

STRUCTURE SETBACKS				
STRUCTURE	DISTANCE FROM NORTH PROPERTY LINE	DISTANCE FROM EAST PROPERTY LINE	DISTANCE FROM SOUTH PROPERTY LINE	DISTANCE FROM WEST PROPERTY LINE
QUICK QUACK BUILDING	60.51 FEET	79.38 FEET	57.50 FEET	81.75 FEET
VACUUM CANOPY	145.51 FEET	35.16 FEET	5.48 FEET	24.63 FEET
DUMPSTER ENCLOSURE	98.08 FEET	32.41 FEET	52.40 FEET	230.92 FEET
VACUUM ENCLOSURE	143.92 FEET	23.12 FEET	6.13 FEET	245.69 FEET

PROJECT ENGINEER:
LARVIN POLLOCK
ELEVATE ENGINEERING
492 WEST 1200 NORTH
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LARVIN@ELEVATEENG.COM

DEVELOPER:
JOSEPH EARNEST
LONESTAR BUILDERS
QQ UTAH COUNTY PO BOX 887
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LEGEND

LOT LINES (PROPERTY)	---
EXISTING CURB AND GUTTER	=====
PROPOSED CURB AND GUTTER	=====
STRIPING	-----
BUILDING SETBACK	-----
LANDSCAPE SETBACK	-----
EXISTING BUILDING	-----
EXISTING FENCE	----- x -----
EASEMENT	-----
TOP BACK OF CURB	TBC
FINISHED FLOOR ELEVATION	FFE
LANDSCAPE AREA	[Pattern]
CONCRETE AREA	[Pattern]

SITE DATA

LOT AREA:	45,370	SF (1.04 ACRES)
BUILDING AREA:	3,980	SF± 8.8%
PAVEMENT AREA:	28,819	SF± 63.5%
LANDSCAPE AREA:	12,571	SF± 27.7%

ZONING: CR (COMMERCIAL REGIONAL)
PERMITTED USE

BUILDING DATA

CONSTRUCTION TYPE: V-B
OCCUPANCY TYPE: B
SPRINKLERS: NO
BUILDING HEIGHT: 29'6"
SETBACKS:
FRONT=50 FEET
REAR=0 FEET
SIDE=0 FEET

PARKING TABULATION

REQUIRED: 1 SPACE PER BAY OR STALL

PROVIDED: 7 STALLS
1 ADA STALL

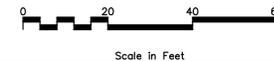
VACUUM STALLS: 14 STALLS
TUNNEL LENGTH: 114 FEET
STACKING: 16 STALLS

NOTES:

- 1 PROPOSED 5' SIDEWALK PER CITY OF COLORADO SPRINGS STD D-8L. SEE SHEET C-4 FOR DETAILS.
- 2 ALL HANDICAP STALLS AND RAMPS TO BE INSTALLED PER ADA AND APWA STANDARDS. SEE SHEET C-4 FOR DETAILS.
- 3 PROPOSED CURB & GUTTER TYPE E PER EL PASO COUNTY STD SD-2-20. SEE SHEET C-4 FOR DETAILS.
- 4 PROPOSED CURB TYPE 3 PER CITY OF COLORADO SPRINGS STD D-6. SEE SHEET C-4 FOR DETAILS.
- 5 CONSTRUCT VACUUM ENCLOSURE WITH CONCRETE PAD AND APRON. INSTALL OWNER PROVIDED VACUUM EQUIPMENT, UNDERGROUND TRUNK LINES, PIPING, ETC. COORDINATE WITH ARCHITECTURAL PLANS.
- 6 PAINT 4" SOLID YELLOW PAINT STRIPE AS SHOWN (TYPICAL).
- 7 INSTALL OWNER PROVIDED "TOMMY BALL" PLANTERS/GARBAGE RECEPTACLE (TYPICAL). COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILS.
- 8 INSTALL OWNER PROVIDED PAY STATIONS WITH CANOPY. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILS.
- 9 INSTALL OWNER PROVIDED GATES AND LOOP DETECTION SYSTEM. COORDINATE TIMING OF INSTALLATION PRIOR TO CONSTRUCTION OF PAVEMENT. SEE ARCHITECTURAL PLANS FOR DETAILS.
- 10 PROPOSED DUMPSTER LOCATION. SEE SHEET C-4 FOR DETAILS.

GENERAL NOTES:

1. CONTRACTOR TO NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION
2. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITY LINES AND STRUCTURES PRIOR TO CONSTRUCTION
3. ALL PROPOSED WATER LINES TO HAVE A MINIMUM OF 5' OF COVER
4. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL AS PER EL PASO COUNTY STANDARDS.
5. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES TO BE REPLACED IN KIND.
6. SEE UTILITY PLAN FOR CONSTRUCTION OF SEWER AND WATER LINES.
7. ALL WORK TO BE ACCORDING TO EL PASO COUNTY STANDARDS.

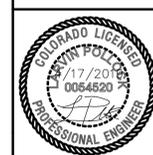


NO.	REVISIONS	BY	DATE

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larvin@elevateeng.com



QUICK QUACK CONSTITUTION
SITE PLAN
2437 MARKSHEFFEL ROAD COLORADO SPRINGS, CO 80951

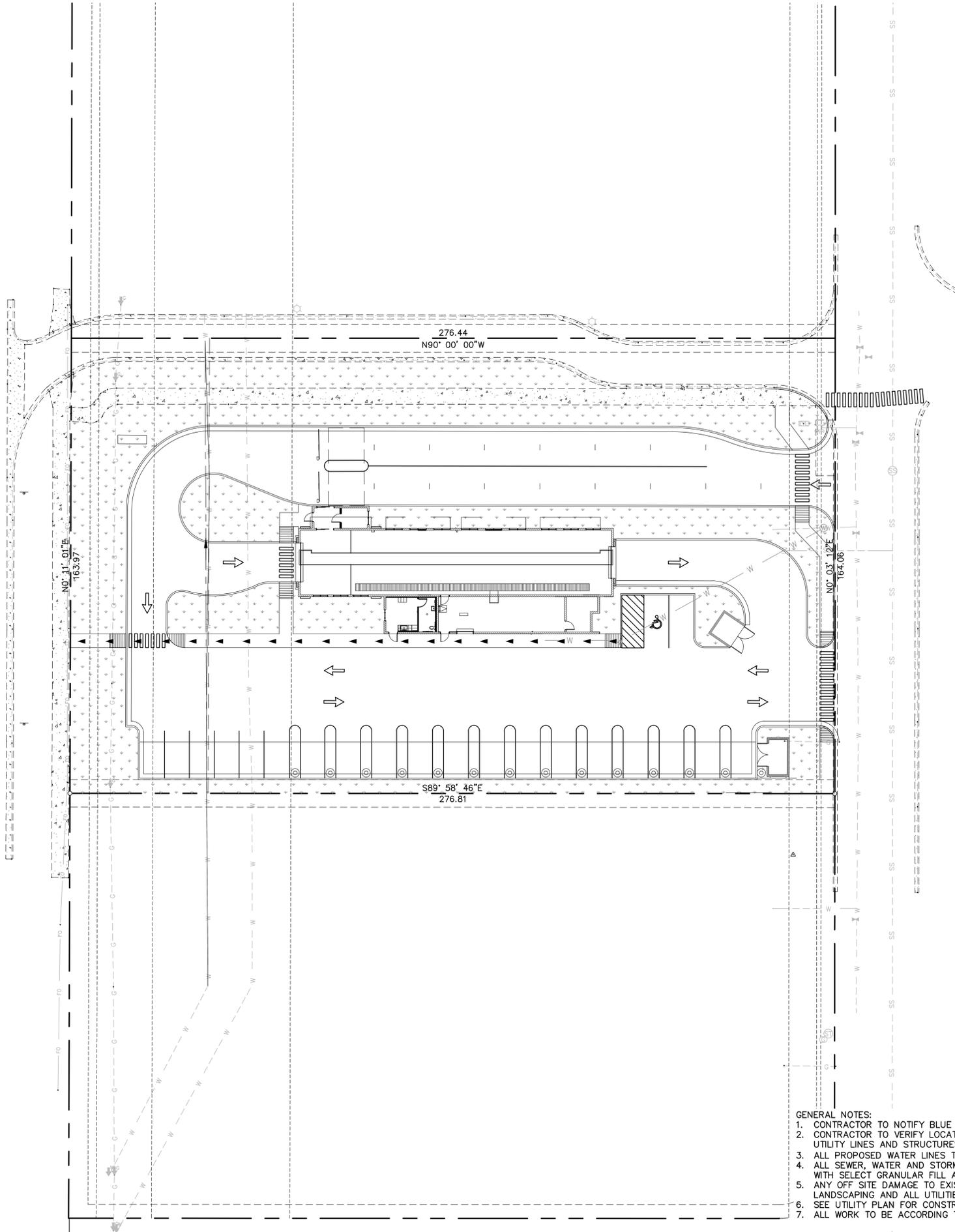


SHEET:
C-1
DATE:
Apr 17, 2019

ALL SITE PAVEMENT TO BE CONCRETE.

FILE # PPR-19-004

N. MARKSHEFFEL ROAD
PUBLIC R.O.W. VARIES



LEGEND

LOT LINES (PROPERTY)	---
EXISTING CURB AND GUTTER	---
PROPOSED CURB AND GUTTER	---
STRIPING	---
BUILDING SETBACK	---
LANDSCAPE SETBACK	---
EXISTING BUILDING	---
EXISTING FENCE	---
EASEMENT	---
TOP BACK OF CURB	TBC
FINISHED FLOOR ELEVATION	FFE
LANDSCAPE AREA	[Pattern]
CONCRETE AREA	[Pattern]
ACCESSIBLE ROUTE	▲

ALL SITE PAVEMENT TO BE CONCRETE.

- GENERAL NOTES:
1. CONTRACTOR TO NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION.
 2. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITY LINES AND STRUCTURES PRIOR TO CONSTRUCTION.
 3. ALL PROPOSED WATER LINES TO HAVE A MINIMUM OF 5' OF COVER.
 4. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL AS PER EL PASO COUNTY STANDARDS.
 5. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES TO BE REPLACED IN KIND.
 6. SEE UTILITY PLAN FOR CONSTRUCTION OF SEWER AND WATER LINES.
 7. ALL WORK TO BE ACCORDING TO EL PASO COUNTY STANDARDS.

Scale in Feet

FILE # PPR-19-004

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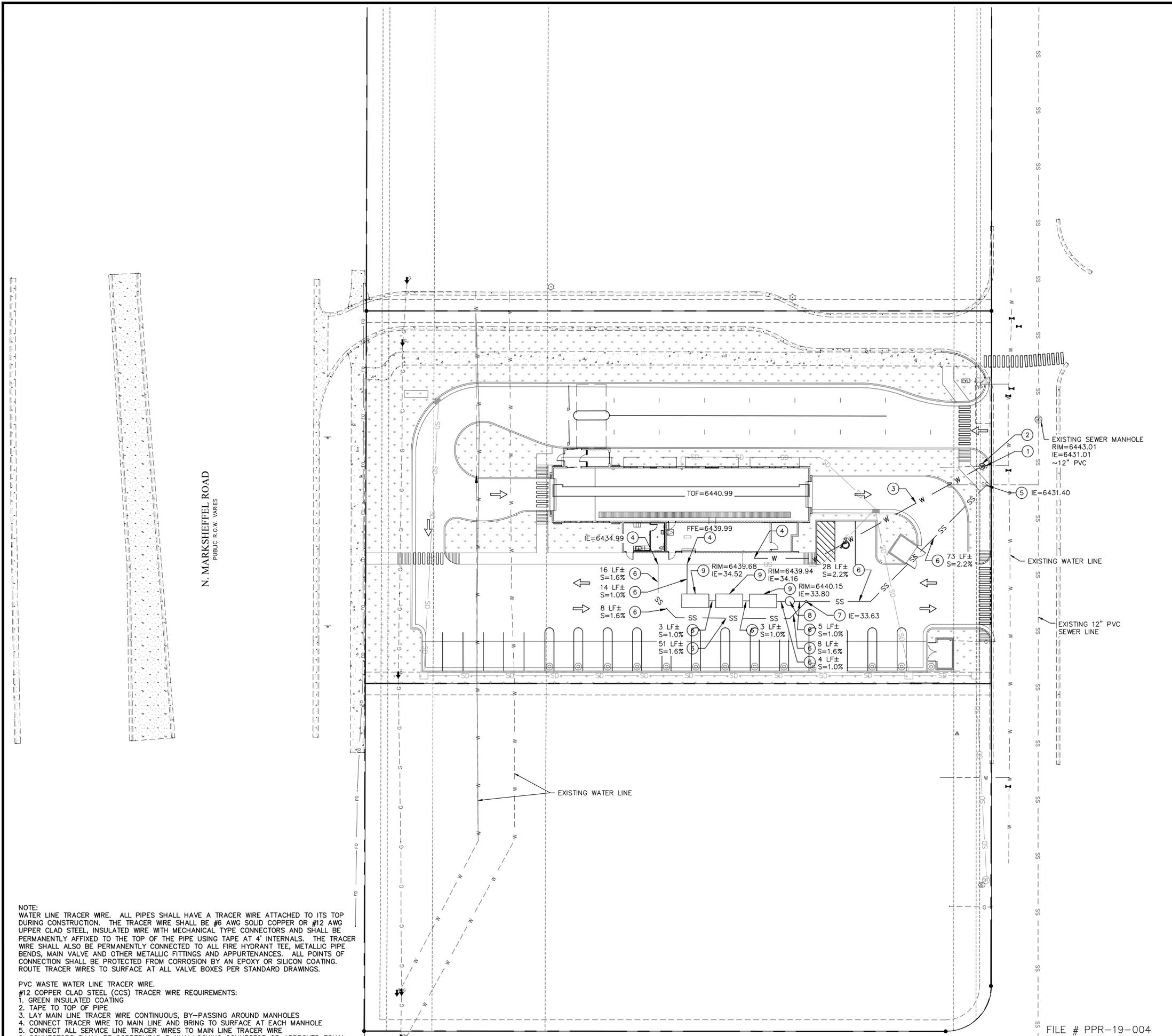
QUICK QUACK CONSTITUTION
ADA ROUTE PLAN
2437 MARKSHEFFEL ROAD COLORADO SPRINGS, CO 80951



SHEET:
C-2
DATE:
Apr 17, 2019

NO.	REVISIONS	BY	DATE

PROJECT ENGINEER: LP
DESIGNER: DL



N. MARKSHEFFEL ROAD
PUBLIC R.O.W. VARIES

LEGEND

PROPERTY/ROW LINE	---
EXISTING CURB AND GUTTER	====
PROPOSED CURB AND GUTTER	====
PROPOSED STORM DRAIN LINE	---SD---SD---SD---
EXISTING STORM DRAIN LINE	---SD---SD---SD---
PROPOSED SEWER LINE	---SS---SS---SS---
EXISTING SEWER LINE	---SS---SS---SS---
PROPOSED WATER LINE	---W---W---
EXISTING WATER LINE	---W---W---
EASEMENT	---
INVERT ELEVATION	IE
EXISTING	EX
FINISHED GRADE	FG
FINISHED FLOOR ELEVATION	FFE

DESIGN NOTES:

- ① CONNECT TO EXISTING WATER STUB.
- ② INSTALL 2" WATER METER PER CMD DETAIL W-39. SEE SHEET C-5 FOR DETAILS.
- ③ INSTALL 2" HDPE CTS DR9 WITH HORIZONTAL EXPANSION LOOP PER CMD DETAIL W-37. SEE SHEET C-5 FOR DETAILS.
- ④ END ALL UTILITIES 5' FROM BUILDING, SEE PLUMBING PLANS FOR CONTINUATION.
- ⑤ CONNECT TO EXISTING SEWER STUB PER CMD DETAIL WW-9. SEE SHEET C-5 FOR DETAILS. CONTRACTOR TO VERIFY LOCATION AND ELEVATION PRIOR TO ANY CONSTRUCTION.
- ⑥ INSTALL 6" Ø PVC SDR-35 SEWER PIPE AT 1% MIN. SLOPE.
- ⑦ INSTALL 6" COMMERCIAL SERVICE CLEANOUT PER CMD DETAIL WW-8. SEE SHEET C-5 FOR DETAILS.
- ⑧ INSTALL 48" SANITARY SEWER SAMPLING MANHOLE PER APWA PLAN 411. SEE SHEET C-5 FOR DETAILS. RIM=6440.30 IE=6433.76 OUT=6433.68
- ⑨ INSTALL 1500 GAL. SAND/OIL SEPARATORS/RECLAIM TANKS PER CMD DETAIL WW-19. SEE SHEET C-5 FOR DETAILS. INSTALL 3' OF 6" Ø PVC SDR-35 SEWER PIPE AT 1% MIN. SLOPE BETWEEN TANKS. COORDINATE WITH PLUMBING PLANS FOR DETAILS.

GENERAL NOTES:

1. CONTRACTOR TO NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITY LINES AND STRUCTURES PRIOR TO CONSTRUCTION. MAXIMUM DEPTH OF WATER LINE TO 6' UNLESS APPROVED BY CMD.
3. ALL PROPOSED WATER LINES TO HAVE A MINIMUM OF 5' OF COVER.
4. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL AS PER CITY STANDARDS.
5. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES TO BE REPLACED IN KIND.
6. SEE GRADING AND DRAINAGE PLAN FOR CONSTRUCTION OF SEWER AND WATER LINES.
7. ALL WATER AND WASTEWATER WORK TO BE DONE ACCORDING CMD STANDARDS.

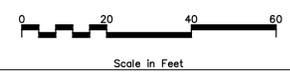
PRIVATE UTILITIES

CONTRACTOR TO CONTACT THE FOLLOWING COMPANIES PRIOR TO ANY CONSTRUCTION. EXACT LOCATION OF THESE UTILITIES TO BE DESIGNED AND COORDINATED BY THE FOLLOWING COMPANIES.

DOMINION ENERGY - 801-853-6597
 ROCKY MOUNTAIN POWER - 801-756-1310
 CENTURY LINK - 801-536-6975

NOTE:
 WATER LINE TRACER WIRE. ALL PIPES SHALL HAVE A TRACER WIRE ATTACHED TO ITS TOP DURING CONSTRUCTION. THE TRACER WIRE SHALL BE #6 AWG SOLID COPPER OR #12 AWG UPPER CLAD STEEL, INSULATED WIRE WITH MECHANICAL TYPE CONNECTORS AND SHALL BE PERMANENTLY AFFIXED TO THE TOP OF THE PIPE USING TAPE AT 4' INTERNALS. THE TRACER WIRE SHALL ALSO BE PERMANENTLY CONNECTED TO ALL FIRE HYDRANT TEE, METALLIC PIPE BENDS, MAIN VALVE AND OTHER METALLIC FITTINGS AND APPURTENANCES. ALL POINTS OF CONNECTION SHALL BE PROTECTED FROM CORROSION BY AN EPOXY OR SILICON COATING. ROUTE TRACER WIRES TO SURFACE AT ALL VALVE BOXES PER STANDARD DRAWINGS.

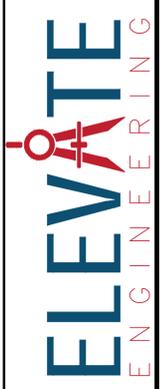
PVC WASTE WATER LINE TRACER WIRE.
 #12 COPPER CLAD STEEL (CCS) TRACER WIRE REQUIREMENTS:
 1. GREEN INSULATED COATING
 2. TAPE TO TOP OF PIPE
 3. LAY MAIN LINE TRACER WIRE CONTINUOUS, BY-PASSING AROUND MANHOLES
 4. CONNECT TRACER WIRE TO MAIN LINE AND BRING TO SURFACE AT EACH MANHOLE
 5. CONNECT ALL SERVICE LINE TRACER WIRES TO MAIN LINE TRACER WIRE
 6. CONNECTORS SHALL BE COPPERHEAD 3-WAY LOCKING CONNECTOR OR APPROVED EQUAL



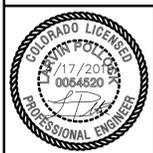
FILE # PPR-19-004

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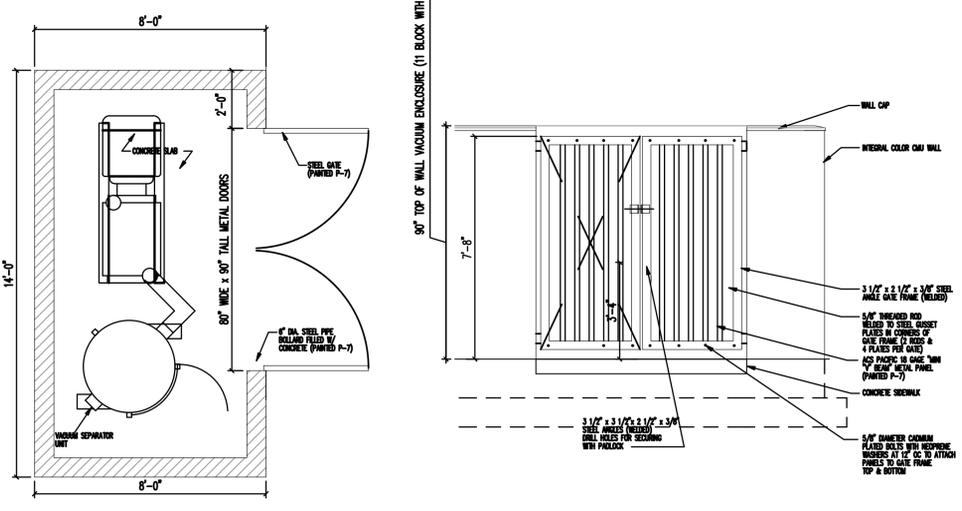
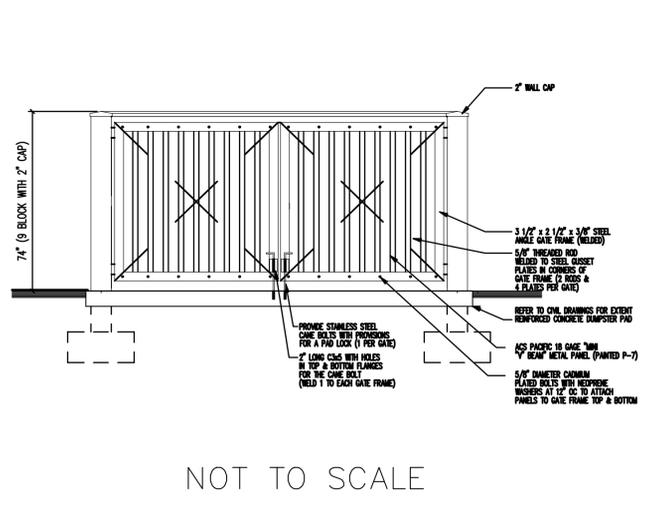
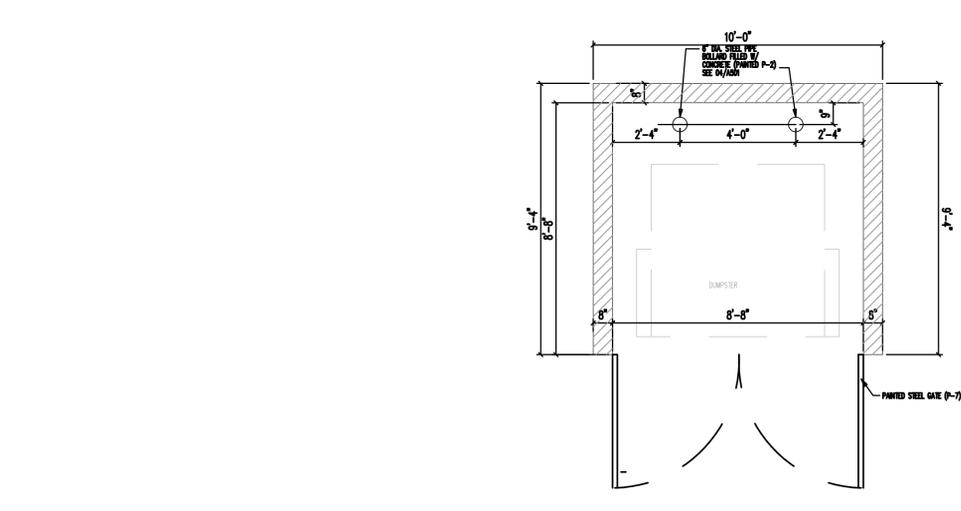
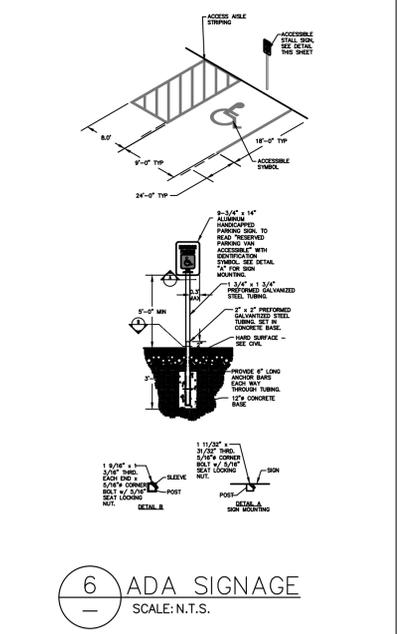
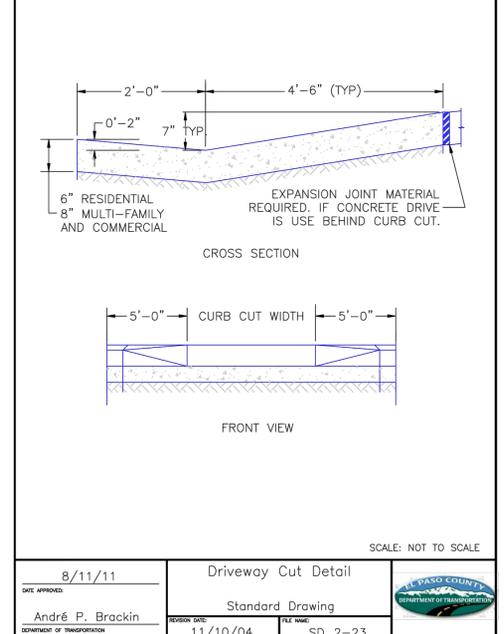
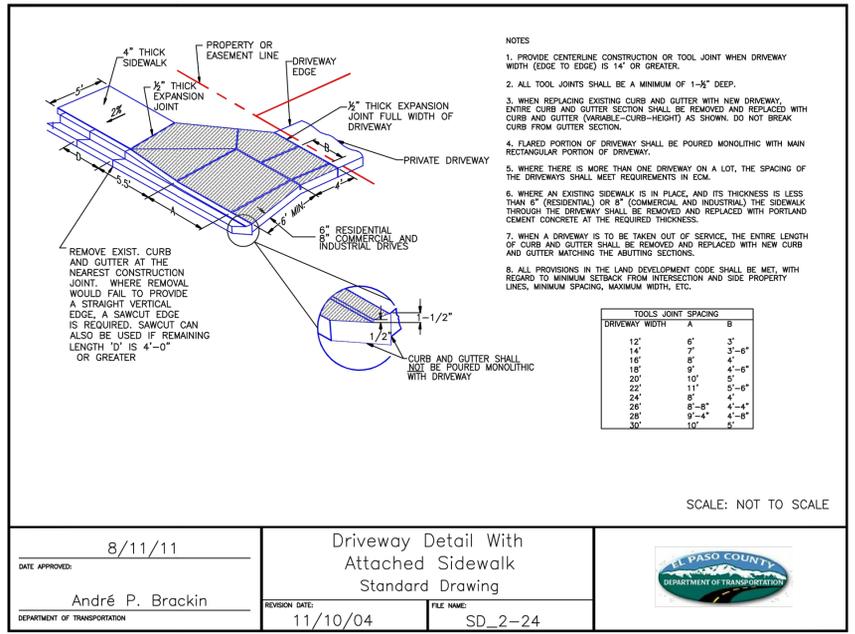
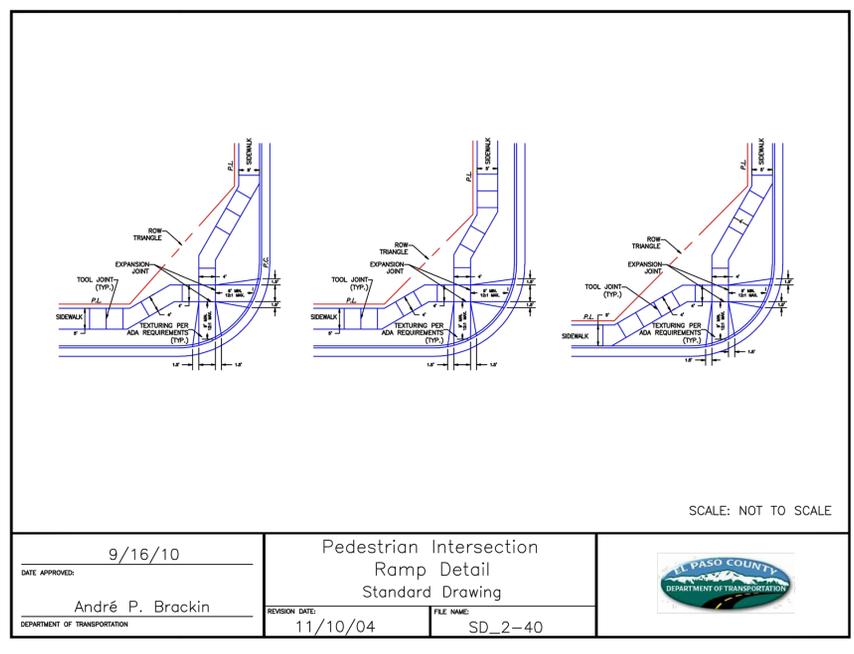
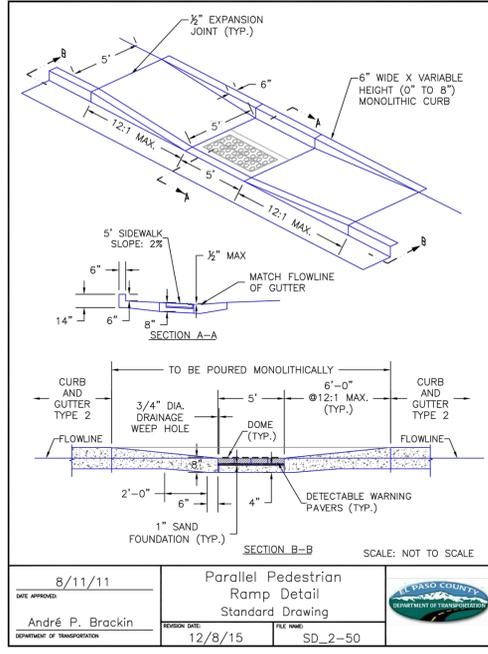
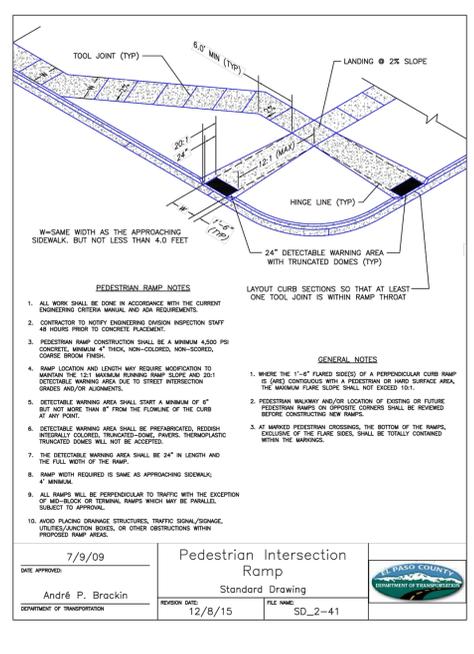
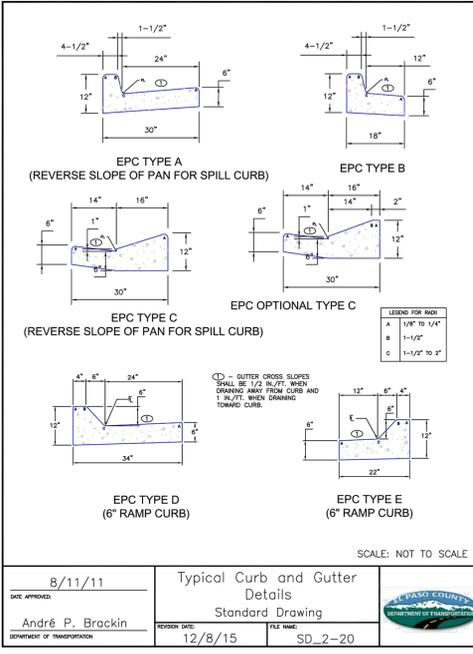
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QUICK QUACK CONSTITUTION
 UTILITY PLAN
 2437 MARKSHEFFEL ROAD COLORADO SPRINGS, CO 80951



SHEET:
C-3
 DATE:
 Apr 17, 2019



NO.	REVISIONS	BY	DATE

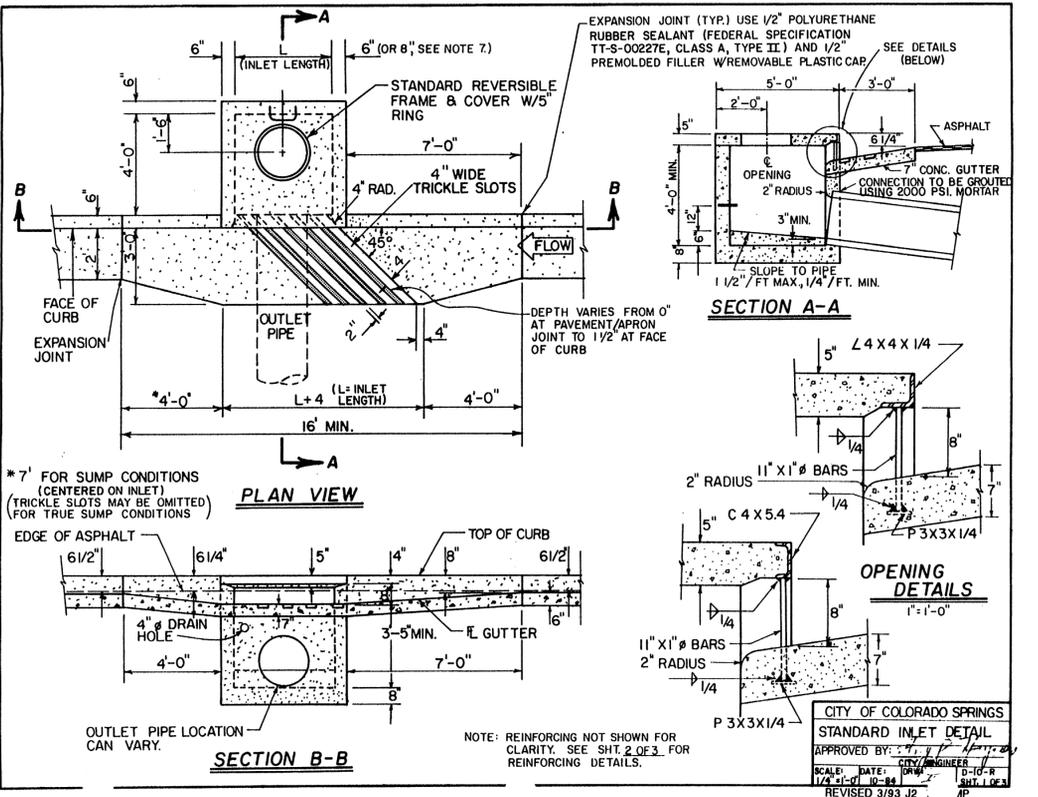
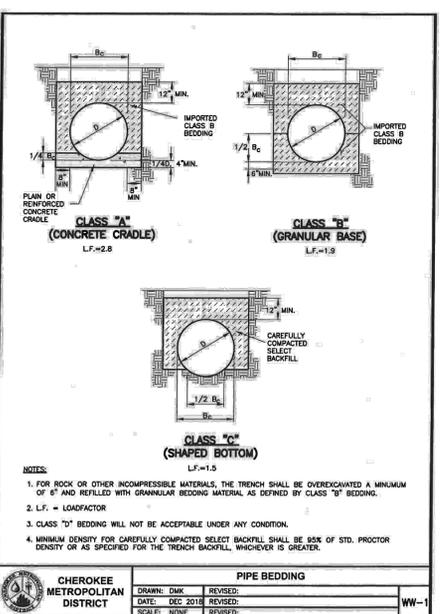
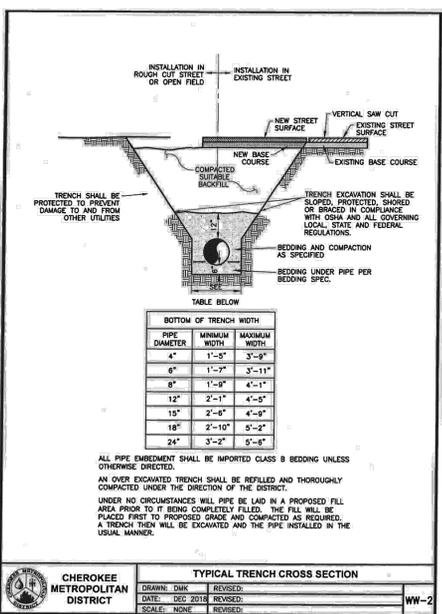
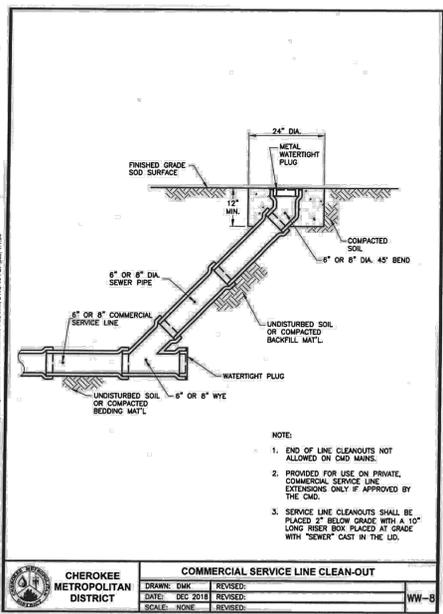
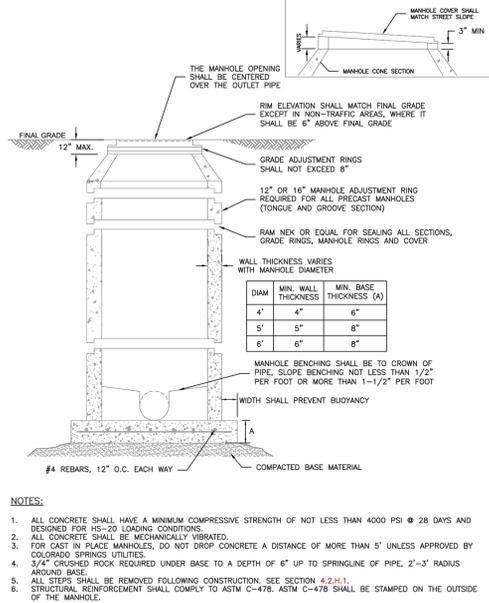
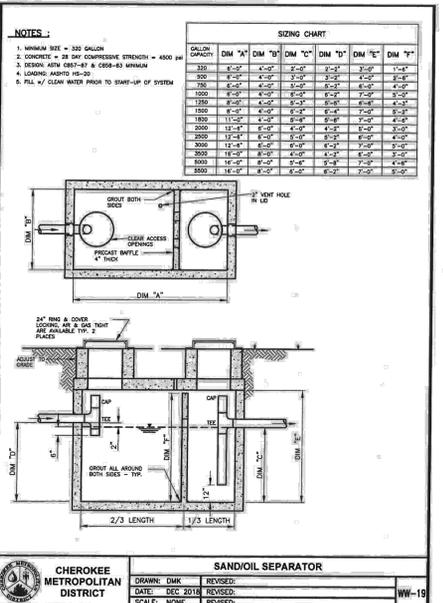
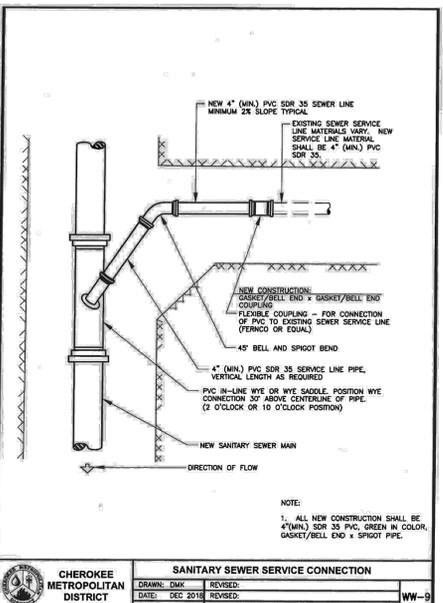
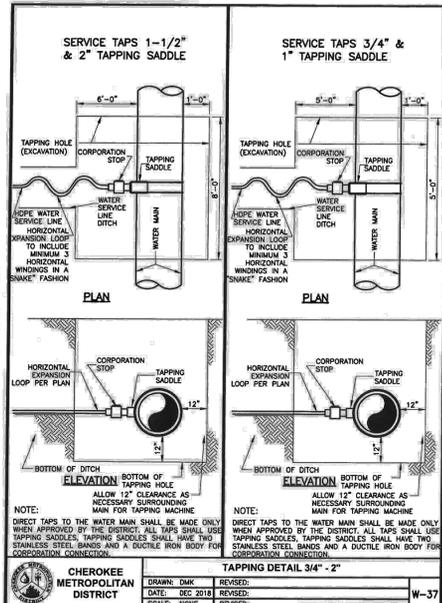
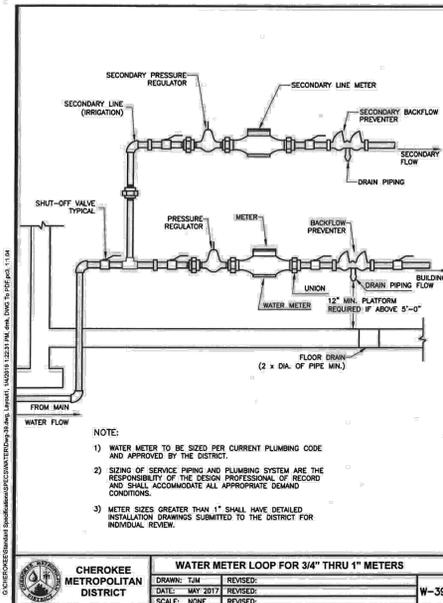
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QUICK QUACK CONSTITUTION
 STANDARD DETAILS
 2437 MARKSHEFFEL ROAD COLORADO SPRINGS, CO 80951



SHEET: C-4
 DATE: Apr 17, 2019



BY DATE

REVISIONS

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ELEVATE
 ENGINEERING

QUICK QUACK CONSTITUTION
 UTILITY DETAILS
 2437 MARKSHEFFEL ROAD COLORADO SPRINGS, CO 80951

DESIGNER: DL

PROJECT ENGINEER: LP

COLORADO LICENSED
 CIVIL ENGINEER
 1/17/2018
 0064520

SHEET: C-5

DATE: Apr 17, 2019

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY
I-01	SODDED LAWN AREA	1,902 sf
I-02	PLANTING AREAS. WOOD MULCH. SEE SPECIFICATIONS.	12,412 sf
I-03	EXISTING TREES TO REMAIN. PRESERVE AND PROTECT.	

PLANT SCHEDULE

CONIFERS	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	QTY
	Abies concolor 'Candicans' / Candicans White Fir	B & B		6'	3
DECIDUOUS TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	QTY
	Fraxinus pennsylvanica 'Summit' / Summit Ash	B & B	1.5" Cal		2
	Prunus virginiana 'Canada Red' / Canada Red Chokecherry	B & B	1" Cal		2
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT	QTY		
AM	Arctostaphylos uva-ursi 'Massachusetts' / Massachusetts Manzanita	5 gal	33		
CE	Cercocarpus montanus / Alderleaf Mountain Mahogany	5 gal	7		
CF	Cornus stolonifera 'Farrow' / Arctic Fire Dogwood	5 gal	73		
Jb	Juniperus horizontalis 'Blue Chip' / Blue Chip Juniper	5 gal	41		
PB	Prunus besseyi 'Pawnee Buttes' / Sand Cherry	5 gal	53		
Rf	Rhamnus frangula 'Columnaris' / Tall Hedge Buckthorn	5 gal	10		
ANNUALS/PERENNIALS	BOTANICAL NAME / COMMON NAME	CONT	QTY		
Wg	Gaura lindheimeri / Wandflower	1 gal	46		
PF	Penstemon x 'Firebird' / Firebird Beard Tongue	1 gal	50		
GRASSES	BOTANICAL NAME / COMMON NAME	CONT	QTY		
M	Muhlenbergia montana / Mountain Muhly	1 gal	52		
Sg	Panicum virgatum / Switch Grass	1 gal	81		

PLANT REQUIREMENTS:

TOTAL SITE/LOT AREA: 45,371 SF

TOTAL INTERNAL LANDSCAPE REQUIRED (5%): 2,268.55 SF.
TOTAL INTERNAL LANDSCAPE PROVIDED: 12,583 SF.

TOTAL INTERNAL TREES REQUIRED: (2,268.55 SF/ 500 SF= 4.5 TREES, ROUNDED UP TO 5.
TOTAL INTERNAL TREES PROVIDED: 8. (3 CONIFERS, 2 SHADE TREES, 2 ORNAMENTAL TREES.)

TOTAL STREET TREES REQUIRED: 8.
TOTAL STREET TREES PROVIDED: 80 ADDITIONAL SHRUBS ADDED (10 PER TREE REQUIRED, BUT NOT ALLOWED IN THE PARKSTRIP/ROW).

DUE TO THE SCALE AND NATURE OF THE SITE, ONLY ONE HYDROZONE WAS NEEDED.

Name of project: QUICK QUACK CARWASH Date: 19 DECEMBER 2018

Climate zone (from Figure 4 of Landscape Policy Manual) - circle one:

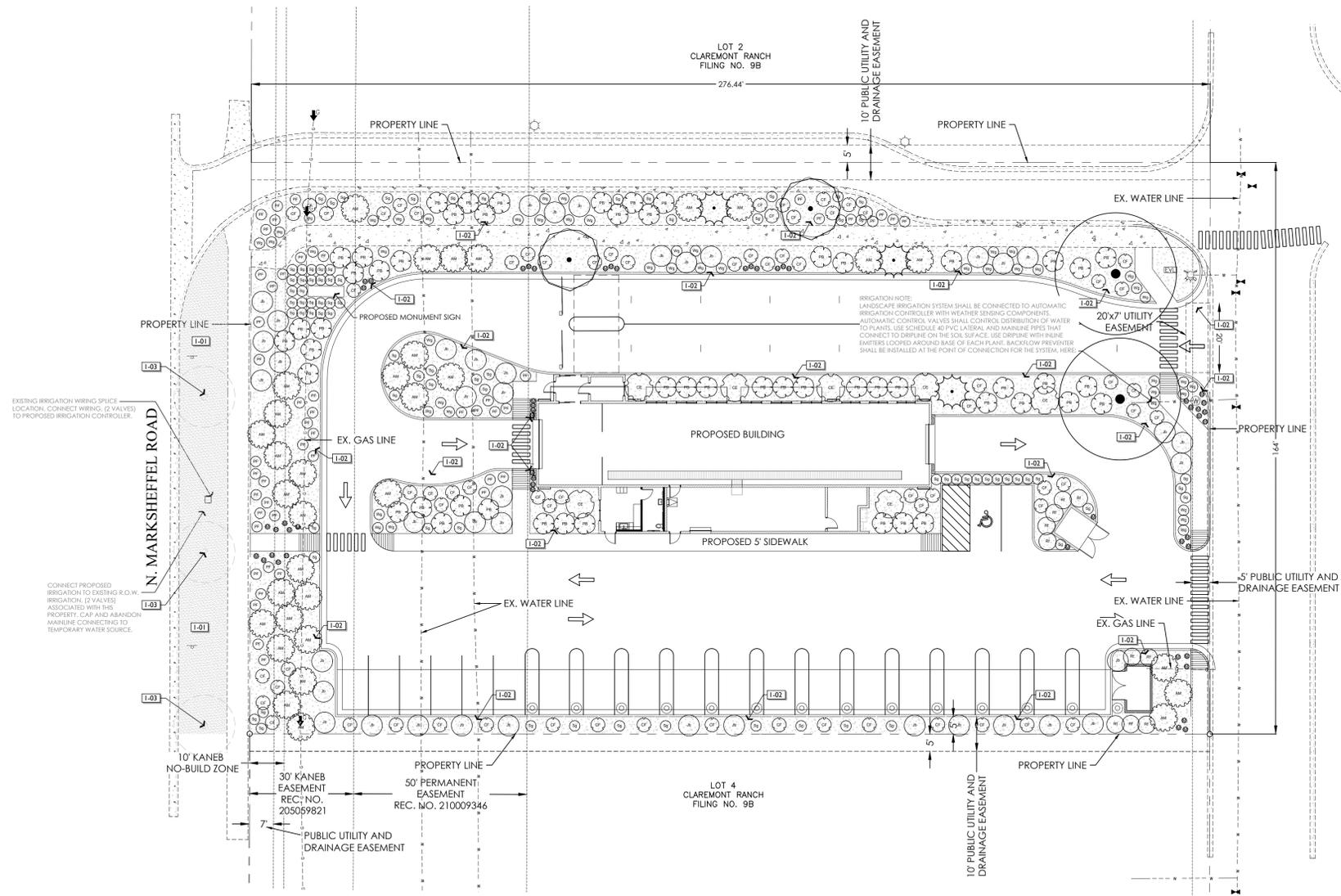
Foothills Foothills & Plains Plains

Plant Communities - to be labeled by number(s) on diagram:

- 1 — Semiarid Shrublands
- 2 — Pinon-Juniper Woodlands
- 3 — Prairie
- 4 — Lower Elevation Riparian
- 5 — Foothill Shrublands
- 6 — Ponderosa Pine Forest
- 7 — Upper Elevation Riparian
- 8 — Douglas-fir Forest

Hydrozones (supplemental water) - to be labeled by letter(s) on diagram:

- V - Very Low (0 to 7 inches per year)
- L - Low (7 to 15 inches per year)
- M - Moderate (15 to 25 inches per year)
- H - High (more than 25 inches per year)



NOTES:
SEE CIVIL ENGINEERING PLANS FOR SITE ZONING, GRADING AND OTHER PERTINENT INFORMATION.

ATTENTION: PRIOR TO PERFORMING ANY WORK ON THIS PLAN CONTRACTOR SHALL IDENTIFY THROUGH BUREAUCRACY AND ON-SITE OBSERVATION ANY AND ALL UTILITIES AND HAZARDS OR CONDITIONS THAT MAY PREVENT WORK FROM BEING PERFORMED ACCORDING TO THESE PLANS ABOVE OR BELOW GROUND. IF CONDITIONS ARE FOUND THAT MAY PREVENT WORK FROM BEING PERFORMED AS PER PLAN, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT PRIOR TO PROCEEDING. ANY DAMAGE TO UTILITIES SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY (I.E. ELECTRICAL, GAS, WATER SEWER, ETC.). EVERY EFFORT HAS BEEN MADE TO ENSURE ACCURACY WITH THESE DRAWINGS, QUANTITIES (IF AND IF LISTED ARE FOR REFERENCE ONLY). CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND QUANTITIES ON THESE PLANS. ARCHITECT SHALL NOT BE RESPONSIBLE FOR DISCREPANCIES BETWEEN QUANTITIES LISTED IN LEGENDS AND PLANS. WHERE DISCREPANCIES EXIST BETWEEN SPECIFICATIONS, DETAILS, AND/OR DRAWINGS, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT PRIOR TO PROCEEDING. CONTRACTOR SHALL INSPECT THE SITE TO VERIFY THAT DRAWINGS ARE CONSISTENT WITH SURVEYED BASE INFORMATION. DURING CONSTRUCTION IF DISCREPANCIES ARE FOUND BETWEEN THESE PLANS AND THE SITE, CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO PROCEEDING.

1"=20' (24"X36") NORTH

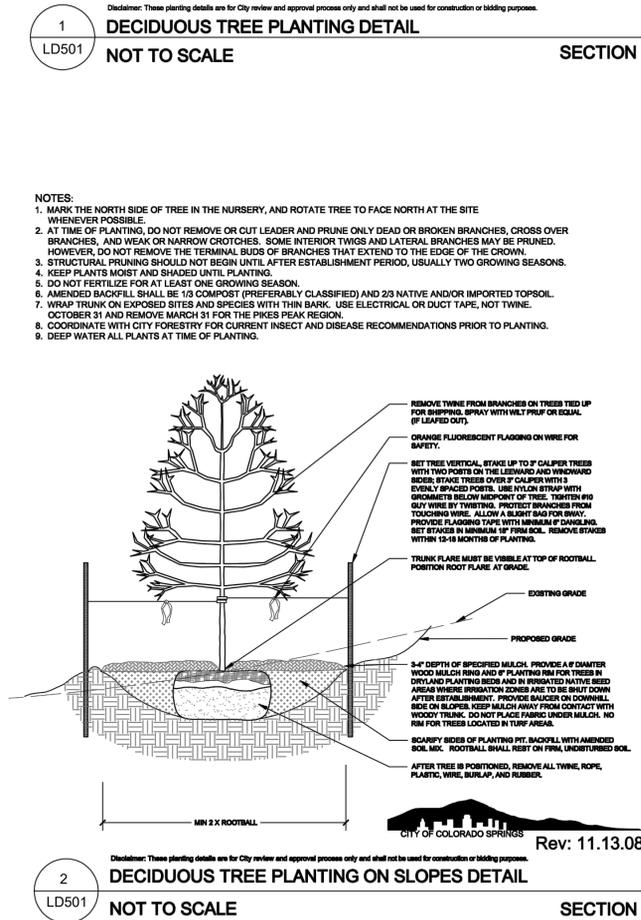
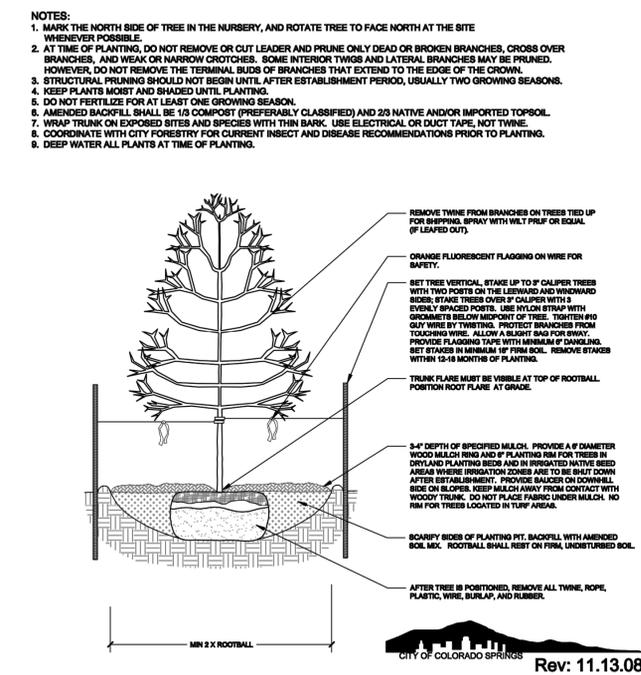
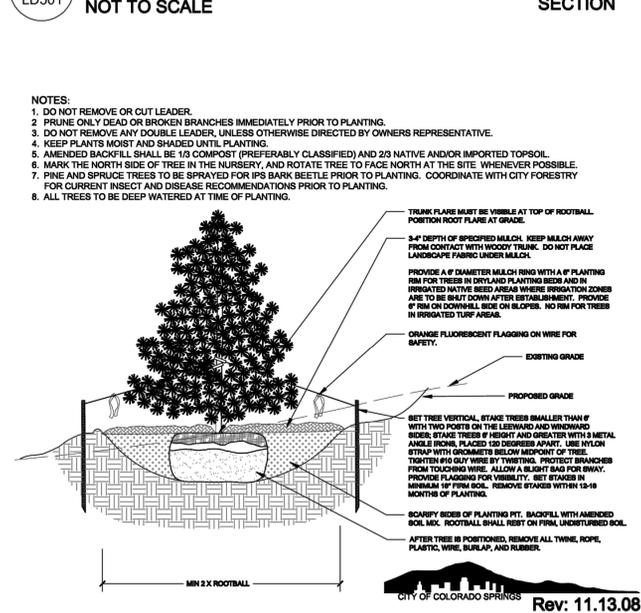
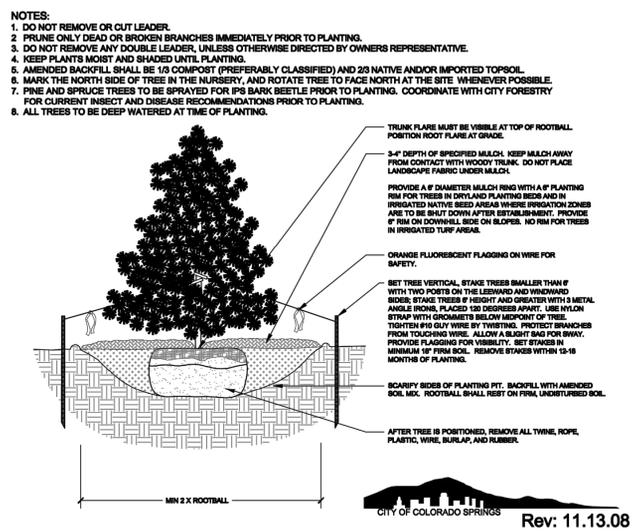
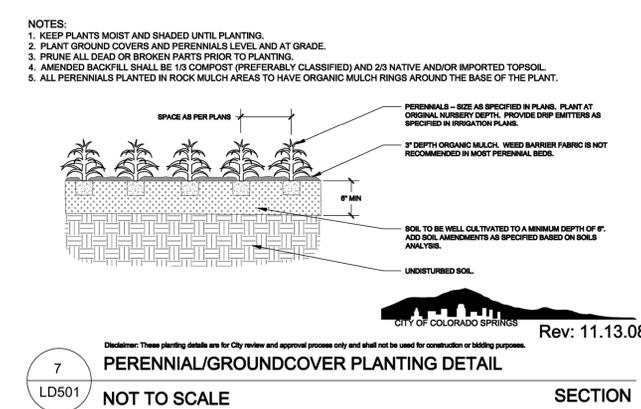
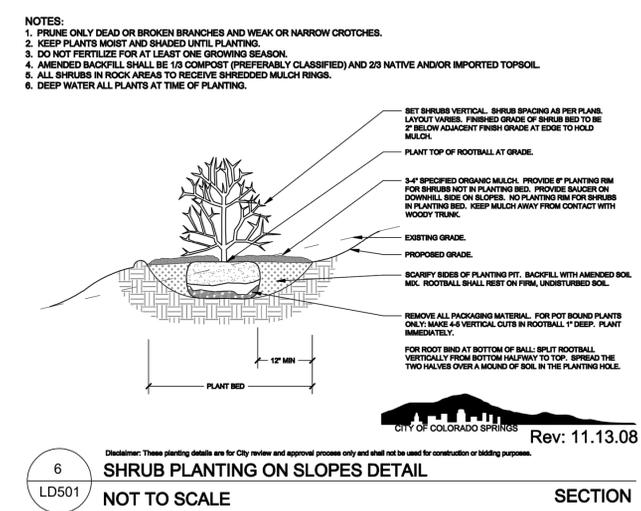
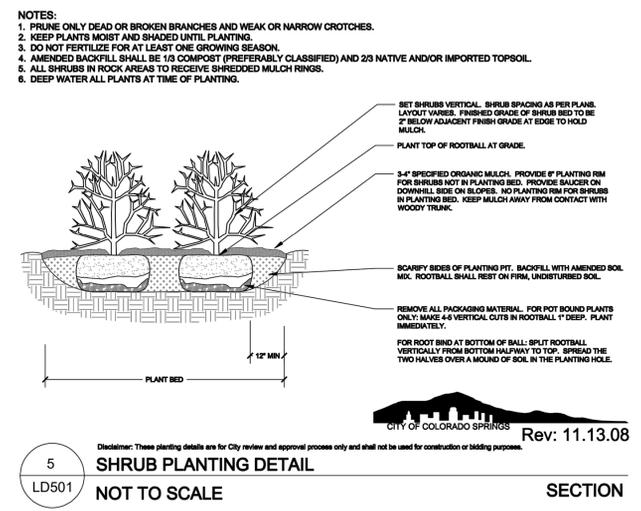


ENG/ARCH: ELEVATE
DRAWN BY: RAB
REVIEWED BY: RAB

DATE: 17 Apr 2019

PLANTING PLAN
LP101





ATTENTION: PRIOR TO PERFORMING ANY WORK ON THIS PLAN CONTRACTOR SHALL IDENTIFY THROUGH BLUESTAKES AND ON-SITE OBSERVATION ANY AND ALL UTILITIES AND HAZARDS OR CONDITIONS THAT MAY PREVENT WORK FROM BEING PERFORMED ACCORDING TO THESE PLANS ABOVE OR BELOW GROUND. IF CONDITIONS ARE FOUND THAT MAY PREVENT WORK FROM BEING PERFORMED AS PER PLAN, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT PRIOR TO PROCEEDING. ANY DAMAGE TO UTILITIES SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY (I.E. ELECTRICAL, GAS, WATER SEWER, ETC.). EVERY EFFORT HAS BEEN MADE TO ENSURE ACCURACY WITH THESE DRAWINGS, QUANTITIES (IF AND IF LISTED ARE FOR REFERENCE ONLY). CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND QUANTITIES ON THESE PLANS. ARCHITECT SHALL NOT BE RESPONSIBLE FOR DISCREPANCIES BETWEEN QUANTITIES LISTED IN LEGENDS AND PLAN. WHERE DISCREPANCIES EXIST BETWEEN SPECIFICATIONS, DETAILS, AND/OR DRAWINGS, CONTRACTOR SHALL INSPECT THE SITE TO VERIFY THAT DRAWINGS ARE CONSISTENT WITH SURVEYED BASE INFORMATION. DURING CONSTRUCTION IF DISCREPANCIES ARE FOUND BETWEEN THESE PLANS AND THE SITE, CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO PROCEEDING.



SECTION 1 - PLANT MATERIAL
PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. Work as evident on drawings and specified herein or required to complete all landscaping and shall include, but not necessarily limited to the following work:
 1. Furnish imported topsoil from outside sources as needed (see sub-section 2.01.)
 2. Ensure all necessary permits are obtained prior to construction and staging.
 3. Excavate trees/shrub pits.
 4. Provide and plant all materials indicated on plan and plant list.
 5. Stake and protect all trees and planted areas as specified and detailed.
- B. Clean all areas prior to Acceptance of the Work, including debris, stains, and dirt from walks and other surfaces.
- C. Related Sections:
 1. SECTION 2 - Turf Sod and Soil Preparation

SECTION 2 - Turf Sod and Soil Preparation

1.02 QUALITY ASSURANCE

A. Regulatory Requirements

- 1. Comply with applicable requirements of Federal, State and Local laws, regulations and codes having jurisdiction at the project site.
- Contractor shall be responsible for certificates of inspection of plant material that may be required by Federal and Local authorities as to accompany shipments of plants.
- Reference Standards
 1. "Standardized Plant Name" by the American Joint Committee of Horticultural Nomenclature.
 2. "American Standard of Nursery Stock" by the American Association of Nurserymen.
 3. American National Standards Institute (ANSI): Publication Z80.1.
- C. Substitutions
 1. Substitutions of plant material will not be permitted unless authorized in writing by the Landscape Architect. If proof is submitted that any plant specified is not obtainable, a proposal will be considered for use of the nearest equivalent size or variety with corresponding adjustment of Contract Price. Such proof shall be substantiated and submitted in writing to the Landscape Architect at least thirty (30) days prior to start of the work under this Section. These provisions shall not relieve Contractor of the responsibility of obtaining specified materials in advance if special growing conditions or other arrangements must be made in order to supply specified materials.

Source Quality Control

- 1. Plants shall be subject to inspection and approval by the Landscape Architect/Owner at place of growth and upon delivery for conformity to specifications. Such approvals shall not impair the right of inspection and rejection during progress of the Work. Submit written request for inspection of plant material at place of plant and quantity of plants to be inspected. The Landscape Architect reserves the right to refuse inspection at this time if, in his judgement, a sufficient quantity of plants is not available for inspection.
- 2. All plants may be inspected at the nursery by the Landscape Architect or Owner and shall be tagged with self-locking tags. Plants delivered to the site without these tags or with broken tags shall be sufficient reason for rejection.

Contractor's Qualifications

- 1. All bidders shall be required to present proof of their qualifications, contract sample, Utah state license, insurance coverage, experience, and ability to perform the scope of work set forth in these specifications according to the following contractor deadlines pending unforeseen delays related to the weather or other conditions outside the contractors control.

1.03 PROJECT PERSONNEL AND SITE PROTECTION

ATTENTION:

The Contractor shall have a designated foreman in direct and personal charge of the work, and the foreman shall be on the job at least eighty-five (85) percent of the working hours. The Owner's Authorized Representative may "shut down" the work under contract if the supervisor is not, in his opinion, adequate to protect the interests of the Owner. Such "shut down" time to be counted as working days and will not extend the time of the contract.

All existing site elements including but not limited to the following shall be protected: All existing utilities, existing hardscapes (drives/cuts/walks/patios), etc. shall be protected from impact damage of any sort, staining from heavy trucks or equipment, or other damage.

1.04 PACKAGING, DELIVERY, STORAGE AND HANDLING

A. Plants shall be properly marked for identification and for checking. Each block of plants and at least 25% of each variety of separate plants in any one shipment shall have legible labels securely attached upon delivery to the site.

Product Handling:

During hot weather and when practical, the contractor may be required to transport plant materials between sunset and sunrise if transported in an open trailer or un-refrigerated box.

Dug material should be maintained and watered as required at the nursery to guarantee their vitality and health until shipping.

Protect all trunks, stems, branches, and root balls during tree tying, wrapping and loading operations from damage.

Load balls or containers onto transport vehicle and secure in a manner that protects the structural integrity of the root balls.

The contractor shall be solely responsible for the safe transportation of plants to the site and their condition upon arrival. Trees damaged, dehydrated or abused during transit or storage will be rejected.

Plant materials shall not be stored on concrete or asphalt or left exposed to the sun.

Roots and balls of plants shall be adequately protected at all times from the sun and drying winds.

The Landscape Architect may inspect any phase of this operation and may reject any plant material improperly handled during any phase of this operation.

Nothing in this Section shall be interpreted as relieving the contractor of the responsibility of providing healthy, viable plants, nor shall it have any effect upon the terms of the warranty specified herein.

Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery, and while stored at the site.

Delivery and plantings, storage of dry bulk materials and other shall be coordinated with project General Contractor to ensure appropriate staging areas. Protect dry bulk materials from inclement weather conditions such as wind and moisture.

1.06 SUBMITTALS

A. Furnish two (1) copies of manufacturer's literature, plans, samples, certifications, delivery tickets, or laboratory analytical data for approval by the Landscape Architect prior to commencement of all work under this contract for the following items:

- 1. Specified granular and tablet Fertilizers (certification, rate of application and number to tablets per plant pit)
- 2. Weed control, Pre-emergent and anti-desiccant (certification)
- 3. Tree guys (literature)
- 4. Lawn Edging (literature) See plan.
- 5. Wood Mulch (sample)

Submit proposed plant placement schedule to owner, indicating dates for each type of landscape work during normal seasons for such work in area of site. Once accepted, revise dates only as approved in writing, after documentation of reasons for delay.

1.07 PROJECT WARRANTY

A. Warranty trees and other plant materials, for a period of one year after date of substantial completion, against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond Landscape Installer's control.

B. Remove and replace trees or other plants found to be dead or in unhealthy condition during warranty period. Replace trees or other plants that are in doubtful condition at end of warranty period, unless, in opinion of Architect, it is advisable to extend warranty period for a full growing season.

C. All replacements shall be plants of the same kind, size, and quality as originally specified and they shall be furnished, planted, guyed and maintained as specified at no additional cost.

D. Another inspection shall be conducted at end of extended warranty period to determine acceptance or rejection. Only one replacement (per tree or plant) will be required at end of warranty period, except for losses or replacements due to failure to comply with specified requirements.

PART 2 - PRODUCTS

2.01 SOIL, SOIL AMMENDMENTS

A. Topsoil may or may not be stockpiled on site for contractor use.

Contractor shall ensure the following amount of topsoil is found in all planter and lawn areas over a non-compacted sub-grade

- Planter Areas: 12 inch depth.

Contractor shall amend top soil on site based on the results of soil test.

Contractor shall have agronomy soils test performed or provide a soil certificate for proposed imported soil. Test results shall be submitted to Landscape Architect for approval prior to delivery of the topsoil to jobsite. Imported topsoil shall be obtained from well-drained arable land and shall be free from sub-soil, refuse, roots, heavy or stiff clay, stones 1 inch and larger in largest dimension, coarse sand, sticks, brush, litter, and other deleterious substances. Amend soil as needed to meet the below.

Soil Parameter	Acceptable	Ideal	Non-Ideal - Possibility Toxic	Notes
pH	5.5-6.4	6.0-7.5	<5.1* and >8.3*	low pH corrected by addition of lime (do not give amount needed); high pH difficult to correct--incise saline sodium problems if any and add with some fertility (most caused by high pH)
EC (dS/m)	<2.5	<1.0 to 1.5	>4.0 to 6.0	lower salt content by leaching with good quality water (use sodium problems if any prior to leaching)
CaCO ₃ (carbonates), %	<10	<5	>10 to 40	difficult to correct, generally requires more phosphorus and some micronutrient fertilizers
NaF (SPT)	<4.0 (3)	<4.0 (3)	>11 (14)	lower by addition of gypsum or similar (do not give amount needed)
OM %	>3.0	>3.0	>3.0	N/A
Sand %	<85%	<75%	N/A	N/A
Clay %	>2.0 (total of silt & clay)	>10 (total of silt & clay)	>10 (total of silt & clay)	N/A
CEC	>12	>15	>15	N/A
Color	red, brown, black (avoid gray & yellow)	N/A	N/A	N/A
Aggregates (3-6 mm) stability, not dispersed (SPT)	>1 hour	>2 hours	N/A	N/A
Saturated infiltration rate (as measured after a full irrigation)	>3.0 inch/hour	>4.0 inch/hour	<1.0 inch/hour	difficult to correct, select different soil
Subsoil drainage rate	>3.0 inch/hour	>3.0 inch/hour	<0.5 inch/hour	difficult to correct, select different soil
Bulk Density, g/cm ³	1.5-1.6	1.3-1.5	>1.7 to 1.8	correct with tillage, but does not always correct problem permanently
Moist. Cap. (mm)	400	400	less EC	add fertilizer to meet plant needs
P - base/neutralizing ppm	400	15-40 ppm	N/A	add fertilizer to meet plant needs; if P is high = environmental problem
Z - Zinc (Zn ppm) (only environmental)	400	20-80 ppm	N/A	add fertilizer to meet plant needs; if P is high = environmental problem
Z - Manganese (Mn ppm) (only environmental)	400	20-80 ppm	N/A	add fertilizer to meet plant needs
Iron (Fe ppm)	100-100	>300	N/A	add fertilizer to meet plant needs
Cu ppm	>300	>300	N/A	add fertilizer to meet plant needs
Mg ppm	>300	300-600	N/A	add fertilizer to meet plant needs
N	see NaF (SPT)	see EC	see EC	add fertilizer to meet plant needs
Z	400	>400	see EC	add fertilizer to meet plant needs
Zn ppm	>1.0	>1.0 to 1.5	>100	add fertilizer to meet plant needs if value is low; if too high then reject soil
Fe ppm	>1	>1 (and per 2.2 of sodium species)	unusually	add fertilizer to meet plant needs if value is low; if too high then reject soil
Mn ppm	>1	>1	>100	add fertilizer to meet plant needs if value is low; if too high then reject soil
Cu ppm	0.2 to 0.3	0.4 to 0.5	>100	add fertilizer to meet plant needs if value is low; if too high then reject soil
Cl ppm	0.8 to 1.0	1.2	>4	add fertilizer to meet plant needs if value is low; if too high then reject soil
Ca ppm	400	12-15%	>170, 300	add fertilizer to meet plant needs if value is low; if too high then reject soil
*Na ppm	0.10	0	>30, 200	if high, note soil pH for greater than 5.3 with time (see pH)

2.02 PLANT MATERIALS

A. Plants shall be typical of their species and variety, have normal growth habits, well developed branches, dense foliage, vigorous, fibrous root systems.

Plants shall be free from defects and injuries. All shipments of plant stock shall comply with existing State and Federal laws and regulations governing plant disease and infection and interstate movement of nursery stock.

Quality and size of plants, spread of roots, and size of balls shall be in accordance with USA-290.1-1973, "American Standard for Nursery Stock" as published by the American Association of Nurserymen. The caliper of trees shall be measured six (6) inches above the surface of the ground. Plant lists indicate minimum size requirements only. Plant materials shall be equal to or greater in size than those specified.

Plants shall not be pruned before planting.

All trees must have straight trunks with single leader intact, except in the case of specimen plants or otherwise indicated by the plan. Bark shall be free of abrasion, all cuts over 1-1/4" shall have callused over.

Trees shall not be accepted which have had their leaders cut or which have leaders damaged so that cutting is necessary.

Trees and shrubs shall be true to name.

Upon request, Contractor shall furnish the landscape architect a list indicating the source of each of the different plants to be supplied.

All Plants shall be ball and burlap or container grown unless otherwise indicated on the Plant Material List.

All plants shall be even in growth with balanced root and top growth and shall be No. 1 in grade or type conforming to the latest edition of American Standard for Nursery Stock.

Plant material shall be nursery grown and shall have received the proper fertilizing, watering, root pruning and such other care as is normally given for a particular plant under nursery conditions. All plants shall be hardy under climate conditions similar to those in the locality of the project.

All material shall be freshly dug according to American Standard for Nursery Stock. All ball and burlap material shall be of firm earth from the original soil in which the plant grew. The ball shall be wrapped with burlap and lightly tied or enclosed in a tight fitting wire basket to hold it firm and intact. Any plants with broken or loose balls or manufactured balls will be rejected.

All plant material in containers shall have been established in that container. Any newly potted material will be rejected.

2.03 FERTILIZER FOR PLANT MATERIAL

A. Fertilize trees and shrubs with a fertilizer tablet having a slow release nitrogen, phosphorus and potash (20-10-5) plus sulphur and iron formulation. 21 gram tablets manufactured by Agfiron or equal. Jobe Tree Spikes are acceptable.

Erection: Position plant in hole and backfill by 1/2 the ball root height. Place tablet(s) beside the root ball about 1 inch from root tips. Do not place tablets in the bottom of the plant hole. Complete backfill, tamp and water.

- 1/2 Gallon Size: 1 Tablet
- 3/5 Gallon Size: 3 Tablets
- 15 Gallon Size: 7 Tablets
- 1 1/2" Caliper Trees: 6 Tablets
- 2" Caliper Trees: 8 Tablets
- 3" Caliper Trees: 12 Tablets

Any fertilizer that becomes caked or otherwise damaged, making it unsuitable for use will not be accepted.

2.04 ORGANIC/INORGANIC MULCH

Provide and place minimum three inch depth of medium wood mulch. Mulch shall be brown in color. No weed barrier fabric shall be installed under organic mulch. Submit sample to owner for approval prior to bulk delivery.

2.05 WEED CONTROL / PRE-EMERGENT

During construction, landscape contractor shall ensure all installed landscaped areas remain weed free. All spray applied weed control shall be applied by a certified chemical applicator and shall adhere to all local and state governing codes and manufacturer's recommended application rates and processes. Contractor shall be aware of high wind conditions and shall in no case apply weed control during a wind event that may carry product beyond it's desired location.

Pre-Emergent weed killer shall be granulated and shall be "Triflan" or "Dacthal" or approved 12 month weed preventer. Product shall be delivered to the site in its original container, bearing the manufacturer's label and instructions for handling and application. Pre-Emergent shall be applied by landscape contractor following final topsoil grade and plant placement and prior to organic mulch placement. Care shall be taken to avoid spreading of Pre-Emergent on adjacent hardscapes and lawn areas. Ensure proper coverage as per manufacturer's recommendation.

PART 3 - EXECUTION

3.01 GENERAL

A. Before commencing Contractor shall become familiar with and obtain any necessary permits required for staging and performing work on the property according to Colorado Springs City or other governing ordinances.

B. Proceed with and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.

C. Plant or install materials during normal planting seasons for each type of landscape work required. Correlate planting with specified maintenance periods to provide maintenance from date of substantial completion for that portion of the work. Actual planting shall be performed only when weather and soil conditions are suitable and in accordance with locally accepted practice and as approved by the landscape architect.

D. Contractor shall be responsible to determine location of all underground utilities and perform work in a manner which will in all cases avoid possible damage. Hand excavate, as required. Low voltage and line voltage electrical lines may exist throughout the site as well as drain lines and sumps. Very all locations with General Contractor.

E. The Contractor is responsible for all damage to these utilities. In the event that damage to existing utilities is found, the owner shall coordinate the repair and labor to fix the work and shall back charge the contractor for these services.

F. Contractor shall only layout quantity of plantings that can be installed same day. Following layout of plantings as per plans and prior to planting, landscape architect shall inspect layout for approval and may adjust as necessary prior to installation. Landscape contractor shall notify landscape architect 48 hours in advance of plants being placed.

G. If underground construction, obstructions, or large rocks are encountered in excavation of planting areas, other locations for the planting may be selected by the landscape architect.

H. Plant totals are for convenience only and are not guaranteed. Verify amounts shown on drawings. All planting indicated on drawings is required unless indicated otherwise.

3.02 PREPARATION OF PLANTING BEDS

A. The Contractor shall furnish and spread topsoil on planting bed areas as required to meet lines, grades and elevations as needed, after light rolling and natural settlement. Finish grade of all planting bed areas shall be minimum of 4 inch below grade of any adjacent hardscape to allow for 3" depth of organic mulch.

B. Where possible, light equipment shall be utilized to deliver and spread topsoil to planter areas. Sub-grade or topsoil shall not be driven on, placed or spread when ground is muddy from precipitation. Allow ground to adequately dry to avoid compaction of sub-grade and topsoil.

C. Fine grade planting bed areas to smooth, even surface with loose, uniformly fine texture. Roll, rake and drag planting bed areas, remove ridges and fill depressions, as required to meet finish grades. Limit fine grading to areas which can be planted immediately after grading.

D. Beds shall be raked smooth and put in first class condition before final acceptance and placement of pre-emergent weed control and organic mulch.

3.03 EXCAVATION FOR PLANTING

Obstruction Below Ground: Do not plant any plant with a large obstruction directly below the root ball. In the event that rock or obstructions are encountered in any planter pit excavation, alternate locations may be selected by the Landscape Architect.

Drainage: In the event that impervious rock or hardpan is encountered during digging operations, in tree pits or shrub pits, it shall be the responsibility of the Landscape Contractor to ensure proper drainage in all pits. Minimum drainage requirements shall be the loss of water at the rate of 6" drop in water level per hour. All rock or hardpan encountered shall be disposed of from the site.

Holes for trees and shrubs shall be three times (3x) the ball diameter for trees and two to three times (2-3x) the ball diameter for shrubs as per planting details where possible. Subsoil excavated from tree and shrub pits may be used as backfill material for planting if it is free from sub-soil, refuse, roots, heavy or stiff clay, stones 1 inch and larger in largest dimension, coarse sand, sticks, brush, litter, and other deleterious substances. Mix excavated soil by 50% volume with imported topsoil to backfilling.

Tree rings in lawn areas, if any, shall be circular in outline, with a diameter at least two (2) feet greater than the diameter of the ball of each plant to be planted and edged with specified edging.

Where turf areas are damaged by planting operations, they shall be replaced by equal quality turf by the Landscape Contractor at no cost to the Owner.

Remove debris, rock, and other deleterious material excavated from plants pits from the site.

3.04 SETTING AND BACKFILLING PLANTS

Planting Plants: Plants shall be set with the root ball at the same natural relationship as it had in the nursery. The top of the root ball should be 1-2" above the finished grade. Plants shall be handled by the root ball, not by the trunk or by the stems. Balls must be handled carefully and the trees must be skidded (not dropped) into the hole.

Place specified fertilizer tablets as specified.

Backfill shall be worked around the ball and tampered to eliminate air pockets. Water plants when the hole is two-thirds (2/3) full of backfill.

At this point, any tie wire, burlap, grow bags, etc., tied or wrapped around the stem or plant ball shall be loosened and pulled away from the plant. The burlap on the ball shall be laid back from the top of the ball and any excess burlap and ties shall be cut off and removed from the planting except where wire cage prohibits removal of burlap. Wire cage shall not be removed.

Soil treatment: A pre-emergent herbicide such as "Dacthal" or "Triflan" or an approved equal shall be delivered to the site in its original container, bearing the manufacturer's label and instructions for handling and application. All trees and shrubs are to receive pre-emergent.

All plants shall be watered and straightened the same day as planted. No holes will be left open over night.

Container grown plants shall have containers cut open and the plants carefully removed so that the earth around roots of plant remain unbroken. Plants shall then be planted in the same manner as ball plants.

Plant trees after final grades are established and prior to planting/placement of lawns, unless otherwise acceptable to landscape architect. If planting of trees occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

All plant material must be watered the same day it is planted in order to comply with these specifications. Any plant not watered at the time of planting may be rejected at the option of the landscape architect.

As needed, the Contractor shall hand newly planted trees twice a week for eight weeks with a minimum of five (5) gallons per tree per watering unless irrigation system is in place and provides adequate water.

All plant material shall be staked and guyed as shown on detail. The stakes will be driven after the tree has been set-in, but before backfilling begins so as to avoid damage to the roots. Any deviation will not be accepted.

3.05 PROTECTION AND CLEAN-UP

A. The Contractor shall remove at the end of each day: excess soil and other litter from roads or other hardscape surfaces (curbs/gutters, walks, driveways, stone patios, steps, walls, decks etc.) and other waste material. All planting sites shall be left in a condition acceptable to the landscape architect. If any remedial action is necessary by the landscape architect, the cost of such action (\$50.00 minimum) shall be withheld from payment due the Contractor. Delays in clean-up caused by weather conditions are to be reported to the landscape architect on the day such delays occur, together with an estimate of when clean-up can be affected.

3.06 INSPECTION AND ACCEPTANCE

A. When landscape work is completed, including maintenance, landscape architect may, upon request, make an inspection to determine acceptability.

B. When inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until inspected by Landscape Architect and found to be acceptable. Remove rejected plants and materials promptly from the project site.

C. Final acceptance shall require that the site be clean and free of any signs of construction in progress. All hardscape areas shall be in like new condition including public streets adjacent to the property that were affected by the construction process.

SECTION 2 - TURF SOD AND SOIL PREPARATION
PART 1 - GENERAL

1.01 SCOPE OF WORK

The Work under this Section shall consist of furnishing all turf, materials and incidentals needed to install topsoil and turf grass in accordance with these Specifications.

1.02 QUALITY ASSURANCE

A. Comply with federal, state and local laws requiring inspection for plant disease and infestations. Inspection certificates required by state law shall accompany each shipment and be delivered to the Construction Project Representative.

Personnel: Employ only qualified personnel familiar with required work.

1.03 SUBMITTALS

Product Data: The Contractor shall submit as part of the project submittal package, two (2) complete sets of the supplier's guaranteed statement of:

- 1. Composition, mixture, percentage of purity and germination for variety of sod, specified herein for approval by the landscape architect.
- 2. Certificate of lawn fertilizer.
- 3. Laboratory analytical data of imported topsoil (if required)

PART 2 - PRODUCTS

2.01 TOPSOIL

A. Contractor will be responsible for placement and amendment of topsoil. Contractor shall use existing on-site topsoil and shall provide imported topsoil as needed.

Contractor shall ensure the following amount of topsoil is found in all lawn areas over a non-compacted sub-grade

- Lawn Areas: 6 inch depth.

Contractor shall have agronomy soils test performed on any proposed imported soil. Test results shall be submitted to Landscape Architect for approval prior to delivery of the topsoil to jobsite. Imported topsoil shall be obtained from well-drained arable land and shall be free from sub-soil, refuse, roots, heavy or stiff clay, stones 1" inch and larger, in largest dimension, coarse sand, sticks, brush, litter, and other deleterious substances. See soil requirements in Section 1, Part 2.01.

2.02 LAWN

Contractor to recommend a drought tolerant bluegrass blend to landscape architect for approval prior to commencement of all work under this contract. Provide sod of uniform pad sizes with maximum 5% deviation in either length or width. Broken pads or pads with uneven ends will not be accepted. Sod pads incapable of supporting their own weight when suspended vertically with a firm grasp on upper 10% of pad will be rejected.

A full and healthy stand of grass shall be actively growing.

Each grass type shall only come from one (1) farm location. If additional sources for each grass type is needed due to availability from original source, contractor shall submit proof (soils analysis) that the farm has similar soil type for growing sod.

Sod shall be farm-grown on a sand based soil type. (No Clay loam soil sources shall mix with sandy loam soil sources).

If the sod for each grass type comes from more than one location, during the submittal phase, the contractor shall submit a map or diagram of the project site to the Landscape Architect proposing where the sod sources will be installed on site; grouping the same sod sources together.

2.03 FERTILIZER

A Fertilizer shall be a complete mixture, analyzing sixteen (16%) Nitrogen; sixteen (16%) Phosphoric Acid; and eight (8%) Pot Ash, of commercial type and applied at a rate of six (6) pounds per thousand (1000) square feet of area.

PART 3 - EXECUTION

3.01 PREPARATION OF SOILS

Report any unusual subsoil condition (ie. roadbase, rocks, etc.) that will require special treatment to the landscape architect.

Where possible, light equipment shall be utilized to deliver and spread topsoil to lawn areas. Sub-grade or topsoil shall not be driven on, placed or spread when ground is muddy from precipitation. Allow ground to adequately dry to avoid compaction of sub-grade and topsoil.

Limit preparation to areas that will be planted promptly after preparation.

Surface drainage shall be ensured and, if shown, shall be directed in the manner indicated on the drawings. Fill low spots and pockets with topsoil and grade to drain properly.

The Contractor shall ensure 6 inches of topsoil in sodded areas or as required to meet lines, grades and elevations shown, after light rolling and natural settlement.

Finish grading shall consist of loosening sub-grade and placing soil, as specified. Bring areas to uniform grade by floating or hand raking. Make minor adjustments of finish grades at the direction of Landscape Architect.

All rocks half inch and larger and non-conforming foreign matter such as building rubble, concrete, wire, cans, sticks, etc., shall be removed from topsoil during finish grading.

Fine grade lawn areas to smooth, even surface with loose, uniformly fine texture. Roll, rake and drag lawn areas, remove ridges and fill depressions, as required to meet finish grades. Limit fine grading to areas which can be planted immediately after grading.

Allow for sod root mass and blade height thickness in areas to be sodded.

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	LMF	Lum. Lumens	Lum. Watts	Part Number
	8	T1	SINGLE	1.000	N.A.	30	RS-30WLED-DO-xx-120
	4	SF1	SINGLE	1.000	17291	130	OSQ-A-NM-4ME-K-57K-UL-xx
	20	LFL8	LFL 8FT	1.000	N.A.	70	LFL-A-8-DO-UL-SV-53K-SA
	2	LFL4	SINGLE	1.000	N.A.	35	LFL-A-4-DO-UL-SV-53K-SA
	2	F10	WALL MOUNT	1.000	2490	19	XSPW-B-WM-3ME-2L-57K-UL-BZ
	4	F1	SINGLE	1.000	4584	66	FLD-OL-SN-D2-14-E-UL-SV-700
	1	SF1-alt wBLS	SINGLE	1.000	8950	86	OSQ-A-NM-4ME-B-57K-UL-xx w_OSQ-BLSLF

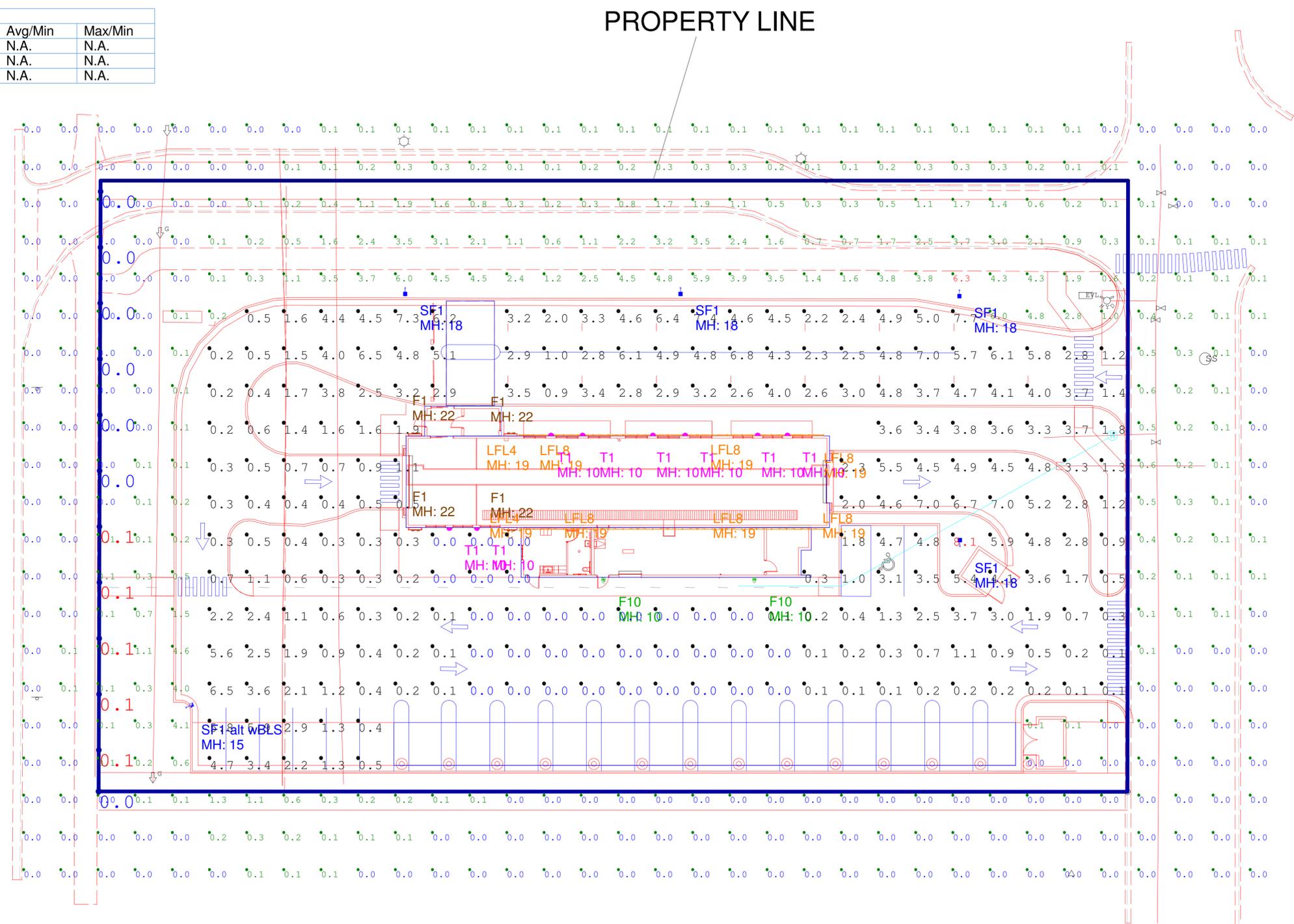
Canopy lights are not shown on the layout.
 Canopy lights are downward facing and should not be cause of glare due to angle and degree of canopy sloping.

Calculation Summary (Footcandles calculated using initial lumens @25°C)						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
West Property Line	Fc	0.04	0.1	0.0	N.A.	N.A.
Pavement	Fc	2.17	8.1	0.0	N.A.	N.A.
Off Pavement	Fc	0.50	6.3	0.0	N.A.	N.A.

FIXTURE MOUNTING HEIGHTS:
 POLE MOUNTED - 18' AFG (16' POLE + 2' BASE)
 POLE MOUNTED - 15' AFG (13' POLE + 2' BASE)
 CANOPY - 12' AFG

ADDITIONAL EQUIPMENT REQUIRED:
 (5) CL-SSP-4011-16-D5-xx (16' x 4" SQUARE POLE, 3@90° MOUNT)
 (1) CL-SSP-4011-13-D5-xx (13' x 4" SQUARE POLE, 3@90° MOUNT)
 PROPOSED POLES MEET 120MPH SUSTAINED WIND LOADS
 (6) OSQ-DAxx DIRECT ARM MOUNT

***CUSTOMER TO VERIFY MOUNTING, VOLTAGE, AND COLOR PRIOR TO PLACING ORDER



Illumination results shown on this lighting design are based on project parameters provided to Cree, Inc. used in conjunction with luminaire test procedures conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting or energy code.

Project Name: QQ - 2437 Marksheffel Rd., Colorado Springs, CO 80951

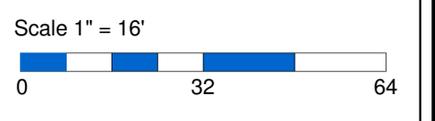
SR-34704

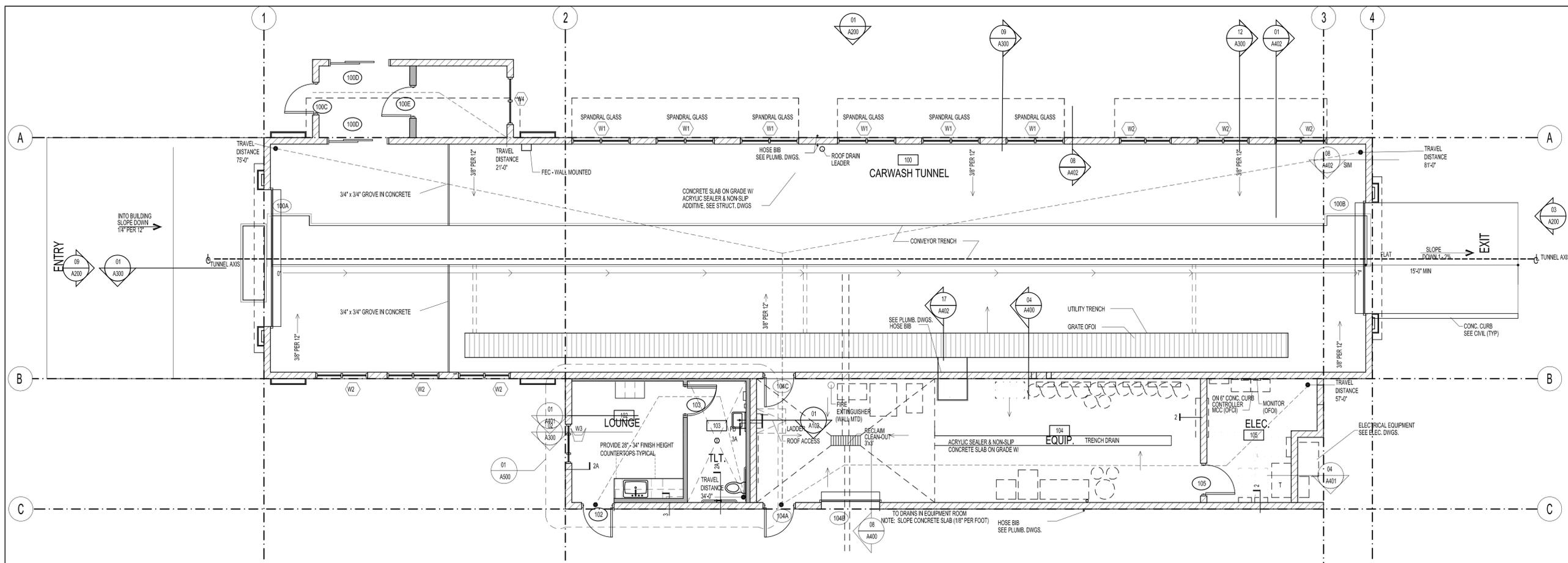
Footcandles calculated at grade

Filename: QQ-181210CSCOBFR3.AGI

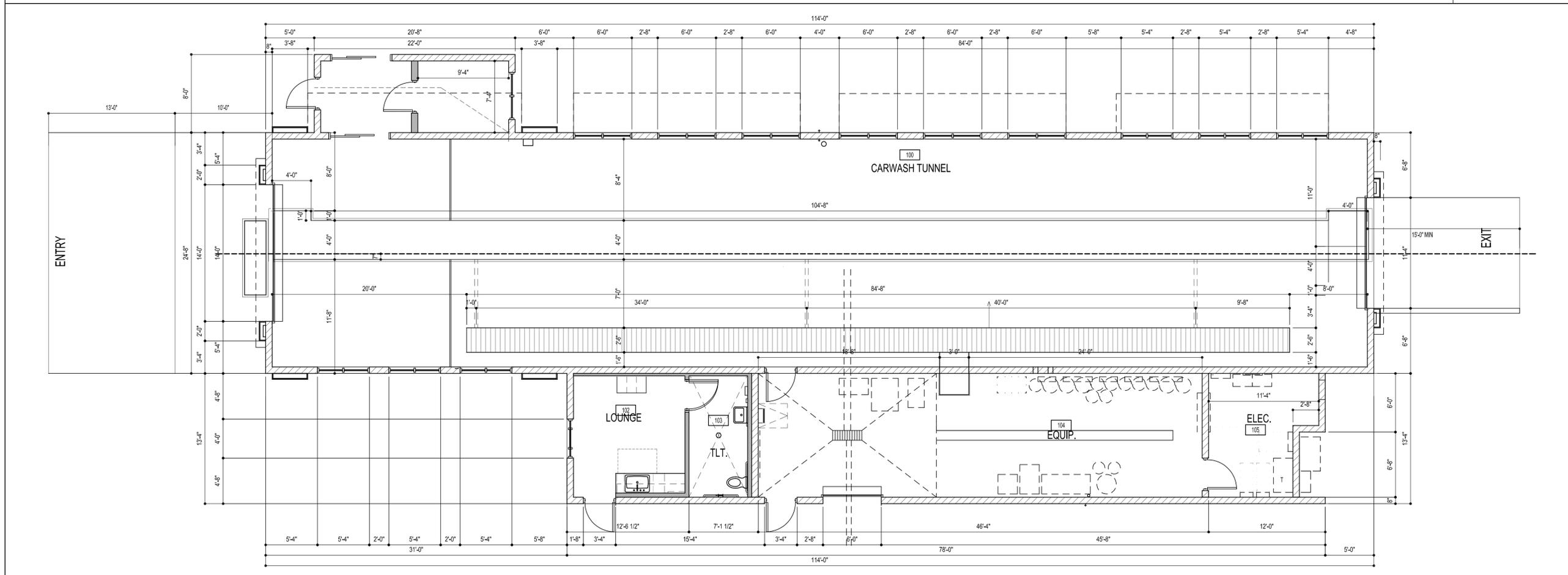
Layout By: Ben Foster

Date: 4/11/2019





ANNOTATION FLOOR PLAN SCALE: 3/16" = 1'-0" 02



DIMENSION FLOOR PLAN SCALE: 3/16" = 1'-0" 01

PROJECT NOTES

ALL EXTERIOR WALL TO BE FILLED WITH PERLITE INSULATION

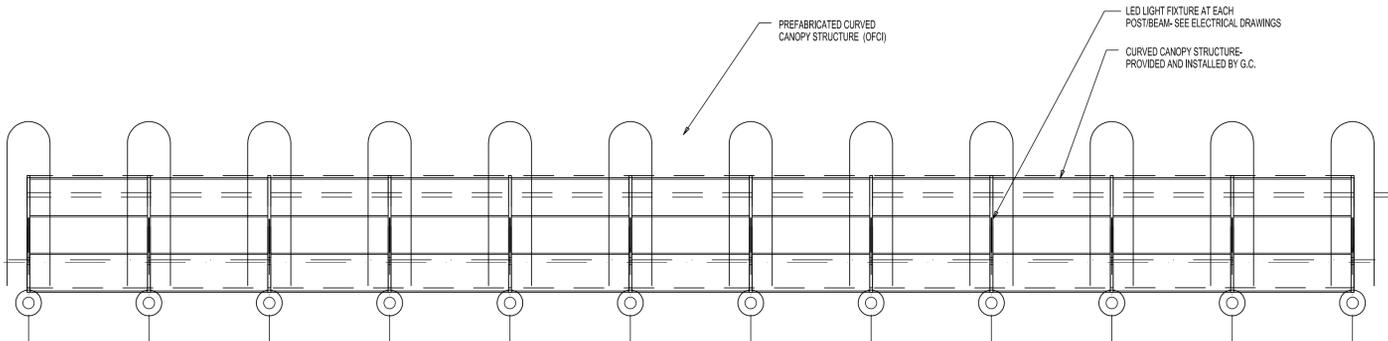
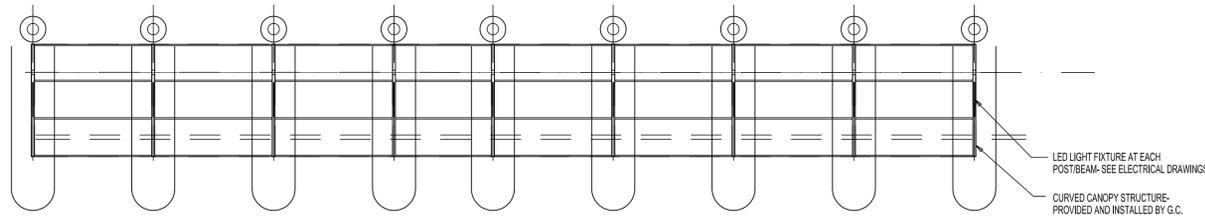
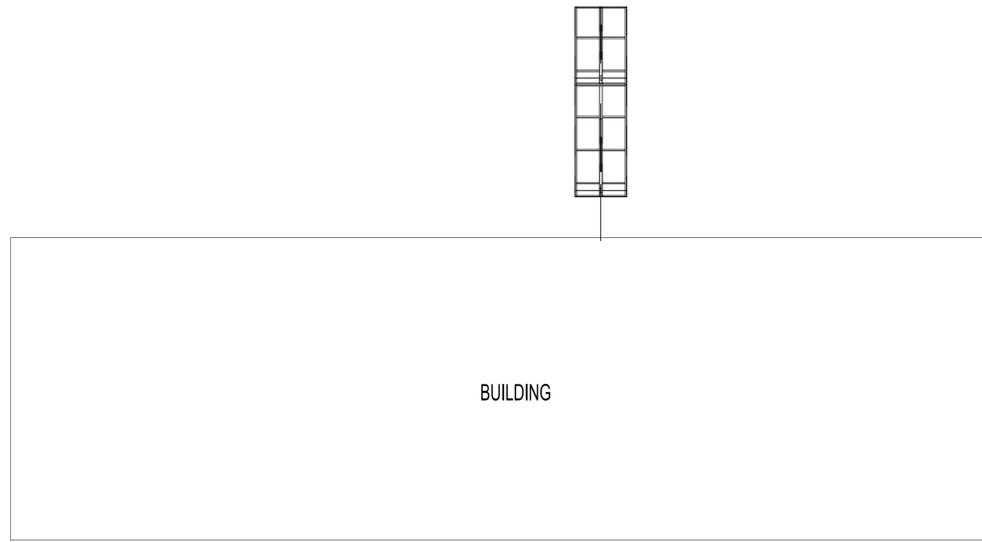
Service counters 36 maximum height. Also areas used for check writing must have an area that is no more than 34 inches maximum in height. Work service counters 28-34 inches maximum in height ANSI 904.4.2 & 904.4.3 (Front Reception Counters and Breakroom)

PROJECT TITLE
Constitutional and Marksheffel



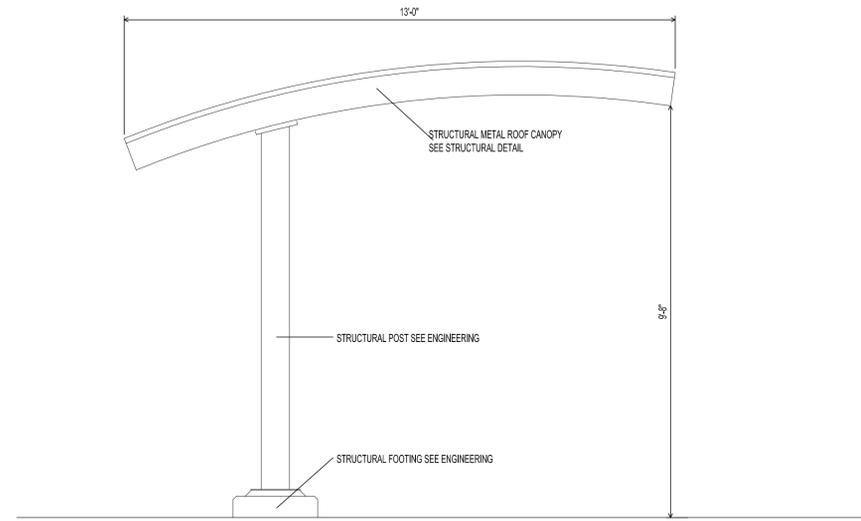
DATE: November 29 2018
REVISIONS:

A100

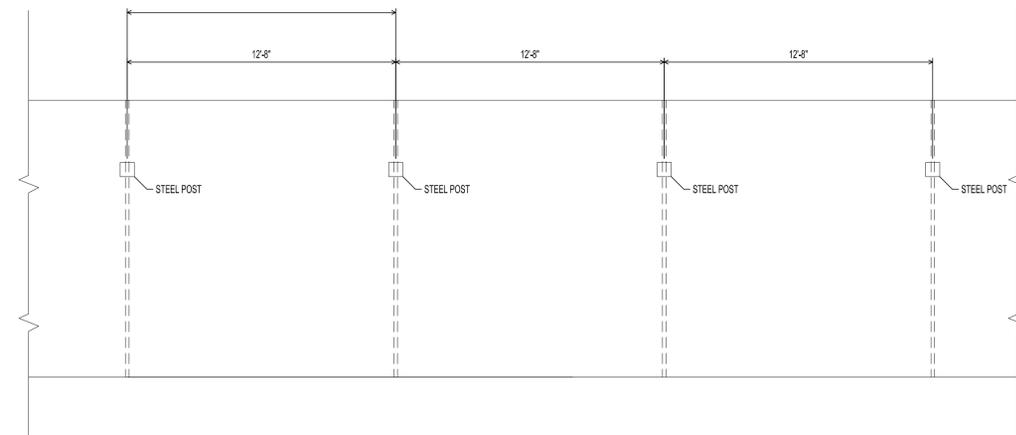


TYPICAL BASIC LAYOUT VERIFY WITH SITE FOR FINAL LOCATION AND LAYOUT

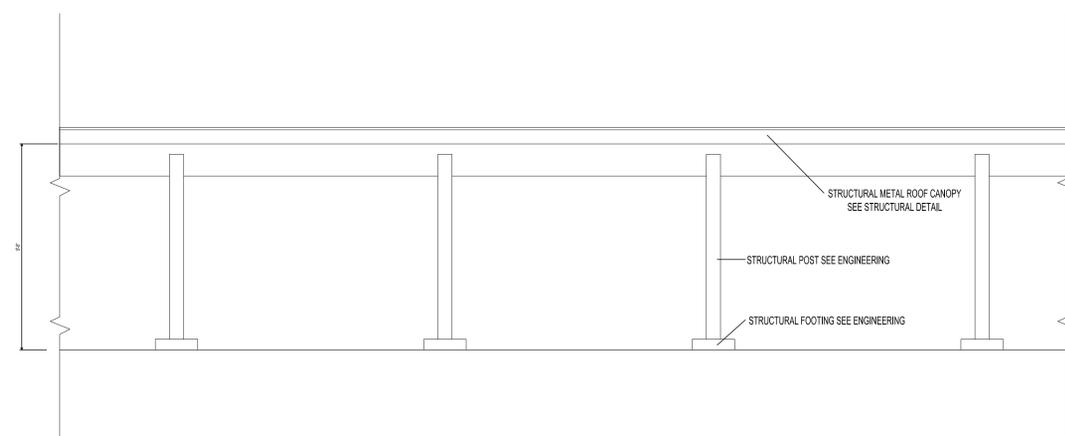
TYPICAL BASIC LAYOUT SCALE: 1"=10'-0" 04



CANOPY SECTION SCALE: N.T.S. 03



CANOPY ELEVATION SCALE: N.T.S. 02



CANOPY ELEVATION SCALE: 1"=10'-0" 01

PROJECT NOTES
CANOPY IS TYPICAL FOR BOTH THE VACUUM AND PAY STATION

PROJECT TITLE
Constitutional and Marksheffel

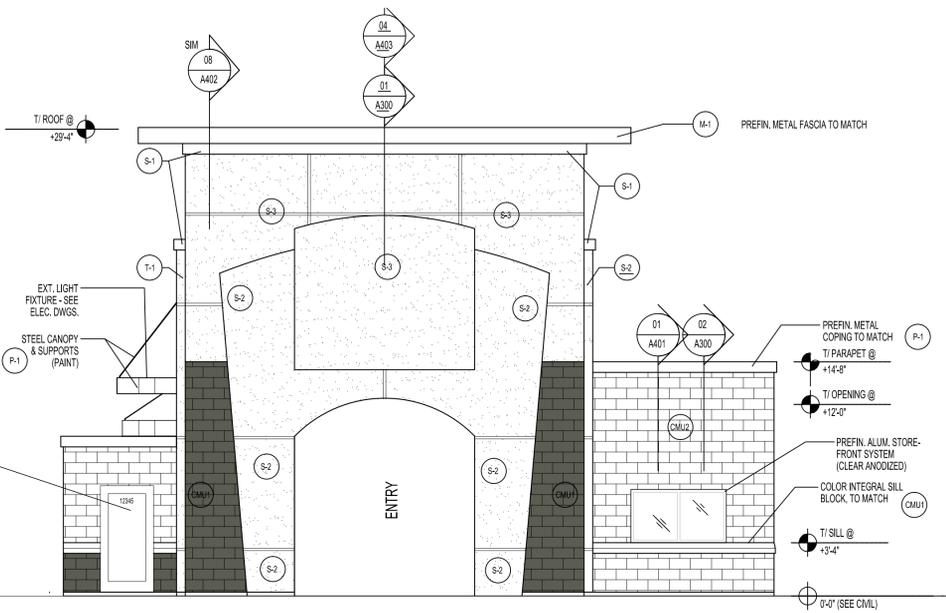


DATE: February 23, 2019
REVISIONS:

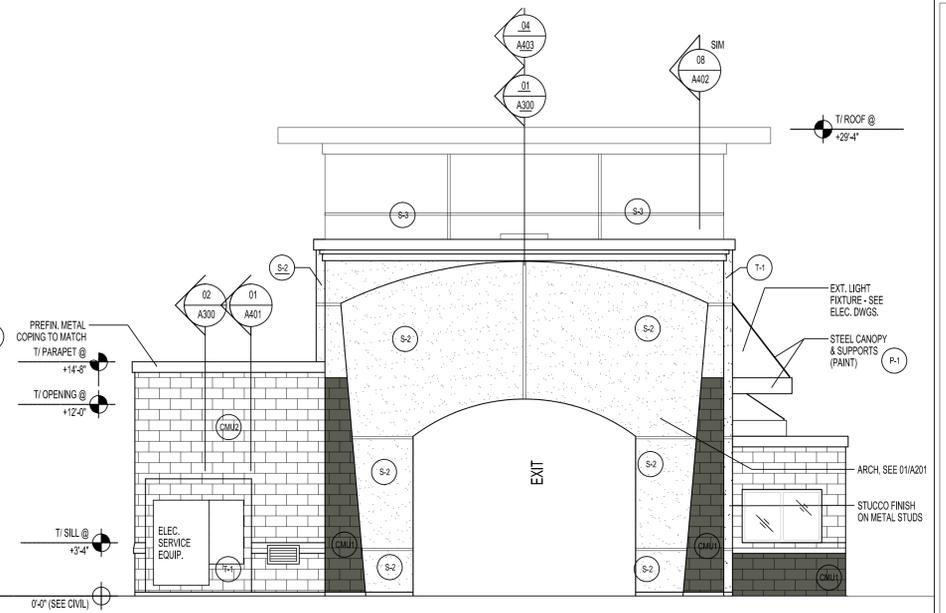
A104

EXTERIOR FINISH SCHEDULE		
LABEL	MATERIAL	COLOR / MANUFACTURER
CMU1	SPLIT-FACE CMU	INTEGRAL COLOR (DARK GREY) TO MATCH SW 7025 "BACKDROP"
CMU2	SMOOTH-FACE CMU	INTEGRAL COLOR (LIGHT GREY) TO MATCH SW 7638 "JOGGING PATH"
S-1	STUCCO	MATCH SW 6755 "STARBOARD" (GREEN)
S-2	STUCCO	MATCH SW 6903 "CHEERFUL" (YELLOW)
S-3	STUCCO	MATCH SW 7024 "SNOWBOUND" (WHITE)
P-1	PAINT	SW 6755 "STARBOARD" (GREEN)
P-2	PAINT	SW 6903 "CHEERFUL" (YELLOW)
P-3	PAINT	SW 7025 "BACKDROP" (DARK GREY)
M-1	STANDING SEAM ROOFING	MATCH SW 6755 "STARBOARD" (GREEN)

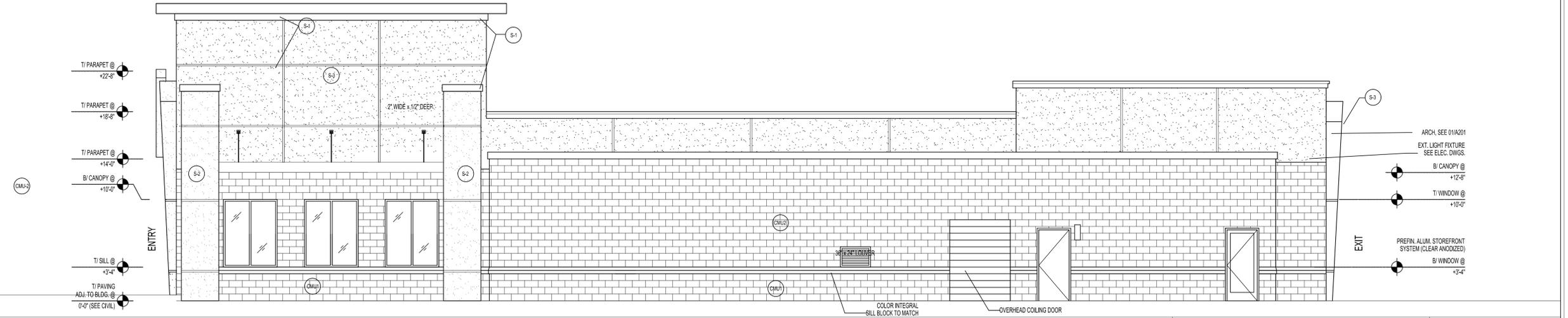
Provide approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm).
Verify Approved Address With Eagle Mountain



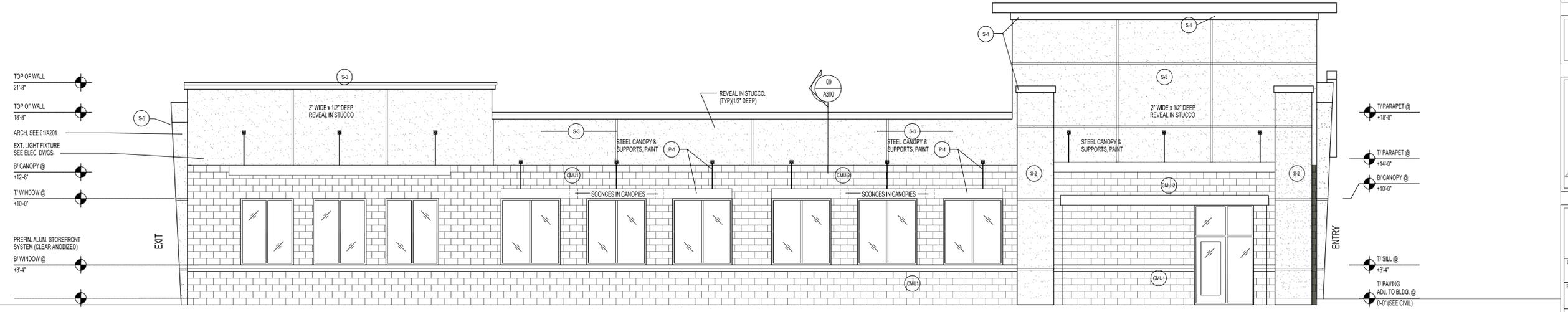
EXTERIOR ELEVATION SCALE: 3/16" = 1'-0" 04



EXTERIOR ELEVATION SCALE: 3/16" = 1'-0" 03



EXTERIOR ELEVATION SCALE: 3/16" = 1'-0" 02



EXTERIOR ELEVATION SCALE: 3/16" = 1'-0" 01

PROJECT NOTES

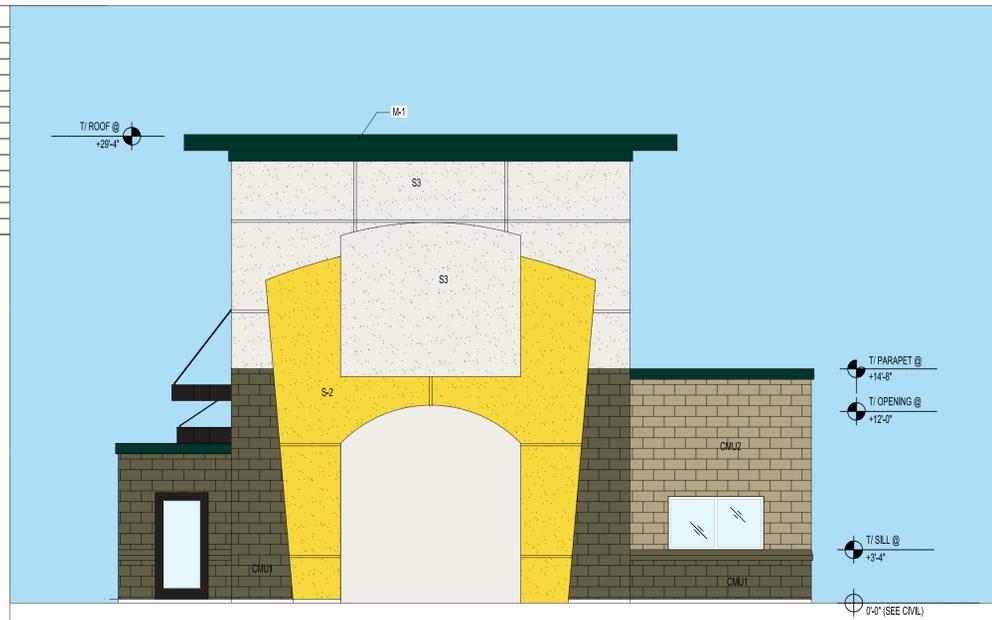
PROJECT TITLE
Constitutional and Marksheffel



DATE: November 29 2018
REVISIONS:

A200

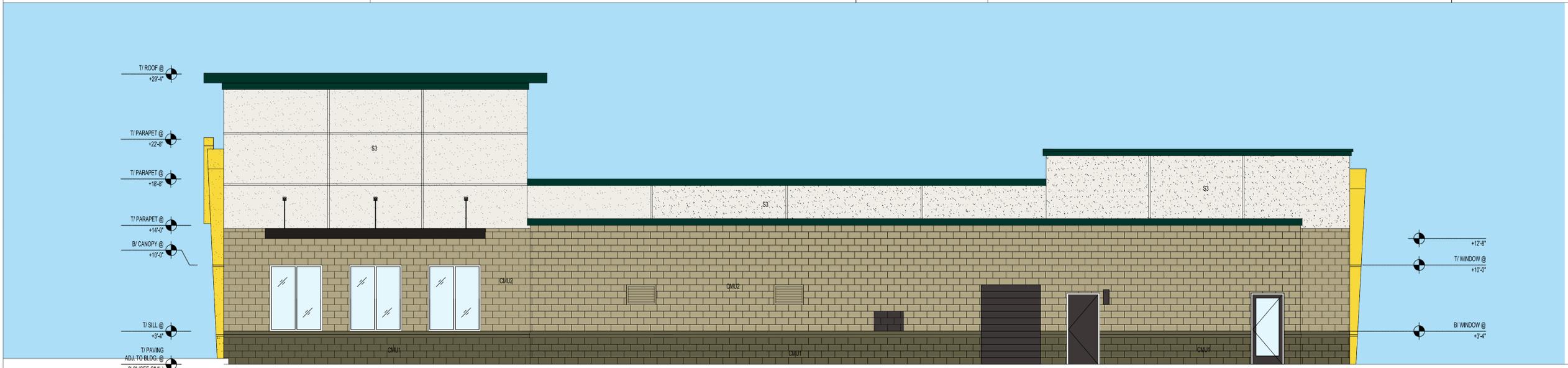
EXTERIOR FINISH SCHEDULE		
LABEL	MATERIAL	COLOR / MANUFACTURER
CMU1	SPLIT-FACE CMU	INTEGRAL COLOR (DARK GREY) TO MATCH SW 7025 'BACKDROP'
CMU2	SMOOTH FACE CMU	INTEGRAL COLOR (LIGHT GREY) TO MATCH SW 7638 'JOGGING PATH'
S-1	STUCCO	MATCH SW 6755 'STARBOARD' (GREEN)
S-2	STUCCO	MATCH SW 6903 'CHEERFUL' (YELLOW)
S-3	STUCCO	DRYVITTT MOONLIGHT
S-4	STUCCO	SW 6755 'STARBOARD' (GREEN)
P-1	PAINT	SW 6755 'STARBOARD' (GREEN)
P-2	PAINT	SW 6903 'CHEERFUL' (YELLOW)
P-3	PAINT	SW 7025 'BACKDROP' (DARK GREY)
M-1	STANDING SEAM ROOFING	MATCH SW 6755 'STARBOARD' (GREEN)



EXTERIOR ELEVATION SCALE: 3/16" = 1'-0" 04



EXTERIOR ELEVATION SCALE: 3/16" = 1'-0" 03



EXTERIOR ELEVATION SCALE: 3/16" = 1'-0" 02



EXTERIOR ELEVATION SCALE: 3/16" = 1'-0" 01

PROJECT NOTES

PROJECT TITLE
Constitutional and Marksheffel



DATE: February 23, 2019
REVISIONS:

A200

QUICK QUACK CAR WASH | PROPOSED SIGNAGE | WALL SIGN

MANUFACTURE AND INSTALL

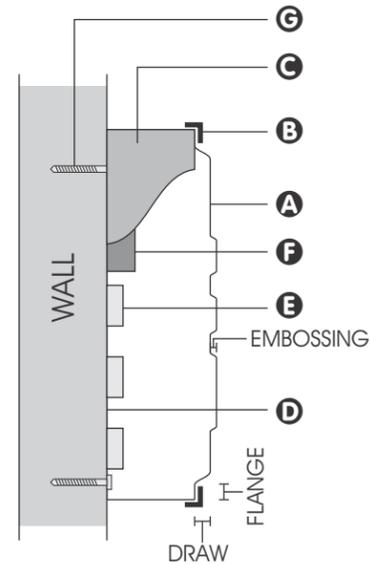
(2) SETS OF FRONT LIT WALL SIGNS WITH VACUUM-FORMED FACES

- A** FACES: 3/16" CLEAR PLEX, VACUUM-FORMED WITH VINYL AND PAINTED GRAPHICS ON 2ND SURFACE
- B** RETAINERS: ALL ALUMINUM, 2" PAINTED WHITE
- C** RETURNS: ALL ALUMINUM 8" DEEP, PAINTED WHITE
- D** BACKS: ALL ALUMINUM STOCK COLOR
- E** ILLUMINATION: WHITE LEDs
CANNOT EXCEED 2 FT CANDLES AS MEASURED 1 FT. FROM THE SURFACE OF THE SIGN
- F** POWER SUPPLY: HOUSED IN SIGN CABINET
- G** FLUSH MOUNTED TO FASCIA (SEE ATTACHMENT DETAIL)

- DISCONNECT SWITCH AT SIGN
- 120V SERVICE SUPPLIED BY OTHERS

POWER REQUIREMENTS PROVIDED BY OTHERS

(1) 20 AMP CIRCUIT
120 VOLTS



TYPICAL SECTION VIEW

NTS

- PMS 3425, 3M EMERALD GREEN 230-126
- PMS 7404, 3M YELLOW 230015
- PMS ORANGE 021, 3M ORANGE 230-44
- PMS BLACK, 3M BLACK 230-22



A1 PRIMARY SIGNAGE



PROPOSED LAYOUT

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

PROPOSED SIGNAGE = 113.33 SF



UTAH COUNTY:
1852 N. 1300 W.
(801) 489-3645
WWW.ALLIED-SIGN.COM

- DRAWING STEPS
- CONCEPT
 - ESTIMATING
 - PERMIT/LANDLORD
 - PRODUCTION/INSTALL

- DRAWING REVIEW
- SURVEY
 - PRODUCTION REVIEW
 - INSTALL REVIEW

Client: Quick Quack Car Wash
Address: Colorado Springs, CO
File Name: Quick Quack (Saratoga Springs, UT) - Sign Package - 09-07-2016

SALES APPROVAL:
Designer: Richard
Sales: Regina

CUSTOMER APPROVAL
SIGNATURE

REVISIONS



QUICK QUACK CAR WASH | PROPOSED SIGNAGE | WALL SIGN

MANUFACTURE AND INSTALL

(1) SET OF NON-ILLUMINATED WALL SIGNS WITH VACUUM-FORMED FACES

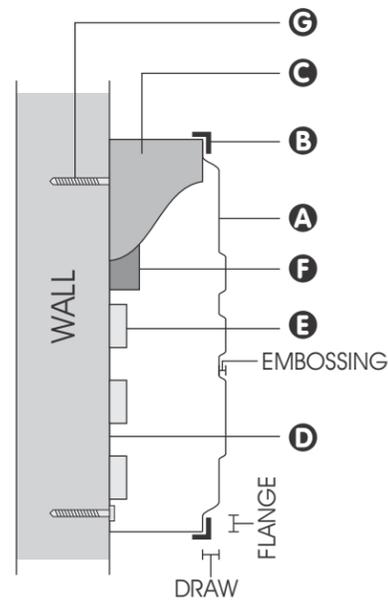
(1) SET OF ILLUMINATED WALL SIGNS WITH VACUUM-FORMED FACES

- A FACES: 3/16" CLEAR PLEX, VACUUM-FORMED WITH VINYL AND PAINTED GRAPHICS ON 2ND SURFACE
- B RETAINERS: ALL ALUMINUM, 2" PAINTED WHITE
- C RETURNS: ALL ALUMINUM 8" DEEP, PAINTED WHITE
- D BACKS: ALL ALUMINUM STOCK COLOR
- E ILLUMINATION: WHITE LEDs
- F POWER SUPPLY: HOUSED IN SIGN CABINET
- G FLUSH MOUNTED TO FASCIA (SEE ATTACHMENT DETAIL)

- DISCONNECT SWITCH AT SIGN
- 120V SERVICE SUPPLIED BY OTHERS

POWER REQUIREMENTS PROVIDED BY OTHERS

(1) 20 AMP CIRCUIT
120 VOLTS



! ACCURATE FIELD SURVEY
REQUIRED PRIOR TO FABRICATION



B1 SECONDARY SIGNAGE
NOT ILLUMINATED

B2 SECONDARY SIGNAGE

- PMS 3425, 3M EMERALD GREEN 230-126
- PMS 7404, 3M YELLOW 230015
- PMS ORANGE 021, 3M ORANGE 230-44
- PMS BLACK, 3M BLACK 230-22

PROPOSED LAYOUT

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

PROPOSED SIGNAGE = 55.50 SF



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- DRAWING STEPS
- CONCEPT
 - ESTIMATING
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 - PRODUCTION/INSTALL

- DRAWING REVIEW
- SURVEY
 - PRODUCTION REVIEW
 - INSTALL REVIEW

Client: Quick Quack Car Wash
Address: Colorado Springs, CO
File Name: Quick Quack (Saratoga Springs, UT) - Sign Package - 09-07-2016

SALES APPROVAL:
Designer: Richard
Sales: Regina

CUSTOMER APPROVAL
SIGNATURE

REVISIONS



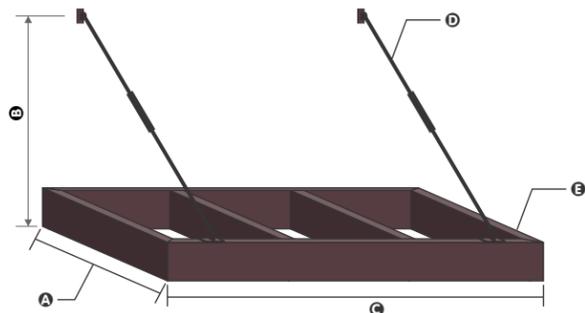
QUICK QUACK CAR WASH | PROPOSED SIGNAGE | METAL CANOPIES

MANUFACTURE AND INSTALL

(4) SUSPENDED METAL CANOPIES

- A PROJECTION: (4) @ 4'-0"
- B DROP: (2) @ 3'-8", (2) @ 7'-0"
- C WIDTH: (4) @ 23'-4"
- D TURNBUCKLE AND RODS, PAINTED P1
- E CANOPY FRAME: 2"x12" ALL ALUMINUM CONSTRUCTION, PAINTED P1

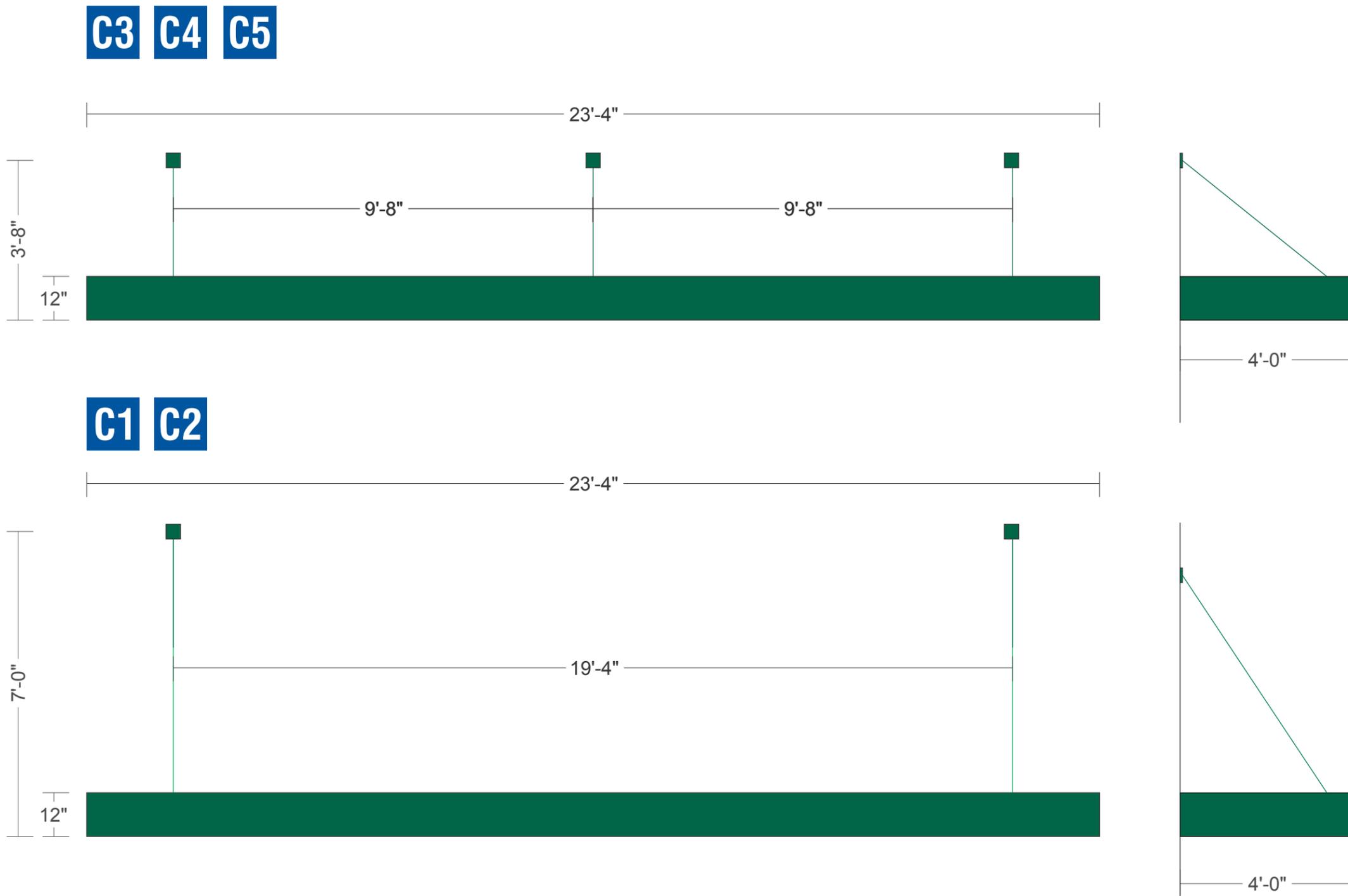
 PAINT TO MATCH SW 6755 "STARBOARD" GREEN



TYPICAL METAL AWNING
NTS (FINAL FRAMING MAY VARY)

PROPOSED LAYOUT

SCALE: 3/8" = 1'-0"



Utah Contractors: 375809-5501 • Nevada:60486 • Colorado:237787 • Idaho:RCE-29969

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DRAWING STEPS
<input type="checkbox"/> CONCEPT
<input type="checkbox"/> ESTIMATING
<input type="checkbox"/> PERMIT/LANDLORD
<input type="checkbox"/> PRODUCTION/INSTALL

DRAWING REVIEW
NAME
SURVEY
NAME
PRODUCTION REVIEW
NAME
INSTALL REVIEW
NAME

Client: Quick Quack Car Wash	SALES APPROVAL:
Address: Colorado Springs, CO	Designer: Richard
File Name: Quick Quack (Saratoga Springs, UT) - Sign Package - 09-07-2016	Sales: Regina

CUSTOMER APPROVAL	REVISIONS
SIGNATURE	

SALT LAKE CITY: 1920 S. 900 W., SALT LAKE CITY, UT • (801) 972-5503 OGDEN: 2924 Pennsylvania Avenue • (801) 621-4612



QUICK QUACK CAR WASH | PROPOSED SIGNAGE | ELEVATIONS

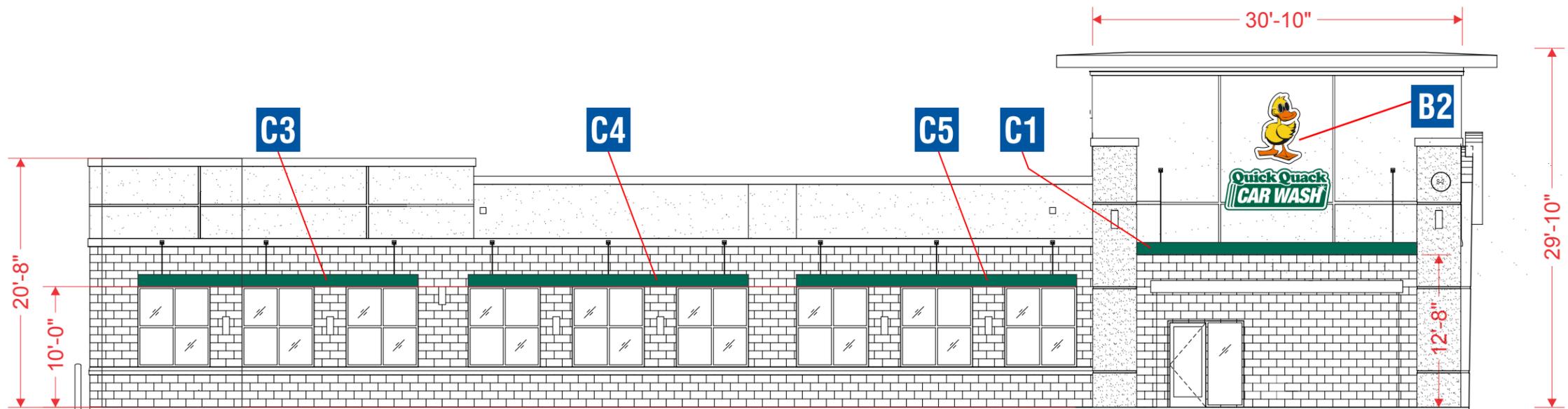


PRIMARY ELEVATION

SCALE: 3/32" = 1'-0"

SECONDARY ELEVATION

SCALE: 3/32" = 1'-0"



B1 SECONDARY ELEVATION
ALLOWED SIGNAGE = 56.65 SF
PROPOSED SIGNAGE = 55.50 SF

B1 SECONDARY ELEVATION
ALLOWED SIGNAGE = 56.65 SF
PROPOSED SIGNAGE = 55.50 SF

SECONDARY ELEVATION

SCALE: 3/32" = 1'-0"

Utah Contractors: 375809-5501 • Nevada:60486 • Colorado:237787 • Idaho:RCE-29969

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UTAH COUNTY:
1852 N. 1300 W.
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DRAWING STEPS	
<input type="checkbox"/>	CONCEPT
<input type="checkbox"/>	ESTIMATING
<input type="checkbox"/>	PERMIT/LANDLORD
<input type="checkbox"/>	PRODUCTION/INSTALL

DRAWING REVIEW	
NAME	SURVEY
NAME	PRODUCTION REVIEW
NAME	INSTALL REVIEW

Client: Quick Quack Car Wash
Address: Colorado Springs, CO
File Name: Quick Quack (Saratoga Springs, UT) - Sign Package - 09-07-2016

SALES APPROVAL:
Designer: Richard
Sales: Regina

CUSTOMER APPROVAL
SIGNATURE

REVISIONS

SALT LAKE CITY: 1920 S. 900 W., SALT LAKE CITY, UT • (801) 972-5503 OGDEN: 2924 Pennsylvania Avenue • (801) 621-4612



QUICK QUACK CAR WASH | PROPOSED SIGNAGE | MONUMENT SIGN

MANUFACTURE AND INSTALL

(1) D/F MONUMENT SIGN

- A** MAIN SIGN BODY: ALL ALUMINUM CONSTRUCTION, PAINTED P1-P2
- B** FACES: 3/16" CLEAR PLEX, VACUUM-FORMED WITH VINYL AND PAINTED GRAPHICS ON 2ND SURFACE
- C** RETAINERS: 1" .090 ALUMINUM PAINTED P2
- D** REVEAL: 1" PAINTED WHITE
- E** "OPEN" SIGN: ALL ALUMINUM CONSTRUCTION, 3/16" TRANS WHITE SG PLEX WITH VINYL GRAPHICS APPLIED
- F** ADDRESS: 1/4" FCO ALUMINUM PAINTED BLACK
- G** STONE BASE: ****TO MATCH BUILDING**** INSTALLED BY 3RD PARTY
- H** MOW PAD: CONC. 3" ABOVE GRADE

- INTERNALLY ILLUMINATED WITH WHITE LEDS
- ****CANNOT EXCEED 2 FT CANDLES AS MEASURED 1 FT. FROM THE SURFACE OF THE SIGN****
- POWER SUPPLY HOUSED IN SIGN BODY
- SUPPORT AND FOOTING (TBD)
- DISCONNECT SWITCH AT SIGN
- 120V SERVICE SUPPLIED BY OTHERS
- ELECTRICAL SWEEP BY OTHERS
- ELECTRICAL GROUNDED TO PIPE SUPPORT

- PMS 3425, 3M EMERALD GREEN 230-126
- PMS 7404, 3M YELLOW 230015
- PMS ORANGE 021, 3M ORANGE 230-44
- PMS BLACK, 3M BLACK 230-22

PROPOSED SIGNAGE = 25 SQ.FT.



PROPOSED LAYOUT

SCALE: 3/4" = 1'-0"