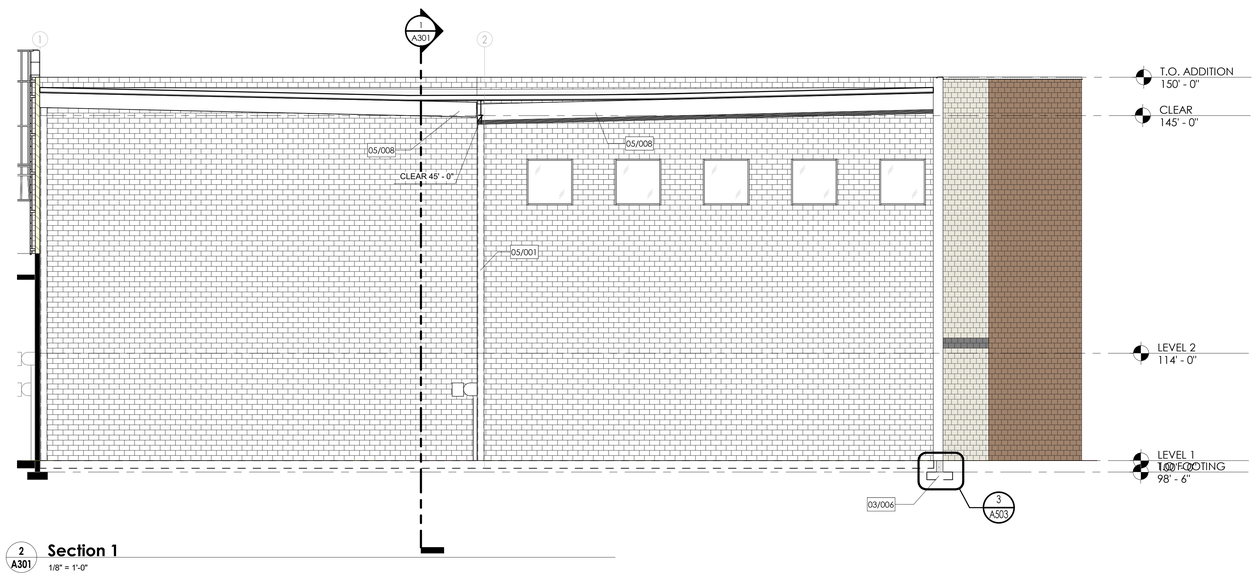
KEYNOTE LEGEND	
03/006	CONCRETE FOOTING, SEE STRUCTURAL FOR SIZE AND REINFORCING
05/001	STRUCTURAL STEEL COLUMN - SEE STRUCTURAL
05/008	STEEL BEAM - SEE STRUCTURAL FOR SIZE



1 A301 BUILDING SECTION
1/8" = 1'-0"



2 A301 Section 1
1/8" = 1'-0"

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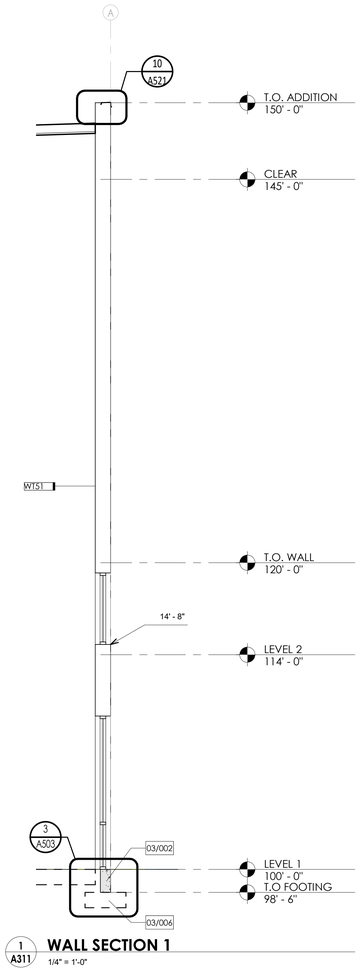
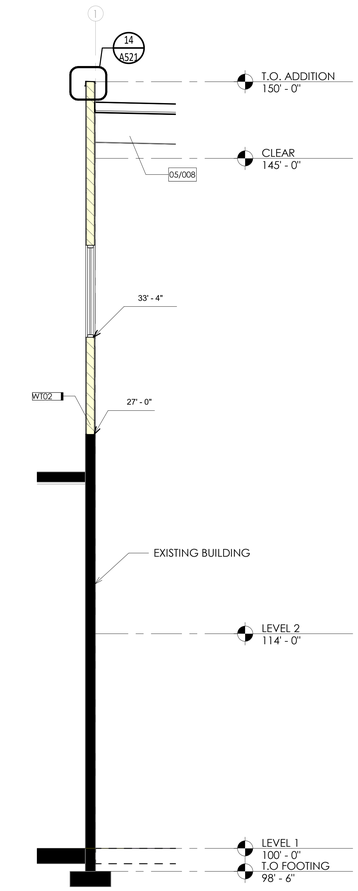


1 A311 **WALL SECTION 1**
1/4" = 1'-0"



2 A311 **WALL SECTION 2**
1/4" = 1'-0"

KEYNOTE LEGEND	
03/002	CONCRETE SHEAR WALL - SEE STRUCTURAL
03/006	CONCRETE FOOTING, SEE STRUCTURAL FOR SIZE AND REINFORCING
05/008	STEEL BEAM - SEE STRUCTURAL FOR SIZE

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WALL SECTIONS

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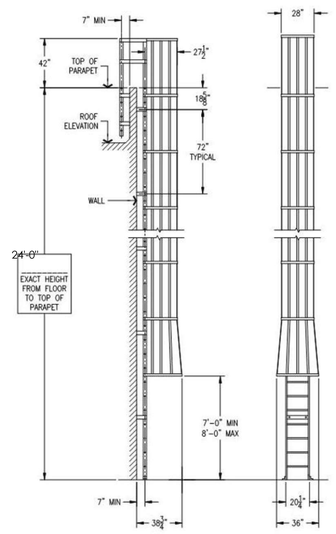

1 A411 **PERMANENT ROOF ACCESS LADDER**
1/4" = 1'-0"

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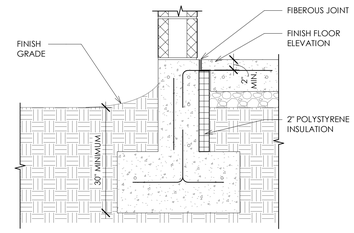

3 A503 **TYPICAL FOUNDATION WALL SLAB RIGID INSULATION DETAIL**
1" = 1'-0"

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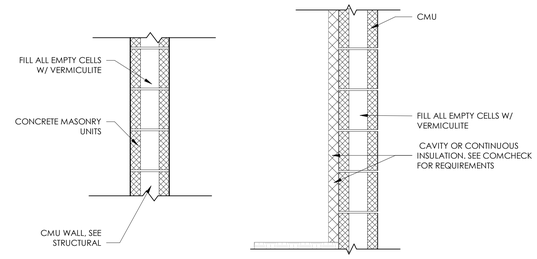
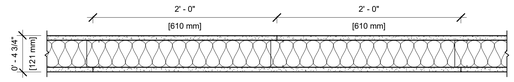


1 A504 **WT51 WALL DETAIL - CMU BLOCK WALL**
1" = 1'-0"

UL DESIGN NO. U423; U425 (BEARING WALL)

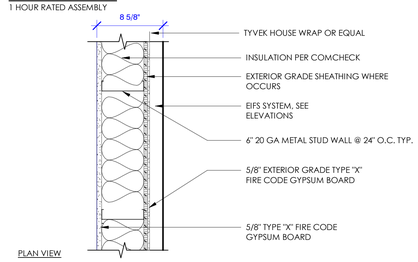
FIRE RATING:	1 Hour
STC:	N/A
SOUND TEST:	N/A
SYSTEM THICKNESS:	4 3/4"



ASSEMBLY OPTIONS:

FLOOR/CEILING RUNNERS:	CHANNEL-SHAPED, 3-1/2" MIN. WIDE WITH 1-1/2" MIN. LEGS, FABRICATED FROM NO. 20 GA. MIN. (0.0329", MIN. BARE METAL THICKNESS) CORROSION RESISTANT STEEL. ATTACHED TO FLOOR AND CEILING WITH STEEL FASTENERS SPACED NOT GREATER THAN 24"
GYPSUM BOARD:	ONE LAYER 5/8" THICK GYPSUM BOARD (UL TYPE ULIX™)
STEEL STUDS:	3-1/2" STEEL STUDS, 20 GA. MSG., SPACED 24" O.C.
INSULATION:	3-1/2" GLASS FIBER BATT INSULATION IN CAVITY
LATERAL SUPPORT MEMBERS:	WHERE REQUIRED FOR LATERAL SUPPORT OF STUDS, SUPPORT MAY BE PROVIDED BY MEANS OF STEEL STRAPS, CHANNELS OR OTHER SIMILAR MEANS AS SPECIFIED IN THE DESIGN OF A PARTICULAR STEEL STUD WALL SYSTEM (NOT SHOWN)
GYPSUM BOARD:	ONE LAYER 5/8" THICK GYPSUM BOARD (UL TYPE ULIX™)

UL DESIGN # U423
1 HOUR RATED ASSEMBLY



PLAN VIEW

3 A504 **WT02-UL#U423/U425-EXTERIOR WALL**
1 1/2" = 1'-0"

NOTES:

STUD AND INSULATION SIZES ARE MINIMUM UNLESS OTHERWISE STATED IN DESIGN.

FOR THE MOST UP-TO-DATE INFORMATION OR ASSEMBLY OPTIONS, REFER TO THE UL FIRE RESISTANCE DIRECTORY.

UL TYPE ULIX™ REQUIRES THE USE OF INSULATION FOR SINGLE-LAYER, STEEL-FRAMED UL FIRE-RATED ASSEMBLIES.

REFER TO THE UL FIRE RESISTANCE DIRECTORY FOR INFORMATION REGARDING PRODUCT ORIENTATION AND FASTENING REQUIREMENTS.

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WALL TYPES

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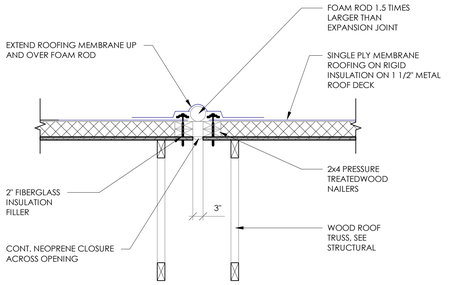
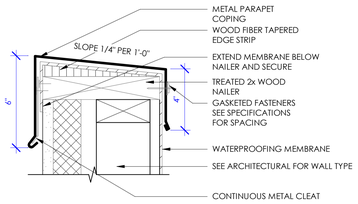
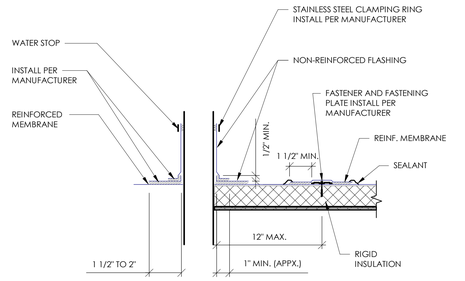


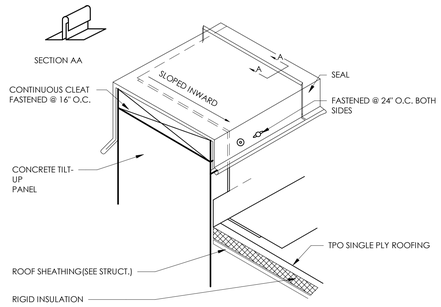
13 A521 EXPANSION JOINT DECK TO DECK
1" = 1'-0"



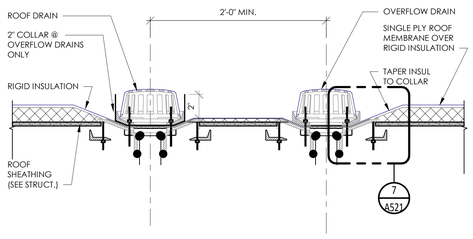
14 A521 COPING DETAIL
3" = 1'-0"



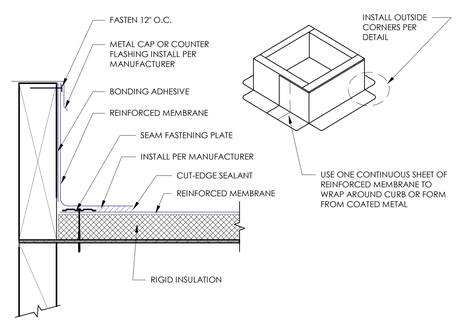
9 A521 FIELD FABRICATED PIPE FLASHING2
1" = 1'-0"



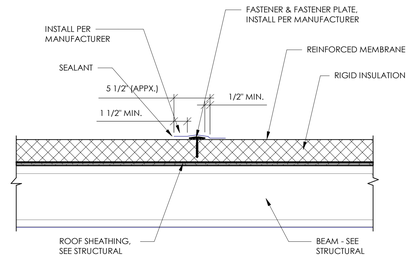
10 A521 COPING DETAIL2
1" = 1'-0"



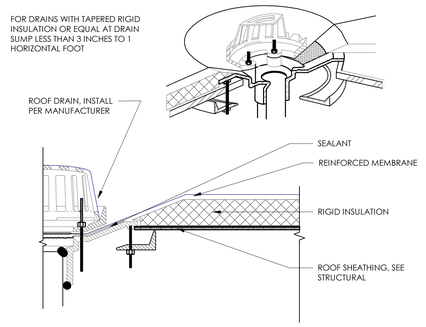
8 A521 ROOF DRAIN SECTION DETAIL2
1" = 1'-0"



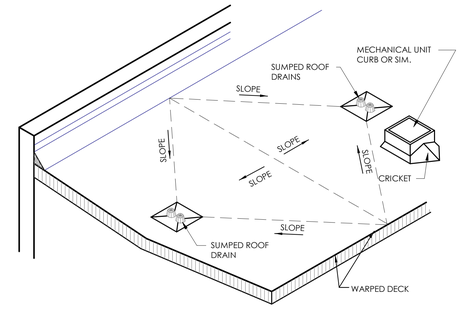
5 A521 CURB FLASHING2
1" = 1'-0"



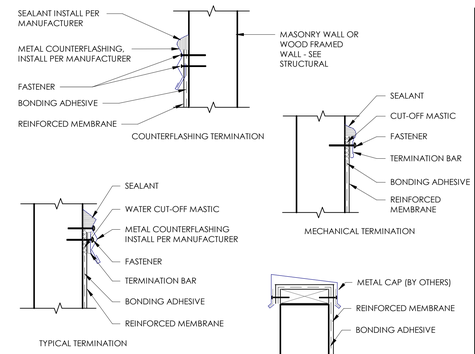
6 A521 LAP CROSS SECTION2
1" = 1'-0"



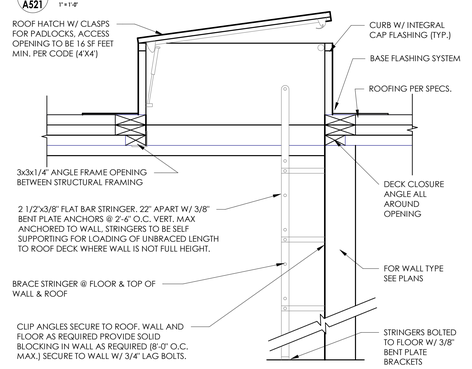
7 A521 ROOF DRAIN2
1" = 1'-0"



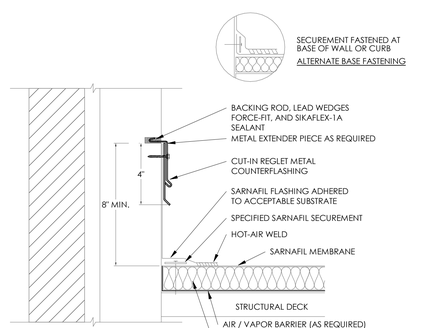
1 A521 CRICKET DETAIL2
1" = 1'-0"



2 A521 FLASHING TERMINATIONS2
1" = 1'-0"



3 A521 ROOF ACCESS HATCH & LADDER2
1" = 1'-0"



NOTES:
1.METAL EXTENDER PIECEEXISTING COUNTERFLASHING IS CONTAMINATED AND OR COUNTERFLASHING FASCIA IS LESS THAN 4-INCHES WIDE.
2.METAL COUNTERFLASHING IS TO BE INSTALLED TO MEET LOCAL CODES AND REQUIREMENTS.
3.VAPOR BARRIER SHALL BE SEALED AT EDGES.

12 A521 CUT IN REGLET2
3" = 1'-0"

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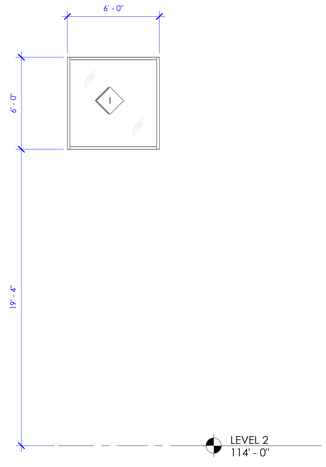
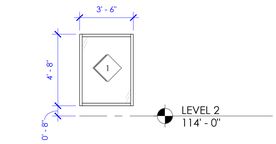
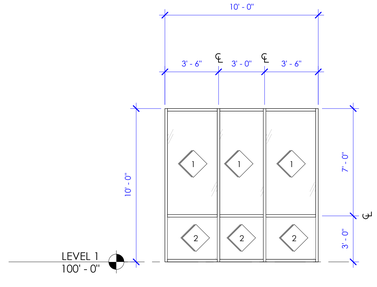


3 A531 **STOREFRONT ELEVATION 3**
1/4" = 1'-0"



2 A531 **STOREFRONT ELEVATION 2**
1/4" = 1'-0"



1 A531 **STOREFRONT ELEVATION 1**
1/4" = 1'-0"

WINDOW FRAMES:

=ALUMINUM STOREFRONT: BLACK ALUMINUM FINISH

=GRAY TINTED GLAZING(OR APPROVED EQUAL)
(AS PER COMCHECK, SEE G002)

NOTES
1. CONTRACTOR TO PROVIDE SUBMITTALS FOR APPROVAL.
2. ALL GLAZING WITHIN 24" INCH OF A DOOR/FLOOR SHALL BE TEMPERED.
3. SEE SHEET A702 FOR WINDOW HEADER, JAMB AND SILL DETAILS.
4. ALL EXTERIOR GLASS TO BE DOUBLE PANE TINTED AND TO BE LOW 'E'. VERIFY GLASS SPECIFICATIONS WITH COM-CHECK PROVIDED BY MECHANICAL ENGINEER.
5. REFER TO MECHANICAL COMCHECK FOR MINIMUM DESIGN STANDARDS FOR GLAZING.

GLAZING LEGEND:

1 GRAY TINTED 1" THICK LOW-E GLAZING, U-VALUE: 0.45 SHGC: 0.38

2 GRAY TINTED 1" THICK LOW-E SAFETY GLAZING, U-VALUE: 0.45 SHGC: 0.38

TEMPERED GLAZING NOTES:

HUMAN IMPACT LOADS. INDIVIDUAL GLAZED AREAS, INCLUDING GLASS MIRRORS, IN HAZARDOUS LOCATIONS AS DEFINED BELOW SHALL COMPLY WITH SECTIONS 2406.1.1 THROUGH 2406.1.5 OF THE IBC(INTERNATIONAL BUILDING CODE).

IDENTIFICATION OF SAFETY GLAZING. EACH PANE OF SAFETY GLAZING INSTALLED IN HAZARDOUS LOCATIONS SHALL BE IDENTIFIED BY A LABEL SPECIFYING THE LABELER, WHETHER THE MANUFACTURER OR INSTALLER, AND THE SAFETY GLAZING STANDARD WITH WHICH IT COMPLIES, AS WELL AS THE INFORMATION SPECIFIED IN SECTION 2403.1 OF THE IBC(INTERNATIONAL BUILDING CODE). THE LABEL SHALL BE ACID ETCHED, SAND BLASTED, CERAMIC FIRED OR AN EMBOSSED MARK, OR SHALL BE OF A TYPE THAT ONCE APPLIED CANNOT BE REMOVED WITHOUT BEING DESTROYED.
EXCEPTIONS:
1. FOR OTHER THAN TEMPERED GLASS, LABELS ARE NOT REQUIRED, PROVIDED THE BUILDING OFFICIAL APPROVES THE USE OF A CERTIFICATE, AFFIDAVIT OR OTHER EVIDENCE CONFIRMING COMPLIANCE WITH THIS CODE.
2. TEMPERED SPANDREL GLASS IS PERMITTED TO BE IDENTIFIED BY THE MANUFACTURER WITH A REMOVABLE PAPER LABEL.

HAZARDOUS LOCATIONS. THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS REQUIRING SAFETY GLAZING MATERIALS:
1. GLAZING IN SWINGING DOORS.
2. GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SLIDING AND BIFOLD CLOSET DOOR ASSEMBLIES.
3. GLAZING IN STORM DOORS.
4. GLAZING IN UNFRAMED SWINGING DOORS.
5. GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) ABOVE A STANDING SURFACE.
6. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24-INCH (610 MM) ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) ABOVE THE WALKING SURFACE.
EXCEPTIONS:
1. PANELS WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOR AND GLAZING.
2. WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET OR STORAGE AREA 3 FEET (914 MM) OR LESS IN DEPTH. GLAZING IN THIS APPLICATION SHALL COMPLY WITH SECTION 2406.3, ITEM 7.
3. GLAZING IN WALLS PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION, OTHER THAN THE WALL TOWARDS WHICH THE DOOR SWINGS WHEN OPENED, IN ONE- AND TWO- FAMILY DWELLINGS OR WITHIN DWELLING UNITS IN GROUP R-2.
7. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN IN THOSE LOCATIONS DESCRIBED IN PRECEDING ITEMS 5 AND 6, WHICH MEETS ALL OF THE FOLLOWING CONDITIONS:
7.1. EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQUARE FEET (0.84 M2);
7.2. EXPOSED BOTTOM EDGE LESS THAN 18 INCHES (457 MM) ABOVE THE FLOOR;
7.3. EXPOSED TOP EDGE GREATER THAN 36 INCHES (914 MM) ABOVE THE FLOOR; AND
7.4. ONE OR MORE WALKING SURFACE(S) WITHIN 36 INCHES (914 MM) HORIZONTALLY OF THE PLANE OF THE GLAZING.
EXCEPTION: SAFETY GLAZING FOR ITEM 7 IS NOT REQUIRED FOR THE FOLLOWING INSTALLATIONS:
1. A PROTECTIVE BAR 11/2 INCHES (38 MM) OR MORE IN HEIGHT, CAPABLE OF WITHSTANDING A HORIZONTAL LOAD OF 50 POUNDS PLF (730 N/M) WITHOUT CONTACTING THE GLASS, IS INSTALLED ON THE ACCESSIBLE SIDES OF THE GLAZING 34 INCHES TO 38 INCHES (864 MM TO 965 MM) ABOVE THE FLOOR.
2. THE OUTBOARD PANE IN INSULATING GLASS UNITS OR MULTIPLE GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLASS IS 25 FEET (7620 MM) OR MORE ABOVE ANY GRADE, ROOF, WALKING SURFACE OR OTHER HORIZONTAL OR SLOPED (WITHIN 45 DEGREES OF HORIZONTAL) (0.78 RAD) SURFACE ADJACENT TO THE GLASS EXTERIOR.
8. GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS, REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE.
9. GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE ALL OF THE FOLLOWING CONDITIONS ARE PRESENT:
9.1. THE BOTTOM EDGE OF THE GLAZING ON THE POOL OR SPA SIDE IS LESS THAN 60 INCHES (1524 MM) ABOVE A WALKING SURFACE ON THE POOL OR SPA SIDE OF THE GLAZING; AND
9.2. THE GLAZING IS WITHIN 60 INCHES (1524 MM) HORIZONTALLY OF THE WATER'S EDGE OF A SWIMMING POOL OR SPA.
10. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36 INCHES (914 MM) HORIZONTALLY OF A WALKING SURFACE; WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES (1524 MM) ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
11. GLAZING ADJACENT TO STAIRWAYS WITHIN 60 INCHES (1524 MM) HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES (1524 MM) ABOVE THE NOSE OF THE TREAD.
EXCEPTION: SAFETY GLAZING FOR ITEM 10 OR 11 IS NOT REQUIRED FOR THE FOLLOWING INSTALLATIONS WHERE:
1. THE SIDE OF A STAIRWAY, LANDING OR RAMP WHICH HAS A GUARDRAIL OR HANDRAIL, INCLUDING BALUSTERS OR IN-FILL PANELS, COMPLYING WITH THE PROVISIONS OF SECTIONS 1012 AND 1607.7; AND
2. THE PLANE OF THE GLASS IS GREATER THAN 18 INCHES (457 MM) FROM THE RAILING.

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LICENSED ARCHITECT
174600
JAMES MICHAEL
STATE OF UTAH

3/25/2022 9:40:20 AM

SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

MARK	DESCRIPTION	Revision Date

Revision Schedule

AE2021.249

WINDOW ELEVATIONS

DATE: **PROJECT ISSUE DATE**

SHEET #:

A531

3/25/2022 9:40:20 AM **PROJECT STATUS**

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DOOR SCHEDULE

DOOR						DOOR FRAME																				
MARK	WIDTH	HEIGHT	THICKNESS	DOOR PANEL	PANEL TYPE	FRAME MATERIAL	DOOR FRAME BUTT	DOOR FRAME CAP	DOOR FRAME (THROAT DIM)	GLAZING	FIRE RATING	DOOR SWING	CLOSER	PUSH PULL	KICKPLATE	LEVER	PANIC HARDWARE CRASHBAR LEVER	WEATHER STRIPPING	THRESHOLD	SILENCER	DOOR STOP	SWEEP	HINGE COUNT	KEY TYPE	FOOTNOTES
101.3	8' - 0"	8' - 0"	0' - 1 3/4"																						
101.2	3' - 0"	7' - 0"	0' - 1 3/4"			HOLLOW METAL							•	•	•	•	•		•					KEY	
101.1	16' - 0"	18' - 0"	0' - 1 3/4"																						
102.2	6' - 0"	7' - 0"	0' - 1 3/4"			HOLLOW METAL																		KEY	
102.1	6' - 0"	7' - 0"	0' - 1 3/4"			HOLLOW METAL																		KEY	

DOOR PANEL NOTES:

WOOD DOORS: PLAIN SLICED RED OAK WITH OAK EDGES, PRE-FINISHED TO CLEARFINISH, CLEAR-500, LD 2 PARTICALE BOARD CORE (MINERAL CORE AS REQUIRED BY FIRE RATING), PREMIUM GRADE A, FIVE PLY WITH MATCHING EDGES MANUFACTURERS LIFE-TIME WARRANY.
HOLLOW METAL EXTERIOR: 16 GAGE GALVANIZED DOORS WITH SEALED TOP CAPS AND 16 GAGE GALVANIZED WELDED FRAMES, ALL PRIM PAINTED.
HOLLOW METAL INTERIOR: 18 GAGE DOORS AND 16 GAGE WELDED FRAMES, ALL PRIME PAINTED.
ALL HOLLOW METAL FRAMES: TO BE PAINTED "FIRE STEEL" DURON 8794M, SEMI GLOSS.

DOOR HARDWARE NOTES:

HINGES: BALL BEARING HINGES THRU-OUT, STAINLESS STEEL AT EXTERIOR.
LOCKS: GRADE 1, SERIES 4000 SCHLAGE ND SERIES OR ALL LOCKS TO BE MASTERKEYED, GRANDMASTER KEYED PER OWNERS REQUIREMENTS. ALL LOCKS NEED TO BE "PUSH AND TWIST," NOT JUST "PUSH"
CLOSERS: GRADE 1 EQUAL TO LCN 4000 SERIES OR STANLEY EQUAL.
THRESHOLDS, DRIP CAPS, SWEEPS AND WEATHER STRIP: PEMKO OR NATIONAL GUARD
DOOR STOPS: EACH DOOR WITH A CLOSER NEEDS A HEAVY DUTY DOOR STOP OVERHEAD.
EGRESS DOORS: EACH EGRESS DOOR EXCEPT THE MAIN EXTERIOR FRONT ENTRANCE NEEDS TO HAVE A PANIC PUSH BAR.

KEYING TYPE

PVCY	=	PRIVACY LOCKS
KEY	=	KEYED LOCK
TB	=	THUMB BOLT
CR	=	CARD READER
MG	=	MAGNETIC LOCK
ES	=	ELECTRIC STRICK
KOTB	=	KEY OUTSIDE, THUMB TURN INSIDE
TBMK	=	DEADBOLTS, MARKED LOCKED/UNLOCKED
LO	=	LOCK SET KEYED OUTSIDE
DBK	=	DEADBOLT KEYED BOTH SIDES
KOPB	=	KEY OUTSIDE, PANIC PUSH BAR INSIDE

GLAZING LEGEND

1 — DOUBLE PANE LOW-E U-VALUE: 0.30 SHGC: 0.40

2 — DOUBLE PANE LOW-E SAFETY GLAZING UFACTOR: 0.30 SHGC: 0.30

GLAZING NOTES
1. ALL ALUMINUM FRAMES TO BE DARK BRONZE.

GENERAL NOTES:

1. ALL DOOR HARDWARE TO BE LEVEL TYP MECHANISMS.
2. EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
3. MASTER KEY ALL LOCKSETS WITH IC-CORES.
4. MANUAL FLUSH BOLTS FOR THE DOUBLE DOORS ARE ONLY ALLOWED IN THE INACTIVE DOOR ACCESSING MECHANICAL AND STORAGE ROOMS.
5. PROVIDE DOOR STOPS OR BUMPERS @ ALL DOOR LOCATIONS WHERE DOOR COMES IN CONTACT WITH ADJACENT WALL. COORDINATE TYPE AND PLACEMENT WITH OWNER.
6. ALL ALUMINUM FRAMES TO BE KAWNEER METAL FRAMES OR EQUAL.
7. ALL KNOCK-DOWN & WELD FRAMES TO BE PAINT GRADE.
8. ALL FIRE RATED DOORS AND ASSEMBLIES SHALL BE LABELED BY AN APPROVED TESTING LABRATORY INDICATING THE RATING OF THE DOOR.

FOOTNOTES:

A. ENTRY DEADBOLT TO HAVE INDICATOR OF LOCKED OR UNLOCKED, DOOR TO HAVE SIGN "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED".

B. PROVIDE A SIGN INDICATING "FIRE RISER" 4 LETTERS MIN. W/ CONTRASTING BACKGROUND

C. PROVIDE A SIGN INDICATING "FIRE ALARM PANEL" 4 LETTERS MIN. W/ CONTRASTING BACKGROUND

D. OVERHEAD/DOCK DOOR: JANUS 2500 OR EQUIVALENT
MOTOR: NONE
FRAME: WEATHER STRIPPING/DOCK LEVELER
SPRING: 15,000 CYCLES MIN.

E. USE OF HEAVY DUTY HINGES, DOOR TO BE 2" THICK

F. INSULATED HOLLOW METAL DOOR WITH A U-FACTOR OF .350

G. (2) KICK PLATES

H. OPERATING CHAIN PLACED ON LEFT HAND SIDE OF DOOR FROM OPERATION SIDE

I. OPERATING CHAIN PLACED ON RIGHT HAND SIDE OF DOOR FROM OPERATION SIDE

J. PROVIDE BLACK KEY BOX MOUNTED TO THE CENTER OF THE DOOR. ON THE OUTSIDE

K. REFER TO DETAIL x/Axxx FOR DOOR JAMB

L. 4" HEADER ON DOOR FRAME TO ACCOUNT FOR DOOR FRAME TO BE IN MASONRY WALL

M. KNOCK BOX FOR EMERGENCY RESPONSE TO BE MOUNTED TO DOOR

N. KEY DOOR FOR MASTER, PROVIDE 6 COPIES

O. KEY DOOR FOR SUB-MASTER, PROVIDE 8 COPIES

P. KEY DOOR FOR KEY 1, PROVIDE 6 COPIES

Q. KEY DOOR FOR KEY 2, PROVIDE 10 COPIES

R. KEY DOOR FOR KEY 3, PROVIDE 12 COPIES

S. KEY DOOR FOR KEY 4, PROVIDE 8 COPIES

T. KEY DOOR FOR KEY 5, PROVIDE 6 COPIES

U. SCHLUTER RUBBER THRESHOLD

V. DOUBLE-SIDED DEAD BOLT

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LICENSED ARCHITECT 174600 JAMES MICHAEL STATE OF UTAH

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SENSAPURE ADDITION
DUSTIN GRAMOLL
1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date

AE2021.249

DOOR SCHEDULES

DATE: **PROJECT ISSUE DATE**

SHEET #:

A601

3/25/2022 9:40:21 AM **PROJECT STATUS**

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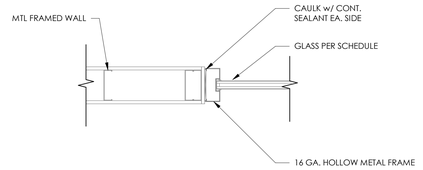
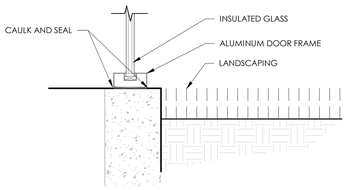
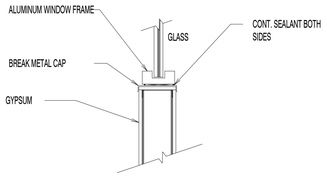




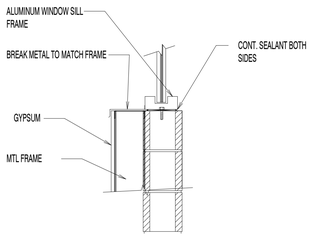
NOTE:
FLASHING AND CAULKING REQ'D FOR COMPLETE SEAL

2 A605 HOLLOW MTL. JAMB DETAIL (FRAMED WALL)1
1 1/2" = 1'-0"

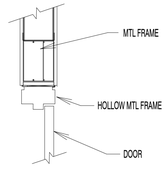
4 A605 WNIDOW SILL (STOREFRONT)
1 1/2" = 1'-0"



M A605 WINDOW SILL1
1" = 1'-0"

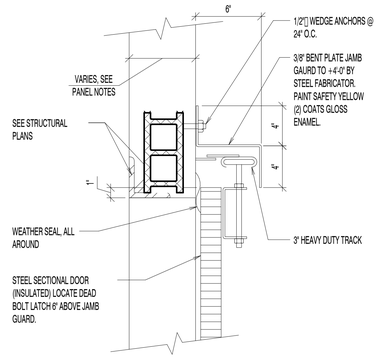


J A605 CMU W/ FURRED MLT WINDOW SILL1
1" = 1'-0"

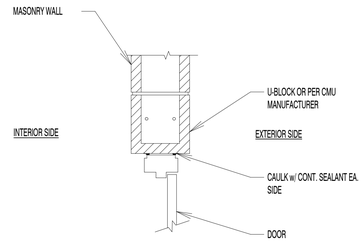


DOOR

F A605 DOOR HEADER
1" = 1'-0"



C A605 JAMB (SECTIONAL DOOR)1
N.T.S

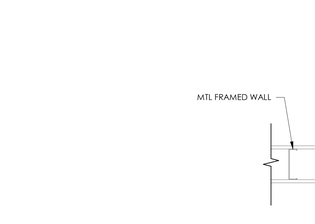


A A605 DOOR HEADER DETAIL1
1" = 1'-0"

1 A605 ENTRY THRESHOLD DETAIL (STOREFRONT)1
1 1/2" = 1'-0"

WINDOW

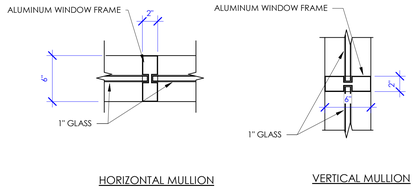
K A605 WINDOW HEADER1
1" = 1'-0"



G A605 CMU W/ FURRED MLT WINDOW HEADER1
1" = 1'-0"

D A605 CMU W/ FURRED MLT DOOR JAMB1
1" = 1'-0"

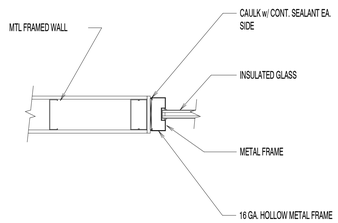
B A605 HEAD AT SECTIONAL DOOR1
1" = 1'-0"



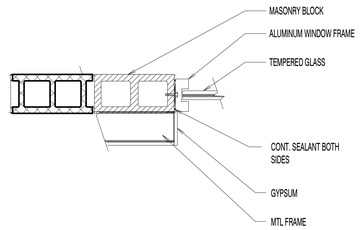
HORIZONTAL MULLION

VERTICAL MULLION

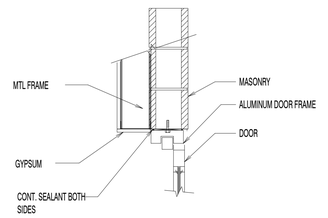
3 A605 WINDOW MULLION DETAIL (STOREFRONT)1
1 1/2" = 1'-0"



L A605 WINDOW JAMB1
1" = 1'-0"



H A605 CMU W/ FURRED MLT WINDOW JAMB1
1" = 1'-0"



E A605 CMU W/ FURRED MLT DOOR HEADER1
1" = 1'-0"

B A605 HEAD AT SECTIONAL DOOR1
1" = 1'-0"

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JAMES M. WILLIAMS No 174209 REGISTERED PROFESSIONAL STRUCTURAL ENGINEER STATE OF UTAH

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SENSAPURE ADDITION
DUSTIN GRAMOLL
1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date
0	RFI 5	12/12/13

AE2021.249

DOOR & WINDOW DETAILS

PROJECT STATUS

DATE: PROJECT ISSUE DATE

SHEET #:

A605

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DESIGN CODE

2018 INTERNATIONAL BUILDING CODE (IBC)

DESIGN CRITERIA

SEISMIC DESIGN CRITERIA

RISK CATEGORY	= II
SEISMIC IMPORTANCE FACTOR, IE	= 1.0
SOIL SITE CLASS	= C
SEISMIC DESIGN CATEGORY	= D
CALCULATED BUILDING PERIOD, T	= 0.20 SECONDS
MAPPED SPECTRAL RESPONSE ACCELERATIONS	
SHORT PERIOD ACCELERATION, Ss	= 1.507G
1-SECOND ACCELERATION, S1	= 0.529G
SEISMIC RESPONSE COEFFICIENTS	
SHORT PERIOD SITE COEFFICIENT, FA	= 1.2
LONG PERIOD SITE COEFFICIENT, FV	= 1.771
DESIGN SPECTRAL RESPONSE ACCELERATIONS	
SHORT PERIOD ACCELERATION, SDS	= 1.206G
1-SECOND ACCELERATION, SD1	= 0.625G

LATERAL FORCE RESISTING SYSTEM

SPECIAL REINFORCED MASONRY SHEAR WALLS:	
RESPONSE MODIFICATION FACTOR, R	= 5.0
SYSTEM OVERSTRENGTH FACTOR, Ωo	=2.5
DEFLECTION AMPLIFICATION FACTOR, Cd	= 5.0
SEISMIC RESPONSE COEFFICIENT, Cs	= 0.241
SEISMIC ANALYSIS PROCEDURE	= E.L.F.
CALCULATED SEISMIC BASE SHEAR, Vs	= 260 KIPS

WIND DESIGN CRITERIA

3 SECOND GUST WIND SPEED	= 115 MPH
WIND EXPOSURE	= C
INTERNAL PRESSURE COEFFICIENT	= ± 0.18
COMPONENT & CLADDING DESIGN PRESSURE	= 30 PSF (VARIES BY HT)
WIND ANAYSIS PROCEDURE:	= DIRECTIONAL
CALCULATED WIND BASE SHEAR, Vw	= 62 KIPS

DESIGN LOADS

DESIGN LOADS ARE THOSE RECOMMENDED BY THE IBC, LOCAL BUILDING CODES, AND THOSE RECOMMENDED BY JMWA/AEURBIA. CHANGES TO THE DESIGN LOADS MUST BE SUBMITTED TO AND APPROVED IN WRITING BY THE OWNER AND JMWA/AEURBIA IN WRITING PRIOR TO FABRICATION OR CONSTRUCTION.

1. COLLATERAL LOAD(S) ARE DEFINED AS MECHANICAL OR DEAD LOADS FOR USE IN THE FUTURE.

ROOF LOADS

ROOF DEAD LOAD:	= 25PSF [20 PSF + 5 PSF (COLLATERAL)]
ROOF SNOW LOAD:	
GROUND SNOW LOAD, PG	= 32 PSF
SNOW IMPORTANCE FACTOR, IS	= 1.0
SNOW EXPOSURE FACTOR, CE	= 1.0
THERMAL FACTOR, CT	= 1.0
FLAT ROOF SNOW LOAD, PF	= 22 PSF

EARTHWORK

DESIGN CRITERIA

SOILS REPORT BY:	GSH GEOTECHNICAL
PROJECT NO.	0898-003-21
DATE:	OCTOBER 22, 2021
SOIL BEARING PRESSURE:	2500 PSF
FROST PROTECTION:	30 INCHES
ENGINEERED STRUCTURAL FILL	AS REQ'D, SEE SOILS REPORT
COEFFICIENT OF FRICTION:	0.4

REQUIREMENTS

1. ALL EARTHWORK, MATERIALS, AND PLACEMENT MUST MEET THE APPROVAL OF THE GEOTECHNICAL / SOILS ENGINEER.
2. THE CONTRACTOR AND OWNER SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL SITE SOIL CONDITIONS.
3. ANY UNFORESEEN CONDITIONS ENCOUNTERED DURING SITE PREPARATION SHALL BE BROUGHT TO THE ATTENTION OF THE SOILS ENGINEER AND ARCHITECT.
4. CONTRACTOR SHALL STRIP THE BUILDING AREA FROM ALL VEGETATION, DEBRIS, AND TOPSOIL. CONTRACTOR SHALL EXCAVATE ANY REMAINING LOOSE NATURAL OR FILL SOILS TO EXPOSE COMPETENT NATURAL SOILS. CONTRACTOR SHALL REMOVE EXISTING FOOTINGS, FOUNDATIONS, SLABS, SITE PAVING, DEBRIS, AND STRUCTURES AS REQUIRED.
5. CONTRACTOR SHALL CHECK FOR SOFT SPOTS OR OTHER UNSUITABLE SOILS BY PROOF ROLLING THE ENTIRE BUILDING PAD AREA WITH NORMAL COMPACTION EQUIPMENT. REMOVE UNSUITABLE MATERIALS AND REPLACE WITH COMPACTED ENGINEERED STRUCTURAL FILL OR 2,000 PSI LEAN CONCRETE, (FLOWABLE FILL).
6. ENGINEERED OR STRUCTURAL FILL MATERIAL BENEATH FOOTINGS SHALL MEET THE REQUIREMENTS OF SOILS REPORT AND SPECIFICATIONS.
7. SEE PLANS FOR THICKNESS OF ALL FLOOR SLABS. UNDERLAY ALL SLABS WITH AT LEAST A 4" THICK LAYER OF FREE-DRAINING GRANULAR MATERIAL. GRANULAR MATERIAL SHALL BE "PEA" GRAVEL OR 1" MINUS CLEAN GAP-GRADED GRAVEL.
8. BACKFILL AROUND FOUNDATION WALLS SHALL BE PERFORMED USING GRANULAR MATERIAL. CARE SHALL BE TAKEN IN PLACING BACKFILL MATERIALS SO AS NOT TO DAMAGE THE FOUNDATION. CONTRACTOR SHALL MONITOR BACKFILL OPERATIONS AS NEEDED.
9. REFER TO SOILS REPORT OR CONTACT GEOTECHNICAL ENGINEER FOR FURTHER EARTHWORK REQUIREMENTS.

GENERAL STRUCTURAL NOTES

1. GENERAL STRUCTURAL NOTES ARE INTENDED TO COMPLEMENT PROJECT STRUCTURAL PLANS AND PROJECT SPECIFICATIONS. SPECIFIC NOTES ON PLANS, DETAILS, AND SCHEDULES SHALL GOVERN OVER THE GENERAL NOTES.
2. TYPICAL DETAILS AND SECTIONS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN.
3. DIMENSIONS SHOWN ON PLANS SHALL ARE FOR INFORMATION ONLY. CONSTRUCTION DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS FOR CONSTRUCTION OR SHOP DRAWINGS.
4. CHANGES TO THE CONTRACT DOCUMENTS MAY BE MADE ONLY BY WRITTEN AUTHORIZATION FROM AN AUTHORIZED REPRESENTATIVE OF J.M. WILLIAMS AND ASSOCIATES JMWA/AE URBIA. JMWA/AE URBIA SHALL BE HELD HARMLESS FOR ANY CLAIMS ARISING DIRECTLY OR INDIRECTLY FROM CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM AN AUTHORIZED REPRESENTATIVE OF JWMA/AE URBIA.
5. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS PRIOR TO CONSTRUCTION/FABRICATION AND SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
6. THE STRUCTURAL DRAWINGS SHALL NOT BE CONSIDERED ALL INCLUSIVE AND DO NOT CONTAIN ALL DIMENSIONS, ELEVATIONS, AND OPENINGS, NEEDED FOR CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH ARCHITECTURAL DRAWINGS, SITE CONDITIONS, AND OTHER TRADES INCLUDING BUT NOT LIMITED TO ARCHITECTURAL, MECHANICAL, CIVIL, ELECTRICAL, AND PLUMBING.
7. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND/OR ENGINEER OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE CONSTRUCTION/FABRICATION OF ANY AFFECTED ELEMENTS. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENTS AS DIRECTED BY THE ARCHITECT/ENGINEER SHALL GOVERN AND BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
8. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH ANY CHANGES, SUBSTITUTIONS, OR MODIFICATIONS. ANY CONSTRUCTION, FABRICATION, OR INSTALLATION PERFORMED BEFORE RECEIVING THE ARCHITECT/ENGINEERS WRITTEN APPROVAL WILL BE AT THE CONTRACTOR'S RISK/EXPENSE.
9. THE CONTRACTOR SHALL COORDINATE THE WORK PERFORMED BY ALL TRADES AND IS ULTIMATELY RESPONSIBLE FOR COMPLIANCE WITH CONTRACT DOCUMENTS AND CODE REQUIREMENTS. THE CONTRACTOR SHALL MEET ALL NOTED REQUIREMENTS AND SHALL INCLUDE THE ASSOCIATED COSTS IN THEIR RESPECTIVE BID.
10. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL TRADES AND SHALL NOTIFY ENGINEER OF SIZE AND LOCATION OF ANY EQUIPMENT OR OTHER ADDITIONAL LOADS NOT SHOWN ON STRUCTURAL PLANS OR TYPICAL DETAILS BEFORE CONSTRUCTION/FABRICATION.
11. FAILURE TO FOLLOW PLANS AND CONSTRUCTION DOCUMENTS CONSTITUTES CHANGE IN PROJECT SCOPE. THE ENGINEER RESERVES THE RIGHT TO REQUEST REPLACEMENT OF ANY PORTION OF THE STRUCTURE DEVIATING FROM THE PLANS WHERE WRITTEN APPROVAL HAS NOT BEEN OBTAINED. DEVIATION FROM CONSTRUCTION DOCUMENTS WITHOUT WRITTEN APPROVAL RELIEVES ENGINEER OF ALL LIABILITY, AND CONTRACTOR ASSUMES FULL LIABILITY. STRUCTURE DEVIATING FROM THE PLANS WHERE WRITTEN APPROVAL HAS NOT BEEN OBTAINED.
12. STRUCTURAL ELEMENTS SHALL NOT BE CUT FOR PIPES, DUCTS, SLEEVES, ETC. UNLESS NOTED OTHERWISE IN THE PLANS AND TYPICAL DETAILS. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ARCHITECT/ENGINEER FOR INSTALLATION OF ANY ADDITIONAL PIPES, DUCTS, OPENINGS, ETC NOT EXPLICITLY SHOWN ON CONTRACT DOCUMENTS.
13. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING AS NECESSARY. SHORING AND SUPPORT BEAMS SHALL SUPPORT ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED (I.E. WIND, CONSTRUCTION LOADING, ETC.). SHORING SHALL REMAIN IN PLACE AS LONG AS SAFETY REQUIRES AND/OR UNTIL ALL THE STRUCTURAL ELEMENTS ARE IN PLACE AND CONNECTED AS REQUIRED IN THE CONTRACT DOCUMENTS.
15. DURING AND AFTER CONSTRUCTION, THE LOADS IMPOSED ON THE STRUCTURE BY THE CONTRACTOR AND OWNER SHALL BE WITHIN THE LIMITS OF THE OCCUPANCY DESIGN LOADS. SEE STRUCTURAL PLANS AND CALCULATIONS FOR THE OCCUPANCY DESIGN LOADINGS AND CRITERIA.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION WITHIN AND ADJACENT TO THE JOB SITE.
17. VISITS TO THE JOB SITE BY REPRESENTATIVES OF JMWA/AE URBIA DO NOT CONSTITUTE APPROVAL OR SPECIAL INSPECTION OF THE WORK PERFORMED BY THE CONTRACTOR OR HIS SUBCONTRACTORS.
18. JMWA/AE URBIA SHALL RECEIVE COPIES OF ALL SPECIAL INSPECTION REPORTS COMPLETED BY THE REVIEWING AUTHORITY OR THIRD PARTY REGARDING STRUCTURAL ITEMS LISTED FOR SPECIAL INSPECTION.
19. ALL DEFERRED SUBMITTAL ITEMS, COMPONENTS, AND SYSTEMS NOT SPECIFICALLY ENGINEERED BY THE ENGINEER OF RECORD SHALL BE "DESIGN-BUILD" BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SHOP DRAWINGS OR AS-BUILT DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER IF REQUIRED BY THE REVIEWING AUTHORITY OR JURISDICTION. IF PRE-ENGINEERED SYSTEM IMPACTS THE ORIGINAL DESIGN FOR INTENT OF THE PROJECT IN ANY WAY, CONTRACTOR SHALL COORDINATE WITH ENGINEER OF RECORD PRIOR TO INSTALLATION.
20. JMWA/AEURBIA IS NOT RESPONSIBLE FOR THE COST OF CONSTRUCTION NOR PROJECT BUDGETS. ANY STRUCTURAL CHANGES REQUIRED BY THE CONTRACTOR, OWNER OR ARCHITECT SHALL BE INVOICED BY JMWA/AEURBIA AND TREATED AS ADDITIONAL SERVICES.
21. JMWA/AEURBIA SHALL BE COMPENSATED FOR ADDITIONAL ENGINEERING REQUIRED AS A RESULT OF ANY THIRD PARTY OR CITY REVIEW, PROVIDED ORIGINAL DESIGN COMPLIES WITH CURRENT BUILDING CODE.
22. OMISSIONS IDENTIFIED DURING PLAN REVIEW OR CONSTRUCTION SHALL BE ENGINEERED BY THE ENGINEER OF RECORD AT NO ADDITIONAL COST TO THE OWNER. THE OWNER SHALL BE RESPONSIBLE FOR PAYMENT OF OMISSIONS THROUGH AN APPROVED CHANGE ORDER.
23. REVIEW OF SHOP DRAWING SUBMITTAL ITEMS BY JMWA/AE URBIA SHALL BE FOR GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS AND IS NOT INTENDED FOR APPROVAL. SHOP DRAWING REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF COMPLETING THE PROJECT ACCORDING TO CONTRACT DOCUMENTS.
24. STRUCTURAL SHOP DRAWINGS SHALL BE APPROVED BY THE ENGINEER AND ARCHITECT OF RECORD PRIOR TO FABRICATION AND ERECTION.
25. THE FOLLOWING LIST INCLUDES, BUT IS NOT LIMITED TO, SPECIFIC ITEMS FOR WHICH SHOP DRAWING SUBMITTALS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION/INSTALLATION:
    A. CONCRETE MIX DESIGN
    B. MASONRY UNITS
    C. CONCRETE & MASONRY REINFORCING
    D. STRUCTURAL STEEL
    E. STEEL DECKING
    F. ALL DEFERRED SUBMITTAL ITEMS

DEFERRED SUBMITTALS

1. FOR THE PURPOSES OF THIS SECTION, DEFERRED SUBMITTALS ARE DEFINED PER IBC SECTION 107.3.4.1 AS THOSE PORTIONS OF THE DESIGN WHICH ARE NOT SUBMITTED AT THE TIME OF THE APPLICATION AND WHICH ARE TO BE SUBMITTED TO THE BUILDING OFFICIAL WITHIN A SPECIFIED PERIOD.
2. DEFERRAL OF ANY SUBMITTAL ITEMS SHALL HAVE PRIOR APPROVAL OF THE BUILDING OFFICIAL. THE ARCHITECT OR ENGINEER OF RECORD SHALL LIST THE DEFERRED SUBMITTALS ON THE PLANS AND SHALL SUBMIT THE DEFERRED SUBMITTAL DOCUMENTS FOR REVIEW BY THE BLDG OFFICIAL.
3. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER FOR REVIEW PRIOR TO FABRICATION AND INSTALLATION AND SHALL INCLUDE:
    A. COMPLETE CALCULATIONS INDICATING MEMBER FORCES, STRESSES, DURATION FACTORS, DIMENSIONS, AND LOCATIONS.
    B. MATERIAL GRADES, DIMENSIONS, SIZES, AND LOCATIONS.
    C. INDICATION OF TYPE AND SIZE OF CONNECTION (WHERE REQUIRED) AND DESIGN REACTIONS AT CONNECTION POINTS FOR REVIEW BY ENGINEER OF RECORD.
4. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

CONCRETE NOTES

1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE IBC, LOCAL ORDINANCES, AND THE MOST CURRENTLY ADOPTED VERSION OF THE AMERICAN CONCRETE INSTITUTE (ACI) ACI 318.
2. CONTRACTOR SHALL COORDINATE OPENINGS, BLOCK OUTS, CURBS, DOWELS, SLEEVES, CONDUITS, BOLTS, AND ANY OTHER EMBEDDED ITEMS WITH MECHANICAL, ELECTRICAL, AND ARCHITECTURAL PRIOR TO PLACING CONCRETE.
3. NO OPENINGS, PIPES, DUCTS, SLEEVES, ETC. SHALL BE PLACED IN STRUCTURAL CONCRETE INCLUDING BUT NOT LIMITED TO WALLS, BEAMS, COLUMNS, FOOTINGS, GRADE BEAMS AND SUSPENDED SLABS (INCLUDED CONCRETE OVER METAL DECK) UNLESS SPECIFICALLY DETAILED OR WRITTEN APPROVAL IS GIVEN BY ENGINEER. FOOTINGS SHALL BE STEPPED TO AVOID PIPING UNLESS OTHERWISE DETAILED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLACEMENT OF ALL ANCHOR BOLTS, SEISMIC ANCHORS OR STRAPS, ETC.., INSTALL PER MANUFACTURER'S SPECIFICATIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, CARE, PLACEMENT AND REMOVAL OF ALL FORMWORK AND SHORES. DO NOT REMOVE FORMS AND SHORING UNTIL STRUCTURAL MEMBERS ACQUIRE SUFFICIENT STRENGTH TO BE SELF-SUPPORTING INCLUDING/IN ADDITION TO ANY RELEVANT CONSTRUCTION LOADS.
6. ONLY ONE GRADE OR TYPE OF CONCRETE SHALL BE POURED ON-SITE AT ANY GIVEN TIME.
7. CONTRACTOR SHALL SEE CIVIL DRAWINGS AND PROJECT SPECIFICATIONS FOR ADDITIONAL SITE CONCRETE REQUIREMENTS NOT GIVEN IN THIS SECTION.
8. CONSTRUCTION ACTIVITY OR STORAGE OF MATERIALS SHALL NOT TAKE PLACE ON NEWLY PLACED CONCRETE UNTIL CONCRETE HAS ACHIEVED 75% OF SPECIFIED CONCRETE STRENGTH OR 7-DAYS, WHICHEVER IS SOONEST. DAMAGED SLABS OR OTHER STRUCTURAL CONCRETE BECAUSE OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.
9. CONTRACTOR SHALL FOLLOW RECOMMENDATIONS IN ACI 305R FOR HOT WEATHER CONCRETE PLACEMENT AND ACI 306R FOR COLD WEATHER CONCRETE PLACEMENT.

CONCRETE MATERIALS

1. ALL CONCRETE ON SITE SHALL BE TYPE I/II CEMENT PER ASTM C150 FOR ALL CONCRETE
2. NO ALUMINUM CONDUIT, PRODUCT CONTAINING ALUMINUM, OR ANY OTHER MATERIAL THAT MAY BE INJURIOUS TO CONCRETE SHALL BE EMBEDDED IN CONCRETE.
3. MAXIMUM SLUMP OF CONCRETE IS EQUAL TO 4 INCHES PLUS OR MINUS 1 INCH.
4. CEMENTITIOUS MATERIALS AND AGGREGATES, UNO:
    A. MIXING WATER — ASTM C1602
    B. FLY ASH AND POZZOLAN — ASTM C618
    C. (25% MAX CEMENTITOUS CONTENT, TYP)
    D. NORMAL WEIGHT AGGREGATES — ASTM C 33
    E. LIGHT WEIGHT AGGREGATES — ASTM C330
    F. MAX AGGREGATE SIZE USED:
        i. 1/5 NARROWEST DIMENSION BTWN FORMS
        ii. 1/3 DEPTH OF THE SLAB
        iii. 3/4 THE MIN CLEAR SPACING BTWN BARS
5. ADMIXTURES WHEN USED, UNO:
    A. WATER REDUCING AND RETARDING ADMIXTURE — ASTM C494
    B. AIR ENTRAINING ADMIXTURES — ASTM C260
    C. CHLORIDE ION CORROSION PREVENTION — ASTM C1582
    D. CALCIUM CHLORIDE SHALL NOT BE ADDED TO CONCRETE MIX
    E. ADMIXTURES NOT MENTIONED AS PART OF THIS SECTION SHALL BE SUBMITTED TO ENGINEER FOR REVIEW BEFORE USE.

CONCRETE STRENGTH

CONCRETE SHALL BE SUPPLIED TO MEET THE FOLLOWING STRENGTH REQUIREMENTS AND REQUIREMENTS SPECIFIC TO THE EXPOSURE CLASSES INCLUDING LIMITS ON WATER/CEMENT RATIO AND AIR CONTENT PER ACI 318:

CONCRETE ELEMENT:	STRENGTH:	EXPOSURE CLASS:
FOOTINGS & FOUNDATION WALLS:	4000 PSI	(F1, SO, W0, C1)
SITE CONCRETE:	4500 PSI	(F3, SO, W1, C2)

REINFORCEMENT & ANCHORAGE

1. REINFORCING STEEL
    A. TYPICAL REINFORCING BAR — ASTM 615 GRADE 60
        i. FIELD BENT DOWELS — ASTM 615 GRADE 40 (OPTIONAL)
2. DEFORMED BAR ANCHORS (DBA): — ASTM A496
3. HEADED STUD ANCHORS (HSA): — ASTM A108
4. ANCHOR BOLTS:
    A. TYPICAL:
        i. ANCHOR BOLTS: — ASTM F1554 GRADE 36
        ii. NUTS: — ASTM A563 NUTS AND
        iii. HARDENED WASHERS: — ASTM GR 36 F436 (5/16" THICK UNO)
5. ALL SPLICES IN REINFORCING BARS SHALL MEET THE REQUIREMENTS OF "REINFORCING LAP SPLICE SCHEDULE".
6. DO NOT SPLICE STIRRUPS AND TIES. DO NOT SPLICE VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN IN DETAILS.
7. MECHANICAL SPLICES SHALL BE POSITIVE CONNECTING COUPLERS AND SHALL MEET ALL APPLICABLE CODE REQUIREMENTS. ADJACENT MECHANICAL SPLICES SHALL BE STAGGERED A MINIMUM OF 24 INCHES ALONG THE REINFORCING BARS. TENSILE CAPACITY OF MECHANICAL SPLICES SHALL BE 125% OF THE SPLICED BAR.
8. ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED PER THE ACI DETAILING MANUAL AND ACI STANDARDS.
9. CONCRETE TO BE MECHANICALLY CONSOLIDATED DURING PLACEMENT PER ACI STANDARDS.
10. USE CHAIRS OR OTHER SUPPORT DEVICES RECOMMENDED BY THE CRSI TO SUPPORT AND TIE REINFORCEMENT BARS AND WWF PRIOR TO PLACING CONCRETE. WWF SHALL BE ADEQUATELY SUPPORTED ABOVE GRADE OR DECK. IT IS RECOMMENDED THAT CONTINUOUS SUPPORTS ARE PLACED AT 36" O.C. MAXIMUM.
11. LIFTING OF REINFORCING OFF GRADE OR DECK DURING PLACEMENT OF CONCRETE IS NOT PERMITTED.
12. REINFORCING STEEL AND EMBEDS SHALL BE PROPERLY TIED INTO PLACE PRIOR TO PLACING CONCRETE.
13. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION AND CONTROL JOINTS OR PROVIDE REINFORCING DOWELS TO MATCH MEMBER REINFORCING, UNO.
14. PROVIDE CORNER BARS AT INTERSECTING WALL CORNERS USING THE SAME BAR SIZE AND SPACING AS THE HORIZONTAL WALL REINFORCING, SEE DETAILS.
15. DO NOT WELD REINFORCING BARS. DO NOT SUBSTITUTE REINFORCING BARS FOR DEFORMED BAR ANCHORS OR HEADED STUD ANCHORS.
16. SEE ACI 315 FOR ADDITIONAL DETAILING REQUIREMENTS FOR REINFORCING.
17. CAST-IN-PLACE REINFORCEMENT SHALL HAVE THE FOLLOWING CLEAR COVER:
    A. CAST AGAINST/PERMANENTLY EXPOSED TO EARTH — 3"
    B. FORMED CONCRETE EXPOSED TO EARTH/WEATHER:
        i. #6 THRU #18 BARS — 2"
        ii. #5 AND SMALLER BARS — 1-1/2"
    C. CONCRETE NOT EXPOSED EARTH/WEATHER:
        i. SLABS, WALLS, JOISTS (#11 AND SMALLER) — 3/4"
        ii. BEAMS, COLUMNS, TIES, STIRRUPS — 1-1/2"

FOOTINGS

1. SEE FOOTING SCHEDULE AND DETAILS FOR SIZE AND REINFORCING REQUIREMENTS, TYP. INTERIOR FOOTINGS MAY BE MONOLITHIC WITH SLAB.
2. CONTRACTOR TO ENSURE THAT ALL EXTERIOR FOOTINGS SHALL BEAR BELOW FROST DEPTH AS NOTED IN "EARTHWORK" SECTION. CONTRACTOR SHALL STEP FOOTINGS & FOUNDATION AS REQUIRED.
3. NO FOOTING SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

FOUNDATION AND RETAINING WALLS

1. BRACE WALLS AS REQUIRED UNTIL FLOOR SLABS AND/OR FLOOR FRAMING ARE IN PLACE, AND UNTIL WALLS HAVE PROPERLY CURED.
2. FOUNDATION WALLS AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ACHIEVED THE DESIGN STRENGTH OR IS PROPERLY SHORED.
3. BACKFILL ADJACENT TO FOUNDATION WALLS OR IN LANDSCAPED AREAS SHALL BE PLACED IN 8 INCH MAXIMUM LOOSE LIFTS. FILL SHALL HAVE MOISTURE CONTENT WITHIN 2% OF OPTIMUM AND SHALL BE COMPACTED TO AT LEAST 90% MAXIMUM DENSITY (ASTM D 1557). HEAVY EQUIPMENT SHALL NOT BE USED TO BACKFILL WITHOUT PRIOR CONSENT OF THE ENGINEER.
4. SEE ARCHITECTURAL DRAWINGS AND DETAILS FOR DRAINAGE METHOD BEHIND FOUNDATION AND RETAINING WALLS.
5. CONSTRUCTION JOINTS (COLD JOINTS) IN WALLS SHALL BE WATERPROOFED TO PREVENT LEAKS.
6. CONTRACTOR SHALL COORDINATE ALL STEPS IN WALLS WITH THE ARCHITECTURAL PRIOR TO PLACEMENT.

MASONRY NOTES

1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE IBC, MSJC/ACI 530, AND LOCAL ORDINANCES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING AS REQUIRED.
3. COORDINATE COURSING AND WALL LOCATIONS WITH ARCHITECTURAL DRAWINGS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ACTUAL LAYOUT AND PLACEMENT OF REINFORCING STEEL. COORDINATE WITH MASONRY MANUFACTURER / SUPPLIER AS REQUIRED.

MATERIALS

1. MATERIALS UNLESS NOTED OTHERWISE ON THE PLANS AND SPECIFICATIONS:
    A. CONCRETE MASONRY UNIT (CMU):
        i. TYPE: — MEDIUMWEIGHT GRADE N
        ii. MIN COMP STRENGTH: — F'M = 2000 PSI MIN.
    B. MORTAR: — TYPE "S"
    C. GROUT: — 2000 PSI
2. SOLID GROUT ALL BEAM AND JOIST POCKETS SOLID AFTER INSTALLATION OF BEAMS AND JOISTS.
3. SOLID GROUT ALL CELLS CONTAINING REINFORCEMENT, ANCHOR BOLTS, OR EMBEDS. ALIGN CELLS TO PRESERVE UNOBSTRUCTED VERTICAL CELLS OF 2" X 3" MINIMUM. GROUT IN 4 FOOT LIFTS MINIMUM WITHOUT PRIOR APPROVAL.
4. MECHANICALLY VIBRATE ALL GROUT DURING PLACEMENT. RE-VIBRATE AFTER EXCESS MOISTURE IS ABSORBED (BEFORE WORKABILITY IS LOST).
5. TERMINATE EACH GROUT POUR AT TOP OF UNIT EXCEPT AT CELLS WITH VERTICAL REINFORCEMENT STOP GROUT 1-1/2" BELOW TOP OF UNIT.
6. SOLID GROUT ALL MASONRY BELOW GRADE
7. ALL MASONRY TO BE INSTALLED WITH RUNNING BOND, UNLESS NOTED OTHERWISE.
8. ALL NON-BEARING PARTITION WALLS SHALL EXTEND TO THE ROOF DECK AS PER STRUCTURAL PLANS, OR SHALL HAVE BRACING PROVIDED PER THE STRUCTURAL MASONRY DETAILS.
9. 40'-0" MAXIMUM SPACING FOR MASONRY CONTROL JOINTS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.
10. SOLID GROUT ADJACENT TO OPENINGS (DOORS, WINDOWS, ETC..) 2'-0" MIN. WIDTH.

REINFORCEMENT

1. MATERIALS UNLESS NOTED OTHERWISE ON THE PLANS AND SPECIFICATIONS:
    A. REINFORCING STEEL: — ASTM 615 GRADE 60 (FY = 60 KSI)
    B. ANCHOR BOLTS: — ATSM A037 W/ ASTM A563 HEAVY HEX NUTS AND HARDENED WASHERS
    C. HEADED STUD ANCHORS: — ASTM A108
2. REQUIRED REINFORCEMENT COVER:
    A. MASONRY EXPOSED TO SOIL: — 1.1/2"
    B. JOINT REINFORCEMENT: — 5/8" FROM THE EXPOSED FACE
    C. OTHER REINFORCEMENT: — ONE BAR DIAMETER (NOT LESS THAN 3/4")
3. SECURE ALL VERTICAL STEEL REINFORCEMENT AGAINST DISPLACEMENT PRIOR TO GROUTING WITH WIRE POSITIONERS OR SIMILAR DEVICE. POSITIONER SPACING NOT TO EXCEED 200 BAR DIAMETERS, 10'-0", OR SPLICE LOCATIONS.
4. LOCATE BAR IN CENTER OF WALL UNLESS NOTED OTHERWISE.
5. PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCING THROUGH JOINING CONCRETE WALLS, MASONRY WALLS, COLUMNS, AND PILASTERS.
6. PROVIDE CONTINUOUS HORIZONTAL REINFORCEMENT AT ALL CORNERS AND INTERSECTING WALLS. PROVIDE CORNER BARS WITH THE REQUIRED LAP SPLICE LENGTH.
7. TERMINATE HORIZONTAL WALL REINFORCING AT EACH SIDE OF CONTROL JOINTS EXCEPT AT ROOF/FLOOR BEARING, BEAMS, AND TOP OF PARAPETS.
8. TERMINATE ALL MASONRY TIES WITH 135 HOOKS PLUS A 6 BAR DIAMETER EXTENSION (4" MINIMUM).
9. DOWEL WALL AND COLUMN REINFORCEMENT INTO THE FOOTING OR STRUCTURE BELOW WITH REINFORCEMENT OF THE SAME SIZE AND SPACING. PROVIDE 40 BAR DIAMETERS FOR SPLICE (24" MIN.). PROVIDE 6" MINIMUM LAP FOR JOINT REINFORCEMENT.
10. DO NOT WELD REINFORCING BARS. DO NOT SUBSTITUTE REINFORCING BARS FOR DBA'S OR HSA'S.

LINTELS

1. ALL STANDARD WALL REINFORCING SHALL CONTINUE THROUGH THE LINTEL SECTION.
2. ALL HORIZONTAL REINFORCING IN HEADERS AND LINTELS SHALL EXTEND 24" MIN. BEYOND EDGE OF OPENING, INTO SUPPORT. PROVIDE STANDARD 90 DEG. HOOK AT ENDS IF HORIZONTAL REINFORCING CANNOT EXTEND 24" BEYOND EDGE OF OPENING.
3. SOLID GROUT ALL LINTELS AND SUPPORTING MASONRY COLUMNS.
4. DO NOT LAP BOTTOM STEEL AT CENTER SPAN. DO NOT LAP STEEL NEAR INTERIOR OR EXTERIOR SUPPORTS.
5. PROVIDE A "U" BLOCK AT THE BOTTOM BLOCK OF THE LINTEL.
6. PENETRATIONS THROUGH LINTELS FOR MECHANICAL, ELECTRICAL SYSTEMS, ETC. ARE NOT PERMITTED WITHOUT APPROVAL OF THE ENGINEER.

MASONRY STRENGTH VERIFICATION

1. VERIFY F'M USING THE "UNIT STRENGTH METHOD" PER IBC SECTION 2105 AND AS DESCRIBED BELOW;
2. SUPPLIER SHALL PROVIDE A LETTER OF STRENGTH CERTIFICATION FOR THE MASONRY AND GROUT PRIOR TO CONSTRUCTION
3. TEST THE GROUT AND MORTAR EVERY 5,000 SQUARE FEET OF MASONRY CONSTRUCTED.
4. AT THE CONTRACTOR'S OPTIONS, USE THE "MASONRY PRISM TEST METHOD" OR THE "MASONRY PRISM TEST RECORD METHOD".

POST INSTALLED ANCHOR NOTES

1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS FOR POST INSTALLED ANCHORS, ACI STANDARDS, AND MSJC SPECIFICATIONS.
2. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFICALLY CALLED FOR IN THE CONTRACT DOCUMENTS. IF POST-INSTALLED ANCHORS ARE DESIRABLE TO BE USED IN PLACE OF CAST-IN-PLACE ANCHORS, CONTRACTOR MUST SUBMIT FORMAL WRITTEN REQUEST TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
3. ANY USE OF POST-INSTALLED ANCHORS FOR RETROFIT OR PLACEMENT/REPLACEMENT OF MISSING ANCHORS INTENDED TO BE CAST-IN-PLACE MUST FIRST BE APPROVED IN WRITING FROM THE ENGINEER.
4. CONTRACTOR SH

WELDING

1. ALL WELDS AND BOLTING TO MEET APPROVAL OF SPECIAL INSPECTOR AS REQUIRED BY BUILDING OFFICIAL.
2. ALL WELDING AND CUTTING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS.
3. WELDS MAY BE PERFORMED IN THE SHOP OR IN THE FIELD. DESIGNATIONS IN THE CONTRACT DOCUMENTS ARE SHOWN ONLY TO ASSIST THE CONTRACTOR IN THE BIDDING PROCESS. AT THE DISCRETION OF THE CONTRACTOR FIELD WELDS MAY BE SUBSTITUTED FOR SHOP WELDS AND FIELD WELDS FOR SHOP WELDS. THE CONTRACTOR SHALL COORDINATE THE WELDING SEQUENCE BETWEEN SUB-CONTRACTORS AND FABRICATORS. CONTRACTOR IS TO VERIFY THAT SEQUENCE OF WELDING CONFORMS WITH APPLICABLE CODES AND REQUIREMENTS PER THE CONTRACT DOCUMENTS.
4. WHERE CONNECTIONS ARE NOT SPECIFIED (IF ANY), CONTRACTOR SHALL SUBMIT CONNECTION DETAIL FOR APPROVAL TO AEURBIA/JMWA PRIOR TO FABRICATION.
5. FIELD WELDING OF CONNECTIONS INTENDED TO BE BOLTED IS NOT PERMITTED WITHOUT PRIOR WRITTEN CONSENT FROM AEURBIA/JMWA.
6. DO NOT WELD REBAR OR ANCHOR BOLTS, INCLUDING "TACK" WELDS.
7. WELDED HEADED STUD ANCHORS (HSA) AND DEFORMED BAR ANCHORS (DBA) SHALL USE FULL FUSION TYPE WELDS USING ELECTRIC ARC AND CERAMIC FERRULES AS SPECIFIED BY THE MANUFACTURER.
   A. THE LENGTHS SPECIFIED IN THE PLANS AND DETAILS MAY BE TAKEN AS THE OVERALL LENGTH OF THE STUD/BAR BEFORE WELDING. OVERALL LENGTH REDUCTION OF STUD/BAR SHALL NOT EXCEED 0.25 INCHES.
   B. CONSULT GUIDELINES AND RESTRICTIONS ON THROUGH DECK WELDING AS REQUIRED BY AWS D1.1 STRUCTURAL WELDING CODE.

BOLTED CONNECTIONS

1. TIGHTEN BOLTS BY THE TURN OF THE NUT, CALIBRATED WRENCH, OR DIRECT TENSION INDICATOR METHOD.
2. USE HARDENED WASHERS BENEATH THE TURNED ELEMENT OF ALL BOLTS OR NUTS. HARDENED BEVELED WASHERS MAY ALSO BE USED TO COMPENSATE FOR THE LACK OF PARALLELISM.
3. PROVIDE HARDENED WASHERS BENEATH THE HEAD AND NUT WHERE A490 BOLTS ARE SPECIFIED PER AISC REQUIREMENTS.
4. HARDENED WASHERS AND PLATES AT OVERSIZED HOLES SHALL CONFORM TO ASTMF-436 AND SHALL COMPLETELY COVER THE SLOT AFTER INSTALLATION.
5. DO NOT REUSE BOLTS, NUTS OR WASHERS.
6. SEE TYPICAL BOLT SCHEDULE FOR BOLT SIZES AND TYPICAL BOLTED CONNECTIONS. PROVIDE A STANDARD AISC FRAMED CONNECTION FOR ONE HALF THE BEAM'S TOTAL UNIFORM LOAD CAPACITY WHERE A CONNECTION IS NOT SHOWN.
7. PROVIDE FULL-DEPTH STIFFENER PLATES AT EACH SIDE OF ALL BEAMS AT ALL BEARING POINTS. STIFFENER PLATE THICKNESS EQUALS THE BEAM WEB THICKNESS (1/4" MIN.). FILLET WELD BOTH SIDES OF STIFFENER, ALL AROUND.

METAL DECKING

1. STEEL DECK TO MEET LATEST REQUIREMENTS OF STEEL DECK INSTITUTE (SDI).
2. ALL DECKS SHALL BE 3-SPAN CONTINUOUS MINIMUM. WHERE 3-SPAN CONDITIONS ARE NOT POSSIBLE, THE CONTRACTOR SHALL PROVIDE HEAVIER GAUGE DECK TO PROVIDE THE EQUIVALENT LOADING OF A DECK UNDER A THREE SPAN CONDITION.
3. STEEL DECK SHALL NOT BE USED TO SUPPORT LOADS FROM PLUMBING, HVAC, FIXTURES, ARCHITECTURAL ELEMENTS, OR EQUIPMENT OF ANY KIND UNLESS SPECIFICALLY NOTED.
4. ALL DECKS AND SUPPORTING MEMBERS MUST BE DRY BEFORE WELDING.
5. CRIMP SEAMS PRIOR TO WELDING OR BUTTON PUNCHING INTERLOCKING SEAMS.
6. LIMIT THE YIELD STRESS OF STEEL DECKS TO A MAXIMUM OF 50 KSI.
7. WHERE DECKS RECEIVE SPRAYED-ON FIREPROOFING, USE SPECIAL PAINT THAT ALLOWS THE SPRAYED-ON FIREPROOFING TO ADHERE TO THE PAINTED DECK.
8. GALVANIZE (G60) DECKS WHEN USED ABOVE OR BELOW MECHANICAL EQUIPMENT ROOMS.
9. REINFORCE DECK AT ALL OPENINGS. SEE PLAN AND DETAILS FOR REQUIREMENTS.
10. CONTRACTOR TO COORDINATE FINISH OF ALL EXPOSED STEEL DECK WITH ARCHITECT.
11. PROVIDE 3" MINIMUM BEARING AND A 4-INCH LAP AT ALL SPLICE POINTS.
12. ALTERNATE ROOF DECK ATTACHMENTS THAN THOSE LISTED IN METAL DECK SCHEDULE MUST BE SUBMITTED TO EOR FOR REVIEW PRIOR TO INSTALLATION AND MUST MEET OR EXCEED THE SHEAR LOAD REQUIREMENTS GIVEN.
13. SEE "DECK SCHEDULE" FOR ROOF AND FLOOR DECK TYPES, CAPACITIES, AND ATTACHMENT REQUIREMENTS.

ABBREVIATIONS

A.B.	ANCHOR BOLTS
ABV	ABOVE
ACI	AMERICAN CONCRETE INSTITUTE
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
APPROX	APPROXIMATE
ARCH	ARCHITECT
ARCH'L	ARCHITECTURAL (DRAWINGS)
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS	AMERICAL WELDING SOCIETY
BFF	BELOW FINISHED FLOOR
BLW	BELOW
BOT	BOTTOM
BRB	BUCKLING RESTRAINED BRACE
BRG	BEARING
BTWN	BETWEEN
CJ	CONTROL JOINT
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNITS
COL	COLUMN
COMP	COMPOSITE
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CP	CONCRETE PIER
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
CW	CONCRETE WALL
DB	DECK BEARING
DBA	DEFORMED BAR ANCHOR
DB	DECK BEARING
DBL	DOUBLE
Ø	OR DIA. DIAMETER
DIM(S)	DIMINSION(S)
DL	DEAD LOAD
DET	DETAIL
DWG(S)	DRAWING(S)
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
ELECT	ELECTRICAL (DRAWINGS)
ELEV	ELEVATION
ELF	EQUIVALENT LATERAL FORCE
EMBED	EMBEDMENT
EOR	ENGINEER OF RECORD
EOS	EDGE OF SLAB
EQ	EQUAL, EQUALLY
EXP	EXPANSION
EXT	EXTERIOR
EQUIP	EQUIPMENT
EXIST	EXISTING
FDN	FOUNDATION
FLR	FLOOR
FRMG	FRAMING
FT	FEET
FTG	FOOTING
FV	FIELD VERIFY
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GSN	GENERAL STRUCTURAL NOTES
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HT	HEIGHT
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
IN	INCH(ES)
INT	INTERIOR
JST	JOIST
JT	JOINT
K	KIPS
KLF	KIPS PER LINEAR FOOT
KSF	KIPS PER SQUARE FOOT
LBS (OR #)	POUNDS
LF	LINEAR FOOT
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSV	LONG SIDE VERTICAL
LSH	LONG SIDE HORIZONTAL
MFR	MANUFACTURER
MAX	MAXIMUM
MECH	MECHANICAL (DRAWINGS)
MIN	MINIMUM
MISC	MISCELLANEOUS
MSJC	MASONRY STANDARDS JOINT COMMITEE
MSW	METAL STUD WALL
MTL	METAL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O.A.	ON CENTER
OD	OUTSIDE DIAMETER
OPP	OPPOSITE
PCF	POUNDS PER CUBIC FOOT
PDF	POWDER DRIVEN FASTENER
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PLUMB	PLUMBING (DRAWINGS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
REINF	REINFORCING
REQ'D	REQUIRED
RTU	ROOF TOP UNIT
SFRS	SEISMIC FORCE RESISTING SYSTEM
SBP	STEEL BASE PLATE
SC	STEEL COLUMN
SCP	STEEL CAP PLATE
SCHED	SCHEDULE
SF	SQUARE FOOT
SIM	SIMILAR
SJI	STEEL JOIST INSTITUTE
SL	SNOW LOAD
SPEC'S	SPECIFICATIONS
STRUCT	STRUCTURAL (DRAWINGS)
STS	SELF TAPPING SCREWS
SW	WOOD SHEAR WALL
T&B	TOP AND BOTTOM
TO	TOP OF ...
TOF	TOP OF FOOTING
TOS	TOP OF SLAB
TOW	TOP OF WALL
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/	WITH
W/O	WITHOUT
WP	WORK POINT
WSW	WOOD STUD WALL
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

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Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2021.249

GENERAL STRUCTURAL NOTES

DATE: **PROJECT ISSUE DATE**

SHEET #:

S002

PROJECT STATUS

2/4/2022

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SPECIAL INSPECTION SCHEDULE

ESTABLISHED PER 2018 IBC

STATEMENT OF SPECIAL INSPECTION (1704.3)

ACCORDING TO CHAPTER 17 OF THE IBC, SPECIAL INSPECTION AND QUALITY ASSURANCE SHALL BE PROVIDED BY AN APPROVED AGENCY OR AGENCIES AS EMPLOYED BY THE OWNER. PRIOR TO THE START OF THE CONSTRUCTION, THE APPROVED AGENCIES SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION. THE CONSTRUCTION OR WORK REQUIRING SPECIAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION OR TESTING PURPOSES UNTIL THE REQUIRED SPECIAL INSPECTION OR TESTS ARE COMPLETE. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS. APPROVED AGENCIES SHALL KEEP RECORDS OF SPECIAL INSPECTIONS AND TESTS. THE APPROVED AGENCY SHALL SUBMIT REPORTS OF SPECIAL INSPECTIONS AND TESTS TO THE BUILDING OFFICIAL, CONTRACTOR, AND TO THE REGISTERED ARCHITECT AND ENGINEER IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED OR TESTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO AND TO THE REGISTERED ARCHITECT AND ENGINEER IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND TESTS, AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS OR TESTS, SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON PRIOR TO THE START OF WORK BY THE OWNER OR THE OWNER'S AUTHORIZED AGENT TO THE BUILDING OFFICIAL. SPECIAL INSPECTION IS REQUIRED FOR ALL ITEMS LISTED IN THE SPECIAL INSPECTION SCHEDULE.

SPECIAL INSPECTION NOTES

1. CONTINUOUS SPECIAL INSPECTION MEANS THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. PERIODIC SPECIAL INSPECTION MEANS THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.
2. ANY CONSTRCTION OR MATERIAL THAT HAS FAILED INSPECTION SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT.
3. EPOXY AND EXPANSION ANCHORS INTO MASONRY OR CONCRETE MAY BE USED ONLY WHEN APPROVED BY ARCHITECT AND / OR ENGINEER USING AN APPROVED PRODUCT WITH CURRENT PUBLISHED ICBO RESEARCH REPORT NUMBERS
4. SPECIAL INSPECTION OF SOILS SHALL REFERENCE THE APPROVED SOILS REPORT TO DETERMINE COMPLIANCE.
5. SPECIAL INSPECTIONS ARE NOT REQUIRED DURING PLACEMENT OF FILL LESS THAN 12 INCHES DEEP.
6. ALL WELDS SHALL BE VISUALLY INSPECTED (IBC 1704.3) AND SHALL BE IN COMPLIANCE WITH AWS D1.1.
7. ALL COMPLETE PENETRATION WELDS SHALL BE TESTED ULTRASONICALLY OR BY USING ANOTHER APPROVED METHOD (AISC 360 N5)
8. SLIP-CRITICAL CONNECTIONS MAY HAVE PERIODIC SPECIAL INSPECTION PROVIDED THAT THE TURN-OF-THE-NUT METHOD WITH MATCH MARKING TECHNIQUES IS USED.

SOILS (IBC 1705.6)

SPECIAL INSPECTIONS OF THE SOIL SHALL BE PERFORMED FOR COMPLIANCE WITH THE STATED REQUIREMENTS IN THE CONSTRUCTION DOCUMENTS AND APPROVED GEOTECHNICAL REPORT.

ITEM FOR VERIFICATION	CONTINUOUS	PERIODIC	COMMENTS
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.		●	
VERIFY EXCAVATIONS ARE EXTENDED TO THE PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.		●	
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.		●	APPLIES IN ALL AREAS WHERE COMPACTED FILL, STRUCTURAL FILL, AND BACKFILL IS REQUIRED
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	●		APPLIES IN ALL AREAS WHERE COMPACTED FILL, STRUCTURAL FILL, AND BACKFILL IS REQUIRED
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.		●	APPLIES IN ALL AREAS WHERE COMPACTED FILL, STRUCTURAL FILL, AND BACKFILL IS REQUIRED

POST-INSTALLED ANCHORS (IBC 1705.1.1)

ALL POST-INSTALLED ANCHORS IN CONCRETE OR MASONRY SHALL BE PERFORMED PER MANUFACTURERS INSTALLATION AND QUALITY ASSURANCE REQUIREMENTS. ICC-ES REPORTS SHOULD BE COLLECTED FOR EACH ANCHORAGE TYPE USED.

ITEM FOR VERIFICATION	CONTINUOUS	PERIODIC	COMMENTS
ADHESIVE ANCHORS (DRILL & EPOXY)	●		ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATION TO RESIST SUSTAINED TENSION OR SEISMIC LOADS SHOULD BE CONTINUOUSLY INSPECTED. ALL OTHER INSTALLATION TYPES MAY BE INSPECTED PERIODICALLY.
SCREW OR MECHANICAL ANCHORS		●	

MISCELLANEOUS ITEMS REQUIRING SPECIAL INSPECTION (1705.12.4, 1705.12.5, 1705.12.6, 1705.12.7)

ITEM FOR VERIFICATION	CONTINUOUS	PERIODIC	COMMENTS
ARCHITECTURAL COMPONENTS		●	ERECTION AND FASTENING OF INTERIOR & EXTERIOR NON-BEARING WALLS & INTERIOR & EXTERIOR CLADDING. SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE: (1) CLADDING AND WALLS ARE LESS THAN 30 FEET IN HEIGHT, (2) CLADDING AND/OR VENEER WEIGH LESS THAN 5 PSF, (3) INTERIOR NON-BEARING WALLS WEIGHING LESS THAN 15 PSF OR LESS
ANCHORAGE OF ELECTRICAL EQUIPEMENT DESIGNED FOR EMERGENCY AND STANDBY POWER SYSTEMS.		●	IN SDC C, D, E, OR F.
ANCHORAGE OF MECHANICAL AND PLUMBING SYSTEMS CARRYING HAZARDOUS MATERIALS		●	IN SDC C, D, E, OR F.
INSTALLATION AND ANCHORAGE OF M/E/P FOR AUTOMATIC FIRE SUPPRESSION SYSTEMS.		●	IN SDC C, D, E, OR F. REQUIRED ONLY WHEN FLEXIBLE HOSE FITTING ARE NOT USED.
STORAGE RACK ANCHORAGE		●	IN SDC D, E, OR F. ANY STORAGE RACK GREATER THAN 8 FEET IN HEIGHT.
INSTALLATION AND ANCHORAGE OF M/E/P FOR AUTOMATIC FIRE SUPPRESSION SYSTEMS.		●	***REQUIRED ONLY WHEN FLEXIBLE HOSE FITTING ARE NOT USED.***
SPRAYED FIRE-RESISTANT MATERAL (**1705.7.14)**		●	SPECIAL INSPECTION SHALL BE BASED ON THE FIRE RESISTANCE DESIGN PER ARCHITECTURAL CONTRACT DOCUMENTS FOR WALL, FLOOR, AND ROOF ASSEMBLIES. SPECIAL INSPECTION SHALL BE PERFORMED AFTER THE ROUGH INSTALLATION OF ELECTRICAL, FIRE-SPRINKLER, MECHANICAL, PLUMBING SYSTEMS, AND SUSPENDED CEILINGS HAVE BEEN INSTALLED AS APPLICABLE. SPECIAL INSPECTION SHALL INCLUDE (1) CONDITION OF SUBSTRATES, (2) THICKNESS OF APPLICATION, (3) DENSITY OF FIRE RESISTANT MATERIAL (pcf), (4) BOND STRENGTH ADHESION/COHESION, (5) CONDITION OF FINISHED APPLICATION.

CONCRETE CONSTRUCTION (IBC 1705.3)

CONCRETE ITEMS REQUIRING SPECIAL INSPECTION: CONCRETE FOOTINGS, EXTERIOR CONCRETE FOOTINGS, CONCRETE WALLS, CONCRETE FOOTINGS AND FOUNDATION WALLS, INTERIOR CONCRETE SLAB-ON-GRADE, CONCRETE TILT-UP PANELS, CONCRETE COLUMNS/PIERS, NONE, ALL POST-TENSIONED CONCRETE (SEE BELOW), (NOT REQ'D WHERE (1) ISOLATED SPREAD FOOTINGS SUPPORT BLDG 3 STORES OR LESS, FOOTINGS SUPPORTING LIGHT-FRAME CONSTRUCTION, STRUCTURAL DESIGN USES 2500 PSI OR LESS, NON-STRUCTURAL SLAB ON GRADE)

ITEM FOR VERIFICATION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
CONCRETE PLACEMENT	●		
VERIFYING REQUIRED DESIGN MIX		●	VERIFY MIX DESIGN MEETS STRENGTH AND EXPOSURE REQUIREMENTS LISTED ON GENERAL STRUCTURAL NOTES
EMBEDDED BOLTS, PLATES, AND ANCHORS		●	VERIFY TYPE, SIZE, DETAILS, AND LOCATION OF EMBEDS
FORMWORK		●	VERIFY DIMENSIONS AND LOCATION; VERIFY CONSTRUCTION LOADS HAVE BEEN CONSIDERED BY CONTRACTOR; VERIFY RATE AND METHOD OF CONCRETE PLACEMENT
CURING TEMPERATURE / TECHNIQUES		●	CURING OF THE CONCRETE SHOULD BE IN COMPLIANCE WITH HOT AND COLD CONDITIONS PER ACI LIMITATIONS.
STRENGTH TESTS (COMPRESSION AND/OR FLEXURE), SLUMP, AIR ENTRAINMENT, AND CONCRETE TEMPERATURE	●		TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY AND SHALL BE AT A MINIMUM OF (1) ONCE PER DAY (2) ONCE PER 150 CUBIC YARDS OF CONCRETE (3) ONCE PER 1500 SQ FT OF SURFACE AREA FOR SLABS OR WALLS; A MINIMUM OF (5) TOTAL STRENGTH TESTS SHOULD BE PERFORMED RANDOMLY ACROSS BATCHES
REINFORCING STEEL PLACEMENT			
ASTM DESIGNATION AND GRADE OF REINFORCING		●	
TYPE, SIZE, LOCATION, DETAILING, AND EMBEDMENT LENGTH		●	
CONCRETE COVER TO REINFORCING		●	
LOCATION AND LENGTH OF LAP SPLICES		●	
TYPE AND LOCATION OF MECHANICAL SPLICES		●	
ASTM DESIGNATION FOR PROTECTIVE COATINGS		●	
PROPER STORAGE OF REINFORCING		●	VERIFY REINFORCEMENT IS FREE OF DIRT, OIL, AND EXCESSIVE CORROSION
MILL TEST REPORTS FOR ALL REINFORCING		●	
WELDING OF REINFORCMENT	●		WELDING OF REINFORCING BARS SHALL BE PER AWS D1.4

MASONRY CONSTRUCTION (IBC 1705.4) - LEVEL B QUALITY ASSURANCE

ITEM FOR VERIFICATION	CONTINUOUS	PERIODIC	COMMENTS
VERIFY PRIOR TO CONSTRUCTION			
COMPLIANCE WITH CONSTRUCTION DOCUMENTS AND SUBMITTALS		●	REVIEW MATERIAL CERTIFICATES, MIX DESIGNS, TEST RESULTS AND CONSTRUCTION PROCEDURES ARE IN COMPLIANCE WITH CONSTRUCTION DOCUMENTS
VERIFICATION OF f'm OF MASONRY UNITS		●	
PROPORTIONS OF SITE PREPARED MORTAR		●	
CONSTRUCTION OF MORTAR JOINTS		●	
TYPE, SIZE, & GRADE OF REINFORCEMENT		●	
TYPE, SIZE, & LOCATION OF EMBEDS & ANCHORS		●	
HOT OR COLD WEATHER PROTECTION		●	
GROUT SPACE		●	
VERIFY DURING CONSTRUCTION			
SIZE AND LOCATION OF STRUCTURAL ELEMENTS		●	
PLACEMENT AND SPACING OF REINFORCING		●	
PLACEMENT OF EMBEDS & ANCHORS		●	
PROPORTIONS OF GROUT AND PLACEMENT OF GROUT		●	
PROPORTIONS OF MORTAR AND PLACEMENT OF MORTAR JOINTS		●	
PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD OR HOT WEATHER	●		COLD WEATHER IS DEFINED AS TEMPERATURES BELOW 40 DEGREES FAHRENHEIT; HOT WEATHER IS DEFINED AS TEMPERATURES ABOVE 90 DEGREES FAHRENHEIT.
OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		●	
VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX UPON DELIVERY TO THE PROJECT SITE		●	
WELDING OF REINFORCMENT	●		

STEEL WELDING (AISC 360-16)

ITEM FOR VERIFICATION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
INSPECTION TASKS PRIOR TO WELDING			
WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	●		
WELDING PROCEDURE SPECIFICATIONS AVAILABLE	●		
MANUFACTUERER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	●		
MATERIAL IDENTIFICATION (TYPE/GRADE)		●	
WELDER IDENTIFICATION SYSTEM		●	
FIT-UP GROOVE WELDS		●	INCLUDING JOINT GEOMETRY, PREPARATIONS, DIMENSIONS, CLEANLINESS, TACKING, AND BACKING TYPE FIT (WHERE APPLICABLE)
CONFIGURATION AND FINISH OF ACCESS HOLES		●	
FIT-UP OF FILLET WELDS		●	INCLUDING DIMENSIONS, CLEANLINESS, AND TACKING
CHECKING WELDING EQUIPMENT		●	
INSPECTION TASKS DURING WELDING			
CONTROL AND HANDLING OF WELDING CONSUMABLES		●	INCLUDING PACKAGING AND EXPOSURE CONTROL
USE OF QUALIFIED WELDERS		●	
CRACKED TACK WELDS		●	VERIFY NO WELDING OVER CRACKED TACK WELDS
ENVIRONMENTAL CONDITIONS		●	VERIFY WIND SPEED WITHIN LIMITS, PRECIPITATION, AND TEMPERATURE
WELDING PROCEDURE SPECIFICATIONS FOLLOWED		●	VERIFY SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, SELECTED WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE (MIN/MAX), PROPER POSITION (F, V, H, OH)
WELDING TECHNIQUES		●	VERIFY INTERPASS AND FINAL CLEANING, EACH PASS WITHIN PROFILE LIMITATIONS, EACH PASS MEETS QUALITY REQUIREMENTS
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS		●	
SINGLE-PASS FILLET WELDS		●	
MULTIPASS FILLET WELDS	●		
COMPLETE AND PARTIAL PENETRATION GROOVE WELDS	●		
INSPECTION TASKS AFTER WELDING			
WELDS CLEANED	●		
SIZE, LENGTH AND LOCATION OF WELDS	●		
WELDS MEET VISUAL ACCEPTANCE CRITERIA; CRACK PROHIBITION, WELD/BASE-METAL FUSION, CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT, AND POROSITY	●		
ARC STRIKES, K-AREA, BACKING AND WELD TABS REMOVED (WHERE REQUIRED), AND ALL REPAIR ACTIVITIES	●		
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER		●	
NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF EOR		●	

STEEL BOLTING (AISC 360-16)

ITEM FOR VERIFICATION	CONTINUOUS	PERIODIC	COMMENTS
INSPECTION TASKS PRIOR TO BOLTING			
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	●		
FASTENERS		●	MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS
CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL		●	INCLUDING GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE.
CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL		●	
CONNECTING ELEMENTS		●	MEET APPLICABLE REQUIREMENTS INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED.
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED		●	NOT REQUIRED IF ONLY SNUG-TIGHT JOINTS ARE SPECIFIED
PROTECTED STORAGE		●	STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS
INSPECTION TASKS DURING BOLTING			
FASTENER PLACEMENT		●	FASTENER ASSEMBLIES PLACED IN ALL HOLES, WASHERS, AND NUTS ARE POSTIONED AS REQUIRED
JOINT		●	BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION
FASTENER COMPONENT		●	FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING
PRETENSIONED FASTENERS		●	VERIFY THAT PRETENSIONED FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES
INSPECTION TASKS AFTER BOLTING			
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	●		

METAL ROOF/FLOOR DECK (1705.2.2, 1705.11.3)

ITEM FOR VERIFICATION	CONTINUOUS	PERIODIC	COMMENTS
DECK PLACEMENT		●	VERIFY PLACEMENT IS IN COMPLIANCE WITH APPROVED SUBMITTALS AND CONTRACT DOCUMENTS
DECK MATERIALS		●	VERIFY MATERIAL AND GAUGE ARE IN COMPLIANCE WITH CONTRACT DOCUMENTS AND APPROVED SUBMITTALS
FASTENING		●	FASTENER TYPE, SIZE, AND SPACING COMPLIES WITH CONTRACT DOCUMENTS, APPROVED SUBMITTALS, AND MANUFACTURERS REQUIREMENTS.

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GENERAL STRUCTURAL NOTES

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S003

PROJECT STATUS

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METAL DECK SCHEDULE

AREA	DECK TYPE			FASTENERS			SIDE SEAM CONNECTION		MIN SHEAR CAPACITY (CAPACITY/MAX DECK SPAN)
	DEPTH	TYPE	GAUGE	FASTENER TYPE	AT SUPPORTS PERP. TO FLUTES	AT SUPPORTS PARALLEL TO FLUTES	TYPE	SPACING	
TYP ROOF	1.1/2"	B'	22	3/4" DIA PUDDLE WELD	36/7	12" O.C.	1.1/2" TSW	12" O.C.	580 PLF/8'-0"
				3/4" DIA PUDDLE WELD	36/7	12" O.C.	PUNCHLOK II	12" O.C.	
				HILTI X-HSN 24	36/7	12" O.C.	PUNCHLOK II	12" O.C.	

NOTES:

1. PROVIDE 2" MIN BEARING AT ALL SUPPORTS. ALL DECK WITH A PROFILES WITH A DEPTH OF 2" OR LESS SHALL HAVE NESTED OR TELESCOPED END LAPS.
2. USE INTERLACKING SIDE SEAMS FOR ALL DECK TYPES.
3. TOP SEAM WELDS SHALL BE 1 1/2" LONG AND SHALL BE ACCORDING TO SDI STANDARDS.
4. MINIMUM SHEAR CAPACITY IS THE CAPACITY REQUIRED FOR ALTERNATE SYSTEMS, SEE GSN.
5. SUBMIT CURRENT ICC APPROVAL FOR ALL DECKS.
6. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

FASTENING PATTERNS

PATTERN : 36/7

17 S004 METAL DECK SCHEDULE
SCALE: N.T.S.

CONCRETE WALL SCHEDULE

WALL MARK	THICKNESS	REINFORCING			WALL TYPE	NOTES:
		VERTICAL	HORIZONTAL	TOP AND BOTTOM		
CW-12A	12"	#5 AT 18" O.C. E.F.	#4 AT 12" O.C. E.F.	(1) #4	"D"	

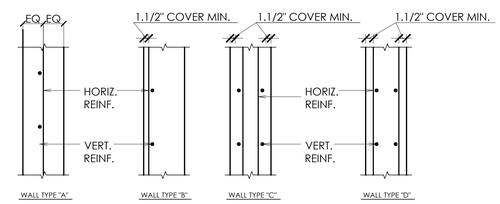
NOTES:

1. REINFORCEMENT FOR CONCRETE FOUNDATION WALLS NOT DESIGNATED ON THE PLANS:

THICKNESS	VERTICAL REINFORCING	HORIZONTAL REINFORCING
6"	#4 BARS AT 18" O.C.	#4 BARS AT 16" O.C.
8"	#4 BARS AT 18" O.C.	#4 BARS AT 12" O.C.

2. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.

WALL REINFORCEMENT PLACEMENT TYPES:



5 S004 CONCRETE WALL SCHEDULE
SCALE: N.T.S.

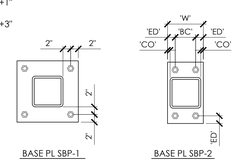
STEEL COLUMN SCHEDULE

COLUMN MARK	COLUMN SIZE	STEEL BASE PLATE	STEEL CAP PLATE	ANCHOR BOLTS
SC10A	HSS10x10x5/16	3/4" (SBP-2	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.
SC-10B	HSS10x10x3/8	3/4" (SBP-2)	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.
SC-12A	HSS 12x12X3/8	3/4" (SBP-1)	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.

STEEL COLUMN NOTES:

1. TYPICAL ANCHOR RODS SHALL MEET THE FOLLOWING REQUIREMENTS, UNO:
   A. ANCHOR BOLTS SHALL PROJECT 3" MINIMUM ABOVE TOP OF THE BASE PLATE.
   B. ANCHOR EMBEDMENT INTO FOOTING SHALL BE 12x ANCHOR BOLT DIAMETER.
   C. EMBEDDED ENDS SHALL HAVE 3" MINIMUM HOOKS.
2. TYPICAL ANCHOR BOLTS SHALL BE INSTALLED WITH HARDENED WASHERS BENEATH NUT. ANY HOLES LARGER THAN THE BOLT DIAMETER PLUS 5/16" SHALL HAVE 5/16" PLATE WASHERS INSTALLED BENEATH HARDENED WASHERS.
   A. TYPICAL BASE PLATE ANCHOR HOLES SHALL BE PER AISC SPECIFICATION (5/16" MAX OVERSIZE).
3. IF DESIRED SPLICE LOCATIONS DIFFER FROM THOSE LEVELS SHOWN ON PLAN, NOTIFY STRUCTURAL ENGINEER PRIOR TO FABRICATION. WRITTEN APPROVAL REQUIRED.
4. NON-SHRINK GROUT UNDER BASE PLATES SHALL BE 1 1/2" THICK U.N.O.
5. FLOOR ELEVATIONS SHOWN ARE FOR INFORMATION ONLY. CONTRACTOR TO CONFIRM WITH ARCHITECTURAL.
6. ALL CAP PLATES/BASE PLATES SHALL WELD TO COLUMN WITH 5/16" FILLET WELD, U.N.O.
7. REFER TO DETAILS FOR ANCHOR BOLT LAYOUT. MODIFICATIONS TO ANCHOR BOLT LAYOUT MAY BE USED WITH WRITTEN APPROVAL.
8. ANCHOR BOLTS SHALL NOT BE WELDED (INCLUDING TACK WELDS).
9. SEE GENERAL STRUCTURAL NOTES FOR MATERIALS AND OTHER REQUIREMENTS.

PLATE LEGEND
'CO' = 1/2" MINIMUM
'ED' = 1 1/2" MINIMUM
'BC' = BEAM OR GIRDER GAGE
'W' = WHICHEVER IS GREATER:
BEAM OR GIRDER GAGE +1"
OR
BEAM OR GIRDER GAGE +3"
OR
COLUMN WIDTH +1"



BASE PLATE LAYOUTS

18 S004 STEEL COLUMN SCHEDULE
SCALE: N.T.S.

MASONRY REINFORCING LAP SCHEDULE

BAR SIZE	(1)BAR PER CELL	(2) BARS PER CELL
#3	13"	13"
#4	21"	21"
#5	34"	34"
#6	37"	USE MECH SPLICE COUPLER
#7	USE MECH SPLICE COUPLER	USE MECH SPLICE COUPLER
#8	USE MECH SPLICE COUPLER	USE MECH SPLICE COUPLER

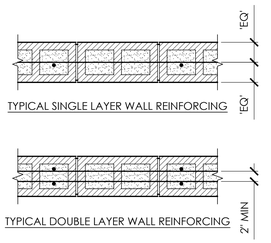
10 S004 MASONRY REINFORCING LAP SCHEDULE
SCALE (24x36): N.T.S.

MASONRY WALL SCHEDULE

WALL MARK	THICKNESS	MATERIALS	SOLID GROUT	REINFORCING		SPECIAL INSP. REQ'D.	JAMBS & ENDS
				VERTICAL	HORIZONTAL		
MW-12A	12"	CMU	NO	#6 @ 8' O.C. E.F.	#5 @ 48" O.C. E.F.	YES	(2) #5 VERT.

NOTES:

1. COORDINATE MASONRY WALL FINISHES, TYPES OF MATERIAL, COURSING, ETC. WITH ARCHITECTURAL DRAWINGS.
2. MASONRY WALLS SHALL BE PLACED IN RUNNING BOND, UNO.
3. DOT NOT SOLID GROUT WALLS UNLESS NOTED OTHERWISE IN NOTES OR SCHEDULES.
4. SOLID GROUT ALL MASONRY BELOW GRADE.
5. CENTER VERTICAL REINFORCING IN THE WALL UNO, SEE SCHEMATICS FOR TYPICAL PLACEMENT OF DOUBLE AND SINGLE WALL REINFORCEMENT.
6. PLACE HORIZONTAL WALL REINFORCING BETWEEN VERTICAL MASONRY COLUMN REINFORCING BARS.
7. CONTINUE HORIZONTAL WALL REINFORCING THRU MASONRY LINTELS. USE LARGER REINFORCING WERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE
8. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.



6 S004 MASONRY WALL SCHEDULE
SCALE: N.T.S.

LEDGER SCHEDULE 'L'

MARK	SIZE	PANEL CONNECTION	(2) BARS PER CELL			
			THICKNESS	WIDTH 'W'	WELD SIZE	WELD LENGTH 'L'
'L1'	L4x4x1/4	3/8"x4"x0'-8" EMBED PL W/ (4) 3/4" DIA x 0'-6" HSA @ 6'-0" O.C. (MAX)	3/8"	5"	3/16"	5"

NOTES:

1. SCHEDULE APPLIES TO DECK LEDGERS AT ROOF AND FLOOR UNLESS NOTED OTHERWISE IN DETAILS.
2. CONTRACTOR OPTION: OMIT SPLICER PL AND PROVIDE FULL PENETRATION WELD AT SPLICE.
3. WELD PLATES OR ANCHOR BOLTS SHALL BE LOCATED NOT LESS THAN 6" NOR MORE THAN 1'-4" FROM THE END OF THE LEDGER OR LEDGER SPLICE.

EMBEDMENT OF ADHESIVE ANCHORS

REBAR DOWEL DIAMETER	ANCHOR BOLT DIAMETER	EMBEDMENT LENGTH
#4	1/2"	6"
#5	5/8"	7"
#6	3/4"	10"
#7	7/8"	13"
#8	1"	16"

NOTES:

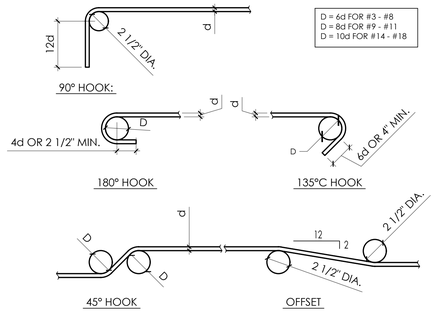
1. EMBEDMENT LENGTHS SHALL BE ADJUSTED WHEN EXISTING WALL IS OF EQUAL OR OF LESS THICKNESS THAN SCHEDULE REQUIRES, IN THESE CASES THE EMBEDMENT LENGTH SHALL BE THE WALL THICKNESS MINUS 1.1/2".
2. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.
3. EMBEDMENT LENGTH IS INTO STRUCTURE, NOT VENEER, U.N.O.

REINFORCING LAP SPICE SCHEDULE

BAR SIZE	f'c = 3000 PSI				f'c = 4000 PSI				f'c = 5000 PSI				f'c = 6000 PSI			
	REGULAR		TOP		REGULAR		TOP		REGULAR		TOP		REGULAR		TOP	
	CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
#3	13"	17"	17"	21"	12"	16"	16"	21"	12"	16"	16"	21"	12"	16"	16"	21"
#4	17"	22"	22"	28"	15"	19"	19"	25"	13"	17"	17"	22"	12"	16"	16"	21"
#5	21"	27"	27"	35"	18"	24"	24"	31"	16"	21"	21"	27"	15"	19"	19"	25"
#6	27"	36"	36"	46"	24"	31"	31"	40"	21"	28"	28"	36"	20"	25"	25"	33"
#7	37"	48"	48"	63"	32"	42"	42"	54"	29"	38"	38"	49"	27"	34"	34"	44"
#8	49"	64"	64"	82"	42"	55"	55"	71"	38"	49"	49"	64"	35"	45"	45"	58"
#9	62"	80"	80"	104"	54"	70"	70"	90"	48"	62"	62"	81"	44"	57"	57"	74"
#10	78"	102"	102"	132"	68"	88"	88"	115"	61"	79"	79"	102"	56"	72"	72"	94"
#11	96"	125"	125"	162"	83"	108"	108"	141"	76"	97"	97"	126"	68"	88"	88"	115"

NOTES:

1. THESE NOTES SHALL BE USED FOR ALL SPLICES, UNLESS NOTED OTHERWISE.
2. CLASS 'A' SPLICES MAY BE USED ONLY IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH.
3. CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE #2 ABOVE ARE MET.
4. TIES AND STIRRUPS SHALL NOT BE SPLICED.
   a. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2.
   b. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33.
   c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
   d. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
5. FOR ALL LIGHTWEIGHT CONCRETE, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3.
6. FOR ALL EPOXY COATED BARS, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3 FOR TOP BARS AND 1.5 FOR REGULAR BARS.
7. TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12" (OR MORE) OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.

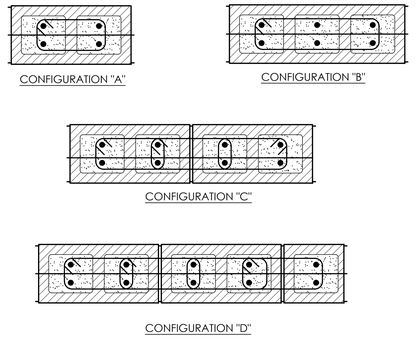


MASONRY PIER SCHEDULE

COLUMN MARK	COLUMN SIZE	REINFORCING			NOTES
		VERTICAL	TIES	CONFIG.	
MP-16	'WT' x 16"	(4) #5	#3 @ 8" O.C.	A	GROUT SOLID
MP-24	'WT' x 24"	(6) #5	#3 @ 8" O.C.	B	GROUT SOLID
MP-32	'WT 'x 32"	(8) #5	#3 @ 8" O.C.	C	GROUT SOLID

NOTES:

1. HORIZONTAL WALL REINFORCING SHALL BE LOCATED TO THE INSIDE OF THE VERTICAL BARS FOR DOUBLE LAYER MASONRY PIERS.
2. VERTICAL REINFORCING AND TIES SHALL EXTEND FULL HEIGHT OF WALL (UNO).
3. VERTICAL MASONRY PIER REINFORCING SHALL EXTEND INTO THE FOOTING AND TERMINATE WITH A STANDARD 90° HOOK. FOR CONCRETE FOUNDATION WALLS TALLER THAN 5'-0", VERTICAL PIER REINFORCING SHALL DOWEL 4'-0" MINIMUM INTO THE FOUNDATION WALL (UNO).
4. IN CONCRETE FOUNDATION WALLS, VERTICAL MASONRY PIER REINFORCING SHALL BE TIED WITH #3 TIES AT THE SAME SPACING AND CONFIGURATION AS THE MASONRY PIER ABOVE.
5. HORIZONTAL REINFORCING OF ADJACENT WALLS SHALL RUN CONTINUOUS THROUGH MASONRY PIERS.
6. WHERE NOTED IN SCHEDULE TIES EXTEND FROM BOTTOM TO TOP OF OPENING AND REPLACE HORIZONTAL WALL REINFORCING.
7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

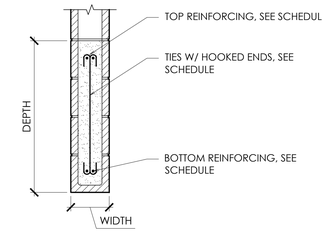


MASONRY LINTEL SCHEDULE

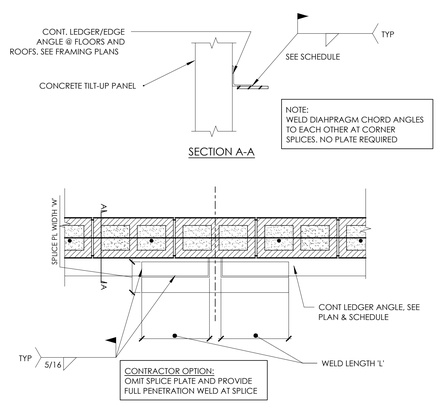
LINTEL MARK	LINTEL DEPTH	REINFORCING		NOTES
		HORIZONTAL	STIRRUPS	
ML-16A	16"	(2) #5 BAR CONT. TOP & BOTTOM	NONE	GROUT SOLID
ML-24A	24"	(2) #5 BAR CONT. TOP & BOTTOM	NONE	GROUT SOLID
ML-40A	40"	(2) #6 BAR CONT. TOP & BOTTOM	#4 @ 16" O.C.	GROUT SOLID
ML-56A	56"	(2) #7 BAR CONT. TOP & BOTTOM	#4 @ 16" O.C.	GROUT SOLID

NOTES:

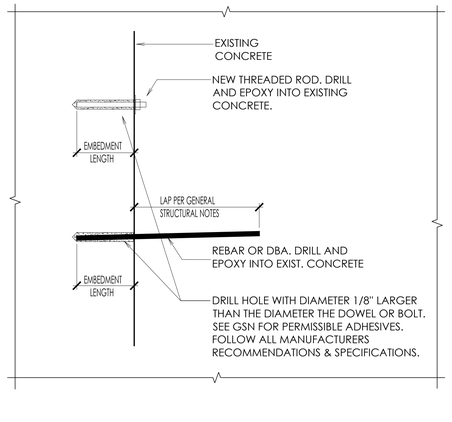
1. LINTEL WIDTH AND MATERIAL TYPE SHALL BE THE SAME AS THE WALL IN WHICH THE LINTEL IS CONSTRUCTED.
2. SOLID GROUT MASONRY LINTELS MONOLITHICALLY WITH THE SUPPORT WALL OR COLUMN AT EACH END.
3. JOISTS SHALL NOT BEAR ON ANY LINTEL LESS THAN 16" DEEP. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SHOWN ON THE PLANS WHICH ARE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS.
4. EXTEND ALL HORIZONTAL REINFORCING 48 BAR DIAMETERS MINIMUM BEYOND THE EDGE OF ALL OPENINGS. IF HORIZONTAL REINFORCING CANNOT EXTEND 48 BAR DIAMETERS BEYOND EDGE OF OPENING, PROVIDE 90° STANDARD HOOK.
5. SPLICE TOP BARS AT MIDSPAN OF LINTEL ONLY AND BOTTOM BARS OVER SUPPORTS ONLY.
6. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.
7. DOWEL VERTICAL REINFORCING OF WALL ABOVE LINTEL INTO THE FULL DEPTH OF LINTEL OR 48 BAR DIAMETERS, WHICHEVER IS LESS.
8. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



TYPICAL LINTEL CONFIGURATION



20 S004 LEDGER SCHEDULE
SCALE: N.T.S.



16 S004 POST-INSTALLED ANCHOR EMBEDMENT DETAIL
SCALE: N.T.S.

12 S004 REINFORCING LAP SPLICE SCHEDULE & BAR BENDING DIAGRAMS
SCALE: N.T.S.

8 S004 MASONRY PIER SCHEDULE
SCALE: N.T.S.

4 S004 MASONRY LINTEL SCHEDULE
SCALE: N.T.S.

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STATE OF UTAH
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SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2021.249

STRUCTURAL SCHEDULES

DATE: PROJECT ISSUE DATE

SHEET #:

S004

PROJECT STATUS

2/4/2022

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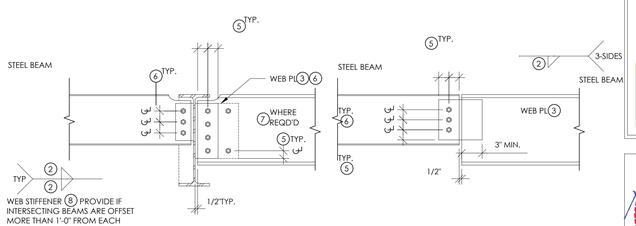
A-325 BOLT SCHEDULE

MAXIMUM BEAM SIZE IN EACH BEAM DEPTH GROUP	A-325N BOLTS	
	No. PER BEAM	SIZE
W8	2	3/4" DIA.
W10	2	3/4" DIA.
W12	3	3/4" DIA.
W14	3	3/4" DIA.
W16	4	3/4" DIA.
W18	5	3/4" DIA.
W21	6	3/4" DIA.
W24	6	3/4" DIA.
W27	7	3/4" DIA.
W30	8	3/4" DIA.

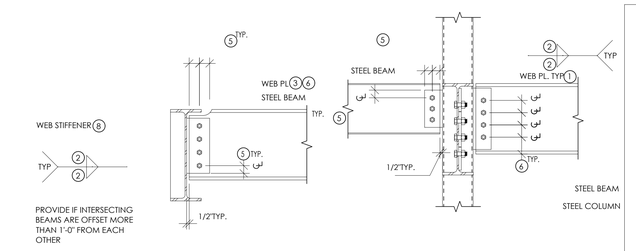
1. HSS COLUMN SHALL HAVE A MINIMUM 1/4" THICKNESS FOR 3/8" SHEAR TABS AND MINIMUM 3/8" THICKNESS FOR 1/2" SHEAR TABS.
2. FILLET WELDS SHALL BE AS FOLLOWS:
   ONE SIDE: PLATE THICKNESS MINUS 1/16" (1/4" MIN.)
   TWO SIDES: 1/2" PLATE THICKNESS PLUS 1/16" (1/4" MIN.) EACH SIDE
3. BEAM WEB CONNECTION PLATE THICKNESS EQUALS BEAM WEB THICKNESS PLUS 1/8" (3/8" MIN.).
4. STIFFENER PL THICKNESS EQUALS BEAM FLANGE THICKNESS OF THE BEAM FRAMING INTO COLUMN (3/8" MIN.).
5. BOLT EDGE DISTANCE SHALL BE EQUAL TO 2X THE DIAMETER OF THE BOLT (1 1/2" MIN.) AT ALL EDGES.
6. VERTICAL BOLT SPACING SHALL BE 3" O.C. TYP. FULL HT OF WEB. SPACING MAY BE REDUCED TO 3X THE DIAMETER OF THE BOLT IF REQR'D TO MAINTAIN A SINGLE ROW OF BOLTS (SINGLE ROW OF BOLTS IS PREFERRED).
7. WHEN MORE THAN ONE COLUMN OF BOLTS IS REQUIRED, THE COLUMN OF BOLTS SHALL BE COMPLETE WITH THE REMAINDER OF THE BOLTS PLACED IN THE SECOND COLUMN.
8.

STEEL BEAM STIFFENER PLATES		
FLANGE WIDTH	STIFFENER THICKNESS	WELD SIZE
LESS THAN 8 1/4"	1/4"	3/16"
8 1/4" TO 12 1/4"	3/8"	1/4"
12 1/4" TO 16 1/2"	1/2"	5/16"
16 1/2" TO 20 3/4"	5/8"	3/8"



BEAM TO BEAM - WEB PLATE CONNECTION

BEAM TO PARALLEL BEAM - WEB PLATE CONNECTION



BEAM TO BEAM - WEB PLATE CONNECTION

BEAM TO TUBE STEEL COLUMN - WEB CONNECTION

6 S005 BOLT SCHEDULE FOR TYP. STEEL CONNECTIONS

SCALE: N.T.S.

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SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2021.249

STRUCTURAL SCHEDULES

DATE: **PROJECT ISSUE DATE**

SHEET #:

S005

PROJECT STATUS

2/4/2022

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STEEL COLUMN SCHEDULE

COLUMN MARK	COLUMN SIZE	STEEL BASE PLATE	STEEL CAP PLATE	ANCHOR BOLTS
SC10A	HSS10x10x5/16	3/4" (SBP-2	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.
SC-10B	HSS10x10x3/8	3/4" (SBP-2)	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.
SC-12A	HSS 12x12X3/8	3/4" (SBP-1)	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.

FOOTING SCHEDULE

MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE				REINFORCING LENGTHWISE				COMMENTS
				NO.	SIZE	LENGTH	SPACING	NO.	SIZE	LENGTH	SPACING	
FC2.5	2'-6"	CONT	1'-0"	-	# 5	2'-0"	48" O.C.	3	#5	CONT	EQ	
FC3.0	3'-0"	CONT	1'-0"	-	# 5	2'-6"	18" O.C.	3	#5	CONT	EQ	
FC3.5	3'-6"	CONT	1'-0"	-	# 5	3'-0"	18" O.C.	4	#5	CONT	EQ	
FS4.5	4'-6"	4'-6"	1'-0"	5	#5	4'-0"	EQ	5	#5	4'-0"	EQ	
FS5.0	5'-0"	5'-0"	1'-0"	5	#5	4'-6"	EQ	5	#5	4'-6"	EQ	
FS6.0	6'-0"	6'-0"	1'-0"	6	#5	5'-6"	EQ	6	#5	5'-6"	EQ	
FS7.0	7'-0"	7'-0"	1'-3"	6	#6	6'-6"	EQ	6	#6	6'-6"	EQ	

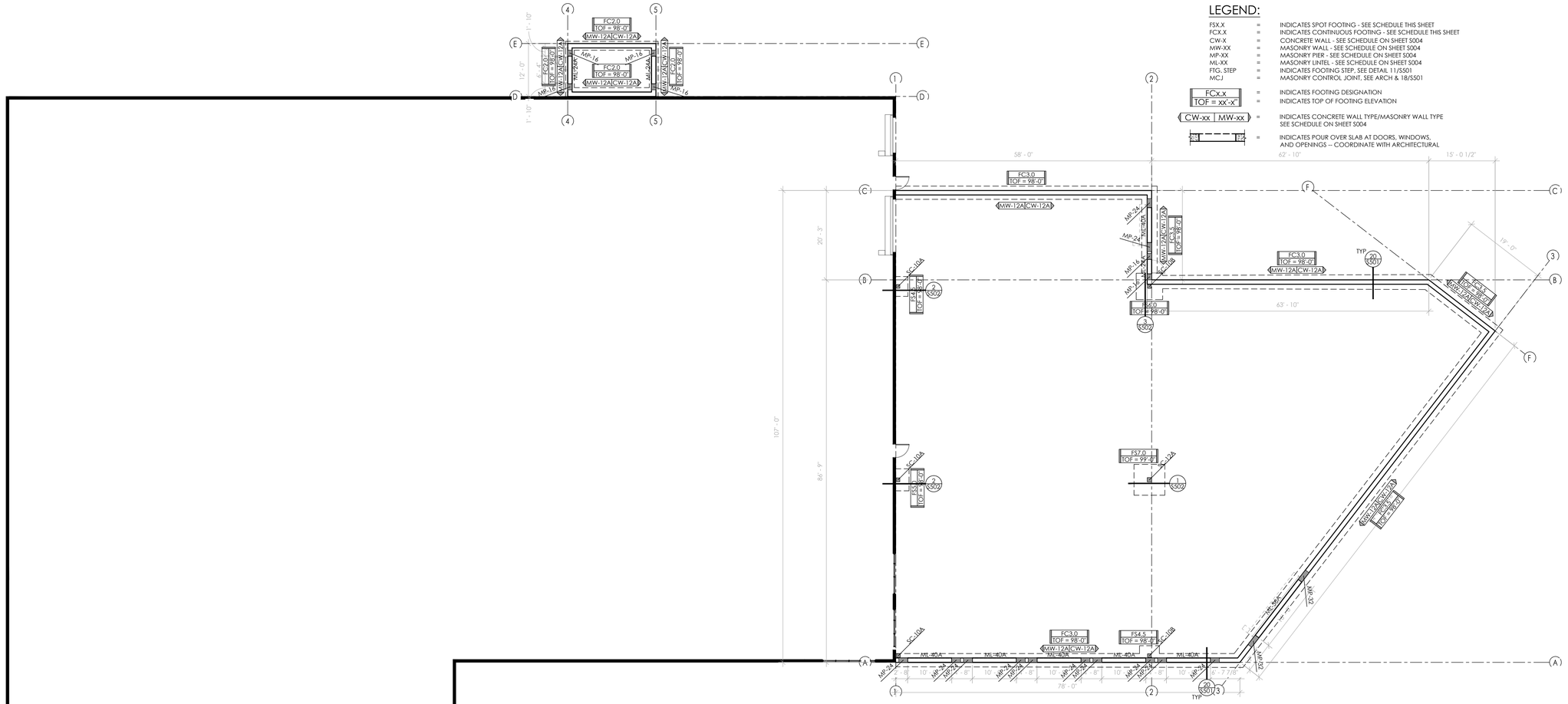
1. SEE GENERAL STRUCTURAL NOTES FOR CONCRETE STRENGTH, REINFORCING, AND OTHER REQUIREMENTS

FOUNDATION NOTES:

1. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, FLOOR DRAINS, AND PLUMBING AT SLAB ON GRADE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.
3. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT USE CONCRETE CONTROL JOINTS AS DIMENSION LINES OR TO LOCATE BUILDING ELEMENTS.
4. CONCRETE CONTROL JOINTS - AS SHOWN ON PLAN INDICATES LOCATION OF EITHER KEYED OR SAWCUT CONTROL JOINTS IN SLAB ON GRADE AT CONTRACTORS OPTION. SEE GENERAL STRUCTURAL NOTES AND DETAIL 1/S501
5. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
6. SEE SHEET S501 FOR TYPICAL FOOTING AND FOUNDATION DETAILS.

LEGEND:

FSX.X	=	INDICATES SPOT FOOTING - SEE SCHEDULE THIS SHEET
FCX.X	=	INDICATES CONTINUOUS FOOTING - SEE SCHEDULE THIS SHEET
CW-X	=	CONCRETE WALL - SEE SCHEDULE ON SHEET S004
MW-XX	=	MASONRY WALL - SEE SCHEDULE ON SHEET S004
MP-XX	=	MASONRY PIER - SEE SCHEDULE ON SHEET S004
ML-XX	=	MASONRY LINTEL - SEE SCHEDULE ON SHEET S004
FTG. STEP	=	INDICATES FOOTING STEP, SEE DETAIL 11/S501
MCJ	=	MASONRY CONTROL JOINT, SEE ARCH & 18/SS01
FCX.X / TOF = XX'-X"	=	INDICATES FOOTING DESIGNATION
	=	INDICATES TOP OF FOOTING ELEVATION
CW-xx | MW-xx	=	INDICATES CONCRETE WALL TYPE/MASONRY WALL TYPE SEE SCHEDULE ON SHEET S004
	=	INDICATES POUR OVER SLAB AT DOORS, WINDOWS, AND OPENINGS -- COORDINATE WITH ARCHITECTURAL



1 S101 FOOTING AND FOUNDATION PLAN

SCALE (30x42): 3/32"=1'-0"

aeurbia architects and engineers
909 West South Jordan Parkway
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phone: 801.746.0456 - fax: 801.575.6456
webpage: aeurbia.com

LICENSED PROFESSIONAL ENGINEER
No. 5568917-2202
S. CHAD ROBINSON
STATE OF UTAH

2/4/2022 11:54:54 AM

SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

MARK	DESCRIPTION	Revision Date

Revision Schedule

AE2021.249

FOOTING & FOUNDATION PLAN

DATE: **PROJECT ISSUE DATE**

SHEET #:

S101

PROJECT STATUS

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STEEL COLUMN SCHEDULE

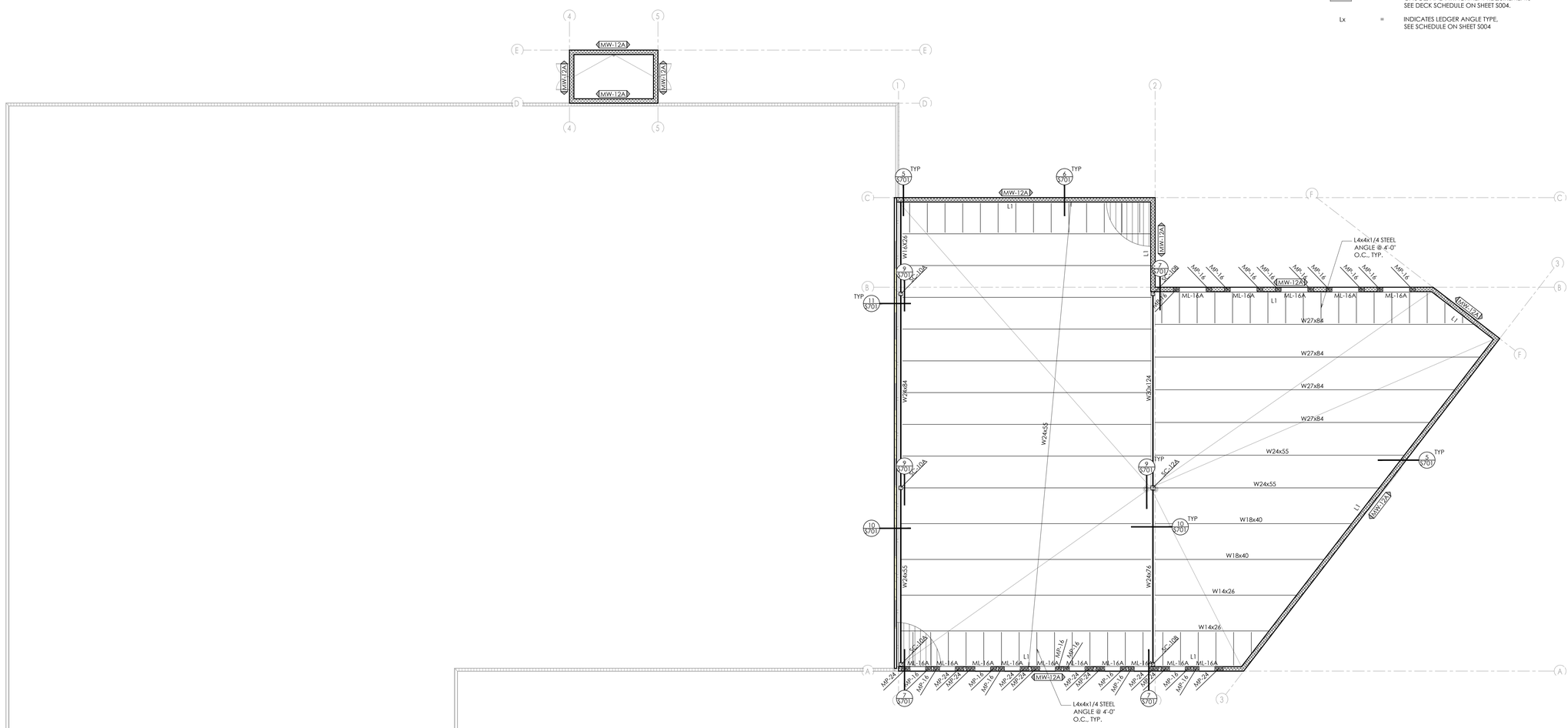
COLUMN MARK	COLUMN SIZE	STEEL BASE PLATE	STEEL CAP PLATE	ANCHOR BOLTS
SC10A	HSS10x10x5/16	3/4" (SBP-2	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.
SC-10B	HSS10x10x3/8	3/4" (SBP-2)	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.
SC-12A	HSS 12x12X3/8	3/4" (SBP-1)	1/2" CLOSURE PLATE	(4) 3/4" DIA A.B.

FLOOR FRAMING NOTES:

1. VERIFY DIMENSIONS TO ALL STEEL COLUMNS WITH ARCHITECTURAL DRAWINGS.
2. VERIFY ALL DIMENSIONS TO ALL ROOFTOP MECHANICAL EQUIPMENT AND OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
3. ALL OPEN-WEB STEEL JOISTS SHALL HAVE 5" DEEP JOIST BEARING ENDS.
4. VERIFY EXACT SIZE, WIGHT AND LOCATIONS OF ALL EQUIPMENT ON AND HANGING FROM ROOF WITH MECHANICAL DRAWINGS, NOTIFY EOR WHERE ANY RTU PLACED ABOVE OR BELOW ROOF DECK THAT IS NOT SHOWN ON THIS SHEET WEIGHS MORE THAN 100 LBS.
5. CONTRACTOR NOTE: PROVIDE CONTINUOUS BOND BEAMS IN COURSES BETWEEN ELEVATIONS 110'-8" & 112'-0" TYP AT GRIDS A, GRID 1, AND GRID 5.

LEGEND

MW-XX	=	MASONRY WALL - SEE SCHEDULE ON SHEET S004
MP-XX	=	MASONRY PIER - SEE SCHEDULE ON SHEET S004
ML-XX	=	MASONRY LINTEL - SEE SCHEDULE ON SHEET S004
SC-X	=	STEEL COLUMN - SEE SCHEDULE ON SHEET S004
	=	INDICATES MASONRY WALL
	=	INDICATES BEAM
	=	INDICATES JOIST
	=	INDICATES METAL ROOF DECK -- FOR TYPE, GAUGE, AND ATTACHMENT REQUIREMENTS SEE DECK SCHEDULE ON SHEET S004.
Lx	=	INDICATES LEDGER ANGLE TYPE, SEE SCHEDULE ON SHEET S004



1 S102 ROOF FRAMING PLAN

SCALE [30x42]: 1/8"=1'-0"

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STATE OF UTAH

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ROOF FRAMING PLAN

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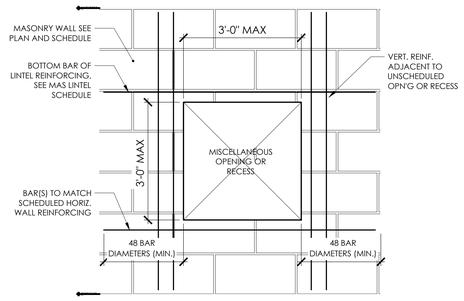
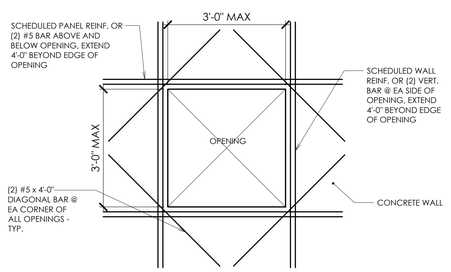
VERTICAL REINFORCING ADJACENT TO UNSCHEDULED OPENING OR RECESS

WEHRE OPENING WIDTH IS LESS THAN OR EQUAL TO 3'-0" USE (2) #5 BARS FOR 8' WALLS. USE (2) #5 BARS FOR 12" WALLS. WHERE OPENING IS LARGER THAN 3'-0" CONTACT AEURBIA/WMWA.

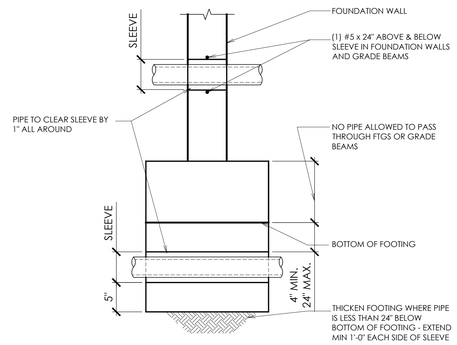


17 S501 MISC. CONC. TILT-UP PANEL OPENING
SCALE: N.T.S.

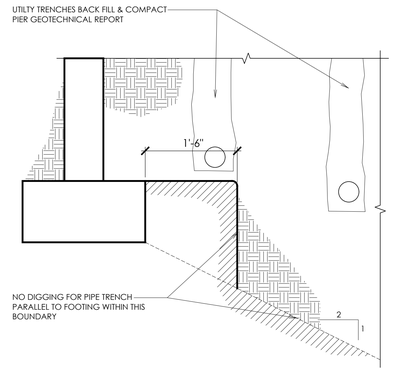
NOTES:
1. UNSCHEDULED OPENINGS WHICH EXCEED DETAILED DIMENSIONS SHALL BE APPROVED BY AEURBIA/JMWA
2. IF REBAR CANNOT BE EXTENDED 4'-0" BEYOND OPENING, EXTEND BAR MAXIMUM ALLOWABLE DISTANCE AND TERMINATE WITH STANDARD HOOK.

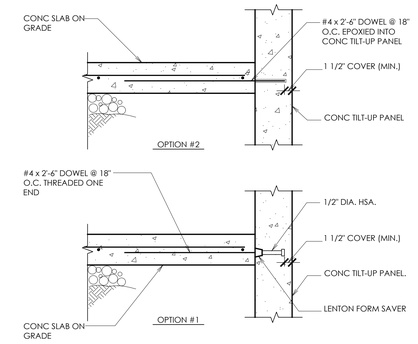


13 S501 MISC. CONCRETE WALL OPENING
SCALE: N.T.S.

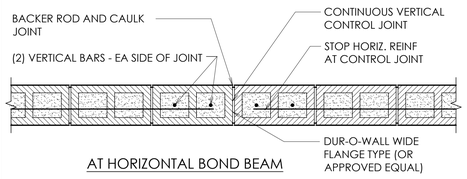


9 S501 PIPE THROUGH FOOTING DEATIL
SCALE: N.T.S.

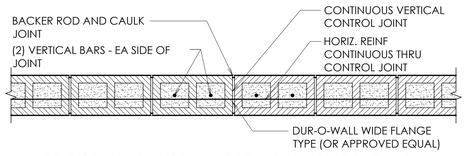




1 S501 OPTIONAL TILT-UP PANEL TO SLAB ON GRADE CONNECTION
SCALE: N.T.S.

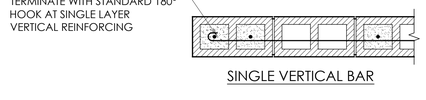


AT HORIZONTAL BOND BEAM

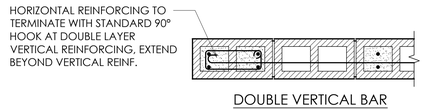


AT FLOOR ROOF JOIST AND DECK BEARING LOCATIONS

18 S501 CONTROL JOINT FOR 8" OR 10" MASONRY
SCALE: N.T.S.



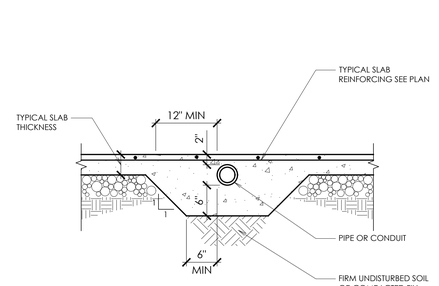
SINGLE VERTICAL BAR



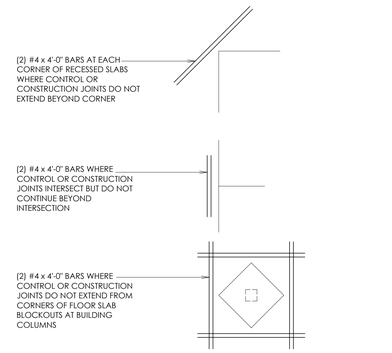
DOUBLE VERTICAL BAR

TERMINATION OF HORIZONTAL REINFORCING DETAIL - TYP.

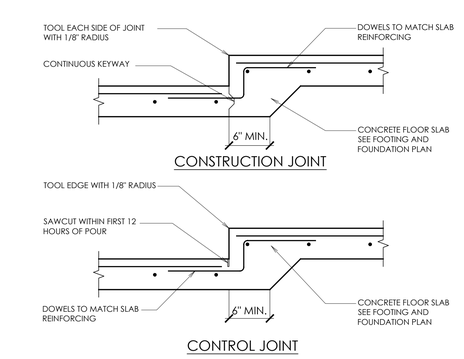
14 S501
SCALE: N.T.S.



10 S501 SLEEVE FOR PIPE AT SLAB
SCALE: N.T.S.



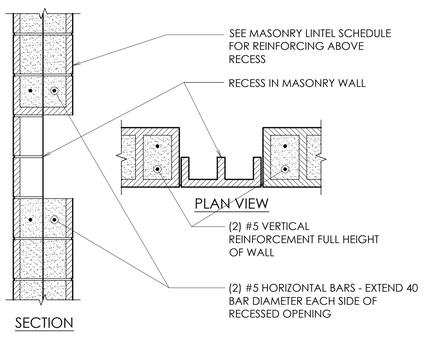
6 S003 SLAB REINFORCING DETAIL - TYP.
SCALE: N.T.S.



CONSTRUCTION JOINT

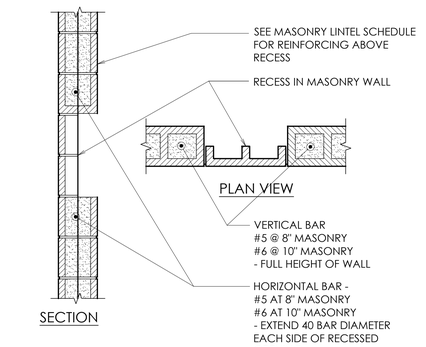
CONTROL JOINT

2 S501 TYPICAL SLAB DEPRESSION DETAIL
SCALE: N.T.S.



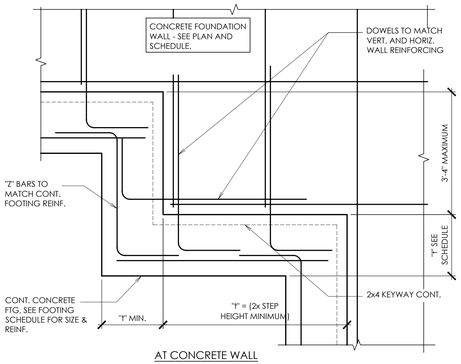
SECTION

19 S501 TYP. RECESS DETAIL
SCALE: N.T.S.



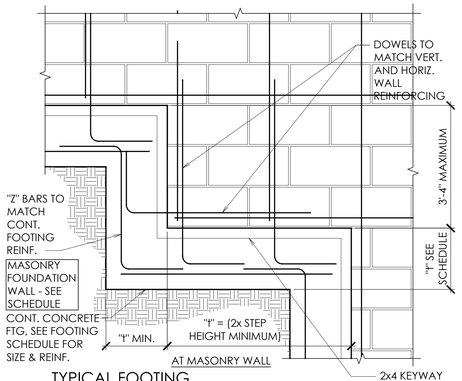
SECTION

15 S501 TYP. RECESS DETAIL
SCALE: N.T.S.



AT CONCRETE WALL

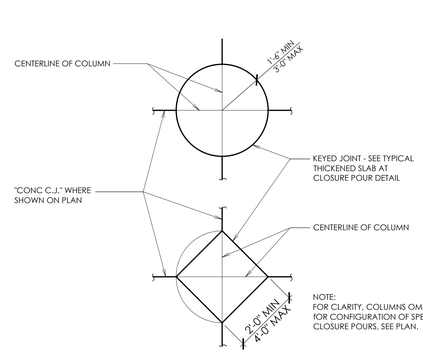
11 S501 TYP. FOOTING STEP DETAIL
SCALE: N.T.S.



AT MASONRY WALL

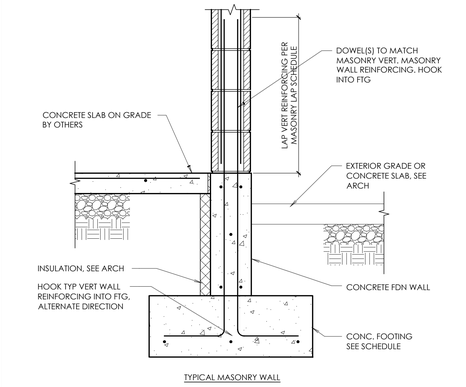
TYPICAL FOOTING STEP AT MASONRY WALL DETAIL

7 S501
SCALE: N.T.S.

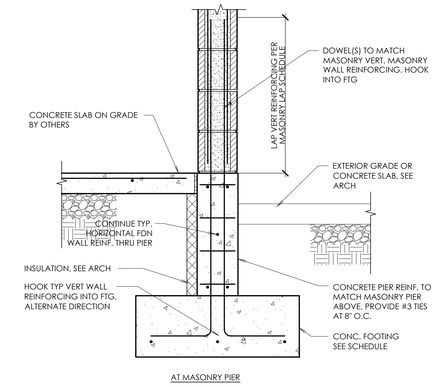


TYPICAL CONCRETE BLOCKOUT AT COLUMNS

3 S501
SCALE: N.T.S.

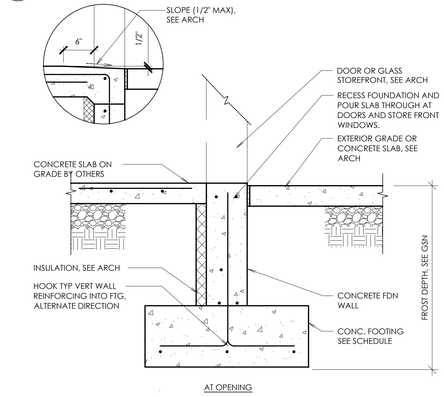


TYPICAL MASONRY WALL



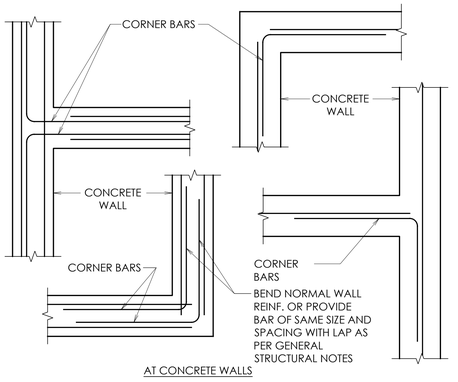
AT MASONRY PIER

20 S501 TYPICAL EXTERIOR MASONRY WALL AT CONCRETE FOOTING
SCALE: N.T.S.



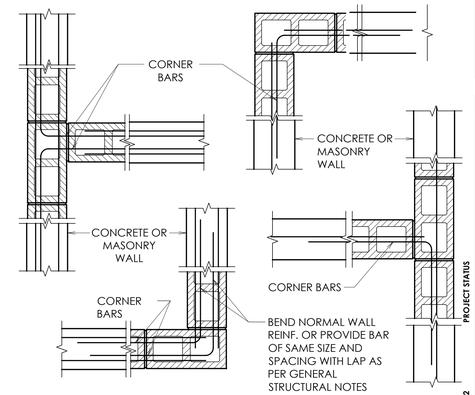
AT OPENING

11 S501 TYP. FOOTING STEP DETAIL
SCALE: N.T.S.



AT CONCRETE WALLS

8 S501 TYP. CORNER WALL REINF. DETAIL
SCALE: N.T.S.



7 S501 TYPICAL FOOTING STEP AT MASONRY WALL DETAIL
SCALE: N.T.S.

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PROFESSIONAL ENGINEER No. 5568917-2202 S. CHAD ROBINSON STATE OF UTAH
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SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2021.249

FOOTING AND FOUNDATION DETAILS

DATE: PROJECT ISSUE DATE

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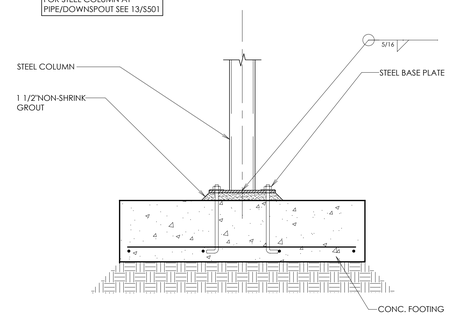
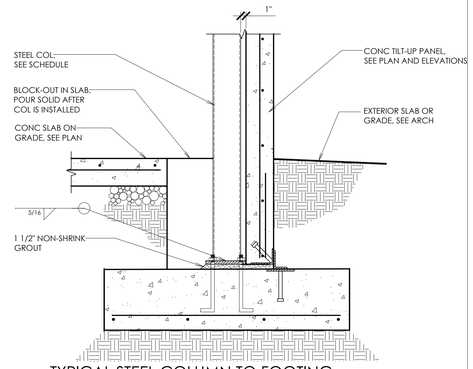
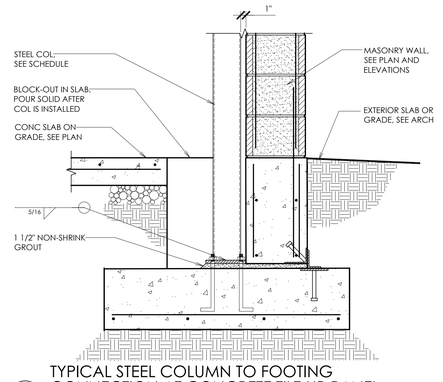
NOTE:
FOR STEEL COLUMN AT
PIPE/DOWNSPOUT SEE 13/S501



1 S502 STEEL COLUMN AT INTERIOR SPOT FOOTING
SCALE: N.T.S.



2 S502 TYPICAL STEEL COLUMN TO FOOTING CONNECTION AT CONCRETE TILT-UP PANEL
SCALE: N.T.S.



3 S502 TYPICAL STEEL COLUMN TO FOOTING CONNECTION AT CONCRETE TILT-UP PANEL
SCALE: N.T.S.

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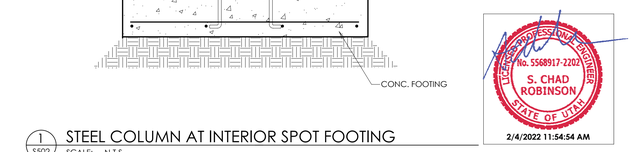

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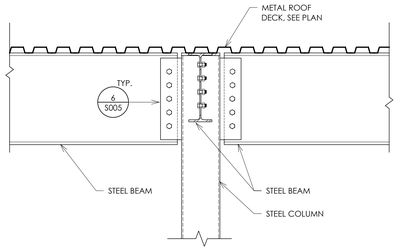
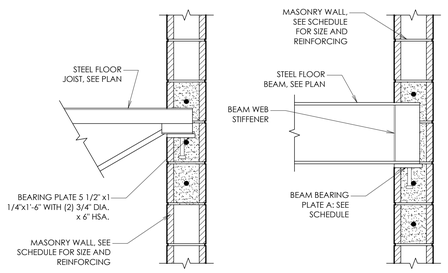
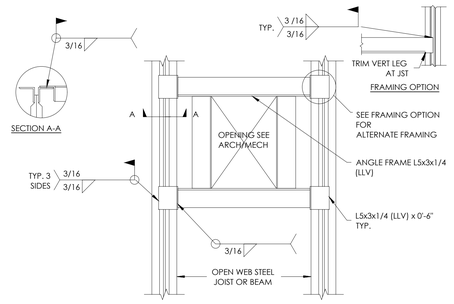


9 S701 TYPICAL ROOF BEAM AT STEEL COLUMN
SCALE: N.T.S.



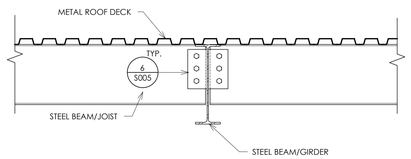
BEAM SIZE	PLATE A: SIZE	ANCHORS
W8-W10	5/8"x5"x0'-10"	(2) 3/4" DIA. x 6"
W12-W14	1 1/8"x5 1/2"x1'-3"	(2) 3/4" DIA. x 6"
W16-W18	1 1/4"x5 1/2"x1'-6"	(3) 3/4" DIA. x 8"
W21-W24	1'-5/8"x6"x1'-8"	(3) 3/4" DIA. x 8"

5 S701 BEARING PLATE SCHEDULE
SCALE: N.T.S.

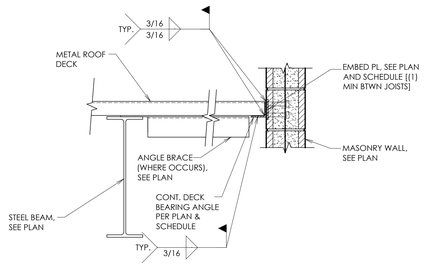


NOTES:
1. SEE DETAIL 4/S701 FOR OPENINGS LESS THAN 12" IN DIAMETER
2. SEE TYPICAL ROOF TOP MECHANICAL UNIT SUPPORT DETAIL FOR FRAMIES UNDER MECHANICAL UNITS
3. ROOF DECK SHALL BE WELDED TO ANGLE FRAMING.

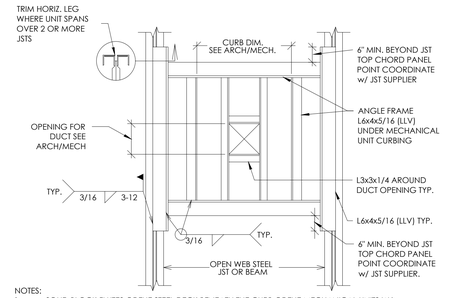
1 S701 TYPICAL ROOF OPENING DETAIL - PLAN VIEW
SCALE: N.T.S.



10 S701 TYPICAL ROOF BEAM AT STEEL COLUMN
SCALE: N.T.S.

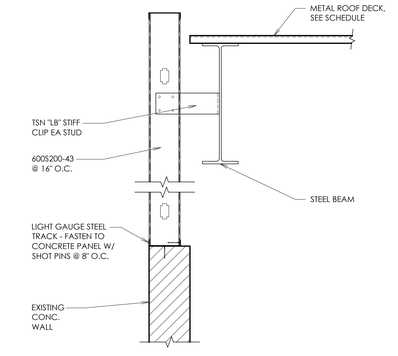


6 S701 ANGLE BRACE AT WALL
SCALE: N.T.S.

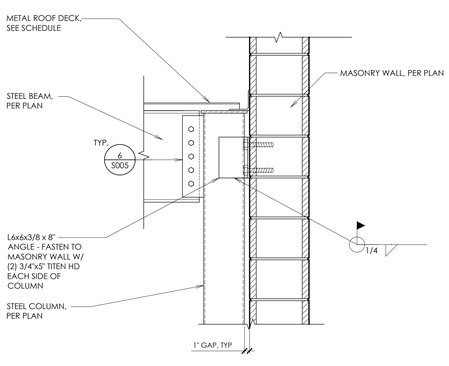


NOTES:
1. SOLID BLOCK FLUTES OF THE STEEL DECK BENEATH THE CURB OF THE MECHANICAL UNITS W/ HSS1-1/2X1-1/2X3/16X0'-6" TRACK WELDED TO THE STEEL DECK OR USE BLOCKING CONNECTED TO THE STEEL DECK.
2. ROOF DECK SHALL BE WELDED TO ANGLE FRAMING.

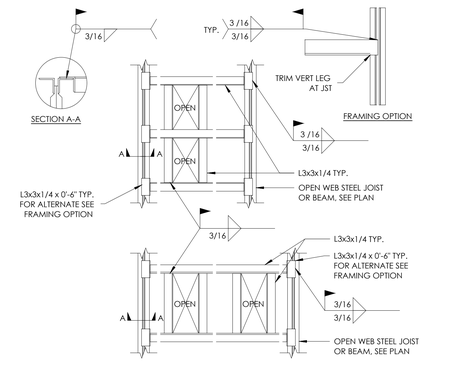
2 S701 TYPICAL ROOF TOP MECH UNIT SUPPORT DETAIL - PLAN VIEW
SCALE: N.T.S.



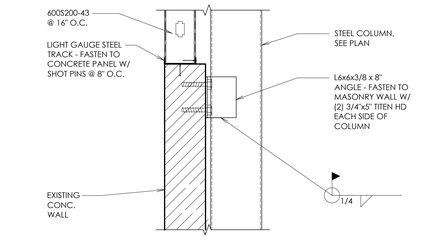
11 S701 SCALE: N.T.S.



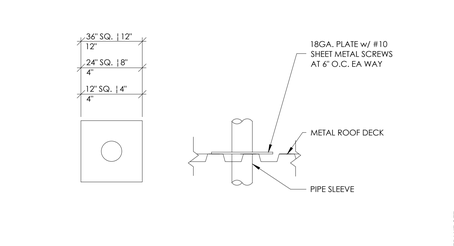
7 S701 TYPICAL BEAM BEARING AT STEEL COLUMN
SCALE: N.T.S.



3 S701 TYPICAL ROOF DRAIN SUPPORT DETAIL (PLAN VIEW)
SCALE: N.T.S.



8 S701 TYPICAL BEAM BEARING AT STEEL COLUMN & CONC. WALL
SCALE: N.T.S.



4 S701 TYPICAL PIPE THRU DECK DETAIL-TYP OPENINGS LESS THAN 12" DIA
SCALE: N.T.S.

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LICENSED PROFESSIONAL ENGINEER
No. 5568917-2202
S. CHAD ROBINSON
STATE OF UTAH
2/7/2022 11:54:54 AM

SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

MARK	DESCRIPTION	Revision Date

Revision Schedule

AE2021.249

ROOF DETAILS

DATE: **02/07/2022**

SHEET #:

S701

PERMIT SET

2/7/2022

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2/8/2022 7:46:22 AM

PLUMBING GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS WHICH ARE OBVIOUSLY AND REASONABLY NECESSARY TO COMPLETE THE INSTALLATION.
2. THE CONTRACTOR SHALL TAKE OUT PERMITS, PROCURE CERTIFICATES AND PAY FEES CONNECTED THEREWITH.
3. BIDDERS SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS SURROUNDING THE PROJECT PRIOR TO BIDDING.
4. THE CONTRACTOR IS REFERRED TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL PLANS AND SPECIFICATIONS. SUCH PLANS AND SPECIFICATIONS ARE CONTRACT DOCUMENTS.
5. DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW APPROXIMATE LOCATIONS.
6. ALL PLUMBING WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE PREVAILING STATE MECHANICAL, PLUMBING AND BUILDING CODES AS WELL AS ALL REGULATIONS THAT MAY APPLY. IN CASE OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND A GOVERNING CODE OR ORDINANCE THE MORE STRINGENT STANDARD SHALL APPLY.
7. NO PIPING SHALL RUN EXPOSED IN FINISHED AREAS.
8. DOMESTIC WATER PIPING, UNDER BUILDING SLAB, NPS 4 AND SMALLER SHALL BE SOFT COPPER TUBE, ASTM B88, TYPE K; WROUGHT COPPER, SOLDER JOINT FITTINGS AND BRAZED JOINTS OR PVC, SCHEDULE 80; SOCKET FITTINGS AND SOLVENT CEMENTED JOINTS OR POLYPROPYLENE (PP-R), SDR 11 PIPE AND SOCKET FUSION, BUTT FUSION, FUSION OUTLET OR ELECTROFUSION FITTINGS AND JOINTS.
9. DOMESTIC WATER PIPING ABOVE GROUND, NPS 2.5 TO NPS 4 SHALL BE HARD COPPER TUBE, ASTM B88, TYPE L; CAST OR WROUGHT COPPER, SOLDER JOINT FITINGS AND BRAZED JOINTS / PRESSURE SEAL JOINT FITTINGS AND PRESSURE SEALED JOINTS / GROOVED JOINT, COPPER TUBE APPURTENANCES AND GROOVED JOINTS OR PVC / CPVC SCHEDULE 80 PIPE; SOCKET FITTINGS AND SOLVENT CEMENTED JOINTS OR POLYPROPYLENE (PP-R), SDR 7.4 PIPE AND SOCKET FUSION, BUTT FUSION, FUSION OUTLET OR ELECTROFUSION FITTINGS AND JOINTS. NOTE THAT PLASTIC PIPING SHALL NOT BE INSTALLED IN ANY PLENUM, UNLESS PROTECTED AS DEFINED UNDER NOTE 34.
10. DOMESTIC WATER PIPING, ABOVE GROUND, NPS 2 AND SMALLER SHALL BE HARD COPPER TUBE, ASTM B88, TYPE L; CAST OR WROUGHT COPPER, SOLDER JOINT FITTINGS AND BRAZED JOINTS / PRESSURE SEAL JOINT FITTINGS AND PRESSURE SEALED JOINTS / GROOVED JOINT, COPPER TUBE APPURTENANCES AND GROOVED JOINTS OR POLYPROPYLENE (PP-R), SDR 7.4 PIPE AND SOCKET FUSION, BUTT FUSION, FUSION OUTLET OR ELECTROFUSION FITTINGS AND JOINTS OR PEX-A TUBE, SDR 9, FITTINGS FOR PEX TUBE AND COLD EXPANSION FITTINGS AND REINFORCING RINGS. NOTE THAT PLASTIC PIPING SHALL NOT BE INSTALLED IN ANY PLENUM, UNLESS PROTECTED AS DEFINED UNDER NOTE 34.
11. DOMESTIC WATER SHALL BE TESTED FOR LEAKS. FILL WATER PIPING WITH CLEAN WATER. CAP AND SUBJECT PIPING TO STATIC WATER PRESSURE OF 50 PSIG ABOVE OPERATING PRESSURE, WITHOUT EXCEEDING PRESSURE RATING OF PIPING SYSTEM MATERIALS. ISOLATE TEST SOURCE AND ALLOW IT TO STAND FOR FOUR HOURS. LEAKS AND LOSS IN TEST PRESSURE CONSTITUTE DEFECTS THAT MUST BE REPAIRED. REPAIR LEAKS AND DEFECTS WITH NEW MATERIALS, AND RETEST PIPING OR PORTION THEREOF UNTIL SATISFACTORY RESULTS ARE OBTAINED.
12. CLEAN AND DISINFECT NEW POTABLE DOMESTIC WATER PIPING AND PARTS OF EXISTING PIPING THAT HAVE BEEN ALTERED, EXTENDED OR REPAIRED BEFORE USING. USE PURGING AND DISINFECTING PROCEDURES PRESCRIBED BY AUTHORITIES HAVING JURISDICTION; IF METHODS ARE NOT PRESCRIBED, USE PROCEDURES DESCRIBED IN EITHER AWWA C651 OR AWWA C652 OR FOLLOW PROCEDURES DESCRIBED BELOW;
    a. FLUSH PIPING SYSTEM WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT OUTLETS.
    b. FILL AND ISOLATE SYSTEM OR PART THEREOF WITH WATER/CHLORINE SOLUTION WITH AT LEAST 200 PPM OF CHLORINE. ISOLATE AND ALLOW TO STAND FOR THREE HOURS.
    c. FLUSH SYSTEM WITH CLEAN, POTABLE WATER UNTIL NO CHLORINE IS IN WATER COMING FROM SYSTEM AFTER THE STANDING TIME.
    d. REPEAT PROCEDURES IF BIOLOGICAL EXAMINATION SHOWS CONTAMINATION.
    e. SUBMIT NEGATIVE BACTERIOLOGICAL TEST TO ENGINEER AND TO AUTHORITIES HAVING JURISDICTION.
13. CONDENSATE PIPING INDOOR AND OUTDOOR SHALL BE TYPE M COPPER WITHIN PLENUMS. SCHEDULE 40 PVC OUTSIDE OF PLENUMS.
14. INSULATE ALL WATER PIPING 0.5"-1.5" WITH 1 INCH R-4.1 FIBERGLASS INSULATION. WATER PIPING 2" AND LARGER WITH 1.5 INCH, R-6.2 FIBERGLASS INSULATION. INSULATION TO HAVE NON-COMBUSTIBLE UL LISTED VAPOR BARRIER.
15. RUN-OUT SIZES TO INDIVIDUAL PLUMBING FIXTURES TO BE EQUAL TO ROUGH-IN SIZE NOTED IN THE PLUMBING FIXTURE SCHEDULE.
16. PLUMBING/PIPING IS SHOWN SCHEMATICALLY FOR VIEWING PURPOSES ONLY; DURING INSTALLATION FIELD MODIFICATIONS TO ROUTING MAY BE REQUIRED.
17. CONTRACTOR TO FURNISH AND INSTALL A LINE SIZE STOP VALVE AT EACH CONNECTION TO EQUIPMENT OR 3/8" RIGID CHROME PLATED WATER SUPPLY LINE WITH STOP FOR FINAL CONNECTION TO PLUMBING FIXTURES.
18. INSTALL ALL REQUIRED CLEANOUTS TO CLEAR EQUIPMENT AND FIXTURES.
19. SANITARY, WASTE, DRAIN, VENT, AND ROOF DRAIN PIPING SHALL BE SCHEDULE 40 SOLID WALL PVC ASTM D-2665 WITH INSTALLATION IN ACCORDANCE WITH ASTM D-2321; PIPING WITHIN PLENUMS SHALL BE HUBLESS CAST IRON MEETING ASTM A888 OR CISPI 301. ALL FITTINGS SHALL BE APPROVED SANITARY TYPE. PROVIDE EXPANSION LOOPS AS REQUIRED BY PLUMBING CODE. PROVIDE CLEANOUTS AS REQUIRED BY IPC 708 AND 1101.
20. ALL FIXTURES ARE PROVIDED WITH STANDARD TRAP AND CLEANOUT (NOT SHOWN). TOILETS SHALL BE ELONGATED STYLE WITH OPEN FRONT SEAT UNLESS OTHERWISE NOTED.
21. ALL WORK SHALL BE PROPERLY TESTED, BALANCED AND CLEANED AND DISINFECTED. PROVIDE A ONE YEAR WARRANTY FROM DATE OF FINAL INSPECTION ON ALL PARTS AND LABOR.
22. ALL DRAIN PIPING SHALL BE SLOPED AT 1/4" PER/FT. UNLESS NOTED OTHERWISE.
23. TERMINATE PLUMBING VENTS A MINIMUM OF 10'-0" FROM ALL AIR HANDLING EQUIPMENT INTAKE VENTS. TERMINATE PLUMBING VENTS 12" ABOVE ROOF. UPSIZE VENT TERMINATIONS IF REQUIRED BY THE PLUMBING CODE.
24. CONTRACTOR SHALL VERIFY LOCAL CODE REQUIREMENTS FOR INDIRECT CONNECTIONS. CONNECTIONS SHALL BE PROVIDED WITH A MINIMUM 1" AIR GAP, UNLESS OTHERWISE NOTED.
25. INSULATE PRIMARY ROOF DRAIN PIPING AND ALL ROOF DRAIN BOWLS WITH 1/2 INCH FIBERGLASS INSULATION WITH NON-COMBUSTIBLE UL LISTED VAPOR BARRIER.
26. NATURAL GAS PIPING SHALL BE SCHEDULE 40 STEEL PIPE, ASTM A53/A53M, BLACK STEEL, TYPE E OR S, GRADE B. NPS 2" AND SMALLER SHALL BE THREADED, NPS 2-1/2" AND LARGER SHALL BE WELDED. WHERE ELEVATED GAS PRESSURE IS SPECIFIED, A GAS PRESSURE REGULATOR SHALL BE FURNISHED AS FOLLOWS:
    a. THE REGULATOR SHALL BE SUITABLE FOR THE SPECIFIED INLET AND REQUIRED OUTLET PRESSURES.
    b. THE REGULATOR SHALL MAINTAIN THE REQUIRED OUTLET PRESSURE UNDER LOCK-UP CONDITION.
    c. THE CAPACITY OR THE REGULATOR SAME BE ADEQUATE TO SUPPLY THE APPLIANCE SERVED WITH A 20% SAFETY FACTOR.
    d. THE REGULATOR SHALL BE LOCATED IN AN ACCESSIBLE AND VISIBLE LOCATION.
    e. COMPLY WITH PROVISIONS OF IFGC 410 FLOW CONTROLS.
23. PAINT EXPOSED, EXTERIOR METAL PIPING, VALVES, SERVICE REGULATORS, SERVICE METERS AND METER BARS, EARTHQUAKE VALVES, AND PIPING SPECIALTIES, WITH FACTORY-APPLIED PAINT OR PROTECTIVE METAL PRIMER.
    1- PRIME COAT: ALKYD PAINT OF PROTECTIVE COATING.
    2- INTERMEDIATE COAT: EXTERIOR ALKYD ENAMEL MATCHING TOPCOAT.
    3- TOPCOAT: EXTERIOR ALKYD ENAMEL GLOSS.
    4- COLOR: GRAY.
24. PROVIDE PREMANUFACTURED PROTECTIVE SHIELDING GUARDS FOR ADA PLUMBING HOT AND COLD WATER SUPPLIES AND TRAP AND DRAIN PIPING. COMPLY WITH ADA REQUIREMENTS.
25. THERMAL INSULATION AND COVERINGS WHICH ARE INSTALLED IN CONCEALED AND EXPOSED SPACES AND AS COVERINGS OVER PIPE AND TUBING SHALL BE TESTED IN ACCORDANCE WITH ASTM E84 AND HAVE A FLAME SPREAD OF 0-25 AND A SMOKE INDEX OF 0-50.
26. THERMAL INSULATION AND COVERINGS OVER PIPE AND TUBING WHICH ARE INSTALLED IN PLENUM SPACES SHALL BE TESTED IN ACCORDANCE WITH ASTM E 84 AND HAVE A FLAME SPREAD OF 0-25 AND A SMOKE INDEX OF 0-50.
27. PRESSURIZED PIPING SHALL NOT BE RUN IN ANY AREA SUBJECT TO FREEZING.
28. PRIOR TO INSTALLING ANY PIPING, VERIFY DEPTH OF CONNECTION POINTS OF GRADE DEPENDENT PIPING AND CONFIRM IN WRITING TO ENGINEER.
29. PROVIDE TRAINING, O & M MANUALS AND COMMISSIONING AS REQUIRED BY THE ENERGY CODE WITH ASSOCIATED PLANS AND REPORTS.
30. ALL SUBSTITUTED FIXTURES AND EQUIPMENT SHALL BE EQUAL TO THE SPECIFIED FIXTURES AND EQUIPMENT AND SHALL MEET THE INTENT OF THE CONTRACT DOCUMENTS. PROVIDE SUBMITTAL TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL.
31. SEISMICALLY BRACE ALL PLUMBING EQUIPMENT, PIPING, ETC AS REQUIRED BY IBC 1613 AND ASCE 7-10, 13.6. PROVIDE CALCULATIONS AND DRAWINGS STAMPED BY A LICENSED ENGINEER FOR REVIEW.
32. CONTRACTOR WILL CAREFULLY REVIEW AND COMPARE THE CONTRACT DOCUMENTS AND ANY OTHER AVAILABLE INFORMATION RELATING TO THE PROJECT PRIOR TO COMMENCING AND DURING PERFORMANCE OF EACH PORTION OF THE WORK AND WILL IMMEDIATELY REPORT TO ENGINEER ANY ERRORS, DISCREPANCIES, INCONSISTENCIES AND OMISSIONS DISCOVERED.
33. WHERE RATED ASSEMBLIES ARE PENETRATED BY DUCTS, PIPES OR OTHER ITEMS, THE "F" AND "T" RATING SHALL BE MAINTAINED WITH REQUIRED UL LISTED ASSEMBLIES OR SEALANT AS REQUIRED BY THE APPLICABLE CODE OR AUTHORITY HAVING JURISDICTION.
34. PLASTIC PIPING INSTALLED WITHIN PLENUMS SHALL BE WRAPPED WITH PLENUM WRAP, FLEXIBLE FIRE RESISTANT, HIGH-TEMPERATURE FIBER BLANKET THERMAL INSULATION ENCAPSULATED IN A FIBERGLASS-REINFORCED ALUMINUM FOIL. PLENUM WRAP DENSITY SHALL BE NOMINAL 6 PCF AND HAVE A NOMINAL 1/2 INCH THICKNESS. THE FIBER BLANKET SHALL HAVE A CONTINUOUS USE LIMIT IN EXCESS OF 1832°F. FLAME SPREAD INDEX AND SMOKE DEVELOPED INDEX OF THE FOIL ENCAPSULATED BLANKET SHALL BE <25/<50. COMPLY WITH ASTM E84 AND E136. MANUFACTURER SHALL BE 3M-BUILDING AND COMMERCIAL SERVICES DIVISION.

PLUMBING LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
WALL CLEAN OUT	WCO	DOMESTIC COLD WATER PIPING	
CLEAN OUT	CO	INDUSTRIAL COLD WATER PIPING	ICW
CLEAN OUT TO GRADE	COTG	SOFT COLD WATER PIPING	SCW
FLOOR CLEAN OUT	FCO	DOMESTIC HOT WATER PIPING	
DROP		INDUSTRIAL HOT WATER PIPING	IHW
RISE		SOFT HOT WATER PIPING	SHW
CAPPED PIPE		DOMESTIC HOT WATER RECIRCULATION PIPING	
PIPE REDUCER		DOMESTIC TEMPERED WATER	TWS
BALL VALVE		VENT PIPING	
GATE VALVE		ACID VENT PIPING	AV
AUTOMATIC TWO-WAY VALVE		WASTE PIPING (ABOVE GRADE OR FLOOR)	
AUTOMATIC THREE-WAY VALVE		WASTE PIPING (BELOW GRADE OR FLOOR)	
TEMPERING VALVE	TWS	ACID WASTE PIPING (ABOVE GRADE OR FLOOR)	AW
UNION		ACID WASTE PIPING (BELOW GRADE OR FLOOR)	AW
GAS COCK VALVE		GREASE WASTE PIPING (ABOVE GRADE OR FLOOR)	GW
PRESSURE REGULATOR		GREASE WASTE PIPING (BELOW GRADE OR FLOOR)	GW
STRAINER		PROCESS WASTE PIPING (ABOVE GRADE OR FLOOR)	PW
HAMMER ARRESTOR		PROCESS WASTE PIPING (BELOW GRADE OR FLOOR)	PW
CHECK VALVE		ROOF DRAIN PIPING (ABOVE GRADE OR FLOOR)	RD
CIRCUIT SETTER		ROOF DRAIN PIPING (BELOW GRADE OR FLOOR)	RD
BUTTERFLY VALVE		SECONDARY ROOF DRAIN PIPING	SRD
BACKFLOW PREVENTOR		NATURAL GAS PIPING	G
RELIEF VALVE	R	LIQUID PROPANE GAS	LPG
MANUAL AIR VENT		COMPRESSED AIR PIPING	A
THERMOMETER		CARBON DIOXIDE PIPING	C02
FLEXIBLE PIPING		NITROGEN PIPING	N
INLINE PUMP		NITROUS OXIDE PIPING	NO
DIRECTION OF SLOPE		OXYGEN PIPING	O
FLOW DIRECTION		VACUUM PIPING	VAC
ACCESS DOOR		WASTE ANESTHETIC GAS PIPING	WAG
FLOW METER	FM	DEIONIZED WATER PIPING	DIW
WATER METER	W	DRAIN PIPING	D
DEVICE IN DROP		FIRE SPRINKLER PIPING	F
SECTION LETTER SHEET NUMBER	TOP BOT	KEYED NOTE	#
ROOM NAME ROOM NUMBER	ROOM NO	PLUMBING FIXTURE CALLOUT	P-??
REVISION DELTA	#	DETAIL NUMBER SHEET DETAIL APPEARS	X S#
NEW CONNECTION		EQUIPMENT CALLOUT	X-#
		LARGE SCALE NUMBER SHEET LARGE SCALE APPEARS	# S#

PLUMBING ABBREVIATIONS

A	COMPRESSED AIR	DMPR	DAMPER	HB	HOSE BIBB	MISC	MISCELLANEOUS	SPEC	SPECIFICATION
AFF	ABOVE FINISHED FLOOR	DN	DOWN	HD	HEAD	N	NITROGEN	SQ FT	SQUARE FEET
ALT	ALTERNATE	DRN	DRAIN	HORIZ	HORIZONTAL	NIC	NOT IN CONTRACT	SRD	SECONDARY ROOF DRAIN
ASL	ABOVE SEA LEVEL	DS	DOWNSPOUT	HP	HORSEPOWER	NO	NITROUSE OXIDE	SS	SERVICE SINK
AV	ACID VENT	ES	EMERGENCY	H	HOUR	NTS	NOT TO SCALE	STD	STANDARD
AW	ACID WASTE	EW	EMERGENCY EYE WASH	HW	HOT WATER	O	OXYGEN	TWS	TEMPERED WATER DOMESTIC
BFF	BELOW FINISHED FLOOR	EWC	ELECTRIC WATER COOLER	HWR	HOT WATER RETURN	PH	PHASE	TEMP	TEMPERATURE
BTU	BRITISH THERMAL UNIT	EWT	ENTERING WATER TEMPERATURE	HZ	HERTZ	PPM	PARTS PER MILLION	TYP	TYPICAL
CO	CLEANOUT	F	FIRE SUPPRESION	ICW	INDUSTRIAL COLD WATER	PRV	PRESSURE REDUCING VALVE	U	URINAL
CO2	CARBON DIOXIDE	FCO	FLOOR CLEANOUT	IE	INVERT ELEVATION	PSI	POUNDS PER SQUARE INCH	V	VOLT
CONTR	CONTRACTOR	FD	FLOOR DRAIN	IHW	INDUSTRIAL HOT WATER	PW	PROCESS WASTE	VAC	VACUUM
COTG	CLEANOUT TO GRADE	FLEX	FLEXIBLE	IN	INCH	QTY	QUANTITY	VTR	VENT THRU ROOF
CW	CLOTHES WASHER	FLR	FLOOR	INV	INVERT	RD	ROOF DRAIN	W/	WITH
CW	COLD WATER	FS	FLOOR SINK	KW	KILOWATT	REQD	REQUIRED	W/O	WITHOUT
D	DRAIN PIPE	FT	FEET	LAV	LAVATORY	REV	REVISION	WAG	WASTE ANESTHETIC GAS
DEG F	DEGREE FAHRENHEIT	G	NATURAL GAS	LB	POUND	RP	RECIRCULATION PUMP	WC	WATER CLOSET
DEMO	DEMOLITION	GA	GAUGE	MAX	MAXIMUM	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER	WCO	WALL CLEANOUT
DET	DETAIL	GAL	GALLON(S)	MBH	THOUSAND BRITISH THERMAL UNITS/HOUR	S	SINK	WH	WATER HEATER
DF	DRINKING FOUNTAIN	GALV	GALVANIZED	MECH	MECHANICAL	SCHED	SCHEDULE		
DIA	DIAMETER	GPM	GALLONS PER MINUTE	MECH RM	MECHANICAL ROOM	SCW	SOFT COLD WATER		
DIM	DIMENSION	GW	GREASE WASTE	MFR	MANUFACTURER	SH	SHOWER		
DIV	DIVISION	HA	HAMMER ARRESTOR	MIN	MINIMUM	SL	SEA LEVEL		

PLUMBING SHEET INDEX

P001	PLUMBING LEGEND AND GENERAL NOTES
PL101	LEVEL 1 PLUMBING FLOOR PLAN
PL102	ROOF PLUMBING PLAN
P601	PLUMBING SCHEDULES

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SENSAPURE ADDITION
DUSTIN GRAMOLL
1945 Fremont Dr Salt Lake City, UT 84104

Revision Schedule

MARK	DESCRIPTION	Revision Date

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PLUMBING LEGEND AND GENERAL NOTES

DATE: **FEBRUARY 8, 2022**

SHEET #:

P001

PROJECT STATUS
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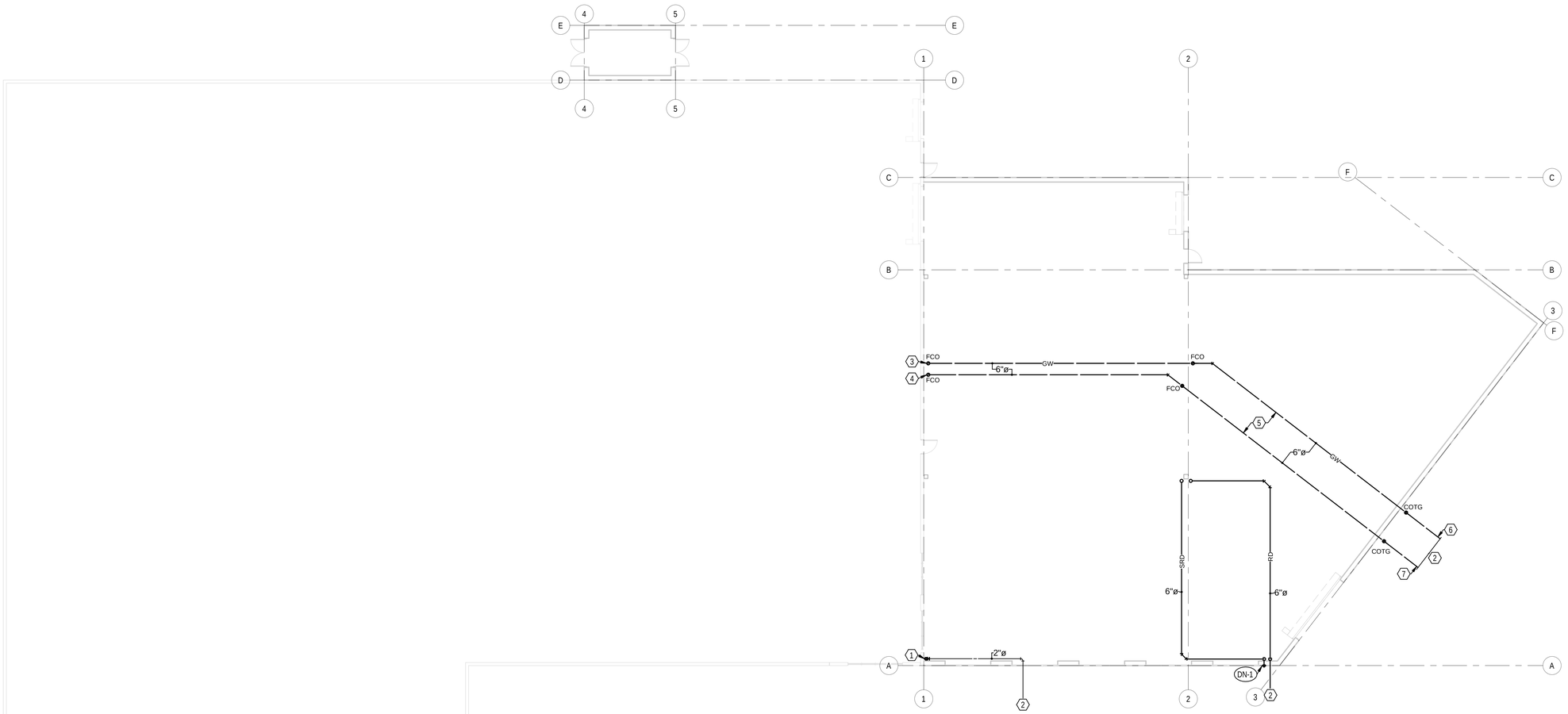
SHEET KEYED NOTES

1 2" PRV STATION, SEE DETAIL 1/P601.
2 SEE SITE UTILITY PLAN FOR CONTINUATION.
3 START GREASE DRAIN AT -2.38' BFF.
4 START SANITARY DRAIN AT -1.92' BFF.
5 RUN AT 1/8" PER FOOT SLOPE.
6 TO SAND AND OIL INTERCEPTOR.
7 TO SANITARY SEWER.



SEWER INVERT ELEVATION

FINISHED FLOOR ELEVATION=	0	4236.30	FT ASL
SANITARY SEWER			
STARTING DEPTH=	-1.92	4234.38	FT ASL
LENGTH OF RUN AT 1/8" PER FOOT SLOPE=	111	FT	
LENGTH OF RUN AT 1/4" PER FOOT SLOPE=	0	FT	
DIFFERENCE IN PIPE SIZE=	0	IN	
INVERT ELEVATION AT SEWER EXIT=	-3.08	4233.22	FT ASL
AVAILABLE FALL=	-3.58	4232.72	FT ASL
SAFETY FACTOR=	0.50		
GREASE SEWER			
STARTING DEPTH=	-2.38	4233.92	FT ASL
LENGTH OF RUN AT 1/8" PER FOOT SLOPE=	115	FT	
LENGTH OF RUN AT 1/4" PER FOOT SLOPE=	0	FT	
DIFFERENCE IN PIPE SIZE=	0	IN	
INVERT ELEVATION AT SEWER EXIT=	-3.58	4232.72	FT ASL
AVAILABLE FALL=	-3.58	4232.72	FT ASL
SAFETY FACTOR=	0.00		

1 LEVEL 1 PLUMBING FLOOR PLAN

1/PL101 3/32" = 1'-0"

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DUSTIN GRAMOLL

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LEVEL 1 PLUMBING FLOOR PLAN

DATE: **FEBRUARY 8, 2022**

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PL101

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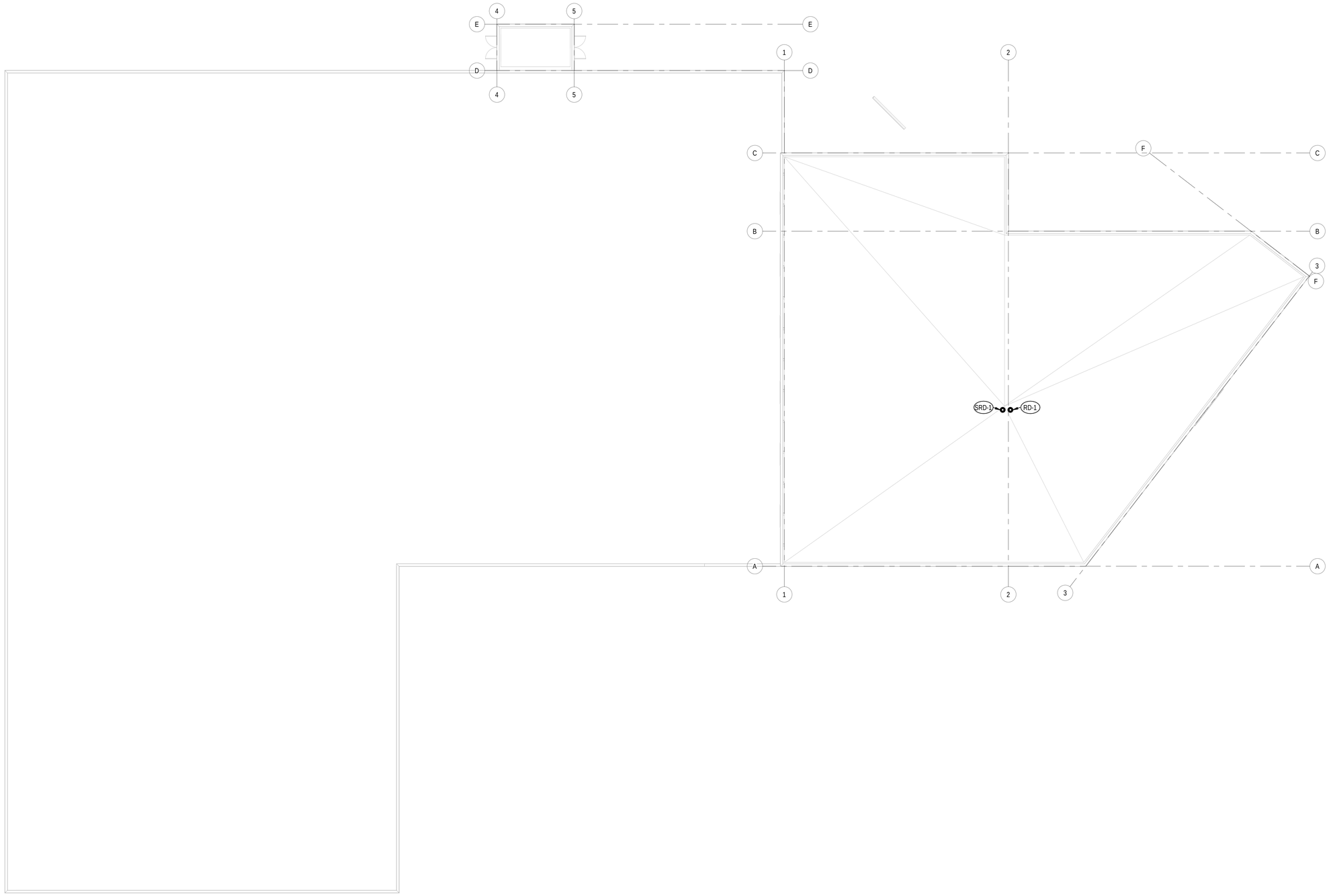

1 ROOF PLUMBING PLAN

1/PL102 3/32" = 1'-0"

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ROOF PLUMBING PLAN

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2/8/2022 7:45:27 AM

ROOF DRAIN CALCULATION

NOTES:

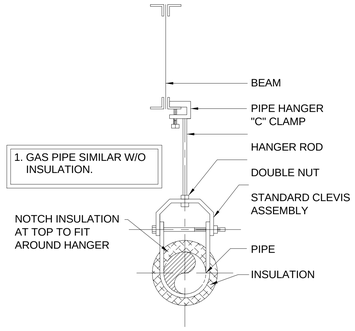
(1)	PLUMBING CODE	IPC 2018
(2)	100 YEAR, 1 HOUR RAINFALL=	2 INCHES/HOUR
(3)	PIPING SLOPE=	0.125 INCHES/FOOT
(4)	PIPE FLOW PERCENTAGE=	75 %

PIPE	VERTICAL DRAIN		HORIZONTAL DRAIN	
SIZE IN	GPM	ROOF AREA SF	GPM	ROOF AREA SF
2	34	1227	22	794
3	87	3140	55	1985
4	180	6497	115	4151
5	311	11225	165	5955
6	538	19418	344	12416
8	1117	40317	714	25771
10	2050	73992	1311	47319
12	3272	118099	2093	75544
15	5543	200068	3546	127988

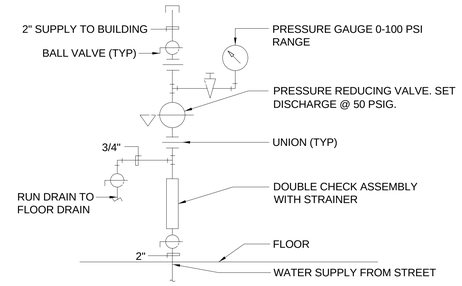
PLUMBING FIXTURE SCHEDULE

NOTES:
(1) MINIMUM SIZE OF DRAIN/WASTE PIPING UNDERFLOOR IS 2".
(2) TERMINATE AT 12" AFF.

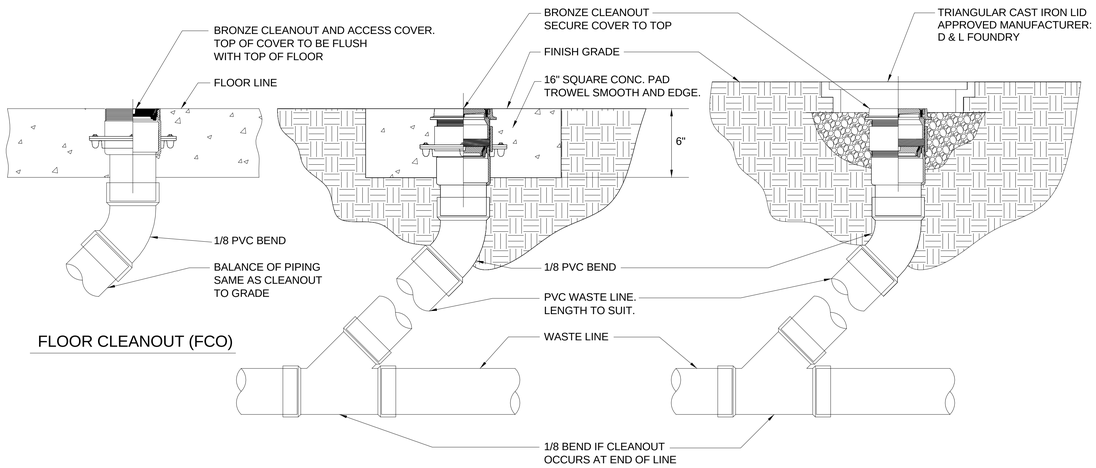
		PIPE SIZES, IN.					
MARK	FIXTURE	TRAP	DRAIN/WASTE (1)	VENT	CW	HW	NOTES
DN-1	DOWNSPOUT NOZZLE		6"				(2)
RD-1	ROOF DRAIN		6"				12416 SF
SRD-1	SECONDARY ROOF DRAIN		6"				



3 PIPE HANGER DETAIL
SCALE: NTS



1 VERTICAL WATER PRESSURE REDUCING STATION DETAIL
SCALE: NTS



2 CLEANOUT DETAILS
SCALE: NTS

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PRELIMINARY
NOT FOR CONSTRUCTION

2/8/2022 7:45:27 AM

SENSAPURE ADDITION

DUSTIN GRAMOLL

1945 Fremont Dr Salt Lake City, UT 84104

MARK	DESCRIPTION	Revision Date

Revision Schedule

AE2021.249

PLUMBING SCHEDULES

DATE: **FEBRUARY 8, 2022**

SHEET #:

P601

PROJECT STATUS
2/8/2022 7:45:27 AM

DAVID L. JENSEN & ASSOCIATES
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ELECTRICAL GENERAL NOTES

GENERAL NOTES:

1. THE ELECTRICAL SYSTEMS DEFINED BY THESE PLANS AND THE SPECIFICATIONS ARE TO BE CONSTRUCTED AS COMPLETE AND OPERABLE SYSTEMS AND SHALL BE BID WITH THIS INTENT. THE CONTRACTOR SHALL VISIT THE SITE, READ ALL THE RELEVANT DOCUMENTS, AND BECOME FAMILIAR WITH THE TYPE OF CONSTRUCTION AND WORK TO BE ACCOMPLISHED. SHOULD ANY ERROR, OMISSION, OR CONFLICT EXIST IN EITHER THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING BEFORE SUBMITTING THEIR BID PRICE SO A CHANGE CAN BE ISSUED IN A PRE-BID ADDENDUM. OTHERWISE, THE CONTRACTOR AND/OR EQUIPMENT SUPPLIERS SHALL SUPPLY THE PROPER MATERIALS AND LABOR TO INSTALL COMPLETE AND OPERABLE SYSTEMS INCLUSIVE OF THE ORIGINAL BID. WHEN EACH ELECTRICAL SYSTEM IS COMPLETE, THE CONTRACTOR SHALL TEST AND CONFIRM ITS PROPER OPERATION. ANY INCOMPLETE SYSTEM SHALL BE MADE COMPLETE AND OPERABLE PRIOR TO PROJECT CLOSEOUT.
2. THE ARCHITECTURAL AND MECHANICAL PLANS ARE CONSIDERED A PART OF THE ELECTRICAL DOCUMENTS SO FAR AS ANY ELECTRICAL ITEMS THEY MAY CONTAIN. THE ELECTRICAL CONTRACTOR SHALL REFER TO AND COORDINATE WITH THEM. NO EXTRA COST SHALL BE ALLOWED FOR FAILURE TO COORDINATE THE CONTRACT DOCUMENTS WITH OTHER TRADES AND/OR IF EQUIPMENT DIMENSIONS ARE GREATER THAN SPECIFIED AND/OR DIMENSIONED ON THE PLANS.
3. THE ELECTRICAL CONTRACTOR SHALL PROVIDE EQUIPMENT, MATERIALS, AND LABOR FOR THE CONNECTIONS OF ALL EQUIPMENT SHOWN ON THE PLANS - ARCHITECTURAL, MECHANICAL, ETC.
4. THIS PROJECT IS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MOST RECENT LOCAL, STATE, AND NATIONAL CODES. IF AT ANY TIME DURING OR AFTER CONSTRUCTION SOMETHING IS FOUND TO BE INSTALLED IN VIOLATION OF THESE CODES LISTED ABOVE, IT SHALL BE CORRECTED BY THE CONTRACTOR.
5. WHERE A RACEWAY ENTERS A BUILDING OR STRUCTURE FROM THE OUTSIDE, IT SHALL BE SEALED AS PER NEC 225.27.
6. ALL ELECTRICAL EQUIPMENT THAT IS LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE WHILE ENERGIZED SHALL BE FIELD OR FACTORY LABELED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS PER NEC 110.16. THE LABEL SHALL ALSO CONTAIN THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE FAULT CURRENT CALCULATIONS WERE PERFORMED AS PER NEC 110.24.
7. EACH DISCONNECTING MEANS SHALL BE LEGIBLY MARKED TO INDICATE ITS PURPOSE AND TO IDENTIFY THE CIRCUIT SOURCE THAT SUPPLIES THE DISCONNECTING MEANS PER NEC 110.22.
8. ALL PANELBOARDS AND SWITCHBOARDS SHALL BE PERMANENTLY MARKED TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THEIR POWER ORIGINATES AS PER NEC 408.4B.
9. ALL EQUIPMENT PROVIDED BY THE EC SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, AND BE PROPERLY INSTALLED FOR THE CONDITIONS AND SPACE THAT EQUIPMENT IS BEING INSTALLED WITHIN.
10. THE EC SHALL INSTALL A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN EACH CONDUIT RUN. CONDUIT SHALL NOT BE USED AS AN EQUIPMENT GROUNDING CONDUCTOR. THE EC SHALL GROUND THE ELECTRICAL SYSTEM IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.
11. CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMMATIC, NOT INDICATING THE ROUTING REQUIRED. THE EC SHALL ROUTE THE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE INSTALLATION AND SHALL COORDINATE WITH DUCTWORK, PIPING, EQUIPMENT, BUILDING STRUCTURE, AND OTHER POTENTIAL OBSTRUCTIONS.
12. THE CONTRACTOR SHALL ALLOW THE MOVEMENT, BEFORE ROUGH-IN, OF ANY ELECTRICAL PANEL, DEVICE, LUMINAIRE, ETC. A DISTANCE OF 10 FEET WITHOUT REQUIRING ADDITIONAL COST TO THE PROJECT.
13. THE EC SHALL SECURE ALL CONDUIT TO THE STRUCTURE AS IT IS SET IN PLACE USING INDUSTRY STANDARD METHODS AND PRACTICES. TO ASSURE ALL DEVICES ARE RIGIDLY SET, THE ELECTRICAL CONTRACTOR SHALL SECURE ALL DEVICE BOXES WITH BRACKETS, HANGERS, ETC. DESIGNED FOR THE APPLICATION.
14. MINIMUM SIZE CONDUIT SHALL BE 3/4" UNO. CONDUIT INSTALLED WITHIN THE BUILDING IN DRY LOCATIONS WITHIN WALL, CEILINGS, OR EXPOSED NOT SUBJECT TO PHYSICAL DAMAGE SHALL BE EMT WITH STEEL SET SCREW FITTINGS. IN EXTERIOR LOCATIONS (EXCEPT FOR THE SERVICE ENTRANCE) THE CONDUIT SHALL BE EMT WITH COMPRESSION GLAND TYPE FITTINGS. UNDERGROUND CONDUIT SHALL BE PVC (SCH. 40) WITH GRC ELBOWS AND RISERS WRAPPED IN CORROSION RESISTANT MATERIALS WHERE IN DIRECT CONTACT WITH THE SOIL.
15. FLEXIBLE CONDUIT SHALL BE LIMITED TO CONNECTIONS TO LIGHT FIXTURES AND FINAL CONNECTIONS TO MOTORS OR OTHER EQUIPMENT SUBJECT TO VIBRATION. LENGTHS OF FLEXIBLE OR SEAL-TITE CONDUIT SHALL NOT BE GREATER THAN 72 INCHES.
16. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL EMPTY CONDUITS WITH 200LB RATED NYLON PULL CORD.
17. BEFORE ANY ELECTRICAL CONDUIT, BOXES, ETC. ARE COVERED (FLOOR, CEILINGS, WALLS, ETC.), THEY SHALL BE APPROVED BY THE INSPECTING OFFICER (INSPECTOR).
18. WHERE WIRE SIZE IS NOT SHOWN ON THE DRAWINGS FOR 20A, 120VAC BRANCH CIRCUITS, THE CIRCUIT SHALL CONSIST OF 2#12 (CU,THHN) + 1#12 (CU,THHN) GND IN 3/4" EMT CONDUIT. THIS WIRE SIZE SHALL BE INCREASED TO #10 (CU,THHN) FOR BRANCH CIRCUITS WITH OVERALL LENGTHS EXCEEDING 125' TO ACCOMMODATE FOR VOLTAGE DROP. REFER TO EQUIPMENT SCHEDULES, FEEDER SCHEDULES, AND NOTES ON DRAWINGS FOR ALL OTHER BRANCH CIRCUIT AND FEEDER WIRE/CONDUIT SIZING.
19. CONDUCTORS SHALL BE COPPER, 600VAC RATED, TYPE THHN/THWN-2 UNO. CONDUCTORS UP TO #10AWG SHALL BE SOLID AND CONDUCTORS #8AWG OR LARGER SHALL BE STRANDED.
20. METAL CLAD CABLING MAY BE USED BETWEEN DEVICES SUCH AS LIGHTING, RECEPTACLES, SWITCHES, ETC. UNLESS OTHERWISE REQUIRED BY THE NEC. HOME RUNS SHALL BE INSTALLED IN CONDUIT. MC CABLE SHALL NOT BE INSTALLED EXPOSED.
21. EC SHALL CLEAN THE ENTIRE ELECTRICAL SYSTEM AFTER COMPLETION OF THE INSTALLATION. REMOVE ALL FINGER PRINTS, FOREIGN MATTER, PAINT, DIRT, GREASE, AND UN-NEEDED LABELS OR STICKERS FROM FIXTURES AND EQUIPMENT. REMOVE ALL RUBBISH AND DEBRIS ACCUMULATED DURING INSTALLATION FROM THE PREMISES.
22. IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS FOR ALL DEVICES TO BE FLUSH MOUNTED AND CONDUIT/CABLING INSTALLED CONCEALED WITHIN WALLS/CEILINGS. IN AREAS WHERE CONDUIT MUST BE INSTALLED EXPOSED IT SHALL BE COORDINATED WITH THE ARCHITECT AND/OR ENGINEER. ALL EFFORTS SHALL BE MADE TO CONCEAL WIRING METHODS.
23. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE SEALED WITH FIRE STOPPING, IE. 3M BRAND CAULK, PUTTY, STRIP AND SHEET FORMS, DOW CORNING 3-6548 SILICONE RTV FOAM.
24. COORDINATE LOCATION OF WALL MOUNTED DEVICES WITH CABINETRY AND OTHER WALL OBSTRUCTIONS. COORDINATE CEILING MOUNTED DEVICES WITH CEILING OBSTRUCTIONS. ANY DEVICES THAT NEED TO BE RELOCATED MUST BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER PRIOR TO ROUGH-IN FOR NEW LOCATION.
25. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE PLACEMENT OF ALL DEVICES INSTALLED WITHIN THE CEILING SUCH AS LIGHTING, SPEAKERS, FIRE SPRINKLERS, SMOKE/HEAT DETECTORS, ETC. ANY EXISTING DEVICES THAT NEED TO BE RELOCATED IN ORDER TO ACCOMMODATE NEW CONSTRUCTION/REMODEL MUST BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER PRIOR TO ROUGH-IN FOR RESOLUTION AND FURTHER DIRECTION.

SITE NOTES:

26. ELECTRICAL CONTRACTOR SHALL COORDINATE AND CONFIRM THE EXACT LOCATION OF THE POWER COMPANY SERVICE TRANSFORMER BEFORE INSTALLING THE PAD, PRIMARY CONDUIT, AND SECONDARY SERVICE LATERAL. PROVIDE LABOR AND CONDUIT, CONDUCTORS, WIRE WAYS, TRANSFORMER LUGS, METER BASES, METER CONDUIT, CONDUCTORS, CONCRETE PAD/VAULT, ETC. AS NEEDED FOR A COMPLETE ELECTRIC SERVICE TO THIS FACILITY.
27. THE EC SHALL COORDINATE LOCATION OF TELEPHONE PEDESTAL, ROUTING/SIZE OF TELEPHONE SERVICE CONDUIT, AND THE MAIN TELEPHONE SERVICE BOARD REQUIREMENTS WITH THE TELEPHONE COMPANY PRIOR TO ROUGH-IN. INSTALL A 3/4" CONDUIT WITH (1) #6 BARE COPPER CONDUCTOR FROM TELEPHONE TERMINAL BOARD (TTB) TO THE MAIN BUILDING GROUNDING SYSTEM.
28. UNDERGROUND CONDUIT FOR SITE LIGHTING SHALL BE BURIED 24" B.F.G. AND SHALL HAVE ONE (1) #10 THHN GREEN GROUND CONDUCTOR TO GROUND ALL LUMINAIRES.
29. PRIOR TO TRENCHING IN ANY AREA, THE CONTRACTOR SHALL COORDINATE WITH COMMUNICATIONS/DATA, CABLE TV, GAS, AND WATER UTILITY PROVIDERS (BLUE STAKES), AND HAVE ALL UTILITIES IN THE AREA IDENTIFIED. IN ADDITION, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A SUBCONTRACTOR SPECIALIZING IN THE LOCATION OF UNDERGROUND STRUCTURES TO IDENTIFY ANY OBSTACLES IN THE PATH OF TRENCHING PRIOR TO COMMENCING WORK. DAMAGE TO ANY UNDERGROUND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR.

LIGHTING NOTES:

30. ALL BATTERY POWERED OR CONTINUOUS BURN LUMINAIRES SHOWN ON THE PLANS, SUCH AS EXIT LIGHTS, NIGHT LIGHTS, OR EMERGENCY LIGHTS, SHALL BE CONNECTED TO THE UN-SWITCHED LEG OF THE LIGHTING CIRCUIT FEEDING THAT AREA.
31. LUMINAIRES INSTALLED IN THE MECHANICAL ROOM SHALL BE PLACED SO THAT ALL EQUIPMENT IS ADEQUATELY ILLUMINATED AFTER THE MECHANICAL EQUIPMENT IS IN PLACE.
32. ALL LUMINAIRES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND NOT THE CEILING GRID OR OTHER NONSTRUCTURAL MEMBERS.
33. TO MAINTAIN CONSISTENT LIGHT QUALITY, FOR ANY ONE LAMP TYPE SUPPLIED, LAMPS SHALL BE OF THE SAME MANUFACTURER, SURFACE TEMPERATURE, COLOR RENDERING INDEX, LAMP EFFICACY, LUMEN OUTPUT, AND STARTING CHARACTERISTICS FOR ALL INSTALLED.
34. LIGHT FIXTURES INSTALLED IN DAMP OR WET LOCATIONS SHALL BE UL LISTED FOR INSTALLATION IN THE PROPER ENVIRONMENT. CARE SHOULD BE TAKEN TO ENSURE THAT DIFFUSERS AND LENSES ARE APPROPRIATE FOR THEIR INSTALLED USE AND PREMATURE DISCOLORATION WILL NOT RESULT DUE TO EXPOSURE TO UV LIGHT, CHEMICALS, OR OTHER CONDITIONS.
35. ELECTRICAL CONTRACTOR SHALL PROVIDE LIGHTING CONTROL SHOP DRAWINGS WITH ELECTRICAL SUBMITTAL FOR REVIEW.

POWER NOTES:

36. ELECTRICAL CONTRACTOR SHALL CONFIRM MINIMUM CODE (NEC) WORKING CLEARANCE BEFORE INSTALLING ANY ELECTRICAL PANELS OR CABINETS AND SHALL MOVE THE PANELS IF REJECTED BY AN INSPECTOR. IF CLEARANCE IS NOT POSSIBLE, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IN WRITING.
37. WIRING DEVICES SHALL HAVE A NYLON COVER PLATE. COLOR SHALL BE COORDINATED WITH ARCHITECT. EXTERIOR OUTLETS SHALL HAVE CAST COVERS WITH FLIP TYPE LIDS UNO.
38. THE EC SHALL MAINTAIN ELECTRICAL CONTINUITY TO REMAINING EQUIPMENT WHEN ANY EXISTING ELECTRICAL EQUIPMENT IS REMOVED.
39. EC SHALL COORDINATE WITH EQUIPMENT SUPPLIERS ON THE EXACT LOCATIONS OF ALL EQUIPMENT AND ELECTRICAL CONNECTIONS PRIOR TO ROUGH-IN. THE EC SHALL MAKE THE FINAL CONNECTION TO ALL EQUIPMENT UNLESS OTHERWISE DIRECTED BY THE EQUIPMENT SUPPLIER. OBTAIN FROM SUPPLIERS ALL WIRING DIAGRAMS FOR EQUIPMENT PRIOR TO ANY ROUGH-IN. TO ASSURE THAT PROPER CHARACTERISTICS ARE PROVIDED, ANY INCORRECT WIRING OR DEVICES INSTALLED BY THE EC WITHOUT THE WIRING DIAGRAM SHALL BE CORRECTED AT THE EC'S EXPENSE. PROVIDE COPIES OF WIRING DIAGRAMS WITHIN EACH PIECE OF EQUIPMENT AND ADDITIONAL COPIES WITH THE OPERATION AND MAINTENANCE MANUALS.
40. EC SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR TO PROVIDE CONDUIT AND DEVICE MOUNTING BOXES FOR THERMOSTATS AND OTHER MECHANICAL CONTROLS. REFER TO MECHANICAL DRAWINGS FOR THE LOCATION OF THERMOSTATS.
41. PROVIDE A 20AMP, 120VAC RECEPTACLE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR CONDITIONING, AND REFRIGERATION EQUIPMENT PER NEC 210.63. RECEPTACLE SHALL BE OF THE GROUND FAULT CIRCUIT INTERRUPTING TYPE, INSTALLED WITHIN A CAST METAL BOX, AND WITHIN 25' OF ALL REQUIRED EQUIPMENT.

ELECTRICAL SYMBOL SCHEDULE

SYMBOL	DESCRIPTION	MOUNTING	NOTES
	LIGHT FIXTURE - SURFACE OR RECESSED	SEE DRAWINGS	1
	EMERGENCY LIGHT FIXTURE - SURFACE OR RECESSED	SEE DRAWINGS	1, 2
	LIGHT FIXTURE - OPEN STRIP	SEE DRAWINGS	1
	EMERGENCY LIGHT FIXTURE - OPEN STRIP	SEE DRAWINGS	1, 2
	LIGHT FIXTURE - WALL MOUNTED	WALL	1
	EMERGENCY LIGHT FIXTURE - WALL MOUNTED	WALL	1, 2
	LIGHT FIXTURE - DOWNLIGHT	CEILING	1
	EMERGENCY LIGHT FIXTURE - DOWNLIGHT	CEILING	1, 2
	LIGHT FIXTURE - WALL WASH DOWNLIGHT	CEILING	1
	LIGHT FIXTURE - CEILING MOUNTED	CEILING	1
	LIGHT FIXTURE - PENDANT/CHANDELIER	CEILING	1
	LIGHT FIXTURE - WALL BRACKET	WALL	1
	EMERGENCY LIGHT FIXTURE - WALL BRACKET	WALL	1, 2
	LIGHT TRACK WITH FIXTURES	SURFACE	1
	EXIT FIXTURE - WALL MOUNT	WALL	1, 2, 3
	EXIT FIXTURE - CEILING MOUNT	CEILING	1, 2, 3
	EXIT FIXTURE W/ EMERGENCY HEADS - WALL MOUNT	WALL	1, 2, 3
	EXIT FIXTURE W/ EMERGENCY HEADS - CEILING MOUNT	CEILING	1, 2, 3
EM	DUAL HEAD EMERGENCY LIGHT FIXTURE	WALL	1, 2
	AREA LIGHT FIXTURE - POLE MOUNTED	POLE	1
	OCCUPANCY SENSOR - CEILING MOUNT	CEILING	1
PC	PHOTO-ELECTRIC CELL WITH RELAY	SURFACE	1
PP	LIGHTING RELAY/POWER PACK	SURFACE	1
TC	TIME CLOCK - 7 DAY	5' - 0"	
$OS	WALL OCCUPANCY SENSOR SWITCH	4' - 0"	
$	SINGLE POLE SWITCH	4' - 0"	
$2	DOUBLE POLE SWITCH	4' - 0"	
$3	THREE WAY SWITCH	4' - 0"	
$4	FOUR WAY SWITCH	4' - 0"	
$D	DIMMER SWITCH	4' - 0"	
$LV	LOW VOLTAGE SWITCH	4' - 0"	
$TH	THERMAL OVERLOAD SWITCH	4' - 0" UNO	
$P	PILOT LIGHT SWITCH	4' - 0"	
	DUPLEX OUTLET, 20A, 120VAC	1' - 6" UNO	
	DUPLEX OUTLET, 20A, 120VAC - GFCI	1' - 6" UNO	
	DUPLEX OUTLET - SPLIT WIRED	1' - 6" UNO	
	DUPLEX OUTLET - ISOLATED GROUND	1' - 6" UNO	
	DUPLEX OUTLET WITH USB PORTS	1' - 6" UNO	
OS	DUPLEX OUTLET - OCCUPANCY SENSOR CONTROLLED	1' - 6" UNO	
	DUPLEX OUTLET, 20A, 120VAC - CEILING	CEILING	
	DUPLEX OUTLET, 20A, 120VAC - FLOOR	FLOOR	
	FOURPLEX OUTLET, 20A, 120VAC	1' - 6" UNO	
	FOURPLEX OUTLET, 20A, 120VAC - GFCI	1' - 6" UNO	
	FOURPLEX OUTLET - ISOLATED GROUND	1' - 6" UNO	
	FOURPLEX OUTLET, 20A, 120VAC - CEILING	CEILING	
	FOURPLEX OUTLET, 20A, 120VAC - FLOOR	FLOOR	
	APPLIANCE OUTLET - 208/240V SINGLE PHASE	18" OR 48"	
	APPLIANCE OUTLET - 208/480V 3-PHASE	18" OR 48"	
	DATA OUTLET	1' - 6" UNO	
	TELEPHONE OUTLET	1' - 6" UNO	
	DUAL TELEPHONE/DATA OUTLET	1' - 6" UNO	
	DATA OUTLET - FLOOR	FLOOR	
	DUAL TELEPHONE/DATA OUTLET - FLOOR	FLOOR	
	CEILING DATA OUTLET/ WIRELESS ACCESS POINT	CEILING	
	CABLE TELEVISION OUTLET	1' - 6" UNO	
	JUNCTION BOX	SURFACE	
	WALL JUNCTION BOX	1' - 6" UNO	
	FLOOR JUNCTION BOX	FLOOR	
	DISCONNECT SWITCH - NON-FUSED	5' - 0" UNO	4
F	DISCONNECT SWITCH - FUSED	5' - 0" UNO	4
	DISCONNECT SWITCH - SHUNT TRIP	5' - 0" UNO	4
	COMBINATION MAGNETIC STARTER/DISCONNECT	5' - 0" UNO	
	MOTOR STARTER	5' - 0" UNO	
	CONTACTOR	5' - 0" UNO	
	MOTOR	SURFACE	
	METER - PLAN VIEW	WALL	
	PUSH BUTTON SWITCH	4' - 0"	
	EMERGENCY POWER SHUTOFF SWITCH	4' - 0"	
	PANELBOARD - SURFACE MOUNTED	6' - 6" TO TOP	
	PANELBOARD - RECESSED	6' - 6" TO TOP	
	TRANSFORMER - PLAN VIEW	PAD/FLOOR	
	TELEPHONE TERMINAL BOARD	WALL	

ELECTRICAL SHEET INDEX

E000	ELECTRICAL GENERAL SHEET
E001	ELECTRICAL SITE PLAN
E101	ELECTRICAL PLAN
E501	ELECTRICAL DETAILS
E601	ELECTRICAL SCHEDULES
ES001	SITE PHOTOMETRIC PLAN

	FIRE ALARM HORN	7' - 6"	
	FIRE ALARM STROBE	7' - 6"	
	FIRE ALARM HORN STROBE	7' - 6"	
	WATERFLOW GONG	7' - 6"	
F	FIRE ALARM DUAL ACTION MANUAL PULL STATION	4' - 0"	
AR	FIRE ALARM ADDRESSABLE CONTROL RELAY		
MM	FIRE ALARM MONITOR MODULE		
	FIRE ALARM CONTROL PANEL	6' - 6" TO TOP	
	FIRE ALARM ANNUNCIATOR PANEL	4' - 0"	
	PHOTOELECTRIC SMOKE DETECTOR	SURFACE	
	RATE OF RISE/HEAT DETECTOR	SURFACE	
CO	CARBON MONOXIDE DETECTOR	SURFACE	
	DUCT SMOKE DETECTOR	DUCT	6
	FIRE SMOKE DAMPER		
	FIRE RISER TAMPER SWITCH		
	FIRE RISER FLOW SWITCH		
	ELECTROMAGNETIC DOOR HOLDER	2' - 0"	
CR	SECURITY CARD READER	4' - 0"	
KP	SECURITY KEYPAD	4' - 0"	
ES	ELECTRIC STRIKE		
	SECURITY CCTV CAMERA		
S	SPEAKER - CEILING		
S	SPEAKER - WALL		
M	MICROPHONE CONNECTION		
$VC	VOLUME CONTROL SWITCH	4' - 0"	

	CIRCUIT BREAKER	M	METER - ONE-LINE
	MLO PANEL - ONE-LINE		TRANSFORMER - ONE-LINE
	MCB PANEL - ONE-LINE		PAD MOUNT XFMR - ONE-LINE
	AUTOMATIC TRANSFER SWITCH		GROUND SLEEVE - ONE-LINE
	CT ENCLOSURE - ONE-LINE	XXXA SP- XXXA 1PNR	FUSED DISCONNECT - ONE-LINE
	CURRENT TRANSFORMER		FUSED SWITCH
			GROUND
	OH RISER	XXX	CABLE/WIRE SIZE TAG
X	KEYED NOTE TAG	X / EXXX	DETAIL/VIEW NUMBER
XX / X	MECH/ELEC. EQUIPMENT TAG		DETAIL/VIEW REFERENCE TAG
X	OTHER EQUIPMENT TAG		SHEET NUMBER
	WIRING / CONDUIT		UNDERGROUND/FLOOR WIRING
	CONDUIT TURNED UP		CONDUIT TURNED DOWN
	CIRCUIT HOME RUN TO PANEL: # OF ARROWHEADS INDICATE # OF CIRCUITS (SEPARATE NEUTRAL PER CIRCUIT). BOTH EX. INCLUDE AN EQUIP. GROUND.		

NOTES

1. SEE LIGHT FIXTURE SCHEDULE FOR TYPE, MOUNTING, AND OTHER SPECIFICS.
2. CONNECT EMERGENCY AND/OR EXIT LIGHTS TO THE UNSWITCHED SIDE OF THE AREA LIGHTING BRANCH CIRCUIT.
3. ARROW DENOTES EXIT DIRECTION.
4. USE HEAVY DUTY FOR 480 VOLT.
5. MOUNT SWITCH AT DOOR JAM PER MANUFACTURER'S INSTRUCTIONS.
6. PROVIDE UL LISTED DEVICE TO BE USED WITH THE FIRE ALARM PANEL/SYSTEM OR PROVIDE A MONITOR MODULE TO CONNECT INTO FIRE ALARM SYSTEM.
7. PROVIDE RACEWAY WITH OUTLETS 12" ON CENTER UNO.

ABBREVIATIONS

AFCI - ARC FAULT CKT INTERRUPTER
AFF - ABOVE FINISHED FLOOR
AFG - ABOVE FINISHED GRADE
AIC - AMPS INTERRUPTING CAPACITY
AL - ALUMINUM
ATS - AUTOMATIC TRANSFER SWITCH
BC - BARE COPPER
BFC - BELOW FINISHED CEILING
BFG - BELOW FINISHED GRADE
CKT - CIRCUIT
CND. OR C. - CONDUIT
CLG - INSTALLED IN CEILING
C.R. - CORD REEL
CT - CURRENT TRANSDUCER
CU - COPPER
(E) - EXISTING TO REMAIN
EC - ELECTRICAL CONTRACTOR
EM - EMERGENCY
(F) - FUTURE
FACP - FIRE ALARM CONTROL PANEL
FLA - FULL LOAD AMPS
FVNR - FULL VOLTAGE NON REVERSING
GC - GENERAL CONTRACTOR
GFCI - GROUND FAULT CKT INTERRUPTER
GND - GROUND
HP - HORSEPOWER
IG - ISOLATED GROUND
KW - KILOWATTS
LCP - LIGHTING CONTROL PANEL
LTG - LIGHTING
LV - LOW VOLTAGE
MC - MECHANICAL CONTRACTOR
MCA - MINIMUM CIRCUIT AMPS
MCB - MAIN CIRCUIT BREAKER
MCC - MOTOR CONTROL CENTER
MDP - MAIN DISTRIBUTION PANEL
MLO - MAIN LUGS ONLY
MOCP - MAX. OVERCURRENT PROTECTION
(N) - NEW
NIC - NOT IN CONTRACT
NEC - NATIONAL ELECTRICAL CODE
NFPA - NATIONAL FIRE PROT. ASSN.
NL - NIGHT LIGHT
NR - NOT REQUIRED
NTS - NOT TO SCALE
PC - PLUMBING CONTRACTOR
PH - PHASE
PNL - PANEL
POC - POINT OF CONNECTION
POS - POINT OF SALE
(R) - RELOCATED
REC - RECEPTACLES
RMC - RIGID METAL CONDUIT
SCA - SHORT CIRCUIT AMPERES
SES - SERVICE ENTRANCE SWITCHGEAR
SPD - SURGE PROTECTIVE DEVICE
TL - TWIST LOCK
TTB - TELEPHONE TERMINAL BOARD
TR - TAMPER RESISTANT
TYP - TYPICAL
UNO - UNLESS NOTED OTHERWISE
VA - VOLT/AMPS
VIF - VERIFY IN FIELD
VR - VANDAL RESISTANT
WP - WEATHERPROOF/NEMA 3R
WU - FURNISHED WITH UNIT
XFMR - TRANSFORMER

SENSAPURE ADDITION
1945 SOUTH FREMONT DRIVE
SALT LAKE CITY, UT 84104

STAMP

NOT FOR CONSTRUCTION

REVISIONS

ROCKY MOUNTAIN CONSULTING ENGINEERS, INC.
2117 South 3600 West, Salt Lake City, UT 84119
(801) 566-0503 www.rmceut.com

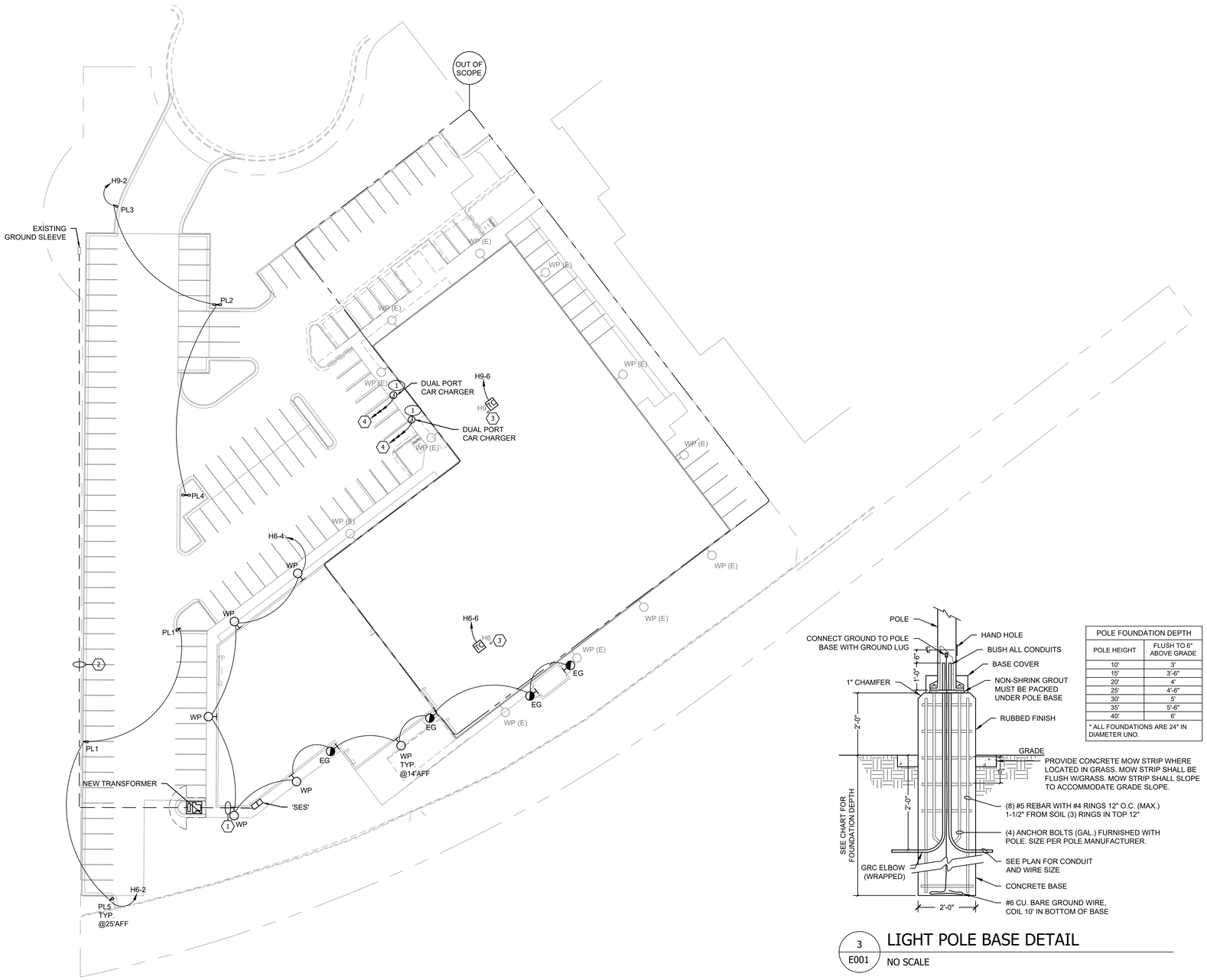
PROJECT #: 21343
DRAWN BY: RB/BW
CHECKED BY: AP
DATE: 01/01/2022

(C) ROCKY MOUNTAIN CONSULTING ENGINEERS, INC. - 2022

SHEET TITLE:

ELECTRICAL GENERAL SHEET

E000



1 E001 ELECTRICAL SITE PLAN

SCALE: 1/32" = 1'-0"

N

KEYED NOTES

1. INSTALL 5 RUNS OF 4" PVC CONDUIT FROM THE TRANSFORMER TO THE SES. CONDUITS SHALL BE BURIED IN ACCORDANCE WITH NEC TABLE 300.5.
2. PROVIDE A 4"C BETWEEN THE EXISTING GROUND SLEEVE TO THE NEW TRANSFORMER. CONDUIT SHALL BE BURIED 48" BELOW GRADE. PROVIDE MAGNETIC MARKING TAPE BURIED 12" DIRECTLY ABOVE CONDUIT COORDINATE WITH ROCKY MOUNTAIN POWER PRIOR TO CONSTRUCTION.
3. APPROXIMATE LOCATION OF EXISTING PANEL. CONFIRM EXACT TIME SHUTOFF WITH OWNER. PROVIDE A 2 CIRCUIT TIME CLOCK INTERMATIC ET2825C OR EQUIVALENT TO CONTROL SHUTOFF FOR EXTERIOR LIGHTING AND 3 1P/20A 277V CIRCUIT BREAKERS TO REPLACE A SPARE 3P BREAKER.
4. PROVIDE A NEW 3P 100A BREAKER FOR CAR CHARGER FEED. COORDINATE EXACT CIRCUIT NUMBER IN PANEL H9 WITH OWNER PRIOR TO ROUGH-IN.

GENERAL NOTES

A. CONNECT ALL EMERGENCY AND EXIT LIGHT FIXTURES TO THE UNSWITCHED SIDE OF THE LIGHTING BRANCH CIRCUIT. LIGHT FIXTURES WITH EMERGENCY DRIVERS SHALL BE NORMALLY SWITCHED WITH THE AREA LIGHTING, BUT HAVE THEIR EMERGENCY DRIVERS CONNECTED AHEAD OF THE LIGHT SWITCH OR LIGHTING CONTROL PANEL RELAY. FIXTURES WILL REMAIN ON FOR NOT LESS THAN 90 MINUTES IN CASE OF POWER LOSS.
B. IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS THAT CONDUIT IS TO BE INSTALLED WITHIN WALLS AND ABOVE CEILINGS CONCEALED WHERE POSSIBLE.
C. COORDINATE MOUNTING HEIGHTS OF ALL WALL MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL ELEVATIONS.
D. ELECTRICIAN TO VERIFY FIXTURE DIMMING CONTROLS AND TO PROVIDE THE NECESSARY WIRING AND DEVICES REQUIRED FOR DIMMING OPERATION.
E. EC TO CONCEAL ALL FIXTURE DRIVERS IN ACCESSIBLE CEILING SPACE OUT OF DIRECT VIEW.

LTG CTRL SEQUENCE OF OPERATION

LIGHTING AND CONTROLS ARE DESIGNED TO MEET IECC 2018.

LIGHTING CONTROL PANEL OR TIME CLOCK WILL BE PROGRAMMED TO TURN LIGHTS ON AND OFF FOR HOURS OF OPERATION.

EXTERIOR LIGHTING SHALL BE PROGRAMMED TO TURN ON AT 6 A.M. AND OFF AT MIDNIGHT. PHOTOCELL WILL AUTOMATICALLY TURN LIGHTS OFF WHEN DAYLIGHTING IS PRESENT AND SATISFIES THE LIGHTING NEEDS. (C405.2.6.1 - C405.2.6.3)

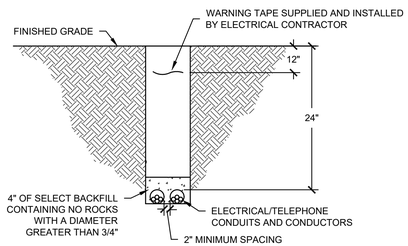
BUILDING FACADE AND LANDSCAPE LIGHTING SHALL BE PROGRAMMED TO SHUT OFF NOT LATER THAN 1 HOUR AFTER BUSINESS CLOSING TO NOT EARLIER THAN 1 HOUR BEFORE BUSINESS OPENS. (C405.2.6.2)

POLE FOUNDATION DEPTH	
POLE HEIGHT	FLUSH TO 6" ABOVE GRADE
10'	3'
15'	3'-6"
20'	4'
25'	4'-6"
30'	5'
35'	5'-6"
40'	6'

* ALL FOUNDATIONS ARE 24" IN DIAMETER UNO.

3 E001 LIGHT POLE BASE DETAIL

NO SCALE



NOTES:

1. ELECTRICAL SERVICE CONDUIT AND CONDUCTORS ARE TO BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. BURIAL DEPTH SHALL BE PER NEC TABLE 300.5
2. TELEPHONE SERVICE CONDUIT SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. TELEPHONE SERVICE CABLING SHALL BE PROVIDED BY THE LOCAL TELEPHONE COMPANY. COORDINATE WITH LOCAL TELEPHONE COMPANY FOR ANY SPECIFIC REQUIREMENTS.
3. THE QUANTITY/SIZE OF CONDUITS AND/OR CONDUCTORS SHALL BE AS CALLED OUT ON THE ELECTRICAL DRAWINGS. COORDINATE WITH THE ELECTRICAL ENGINEER.

2 E001 UNDERGROUND CONDUIT DETAIL

NO SCALE

SENSAPURE ADDITION

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SHEET TITLE:

ELECTRICAL SITE PLAN

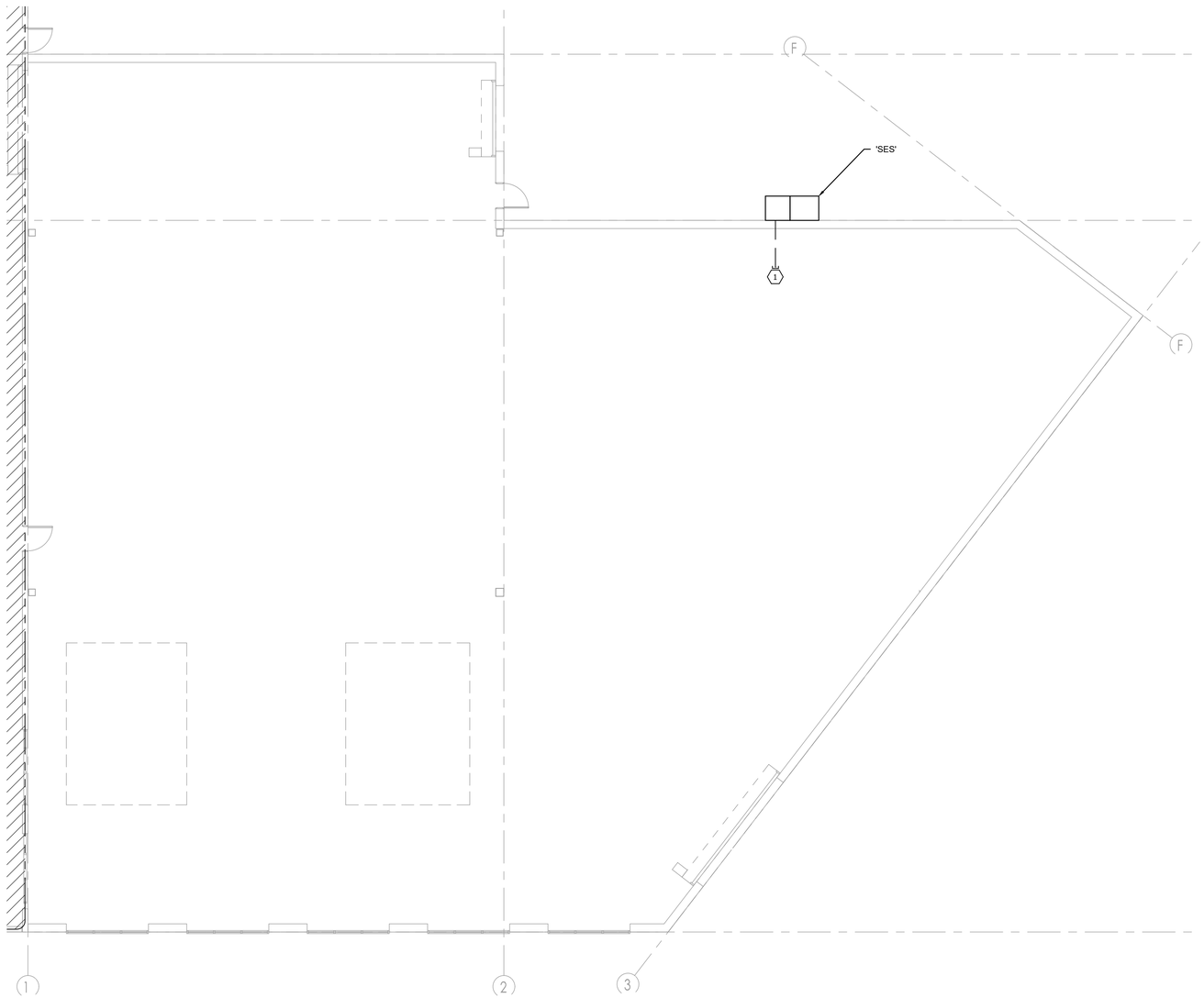
E001

KEYED NOTES

1. STUB CONDUITS INSIDE BUILDING FOR FUTURE MDP. SEE ONE LINE FOR DETAILS.

GENERAL NOTES

A. COORDINATE MOUNTING HEIGHTS OF ALL EQUIPMENT WITH ARCHITECTURAL DRAWINGS AND MILL WORK CONTRACTOR PRIOR TO ROUGH IN.
B. VERIFY AND COORDINATE EXACT ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT WITH MANUFACTURER'S RECOMMENDATIONS PRIOR TO INSTALLATION OF EQUIPMENT.



1 / E101 ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

N

SENSAPURE ADDITION

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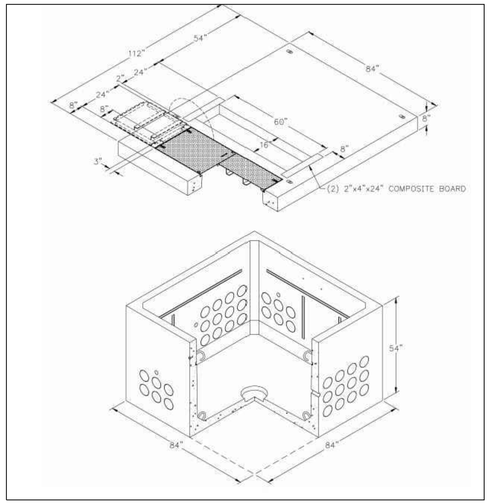
SHEET TITLE:

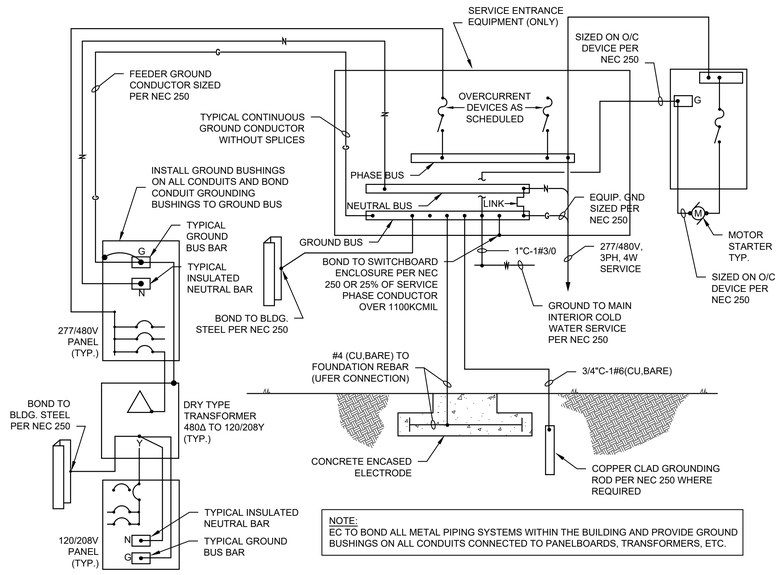
ELECTRICAL PLAN

E101



1 E501 RMP VAULT DETAIL

NO SCALE



2 E501 TYPICAL GROUNDING/BONDING DETAIL

NO SCALE

KEYED NOTES

1. PROVIDE A NAME PLATE ON EACH ELECTRICAL PANEL AND SERVICE DISCONNECT WITH AVAILABLE FAULT CURRENT AND THE DATE WHICH THE CALCULATIONS WERE PERFORMED (02/04/21) PER NEC 110.24.
2. STUB CONDUIT JUT INSIDE BUILDING FOR FUTURE MDP.

GENERAL NOTES

A. COORDINATE MOUNTING HEIGHTS OF ALL EQUIPMENT WITH ARCHITECTURAL DRAWINGS AND MILL WORK CONTRACTOR PRIOR TO ROUGH IN.
B. VERIFY AND COORDINATE EXACT ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT WITH MANUFACTURER'S RECOMMENDATIONS PRIOR TO INSTALLATION OF EQUIPMENT.

FAULT CURRENT CALCULATIONS	
480 Volts	
Panel	SES
Feed From	UTILITY
Available Fault Current	22096
(L) Length to panel	50
Conduit Type (P,S)	P
Conductor Size	350
Conductor Type (c,a)	A
No of Runs	5
C - from chart	16813
Voltage	480
f	0.04742148
m	0.9547255
I s.c. at Panel	21096

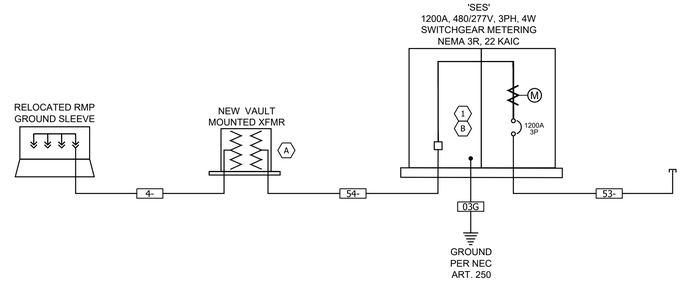
AVAILABLE FAULT CURRENTS

(A) ESTIMATED 22,096A (B) 21,096A

CONDUIT/CONDUCTOR SCHEDULE

MARK	AMPS	CONDUIT	CU/AL	CONDUCTORS (TOTAL) PHASE	NEUTRAL	GROUND	NOTES
54-	-	(5) 4"	-	-	-	-	3
53-	-	(5) 3"	CU	-	-	-	1
4-	-	4"	-	-	-	-	3
03G	-	-	CU	-	-	3/0	2

NOTES:
1. CONDUCTOR INSULATIONS TO BE RATED THWN-2/THHN 90°C.
2. GROUNDING ELECTRODE CONDUCTOR TO BE BONDED TO ALL AVAILABLE GROUNDING ELECTRODES.
3. CONTRACTOR TO PROVIDE SERVICE LATERAL CONDUIT. CONDUCTORS ARE TO BE PROVIDED, INSTALLED, AND TERMINATED BY RMP.



3 E501 ONE-LINE DIAGRAM

NO SCALE

SENSAPURE ADDITION

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SHEET TITLE:

ELECTRICAL DETAILS

E501

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	VOLTAGE	LAMPING	CONTROL	MOUNTING	LOAD(VA)	DESCRIPTION
EG	LITHONIA	AFB PEL DDBTXD UVOLT LTP WT CW	UNV	LED 225 LUMENS 4000K	-	WALL	16	ARCHITECTURAL EMERGENCY WITH LITHIUM IRON PHOSPHATE BATTERY COLD WEATHER RATED PHOTOCELL DARK BRONZE. BID AS SPECIFIED TO MATCH EXISTING
WP	LITHONIA	WDGE3 LED P2 40K 80CRI RFT MVOLT SRM PE DDBXD	UNV	LED 7,909 LUMENS 4000K	-	WALL	59	WEDGE STYLE LED WALL PACK PHOTOCELL DARK BRONZE
PL1	LITHONIA	RSX2 LED P2 40K R4 MVOLT SPA HS PE DDBXD	UNV	LED 17,427 LUMENS 4000K	-	POLE	114	SINGLE HEAD POLE MOUNTED BLADE STYLE LED FIXTURE TYPE IV DISTRIBUTION HOUSE SIDE SHIELD PHOTOCELL WITH 25' SQUARE STRAIGHT STEEL POLE DARK BRONZE
PL2	LITHONIA	RSX2 LED P2 40K R4 MVOLT SPA HS PE DDBXD	UNV	LED 34,854 LUMENS 4000K	-	POLE	228	DOUBLE HEAD POLE (180) MOUNTED BLADE STYLE LED FIXTURE TYPE IV DISTRIBUTION HOUSE SIDE SHIELD PHOTOCELL WITH 25' SQUARE STRAIGHT STEEL POLE DARK BRONZE
PL3	LITHONIA	RSX2 LED P2 40K R3 MVOLT SPA HS PE DDBXD	UNV	LED 17,202 LUMENS 4000K	-	POLE	114	SINGLE HEAD POLE MOUNTED BLADE STYLE LED FIXTURE TYPE III DISTRIBUTION HOUSE SIDE SHIELD PHOTOCELL WITH 25' SQUARE STRAIGHT STEEL POLE DARK BRONZE
PL4	LITHONIA	RSX2 LED P2 40K R3 MVOLT SPA HS PE DDBXD	UNV	LED 34,404 LUMENS 4000K	-	POLE	228	DOUBLE HEAD POLE (180) MOUNTED BLADE STYLE LED FIXTURE TYPE III DISTRIBUTION HOUSE SIDE SHIELD PHOTOCELL WITH 25' SQUARE STRAIGHT STEEL POLE DARK BRONZE
PL5	LITHONIA	RSX2 LED P2 40K R4S MVOLT SPA PE EGS DDBXD	UNV	LED 16,815 LUMENS 4000K	-	POLE	114	SINGLE HEAD POLE MOUNTED BLADE STYLE LED FIXTURE TYPE IV SHORT DISTRIBUTION EXTERNAL GLARE SHIELD PHOTOCELL WITH 25' SQUARE STRAIGHT STEEL POLE DARK BRONZE

NOTES:

1. ALL LIGHT FIXTURES SHOWN HALF SHADED SHALL BE PROVIDED WITH AN EMERGENCY BATTERY PACK CAPABLE OF PROVIDING 90 MIN. OF EGRESS ILLUMINATION.

2. ALL LIGHTING VALUE ENGINEERING PROVIDED FOR THIS PROJECT SHALL BE SUBMITTED TO THE ELECTRICAL ENGINEER FOR REVIEW AND APPROVAL AFTER THE PROJECT HAS BEEN BID AND AWARDED. ANY CREDITS FOR VE SHALL INCLUDE TIME TO COMPENSATE OUR OFFICE FOR ENGINEERING REVIEW AND VERIFICATION OF BRANCH CIRCUIT LOADING AND/OR ENERGY CODE COMPLIANCE. NO VE SUBMITTALS WILL BE APPROVED WITHOUT THIS PROCESS IN PLACE. VE SUBMITTALS SHALL INCLUDE PHOTOMETRIC ANALYSIS TO ENSURE NEW LIGHT FIXTURES PROVIDE COMPARABLE LIGHT LEVELS TO THOSE ORIGINALLY DESIGNED.

3. PRIOR APPROVALS SHALL BE SUBMITTED TO OUR OFFICE NO LESS THAN 5 BUSINESS DAYS OF THE PROJECT BID DATE. ANYTHING SUBMITTED AFTER THIS TIME FRAME WILL NOT BE REVIEWED AND WILL BE CONSIDERED NON-APPROVED FOR BIDDING PURPOSES. ALL LIABILITY ASSOCIATED WITH NON-APPROVED FIXTURES THAT DO NOT MEET THE PROJECT REQUIREMENTS WILL REST SOLELY WITH THE CONTRACTOR.

EQUIPMENT SCHEDULE

MARK	DESCRIPTION	ELECTRICAL V	PH	KW	HP	MCA	FLA	MOCP	CONDUIT SIZE	WIRE QTY.	WIRE SIZE	GND. SIZE	STARTER NEMA SIZE	OVERCURRENT PROTECTION DISCONNECT SIZE/POLE	FUSE SIZE	REMARKS
1	CHARGE POINT CAR CHARGER	480	3				80	100	1-1/2"	3	1	8	-	-	-	13A

NOTE: COORDINATE FINAL EQUIPMENT CONNECTIONS WITH EQUIPMENT PROVIDER PRIOR TO ROUGH-IN. VERIFY ALL MOUNTING HEIGHTS.

REMARKS:

1. FUSED DISCONNECT SWITCH
2. NON-FUSED DISCONNECT SWITCH
3. BREAKER IN ENCLOSURE
4. THERMAL OVERLOAD SWITCH
5. TOGGLE SWITCH
6. MAGNETIC STARTER
7. MAGNETIC STARTER/NON-FUSED DISCONNECT SWITCH
8. MAGNETIC STARTER/FUSED DISCONNECT COMBINATION
9. MAGNETIC STARTER/BREAKER COMBINATION
10. REDUCED VOLTAGE STARTER
11. VARIABLE FREQUENCY DRIVE
12. RECEPTACLE/SPECIAL PURPOSE OUTLET/ETC.
13. DIRECT CONNECTION
14. DUCT DETECTOR IN RETURN DUCT
15. SWITCH WITH LIGHTS

A. FURNISHED, INSTALLED AND CONNECTED UNDER DIVISION 26
B. FURNISHED AND INSTALLED UNDER ANOTHER DIVISION REQUIRING CONNECTION UNDER DIVISION 26
C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIVISION 26
D. FURNISHED, INSTALLED, AND CONNECTED UNDER ANOTHER DIVISION
E. FURNISHED AND INSTALLED UNDER DIVISION 26 REQUIRING CONNECTION UNDER ANOTHER DIVISION

SENSAPURE ADDITION

1945 SOUTH FREMONT DRIVE
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REVISIONS

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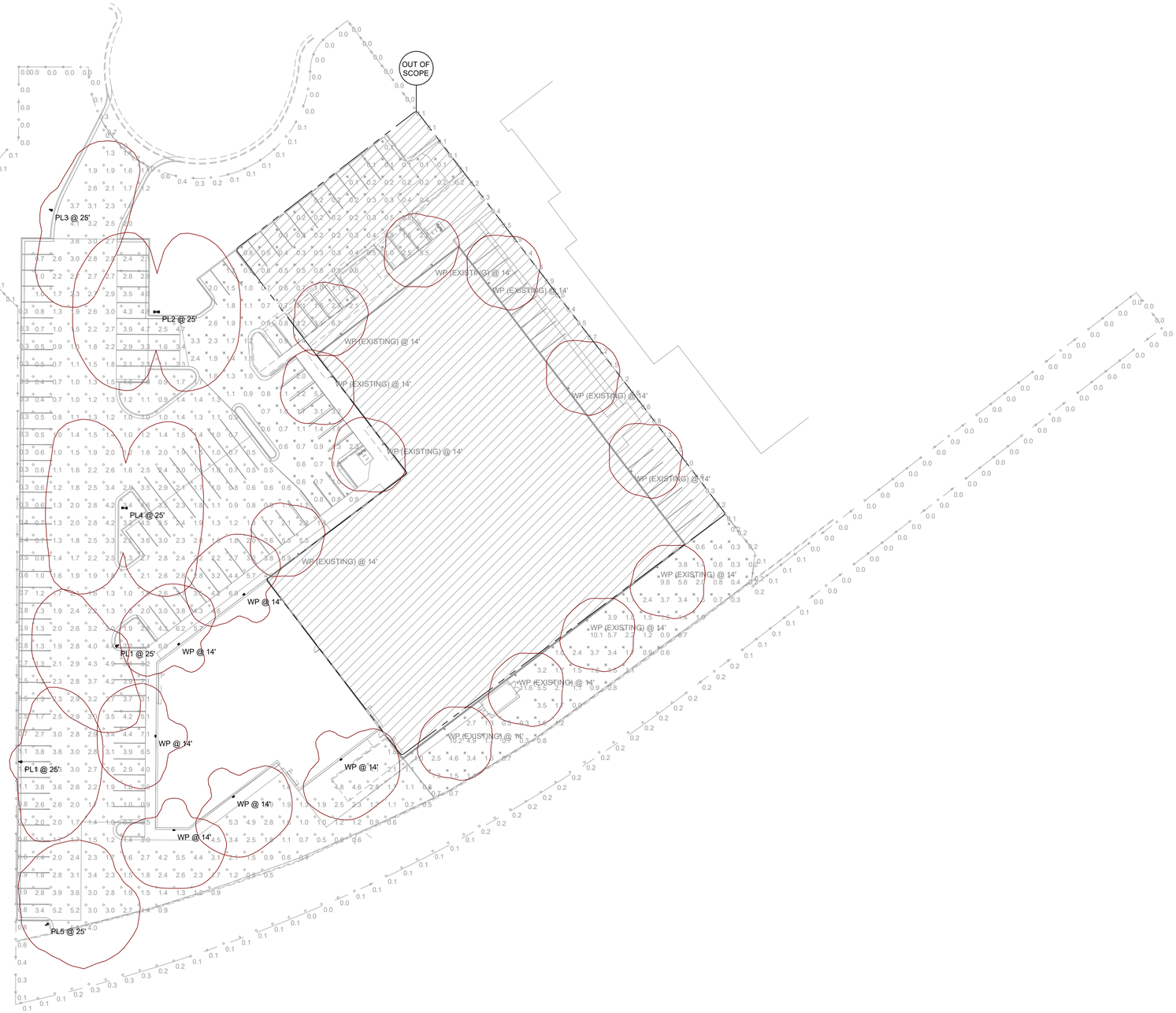
SHEET TITLE:

ELECTRICAL SCHEDULES

E601



1 ES001 SITE PHOTOMETRIC PLAN - FOR REFERENCE ONLY

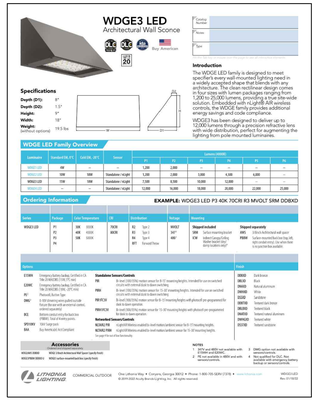
SCALE: 1/32" = 1'-0"

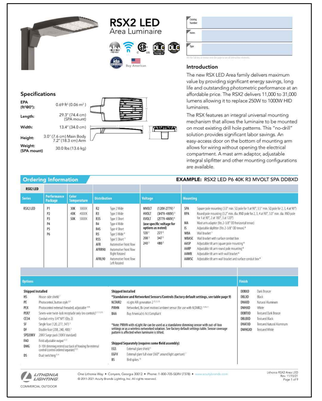
N

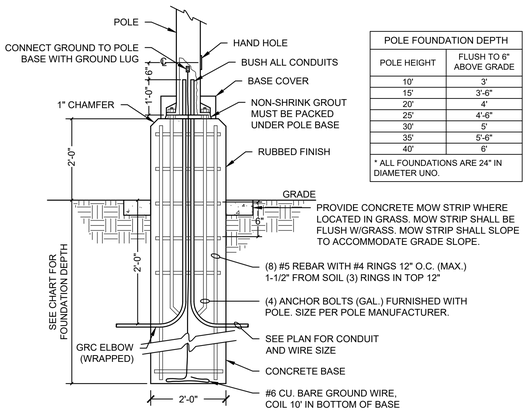
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
EXISTING PARKING-OUT OF SCOPE	+	1.1 fc	6.7 fc	0.1 fc	67.0:1	11.0:1
EXISTING REAR DRIVE-OUT OF SCOPE	+	2.1 fc	11.6 fc	0.2 fc	58.0:1	10.5:1
PARKING/DRIVE AREAS	◇	2.2 fc	7.1 fc	0.4 fc	17.8:1	5.5:1
PROPERTY LINE	◇	0.3 fc	1.5 fc	0.0 fc	N/A	N/A

Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	PL1	2	Lithonia Lighting	RSX2 LED P2 40K R4 HS	RSX Area Fixture Size 2 P2 Lumen Package 4000K CCT Type R4 Distribution with HS Shield	1	12135	0.9	114.071
	PL2	1	Lithonia Lighting	RSX2 LED P2 40K R4 HS	RSX Area Fixture Size 2 P2 Lumen Package 4000K CCT Type R4 Distribution with HS Shield	1	12135	0.9	228.142
	PL3	1	Lithonia Lighting	RSX2 LED P2 40K R3 HS	RSX Area Fixture Size 2 P2 Lumen Package 4000K CCT Type R3 Distribution with HS Shield	1	12688	0.9	114.071
	PL4	1	Lithonia Lighting	RSX2 LED P2 40K R3 HS	RSX Area Fixture Size 2 P2 Lumen Package 4000K CCT Type R3 Distribution with HS Shield	1	12688	0.9	228.142
	PL5	1	Lithonia Lighting	RSX2 LED P2 40K R4S EGS	RSX Area Fixture Size 2 P2 Lumen Package 4000K CCT Type R4S Distribution with EGS Shield	1	14666	0.9	114.071
	WP	6	Lithonia Lighting	WDGE3 LED P2 70CRI RFT 40K	WDGE3 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 70CRI, FORWARD THROW OPTIC	1	8596	0.9	59.2761
	WP (EXISTING)	12	ESL Vision LLC	ESL-WP-60W-440	LED	1	8606	0.9	61.16







POLE FOUNDATION DEPTH	
POLE HEIGHT	FLUSH TO 6" ABOVE GRADE
10'	3'
15'	3'-6"
20'	4'
25'	4'-6"
30'	5'
35'	5'-6"
40'	6'

* ALL FOUNDATIONS ARE 24" IN DIAMETER UNO.

2 ES001 LIGHT POLE BASE DETAIL

NO SCALE

SENSAPURE ADDITION

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SHEET TITLE:

SITE PHOTOMETRIC PLAN

ES001