

ASD NEW ELEMENTARY #101

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BP1 - CONSTRUCTION BID SET
JUNE 02, 2020

ABBREVIATIONS NOT ALL ABBREVIATIONS MAY BE USED

A	AND	LAV	LAVATORY
@	AT	LB/LBS	POUND (S)
ACT	ACOUSTICAL CEILING TILE	MAT	MATERIAL (S)
ADJ	ADJUSTABLE	MAX	MAXIMUM
AFF	ABOVE FINISH FLOOR	MDF	MEDIUM DENSITY FIBERBOARD
ALT	ALTERNATE	MDF	MEDIUM DENSITY FIBERBOARD
ALUM	ALUMINUM	MEMB	MEMBRANE
APPROX	APPROXIMATE	MEZZ	MEZZANINE
ARCH	ARCHITECTURAL	MFR	MANUFACTURER
		MGR	MANAGER
BD	BOARD	MIN	MINIMUM
BLD	BUILDING	MIR	MIRROR
BLK	BLOCK (ING)	MISC	MISCELLANEOUS
BO	BOTTOM OF	MO	MASONRY OPENING
BRG	BEARING	MTD	MOUNT (ED)
BSMT	BASEMENT	MTL	METAL
BS	BOTH SIDES	MW	MICROWAVE
BS	BOTH WAYS		
CB	CABINET	N	NORTH
CC	CATCH BASIN	NC	NOT IN CONTRACT
CCSA	CUSTOM COLOR SELECTED BY ARCH	NO	NUMBER
CG	CORNER GUARD	NOM	NOMINAL
CHAM	CHAMFER	NRC	NOISE REDUCTION COEFFICIENT
CJ	CONTROL JOINT	NTS	NOT TO SCALE
CL	CENTER LINE	OC	ON CENTER
CLG	CEILING	OD	OUTSIDE DIAMETER
CLR	CLEAR	OFCDI	OWNER FURNISHED CONTRACTOR INSTALLED
CM	CONSTRUCTION MANAGER	OFD	OVERFLOW DRAIN
COL	COLLUM	OH	OVERHEAD
COMP	COMPUTER	OP	OPENING
CONC	CONCRETE	OPG	OPPOSITE
CONT	CONTINUOUS	OSB	ORIENTED STRAND BOARD
CSA	CONCRETE MASONRY UNIT	OZ	OUNCE
CSB	COLOR SELECTED BY ARCHITECT		
CSA	CERAMIC TILE	PERI	PERIMETER
D	DEPTH	PERM	PERMANENT
DB	DECK BEARING	PL	PLATE
DBL	DOUBLE	PLM	PLASTIC LAMINATE
DEPT	DEPARTMENT	PNL	PANEL
DF	DRINKING FOUNTAIN	PNT	PAINT (ED)
DN	Diameter	P.O.	POINT OF
DM	DIAMENSION	PAIR	PAIR
DN	DOWN	PT	POST TENSIONED
DRN	DRAIN	PART	PARTITION
DTU	DETAIL	PLY	PLYWOOD
DW	DISHWASHER	QT	QUARRY TILE
DWG	DRAWING		
E	EAST	R/RAD	RADIUS
(E)	EXISTING	REF	REFLECTED CEILING PLAN
EA	EXTERIOR INSULATION SYSTEM	RECS	RECESSED
EFS	EXPANSION JOINT	REF	REFERENCE
ELEC	ELECTRICAL	REFG	REFRIGERATOR
ELEV	ELEVATION	REINF	REINFORCE (ED)
EQ	EQUAL	REMO	REMOVE (ED)
EQUIP	EQUIPMENT	REPL	REPLACE
EVAP	EVAPORATIVE	REQD	REQUIRED
EXIST	EXISTING	REV	REVISION (S)
EXP	EXPANSION	RM	ROOM
EXT	EXTERIOR	RO	ROUGH OPENING
EW	ELECTRIC WATER COOLER	S	SOUTH
FA	FIRE ALARM	SALV	SALVAGE (ED)
FE	FLOOR DRAIN	SECT	SECTION
FDN	FOUNDATION	SF	SQUARE FOOT
FD	FIRE EXTINGUISHER	SIM	SIMILAR
FG	FIRE EXTINGUISHER CABINET	SLNT	SLANT
FG	FINISH GRADE	SPEC	SPECIFICATION (S)
FN	FIRE HYDRANT	SQ	SQUARE
FLR	FINISHED FLOOR	SS	STAINLESS STEEL
FLR	FLOOR	STC	SOUND TRANSMISSION CLASS
FLR	FLOOR	STD	STANDARD
F.O.	FACE OF	STL	STEEL
F.F.	FOOT FEET	STOR	STORAGE
FRP	FIBER REINFORCED PANEL	STRUC	STRUCTURE (AL)
FRT	FIRE RETARDANT TREATED WOOD	SUSP	SUSPENDED
FTG	FOOTING	SYM	SYMMETRY (ICAL)
FV	FIELD VERIFY	T	THICKNESS
GA	GAUGE	T & B	TOP AND BOTTOM
GA/V	GALVANIZED	T & G	TONGUE AND GROOVE
GB	GRAB BAR	TD	TO BE DETERMINED
GC	GENERAL CONTRACTOR	TEMP	TEMPORARY
GRD	GRADE	THRU	THROUGH
GYP	GYPSONUM REINFORCED PANEL	TOP OF	TOP OF
GWB	GYPSONUM WALLBOARD	TRNS	TRANSFORMER
HC	HOSE BIBB	TS	TUBE STEEL
HB	HANDICAP ACCESSIBLE	TYP	TYPICAL
HDW	HARDWARE	UNF	UNFINISHED
HDF	HIGH DENSITY FIBERBOARD	UNO	UNLESS OTHERWISE NOTED
HM	HOLLOW METAL	VAR	VARIABLE
H	HEIGHT	VAP	VAPOR BARRIER
H	HORIZONTAL	VCT	VINYL COMPOSITION TILE
ID	INSIDE DIAMETER	VERT	VERTICAL
ICF	INSULATED CONCRETE FORM	VEST	VESTIBULE
IN	INCH	VVC	VINYL WALLCOVERING
INCL	INCLUDE	W	WEST
INFO	INFORMATION	W	WIDTH
INT	INTERIOR	W	WITH
INSUL	INSULATOR, (D), (ION)	WC	WATER CLOSET
INV	INVERT	WD	WOOD
JST	JOIST	W/O	WITHOUT
JT	JOINT	W/SCOT	WAINSCOT
		WST	WELDED WIRE FABRIC

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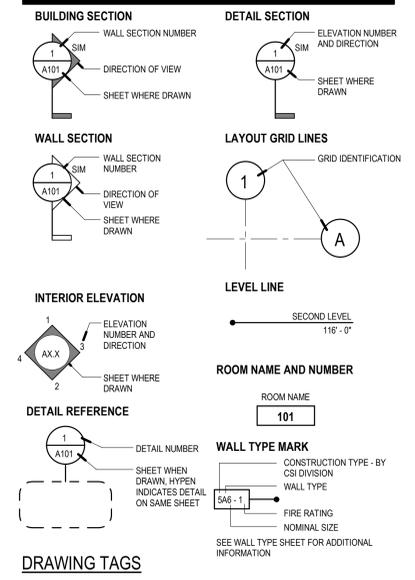
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REFERENCE SYMBOL LEGEND



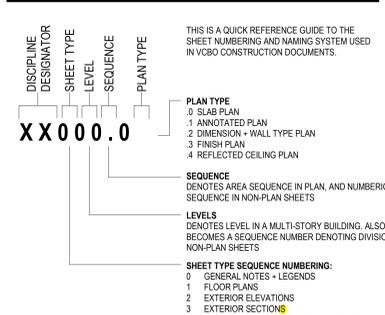
SHEET INDEX HIGHLIGHTED SHEETS HAVE BEEN INCLUDED IN THIS SUBMITTAL SET

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G403	A355	WALL SECTIONS
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G417	A453	VERTICAL CIRCULATION
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G428	A560	DETAILS - DOOR + WINDOW
G429	A561	DETAILS - DOOR + WINDOW
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L005	L005	LANDSCAPE PLAN
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L007	L007	IRRIGATION PLAN
L008	L008	IRRIGATION PLAN
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P401	P401	ENLARGED PLUMBING PLANS
P402	P402	ENLARGED PLUMBING PLANS
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E121.1	E121.1	LEVEL 02 - AREA 22 - POWER PLAN
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Grand total:	210	



SHEET NUMBERING + NAMING



PLUMBING FIXTURE ANALYSIS

IBC 2018 2902.1			
OCCUPANCY TYPE	E		
TOTAL APPLICABLE S.F.	86,854		
OCCUPANT LOAD FACTOR	2.368		
MAXIMUM ACTUAL OCCUPANTS AS DIRECTED BY THE SCHOOL DISTRICT	1,500		
OCCUPANT LOAD BASED ON PLUMBING FIXTURES PROVIDED	1,500		
DIVIDE BY 2	1,280.5	750	EA. MALE & FEMALE
WATER CLOSETS			
FEMALE (1:50)	24	15	REQUIRED PROVIDED
MALE (1:50)	24	15	REQUIRED PROVIDED
URINALS (97% OF WC IN E)	15	5	WC PROVIDED URINAL PROVIDED
LAVATORIES			
FEMALE (1:50)	24	15	REQUIRED PROVIDED
MALE (1:50)	24	15	REQUIRED PROVIDED
DRINKING FOUNTAINS (MIN FLOW PER 1109.5.1)			
1:100 (60% may be water coolers or bottled water per IPC 2012 410.3 Substitution)	24	15	REQUIRED PROVIDED
SERVICE SINK			
	1	8	REQUIRED PROVIDED

LEGEND - OCCUPANCY

Occupancy Category	Minimum Egress Requirements (Table 1004.1.1)	Occupant Load Factor	Total Occupants
LEVEL 01			
AC	Assembly - Concentrated (chairs only - not fixed)	7	738
BU	Business Areas	100	10
CL	Educational - Classrooms	20	658
ES	Educational - Classrooms	50	41
KT	Kitchens, Commercial	200	10
PL	Stages and Platforms	15	101
ST	Accessory Storage Areas, Mechanical, Equipment Room	300	8
LEVEL 02			
BU	Business Areas	100	6
CL	Educational - Classrooms	20	737
LR	Library - Reading Rooms	50	36
ST	Accessory Storage Areas, Mechanical, Equipment Room	300	7
PENTHOUSE			
ST	Accessory Storage Areas, Mechanical, Equipment Room	300	16
Grand total			
			2368

OCCUPANCY CLASSIFICATION (Ch. 3)

OCCUPANCY CLASSIFICATION	NET AREA	OCCUPANCY COUNT
-	19558 SF	0
-	7128 SF	33
A3	7200 SF	846
B	4815 SF	57
E	37261 SF	1743
F1	2121 SF	12
S1	2185 SF	12
S2	87 SF	1
	80355 SF	2704

DESIGN DATA

GOVERNING BUILDING CODES:
IBC 2018, to include Appendix J, ANSI 117-1 2009, NFPA 101 LIFE SAFETY 2018, IBC 2018, IPC 2018, IECC 2018, for commercial projects, IFGC 2018, NEC 2017

PROJECT DESCRIPTION: TWO STORY ELEMENTARY SCHOOL

OCCUPANCY TYPE - CH. 3
• E - EDUCATION (SECTION 505)

CONSTRUCTION TYPE - CH. 6
• TYPE II-B (SECTION 602)

ALLOWABLE BUILDING HEIGHT: PER TABLE 504.3: 75 FEET
• ACTUAL HEIGHT - 44' - 0"

ALLOWABLE STORIES ABOVE GRADE PLANE: PER TABLE 504.4: 3 STORIES
• ACTUAL STORIES - 2

BUILDING AREA: PER TABLE 506.2
• SINGLE OCCUPANCY, MULTISTORY BUILDING (506.2.3) WITH NONSEPARATED OCCUPANCIES (506.3) USING AN OCCUPANCY CLASSIFICATION OF E (INCLUDING OCCUPANCY CLASSIFICATIONS OF A3, B, E, F1, S1, AND S2, A3 IS NOT CONSIDERED A SEPARATE OCCUPANCY IN AN E BUILDING (303.1.3), RESULTING IN E AS THE MOST RESTRICTIVE CLASSIFICATION (508.3.1)). REFER TO 'OCCUPANCY CLASSIFICATION' FOR OCCUPANCY BREAKDOWN

ALLOWABLE - 108,750 SF
ACTUAL - 86,854 SF

EACH STORY ALLOWABLE - 54,375 SF
LEVEL 01 ACTUAL - 44,734 SF
LEVEL 02 ACTUAL - 37,849 SF
EQUIPMENT PLATFORM ACTUAL - 4,250 SF

W = 30
If = [1007 / 1007 - 25] 30 / 30 = 75
Ab = [43,500 - (14,500 x 75)] x 2 = 108,750 SF

INCIDENTAL USE AREAS: PER TABLE 509
• 1 HOUR FIRE BARRIER - MECHANICAL 156, AND OUTDOOR STORAGE 282
RESIST PASSAGE OF SMOKE (509.4.2) - NONE

FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (TABLE 601):
• PRIMARY STRUCTURAL FRAME - 0 HOUR
• BEARING WALLS (EXTERIOR) - 0 HOUR
• BEARING WALLS (INTERIOR) - 0 HOUR
• NON-BEARING WALLS & PARTITION (INTERIOR) - 0 HOUR
• FLOOR CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS - 0 HOUR
• ROOF CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS - 0 HOUR

AUTOMATIC SPRINKLER SYSTEM: PER SECTION 903 - YES

DESIGN OCCUPANCY LOAD: PER SECTION 1004
• LEVEL 01 - 1,566 OCCUPANTS
• LEVEL 02 - 786 OCCUPANTS
• EQUIP. PLATFORMS (PENTHOUSES) - 16 OCCUPANTS
• TOTAL - 2,368 OCCUPANTS

EGRESS WIDTH FOR OCCUPANCY SERVED: PER 1005
• REQUIRED STAIR WIDTH: 253 OCCS. x 0.3 = 76"
TOTAL STAIR WIDTH PROVIDED = 196"
• LEVEL 01: 1,566 OCCS. x 0.2 = 313" REQUIRED PROVIDED: 492"
• LEVEL 02: 786 OCCS. x 0.2 = 157" REQUIRED PROVIDED: 306"

EXIT ACCESS: CH. 10

COMMON PATH OF EGRESS TRAVEL: PER TABLE 1006.2.1 - 75 FEET

TRAVEL DISTANCE: PER TABLE 1017.2
• WITH SPRINKLER SYSTEM - 286' MAXIMUM LENGTH OF EXIT ACCESS TRAVEL
WITH SPRINKLER SYSTEM - 0 HOUR FIRE RATED CONSTRUCTION

CORRIDOR FIRE RESISTANCE RATING: PER TABLE 1020.1
• WITH SPRINKLER SYSTEM - 0 HOUR FIRE RATED CONSTRUCTION

MINIMUM CORRIDOR WIDTH: PER TABLE 1020.2 IN INCHES
• 36" WITH AN OCCUPANT LOAD OF LESS THAN 50
• 44" UNLESS NOTED OTHERWISE
• 72" GROUP E WITH OCCUPANT LOAD OF 100 OR MORE

DEAD END CORRIDOR LENGTH: PER 1020.4, EXCEPTION 2
• 50'-0" GROUP E WITH AUTOMATIC SPRINKLER SYSTEM

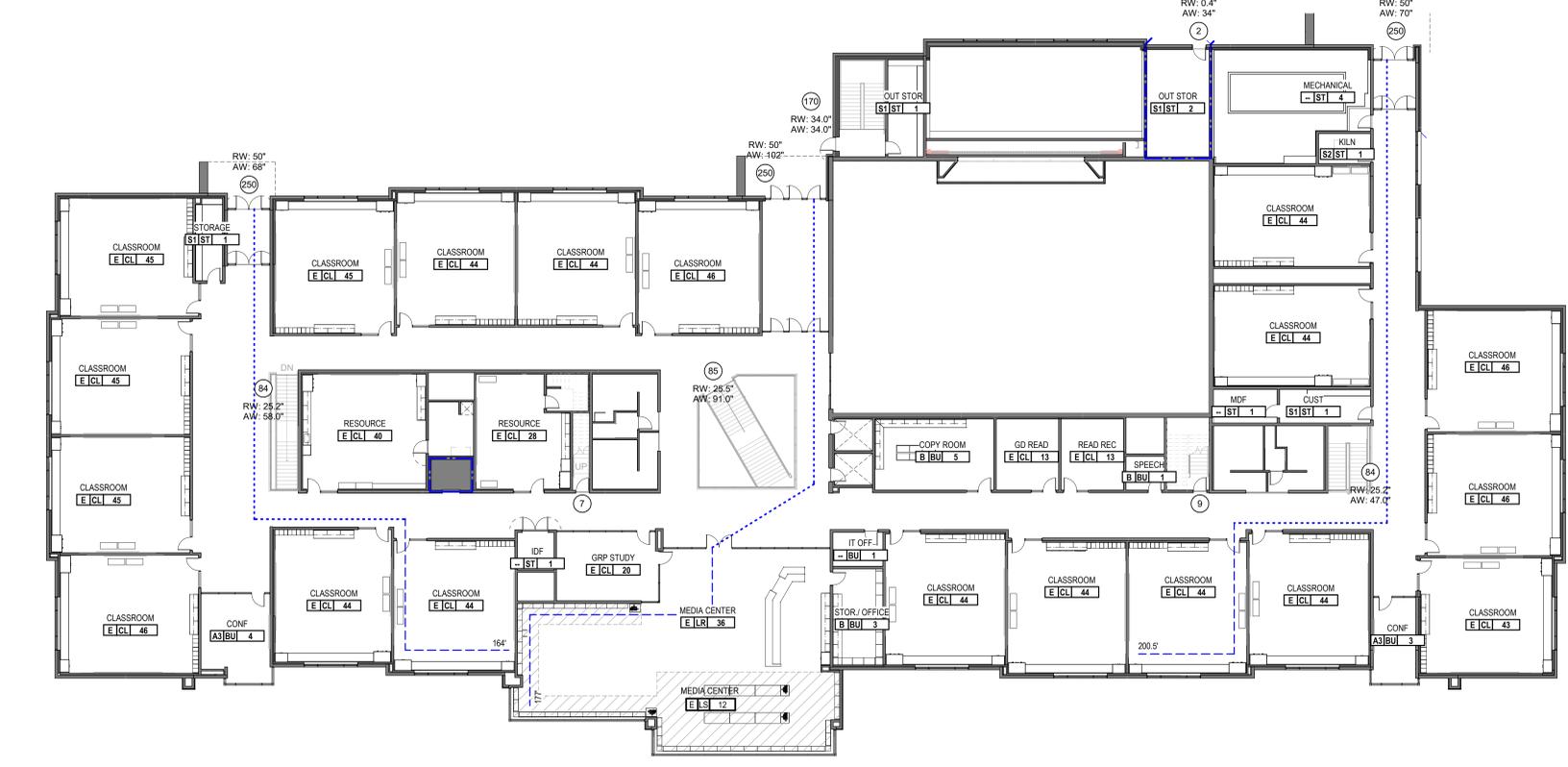
REV DATE DESCRIPTION

REV	DATE	DESCRIPTION

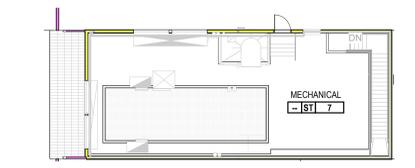
VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 02, 2020



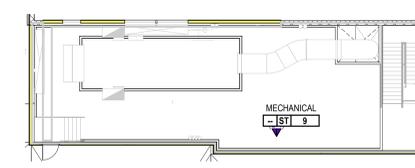
C3 PLAN - LEVEL 01 - CODE + LIFE SAFETY
SCALE: 1/16" = 1'-0"



A3 PLAN - LEVEL 02 - CODE + LIFE SAFETY
SCALE: 1/16" = 1'-0"



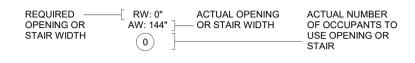
B5 PLAN - PENTHOUSE - SOUTH - CODE + LIFE SAFETY
SCALE: 1/16" = 1'-0"



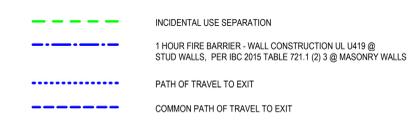
A5 PLAN - PENTHOUSE - NORTH - CODE + LIFE SAFETY
SCALE: 1/16" = 1'-0"

OCCUPANCY TAG GUIDE

OCCUPANCY CLASSIFICATION	ROOM TYPE (IBC CH. 3)	ACTUAL ROOM OCCUPANT LOAD	OCCUPANT LOAD TYPE (IBC TABLE 1004.1.2)
A3	CL 15		



FIRE RATING LEGEND





E5 SE EXTERIOR PERSPECTIVE

SCALE: NOT TO SCALE



D5 NE EXTERIOR PERSPECTIVE

SCALE: NOT TO SCALE



B5 NW EXTERIOR PERSPECTIVE

SCALE: NOT TO SCALE



A5 SW EXTERIOR PERSPECTIVE

SCALE: NOT TO SCALE

3D VIEW GENERAL NOTES

- THREE DIMENSIONAL VIEWS SHOWN IN THIS SET OF DRAWINGS ARE PROVIDED TO HELP EXPLAIN THE OVERALL CONCEPT AND INTENT OF THE BUILDING DESIGN AND ARE TO BE USED FOR REFERENCE ONLY.
- BIDDERS ARE NOT TO USE THESE VIEWS TO DETERMINE COMPONENT TYPES, QUANTITIES, ASSEMBLY METHODS OR ANY OTHER INFORMATION WHICH RELATE TO CONSTRUCTION COST.
- RENDERINGS MAY ALSO BE AVAILABLE TO VIEW AS 3D PANORAMIC IMAGES BY SCANNING THE QR CODE, OR BY CLICKING ON THE LINK IN THE PDF FILE. WHEN USING YOUR PHONE YOU CAN USE A GOOGLE CARDBOARD HEADSET FOR AN IMMERSIVE VIRTUAL ENVIRONMENT.

REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 02, 2020

GENERAL NOTES

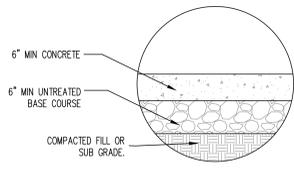
- ANY MODIFICATION TO THIS CONSTRUCTION PACKAGE SHALL BE APPROVED BY THE OWNER. PRIOR TO SAID APPROVAL, ALL IMPROVEMENT DRAWINGS SHALL BE RESUBMITTED AND APPROVED BY THE CITY ENGINEER.
- THE CONTRACTOR SHALL LOCATE, RETAIN AND PROTECT ALL EXISTING UTILITIES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. EXISTING GAS, TELEPHONE, POWER, OR WATERLINES WHICH MUST BE RELOCATED OR LOWERED FOR NEW GRAVITY LINES WILL BE COMPLETED BY THE CONTRACTOR TO THE UTILITY COMPANY SPECIFICATIONS.
- ALL SUITABLE EXCAVATION MATERIAL MAY BE STOCKPILED ON LANDSCAPE AREAS (NOT OVER 3'DEEP) AND GRADED TO DRAIN EXCESS TOPSOIL. SHALL BE REMOVED AND STORED AS INDICATED ON THE LANDSCAPE PLANS. SUITABLE MATERIAL IS DEFINED IN THE PROJECT GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT AS WELL AS CITY EARTHWORK SPECIFICATIONS. ALL EARTHWORK SHALL BE COMPLIANT WITH THESE DOCUMENTS. CITY SPECIFICATIONS AND THE GEOTECHNICAL REPORT ARE IN CONFLICT REFER TO THE CITY ENGINEER FOR DIRECTION ON WHICH REQUIREMENTS MUST BE FOLLOWED IN THE FIELD.
- TRACER TAPE SHALL BE PLACED ABOVE ALL SEWER, PVC ROOF DRAIN LINES, WATER AND SECONDARY WATER LINES PER CITY AND DISTRICT STANDARD SPECIFICATIONS. TRACER WIRE SHALL BE INSTALLED OVER THE WATER LINES.
- ALL EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY, AS INDICATED ON THE C200 SHEET. CONTRACTOR SHALL NOTIFY BLUE STAKES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION. CONTRACTOR SHALL PORTHOLE AND FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL UTILITY CONFLICTS UPON DISCOVERY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BACKFILLING, COMPACTING, AND PAVEMENT RESTORATION WHERE NECESSARY TO INSTALL NEW UTILITIES OR NEW IMPROVEMENTS PER CITY STANDARDS IN EXISTING ROADWAYS.
- CONTRACTOR SHALL PROVIDE CITY INSPECTOR WITH CONSTRUCTION SCHEDULE AFTER SAID SCHEDULE HAS BEEN APPROVED BY OWNER.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION DEMOLITION AND INSTALLATION OF ELECTRICAL, AND COMMUNICATION SERVICES WITH THE UTILITY COMPANY. OWNER SHALL PAY ALL ASSOCIATED UTILITY COMPANY FEES. CONTRACTOR TO PROVIDE ELECTRICAL, LINE OR COMMUNICATION TRENCHING AND BACKFILL. COORDINATE LOCATIONS WITH POWER AND COMMUNICATION COMPANY. REFER TO ELECTRICAL PLANS.
- CONTRACTOR TO KEEP A SET OF NEAT PLANS ON WHICH ALL CHANGES HAVE BEEN CLEARLY SHOWN. THIS SET OF REVISIONS SHALL BE TURNED INTO THE ARCHITECT.
- CONTRACTOR TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY PRIOR TO ANY WORK.
- ALL UTILITY STRUCTURES WITHIN PAVEMENT SHALL BE RAISED TO ACCURATE FINISHED GRADE WITH A CONCRETE COLLAR. SEE DETAIL ON THIS SHEET.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS, BONDS, AND APPROVALS HAVE BEEN OBTAINED. ALL PERMIT AND BOND FEES ARE TO BE PAID BY THE OWNER.
- NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED, AND THOROUGHLY REVIEWED, ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE CURRENT REQUIREMENTS AND DEVELOPMENT STANDARDS OF THE CITY. THE SOILS REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND SHALL TAKE PRECEDENCE IN CASE OF CONFLICT UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY BETWEEN THE SOILS REPORT AND PLANS ETC.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DUST AND EROSION CONTROL, CLEANING STREET AND OTHER SWMP REGULATIONS.
- ALL EXISTING ASPHALT TO REMAIN SHALL BE SAW CUT IN NEAT, STRAIGHT LINES BY THE CONTRACTOR PRIOR TO EXCAVATION.
- NO CHANGE IN DESIGN LOCATIONS OR GRADE WILL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE OWNER AND ENGINEER.
- CONTRACTOR SHALL NOT ALLOW ANY GROUND WATER, SURFACE WATER, ANIMALS, OR DEBRIS TO ENTER NEW PIPING DURING CONSTRUCTION.
- CONTRACTOR SHALL TAKE NECESSARY MEASURES TO PROTECT ALL NEW FACILITIES DURING THE CONSTRUCTION PERIOD UNTIL THE DESIGN GRADE AND COVER HAVE BEEN REACHED AND WORK HAS BEEN ACCEPTED BY OWNER.
- CONTRACTOR IS TO REMAIN WITHIN THE CONTRACT LIMITS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ADJACENT SURFACE IMPROVEMENTS DURING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF, OR DAMAGE TO, EXISTING AND NEW UTILITIES AND FACILITIES, INCLUDING WORK DONE WITHIN THE WARRANTY PERIOD.
- ALL ON-SITE PAVEMENT SECTIONS, GRADING, EXCAVATION, BACKFILLING, AND OTHER EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS PREPARED FOR THIS PROJECT. STRUCTURAL FILL, BEDDING, IMPORTED BACKFILL, GRANULAR SUBBASE, BASE COURSE AND ASPHALTIC CONCRETE MATERIALS SHALL MEET THE REQUIREMENTS OUTLINED IN THE PROJECT SPECIFICATIONS. ALL EARTHWORK AND PAVING IN CITY R.O.W. SHALL MEET CITY SPECS.
- COORDINATE GAS INSTALLATION WITH THE GAS COMPANY. GAS COMPANY WILL ROUTE GAS TO THE METER LOCATION SHOWN ON THE PLANS. ACCOMMODATE GAS COMPANY CONTRACTOR ON-SITE DURING GAS LINE INSTALLATION.
- SEE SHEET C200 FOR SURVEY CONTROL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS AND TRAFFIC PERMITS AND TRAFFIC CONTROL PLANS FOR ALL WORK IN CITY R.O.W. (EXISTING AND NEW ROADWAYS) PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION AND INSTALLATION OF ELECTRICAL, TELEPHONE, NATURAL GAS, AND SERVICES WITH THE UTILITY COMPANY. ASSOCIATED UTILITY COMPANY FEES WILL BE PAID AS OUTLINED IN CONTRACT GENERAL CONDITIONS. CONTRACTOR TO PROVIDE ELECTRICAL AND TELEPHONE LINE TRENCHING AND BACKFILL. COORDINATE LOCATIONS WITH ROCKY MOUNTAIN POWER AND CENTURY LINK. COORDINATE AND SCHEDULE WITH DOMINION ENERGY, CENTURY LINK, AND ROCKY MOUNTAIN POWER FOR CONNECTION OF THESE UTILITIES TO THE NEW BUILDING. GAS, TELEPHONE AND POWER ALL MUST BE EXTENDED TO THE SITE FROM THE NEW DEVELOPMENT IN THE AREA. COORDINATE WITH THESE UTILITIES FOR LOCATION OF THESE NEW EXTENSIONS.
- THE USE OF MOTOR OILS AND OTHER PETROLEUM-BASED OR TOXIC LIQUIDS, FOR DUST SUPPRESSION, IS ABSOLUTELY PROHIBITED.
- NO DRIVEWAY SHALL BE CONSTRUCTED TO CONVEY STORM RUNOFF TOWARDS ANY BUILDING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND MONUMENT REFERENCE MARKS WITHIN THE PROJECT SITE. CONTACT THE CITY OR COUNTY SURVEYOR FOR MONUMENT LOCATIONS AND CONSTRUCTION DETAILS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES AND FOR THE PROTECTION OF WORKERS.
- CONTACT FOR UTILITY COORDINATION INCLUDE:
SEWER-SARATOGA SPRINGS 801-766-9793
WATER-SARATOGA SPRINGS 801-766-9793
STORM-SARATOGA SPRINGS 801-766-9793
IRRIGATION-SARATOGA SPRINGS 801-766-9793
GAS-DOMINION ENERGY 1-800-323-5517
POWER-ROCKY MOUNTAIN POWER 1-800-469-3981
- THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING THAT MAY BE NEEDED TO COMPLETE THE JOB.
- CONTRACTOR TO COORDINATE INSTALLATION OF ALL LANDSCAPE SLEEVES PRIOR TO FORMING CONCRETE SIDEWALKS, RETAINING WALLS, SEAT WALLS OR STAR WALLS. SEE LANDSCAPE PLANS.

SARATOGA SPRINGS CITY STANDARD NOTES:

- CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND INNER ELEVATION OF EXISTING MANHOLE AND OTHER UTILITIES BEFORE STAKING OR CONSTRUCTING ANY NEW SEWER LINES.
- CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND INVERT ELEVATIONS OF EXISTING STORM DRAIN STRUCTURES AND OTHER UTILITIES BEFORE STAKING OR CONSTRUCTING ANY NEW STORM DRAIN LINES.
- OBTAIN AND COMPLY WITH STANDARD TECHNICAL SPECIFICATIONS AND DRAWINGS FOR THE CITY OF SARATOGA SPRINGS, UTAH
- EXISTING UTILITIES HAVE BEEN NOTED TO THE BEST OF THE ENGINEERS KNOWLEDGE, HOWEVER IT IS THE OWNERS AND CONTRACTORS RESPONSIBILITY TO LOCATE UTILITIES INFIELD AND NOTIFY CITY ENGINEER AND CITY IF DISCREPANCIES EXIST PRIOR TO CONTINUING IN ANY CONSTRUCTION.
- POST ACCEPTANCE ALTERATIONS TO LIGHTING PLANS OR INTENDED SUBSTITUTIONS FOR ACCEPTED LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND ACCEPTANCE.
- THE CITY RESERVES THE RIGHT TO CONDUCT POST-INSTALLATION INSPECTIONS TO VERIFY COMPLIANCE WITH THE CITY'S REQUIREMENTS AND ACCEPTANCE OF LIGHTING PLANS COMMITMENTS, AND IF DEEMED APPROPRIATE BY THE CITY TO REQUIRE REMEDIAL ACTION AT NO EXPENSE TO THE CITY.
- ALL EXTERIOR LIGHTING SHALL MEET IESNA FULL CUTOFF CRITERIA.

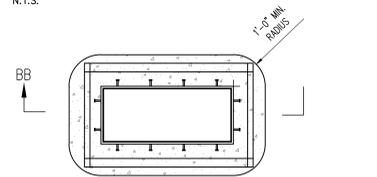
SPECIAL PROJECT NOTE

ALL CONSTRUCTION ACTIVITY WITHIN STREET ROW AND FOR SITE WATER LINES AND SEWER LINES SHALL CONFORM TO STANDARD TECHNICAL SPECIFICATIONS AND DRAWINGS FOR CITY OF SARATOGA SPRINGS, UTAH (JULY 16, 2019) CONTRACTOR SHALL OBTAIN COPIES OF SAID CITY STANDARDS, AND APWA STANDARDS (LATEST EDITION) PRIOR TO BID AND CONSTRUCTION.



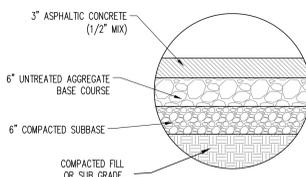
- NOTE:**
- USE FOR DUMPER PADS AND OTHER CONCRETE PAVING WITH VEHICLE TRAFFIC. AS INDICATED BY HATCH ON CIVIL SITE LAYOUT PLAN. REINFORCING FOR DUMPER PADS REFER TO ARCHITECTURAL SPECS.
 - PROOF ROLL NATURAL SUBGRADE PER SPECS.
 - PAVEMENT CONSTRUCTION DURING WET PERIODS WILL REQUIRE 12" OF GRANULAR FILL MATERIAL PLACED DIRECTLY BELOW THE GRANULAR FILL SUBBASE LAYER. INSTALL GEOTEXTILE FABRIC (MIRAFI 600X OR EQUIVALENT) WHERE SUBGRADE COMPACTION IS NOT FEASIBLE. PROVIDE ADDITIONAL FILL & FABRIC IF NECESSARY FOR COMPLETION SCHEDULE AT NO ADDITIONAL COST TO OWNER.
 - SEALED CONTRACTION JOINTS TO BE 1/2" DEEP. JOINT PATTERN AS OUTLINED ON ARCHITECTURAL SITE PLANS. 15' MAXIMUM SPACING.
 - SEAL ALL EXPANSION JOINTS PER SPECS.

CONCRETE PAVEMENT SECTION (ON SITE ONLY) N.T.S.



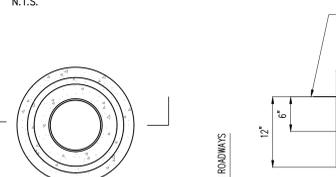
CATCH BASIN/JUNCTION BOX SECTION BB

- NOTE:**
- REQUIRED FOR EXISTING OR NEW CATCH BASINS (OUTSIDE OF C&G), CLEAN OUTS, VALVES OR MANHOLES IN THE PROJECT LIMITS AND WITHIN ASPHALT PAVEMENT.
 - WHERE CONCRETE PAVING IS COMPLETED AROUND UTILITY STRUCTURE, USE REINFORCEMENT SHOWN AROUND THE UTILITY STRUCTURE.
 - CONCRETE COLLARS ARE NOT REQUIRED IN LANDSCAPE AREAS.

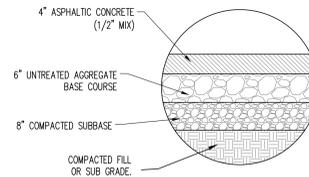


- NOTE:**
- USE FOR PARKING AREAS OR OTHER LIGHT VEHICLE TRAFFIC.
 - PROOF ROLL NATURAL SUBGRADE PER SPECS.
 - PAVEMENT CONSTRUCTION DURING WET PERIODS WILL REQUIRE 12" OF GRANULAR FILL MATERIAL PLACED DIRECTLY BELOW THE GRANULAR FILL SUBBASE LAYER. INSTALL GEOTEXTILE FABRIC (MIRAFI 600X OR EQUIVALENT) WHERE SUBGRADE COMPACTION IS NOT FEASIBLE. PROVIDE ADDITIONAL FILL & FABRIC IF NECESSARY FOR COMPLETION SCHEDULE AT NO ADDITIONAL COST TO OWNER.
 - STREET REPAIR IN CITY RIGHT OF WAY TO MEET CITY STANDARD ON C102.

ASPHALT PAVEMENT SECTION (ON SITE ONLY) N.T.S.

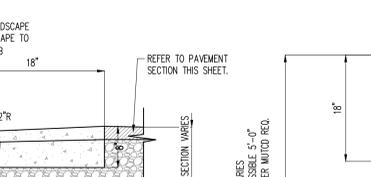


- NOTE:**
- REQUIRED FOR EXISTING OR NEW CATCH BASINS (OUTSIDE OF C&G), CLEAN OUTS, VALVES OR MANHOLES IN THE PROJECT LIMITS AND WITHIN ASPHALT PAVEMENT.
 - WHERE CONCRETE PAVING IS COMPLETED AROUND UTILITY STRUCTURE, USE REINFORCEMENT SHOWN AROUND THE UTILITY STRUCTURE.
 - CONCRETE COLLARS ARE NOT REQUIRED IN LANDSCAPE AREAS.



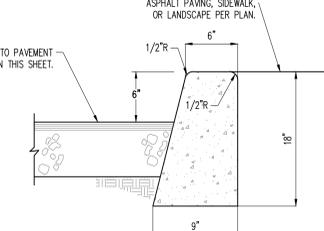
- NOTE:**
- USE FOR SITE ROADWAYS AND BUS AREAS, AND OTHER HEAVY TRAFFIC AREAS. AS INDICATED BY HATCH ON CIVIL SITE LAYOUT PLAN.
 - PROOF ROLL NATURAL SUBGRADE PER SPECS.
 - PAVEMENT CONSTRUCTION DURING WET PERIODS WILL REQUIRE 12" OF GRANULAR FILL MATERIAL PLACED DIRECTLY BELOW THE GRANULAR FILL SUBBASE LAYER. INSTALL GEOTEXTILE FABRIC (MIRAFI 600X OR EQUIVALENT) WHERE SUBGRADE COMPACTION IS NOT FEASIBLE. PROVIDE ADDITIONAL FILL & FABRIC IF NECESSARY FOR COMPLETION SCHEDULE AT NO ADDITIONAL COST TO OWNER.
 - STREET REPAIR IN CITY RIGHT OF WAY TO MEET CITY STANDARD ON C102.

HEAVY DUTY (ON SITE ONLY) ASPHALT PAVEMENT SECTION N.T.S.



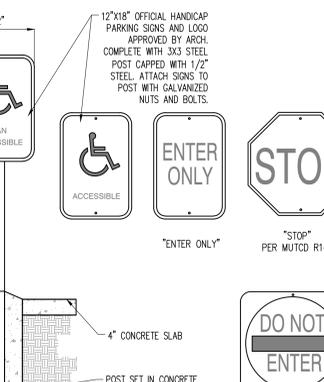
- NOTE:**
- CONCRETE SHALL BE MONOLITHIC 4000 PSI @ 28 DAYS (6% AIR ENTRAINED).
 - PLACE EXPANSION-CONTRACTION JOINTS AT ALL BC AND EC POINTS. PLACE CONTROL JOINTS AT 10' INTERVALS.
 - PLACE JOINT FILLER STRIPS BETWEEN WALK AND CURB TO DEPTH OF CONCRETE PLUS ONE INCH WITH TOP SET FLUSH WITH TOP BACK OF CURB.

CURB & GUTTER N.T.S.



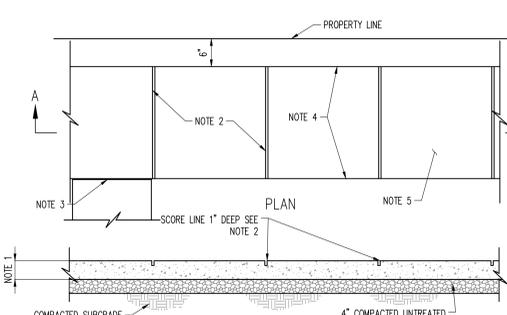
- NOTE:**
- REMOVE NON-ENGINEERED FILL BELOW CURB AND 2' MINIMUM BEYOND THE EDGE OF CONCRETE AND REPLACE WITH STRUCTURAL FILL. REFER TO SPEC. SECTION 312000 FOR SUBGRADES PREPARATION OVEREXCAVATION REQUIREMENTS.

CURB DETAIL N.T.S.



- NOTE:** ALL SIGNS TO CONFORM TO MUTCD 2009 STANDARDS.
- "STOP" PER MUTCD R1-1
 - "DO NOT ENTER" PER MUTCD R5-1
 - "MAINTENANCE & DELIVERIES ONLY"
 - "DROP OFF ONLY"
 - "NO PARKING FIRE LANE TOW AT OWNERS EXPENSE"

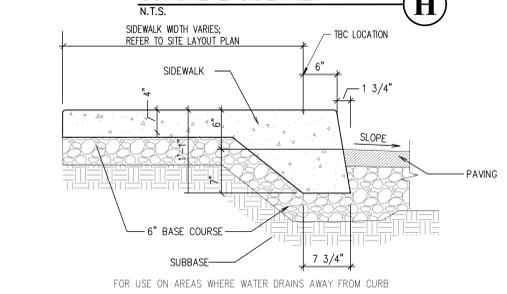
SIGN DETAIL N.T.S.



CONCRETE RING AROUND SURFACE UTILITY STRUCTURES N.T.S.

- NOTE:**
- USE MONOLITHIC CONSTRUCTION 4" THICK EXCEPT AT DRIVEWAYS WHERE THICKNESS OF 6" IS REQUIRED.
 - PLACE SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK.
 - USE 1/2" EXPANSION JOINT FILLER MADE OF PREMOULDED BITUMINOUS OR SIMILAR MATERIAL AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS OR DRIVEWAYS.
 - EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
 - USE HAIR-BROOM BRUSH TO FINISH SIDEWALKS.
 - OVER NEWLY BACKFILLED TRENCHES, PLACEMENT OF 2-10' #4 BARS IN SIDEWALK IS REQUIRED.
 - COORDINATE WITH ARCHITECTURAL PLANS FOR CONTROL JOINT LOCATIONS.
 - REMOVE NON-ENGINEERED FILL BELOW SIDEWALK AND 2' MINIMUM BEYOND THE EDGE OF CONCRETE AND REPLACE WITH STRUCTURAL FILL.

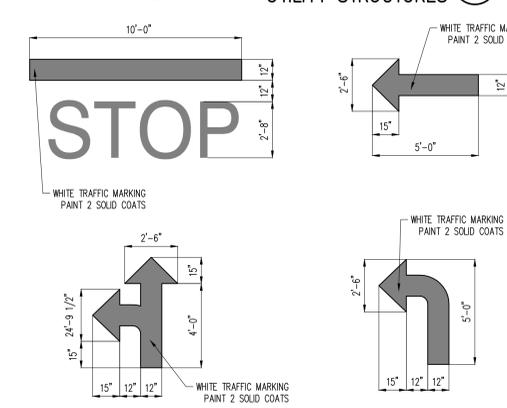
CONCRETE SIDEWALK N.T.S.



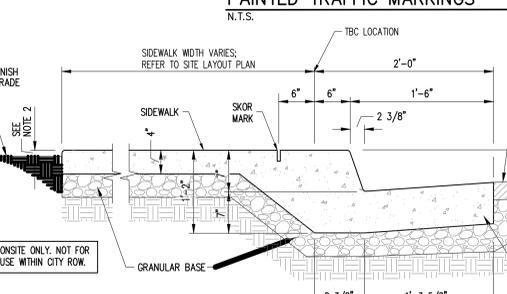
- NOTE:**
- USE MONOLITHIC CONSTRUCTION 4" THICK.
 - PLACE SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK.
 - USE 1/2" EXPANSION JOINT FILLER MADE OF PREMOULDED BITUMINOUS OR SIMILAR MATERIAL AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS.
 - EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
 - USE HAIR-BROOM BRUSH TO FINISH SIDEWALKS.
 - MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

MONOLITHIC SIDEWALK AND CURB DETAIL N.T.S.

CONCRETE RING AROUND SURFACE UTILITY STRUCTURES N.T.S.

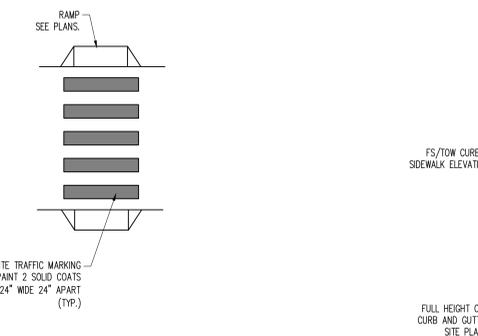


PAINTED TRAFFIC MARKINGS N.T.S.

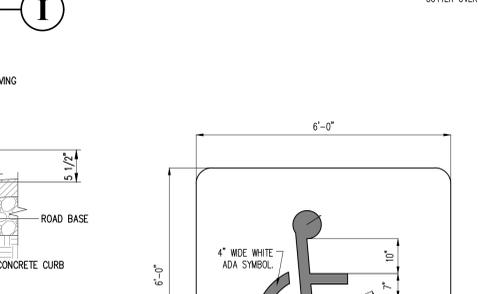


- NOTE:**
- USE MONOLITHIC CONSTRUCTION 4" THICK.
 - PLACE SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK.
 - USE 1/2" EXPANSION JOINT FILLER MADE OF PREMOULDED BITUMINOUS OR SIMILAR MATERIAL AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS.
 - EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
 - USE HAIR-BROOM BRUSH TO FINISH SIDEWALKS.
 - MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

MONOLITHIC SIDEWALK AND CURB AND GUTTER DETAIL N.T.S.

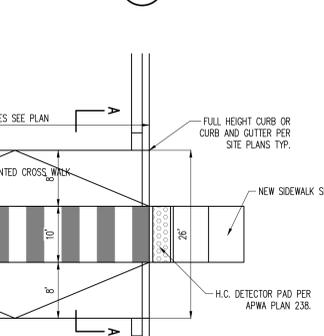


RAISED ADA SYMBOL N.T.S.

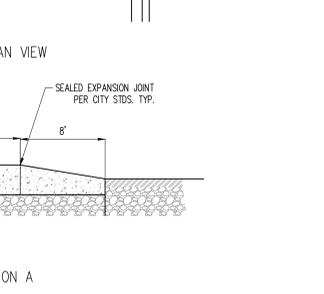


- NOTE:**
- USE MONOLITHIC CONSTRUCTION 4" THICK.
 - PLACE SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK.
 - USE 1/2" EXPANSION JOINT FILLER MADE OF PREMOULDED BITUMINOUS OR SIMILAR MATERIAL AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS.
 - EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
 - USE HAIR-BROOM BRUSH TO FINISH SIDEWALKS.
 - MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

PAINTED ADA SYMBOL N.T.S.



RAISED CROSSWALK N.T.S.



- NOTE:**
- USE MONOLITHIC CONSTRUCTION 4" THICK.
 - PLACE SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK.
 - USE 1/2" EXPANSION JOINT FILLER MADE OF PREMOULDED BITUMINOUS OR SIMILAR MATERIAL AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS.
 - EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
 - USE HAIR-BROOM BRUSH TO FINISH SIDEWALKS.
 - MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

MONOLITHIC SIDEWALK AND CURB DETAIL N.T.S.

VCBO ARCHITECTURE
524 SOUTH 900 EAST
SALT LAKE CITY, UT 84102
801.576.8800
VCBO.COM

MERIDIAN ENGINEERING, INC.

STATE OF UTAH
06/02/2020
NICHOLEEE LUTHE
8023333

REV DATE DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET

GENERAL NOTES AND DETAILS

C100



SECTION VIEW

PLAN VIEW

NOTES:

- HYDRANT SHALL BE "TRIFLY" TYPE WITH A REPLACEABLE BREAK-AWAY UNIT IMMEDIATELY ABOVE GROUND.

DATE	REVISION
06/02/2020	1. REVISED PER CITY COMMENTS

STANDARD DETAILS
DRINKING WATER
DW-4

NOTES:

- CITY TO BE GIVEN 72 HOUR NOTICE BEFORE LOOPING ANY WATERLINE WHEN SHUT OFF IS REQUIRED
- A CASE OR SLEEVE IS REQUIRED WHEN CROSSING GROUNDWATER UNDER SANITARY AND STORM SEWER.
- ENGINEER SHALL DETERMINE # AND LOCATION OF RESTRAINTS.

DATE	REVISION
06/02/2020	1. REVISED PER CITY COMMENTS

STANDARD DETAILS
DRINKING WATER
DW-3

SAFE BEARING LOADS

SOIL TYPE	SAFE BEARING LOAD (LB/FT ²)
SAND	1500
SAND & GRAVEL	3000
SAND & GRAVEL CEMENTED WITH CLAY SHALE	3000

THRUST ON FITTINGS

PIPE SIZE	90° BENDS	45° BENDS	22.5° BENDS
4"	18.5	28.1	14.2
6"	28	33.7	20.1
8"	35.8	53	25.9
10"	107.5	152	82.4
12"	153.1	216.4	112.3
14"	215.5	304.7	154.5
16"	281.5	398.1	204.8
18"	358.3	503.8	272.8
20"	438.8	622	338.6
24"	633.3	885.8	484.7

THRUST BLOCK AREA AGAINST TRENCH WALL (SQ. FT.)

PIPE SIZE	90° BENDS	45° BENDS	22.5° BENDS
4"	2.8	3.9	2.1
6"	5.7	8.1	4.4
8"	8.9	14.0	7.8
10"	16.1	22.8	12.4
12"	23.0	32.5	17.8
14"	32.3	45.7	24.7
16"	43.2	59.7	32.3
18"	53.4	75.8	40.8
20"	66.0	93.3	50.5
24"	95.0	134.3	72.7

DATE	REVISION
06/02/2020	1. REVISED PER CITY COMMENTS

STANDARD DETAILS
DRINKING WATER
DW-2

CROSS-SECTION-TYPICAL TRENCH

NOTES:

- VALVES 12 INCHES AND LARGER SHALL BE BUTTERFLY VALVES.
- WHENEVER POSSIBLE "HOT TAP" CONNECTIONS REQUIRED. HOT TAP VALVE TO BE SUPPORTED DURING CONNECTION. CONTRACTOR TO NOTIFY CITY 24 HOURS IN ADVANCE OF MAKING CONNECTION.
- PIPE ZONE SHALL BE BACKFILLED WITH BEDDING MATERIAL OR OTHER ACCEPTABLE MATERIAL.
- TRACING WIRE TO BE BROUGHT OUTSIDE OF BOTTOM PORTION OF VALVE BOX AND INSIDE TOP TO SURFACE.
- FURNISH AND INSTALL POLY-WRAP ON DUCTILE IRON PIPE.
- WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPROVED SHOULDER MATERIALS AS REQUIRED AND AS DIRECTED.
- RESIDENT PROJECT ENGINEER WILL CALCULATE QUANTITIES OF CONCRETE RESTS AND SPOTTY PLACEMENT METHODS & REQUIREMENTS. RESTS SHALL BE APPROVED BY CITY ENGINEER.
- CONCRETE SHALL BE 4000 PSI MIN.
- POUR CONCRETE AGAINST UNDISTURBED SOIL.

CONSTRUCTION NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND USMR REQUIREMENTS, LATEST EDITIONS).
- MINIMUM COVER OVER TOP OF PIPE SHALL BE 48-INCHES BELOW THE FINISHED GRADE. THIS DEPTH MAY BE INCREASED AS REQUIRED TO UNDERGROUND UTILITIES, STORM DRAINS, OR WHERE INDICATED ON THE DRAWINGS.
- CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 200 FEET OF UTILITY CROSSINGS SHOWN ON THE DRAWINGS OR AS "TIE-STRUCK".
- SEWER MAINS, WATER MAINS, GAS MAINS AND OTHER UTILITIES ARE SHOWN ON THE PLANS IN A GENERAL SCHEMATIC WAY ACCORDING TO INFORMATION RECEIVED FROM OTHERS AND SOMETIMES FROM FIELD MEASUREMENTS. THE ACCURACY OR COMPLETENESS OF THE LOCATIONS SHOWN IS NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF EXISTING SERVICE CONNECTIONS AND UTILITIES AND TAKE THE NECESSARY STEPS TO AVOID THEM.
- ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.
- THE CONTRACTOR MAY, AT HIS DISCRETION, USE SLOPING WALLS IN UNIMPROVED TERRAIN.
- THE PIPE ZONE WIDTH AS RECOMMENDED BY THE PIPE MANUFACTURER. THE WIDTH OF THE PIPE ZONE IS MEASURED AT THE PIPE SPRING LINE AND INCLUDES ANY NECESSARY SEATING IN TRENCH BOX APPLICATIONS FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. IN ROCKY SUB-GRADES A MINIMUM OF 18" CLEARANCE ON ALL SIDES OF PIPE SHALL BE PROVIDED.

DATE	REVISION
06/02/2020	1. REVISED PER CITY COMMENTS

STANDARD DETAILS
DRINKING WATER
DW-1

SECTION

NOTES:

- CASING PIPES SHALL BE REQUIRED AS INDICATED ON THE DRAWINGS AND/OR WHERE REQUIRED BY THE CITY INSPECTOR OR ENGINEER.
- THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE SIZED AT LEAST 4" LARGER THAN THE OUTSIDE DIAMETER OF CARRIER PIPE.
- CARRIER PIPE SHALL BE TESTED BEFORE SEALING THE ENDS OF THE CASING.
- SPACERS SHALL BE SECURELY ATTACHED TO CARRIER PIPE PER MANUFACTURER'S REQUIREMENTS.
- CASING PIPE SHALL BE WELDED STEEL, ASTM A53, GRADE B.
- THERE SHALL BE A MAXIMUM OF 1' FROM THE ENDS OF THE CASING TO THE SPACER.

MINIMUM WALL THICKNESS OF CASING	WALL THICKNESS
12" - 14"	0.189
14" - 18"	0.312
18" - 24"	0.375
24" - 30"	0.500
30" - 36"	0.600
36" - 42"	0.682

LARGER CASING AS DIRECTED BY THE CITY ENGINEER.

DATE	REVISION
06/02/2020	1. REVISED PER CITY COMMENTS

STANDARD DETAILS
DRINKING WATER
DW-16

NOTES:

- ALL WORK SHALL CONFORM TO APWA STANDARDS UNLESS OTHERWISE APPROVED BY CITY ENGINEER

DATE	REVISION
06/02/2020	1. REVISED PER CITY COMMENTS

STANDARD DETAILS
DRINKING WATER
DW-15

NOTES:

- INSPECTION: METER BOX AND SERVICE LINE SHALL BE INSPECTED BY CITY PRIOR TO BACKFILLING.
- BACKFILL: INSTALL BACKFILL IN LIFTS NOT EXCEEDING 8" AFTER COMPACTION. COMPACT EACH LIFT TO AN AVERAGE DRY DENSITY OF 97% WITH NO DENSITY TEST RESULT LESS THAN 90%.
- CONTRACTOR TO SUPPLY ALL MATERIALS EXCLUDING METER.
- METER BOXES SHALL BE A 4"x4"x4" CONCRETE VAULT.
- PIPE: INSTALL MINIMUM 2" CTS POLY PIPE FROM METER AND FROM METER TO BUILDING. INSTALL TRACING WIRE FROM MAIN LINE TO METER.
- PLACEMENT: ALL METERS ARE TO BE INSTALLED IN THE PARK STRIP, MUST BE PLACED NEAR THE MIDPOINT OF THE LOT, AND MUST NOT BE LOCATED IN A DRIVEWAY OR IN A SIDEWALK.
- METER SETTER SHALL BE MUELLER H-1423-2, OR ACCEPTABLE EQUAL. INSTALL CORRECT SIZE METAL PIPE TO STABILIZE SETTER.
- PIPE SPACERS SHALL BE MADE USING A COMPRESSION FITTING, MUELLER 110 COMPRESSION CONNECTION (MUELLER H-15403) W/ STAINLESS STEEL INSERTS.
- WATER SERVICES SHALL BE STUBBED TO A POINT APPROXIMATELY 1 (ONE) FOOT BEYOND UTILITY EASEMENT.
- IN TRAFFIC AREAS, BOXES SHOULD BE ABLE TO SUPPORT H-20 LOADING. (NOTE: TYPICALLY WATER METERS ARE NOT ALLOWED IN TRAFFIC AREAS)
- METER LD TO BE 1" ABOVE THE LINE GRADE OF WALK/CURB.
- 1 1/2-INCH METER INSTALLATION TO BE SIMILAR, USING 1 1/2-INCH METER, PIPE, FITTINGS AND SETTER.

DATE	REVISION
06/02/2020	1. REVISED PER CITY COMMENTS

STANDARD DETAILS
DRINKING WATER
DW-13B

NOTES:

- INSPECTION: METER BOX AND SERVICE LINE SHALL BE INSPECTED BY CITY PRIOR TO BACKFILLING.
- BACKFILL: INSTALL BACKFILL IN LIFTS NOT EXCEEDING 8" AFTER COMPACTION. COMPACT EACH LIFT TO AN AVERAGE DRY DENSITY OF 97% WITH NO DENSITY TEST RESULT LESS THAN 90%.
- CONTRACTOR TO SUPPLY ALL MATERIALS EXCLUDING METER.
- METER BOXES SHALL BE A 4"x4"x4" CONCRETE VAULT.
- PIPE: INSTALL MINIMUM 2" CTS POLY PIPE FROM METER AND FROM METER TO BUILDING. INSTALL TRACING WIRE FROM MAIN LINE TO METER.
- PLACEMENT: ALL METERS ARE TO BE INSTALLED IN THE PARK STRIP, MUST BE PLACED NEAR THE MIDPOINT OF THE LOT, AND MUST NOT BE LOCATED IN A DRIVEWAY OR IN A SIDEWALK.
- METER SETTER SHALL BE MUELLER H-1423-2, OR ACCEPTABLE EQUAL. INSTALL CORRECT SIZE METAL PIPE TO STABILIZE SETTER.
- PIPE SPACERS SHALL BE MADE USING A COMPRESSION FITTING, MUELLER 110 COMPRESSION CONNECTION (MUELLER H-15403) W/ STAINLESS STEEL INSERTS.
- WATER SERVICES SHALL BE STUBBED TO A POINT APPROXIMATELY 1 (ONE) FOOT BEYOND UTILITY EASEMENT.
- IN TRAFFIC AREAS, BOXES SHOULD BE ABLE TO SUPPORT H-20 LOADING. (NOTE: TYPICALLY WATER METERS ARE NOT ALLOWED IN TRAFFIC AREAS)
- METER LD TO BE 1" ABOVE THE LINE GRADE OF WALK/CURB.
- 1 1/2-INCH METER INSTALLATION TO BE SIMILAR, USING 1 1/2-INCH METER, PIPE, FITTINGS AND SETTER.

DATE	REVISION
06/02/2020	1. REVISED PER CITY COMMENTS

STANDARD DETAILS
DRINKING WATER
DW-6





TEMPORARY 2" BLOW-OFF VALVE

DATE	REVISION
06/02/2020	ISSUE FOR CONSTRUCTION

STANDARD DETAILS: PRESSURIZED IIR

4 INCH METER VAULT

DATE	REVISION
06/02/2020	ISSUE FOR CONSTRUCTION

STANDARD DETAILS: PRESSURIZED IIR

CONCRETE THRUST BLOCKS

PIPE SIZE (INCHES)	90° BENDS	45° BENDS	22.5° BENDS
4"	18.8	20.1	14.2
6"	29	32.7	23.1
8"	40.6	45	32.5
10"	52.3	57.6	41.7
12"	64.1	70.8	51.2
14"	75.9	84	60.9
16"	87.7	97.2	70.8
18"	99.5	110.4	80.8
20"	111.3	123.6	90.8
24"	134.5	149.4	111.2

STANDARD DETAILS: PRESSURIZED IIR

CROSS-SECTION: TYPICAL TRENCH

NOTES:

- VALVES 12 INCHES AND LARGER SHALL BE BUTTERFLY VALVES.
- WHENEVER POSSIBLE "HOT TAP" CONNECTIONS REQUIRED. HOT TAP VALVE TO BE SUPPORTED DURING CONNECTION.
- PIPE ZONE SHALL BE BACKFILLED WITH BEDDING MATERIAL, OR OTHER ACCEPTABLE MATERIAL.
- TRACING WIRE TO BE BROUGHT OUTSIDE OF BOTTOM PORTION OF VALVE BOX AND INSIDE TOP TO SURFACE.
- RESTORE EXIST. SURFACE USING TEE PATCH PER ST-28 CITY BITUMINOUS SURFACING BEFORE RESTORING SURFACE COURSE.
- WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.

STANDARD DETAILS: PRESSURIZED IIR

PRE-CAST SANITARY SEWER MANHOLE

DATE	REVISION
06/02/2020	ISSUE FOR CONSTRUCTION

STANDARD DETAILS: SANITARY SEWER

RECOMMENDED TRENCH QUANTITIES

PIPE DIAMETER (INCHES)	RECOMMENDED MAXIMUM TRENCH WIDTH FOR FILL IN PIPE ZONE	RECOMMENDED MAXIMUM WIDTH FOR FILL & SURFACING ABOVE PIPE ZONE MEASURED AT TOP OF TRENCH CENTERED ON PIPE
8	101.8	182.8
10	124.2	224.2
12	146.6	265.6
14	169.0	307.0
16	191.4	348.4
18	213.8	389.8
20	236.2	431.2
22	258.6	472.6
24	281.0	514.0
26	303.4	555.4
28	325.8	596.8
30	348.2	638.2
32	370.6	679.6
34	393.0	721.0
36	415.4	762.4
38	437.8	803.8
40	460.2	845.2
42	482.6	886.6
44	505.0	928.0
46	527.4	969.4
48	549.8	1010.8
50	572.2	1052.2
52	594.6	1093.6
54	617.0	1135.0
56	639.4	1176.4
58	661.8	1217.8
60	684.2	1259.2

STANDARD DETAILS: SANITARY SEWER

PRESSURIZED IRRIGATION PIPE CASING DETAIL

DIAMETER	MIN. THICKNESS
12" and under	0.1875"
14"	0.2125"
16"	0.2375"
18"	0.2625"
20"	0.2875"
22"	0.3125"
24"	0.3375"
26"	0.3625"
28"	0.3875"
30"	0.4125"
32"	0.4375"
34"	0.4625"
36"	0.4875"
38"	0.5125"
40"	0.5375"
42"	0.5625"
44"	0.5875"
46"	0.6125"
48"	0.6375"
50"	0.6625"
52"	0.6875"
54"	0.7125"
56"	0.7375"
58"	0.7625"
60"	0.7875"

STANDARD DETAILS: PRESSURIZED IIR

CONCRETE COLLAR FOR WATER VALVES

DATE	REVISION
06/02/2020	ISSUE FOR CONSTRUCTION

STANDARD DETAILS: PRESSURIZED IIR



REV DATE DESCRIPTION

VCBO NUMBER: 20101
CLIENT NUMBER:
DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET

SARATOGA SPRINGS
UTILITY AND STREET
DETAILS

PLAN VIEW

NOTES:

1. A MINIMUM 6" DEPTH OF ROADBASE MATERIAL SHALL BE PLACED TO GRADE AND COMPACTED TO 90% OF MAXIMUM DRY DENSITY UNDER DRIVEWAY, WATERWAY, AND CURB & GUTTER PRIOR TO PLACEMENT OF CONCRETE.
2. A MINIMUM 6" DEPTH OF ROADBASE MATERIAL SHALL BE PLACED TO GRADE AND COMPACTED TO 90% OF MAXIMUM DRY DENSITY UNDER SIDEWALK AT ALL OTHER LOCATIONS PRIOR TO PLACEMENT OF CONCRETE.
3. WHERE CONSTRUCTION IS ADJACENT TO STATE HIGHWAY FRONTAGE, STATE HIGHWAY DEPARTMENT REQUIREMENTS SHALL GOVERN.
4. CONCRETE SHALL BE 3/4 INCH MAXIMUM AGGREGATE, 6.3 BAGS PER YARD OF TYPE 2 CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
5. EXPANSION JOINTS FOR CURB & GUTTER ARE TO BE SPACED NO MORE THAN 100 FT. AND SIDEWALKS SHALL BE SPACED NO MORE THAN EVERY 40 FT. EXPANSION JOINTS SHALL BE CONSTRUCTED BY PLACING AN APPROVED MATERIAL, (TYPICALLY BITUMINOUS IMPREGNATED FIBERBOARD), THE FULL DEPTH OF THE CONCRETE. EXPANSION MATERIAL SHALL BE SET 1/2" BELOW THE FINISH LEVEL OF THE SIDEWALK.
6. CONSTRUCTION JOINT IS MADE BY SCORING THE CONCRETE WITH 1/2" RADIUS EDGING TOOL OR OTHER METHOD APPROVED BY ENGINEER.
7. SLOPE SIDEWALK TO ROADWAY AT 2% GRADE.
8. LOCATE ALL INLET GRATES 2' MINIMUM AWAY FROM THE PEDESTRIAN CROSSWALK, WITH ALL DRAINAGE INTERCEPTED BEFORE IT SETS TO THE CROSSWALK AREA.
9. THE SIDEWALK SHALL BE A MIN. 8" THICK CONCRETE.
10. IN ROCKY SUB-GRADES 18" OF BOTTOM OF TRENCH TO BOTTOM OF PIPE, MIN. OF 2' OF OUTSIDE DIAMETER.
11. INSTALL MAGNETIC DETECTOR TAPE WITH A MIN. OF 14 GAUGE COATED TRACER WIRE FOR ALL PVC OR OTHER PIPE.
12. PAINT LOT NUMBER AT PROPERTY LINE.
13. SEWER LATERAL LOCATIONS TO BE MARKED ON TOP OF CURB WITH AN S.
14. CULINARY WATER LATERAL LOCATIONS TO BE MARKED ON TOP OF CURB WITH AN W.
15. SECONDARY WATER LATERAL LOCATIONS TO BE MARKED ON TOP OF CURB WITH AN L.
16. WATER VALVE LOCATIONS TO BE MARKED ON TOP OF CURB WITH A V.

ST-1

CROSS-SECTION: TYPICAL TRENCH

NOTES:

1. THE CITY RECOMMENDS CONTRACTOR MEET ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND USFH REQUIREMENTS, LATEST EDITIONS).
2. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 50' OF SAID UTILITIES WHICH MAY BE EXPOSED, DAMAGED OR CROSSED AS SHOWN ON THE DRAWINGS OR AS "BLUE STAKES". THE CONTRACTOR WILL MAKE ARRANGEMENTS WITH THE UTILITY COMPANY TO MOVE THE UTILITY IF NECESSARY OR OBTAIN PERMISSION FROM THE CITY ENGINEER TO MODIFY GRADE OF PIPELINE IN ORDER TO GO AROUND UTILITIES.
3. TESTING: ALL STORM DRAIN LINES TO BE "WEDGED" AND NECESSARY REPAIRS MADE BEFORE ACCEPTANCE. A MANDREL OR BALL CAN BE USED TO VERIFY DEFORMATION OF A PIPE AS DETERMINED FROM THE VOID UNLESS SPECIFIED OTHERWISE.
4. ALL STORM DRAIN TO BE INSTALLED IN PUBLIC RIGHT-OF-WAY OR RECORDED DRAINAGE EASEMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.
6. MIN. DEPTH OF COVER SHALL MEET MANUFACTURERS RECOMMENDATIONS.
7. IN ROCKY SUB-GRADES 18" OF CLEARANCE SHALL BE PROVIDED ON ALL SIDES OF PIPE.
8. INSTALL MAGNETIC DETECTOR TAPE 3" ABOVE PIPE IN TRENCH.

SD-1

SEWER PIPE CASING

SEAL EACH END OF CASING WITH 1/2-INCH THICK SYNTHETIC RUBBER, PULL-ON TYPE END SEALS, AS MANUFACTURED BY PIPELINE SEAL AND INSULATOR, INC. OR EQUAL, LINE-SEAL AT EACH END OF CASING.

ANY VOIDS CREATED BY BORING, JACKING, OR TUNNELING SHALL BE FILLED BY PRESSURE GROUTING.

CASING SPACERS MANUFACTURED BY PIPELINE SEAL AND INSULATOR, INC. MODEL S122-2 SPACED EVERY 5-FT TO CENTER THE PIPE INSIDE THE CASING. PIPE THROUGHOUT THE LENGTH OF THE CASING SHALL BE AT A CONTINUOUS GRADE AS SHOWN IN DRAWINGS.

DIAMETER	WALL THICKNESS
12" and under	0.188"
14" - 16"	0.215"
20" - 22"	0.275"
24" - 26"	0.335"
28" - 30"	0.400"
34" - 42"	0.562"

LAGGED CASING AS DIRECTED BY THE CITY ENGINEER.

NOTES:

1. CASING PIPES SHALL BE REQUIRED AS INDICATED ON THE DRAWINGS AND/OR WHERE REQUIRED BY THE CITY INSPECTOR OR ENGINEER.
2. THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE SIZED AT LEAST 4" LARGER THAN THE OUTSIDE DIAMETER OF CARRIER PIPE.
3. CARRIER PIPE SHALL BE TESTED BEFORE SEALING THE ENDS OF THE CASING.
4. SPACERS SHALL BE SECURELY ATTACHED TO CARRIER PIPE PER MANUFACTURER'S REQUIREMENTS.
5. CASING PIPE SHALL BE WELDED STEEL, ASTM A53, GRADE B.
6. THERE SHALL BE A MAXIMUM OF 1" FROM THE ENDS OF THE CASING TO THE SPACER.

SS-4

SEWER SERVICE CONNECTION

NOTES:

1. ALL RESIDENTIAL SERVICES SHALL BE 4" DIAMETER, NON-RESIDENTIAL SHALL BE 6" DIAMETER UNLESS DIRECTED OTHERWISE AND SHALL BE EXTENDED FROM MAIN LINES TO PROPERTY LINES.
2. EVERY RESIDENTIAL UNIT SHALL HAVE A SEPARATE SEWER LATERAL.
3. MINIMUM GRADE SHALL BE 2% FOR SERVICE LINES.
4. ALL 90° BENDS AT CONNECTION TO MAIN MUST BE CONSTRUCTED WITH ONE 45° BEND AND A WYE.
5. DIRECT NOSE ON IS ALLOWED WHEN CONNECTING TO EXISTING MAIN LINE. USE RUBBER BOOT AS PER CITY WITH STAINLESS STEEL STRAPS, IF REQUIRED. CORE CUT EXISTING PIPE, DO NOT BREAK OUT WITH A HAMMER.
6. NOTIFY CITY 24 HOURS IN ADVANCE OF ANY CONNECTION. EVERY CONNECTION TO BE INSPECTED BY CITY.
7. CONNECTION TO USERS TO BE DONE BY OTHERS.
8. CAST IRON WYES ARE REQUIRED FOR ALL NON-RESIDENTIAL CONNECTIONS.

SS-3

COMMERCIAL DRIVE APPROACH

NOTES:

1. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
2. PLACE 1/2" EXPANSION JOINT BETWEEN DRIVEWAY APRON AND CURB AND IN THE DRIVEWAY CENTERLINE IF "W" IS GREATER THAN 20', FILLER MATERIAL SHALL BE FULL DEPTH OF CONCRETE PLUS 1", WITH TOP SET FLUSH WITH TOP OF CONCRETE.
3. USE UNIMPROVED ROADBASE UNDER CURB, GUTTER AND SIDEWALK COMPACT TO 90% OF THE MAXIMUM DRY DENSITY.
4. ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 2:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO STAY WITHIN 2:1 RATIO.
5. BACK EDGE OF SIDEWALK TO BE SET AT AN ELEVATION 2% HIGHER THAN THE TOP BACK OF CURB.
6. SIDEWALK TO BE A MINIMUM OF 5 FEET WIDE UNLESS OTHERWISE SPECIFIED.
7. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CITY'S STANDARD SPECIFICATIONS.

ST-4B

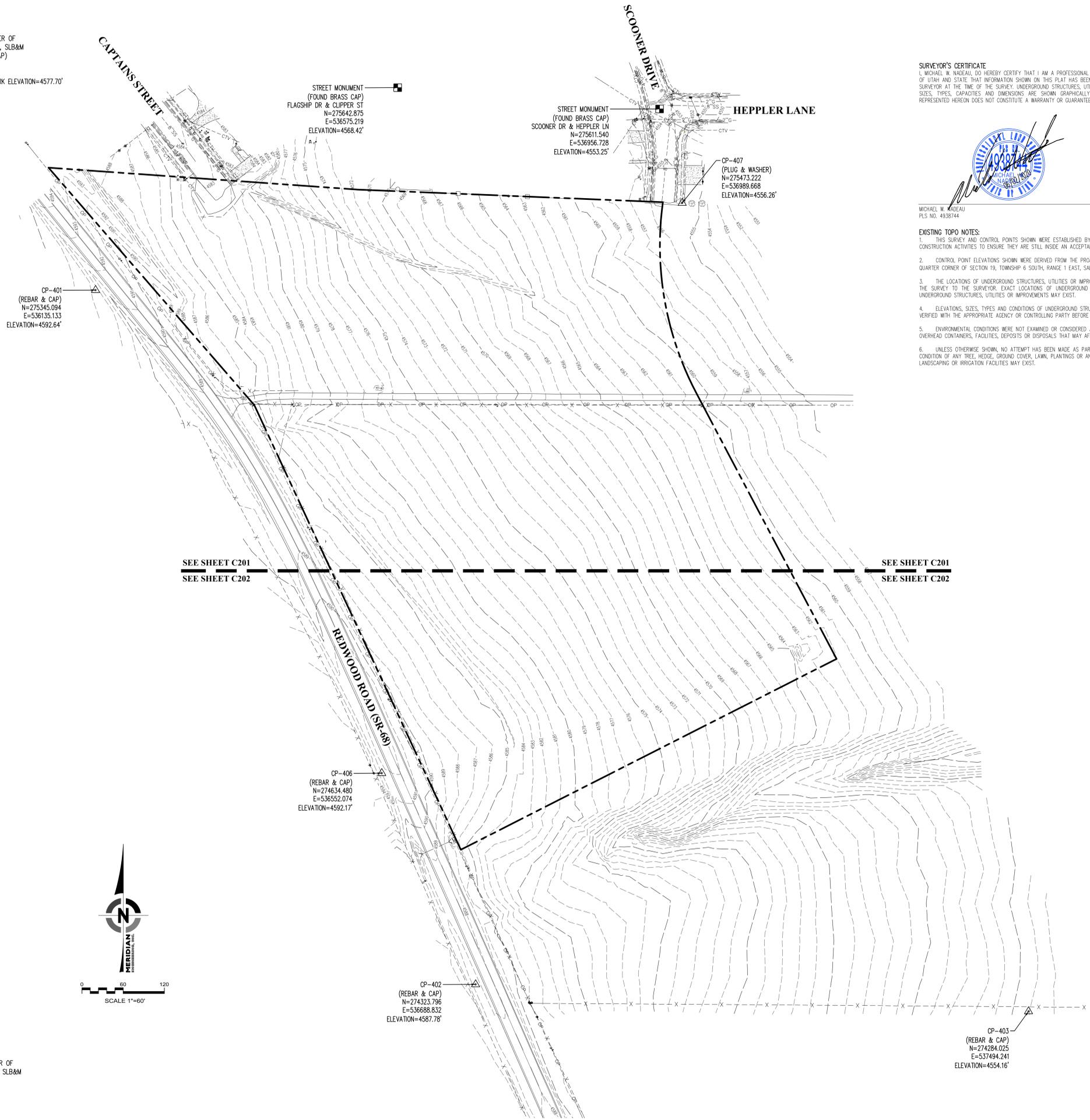


SURVEYOR'S CERTIFICATE
I, MICHAEL W. NADEAU, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, HOLDING CERTIFICATE NUMBER 4938744, AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH AND STATE THAT INFORMATION SHOWN ON THIS PLAN HAS BEEN OBTAINED THROUGH SURFACE SURVEYS OF STRUCTURES, UTILITIES AND IMPROVEMENTS VISIBLE TO THE SURVEYOR AT THE TIME OF THE SURVEY. UNDERGROUND STRUCTURES, UTILITIES AND IMPROVEMENTS HAVE NOT BEEN SURVEYED. UNDERGROUND FEATURES, INCLUDING ELEVATIONS, SIZES, TYPES, CAPACITIES AND DIMENSIONS ARE SHOWN GRAPHICALLY AS OBTAINED THROUGH MUNICIPAL OR GOVERNING ENTITY RECORDS AND MAPS. INFORMATION AS REPRESENTED HEREON DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.



MICHAEL W. NADEAU
PLS NO. 4938744

- EXISTING TOPO NOTES:**
- THIS SURVEY AND CONTROL POINTS SHOWN WERE ESTABLISHED BY MERIDIAN ENGINEERING, INC. IN MARCH OF 2020. ALL CONTROL POINTS SHOULD BE VERIFIED PRIOR TO CONSTRUCTION ACTIVITIES TO ENSURE THEY ARE STILL INSIDE AN ACCEPTABLE MEASUREMENT TOLERANCE.
 - CONTROL POINT ELEVATIONS SHOWN WERE DERIVED FROM THE PROJECT BENCHMARK USING DIFFERENTIAL LEVELING. PROJECT BENCHMARK FOR THIS PROJECT IN THE NORTH QUARTER CORNER OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN (ELEVATION=4577.70').
 - THE LOCATIONS OF UNDERGROUND STRUCTURES, UTILITIES OR IMPROVEMENTS AS SHOWN HEREON ARE BASED ON ABOVE GROUND APPURTENANCES VISIBLE AT THE TIME OF THE SURVEY TO THE SURVEYOR. EXACT LOCATIONS OF UNDERGROUND STRUCTURES, UTILITIES OR IMPROVEMENTS MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL UNDERGROUND STRUCTURES, UTILITIES OR IMPROVEMENTS MAY EXIST.
 - ELEVATIONS, SIZES, TYPES AND CONDITIONS OF UNDERGROUND STRUCTURES, UTILITIES OR IMPROVEMENTS AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED WITH THE APPROPRIATE AGENCY OR CONTROLLING PARTY BEFORE DESIGN OR CONSTRUCTION.
 - ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS, FACILITIES, DEPOSITS OR DISPOSALS THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY.
 - UNLESS OTHERWISE SHOWN, NO ATTEMPT HAS BEEN MADE AS PART OF THIS PLAN AND THE SURVEY ON WHICH IT IS BASED TO DISCLOSE THE LOCATIONS, SIZE, TYPE OR CONDITION OF ANY TREE, HEDGE, GROUND COVER, LAWN, PLANTINGS OR ANY OTHER LANDSCAPING OR SPRINKLER HEADS, PIPES OR ANY APPURTENANT PARTS THEREOF. ADDITIONAL LANDSCAPING OR IRRIGATION FACILITIES MAY EXIST.



SEE SHEET C201
SEE SHEET C202

LEGEND

	PROPERTY BOUNDARY
	SECTION LINE
	EXISTING OVERHEAD POWER LINE
	EXISTING STORM DRAIN LINE
	EXISTING SEWER LINE
	EXISTING WATER LINE
	EXISTING BURIED TELEPHONE LINE
	EXISTING TELEPHONE LINE
	EXISTING CABLE LINE
	EXISTING FIBER OPTIC LINE
	EXISTING GAS LINE
	EXISTING DECORATIVE FENCE
	EXISTING CURB & GUTTER
	EXISTING MAJOR CONTOUR LINE
	EXISTING MINOR CONTOUR LINE
	EXISTING CONCRETE
	EXISTING BUILDING
	EXISTING POWER POLE W/ LIGHT STAND
	EXISTING SEWER MANHOLE
	EXISTING STORM DRAIN MANHOLE
	EXISTING WATER MANHOLE
	EXISTING CATCH BASIN
	EXISTING CLEAN OUT
	EXISTING WATER METER
	EXISTING GAS METER
	EXISTING ELECTRICAL BOX
	EXISTING IRRIGATION BOX
	EXISTING ELECTRICAL TRANSFORMER
	EXISTING WATER VALVE
	EXISTING FIRE HYDRANT
	EXISTING FENCE POST
	EXISTING BOLLARD
	EXISTING LIGHT POLE
	EXISTING PINE TREE
	EXISTING DECIDUOUS TREE
	CONTROL MONUMENT
	FOUND STREET MONUMENT
	FOUND SECTION CORNER



NORTH 1/4 CORNER OF
SEC. 19, T6S, R1E, SLB&M
(FOUND BRASS CAP)
N=276486.805
E=535796.221
PROJECT BENCHMARK ELEVATION=4577.70'

STREET MONUMENT
(FOUND BRASS CAP)
FLAGSHIP DR & CLIPPER ST
N=275642.875
E=536575.219
ELEVATION=4568.42'

STREET MONUMENT
(FOUND BRASS CAP)
SCHOONER DR & HEPLER LN
N=275611.540
E=536556.728
ELEVATION=4553.25'

CP-407
(PLUG & WASHER)
N=275473.222
E=536989.668
ELEVATION=4556.26'

CP-401
(REBAR & CAP)
N=275345.094
E=536135.133
ELEVATION=4592.64'

CP-406
(REBAR & CAP)
N=274634.480
E=536552.074
ELEVATION=4592.17'

CP-402
(REBAR & CAP)
N=274323.796
E=536688.832
ELEVATION=4587.78'

CP-403
(REBAR & CAP)
N=274284.025
E=537494.241
ELEVATION=4554.16'

BASIS OF BEARING
110.00047°E (MONUMENT TO MONUMENT)
*STATION FOR PROPOSED REPRESENTATIVE ONLY.
MONUMENTS ARE FURTHER EAST THAN SHOWN.

NORTH 1/4 CORNER OF
SEC. 19, T6S, R1E, SLB&M
FOUND BRASS CAP
N=271232.844
E=535772.676

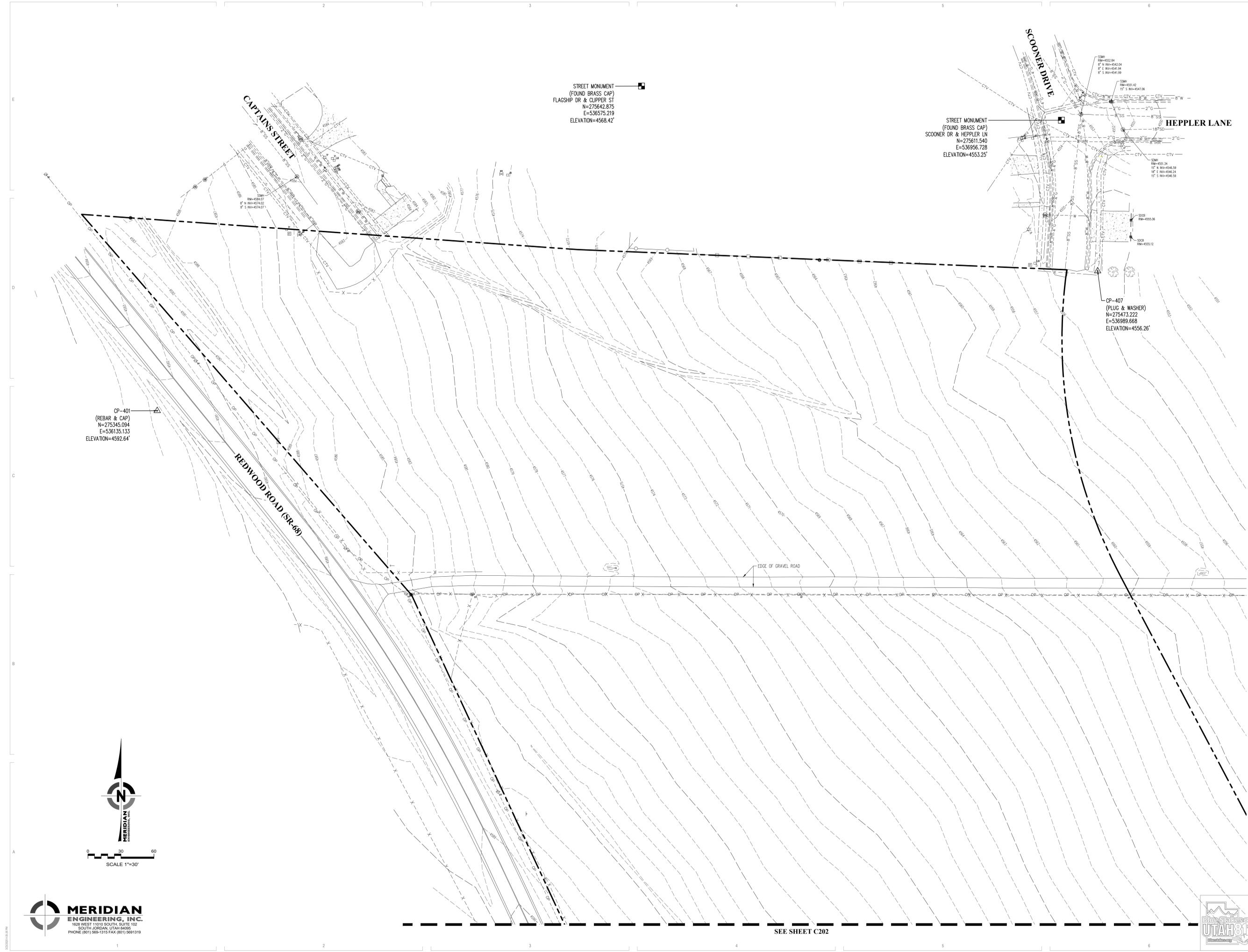


REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET

EXISTING TOPOGRAPHY AND SURVEY
C201



STREET MONUMENT
(FOUND BRASS CAP)
FLAGSHIP DR & CLIPPER ST
N=275642.875
E=536575.219
ELEVATION=4568.42'

STREET MONUMENT
(FOUND BRASS CAP)
SCOOTER DR & HEPPLER LN
N=275611.540
E=536896.728
ELEVATION=4553.25'

CP-407
(PLUG & WASHER)
N=275473.222
E=536989.668
ELEVATION=4556.26'

CP-401
(REBAR & CAP)
N=275345.094
E=536135.133
ELEVATION=4592.64'

SEE SHEET C202



SEE SHEET C201

REV DATE DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101

ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT

BP1 - CONSTRUCTION BID SET

EXISTING TOPOGRAPHY AND SURVEY



CP-405
(REBAR & CAP)
N=274634.480
E=536552.074
ELEVATION=4592.17'

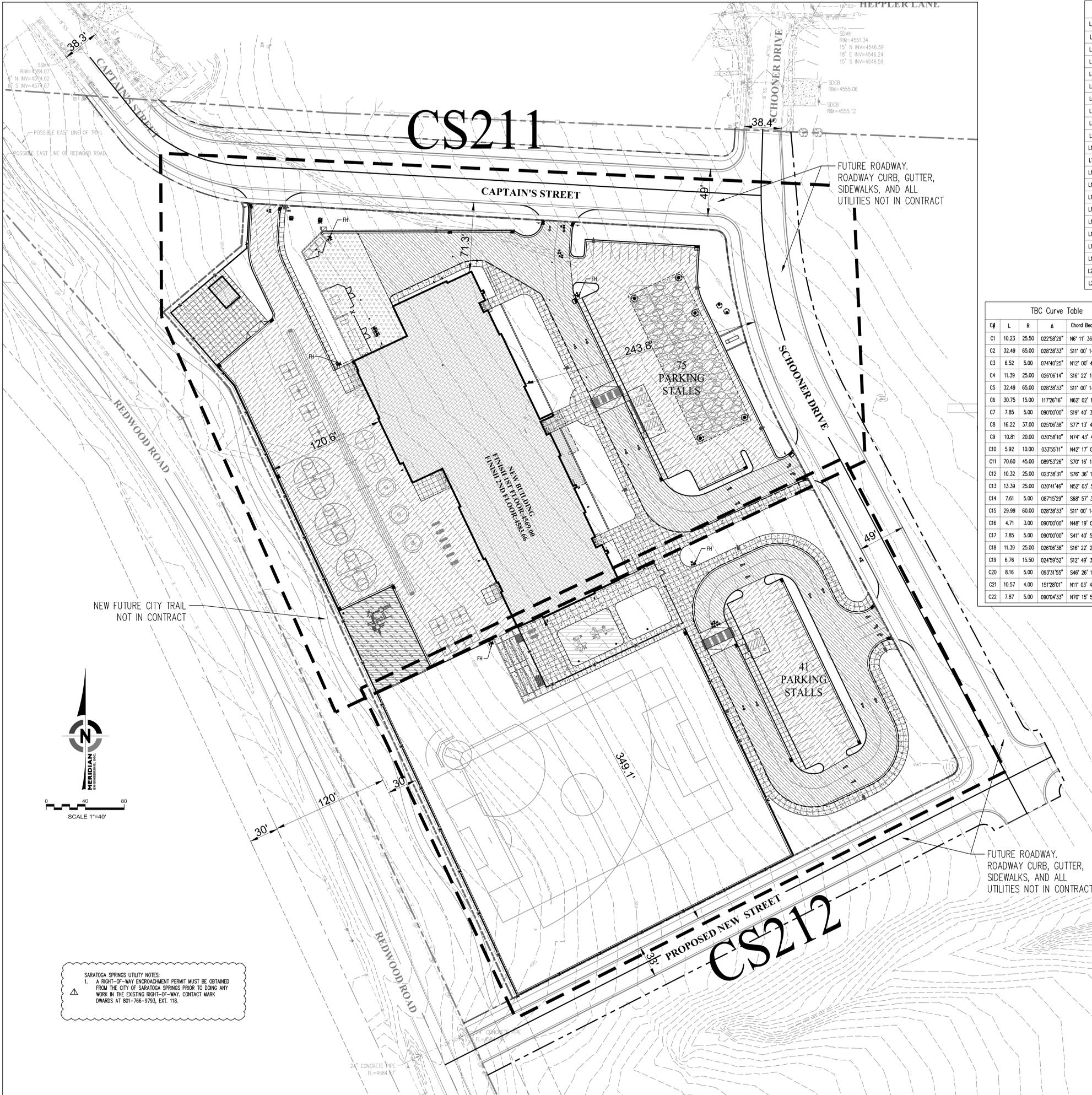
24" CONCRETE PIPE
FL=4584.97'

24" CONCRETE PIPE
FL=4584.74'

CP-402
(REBAR & CAP)
N=274323.796
E=536688.832
ELEVATION=4587.78'

CP-403
(REBAR & CAP)
N=274284.025
E=537494.241
ELEVATION=4554.16'





TBC Line Table		
L#	L	Bearing
L1	32.26	S3° 19' 02.53"W
L2	44.29	S25° 19' 30.38"E
L3	9.28	S49° 20' 55.00"W
L4	45.60	S49° 20' 55.00"W
L5	27.88	S40° 39' 05.00"E
L6	257.69	S24° 42' 10.01"E
L7	59.54	N64° 41' 41.47"E
L8	94.00	S25° 19' 30.38"E
L9	70.90	N64° 40' 29.62"E
L10	18.49	S3° 19' 02.53"W
L11	121.64	S25° 19' 30.38"E
L12	2.03	S3° 19' 02.53"W
L13	6.69	N59° 14' 41.95"W
L14	196.25	S89° 44' 29.54"W
L15	3.08	S45° 00' 00.00"W
L16	5.00	N25° 19' 30.38"W
L17	75.27	N64° 40' 29.62"E
L18	4.47	N89° 47' 07.64"E
L19	58.78	S59° 14' 41.95"E
L20	117.67	S25° 19' 28.68"E
L21	114.31	N25° 19' 28.68"W

TBC Line Table		
L#	L	Bearing
L22	111.20	S64° 47' 03.23"E
L23	174.64	S25° 19' 38.23"E
L24	30.06	S3° 19' 02.53"W
L25	118.00	S86° 40' 57.47"E
L26	15.50	N3° 19' 02.53"E
L27	5.46	S86° 40' 57.47"E
L28	19.55	S3° 19' 02.53"W
L29	0.81	S0° 19' 38.13"E
L30	16.90	N86° 47' 43.17"W
L31	16.65	N64° 40' 22.81"E
L32	117.33	N25° 19' 30.38"W
L33	54.50	N25° 19' 30.38"W
L34	19.05	S64° 40' 29.62"W
L35	19.78	N25° 12' 29.62"W
L36	54.99	S64° 49' 17.02"W
L37	16.00	S25° 10' 42.98"E
L38	15.96	N25° 10' 42.98"W
L39	49.06	N64° 47' 03.23"E
L40	93.35	S25° 19' 28.68"E
L41	105.31	S25° 19' 28.68"E
L42	31.28	S25° 19' 51.24"E

TBC Line Table		
L#	L	Bearing
L43	42.57	N64° 47' 03.23"E
L44	14.19	N25° 19' 30.38"W
L45	149.43	S25° 19' 30.38"E
L46	42.77	N64° 47' 04.34"E
L47	54.09	N25° 19' 33.67"W
L48	134.03	N64° 47' 03.23"E
L49	68.67	S64° 46' 16.16"W
L50	32.10	S25° 19' 34.56"E
L51	31.36	S25° 19' 30.38"E
L52	38.17	N64° 40' 29.54"E
L53	31.36	N25° 19' 30.38"W
L54	38.08	S64° 40' 29.62"W
L55	32.31	S25° 29' 13.00"E
L56	49.09	N64° 40' 29.54"E
L57	16.18	N25° 19' 30.38"W
L58	14.95	S64° 47' 03.23"W
L59	190.00	S25° 19' 30.38"E
L60	14.73	N64° 47' 03.23"E
L61	16.21	S64° 40' 29.62"W
L62	45.50	S25° 19' 28.68"E
L63	135.50	N25° 19' 32.07"W

TBC Line Table		
L#	L	Bearing
L71	12.71	S64° 40' 29.62"W
L72	142.50	S25° 19' 30.38"E
L73	8.00	N25° 19' 30.38"W
L74	12.23	S64° 40' 29.62"W
L75	40.67	S25° 19' 30.38"E
L76	12.23	N64° 40' 29.62"E
L77	44.13	N64° 40' 29.62"E
L78	4.24	N19° 40' 29.62"E
L79	101.35	N25° 19' 30.48"W
L80	30.81	N64° 40' 29.62"E
L81	19.92	N64° 40' 29.62"E
L82	101.95	S25° 19' 30.48"E
L83	36.48	N64° 45' 55.55"E
L84	12.23	S64° 40' 29.62"W
L85	29.94	S25° 19' 30.38"E
L86	4.55	N89° 59' 38.20"E
L87	72.77	N64° 40' 29.62"E
L88	4.00	N25° 19' 30.38"W

TBC Curve Table					
C#	L	R	Δ	Chord Bearing	Chord L
C1	10.23	25.50	022°58'29"	N6° 11' 36"W	10.16
C2	32.49	65.00	028°38'33"	S11° 00' 14"E	32.16
C3	6.52	5.00	074°40'25"	N12° 00' 42"E	6.06
C4	11.39	25.00	026°06'14"	S16° 22' 10"W	11.29
C5	32.49	65.00	028°38'33"	S11° 00' 14"E	32.16
C6	30.75	15.00	117°26'16"	N62° 02' 10"E	25.64
C7	7.85	5.00	090°00'00"	S19° 40' 30"W	7.07
C8	16.22	37.00	025°06'38"	S77° 13' 49"W	16.09
C9	10.81	20.00	030°58'10"	N74° 43' 47"W	10.68
C10	5.92	10.00	033°55'11"	N42° 17' 06"W	5.83
C11	70.60	45.00	089°53'26"	S70° 16' 14"E	63.58
C12	10.32	25.00	023°38'31"	S76° 36' 19"W	10.24
C13	13.39	25.00	030°41'46"	N52° 03' 50"E	13.23
C14	7.61	5.00	087°15'29"	S68° 57' 33"E	6.90
C15	29.99	60.00	028°38'33"	S11° 00' 14"E	29.68
C16	4.71	3.00	090°00'00"	N48° 19' 03"E	4.24
C17	7.85	5.00	090°00'00"	S41° 40' 57"E	7.07
C18	11.39	25.00	026°06'38"	S16° 22' 21"W	11.29
C19	6.76	15.50	024°59'52"	S12° 49' 34"E	6.71
C20	8.16	5.00	093°31'55"	S46° 26' 19"W	7.29
C21	10.57	4.00	151°28'01"	N11° 03' 43"W	7.75
C22	7.87	5.00	090°04'33"	N70° 15' 59"W	7.08

TBC Curve Table					
C#	L	R	Δ	Chord Bearing	Chord L
C23	7.85	2.50	180°00'00"	S64° 49' 17"W	5.00
C24	7.85	5.00	089°53'46"	N19° 48' 10"E	7.07
C25	54.91	35.00	089°53'26"	S70° 16' 14"E	49.45
C26	10.46	25.00	023°57'41"	N48° 20' 13"E	10.38
C27	37.28	25.00	085°26'24"	S68° 03' 03"E	33.92
C28	78.52	49.95	090°04'07"	N70° 27' 39"W	70.68
C29	77.22	50.05	088°23'27"	S20° 31' 36"W	69.79
C30	78.44	50.00	089°53'25"	S70° 16' 13"E	70.64
C31	78.64	50.00	090°06'38"	N19° 43' 45"E	70.78
C32	38.74	24.96	088°54'45"	S19° 05' 40"W	34.96
C33	10.46	25.00	023°57'41"	S76° 26' 43"W	10.38
C34	11.68	15.00	044°37'19"	S87° 05' 43"W	11.39
C35	33.85	11.57	167°38'51"	S28° 25' 26"E	23.01
C36	91.18	60.02	087°02'39"	S69° 44' 27"E	82.66
C37	21.59	15.00	082°28'06"	S66° 33' 38"E	19.77
C38	10.99	15.00	041°57'54"	N36° 21' 31"E	10.74
C39	7.94	5.00	090°56'10"	S20° 08' 54"W	7.13
C40	7.85	5.00	089°59'53"	S70° 19' 27"E	7.07
C41	7.85	5.00	089°56'17"	N19° 38' 38"E	7.07
C42	8.52	5.00	097°35'06"	S17° 31' 15"W	7.52
C43	35.51	23.00	088°28'35"	N69° 27' 02"W	32.09
C44	31.45	20.00	090°06'34"	N19° 43' 46"E	28.31

TBC Curve Table					
C#	L	R	Δ	Chord Bearing	Chord L
C45	9.42	3.00	180°00'00"	S25° 12' 57"E	6.00
C46	4.40	3.00	083°56'39"	S73° 14' 37"E	4.01
C47	8.40	5.00	096°16'17"	N72° 35' 20"W	7.45
C48	4.77	3.00	091°07'33"	N19° 06' 43"E	4.28
C49	14.98	4.57	187°57'10"	N21° 19' 34"W	9.11
C50	33.20	23.00	062°41'52"	S66° 40' 26"E	30.39
C51	35.44	24.00	084°36'02"	S16° 58' 31"W	32.30
C52	7.85	5.00	089°59'34"	N70° 19' 17"W	7.07
C53	8.10	5.01	092°40'55"	S21° 03' 59"W	7.25
C54	6.89	5.00	078°55'29"	S75° 45' 03"E	6.36
C55	8.10	5.01	092°40'16"	N21° 03' 50"E	7.25
C56	7.94	5.00	090°56'10"	N70° 47' 55"W	7.13
C57	18.34	24.00	043°46'47"	N68° 48' 39"W	17.90
C58	18.34	24.00	043°46'47"	S18° 09' 38"W	17.90
C59	15.69	10.00	089°54'34"	S70° 16' 47"E	14.13
C60	5.64	5.00	064°40'51"	S57° 39' 56"E	5.35
C61	13.59	31.00	025°06'38"	N77° 13' 49"E	13.48

PARKING STALL COUNT	
TOTAL STALLS:	116
STALLS:	110
HC STALLS:	6

- GENERAL SITE LAYOUT NOTES:
- REFER TO ARCH SITE PLAN FOR DETAIL OF DUMPSTER ENCLOSURE.
 - REFER TO ELECTRICAL PLANS FOR TRANSFORMER LOCATIONS AND LIGHTING.
 - REFER TO LANDSCAPE PLANS FOR LAYOUT OF PLANTINGS.
 - VERIFY THE GRID DISTANCES SHOWN FOR BUILDING LOCATIONS WITH ARCH PLANS.
 - ALL PAVEMENT REPAIR TO MEET REQUIREMENT STANDARD DETAILS ON C100.
 - TRANSITION CURB FROM STANDARD CURB HEIGHT TO CURB TERMINATION OVER 6" MINIMUM AT ALL LOCATIONS.
 - REPAIR/CONSTRUCT DRIVE APPROACHES PER CITY STANDARDS.

HATCH LEGEND	
	ASPHALT PAVEMENT SEE DETAIL B ON SHEET C100
	HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL C ON SHEET C100
	NON VEHICLE CONCRETE OR SIDEWALK PER DETAIL H ON C100
	VEHICLE CONCRETE OR SIDEWALK PER DETAIL A ON C100
	PLAYGROUND BARK REFER TO LANDSCAPING PLANS
	NEW BUILDING
	BUILDING OVERHANG
	UNDERGROUND DETENTION BASIN REFER TO C0400 PLANS
	PLAYGROUND SURFACE REFER TO ARCHITECTURAL PLANS.
	NEW SURFACE UTILITIES REFER TO C1300

SARATOGA SPRINGS UTILITY NOTES:
 1. A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE CITY OF SARATOGA SPRINGS PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY. CONTACT MARK DWARDS AT 801-766-9793, EXT. 118.

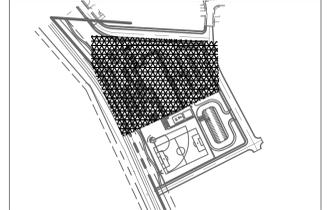
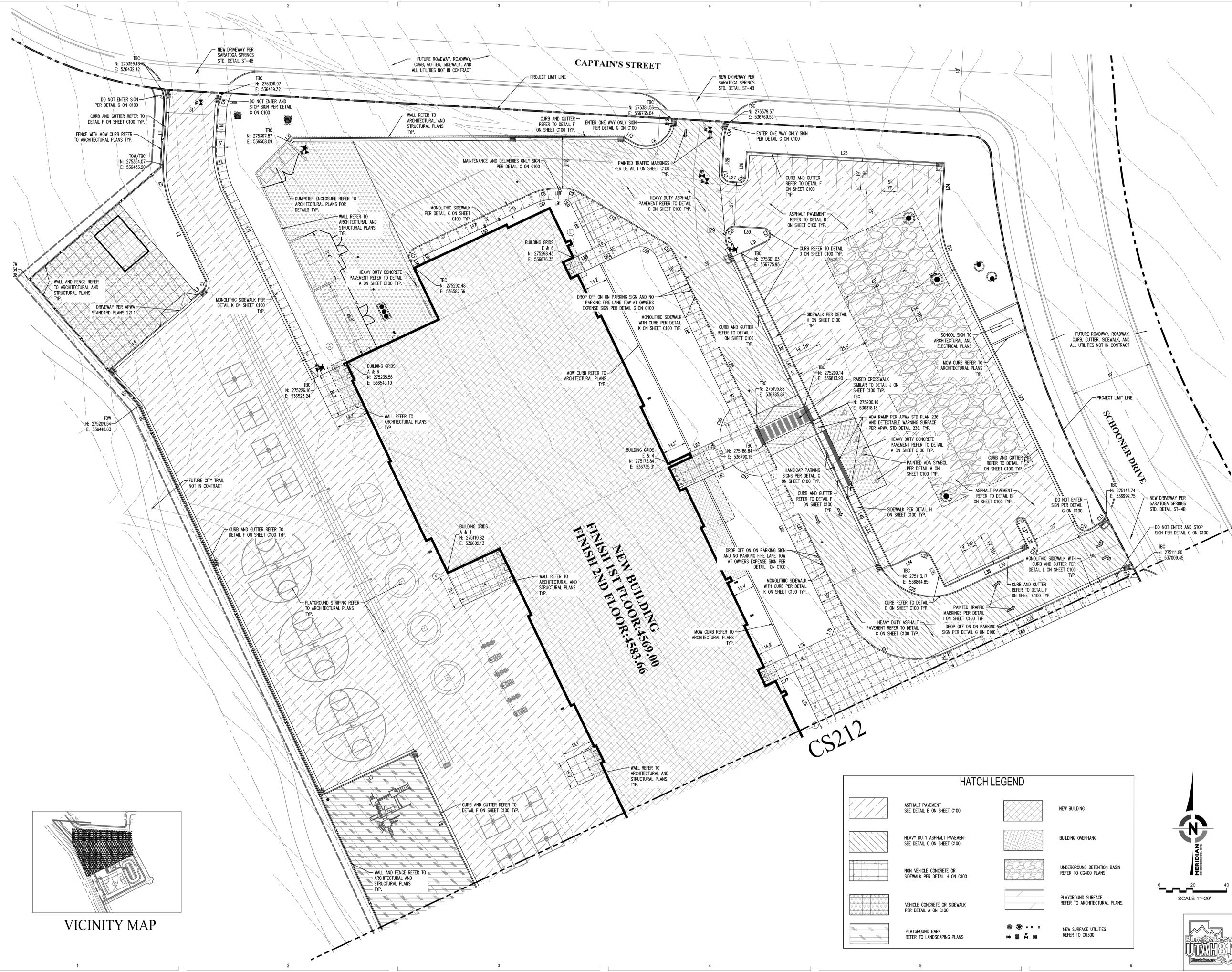


REV 1 DATE 07-05-2020 DESCRIPTION add#1

VCBO NUMBER: 20010
 CLIENT NUMBER:
 DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101
 ALPINE SCHOOL DISTRICT
 XXXX XXXX XX, SARATOGA SPRINGS, UT XXXX
 CONSTRUCTION BID SET

OVERALL SITE PLAN
 CS210

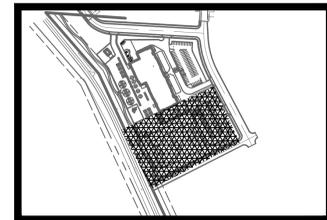


VICINITY MAP

HATCH LEGEND

	ASPHALT PAVEMENT SEE DETAIL B ON SHEET C100		NEW BUILDING
	HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL C ON SHEET C100		BUILDING OVERHANG
	NON VEHICLE CONCRETE OR SIDEWALK PER DETAIL H ON C100		UNDERGROUND DETENTION BASIN REFER TO C0400 PLANS
	VEHICLE CONCRETE OR SIDEWALK PER DETAIL A ON C100		PLAYGROUND SURFACE REFER TO ARCHITECTURAL PLANS.
	PLAYGROUND BARK REFER TO LANDSCAPING PLANS		NEW SURFACE UTILITIES REFER TO C0300





VICINITY MAP



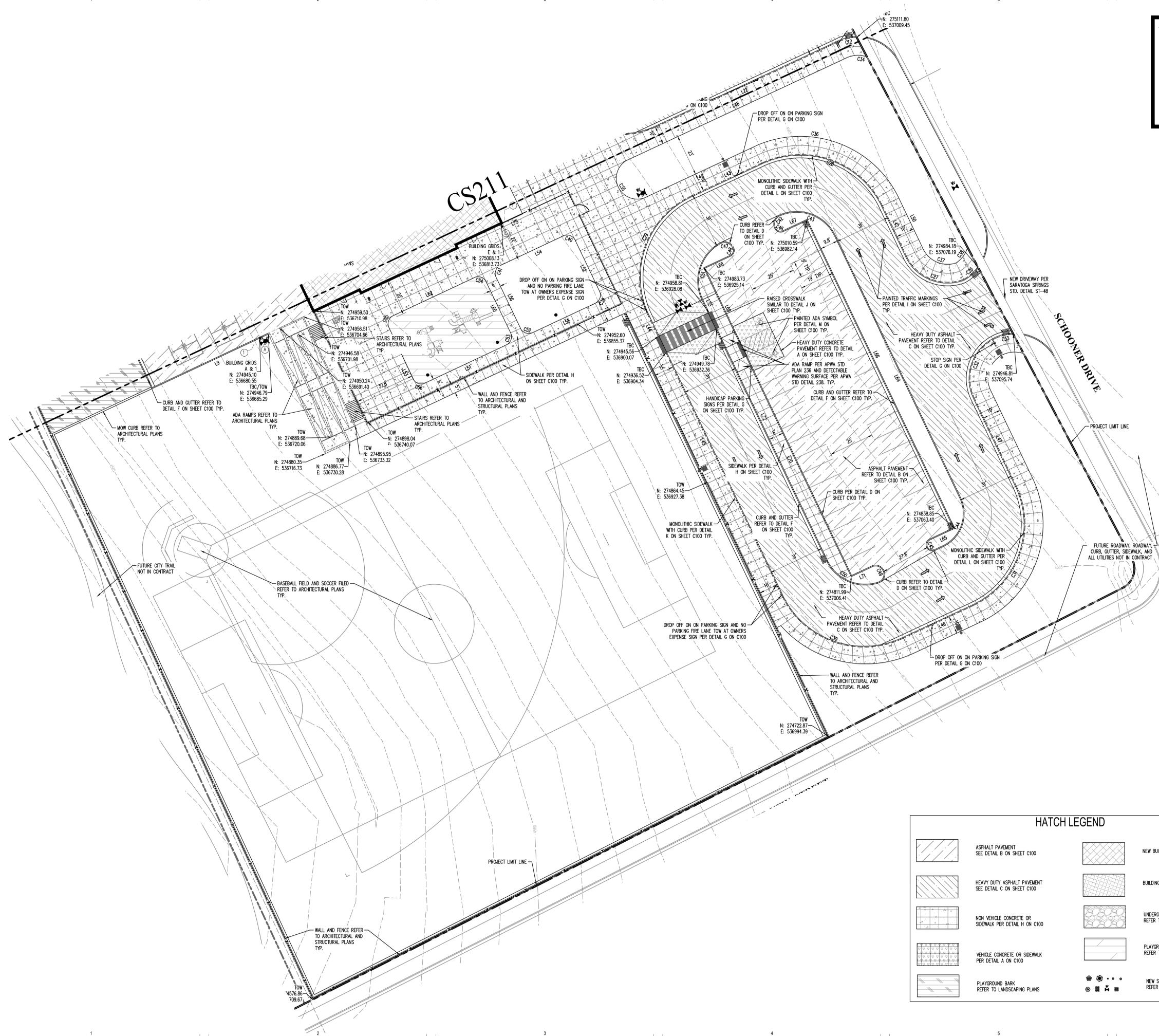
REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET

ENLARGED SITE PLAN

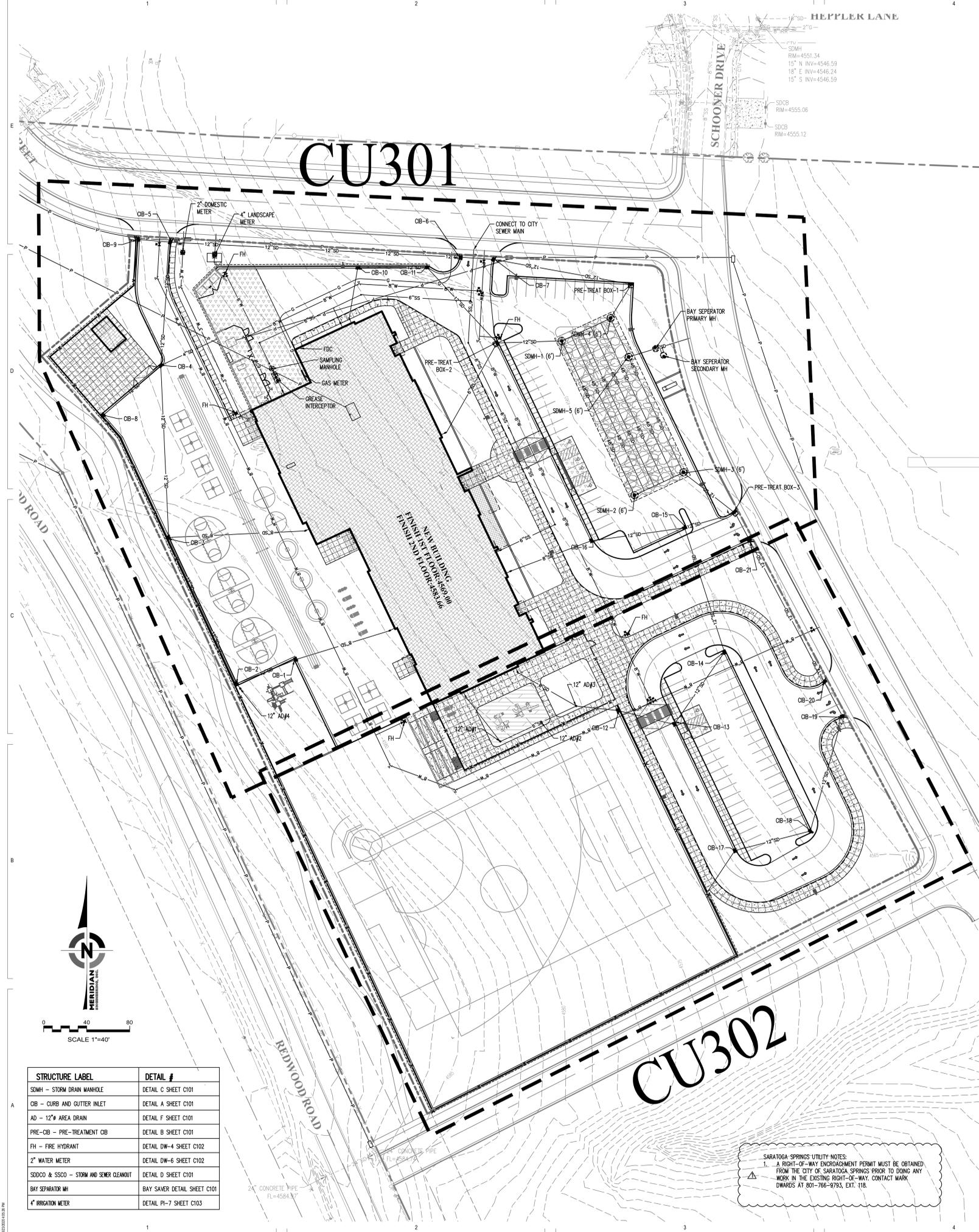
CS212



HATCH LEGEND	
	ASPHALT PAVEMENT SEE DETAIL B ON SHEET C100
	HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL C ON SHEET C100
	NON VEHICLE CONCRETE OR SIDEWALK PER DETAIL H ON C100
	VEHICLE CONCRETE OR SIDEWALK PER DETAIL A ON C100
	PLAYGROUND BARK REFER TO LANDSCAPING PLANS
	NEW BUILDING
	BUILDING OVERHANG
	UNDERGROUND DETENTION BASIN REFER TO C0400 PLANS
	PLAYGROUND SURFACE REFER TO ARCHITECTURAL PLANS.
	NEW SURFACE UTILITIES REFER TO C0300



3/23/2024 10:29:29 AM



QUANTITIES NOTE:
 ALL QUANTITIES SHOWN ARE FOR THE USE OF THE CITY REVIEWER ONLY. CONTRACTOR IS RESPONSIBLE FOR DOING THEIR OWN TAKES FROM THE CONSTRUCTION DOCUMENTS.

SECONDARY WATER		
3" POLY PIPE	200 LF	
45° BEND	3 EA	
2" WATER METER	1 EA	
WATER		
6" C900 PVC	204 LF	
8" C900 PVC	1445 LF	
FIRE HYDRANT WITH 6" VALVE		
8" V/VALE	5 EA	
45° BEND	8 EA	
90° BEND	1 EA	
8"X6" TEE	5 EA	
8"X8" TEE	2 EA	
SEWER		
4" PVC	22 LF	
6" PVC	560 LF	
SSCO	9 EA	
GREASE INTERCEPTOR	1 EA	
SAMPLING MANHOLE	1 EA	

- UTILITY PLAN:**
- PLUMBING CONTRACTOR WILL TERMINATE THEIR ROOF DRAIN LINES WITH A CLEAN OUT APPROXIMATELY 5' FROM THE BUILDING. COORDINATE WITH PLUMBING CONTRACTOR ON SCHEDULE AND PLACEMENT OF ROOF DRAIN LINES NEAR THE BUILDING.
 - ALIGN ALL INTERIOR AND EXTERIOR UTILITIES. SITE UTILITY CONTRACTOR TO COORDINATE PLACEMENT HORIZONTALLY AND VERTICALLY WITH BUILDING PLUMBING CONTRACTOR. SITE INTERFERENCE LINE BETWEEN THE BUILDING PLUMBING CONTRACTOR AND THE SITE UTILITY CONTRACTOR WILL BE AT 5' FROM THE BUILDING AND EXCEPT FOR THE FIRE SPRINKLER LINE A CLEAN OUT WILL BE INSTALLED BY THE PLUMBING CONTRACTOR APPROXIMATELY 5' FROM THE BUILDING FOR STORM DRAIN AND SEWER LINES CONNECTION TO BUILDING PIPING AND ALL PIPING BEYOND THIS INTERFACE SHALL BE THE SITE UTILITY CONTRACTOR'S RESPONSIBILITY. PROVIDE REDUCERS, ADAPTERS, OR OTHER FITTINGS AS REQUIRED AT THE INTERFACE TO CONNECT TO BUILDING PIPE. COLLECT ROOF DRAIN LINES AS SHOWN AND ROUTE TO NEW CATCH BASINS OR CLEAN OUTS ON SITE. PREFERRED SLOPES, APPROXIMATE DISTANCES, AND INVERTS OF GRAVITY PIPING ARE SHOWN ON THE PLAN. MAY REQUIRE ADJUSTMENT TO CONNECT TO BUILDING ROOF OR SEWER DRAIN LINES. MAINTAIN 2% SLOPE FOR 4" DIAMETER OR SMALLER PIPES, 1% FOR 6" AND 0.2% FOR 8" DIAMETER PIPES.
 - SITE CONTRACTOR SHALL COORDINATE WITH SARATOGA SPRINGS WHEN COMPLETING THE SEWER CONNECTION.
 - SITE CONTRACTOR SHALL COORDINATE WITH SARATOGA SPRINGS INSPECTOR WHEN COMPLETING WATER CONNECTIONS IN CITY STREETS OR ON SITE WHERE REQUIRED.
 - ALL CONSTRUCTION IN THE CULINARY WATERLINE AND SANITARY SEWER LINE PIPE ZONE SHALL COMPLY WITH ALL SARATOGA SPRINGS SPECIFICATIONS AND REQUIREMENTS. SEE GENERAL NOTES ON SHEET C100. WHERE THRUST BLOCKING CANNOT BE COMPLETED DUE TO OTHER ADJACENT UTILITIES OR OTHER SITE CONSTRAINTS, RESTRAINED JOINTS WILL BE REQUIRED PER SARATOGA SPRINGS STANDARD SPECS. THRUST BLOCK ALL WATERLINE FITTINGS PER SARATOGA SPRINGS STANDARDS TIP.
 - COORDINATES FOR FIRE HYDRANTS, CURB INLETS, CATCH BASINS, OR CLEAN OUTS ARE AT THE CENTER OF THE UTILITY STRUCTURE. ALL STORM DRAIN BOXES ARE 3'X3', UNLESS OTHERWISE NOTED OR THOSE INLETS PLACES IN CURB AND GUTTER.
 - ALL VALVES, AREA CATCH BASINS (NOT IN C&G), CLEAN OUTS, OR MANHOLES SHALL HAVE CONCRETE GRADE ADJUSTMENT COLLARS PLACED PER DETAIL E ON C100.
 - STORM DRAIN CLEAN OUTS TO BE SIMILAR TO DETAIL SHOWN ON PLUMBING PLANS AND SHALL BE EXTENDED TO GRADE. ALL EXTERIOR ROOF DRAIN PIPING TO BE CAST IRON SOIL PIPE AND FITTINGS IN ACCORDANCE WITH ASTM A 74.
 - ROOF DRAIN CONNECTIONS AT CATCH BASINS OR CLEAN OUT BOXES TO BE CORE DRILLED AND EPOXY GROUTED INTO PRECAST BOXES DUE TO FIELD ADJUSTMENTS WHICH MAY BE NECESSARY TO CONNECT TO BUILDING PIPING. 3" & 4" INTERIOR ROOF DRAIN PIPE TO BECOME 4" OR 6" STORM DRAIN PIPE. 5" & 6" INTERIOR ROOF DRAIN PIPE TO BECOME 8" STORM DRAIN PIPE.
 - ALL CONSTRUCTION, PIPING MATERIALS AND INSTALLATION TO BE:
 - WATER LINES:
 - 8" PVC AWWA C-900 WITH CEMENT MORTAR-LINED DUCTILE IRON PIPE FITTINGS WRAPPED IN 10 MIL. POLYETHYLENE SLEEVES PER AWWA C-105 AND PER CITY STANDARDS.
 - 6" FIRE SPRINKLER LINE PER CITY STANDARD.
 - 3" POLY PIPE CONFORM TO SARATOGA SPRINGS STANDARD.
 - SEWER LINES, MANHOLES, AND CLEANOUTS:
 - PVC PIPE 6" TO 12" (SDR 35), USE 6" DI AT FITTING ON SERVICE LINES TO BUILDINGS REFER TO CLEAN OUT DETAILS.
 - MANHOLES AND CLEANOUTS TO SARATOGA SPRINGS STANDARDS. PVC PIPING, PRECAST MANHOLES.
 - STORM DRAIN:
 - 8" TO 15" HOPE PIPE WITH WATER TIGHT JOINTS. WYE FITTING TO BE WATER TIGHT JOINT STANDARDS.
 - WALL DRAINS TO BE 3" PERFORATED PVC PIPE (SDR 35).
 - ROOF DRAIN PIPING:
 - ROOF AND AREA DRAIN PIPING: 6" PIPING PVC (SDR 35).
 - DETENTION BASIN:
 - PERFORATED HOPE PIPE
 - SEE DETAIL H SHEET C101
 - GAS LINE:
 - DOMINION ENERGY. COORDINATE WITH DOMINION ENERGY.
 - PROJECT SHALL COMPLY WITH ALL UTAH DIVISION OF DRINKING WATER RULES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE PERTAINING TO BACKFLOW PROTECTION AND CROSS CONNECTION PREVENTION. ANY NEW BACKFLOW DEVICES AND THE STOP AND WASTE VALVE ARE SHOWN ON THE LANDSCAPE DRAWINGS.
 - INSPECTION AND APPROVAL FOR THE SEWER/WATER LINE CROSSINGS ON SITE SHALL BE REVIEWED AND APPROVED BY SARATOGA SPRINGS PRIOR TO CONSTRUCTION OF THE CROSSING. SARATOGA SPRINGS SHALL ALSO INSPECT THE CROSSING PRIOR TO BACKFILL.
 - REFER TO SHEET C200 FOR PROJECT BASIS OF BEARING, BASIS OF COORDINATES AND BENCHMARK.
 - ALL UTILITIES OUTSIDE OF PUBLIC R.O.W. ARE PRIVATELY OWNED AND SHALL BE MAINTAINED BY OWNER UNLESS NOTED OTHERWISE.
 - POT HOLE AND FIELD VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - USE FLOWABLE FILL BETWEEN UTILITY CROSSINGS THAT ARE LESS THAN 12" SEPARATION. ALL GRAVITY LINES MUST BE INSTALLED BEFORE PRESSURIZED LINES.
 - PIPE LENGTHS ARE APPROXIMATE LENGTHS AND ARE ROUNDED TO THE NEAREST FOOT. LENGTHS ARE FROM CENTER TO CENTER OF INLETS OR CLEANOUTS. PIPE SLOPES ARE ALSO APPROXIMATE. USE INVERTS AT EACH BOX FOR CONTROL OF PIPE INSTALLATION.
 - ALL FIRE SPRINKLER LINES SHALL HAVE 60" OF COVER MINIMUM. ALL OTHER WATERLINES INCLUDING EXISTING LINES TO HAVE 48" MINIMUM COVER.
 - POTHOLE ALL EXISTING UTILITY CROSSINGS PRIOR TO ROUTING ANY NEW UTILITIES. ALL NEW SEWER, DRAINAGE, OR OTHER GRAVITY LINES SHALL BE COMPLETED PRIOR TO ROUTING ANY PRESSURE LINES. WHERE EXISTING UTILITIES CONFLICT WITH NEW GRAVITY LINES, RAISE OR LOWER EXISTING UTILITIES TO ACCOMMODATE NEW GRAVITY LINES. PROVIDE 12" MIN. CLEARANCE BETWEEN WATER AND OTHER UTILITIES. WATER LINES SHALL NOT BE PLACED UNDER SEWER LINES AND SHALL HAVE A MINIMUM OF 18" CLEARANCE OF SEWER.
 - THRUST BLOCK ALL FITTINGS OR PROVIDE RESTRAINED JOINTS PER CITY STANDARDS. THE NEW 4" & 6" CONNECTIONS TO THE NEW BUILDING WILL REQUIRE RESTRAINED JOINTS FOR MANY FITTINGS DUE TO LIMITED SPACE BETWEEN PIPES.
 - COORDINATE WITH LANDSCAPE PLANS PRIOR TO COMPLETION OF PAVEMENT FOR INSTALLATION OF IRRIGATION SLEEVES ACROSS PAVING OR PARKING AREAS.
 - WATER VALVES, SEWER MANHOLES, STORM DRAIN INLETS OR CLEANOUT BOXES, AND OTHER SURFACE UTILITY ACCESSORIES SHALL BE RAISED AND SLOPED TO ACCURATE FINISH SURFACE BY A CONCRETE GRADE COLLAR IN PAVEMENT. COLLAR SHALL BE 4" 12" WIDE AROUND THE UTILITY APPARATUS AND 6" MINIMUM THICKNESS. PLACE 2 #4 REBAR HOOPS IN COLLAR. REFER TO DETAIL ON SHEET C100. CONCRETE COLLARS TO BE USED IN ONLY ASPHALT PAVEMENT AREAS OR PAVEMENT AREAS.
 - WHERE UTILITY LINES CROSS SITE WALLS, WALL FOOTINGS, SHALL STEP BELOW UTILITIES FOR WATER AND STORM DRAIN LINES THAT DO NOT HAVE 3' OF FILL BETWEEN THE BOTTOM OF THE NORMAL WALL FOOTING DEPTH (30" DEPTH) AND THE TOP OF PIPE REFER TO DETAIL ON STRUCTURAL PLANS FOR TYPICAL FOOTING STEP DETAIL. WHERE UTILITY LINES HAVE A MINIMUM OF 3' OF FILL BETWEEN THE TOP OF PIPE AND BOTTOM WALL FOOTING THE WALL FOOTING DOES NOT NEED TO STEP BELOW THE NORMAL 30" DEPTH.
 - USE HS-20 SOLID COVERS ON ALL MANHOLES, CIB, AND CIB'S. AD AND ADS BOXES TO HAVE PEDESTRIAN TRAFFIC GRATED COVERS EXCEPT AS NOTED. ALL CIB BOXES TO HAVE HS-20 FRAME AND GRATES.
 - REPAIR PAVEMENT, AS WELL AS CURB AND GUTTER, AND SIDEWALKS WHERE UTILITIES CROSS INTO PUBLIC R.O.W. TO MAINTAIN TRAFFIC THROUGH THESE AREAS. ALL REPAIR IN PUBLIC R.O.W. TO MEET APWA AND CITY STANDARDS.
 - SET NEW UTILITY MANHOLE OR STRUCTURE OVER EXISTING PIPING WHERE NEW AND EXISTING PIPING CONNECT. RECONNECT ALL EXISTING PIPING TO NEW STRUCTURES. PROVIDE NEW SECTIONS OF PIPE IF NECESSARY TO RECONNECT ALL PIPING TO THE NEW UTILITY STRUCTURES.
 - GAS LINE CONSTRUCTION TO THE BUILDING METER WILL BE COMPLETED BY DOMINION ENERGY/ COORDINATE GAS INSTALLATION WITH DOMINION ENERGY.
 - 8"X6" WYE FITTINGS FOR ROOF DRAIN OR OTHER WYE CONNECTIONS TO THE 6" OR 8" PVC DRAIN LINES TO BE DI FITTINGS WRAPPED IN 10 MIL. POLYETHYLENE (PER AWWA C105). PLACE CONCRETE ON WYE FITTING SIMILAR TO THE CLEANOUT DETAIL.
 - CONTRACTOR RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS AND INSPECTIONS WHILE WORKING IN THE PUBLIC RIGHT OF WAY.
 - PROJECT LOCATED IN FEMA FLOOD PLAIN ZONE X.
 - VALVES ATTACH DIRECTLY TO TEE FITTINGS. "FL" INDICATES FLANGE FITTING AND "MJ" INDICATED MECHANICAL JOINT FITTING. ALL VALVING WILL CONNECT TO MAIN LINE PIPE WITH FLANGE FITTING. MAIN LINE FITTINGS CONNECTING TO VALVES WILL ALSO BE FLANGE FITTINGS. WRAP AND GREASE ALL FITTINGS PER SPECIFICATIONS AND NOTES.
 - ALL WYE FITTINGS FOR STORM DRAIN PIPING TO BE FACTORY FABRICATED. WHERE MAIN PIPE IS 8" OR LARGER, USE FLOWABLE FILL 3' UPSTREAM AND DOWNSTREAM FROM ALL FITTINGS. WYE FITTINGS CONNECTING TO PIPE LARGER THAN 8" SHALL BE NEAR THE TOP OF THE MAIN STORM DRAIN PIPE. FLOWABLE FILL MAY TERMINATE 6" ABOVE THE TOP OF THE SMALLER STORM DRAIN PIPE CONNECTION TO THE MAIN PIPE. PROVIDE A MINIMUM OF 18" TOPSOIL COVER OVER TOP OF FLOWABLE FILL IN LANDSCAPE AREAS.
 - THE CONTRACTOR SHALL MAINTAIN 10 FOOT HORIZONTAL AND 18 INCH VERTICAL SEPARATION BETWEEN SANITARY SEWER AND CULINARY WATER LINES. FOLLOW CITY STANDARDS FOR ALL WATER/SEWER CROSSINGS.

SARATOGA SPRINGS UTILITY NOTES:
 1. A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE CITY OF SARATOGA SPRINGS PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY. CONTACT MARK DWARDS AT 801-786-9793, EXT. 118.

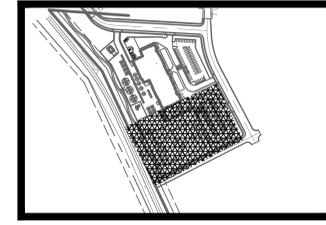
STRUCTURE LABEL	DETAIL #
SDMH - STORM DRAIN MANHOLE	DETAIL C SHEET C101
CIB - CURB AND GUTTER INLET	DETAIL A SHEET C101
AD - 12" AREA DRAIN	DETAIL F SHEET C101
PRE-CIB - PRE-TREATMENT CIB	DETAIL B SHEET C101
FH - FIRE HYDRANT	DETAIL DW-4 SHEET C102
2" WATER METER	DETAIL DW-6 SHEET C102
SDCO & SSCO - STORM AND SEWER CLEANOUT	DETAIL D SHEET C101
BAY SEPARATOR MH	BAY SAVER DETAIL SHEET C101
4" IRRIGATION METER	DETAIL PI-7 SHEET C103



REV	DATE	DESCRIPTION
1	07-05-2020	add#1

VCBO NUMBER: 20010
 CLIENT NUMBER:
 DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101
 ALPINE SCHOOL DISTRICT
 XXXX XXXX XX, SARATOGA SPRINGS, UT XXXX
 CONSTRUCTION BID SET

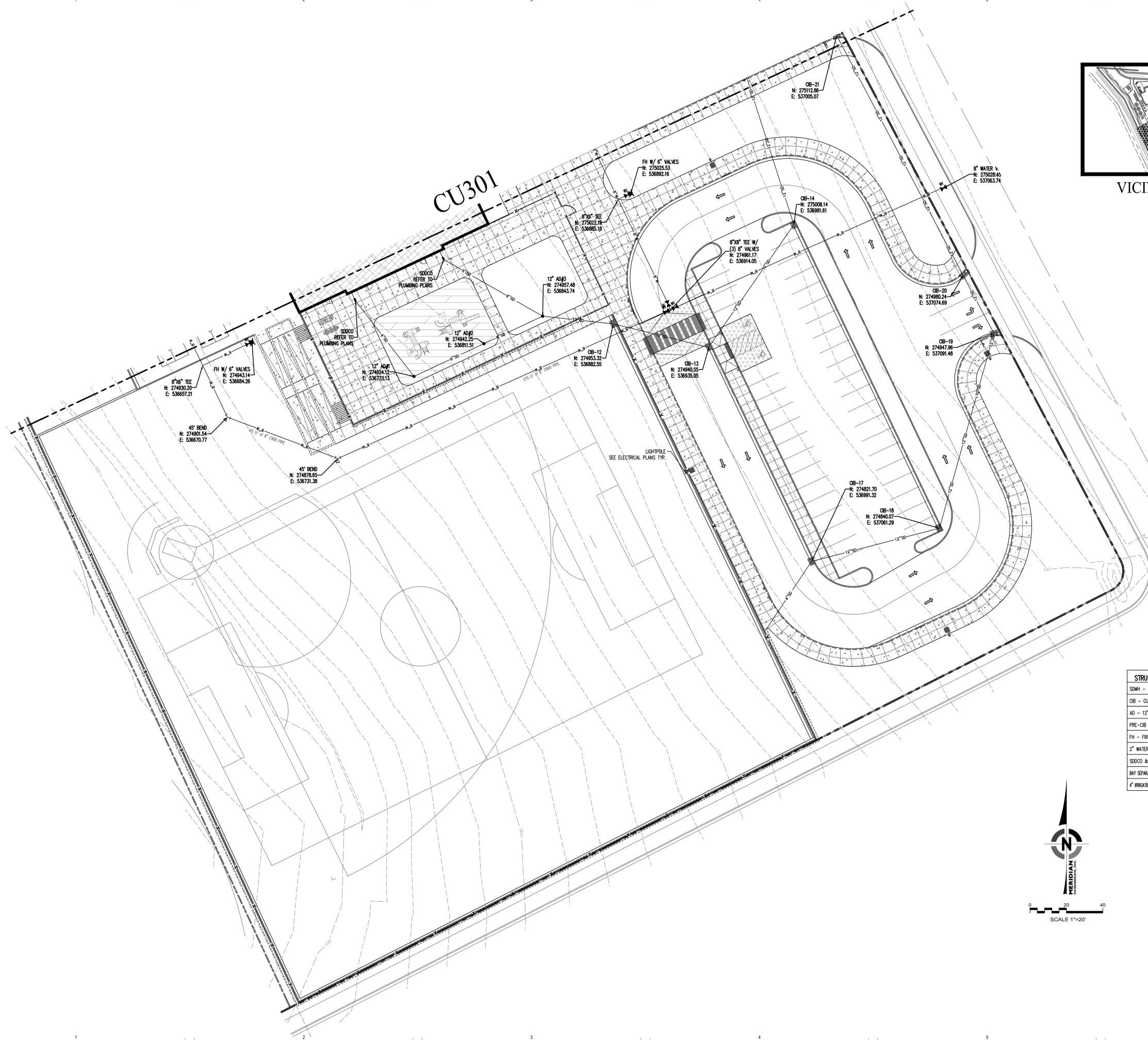


VICINITY MAP



REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020



STRUCTURE LABEL	DETAIL #
SDMH - STORM DRAIN MANHOLE	DETAIL C SHEET C101
CB - CURB AND GUTTER INLET	DETAIL A SHEET C101
AD - 12" AREA DRAIN	DETAIL F SHEET C101
PRE-CB - PRE-TREATMENT CB	DETAIL B SHEET C101
FH - FIRE HYDRANT	DETAIL DW-4 SHEET C102
2" WATER METER	DETAIL DW-6 SHEET C102
SSDCO & SSSCO - STORM AND SEWER CLEANOUT	DETAIL D SHEET C101
BAY SEPARATOR MH	BAY SAVER DETAIL SHEET C101
4" IRRIGATION METER	DETAIL PI-7 SHEET C103



ASD NEW ELEMENTARY #101

ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET



ENLARGED UTILITY PLAN

CG401

CG402

QUANTITIES NOTE:
ALL QUANTITIES SHOWN ARE FOR THE USE OF THE CITY REVIEWER ONLY. CONTRACTOR IS RESPONSIBLE FOR DOING THEIR OWN TAKES FROM THE CONSTRUCTION DOCUMENTS.

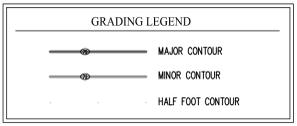
STORM DRAIN	
48" PERF. HDPE	700 LF
15" RCP	60 LF
12" HDPE	2085 LF
8" PVC	415 LF
6" PVC	245 LF
4" PVC	162 LF
3" PERF. WALL DRAIN	1650 LF
CB=	21 EA
PRE-TREAT BOX=	3 EA
SDCB=	5 EA
AD=	3 EA
SDMH=	5 EA
BAYSEPARATOR=	1 EA

- GRADING PLAN NOTES:**
- REFER TO SHEET ARCHITECTURAL SITE PLAN DETAILS FOR RAISED PLANTERS, HANDICAP RAMPS, SIDEWALK DETAILS, FLUSH CURB, DIMENSIONS OF PLAYGROUND, PARKING LOT STRIPING AND SITE FENCING WITH MOW STRIP.
 - CONTOURS OF THE SITE ARE BASED ON A SURVEY BY MERIDIAN ENGINEERING. REFER TO SHEET C200 FOR PROJECT BENCH MARK AND BASIS OF BEARING.
 - ALL WORK IN SARATOGA SPRINGS SHALL BE IN ACCORDANCE WITH APWA AND CITY OF SARATOGA SPRINGS STANDARD PLANS AND SPECIFICATIONS. NEW CURB AND GUTTER, PAVEMENT REPAIRS, AND THE NEW DRIVEWAYS SHALL COMPLY WITH THESE APWA AND CITY STANDARDS. TRAFFIC CONTROL FOR THE PROJECT SHALL ALSO BE APPROVED BY THE CITY WHERE THE SITE ACCESSES TO PUBLIC STREETS. COORDINATE WITH CITY FOR PAVEMENT CONSTRUCTION IN RIGHT OF WAY TO THE REQUIRED PAVEMENT THICKNESS FOR ALL STREET REPAIRS.
 - PROVIDE APPROVED SILT PROTECTION FOR ALL NEW AND EXISTING CATCH BASINS UNTIL LANDSCAPING IS WELL ESTABLISHED AND PARKING IS COMPLETE. THE PIPING SYSTEM SHALL BE CLEANED OUT BEFORE FINAL APPROVAL. USE MIRAFI DANDY BAG OR ANOTHER APPROVED EQUIVALENT FOR EXISTING INLET PROTECTION. REFER TO SHEET C200 AND C210.
 - DIMENSIONS OR COORDINATES ARE TO THE CENTER OF CATCH BASINS FOR AREA INLETS AND AT THE CENTER OF THE CATCH BASIN AT TBC FOR INLETS IN CURB AND GUTTER.
 - HANDICAP PARKING AREA SHALL NOT EXCEED 2% IN ANY DIRECTION. THE PERPENDICULAR GROSS SLOPE TO PARKING STALL IN OTHER AREAS OF THE PARKING LOT SHALL NOT EXCEED 4% IN SLOPE AND SLOPE SHALL NOT EXCEED 6% IN ANY DIRECTION FOR DRIVEWAYS.
 - ALL WALKWAYS SHALL NOT EXCEED 5% SLOPE. THE PERPENDICULAR GROSS SLOPE TO NOT EXCEED 2% MAX SLOPE FOR WALKWAYS 2% MAX. FROM BUILDING OR STAIR RISERS FOR 5' MINIMUM. ALSO SLOPE 2% MAX FOR 5' AT THE END OF THE 1:12 SLOPE OF ALL H.C. RAMPS.
 - PIPING LENGTHS ARE APPROXIMATE LENGTHS AND ARE ROUNDED TO THE NEAREST FOOT. LENGTHS ARE FROM CENTER TO CENTER OF INLETS OR CLEANOUTS. PIPE SLOPES ARE ALSO APPROXIMATE. USE INVERTS AT EACH BOX FOR CONTROL OF PIPE INSTALLATION.
 - "TBC" IS TOP BACK OF CURB ELEVATIONS, "FS" IS FINISH SURFACE ELEVATIONS, "TOC" IS TOP OF CONCRETE ELEVATIONS, "TOW" IS TOP OF WALL ELEVATIONS, "BOT" IS FINISH SURFACE AT BOTTOM OF WALL ELEVATIONS, "FL" IS FLOW LINE.
 - TRANSITION FACE OF CURB TO BE FLUSH TO ADJACENT FINISHED SURFACE WHERE INDICATED BY "TBC/FS" TO FULL HEIGHT OVER 5' (MIN).
 - PLACE CONCRETE COLLAR AROUND ALL NEW CATCH BASINS OR CLEANOUTS (NOT IN CURB AND GUTTER). COLLAR TO BE 1" MINIMUM WIDTH AND SHALL BE 8" MINIMUM THICKNESS. PLACE 2 #4 BARS AROUND OPENING. SEE DETAIL ON SHEET C100.
 - LANDSCAPE AREAS TO BE GRADED TO DRAIN AND MOUND WHERE INDICATED ON LANDSCAPE PLANS.
 - REFER TO SHEET C100 AND C210 FOR REQUIRED PAVEMENT SECTIONS.
 - ALL STORM WATER TO BE DETAINED ONSITE USING 2"/HR PERCOLATION RATE (PER SARATOGA SPRINGS CITY) FOR THE 100-YEAR STORM EVENT.
 - IF MORE THAN 3 FEET OF GRADING FILL WILL BE PLACED ABOVE THE EXISTING SURFACE (TO RAISE SITE GRADES), THE OWNERS GEOTECHNICAL ENGINEER SHOULD BE NOTIFIED SO THAT THEY MAY ASSESS POTENTIAL SETTLEMENT AND MAKE ADDITIONAL RECOMMENDATIONS IF NEEDED.
 - DO NOT DRIVE HEAVY EQUIPMENT OR TRUCKS OVER EXCAVATED SUBGRADE. SOFT AREAS CAUSED BY ROUTING HEAVY EQUIPMENT OR TRUCKS OVER SUBGRADE WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. REPAIRS TO BE COMPLETED AS OUTLINED IN THE SPEC SECTION WITH UP TO 2" OF IMPORTED STRUCTURAL GRANULAR FILL TO STABILIZE SOFT AREAS CAUSED BY ROUTING HEAVY EQUIPMENT OR TRUCKS OVER EXCAVATED SUBGRADE.
 - SITE SOILS MAY NOT SUPPORT CONSTRUCTION TRAFFIC DURING WET PERIODS OF THE YEAR. CONTRACTOR WILL BE RESPONSIBLE TO PLACE GRANULAR FILL AND/OR COBBLE MATERIALS AS NECESSARY TO MAINTAIN ACCESS TO THE SITE OR BUILDING THROUGHOUT THE CONSTRUCTION SITE AT ALL TIMES. EXCESS MATERIAL SHALL BE REMOVED AS REQUIRED TO COMPLETE THE SITE TO THE GRADES SHOWN ON GRADING PLANS. ALSO REFER TO GEOTECHNICAL INVESTIGATION SHEETS FOR SITE SOIL PREPARATION REQUIREMENTS.
 - PROVIDE TEMPORARY STORM DRAIN PUMPING, PONDING, BERMING, PIPING AND INLETS OR OTHER MEASURES TO RETAIN CONSTRUCTION STORM DRAIN RUNOFF ON SITE DURING CONSTRUCTION UNTIL THE NEW SYSTEM IS OPERATIONAL. ALL CONSTRUCTION SITE RUNOFF TO HAVE HEAVY SEDIMENT REMOVED PRIOR TO RELEASING TO EXISTING SITE DRAIN SYSTEM. PROTECT ADJACENT BUILDING FROM CONSTRUCTION RUNOFF AT ALL TIMES.
 - THERE SHOULD BE NO STANDING WATER ONSITE. ALL STORM WATER SHALL DRAIN TO AN INLET OR AREA DRAIN. CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IF ANY LOW SPOTS THAT DO NOT DRAIN ARE ENCOUNTERED. A WATER TEST WILL BE PERFORMED BY THE CONTRACTOR WITH THE ENGINEER OF RECORD IN ATTENDANCE OR A SURVEY OF THE NEW IMPROVEMENTS PROVIDED TO THE ENGINEER AT COMPLETION OF THE PROJECT TO VERIFY THAT ALL STORM DRAIN WATER DRAINS AS DESIGNED.
 - ALL "MATCH" LOCATIONS INDICATE THAT THE CONTRACTOR IS TO MATCH THE EXISTING GRADE. AN APPROXIMATE ESTIMATE IS PROVIDED BY THE ENGINEER BASED ON AN INTERPOLATION OF NEAREST SPOT ELEVATIONS PROVIDED BY THE SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE ELEVATIONS. IF THE ELEVATION PROVIDED BY THE ENGINEER VARIES GREATLY FROM THE ACTUAL ELEVATION FOUND BY THE CONTRACTOR THE CONTRACTOR IS TO NOTIFY THE ENGINEER SO THAT THE ENGINEER CAN PROVIDE FURTHER DIRECTION.
 - GRADE UNIFORMLY BETWEEN SPOT ELEVATIONS AND CONTOURS UNLESS NOTED OTHERWISE. IF ANY QUESTIONS ARISE ABOUT THE PROPOSED GRADING SHOWN ON PLANS CONTACT THE ENGINEER OF RECORD BEFORE FIELD GRADING.
 - REMOVE ALL CLAY MATERIALS FROM UNDER BUILDINGS AS OUTLINED IN THE SPECIFICATIONS. UNDER NEW PAVEMENT REMOVE A MINIMUM OF 12" OF CLAY LAYER AND REPLACE WITH GRANULAR FILL AS OUTLINED IN THE PAVEMENT DETAILS ON C100 AND THE EARTH MOVING SPECIFICATION. ALL UTILITIES TRENCHES TO BE BACKFILLED WITH GRANULAR BACKFILL PER TRENCH DETAIL ON C100. AT PLAYGROUND AREAS TO REMOVE TOP SOIL OR MULCH ALL SURFACE CLAY LAYERS TO BE REMOVED FROM BENEATH THESE AREAS. BACKFILL WHERE NECESSARY WITH GRANULAR BACKFILL MATERIAL. IF CLAY EXCAVATION EXTENDS BELOW REQUIRED ROUGH GRADE ELEVATION BELOW PLAYGROUND AREAS.
 - SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL STUDY REFERENCED PLAN SET. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED WITHIN THE STATE WHERE THE WORK IS BEING PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOIL REPORT.
 - ADS INJECTION MOLDED 45' REDUCER WYE (OR APP EQUIVALENT) FLOWABLE FILL TO BE PLACED AROUND EACH WYE CONNECTION. TYP.
 - NO STORM WATER TO ENTER THE DETENTION BASIN UNTIL THE PIPING SYSTEM AND PRE-TREATMENT INLET HAS BEEN INSTALLED. CONTRACTOR TO CLEAN ENTIRE SYSTEM BEFORE IT IS ATTACHED TO THE RETENTION BASIN.
 - NOTIFY ENGINEER OF RECORD IF THERE ARE ANY CONFLICTS WITH UTILITY LINES OR IF ASSUMED INVERTS VARY. FOR FURTHER COORDINATION, SEWER AND WATERLINES TO HAVE 18" SEPARATION WITH WATER OVER SEWER. ALL OTHER UTILITIES TO HAVE 12" SEPARATION MIN. IF 12" SEPARATION CANNOT BE ACHIEVED UTILITIES TO HAVE FLOWABLE FILL BETWEEN THE UTILITY LINES 5' EACH WAY.
 - CONTRACTOR IS RESPONSIBLE TO INFORM THE ENGINEER OF RECORD IF THE GRADES SHOWN ON THE SURVEY DO NOT MEET THE ACTUAL GRADES IN THE FIELD.
 - ALL STRUCTURE LIDS WITHIN THE PROJECT LIMITS WILL NEED TO HAVE THEIR GRADE ADJUSTED. WATER VALVES, SEWER MANHOLES, STORM DRAIN INLETS OR CLEANOUT BOXES, AND OTHER SURFACE UTILITY ACCESSORIES SHALL BE RAISED AND SLOPED TO ACCURATE FINISH SURFACE BY A CONCRETE GRADE COLLAR IN PAVEMENT. COLLAR SHALL BE 12" WIDE AROUND THE UTILITY APPARATUS; AND 8" MINIMUM THICKNESS. PLACE 2 #4 REBAR HOOPS IN COLLAR. CONCRETE COLLARS TO BE USED ONLY IN ASPHALT/CONCRETE/AND GRASS PAVEMENT AREAS.
 - REMOVE AND REPLACE ANY DAMAGED CURB, GUTTER, OR SIDEWALK ALONG FRONTAGE BEFORE FINAL INSPECTION.
 - ALL GUTTERS TO SLOPE 0.5% MINIMUM TOWARDS CURB INLET BOX. CONTRACTOR TO NOTIFY ENGINEER OF RECORD IF THE PROPOSED GRADE DOES NOT MEET 0.5% SLOPE IN GUTTER.
 - SITE WALLS (EXCEPT STAIR CHEEK WALLS OR SEAT WALLS) TO HAVE A 3" PERFORATED DRAIN (PVC OR HDPE WRAPPED IN DRAINAGE FABRIC) AS SHOWN ON PLANS AND ON THE RETAINING WALL DETAILS ON THE STRUCTURAL PLANS. CONNECT TO SITE DRAINAGE STRUCTURES AS SHOWN WITH 4" PVC SOLID PIPE (SBR 35) FROM THE CONNECTION AT THE PERFORATED DRAIN TO THE STORM DRAIN STRUCTURE. SLEEVE DRAIN PIPE THROUGH SITE WALLS AS REQUIRED TO CONNECT TO DRAINAGE SYSTEM. WALK FOOTINGS STEP DOWN BELOW NORMAL DEPTH FOR UTILITY CROSSING. PERFORATED DRAIN PIPE DOES NOT STEP DOWN TO AVOID ANY LOW POINTS IN THE WALL DRAIN PIPING.

I HEREBY CERTIFY THAT THIS DESIGN FOR THE ONSITE DRAINAGE OF THIS DEVELOPMENT WAS PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE PROVISIONS OF THE CITY OF SARATOGA SPRINGS' STANDARD SPECIFICATIONS AND DRAWINGS, AND WAS DESIGNED TO COMPLY WITH THE PROVISIONS THEREOF. I UNDERSTAND THAT THE CITY ASSUMES NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR THIS DESIGN.

- SARATOGA SPRING GRADING AND DRAINAGE NOTES:**
- ACCEPTED CONSTRUCTION DRAWINGS OR A GRADING PERMIT MUST BE OBTAINED FROM SARATOGA SPRINGS CITY PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEERING DEPT AT 801-766-9793
 - A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE CITY OF SARATOGA SPRINGS PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY. CONTACT MARK DWARDS AT 801-766-9793, EXT. 118.

THE CONTRACTOR TO SCHEDULE THE ENGINEER OF RECORD IN WRITING 3 DAYS MINIMUM BEFORE PLACEMENT OF CONCRETE CURBING, FLATWORK, OR ASPHALT PAVING. ALL AREAS MUST BE FORMED AND HAVE COMPACTED BASE COURSE. IN PLACE FOR THE ENGINEER TO COMPLETE A RANDOM SPOT GRADE CHECK BEFORE ASPHALT AND CONCRETE CONSTRUCTION. THE RANDOM GRADE CHECKS ARE FOR GENERAL CONFORMANCE TO SLOPES AND GRADING SHOWN ON PLANS USING A SMART LEVEL. RANDOM CHECKS DO NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GRADING IS IN CONFORMANCE WITH PLANS AND SPECIFICATIONS AND SATISFY PERFORMANCE OF HIS WORK. WITHIN 2 DAYS OF THE RANDOM SPOT CHECK, RESULTS OF THE SPOT CHECKS AND AREAS OF NON COMPLIANCE WILL BE PROVIDED TO THE CONTRACTOR AND ARCHITECT.



REV	DATE	DESCRIPTION
1	07-05-2020	cd4#1

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
XXXX XXXX XX, SARATOGA SPRINGS, UT XXXX
CONSTRUCTION BID SET





REV DATE DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020

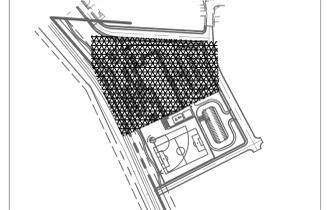
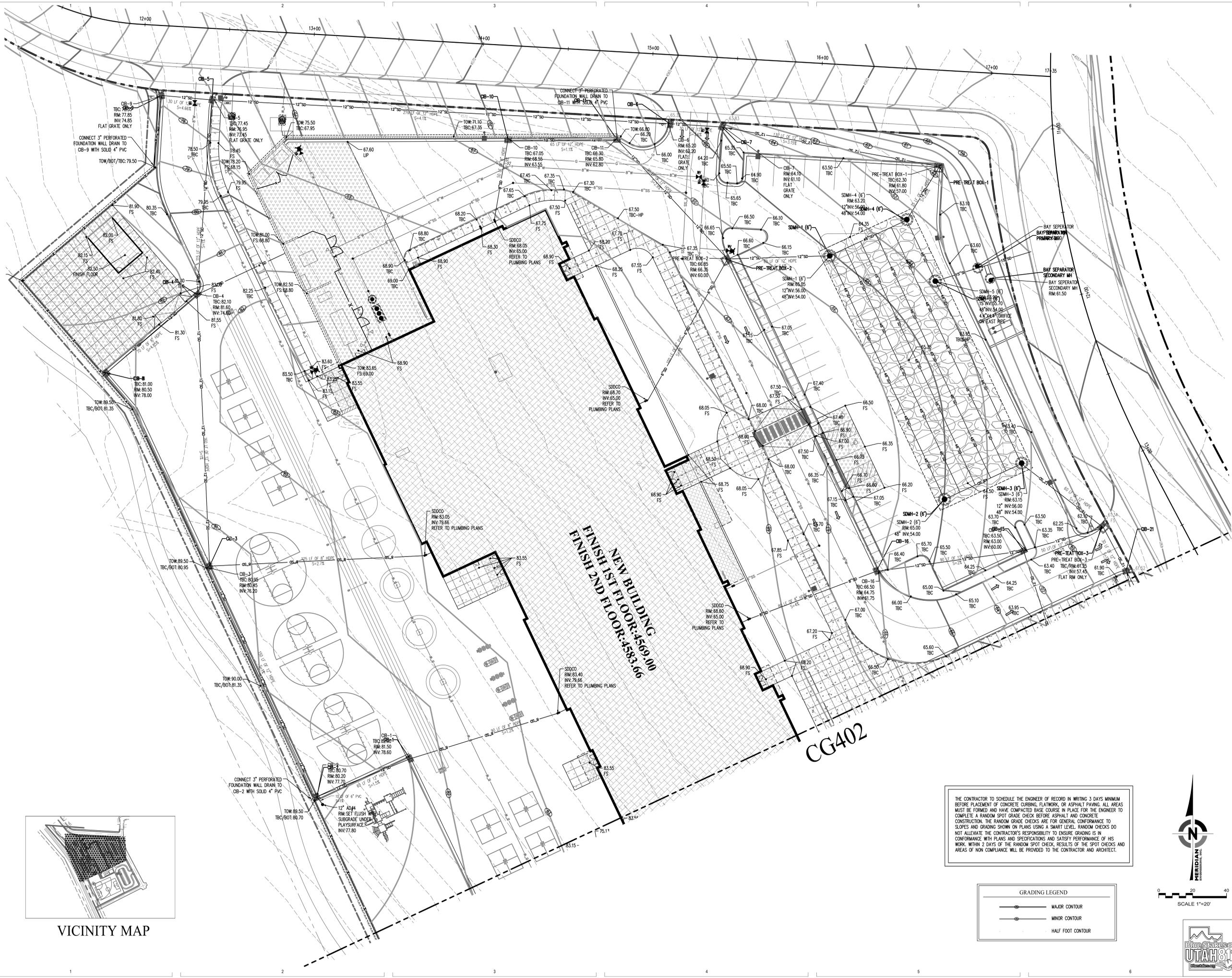
ASD NEW ELEMENTARY #101

ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT

BP1 - CONSTRUCTION BID SET

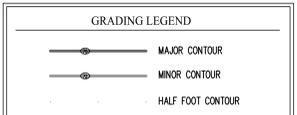
ENLARGED GRADING PLAN

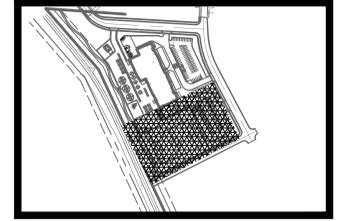
CG401



VICINITY MAP

THE CONTRACTOR TO SCHEDULE THE ENGINEER OF RECORD IN WRITING 3 DAYS MINIMUM BEFORE PLACEMENT OF CONCRETE CURBS, FLATWORK, OR ASPHALT PAVING. ALL AREAS MUST BE FORMED AND HAVE COMPACTED BASE COURSE IN PLACE FOR THE ENGINEER TO COMPLETE A RANDOM SPOT GRADE CHECK BEFORE ASPHALT AND CONCRETE CONSTRUCTION. THE RANDOM GRADE CHECKS ARE FOR GENERAL CONFORMANCE TO SLOPES AND GRADING SHOWN ON PLANS USING A SMART LEVEL. RANDOM CHECKS DO NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GRADING IS IN CONFORMANCE WITH PLANS AND SPECIFICATIONS AND SATISFY PERFORMANCE OF HIS WORK. WITHIN 2 DAYS OF THE RANDOM SPOT CHECK, RESULTS OF THE SPOT CHECKS AND AREAS OF NON COMPLIANCE WILL BE PROVIDED TO THE CONTRACTOR AND ARCHITECT.



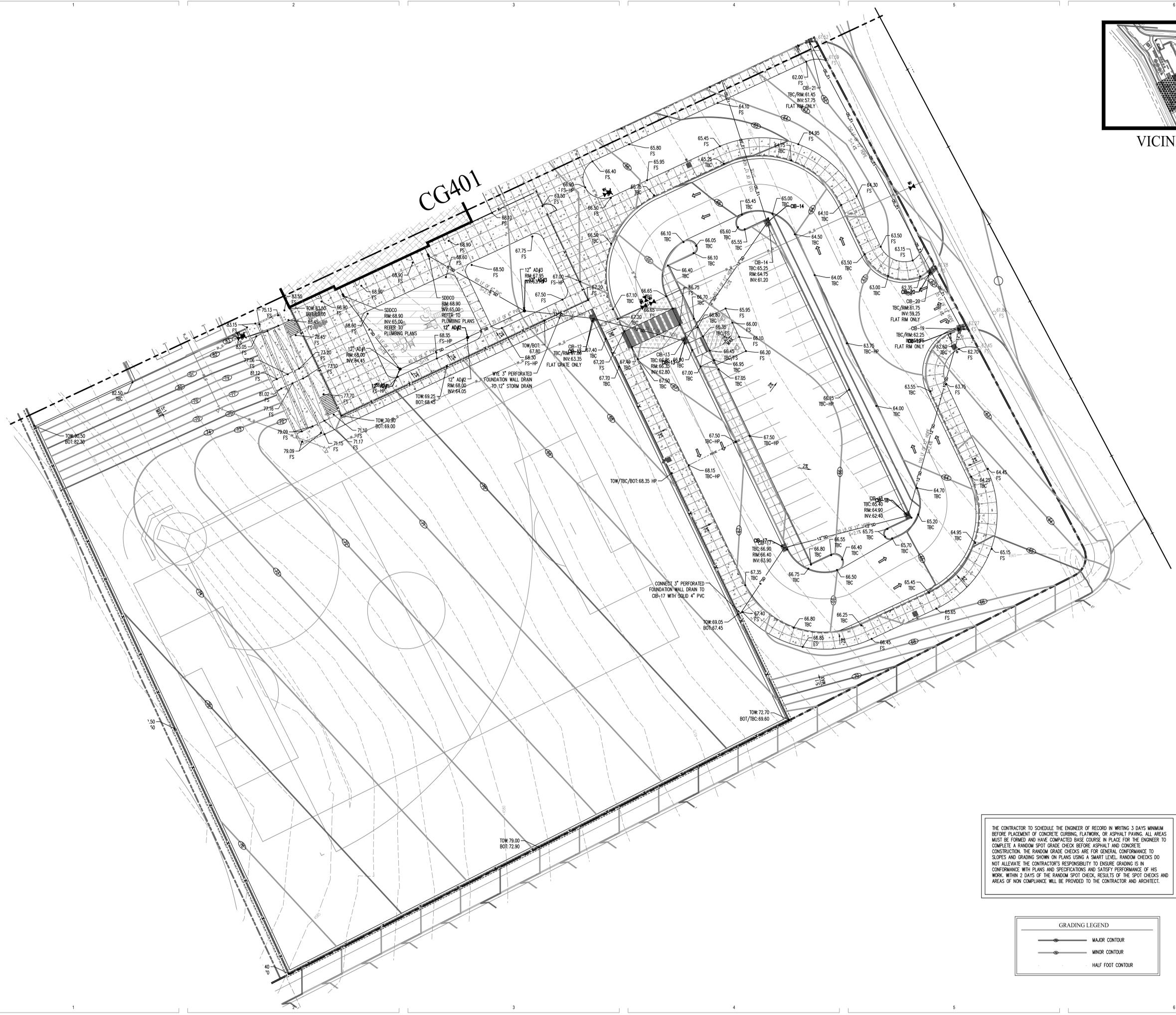


VICINITY MAP



REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020



THE CONTRACTOR TO SCHEDULE THE ENGINEER OF RECORD IN WRITING 3 DAYS MINIMUM BEFORE PLACEMENT OF CONCRETE CURBS, FLATWORK, OR ASPHALT PAVING. ALL AREAS MUST BE FORMED AND HAVE COMPACTED BASE COURSE IN PLACE FOR THE ENGINEER TO COMPLETE A RANDOM SPOT GRADE CHECK BEFORE ASPHALT AND CONCRETE CONSTRUCTION. THE RANDOM GRADE CHECKS ARE FOR GENERAL CONFORMANCE TO SLOPES AND GRADING SHOWN ON PLANS USING A SMART LEVEL. RANDOM CHECKS DO NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GRADING IS IN CONFORMANCE WITH PLANS AND SPECIFICATIONS AND SATISFY PERFORMANCE OF HIS WORK. WITHIN 2 DAYS OF THE RANDOM SPOT CHECK, RESULTS OF THE SPOT CHECKS AND AREAS OF NON COMPLIANCE WILL BE PROVIDED TO THE CONTRACTOR AND ARCHITECT.

GRADING LEGEND

	MAJOR CONTOUR
	MINOR CONTOUR
	HALF FOOT CONTOUR



ASD NEW ELEMENTARY #101

ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET

ENLARGED GRADING PLAN



NOTES:

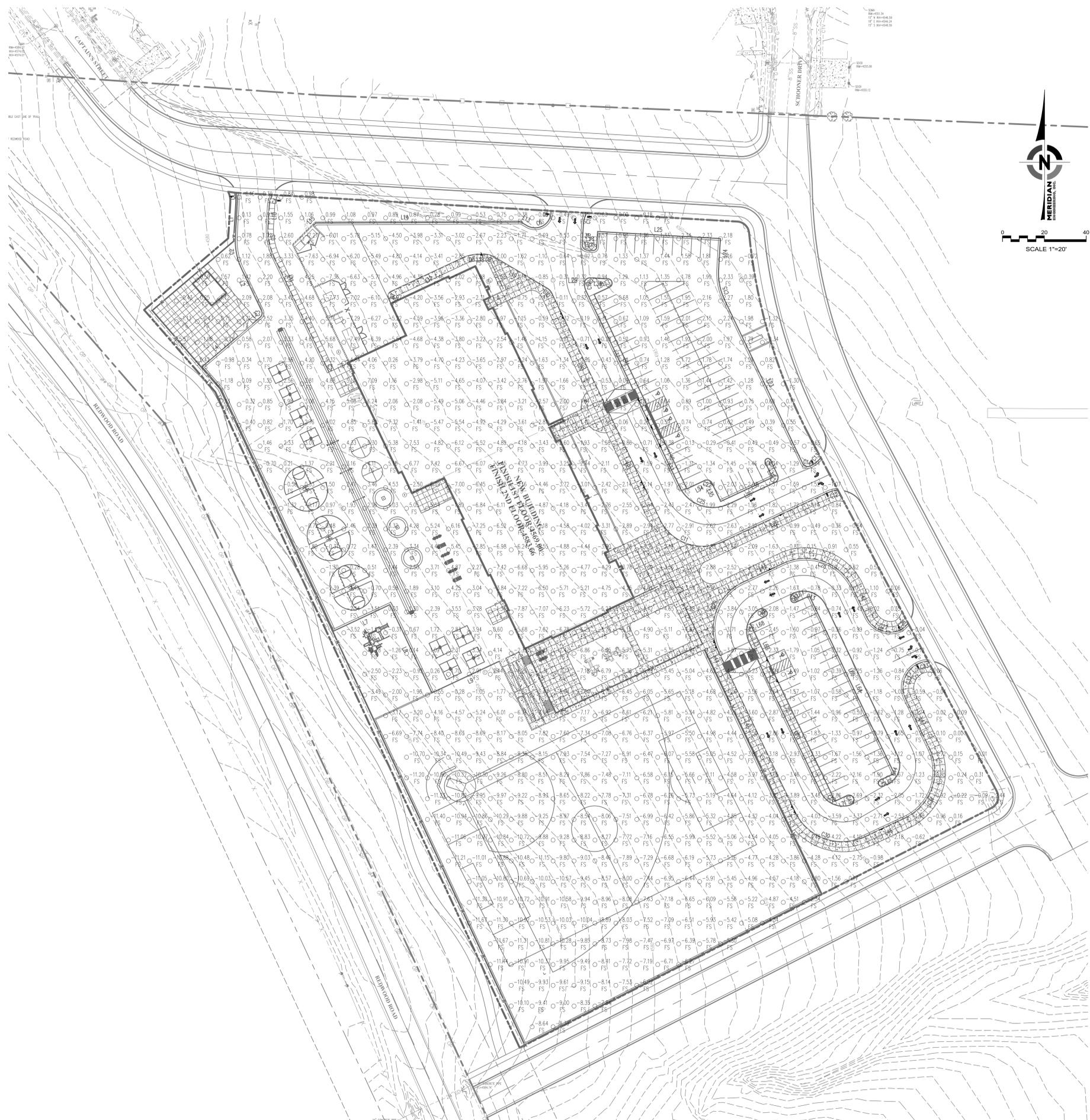
1. SITE EXCAVATION MATERIALS ARE NOT ALLOWED FOR USE BELOW FOOTING, BUILDING SLAB, OR OTHER STRUCTURAL ITEMS ON SITE (REFER TO SPECIFICATIONS.) SITE EXCAVATION MATERIALS CAN BE USED UNDER PAVEMENTS IF THEY MEET THE PROJECT SPECIFICATIONS AND REQUIREMENTS FROM THE GEOTECHNICAL REPORT. THE FILL MATERIAL SHOWN ON THE CALCULATIONS INCLUDED ALL NECESSARY FILL (INCLUDING OF PAVEMENT, CONCRETE, BASE COURSE, AND IMPORTED STRUCTURAL FILL.) TO BRING THE SITE TO THE FINISH SURFACE SHOWN ON THE GRADING PLANS. ADDITIONAL EXCAVATION IS REQUIRED IN CUT AREAS TO EXCAVATE TO THE NECESSARY SUBGRADE ELEVATIONS FOR THE NEW PAVEMENT.
2. ANY TOP SOIL ON THE SITE IS ASSUMED TO BE REMOVED AND REUSED AT THE TOP OF THE GRASS PLAY FIELD, AND OTHER LANDSCAPE AREAS AS INDICATED ON THE LANDSCAPE PLANS. CONTRACTOR SHALL STRIP THE TOP OF MATERIAL AS OUTLINED IN THE SPECIFICATIONS AND LANDSCAPE PLAN PRIOR TO ANY EXCAVATIONS OR BACKFILLING. SCREEN ALL TOPSOIL IN ACCORDANCE WITH LANDSCAPING SPECIFICATIONS PRIOR TO FINAL PLACEMENT OF THE MATERIAL.
3. THE MASS GRADING QUANTITIES ARE CALCULATED TO THE FINISH FLOOR OF THE BUILDING. ALL OTHERS AREAS ARE ALSO CALCULATED TO THE FINISH SURFACE SHOWN ON THE GRADING PLAN INCLUDING PAVEMENT AND TOPSOIL.
4. EXCAVATION FOR BUILDING FOOTINGS, UTILITY TRENCHES, SITE RETAINING WALLS, AND PAVEMENT/SIDEWALK SECTIONS OR OTHER MISCELLANEOUS STRUCTURES ARE NOT INCLUDED IN THE APPROXIMATED MASS GRADING QUANTITIES UNDER ALL SITE PAVEMENT.

LEGEND

- 1.6 APPROXIMATE FILL TO GRADE (SEE NOTE 3)
- 1.6 APPROXIMATE CUT TO GRADE (SEE NOTE 3)

CONTRACTOR BID NOTE:

THESE QUANTITIES ARE PREPARED TO HELP IN THE PREPARATION OF THE GRADING PLAN TO MINIMIZE THE REMOVAL OF MATERIAL FROM THE SITE AND TO APPROXIMATE THE AMOUNT OF MASS GRADING THAT WILL BE NECESSARY TO COMPLETE THE WORK. THE CONTRACTOR WILL NEED TO COMPLETE THEIR OWN EARTHWORK TAKE OFF BASED ON THE GRADING PLANS. THE ACTUAL QUANTITIES OF EARTHWORK MAY VARY FROM THE AMOUNTS SHOWN ON THIS SHEET. THE CONTRACTOR'S BID WILL INCLUDE ALL NECESSARY EARTHWORK TO COMPLETE THE PROJECT TO THE FINISH GRADES SHOWN ON THE GRADING PLANS.



REV DATE DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET



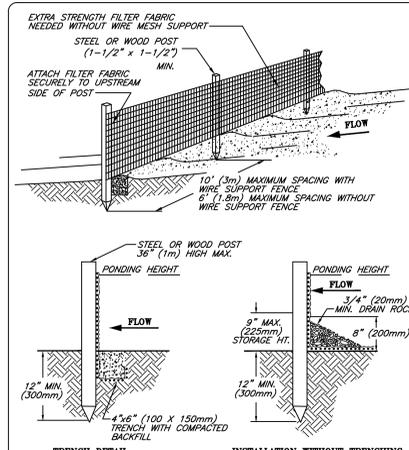
CUT AND FILL PLAN

SILT FENCES, INSTALLATION OF SILT FENCES NOTE:

- DIG OR TRENCH A FOUR INCH WIDE BY SIX INCH DEEP TRENCH. THE LENGTH OF THE SILT FENCE
- ROLL OUT SILT FENCE MATERIAL ALONG THE FRONT OF THE TRENCH SUCH THAT THE STAKES WILL BE ON THE DOWNSTREAM SIDE AND THE BOTTOM FLAP LAY IN THE TRENCH.
- STARTING AT ONE END, DRIVE THE FIRST STAKE AT LEAST 10 INCHES INTO THE GROUND. NOTE THAT THE STAKE MUST BE DRIVEN FAR ENOUGH INTO THE GROUND SO THAT 8 - 12 INCHES OF MATERIAL REMAINS IN THE GROUND.
- AT THE NEXT STAKE, PULL THE MATERIAL TAUT BEFORE DRIVING THE SECOND STAKE INTO THE GROUND. NOTE THAT THE STAKE MUST BE DRIVEN FAR ENOUGH INTO THE GROUND SO THAT 8 - 12 INCHES OF MATERIAL REMAINS IN THE GROUND.
- REPEAT STEP 4 UNTIL THE STAKES ARE DRIVEN INTO THE GROUND.
- WHEN ATTACHING TWO LENGTHS OF FENCE TOGETHER, DO THE FOLLOWING:
 - PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
 - ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION, TO CREATE A TIGHT SEAL WITH THE FENCE MATERIAL.
 - DRIVE BOTH POST INTO THE GROUND SO THAT 8 - 12 INCHES OF MATERIAL REMAINS IN THE GROUND.

EROSION CONTROL GENERAL NOTES:

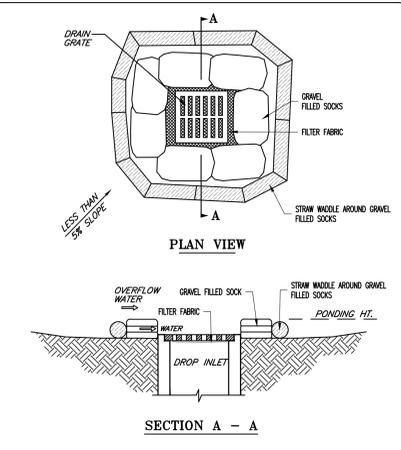
- AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DUE TO WIND AND RUNOFF. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING THE EROSION CONTROL FACILITIES SHOWN.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DUE TO UNFORESEEN PROBLEMS OR IF THE PLAN DOES NOT FUNCTION AS INTENDED. A REPRESENTATIVE OF THE CITY PUBLIC WORKS DEPARTMENT MAY REQUIRE ADDITIONAL CONTROL DEVICES UPON INSPECTION OF PROPOSED FACILITIES.
- ALL BEST MANAGEMENT PRACTICES AND EROSION CONTROL MEASURES ARE TO CONFORM TO THE CITY LAND DISTURBANCE DESIGN AND CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STREETS CLEAN AND FREE FROM DEBRIS DEPOSITED BY TRAFFIC FROM THE SITE.
- ALL STORM DRAIN FACILITIES ON SITE AND ADJACENT TO THE SITE NEED TO BE PROTECTED FROM SITE RUNOFF. INLET PROTECTION DEVICES SHALL BE INSTALLED IMMEDIATELY AS INDIVIDUAL INLETS ARE INSTALLED.
- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE PAVED, SEEDED WITH NATIVE VEGETATION OR LANDSCAPED. REFER TO LANDSCAPE PLANS FOR SEED MIX AND PLANTING SPECIFICATIONS.
- EROSION CONTROL STRUCTURES BELOW SODDED AREAS MAY BE REMOVED ONCE SOD AND FINAL LANDSCAPING ARE IN PLACE. EROSION CONTROL STRUCTURES BELOW SEEDED AREAS MUST REMAIN IN PLACE UNTIL THE ENTIRE AREA HAS ESTABLISHED A MATURE COVERING OF HEALTHY VEGETATION. EROSION CONTROL IN PROPOSED PAVEMENT AREAS SHALL REMAIN IN PLACE UNTIL PAVEMENT IS COMPLETE.
- CONTRACTOR SHALL USE VEHICLE TRACKING CONTROL AT ALL LOCATIONS WHERE VEHICLES WILL ENTER OR EXIT THE SITE. CONTROL FACILITIES SHALL BE MAINTAINED WHILE CONSTRUCTION IS IN PROGRESS, MOVED WHEN NECESSARY AND REMOVED WHEN THE SITE IS PAVED.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, ETC.) SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT WITH STORM WATER DISCHARGES FROM THE SITE.
- BLOWING DUST MUST BE CONTROLLED AT ALL TIMES. SITE WATERING SHALL BE USED TO CONTROL DUST. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS ABSOLUTELY PROHIBITED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, GRAVEL BAGS, ETC.) DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT.
- ALL OFF-SITE CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF BITUMINOUS PAVING FOR ROAD CONSTRUCTION.
- ALL MEASURES CONTAINED IN THIS PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A RAINFALL EVENT. ANY NEEDED CLEANING AND REPAIRS SHALL BE DONE IMMEDIATELY UPON DISCOVERY.
- ALL UTILITY LINES SHALL BE CLEANED OF DIRT AND DEBRIS PRIOR TO BEING PUT INTO SERVICE. DOWN-GRADE LINES MUST BE PROTECTED FROM WASH-WATER DURING THE CLEANING TO AVOID CONTAMINATION AND COMPROMISING OUTFALL CLEANLINESS.



NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

FILE: SILT FENCE

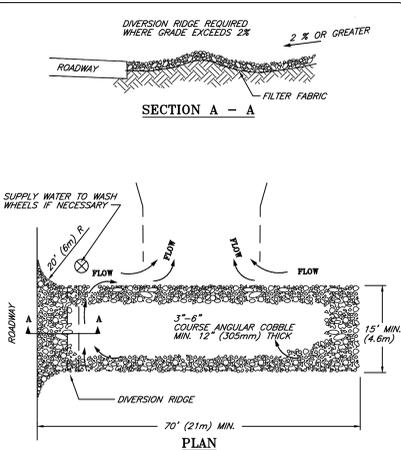
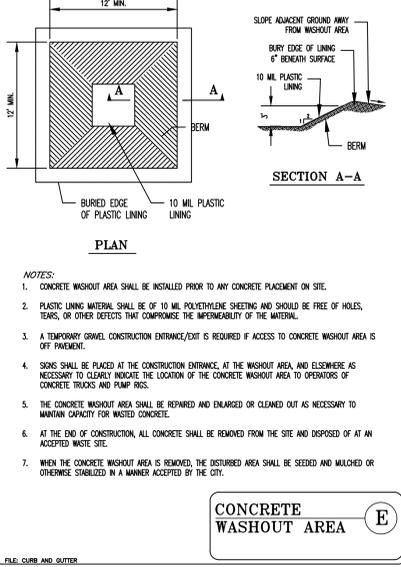
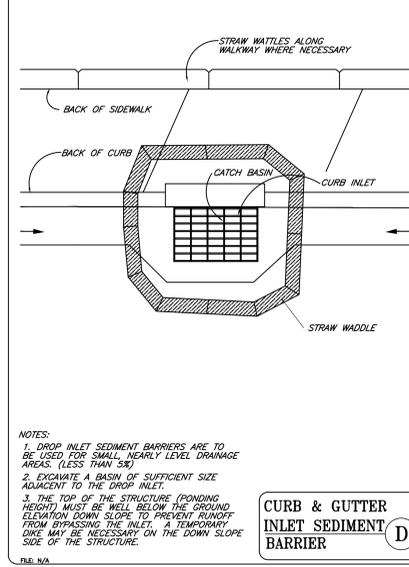
SILT FENCE A



NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS (LESS THAN 5%).
2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWN SLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWN SLOPE SIDE OF THE STRUCTURE.

FILE: ENTRANCE

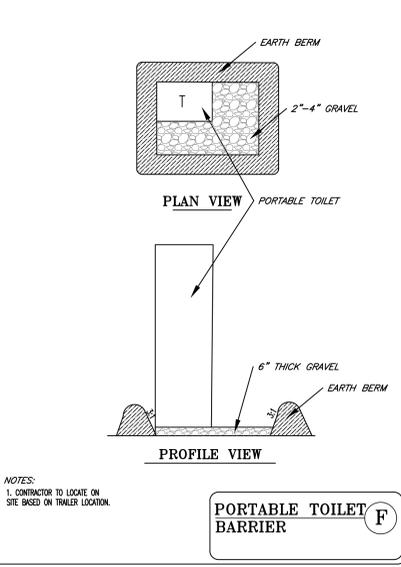
INLET SEDIMENT BARRIER B



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

FILE: N/A

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT C



LIMIT OF DISTURBANCE NOTES:

- THE LIMITS OF DISTURBANCE (L.O.D.) TO BE FIELD MARKED.
- FIELD VERIFICATION OF AN L.O.D. BY CITY ENGINEERING.
- PRECONSTRUCTION EROSION AND SEDIMENT CONTROL MEETING REQUIRED PRIOR TO ANY DISTURBANCE. THE REQUIRED ATTENDEES WILL BE DEVELOPER'S PROJECT MANAGER, CONSTRUCTION COMPANY'S ON SITE MANAGER.
- MODIFICATION OF L.O.D. AS REQUIRED BY RESULTS OF PRECONSTRUCTION MEETING.
- THE CONTRACTOR TO OBTAIN WRITTEN APPROVAL FROM THE CITY CERTIFYING THE L.O.D., DUST CONTROL, AND TREE PROTECTION HAS BEEN REVIEWED AND APPROVED PRIOR TO WORK BEGINNING.

CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES NOTES:

- CONTRACTOR WILL PERFORM EARTHWORK IN ACCORDANCE WITH THE CITY STANDARD SPECIFICATIONS, CITY EROSION, SEDIMENT, REVEGETATION REQUIREMENTS AND THE DUST CONTROL PLAN AS REQUIRED BY THE STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL DIVISION OF AIR QUALITY.
- THE CONTRACTOR WILL PERFORM EARTHWORK IN ACCORDANCE WITH THE PROJECT EARTHWORK SPECIFICATIONS AND THE EARTHWORK RECOMMENDATIONS FOUND IN THE GEOTECHNICAL INVESTIGATION REPORT PREPARED FOR THIS PROJECT. IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE DOCUMENTS MENTIONED (NOTE 2) AND THE CITY'S EROSION AND SEDIMENT CONTROL REQUIREMENTS OR THE DUST CONTROL PLAN AS REQUIRED BY THE STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL DIVISION OF AIR QUALITY, THE CITY'S REQUIREMENTS AND THE STATE REQUIREMENTS WILL CONTROL.
- L.O.D. BARRIERS WILL BE PROPERLY INSTALLED PRIOR TO ANY DISTURBANCE. L.O.D. BARRIERS ARE DEFINED AS SILT FENCE AND ENVIRONMENTAL FENCE.
- INSTALL SILT FENCE ON ALL DOWNHILL SIDE OF L.O.D. SEE DETAIL AND SILT FENCE NOTES FOR CORRECT INSTALLATION PROCEDURE.
- ENVIRONMENTAL FENCES ARE TO BE INSTALLED ON ALL UPHILL SIDE OF L.O.D.
- THE L.O.D. SILT FENCE BARRIERS DO NOT REPLACE OR FUNCTION AS SEDIMENTATION B.M.P.S. ADDITIONAL SEDIMENT (BEST MANAGEMENT PRACTICES) B.M.P.S WILL BE REQUIRED AS SHOWN ON THE PLANS OR AS REQUIRED BY THE CITY THROUGHOUT THE PROJECT AS UNFORESEEN SITUATIONS OCCUR.
- WITHIN THE SAME WORKING DAY SOIL IS DISTURBED ALL SEDIMENT CONTROL B.M.P.S. WILL BE INSTALLED. AN EXAMPLE OF SEDIMENT CONTROL B.M.P. IS A SILT FENCE OR A TEMPORARY SEDIMENTATION BASIN. EXISTING VEGETATION WILL NOT BE BURIED, THE METHOD OF DISPOSAL WILL BE SUBMITTED AND APPROVED BY THE CITY.
- INSTALL ALL SEDIMENTATION B.M.P.S AS SHOWN ON PLANS AND AS DIRECTED BY THE CITY
- DUST CONTROL MEASURES WILL BE ON SITE AND IN WORKING ORDER WHEN SOIL IS DISTURBED. DUST CONTROL WILL BE USED 24 HOURS SEVEN DAYS PER WEEK UNTIL SOIL IS RESEEDED AND PROTECTED. WATER USED TO CONTROL DUST WILL CONTAIN CALCIUM CHLORIDE OR SIMILAR ADDITIVE. THE DUST CONTROL PLAN AS REQUIRED BY THE STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL DIVISION OF AIR QUALITY DOES NOT REPLACE THE CALCIUM CHLORIDE REQUIREMENT.
- INSTALL IMPROVEMENTS AS SHOWN ON THE APPROVED CONSTRUCTION PLANS.
- ALL DISTURBED SOIL WILL BE MADE STABLE AS WITHIN 21 DAYS OF DISTURBANCE.
- TEMPORARY AND PERMANENT SEDIMENT BEST MANAGEMENT PRACTICES WILL REMAIN FUNCTIONAL AT ALL TIMES THROUGH THE ENTIRE PROJECT AND UNTIL ALL DISTURBED SOIL HAS BEEN STABILIZED TO PREVENT EROSION. WRITTEN APPROVAL MUST BE OBTAINED FROM THE CITY CERTIFYING ALL DISTURBED SOIL IS STABLE BEFORE ABANDONING SEDIMENTATION BEST MANAGEMENT PRACTICES.
- IF THE EXISTING GRADES ARE DIFFERENT THAN WHAT IS SHOWN ON THE GRADING PLAN, STOP WORK AND NOTIFY THE CITY.
- IF THE PROJECT REQUIRES EXPORT OR IMPORT MATERIAL TO ACHIEVE A BALANCED SITE. THE CONTRACTOR IS TO KEEP OFFSITE ROADS CLEAN AT ALL TIMES. FAILURE TO KEEP STREETS CLEAN WILL RESULT IN A MANDATORY WORK STOP ORDER BEING ISSUED ON THE IMPORT/ EXPORT OPERATION.
- THE PROJECT CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL PAVED STREETS ADJACENT TO OR ABUTTING THE GRADING PROJECT CLEAN AND FREE OF DIRT, MUD, AND DEBRIS AT ALL TIMES. WHEREAS THIS IS A PUBLIC HEALTH AND SAFETY ISSUE, FAILURE TO COMPLY WILL RESULT IN A MANDATORY WORK STOP ORDER BEING ISSUED OVER THE ENTIRE PROJECT, INCLUDING COMMERCIAL AND RESIDENTIAL CONSTRUCTION PROJECTS.
- THE CONTRACTOR WILL PROVIDE ADDITIONAL TEMPORARY EROSION CONTROL PLANS, AND PERMITS AS REQUIRED BY THE CITY, THE COUNTY AND THE STATE OF UTAH AS REQUIRED THROUGHOUT THE DURATION OF THE PROJECT.
- FAILURE TO FOLLOW THE SEQUENCE OF CONSTRUCTION SHALL RESULT IN THE ISSUANCE OF A WORK STOP ORDER BEING ISSUED.
- CONCRETE TRUCKS TO USE PRE-ASSIGNED WASH OUT AREA. CONCRETE TRUCKS ARE NOT TO BE CLEANED OUT OR WASHED DOWN IN THE PUBLIC RIGHT-OF-WAY.
- PORTABLE TOILETS TO BE LOCATED ADJACENT TO CONTRACTOR TRAILER. TOILETS SHALL BE MAINTAINED BY CONTRACTOR.
- CONSTRUCTION WASTE BIN TO BE LOCATED NEAR CONTRACTOR TRAILER. ALL CONSTRUCTION WASTE TO BE PLACED IN WASTE BIN.
- ALL CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES (B.M.P.S) ARE TO BE INSPECTED AND MAINTAINED AT LEAST WEEKLY, ALSO BEFORE AND AFTER EACH STORM EVENT.
- CONTRACTOR SHALL BE REQUIRED TO KEEP A RECORD OF ALL INSPECTIONS AND MAINTENANCE ON SITE WITH THE STORM WATER POLLUTION PREVENTION PLAN.



REV	DATE	DESCRIPTION
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VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 2, 2020

CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES



DECIDUOUS TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	AFRICA LINDLEYA (MAY VARIETY) MAY VARIETY	3	1.50' CAL.
	BEETLEFLY (MAY VARIETY) MAY VARIETY	12	7' CAL.
	MAY VARIETY (MAY VARIETY) MAY VARIETY	3	1.50' CAL.
	PLATANUS (MAY VARIETY) MAY VARIETY	1	7' CAL.
	REDWOOD (MAY VARIETY) MAY VARIETY	4	1.50' CAL.
	SPRING (MAY VARIETY) MAY VARIETY	12	7' CAL.
	LEAF (MAY VARIETY) MAY VARIETY	9	7' CAL.

ALL TREE AND SHRUB LANDS SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

EVERGREEN TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PROVIDE (MAY VARIETY) MAY VARIETY	4	7' CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	1	7' CAL.

SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PROVIDE (MAY VARIETY) MAY VARIETY	17	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	9	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	17	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	10	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	9	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	18	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	11	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	1	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	14	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	1	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	1	10" CAL.

EVERGREEN SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PROVIDE (MAY VARIETY) MAY VARIETY	4	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	11	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	4	10" CAL.

PERENNIAL LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PROVIDE (MAY VARIETY) MAY VARIETY	15	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	12	10" CAL.
	PROVIDE (MAY VARIETY) MAY VARIETY	18	10" CAL.

LAWN LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	LAWN, KENTUCKY BLUEGRASS 5 VARIETY MIX MINIMUM.	SOD ROLLS

INERT LANDSCAPE MATERIALS

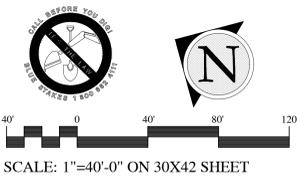
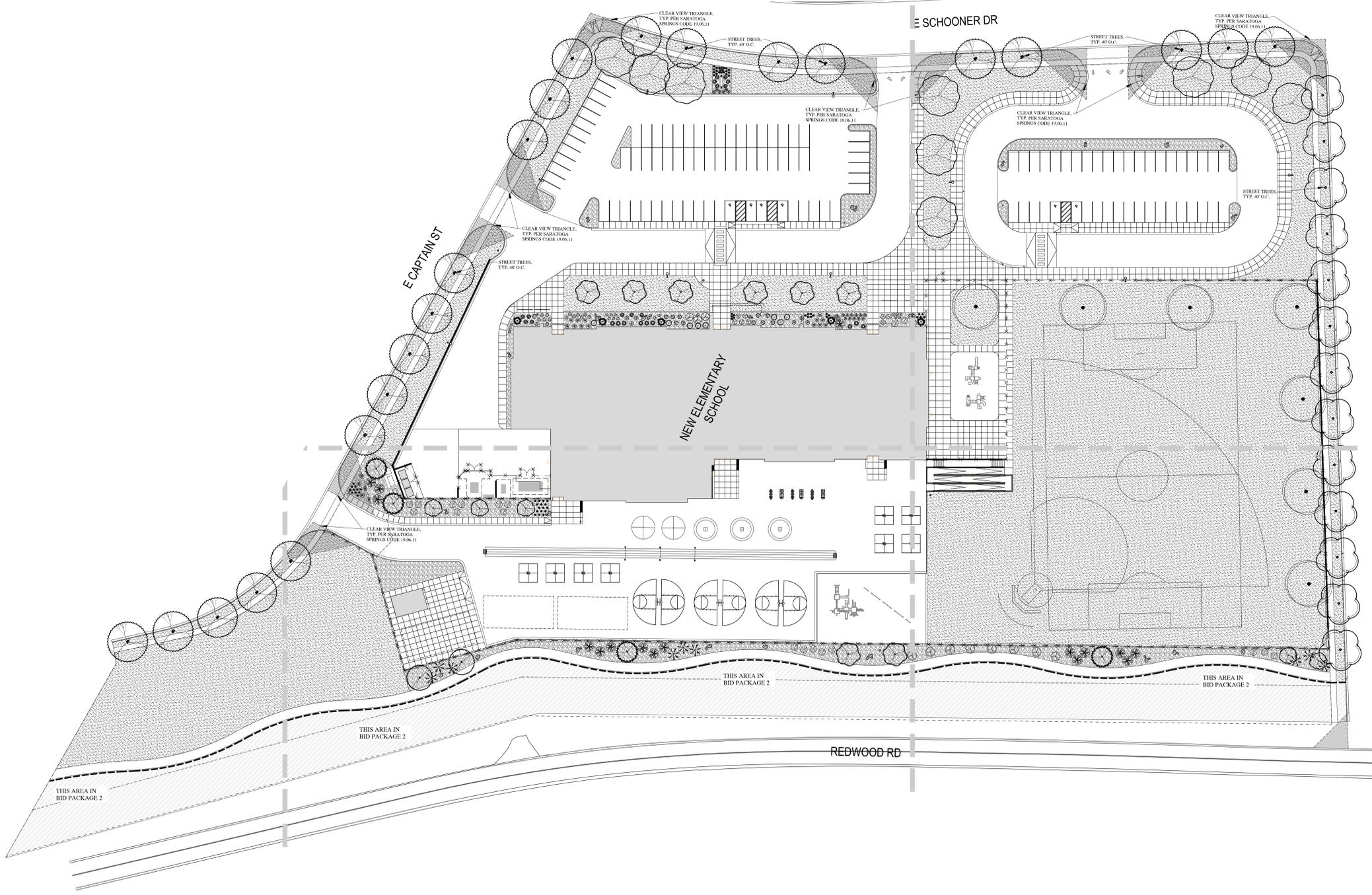
SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	6" DEPTH OF 4"-6" FRACTURED COPPER CANYON ANGULAR ROCK (OR OWNER APPROVED EQUAL). ROCK TO BE WASHED PRIOR TO PLACING ROCK ON TOP OF WEED BARRIER FABRIC (SEE SPECS FOR MORE INFO). SEE DETAIL #11 SHEET LS100 FOR ADDITIONAL INSTALLATION NOTES. ROCK IS AVAILABLE THROUGH STAKER PARSONS. PLACE A SINGLE LAYER OF 3/4" SCREENED, DOUBLE WASHED FRACTURED COPPER CANYON ROCK ON TOP OF FABRIC TO COVER FABRIC PRIOR TO PLACING 6" DEPTH OF 4-6" SIZED ROCK. SUBMIT SAMPLE TO OWNER FOR APPROVAL.	PER PLAN
	LANDSCAPE BOULDERS - BOULDER TYPE TO CONTRAST THE COPPER CANYON ROCK. BOULDERS ARE AVAILABLE FROM STAKER PARSONS OR OWNER APPROVED EQUAL. SUBMIT SAMPLES FOR APPROVAL. SEE DETAILS 10 & 11 ON SHEET LS300, VARIOUS SIZES AS NOTED.	40% 2'X2' 30% 3'X3' 30% 3'X4'

LANDSCAPE NOTES

- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS FOR BIDDING AND INSTALLATION PURPOSES. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE.
- PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. ANY SUBSTITUTIONS TO BE APPROVED BY OWNER AND/OR LANDSCAPE ARCHITECT.
- NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALLED PRIOR TO LANDSCAPE INSTALLATION TO ENSURE PROPER WATERING OF ALL LANDSCAPE AREAS. REFER TO IRRIGATION PLANS FOR SPECIFICS. A RAIN SENSOR SHALL BE INSTALLED ON THE IRRIGATION SYSTEM.
- NEW LAWN AREAS TO BE SODDED WITH 100% KENTUCKY BLUEGRASS (MINIMUM OF 5 DIFFERENT VARIETIES). FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. SEE SOD LAYING NOTES FOR MORE INFORMATION.
- SEE SPECS FOR ALL TOPSOIL AND AMENDMENT REQUIREMENTS.
- PLANTER BEDS TO BE EXCAVATED AS NECESSARY PER SPECS IN ORDER TO ALLOW FOR TOPSOIL, AMENDMENTS AND MULCH. THE FINISHED GRADE OF PLANTER AREAS SHALL BE APPROX. 1" BELOW TOP OF CURB, SIDEWALK, OR OTHER PAVED AREA. DEWITT'S 5 OZ. WEED BARRIER FABRIC TO BE INSTALLED IN ALL ROCK AREAS. DO NOT INSTALL WEED BARRIER FABRIC UNDER AREAS TO RECEIVE WOOD MULCH.
- TREES LOCATED IN LAWN AREAS SHALL HAVE A GRASS FREE TREE RING AROUND BASE OF TREE WITH 3" DEPTH OF CHOCOLATE COLORED WOOD MULCH. THE GRASS FREE RING FOR FLOWERING TREES SHALL BE 4" DIAMETER AND UP TO 6' DIAMETER FOR SHADE TREES WHERE APPROPRIATE. PULL MULCH MIN. 6' AWAY FROM ALL TREES. TREES IN PARKSTRIPS TO HAVE A 5' AREA VOID OF SOD FOR TREE WELLS.
- IF HIGH WINDS ARE FREQUENT ON SITE, ALL TREES TO BE STAKED AT TIME OF PLANTING. SEE DETAILS FOR SPECIFICS. REMOVE STAKING WITHIN FIRST YEAR OR WHEN TREE IS ESTABLISHED.
- SEE ARCHITECT AND CIVIL PLANS FOR ALL BUILDING AND SITE INFORMATION INCLUDING FENCING, GATES AND FENCE CURBING, PLAYGROUND AREA, ETC.
- THESE LANDSCAPE NOTES, SOD NOTES ETC. APPLY TO SHEETS LS100 THRU LS104.

SOD LAYING NOTES

- LAY SOD WITHIN 24 HOURS OF BEING LIFTED.
- LAY SOD IN ROWS WITH JOINTS STAGGERED. BUTT SECTIONS CLOSELY WITHOUT OVERLAPPING OR LEAVING GAPS BETWEEN SECTIONS. CUT OUT IRREGULAR OR THIN SECTIONS WITH A SHARP KNIFE.
- LAY SOD FLUSH WITH ADJOINING EXISTING SODDED OR PAVED SURFACES.
- AFTER SODDING HAS BEEN COMPLETED, ROLL HORIZONTAL SURFACE AREAS IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER WITH A 150 POUND SOD ROLLER. REPAIR AND RE-ROLL AREAS WITH DEPRESSIONS, LUMPS OR OTHER IRREGULARITIES. HEAVY ROLLING TO CORRECT IRREGULARITIES IN GRADE IS NOT PERMITTED.
- WATER ALL SODDED AREAS IMMEDIATELY AFTER SOD LAYING TO OBTAIN MOISTURE PENETRATION THROUGH SOD INTO TOP 4" OF TOPSOIL.
- PROVIDE ADEQUATE PROTECTION OF SODDED AREAS AGAINST TRESPASSING, EROSION AND DAMAGE OF ANY KIND. REMOVE THIS PROTECTION AFTER SODDED AREAS HAVE BEEN ACCEPTED BY THE OWNER.
- REPLACE DAMAGED AREAS AT NO ADDITIONAL COST TO OWNER.



REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
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DECIDUOUS TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	ACER TATARICUM 'HOT WINGS' HOT WINGS TATARIAN MAPLE SINGLE TRUNK VARIETY	5	1 1/2" CAL.
	GLEDITSIA TRIACANTHOS 'INERMIS' 'SHADEMASTER'™ SHADEMASTER LOCUST	22	2" CAL.
	MALUS X 'SPRING SNOW' SPRING SNOW CRAB APPLE	2	1 1/2" CAL.
	PLATANUS X ACERIFOLIA 'MORTON CIRCLE' EXCLAMATION LONDON PLANE TREE	7	2" CAL.
	PRUNUS SERRULATA 'KWANZAN' FLOWERING CHERRY	8	1 1/2" CAL.
	SOPHORA JAPONICA 'REGENT' JAPANESE PAGODA TREE	13	2" CAL.
	ULMUS PARVIFOLIA 'ALLEE' ALLEE LACEBARK ELM	9	2" CAL.

ALL TREE AND SHRUB LAYOUT SHALL BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO INSTALLATION.

EVERGREEN TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PINUS NIGRA AUSTRIAN BLACK PINE	4	7-8" TALL
	PINUS NIGRA 'ARNOLD SENTINEL' ARNOLD SENTINEL PINE	5	7-8" TALL

SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	CARYOPTERIS X CLANDONENSIS 'BEYOND MIDNIGHT' BLUEBEARD SHRUB	17	5 GAL.
	CORNUS ALBA 'BAIHALO' IVORY HALO DOGWOOD	8	5 GAL.
	CORNUS SERICEA 'KELSEY' KELSEY DOGWOOD	17	5 GAL.
	FORSYTHIA X 'COURTASOL'™ GOLD TIDE FORSYTHIA	10	5 GAL.
	HYBISCUS SYRIACUS 'LIL. KIM RED' LIL. KIM RED ROSE OF SHARON	6	5 GAL.
	LIGUSTRUM VICARYI GOLDEN PRIVET	20	5 GAL.
	PHYSOCARPUS OPULIFOLIUS 'DIABLO' DIABLO NINEBARK	15	5 GAL.
	PRUNUS LAROCERASUS 'OTTO LUYKEN' OTTO LUYKEN LAUREL	8	5 GAL.
	RHUS AROMATICA 'GRO-LOW' GRO-LOW FRAGRANT SUMAC	3	5 GAL.
	SPIREA JAPONICA 'TRACY'™ DOUBLE PLAY BIG BANG JAPANESE SPIREA	14	5 GAL.
	VIBURNUM OPULUS NANUM DWARF EUROPEAN VIBURNUM	5	5 GAL.
	WEIGELIA FLORIDA 'WINE AND ROSES' WINE AND ROSES WEIGELIA	3	5 GAL.

EVERGREEN SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	JUNIPERUS HORIZONTALIS 'BLUE CHIP' BLUE CHIP JUNIPER	9	5 GAL.
	PINUS MUGO MUGUS 'SLOWMOUND' SLOWMOUND MUGO PINE	13	5 GAL.
	TAXUS BACCATA 'RAPENDENS' DWARF ENGLISH YEW	9	5 GAL.

PERENNIAL LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	HEMEROCALLIS X 'STELLA DE ORO' STELLA DE ORO DAYLILY	35	1 GAL.
	HEMEROCALLIS X 'ROSY RETURNS' ROSY RETURNS DAYLILY	32	1 GAL.
	PENNISETUM ALOPECUROIDES 'DESERT PLAINS' DESERT PLAINS FOUNTAIN GRASS	18	5 GAL.

LAWN LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	LAWN - KENTUCKY BLUEGRASS 5 VARIETY MIX MINIMUM.	SOD ROLLS

INERT LANDSCAPE MATERIALS

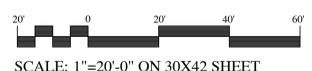
SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	6" DEPTH OF 4"-6" FRACTURED COPPER CANYON ANGULAR ROCK (OR OWNER APPROVED EQUAL). ROCK TO BE WASHED PRIOR TO PLACING ROCK ON TOP OF WEED BARRIER FABRIC (SEE SPECS. FOR MORE INFO). SEE DETAIL #11 SHEET LS100 FOR ADDITIONAL INSTALLATION NOTES. ROCK IS AVAILABLE THROUGH STAKER PARSON. PLACE A SINGLE LAYER OF 1/2" SCREENED, DOUBLE WASHED FRACTURED COPPER CANYON ROCK ON TOP OF FABRIC TO COVER FABRIC PRIOR TO PLACING 6" DEPTH OF 4-6" SIZED ROCK. SUBMIT SAMPLE TO OWNER FOR APPROVAL.	PER PLAN
	LANDSCAPE BOULDERS - BOULDER TYPE TO CONTRAST THE COPPER CANYON ROCK. BOULDERS ARE AVAILABLE FROM STAKER PARSONS OR OWNER APPROVED EQUAL. SUBMIT SAMPLES FOR APPROVAL. SEE DETAILS # 10 & 11 ON SHEET LS800, VARIOUS SIZES AS NOTED.	40% 2'X2'X2' 30% 3'X3'X3' 30% 3'X4'X4'

LANDSCAPE NOTES

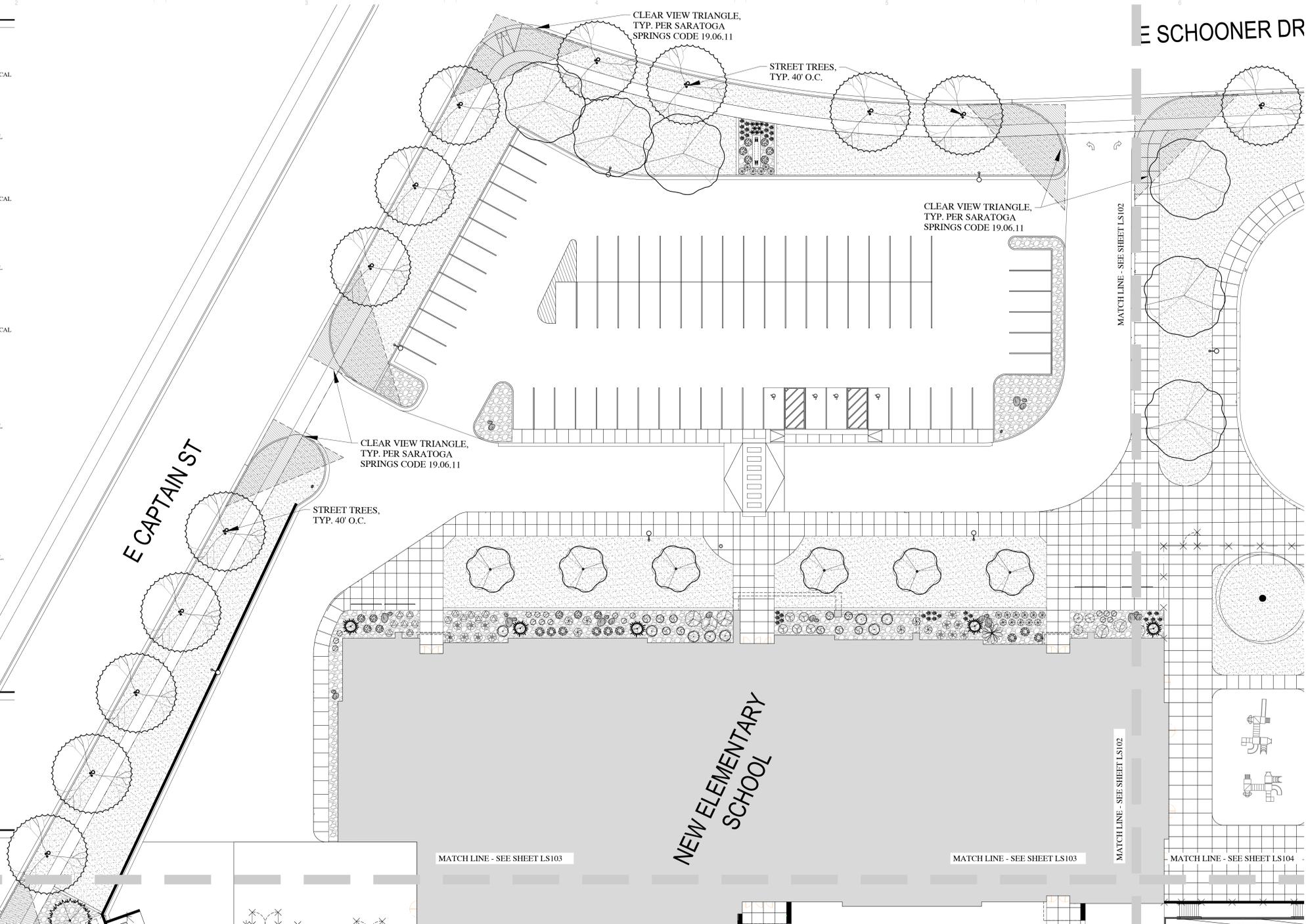
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS FOR BIDDING AND INSTALLATION PURPOSES. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE.
- PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. ANY SUBSTITUTIONS TO BE APPROVED BY OWNER AND/OR LANDSCAPE ARCHITECT.
- NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALLED PRIOR TO LANDSCAPE INSTALLATION TO ENSURE PROPER WATERING OF ALL LANDSCAPE AREAS. REFER TO IRRIGATION PLANS FOR SPECIFICS. A RAIN SENSOR SHALL BE INSTALLED ON THE IRRIGATION SYSTEM.
- NEW LAWN AREAS TO BE SODDED WITH 100% KENTUCKY BLUEGRASS (MINIMUM OF 5 DIFFERENT VARIETIES), FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. SEE SOD LAYING NOTES FOR MORE INFORMATION.
- SEE SPECS. FOR ALL TOPSOIL AND AMENDMENT REQUIREMENTS.
- PLANTER BEDS TO BE EXCAVATED AS NECESSARY PER SPECS IN ORDER TO ALLOW FOR TOPSOIL, AMENDMENTS AND MULCH. THE FINISHED GRADE OF LAWN AREAS SHALL BE APPROX. 1" BELOW TOP OF LAWN EDGING, SIDEWALK OR OTHER PAVED AREAS. FINISHED GRADE OF PLANTER AREAS SHALL BE APPROX. 1" BELOW TOP OF CURB, SIDEWALK, OR OTHER PAVED AREA. DEWITT'S OZ. WEED BARRIER FABRIC TO BE INSTALLED IN ALL ROCK AREAS. DO NOT INSTALL WEED BARRIER FABRIC UNDER AREAS TO RECEIVE WOOD MULCH.
- TREES LOCATED IN LAWN AREAS SHALL HAVE A GRASS FREE TREE RING AROUND BASE OF TREE WITH 1" DEPTH OF CHOCOLATE COLORED WOOD MULCH. THE GRASS FREE RING FOR FLOWERING TREES SHALL BE 4" DIAMETER AND UP TO 6" DIAMETER FOR SHADE TREES WHERE APPROPRIATE. PULL MULCH MIN. 6" AWAY FROM ALL TREES. TREES IN PARKSTRIPS TO HAVE A 5' AREA VOID OF SOD FOR TREE WELLS.
- IF HIGH WINDS ARE FREQUENT ON SITE, ALL TREES TO BE STAKED AT TIME OF PLANTING. SEE DETAILS FOR SPECIFICS. REMOVE STAKING WITHIN FIRST YEAR OR WHEN TREE IS ESTABLISHED.
- SEE ARCHITECT AND CIVIL PLANS FOR ALL BUILDING AND SITE INFORMATION INCLUDING FENCING, GATES AND FENCE CURBING, PLAYGROUND AREA, ETC.
- THESE LANDSCAPE NOTES, SOD NOTES ETC. APPLY TO SHEETS LS100 THRU LS104.

SOD LAYING NOTES

- LAY SOD WITHIN 24 HOURS OF BEING LIFTED.
- LAY SOD IN ROWS WITH JOINTS STAGGERED. BUTT SECTIONS CLOSELY WITHOUT OVERLAPPING OR LEAVING GAPS BETWEEN SECTIONS. CUT OUT IRREGULAR OR THIN SECTIONS WITH A SHARP KNIFE.
- LAY SOD FLUSH WITH ADJOINING EXISTING SODDED OR PAVED SURFACES.
- AFTER SODDING HAS BEEN COMPLETED, ROLL HORIZONTAL SURFACE AREAS IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER WITH A 150 POUND SOD ROLLER. REPAIR AND RE-ROLL AREAS WITH DEPRESSIONS, LUMPS OR OTHER IRREGULARITIES. HEAVY ROLLING TO CORRECT IRREGULARITIES IN GRADE IS NOT PERMITTED.
- WATER ALL SODDED AREAS IMMEDIATELY AFTER SOD LAYING TO OBTAIN MOISTURE. PENETRATION THROUGH SOD INTO TOP 4" OF TOPSOIL.
- PROVIDE ADEQUATE PROTECTION OF SODDED AREAS AGAINST TRESPASSING, EROSION AND DAMAGE OF ANY KIND. REMOVE THIS PROTECTION AFTER SODDED AREAS HAVE BEEN ACCEPTED BY THE OWNER.
- REPLACE DAMAGED AREAS AT NO ADDITIONAL COST TO OWNER.



SCALE: 1"=20'-0" ON 30X42 SHEET



REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE ISSUED: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET
PLANTING PLAN
LS101

DECIDUOUS TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	ACER TATARICUM 'HOT WINGS' HOT WINGS TATARIAN MAPLE SINGLE TRUNK VARIETY	5	1 1/2" CAL
	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'™ SHADEMASTER LOCUST	22	2" CAL
	MALUS X 'SPRING SNOW' SPRING SNOW CRAB APPLE	2	1 1/2" CAL
	PLATANUS X ACERIFOLIA 'MORTON CIRCLE' EXCLAMATION LONDON PLANE TREE	7	2" CAL
	PRUNUS SERRULATA 'KWANZAN' FLOWERING CHERRY	8	1 1/2" CAL
	SOPHORA JAPONICA 'REGENT' JAPANESE PAGODA TREE	13	2" CAL
	ULMUS PARVIFOLIA 'ALLEE' ALLEE LACEBARK ELM	9	2" CAL

ALL TREE AND SHRUB LAYOUT SHALL BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO INSTALLATION.

EVERGREEN TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PINUS NIGRA AUSTRIAN BLACK PINE	4	7-8" TALL
	PINUS NIGRA 'ARNOLD SENTINEL' ARNOLD SENTINEL PINE	5	7-8" TALL

SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	CARYOPTERIS X CLANDONENSIS 'BEYOND MIDNIGHT' BLUEBEARD SHRUB	17	5 GAL
	CORNUS ALBA 'BALLHALO' IVORY HALO DOGWOOD	8	5 GAL
	CORNUS SERICEA 'KELSEY' KELSEY DOGWOOD	17	5 GAL
	FORSYTHIA X 'CORDATA SOL' GOLD TIDE FORSYTHIA	10	5 GAL
	HYBISCUS SYRIACUS 'LIL KIM RED' LIL KIM RED ROSE OF SHARON	6	5 GAL
	LIGUSTRUM VICARYI GOLDEN PRIVET	20	5 GAL
	PHYSOCARPUS OPULIFOLIUS 'DIABLO' DIABLO NINEBARK	15	5 GAL
	PRUNUS LAUROCERASUS 'OTTO LUYKEN' OTTO LUYKEN LAUREL	8	5 GAL
	RHUS AROMATICA 'GRO-LOW' GRO-LOW FRAGRANT SUMAC	3	5 GAL
	SPIREA JAPONICA 'TRACY' DOUBLE PLAY BIG BANG JAPANESE SPIREA	14	5 GAL
	VIBURNUM OPULUS NANUM DWARF EUROPEAN VIBURNUM	5	5 GAL
	WEIGELIA FLORIDA 'WINE AND ROSES' WINE AND ROSES WEIGELA	3	5 GAL

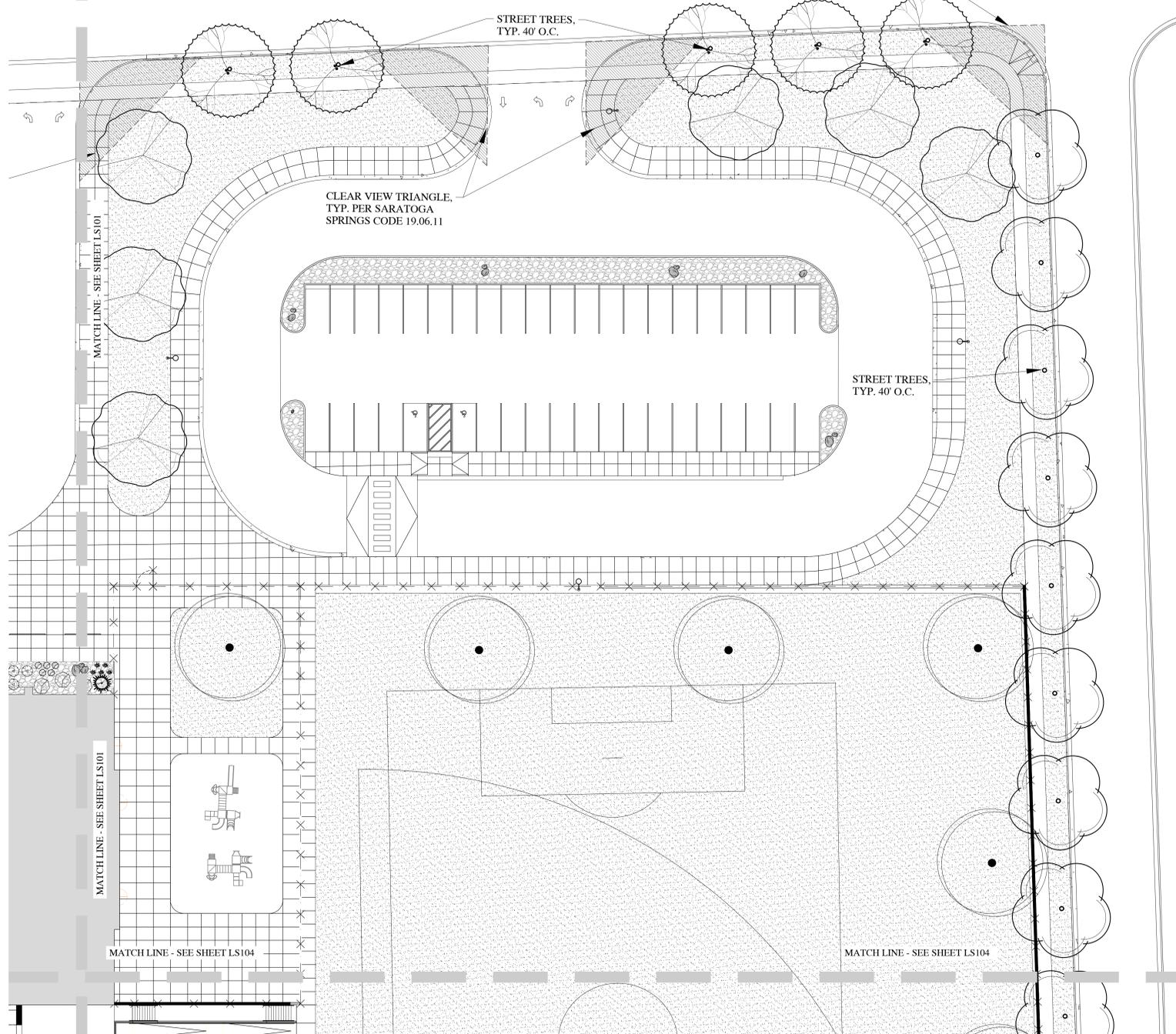
EVERGREEN SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	JUNIPERUS HORIZONTALIS 'BLUE CHIP' BLUE CHIP JUNIPER	9	5 GAL
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	TAXUS BACCATA RAPENDENS DWARF ENGLISH YEW	9	5 GAL

PERENNIAL LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	HEMEROCALLIS X 'STELLA DE ORO' STELLA DE ORO DAYLILY	35	1 GAL
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	PENNISETUM ALOPECUROIDES 'DESERT PLAINS' DESERT PLAINS FOUNTAIN GRASS	18	5 GAL

E SCHOONER DR



LAWN LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	TURF LAWN KENTUCKY BLUEGRASS 5 VARIETY MIX MINIMUM.	SOD ROLLS

INERT LANDSCAPE MATERIALS

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	6" DEPTH OF 4"-6" FRACTURED COPPER CANYON ANGULAR ROCK (OR OWNER APPROVED EQUAL). ROCK TO BE WASHED PRIOR TO PLACING ROCK ON TOP OF WEED BARRIER FABRIC (SEE SPECS. FOR MORE INFO). SEE DETAIL #11 SHEET LS300 FOR ADDITIONAL INSTALLATION NOTES. ROCK IS AVAILABLE THROUGH STAKER PARSONS. PLACE A SINGLE LAYER OF 7" SCREENED, DOUBLE WASHED FRACTURED COPPER CANYON ROCK ON TOP OF FABRIC TO COVER FABRIC PRIOR TO PLACING 6" DEPTH OF 4"-6" SIZED ROCK. SUBMIT SAMPLE TO OWNER FOR APPROVAL.	PER PLAN
	LANDSCAPE BOULDERS - BOULDER TYPE TO CONTRAST THE COPPER CANYON ROCK. BOULDERS ARE AVAILABLE FROM STAKER PARSONS OR OWNER APPROVED EQUAL. SUBMIT SAMPLES FOR APPROVAL. SEE DETAILS 10 & 11 ON SHEET LS300, VARIOUS SIZES AS NOTED.	40% 2'X2' 30% 3'X3' 30% 3'X4'

LANDSCAPE NOTES

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- NEW LAWN AREAS TO BE SOOLED WITH 100% KENTUCKY BLUEGRASS (MINIMUM OF 5 DIFFERENT VARIETIES). FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. SEE SOD LAYING NOTES FOR MORE INFORMATION.
- SEE SPECS FOR ALL TOPSOIL AND AMENDMENT REQUIREMENTS.
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- SEE ARCHITECT AND CIVIL PLANS FOR ALL BUILDING AND SITE INFORMATION INCLUDING FENCING, GATES AND FENCE CURBING, PLAYGROUND AREA, ETC.
- THESE LANDSCAPE NOTES, SOD NOTES ETC. APPLY TO SHEETS LS100 THRU LS104.

SOD LAYING NOTES

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- REPLACE DAMAGED AREAS AT NO ADDITIONAL COST TO OWNER.



VCBO ARCHITECTURE
624 SOUTH 66th EAST
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(801) 575-8800
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PROFESSIONAL SEAL
#4884514
Cory B. Whiting
Landscape Architect
17 North 47th West, American Fork, Utah 84003
(801) 725-6415
www.inthesitegroup.com

In Site DESIGN GROUP
Landscape Architecture, Land Planning

REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE ISSUED: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET

PLANTING PLAN
LS102

DECIDUOUS TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	ACER TATARICUM 'HOT WINGS' HOT WINGS TATARIAN MAPLE SINGLE TRUNK VARIETY	5	1 1/2" CAL.
	GLEDTISIA TRIACANTHOS INERMIS 'SHADEMASTER'™ SHADEMASTER LOCUST	22	2" CAL.
	MALUS X 'SPRING SNOW' SPRING SNOW CRAB APPLE	2	1 1/2" CAL.
	PLATANUS X ACERIFOLIA 'MORTON CIRCLE' EXCLAMATION LONDON PLANE TREE	7	2" CAL.
	PRUNUS SERRULATA 'KWANZAN' FLOWERING CHERRY	8	1 1/2" CAL.
	SOPHORA JAPONICA 'REGENT' JAPANESE PAGODA TREE	13	2" CAL.
	ULMUS PARVIFOLIA 'ALLEE' ALLEE LACEBARK ELM	9	2" CAL.

ALL TREE AND SHRUB LAYOUT SHALL BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO INSTALLATION.

EVERGREEN TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PINUS NIGRA AUSTRIAN BLACK PINE	4	7-8" TALL
	PINUS NIGRA 'ARNOLD SENTINEL' ARNOLD SENTINEL PINE	5	7-8" TALL

SHRUB LEGEND

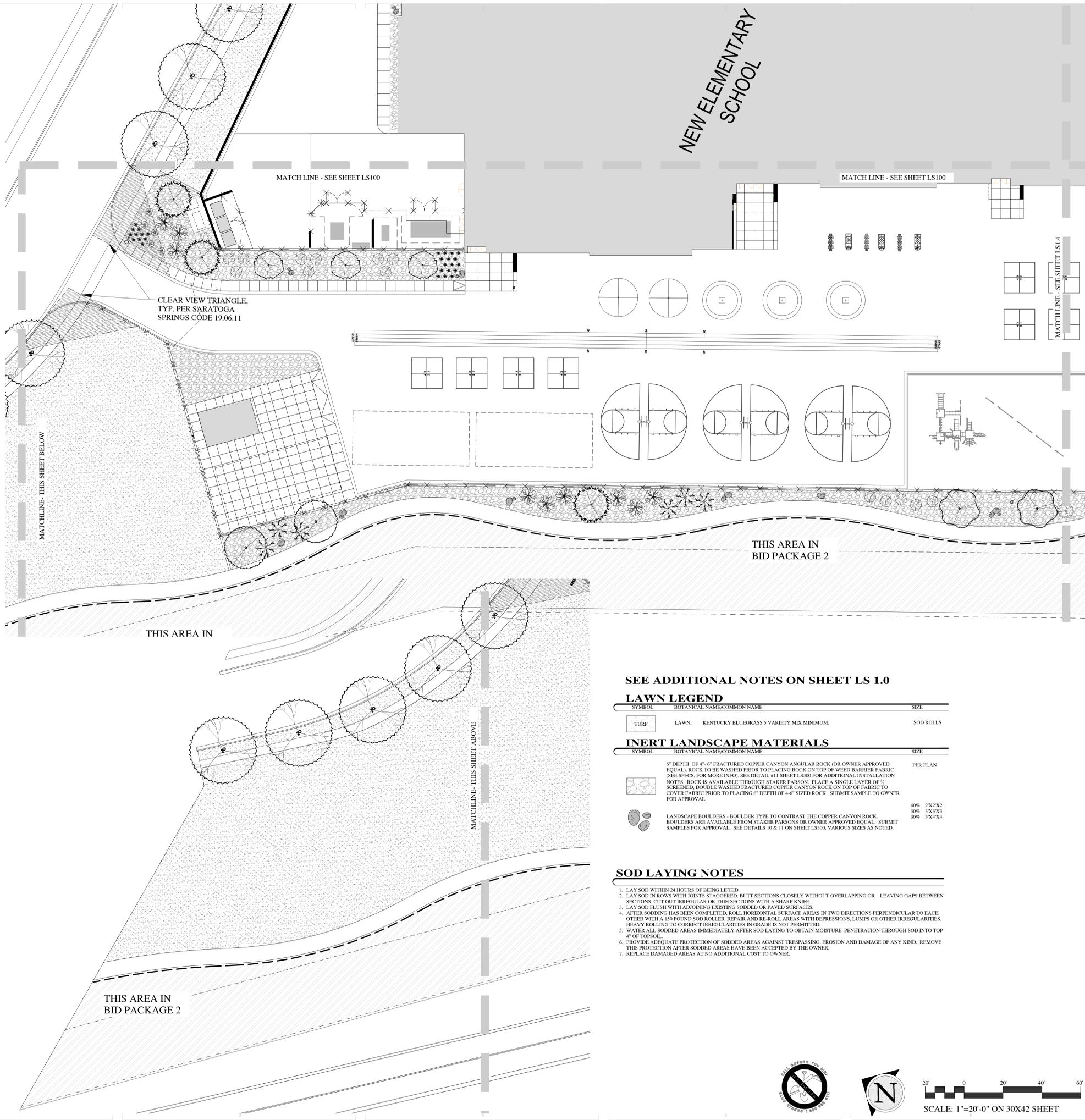
SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	CARYOPTERIS X CLANDONENSIS 'BEYOND MIDNIGHT' BLUEBEARD SHRUB	17	5 GAL.
	CORNUS ALBA 'BAIHALO' IVORY HALO DOGWOOD	8	5 GAL.
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	WEIGELIA FLORIDA 'WINE AND ROSES' WINE AND ROSES WEIGELA	3	5 GAL.

EVERGREEN SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	JUNIPERUS HORIZONTALIS 'BLUE CHIP' BLUE CHIP JUNIPER	9	5 GAL.
	PINUS MUGO MUGUS 'SLOWMOUND' SLOWMOUND MUGO PINE	13	5 GAL.
	TAXUS BACCATA RAPENDENS DWARF ENGLISH YEW	9	5 GAL.

PERENNIAL LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	HEMEROCALLIS X 'STELLA DE ORO' STELLA DE ORO DAYLILY	35	1 GAL.
	HEMEROCALLIS X 'ROSY RETURNS' ROSY RETURNS DAYLILY	32	1 GAL.
	PENNISETUM ALOPECUROIDES 'DESERT PLAINS' DESERT PLAINS FOUNTAIN GRASS	18	5 GAL.



SEE ADDITIONAL NOTES ON SHEET LS 1.0

LAWN LEGEND

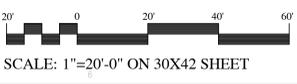
SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	LAWN, KENTUCKY BLUEGRASS 5 VARIETY MIX MINIMUM.	SOD ROLLS

INERT LANDSCAPE MATERIALS

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	6" DEPTH OF 4"-6" FRACTURED COPPER CANYON ANGULAR ROCK (OR OWNER APPROVED EQUIV.) ROCK TO BE WASHED PRIOR TO PLACING ROCK ON TOP OF WEED BARRIER FABRIC (SEE SPECS. FOR MORE INFO). SEE DETAIL #11 SHEET LS300 FOR ADDITIONAL INSTALLATION NOTES. ROCK IS AVAILABLE THROUGH STAKER PARSON. PLACE A SINGLE LAYER OF 1/2" SCREENED, DOUBLE WASHED FRACTURED COPPER CANYON ROCK ON TOP OF FABRIC TO COVER FABRIC PRIOR TO PLACING 6" DEPTH OF 4-6" SIZED ROCK. SUBMIT SAMPLE TO OWNER FOR APPROVAL.	PER PLAN
	LANDSCAPE BOULDERS - BOULDER TYPE TO CONTRAST THE COPPER CANYON ROCK. BOULDERS ARE AVAILABLE FROM STAKER PARSONS OR OWNER APPROVED EQUIV. SUBMIT SAMPLES FOR APPROVAL. SEE DETAILS 10 & 11 ON SHEET LS300, VARIOUS SIZES AS NOTED.	40% 2'X2' 30% 3'X3' 30% 3'X4'X4'

SOD LAYING NOTES

- LAY SOD WITHIN 24 HOURS OF BEING LIFTED.
- LAY SOD IN ROWS WITH JOINTS STAGGERED. BUTT SECTIONS CLOSELY WITHOUT OVERLAPPING OR LEAVING GAPS BETWEEN SECTIONS. CUT OUT IRREGULAR OR THIN SECTIONS WITH A SHARP KNIFE.
- LAY SOD FLUSH WITH ADJOINING EXISTING SODDED OR PAVED SURFACES.
- AFTER SODDING HAS BEEN COMPLETED, ROLL HORIZONTAL SURFACE AREAS IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER WITH A 150 POUND SOD ROLLER. REPAIR AND RE-ROLL AREAS WITH DEPRESSIONS, LUMPS OR OTHER IRREGULARITIES. HEAVY ROLLING TO CORRECT IRREGULARITIES IN GRADE IS NOT PERMITTED.
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REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE ISSUED: JUNE 2, 2020

DECIDUOUS TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	ACER TATARICUM 'HOT WINGS' HOT WINGS TATARIAN MAPLE SINGLE TRUNK VARIETY	5	1 1/2" CAL.
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	PRUNUS SERRULATA 'KWANZAN' FLOWERING CHERRY	8	1 1/2" CAL.
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	ULMUS PARVIFOLIA 'ALLEE' ALLEE LACEBARK ELM	9	2" CAL.

ALL TREE AND SHRUB LAYOUT SHALL BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO INSTALLATION.

EVERGREEN TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PINUS NIGRA AUSTRIAN BLACK PINE	4	7-8" TALL
	PINUS NIGRA 'ARNOLD SENTINEL' ARNOLD SENTINEL PINE	5	7-8" TALL

SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	CARYOPTERIS X CLANDONENSIS 'BEYOND MIDNIGHT' BLUEBEARD SHRUB	17	5 GAL.
	CORNUS ALBA 'BAILHALO' IVORY HALO DOGWOOD	8	5 GAL.
	CORNUS SERICEA 'KELSEY' KELSEY DOGWOOD	17	5 GAL.
	FORSYTHIA X 'COURTASOL' TM GOLD HIDE FORSYTHIA	10	5 GAL.
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EVERGREEN SHRUB LEGEND

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	PINUS MUGO MUGUS 'SLOWMOUND' SLOWMOUND MUGO PINE	13	5 GAL.
	TAXUS BACCATA RAPENDENS DWARF ENGLISH YEW	9	5 GAL.

PERENNIAL LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	HEMEROCALLIS X 'STELLA DE ORO' STELLA DE ORO DAYLILY	35	1 GAL.
	HEMEROCALLIS X 'ROSY RETURNS' ROSY RETURNS DAYLILY	32	1 GAL.
	PENNISETUM ALOPECUROIDES 'DESERT PLAINS' DESERT PLAINS FOUNTAIN GRASS	18	5 GAL.

LAWN LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	LAWN - KENTUCKY BLUEGRASS 5 VARIETY MIX MINIMUM.	SOD ROLLS

INERT LANDSCAPE MATERIALS

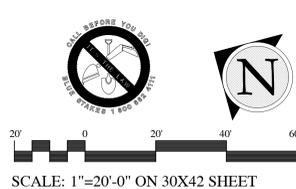
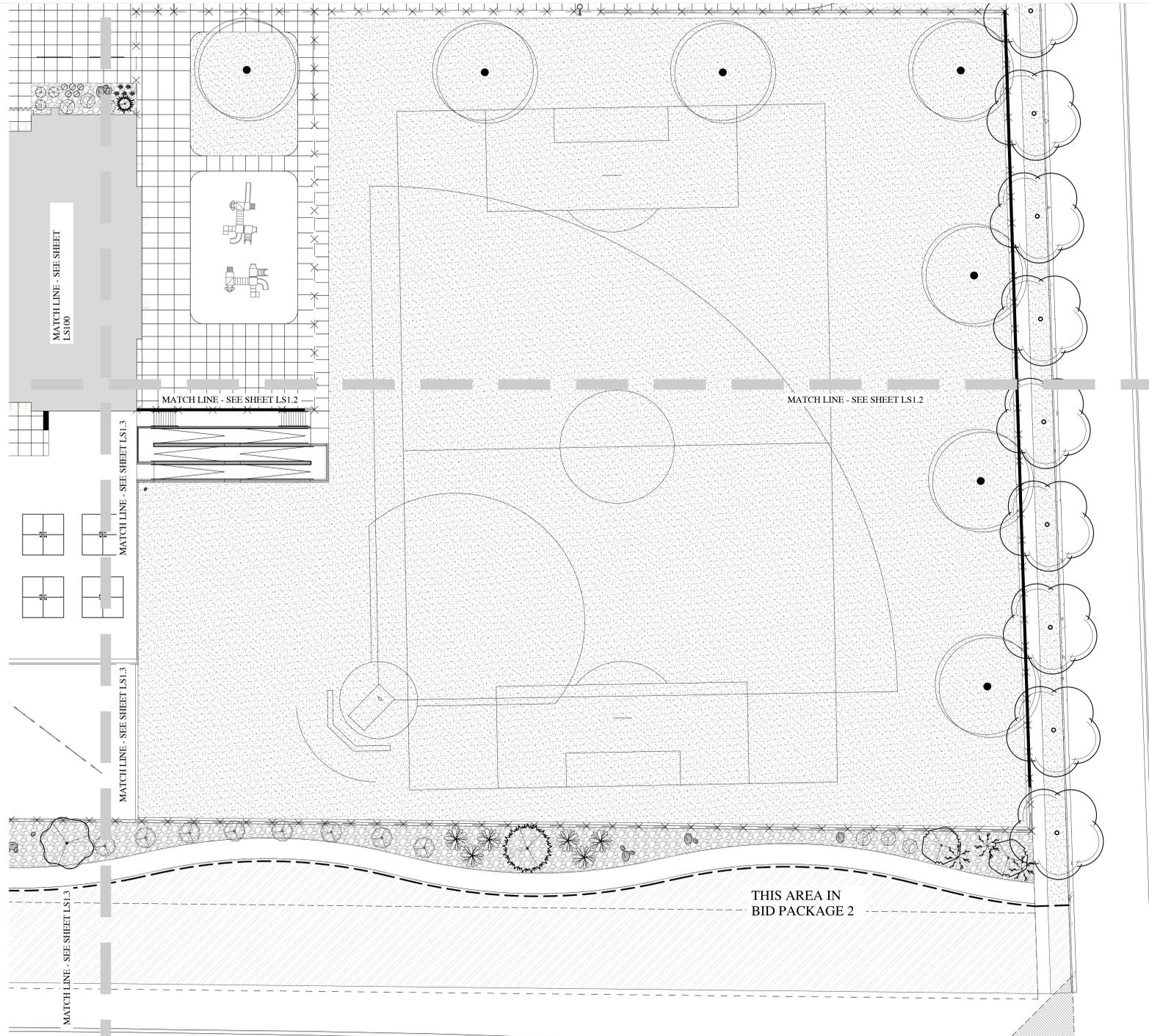
SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE
	6" DEPTH OF 4" - 6" FRACTURED COPPER CANYON ANGULAR ROCK OR OWNER APPROVED EQUAL ROCK TO BE WASHED PRIOR TO PLACING ROCK ON TOP OF WEED BARRIER FABRIC (SEE SPECS. FOR MORE INFO. SEE DETAIL #11 SHEET LS300 FOR ADDITIONAL INSTALLATION NOTES. ROCK IS AVAILABLE THROUGH STAKER PARSONS. PLACE A SINGLE LAYER OF 1/2" SCREENED, DOUBLE WASHED FRACTURED COPPER CANYON ROCK ON TOP OF FABRIC TO COVER FABRIC PRIOR TO PLACING 6" DEPTH OF 4" - 6" SIZED ROCK. SUBMIT SAMPLE TO OWNER FOR APPROVAL.	PER PLAN
	LANDSCAPE BOULDERS - BOLDER TYPE TO CONTRAST THE COPPER CANYON ROCK. BOULDERS ARE AVAILABLE FROM STAKER PARSONS OR OWNER APPROVED EQUAL. SUBMIT SAMPLES FOR APPROVAL. SEE DETAILS 10 & 11 ON SHEET LS300, VARIOUS SIZES AS NOTED.	40% 2'X2'X2' 30% 3'X3'X3' 30% 3'X4'X4'

LANDSCAPE NOTES

- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS FOR BIDDING AND INSTALLATION PURPOSES. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE.
- PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. ANY SUBSTITUTIONS TO BE APPROVED BY OWNER AND/OR LANDSCAPE ARCHITECT.
- NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALLED PRIOR TO LANDSCAPE INSTALLATION TO ENSURE PROPER WATERING OF ALL LANDSCAPE AREAS. REFER TO IRRIGATION PLANS FOR SPECIFICS. A RAIN SENSOR SHALL BE INSTALLED ON THE IRRIGATION SYSTEM.
- NEW LAWN AREAS TO BE SODDED WITH 100% KENTUCKY BLUEGRASS (MINIMUM OF 5 DIFFERENT VARIETIES). FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. SEE SOD LAYING NOTES FOR MORE INFORMATION.
- SEE SPECS FOR ALL TOPSOIL AND AMENDMENT REQUIREMENTS.
- PLANTER BEDS TO BE EXCAVATED AS NECESSARY PER SPECS IN ORDER TO ALLOW FOR TOPSOIL, AMENDMENTS AND MULCH. THE FINISHED GRADE OF LAWN AREAS SHALL BE APPROX. 1" BELOW TOP OF LAWN EDGING, SIDEWALK OR OTHER PAVED AREAS. FINISHED GRADE OF PLANTER AREAS SHALL BE APPROX. 1" BELOW TOP OF CURB, SIDEWALK, OR OTHER PAVED AREA. DEWITT'S 2 OZ. WEED BARRIER FABRIC TO BE INSTALLED IN ALL ROCK AREAS. DO NOT INSTALL WEED BARRIER FABRIC UNDER AREAS TO RECEIVE WOOD MULCH.
- TREES LOCATED IN LAWN AREAS SHALL HAVE A GRASS FREE TREE RING AROUND BASE OF TREE WITH 3" DEPTH OF CHOCOLATE COLORED WOOD MULCH. THE GRASS FREE RING FOR FLOWERING TREES SHALL BE 4" DIAMETER AND UP TO 6" DIAMETER FOR SHADE TREES WHERE APPROPRIATE. PULL MULCH MIN. 6' AWAY FROM ALL TREES. TREES IN PARKSTRIPS TO HAVE A 5' AREA VOID OF SOD FOR TREE WELLS.
- IF HIGH WINDS ARE FREQUENT ON SITE, ALL TREES TO BE STAKED AT TIME OF PLANTING. SEE DETAILS FOR SPECIFICS. REMOVE STAKING WITHIN FIRST YEAR OR WHEN TREE IS ESTABLISHED.
- SEE ARCHITECT AND CIVIL PLANS FOR ALL BUILDING AND SITE INFORMATION INCLUDING FENCING, GATES AND FENCE CURBING, PLAYGROUND AREA, ETC.
- THESE LANDSCAPE NOTES, SOD NOTES ETC. APPLY TO SHEETS LS100 THRU LS104.

SOD LAYING NOTES

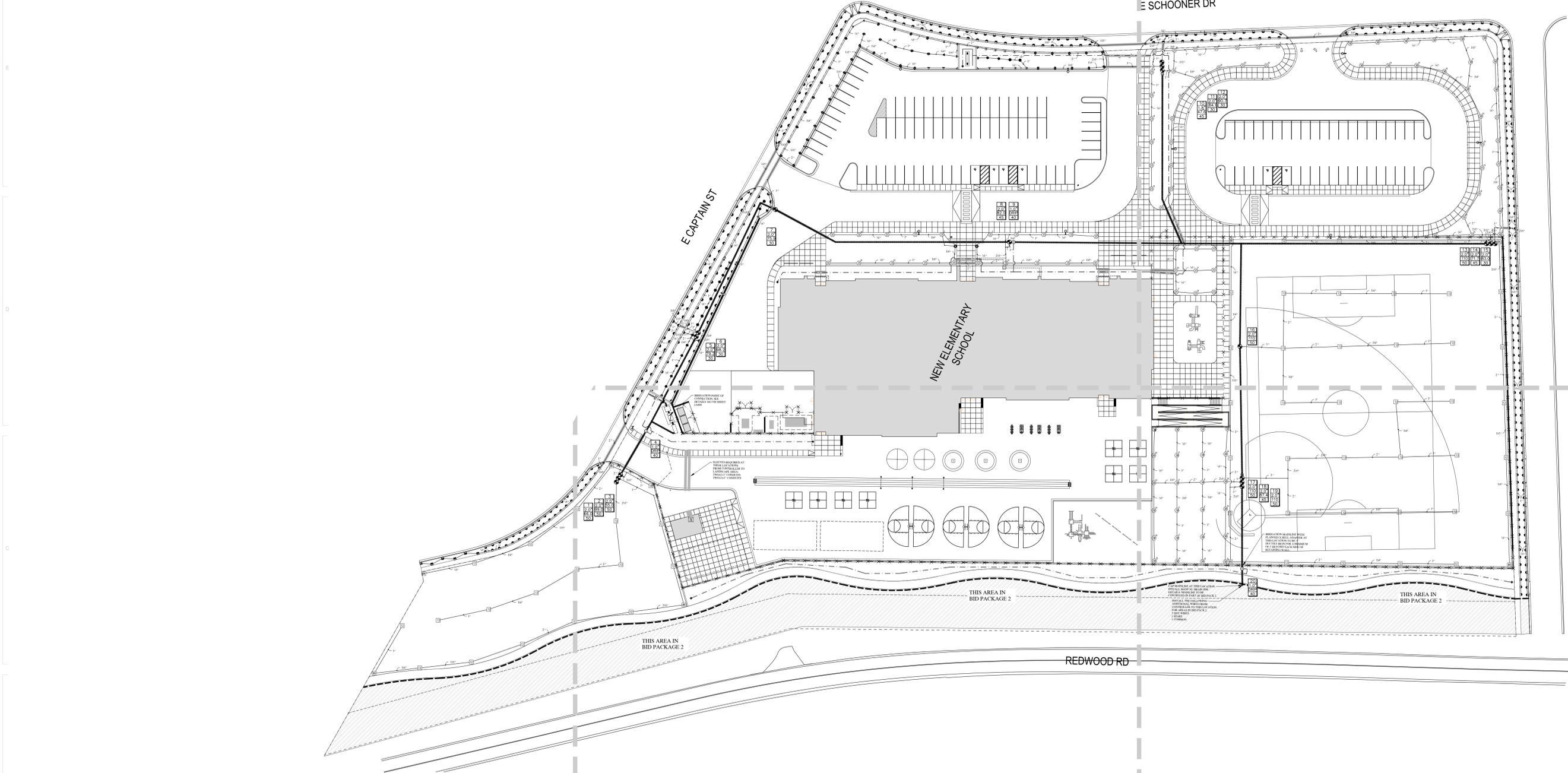
- LAY SOD WITHIN 24 HOURS OF BEING LIFTED.
- LAY SOD IN ROWS WITH JOINTS STAGGERED. BUTT SECTIONS CLOSELY WITHOUT OVERLAPPING OR LEAVING GAPS BETWEEN SECTIONS. CUT OUT IRREGULAR OR THIN SECTIONS WITH A SHARP KNIFE.
- LAY SOD FLUSH WITH ADJOINING EXISTING SODDED OR PAVED SURFACES.
- AFTER SODDING HAS BEEN COMPLETED, ROLL HORIZONTAL SURFACE AREAS IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER WITH A 150 POUND SOD ROLLER. REPAIR AND RE-ROLL AREAS WITH DEPRESSIONS, LUMPS OR OTHER IRREGULARITIES. HEAVY ROLLING TO CORRECT IRREGULARITIES IN GRADE IS NOT PERMITTED.
- WATER ALL SODDED AREAS IMMEDIATELY AFTER SOD LAYING TO OBTAIN MOISTURE PENETRATION THROUGH SOD INTO TOP 4" OF TOPSOIL.
- PROVIDE ADEQUATE PROTECTION OF SODDED AREAS AGAINST TRESPASSING, EROSION AND DAMAGE OF ANY KIND. REMOVE THIS PROTECTION AFTER SODDED AREAS HAVE BEEN ACCEPTED BY THE OWNER.
- REPLACE DAMAGED AREAS AT NO ADDITIONAL COST TO OWNER.



REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE ISSUED: JUNE 2, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET
PLANTING PLAN
LS104



IRRIGATION NOTES

1. A PUMP IS REQUIRED FOR PROPER OPERATION OF THE SPRINKLER IRRIGATION SYSTEM. ONCE PRESSURES HAVE BEEN TESTED, THE CONTRACTOR SHALL SUBMIT PUMP SHOP DRAWINGS FOR APPROVAL TO VERIFY IF THE CURRENT PUMP SPECIFIED WILL WORK OR IF ADJUSTMENTS NEED TO BE MADE PRIOR TO ORDERING AND INSTALLING THE PUMP SYSTEM.
2. SEE SHEETS LS200-LS203 FOR IRRIGATION DETAILS. SEE SPECS FOR ADDITIONAL IRRIGATION INSTALLATION PROCEDURES.
3. POWER TO CONTROLLER TO BE PROVIDED BY ELECTRICAL CONTRACTOR. THE CONTROLLER SHALL BE CONNECTED TO THE BUILDING GROUNDING GRID PER MANUFACTURERS SPECS AT 10 OHMS OR LESS AND SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. CONTROLLER TO BE HARD WIRED. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL RAINBIRD WR2 RAIN SENSOR FOR THE CONTROLLER.
4. ALL VALVES, VALVE BOXES, DRAINS, AND BOTH ENDS OF SLEEVES SHALL HAVE GPS POINTS TO CREATE AN GPS AS-BUILT DOCUMENT. CONSULT WITH THE OWNER FOR THE DELIVERABLE TYPE REQUIRED.
5. IRRIGATION SYSTEM IS DESIGNED TO USE UP TO 110 GPM WITH AN OPERATING PRESSURE OF 50 PSI AT FURTHEST IRRIGATION FALCON ROTOR HEAD. THE CONTRACTOR SHALL VERIFY EXISTING PRESSURES ON-SITE PRIOR TO CONSTRUCTION AND ENSURE THAT 50PSI CAN BE ACHIEVED AT THE FURTHEST AND HIGHEST ROTOR HEAD FROM THE PUMP LOCATION.
6. 3" IRRIGATION SERVICE MAINLINE SHALL BE PURPLE C-900 PIPE WITH M1 FITTINGS (OR AS DETAILED BY THE CIVIL PLANS) AND SHALL BE INSTALLED BY THE UTILITY SITE CONTRACTOR (SEE CIVIL PLANS FOR INFORMATION/SPECS). ON THE NEW P.I. WATER METER, SERVICE PIPING, METER VAULT, FITTINGS, ETC. AS REQUIRED BY SARATOGA SPRINGS (CTY). BURY MAINLINE AT THE FOLLOWING DEPTHS: 3" AT 18-24" DEEP, 3" AND SMALLER MAINLINE SHALL BE SCH. 40 PVC BUT THE P.O.C. SHALL BE DUCTILE IRON WITH DUCTILE FITTINGS PER THE DETAILS. ALL MAINLINE 3" AND SMALLER SHALL BE SCH. 40 PVC WITH SCHEDULE 40 FITTINGS AND OTHER OBSTRUCTIONS SUCH AS HOLES, HYDRANTS, ETC. AS WELL AS NEW TREES OR SHRUB PLANTINGS. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 3/4" PIPE MAX. 8 GPM, 1" PIPE MAX. 13 GPM, 1-1/4" PIPE MAX. 23 GPM, 1-1/2" PIPE MAX. 30 GPM, 2" PIPE MAX. 50 GPM, 2-1/2" PIPE MAX. 75 GPM, AND 3" PIPE MAX. 110 GPM.
7. CONTRACTOR SHALL HAVE ALL UTILITIES BELT STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
8. INSTALL ALL NEW VALVE BOXES 6" MIN. FROM WALKS AND WALLS SQUARED WITH THE WALK. PLACE VALVE BOXES IN PLANTER BEDS WHEN POSSIBLE. ROUND VALVE BOXES ARE NOT ALLOWED. CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE RAINBIRD PRODUCTS OR AN OWNER APPROVED EQUAL.
9. CONTRACTOR MAY MAKE SUBSTITUTIONS TO IRRIGATION COMPONENTS ONLY UPON WRITTEN APPROVAL FROM ALPINE SCHOOL DISTRICT. IF CONTRACTOR ELECTS TO USE DIFFERENT COMPONENTS THAN WHAT IS CALLED FOR, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A NEW DESIGN SHOWING HOW NEW COMPONENTS MEET OR EXCEED THE EXISTING DESIGN STANDARD SET FORTH IN THESE CONSTRUCTION DOCUMENTS.
10. CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
11. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE LANDSCAPE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
12. ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
13. INSTALL A SEPARATE 1" ELECTRICAL CONDUIT FROM THE HYDROMETER TO THE CONTROLLER LOCATION FOR THE HYDROMETER WIRE. INSTALL A SEPARATE 1" ELECTRICAL CONDUIT FROM THE PUMP STATION TO THE CONTROLLER LOCATION FOR THE PUMP RELAY. ELECTRICAL CONTRACTOR TO INSTALL POWER TO PUMP FOR PUMP, HEATER, ETC. (SEE PUMP DETAIL FOR POWER REQUIREMENTS). INSTALL SCH. 40 GREY ELECTRICAL WIRING CONDUIT BETWEEN ALL IRRIGATION BOXES AND FROM IRRIGATION BOXES AND PUMP LOCATION TO THE CONTROLLER. EXACT LOCATION OF CONTROLLER TO BE CONFIRMED WITH THE OWNER.
14. DRIP VALVES MAY NEED TO BE OPERATED AT THE SAME TIME SO THAT THE COMBINED FLOWS WILL BE AT LEAST 14 GPM. RUNNING MULTIPLE DRIP ZONES TOGETHER WILL ENABLE FLOW SENSING FOR THESE VALVES. IF DRIP ZONES ARE NOT RAN TOGETHER, THEN THE DRIP ZONES MAY NEED TO BE EXCLUDED FROM FLOW SENSING. FLOWS LESS THAN 14 GPM WILL NOT BE READ BY THE 3" HYDROMETER THEREFORE FLOW DATA WILL NOT BE AVAILABLE.
15. THE CONTROLLER SHALL BE PROGRAMMED WITH THE MASTER VALVE SCHEDULE TO ENABLE DAYTIME USE OF THE QUICK COUPLERS.
16. INSTALL HE-VAN NOZZLES WHERE NECESSARY TO MINIMIZE OVERSPRAY OF WATER ONTO SIDEWALKS AND OTHER PAVED SURFACES.
17. IRRIGATION NOTES AND LEGEND APPLY TO SHEETS LS200 THRU LS204.

IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER	PAT.	RD.	PSI	Q	T	H	TT	TQ	F	DRIP GPM	DETAILS	REMARKS
NOT SHOWN	GPH INC. GPSCVIM DRIP EMITTER	F	--	30	--	--	--	--	--	--	2.0	18-19	SEE IRRIGATION DETAILS
NOT SHOWN	RAINBIRD PC-05 EMITTER WITH DIFFUSER CAP	F	--	30	--	--	--	--	--	5.0	18,19,21-23	SEE IRRIGATION DETAILS	
NOT SHOWN	DRIPLINE: NETAFIM TL26-18	F	--	30	--	--	--	--	--	--	26/18"	21-23	SEE IRRIGATION DETAILS
①	RAIN BIRD 1804-PRS POP-UP SPRAY 15' STRIP SERIES	LCS, RCS, SST	15'	30	--	--	--	--	--	--	1.21	14	ADJUST ARC AS NEEDED
②	RAIN BIRD 1804-PRS POP-UP SPRAY 8' SERIES	Q.I.H.F.VAN	8'	30	26	--	--	--	--	--	1.04	14	ADJUST ARC AS NEEDED
③	RAIN BIRD 1804-PRS POP-UP SPRAY 10' SERIES	Q.I.H.F.VAN	10'	30	39	53	79	--	--	--	1.58	14	ADJUST ARC AS NEEDED
④	RAIN BIRD 1804-PRS POP-UP SPRAY 12' SERIES	Q.I.H.F.VAN	12'	30	65	87	130	--	--	--	2.60	14	ADJUST ARC AS NEEDED
⑤	RAIN BIRD 1804-PRS POP-UP SPRAY 15' SERIES	Q.I.H.F.VAN	15'	30	92	123	185	--	--	--	3.70	14	ADJUST ARC AS NEEDED
⑥	RAIN BIRD 1804-PRS POP-UP SPRAY 18' SERIES VAN	VAN	18'	30	--	--	--	--	--	--	14	ADJUST ARC AS NEEDED	
⑦	RAIN BIRD 5004-PL-R-SS WITH 25 SERIES NOZZLES	Q.T.H.F.	25'	45	1.00	1.38	1.98	--	--	--	3.82	15	ADJUST ARC AS NEEDED
⑧	RAIN BIRD 5004-PL-R-SS WITH 30 SERIES NOZZLES	Q.T.H.F.	30'	45	1.40	1.85	2.96	--	--	--	5.78	15	ADJUST ARC AS NEEDED
⑨	RAIN BIRD 5004-PL-R-SS WITH 35 SERIES NOZZLES	Q.T.H.F.	35'	45	1.92	2.46	3.81	--	--	--	15	ADJUST ARC AS NEEDED	
⑩	RAIN BIRD FALCON 6504 SS	F	50'	50	5.5	7.4	11	--	--	--	15	ADJUST ARC AS NEEDED	
⑪	RAIN BIRD FALCON 6504 SS	F	50'	50	--	--	--	--	--	--	11	15	ADJUST ARC AS NEEDED
⑫	RAIN BIRD 13-18 ROTARY WITH P45 SPRAY HEAD	VAN	13-18	45	--	--	--	--	--	--	14	ADJUST ARC AS NEEDED	
⑬	CONTROLLER: WEATHERTRAK ETIPRO3 STANDARD WIRE CONTROLLER (SIZE AS NEEDED) WITH WT-CIM-10YA. EXACT LOCATION T.B.D. BY OWNER. INSTALL RAINBIRD RAIN SENSOR. CONNECT TO NETAFIM HYDROMETER.										3		COORDINATE EXACT LOCATION WITH OWNER.
⑭	3" CLEMONS 275 AS FILTER WITH 3" NETAFIM HYDROMETER. (INSTALL FILTER IN ALUMINUM STRONG BOX ENCL. (S) (R))										1-2		INSTALL PER LOCAL CODE
⑮	RAIN BIRD P85B-P85B AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN). INSTALL P85-D OPTION PER REQ. PER SPEC/DETAILS.										10-12		JUMBO VALVE BOX
⑯	DRIP CONTROL ZONE KIT: RAINBIRD XZC-100-PRB COM.										17		JUMBO VALVE BOX
⑰	3" FLANGED LEMMO ISOLATION VALVE WITH MANUAL DRAIN INSTALLED ON LINE (SIZED FLANGED TEE)										7		SEE IRRIGATION DETAILS
⑱	3" PURPLE C-900 IRRIGATION SUPPLY LINE (SEE CIVIL PLANS FOR MORE INFORMATION).										1-2		SEE CIVIL PLANS
⑲	3" SCH. 40 PVC WITH SCH. 40 GLUED FITTINGS AND 3" DUCTILE IRON PIPE WITH DUCTILE FITTINGS AT POINT OF CONNECTION AND PER PLAN.										2.5-13		SEE IRRIGATION DETAILS
⑳	LATERAL LINE: PVC SCH. 40 (SIZE PER PLAN)										4-5		SEE IRRIGATION DETAILS
㉑	DRIP LATERAL: PVC SCH. 40 OR STICKY STRIP PVC HOSE BY GPH. CONTRACTOR SHALL SIZE PIPE PER DETAILS AND SPECS.										18-19		SEE IRRIGATION DETAILS
㉒	1" RAINBIRD QUICK COUPLER VALVE, MODEL #44NF FOR IRRIGATION SYSTEM BLOWOUT. ALL GALVANIZED FITTINGS & PIPE.										8		SEE IRRIGATION DETAILS
㉓	1" RAINBIRD QUICK COUPLER VALVE, MODEL #44NF. NOT FOR IRRIGATION SYSTEM BLOWOUT.										8		SEE IRRIGATION DETAILS
㉔	14 GA. SOLID COPPER WIRE. SLEEVE SIZE TO BE A MIN. OF TWICE THE DIAMETER OF THE MAIN LATERAL.										4.5,10-11		ROUTE WITH MAINLINE
㉕	WIRE CHASE. SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE. 1" DIA. WC IS THE MINIMUM SIZED ALLOWED.										4-5		COORDINATE WITH ALL TRADES
㉖	FLUSH VALVE AND INDICATOR HEAD: 1/2" PVC BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX										2-0		REFERENCE DETAILS

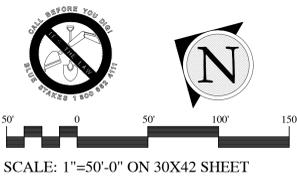
VALVE ID TAG



DRIP EMITTER LEGEND

PLANT TYPE	EMITTER QTY	EMITTER TYPE
PERENNIALS/GRASSES	1	GPSCV2M (2GPH)
ALL SHRUBS	2	GPSCV2M (2GPH)
TREES	2	PC-05 (5GPH) WITH DIFFUSER CAP

- NOTE:
1. EMITTERS LISTED ARE AVAILABLE FROM GPH AND RAINBIRD.
 2. EMITTERS ARE NOT NECESSARY FOR TREES IN LAWN AREAS.
 3. INSTALL NETAFIM TL2V IN ADDITION TO PC-05 EMITTERS PER DETAILS ON SHEET LS401.



REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
 CLIENT NUMBER:
 DATE ISSUED: JUNE 2, 2020

IRRIGATION NOTES

1. A PUMP IS REQUIRED FOR PROPER OPERATION OF THE SPRINKLER IRRIGATION SYSTEM. ONCE PRESSURES HAVE BEEN TESTED, THE CONTRACTOR SHALL SUBMIT PUMP SHOP DRAWINGS FOR APPROVAL. TO VERIFY IF THE CURRENT PUMP SPECIFIED WILL WORK OR IF ADJUSTMENTS NEED TO BE MADE PRIOR TO ORDERING AND INSTALLING THE PUMP SYSTEM.
2. SEE SHEETS LS400-LS402 FOR IRRIGATION DETAILS. SEE SPECS FOR ADDITIONAL IRRIGATION INSTALLATION PROCEDURES.
3. POWER TO CONTROLLER TO BE PROVIDED BY ELECTRICAL CONTRACTOR. THE CONTROLLER SHALL BE CONNECTED TO THE BUILDING GROUNDING GRID PER MANUFACTURER SPECS. AT 10 OHMS OR LESS AND SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. CONTROLLER TO BE HARD WIRED. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL RAINBIRD WR2 RAIN SENSOR FOR THE CONTROLLER.
4. ALL VALVES, VALVE BOXES, DRAINS, AND BOTH ENDS OF SLEEVES SHALL HAVE GPS POINTS TO CREATE AN GPS AS-BUILT DOCUMENT. CONSULT WITH THE OWNER FOR THE DELIVERABLE TYPE REQUIRED.
5. IRRIGATION SYSTEM IS DESIGNED TO USE UP TO 110 GPM WITH AN OPERATING PRESSURE OF 50 PSI AT FURTHEST IRRIGATION FALCON ROTOR HEAD. THE CONTRACTOR SHALL VERIFY EXISTING PRESSURES ON-SITE PRIOR TO CONSTRUCTION AND ENSURE THAT 50PSI CAN BE ACHIEVED AT THE FURTHEST AND HIGHEST ROTOR HEAD FROM THE PUMP LOCATION.
6. 3" IRRIGATION SERVICE MAINLINE SHALL BE PURPLE C-900 PIPE WITH MJ FITTINGS OR AS DETAILED BY THE CIVIL PLANS AND SHALL BE INSTALLED BY THE UTILITY SITE CONTRACTOR (SEE CIVIL PLANS FOR INFORMATION). ON THE NEW P.I. WATER METER, SERVICE PIPING, METER VAULT, FITTINGS, ETC. AS REQUIRED BY SARATOGA SPRINGS CITY. BURY MAINLINE AT THE FOLLOWING DEPTHS: 3" AT 18" DEEP, 3" AND SMALLER MAINLINE SHALL BE SCH 40 PVC BUT THE P.O.C. SHALL BE DUCTILE IRON WITH DUCTILE FITTINGS PER THE DETAILS. ALL MAINLINE 3" AND SMALLER SHALL BE SCH 40 PVC WITH SCHEDULE 80 FITTINGS AND THRUST BLOCKS. SIZE MAINLINE PER PLAN. LATERAL LINES SHALL BE NO SMALLER THAN 3/4" MAINLINE AND LATERAL LINE LAYOUT IS SCHEMATIC. ADJUST LOCATION OF MAINLINE AND LATERAL LINES AS NECESSARY IN ORDER TO AVOID TREES AND OTHER OBSTRUCTIONS SUCH AS POLES, HYDRANTS, ETC. AS WELL AS NEW TREES OR SHRUB PLANTINGS. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 3/4" PIPE MAX. 8 GPM, 1" PIPE MAX. 13 GPM, 1-1/4" PIPE MAX. 23 GPM, 1-1/2" PIPE MAX. 30 GPM, 2" PIPE MAX. 50 GPM, 2-1/2" PIPE MAX. 75 GPM, AND 3" PIPE MAX. 110 GPM.
7. CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
8. INSTALL ALL NEW VALVE BOXES 6" MIN. FROM WALKS AND WALLS SQUARED WITH THE WALK. PLACE VALVE BOXES IN PLANTER BEDS WHEN POSSIBLE. ROUND VALVE BOXES ARE NOT ALLOWED. CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE RAINBIRD PRODUCTS OR AN OWNER APPROVED EQUAL.
9. CONTRACTOR MAY MAKE SUBSTITUTIONS TO IRRIGATION COMPONENTS ONLY UPON WRITTEN APPROVAL FROM ALPINE SCHOOL DISTRICT. IF CONTRACTOR ELECTS TO USE DIFFERENT COMPONENTS THAN WHAT IS CALLED FOR, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A NEW DESIGN SHOWING HOW NEW COMPONENTS MEET OR EXCEED THE EXISTING DESIGN STANDARD SET FORTH IN THESE CONSTRUCTION DOCUMENTS.
10. CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
11. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE LANDSCAPE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
12. ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
13. INSTALL A SEPARATE 1" ELECTRICAL CONDUIT FROM THE PUMP STATION TO THE CONTROLLER LOCATION FOR THE HYDROMETER WIRE. INSTALL A SEPARATE 1" ELECTRICAL CONDUIT FROM THE PUMP STATION TO THE CONTROLLER LOCATION FOR THE PUMP RELAY. ELECTRICAL CONTRACTOR TO INSTALL POWER TO PUMP, PUMP HEATER, ETC. (SEE PUMP DETAIL FOR POWER REQUIREMENTS). INSTALL SCH. 40 GREY ELECTRICAL WIRING CONDUIT BETWEEN ALL IRRIGATION BOXES AND FROM IRRIGATION BOXES AND PUMP LOCATION TO THE CONTROLLER. EXACT LOCATION OF CONTROLLER TO BE CONFIRMED WITH THE OWNER.
14. DRIP VALVES MAY NEED TO BE OPERATED AT THE SAME TIME SO THAT THE COMBINED FLOWS WILL BE AT LEAST 14 GPM. RUNNING MULTIPLE DRIP ZONES TOGETHER WILL ENABLE FLOW SENSING FOR THESE VALVES. IF DRIP ZONES ARE NOT RAN TOGETHER, THEN THE DRIP ZONES MAY NEED TO BE EXCLUDED FROM FLOW SENSING. FLOWS LESS THAN 14 GPM WILL NOT BE READ BY THE 3" HYDROMETER THEREFORE FLOW DATA WILL NOT BE AVAILABLE.
15. THE CONTROLLER SHALL BE PROGRAMMED WITH THE MASTER VALVE SCHEDULE TO ENABLE DAYTIME USE OF THE QUICK COUPLERS.
16. INSTALL THE VAN NOZZLES WHERE NECESSARY TO MINIMIZE OVERSPRAY OF WATER ONTO SIDEWALKS AND OTHER PAVED SURFACES.
17. IRRIGATION NOTES AND LEGEND APPLY TO SHEETS LS200 THRU LS204.

VALVE ID TAG



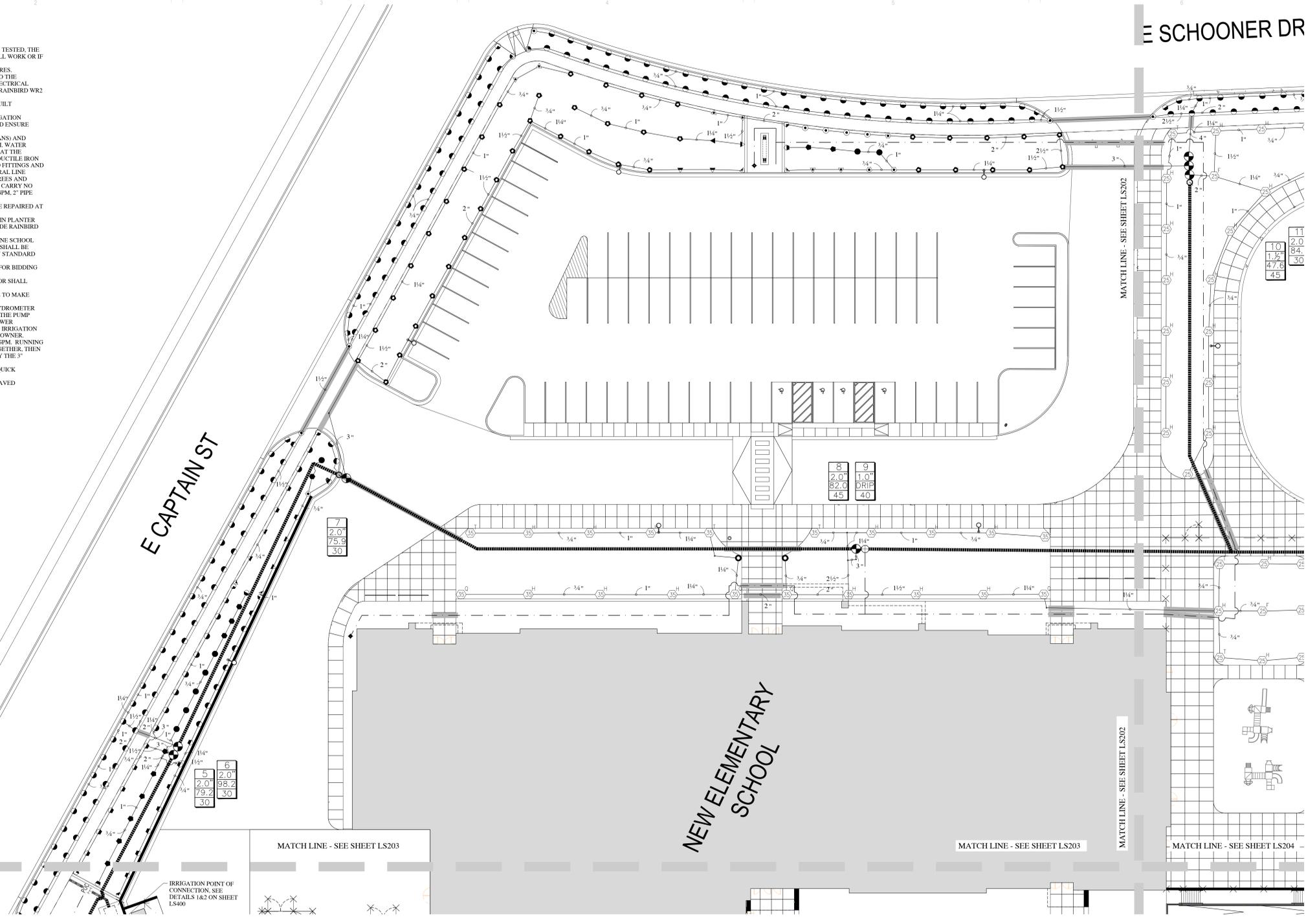
DRIP EMITTER LEGEND

PLANT TYPE	EMITTER QTY	EMITTER TYPE
PERENNIALS/GRASSES	1	GPSTCV2M (GPH)
ALL SHRUBS	2	GPSTCV2M (GPH)
TREES	2	PC-05 (GPH) WITH DIFFUSER CAP

- NOTE:
1. EMITTERS LISTED ARE AVAILABLE FROM GPH AND RAINBIRD.
 2. EMITTERS ARE NOT NECESSARY FOR TREES IN LAWN AREAS.
 3. INSTALL NETAFIM FLCV IN ADDITION TO PC-05 EMITTERS PER DETAILS ON SHEET LS401.

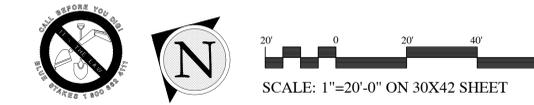
IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER	PAT.	RD.	PSI	GPM				DRIP GPH	DETAILS	REMARKS
					Q	T	H	TT	TQ	F	
NOT SHOWN	GPH INC. GPSTCV2M DRIP EMITTER	F	--	30	--	--	--	--	2.0	18-19	SEE IRRIGATION DETAILS
NOT SHOWN	RAINBIRD PC-05 EMITTER WITH DIFFUSER CAP	F	--	30	--	--	--	--	5.0	18,19,21-23	SEE IRRIGATION DETAILS
NOT SHOWN	DRIP LINE: NETAFIM FLCV26-18	F	--	30	--	--	--	--	26/18"	21-23	SEE IRRIGATION DETAILS
●	RAIN BIRD 1804-PRS POP-UP SPRAY 13" STRIP SERIES	LCS, R.C.S, SST	15"	30	--	--	--	--	1.21	14	ADJUST ARC AS NEEDED
●	RAIN BIRD 1804-PRS POP-UP SPRAY 8 SERIES	Q.T.H.F. VAN	8"	30	26	--	52	--	1.04	14	ADJUST ARC AS NEEDED
●	RAIN BIRD 1804-PRS POP-UP SPRAY 10 SERIES	Q.T.H.F. VAN	10"	30	39	53	79	--	1.58	14	ADJUST ARC AS NEEDED
●	RAIN BIRD 1804-PRS POP-UP SPRAY 12 SERIES	Q.T.H.F. VAN	12"	30	65	87	130	--	2.60	14	ADJUST ARC AS NEEDED
●	RAIN BIRD 1804-PRS POP-UP SPRAY 15 SERIES	Q.T.H.F. VAN	15"	30	92	123	185	--	3.70	14	ADJUST ARC AS NEEDED
●	RAIN BIRD 1804-PRS POP-UP SPRAY 18 SERIES VAN	VAN	18"	30	--	--	--	--	--	14	ADJUST ARC AS NEEDED
●	RAIN BIRD 5004-PL-R-SS WITH 25 SERIES NOZZLES	Q.T.H.F.	25"	45	1.00	1.38	1.98	--	3.82	15	ADJUST ARC AS NEEDED
●	RAIN BIRD 5004-PL-R-SS WITH 30 SERIES NOZZLES	Q.T.H.F.	30"	45	1.40	1.85	2.86	--	5.78	15	ADJUST ARC AS NEEDED
●	RAIN BIRD 5004-PL-R-SS WITH 35 SERIES NOZZLES	Q.T.H.F.	35"	45	1.92	2.46	3.81	--	--	15	ADJUST ARC AS NEEDED
●	RAIN BIRD FALCON 6004 SS	Q.T.H.	50"	50	5.5	7.4	11	--	--	15	ADJUST ARC AS NEEDED
●	RAIN BIRD FALCON 6004 SS	F	50"	50	--	--	--	--	11	15	ADJUST ARC AS NEEDED
●	RAIN BIRD 13-18 ROTARY WITH P45 SPRAY HEAD	VAN	13-18	45	--	--	--	--	--	14	ADJUST ARC AS NEEDED
□	CONTROLLER: WEATHERTRAK ETPRO3 STANDARD WIRE CONTROLLER (SIZE AS NEEDED) WITH WT-CIM-10YA. EXACT LOCATION T.B.D. BY OWNER. INSTALL RAINBIRD RAIN SENSOR (CONNECT TO NETAFIM HYDROMETER).									3	COORDINATE EXACT LOCATION WITH OWNER.
□	3" CLEMONS 275AS FILTER WITH 3" NETAFIM HYDROMETER (INSTALL FILTER IN ALUMINUM STRONG BOX ENCLOSURE).									1-2	INSTALL PER LOCAL CODE
□	RAIN BIRD PESP-PSD AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN). INSTALL PER OPTION PER B. REQ. PER SPECS DETAILS.									10-12	JUMBO VALVE BOX
□	DRIP CONTROL ZONE KIT: RAINBIRD X-CZ-100-PRB COM									17	JUMBO VALVE BOX
□	3" FLANGED LEPICO ISOLATION VALVE WITH MANUAL DRAIN INSTALLED ON LINE SIZED FLANGED TEE)									7	SEE IRRIGATION DETAILS
□	3" PURPLE C-900 IRRIGATION SUPPLY LINE (SEE CIVIL PLANS FOR MORE INFORMATION)									1-2	SEE IRRIGATION DETAILS
□	3" SCH. 40 PVC WITH SCH. 80 GLUED FITTINGS AND 3" DUCTILE IRON PIPE WITH DUCTILE FITTINGS AT POINT OF CONNECTION AND PER PLAN.									2-5,13	SEE IRRIGATION DETAILS
□	LATERAL LINE: PVC SCH. 40 (SIZE PER PLAN)									4-5	SEE IRRIGATION DETAILS
□	DRIP LATERAL: PVC SCH. 40, OR STICKY STRIP PVC HOSE BY GPH. CONTRACTOR SHALL SIZE PIPE PER DETAILS AND SPECS.									18-19	SEE IRRIGATION DETAILS
□	1" RAINBIRD QUICK COUPLER VALVE FOR IRRIGATION SYSTEM BLOWOUT. ALL GALVANIZED FITTINGS & PIPE.									8	SEE IRRIGATION DETAILS
□	1" RAINBIRD QUICK COUPLER VALVE, MODEL #44NF. NOT FOR IRRIGATION SYSTEM BLOWOUT.									8	SEE IRRIGATION DETAILS
○	NOT SHOWN	14 GA. SOLID COPPER WIRE								4,5,10-11	ROUTE WITH MAINLINE
○	SLAVE: SIZE TO BE A MIN. OF TWICE THE DIAMETER OF THE MAIN LATERAL									6	COORDINATE WITH ALL TRADES
○	NOT SHOWN	WIRE CHASE. SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE. 1" DIA. WC IS THE MINIMUM SIZED ALLOWED.								4-5	COORDINATE WITH ALL TRADES
○	FLUSH VALVE AND INDICATOR HEAD: 1/2" PVC BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX									20	REFERENCE DETAILS



REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE ISSUED: JUNE 2, 2020



E SCHOONER DR

IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER	PAT.	RD.	PSI	Q	T	H	TT	TQ	F	DRIP GPM	DETAILS	REMARKS
NOT SHOWN	GPH INC. GPSCV2M DRIP EMITTER	F	--	30	--	--	--	--	--	--	2.0	18-19	SEE IRRIGATION DETAILS
NOT SHOWN	RAINBIRD PC-05 EMITTER WITH DIFFUSER CAP	F	--	30	--	--	--	--	--	--	5.0	18,19,21,23	SEE IRRIGATION DETAILS
NOT SHOWN	RAINBIRD F88-3PS AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN)	F	--	30	--	--	--	--	--	--	26/18	21-23	SEE IRRIGATION DETAILS
■	RAIN BIRD 1804-PRS POP-UP SPRAY 15' STRIP SERIES	LCS, RCS, SST	15'	30	--	--	--	--	--	--	1.21	14	ADJUST ARC AS NEEDED
■	RAIN BIRD 1804-PRS POP-UP SPRAY 8' SERIES	Q.T.H.F.VAN	8'	30	26	52	--	--	--	--	1.04	14	ADJUST ARC AS NEEDED
■	RAIN BIRD 1804-PRS POP-UP SPRAY 10' SERIES	Q.T.H.F.VAN	10'	30	39	53	29	--	--	--	1.58	14	ADJUST ARC AS NEEDED
■	RAIN BIRD 1804-PRS POP-UP SPRAY 12' SERIES	Q.T.H.F.VAN	12'	30	65	87	1.30	--	--	--	2.60	14	ADJUST ARC AS NEEDED
■	RAIN BIRD 1804-PRS POP-UP SPRAY 15' SERIES	Q.T.H.F.VAN	15'	30	92	1.23	1.85	--	--	--	3.70	14	ADJUST ARC AS NEEDED
■	RAIN BIRD 1804-PRS POP-UP SPRAY 18' SERIES VAN	VAN	18'	30	--	--	--	--	--	--	--	14	ADJUST ARC AS NEEDED
■	RAIN BIRD 5004-PL-R-SS WITH 25 SERIES NOZZLES	Q.T.H.F.	25'	45	1.00	1.38	1.98	--	--	--	3.82	15	ADJUST ARC AS NEEDED
■	RAIN BIRD 5004-PL-R-SS WITH 10 SERIES NOZZLES	Q.T.H.F.	30'	45	1.40	1.85	2.96	--	--	--	5.78	15	ADJUST ARC AS NEEDED
■	RAIN BIRD 5004-PL-R-SS WITH 15 SERIES NOZZLES	Q.T.H.F.	30'	45	1.92	2.46	3.81	--	--	--	--	15	ADJUST ARC AS NEEDED
■	RAIN BIRD FALCON 6504 SS	Q.T.H.F.	50'	50	5.5	7.4	11	--	--	--	--	15	ADJUST ARC AS NEEDED
■	RAIN BIRD FALCON 6504 SS	F	50'	50	--	--	--	--	--	--	--	15	ADJUST ARC AS NEEDED
■	RAIN BIRD 15-18 ROTARY WITH P45 SPRAY HEAD	VAN	15-18	45	--	--	--	--	--	--	--	14	ADJUST ARC AS NEEDED
■	CONTROLLER: WEATHERTRAK ETPRO3 STANDARD WIRE CONTROLLER (SIZE AS NEEDED) WITH WT-CIM-10YA. EXACT LOCATION T.B.D. BY OWNER. INSTALL RAINBIRD RAIN SENSOR. CONNECT TO NETAFIM HYDROMETER.											3	COORDINATE EXACT LOCATION WITH OWNER.
■	3" CLEMONS 275AS FILTER WITH 3" NETAFIM HYDROMETER (INSTALL FILTER IN ALUMINUM STRONG BOX ENCLOSURE)											1-2	INSTALL PER LOCAL CODE
■	RAIN BIRD F88-3PS AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN). INSTALL PRS-D OPTION PER REQ. PER SPECS/DETAILS.											10-12	JUMBO VALVE BOX
■	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-100-PRB-COM											17	JUMBO VALVE BOX
■	3" FLANGED LEMCO ISOLATION VALVE WITH MANUAL DRAIN INSTALLED ON LINE (SIZED FLANGED TEE)											7	SEE IRRIGATION DETAILS
■	3" PURPLE C-900 IRRIGATION SUPPLY LINE (SEE CIVIL PLANS FOR MORE INFORMATION)											1-2	SEE CIVIL PLANS
■	3" SCH. 40 PVC WITH SCH. 80 GLUED FITTINGS AND 3" DUCTILE IRON PIPE WITH DUCTILE FITTINGS AT POINT OF CONNECTION AND PER PLAN											2-5,13	SEE IRRIGATION DETAILS
---	LATERAL LINE: PVC SCH. 40 (SIZE PER PLAN)											4-5	SEE IRRIGATION DETAILS
---	DRIP LATERAL: PVC SCH. 40 OR STICKY STRIP PVC HOSE BY GPH. CONTRACTOR SHALL SIZE PIPE PER DETAILS AND SPECS.											18-19	SEE IRRIGATION DETAILS
---	1" RAINBIRD QUICK COUPLER VALVE, MODEL #44NF FOR IRRIGATION SYSTEM BLOWOUT. ALL GALVANIZED FITTINGS & PIPE.											8	SEE IRRIGATION DETAILS
---	1" RAINBIRD QUICK COUPLER VALVE, MODEL #44NF. NOT FOR IRRIGATION SYSTEM BLOWOUT.											8	SEE IRRIGATION DETAILS
---	14 GA. SOLID COPPER WIRE											4,5,10-11	ROUTE WITH MAINLINE
---	SLEEVE (SIZE TO BE A MIN. OF TWICE THE DIAMETER OF THE MAIN LATERAL)											6	COORDINATE WITH ALL TRADES
---	WIRE CHASE. SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE. 1" DIA. WC IS THE MINIMUM SIZED ALLOWED.											4-5	COORDINATE WITH ALL TRADES
---	FLUSH VALVE AND INDICATOR HEAD: 1/2" PVC BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX											20	REFERENCE DETAILS

IRRIGATION NOTES

- A PUMP IS REQUIRED FOR PROPER OPERATION OF THE SPRINKLER IRRIGATION SYSTEM. ONCE PRESSURES HAVE BEEN TESTED, THE CONTRACTOR SHALL SUBMIT PUMP SHOP DRAWINGS FOR APPROVAL TO VERIFY IF THE CURRENT PUMP SPECIFIED WILL WORK OR IF ADJUSTMENTS NEED TO BE MADE PRIOR TO ORDERING AND INSTALLING THE PUMP SYSTEM.
- SEE SHEETS LS400-LS402 FOR IRRIGATION DETAILS. SEE SPECS FOR ADDITIONAL IRRIGATION INSTALLATION PROCEDURES.
- POWER TO CONTROLLER TO BE PROVIDED BY ELECTRICAL CONTRACTOR. THE CONTROLLER SHALL BE CONNECTED TO THE BUILDING GROUNDING GRID PER MANUFACTURERS SPECS AT 10 OHMS OR LESS AND SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. CONTROLLER TO BE HARD WIRED. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL RAINBIRD W2 RAIN SENSOR FOR THE CONTROLLER.
- ALL VALVES, VALVE BOXES, DRAINS, AND BOTH ENDS OF SLEEVES SHALL HAVE GPS POINTS TO CREATE AN GPS AS-BUILT DOCUMENT. CONSULT WITH THE OWNER FOR THE DELIVERABLE TYPE REQUIRED.
- IRRIGATION SYSTEM IS DESIGNED TO USE UP TO 110 GPM WITH AN OPERATING PRESSURE OF 50 PSI AT FURTHEST IRRIGATION FALCON ROTOR HEAD. THE CONTRACTOR SHALL VERIFY EXISTING PRESSURES ON-SITE PRIOR TO CONSTRUCTION AND ENSURE THAT 50PSI CAN BE ACHIEVED AT THE FURTHEST AND HIGHEST ROTOR HEAD FROM THE PUMP LOCATION.
- IRRIGATION SERVICE MAINLINE SHALL BE PURPLE C-900 PIPE WITH MJ FITTINGS (OR AS DETAILED BY THE CIVIL PLANS) AND SHALL BE INSTALLED BY THE UTILITY SITE CONTRACTOR (SEE CIVIL PLANS FOR INFORMATION/SPECS. ON THE NEW P1 WATER METER. SERVICE PIPING, METER VAULT, FITTINGS, ETC. AS REQUIRED BY SARATOGA SPRINGS CITY). BURY MAINLINE AT THE FOLLOWING DEPTHS: 3" AT 18-24" DEEP, 3" AND SMALLER MAINLINE SHALL BE SCH. 40 PVC BUT THE P.O.C. SHALL BE DUCTILE IRON WITH DUCTILE FITTINGS PER THE SPECS. ALL MAINLINE 3" AND SMALLER SHALL BE SCH. 40 PVC WITH SCHEDULE 80 FITTINGS AND THRUST BLOCKS. SIZE MAINLINE PER PLAN. LATERAL LINES SHALL BE NO SMALLER THAN 3/4". MAINLINE AND LATERAL LINE LAYOUT IS SCHEMATIC. ADJUST LOCATION OF MAINLINE AND LATERAL LINES AS NECESSARY IN ORDER TO AVOID TREES AND OTHER OBSTRUCTIONS SUCH AS POLES, HYDRANTS, ETC. AS WELL AS NEW TREES OR SHRUB PLANTINGS. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 3/4" PIPE MAX. 8 GPM, 1" PIPE MAX. 13 GPM, 1-1/4" PIPE MAX. 23 GPM, 1-1/2" PIPE MAX. 30 GPM, 2" PIPE MAX. 50 GPM, 2-1/2" PIPE MAX. 75 GPM, AND 3" PIPE MAX. 110 GPM.
- CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
- INSTALL ALL NEW VALVE BOXES 6" MIN. FROM WALKS AND WALLS SQUARED WITH THE WALK. PLACE VALVE BOXES IN PLANTER BEDS WHEN POSSIBLE. ROUND VALVE BOXES ARE NOT ALLOWED. CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE RAINBIRD PRODUCTS OR AN OWNER APPROVED EQUAL.
- CONTRACTOR MAY MAKE SUBSTITUTIONS TO IRRIGATION COMPONENTS ONLY UPON WRITTEN APPROVAL FROM ALPINE SCHOOL DISTRICT. IF CONTRACTOR ELECTS TO USE DIFFERENT COMPONENTS THAN WHAT IS CALLED FOR, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A NEW DESIGN SHOWING HOW NEW COMPONENTS MEET OR EXCEED THE EXISTING DESIGN STANDARD SET FORTH IN THESE CONSTRUCTION DOCUMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE LANDSCAPE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
- ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
- INSTALL A SEPARATE 1" ELECTRICAL CONDUIT FROM THE HYDROMETER TO THE CONTROLLER LOCATION FOR THE PUMP RELAY. ELECTRICAL CONTRACTOR TO INSTALL POWER TO PUMP FOR PUMP, HEATER, ETC. (SEE PUMP DETAIL FOR POWER REQUIREMENTS). INSTALL SCH. 40 GREY ELECTRICAL WIRING CONDUIT BETWEEN ALL IRRIGATION BOXES AND FROM IRRIGATION BOXES AND PUMP LOCATION TO THE CONTROLLER. EXACT LOCATION OF CONTROLLER TO BE CONFIRMED WITH THE OWNER.
- DRIP VALVES MAY NEED TO BE OPERATED AT THE SAME TIME SO THAT THE COMBINED FLOWS WILL BE AT LEAST 14 GPM. RUNNING MULTIPLE DRIP ZONES TOGETHER WILL ENABLE FLOW SENSING FOR THESE VALVES. IF DRIP ZONES ARE NOT RAN TOGETHER, THEN THE DRIP ZONES MAY NEED TO BE EXCLUDED FROM FLOW SENSING. FLOWS LESS THAN 14 GPM WILL NOT BE READ BY THE 3" HYDROMETER THEREFORE FLOW DATA WILL NOT BE AVAILABLE.
- THE CONTROLLER SHALL BE PROGRAMMED WITH THE MASTER VALVE SCHEDULE TO ENABLE DAYTIME USE OF THE QUICK COUPLERS.
- INSTALL HE-VAN NOZZLES WHERE NECESSARY TO MINIMIZE OVERSPRAY OF WATER ONTO SIDEWALKS AND OTHER PAVED SURFACES.
- IRRIGATION NOTES AND LEGEND APPLY TO SHEETS LS200 THRU LS204.

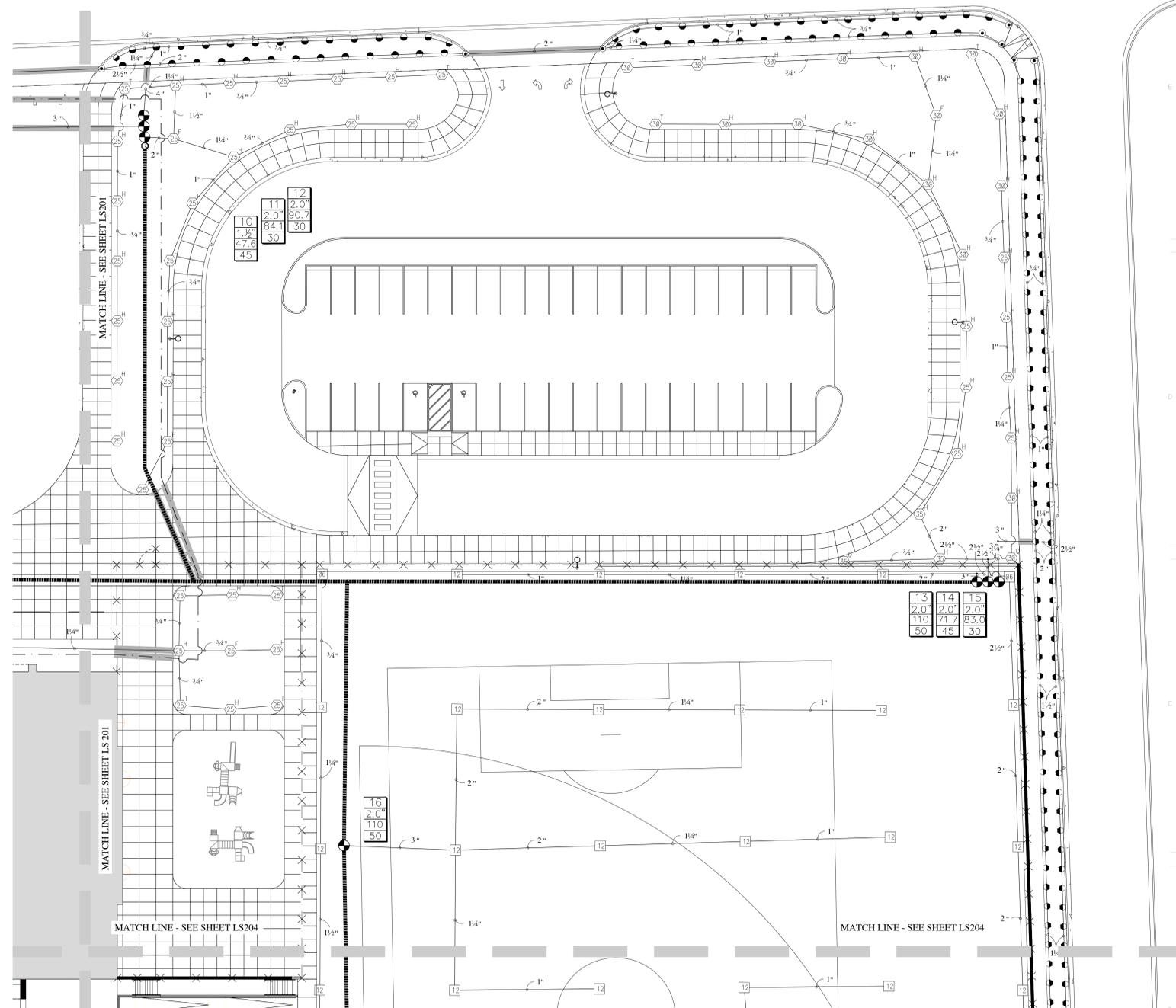
VALVE ID TAG



DRIP EMITTER LEGEND

PLANT TYPE	EMITTER QTY	EMITTER TYPE
PERENNIALS/GRASSES	1	GPSCV2M (2GPH)
ALL SHRUBS	2	GPSCV2M (2GPH)
TREES	2	PC-05 (5GPH) WITH DIFFUSER CAP

- NOTE:
- EMITTERS LISTED ARE AVAILABLE FROM GPH AND RAINBIRD.
 - EMITTERS ARE NOT NECESSARY FOR TREES IN LAWN AREAS.
 - INSTALL NETAFIM TLV IN ADDITION TO PC-05 EMITTERS PER DETAILS ON SHEET LS401.

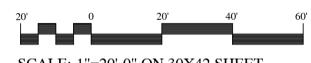


REV	DATE	DESCRIPTION
13	2.0	50
14	2.0	45
15	2.0	30

VCBO NUMBER: 20010
 CLIENT NUMBER:
 DATE ISSUED: JUNE 2, 2020

ASD NEW ELEMENTARY #101
 ALPINE SCHOOL DISTRICT
 SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
 BP1 - CONSTRUCTION BID SET

IRRIGATION PLAN
LS202



SCALE: 1"=20'-0" ON 30X42 SHEET

IRRIGATION NOTES

- A PUMP IS REQUIRED FOR PROPER OPERATION OF THE SPRINKLER IRRIGATION SYSTEM. ONCE PRESSURES HAVE BEEN TESTED, THE CONTRACTOR SHALL SUBMIT PUMP SHOP DRAWINGS FOR APPROVAL TO VERIFY IF THE CURRENT PUMP SPECIFIED WILL WORK OR IF ADJUSTMENTS NEED TO BE MADE PRIOR TO ORDERING AND INSTALLING THE PUMP SYSTEM.
- SEE SHEETS LS400-LS402 FOR IRRIGATION DETAILS. SEE SPECS FOR ADDITIONAL IRRIGATION INSTALLATION PROCEDURES.
- POWER TO CONTROLLING GRID PER MANUFACTURERS SPECS AT 10 OHMS OR LESS AND SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. CONTROLLER TO BE HARD WIRED. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL RAINBIRD WR2 RAIN SENSOR FOR THE CONTROLLER.
- ALL VALVES, VALVE BOXES, DRAINS, AND BOTH ENDS OF SLEEVES SHALL HAVE GPS POINTS TO CREATE AN GPS AS BUILT DOCUMENT. CONSULT WITH THE OWNER FOR THE DELIVERABLE TYPE REQUIRED.
- IRRIGATION SYSTEM IS DESIGNED TO USE UP TO 110 GPM WITH AN OPERATING PRESSURE OF 50 PSI AT FURTHEST IRRIGATION FALCON ROTOR HEAD. THE CONTRACTOR SHALL VERIFY EXISTING PRESSURES ON SITE PRIOR TO CONSTRUCTION AND ENSURE THAT 50PSI CAN BE ACHIEVED AT THE FURTHEST AND HIGHEST ROTOR HEAD FROM THE PUMP LOCATION.
- IRRIGATION SERVICE MAINLINE SHALL BE PURPLE C-900 PIPE WITH MD FITTINGS (OR AS DETAILED BY THE CIVIL PLANS) AND SHALL BE INSTALLED BY THE UTILITY SITE CONTRACTOR (SEE CIVIL PLANS FOR INFORMATION) SPECS. ON THE NEW P.I. WATER METER, SERVICE PIPING, METER VAULT, FITTINGS, ETC. AS REQUIRED BY SARATOGA SPRINGS CITY. BURY MAINLINE AT THE FOLLOWING DEPTHS: 3" AT 18-24" DEEP, 3" AND SMALLER MAINLINE SHALL BE SCH 40 PVC BUT THE P.O.C. SHALL BE DUCTILE IRON WITH DUCTILE FITTINGS PER THE DETAILS. ALL MAINLINE 3" AND SMALLER SHALL BE SCH 40 PVC WITH SCHEDULE 80 FITTINGS AND THRUST BLOCKS. SIZE MAINLINE PER PLAN. LATERAL LINES SHALL BE NO SMALLER THAN 3/4". MAINLINE AND LATERAL LINE LAYOUT IS SCHEMATIC. ADJUST LOCATION OF MAINLINE AND LATERAL LINES AS NECESSARY IN ORDER TO AVOID TREES AND OTHER OBSTRUCTIONS SUCH AS POLES, HYDRANTS, ETC. AS WELL AS NEW TREES OR SHRUB PLANTINGS. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 3/4" PIPE MAX. 13 GPM, 1-1/4" PIPE MAX. 23 GPM, 1-1/2" PIPE MAX. 30 GPM, 2" PIPE MAX. 50 GPM, 2-1/2" PIPE MAX. 75 GPM, AND 3" PIPE MAX. 110 GPM.
- CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
- INSTALL ALL NEW VALVE BOXES 6" MIN. FROM WALKS AND WALLS SQUARED WITH THE WALK. PLACE VALVE BOXES IN PLANTER BEDS WHEN POSSIBLE. ROUND VALVE BOXES ARE NOT ALLOWED. CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE RAINBIRD PRODUCTS OR AN OWNER APPROVED EQUAL.
- CONTRACTOR MAY MAKE SUBSTITUTIONS TO IRRIGATION COMPONENTS ONLY UPON WRITTEN APPROVAL FROM ALPINE SCHOOL DISTRICT. IF CONTRACTOR ELECTS TO USE DIFFERENT COMPONENTS THAN WHAT IS CALLED FOR, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A NEW DESIGN SHOWING HOW NEW COMPONENTS MEET OR EXCEED THE EXISTING DESIGN STANDARD SET FORTH IN THESE CONSTRUCTION DOCUMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE LANDSCAPE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
- ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
- INSTALL A SEPARATE 1" ELECTRICAL CONDUIT FROM THE HYDROMETER TO THE CONTROLLER LOCATION FOR THE HYDROMETER WIRE. INSTALL A SEPARATE 1" ELECTRICAL CONDUIT FROM THE PUMP STATION TO THE CONTROLLER LOCATION FOR THE PUMP RELAY. ELECTRICAL CONTRACTOR TO INSTALL POWER TO PUMP FOR PUMP HEATER, ETC. (SEE PUMP DETAIL FOR POWER REQUIREMENTS). INSTALL SCH. 40 GREY ELECTRICAL WIRING CONDUIT BETWEEN ALL IRRIGATION BOXES AND FROM IRRIGATION BOXES AND PUMP LOCATION TO THE CONTROLLER. EXACT LOCATION OF CONTROLLER TO BE CONFIRMED WITH THE OWNER. DRIP VALVES MAY NEED TO BE OPERATED AT THE SAME TIME SO THAT THE COMBINED FLOWS WILL BE AT LEAST 14 GPM. RUNNING MULTIPLE DRIP ZONES TOGETHER WILL ENABLE FLOW SENSING FOR THESE VALVES. IF DRIP ZONES ARE NOT RUN TOGETHER, THEN THE DRIP ZONES MAY NEED TO BE EXCLUDED FROM FLOW SENSING. FLOWS LESS THAN 14 GPM WILL NOT BE READ BY THE 3" HYDROMETER THEIR SPORE FLOW DATA WILL NOT BE AVAILABLE.
- THE CONTROLLER SHALL BE PROGRAMMED WITH THE MASTER VALVE SCHEDULE TO ENABLE DAYTIME USE OF THE QUICK COUPLERS.
- INSTALL THE VAN NOZZLES WHERE NECESSARY TO MINIMIZE OVERSPRAY OF WATER ONTO SIDEWALKS AND OTHER PAVED SURFACES.
- IRRIGATION NOTES AND LEGEND APPLY TO SHEETS LS200 THRU LS204.

VALVE ID TAG



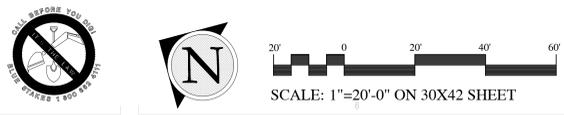
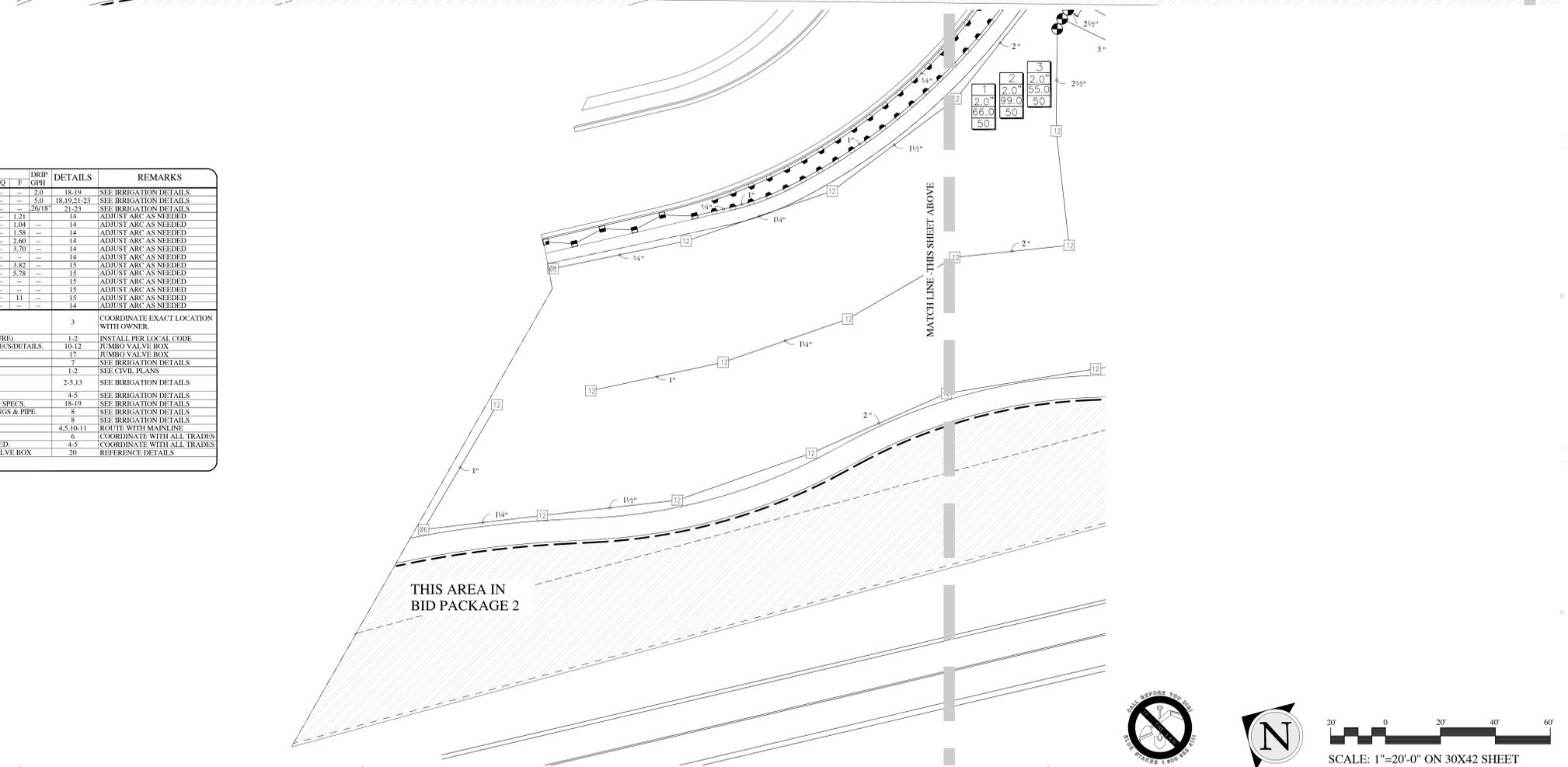
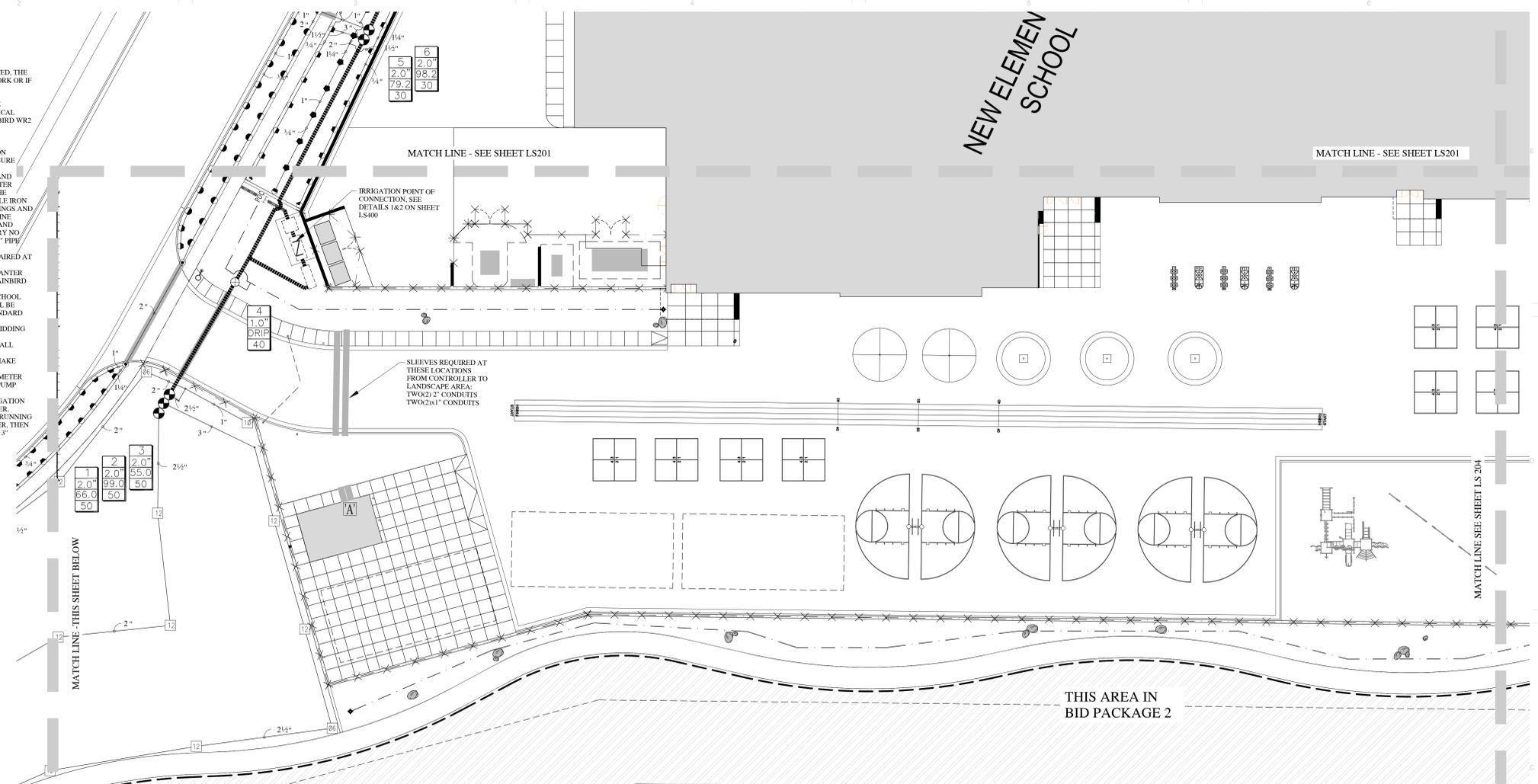
DRIP EMITTER LEGEND

PLANT TYPE	EMITTER QTY	EMITTER TYPE
PERENNIALS/GRASSES	1	GPSTCV2M (2GPH)
ALL SHRUBS	2	GPSTCV2M (2GPH)
TREES	3	PC-05 (6GPH) WITH DIFFUSER CAP

- NOTE:
- EMITTERS LISTED ARE AVAILABLE FROM GPH AND RAINBIRD.
 - EMITTERS ARE NOT NECESSARY FOR TREES IN LAWN AREAS.
 - INSTALL NETAFIM FLOW IN ADDITION TO PC-05 EMITTERS PER DETAILS ON SHEET LS401.

IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER	PAT.	RD.	PSI	GPM				DRIP GPH	DETAILS	REMARKS
					Q	T	H	TT	TQ	F	
NOT SHOWN	GPH INC. GPSTCV2M DRIP EMITTER	F	--	30	--	--	--	--	--	2.0	18-19
NOT SHOWN	RAINBIRD PC-05 EMITTER WITH DIFFUSER CAP	F	--	30	--	--	--	--	--	5.0	18,19,21-23
NOT SHOWN	NETAFIM FLOW	F	--	30	--	--	--	--	--	26/18	21-23
●	RAIN BIRD 1804-PRS POP-UP SPRAY 15' STRIP SERIES	LCS, R.S., SSI	15'	30	--	--	61	--	--	1.21	14
●	RAIN BIRD 1804-PRS POP-UP SPRAY 8 SERIES	Q.T.H.F. VAN	8	30	26	--	52	--	--	1.04	14
●	RAIN BIRD 1804-PRS POP-UP SPRAY 10 SERIES	Q.T.H.F. VAN	10	30	39	53	79	--	--	1.58	14
●	RAIN BIRD 1804-PRS POP-UP SPRAY 12 SERIES	Q.T.H.F. VAN	12	30	65	87	130	--	--	2.60	14
●	RAIN BIRD 1804-PRS POP-UP SPRAY 15 SERIES	Q.T.H.F. VAN	15	30	92	123	185	--	--	3.70	14
●	RAIN BIRD 1804-PRS POP-UP SPRAY 18 SERIES VAN	VAN	18	30	--	--	--	--	--	3.82	15
●	RAIN BIRD 5004-PL-R-SS WITH 25 SERIES NOZZLES	Q.T.H.F.	30	45	1.00	1.38	1.98	--	--	5.78	15
●	RAIN BIRD 5004-PL-R-SS WITH 30 SERIES NOZZLES	Q.T.H.F.	30	45	1.40	1.85	2.66	--	--	5.78	15
●	RAIN BIRD 5004-PL-R-SS WITH 35 SERIES NOZZLES	Q.T.H.F.	35	45	1.92	2.46	3.81	--	--	5.78	15
●	RAIN BIRD FALCON 6504 SS	Q.T.H.F.	50	50	5.5	7.4	11	--	--	11	15
●	RAIN BIRD FALCON 6504 SS	F	50	50	--	--	--	--	--	11	15
●	RAIN BIRD 15-R ROTARY WITH 15'S SPRAY HEAD	VAN	15-R	45	--	--	--	--	--	14	14
ⓐ	CONTROLLER WEATHERBARK ETPRO3 STANDARD WIRE CONTROLLER (SIZE AS NEEDED) WITH WT-CIM-10YA EXACT LOCATION T.B.D. BY OWNER. INSTALL RAINBIRD RAIN SENSOR. CONNECT TO NETAFIM HYDROMETER.										3
ⓑ	3" CLEMONS 275AS FILTER WITH 3" NETAFIM HYDROMETER (INSTALL FILTER IN ALUMINUM STRONG BOX ENCLOSURE)										1-2
Ⓒ	RAIN BIRD PESH-PRESD AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN). INSTALL PRS-D OPTION PER REQ. PER SP3C/DETAILS.										10-12
Ⓓ	DRIP CONTROL ZONE KIT RAINBIRD XZZ-100-RRR COM										17
Ⓔ	3" FLANGED LEMCO ISOLATION VALVE WITH MANUAL DRAIN (INSTALLED ON LINE SIZED FLANGED TEE)										7
Ⓕ	3" PURPLE C-900 IRRIGATION SUPPLY LINE (SEE CIVIL PLANS FOR MORE INFORMATION)										1-2
Ⓖ	3" SCH 40 PVC WITH SCH 80 GLUED FITTINGS AND 3" DUCTILE IRON PIPE WITH DUCTILE FITTINGS AT POINT OF CONNECTION AND PER PLAN.										2.5,13
Ⓗ	LATERAL LINE PVC SCH. 40 (SIZE PER PLAN)										4,5
Ⓘ	DRIP LATERAL PVC SCH 40 OR STEEL STRIP PVC HOSE BY GPH. CONTRACTOR SHALL SIZE PIPE PER DETAILS AND SPECS.										18-19
Ⓝ	1" RAINBIRD QUICK COUPLER VALVE, MODEL 444NP. FOR IRRIGATION SYSTEM BLOWOUT. ALL GALVANIZED FITTINGS & PIPE.										8
Ⓞ	1" RAINBIRD QUICK COUPLER VALVE, MODEL 444NP. NOT FOR IRRIGATION SYSTEM BLOWOUT.										8
Ⓟ	14 GA. SOLID COPPER WIRE										4,5,10,11
Ⓠ	SLEEVE (SIZE TO BE A MIN. OF TWICE THE DIAMETER OF THE MAIN LATERAL)										6
Ⓡ	WIRE CHASE. SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE. 1" DIA. WC IS THE MINIMUM SIZED ALLOWED.										4,5
Ⓢ	FLUSH VALVE AND INDICATOR HEAD: 1/2" PVC BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX										20



IRRIGATION NOTES

- A PUMP IS REQUIRED FOR PROPER OPERATION OF THE SPRINKLER IRRIGATION SYSTEM. ONCE PRESSURES HAVE BEEN TESTED, THE CONTRACTOR SHALL SUBMIT PUMP SHOP DRAWINGS FOR APPROVAL TO VERIFY IF THE CURRENT PUMP SPECIFIED WILL WORK OR IF ADJUSTMENTS NEED TO BE MADE PRIOR TO ORDERING AND INSTALLING THE PUMP SYSTEM.
- SEE SHEETS LS400 & LS402 FOR IRRIGATION DETAILS. SEE SPECS FOR ADDITIONAL IRRIGATION INSTALLATION PROCEDURES.
- POWER TO CONTROLLER TO BE PROVIDED BY ELECTRICAL CONTRACTOR. THE CONTROLLER SHALL BE CONNECTED TO THE BUILDING GROUNDING GRID PER MANUFACTURER'S SPECS AT 10 OHMS OR LESS AND SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. CONTROLLER TO BE HARD WIRED. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL RAINBIRD WR2 RAIN SENSOR FOR THE CONTROLLER.
- ALL VALVES, VALVE BOXES, DRAINS, AND BOTH ENDS OF SLEEVES SHALL HAVE GPS POINTS TO CREATE AN GPS AS-BUILT DOCUMENT. CONSULT WITH THE OWNER FOR THE DELIVERABLE TYPE REQUIRED.
- IRRIGATION SYSTEM IS DESIGNED TO USE UP TO 110 GPM WITH AN OPERATING PRESSURE OF 50 PSI AT FURTHEST IRRIGATION FALCON ROTOR HEAD. THE CONTRACTOR SHALL VERIFY EXISTING PRESSURES ON-SITE PRIOR TO CONSTRUCTION AND ENSURE THAT SLOPE CAN BE ACHIEVED AT THE FURTHEST AND HIGHEST ROTOR HEAD FROM THE PUMP LOCATION.
- IRRIGATION SERVICE MAINLINE SHALL BE PURPLE C-900 PIPE WITH M FITTINGS OR AS DETAILED BY THE CIVIL PLANS, AND SHALL BE INSTALLED BY THE UTILITY SITE CONTRACTOR (SEE CIVIL PLANS FOR INFORMATION/SPECS). ON THE NEW P.I. WATER METER, SERVICE PIPING, METER VALVE, FITTINGS, ETC. AS REQUIRED BY SARATOGA SPRINGS CITY. BURY MAINLINE AT THE FOLLOWING DEPTHS: 3" AT 18-24" DEEP, 3" AND SMALLER MAINLINE SHALL BE SCH. 40 PVC BUT THE P.O.C. SHALL BE DUCTILE IRON WITH DUCTILE FITTINGS PER THE DETAILS. ALL MAINLINE 5" AND SMALLER SHALL BE SCH 40 PVC WITH SCHEDULE 80 FITTINGS AND THUS BLOCKS SIZE MAINLINE PER PLAN. LATERAL LINES SHALL BE NO SMALLER THAN 3/4" MAINLINE AND LATERAL LINE LAYOUT IS SCHEMATIC. ADJUST LOCATION OF MAINLINE AND LATERAL LINES AS NECESSARY IN ORDER TO AVOID TREES AND OTHER OBSTRUCTIONS SUCH AS POLES, HYDRANTS, ETC. AS WELL AS NEW TREES OR SHRUB PLANTINGS. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 3/4" PIPE MAX. 8 GPM, 1" PIPE MAX. 13 GPM, 1-1/4" PIPE MAX. 23 GPM, 1-1/2" PIPE MAX. 30 GPM, 2" PIPE MAX. 50 GPM, 2-1/2" PIPE MAX. 75 GPM, AND 3" PIPE MAX. 110 GPM.
- CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
- INSTALL ALL NEW VALVE BOXES 6" MIN. FROM WALKS AND WALLS SQUARED WITH THE WALK. PLACE VALVE BOXES IN PLANTER BEDS WHEN POSSIBLE. ROUND VALVE BOXES ARE NOT ALLOWED. CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE RAINBIRD PRODUCTS OR AN OWNER APPROVED EQUAL.
- CONTRACTOR MAY MAKE SUBSTITUTIONS TO IRRIGATION COMPONENTS ONLY UPON WRITTEN APPROVAL FROM ALPINE SCHOOL DISTRICT. IF CONTRACTOR ELECTS TO USE DIFFERENT COMPONENTS THAN WHAT IS CALLED FOR, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A NEW DESIGN SHOWING HOW NEW COMPONENTS MEET OR EXCEED THE EXISTING DESIGN STANDARD SET FORTH IN THESE CONSTRUCTION DOCUMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE LANDSCAPE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
- ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
- INSTALL A SEPARATE 1" ELECTRICAL CONDUIT FROM THE PUMP STATION TO THE CONTROLLER LOCATION FOR THE PUMP RELAY. ELECTRICAL CONTRACTOR TO INSTALL POWER TO PUMP FOR PUMP, HEATER, ETC. (SEE PUMP DETAIL FOR POWER REQUIREMENTS). INSTALL SCH. 40 GREY ELECTRICAL WIRING CONDUIT BETWEEN ALL IRRIGATION VALVE BOXES AND FROM IRRIGATION BOXES AND PUMP LOCATION TO THE CONTROLLER. EXACT LOCATION OF CONTROLLER TO BE CONFIRMED WITH THE OWNER.
- DRIP VALVES MAY NEED TO BE OPERATED AT THE SAME TIME SO THAT THE COMBINED FLOWS WILL BE AT LEAST 14 GPM. RUNNING MULTIPLE DRIP ZONES TOGETHER WILL ENABLE FLOW SENSING FOR THESE VALVES. IF DRIP ZONES ARE NOT RAN TOGETHER, THEN THE DRIP ZONES MAY NEED TO BE EXCLUDED FROM FLOW SENSING. FLOWS LESS THAN 14 GPM WILL NOT BE READ BY THE 3" HYDROMETER THEREFORE FLOW DATA WILL NOT BE AVAILABLE.
- THE CONTROLLER SHALL BE PROGRAMMED WITH THE MASTER VALVE SCHEDULE TO ENABLE DAYTIME USE OF THE QUICK COUPLERS.
- INSTALL HE-VAN NOZZLES WHERE NECESSARY TO MINIMIZE OVERSPRAY OF WATER ONTO SIDEWALKS AND OTHER PAVED SURFACES.
- IRRIGATION NOTES AND LEGEND APPLY TO SHEETS LS200 THRU LS204.

VALVE ID TAG



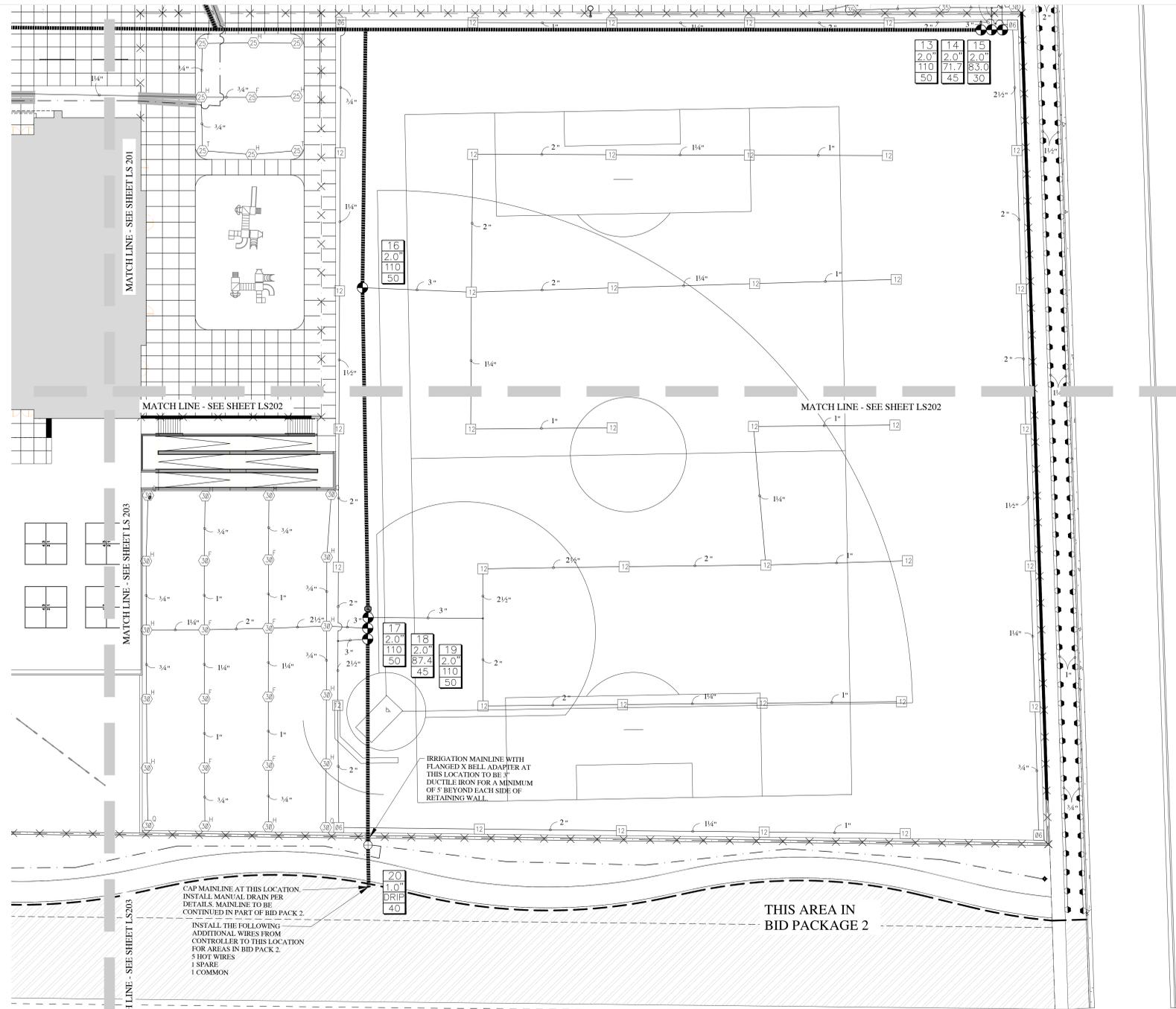
DRIP EMITTER LEGEND

PLANT TYPE	EMITTER QTY	EMITTER TYPE
PERENNIALS/GRASSES	1	GPSTCV2M (2GPH)
ALL SHRUBS	2	GPSTCV2M (2GPH)
TREES	2	PC-05 (5GPH) WITH DIFFUSER CAP

- NOTE:
- EMITTERS LISTED ARE AVAILABLE FROM GPH AND RAINBIRD.
 - EMITTERS ARE NOT NECESSARY FOR TREES IN LAWN AREAS.
 - INSTALL NETAFIM TL CV IN ADDITION TO PC-05 EMITTERS PER DETAILS ON SHEET LS401.

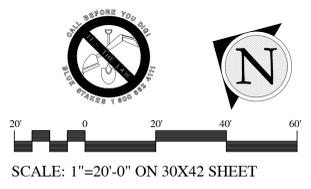
IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER	PAT.	RD.	PSI	GPM							DRIP GPH	DETAILS	REMARKS
					Q	T	H	TT	TQ	F				
NOT SHOWN	GPH INC. GPSTCV2M DRIP EMITTER	F	30	--	--	--	--	--	--	--	2.0	18-19	SEE IRRIGATION DETAILS	
NOT SHOWN	RAINBIRD PC-05 EMITTER WITH DIFFUSER CAP	F	30	--	--	--	--	--	--	5.0	18,19,21-23	SEE IRRIGATION DETAILS		
NOT SHOWN	DRIP LINE: NETAFIM TL CV26-18	F	30	--	--	--	--	--	--	26/18"	21-23	SEE IRRIGATION DETAILS		
①	RAIN BIRD 1804-PRS POP-UP SPRAY 15 SERIES	LCS, RCS, SST	15	30	--	--	61	--	--	1.21	14	ADJUST ARC AS NEEDED		
②	RAIN BIRD 1804-PRS POP-UP SPRAY 5 SERIES	Q.T.H.F.VAN	5	30	26	--	52	--	--	1.04	14	ADJUST ARC AS NEEDED		
③	RAIN BIRD 1804-PRS POP-UP SPRAY 10 SERIES	Q.T.H.F.VAN	10	30	39	53	79	--	--	1.58	14	ADJUST ARC AS NEEDED		
④	RAIN BIRD 1804-PRS POP-UP SPRAY 12 SERIES	Q.T.H.F.VAN	12	30	65	87	130	--	--	2.60	14	ADJUST ARC AS NEEDED		
⑤	RAIN BIRD 1804-PRS POP-UP SPRAY 15 SERIES	Q.T.H.F.VAN	15	30	92	123	185	--	--	3.70	14	ADJUST ARC AS NEEDED		
⑥	RAIN BIRD 1804-PRS POP-UP SPRAY 18 SERIES VAN	VAN	18	30	--	--	--	--	--	--	14	ADJUST ARC AS NEEDED		
⑦	RAIN BIRD 5004-PL-R-SS WITH 25 SERIES NOZZLES	Q.T.H.F.	25	45	1.00	1.38	1.98	--	--	3.82	15	ADJUST ARC AS NEEDED		
⑧	RAIN BIRD 5004-PL-R-SS WITH 30 SERIES NOZZLES	Q.T.H.F.	30	45	1.40	1.85	2.96	--	--	5.78	15	ADJUST ARC AS NEEDED		
⑨	RAIN BIRD 5004-PL-R-SS WITH 35 SERIES NOZZLES	Q.T.H.F.	35	45	1.92	2.46	3.81	--	--	--	15	ADJUST ARC AS NEEDED		
⑩	RAIN BIRD FALCON 6504 SS	Q.T.H.	50	50	5.5	7.4	11	--	--	--	15	ADJUST ARC AS NEEDED		
⑪	RAIN BIRD 13-18 ROTARY WITH P45 SPRAY HEAD	VAN	13-18	45	--	--	--	--	--	11	15	ADJUST ARC AS NEEDED		
[A]	CONTROLLER: WEATHER TRAK FT1PRO3 STANDARD WIRE CONTROLLER (SIZE AS NEEDED) WITH W1-CIM-10YA. EXACT LOCATION T.B.D. BY OWNER. INSTALL RAINBIRD RAIN SENSOR. CONNECT TO METAFIM HYDROMETER.										3	COORDINATE EXACT LOCATION WITH OWNER.		
[B]	3" CLEMONS 275AS FILTER WITH 5" METAFIM HYDROMETER. (INSTALL FILTER IN ALL MAINLINE FROM BOX ENCL OSTR) RAIN BIRD PRS-PSD AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLANS). INSTALL PRS-D OPTION PER REQ. PER SPECS/DETAILS.										10-12	INSTALL PER LOCAL CODE. JUMBO VALVE BOX.		
[C]	DRIP CONTROL ZONE KIT: RAINBIRD XZ-100-PIB-COM.										17	JUMBO VALVE BOX.		
[D]	3" FLANGED LEEFMO ISOLATION VALVE WITH MANUAL DRAIN INSTALLED ON LINE (SIZED FLANGED TEE)										7	SEE IRRIGATION DETAILS.		
[E]	3" PURPLE C-900 IRRIGATION SUPPLY LINE (SEE CIVIL PLANS FOR MORE INFORMATION).										1-2	SEE CIVIL PLANS.		
[F]	3" SCH. 40 PVC WITH SCH. 80 GLUED FITTINGS AND 3" DUCTILE IRON PIPE WITH DUCTILE FITTINGS AT POINT OF CONNECTION AND PER PLAN.										2.5,13	SEE IRRIGATION DETAILS.		
[G]	LATERAL LINE: PVC SCH. 40 (SIZE PER PLAN)										4-5	SEE IRRIGATION DETAILS.		
[H]	DRIP LATERAL: PVC SCH. 40 OR STICKY-STRIP PVC HOSE BY GPH. CONTRACTOR SHALL SIZE PIPE PER DETAILS AND SPECS.										18-19	SEE IRRIGATION DETAILS.		
[I]	1" RAINBIRD QUICK COUPLER VALVE, MODEL #4NP, FOR IRRIGATION SYSTEM BLOWOUT. ALL GALVANIZED FITTINGS & PIPE.										8	SEE IRRIGATION DETAILS.		
[J]	1" RAINBIRD QUICK COUPLER VALVE, MODEL #4NP, NOT FOR IRRIGATION SYSTEM BLOWOUT.										8	SEE IRRIGATION DETAILS.		
[K]	14 GA. SOLID COPPER WIRE										4.5,10-11	ROUTE WITH MAINLINE.		
[L]	SLEEVE: SIZE TO BE A MIN. OF TWICE THE DIAMETER OF THE MAIN LATERAL.										6	COORDINATE WITH ALL TRADES.		
[M]	WIRE CHASE: SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE. 1" DIA. WC IS THE MINIMUM SIZED ALLOWED.										4-5	COORDINATE WITH ALL TRADES.		
[N]	FLUSH VALVE AND INDICATOR HEAD: 1/2" PVC BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX.										20	REFERENCE DETAILS.		

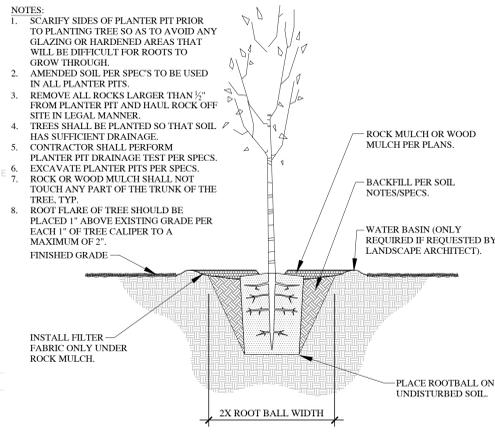


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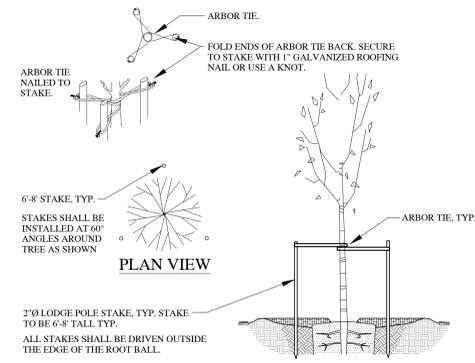
VCBO NUMBER: 20010
CLIENT NUMBER:
DATE ISSUED: JUNE 2, 2020



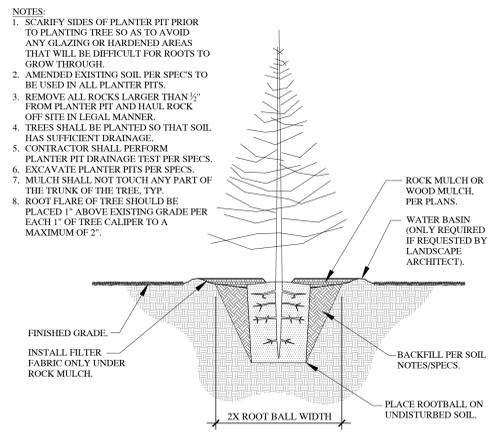
SCALE: 1"=20'-0" ON 30X42 SHEET



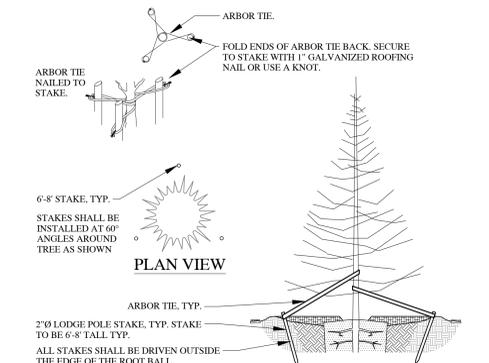
1 DECIDUOUS TREE PLANTING SCALE: NTS



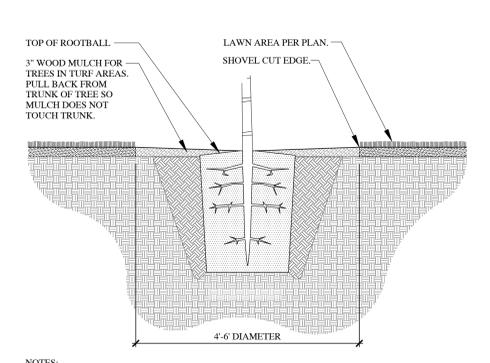
2 DECIDUOUS TREE STAKING SCALE: NTS



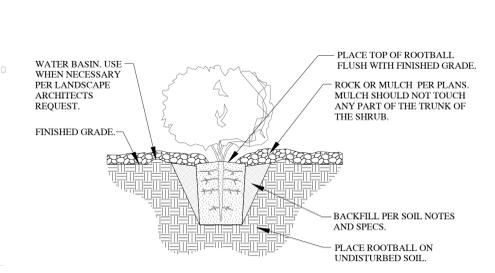
3 EVERGREEN PLANTING SCALE: NTS



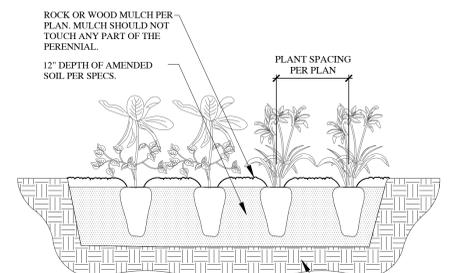
4 EVERGREEN TREE STAKING SCALE: NTS



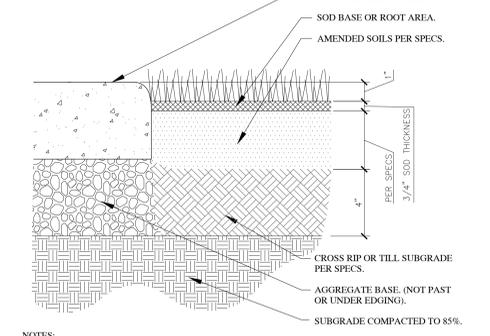
5 TREE WELL IN TURF AREA SCALE: NTS



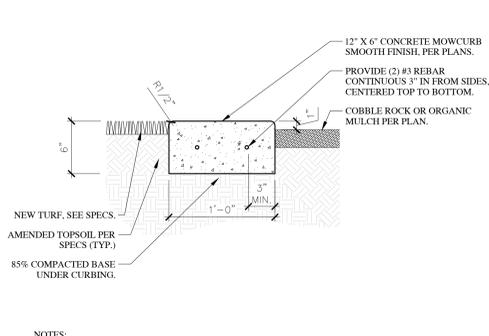
6 SHRUB & ORNAMENTAL GRASS PLANTING SCALE: NTS



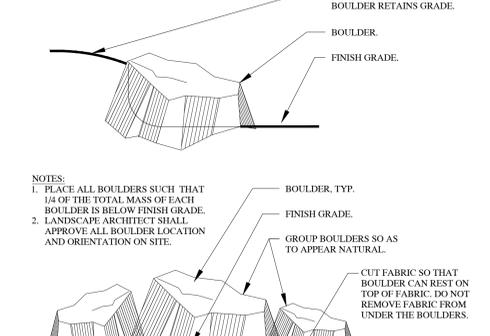
7 PERENNIAL PLANTING SCALE: NTS



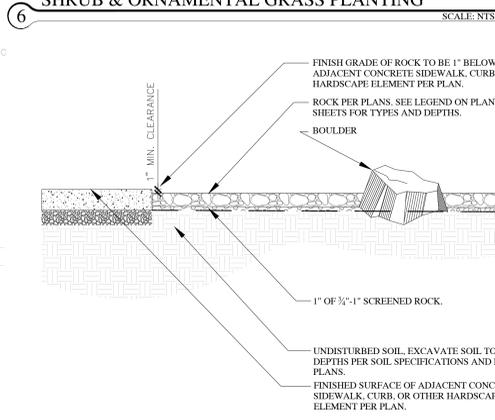
8 SOD LAYING AND EDGE SCALE: NTS



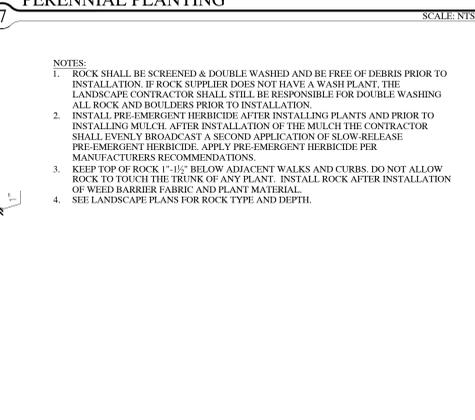
9 12\"/>



10 BOULDER PLACEMENT SCALE: NTS



11 ROCK WITH BOULDER SCALE: NTS



12 TREE PLANTING ON SLOPE SCALE: NTS

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REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
 CLIENT NUMBER:
 DATE ISSUED: JUNE 2, 2020

ASD NEW ELEMENTARY #101
 ALPINE SCHOOL DISTRICT
 SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
 BP1 - CONSTRUCTION BID SET

PLANTING DETAILS
LS300



GENERAL SITE PLAN NOTES

- GRADING AT THE BUILDING SHALL HAVE A 5% MINIMUM SLOPE AWAY FROM THE BUILDING FOR A MINIMUM OF 10'-0". UNO. CONCRETE SHALL BE SLOPED 2% AWAY FROM BUILDING. IBC 2015 SECTION 1804.4.
- FOUNDATION TO BE 8" ABOVE FINISHED GRADE UNO. IBC 2015 SECTION 1808
- ALL CONNECTIONS FROM CITY STREETS TO THE BUILDING ARE TO BE PROVIDED UNDER THIS CONTRACT. CONTRACTOR TO VERIFY CITY STANDARDS FOR ROAD, CURB, UTILITY AND SIGNAGE REQUIREMENTS.
- ALL EXTERIOR SIDEWALKS, STAIRS AND LANDINGS TO HAVE POSITIVE DRAINAGE BUT NO MORE THAN A MAXIMUM OF 1/4" SLOPE PER FOOT TO ALLOW POSITIVE DRAINAGE. ALL STAIRS AND RAMPS TO HAVE A LANDING OF 48 INCHES LONG AT THE TOP AND BOTTOM WITH A MAXIMUM SLOPE OF 1/4" PER FOOT. ALL REBAR IN EXTERIOR APPLICATIONS TO BE EPOXY COATED.
- ALL HARDSCAPE TO BE A MINIMUM OF 4" THICK AIR ENTRAINED CONCRETE OVER 6" ROAD BASE. UNO. AND ALL SIDEWALKS SHALL BE NO LESS THAN 5'-0" WIDE.
- FINISH GRADE OF SOFTSCAPE SHALL BE 2" UNIFORMLY BELOW PAVING SURFACES UNLESS NOTED OTHERWISE.
- 24" X 4" X CONTINUOUS MINIMUM CONCRETE MOW STRIP. TO BE PROVIDED AROUND ENTIRE BUILDING EXCEPT WHERE CONCRETE SIDEWALKS OR PLANTERS OCCUR. TYP. SEE DETAIL 3305.2.
- LIGHT POLE BASE IN ALL LANDSCAPE LOCATIONS TO BE 6" ABOVE FINISHED GRADE. BE LOCATED AT LEAST 36" FROM FACE OF POLE BASE TO BACK OF CURB AND HAVE A CONCRETE MOW STRIP PER DETAIL A5A10. VERIFY LOCATION ON SITE WITH ARCHITECT PRIOR TO ANY INSTALLATION.
- LIGHT POLE BASE IN ALL PAVED LOCATIONS TO BE 36" ABOVE FINISHED GRADE. VERIFY LOCATION ON SITE WITH ARCHITECT PRIOR TO ANY INSTALLATION.
- COORDINATE ORIENTATION OF FIRE HYDRANT OUTLETS WITH THE FIRE MARSHALL'S OFFICE PRIOR TO THE FINAL INSTALLATION OF THE HYDRANT ASSEMBLY.

SITE MATERIALS LEGEND

- BUILDING
- LAWN
- CONCRETE SIDEWALK (4" CONCRETE SLAB OVER 4" GRAVEL BASE OVER COMPACTED SUB-BASE)
- RIGID CONCRETE PAVEMENT (6" RIGID CONCRETE PAVEMENT OVER 6" COMPACTED ROAD BASE)
- REINFORCED CONCRETE PAVEMENT (6" CONCRETE PAVEMENT W/ 4LB MIBRO FIBER MESH OVER 6" COMPACTED ROAD BASE)
- SNOWMELT SYSTEM
- LIGHT DUTY ASPHALT PAVEMENT (3" FLEX PAVEMENT OVER 6" COMPACTED ROAD BASE OVER 6" COMPACTED SUB-BASE)
- HEAVY DUTY ASPHALT PAVEMENT (4" FLEX PAVEMENT OVER 6" COMPACTED ROAD BASE OVER 6" COMPACTED SUB-BASE)
- IMAGINARY LINE INDICATING FIRE ACCESS LANES
- LANDSCAPING, DECORATIVE COBBLE ROCK MULCH
- PLAY TOY WOOD FIBER SOFT FALL MATERIAL
- PLAY TOY POURED IN PLACE RUBBER SURFACING

LINE TYPES LEGEND

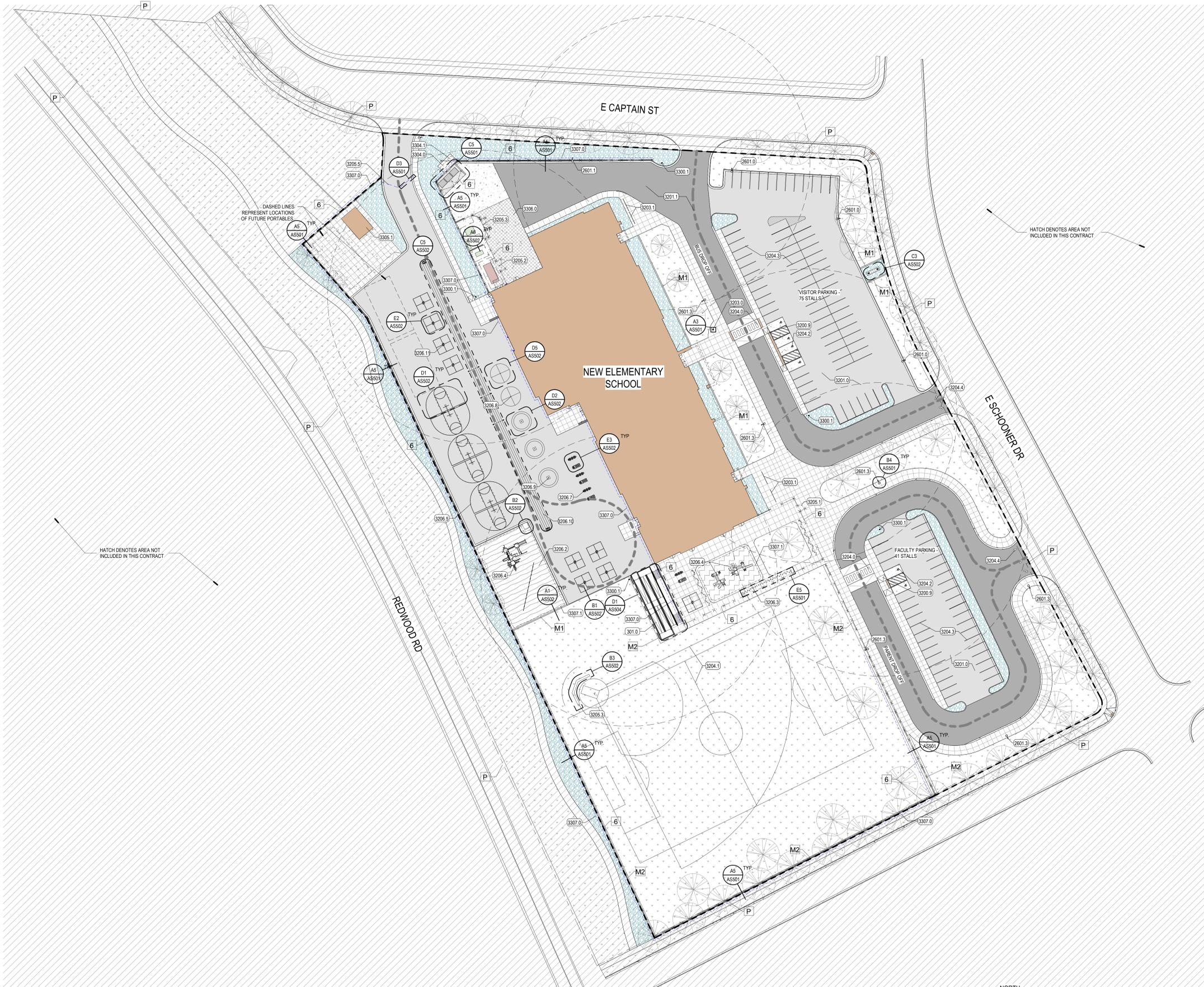
- 6 6'-0" CHAINLINK FENCE W/ 24" WIDE CONCRETE MOW STRIP
- P PROPERTY LINE
- NIC CONSTRUCTION NOT COVERED UNDER THIS CONTRACT
- M1 1'-0" WIDE CONCRETE MOW STRIP
- M2 2'-0" WIDE CONCRETE MOW STRIP

PARKING STALL COUNT

- VISITOR PARKING** (IBC TABLE 1106.1) - 75 STALLS
- 71 STANDARD STALLS
 - 3 ADA CAR STALLS
 - 1 ADA VAN STALL
- FACULTY PARKING** (IBC TABLE 1106.1) - 41 STALLS
- 39 STANDARD STALLS
 - 1 ADA CAR STALLS
 - 1 ADA VAN STALL

KEYED NOTES

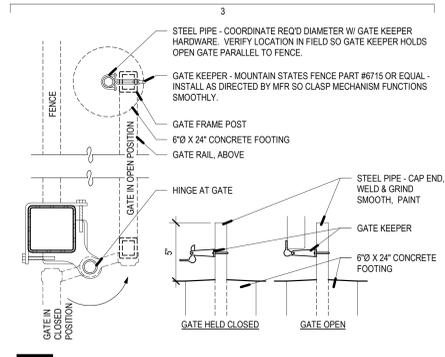
- 301.0 REINFORCED CONCRETE RAMP W/ 1:12 MAX SLOPE, 38" MIN CLEAR BETWEEN HANDRAILS, AND 4" TALL CONCRETE CURBS AT ALL OPEN SIDES. TYP.
- 2601.0 SITE LIGHTING WITH 307" DIA. X 20" TALL CONCRETE BASE.
- 2601.1 EXISTING CITY STREET LIGHTING TO BE RELOCATED TO THIS LOCATION - CONTRACTOR TO COORDINATE WITH CITY PRIOR TO REMOVAL AND RELOCATION
- 2601.3 SITE LIGHTING WITH 307" DIA. X 12" TALL CONCRETE BASE.
- 3200.9 ACCESSIBLE CONCRETE CURB CUT @ 1:12 MAX SLOPE, WITH GRAY TRUNCATED DOME INSERT. TYP.
- 3201.0 3" FLEXIBLE ASPHALT PAVING OVER 6" COMPACTED ROAD BASE OVER 6" ENGINEERED SUB-BASE OVER PROOF-ROLLED NATIVE MATERIAL AT ALL STANDARD DUTY PAVING AREAS DESIGNATED ON THE SITE PLAN.
- 3201.1 4" FLEXIBLE ASPHALT PAVING OVER 6" COMPACTED ROAD BASE OVER 8" ENGINEERED SUB-BASE OVER PROOF-ROLLED NATIVE MATERIAL AT ALL HEAVY DUTY PAVING AREAS DESIGNATED ON THE SITE PLAN.
- 3203.0 25' TALL ALUMINUM FLAG POLE
- 3203.1 BIKE RACK PROVIDED AND INSTALLED BY DISTRICT. EACH 20' BIKE RACK TO HOLD 18 BIKES
- 3204.0 PAINTED CROSSWALK
- 3204.1 FIELD GAME LINES AND LAYOUT, FOR REFERENCE ONLY
- 3204.2 ADA PARKING STALLS
- 3204.3 PAINTED PARKING STRIPES AND ACCESS LANES
- 3204.4 PAINTED DIRECTIONAL ARROWS
- 3205.1 4'-0" X 6'-0" SINGLE LEAF CHAIN LINK GATE WITH LOCKING HASP
- 3205.2 10'-0" X 8'-0" DOUBLE LEAF CHAIN LINK GATE WITH LOCKING HASP, CANE BOLT & MUSHROOM TOP BOLT RECEIVER DRILLED AND SET IN MASTIC, & GATE KEEPER. TYP.
- 3205.3 CHAIN LINK BACKSTOP W/ 4" X 24" X CONT. CONCRETE MOW STRIP OVER 4" COMPACTED ROADBASE AND PROOF-ROLLED SUBGRADE. TYP.
- 3205.5 34'-0" DOUBLE LEAF GALVANIZED STEEL CRASH MAINTENANCE GATE WITH STOP BOLLARDS
- 3206.2 WOOD FIBER FALL MATERIAL AT "BIG KID" PLAY STRUCTURE
- 3206.3 POURED IN PLACE RUBBER SURFACING AT KINDERGARTEN PLAY STRUCTURE AREA ONLY. INSTALL OVER BASE & RECESSED CONCRETE SLAB, PER MFR STANDARD DETAILS
- 3206.4 PLAYGROUND STRUCTURE
- 3206.5 PAINTED BASKETBALL COURT LINES
- 3206.7 PAINTED HOPSCOTCH LINES
- 3206.8 TETHERBALL POLE WITH PAINTED GAME LINES
- 3206.9 TOSS & SCORE BASKET WITH PAINTED GAME LINES
- 3206.10 PAINTED 100 YARD DASH
- 3206.11 PAINTED FOUR SQUARE
- 3300.1 FIRE HYDRANT ASSEMBLY
- 3304.0 LANDSCAPE IRRIGATION SECONDARY WATER FILTER ON 4" CONCRETE HOUSEKEEPING PAD
- 3304.1 SECONDARY WATER PUMP ON 4" CONCRETE HOUSEKEEPING PAD
- 3305.1 IRRIGATION CONTROL CLOCK TO BE LOCATED IN OUTDOOR STORAGE BUILDING
- 3306.0 HATCHED AREA DENOTES SNOWMELT SYSTEM
- 3307.0 DASHED LINE DENOTES RETAINING WALL WATER CONTROL ASSEMBLY - INCLUDING FULL HEIGHT WASHED GRAVEL CHIMNEY WRAPPED IN GEOTECH FABRIC WITH A GEOTECH FABRIC WRAPPED 4" PERFORATED DRAIN PIPE AT TOE OF FOOTING TIED TO STORM DRAIN SYSTEM. HIGH EARTH SIDE OF RETAINING WALL AND FOOTING TO BE COATED WITH SELF-ADHERED SHEET WATER PROOFING AND MOLDED SHEET DRAINAGE PANEL.
- 3307.1 DASHED LINE DENOTES PLAYGROUND PERIMETER 4" PERFORATED DRAINAGE PIPE TIED TO STORM DRAIN SYSTEM



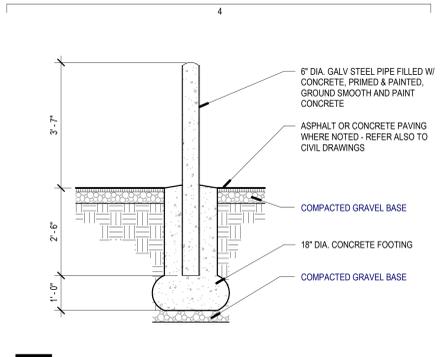
A4 PLAN - SITE - OVERALL
SCALE: 1" = 40'-0"
NORTH

REV	DATE	DESCRIPTION

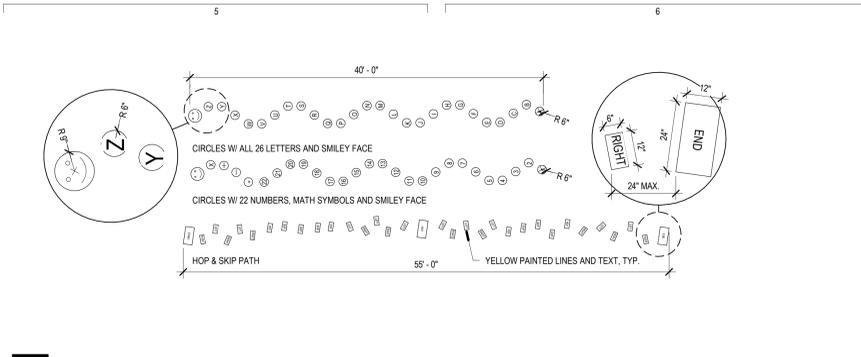
VCBO NUMBER: 2010
CLIENT NUMBER:
DATE: JUNE 02, 2020



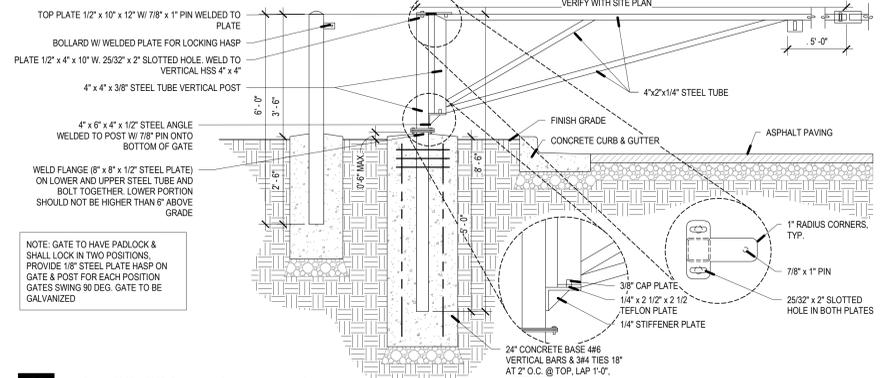
E3 GATE KEEPER
SCALE: 2" = 1'-0"



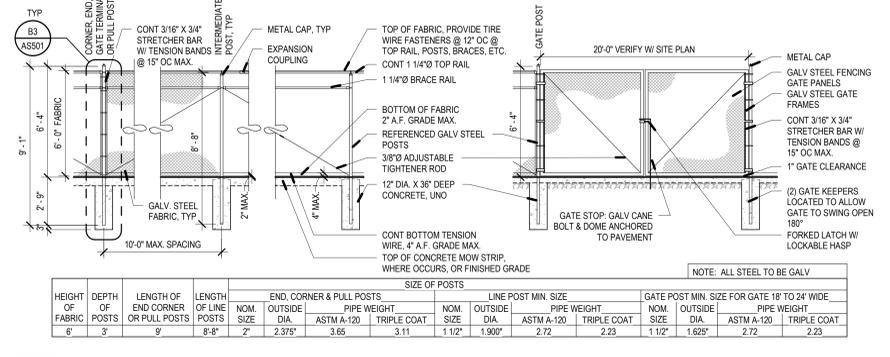
E4 PIPE BOLLARD
SCALE: 1/2" = 1'-0"



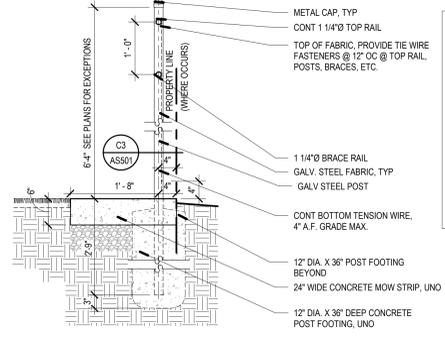
E5 WALK PATHS STRIPING DETAIL
SCALE: 1/8" = 1'-0"



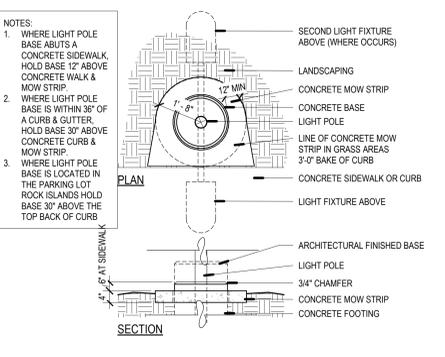
D3 FIRE ACCESS GATE DETAIL, TYP.
SCALE: 1/2" = 1'-0"



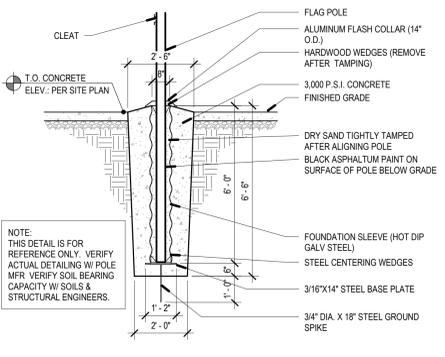
B3 CHAIN LINK FENCE AND GATE
SCALE: 1/4" = 1'-0"



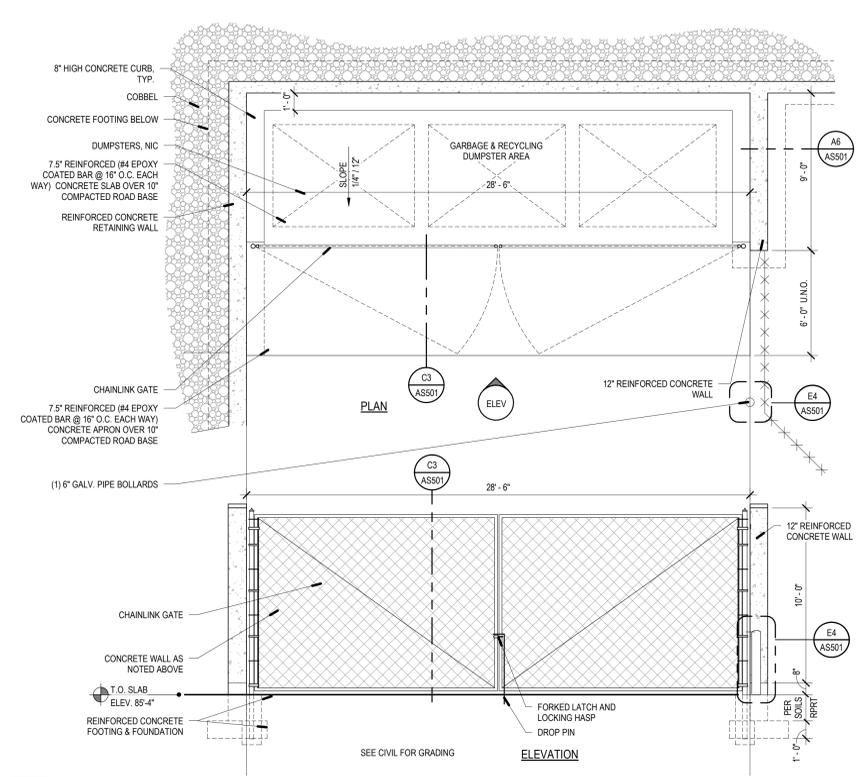
C3 CHAIN LINK FENCE AND GATE
SCALE: 1/4" = 1'-0"



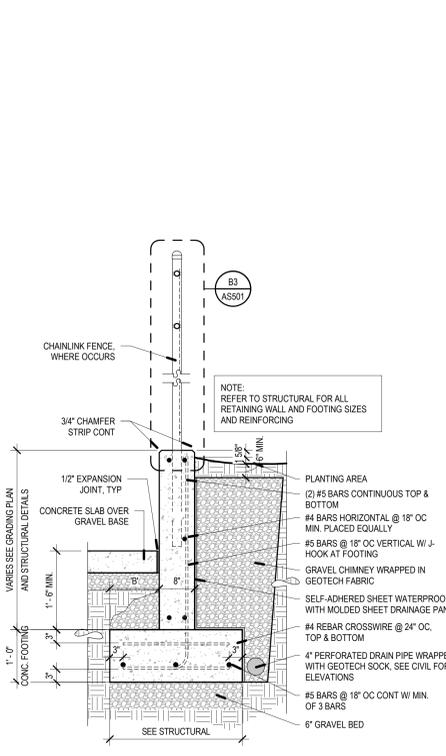
B4 LIGHT POLE
SCALE: 1/2" = 1'-0"



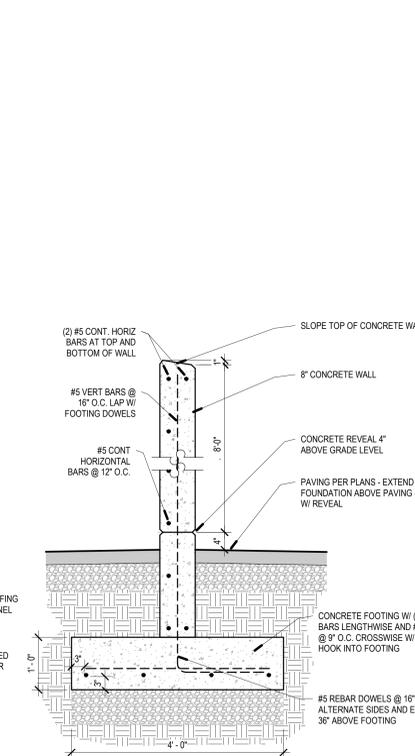
A3 FLAG POLE
SCALE: 3/8" = 1'-0"



C5 TYP DUMPSTER / RECYCLING ENCLOSURE
SCALE: 1/4" = 1'-0"



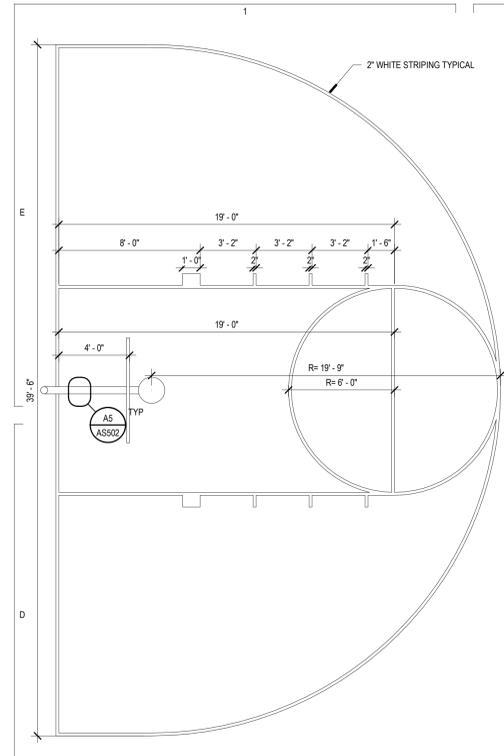
A5 RETAINING WALL - CONCRETE
SCALE: 3/4" = 1'-0"



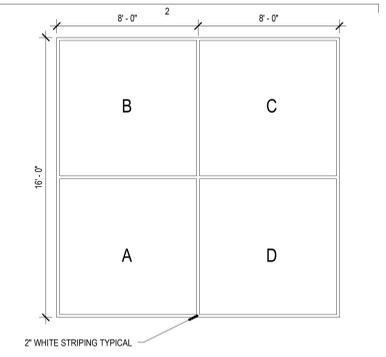
A6 SERVICE YARD SCREEN WALL
SCALE: 3/4" = 1'-0"

REV	DATE	DESCRIPTION

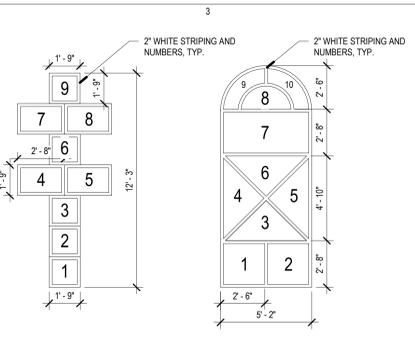
VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 02, 2020



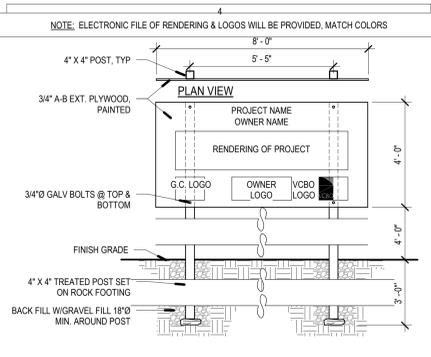
D1 HALF-COURT BASKETBALL
SCALE: 1/4" = 1'-0"



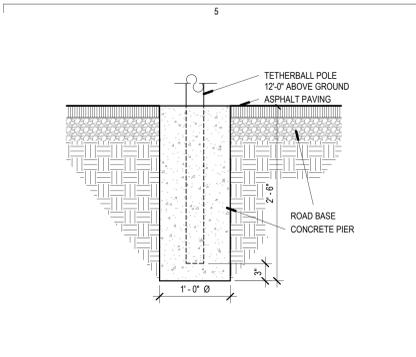
E2 FOUR SQUARE
SCALE: 1/4" = 1'-0"



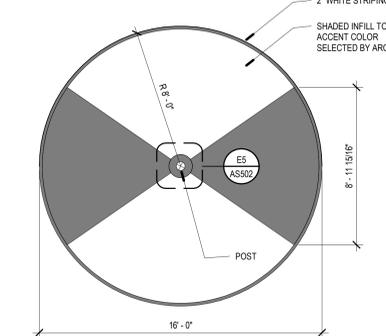
E3 HOPSCOTCH
SCALE: 1/4" = 1'-0"



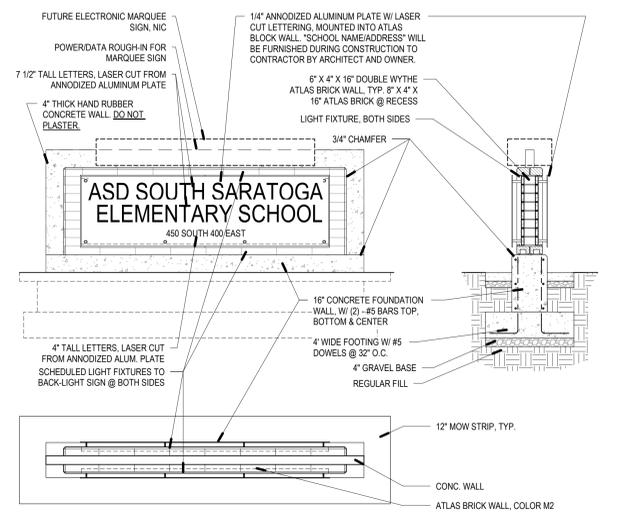
E4 CONSTRUCTION SIGN
SCALE: 3/8" = 1'-0"



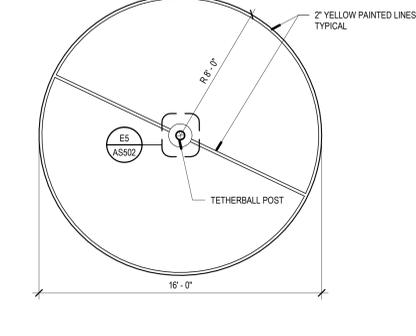
E5 TETHERBALL POLE DETAIL
SCALE: 1" = 1'-0"



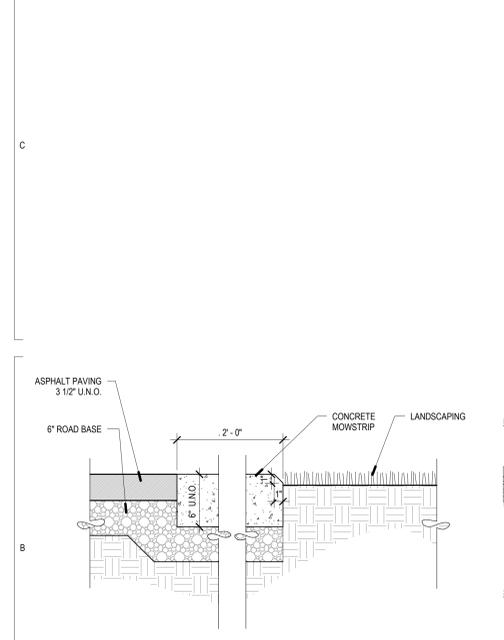
D2 TOSS-N-SCORE
SCALE: 1/4" = 1'-0"



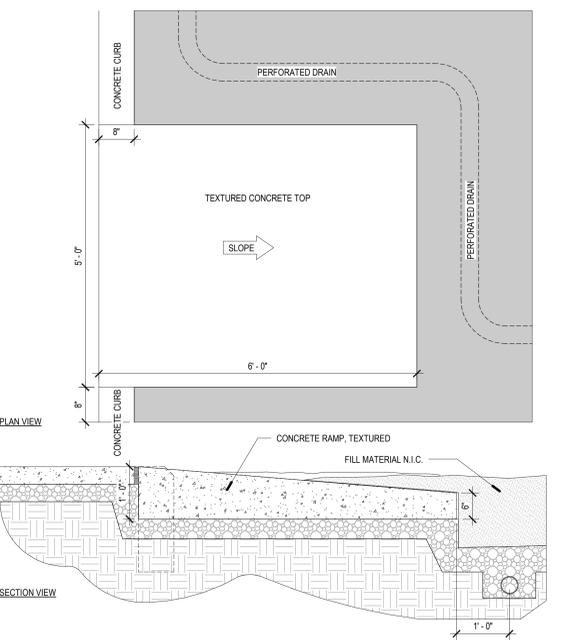
C3 MONUMENT SIGN
SCALE: 3/8" = 1'-0"



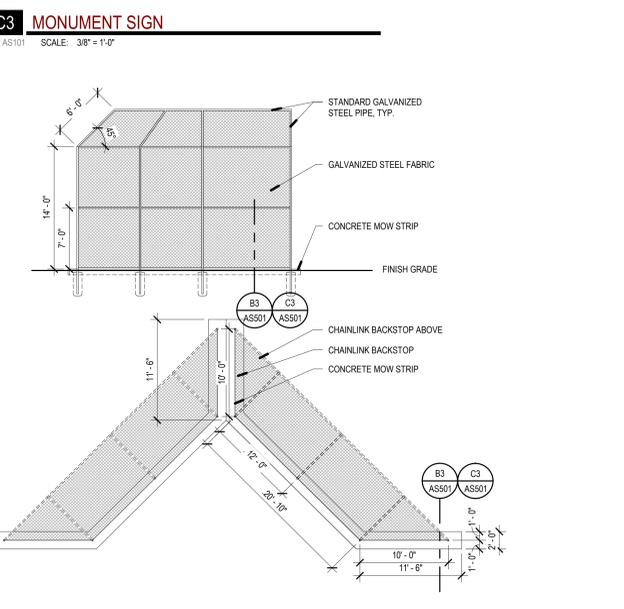
D5 TETHERBALL STRIPING DETAIL
SCALE: 1/4" = 1'-0"



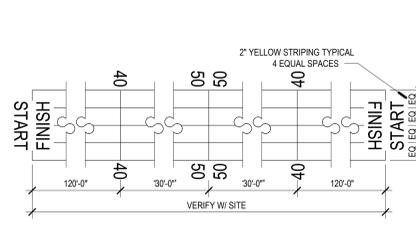
B1 ASPHALT @ LANDSCAPING
SCALE: 1 1/2" = 1'-0"



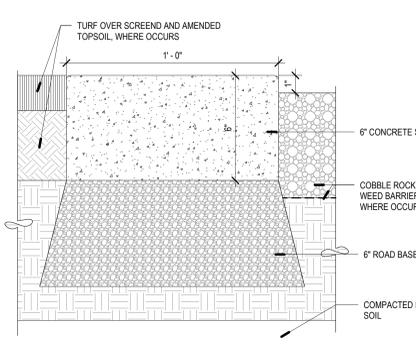
B2 PLAY AREA ACCESS RAMP
SCALE: 3/4" = 1'-0"



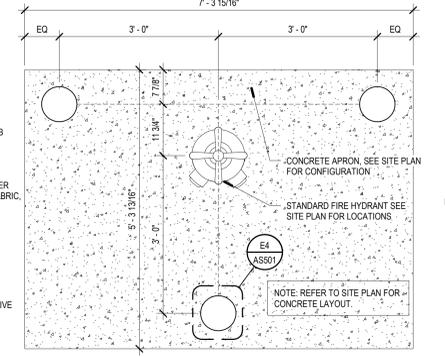
B3 CHAINLINK BACKSTOP
SCALE: 1/8" = 1'-0"



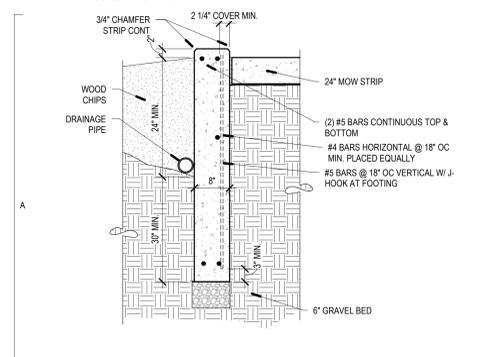
C5 100 YARD DASH
SCALE: 1/8" = 1'-0"



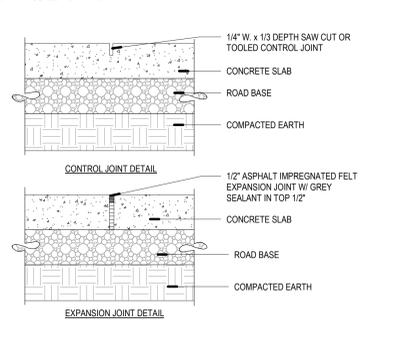
B5 CONCRETE MOW STRIP
SCALE: 3" = 1'-0"



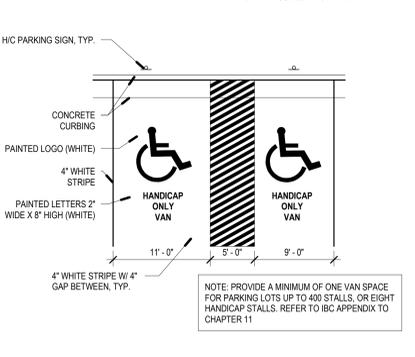
B6 FIRE HYDRANT W/ 3 BOLLARDS
SCALE: 3/4" = 1'-0"



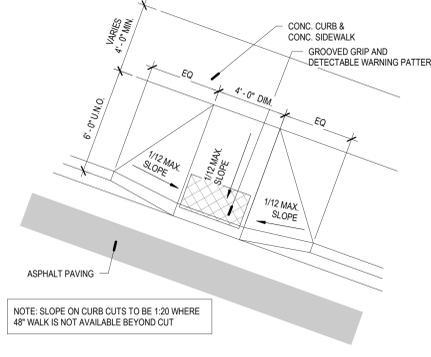
A1 PLAY AREA CURB
SCALE: 3/4" = 1'-0"



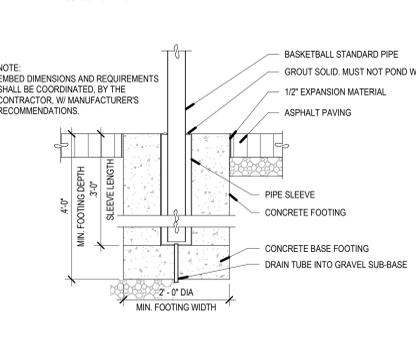
A2 CONCRETE JOINT - TYP.
SCALE: 1 1/2" = 1'-0"



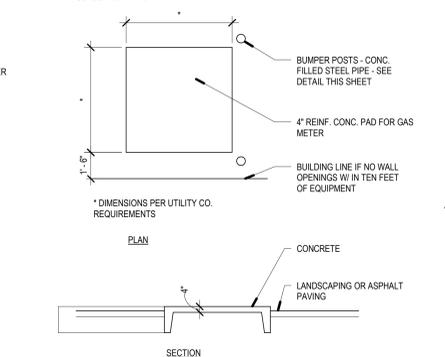
A3 HANDICAP PARKING STALL
SCALE: 1/8" = 1'-0"



A4 HANDICAP CURB CUT - TYP.
SCALE: 1/4" = 1'-0"



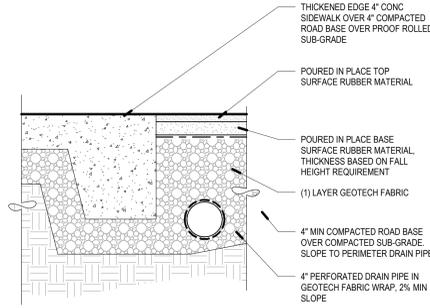
A5 OUTDOOR BASKETBALL PIPE SLEEVE
SCALE: 3/4" = 1'-0"



A6 GAS METER PAD
SCALE: 1/4" = 1'-0"

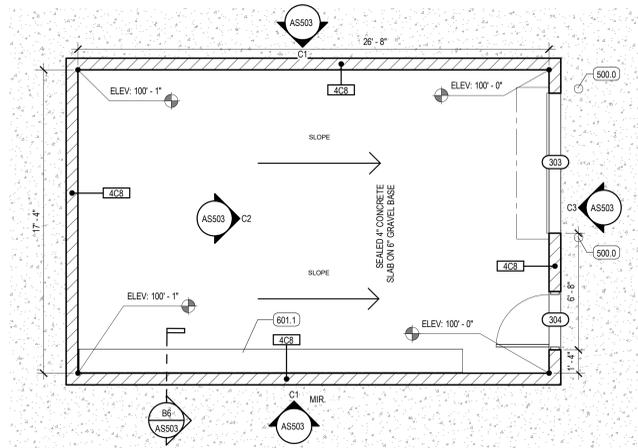
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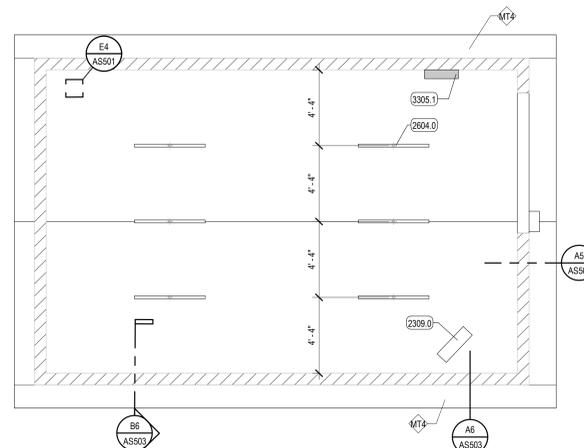
D1 TRANSITION - CONCRETE TO RUBBER

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



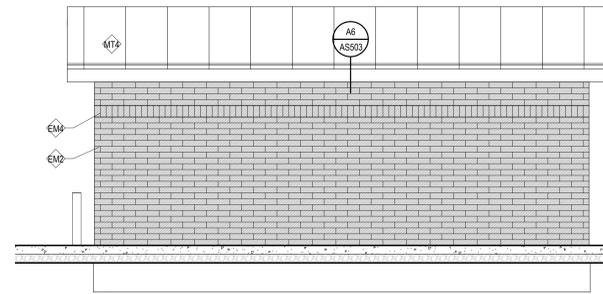
D2 PLAN - SHED

A4/A201 SCALE: 1/4" = 1'-0"



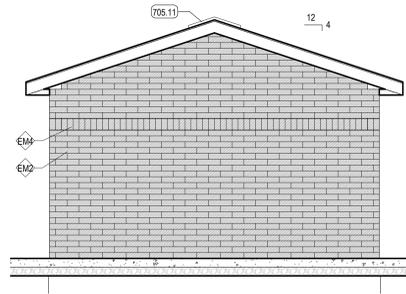
D3 PLAN - SHED - RCP

A4/A201 SCALE: 1/4" = 1'-0"



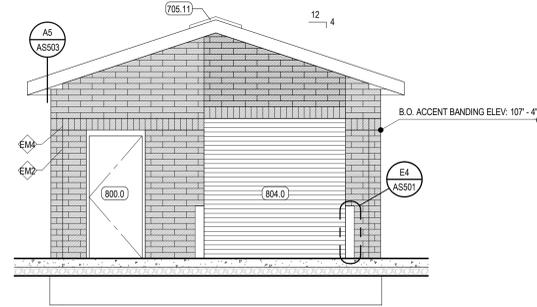
C1 SIDE ELEVATION

D2/AS503 SCALE: 1/4" = 1'-0"



C2 REAR ELEVATION

D2/AS503 SCALE: 1/4" = 1'-0"



C3 FRONT ELEVATION

D2/AS503 SCALE: 1/4" = 1'-0"

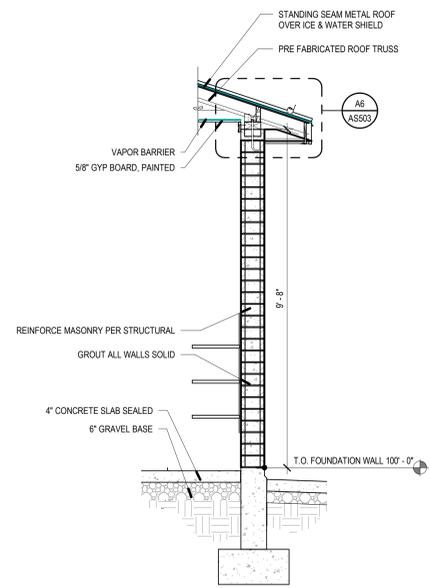
EXT. ELEVATION FINISH NOTES

- ATLAS BRICK**
 EM1 - INTERSTATE CEDAR - 8X4X16
 EM2 - INTERSTATE IRONSTONE - 8X4X16
 EM3 - INTERSTATE IRONSTONE - 8X4X8
 EM4 - INTERSTATE IRONSTONE - 8X8X4
- METAL PANELS**
 MT1 - ALL ENTRY CANOPIES - MEDIUM BRONZE
 MT2 - ALL MECHANICAL PENTHOUSES - BROWNSTONE
- METAL FLASHING/COPING**
 MT3 - AT TUMBLEWEED - BROWNSTONE
 MT4 - AT MOUNTAIN RED AND IRONSTONE - MEDIUM BRONZE
 MT5 - AT ALUMINUM WINDOW SYSTEM - SILVER METALLIC
 MT6 - AT ENTRY CANOPIES - MEDIUM BRONZE
- SOFFIT PANELS**
 MT7 - SOFFITS @ ENTRY CANOPIES - SILVER METALLIC

- NOTES:**
- SEE SHEET A203 FOR VERTICAL CONTROL ELEVATION
 - SEE SHEET A400 FOR ADDITIONAL FINISH NOTES.
 - MASONRY JOINTS TO BE TOOLED AS FOLLOWS:
 -AT ALL EXTERIOR BRICK/CMU, ALL JOINTS TO BE CONCAVE TOOLED & BRUSHED, TYP. @ TOP/BOTTOM.
 -AT INTERIOR HONED BLOCK, ALL JOINTS TO BE CONCAVE TOOLED AND BRUSHED.
 -AT ALL INTERIOR PAINTED SMOOTH BLOCK, JOINTS SHALL BE CONCAVE TOOLED AND BRUSHED.

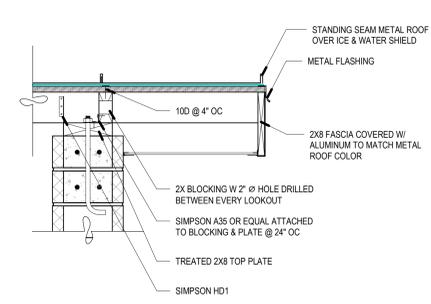
KEYED NOTES

- 500.0 STEEL PIPE BOLLARD PAINTED WHERE EXPOSED (6" DIA. X 48" A.F.F. GALVANIZED & CONCRETE FILLED WITH RAISED CONCRETE DOME TOP TO SHED WATER, TYP.)
 601.1 16" DEEP ADJUSTABLE SHELVING
 705.11 PRE-FINISHED METAL ROOF RIDGE CAP
 800.0 SCHEDULED DOOR AND FRAME. SEE DOOR SCHEDULE FOR DETAILS, TYP
 804.0 OVERHEAD COILING DOOR, PAINTED
 2309.0 ELECTRIC UNIT HEATER
 2604.0 LIGHT FIXTURE
 3305.1 IRRIGATION CONTROL CLOCK TO BE LOCATED IN OUTDOOR STORAGE BUILDING



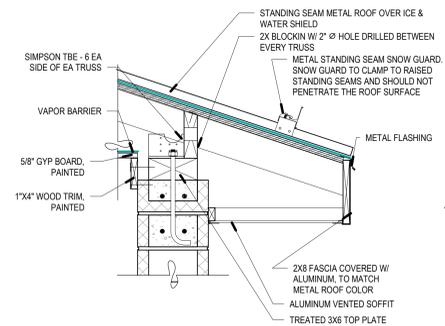
B6 SHED WALL

D2/AS503 SCALE: 1/2" = 1'-0"



A5 SOFFIT - ENLARGED - 2

C3/AS503 SCALE: 1 1/2" = 1'-0"



A6 SOFFIT - ENLARGED

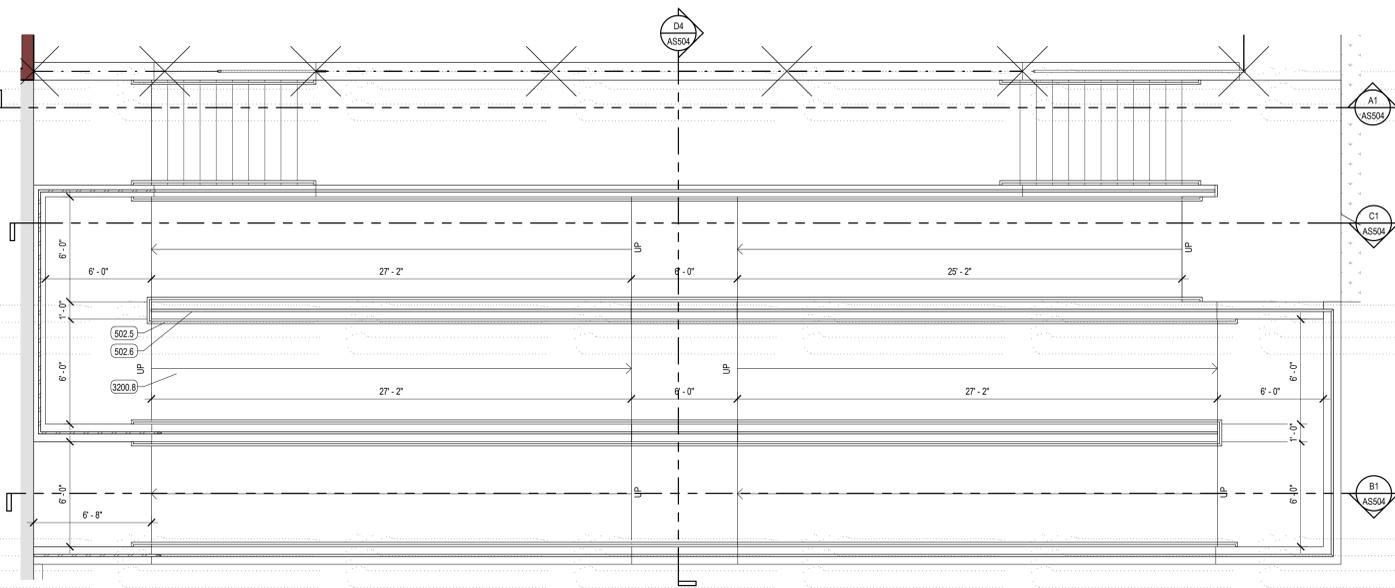
B6/AS503 SCALE: 1 1/2" = 1'-0"

REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
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KEYED NOTES

- 502.5 1 1/2" O.D. METAL PIPE HANDRAIL, PAINTED U.N.O.
- 502.6 1 1/2" O.D. METAL PIPE GUARDRAIL, PAINTED U.N.O.
- 3200.1 4" THICK CONCRETE SIDEWALK OVER 4" COMPACTED ROADBASE AND PROOF-ROLLED SUBGRADE. PROVIDE STANDARD BROOMED FINISH, TYP.
- 3200.8 4" THICK ACCESSIBLE CONCRETE RAMP @ MAX 1:12 SLOPE, AND LANDING WITH 6" RAISED CURBS AT ALL OPEN SIDES OVER 4" COMPACTED ROADBASE AND PROOF-ROLLED SUBGRADE, TYP. PROVIDE STANDARD BROOMED FINISH, TYP.

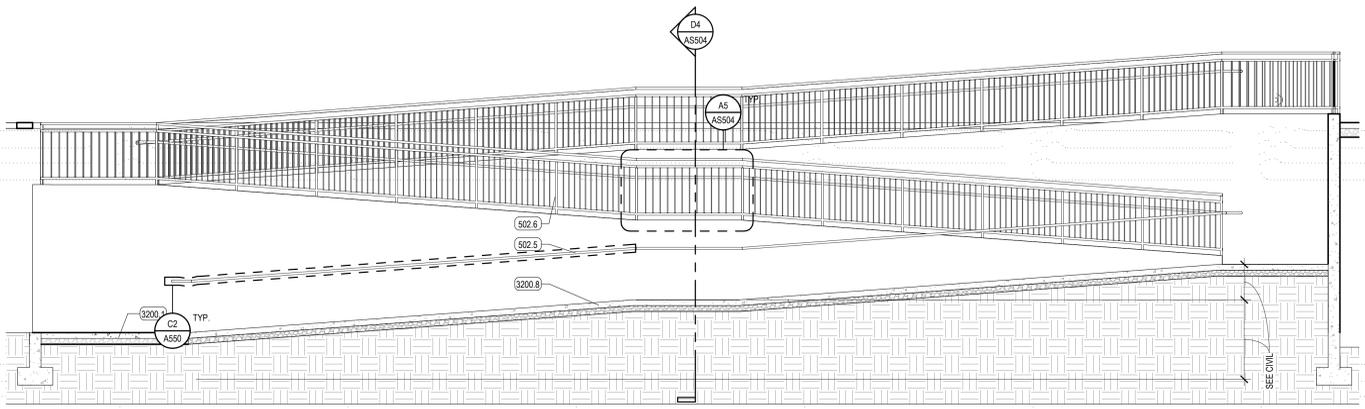
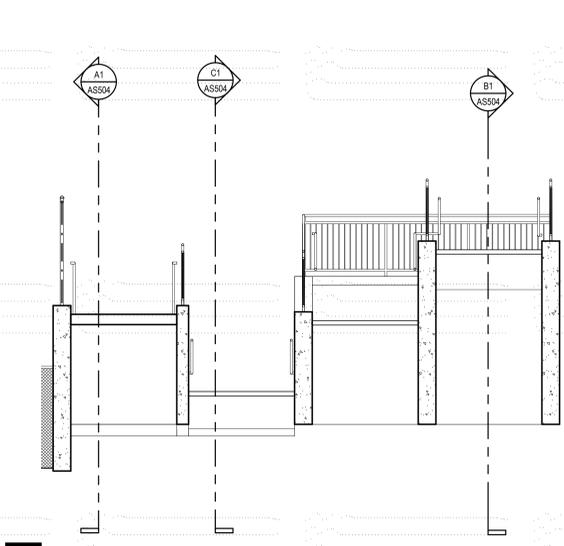


D1 PLAN - RAMP

A4/AS504 SCALE: 1/4" = 1'-0"

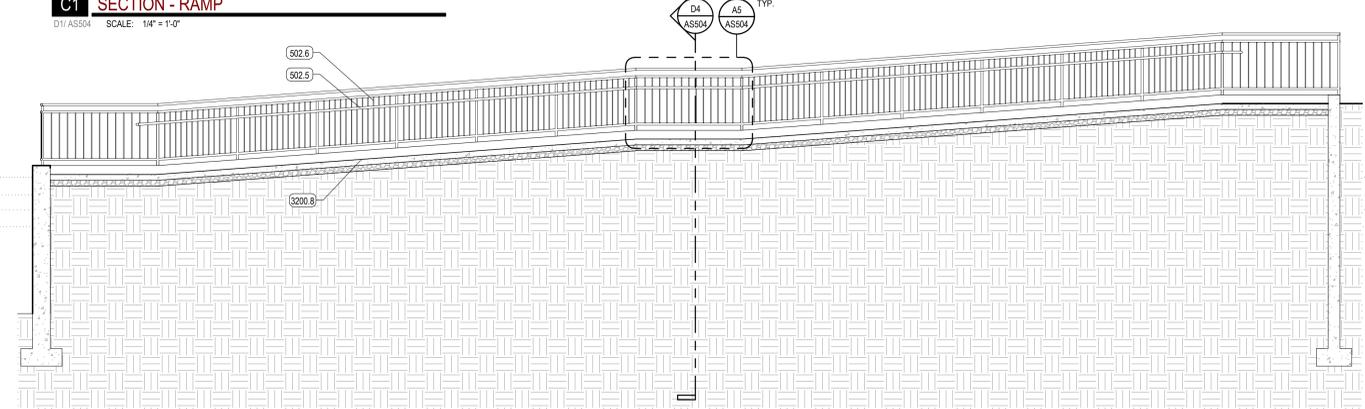
D4 CROSS SECTION - RAMP

A1/AS504 SCALE: 1/4" = 1'-0"



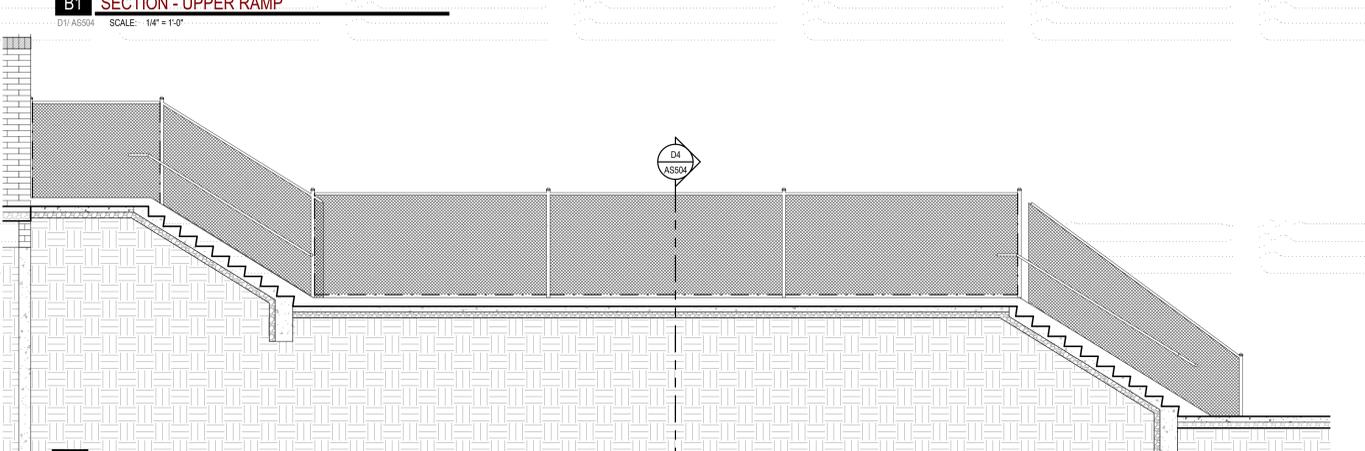
C1 SECTION - RAMP

D1/AS504 SCALE: 1/4" = 1'-0"



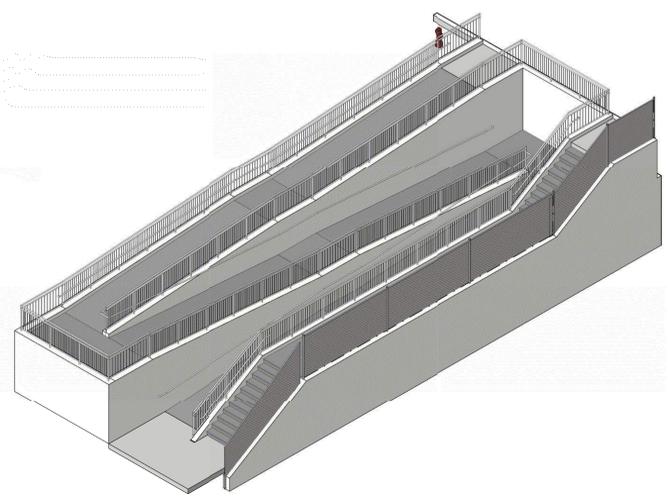
B1 SECTION - UPPER RAMP

D1/AS504 SCALE: 1/4" = 1'-0"



A1 SECTION - STAIR

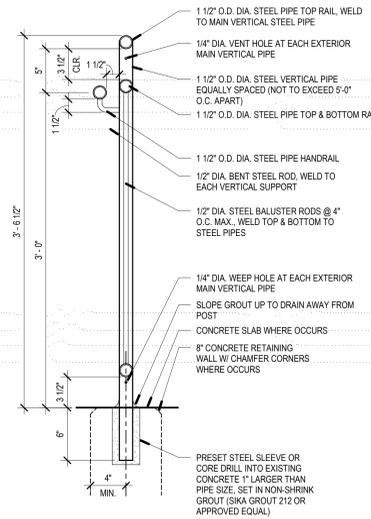
D1/AS504 SCALE: 1/4" = 1'-0"



B4 3D - RAMP - FOR REFERENCE ONLY

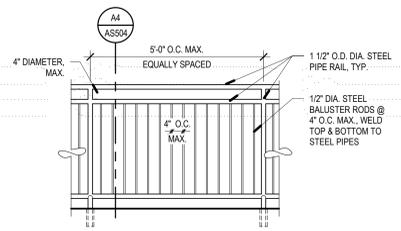
SCALE:

- NOTES:**
1. ALL PIPE MATERIAL SHALL BE SIZED PER SPECIFICATIONS
 2. GALVANIZED STEEL TO BE USED AT EXTERIOR AND AS NOTED ELSE WHERE
 3. GRIND ALL WELDS SMOOTH



A4 SITE GUARDRAIL SECTION

A5/AS504 SCALE: 1 1/2" = 1'-0"

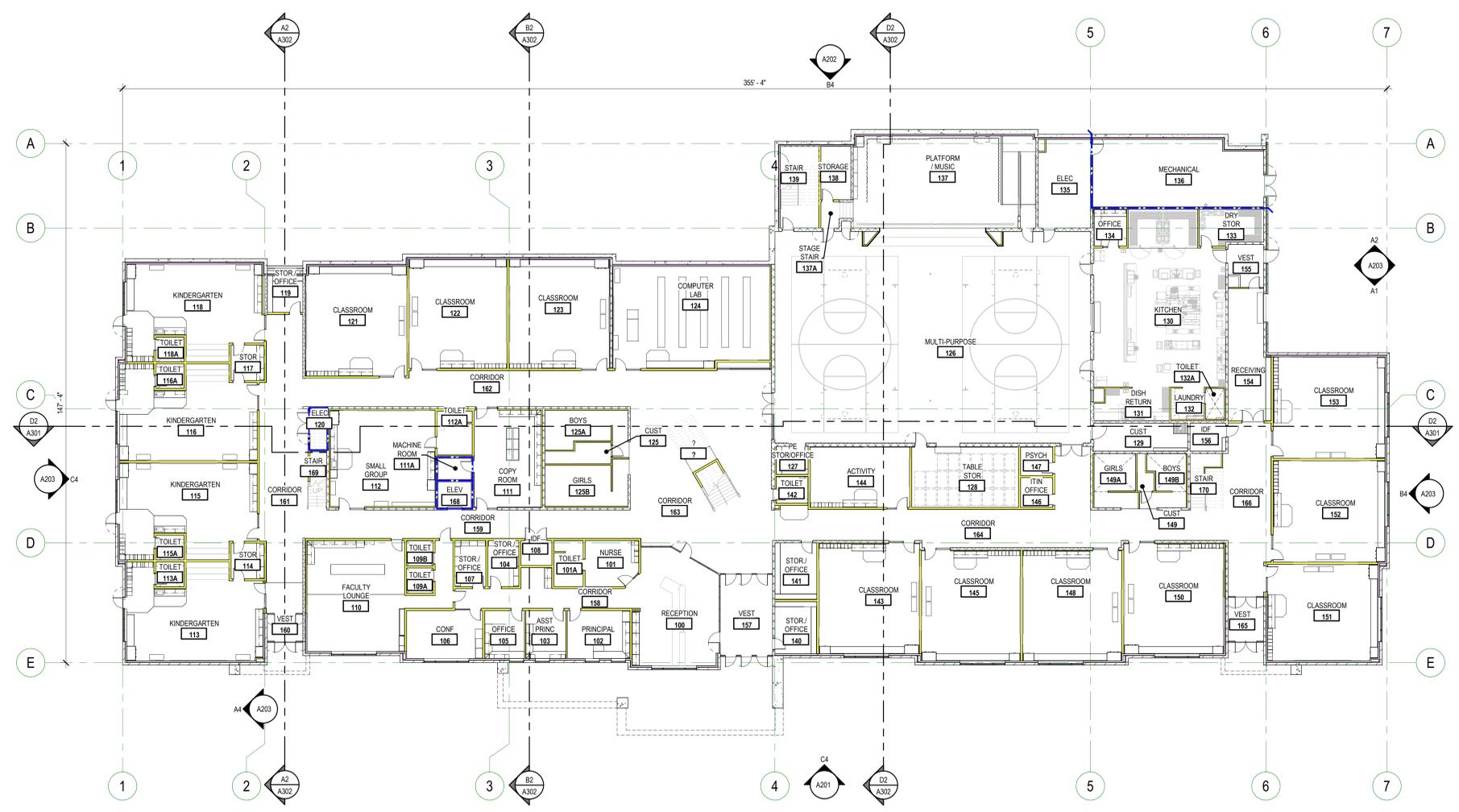


A5 TYP. SITE GUARDRAIL DETAIL

B1/AS504 SCALE: 1/2" = 1'-0"

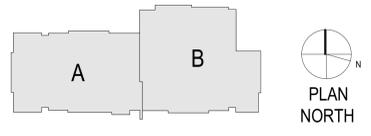
REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
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A4 PLAN - LEVEL 01 - OVERALL
SCALE: 1/16" = 1'-0"

KEY PLAN

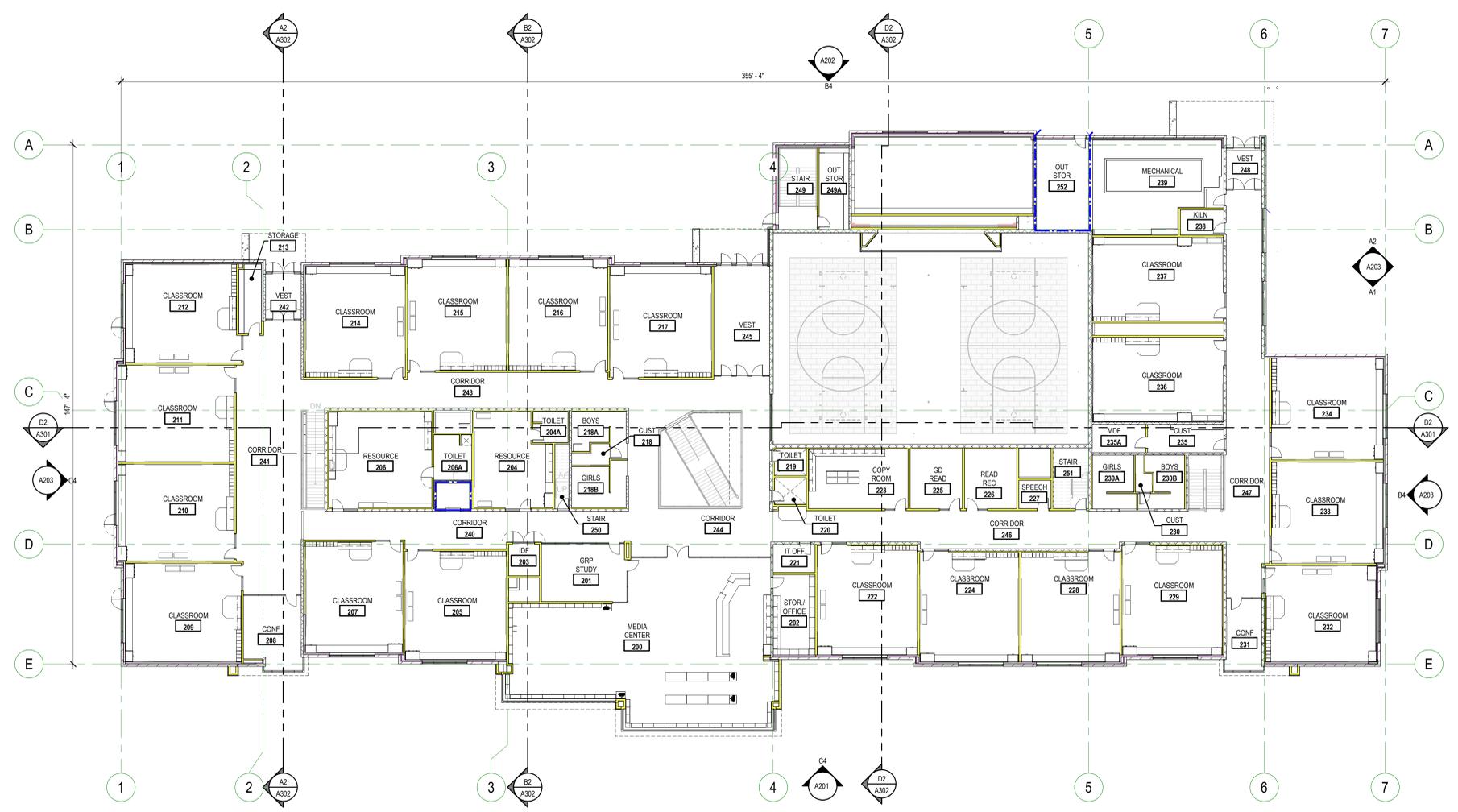


REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER: 152
DATE: JUNE 02, 2020

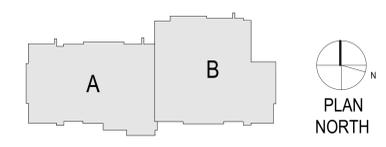
ASD NEW ELEMENTARY #101

ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET - SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET



A4 PLAN - LEVEL 02 - OVERALL
SCALE: 1/16" = 1'-0"

KEY PLAN



REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 02, 2020

ASD NEW ELEMENTARY #101

ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET - SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET

KEYED NOTES

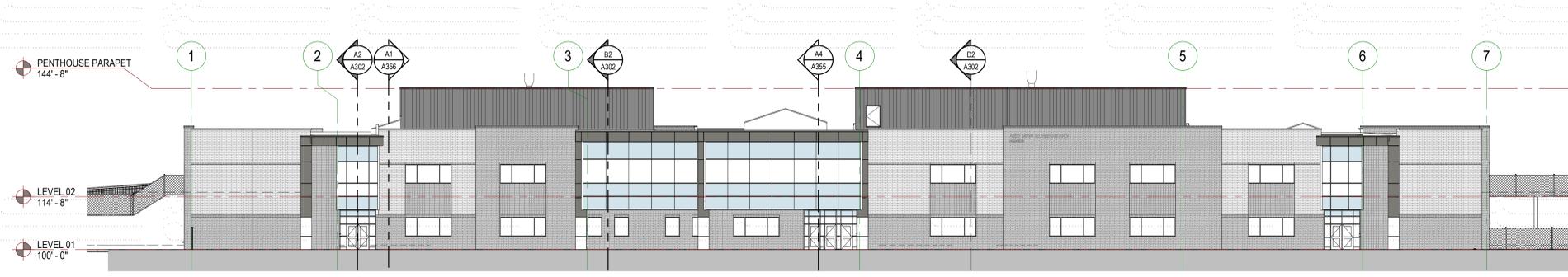
- 302.0 REINFORCED CONCRETE FOOTING
- 302.1 REINFORCED CONCRETE FOUNDATION WALL, ARCHITECTURAL GRADE FINISH WHERE EXPOSED. PROVIDE CONTINUOUS SKIM COAT OF PATCH-CRETE TO PROVIDE SMOOTH, UNIFORM, BEE-HOLE FREE SURFACE READY FOR PAINT, TYP.
- 302.2 REINFORCED CONCRETE PIER/WALL, ARCHITECTURAL GRADE FINISH WHERE EXPOSED. PROVIDE CONTINUOUS SKIM COAT OF PATCH-CRETE TO PROVIDE SMOOTH, UNIFORM, BEE-HOLE FREE SURFACE, TYP. PROVIDE MOCK-UP PRIOR TO INSTALLATION.
- 401.1 12"x8"x16" CMU WITH TOOLED & BRUSHED HEAD AND BED JOINTS, TYP. - SEE ELEVATIONS FOR COLOR, PATTERN AND FINISH
- 401.1 8"x8"x4" ATLAS BRICK, SOLDIER COURSE WITH TOOLED & BRUSHED HEAD AND BED JOINTS, TYP. - SEE ELEVATIONS FOR COLOR, PATTERN AND FINISH
- 402.0 MASONRY CONTROL JOINT WITH CONTINUOUS NEOPRENE "TEE" GASKET, TYP.
- 503.0 STEEL ROOF ACCESS LADDER, PAINTED C.S.B.A.
- 705.1 PRE-FINISHED FIELD-INSULATED EXTERIOR METAL WALL PANEL WITH POST INSTALLED 1.5" X CONT. RIGID INSULATION INSERTS FACTORY CUT TO FIT THE PROFILE OF THE METAL WALL PANELS. INSERTS PROVIDED BY WALL PANEL INSTALLER.
- 705.2 PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER.
- 709.0 PRE-FINISHED ALUMINUM COMPOSITE METAL (ACM) WALL PANEL SYSTEM WITH DRY JOINTS
- 709.1 PRE-FINISHED ALUMINUM COMPOSITE METAL (ACM) INTEGRATED PARAPET CAP
- 800.0 SCHEDULED DOOR AND FRAME - SEE DOOR SCHEDULE FOR DETAILS, TYP.
- 802.0 TRANSLUCENT SKYLIGHT ASSEMBLY WITH EXTENDED CURB TO PROVIDE A MINIMUM 12" EXPOSED CURB FROM HIGHEST POINT OF ADJACENT ROOFING TO LOWEST EDGE OF SKYLIGHT FLASHING DRIP EDGE. REFER TO DETAILS FOR MORE INFORMATION, TYP.
- 803.1 SCHEDULED ALUMINUM STOREFRONT SYSTEM
- 803.2 SCHEDULED ALUMINUM CURTAINWALL SYSTEM
- 2206.0 FREEZE PROOF HOSE BIB IN RECESSED METAL ENCLOSURE WITH LOCKING DOOR. SET FACE OF ENCLOSURE FLUSH WITH MASONRY FACE FOR A FLUSH FINISH, TYP.

REV	DATE	DESCRIPTION

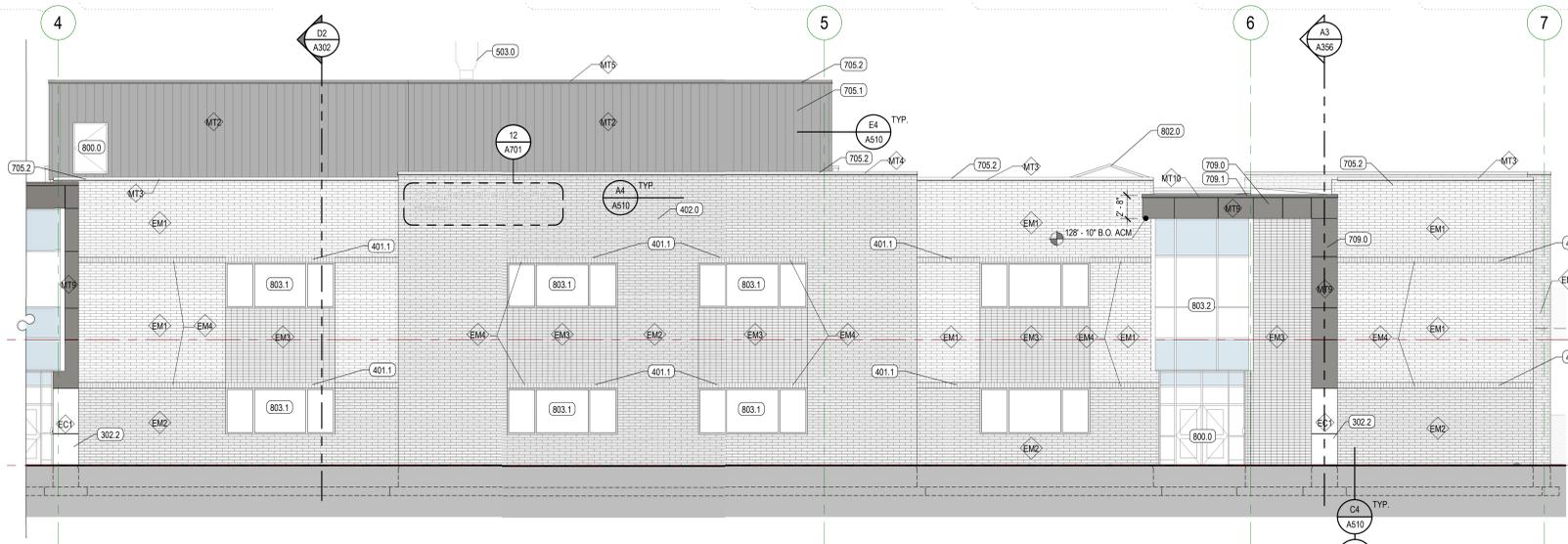
VCBO NUMBER: 20010
CLIENT NUMBER:
DATE: JUNE 02, 2020

ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET

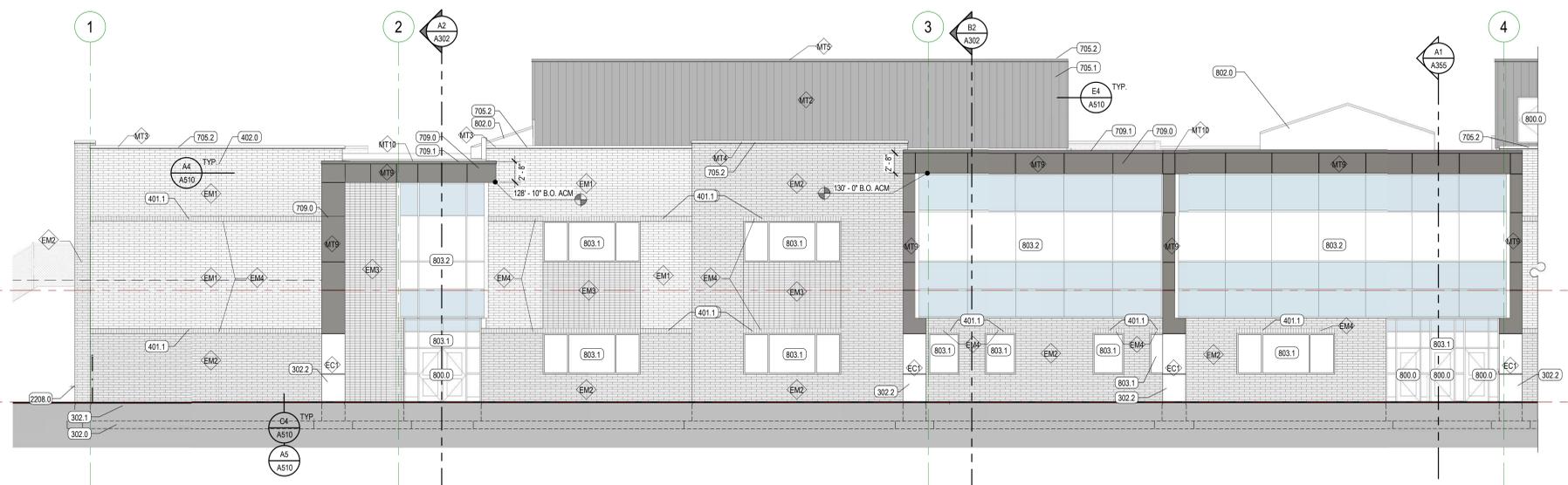
EXTERIOR ELEVATIONS



C4 ELEVATION - SOUTH
SCALE: 1/16" = 1'-0"

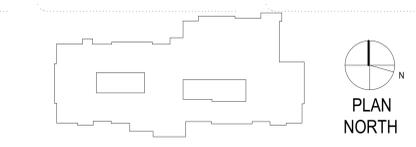


B4 ELEVATION - SOUTH - AREA B
SCALE: 1/8" = 1'-0"



A4 ELEVATION - SOUTH - AREA A
SCALE: 1/8" = 1'-0"

KEY PLAN



PLAN NORTH

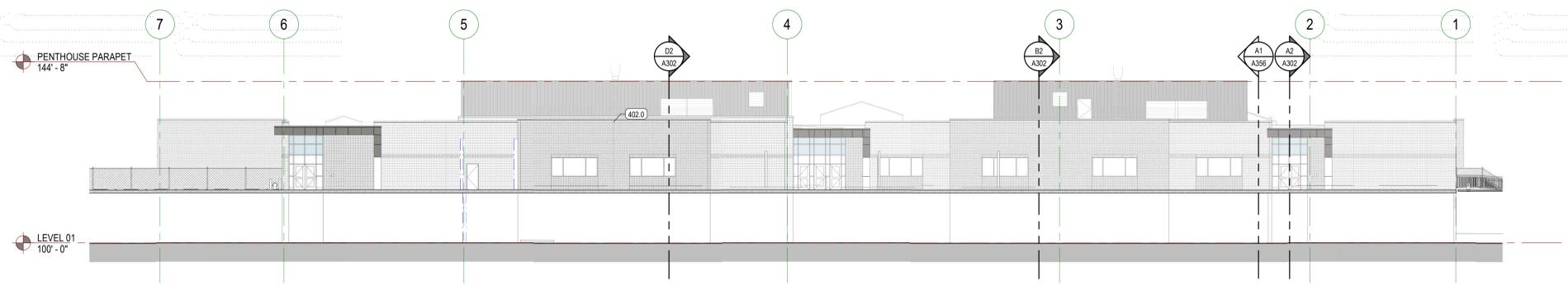
KEYED NOTES

- 302.0 REINFORCED CONCRETE FOOTING
- 302.2 REINFORCED CONCRETE PERIWALL, ARCHITECTURAL GRADE FINISH WHERE EXPOSED. PROVIDE CONTINUOUS SKIM COAT OF PATCH-CRETE TO PROVIDE SMOOTH UNIFORM, BEE-HOLE FREE SURFACE. TYP. PROVIDE MOCK-UP PRIOR TO INSTALLATION.
- 401.1 8"X8" ATLAS BRICK, SOLDIER COURSE WITH TOOLED & BRUSHED HEAD AND BED JOINTS. TYP. - SEE ELEVATIONS FOR COLOR, PATTERN AND FINISH
- 402.0 MASONRY CONTROL JOINT WITH CONTINUOUS NEOPRENE "TEE" GASKET, TYP.
- 705.1 PRE-FINISHED FIELD-INSULATED EXTERIOR METAL WALL PANEL WITH POST INSTALLED 1.5" X CONT. RIGID INSULATION INSERTS FACTORY CUT TO FIT THE PROFILE OF THE METAL WALL PANELS. INSERTS PROVIDED BY WALL PANEL INSTALLER
- 705.2 PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER.
- 709.0 PRE-FINISHED ALUMINUM COMPOSITE METAL (ACM) WALL PANEL SYSTEM WITH DRY JOINTS
- 709.1 PRE-FINISHED ALUMINUM COMPOSITE METAL (ACM) INTEGRATED PARAPET CAP
- 800.0 SCHEDULED DOOR AND FRAME. SEE DOOR SCHEDULE FOR DETAILS. TYP.
- 802.0 TRANSLUCENT SKYLIGHT ASSEMBLY WITH EXTENDED CURB TO PROVIDE A MINIMUM 12" EXPOSED CURB FROM HIGHEST POINT OF ADJACENT ROOFING TO LOWEST EDGE OF SKYLIGHT FLASHING DRAIN EDGE. REFER TO DETAILS FOR MORE INFORMATION. TYP.
- 803.1 SCHEDULED ALUMINUM STOREFRONT SYSTEM
- 2304.0 PRE-FINISHED MECHANICAL LOUVER
- 2800.0 SECURITY ACCESS CARD READER

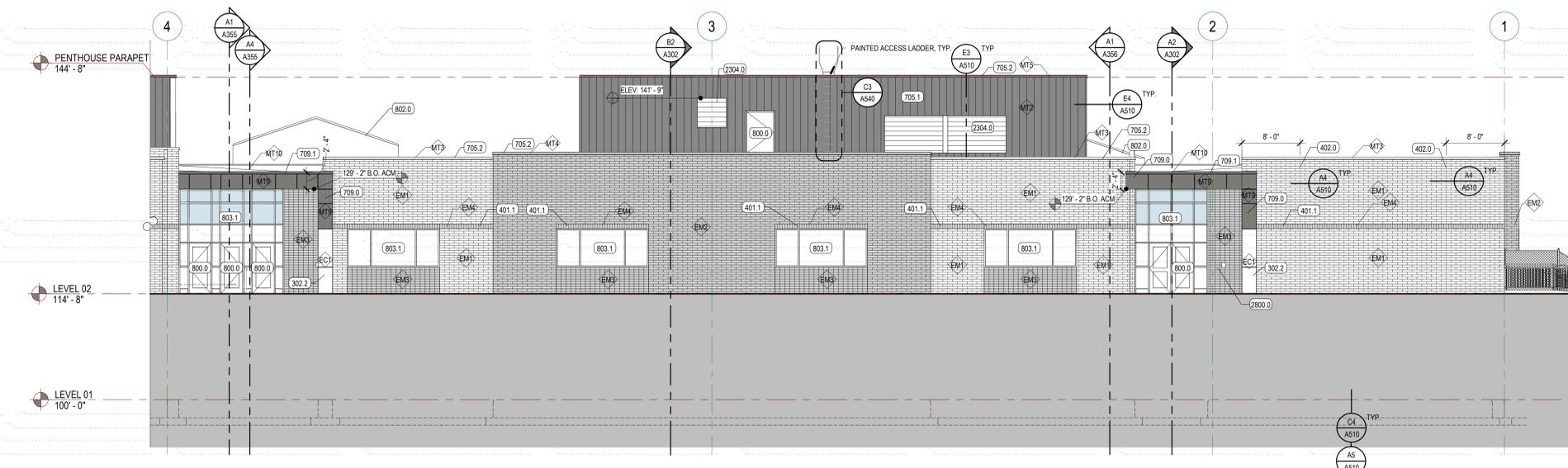
REV	DATE	DESCRIPTION

VCBO NUMBER: 20010
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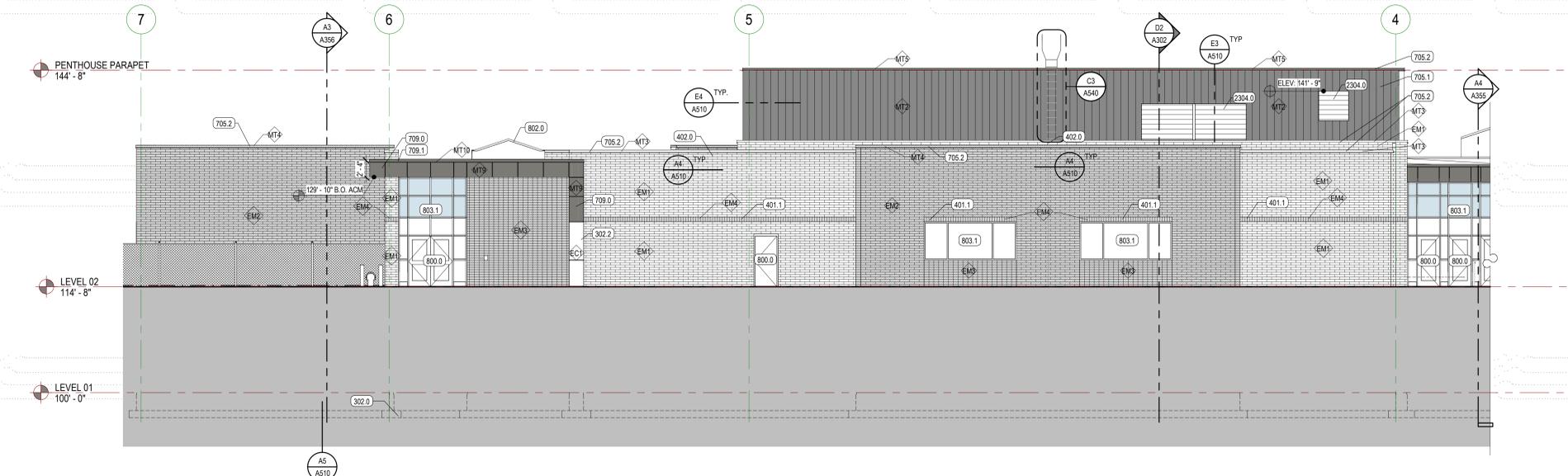
ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET, SARATOGA SPRINGS, UT
BP1 - CONSTRUCTION BID SET



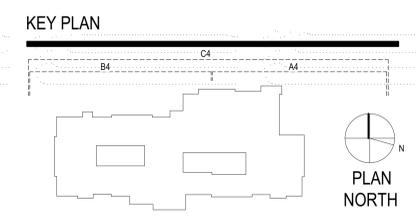
C4 ELEVATION - NORTH
SCALE: 1/16" = 1'-0"



B4 ELEVATION - NORTH - AREA A
SCALE: 1/8" = 1'-0"

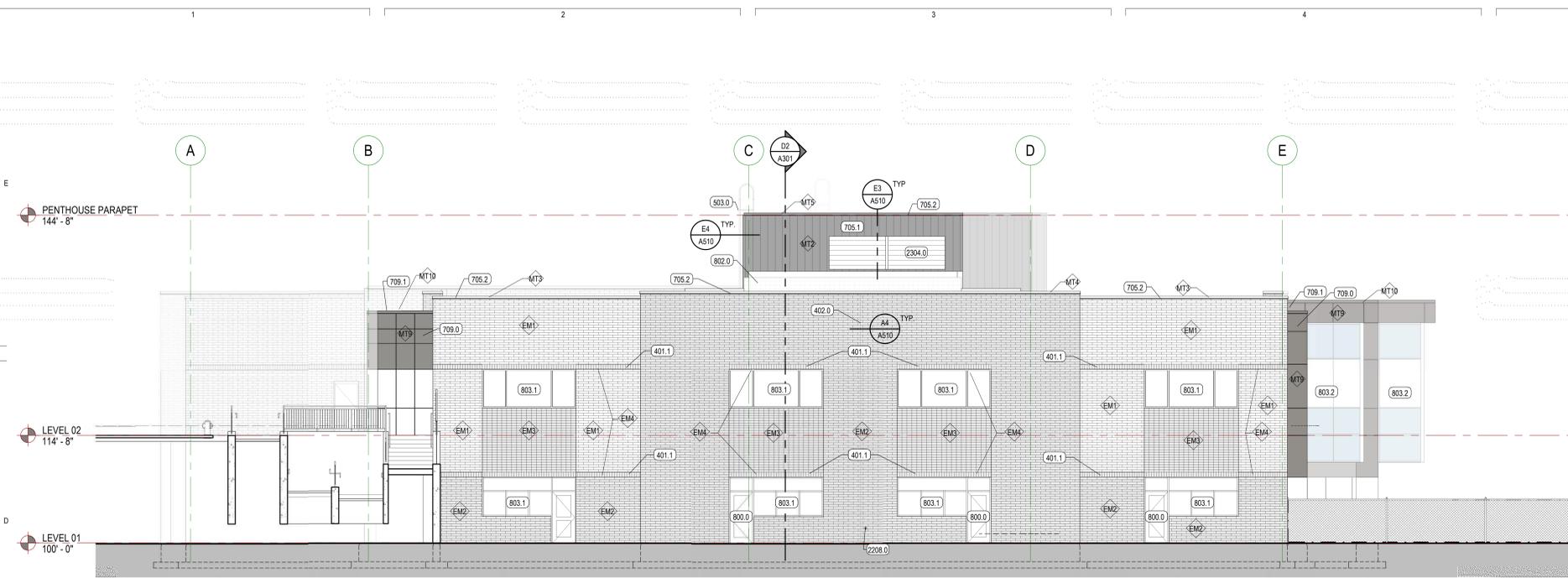


A4 ELEVATION - NORTH - AREA B
SCALE: 1/8" = 1'-0"

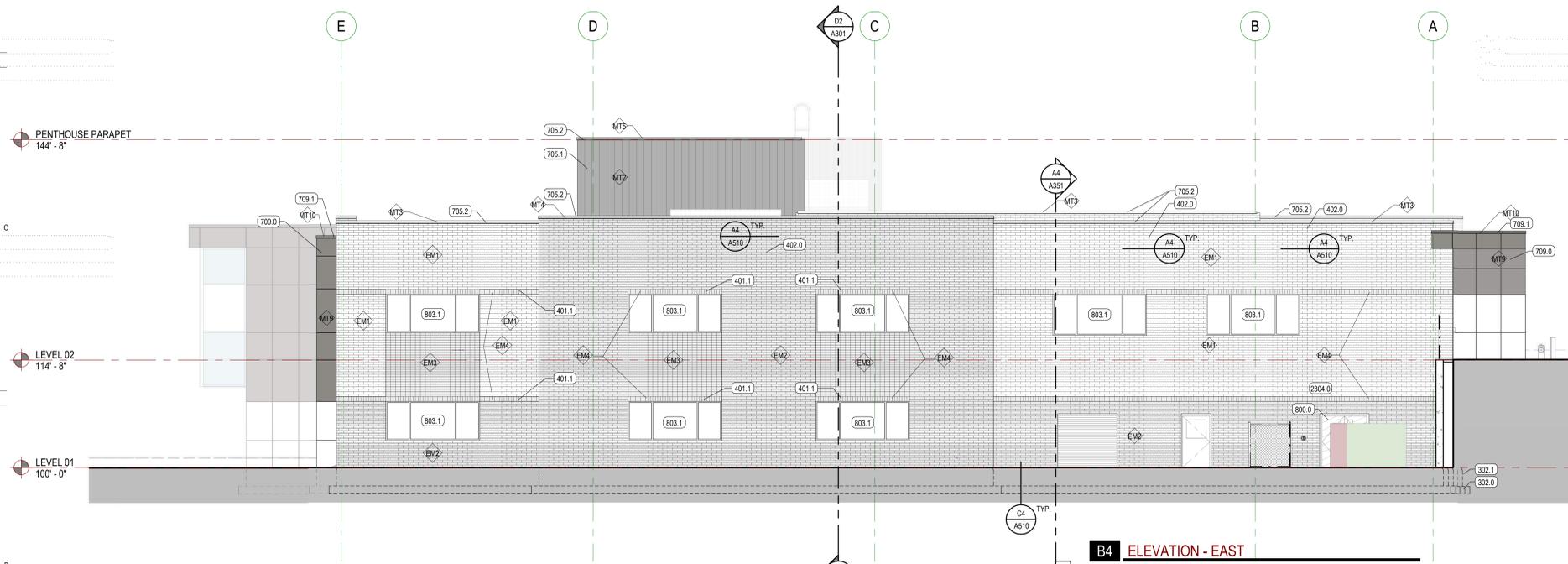


KEYED NOTES

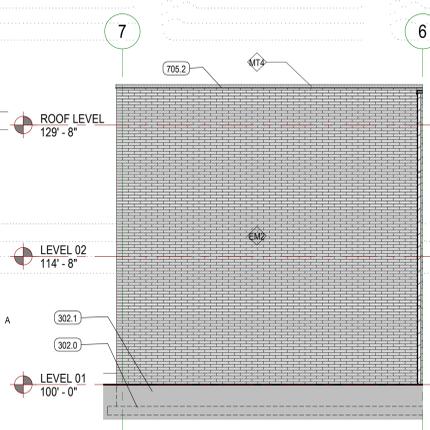
- 302.0 REINFORCED CONCRETE FOOTING
- 302.1 REINFORCED CONCRETE FOUNDATION WALL, ARCHITECTURAL GRADE FINISH WHERE EXPOSED. PROVIDE CONTINUOUS SIRM COAT OF PATCH-GRETE TO PROVIDE SMOOTH, UNIFORM, BEE-HOLE FREE SURFACE READY FOR PAINT, TYP.
- 401.1 8"X8" ATLAS BRICK, SOLDIER COURSE WITH TOOLED & BRUSHED HEAD AND BED JOINTS, TYP. - SEE ELEVATIONS FOR COLOR, PATTERN AND FINISH
- 402.0 MASONRY CONTROL JOINT WITH CONTINUOUS NEOPRENE "TEE" GASKET, TYP.
- 503.0 STEEL ROOF ACCESS LADDER, PAINTED C.S. & A
- 705.1 PRE-FINISHED FIELD-INSULATED EXTERIOR METAL WALL PANEL WITH POST INSTALLED 1.5" X CONT. RIGID INSULATION INSERTS FACTORY CUT TO FIT THE PROFILE OF THE METAL WALL PANELS. INSERTS PROVIDED BY WALL PANEL INSTALLER.
- 705.2 PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER.
- 709.0 PRE-FINISHED ALUMINUM COMPOSITE METAL (ACM) WALL PANEL SYSTEM WITH DRY JOINTS
- 709.1 PRE-FINISHED ALUMINUM COMPOSITE METAL (ACM) INTEGRATED PARAPET CAP
- 800.0 SCHEDULED DOOR AND FRAME. SEE DOOR SCHEDULE FOR DETAILS, TYP.
- 802.0 TRANSLUCENT SKYLIGHT ASSEMBLY WITH EXTENDED CURB TO PROVIDE A MINIMUM 12" EXPOSED CURB FROM HIGHEST POINT OF ADJACENT ROOFING TO LOWEST EDGE OF SKYLIGHT FLASHING DRIP EDGE. REFER TO DETAILS FOR MORE INFORMATION, TYP.
- 803.1 SCHEDULED ALUMINUM STOREFRONT SYSTEM
- 803.2 SCHEDULED ALUMINUM CURTAINWALL SYSTEM
- 2208.0 FREEZE PROOF HOSE BIB IN RECESSED METAL ENCLOSURE WITH LOCKING DOOR. SET FACE OF ENCLOSURE FLUSH WITH MASONRY FACE FOR A FLUSH FINISH, TYP.
- 2302.0 MECHANICAL EQUIPMENT AND ASSOCIATED 6" THICK REINFORCED CONCRETE CURB, TYP.
- 2304.0 PRE-FINISHED MECHANICAL LOUVER



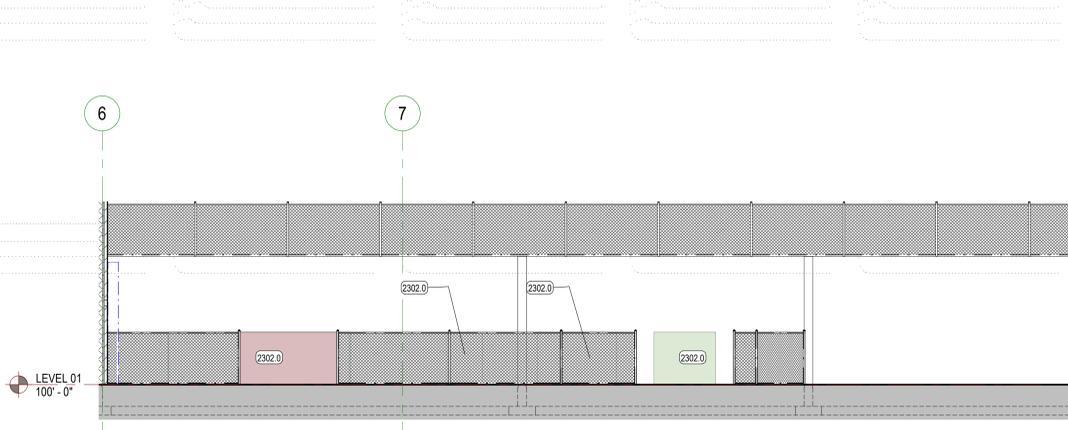
C4 ELEVATION - WEST
SCALE: 1/8" = 1'-0"



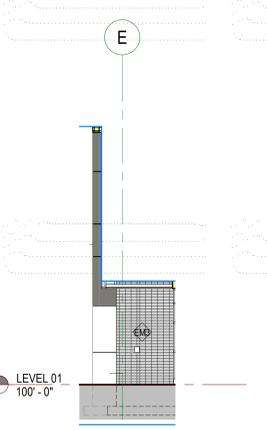
B4 ELEVATION - EAST
SCALE: 1/8" = 1'-0"



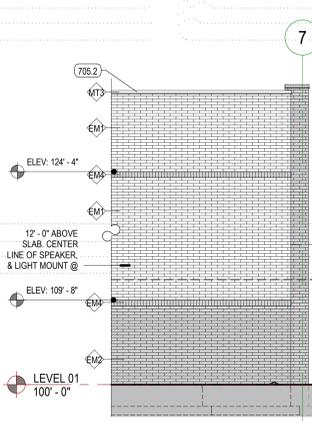
A1 PARTIAL ELEVATION - SOUTH
SCALE: 1/8" = 1'-0"



A2 PARTIAL ELEVATION - NORTH
SCALE: 1/8" = 1'-0"

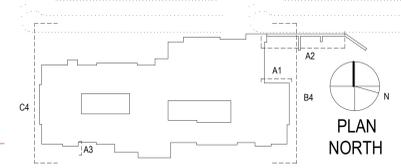


A4 PARTIAL ELEVATION - EAST
SCALE: 1/8" = 1'-0"



A5 VERTICAL CONTROL ELEVATION
SCALE: 1/8" = 1'-0"

KEY PLAN



REV	DATE	DESCRIPTION

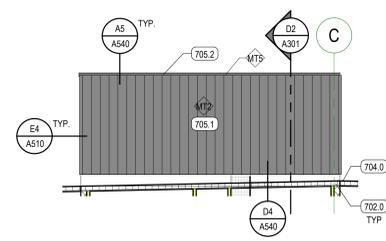
VCBO NUMBER: 20010
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ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET - SARATOGA SPRINGS, UT
BPI - CONSTRUCTION BID SET

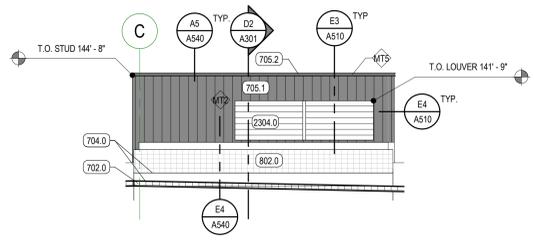
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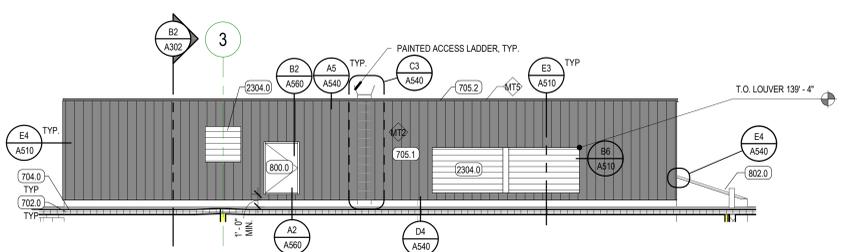
ASD NEW ELEMENTARY #101
ALPINE SCHOOL DISTRICT
SCHOONER DR AND CAPTAINS STREET - SARATOGA SPRINGS, UT
BPI - CONSTRUCTION BID SET



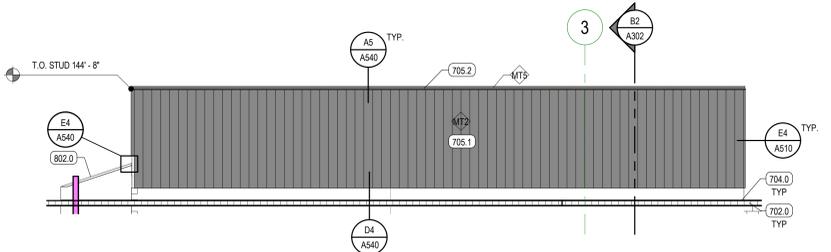
D1 AREA 41 PENTHOUSE - RIGHT
SCALE: 1/8" = 1'-0"



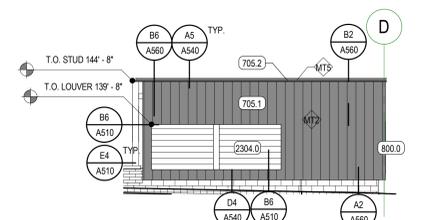
D4 AREA 41 PENTHOUSE - LEFT
SCALE: 1/8" = 1'-0"



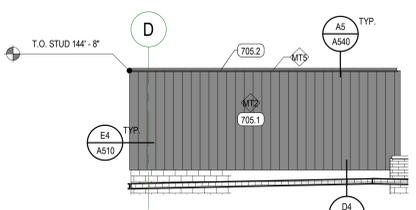
C1 AREA 41 PENTHOUSE - TOP
SCALE: 1/8" = 1'-0"



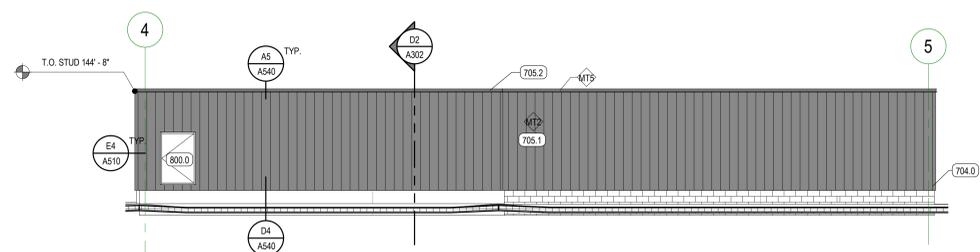
C4 AREA 41 PENTHOUSE - BOTTOM
SCALE: 1/8" = 1'-0"



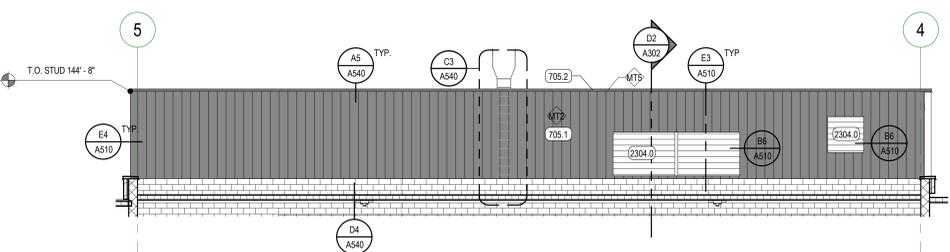
B1 AREA 42 PENTHOUSE - LEFT
SCALE: 1/8" = 1'-0"



B4 AREA 42 PENTHOUSE - RIGHT
SCALE: 1/8" = 1'-0"



A1 AREA 42 PENTHOUSE - BOTTOM
SCALE: 1/8" = 1'-0"

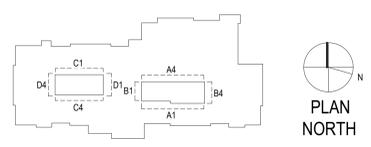


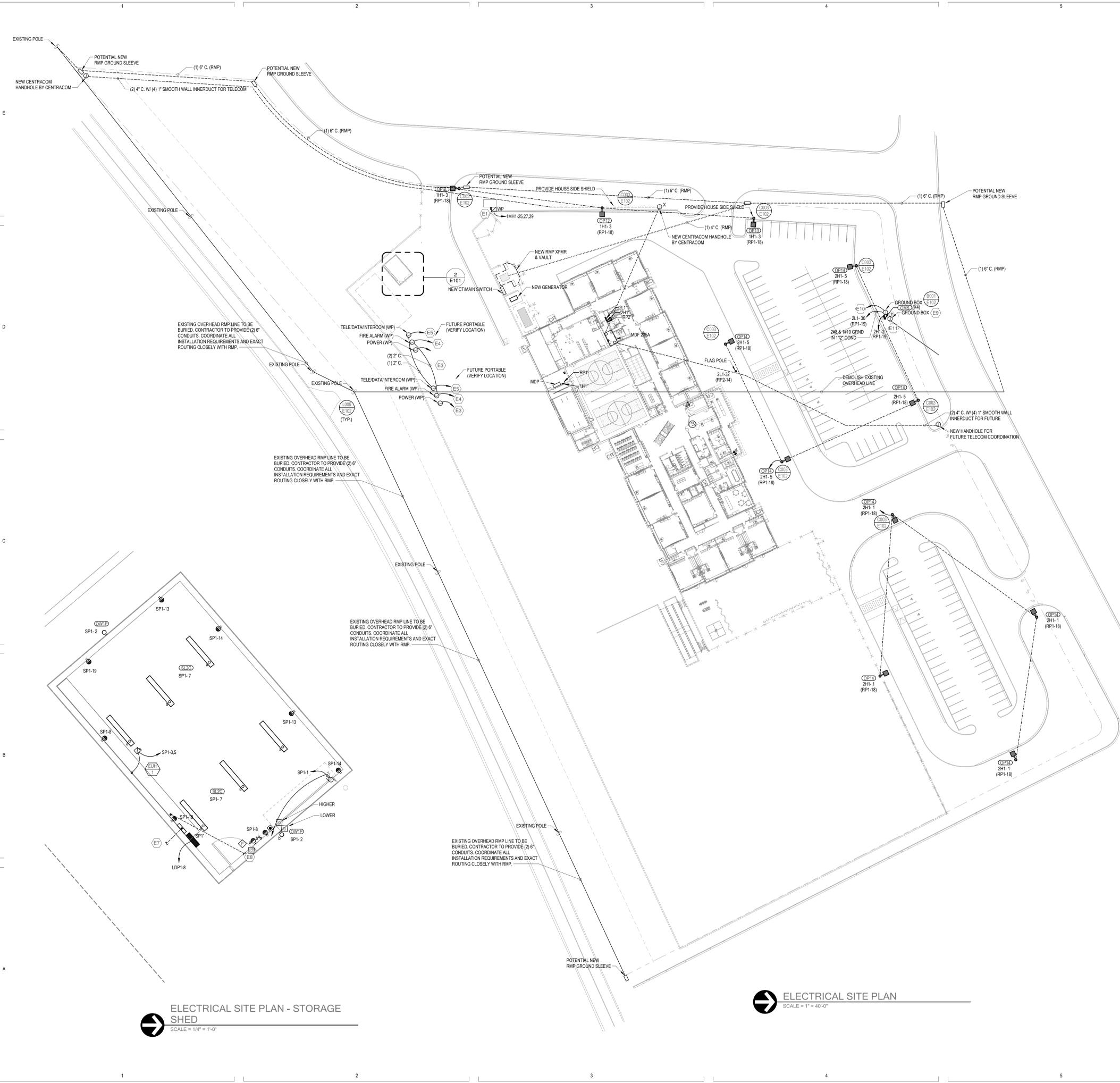
A4 AREA 42 PENTHOUSE - TOP
SCALE: 1/8" = 1'-0"

KEYED NOTES

- 702.0 ROOF INSULATION - (2) LAYERS 2.5" RIGID INSULATION MIN. R-30, TYP.
- 704.0 FIN LISTED 60 MIL PVC SINGLE-PLY MEMBRANE ROOFING SYSTEM WITH 14-30 & SH CLASSIFICATIONS, ALL OTHERS TO SUBMIT FOR PRIOR APPROVAL. ALL VERTICAL MEMBRANE SURFACES AT STEPPED WALLS, CURBS, ETC. TO BE 12" MINIMUM FROM LOWER ROOF MEMBRANE TO TERMINATION BAR OR CURB. TYP. COORDINATE WITH ARCHITECT ANY CONDITIONS THAT VARY FROM THIS REQUIREMENT PRIOR TO INSTALLATION OF ROOFING SYSTEM, TYP.
- 705.1 PRE-FINISHED FIELD-INSULATED EXTERIOR METAL WALL PANEL WITH POST-INSTALLED 1.5" X CONT. RIGID INSULATION INSERTS FACTORY CUT TO FIT THE PROFILE OF THE METAL WALL PANELS. INSERTS PROVIDED BY WALL PANEL INSTALLER.
- 705.2 PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER.
- 800.0 SCHEDULED DOOR AND FRAME. SEE DOOR SCHEDULE FOR DETAILS, TYP.
- 802.0 TRANSLUCENT SKYLIGHT ASSEMBLY WITH EXTENDED CURB TO PROVIDE A MINIMUM 12" EXPOSED CURB FROM HIGHEST POINT OF ADJACENT ROOFING TO LOWEST EDGE OF SKYLIGHT FLASHING DRIP EDGE. REFER TO DETAILS FOR MORE INFORMATION, TYP.
- 2304.0 PRE-FINISHED MECHANICAL LOUVER

KEY PLAN





ELECTRICAL SITE PLAN - STORAGE SHED
SCALE = 1/4" = 1'-0"

ELECTRICAL SITE PLAN
SCALE = 1" = 40'-0"

GENERAL SHEET NOTES

- INSPECT ALL CONDUITS WITH CAMERA TO CONFIRM THAT CONDUITS HAVE NOT BEEN CRUSHED OR BROKEN. CAP OPEN ENDS OF CONDUITS AND INSTALL A 200LB NYLON PULL CORD IN EACH EMPTY CONDUIT RUN.
- PROVIDE PLANS, PHOTO DOCUMENTATION, AND GPS COORDINATES INDICATING THE LOCATION OF ANY AND ALL CONDUITS INTENDED FOR FUTURE USE BY OWNER. SUBMIT DOCUMENTATION WITH O&Ms.
- BIDDERS SHALL EXAMINE THE SITE AND THE COMPLETE SET OF PLANS AND SPECIFICATIONS FOR ALL TRADES COVERING THE ENTIRE PROJECT. THEY SHALL BECOME FULLY CONSERANT WITH THE TYPE OF GENERAL CONSTRUCTION AS WELL AS ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM. DIVISION 26 SHALL COORDINATE PROJECT PHASING WITH THE GENERAL CONTRACTOR AND BID/PERFORM RESPONSIBILITIES FOR THIS PROJECT TO CONTRACT EXPECTATIONS.
- COORDINATE ELECTRICAL DEMOLITION WITH ARCHITECTURAL DRAWINGS AND GENERAL CONTRACTOR.
- CLOSELY COORDINATE ANY REQUIRED POWER SHUTDOWNS WITH THE HEAD CUSTODIAN AND OWNER.
- VERIFY LOCATION OF LIGHT POLES WITH THE OWNER AND ARCHITECT PRIOR TO ROUGH-IN.

SHEET KEYNOTES

- E1 FIELD COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS OF IRRIGATION PUMP WITH LANDSCAPE CONTRACTOR PRIOR TO ROUGH-IN. VERIFY IRRIGATION PUMP HORSEPOWER AND ASSOCIATED BREAKER WITH MANUFACTURER'S SHOP DRAWINGS.
- E3 PROVIDE UNDERGROUND CONCRETE JUNCTION BOX AS SHOWN. PROVIDE (1) 4" CONDUIT WITH (4) 360CMIL WITH #2 GND FROM JUNCTION BOX TO SWITCHBOARD 10PH1 LOCATED IN MAIN ELECTRICAL ROOM 135. LABEL CONDUIT POWER FEED FOR FUTURE PORTABLE.
- E4 PROVIDE UNDERGROUND CONCRETE JUNCTION BOX AS SHOWN. PROVIDE (2) 2" CONDUITS FROM JUNCTION BOX TO MAIN FIRE ALARM PANEL (FACP) IN MDF 235A. LABEL CONDUIT FIRE ALARM FEED FOR FUTURE PORTABLE.
- E5 PROVIDE UNDERGROUND CONCRETE JUNCTION BOX AS SHOWN. PROVIDE (1) 2" CONDUIT FROM JUNCTION BOX TO MDF 235A. LABEL CONDUIT DATA/INTERCOM FEED FOR FUTURE PORTABLE.
- E7 EXTEND (2) 2" CONDUIT FROM CONTROLLER AND OUT INTO LANDSCAPE AREA. COORDINATE WITH IRRIGATION CONTRACTOR AND LANDSCAPE DRAWINGS PRIOR TO ROUGH-IN.
- E8 PROVIDE (1) 2" CONDUIT FROM STUB-UP LOCATION IN SHED TO MDF 235A. LABEL CONDUIT "FUTURE TELECOM SHED".
- E9 PROVIDE 2#8 AND 1#10 TO GROUND IN 1-4" CONDUIT TO PANEL "1L1" THRU RELAY PANEL RP1.
- E10 PROVIDE 1-2" CONDUIT TO DATA 1230 FOR FUTURE REQUIREMENTS.
- E11 REFER TO ARCHITECTURAL DETAIL C3/ASS02 FOR ADDITIONAL ROUGH-IN REQUIREMENTS.

ELECTRICAL SITE UTILITY COORDINATION

ELECTRICAL SITE UTILITY INFORMATION HAS BEEN COORDINATED WITH THE FOLLOWING UTILITY COMPANY REPRESENTATIVES. VERIFY ALL LOCATIONS, DIMENSIONS, CLEARANCES, REGULATIONS, ETC., PRIOR TO INSTALLATION. NOTIFY ENGINEER OF ANY REVISIONS REQUIRED.

POWER COMPANY	ROCKY MOUNTAIN POWER
CONTACT	MARK STEELE
PHONE NO.	(801)756-1220
EMAIL	MARK.STEELE@ROCKYMOUNTAINPOWER.NET
WORK ORDER NO.	
IP COMPANY	CENTRACOM
CONTACT	BRAD WELCH
PHONE NO.	435-427-0639
EMAIL	BRADW@CENTRACOM.COM



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