# NSSRD Outdoor Sports Complex 235 S Beacon Hill Dr, Coalville, UT 84017







## Construction Documents City Review Set



	Sheet List Table		
Sheet Number		Sheet Title	
	L.000	COVER SHEET	
	L.100	INDEX SHEET	
	DEMO		
	LD.100	DEMO PLAN	
	C100	DEMOLITION PLAN	
	SITE		
	LS.100	OVERALL SITE PLAN	
	LS.101	SITE PLAN	
	LS.102	SITE PLAN	
	LS.501	SITE DETAILS	
	CIVIL		
	C200-C400	CIVIL PLANS & DETAILS	
	ELECTRICAL		
	EE001-EE103	ELECTRICAL PLANS & DETAILS	
	ES101-ES505	ELECTRICAL SITE PLAN & DETAILS	
	EL601	EXT. LIGHTING FIXTURE SCHEDUL	
	EP601	<b>ONE-LINE DIAGRAM &amp; SCHEDULES</b>	
	LANDSCAPE		
	LP.100	OVERALL LANDSCAPE PLAN	
	LP.101	LANDSCAPE PLAN	
	LP.102	LANDSCAPE PLAN	
	LP.501	LANDSCAPE DETAILS/NOTES	
	LI.100	OVERALL IRRIGATION PLAN	
	LI.101	IRRIGATION PLAN	
	LI.102	IRRIGATION PLAN	
	LI.501	IRRIGATION DETAILS/NOTES	

OWNER
60 N Main Stre Coalville, UT 84

0: 435.336.3143

LANDSCAPE A blu line designs 8719 S. Sandy Parl Sandy, Utah 84070 P: 801.679.3157 C: 801.318.548

SURVEY/ CIVI CMT Techincal 9270 S 300 W,

O: 801.562.2521

ELECTRICAL E Spectrum Engin 324 S State St S

O: 801.401.8495

CONTACT: Spencer Little

E-MAIL: scl@spectrum-engineers.com



vicinity map n.t.s.

		project team
et P.O. BOX 1 4017	128	NORTH SUMMIT
}	CONTACT: Ron Boyer E-MAIL: rboyer@summitcounty.org	- RECREATION -
ARCHITECT		
S rkway '0		(blū)
	CONTACT: Scott Stephens E-MAIL: scott@blulinedesigns.com	
L Services Sandy, Utah	84070, US	TECHNICAL S E R V I C E S
x 112	CONTACT: Ryan Betz E-MAIL: ryan.betz@cmttechnical services.c	om
ENGINEER		
ieers Suite 400, Sa	lt Lake City, UT 84111	SPECTRUM ENGINEERS

## project location



project site n.t.s. n

## general notes

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATEST AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND COALVILLE CITY STANDARDS, SPECIFICATIONS, AND DETAILS. ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

2. EXISTING UTILITIES, EASEMENTS, AND STRUCTURES SHOWN ON THE DRAWINGS ARE IN ACCORDANCE WITH AVAILABLE RECORDS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, SIZE, TYPE, AND STRUCTURES TO BE ENCOUNTERED ON THE PROJECT PRIOR TO ANY EXCAVATION AND CONSTRUCTION IN THE VICINITY OF THE EXISTING UTILITIES AND STRUCTURES.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS, LICENSES, AND APPROVALS REQUIRED TO LEGALLY AND RESPONSIBLY COMPLETE THE WORK.

4. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, DISPOSAL, OR RELOCATION OF ALL OBSTRUCTIONS AND DEBRIS WITHIN THE DELINEATED CONSTRUCTION AREA PRIOR TO STARTING NEW CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ANY DEBRIS RESULTING FROM NEW CONSTRUCTION.

5. CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID DAMAGE TO EXISTING FEATURES AND FACILITIES SCHEDULED TO REMAIN AS PART OF THE FINISHED CONSTRUCTION. REPAIR, REPLACEMENT, AND/OR REMOVAL AS DETERMINED BY OWNER SHALL BE AT THE CONTRACTOR'S EXPENSE.

6. THE CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST THE TOPS OF ALL EXISTING MANHOLES, CATCH BASINS, INLETS, COVERS, AND SIMILAR STRUCTURES TO FINISH GRADE.

7. THE CONTRACTOR SHALL CALL BLUE STAKES AT 1-800-662-4111 FOR UNDERGROUND UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION.

8. ALL NEW UNDERGROUND UTILITIES SHALL HAVE UNDERGROUND UTILITY WARNING TAPE. INSTALL UNDERGROUND UTILITY WARNING TAPE A MAXIMUM OF 12 INCHES ABOVE THE UTILITY PIPE CROWN. TAPE SHALL BE A MINIMUM 3 INCH WIDTH. TAPE SHALL BE ACID AND ALKALI RESISTANT, REINFORCED FOR 100 LB. TENSILE STRENGTH AND METALLIC SUCH THAT THE TAPE CAN BE DETECTED WITH A STANDARD SURVEY-TAPE METAL DETECTOR TO A DEPTH OF 6 FEET. TAPE COLORS SHALL BE BLUE FOR WATER AND GREEN FOR SEWER. IMPRINT WITH THE WORD 'CAUTION' AT A MAXIMUM OF 2 FOOT INTERVALS, IDENTIFYING THE UTILITY LINE BEING PROTECTED, IRRIGATION MAINLINES INCLUDED.

9. THE PROJECT SHALL NOT BE CONSIDERED COMPLETE UNTIL ALL CURBS, PAVEMENT, AND SIDEWALKS HAVE BEEN SWEPT CLEAN OF ALL DIRT AND DEBRIS.

10. CONTRACTOR SHALL ROUGH GRADE TO WITHIN +/- A TENTH OF A FOOT FROM FINISH GRADE UNLESS OTHERWISE NOTED.

11. ALL SPOT ELEVATIONS ARE FINISH GRADE UNLESS OTHERWISE NOTED.

12. ALL CLARIFICATIONS OF DISCREPANCIES BETWEEN THE DRAWINGS AND THE SITE SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING OF WORK.

13. CROSS SLOPES ON ALL NEW HARDSCAPE AND PAVEMENT SHALL NOT EXCEED 2% UNLESS OTHERWISE SHOWN.

14. ALL AREAS WITHIN AND AFFECTED BY THIS PROJECT SHALL HAVE POSITIVE DRAINAGE. POSITIVE DRAINAGE SHALL BE PROVIDED TO DIRECT STORMWATER AWAY FROM ALL STRUCTURES.

15. CONTRACTOR SHALL PROVIDE AND MAINTAIN A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AS REQUIRED BY SPANISH FORK CITY AND THE STATE OF UTAH.

16. ALL CONSTRUCTION SHALL ADHERE TO THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORTS COMPLETED BY CMT ENGINEERING LABORATORIES INCLUDING OVER-EXCAVATION, COMPACTION, AND TREATMENT OF UNDOCUMENTED FILL. REPORTS SHALL BE PROVIDED BY THE OWNER.

17. UNDER NO CIRCUMSTANCES IS THE CONTRACTOR TO EXCAVATE OR GRADE INTO THE EXISTING LEVEE. AS NECESSARY PER THE LANDSCAPE AND IRRIGATION PLANS THERE MAY BE INSTANCES WHERE FILL MATERIAL MAY BE PLACED ON TOP OF THE LEVEE.

18. LAYOUT OF ALL EDGER SHALL BE REVIEWED AND APPROVED IN THE FIELD BY OWNER PRIOR TO INSTALLATION.



8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS



**DESIGN REVIEW- NOT FOR CONSTRUCTION** 



#### LEGEND



CLEAR AND GRUB TO THE DEPTH OF 6", TYP. REMOVE, AND DISPOSE C

NSSRD OUTDOOR SPORTS COMPLEX DEMOLITION NOTES:
1. CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID DAMAGE TO EXISTING FEATURES AND FACILITIES SCHEDULED TO REMAIN AS PART OF THE FINISHED CONSTRUCTION. REPAIR, REPLACEMENT, AND/OR REMOVAL AS DETERMINED BY OWNER SHALL BE AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL CLEAR, REMOVE, AND DISPOSE OF TREES, STUMPS, LOGS, LIMBS, STICKS, VEGETATION, DEBRIS AND OTHER MATERIAL ON THE NATURAL GROUND SURFACE.
4. ALL CLEAN CLEARING AND GRUBBING MATERIAL (EXCLUDING DEBRIS, STUMPS, TREES, ETC.) SALVAGE AND STORE FOR REUSE.

DEMO BOUNDARY

REMOVE, AND DISPOSE OF TREES, STUMPS, LOGS, LIMBS, STICKS, VEGETATION, DEBRIS AND OTHER MATERIAL ON THE NATURAL GROUND SURFACE.

Sca	ale: 1"	= 60'-0	"		
					<b>(</b> n <b>)</b>
0	30	60	120	180	



8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS



**ESIGN REVIEW- NOT FOR CONSTRUCTION** 

 $\cap$ 

LD.100





## SCALE IN FEET

60

120

#### LEGEND

<u> </u>	EXISTING 5' CONTOUR
<u> </u>	EXISTING 1' CONTOUR
	EXISTING CURB & GUTTER
	EXISTING SIDEWALK
xxxx	EXISTING FENCE
	EXISTING EDGE OF ASPHALT
——————————————————————————————————————	EXISTING SEWER LINE
SD SD	EXISTING STORM DRAIN LINE
wire	EXISTING WATER LINE
————E———E———E——	EXISTING UNDERGROUND ELECTRICAL
	EXISTING BUILDING PAD
	EASEMENT LINE
<b></b>	PROJECT BOUNDARY
	PROPOSED SAWCUT

#### **DEMOLITION NOTES**

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS AND SPECIFICATIONS. IN THE ABSENCE OF PROJECT STANDARD AND SPECIFICATIONS APWA STANDARD AND SPECIFICATIONS SHALL GOVERN.
- 2. CONTRACTOR SHALL RETAIN AND PROTECT ALL EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED. CONTRACTOR IS RESPONSIBLE TO REPAIR ALL SIDEWALK, PAVEMENT, GRAVEL, UTILITIES, LANDSCAPING, IRRIGATION, FENCING AND EXISTING IMPROVEMENTS DAMAGED AS PART OF CONSTRUCTION.
- 3. SIDEWALKS AND CURBS DESIGNATED TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE NEAREST EXPANSION JOINT, MATCHING THESE PLANS AS CLOSELY AS POSSIBLE.
- 4. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH PRIOR TO STARTING ANY ACTIVITIES. ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATIONS ONLY.
- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THEN EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE. ENSURE ALL OSHA STANDARDS ARE FOLLOWED.
- 4. CONTRACTOR IS RESPONSIBLE TO PROVIDE, INSTALL AND MAINTAIN APPROPRIATE TRAFFIC CONTROL DEVICES, AS WELL AS ANY ADDITIONAL TRAFFIC CONTROL DEVICES THAT MAY BE REQUIRED TO INSURE SAFE AND EFFICIENT MOVEMENT OF TRAFFIC AND PEDESTRIANS THROUGH OR AROUND THE WORK AREA AND TO PROVIDE MAXIMUM PROTECTION AND SAFETY TO ROAD WORKERS.
- 5. IF DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH INDICATE AN UNIDENTIFIED SITUATION IS PRESENT, THE CONTRACTOR SHALL CONTACT THE OWNER AND ENGINEER IMMEDIATELY.



buine designs planning landscape architecture design 8719 S. Sandy Parkway Sandy, UT 84070 p 801.679.3157 CONSULTANTS CIVIL

SERVICES CMT TECHNICAL SERVICES 9270 SOUTH 300 WEST, SUITE A-2 SANDY, UTAH 84070 P: (801) 562-2521

> OMPL Ζ  $\mathbf{O}$ TIO S ORT Ш R  $\bigcirc$ S ITDOOR R **SUMMIT** Hill Dr. T RD  $\infty$ R S M M M M 0 5 S S Salvi Ζ S S S REVISIONS DESCRIPTION





DEMOLITION PLAN



GN REVIEW - NOT FOR CONSTRUCTION



	DETAIL
DING, EXPANSION OF EXISTING	
	1/LS.501
	1/LS.501
	1/LS.501
	1/LS.501
E CIVIL DRAWINGS	
IVIL DRAWINGS	
VIL DRAWINGS	
	2/LS.501
	3/LS.501
ICING	5/LS.501
ENCING	6/LS.501
E	7/LS.501
BLE GATE	
E	8/LS.501
	8/LS.501
S	9/LS.501
	10/LS.501
	11/LS.501
	12/LS.501

cale:	1'' = 3	30'-0"			~
					n)
1	53	0 6	50	90	

![](_page_4_Picture_5.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_4_Figure_8.jpeg)

ZO Ζ

 $\cap$ 

![](_page_5_Figure_0.jpeg)

#### REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	DETAIL
1	FUTURE CONCESSIONS BUILDING, EXPANSION OF EXISTING RESTROOM - CONTRACTOR TO PROVIDE SHOP DRAWINGS	
2	PICKLE BALL COURT	
3	BASKETBALL COURT	
4	DUGOUT	
5	GREEN SYNTHETIC TURF	1/LS.501
6	BROWN SYNTHETIC TURF	1/LS.501
7	WHITE STRIPING	1/LS.501
8	SYNTHETIC TURF EDGER	1/LS.501
9	8`-0" CONCRETE PATH- SEE CIVIL DRAWINGS	
10	8'-0" ASPHALT PATH- SEE CIVIL DRAWINGS	
11	CURB AND GUTTER- SEE CIVIL DRAWINGS	
12	CONCRETE STAIRS	2/LS.501
13	HANDRAIL	3/LS.501
14	BACKSTOP	
15	4' PORTABLE OUTFIELD FENCING	5/LS.501
16	4' INTERIOR PICKLE BALL FENCING	6/LS.501
17	6' BLACK CHAIN LINK FENCE	7/LS.501
18	6' BLACK CHAIN LINK DOUBLE GATE	
19	8' BLACK CHAIN LINK FENCE	8/LS.501
20	10' CHAIN LINK FENCING	8/LS.501
21	PICKLEBALL NET AND POSTS	9/LS.501
22	BASKETBALL STANDARD	10/LS.501
23	COURT STRIPING	
24	ALUMINUM BENCH	11/LS.501
25	ALUMINUM BLEACHERS	12/LS.501
26	PITCHER'S MOUND	
27	HOME PLATE	
28	REMOVABLE BASE	
(29)	DETENTION BASIN: SEE GRADING PLAN	

Scale: 1" = 20'-0"				
)	10	20	40	

![](_page_5_Picture_4.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_5_Figure_7.jpeg)

SIGN REVIEW- NOT FOR CONSTRUCTION

 $\square$ 

(n)

![](_page_6_Figure_0.jpeg)

#### **REFERENCE NOTES SCHEDULE**

SYMBOL	DESCRIPTION	DETAIL
1	FUTURE CONCESSIONS BUILDING, EXPANSION OF EXISTING RESTROOM - CONTRACTOR TO PROVIDE SHOP DRAWINGS	
2	PICKLE BALL COURT	
3	BASKETBALL COURT	
4	DUGOUT	
5	GREEN SYNTHETIC TURF	1/LS.501
6	BROWN SYNTHETIC TURF	1/LS.501
7	WHITE STRIPING	1/LS.501
8	SYNTHETIC TURF EDGER	1/LS.501
9	8`-0" CONCRETE PATH- SEE CIVIL DRAWINGS	
10	8'-0" ASPHALT PATH- SEE CIVIL DRAWINGS	
11	CURB AND GUTTER- SEE CIVIL DRAWINGS	
12	CONCRETE STAIRS	2/LS.501
13	HANDRAIL	3/LS.501
14	BACKSTOP	
15	4' PORTABLE OUTFIELD FENCING	5/LS.501
16	4' INTERIOR PICKLE BALL FENCING	6/LS.501
17	6' BLACK CHAIN LINK FENCE	7/LS.501
18	6' BLACK CHAIN LINK DOUBLE GATE	
19	8' BLACK CHAIN LINK FENCE	8/LS.501
20	10' CHAIN LINK FENCING	8/LS.501
21	PICKLEBALL NET AND POSTS	9/LS.501
22	BASKETBALL STANDARD	10/LS.501
23	COURT STRIPING	
24	ALUMINUM BENCH	11/LS.501
25	ALUMINUM BLEACHERS	12/LS.501
26	PITCHER'S MOUND	
27	HOME PLATE	
28	REMOVABLE BASE	
(29)	DETENTION BASIN: SEE GRADING PLAN	

Sca	le: 1"	= 20'-0"			
	-				<b>(</b> n <b>)</b>
)	10	20	40	60	

![](_page_6_Picture_4.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_6_Figure_7.jpeg)

NO Z U

 $\cap$ 

![](_page_7_Figure_0.jpeg)

![](_page_7_Picture_8.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_7_Figure_11.jpeg)

LS.501

Ζ

P-21-252-85

![](_page_8_Figure_0.jpeg)

-6	0	0	60	120
		SCALE	IN FEET	

#### LEGEND

	EXIST
	EXIST
xxxx	EXIST
	EXIST
	EXIST
	PROF
	PROF
XXX	PROF
	PROF
	PROF
	PROF
	PRO.I

EXISTING CURB & GUTTER EXISTING SIDEWALK EXISTING FENCE EXISTING EDGE OF ASPHALT EXISTING BUILDING PAD PROPOSED CURB & GUTTER PROPOSED SIDEWALK PROPOSED FENCE PROPOSED EDGE OF ASPHALT PROPOSED BUILDING PAD PROPOSED SAWCUT PROJECT BOUNDARY

#### SITE NOTES

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS AND SPECIFICATIONS. IN THE ABSENCE OF PROJECT STANDARD AND SPECIFICATIONS APWA STANDARD AND SPECIFICATIONS SHALL GOVERN.
- 2. CONTRACTOR SHALL RETAIN AND PROTECT ALL EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED. CONTRACTOR IS RESPONSIBLE TO REPAIR ALL SIDEWALK, PAVEMENT, GRAVEL, UTILITIES, LANDSCAPING, IRRIGATION, FENCING AND EXISTING IMPROVEMENTS DAMAGED AS PART OF CONSTRUCTION.
- 3. ALL CURB DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL WORK SHALL COMPLY WITH THE PROJECT PLANS, PROJECT SPECIFICATIONS, AND PROJECT GEOTECHNICAL ENGINEERING REPORT, WHICHEVER IS THE MOST STRINGENT.
- 5. ALL STRIPING, PAVEMENT MARKINGS, AND SIGNAGE TO COMPLY WITH THE CURRENT M.U.T.C.D. EDITION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCAL CODE, WHICHEVER IS MORE STRINGENT.
- 6. CONTRACTOR IS RESPONSIBLE FOR PERFORMING WORK ON OR ADJACENT TO A PUBLIC ROAD TO PROVIDE, INSTALL, AND MAINTAIN APPROPRIATE TRAFFIC CONTROL DEVICES, AS WELL AS ANY ADDITIONAL TRAFFIC CONTROL DEVICES THAT MAY BE REQUIRED TO INSURE SAFE AND EFFICIENT MOVEMENT OF TRAFFIC AND PEDESTRIANS THROUGH OR AROUND THE WORK AREA AND TO PROVIDE MAXIMUM PROTECTION AND SAFETY TO ROAD WORKERS.
- 7. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN CONTACT ENGINEER FOR CLARIFICATION.

![](_page_8_Picture_13.jpeg)

ESIGN REVIEW - NOT FOR CONSTRUCTION

![](_page_8_Picture_15.jpeg)

blu line designs planning landscape architecture design

> 8719 S. Sandy Parkway Sandy, UT 84070 p 801.679.3157

consultants CIVIL

![](_page_8_Picture_19.jpeg)

COMPL Ζ TIO S ORT  $\triangleleft$ ш R  $\mathbf{O}$ ဟ ш OR Ľ **JDO** SUMMIT OU ⊡Dr, NSSRD 235 S Beacon Coalville, UT 82 T NOR

 REVISIONS

 NO.
 DESCRIPTION

 Stamp
 PROFESS C:

 NO.
 13395 08-2202

 JAMES J.
 JAMES J.

 JAMES J.
 TOF UTABLE

 Designed By:
 RPB

Drawn By: RPB Date: 7/21/2023 Checked By: JJM Project No: 21-252 Drawing Title

SITE PLAN

![](_page_9_Figure_0.jpeg)

![](_page_9_Figure_1.jpeg)

![](_page_9_Picture_3.jpeg)

#### LEGEND

			·
	-x— - _//_/_/	X	X
X-		- X	— X——

**EXISTING CURB & GUTTER** EXISTING SIDEWALK EXISTING FENCE EXISTING EDGE OF ASPHALT EXISTING BUILDING PAD PROPOSED CURB & GUTTER PROPOSED SIDEWALK PROPOSED FENCE PROPOSED EDGE OF ASPHALT PROPOSED BUILDING PAD PROPOSED SAWCUT PROJECT BOUNDARY

#### SITE NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS AND SPECIFICATIONS. IN THE ABSENCE OF PROJECT STANDARD AND SPECIFICATIONS APWA STANDARD AND SPECIFICATIONS SHALL GOVERN.

- 2. CONTRACTOR SHALL RETAIN AND PROTECT ALL EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED. CONTRACTOR IS RESPONSIBLE TO REPAIR ALL SIDEWALK, PAVEMENT, GRAVEL, UTILITIES, LANDSCAPING, IRRIGATION, FENCING AND EXISTING IMPROVEMENTS DAMAGED AS PART OF CONSTRUCTION.
- 3. ALL CURB DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 4. ALL WORK SHALL COMPLY WITH THE PROJECT PLANS, PROJECT SPECIFICATIONS, AND PROJECT GEOTECHNICAL ENGINEERING REPORT, WHICHEVER IS THE MOST STRINGENT.
- ALL STRIPING, PAVEMENT MARKINGS, AND SIGNAGE TO COMPLY WITH THE CURRENT M.U.T.C.D. EDITION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCAL CODE, WHICHEVER IS MORE STRINGENT.
- 6. CONTRACTOR IS RESPONSIBLE FOR PERFORMING WORK ON OR ADJACENT TO A PUBLIC ROAD TO PROVIDE, INSTALL, AND MAINTAIN APPROPRIATE TRAFFIC CONTROL DEVICES, AS WELL AS ANY ADDITIONAL TRAFFIC CONTROL DEVICES THAT MAY BE REQUIRED TO INSURE SAFE AND EFFICIENT MOVEMENT OF TRAFFIC AND PEDESTRIANS THROUGH OR AROUND THE WORK AREA AND TO PROVIDE MAXIMUM PROTECTION AND SAFETY TO ROAD WORKERS.
- 7. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN CONTACT ENGINEER FOR CLARIFICATION.

#### **KEYNOTE LEGEND**

- (1) ASPHALT PAVEMENT REQ'D (SEE DETAIL-1 ON SHEET C400)
- $\langle 2 \rangle$  30" TYPE "A" CURB & GUTTER REQ'D (SEE DETAIL-2 ON SHEET C400)
- (3) 4" CONCRETE SIDEWALK REQ'D (SEE DETAIL-3 ON SHEET C400)
- Image: Pickleball court w/ post-tension slab req'd(contractor submittal req'd)
- **5** SWALE REQ'D (SEE GRADING PLANS)
- 6 FENCE REQ'D (SEE LANDSCAPE ARCHITECT PLANS)

![](_page_9_Picture_25.jpeg)

blu line designs planning landscape architecture design 8719 S. Sandy Parkway Sandy, UT 84070 p 801.679.3157 CONSULTANTS CIVIL TECHNICAL

SERVICES CMT TECHNICAL SERVICES 9270 SOUTH 300 WEST, SUITE A-2 SANDY, UTAH 84070 P: (801) 562-2521

OMPL Ζ  $\mathbf{O}$ Ο S \_\_\_\_\_ OR<sup>-</sup> Ш Ŷ  $\mathbf{O}$ S Ш OR R DO Hill Dr. S JATH VSSRD 35 S Beacor Jalville, I C ŠŠ S Ζ

![](_page_9_Figure_29.jpeg)

RUCTION

ONS<sup>-</sup>

 $\circ$ 

FOR

REVIEW

Ζ

![](_page_9_Picture_30.jpeg)

![](_page_9_Picture_32.jpeg)

![](_page_10_Figure_0.jpeg)

![](_page_10_Figure_1.jpeg)

11. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATOL.

![](_page_10_Picture_3.jpeg)

Ο LĨ.

 $\cap$ 

REVIEW

![](_page_10_Picture_4.jpeg)

![](_page_10_Figure_5.jpeg)

Checked By Project No 21-252 Drawing Titl OVERALL

**GRADING &** DRAINAGE PLAN

![](_page_10_Picture_8.jpeg)

![](_page_11_Figure_0.jpeg)

![](_page_11_Picture_1.jpeg)

\_ \_\_ \_\_ \_\_ \_\_

\_\_\_\_\_OHE\_\_\_

LEGE	END_
0	EXISTING 5' CONTOUR
1	EXISTING 1' CONTOUR
	EXISTING CURB & GUTTER
	EXISTING SIDEWALK
x— — — x—	EXISTING FENCE
_///	EXISTING EDGE OF ASPHALT
— — SWR —	EXISTING SEWER LINE
— — SD	EXISTING STORM DRAIN LINE
- WTR	EXISTING WATER LINE
тт	EXISTING TELECOMM LINE
G— — —G—	EXISTING GAS LINE
е— — —е—	EXISTING UNDERGROUND ELECTRICAL
-OHE	EXISTING OVERHEAD ELECTRIC
	EXISTING BUILDING PAD
<u> </u>	PROPOSED 5' CONTOUR
21)	PROPOSED 1' CONTOUR
	PROPOSED CURB & GUTTER
	PROPOSED SIDEWALK
	PROPOSED SEWER LINE
	PROPOSED STORM DRAIN LINE
X	PROPOSED FENCE
	PROPOSED EDGE OF ASPHALT
	PROPOSED WATER LINE
	PROPOSED SPILL CURB & GUTTER
	PROPOSED BUILDING PAD
• — — —	PROJECT BOUNDARY

#### **GRADING NOTES**

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS AND SPECIFICATIONS. IN THE ABSENCE OF PROJECT STANDARD AND SPECIFICATIONS APWA STANDARD AND SPECIFICATIONS SHALL GOVERN.

- CONTRACTOR SHALL RETAIN AND PROTECT ALL EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED. CONTRACTOR IS RESPONSIBLE TO REPAIR ALL SIDEWALK, PAVEMENT, GRAVEL, UTILITIES, LANDSCAPING, IRRIGATION, FENCING AND EXISTING IMPROVEMENTS DAMAGED AS PART OF CONSTRUCTION.
- 3. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND SPECIFICATIONS.
- / 4. ALL WORK SHALL COMPLY WITH THE PROJECT PLANS, PROJECT SPECIFICATIONS, AND PROJECT GEOTECHNICAL ENGINEERING REPORT, WHICHEVER IS THE MOST STRINGENT.
- THE CONTRACTOR SHALL STRIP AND CLEAR THE TOPSOIL, MAJOR ROOTS AND ORGANIC MATERIAL FROM ALL PROPOSED BUILDING AND PAVEMENT AREAS PRIOR TO SITE GRADING. (THE TOPSOIL MAY BE STOCKPILED FOR LATER USE IN LANDSCAPED AREAS.)
- 6. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL GRADE THE PROJECT SITE TO PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ASPHALT, CURB AND GUTTER, AND ADJOINING SITE IMPROVEMENTS.
- 8. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH PRIOR TO STARTING ANY ACTIVITIES. ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATIONS ONLY.
- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THEN EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTIO TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE. ENSUF ALL OSHA STANDARDS ARE FOLLOWED.

10. CONTRACTOR SHALL ENSURE FINISHED GRADE SLOPES AWAY FROM  $\Box$ STRUCTURES ACCORDING TO BUILDING CODES AND AS SHOWN ON TH PLAN.

11. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE Ц MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATO

![](_page_11_Picture_16.jpeg)

 $\circ$ 

REVIEV

7

![](_page_11_Picture_17.jpeg)

![](_page_11_Figure_18.jpeg)

![](_page_11_Figure_19.jpeg)

![](_page_11_Figure_20.jpeg)

**GRADING &** DRAINAGE PLAN

![](_page_11_Picture_22.jpeg)

![](_page_12_Figure_0.jpeg)

-20	0	20	40

#### SCALE IN FEET

#### LEGEND — — — *5600* — — EXISTING 5' CONTOUR - - - 5601 - - Existing 1' contour ========= EXISTING CURB & GUTTER ---- EXISTING SIDEWALK ---x ---x ---x EXISTING FENCE ----- EXISTING EDGE OF ASPHALT — — — SWR — — SWR — EXISTING SEWER LINE MTR ------ EXISTING WATER LINE T----T--- EXISTING TELECOMM LINE --------------------------------EXISTING GAS LINE ————E————E—— EXISTING UNDERGROUND ELECTRICA OHE OHE EXISTING OVERHEAD ELECTRIC - EXISTING BUILDING PAD **5600** PROPOSED 5' CONTOUR ----- PROPOSED 1' CONTOUR PROPOSED CURB & GUTTER - PROPOSED SIDEWALK - PROPOSED SEWER LINE PROPOSED STORM DRAIN LINE PROPOSED EDGE OF ASPHALT - PROPOSED WATER LINE PROPOSED SPILL CURB & GUTTER ------ PROPOSED BUILDING PAD - - PROJECT BOUNDARY

#### **GRADING NOTES**

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS AND SPECIFICATIONS. IN THE ABSENCE OF PROJECT STANDARD AND SPECIFICATIONS APWA STANDARD AND SPECIFICATIONS SHALL GOVERN.

2. CONTRACTOR SHALL RETAIN AND PROTECT ALL EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED. CONTRACTOR IS RESPONSIBLE TO REPAIR ALL SIDEWALK, PAVEMENT, GRAVEL, UTILITIES, LANDSCAPING, IRRIGATION, FENCING AND EXISTING IMPROVEMENTS DAMAGED AS PART OF CONSTRUCTION.

3. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND SPECIFICATIONS.

4. ALL WORK SHALL COMPLY WITH THE PROJECT PLANS, PROJECT SPECIFICATIONS, AND PROJECT GEOTECHNICAL ENGINEERING REPORT, WHICHEVER IS THE MOST STRINGENT.

THE CONTRACTOR SHALL STRIP AND CLEAR THE TOPSOIL, MAJOR ROOTS AND ORGANIC MATERIAL FROM ALL PROPOSED BUILDING AND PAVEMENT AREAS PRIOR TO SITE GRADING. (THE TOPSOIL MAY BE STOCKPILED FOR LATER USE IN LANDSCAPED AREAS.)

THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL GRADE THE PROJECT SITE TO PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ASPHALT, CURB AND GUTTER, AND ADJOINING SITE IMPROVEMENTS.

IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH PRIOR TO STARTING ANY ACTIVITIES. ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATIONS ONLY.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THEN EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTIO TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE. ENSUF ALL OSHA STANDARDS ARE FOLLOWED.

CONTRACTOR SHALL ENSURE FINISHED GRADE SLOPES AWAY FROM  $\Box$ STRUCTURES ACCORDING TO BUILDING CODES AND AS SHOWN ON TH PLAN.

. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE  $\mathbf{r}$ MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVAT ${\cal O}$ I

![](_page_12_Picture_20.jpeg)

ШЧ

![](_page_12_Picture_21.jpeg)

**⊠**O Ζ  $\bigcirc$ O S . И О И Ш Υ Ω  $\mathbf{O}$ S  $\mathbf{C}$ R  $\bigcirc$  $\bigcirc$  $\geq$  $\square$  $\geq$ ŊĞ~ S  $\square$ R R S m m O Σŝ Ζ

![](_page_12_Figure_23.jpeg)

![](_page_12_Picture_24.jpeg)

**GRADING &** DRAINAGE PLAN

![](_page_12_Picture_26.jpeg)

![](_page_13_Figure_0.jpeg)

![](_page_14_Figure_0.jpeg)

![](_page_14_Figure_1.jpeg)

	SYMBOLS LEGEND
SYMBOL	DESCRIPTION
ELECTRIC	AL POWER AND DISTRIBUTION
	TRANSFER SWITCH (ONE-LINE DIAGRAM).
	DIGITAL MULTIMETER (ONE-LINE DIAGRAM).
•	SERVICE ENTRANCE SURGE PROTECTION (ONE-LINE DIAGRAM).
G	GENERATOR, POWER (ONE-LINE DIAGRAM).
M	METER.
Ŀ	DISCONNECT SWITCH, FUSED.
Σh	STARTER, COMBINATION WITH DISCONNECT SWITCH.
•	PUSHBUTTON.
<u>r</u> 77	PANELBOARD CABINET, FLUSH MOUNTED.
77	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.
/////	PANELBOARD CABINET, SURFACE MOUNTED, 2 SECTION.
 DP#	DISTRIBUTION PANEL OR SWITCHBOARD.
\$ST	SWITCH, TOGGLE MOTOR STARTER WITH OVERLOAD PROTECTION.
75	TRANSFORMER: NUMBER INDICATES KVA.
GHTING (	(REFER TO FIXTURE SCHEDULE FOR SYMBOLS)
(D420) 1C1 z1	FIXTURE ID:(D420) INDICATES FIXTURE TYPE AS SCHEDULED "1C1" INDICATES ROOM/DIMMING CONTROLLER CIRCUITING "z1" INDICATES ZONE CIRCUITING.
(D420) 1C1e z1	FIXTURE ID:(D420) INDICATES FIXTURE TYPE AS SCHEDULED "1C1e" INDICATES ROOM/DIMMING CONTROLLER CIRCUITING "z1" INDICATES ZONE CIRCUITING. EMERGENCY WITH BATTERY PACK, CONNECTED TO GENERATOR
ITE ELEC	TRICAL AND COMMUNICATIONS UTILITIES
-3ØUP	ELECTRIC LINE: THIN LINE. 1Ø = SINGLE PHASE, 2Ø = 2-PHASE, 3Ø = 3-PHASE, O = OVERHEAD, U = UNDERGROUND, P = PRIMARY, S = SECONDARY
• •	LIGHTNING ARRESTOR.
-0-	UTILITY POLE.
	UTILITY, DISTRIBUTION SWITCH OR SWITCHING STATION.
E	UTILITY, PRIMARY ELECTRICAL GROUND SLEEVE.
М	UTILITY SERVICES, MANHOLE.
С	UTILITY, COMMUNICATIONS MANHOLE.
E	UTILITY, ELECTRICAL MANHOLE.
T	UTILITY, TELEPHONE MANHOLE.
ТМ	PRECAST CONCRETE, MANHOLE, TRANSFORMER VAULT.
	1
TP	PRECAST CONCRETE, TRANSFORMER PAD.
TP S	PRECAST CONCRETE, TRANSFORMER PAD. SUBSTATION.

	SYMBOLS LEGEND		SYM	BOLS	LEGEND		ABBREV	ΊΑΤ	101
SYMBOL	DESCRIPTION	SYMBOL	DESCRIP	TION			NOTE: ALL ABBREVIAT	IONS MA	Y NOT
FERENC	E AND LINE SYMBOLS	WIRING DE	VICES			1P 1PH	SINGLE POLE SINGLE-PHASE	I/O IG	INPL ISOL
A5 E-501	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E-501 INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.	φ	RECEPTACL	E, DUPLEX: NE		1WAY 2/C 2WAY	ONE-WAY TWO-CONDUCTOR TWO-WAY	IMC	INTE CON INSL
		₩	INTERRUPTE NEMA 5-20R.	R, WET LABEL	"WEATHERPROOF IN USE":	3/C 3WAY 4OUT	THREE-CONDUCTOR THREE-WAY QUADRUPLE RECEPTACLE OUTLET	IR J-BOX kV kVA	
E-201	ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.	₿	RECEPTACL	E, DUPLEX WIT R: NEMA 5-20F	H GROUND FAULT CIRCUIT २.	4PDT		kVAR	KILC
$\checkmark$		∯ wp	RECEPTACLI INTERRUPTE	E, DUPLEX WIT R, WEATHERP	H GROUND FAULT CIRCUIT ROOF: NEMA 5-20R.	4F31 4W	FOUR-FOLE SINGLE THROW FOUR-WIRE	kW kWb	KILC
A5 E-201	ELEVATION OR SECTION INDICATOR, INTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.		AL POWER			A A AC ADA	ABOVE COUNTER ARMORED CABLE AMERICANS WITH	LED LFMC	LIGH LIQU MET
DOM NAME			DISCONNEC	T, FUSED (ONE	-LINE DIAGRAM).	ADJ AFF AFG	DISABILITIES ACT ADJACENT ABOVE FINISHED FLOOR ABOVE FINISHED GRADE	LFNC LPS LRA	LIQU NON LOW LOC
$\sim$						AIC	AMPERE INTERRUPTING CAPACITY	LIG LV	LIGF
			DISCONNEC	I, NONFUSED (	ONE-LINE DIAGRAM).	ALUM AMP	ALUMINUM AMPERE	MATV	MAS TELE
X-X XMDP	MECHANICAL EQUIPMENT INDICATOR. "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "XMDP" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.		OVERLOAD F	RELAY (ONE-LIN	IE DIAGRAM).	ANN AP	ANNUNCIATOR ACCESS POINT (WIRELESS DATA)	MAX MC MCA	MAX MET MINI
_\	BREAK, STRAIGHT: TO BREAK PARTS OF DRAWING	5	STARTER (O	NE-LINE DIAGR	AM).	AR ASC ATS	AS REQUIRED AMPS SHORT CIRCUIT AUTOMATIC TRANSFER	MCB MCC MCP	MOT MOT PRO
$\sim$	NEW LINE: MEDIUM LINE.		CIRCUIT BRE	AKER, MOLDEI	D CASE (ONE-LINE DIAGRAM).	AV AWG	AUDIO VISUAL AMERICAN WIRE GAGE	MDP MG MH	MAIN MOT MAN
	HIDDEN FEATURES LINE: HIDDEN, THIN LINE							MIN	MINI
	EXISTING TO REMAIN LINE: THIN LINE.	, , , , , , , , , , , , , , , , , , ,	CIRCUIT BRE (ONE-LINE D	AKER, MOLDEI AGRAM).	D CASE WITH SHUNT TRIP	CATV	COMMUNITY ANTENNA TELEVISION	MOCP	MAX PRO
	DEMOLITION LINE: DASHED, MEDIUM LINE	MCP	CIRCUIT BRE	AKER, MOTOR	CIRCUIT PROTECTION	ССВА	CUSTOM COLOR AS	NC	NOR
	CONTRACT LIMIT LINE: DASHDOT, WIDE LINE.		(ONE-LINE D	AGRAM).		ССТУ	CLOSED CIRCUIT		
X-X XKP	KITCHEN EQUIPMENT INDICATOR. "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "XKP" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.		CIRCUIT BRE	AKER, SOLID S	TATE (ONE-LINE DIAGRAM).	CF/CI CF/OI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED CONTRACTOR FURNISHED/ OWNER INSTALLED	NFC NFPA	MAN ASS NAT NAT
IRING ME	THODS	Å		AKER. SOLID S	TATE WITH GROUND FAULT		SELECTED BY ARCHITECT	NIC	NOT
$\frown$	WIRING.		PROTECTION	N (ONE-LINE DIA	AGRAM).	CM		NL NO	NIGH
$\frown$	WIRING TURNED UP OR TOWARDS OBSERVER.						CONDUT	NTS OC	NOT ON (
$\overline{\frown}$	WIRING TURNED DOWN OR AWAY FROM OBSERVER.		TRANSFORM	IER (ONE-LINE	DIAGRAM).	COR	CONTRACTING OFFICER'S REPRESENTATIVE	OCP	OVE PRO
A-1,3,5	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE	225/3 "1H"	PANELBOAR SHOWN (ON	D WITH MAIN L E-LINE DIAGRA	UGS ONLY. BUS SIZE AND PHASE AS M).	CF CT CTV CU dBA DPDT	CONTROL PAREL CURRENT TRANSFORMER CABLE TELEVISION COPPER UNIT OF SOUND LEVEL DOUBLE POLE, DOUBLE	OF/CI OF/OI OFP OH DR	
	ELECTRICAL SPECIFICATIONS.					- DS	THROW DISCONNECT SWITCH EACH	OL PB PF	OVE PUS POM
1 -1,3,5	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. NUMBER IN BOX REFERS TO THE CONDUCTOR AND CONDUIT SCHEDULE. FOR BRANCH WIRING USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES	)225/3 "1H"	PANELBOAR AS SHOWN (ON	D WITH MAIN C E-LINE DIAGRA	IRCUIT BREAKER. SIZE AND PHASE M).	EM EMT ENT	EMERGENCY ELECTRICAL METALLIC TUBING ELECTRIC NONMETALLIC TUBING	PH PNL PT PTZ	PHA PAN POT PAN
	EXCEED THOSE SPECIFIED IN THE ELECTRICAL SPECIFICATIONS.	225/3				EPO EQUIP EX	EMERGENCY POWER OFF EQUIPMENT EXISTING	R R RCP RMC	REM REF
	LOW VOLTAGE WIRING: DIVIDE, MEDIUM LINE.	"1H"	PANELBOAR (ONE-LINE D	D WITH MAIN A IAGRAM).	ND SUB FEED CIRCUIT BREAKER	F   FA	FURNITURE MOUNTED FIRE ALARM	RNC RPM	RIGI RFV
+	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK. CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER	60/3				FCP	FIRE ALARM CONTROL PANEL FULL LOAD AMPS	RR S/S	REM STA
$\cdot$						FMC FOB	FLEXIBLE METAL CONDUIT FREIGHT ON BOARD	SCA SCBA	SHO
0	JUNCTION BOX.	225/3 "1H" 计 LL	PANELBOAR WITH CIRCU	D WITH MAIN LI T BREAKER (O	UGS ONLY AND SURGE PROTECTION	FVNR	FULL VOLTAGE NON-REVERSING	SF SFBA	SQU SQU
РВ	PULL BOX.					G	GROUND	SPDT	SELI SINC
	EARTH GROUND (ONE-LINE DIAGRAM).					GEN GFCI	GENERATOR GROUND FAULT INTERRUPTER	SPEC	THR SPE
						GFP	GROUND FAULT PROTECTION	SPSI	SINC
EQ	CONDUCTOR & CONDUIT INDICATOR. REFER TO EQUIPMENT SCHEDULE OF ASSOCIATED EQUIPMENT/DEVICE.					HD HID HOA	HEAVY DUTY HIGH INTENSITY DISCHARGE	ST SWBD SWGR	SINC SWI SWI
				יחויאו			HORSE POWER HIGH POWER FACTOR		TELE
					12AWG WIRE SIZE TYPICAL	HPS HV HZ	HIGH PRESSURE SODIUM HIGH VOLTAGE HERTZ	TP TTB TV	TWIS TELE BOA TELE
					14AWG WIRE SIZE TYPICAL			TVSS TYP	TRA SUR TYP
					SWITCHED LEG FOR LTG CKT WIRE SIZE BY BRANCH CIRCUIT			UF UGND UPS	UND UND UNII
					VOICE/DATA CABLE			V	SUP VOL

	12AWG WIRE SIZE TYPICAL
	14AWG WIRE SIZE TYPICAL
	SWITCHED LEG FOR LTG CKT WIRE SIZE BY BRANCH CIRCUIT
	VOICE/DATA CABLE CAT6 TYPICAL
	WIRE SIZE SPECIFIED BY CALLOUT TAG
EQ	CONDUCTOR & CONDUIT INDICATOR REFER TO EQUIPMENT SCHEUDLE OF ASSOCIATED EQUIPMENT/DEVICE

IONS	
Y NOT BE USED.	
INPUT/ OUTPUT ISOLATED GROUND	
INTERMEDIATE METAL CONDUIT	
INSULATED/ ISOLATED	

INFRARED OX JUNCTION BOX KILOVOLT KILOVOLT AMPERE

AR KILOVOLT AMPERE REACTIVE KILOWATT

KILOWATT HOUR LIGHT EMITTING DIODE MC LIQUID TIGHT FLEXIBLE

METAL CONDUIT NC LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT LOW PRESSURE SODIUM

LOCKED ROTOR AMPS LIGHTING LOW VOLTAGE MASTER ANTENNA

TELEVISION SYSTEM MAXIMUM METAL CLAD MINIMUM CIRCUIT AMPS

MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER P MOTOR CIRCUIT PROTECTION

DP MAIN DISTRIBUTION PANEL MOTOR GENERATOR MANHOLE MINIMUM

ILO MAIN LUGS ONLY OCP MAXIMUM OVERCURRENT PROTECTION NOT APPLICABLE

NORMALLY CLOSED NATIONAL ELECTRICAL CODE

MA NATIOANL ELECTRICAL MANUFACTURERS ASSOCIATION

NATIONAL FIRE CODE PA NATIONAL FIRE PROTECTION ASSOCIATION NOT IN CONTRACT

> NIGHT LIGHT NORMALLY OPEN NOT TO SCALE ON CENTER

OVER CURRENT PROTECTION

F/CI OWNER FURNISHED/ CONTRACTOR INSTALLED OWNER FURNISHED/ OWNER

INSTALLED OBTAIN FROM PLANS DR OVERHEAD (COILING) DOOR OVERLOAD

PUSHBUTTON POWER FACTOR

PHASE PANEL

POTENTIAL TRANSFORMER PAN/TILT/ZOOM QUANTITY

REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT

RIGID NONMETAL CONDUIT PM REVOLUTIONS PER MINUTE REMOVE AND RELOCATE START/STOP

SHORT CIRCUIT AMPS BA STANDARD COLOR AS SELECTED BY ARCHITECT SQUARE FOOT (FEET)

-BA STANDARD FINISH AS SELECTED BY ARCHITECT PDT SINGLE POLE, DOUBLE THROW

PEC SPECIFICATION PST SINGLE POLE, SINGLE

THROW SINGLE THROW BD SWITCHBOARD

GR SWITCHGEAR TWIST LOCK

> TELEPHONE POLE TWISTED PAIR

TELEPHONE TERMINAL BOARD TELEVISION

TRANSIENT VOLTAGE SURGE SUPPRESSER

TYPICAL UNDERFLOOR

ND UNDERGROUND UNINTERRUPTIBLE POWER

SUPPLY VOLTS VA VOLT AMPERE

VFC/VF VARIABLE FREQUENCY MOTOR CONTROLLER W/ WITH

W/O WITHOUT WP WEATHERPROOF XFMR TRANSFORMER

D

DEFINITIONS NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED". "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE." INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE

CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS. VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC ...

### GENERAL ELECTRICAL NOTES

- CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR. THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.
- OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.
- A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.
- THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.
- C. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.
- EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.
- SUBMITTALS: PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.
- REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.
- ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND IFC. COMPLIANCE AND FINAL APPROVAL IS SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.
- TAKE OFF QUANTITIES SHOWN IN SCHEDULE(S) ARE FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OF THE DEVICES, FIXTURES, EQUIPMENT, RACEWAYS, CONDUCTORS, CABLING, ETC. SHOWN AND SPECIFIED IN THE CONTRACT DOCUMENTS INCLUDING THE EXTRA MATERIAL SPECIFIED.

## ELECTRICAL SHEET INDEX

ES202	Unnamed
EE001	ELEC COVER SHEET
EE002	ELECTRICAL SPECIFICATIONS
EE003	SITE ELECTRICAL DETAILS
ES101	ELECTRICAL SITE PLAN
ES201x	ELECTRICAL SITE LIGHTING CALCULATIONS
ES505	SITE JUNCTION BOX DETAILS
xES102	ELECTRICAL SITE DEMO PLAN
EP601	ONE-LINE DIAGRAM AND SCHEDULES

![](_page_15_Picture_66.jpeg)

#### GENERAL REQUIREMENTS:

COMPLY WITH THE REQUIREMENTS OF ALL REQUIRED BUILDING CODES, INCLUDING, BUT NOT LIMITED TO THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, INTERNATIONAL ENERGY CONSERVATION CODE, LOCAL CODES, AND INTERNATIONAL BUILDING CODES. PROVIDE AND PAY FOR ALL REQUIRED PERMITS. BIDDERS SHALL VIEW THE SITE AND SHALL INCLUDE ALL COSTS INCURRED BY EXISTING CONDITIONS IN THE BID PROPOSAL.

MATERIALS OTHER THAN THOSE SPECIFIED MAY BE ACCEPTED PROVIDING A WRITTEN REQUEST IS SUBMITTED TO THE ENGINEER AT THIS LEAST 10 WORKING DAYS PRIOR TO BID OPENING. APPROVED PRODUCTS WILL BE LISTED IN THE ADDENDUM. ALL EQUIPMENT SHALL BE NEW AND CONTAIN THE MANUFACTURER'S NAME, MODEL NUMBER AND ELECTRICAL CHARACTERISTICS. ALL EQUIPMENT SHALL BE UL LISTED FOR IT'S INTENDED USE AND/OR APPROVED BY THE AUTHORITY HAVING JURISDICTION.

PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. PREPARE AN INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.

ELECTRONIC SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER WITHIN 21 DAYS OF AWARD ON THE CONTRACT, UNLESS OTHERWISE DIRECTED BY ARCHITECT

#### SUBMITTALS:

SUBMITTALS SHALL INCLUDE ALL ELECTRICAL MATERIAL PROVIDED AS IT RELATED TO THIS PROJECT AND SHALL SPECIFICALLY INCLUDE BUT IS NOT LIMITED TO: WIRING DEVICES, RACEWAYS, SURFACE RACEWAYS, FLOORBOXES, LIGHTING FIXTURES, LIGHTING CONTROLS, PANELS AND BREAKERS, DISCONNECTS, TELEPHONE/DATA STRUCTURED CABLING SYSTEMS, FIRE ALARM SYSTEMS, ACCESS CONTROLS SYSTEM, INTRUSION DETECTION SYSTEM, AND LIGHTNING PROTECTION SYSTEMS.

- PRODUCT DATA: FOR EACH TYPE OF PRODUCT. 1. PROVIDE A PRODUCT SUMMARY PAGE OF ALL SPECIFIC PRODUCTS TO BE USED ON THE PROJECT.
- HIGHLIGHT ALL PRODUCTS INTENDED TO BE USED. SPECIFICALLY CROSS OUT PRODUCTS THAT ARE NOT INTENDED TO BE USED.
- 4. PDF SUBMITTAL SHALL BE BOOKED MARKED WITH CORRECT LABELING TO QUICKLY GO TO THE PAGE IN THE SUBMITTAL WITH THE INFORMATION ON THE PRODUCT.
- 5. SUBMITTALS THAT DO NOT MEET THESE REQUIREMENTS WILL BE REJECTED.

PROVIDE AS-BUILT DRAWINGS TO ARCHITECT BEFORE APPLICATION FOR FINAL PAYMENT. REQUEST A CLEAN SET OF DRAWINGS FROM ARCHITECT AND PREPARE THESE DRAWINGS IN A QUALITY EQUAL TO THAT OF THE ORIGINAL DRAWINGS.

#### INSTALLATION REQUIREMENTS:

ELECTRICAL PLANS ARE DIAGRAMMATIC. VERIFY EXACT EQUIPMENT LOCATIONS FOR ALL EQUIPMENT. COORDINATE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND EXISTING CONDITIONS TO AVOID CONFLICTS. ALL WORK SHALL BE INSTALLED IN A NEAT, INCONSPICUOUS, WORKMANLIKE MANNER. CONDUIT RUNS SHALL BE PARALLEL AND

PERPENDICULAR TO STRUCTURAL LINES WHERE EXPOSED. OUTLET BOXES, FIXTURES AND EQUIPMENT SHALL BE SECURELY MOUNTED AND SUPPORTED.

THE SITE SHALL BE LEFT CLEAN AND FREE OF DIRT AND DEBRIS. PANELS, FIXTURES, OUTLETS AND EQUIPMENT SHALL BE LEFT CLEAN AND FREE OF FOREIGN MATERIALS AND DIRT. PANELS, SWITCHES, AND ALL CONTROLS SHALL BE CLEARLY AND PERMANENTLY LABELED WITH LAMINATED ENGRAVED LABELS. WHERE CHANGES ARE MADE IN EXISTING PANELS, DISTRIBUTION CENTERS, ETC., THE LABELING AND SCHEDULES SHALL BE ACCURATELY CORRECTED TO REFLECT THE CHANGES. NEW TYPED PANEL SCHEDULES SHALL BE PROVIDED FOR ALL NEW/EXISTING PANELBOARDS THAT HAVE CHANGES. RECEPTACLES AND LIGHT SWITCH COVER PLATES SHALL BE LABELED WITH A PERMANENT ADHESIVE TYPED LABEL INDICATING THE PANEL AND CIRCUIT NUMBER. VOICE & DATA OUTLET COVERS SHALL BE LABELED WITH A PERMANENT ADHESIVE TYPED LABEL

INDICATING THE UNIQUE TELECOM ID. THE STRUCTURED CABLING SHALL BE LABELED AT BOTH ENDS WITH THE UNIQUE ID. THE PATCH PANEL SHALL BE LABELED WITH THE UNIQUE ID. A COMPUTER GENERATOR COLOR CODED MAP SHALL BE

PROVIDED BY THE CONTRACTOR TO THE OWNER SHOWING ALL JACK ID'S ALONG WITH THEIR LOCATION ON A BUILDING FLOORPLAN. ALL WIRING SHALL BE INSTALLED IN RACEWAYS EXCEPT WHERE OTHERWISE SPECIFICALLY SHOWN ON

THE DRAWINGS. SEE EQUIPMENT NAMEPLATE SCHEDULE FOR NAMING. LABELING. AND COLOR REQUIREMENTS.

#### SAFETY:

THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE CONSTRUCTION REVIEW RELATED TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, SEQUENCES, OR PROCEDURES REQUIRED FOR THE CONTRACTOR TO COMPLETE THE WORK.

#### SEISMIC BRACING AND SUPPORTS:

CONTRACTOR SHALL BE RESPONSIBLE TO SEISMICALLY BRACE ALL EQUIPMENT, FEEDERS, LIGHTS, CABLETRAY, AND OTHER ELECTRICAL ITEMS IN ACCORDANCE WITH PREVAILING CODES. DEFERRED SUBMITTALS OF SEISMIC BRACING SHALL BE REQUIRED UPON REQUEST AND SHALL COMPLY WITH ASCE 7-02 FOR SUPPORT AND BRACING OF NON-STRUCTURAL SYSTEMS. THIS SHALL INCLUDE SEISMIC DESIGN DEFERRED SUBMITTALS OF THE SITE LIGHTING POLE BASE DETAILS.

#### GUARANTEE:

DAMAGE

GUARANTEE THE ELECTRICAL INSTALLATION AGAINST ALL DEFECTS IN MATERIALS, EQUIPMENT AND WORKMANSHIP. FOR ONE YEAR AFTER THE DATE OF ACCEPTANCE OF THE WORK. DEFECTS SHALL BE PROMPTLY REMEDIED TO THE SATISFACTION OF THE ARCHITECT AT NO COST TO THE OWNER. ALL EQUIPMENT AND PRODUCTS SHALL CARRY A MINIMUM 1 YEAR WARRANTY FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.

#### MATERIALS AND METHODS:

ARMORED CABLE (AC) NOT PERMITTED ON THIS PROJECT.

METAL-CLAD CABLE (MC) MAY BE USE WHEN CONCEALED IN WALLS OR ABOVE DROPPED CEILINGS (SUCH AS ACOUSTICAL LAY-IN TILE CEILING) AND FOR LENGTHS NO LONGER THAN 6 FEET FOR EXPOSED CONDITIONS. SEE CIRCUITING WIRING METHOD BELOW.

NONMETALLIC-SHEATHED CALBE (NM, NMC, NMS, ROMEX) NOT PERMITTED ON THIS PROJECT. SERVICE-ENTRANCE CABLE (SE, USE, SER) NOT PERMITTED ON THIS PROJECT.

RIGID METAL CONDUIT (RMC) ALLOWED. INTERMEDIATE METAL CONDUIT (IMC) SHALL BE USED IN WET LOCATIONS OR IN AREAS SUBJECT TO

FLEXIBLE METAL CONDUIT (FMC) MAY BE USED WHEN INSTALLED PER CODE AND IN LENGTHS NO LONGER THAN 6 FEET WHERE FLEXIBILITY IS NECESSARY AND WHEN CONNECTING TO EQUIPMENT SUBJECT TO VIBRATION SUCH AS MOTORS OR TRANSFORMERS. RIGID POLYVINYL CHLORIDE CONDUIT (PVC) SHALL BE USED FOR UNDERGROUND. SHALL BE SCHEDULE 40. ELECTRICAL METALLIC TUBING (EMT) SHALL BE USED IN DRY LOCATIONS NOT SUBJECT TO DAMAGE AND WHERE ALLOWED BY CODE.

ELECTRICAL NONMETALLIC TUBING (ENT) MAY BE USED WHEN CONCEALED AND FOR LOW VOLTAGE CABLING (VOICE, DATA, TV, AUDIO, VISUAL, ETC.).

PROVIDE RACEWAY IN 3/4" MINIMUM SIZE. ALL CONDUIT EXPOSED IN OCCUPIED SPACES SHALL BE EMT, UNLESS SPECIFICALLY NOTED OTHERWISE SURFACE METAL RACEWAY IS NOT PERMITTED UNLESS APPROVED IN WRITING BY ARCHITECT OR SPECIFICALLY CALLED OUT IN THE DRAWINGS TO BE PROVIDED. EMT CONNECTORS TO BE STEEL, ZINC, OR CADMIUM COATED, FACTORY PRE-INSULATED. CONDUIT BUSHINGS TO BE HEAVY DUTY, INSULATED.

WIRE SHALL BE COPPER THHN/THWN-2 FOR COPPER SIZES #2 AND SMALLER. ALUMINUM XHHW-2 WIRE MAY BE USED FOR ALUMINUM SIZES 1/0 AND LARGER. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, COPPER #12 IS THE MINIMUM SIZE FOR LIGHTING AND POWER USE. SIZE WIRE AS INDICATED ON THE DRAWINGS, OR APPROPRIATE TO CARRY THE ENTIRE LOAD PER THE CURRENT VERSION OF NEC. PROVIDED DEDICATED NEUTRAL WIRING FOR ALL BRANCH CIRCUITS, COMMON (SHARED) NEUTRAL WIRING IS NOT PERMITTED. SEE BRANCH CIRCUIT CONDUCTOR AND CONDUIT SIZING TABLE FOR CONDUCTOR SIZING FOR VOLTAGE

DROP. PHASE A - BLACK: NEUTRAL A - WHITE WITH/BLACK STRIPE PHASE B - RED; NEUTRAL B - WHITE WITH/RED STRIPE PHASE C - BLUE; NEUTRAL C - WHITE WITH/BLUE STRIPE GROUND - GREEN

BOXES TO BE 4 INCH OCTAGONAL FOR LIGHTING OUTLETS AND 4 INCH SQUARE BACKBOXES (MINIMUM 1-1/2 INCHES DEPTH) WITH APPROPRIATE DEVICE COVERS FOR DEVICE OUTLETS IN CONCEALED WORK. PROVIDE 4-11/16" SQUARE DEEP J-BOXES FOR ALL LOW-VOLTAGE/DATA DEVICES. PROVIDE SINGLE GANG MUD RINGS FOR SINGLE GANG OUTLETS. DO NOT INSTALL OUTLET BOXES BACK TO BACK IN THE SAME STUD SPACE. OUTLET BOXES SHALL BE INSTALLED NOT MORE THAN 1/8 INCH BACK IN SHEETROCK AND PLUMB.

**CIRCUIT WIRING METHOD:** FEEDERS SHALL BE IN CONDUCTORS IN RACEWAY. BRANCH CIRCUITS SHALL BE CONDUCTORS IN RACEWAY TO THE FIRST DEVICE OR J-BOX IN ACCESSIBLE LOCATION. MC CABLE MAY BE USED WHEN CONCEALED TO THE OTHER DEVICES AND FIXTURES ON THE CIRCUIT. AREAS WITH OPEN CEILING ARE REQUIRED TO HAVE EMT/IMC CONDUIT ONLY EXCEPT UP TO 6 FEET OF MC CABLE TO FIXTURE OR DEVICES. NO VISIBLE MC CABLE IS PREFERRED.

WIRING DEVICES:

OTHERWISE) UNLESS NOTED OTHERWISE ON THE DRAWINGS, SEE TYPICAL MOUNTING HEIGHT DETAILS: SWITCH - 45" STANDARD RECEPTACLE OR VOICE/DATA OUTLET - 18" RECEPTACLE OR VOICE/DATA OUTLET (ABOVE COUNTER) - 3" ABOVE BACKSPLASH PANELBOARD, FACP - 72" TO TOP FIRE ALARM NOTIFICATION DEVICE - 96" VOICE/DATA - 18" CONSULT ARCHITECTURAL ELEVATIONS AND MILLWORK SHOP DRAWINGS TO DETERMINE EXACT MOUNTING HEIGHT OF ALL OUTLETS ABOVE COUNTER. COORDINATE WITH MILLWORK INSTALLER TO PROVIDE GROMMETS WHERE OUTLETS ARE LOCATED BELOW COUNTER. ALL DEVICES ARE BASED ON LUTRON'S WIRELESS LIGHTING CONTROL SYSTEM. ALL DEVICES SHALL WORK WITH AND BE COMPATIBLE WITH SAID SYSTEM. WALL SWITCHES FOR GENERAL USE TO BE 20 AMPERE, 120/277 VOLT AC RATED, QUIET ACTING. DUPLEX RECEPTACLES TO BE 20 AMPERE SPECIFICATION GRADE. WALL SWITCH SENSOR SWITCHES SHALL BE LUTRON. DIMMER SWITCHES SHALL BE 0-10 VOLT LUTRON. MULTI-BUTTON DIMMER SWITCHES SHALL BE 0-10 VOLT LUTRON. SELECTION OF COLOR AND PLATE MATERIAL SHALL BE BY ARCHITECT. PLATE MATERIAL MAY BE EITHER STAINLESS STEEL, OR NYLON, INCLUDE WORST CASE (MOST EXPENSIVE) IN BID. STAINLESS STEEL PLATES SHALL BE REQUIRED IN KITCHEN AND RESTROOM AREAS. ALL DEVICES SHALL BE ALIGNED VERTICALLY AND HORIZONTALLY. HORIZONTALLY MOUNTED RECEPTACLES SHALL HAVE THE NEUTRAL UP WITH THE GROUND TO THE LEFT.

FLOOR BOXES:

PROVIDE FLUSH FLOOR BOX, CONCRETE TIGHT, OF CAST METAL OR STEEL CONSTRUCTION, WITH CARPET RINGS AND PLATES. AS PROVIDED BY HUBBELL OR WIREMOLD. EQUIP WITH MINIMUM TWO SIMPLEX POWER RECEPTACLES RATED AT 20 AMPS. EQUIP WITH TWO CATEGORY 6 VOICE/DATA MODULAR OUTLETS WHERE SHOWN (TO BE WIRED BY SEPARATE CONTRACT).

OCCUPANCY SENSORS:

LIGHTING CONTROL PACKAGE. THEY ARE IN THE ROOM. **REQUIRED**.

LOW VOLTAGE WIRING INSTALLED IN INACCESSIBLE CEILING AREA MUST BE RUN IN EMT CONDUIT. THE CONDUIT MAY STOP SHORT OF THE SENSOR OR POWER PACK (WITHIN 6 INCHES).

COLOR REQUIREMENTS.

#### **EQUIPMENT CONNECTIONS:**

ROUGHING-IN AND ORDERING EQUIPMENT. PROVIDE ALL CONTROL WIRING FOR GENERATOR AND TRANSFER SWITCHES. SHOP DRAWINGS.

ALL WIRING SHALL BE COLOR CODED WITH SOLID COLORING OR FOR SIZES ABOVE #6 MAY HAVE COLORED TAPE BANDS AT ALL ACCESSIBLE LOCATIONS AND ENDS, COLOR CODING SHALL BE AS FOLLOWS:

INSTALL WIRING DEVICES TO THE FOLLOWING HEIGHTS (HEIGHTS TO CENTER OF DEVICE UNLESS NOTED

PROVIDE A WIRELESS LIGHTING CONTROL SOLUTION FOR THE BUILDING THAT MEETS CURRENT ENERGY REQUIREMENT FOR CONTROL, DAYLIGHT, PROGRAMING, DIMMING, ETC. SYSTEM SHALL BE LUTRON. THE SYSTEM SHALL AUTOMATICALLY CONTROL RECEPTACLES IN SPACE DEFINED IN THE ENERGY CODE. PROVIDE CEILING OCCUPANCY SENSORS. SENSORS SHALL BE DUAL TECHNOLOGY PART OF THE WIRELESS

INFRARED/ULTRASONIC IN ALL AREAS, BUT ULTRASONIC ONLY IN RESTROOMS. PROVIDE CEILING SENSORS OF LOW PROFILE, NON-ADJUSTABLE STYLE, ORIENTED TO COVER THE ROOM. MOUNT SENSORS A MINIMUM OF 3 FEET AWAY FROM AIR DIFFUSERS. PROVIDE ALL POWER PACKS REQUIRED. PROVIDE DUAL TECHNOLOGY WALL MOUNT/SWITCH SENSORS WITH MANUAL OVERRIDE IN SMALL AREAS ORIENTED TOWARDS THE CENTER OF THE ROOM, WHERE WALL MOUNT OCCUPANCY SENSORS ARE INDICATED. ADJUST SENSORS TO OPERATE EFFECTIVELY WHEN SOMEONE ENTERS THE ROOM, AND REMAIN ON WHILE

TEST EACH ROOM INDEPENDENTLY. VISIT THE SITE 3 MONTHS AFTER OCCUPANCY AND READJUST AS

ELECTRICAL PANELBOARDS, SWITCHBOARDS & BREAKERS:

PROVIDE SPECIFICATION GRADE, DOOR IN DOOR, PANELBOARDS OF SQUARE D NQOD, CUTLER HAMMER, SIEMENS, OR EATON. PROVIDE BOLT ON BREAKERS. PROVIDE ALUMINUM BUSSING, 100% RATED NEUTRAL BUS, AND BONDED GROUND BUS. PROVIDE ISOLATED GROUND BUS WHERE INDICATED. PROVIDE TYPED PANEL SCHEDULE. PROVIDE PERMANENT ENGRAVED PANEL ID LABEL ON THE OUTSIDE OF EACH PANELBOARD AND SWITCHBOARD. SEE EQUIPMENT NAMEPLATE SCHEDULE FOR NAMING, LABELING, AND

PANEL AND BREAKERS SHALL BE FULLY RATED FOR THE FAULT CURRENT VALUES INDICATED IN THE DRAWINGS. SERIES RATING IS NOT PERMITTED. PROVIDE NEMA-3R ENCLOSURES FOR ANY PANELBOARD OR SWITCHBOARD INSTALLED OUTSIDE. PROVIDE NEMA ENCLOSER REQUIRED FOR THE SPACE THE GEAR WILL BE INSTALLED, CONTRACTOR TO CONFIRM CONTRACT DOCUMENTS FOR HAZARDOUS LOCATIONS.

CONNECT EACH ITEM OF MECHANICAL OR OTHER TYPES OF EQUIPMENT SHOWN ON THE DRAWINGS, PROVIDING ALL POWER REQUIREMENTS. VERIFY EQUIPMENT ELECTRICAL REQUIREMENTS PRIOR TO

FURNISH ALL CODE REQUIRED DISCONNECTS UNDER THIS WORK, WHETHER SPECIFICALLY SHOWN OR NOT. CONTROL DEVICES AND CONTROL WIRING WILL BE FURNISHED AND INSTALLED UNDER OTHER WORK UNLESS SPECIFICALLY CALLED FOR ON THE ELECTRICAL DRAWINGS.

PROVIDE ALL ELECTRICAL AS REQUIRED BY THE ELEVATOR MANUFACTURE PER THEIR SUBMITTAL AND

PROVIDE ALL ELECTRICAL TO POOL/SPA EQUIPMENT PER SHOP DRAWINGS AND SUBMITTALS.

LIGHTING FIXTURES:

ALL LIGHTING SHALL BE LED. FIXTURES SHALL BE ADEQUATELY SUPPORTED WITH A SAFETY FACTOR OF FOUR. FIXTURES SHALL BE STABILIZED OR LOCKED INTO PLACE TO RESIST SEISMIC FORCES. SUPPORT ALL RECESSED FIXTURES INDEPENDENTLY OF THE CEILING SYSTEM, USING WIRE TIED FROM TWO CORNERS OF THE FIXTURE TO THE STRUCTURE ABOVE. FOR SUSPENDED FIXTURES ON DROPPED CEILING, LOCATE BOXES AT THE DROPPED CEILING LEVEL AND SUPPORT INDEPENDENT OF THE CEILING. FIXTURES SHALL ALL BE CLEAN AND IN PROPER OPERATION AT THE TIME OF ACCEPTANCE OF THE WORK.

PROVIDE EMERGENCY ILLUMINATION OF 1 FOOT CANDLE IN THE PATH OF EGRESS FOR MINIMUM OF 90 MINUTES.

PROVIDE EMERGENCY BATTERY PACKS IN FIXTURES SPECIFIED CAPABLE OF OPERATING LAMPS FOR MINIMUM OF 90 MINUTES OR PROVIDE A LIGHTING INVERTER SIZED TO POWER ALL EMERGENCY FIXTURES FOR 90 MINUTES. DO NOT INSTALL POWER RACEWAYS OR TELECOMMUNICATIONS RACEWAYS WITHIN 5 INCHES OF ANY FLUORESCENT OR HID FIXTURE.

LIGHTING CONTROL RELAY PANEL:

PROVIDE A WIRELESS LIGHTING CONTROL SOLUTION FOR THE BUILDING THAT MEETS CURRENT ENERGY REQUIREMENT FOR CONTROL, DAYLIGHT, PROGRAMING, DIMMING, ETC. SYSTEM SHALL BE LUTRON. PROVIDE PROGRAMING TO MEETING THE OWNER REQUIREMENTS. MEET WILL OWNER TO DETERMINE PROGRAMING AND PROVIDE ACCORDINGLY. PROVIDE FINE TUNE ADJUSTMENTS REQUIRED BY OWNER.

LIGHTING COMMISSIONING:

THE CONTRACTOR SHALL PERFORM OR SHALL ENGAGE A PARTY TO PERFORM THE FOLLOWING TESTS AND INSPECTIONS WITH THE ASSISTANCE OF A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE. ENSURE THAT THE LIGHTING CONTROLS FOR AUTOMATIC LIGHTING SYSTEMS COMPLY WITH 2018 IECC SECTION C408.3. ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN

PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

WHERE REQUIRED BY THE CODE OFFICIAL, AN APPROVED PARTY INDEPENDENT FORM THE DESIGN OR CONSTRUCTION OF THE PROJECT SHALL BE RESPONSIBLE FOR THE FUNCTIONAL TESTING AND SHALL PROVIDE DOCUMENTATION TO THE CODE OFFICIAL CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET THE PROVISIONS OF 2018 IECC SECTION C405. PROVIDE THE FOLLOWING PROCEDURES FOR EACH; OCCUPANT SENSOR, TIME SWITCH, PROGRAMMABLE SCHEDULE CONTROL, PHOTOSENSOR, AND DAYLIGHTING CONTROL. CONFIRM THAT THE PLACEMENT, SENSITIVITY, AND TIME-OUT ADJUSTMENTS FOR THE OCCUPANT SENSORS YIELD ACCEPTABLE PERFORMANCES. CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF. CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR THE PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

![](_page_16_Picture_73.jpeg)

LEGEN	ID SI		GHT PO	OLE PIE	R FOOTING	SCHE	DULE <sup>1</sup>		
Χ^	С		NOTE						
WIND SPEED (mph)	MAX EPA (FT <sup>2</sup> )	LIGHT POLE HEIGHT (ft)	LIGHT POLE DIA (in) max	FOOTING DIAMETER,d (in)	h=MIN FOUNDATION <sup>2</sup> EMBED. (ft)	VERTICAL REINF. BAR SIZE	VERTICAL BAR QUANTITY	CIRC.TIE BAR SIZE	CIRC. TIE SPACING (in)
120	2	30	8	24	7'-6"	#5	8	#4	12" O.C.
120	2	25	8	24	6'-6"	#5	8	#4	12" O.C.
120	2	20	8	24	6'-0	#5	8	#4	12" O.C.
120	2	15	8	24	5'-0"	#5	8	#4	12" O.C.
120	2	10	8	24	4'-6"	#5	8	#4	12" O.C.
120	2	30 <sup>3</sup>	8	18	-	-	-	-	-
120	2	25 <sup>3</sup>	8	18	-	-	-	-	-
120	2	20	8	18	6'-0"	#5	5	#4	12" O.C.
120	2	15	8	18	5'-0"	#5	5	#4	12" O.C.
120	2	10	8	18	4'-6"	#5	5	#4	12" O.C.
120	2	30 <sup>3</sup>	6	16	-	-	-	-	-
120	2	25 <sup>3</sup>	6	16	-	-	-	-	-
120	2	20	6	16	6'-6"	#5	4	#4	12" O.C.
120	2	15	6	16	5'-6"	#5	4	#4	12" O.C.
120	2	10	6	16	4'-6"	#5	4	#4	12" O.C.

NOTE: 1. CONTRACTOR SHALL SUBMIT DEFERRED SUBMITTAL FOR LIGHT POST FOOTING TO ENGINEER OF RECORD. SCHEDULE ABOVE IS FOR BIDDING PURPOSES ONLY. 2. SCHEDULE ABOVE ASSUMES CLAY OR SILT SOIL CONDITIONS WITH SEISMIC CLASS D AND DEFAULT SOIL PARAMETERS FROM IBC SECTION 1806.2 3. EXCEEDS THE MAXIMUM BEARING CAPACITY OF 1500 PSF. VERIFY ALLOWABLE SOIL BEARING WITH SOILS REPORT.

 4. TOP SOIL SHALL NOT BE USED TO RESIST LATERAL LOAD IN FOOTING. THE EMBED DEPTH IN THE TABLE SHALL BE BEGIN BELOW THE BASE OF THE TOP SOIL AS SHOWN IN THE ELEVATION.
 5. SECTION VIEW IS FOR VISUAL REPRESENTATION ONLY. VERIFY BAR QUANTITY WITH SCHEDULE60,000 PSI REBAR YIELD STRENGTH
 6. CONCRETE MIX SHALL BE FOR EXTERIOR CONCRETE SUBJECT TO FREEZE THAW CONATIONS WITH THE MINIMUM PROPERTIES.

A. 3000 PSI B. TYPE II PORTLAND CEMENT C. WATER TO CEMENT RATIO = 0.5%

D. AIR ENTRAINMENT = 5% E. MAX AGGREGATE SIZE= 1'

F. CONCRETE EXPOSURE CLASS= F2, S0, C1 G. 4" SLUMP BEFORE ADDITION OF PLASTICIZER

![](_page_17_Figure_6.jpeg)

## 7 WALKWAY LIGHT POLE BASE DETAIL

SEE FIXTURE SCHEDULE FOR FIXTURE HEAD REQUIREMENTS	
ROUND ALUMINUM POLE? SQUARE ALUMINUM POLE? ROUND STEEL POLE? SQUARE STEEL POLE? PAINTED TO MATCH FIXTURE	
HAND HOLE COVER	
PROVIDE IN-LINE FUSE WITH INSULATED FUSE HOLDER HERE	
INTERIOR PAINTED WITH	
ANCHOR BOLTS AND FULL BASE COVER PER LIGHT POLE MANUFACTURER. SEE LIGHT POLE MANUFACTURER TEMPLATE TO SET ANCHOR BOLTS	
.75" CHAMFER ALL EXPOSED EDGES-	
2 SETS #4 TIES IN TOP 5" OF BASE	
#6 .75" CONDUIT	
CONDUIT WITH J-BOX (TYPICAL)	
8 #6 BARS VERTICAL WITH 3	3ª CLR
24"Ø CONCRETE BASE	
8' X .75" COPPER WELD GROUND ROD	+/75" GROUT BED UNDER LIGHT POLE BASE

![](_page_17_Figure_9.jpeg)

![](_page_17_Figure_10.jpeg)

![](_page_17_Figure_11.jpeg)

![](_page_17_Picture_12.jpeg)

DESIGN REVIEW – NOT FOR CONSTRUCTIO

Ζ

![](_page_18_Figure_0.jpeg)

![](_page_18_Figure_1.jpeg)

![](_page_18_Figure_2.jpeg)

![](_page_18_Picture_3.jpeg)

![](_page_18_Picture_5.jpeg)

![](_page_19_Figure_0.jpeg)

### GENERAL SHEET NOTES

CENTER ALL CEILING MOUNTED LIGHT FIXTURES AND DE
CENTERED IN CEILING TILE. UNLESS OTHERWISE NOTED.

- CIRCUIT ALL EXIT SIGNS TO NEAREST UNSWITCHED LEG OF EMERGENCY LIGHTING CIRCUIT.
- ALL ENCLOSED SPACES SHALL HAVE MANUAL ON LIGHTING CONTROL WITH AUTOMATIC OFF VIA DUAL TECHNOLOGY SENSOR OR TIME CLOCK. SENSOR(S) SHALL PROVIDE A MINIMUM OF 90 PERCENT COVERAGE IN SPACE. PROVIDE ADDITIONAL SENSORS AS REQUIRED. COMPLY WITH 2018 IECC SECTION C405.
- 4 PROVIDE DAYLIGHTING CONTROL FOR ALL LIGHTING WITH IN DAYLIGHT ZONE AS DEFINED BY THE 2018 IECC. PROVIDE DIMMING LIGHTING FIXTURES AND DAYLIGHT SENSOR PHOTOCELL.
- 5 INSTALL LIGHT FIXTURES INLINE AND CENTERED.
- 6 COORDINATE ALL LIGHT FIXTURE MOUNTING HEIGHTS WITH ARCHITECT.
- 7 ARCHITECT TO SELECT ALL LIGHT FIXTURE FINISHES.
- 8 LOCATE ALL VACANCY/OCCUPANCY SENSORS MINIMUM OF 6 FEET FROM SUPPLY AIR DIFFUSERS AND 3 FEET FROM RETURN AIR DIFFUSERS.
- ALL CEILING AND WALL MOUNTED SENSORS SHALL BE DUAL TECHNOLOGY WITH BUILT IN LIGHT LEVEL SENSOR AND BAS/HVAC ISOLATED RELAY.
- 10 ALL LIGHT FIXTURES THAT PENETRATE FIRE RATED SURFACE/ASSEMBLY SHALL B IN A FIRE RATED ENCLOSURE OR BE PROVIEDED WITH A FIRE RATED ASSMBLY (LISTED PUTTY PADS) TO MAINTAIN A FIRE RATING OR SURFACE PENETRATED.
- 10 LOCATE ALL ROOM CONTROLLER IN ACCESSIBLE CEILINGS OR IN THE ELECTRICAL ROOM.

⊖ SHEET KEYNOTES

![](_page_19_Picture_14.jpeg)

![](_page_20_Figure_0.jpeg)

	DESCRIP	TION	<u>S</u>	YMBOLS L	EGEND			FIXTURE S	STYLES		
OLT DOWN	I COVER		PG-34	PG-22	PG-23	PG-22	STYLE	DESCRIF	PTION	IMAGES	
TANDARD	WITH NO BC	LTS						STRAIGHT SIDES ALLOW FOR EASY ASJUS		14°	
AST IRON 6	6 4-1/2" X 7-1	/2" LID				$\square$	PG	THE GRADE LEVEL CHANGE, USED FOR A SUCH AS A SPLICE BOX, PULL BOX, EQUIP ANY APPLICATION REQUIRING EASY ACCE SERVICE, PG BOXES ARE STACKABLE FOR	A VARIELY OF PORPOSES, IJPMENT ENCLOSURE, OR FOR CESS TO AN UNDERGROUND OR INCREASED DEPTH.		
AST IRON (	6"X12" LID		NOTES: 1. CONTRACTOR SH	IALL PROV			PC	STRAIGHT SIDES ALLOW FOR EASY ASJU: THE GRADE LEVEL CHANGE. ALL PC BOXE AVAILABLE WITH GASKETING.	STMENT OF BOX SHOULD S ARE STACKABLE AND /		
AST IRON 9	9"X12" LID		2. ALL ENCLOSURES	SHALL BE	UL LISTED	JECT.					
OLYMER C	ONCRETE 6	'X9" DROP-IN LID	3. CONTRACTOR SH WITH CIVIL ENGINEE	IALL COORI ER AND AR(	DINATE THE TIE CHITECT IN THE	R RATING	PX	PX STYLES ARE EXCELLENT FOR SERVICE OFFER FLARED DESIGN TO PREVENT FRC ALSO NESTABLE FOR COMPACT STORAGI	: BOX ASSEMBLIES AND IST HEAVE. PX BOXES AR E.		
OLYMER C	ONCRETE 7	" X 13" DROP-IN LID	4. CONTRACTOR SH	IALL ADJUS	T THE SIZE OF	ГНЕ	-	THE FLARED DESIGN PREVENTS FROST H	EAVE AND COVERS ARE		
HROUGH S	LOT (NO ME	TER LID)	<ul> <li>ENCLOSURE AS REC AN RFI OR PROVIDE</li> <li>THAT THE DESIGN T</li> </ul>	QUIRED FO SOME OTH EAM AND (	R INSTALLATIOI HER DOCUMEN OWNER UNDER:	N. SUBMIT ATION SO STAND	РТ	NTERCHANGABLE WITH MANY PRECAST BOXES ARE ALSO NESTABLE FOR COMPA	CONCRETE PARTS. PT CT STORAGE.		
PPENS UNDER 90°			THIS MODIFICATION	PRIOR TO		ARD WITH	-	THESE ENCLOSURES FEATURE A 1 DEGRI	EE FLARE FOR MAXIMUM		
SED WITH	DROP-IN LIE	)	5. PROVIDE BASIS O PRE-APPROVED EQ	F DESIGN ( UAL.	(BOD) ENCLOSU	RE OR	PD MINIMIZES FROST HEAVE.				
	DSUF	RE SCHE	DULE	J I				1			
WIDTH	DEPTH	ABOVE GRADE HEIGHT	BASIS OF DESIGN MANUFACTURE PART	NO.	BOX OPTI				STYLE		

![](_page_20_Picture_4.jpeg)

ONSTRUCTI  $\cup$ FOR  $\vdash$ 

NOI

![](_page_21_Figure_0.jpeg)

![](_page_21_Figure_1.jpeg)

![](_page_21_Figure_2.jpeg)

Control Cabinet Terminal Blocks

![](_page_21_Figure_3.jpeg)

(OP-1)

(OP-3)

(OP-2)

### EXTERIOR LIGHTING FIXTURE SCHEDULE **GENERAL NOTES**

## DIAMETER LENGTH

—WIDTH

. SUBSTITUTIONS AND/OR EQUAL FIXTURES MUST RECEIVE APPROVAL PRIOR TO BIDDING, THEY MUST BE SUBMITTED TO THE ENGINEER NO LESS THAN 2 WEEKS PRIOR TO BID OPENING.

2. SAMPLES MUST BE PROVIDED FOR ANY AND ALL FIXTURES UPON A/E REQUEST PRIOR TO RELEASING FIXTURES.

3. ALL FIXTURES SHALL BE LISTED AND APPROVED FOR THEIR INTENDED USE AND LOCATION. 4. VERIFY THE PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS.

5. COMPLY WITH THE "INTERIOR LIGHTING" SECTION OF THE SPECIFICATIONS.

6. ALL LIGHT FIXTURES TO BE EITHER "DLC" OR "LIGHTING FACTS" LISTED OR TO BE APPROVED BY ARCHITECT/ENGINEER AND OWNER.

CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES.

		LUMINAIRE						C	DRIVER		
		BU	IG RAT	ING							
DESCRIPTION	SIZE (NOMINAL)	BACK	BACK UP GLARE		LUMENS	COLOR TEMP CRI		TYPE	VOLTAGE	WATTS	MANUFACTURER
DESCRIPTION: LED AREA FLOOD LIGHT MOUNTING: POLE MOUNTED FINISH: SCBA OPTICS: OPTIONS: MOUNTED TO 15'-0" POLE EM:	LENGTH: 17" WIDTH: 10" HEIGHT: 2" POLE HEIGHT: 15' - 0"	0	0	0	2,050	4000K	70	LED DRIVER	120/277	200	BEGA (AREA/ROADWAY LUMINAIRE - A SINGLE)
DESCRIPTION: LED AREA FLOOD LIGHT MOUNTING: POLE MOUNTED FINISH: SCBA OPTICS: OPTIONS: MOUNTED TO 30'-0" POLE EM:	LENGTH: 22.5" WIDTH: 13" HEIGHT: 5"	5	0	1	35,000	4000K	70	LED DRIVER	120/277	280	CHM (FL SMALL SERIES)
DESCRIPTION: LED AREA FLOOD LIGHT MOUNTING: POLE MOUNTED FINISH: SCBA OPTICS: OPTIONS: MOUNTED TO 50'-0" POLE FM <sup>.</sup>	LENGTH: 12" WIDTH: 23" HEIGHT: 23" POLE HEIGHT: 50' - 0"				94,800	4000K	70	LED DRIVER	208/480	200	CHM (RECFLOOD)

![](_page_21_Figure_15.jpeg)

VOLTS/PHASE/WIRE:         PANEL SIZE & TY           120/208//         1/20///						IZE & TYPE:	400 AMPERE MAI	YPE:	FI	ED FR	OM:	CABINET: LOCATION: NOTES:							
ACCES	SORIE	s:	0 1111	_	P/		IRECTORY, IDEN			G BAR			Al		<b>IG:</b> 22	000			-
СКТ		OCP		LC	)AD (k		,		F	PHASE		D		LC	)AD (k)	<b>/</b> A)		OCP	-
NO		POLE	BKR	LTG	PWR	co	DESC	RIPTION		4		- 3	DESCRIPTION	co	PWR	LTG	BKR	POLE	ſ
1	20	1		0.0	0.0	0.2	ELECTR	ICAL ROOM	0.2	0.2			STORAGE	0.2	0.0	0.0		1	ŀ
3	20	1		0.0	0.0	0.2	STO	ORAGE			0.2	0.2	ELECTRICAL ROOM	0.2	0.0	0.0		1	F
5	20	1		0.0	0.0	0.2	SOU	TH WALL	0.2	0.2			SOUTH WALL	0.2	0.0	0.0		1	t
7	20	1		0.0	0.0	0.2	SOU	TH WALL			0.2	0.2	SERVICE WINDOW	0.2	0.0	0.0		1	T
9	20	1		0.0	0.0	0.2	COUN	NTERTOP	0.2	0.2			SERVICE WINDOW	0.2	0.0	0.0		1	ſ
11	20	1		0.0	0.0	0.2	COUN	NTERTOP			0.2	0.2	COUNTERTOP	0.2	0.0	0.0		1	
13	20	1		0.0	0.0	0.2	COUN	COUNTERTOP					COUNTERTOP	0.2	0.0	0.0		1	
15	20	1		0.0	0.0	0.2	CEILII	CEILING DROP			0.2	0.2	CEILING DROP	0.2	0.0	0.0		1	
17	20	1		0.0	0.0	0.2	CEILII	0.2	3.3			RANGE	0.0	6.7	0.0		2		
19	20	1		0.0	0.0	0.4	DIAMON	DOUTLETS			0.4	3.3							
21	20	1		0.0	0.0	0.4	DIAMON	DOUTLETS	0.4									<u> </u>	
23																		<b></b>	L
25																		<u> </u>	
27																			
29																		<u> </u>	+
31																			╞
25																		<u> </u>	┝
37																			┝
39												0.0	EXISTING PANEL "P"					2	┝
41										0.0		0.0							F
TOTAL	S:			1			CONNECTI	ED KVA PER PHASE		5		5	CONNE	ECTED	TOTAL	kVA =		10	-
							CONNECTED	AMPS PER PHASE	5	51	4	9	AVERAGE CONNECTED	AMPS F	ER PH	ASE =		50	
NEC D	VERSI	FIED L	OAD C	ALCU		NS													
																			-
LIG	HTING	& CON	ITINUC	US LC	ADS:			- 100% CC	NNEC	TED	OAD	PLUS	S 25%	DIVERS	IFIED T	OTAL	kVA =	10	
			REC	ΕΡΤΔ		3 8 kV/	\@100% = 3.8 k		)k\/Δ <i>(</i>	<u> </u>	% REI					ER PH	ASE =	50	
			NLO			0.0 K ¥7	K @ 100 /0 - 0.0 K		τοτλι	9 100 9 S INIC								50	
	ALL	OTHEF	r load	S @ 1	00% :	6.7	kVA												

![](_page_22_Figure_1.jpeg)

**1** 

SCALE: NTS

PROVIDE PERMANENT LABEL ON "MAIN SWITCHBOARD" STATING: "MAXIMUM CALCULATED AIC - 4,995A, 2021-09- 03" CALCULATIONS ARE BASED ON THE FOLLOWING ASSUMPTIONS: - INFINITE PRIMARY - UTILITY TRANSFORMNER SIZE 112kVA - TRANSFORMER IMPEDANCE OF 2.7% - SUPPLY FEEDER LENGTH OF 5' NOTES:

CONTRACTOR SHALL SUBMIT VARIATIONS FROM ASSUMPTIONS PRIOR TO ORDERING EQUIPMENT.

2. THE SERVICE EQUIPMENT SHALL BE PROVIDED WITH A PERMANENT LABEL INCLUDING: NOMINAL SYSTEM VOLTAGE, AVAILABLE FAULT CURRENT, AND CLEARING TIME ON MAIN OVERCURRENT PROTECTIVE DEVICE BASED ON THE ABAILABLE FAULT CURRENT.

	01/7				
ΔΜΡ	NO				
20	2				
20	4				
20	6				
20	8				
20	10				
20	12				
20	14				
20	16				
40	18				
	20				
	22				
	24				
	26				
	28				
	30				
	32				
	34				
	36				
	38				
200	40				
	42				
REAKE	ER,				

	A Al				С
		SCHEDUL			
(**	*-				
		SUBSCRIF		E 5)	
SYM	AMP	CONDUIT SIZE	QTY	SIZE	G
$4_A$ $5_A$					
$6_{A}$					
9 <sub>A</sub>					
					$\nearrow$
$12_A$ $13_A$					
14 <sub>A</sub>					
$15_A$ $16_A$					
(17 <sub>A</sub>					
19 <sub>A</sub>					
20A	130	2	3	2/0	4
22 <sub>A</sub>	130	2	4	2/0	4
23 <sub>A</sub>	150	2	3	3/0 3/0	4
25 <sub>A</sub>	175	2	3	4/0	4
<u>26</u> 27⊿	175 200	2.50 2.50	4	4/0 250	4
28 <sub>A</sub>	200	3	4	250	4
<u>29</u> A 30A	230	2.50	3 4	300	2
31 <sub>A</sub>	250	3	3	350	2
33 <sub>A</sub>	310	3	3	500	1
34 <sub>A</sub>	310	4 2 EA 2 50	4	500 250	1
<u>36</u> A	380	2 EA 3	4	250	1
<u>37</u> ⊿ 38⊿	400	2 EA 2.50 2 EA 2.50	3	250 250	1/0 1/0
<u>39</u> A	500	2 EA 3	3	350	1/0
40 <sub>A</sub>	620	2 EA 3 2 EA 3	4	350 500	3/0
42 <sub>A</sub>	620	2 EA 4	4	500	3/0
43 <sub>A</sub>	750	3 EA 3 3 EA 3	3 4	350	3/0
45 <sub>A</sub>	810	3 EA 3	3	400	4/0
47 <sub>A</sub>	1000	4 EA 3	3	350	4/0
48 <sub>A</sub>	1000	4 EA 3 4 EA 4	4	350 500	4/0 250
50 <sub>A</sub>	1140	4 EA 4	4	500	250
<u>51</u> A	1240	4 EA 4 4 EA 4	3 4	500 500	350
53 <sub>A</sub>	1620	6 EA 4	4	400	400
55 <sub>A</sub>	2695	7 EA 4	4	750	600
<u>56</u> A	3080 4235	8 EA 4	4	750 750	600 800
58 <sub>A</sub>	-	5 EA 4	-	-	-
<u>59</u> A		5 10 EA 4	-	-	-
1 2 3 4 5	CONDUC NOTE 5. J PROVIDE BREAKEI PROVIDE GROUNE GROUNE SYMBOL "2N":	CON TORS SHOW ALL CONDUC E EQUIPMENT RS ARE SIZE #10 NEUTR/ 0 (G) CONDUC SUBSCRIPTS INCLUDE TM	DUIT AN /N ARE SI CTORS SH T GROUN D GREAT ALS FOR CTOR MA S: /O NEUTR	ID COND HOWN FOI HOWN ARE D CONDUC ER THAN / MULTIWIR Y BE DELE RAL COND	UCTO REACH THWN CTORS AMPER E BRAI ETED O
	"CI	PROVIDE CII RESISTIVE C CONCRETE.	RCUIT INT CABLES IN	regrity ( N Condui	ABLE; Γ OR PI
	"FG"	FULL SIZE G BE SAME SIZ	ROUND, S ZE AS THI	SIZE EQUI E PHASE (	PMENT CONDU
	"HH":	NEUTRAL CU LOADS. CUF ACCORDING	JRRENTS RRENT C/ GLY.	S EXIST DU ARRYING (	ie to f Condu
	"IG":	INCLUDE IG SCHEDULED CONDUCTOI	(INSULAT ) ALONG ' R.	ED/ISOLA	ted gi grou
	"MC"	PROVIDE FE SINGLE CON	EDER IN	METAL-CL S IN CONE	AD CA DUIT.
	"SE":	SUBSTITUTE IS SIZED FO SEPARATEL	E "SE" CO R THE GF Y DERIVE	NDUCTOR ROUNDING D SYSTEM	FOR " OF TH 1.
	"SER"	PROVIDE SE SINGLE CON	RVICE-EI	NTRANCE IS IN CONE	Cable Duit.
6 7	RACEWA ALUMINU DRIVEN I	Y ONLY. CO IM CONDUCT EQUIPMENT.	NDUCTO	RS PROVII T TO BE U	JED BN SED FC

	)ND		TOR		C	OP	PER	C			СТО	RA	ND	1	GENERAL SHEET NOTE
	5Cr	1EL	JULE			C	ONE		ΤS	CH	EDI	JLE			TRADES PRIIOR TO INSTALLATION.
	(E.G.)	5 IG		(**	*	SCHE	DULE NUME CRIPT (NOT	3ER E 5)		(E.0	G.) <u>5</u> IG			2	PROVIDE COMPLETE SUBMITTALE OF ALL EQUIPMENT, DEV MOUNTIN, INSTALLATION METHODS, ETC. TOR REPRESENT UNDERSTANDING OF WHAT IS TO BE PROVIDED FOR REVIE TO INSTALL.
G G	IG	SE	NOTES	SYM	AMP 20	HH AMPS -	CONDUIT SIZE .75	COND QTY 2	UCTOR (1 SIZE 12	NOTE 1) G 12	IG/HH 12	SE 8	NOTES	3	COORDINATE EXACT LOCATIONS OF SPEACKERS WITH ARG
				2 3 4	20 20 30 30	- 24 -	.75 .75 .75 .75	3 4 2 3	12 12 10 10	12 12 10	12 12 10 10	8 8 8 8	2,3 2,3 2 2	4	SPEAKERS SHALL BE LOCATED WITH THE SAME SPACING A THE PATHWAY TO OTHER GEATURES TO HAVE A UNIFORM CONSISTANCY.
				0 6 7 8	30 40 40	32	.75 .75 1	4 2 3	10 10 8 8	10 10 10	10 10 8 8	8 6 6	2 2 2 2	5	MANTAIN MAXIMUM SEPARATION BETWEEN AV SYSTEM CO CONUIT. MINIMUM SEPARATION REQUIREMENTS ARE 24".
				9 10	40	44	1	4	8	10 10 10	8	6 4	2	6	INSTALL NYLON PULL STRINGS IN ALL AV SYSTEM CONDUIT
				11 12 13	55 55 70	- 60 -	1 1.25 1	3 4 2	6 6 4	10 10 8	8 8 4	4 4 2	2 2 2	7	INSTALL ALL EQUIPMENT IN COMPLIANCE WITH THE MANUF INSTRUCTIONS, CODES, AND INSUSTRY WIDE ACCEPTED B
				14 15 16	70 70 85	- 76	1.25 1.25 1.25	- 3 4 2	4 4 3	8 8 8	4 4 3	2 2 2	2 2 2	8	ALL ROUGH-IN SHALL BE IN COMPLIANCE WITH ANSI/TIA/EIA BUT IS NOT LIMITED TO, ALL CONDUITS HAVING NO MORE T BENDS
				17	85 85	- 92	1.25 1.25 1.25	3 4	3	8	3 3	2 2 2	2 2 2	9	ALL CONDUIT FOR AV ROUGH-IN SHALL BE RATED FOR OUT
4	1/0	4	2,7	19 20 21	95 95 130	- 104 -	1.25 1.50 1.50	3 4 3	2 2 1	8 8 6	2 2 2	2 2 2	2 2 2	10	ALL AV CONDUITS SHALL BE INSTALLED USING SHORTEST
4 4 4	1/0 1/0 1/0	4 4 4	2,7 2,7 2,7	22 23 24	130 150 150	116 - 136	1.50 2 2	4 3 4	1 1/0 1/0	6 6 6	2 2 2	2 1/0 1/0	2 2 2	11	CONDUITS AND JUNCTION BOXES SHOWN ON RISER DIAGR
4	1/0 1/0	2 2	2,7 2,7 2,7	25 26	175 175	- 156	2 2	3 4	2/0 2/0	6 6	2 2	2/0 2/0	2 2 2	12	COVER ALL JUNCTION BOXES WITH A BLANK NYLON COVER
4 4 2	1/0 1/0	2 2 1/0	2,7 2,7 2,7	27) 28 20	200	- 180	2 2.50 2.50	3 4 3	3/0 3/0	6 6 4	2	2/0 2/0 2/0	2 2		
2 2	1/0 1/0 2/0	1/0 1/0	2,7	<u>30</u> 31	230 230 255	208	2.50	4	4/0	4	2	2/0 2/0 2/0	2		
2	2/0 2/0 3/0	1/0 1/0	2,7	<u>32</u> 33	255 310	232	2.50	4 3	250 250 350	4	1	2/0 2/0 3/0	2		
1 1	3/0 4/0	1/0 3/0	2,7 2,7 2,7	34 35	310 380	280 -	3 3.50	4 3	350 500	3	1/0 3/0	3/0 3/0	2 2		
1 1/0	4/0 4/0	3/0 3/0	2,7 2,7	36 37	380 400	344 -	4 2 EA 2	4 3	500 3/0	3 3	3/0 3/0	3/0 3/0	2 2		
1/0 1/0	4/0 300	3/0 3/0	2,7 2,4,7	38 39	400 510	360 -	2 EA 2.50 2 EA 2.50	4 3	3/0 250	3 1	3/0 4/0	3/0 3/0	2 2		
1/0 3/0	300 300	3/0 3/0	2,4,7 2,4,7	40 41	510 620	464 -	2 EA 3 2 EA 3	4 3	250 350	1 1/0	4/0 4/0	3/0 3/0	2 2,4		
3/0 3/0	300 300	3/0 4/0	2,4,7 2,4,7	42 43	620 760	560 -	2 EA 3 2 EA 3.50	4 3	350 500	1/0 1/0	4/0 4/0	3/0 3/0	2,4 2,4		
3/0 4/0	300 300	4/0 250	2,4,7 2,4,7	44 45	760 855	688 -	2 EA 4 3 EA 3	4 3	500 300	1/0 2/0	4/0 4/0	3/0 3/0	2,4 2,4		
4/0 4/0	300 300	250 250	2,4,7 4,7	46 47	855 1000	768 -	3 EA 3 3 EA 3.50	4 3	300 400	2/0 2/0	4/0 4/0	3/0 3/0	2,4 4		
4/0 250	300 300	250 250	4,7 4,7	48 49	1000 1140	912 -	3 EA 3.50 3 EA 4	4	400 500	2/0 3/0	4/0 4/0	3/0 3/0	4 4		
250 350	300 300	250 250	4,7 4,7	50 51	1140 1240	1032 -	3 EA 4 4 EA 3	4	500 350	3/0 3/0	4/0 4/0	3/0 3/0	4 4		
350 400	300 350	250 250	4,7 4,7	52 53	1240 1675	1120 1520	4 EA 3 5 EA 4	4	350 400	3/0 4/0	4/0 4/0	3/0 4/0	4 4		
400 600	500 750	250 750	4,7 4,7	54 55	2010 2660	1824 2408	6 EA 4 7 EA 4	4 4	400 500	250 350	250 350	250 350	4 4		
600 800 -	750 750 -	750 750 -	4,7 4,7 6	56 57 58	3040 4180 -	2752 3784 -	8 EA 4 11 EA 4 5 EA 4	4 4	500 500 -	500 500 -	500 500 -	500 500 -	4 4 6		⊖ SHEET KEYNOTES
-	-	-	6 6	59 60	-	-	5 10 EA 4	-	-	-	-	-	6 6	1.	LOCATE RECEPTACLES BEHIND DRINKING FOUNTAINS.
CTOR	SCHEDU	LE NOTE	S				CONDUIT	AND C				IOTES		2.	REFER TO ARCHITECTURAL ELEVATIONS FOR PLACEMEN
EACH C HWN U ORS PE	ONDUIT WI NLESS OTH FR TABLE 2	TH MODIFI ERWISE N 50-122 WH	CATIONS AS NOTED IN IOTED. EN CIRCUIT	1.	CONDUC IN NOTE	CTORS S	HOWN ARE S	SHOWN S SHOW	FOR EACH	CONDUIT	WITH MOI	DIFICATIONS	S AS NOTED D.	3.	LOCATE AT BOTTOM OF BEAMS (OR JOISTS) OR AT CEILIN .5 PERPENDICULAR TO BEAM OR JOIST DIRECTION.) FOR
PERE F	RATING SHO H CIRCUITS	OWN IN TA	BLE. COMPUTERS.	2.	PROVID BREAKE	E EQUIP RS ARE	MENT GROU	ND CONI		PER TABL E RATING	E 250-122 SHOWN IN	WHEN CIRC	UIT		REFER TO NEPA 72.
ED ON S		NTRANCE	CONDUCTORS.	3. 4. 5.	GROUN	C (G) CO SUBSC	NDUCTOR M.	AY BE DI	ELETED O	N SERVIC	E ENTRANO	CE CONDUC	TORS.	4.	LOCATE DETECTOR ANYWHERE IN SHADED AREA BUT NO
ORS, ORS.	SIZED AS S	SCHEDULE	DFOR		"2N":	INCLUD	E TWO NEUT	RAL CON		S, SIZED A	AS SCHEDU	ILED		5.	BEAM POCKET. FOR D > 4 REDUCE SPACING .33 PERPEN
BLE; TY R PRO	PE TWO-HO VIDE FEED	OUR FIRE ER ENCAS	ED IN		"CI"	PROVIE RESIST	E CIRCUIT IN	TEGRIT N COND	Y CABLE; T UIT OR PR	YPE TWO OVIDE FE	-HOUR FIR EDER ENC	E ASED IN			
IENT G NDUCT	ROUNDING ORS.		TOR TO		"FG"	FULL SI	ZE GROUND,	SIZE EG		GROUNDI	ING CONDL	ICTOR			
TO HIG NDUCT	H HARMON ORS DERA	IIC "NONLII TED	NEAR"		"HH":	NEUTR	SAME SIZE AS	S THE PH S EXIST	IASE CONE DUE TO HI G CONDUC	OUCTORS GH HARM	IONIC "NON	ILINEAR"			
d gro Round	UND COND OF EQUIPI	UCTOR) MENT GRO	UND			ACCOR GROUN	DINGLY. PRO		IE IG/HH S	IZE FOR T		MENT			
) CABLI T.	E; TYPE MC	IN PLACE	OF		"IG":	INCLUD SCHED CONDU	e IG (INSULA JLED ALONG CTOR.	IED/ISO WITH TH	LATED GR HE GROUN	UUND CO ID OF EQL	JIPMENT G	) ROUND			
DR "G" F THE S	CONDUCTO SECONDAR	OR SHOWN	I, WHICH		"MC"	PROVIE SINGLE	E FEEDER IN CONDUCTOF	I METAL- RS IN CC	CLAD CAB	LE; TYPE	MC IN PLA	CE OF			
BLE; T	YPE SE OR	SER IN PL	ACE OF		"SE":	SUBSTI WHICH THE SE	TUTE "SE" CO IS SIZED FOF PARATELY DI	ONDUCTOR THE GF ERIVED :	OR FOR "G ROUNDING SYSTEM.	" Conduc of the s	CTOR SHO	WN, Y OF			
					"SER"	PROVIE OF SING	E SERVICE-E GLE CONDUC	NTRANC	CE CABLE; I CONDUIT.	TYPE SE	OR SER IN	PLACE			
	JUNNEUI			6.	RACEW	AY ONLY	CONDUCT	ORS PRO	OVIDED BY	UTILITY.					

![](_page_22_Picture_10.jpeg)

![](_page_23_Figure_0.jpeg)

#### PLANT SCHEDULE

DECIDUOUS TREES BOTANICAL / COMMON NAME

CERCIS CANADENSIS / EASTERN REDBUD

#### MALUS X 'SPRING SNOW' / SPRING SNOW CRABAPPLE

CUPRESSUS NOOTKATENSIS `PENDULA` / WEEPING NOOTKA CYPRESS

ZELKOVA SERRATA / SAWLEAF ZELKOVA

EVERGREEN TREES BOTANICAL / COMMON NAME

\_\_\_\_\_

PICEA OMORIKA / SERBIAN SPRUCE

![](_page_23_Figure_8.jpeg)

•

.

GROUND COVERS BOTANICAL / COMMON NAME

\_\_\_\_\_<u>.</u>\_\_\_\_

NATIVE CABIN BLEND BY GRANITE SEED / GRANITE SEED

PICEA PUNGENS 'HOOPSII' / HOOPSII COLORADO SPRUCE

PINUS SYLVESTRIS 'FASTIGIATA' / ERECT SCOTCH PINE

PLANTING BED / MULCH

NATIVE CABIN BLEND - SEED MIX:

SPECIES

N1/N1/1

MOUNTAIN BROME (BROMUS MARGINATUS) SLENDER WHEATGRASS (ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS)

SANDBERG BLUEGRASS (POA SECUNDA SSP. SANDBERGII) BIG BLUEGRASS (POA SECUNDA SSP. AMPLA)

ROCKY MOUNTAIN FESCUE (FESTUCA SAXIMONTANA)

WESTERN WHEATGRASS (PASCOPYRUM SMITHII) BLUEBUNCH WHEATGRASS (PSEUDOROEGNERIA SPICATA SSP. SPICATA)

WESTERN YARROW (ACHILLEA MILLEFOLIUM VAR. OCCIDENTALIS)\* ROCKY MOUNTAIN PENSTEMON (PENSTEMON STRICTUS)\*

PRAIRIE CONEFLOWER (RATIBIDA COLUMNIFERA)\*

COLORADO BLUE COLUMBINE (AQUILEGIA COERULEA)\* ARROWLEAF BALSAMROOT (BALSAMORHIZA SAGITTATA)\*

ROCKY MOUNTAIN BEEPLANT (CLEOME SERRULATA)\* BLUE FLAX (LINUM PERENNE)\*

UTAH SERVICEBERRY (AMELANCHIER UTAHENSIS)\*

BASIN BIG SAGEBRUSH (ARTEMISIA TRIDENTATA SSP. TRIDENTATA)\* RUBBER RABBITBRUSH (ERICAMERIA NAUSEOSA)\*

RUBBER RABBITBRUSH (ERICAMERIA NAUSEOSA)\* ANTELOPE BITTERBRUSH (PURSHIA TRIDENTATA)\* QUICKGUARD STERILE TRITICALE\*

![](_page_23_Picture_27.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_23_Figure_30.jpeg)

**ESIGN REVIEW- NOT FOR CONSTRUCTION** 

n

![](_page_24_Figure_0.jpeg)

#### PLANT SCHEDULE

![](_page_24_Figure_2.jpeg)

CERCIS CANADENSIS / EASTERN REDBUD

MALUS X 'SPRING SNOW' / SPRING SNOW CRABAPPLE

ZELKOVA SERRATA / SAWLEAF ZELKOVA

EVERGREEN TREES BOTANICAL / COMMON NAME

CUPRESSUS NOOTKATENSIS `PENDULA` / WEEPING NOOTKA CYPRESS

PICEA OMORIKA / SERBIAN SPRUCE

PICEA PUNGENS 'HOOPSII' / HOOPSII COLORADO SPRUCE

PINUS SYLVESTRIS 'FASTIGIATA' / ERECT SCOTCH PINE

BOTANICAL / COMMON NAME

BERBERIS THUNBERGII 'NCBT2' TM / SUNJOY NEO BARBERRY

BUXUS MICROPHYLLA 'JULIA JANE' / JULIA JANE LITTLELEAF BOXWOOD

CORNUS SERICEA 'FLAVIRAMEA' / YELLOW TWIG DOGWOOD

NATIVE CABIN BLEND BY GRANITE SEED / GRANITE SEED

PENSTEMON CARDINALIS 'NATIVE ROOTS' / CARDINAL BEARDTONGUE

GROUND COVERS BOTANICAL / COMMON NAME

![](_page_24_Figure_17.jpeg)

SHRUBS

 $\langle \cdot \rangle$ 

PLANTING BED / MULCH

NATIVE CABIN BLEND - SEED MIX:

SPECIES MOUNTAIN BROME (BROMUS MARGINATUS) SLENDER WHEATGRASS (ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS) SANDBERG BLUEGRASS (POA SECUNDA SSP. SANDBERGII) BIG BLUEGRASS (POA SECUNDA SSP. AMPLA) ROCKY MOUNTAIN FESCUE (FESTUCA SAXIMONTANA) WESTERN WHEATGRASS (PASCOPYRUM SMITHII) BLUEBUNCH WHEATGRASS (PSEUDOROEGNERIA SPICATA SSP. SPICATA)

WESTERN YARROW (ACHILLEA MILLEFOLIUM VAR. OCCIDENTALIS)\* ROCKY MOUNTAIN PENSTEMON (PENSTEMON STRICTUS)\*

PRAIRIE CONEFLOWER (RATIBIDA COLUMNIFERA)\* COLORADO BLUE COLUMBINE (AQUILEGIA COERULEA)\*

ARROWLEAF BALSAMROOT (BALSAMORHIZA SAGITTATA)\* ROCKY MOUNTAIN BEEPLANT (CLEOME SERRULATA)\*

BLUE FLAX (LINUM PERENNE)\*

UTAH SERVICEBERRY (AMELANCHIER UTAHENSIS)\* BASIN BIG SAGEBRUSH (ARTEMISIA TRIDENTATA SSP. TRIDENTATA)\* RUBBER RABBITBRUSH (ERICAMERIA NAUSEOSA)\* ANTELOPE BITTERBRUSH (PURSHIA TRIDENTATA)\*

QUICKGUARD STERILE TRITICALE\*

![](_page_24_Picture_27.jpeg)

![](_page_24_Picture_28.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_24_Figure_31.jpeg)

Z

n

![](_page_25_Picture_0.jpeg)

![](_page_25_Figure_1.jpeg)

![](_page_25_Figure_2.jpeg)

- WESTERN YARROW (ACHILLEA MILLEFOLIUM VAR. OCCIDENTALIS)\*
- ROCKY MOUNTAIN PENSTEMON (PENSTEMON STRICTUS)\*
- PRAIRIE CONEFLOWER (RATIBIDA COLUMNIFERA)\*
- COLORADO BLUE COLUMBINE (AQUILEGIA COERULEA)\* ARROWLEAF BALSAMROOT (BALSAMORHIZA SAGITTATA)\*
- ROCKY MOUNTAIN BEEPLANT (CLEOME SERRULATA)\*
- BLUE FLAX (LINUM PERENNE)\*
- UTAH SERVICEBERRY (AMELANCHIER UTAHENSIS)\* BASIN BIG SAGEBRUSH (ARTEMISIA TRIDENTATA SSP. TRIDENTATA)\*
- RUBBER RABBITBRUSH (ERICAMERIA NAUSEOSA)\*
- ANTELOPE BITTERBRUSH (PURSHIA TRIDENTATA)\* QUICKGUARD STERILE TRITICALE\*

![](_page_25_Picture_12.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_25_Figure_15.jpeg)

SIGN REVIEW- NOT FOR CONSTRUCTION

n

60

Scale: 1" = 20'-0"

40

0 10 20

![](_page_26_Figure_0.jpeg)

SHRUB DETAIL NOT TO SCALE

#### LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL BE GRADE A, GROWN IN CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THIS WORK AND SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1 UNLESS OTHERWISE NOTED. PROVIDE TREES OF NORMAL GROWTH AND UNIFORM HEIGHTS, ACCORDING TO SPECIES, WITH STRAIGHT TRUNKS AND WELL DEVELOPED LEADERS, LATERALS, AND ROOTS.

2. EXISTING STRUCTURES SHOWN ON THE DRAWINGS ARE IN ACCORDANCE WITH AVAILABLE RECORDS. CONTRACTOR SHALL REFER TO CIVIL DRAWINGS FOR THE LOCATION OF UTILITIES AND EASEMENTS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, SIZE, AND TYPE OF UTILITIES AND STRUCTURES TO BE ENCOUNTERED ON THE PROJECT PRIOR TO ANY EXCAVATION AND CONSTRUCTION.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS, LICENSES, AND APPROVALS REQUIRED TO LEGALLY AND RESPONSIBLY COMPLETE THE WORK.

4. CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID DAMAGE TO EXISTING FEATURES AND FACILITIES SCHEDULED TO REMAIN AS PART OF THE FINISHED CONSTRUCTION. REPAIR, REPLACEMENT, AND/OR REMOVAL AS DETERMINED BY OWNER SHALL BE AT THE CONTRACTOR'S EXPENSE.

5. THE CONTRACTOR SHALL CALL BLUE STAKES AT 1-800-662-4111 FOR UNDERGROUND UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION.

6. CONTRACTOR SHALL ROUGH GRADE TO WITHIN +/- A TENTH OF A FOOT FROM FINISH GRADE. ALL SOD AREAS SHALL BE GRADED 4 INCHES BELOW PROPOSED FINISH GRADE. ALL SHRUB AREAS SHALL BE GRADED 12 INCHES BELOW PROPOSED FINISH GRADE.

7. CONTRACTOR SHALL INSTALL A MIN. OF 4 INCHES OF PLANTING SOIL FOR ALL SOD AREAS AND 12 INCHES OF PLANTING SOIL FOR ALL SHRUB AND PERENNIAL BEDS. EXISTING TOPSOIL MAY BE AMENDED AS AVAILABLE AT 3 CY. OF ORGANICS PER 1000 SF.

8. ALL COMPACTED AREAS DEVELOPED THROUGH CONSTRUCTION WITHIN PROPOSED LANDSCAPE AREAS SHALL BE SCARIFIED AND LOOSENED TO A DEPTH OF 12" PRIOR TO LANDSCAPE AND IRRIGATION WORK BEGINNING.

9. NO PLANT SPECIES SUBSTITUTIONS WILL BE MADE WITHOUT APPROVAL OF OWNER.

10. ALL PLANT LAYOUT SHALL BE VERIFIED AND APPROVED IN FIELD BY OWNER PRIOR TO PLANTING. FAILURE TO RECEIVE APPROVAL MAY RESULT IN RE-WORK BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. 11. ALL AREAS WITHIN AND AFFECTED BY THIS PROJECT SHALL HAVE

POSITIVE DRAINAGE. POSITIVE DRAINAGE SHALL BE PROVIDED TO DIRECT STORMWATER AWAY FROM ALL STRUCTURES.

12. ALL CLARIFICATIONS OF DISCREPANCIES BETWEEN THE DRAWINGS AND THE SITE SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO BEGINNING OF WORK.

13. CONTRACTOR TO PRESERVE AND PROTECT EXISTING LANDSCAPE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES INCIDENT TO CONSTRUCTION AND RESTORING LANDSCAPE TO PRECONSTRUCTION CONDITION. CONTRACTOR TO ENSURE EXISTING LANDSCAPE RECEIVES ADEQUATE WATER THROUGHOUT CONSTRUCTION.

JAIN FLEXSTRAP TREE TIE OR APPROVED EQUAL - STAKE DECIDUOUS TREES WITH 2 - 2" DIA. LODGE POLE PINE STAKES AT 180 DEGREES. FOR TREES LARGER THAN 2" CALIPER OR IN WINDY CONDITIONS, STAKE WITH 3 - 2" DIA. LODGE POLE PINE STAKES AT 120 DEGREES. EMBED MIN. 3' INTO GROUND. DRIVE FIRMLY INTO SUBGRADE. REMOVE STAKES AFTER ONE YEAR. - PLANT SO THAT TOP OF ROOTBALL IS 2" ABOVE FINISHED GRADE SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOTBALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL. - FINISH GRADE

- FORM SAUCER (NATIVE AREAS ONLY) PROVIDE MIN. 1'-6" RADIUS MULCH (4" DEPTH) COLLAR WHEN TREES ARE PLANTED IN SOD. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. - SOIL - SUBGRADE

PREPARED BACKFILL MIX - 30% EXISTING SOIL, 50% LOAMY TOPSOIL, AND 20% CLEAN SAND. WATER AND TAMP TO REMOVE AIR POCKETS. BRING LEVEL TO FINISH GRADE. SCARIFY SIDES OF PIT. - ROOTBALL- PLANT ON UNEXCAVATED OR TAMPED SOIL. REMOVE ALL WIRE, ENTIRE BASKET,

NYLON TIES, TWINE, ROPE, AND 2/3 BURLAP. TREE PLANTING - FLEX STRAP

DIAMETER SHALL BE

2 TIMES SIZE OF ROOTBALL

2

NOT TO SCALE

2" DIA. ONE CONTINUOUS STRAP. LODGEPOLE STAKE PINE STAKES, TYP. TREE TRUNK - ROOFING NAIL TYPICAL TREE STAKING WITH STRAPS — FLEXIBLE STRAP TREE TIES — TREE TRUNK - ROOFING NAIL - 2" DIA. LODGEPOLE STAKE PINE STAKES, TYP. TREES IN WINDY CONDITIONS OR LARGER THAN 2" CAL. TREE STAKING - FLEX STRAPS 3 NOT TO SCALE

> <u>SHRUBS</u>  $\langle \cdot \rangle$

 $\odot$ 

\_\_**\***\_\_

3

SPECIES MOUNT SLENDE SANDB BIG BL ROCKY WESTE BLUEBU

<b>PIANT</b>	SCHEDUI	F

۲

•

DECIDUOUS TREES BOTANICAL / COMMON NAME CONT CAL <u>QTY</u> CERCIS CANADENSIS / EASTERN REDBUD B&B 11/2" CAL 6 MALUS X 'SPRING SNOW' / SPRING SNOW CRABAPPLE B&B 11/2"CAL 5 ZELKOVA SERRATA / SAWLEAF ZELKOVA B&B 2" CAL 6 EVERGREEN TREES BOTANICAL / COMMON NAME <u>CONT</u> <u>CAL</u> <u>QTY</u> CUPRESSUS NOOTKATENSIS `PENDULA` / WEEPING NOOTKA CYPRESS B&B 6` HT MIN. 9 PICEA OMORIKA / SERBIAN SPRUCE B&B 6`HTMIN. 14 PICEA PUNGENS 'HOOPSII' / HOOPSII COLORADO SPRUCE B&B 6`HT MIN. 10 PINUS SYLVESTRIS 'FASTIGIATA' / ERECT SCOTCH PINE B&B 6`HT MIN. 21 CONT <u>QTY</u> **BOTANICAL / COMMON NAME** BERBERIS THUNBERGII 'NCBT2' TM / SUNJOY NEO BARBERRY 5 GAL 13 BUXUS MICROPHYLLA 'JULIA JANE' / JULIA JANE LITTLELEAF BOXWOOD 5 GAL 5 CORNUS SERICEA 'FLAVIRAMEA' / YELLOW TWIG DOGWOOD 5 GAL 3 PENSTEMON CARDINALIS 'NATIVE ROOTS' / CARDINAL BEARDTONGUE 5 GAL 23 GROUND COVERS BOTANICAL / COMMON NAME CONT NATIVE CABIN BLEND BY GRANITE SEED / GRANITE SEED SEED 71,617 SF BED 414 SF PLANTING BED / MULCH

NATIVE CABIN BLEND - SEED MIX:

SPECIES	PLS/ACRE
MOUNTAIN BROME (BROMUS MARGINATUS)	6.0
SLENDER WHEATGRASS (ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS)	5.0
SANDBERG BLUEGRASS (POA SECUNDA SSP. SANDBERGII)	1.0
BIG BLUEGRASS (POA SECUNDA SSP. AMPLA)	1.0
ROCKY MOUNTAIN FESCUE (FESTUCA SAXIMONTANA)	1.0
WESTERN WHEATGRASS (PASCOPYRUM SMITHII)	4.0
BLUEBUNCH WHEATGRASS (PSEUDOROEGNERIA SPICATA SSP. SPICATA)	2.0
WESTERN YARROW (ACHILLEA MILLEFOLIUM VAR. OCCIDENTALIS)*	0.10
ROCKY MOUNTAIN PENSTEMON (PENSTEMON STRICTUS)*	0.50
PRAIRIE CONEFLOWER (RATIBIDA COLUMNIFERA)*	0.40
COLORADO BLUE COLUMBINE (AQUILEGIA COERULEA)*	0.50
ARROWLEAF BALSAMROOT (BALSAMORHIZA SAGITTATA)*	2.00
ROCKY MOUNTAIN BEEPLANT (CLEOME SERRULATA)*	2.00
BLUE FLAX (LINUM PERENNE)*	1.00
UTAH SERVICEBERRY (AMELANCHIER UTAHENSIS)*	1.00
BASIN BIG SAGEBRUSH (ARTEMISIA TRIDENTATA SSP. TRIDENTATA)*	0.50
RUBBER RABBITBRUSH (ERICAMERIA NAUSEOSA)*	0.25
ANTELOPE BITTERBRUSH (PURSHIA TRIDENTATA)*	3.00
QUICKGUARD STERILE TRITICALE*	10.0

![](_page_26_Picture_29.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_26_Figure_32.jpeg)

NO

![](_page_27_Figure_0.jpeg)

### IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1IN. BALL VALVE WITH 1IN. PESB VALVE AND 1IN. PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3 GPM-20 GPM
	NETAFIM TLCV-09-12 DRIP RING
	AREA TO RECEIVE DRIPLINE NETAFIM TLCV-04-18 TECHLINE PRESSURE COMPENSATING LANDSCAPE DRIPLINE WITH CHECK VALVE. 0.4 GPH EMITTERS AT 18" O.C. DRIPLINE LATERALS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. 17MM.
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
С	CONTROLLER -CONNECT PROPOSED ZONES TO EXISTING SMART CONTROLLER - HUNTER PRO-HC-600 AND ACCESSORIES.
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40
	Valve Callout
# •	Valve Number

#" #•- Valve Flow Valve Size

![](_page_27_Picture_5.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_27_Figure_8.jpeg)

SIGN REVIEW- NOT FOR CONSTRUCTION

 $\square$ 

n

![](_page_28_Figure_0.jpeg)

#### IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
5	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1IN. BALL VALVE WITH 1IN. PESB VALVE AND 1IN. PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3 GPM-20 GPM
	NETAFIM TLCV-09-12 DRIP RING
	AREA TO RECEIVE DRIPLINE NETAFIM TLCV-04-18 TECHLINE PRESSURE COMPENSATING LANDSCAPE DRIPLINE WITH CHECK VALVE. 0.4 GPH EMITTERS AT 18" O.C. DRIPLINE LATERALS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. 17MM.
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
С	CONTROLLER -CONNECT PROPOSED ZONES TO EXISTING SMART CONTROLLER - HUNTER PRO-HC-600 AND ACCESSORIES.
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40
	Valve Callout
# •	Valve Number
# <mark>●</mark> #●	Valve Flow Valve Size

Sca	ale: 1"	= 20'-0"			
					(n)
0	10	20	40	60	

![](_page_28_Picture_4.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_28_Figure_7.jpeg)

NO Z

 $\cap$ 

![](_page_29_Figure_0.jpeg)

## IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1IN. BALL VALVE WITH 1IN. PESB VALVE AND 1IN. PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3 GPM-20 GPM
	NETAFIM TLCV-09-12 DRIP RING
	AREA TO RECEIVE DRIPLINE NETAFIM TLCV-04-18 TECHLINE PRESSURE COMPENSATING LANDSCAPE DRIPLINE WITH CHECK VALVE. 0.4 GPH EMITTERS AT 18" O.C. DRIPLINE LATERALS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. 17MM.
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
C	CONTROLLER -CONNECT PROPOSED ZONES TO EXISTING SMART CONTROLLER - HUNTER PRO-HC-600 AND ACCESSORIES.
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40
	Valve Callout
# •	Valve Number
#" #●	Valve Flow
	Valve Size

Sca	le: 1"	= 20'-0'	1		
					(n)
	10		1	Г 60	

![](_page_29_Picture_4.jpeg)

8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_29_Figure_7.jpeg)

NOI Ž -IGN REVIE S

#### **IRRIGATION NOTES**

1. THIS DRAWING IS DIAGRAMMATIC AND IS INTENDED TO CONVEY THE GENERAL LAYOUT OF IRRIGATION SYSTEM COMPONENTS. ALL IRRIGATION EQUIPMENT SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE. LOCATE MAINLINE AND VALVES NEAR WALKS WHERE FEASIBLE.

2. THE CONTRACTOR SHALL VERIFY THE AVAILABLE WATER PRESSURE AT THE SITE PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES BETWEEN THE WATER PRESSURE SHOWN ON THE DRAWINGS AND ACTUAL PRESSURE READINGS AT THE POINT OF CONNECTION TO THE LANDSCAPE ARCHITECT. WATER PRESSURE AT THE POINT OF CONNECTION IS EXPECTED TO BE A MINIMUM OF **65-70** PSI. IN THE EVENT THAT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL STRUCTURES, SITE IMPROVEMENTS, WALKS, UTILITIES, AND GRADE CHANGES, COORDINATE LAYOUT OF THE IRRIGATION SYSTEM WITH OTHER TRADES SO THAT CONSTRUCTION CAN CONTINUE IN A NORMAL SEQUENCE OF EVENTS. ADJUSTMENTS MAY BE NECESSARY TO MAINTAIN FULL COVERAGE DEPENDING ON ACTUAL SITE CONDITIONS. ANY SIGNIFICANT CHANGES WILL REQUIRE WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT. ALL MODIFICATIONS SHALL BE RECORDED ON 'AS-BUILT' DRAWINGS.

4. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM WHEN IT IS APPARENT IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADING DIFFERENCES MAY NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

5. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT SITE CONDITIONS AND EXISTING IRRIGATION SYSTEM (IF ANY). IN THE EVENT THAT THE CONTRACTOR DAMAGES, DISPLACES OR OTHERWISE CAUSES OTHER TRADES WORK TO BE REINSTALLED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ORIGINAL CONDITION AT HIS OWN EXPENSE.

6. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM PERFORMANCE. INSTALL HEADS WITH THE APPROPRIATE ARC AND RADIUS FOR THE AREA TO BE COVERED. ADJUST NOZZLES TO ELIMINATE OVERSPRAY ONTO WALKS, BUILDINGS, ETC.

7. IRRIGATION CONTROLLER(S) SHALL BE GROUNDED PER ESTABLISHED ASIC GUIDELINES.

8. IRRIGATION CONTROL WIRES SHALL BE COLOR CODED WIRE FOR DIRECT BURIAL. COMMON, HOT, & SPARE WIRES SHALL BE 14 AWG (WHITE, RED & YELLOW RESPECTIVELY). FOR CONTROL WIRE RUNS EXCEEDING 3000 FEET OR COMMON WIRE RUNS EXCEEDING 1500 FEET, USE 12 AWG WIRE. CONTRACTOR SHALL RUN 1 DEDICATED SPARE WIRE 'HOMERUN' FROM CONTROLLER TO TERMINUS OF EACH WIRE LEG. WHERE REQUIRED, COMMUNICATION WIRE TO FLOW SENSOR SHALL BE PAIGE ELECTRIC PE-39-3 CABLE. ALL WIRE SPLICES TO BE LOCATED IN VALVE BOX. ALL WIRE CONNECTIONS SHALL BE 3M DBRY.

9. ALL MAINLINES, LATERAL LINES, AND CONTROL WIRES UNDER PAVING SHALL BE INSTALLED IN SEPARATE SLEEVES.

10. ALL MAINLINE AND LATERAL LINE PIPE SHALL BE SCHEDULE 40 PVC THROUGH 3" PIPE. 4" TO 6" PIPE SHALL BE CLASS 200 PVC. ALL LATERAL LINE FITTINGS SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE NOTED. ALL MAINLINE FITTINGS UNDER 3" SHALL BE SCHEDULE 80 PVC. MAINLINE FITTINGS 3" AND LARGER SHALL BE HARCO DUCTILE IRON, RESTRAIN PER MANUFACTURER'S RECOMMENDATIONS.

11. CONTRACTOR SHALL USE WELD-ON P-70 PRIMER AND 711 LOW VOC CEMENT FOR ALL SOLVENT WELDED JOINTS.

12. ALL LINES SHALL SLOPE TO DRAIN. ADD MANUAL DRAINS AT ALL MAINLINE LOW POINTS AS NECESSARY FOR COMPLETE DRAINAGE OF THE ENTIRE SYSTEM. INDICATE ALL DRAIN LOCATIONS ON 'AS-BUILT' DRAWINGS.

13. ALL VALVE BOXES AND LIDS IN ROCK MULCH AREAS ARE TO BE TAN IN COLOR. VALVE BOXES AND LIDS IN BARK MULCH AND LAWN AREAS ARE TO BE STANDARD GREEN. ALIGN VALVE BOXES PARALLEL WITH EDGE OF PAVEMENT/PLANTING BEDS. WHERE FEASIBLE, LOCATE THE EDGE OF VALVE BOX 12"-18" FROM EDGE OF PAVEMENT.

14. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE, HEADS SHALL BE LOCATED 1" AWAY FROM AND 1/4" BELOW ADJACENT CURBS, WALLS, WALKS, AND MOWSTRIPS.

15. DRIP DISTRIBUTION TUBING TO BE BURIED BELOW MULCH AND STAKED AT MIN. 6' O.C. DRIP FITTINGS SHALL BE BARBED INSERT TYPE FITTINGS, COMPRESSION TYPE FITTINGS WILL NOT BE ACCEPTED. EMITTERS SHALL BE LOCATED ON UPHILL SIDE OF PLANTS. INSTALL DRIP FLUSH VALVE AT LOW POINT OF EACH DRIP ZONE AND AT THE END DRIP LINES.

16. GUARANTEE: ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF ACCEPTANCE AGAINST ALL DEFECTS IN MATERIAL, EQUIPMENT, AND WORKMANSHIP. GUARANTEE SHALL COVER REPAIR OF DAMAGE TO ANY PART OF THE PREMISES RESULTING FROM LEAKS OR OTHER DEFECTS IN MATERIAL, EQUIPMENT, OR WORKMANSHIP TO THE SATISFACTION OF THE OWNER. REPAIRS, IF REQUIRED, SHALL BE DONE PROMPTLY AND AT NO ADDITIONAL COST TO THE OWNER.

17. SEE DETAILS FOR ADDITIONAL INFORMATION. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

![](_page_30_Figure_18.jpeg)

- FITTINGS

![](_page_30_Figure_27.jpeg)

![](_page_30_Figure_28.jpeg)

![](_page_30_Picture_38.jpeg)

blu line designs planning landscape architecture design 8719 S. Sandy Parkway Sandy, UT 84070 p 801.913.7994

CONSULTANTS

![](_page_30_Figure_41.jpeg)