COLORADO SPRINGS POLICE DEPT. FIRING RANGE
SITE DEVELOPMENT PLAN

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PROJECT TEAM

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architect

associated with

project
COLORADO SPRINGS POLICE
DEPT. FIRING RANGE

15905 SNIPER LANE
FOUNTAIN, CO 80817

seal

issue / revision

issue / revision	date:
DEVEL. PLAN	08/14/19
DP RESUBMIT	02/21/2020

job # 103-01

drawn JVC

chkd MR

description
COVER
SHEET

number
G-001

MATERIALS

- EARTH
- POROUS FILL
- ROCK
- CONCRETE
- BRICK
- CONCRETE BLOCK
- CEMENT, SAND, GROUT, PLASTER
- STONE
- STEEL
- FINISHED WOOD
- ROUGH WOOD
- SHIMS
- PLYWOOD
- GLASS
- ALUMINUM
- GYPSUM BOARD (GYP. BD.)
- BATT INSULATION
- RIGID INSULATION
- FIRESAFING
- CERAMIC TILE

SYMBOLS

- FD — FLOOR DRAIN
- 16.58 — NEW OR REQ'D. ELEVATION
- 5280 — EXISTING CONTOURS
- 5280 — NEW CONTOURS
- LEVEL/ELEV. INDICATOR
- 26 — KEYNOTE (DEMOLITION)
- A — WINDOW TYPE
- 5 / B — GRID LINE
- ROOM NAME / 100 — ROOM/SPACE NUMBER
- G — FRAME TYPE
- 100 / A — DOOR NUMBER
- 4 / A1.1 — DETAIL NUMBER / DETAIL / SHEET WHERE DRAWN
- 5 / A6.1 — BUILDING SECTIONS
- 5 / A6.2 — WALL SECTIONS
- 5 / A7.1 — ELEVATIONS
- ENLARGED PLAN OR ELEVATION
- 5 — PARTITION TYPES
- CENTERLINE, GRIDS
- PROPERTY, BOUNDARY LINES

ARCHITECTURAL ABBREVIATIONS

AB	ANCHOR BOLTS
ABV	ABOVE
ACOUST	ACOUSTICAL
AD	AREA DRAIN
ALUM	ALUMINUM
ADJ	ADJUSTABLE/ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATIVE, ALTERNATE
ALUM/AL	ALUMINUM
AP	ACCESS PANEL
∠	ANGLE
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL/ARCHITECT
AUTO	AUTOMATIC
A.V.	AUDIO VIDEO
BD	BOARD
BLK	BLOCK
BLKG	BLOCKING
BLDG	BUILDING
BM	BEAM
B.M.	BENCH MARK
BOT	BOTTOM
BR	BACKER ROD
BRG	BEARING
CAB'T	CABINET
CB	CHALKBOARD
CEM	CEMENT
CEM PLAS	CEMENT PLASTER
CJ	CASE IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT
℄	CENTER LINE
CL	CLOSET
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMP	COMPOSITE
CONC	CONCRETE
CONF	CONFERENCE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CORR	CORRIDOR
CPT	CARPET
CP	CENTER POINT
CR	CLASSROOM
CT	CERAMIC TILE
CTSK	COUNTERSINK
DBL	DOUBLE
DEMO	DEMOLITION
DEG	DEGREE
DET/DTL	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DR	DOOR
DO	DOOR OPENING
DN	DOWN
DS	DOWNSPOUT
DWG	DRAWING

E	EAST
EA	EACH
EC	ELECTRICAL CONTRACTOR
ED	EDUCATION
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC
ELEV	ELEVATION/ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
ENG	ENGINEER/ENGINEERING
EP	ELECTRICAL PANEL
EQ	EQUAL
ETC	ETCETERA
EWC	ELECTRIC WATER COOLER
EW	EACH WAY
EX, EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FIN	FINISH
FLASH	FLASHING
FLR	FLOOR
FLUOR	FLUORESECENT
F.M.	FLOOR MAT
F.O.M.	FACE OF MASONRY
FR	FRAME
F.R.	FIRE RESISTANT
FS	FLOOR SINK
FT	FEET/FOOT
FTG	FOOTING
FURR	FURRING
F.V.	FIELD VERIFY
GALV	GALVANIZED
GI	GALVANIZED IRON/STEEL
GA	GUAGE/GAGE
GB/GYP BD	GYPSUM BOARD
GYP PLAS	GYPSUM PLASTER
HC	HANDICAPPED
HDWE	HARDWARE
HR	HOUR
HT	HEIGHT
HDR	HEADER
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HB	HOSE BIB
INCL	INCLUSIVE
ID	INSIDE DIAMETER
INST	INSTRUMENT
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
JST	JOIST
KO	KNOCK OUT

LAV	LAVATORY
LD BRG	LOAD BEARING
LMC	LIBRARY MEDIA CENTER
LOUV	LOUVER
LT	LIGHT
MANUF/MANF	MANUFACTOR
MAS	MASONRY
MAT'L	MATERIAL
MAX	MAXIMUM
MB	MARKER BOARD
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MIL / MM	MILLIMETER
MIN	MINIMUM
-	MINUS
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MT/MNT	MOUNT, MOUNTED
MTG	MOUNTING / MEETING
MTL/MET	METAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIA/OVERFLOW DRAIN
OF, OFD	OVER FLOW DRAIN
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
PL	PLATE
PLAS LAM	PLASTIC LAMINATE
PLN	PLAN
+	PLUS
PLBG	PLUMBING
PNT	PAINTED
PR	PAIR
PLYWD	PLYWOOD
PL	PROPERTY LINE
POLYISO	POLYISOCYANURATE
PRIN	PRINCIPAL
PT	POINT
PRPT	PARAPET
PTN	PARTITION
PVC	POLYVINYLCLORIDE
QT	QUARRY TILE
R	REINFORCEMENT
RAD/R	RADIUS
RE:	REFER TO
RECPT	RECEPTACLE
REFIN	REFINISH
REFL	REFLECTED
REINF	REINFORCEMENT/REINFORCING
RELOC	RELOCATED
REQ'D	REQUIRED
REV	REVISED/REVISION

RTU	ROOF TOP UNIT
RF	ROOF, ROOFING
R&R	REMOVE AND REPLACE
RD	ROOF DRAIN
RDL	ROOF DRAIN LEADER
RM	ROOM
RO	ROUGH OPENING
RE:	REFER REFERENCE
R's	RISERS
SAG	SUSPENDED ACOUSTICAL GRID
SAT	SUSPENDED ACOUSTICAL TILE
SALV	SALVAGE
SCHED	SCHEDULES
SEP	SEPERATE
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATIONS/SPECIFIED/
SQ	SQUARE
SQ FT/SF	SQUARE FOOT/SQUARE FEET
SQ IN	SQUARE INCH
SQ YD	SQUARE YARD
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUC	STRUCTURAL
ST	STRAIGHT
TELE	TELEPHONE
TB	TACK BOARD
THK	THICK
T&B	TOP AND BOTTOM
T&G	TONGUE & GROOVE
TLT / TOIL	TOILET
T.O.	TOP OF
T.O.M.	TOP OF MASONRY
TS	TUBE STEEL
T's	TREADS
TOW	TOP OF WALL
TRANSF	TRANSFORMER
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UNF	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
V/S	VENT STACK
VWC	VINYL WALL COVERING
WC	WATER CLOSET
W	WASHER
WDW/WIND	WINDOW
W/	WITH
W/O	WITHOUT
WD	WOOD
WF	WIDE FLANGE
WK	WORK
@	AT

GENERAL NOTES

DO NOT SCALE DRAWINGS.

1 PROSPECTIVE BIDDERS MUST EXAMINE THE CONTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) CAREFULLY AND, BEFORE BIDDING, MUST REQUEST CLARIFICATION FROM THE ARCHITECT IN WRITING AT LEAST 14 DAYS PRIOR TO THE TIME SET FOR OPENING THE BIDS, AN INTERPRETATION OR CORRECTION OF EVERY PATENT AMBIGUITY, INCONSISTENCY, OR ERROR THEREIN. SUCH INTERPRETATION OR CORRECTION, AS WELL AS ANY ADDITIONAL CONTRACT PROVISIONS THE ARCHITECT MAY DECIDE TO INCLUDE, WILL BE ISSUED IN WRITING BY THE ARCHITECT AS AN ADDENDUM TO THE CONTRACT, WHICH WILL BE MAILED OR DELIVERED TO EACH PERSON RECORDED AS HAVING RECEIVED A COPY OF THE CONTRACT DOCUMENTS FROM THE ARCHITECT, AND WHICH WILL ALSO BE POSTED AT THE PLACE WHERE THE CONTRACT DOCUMENTS ARE AVAILABLE FOR INSPECTION OF PROSPECTIVE BIDDERS. UPON SUCH MAILING OR DELIVERY AND POSTING, SUCH ADDENDUM SHALL BECOME A PART OF THE CONTRACT DOCUMENTS, AND BINDING ON ALL BIDDERS. WHERE CLARIFICATIONS ARE NOT MADE PRIOR TO BIDDING THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK WITH NO COST TO THE OWNER.

2 DIMENSIONS SHOWN ARE TO FACE OF FOUNDATION WALL, FACE OF MASONRY, FACE OF STUD UNLESS OTHERWISE INDICATED. ALL DIMENSIONS MUST BE VERIFIED TO CONFORM TO EXISTING CONDITIONS.

3 ALL BLOCK IS 8" NOMINAL WIDE UNLESS OTHERWISE NOTED BY DIMENSION OR PARTITION TYPES. MASONRY AND STUD WALL DIMENSIONS ARE NOMINAL.

4 ALL ANGLES ARE 90 DEGREES OR 45 DEGREES UNLESS OTHERWISE NOTED.

5 SITE PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

6 ALL SPOT ELEVATIONS OUTSIDE OF THE BUILDING RELATE TO SURVEY DATUM AT THE BENCHMARK. ALL SPOT ELEVATIONS INSIDE THE BUILDING REFER TO REFERENCE ELEVATION.

7 NOTIFY ARCHITECT IMMEDIATELY SHOULD CONDITIONS BE FOUND CONTRADICTORY TO THESE DRAWINGS.

8 PROVIDE BULLNOSE C.M.U. WHERE INDICATED ON DRAWINGS AND/OR AT ALL 90 DEGREE OUTSIDE CORNERS WITHIN THE PROJECT.

9 ALL WORK TO BE BASED ON 2003 IBC AND LOCAL CODE REQUIREMENTS.

10 CONTRACTOR SHALL HAVE ONE STAMPED PERMIT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES.

11 WATER RESISTANT (GREEN) GYP. BD. SHALL BE USED IN ALL WET OR EXTERIOR AREAS

12 ALL REFERENCES TO SPECIFIC MANUFACTURERS ARE FOR REFERENCE ONLY AND CAN BE SUBSTITUTED BY AN APPROVED EQUAL. SUBMIT REQUESTS FOR SUBSTITUTIONS TO ARCHITECT.

13 G.C. TO PROVIDE A FULLY INSULATED BLDG. ENVELOPE.

14 THE CONTRACT DOCUMENTS INCLUDE THE PROJECT MANUAL AND SPECIFICATIONS AS ONE COMPLETE PACKAGE. IF THE CONTRACTOR CHOOSES TO SPLIT APART THE DRAWINGS OR SPECIFICATIONS DURING BIDDING TO PROCURE BIDS FROM SUBS HE SHALL BE RESPONSIBLE FOR COORDINATION WITH OTHER WORK SHOWN ON OTHER DRAWING SHEETS OR SPECIFICATION SECTIONS. IN NO WAY SHALL THIS RELIEVE THE SUB OR GENERAL CONTRACTOR FROM HIS RESPONSIBILITY TO PROVIDE ITEMS DESIGNATED ELSEWHERE."

15 IN ALL OCCURRENCES OF PLANER ALIGNMENTS (I.E. WALL TO SOFFIT, WALL TO MILLWORK, ETC.) UNLESS OTHERWISE SHOWN OR NOTED, PROVIDE A MINIMUM OF A 3" OFFSET. CLARIFY ANY AMBIGUITIES WITH ARCHITECT.

PROJECT LOCATION & SITE

VICINITY MAP

LOCATION MAP

HB&A
Architecture AND Planning
102 E. Moreno Avenue
Colorado Springs, CO 80903
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www.hbaa.com

architect

associated with

project: COLORADO SPRINGS POLICE DEPT. FIRING RANGE

15905 SNIPER LANE
FOUNTAIN, CO 80817

seal

issue / revision	date:
DEVEL. PLAN	08/14/19
DP RESUBMIT	02/21/2020

issue / revision

job # 103-01

drawn JVC

chkd MR

description: GENERAL NOTES & MAPS

number: G-002

Colorado Springs Police Department Firing Range

GRADING, EROSION AND STORMWATER QUALITY CONTROL PLAN

15095 Sniper Road
Fountain / El Paso County, Colorado 80817

PROJECT SPECIFIC GRADING AND EROSION CONTROL NOTES

1. Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off-site waters, including wetlands.
2. Notwithstanding anything depicted in these plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code, the Engineering Criteria Manual, the Drainage Criteria Manual, and the Drainage Criteria Manual Volume 2. Any deviations from regulations and standards must be requested, and approved, in writing.
3. A separate Stormwater Management Plan (SMWP) for this project shall be completed and an Erosion and Stormwater Quality Control Permit (ESQCP) issued prior to commencing construction. Management of the SWMP during construction is the responsibility of the designated Qualified Stormwater Manager or Certified Erosion Control Inspector. The SWMP shall be located on site at all times during construction and shall be kept up to date with work progress and changes in the field.
4. Once the ESQCP is approved and a "Notice to Proceed" has been issued, the contractor may install the initial stage erosion and sediment control measures as indicated on the approved GEC. A Preconstruction Meeting between the contractor, engineer, and El Paso County will be held prior to any construction. It is the responsibility of the applicant to coordinate the meeting time and place with County staff.
5. Control measures must be installed prior to commencement of activities that could contribute pollutants to stormwater. Control measures for all slopes, channels, ditches, and disturbed land areas shall be installed immediately upon completion of the disturbance.
6. All temporary sediment and erosion control measures shall be maintained and remain in effective operating condition until permanent soil erosion control measures are implemented and final stabilization is established. All persons engaged in land disturbance activities shall assess the adequacy of control measures at the site and identify if changes to those control measures are needed to ensure the continued effective performance of the control measures. All changes to temporary sediment and erosion control measures must be incorporated into the Stormwater Management Plan.
7. Temporary stabilization shall be implemented on disturbed areas and stockpiles where ground disturbing construction activity has permanently ceased or temporarily ceased for longer than 14 days.
8. Final stabilization must be implemented at all applicable construction sites. Final stabilization is achieved when all ground disturbing activities are complete and all disturbed areas either have a uniform vegetative cover with individual plant density of 70 percent of pre-disturbance levels established or equivalent permanent alternative stabilization method is implemented. All temporary sediment and erosion control measures shall be removed upon final stabilization and before permit closure.
9. All permanent stormwater management facilities shall be installed as designed in the approved plans. Any proposed changes that affect the design or function of permanent stormwater management structures must be approved by the ECM Administrator prior to implementation.
10. Earth disturbances shall be conducted in such a manner so as to effectively minimize accelerated soil erosion and resulting sedimentation. All disturbances shall be designed, constructed, and completed so that the exposed area of any disturbed land shall be limited to the shortest practical period of time. Pre-existing vegetation shall be protected and maintained within 50 horizontal feet of a waters of the state unless shown to be infeasible and specifically requested and approved.
11. Compaction of soil must be prevented in areas designated for infiltration control measures or where final stabilization will be achieved by vegetative cover. Areas designated for infiltration control measures shall also be protected from sedimentation during construction until final stabilization is achieved. If compaction prevention is not feasible due to site constraints, all areas designated for infiltration and vegetation control measures must be loosened prior to installation of the control measure(s).
12. Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be a stabilized conveyance designed to minimize erosion and the discharge of sediment off site.
13. Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to enter State Waters, including any surface or subsurface storm drainage system or facilities. Concrete washouts shall not be located in an area where shallow groundwater may be present, or within 50 feet of a surface water body, creek or stream.
14. During dewatering operations of uncontaminated ground water may be discharged on site, but shall not leave the site in the form of surface runoff unless an approved State dewatering permit is in place.
15. Erosion control blanketing or other protective covering shall be used on slopes steeper than 3:1.
16. Contractor shall be responsible for the removal of all wastes from the construction site for disposal in accordance with local and State regulatory requirements. No construction debris, tree slash, building material wastes or unused building materials shall be buried, dumped, or discharged at the site.
17. Waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. Control measures may be required by El Paso County Engineering if deemed necessary, based on specific conditions and circumstances.
18. Tracking of soils and construction debris off-site shall be minimized. Materials tracked off-site shall be cleaned up and properly disposed of immediately.
19. The owner/developer shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, soil, and sand that may accumulate in roads, storm drains and other drainage conveyance systems and stormwater appurtenances as a result of site development.
20. The quantity of materials stored on the project site shall be limited, as much as practical, to that quantity required to perform the work in an orderly sequence. All materials stored on-site shall be stored in a neat, orderly manner, in their original containers, with original manufacturer's labels.
21. No chemical(s) having the potential to be released in stormwater are to be stored or used onsite unless permission for the use of such chemical(s) is granted in writing by the ECM Administrator. In granting approval for the use of such chemical(s), special conditions and monitoring may be required.
22. Bulk storage of allowed petroleum products or other allowed liquid chemicals in excess of 55 gallons shall require adequate secondary containment protection to contain all spills onsite and to prevent any spilled materials from entering State Waters, any surface or subsurface storm drainage system or other facilities.
23. No person shall cause the impediment of stormwater flow in the curb and gutter or ditch except with approved sediment control measures.
24. Owner/developer and their agents shall comply with the "Colorado Water Quality Control Act" (Title 25, Article 8, CRS), and the "Clean Water Act" (33 USC 1344), in addition to the requirements of the Land Development Code, DCM Volume II and the ECM Appendix I. All appropriate permits must be obtained by the contractor prior to construction (1041, NPDES, Floodplain, 404, fugitive dust, etc.). In the event of conflicts between these requirements and other laws, rules, or regulations of other Federal, State, local, or County agencies, the most restrictive laws, rules, or regulations shall apply.
25. All construction traffic must enter/exit the site only at approved construction access points.
26. Prior to construction the permittee shall verify the location of existing utilities.
27. A water source shall be available on site during earthwork operations and shall be utilized as required to minimize dust from earthwork equipment and wind.
28. The soils report for this site has been prepared by Kumar & Assoc, Inc. and shall be considered a part of these plans.
29. At least ten (10) days prior to the anticipated start of construction, for projects that will disturb one (1) acre or more, the owner or operator of construction activity shall submit a permit application for stormwater discharge to the Colorado Department of Public Health and Environment, Water Quality Division. The application contains certification of completion of a stormwater management plan (SWMP), of which this Grading and Erosion Control Plan may be a part. For information or application materials contact:
    Colorado Department of Public Health and Environment
    Water Quality Control Division
    WQCD - Permits
    4300 Cherry Creek Drive South
    Denver, CO 80246-1530
    Attn: Permits Unit.

SEED MIX

AREAS DISTURBED BY THE EARTHWORK ACTIVITIES AND NOT RECEIVING OTHER TREATMENT SHALL BE PERMANENTLY REVEGETATED WITH THE FOLLOWING SEED MIX.

SPECIES	VARIETY	pls/acre
SIDEOATS GRAMA	*El Reno*	3.0
WESTERN WHEAT GRASS	*Barton*	2.5
SLENDER WHEAT GRASS	*Native*	2.0
LITTLE BLUESTEM	*Pastura*	2.0
SAND DROPSEED	*Native*	0.5
SWITCH GRASS	*Nebraska 28*	3.0
WEEPING LOVE GRASS	*Morpha*	1.0
		14.0 lbs

SEEDING APPLICATION: DRILL SEED 1/4" TO 1/2" INTO TOPSOIL. IN AREAS INACCESSIBLE TO A DRILL, HAND BROADCAST AT DOUBLE THE RATE AND RAKE 1/4" TO 1/2" INTO THE TOPSOIL. MULCHING APPLICATION: 1-1/2 TONS NATIVE HAY PER ACRE, MECHANICALLY CRIMPED INTO THE TOPSOIL.

Know what's **below.**
Call before you dig.

VICINITY MAP
NOT TO SCALE

LEGEND

- EXISTING SANITARY MANHOLE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- EXISTING ELECTRIC TRANSFORMER
- EXISTING POWER POLE
- EXISTING FIBER OPTIC PEDESTAL
- EXISTING TELEPHONE PEDESTAL
- EXISTING GAS TEST STATION
- EXISTING DECIDUOUS TREE
- EXISTING SIGN
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER W/STRUCTURES
- EXISTING WATER LINE
- PROPOSED WATER LINE
- EXISTING GAS MAIN
- EXISTING ELECTRIC LINE (UNDERGROUND)
- EXISTING ELECTRIC LINE (OVERHEAD)
- EXISTING FIBEROPTIC LINE
- EXISTING TELEPHONE LINE
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- EXISTING CONCRETE (TO BE REMOVED)
- PROPOSED CONCRETE
- PROPOSED BUILDING
- PROPOSED GRAVEL SURFACE

SHEET INDEX

C-100 Grading and Erosion Control Plan -- Cover Sheet
C-101 Grading and Erosion Control Plan
C-102 Grading and Erosion Control Details 1 of 2
C-103 Grading and Erosion Control Details 2 of 2

GRADING LEGEND

- SF — SILT FENCE
- RS — ROCK SOCK
- IP — INLET PROTECTION
- CWA — CONCRETE WASHOUT AREA
- SSA — STABILIZED STAGING AREA
- VTC — VEHICLE TRACKING CONTROL
- EROSION CONTROL BLANKET
- PERMANENT SEEDING & MULCH
- ROCK
- RIPRAP
- 8 FT WIDE EARTHEN BERM AT POND PERIMETER 4:1 SIDE SLOPES MIN
- COMPACTED EARTH BERM; RUNOFF INTERCEPT — 4 FT WIDE EARTHEN BERM AT PARKING AREA 4:1 INSIDE SLOPE MIN. (RUNOFF INTERCEPT) 4 VARIES
- 2.0% — FLOW DIRECTION ARROW
- CUT/FILL DELINEATION
- LIMITS OF SOIL DISTURBANCE
- CF — CONSTRUCTION FENCING
- PROPERTY LINE
- (6525) — EXISTING CONTOUR
- 6525 — PROPOSED CONTOUR

SEE DETAILS ON SHEET C-102 & 103

SITE SOIL TYPE NOTE:

According to the Soil Survey for El Paso County, Colorado, Soils within the subject site are classified to be within Hydrologic Soils Group C (Limon Clay #47) (SeeFigure 2). The soils all well drained, typical of alluvial fans, and have a low hazard of erosion and soil blowing.

PRE-EXCAVATION CHECKLIST

- ☐ Gas and other utility lines of record shown on the plans.
- ☐ Utilities Central Locating called at least 2 business days ahead. (1-800-922-1987)
- ☐ Utilities located and marked.
- ☐ Employees briefed on marking and color codes.*
- ☐ Employees trained on excavation and safety procedures for natural gas lines.
- ☐ When excavation approaches gas lines, employees expose lines by careful probing and hand digging.

*A.G.A./A.P.W.A. STANDARD UTILITY MARKING COLOR CODE

Natural Gas	Yellow
Electric	Red
Water	Blue
Wastewater	Green

OPINION OF COST FOR EROSION CONTROL REQUIREMENTS

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Vehicle Tracking Control	2	EA	$ 2,370.00	$ 4,740.00
Silt Fence	3,218	LF	$ 2.50	$ 8,045.00
Concrete Washout	1	EA	$ 760.00	$ 760.00
Permanent Seeding	4	AC	$ 800.00	$ 3,200.00
Rolled Erosion Control Product	20,855	SF	$ 0.40	$ 8,342.00
Inlet Protection	3	EA	$ 200.00	$ 600.00
Maintenance (40% OF E.C.)	1	LS	$ 10,275.00	$ 10,275.00
			TOTAL	$ 35,962.00

GENERAL GRADING AND EROSION CONTROL NOTES

TIMING
Anticipated starting and completion time period of site grading: Apring 2020 - Winter 2020
Expected date on which the final stabilization will be completed: Spring 2021

AREAS
Total area of the site to be cleared, excavated, or graded: 17.20 Acres

RECEIVING WATERS
Name of receiving waters: Jimmy Camp Creek / Fountain Creek

EARTHWORKS
3,053 CY CUT, 133,276 CY FILL, NET 130,224 CY FILL

STATEMENTS

ENGINEER'S STATEMENT
THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

ANDREW W. McCORD P.E. 25057 — DATE
FOR AND ON BEHALF OF KIOWA ENGINEERING CORPORATION

OWNER'S STATEMENT
THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

BY: PAT RIGDON
TITLE: COLORADO SPRINGS POLICE DEPARTMENT
ADDRESS: CSPD FIRING RANGE
15905 SNIPER LANE
FOUNTAIN, COLORADO 80817

EL PASO COUNTY
COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA AND ENGINEERING CRITERIA MANUAL, AS AMENDED.

JENNIFER IRVINE, P.E. — DATE
COUNTY ENGINEER/ECM ADMINISTRATOR

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architect

Kiowa Engineering Corporation
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associated with

project: COLORADO SPRINGS POLICE DEPT. FIRING RANGE
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soil

issue / revision	date:
DEVEL. PLAN	08/14/19
DP RESUBMIT	02/21/2020

issue / revision

job # 19007
drawn MJK
chkd AWMc

description: GRADING, EROSION & STORMWATER MGMT COVER

number: C-100

GRAPHIC LEGEND

- SILT FENCE
- IP-1 PROTECTION
- VTC TRACKING CONTROL
- EROSION CONTROL BLANKET
- PERMANENT SEEDING & MULCH
- PLACED ROCK
- RIPRAP
- 8 FT WIDE EARTHEN BERM AT POND PERIMETER 4:1 SIDE SLOPES MIN (8)
- COMPACTED EARTH BERM / RUNOFF INTERCEPT — 4 FT WIDE EARTHEN BERM AT PARKING AREA 4:1 INSIDE SLOPE MIN. (RUNOFF INTERCEPT) (4) VARIES
- LIMITS OF GRADING DISTURBANCE (16.91 AC±)

SEE DETAILS ON SHEET C-103

SITE SPECIFIC GRADING NOTES

1. THE BERMS ARE DETAILED ON SHEET C-102.
2. SOILS INVESTIGATION SHALL BE PERFORMED TO DETERMINED A BEST APPROACH FOR ACQUISITION OF FILL MATERIAL TO FORM BERMS.
3. ONCE SOILS ARE ASSESSED AND MATERIAL IS IDENTIFIED, A HAUL ROAD SHALL BE INSTALLED TO CONVEY FILL MATERIALS ALONG A DEFINED PATH IN ACCORDANCE WITH COUNTY REQUIREMENT.

0 60' 120'
SCALE: 1"=60'

Engineer's Statement:

This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this report.

Engineer of Record Signature Date

Owner's Statement:

The Owner will comply with the requirements of the Grading and Erosion Control Plan.

Owner Signature Date

Know what's below. Call before you dig.

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drawn MJK
chkd AWMc

GRADING, EROSION & STORMWATER MGMT PLAN

C-101

VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   -LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   -TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

VEHICLE TRACKING CONTROL (VTC)
NTS

CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE, CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CONCRETE WASHOUT AREA (CWA)
NTS

SF-1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SILT FENCE DETAIL (SF)
NTS

TYPICAL BACKSTOP CROSS-SECTION (A-A)
SCALE: 1"=10' (H) 1"=10' (V)

TYPICAL 12' SIDE BERM CROSS-SECTION (B-B)
SCALE: 1"=10' (H) 1"=10' (V)

TYPICAL 20' SIDE BERM CROSS-SECTION (C-C)
SCALE: 1"=10' (H) 1"=10' (V)

TYPICAL BERM CROSS-SECTIONS
SCALE: AS SHOWN

INSTALLATION REQUIREMENTS

1. SEE GEC FOR;
   – LOCATION, LENGTH AND WIDTH OF SEDIMENT CONTROL LOG.
2. SEDIMENT CONTROL LOGS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR, OR COCONUT FIBER.
4. NOT FOR USE IN CONCENTRATED AREAS.
5. THE SEDIMENT CONTROL LOG SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 2".

MAINTENANCE REQUIREMENTS

1. THE GESC MANAGER SHALL INSPECT SEDIMENT CONTROL LOGS DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOGS SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN HALF THE HEIGHT OF THE CREST OF LOG.
3. SEDIMENT CONTROL LOGS SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE DRILLED, SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

SEDIMENT CONTROL LOG
NTS

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seal

issue / revision	date:
DEVEL. PLAN	08/14/19
DP RESUBMIT	02/21/2020

issue / revision

job # 19007
drawn MJK
chkd AWMc

description: GRADING, EROSION & STORMWATER MGMT DETAIL 1

number: C-102

IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.

IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -LOCATION OF INLET PROTECTION.
   -TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ⅓ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

CURB SOCK INLET PROTECTION (IP-1)

NTS

ECB-3. OUTSIDE OF DRAINAGEWAY

STAKING PATTERNS BY ECB TYPE

STAKING PATTERNS BY SLOPE OR CHANNEL TYPE

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -LOCATION OF ECB.
   -TYPE OF ECB (STRAW, STRAW-COCONUT, COCONUT, OR EXCELSIOR).
   -AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.

2. 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPs, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.

3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.

4. PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.

5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.

6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.

7. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.

8. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB-1.

9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBS SHALL BE RESEEDED AND MULCHED.

10. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

TABLE ECB-1. ECB MATERIAL SPECIFICATIONS

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	–	100%	–	DOUBLE/ NATURAL
STRAW-COCONUT	30% MIN	70% MAX	–	DOUBLE/ NATURAL
COCONUT	100%	–	–	DOUBLE/ NATURAL
EXCELSIOR	–	–	100%	DOUBLE/ NATURAL

*STRAW ECBs MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL.
**ALTERNATE NETTING MAY BE ACCEPTABLE IN SOME JURISDICTIONS

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

Rolled Erosion Control Products (RECP) EC-6

EROSION CONTROL BLANKET MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.

5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND TOWN OF PARKER COLORADO, NOT AVAILABLE IN AUTOCAD)

ROLLED EROSION CONTROL PRODUCTS DETAIL (RECP)

NTS

SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   -LOCATION OF STAGING AREA(S).
   -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

STABILIZED STAGING AREA DETAIL (SSA)

NTS

IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

IP-4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

CURB SOCK SUMP/AREA INLET PROTECTION (IP-3)

NTS

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associated with

project: COLORADO SPRINGS POLICE DEPT. FIRING RANGE
15905 SNIPER LANE
FOUNTAIN, CO 80817

seal

issue / revision	date:
DEVEL. PLAN	08/14/19
DP RESUBMIT	02/21/2020

issue / revision

job # 19007
drawn MJK
chkd AWMc

description: GRADING, EROSION & STORMWATER MGMT DETAIL 2

number: C-103

UTILITY NOTES

1. THE ELECTRICAL EASEMENT LOCATION (AT THE OVERHEAD POWER LINES) IS DESCRIBED AS FOLLOWING FROM POLE TO POLE. COORDINATION WITH MOUNTAIN VIEW ELECTRIC ASSOCIATION IS EXPECTED DURING PLANNING & REVIEW TO DETERMINE A SUITABLE APPROACH FOR RELOCATION OF POLES TO ACCOMMODATE THE PLANNED DEVELOPMENT.
2. THERE IS A 60' WIDE EL PASO COUNTY RIGHT-OF-WAY RESERVATION ALONG THE SECTION LINE (30' ON EACH SIDE).
3. WATER SERVICE SHALL BE EXTENDED FROM THE EXISTING SERVICE AN ADDITIONAL 330 LF (SEE PLAN).
4. PRIVATE SANITARY VAULT SIZING SHALL BE BASED ON AWWA METHOD (FIXTURE COUNT). NO DISCHARGE IS IDENTIFIED, HEREON. SYSTEM IS EXPECTED TO STORE EFFLUENT AND TO BE EVACUATED BY PUMP ON A MAINTENANCE SCHEDULE.

Engineer's Statement:

This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this report.

Engineer of Record Signature Date

Owner's Statement:

The Owner will comply with the requirements of the Grading and Erosion Control Plan.

Owner Signature Date

Know what's **below.**
Call before you dig.

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job # 19007
drawn MJK
chkd AWMc

description
UTILITY PLAN

number
C-104

2 FIRING RANGE SITE PLAN
1" = 100'-0"

N

1 OVERALL SITE PLAN
1" = 200'-0"

N

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issue / revision

job # 103-01

drawn JVC

chkd MR

description

ARCHITECTURAL
SITE PLANS

number

AS101

GENERAL NOTES

1. THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

1 ENLARGED FIRING RANGE SITE PLAN
1" = 50'-0"

N

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job # 103-01

drawn JVC

chkd MR

description

ENLARGED ARCHITECTURAL SITE PLAN

number

AS102

GENERAL NOTES

1. THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

1 ARCHITECTURAL SITE PLAN - ADA ROUTE
1 : 300

N

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description

ADA ROUTE SITE PLAN

number

AS103

3 TYP. 100YD RANGE SINGLE BAFFLE PLAN
1" = 10'-0"

2 ENLARGED 100YD RANGE SITE PLAN - OPTION #2
1" = 30'-0"

N

1 ENLARGED 100YD RANGE SITE PLAN - OPTION #1
1" = 30'-0"

N

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description

100 YD RANGE PLANS

number

AS110

6 TARGET BASE PROTECTION
1" = 1'-0"

5 TYP. BAFFLE COLUMN PLAN
1" = 1'-0"

4 TYP. DETAIL @ MULTI-BAFFLE
3/4" = 1'-0"

3 TYP. DETAIL @ SINGLE BAFFLE
1/2" = 1'-0"

2 100 YD RANGE SECTION - OPTION #2
1/16" = 1'-0"

1 100 YD RANGE SECTION - OPTION #1
1/16" = 1'-0"

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chkd MR

description
100 YD RANGE SECTIONS

number
AS111

1 LANDSCAPING AT CLASSROOM BUILDING
1/8" = 1'-0"

N

PLANT LIST						
TYPE	BOTANICAL NAME	COMMON NAME	HEIGHT	WIDTH	QTY	MARK
SHRUB	AMORPHA CANESCENS	SILVERY LEADPLANT	36"	48"	6	A
GRASS	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	18"	24"	18	B
PERENNIAL	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	18"	18"	17	C

LANDSCAPE MATERIAL SCHEDULE		
SYMBOL	TYPE	NOTES
	RIVER ROCK	2"- 4" DECORATIVE COLORADO RIVER ROCK
	MULCH	4" WOOD MULCH
	CONCRETE	4" SLAB-ON-GRADE CONCRETE (USED FOR SIDEWALKS)
	DECOMPOSED GRANITE	COMPACTED DECOMPOSED GRANITE (USED FOR ADA ROUTES)

3 ENTRY SIGNAGE
3/4" = 1'-0"

2 LANDSCAPING AT SITE ENTRANCE
1/8" = 1'-0"

N

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description
LANDSCAPE
SITE PLAN

number
AS120

1 CLASSROOM FLOOR PLAN
1/4" = 1'-0"

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job # 103-01

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description

CLASSROOM FLOOR PLAN

number

A-101

4 TYP. ELEVATION @ RANGE BENCH
3/4" = 1'-0"

3 TYP. RANGE BENCH PLAN
3/4" = 1'-0"

2 100YD CANOPY FLOOR PLAN
1/8" = 1'-0"

N

1 50YD CANOPY FLOOR PLAN
3/16" = 1'-0"

N

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seal

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issue / revision

job # 103-01

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chkd MR

description

RANGE
CANOPY
PLANS

number

A-102

4 SECTION THRU 100 YARD RANGE - OPTION #1
1/16" = 1'-0"

3 ELEVATION @ 100 YARD RANGE - OPTION #1
1/16" = 1'-0"

2 TYP. SECTION THRU 50 YARD RANGE
3/32" = 1'-0"

1 TYP. ELEVATION @ 50 YARD RANGE
3/32" = 1'-0"

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job # 103-01

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description
SITE
ELEVATIONS
& SECTIONS

number
A-401

4 CLASSROOM BLDG ELEVATION - WEST
1/8" = 1'-0"

3 CLASSROOM BLDG ELEVATION - SOUTH
1/8" = 1'-0"

2 CLASSROOM BLDG ELEVATION - EAST
1/8" = 1'-0"

1 CLASSROOM BLDG ELEVATION - NORTH
1/8" = 1'-0"

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issue / revision

job # 103-01

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chkd MR

description

EXTERIOR BUILDING ELEVATIONS

number

A-402

3 TYP. CANOPY ELEVATION - NORTH
3/8" = 1'-0"

2 100 YD CANOPY ELEVATION - EAST
1/8" = 1'-0"

1 50 YD CANOPY ELEVATION - EAST
3/16" = 1'-0"

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issue / revision	date:
DEVEL. PLAN	08/14/19
DP RESUBMIT	02/21/2020

issue / revision

job # 103-01

drawn JVC

chkd MR

description
RANGE
CANOPY
ELEVATIONS

number
A-403

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
100 YARD	Fc	6.26	7.9	3.9	1.61	2.03
50 YARD	Fc	4.83	5.9	3.0	1.61	1.97
SITE	Fc	0.61	16.8	0.0	N.A.	N.A.
100 YARD RANGE - OPTION 1	Fc	1.98	16.8	0.0	N.A.	N.A.
100 YARD RANGE - OPTION 2	Fc	2.57	16.8	0.0	N.A.	N.A.
50 YARD RANGE	Fc	3.84	13.1	0.1	38.40	131.00
PARKING LOT	Fc	1.34	2.8	0.2	6.70	14.00
PROPOSED ROAD 1	Fc	1.86	2.5	0.3	6.20	8.33
PROPOSED ROAD 2	Fc	1.91	2.6	0.3	6.37	8.67
TYPICAL CANOPY AREA	Fc	12.25	16.8	2.4	5.10	7.00

Luminaire Schedule				
Label	Mounting	Lumens	LLF	Description
R5MA	16'-0"	30,000	0.900	RFL5-360L-265-4K7-M
R5SA	16'-0"	30,000	0.900	RFL5-360L-265-4K7-N
RAR2	23'-0"	12,000	0.900	RAR1-160L-70-4K7-2
RAR3	23'-0"	12,000	0.900	RAR1-160L-70-4K7-3
MD	-	1600	0.900	CUSO-AC
WP3	-	-	0.900	LNC2-12LU-4K-3
CAN2	9'-0"	-	0.900	LXEM4-40LW-RFA-EDU
WPC	COLUMN	-	0.855	LXEM2-40VW-RFA-EDU

1 LIGHTING PHOTOMETRIC PLAN
1" = 50'-0"

2 100 YARD RANGE WITH BAFFLES- OPTION 1
1" = 50'-0"

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issue / revision	date:
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job # 103-01
drawn EJR
chkd JJA

description
LIGHTING PHOTOMETRIC PLAN

number
E-DP1

3 100 YARD RANGE WITH BAFFLES- OPTION 2
1" = 50'-0"

2 50 YARD VERTICLE PHOTOMETRIC
NTS

1 100 YARD VERTICLE PHOTOMETRIC
NTS

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job # 103-01
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chkd JJA

description
LIGHTING PHOTOMETRIC PLAN

number
E-DP2

CSPD SHOOTING RANGE
UNDER CANOPY FIXTURE

Columbia LIGHTING

Enclosed and Gasketed Fiberglass Extreme Environment / LED

PROJECT INFORMATION

Project Name

Catalog No.

Type: CAN2

Date

FEATURES

- LED Enclosed and Gasketed
- Long life 60,000 hour LDS at L80 for reduced maintenance
- Four LED color choices and 80 CRI
- IP66 all sizes when ordered with standard polyacetal (POM) latches
- IP65 all sizes, IPX4° and 8°
- Available in 2', 4', or 8' lengths
- NEMA 4X housing
- Fiberglass housing with F1 weatherability rating, standard
- Smooth housing for easy cleaning
- Gasket is non-porous to ensure seal
- Impact modified acrylic lens equivalent to 100% DR
- Wide range of lens selections
- Lens firmly secured with tamper resistance ready polyacetal (POM) latches
- Stainless steel latching optional
- ControlScope® compatible
- Drivers include minimum 2.5kV surge protection
- UL Sanitation Certified per NSF Standards
- Removable gear tray electrical access for modular replaceability
- Emergency battery pack installed, optional on most models
- -40°C up to +50°C ambient operation; see table provided for details
- DLC* (DesignLights Consortium) Qualified, with some Premium Qualified configurations - see www.designlights.org
- Includes surface mounting brackets
- Occupancy and/or daylight sensing accessories available
- Five year warranty

CONSTRUCTION
Housing is formed from UL 5VA fiberglass. F1 weatherability rating, suitable for indoor or outdoor use with respect to exposure to UV light. Pour-in-place non-porous gasketing assures seal. LED affixed to removable heat sinked gear tray. 14 Latches per 8', 8 per 4', 6 per 2'. Latches are provided tamper resistance ready, tamper resistant screws by others. Latches are standard polyacetal (POM), optional in stainless steel. Access openings are provided for electrical connection.

SHIELDING
Linear ribbed frosted acrylic lens impact modified equivalent to 100% DR; modification adds flexibility to reduce impact breakage compared to standard acrylic formulations. Optional ribbed polycarbonate lens or deep acrylic. All lenses available in clear or frost.

FINISH
White painted parts are treated with a five-stage phosphate bonding process and finished with high reflectance baked enamel.

ELECTRICAL
Long-life LEDs are rated for 60,000 hours at L80 lumen maintenance. Extra High Lumen packages (XL) rated L70 at 60,000 hours. Driver options include fixed output for on/off function, step dimming* (high/low/off) or continuous 0-10V dimming. QR code label affixed to housing for easy traceability.

MOUNTING
Use flexible conduit only.

CERTIFICATION
All luminaires are built to UL 1598 and 2108 standards, and bear appropriate CSA labels. Ingress protection IP65 and IPX7 standard. UL Sanitation Certified per NSF Standards. Wet location labeling is standard. Emergency-equipped fixtures built to UL 924. DLC* (DesignLights Consortium) Qualified, with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at www.designlights.org. The DTS, Dimming Bypass Module, is for emergency circuit control loads including sensors and wireless systems listed to UL924. See page 13 for wiring diagram. Link to Dimming Bypass Module Specification sheet.

WARRANTY
Five year warranty (Terms and Conditions Apply).

ORDERING INFORMATION

EXAMPLE LXEM4-35HL-RFA-EDU

LXEM – – – – –

MODEL: LXEM LED Enclosed and Gasketed

SIZE: 2 2' [1,2,3,4] ; 4 4' ; 8 8'

COLOR TEMP: 30 3000K ; 35 3500K ; 40 4000K ; 50 5000K

LUMEN OUTPUT: VW Very Low Watt ; LW Low Watt ; ML Medium Lumen ; HL High Lumen ; VL Very High Lumen ; XL Xtra High Lumen[5]

SHIELDING: RFA Ribbed Frosted Acrylic ; RA Ribbed Clear Acrylic[6] ; DFA Deep Frosted Acrylic ; DCA Deep Clear Acrylic[6] ; RFP Ribbed Frosted Polycarbonate[6] ; RP Ribbed Clear Polycarbonate[6,7]

DRIVER: E Fixed Output ; ESD Step Dimming[7] ; ED 0-10V Dimming ; ED1 0-10V 1% Dimming[8]

VOLTAGE: U 120V-277V ; 347 347V

OPTIONS: ELL14 Emergency Battery Pack Installed, 1400 Lumens[2,3,9] ; GLR Fast Blow Fuse ; DTS Dimming Bypass Module[9,10] ; OCM Microwave Occupancy Sensor[9,11] ; SSL Stainless Steel Tamper Resistance Ready Latches ; TP Tamper Proof Latches ; F3CRW 3 Wire 8' Wet Cord ; F4CS1W 4 Wire 15' Wet Cord ; F4CRW 4 Wire 8' Wet Cord ; F4CS1W 4 Wire 15' Wet Cord ; F5CRW 5 Wire 8' Wet Cord ; F5CS1W 5 Wire 15' Wet Cord ; F6CRW 6 Wire 8' Wet Cord ; SWH Single Wet Hub 1/2" NPT Hub ; DWH Dual Wet Hub 1/2" NPT Hub ; ZBE ControlScope® compatible[9,11]

ACCESSORIES (ORDER SEPARATELY)

X1DPM	Dual Pendant Brackets (ignitabel by others)[2]
X1HC	Chain Hanger Kit (Includes 14' Chain)
XE4SMB	45° Mounting Bracket[12]
XE4SMBSS	45° Stainless Steel Mounting Bracket[12]

SENSOR KITS (Order Separately)
All sensor kits include On/Off Occupancy & Daylight.
Daylight activation requires setting of dip-switches on site.

	Catalog #	# Relays	Lens Type	Voltage	Wet Label
120V/277V	OS1B26WLK	1	360°	120/277	Yes
	OS2B26WLK	2	360°	120/277	Yes
	OS1A8WLK	1	Aisle	120/277	Yes
	OS2A8WLK	2	Aisle	120/277	Yes

[1] 4' and 8', not available in 2' size
[2] Not available with battery pack or DTS
[3] Not available with XL lumen package
[4] Not available with VL lumen package
[5] Clear lenses (RA, DCA and RP) may cause noticeable light patterns on fixtures. See website for photometrics
[6] 2' and 4' only. 8' not available
[7] See table for availability
[8] Not available in 347V
[9] For emergency circuit control loads including sensors and wireless systems listed to UL924. Only available with 0-10V drivers. See page 13 for wiring diagram
[10] Registered trademark of Daintree Networks, used by permission
[11] Requires 3/8" QD threaded rod by others
[12] 2' required for 8' fixture
[13] OCM option uses Watthopper TM-105

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LED / LXEM

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HUBBELL Lighting

CSPD SHOOTING RANGE
FLOOD LIGHT

RATIO FLOODLIGHT

MEDIUM AND LARGE

Cat.#

Job

Type: R5MA, R5SA

SPECIFICATIONS

Intended Use:
Medium and Large LED flood with a variety of NEMA distribution for lighting applications such as safety/security, accent, flag pole, columns, or signs

Construction:
- Corrosion resistant, rugged die-cast aluminum housing with powder coat paint finish
- High impact UV stabilized acrylic outer lens protects LEDs and allows for cleaning and debris removal
- Internal venting fins create optimal heat dissipation and allow all water to drain from the face of the luminaire
- Visor, Louver and Vandal Lens options
- Easy maintenance access to electrical components with removal of 4 screws from back of fixture housing
- Lens hardware is internal to the fixture allowing for even pressure on the gasket for an optimal water tight seal

Optical/LED:
- 176 or 360 midpower LEDs
- Ambient operating temperature -40°C to 40°C
- Stock Versions: 4000K and 5000K CCT
- Variety of NEMA distributions: - N (3x3), M (4x4), and W (6x6) - for wide range of lighting applications; Stock version Wide (6x6) only
- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance.

Electrical:
- 120-277V operation, 50/60Hz
- Driver IP66 and RoHS compliant driver
- 0-10V dimming driver standard, continuous dimming option to have leads pulled out for easy connection
- Drivers have 90% power factor and less than 20A THD

Electrical (cont'd):
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- 10kA surge protector optional

Controls:
- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- 0-10V dimming leads available for use with control devices (provided by others, must specify lead length)
- SiteSync™ wireless control system is available via 7-pin and can be ordered separately. See ordering information and details at: www.hubbelllighting.com/siteync

Installation:
- Interchangeable knuckle and trunnion mounting options
- Knuckle arm fitter option available for 2-3/8" OD tenon. 180 degrees of adjustability (with no options). 4 degree adjustable increments
- Trunnion option available for surface and cross-sarm mounting using (1) 3/4" or (2) 1/2" size through bolts

Listings:
- Fixture is IP66 rated
- Listed to UL1598 for use in wet locations

Warranty:
5 year limited warranty, for more information visit: http://www.hubbelllighting.com/resources/warranty/

CERTIFICATIONS/LISTINGS

IP66

PRODUCT IMAGE(S)

RFL4 RFL5

DIMENSIONS

RFL4 RFL5

	A	B	C	D	E
RFL4	13.8" 351mm	8.6" 218mm	3.5" 89mm	16.0" 406mm	18.1" 460mm
RFL5	11.2" 152mm	F 3.5" 89mm	G 18.6" 472mm	H	

RFL4 EPA(Front/Side)	RFL5 EPA(Front/Side)
1.24ft² / 0.43ft²	2.00ft² / 0.50ft²

SHIPPING INFORMATION

Catalog Number	G.Wt(kg)/ CTN	Carton Dimensions Length inch (cm)	Width inch (cm)	Height inch (cm)
RFL4	15 (6.8)	20.75 (52.7)	15.125 (38.4)	6.9375 (17.6)
RFL5	19 (8.6)	25 (63.5)	15.125 (38.4)	6.9375 (17.6)

ORDERING INFORMATION

ORDERING EXAMPLE: RFL4-176L-95-4KL-M-UNV-K-GYS

_ _ – _ _ – _ _ – _ _ – _ _ – _ _ – _ _ – _ _

SERIES: RFL4 Ratio Flood Size 4 ; RFL5 Ratio Flood Size 5

 # LEDS WATTAGE: 176L-95 176 LEDs - 12,000 lm ; 176L-120 176 LEDs - 15,000 lm ; 360L-130 360 LEDs - 18,000 lm ; 360L-190 360 LEDs - 25,000 lm ; 360L-265 360 LEDs - 30,000 lm

CCT/CRI: 3K7 3000K, 70 CRI ; 4K7 4000K, 70 CRI ; 5K7 5000K, 70 CRI

DISTRIBUTION: N Narrow, 2x2 ; M Medium Flood, 4x4 ; W Wide Flood, 6x6

VOLTAGE: UNV Universal 120-277 ; 120 120V ; 208 208V ; 240 240V ; 277 277V ; 347 347V ; 480 480V

COLOR: GYS Light gray smooth ; DB Dark bronze textured ; BL Black textured ; GT Graphite Textured ; PS Platinum silver smooth ; WH White textured ; CC Custom Color

MOUNTING: K Knuckle ; T Trunnion

CONTROL OPTIONS: CD Continuous Dimmable ; NXWE[1,2] NX Wireless Enabled (module + radio) ; NXSPW F[1,3,4] NX Wireless, PIR Occ. Sensor, Daylight Harvesting, 14' ; NXSP_F[1,3,4] NX, PIR Occ. Sensor, Daylight Harvesting, 14'

CONTROL OPTIONS OTHER: SCP_ F[1,5,6] Programmable occupancy sensor ; 7PR[7] 7-Pin twist lock receptacle ; 7PR-SC[7] 7-Pin receptacle with shorting cap ; 7PR-MD F[7,8] Low voltage sensor for 7PR ; 7PR-TL[7] 7-Pin PCB with photo control

OPTIONS: SP Surge Protector ; F Fusing ; PC Polycarbonate Lens

1 Replace "_" with "14" for up to 14' mounting height, "30F" for 15-30' mounting height
2 Replace "_" with "8" for up to 8' mounting height, "40F" for 9-40' mounting height
3 Option only available with knuckle mounting
4 Available with knuckle option only

STOCK ORDERING INFORMATION NEXT PAGE

HUBBELL Outdoor Lighting

Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
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CSPD SHOOTING RANGE
PARKING LOT STANDARD

RATIO LED SERIES

AREA/SITE LIGHTER

Cat.#

Job

Type: RAR2, RAR3

SPECIFICATIONS

Intended Use:
Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as retail, commercial and campus parking lots.

Construction:
- Rectilinear form mimics the traditional shoebox form factor keeping a similar but updated style and appearance, ideal for retrofit applications
- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish

Optics/LED:
- 80, 160, 320 or 480 midpower LEDs
- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 3000K, 4000K, or 5000K (70 CRI) CCT
- Zero uplight at 0 degrees of tilt
- Field rotatable optics

Electrical:
- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20KA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is consumed

Controls:
- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- 0-10V dimming leads available for use with control devices (provided by others, must specify lead length)
- SiteSync™ wireless control system is available via 7-pin and can be ordered separately. See ordering information and details at: www.hubbelllighting.com/siteync

Installation:
- Standard square arm mounts
- Optional universal mounting block and round pole adaptor also available as accessories
- Knuckle arm fitter option available for 2-3/8" OD tenon. Max tilt of 60 degrees with 4 degree adjustable increments. (Restrictions apply for 7-pin options)

Listings:
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 3G rated for ANSI C136.31 high vibration applications
- Fixture is IP66 rated
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt

Warranty:
Five year limited warranty (for more information visit: http://www.hubbelloutdoor.com/resources/warranty/

PRODUCT IMAGE(S)

RAR1 RAR2

DIMENSIONS

RAR1 RAR2

A	B	C	D	E	F
5.0" 127mm	14.0" 355.6mm	12.0" 304.8mm	7.5" 190.5mm	19.5" 495.3mm	17.39" 441.7mm

G	H	I	Weight
27.0" 685.8mm	18.2" 462.8mm	3.25" 82.5mm	RAR-1 13.5 lbs (6.13 kgs) ; RAR-2 24.0 lbs (10.8 kgs)

RAR-1 EPA90°	RAR-2 EPA90°	RAR-1 EPA0/30°	RAR-2 EPA0/30°
.45 ft² ; .13 m²	.55 ft² ; .17 m²	.56 ft² ; .17 m²	1.48 ft² ; .45 m²

SHIPPING INFORMATION

Catalog Number	G.Wt(kg)/ CTN	Carton Dimensions Length inch (cm)	Width inch (cm)	Height inch (cm)
RAR1	15 (6.8)	20.75 (52.7)	15.125 (38.4)	6.9375 (17.6)
RAR2	19 (8.6)	25 (63.5)	15.125 (38.4)	6.9375 (17.6)

CERTIFICATIONS/LISTINGS

c UL us IP66

ORDERING INFORMATION - STOCK CONFIGURATIONS

CATALOG NUMBER	LUMENS	WATTAGE	LED COUNT	CCT/CRI	VOLTAGE	DISTRIBUTION	MOUNTING	FINISH
RAR1-100-4K-3	12,000	100W	160L	4000K/70CRI	120-277V	Type 3	Square Arm	Bronze
RAR1-100-4K-4	12,000	100W	160L	4000K/70CRI	120-277V	Type 4W	Square Arm	Bronze
RAR2-140-4K-3	18,000	140W	320L	4000K/70CRI	120-277V	Type 3	Square Arm	Bronze
RAR2-140-4K-4	18,000	140W	320L	4000K/70CRI	120-277V	Type 4W	Square Arm	Bronze
RAR2-165-4K-3	21,000	165W	320L	4000K/70CRI	120-277V	Type 3	Square Arm	Bronze
RAR2-165-4K-4	21,000	165W	320L	4000K/70CRI	120-277V	Type 4W	Square Arm	Bronze

CONFIGURABLE ORDERING INFORMATION NEXT PAGE

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15905 SNIPER LANE
FOUNTAIN, CO 80817

seal

issue / revision	date:
DEVEL. PLAN	08/14/19
DP RESUBMIT	02/21/2020

issue / revision

job # 103-01
drawn EJR
chkd JJA

description: LIGHTING DETAILS

number: E-DP3

CSPD SHOOTING RANGE
MAN DOOR WALL PACK

COMPASS®

DESCRIPTION

The CUSO Series is an architectural, low-profile outdoor light, offering "normally On" AC and emergency lighting with powerful LED illumination. The housing is fully sealed and gasketed, and has an IP65 rating. Designed for wall mounting with universal K/O pattern in back-plate for easy installation to most standard size junction boxes. Includes a single ½" NPT conduit entry in the top, center of the housing. Illumination provided by 8 high power LEDs which achieve 1,600 lumens in AC and 600 lumens in emergency. Available in 3000K or 4000K color temperature. Models at 3000K include a photo-sensor and PIR(passive infra-red) motion detector which cannot be altered. The unit will only turn on in AC mode when motion is detected. Models at 4000K include a photo-sensor and do not include motion detector. The unit can be controlled by a switch, timer or the photo-cell.

APPLICATION

The CUSO Series can be applied in areas that are susceptible to rain and severe moisture like parking decks, and outdoor commercial applications to meet all Path of Egress requirements.

COMPLIANCES & LISTINGS

UL924 Listed for Wet Location
NFPA 101 and NFPA 70
OSHA

WARRANTY

5 year full unit warranty

MD

tradeSELECT™

FEATURES

- Includes self-diagnostic/self-test feature to monitor proper operation
- Quick installation
- Universal 120-277VAC input, 60Hz.
- Includes long-life 7.2V Nickel Cadmium battery for UL recognized 90 minute operation
- Full re-charge within 24 hours
- Provided with water-proof test switch and AC-On indicator
- 0°C to 50°C Standard Model, -25°C to 50°C with optional heater
- UL924 and Wet Location Listed

INPUT POWER REQUIREMENTS

	Max.	Max. with heater
120VAC, 60Hz	17W	32W
277VAC, 60 Hz	17W	32W

ORDERING GUIDE

Catalog Number	Description
CUSO DB	Outdoor AC/EM, 3000K, Photo-sensor and PIR Motion Detect, Self-Diag., Dark Bronze
CUSO DB-H	Outdoor AC/EM, 3000K, Photo-sensor and PIR Motion Detect, Self-Diag., Dark Bronze, Heater
CUSO BK	Outdoor AC/EM, 3000K, Photo-sensor and PIR Motion Detect, Self-Diag., Black
CUSO BK-H	Outdoor AC/EM, 3000K, Photo-sensor and PIR Motion Detect, Self-Diag., Black, Heater
CUSO WH	Outdoor AC/EM, 3000K, Photo-sensor and PIR Motion Detect, Self-Diag., White
CUSO WH-H	Outdoor AC/EM, 3000K, Photo-sensor and PIR Motion Detect, Self-Diag., White, Heater
CUSO4DB-ND	Outdoor AC/EM, 4000K, Photo-sensor, Self-Diag., Dark Bronze
CUSO4DB-H-ND	Outdoor AC/EM, 4000K, Photo-sensor, Self-Diag., Dark Bronze, Heater
CUSO4BK-ND	Outdoor AC/EM, 4000K, Photo-sensor, Self-Diag., Black
CUSO4BK-H-ND	Outdoor AC/EM, 4000K, Photo-sensor, Self-Diag., Black, Heater
CUSO4WH-ND	Outdoor AC/EM, 4000K, Photo-sensor, Self-Diag., White
CUSO4WH-H-ND	Outdoor AC/EM, 4000K, Photo-sensor, Self-Diag., White, Heater

DIMENSIONS

Single Carton Weight: 4.0 lbs.
Master Carton Quantity: 6 each

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HUBBELL Lighting

603879_COM_CUSO_SPEC 07/17

CSPD SHOOTING RANGE
WALL PACK

LNC2 SERIES

Cat.#

Job

Type: WP3

SPECIFICATIONS

The small sized LNC2 is designed for perimeter illumination for safety, security and identification. No uplight and prismatic lenses offer neighbor friendly lighting at typical mounting heights of 8-15'. Units have protective polyester finish for long lasting appearance. Ideal for schools, factories, hospitals, warehouses and retail applications. Energy efficient LEDs provide up to 85% energy savings when compared to traditional light sources with little to no maintenance.

Construction:
Rugged die-cast aluminum housing protects components and provides an architectural appearance. Casting thermally conducts LED heat to optimize performance and long life. Powder paint finish provides durability in outdoor environments.

Electrical:
- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option in 12L-070 configuration
- Minimum operating temperature is -40°C/-40°F (excludes 12L-035 and P15 configurations)
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Driver RoHS and IP66
- 10kA surge protector

LED(s) CCT:
- 3000K CCT nominal , 4000K CCT nominal, 5000K CCT nominal (70 CRI)
- 9, 12 and 18 LED configurations available see pages 2 and 3 for electrical and photometric details

Optical:
Zero uplight distributions using individual acrylic LED optics provide IES type II, III and IV distributions. Optional (CS) acrylic diffuser available for reduced glare. Prismatic refractor lens provides ~10% uplight for increased vertical FC and forward light projection ideal for security lighting.

Lumen Maintenance:
L96 at 60,000hrs (Projected per IESNA TM-21-11), see table on page 2 for all values

Installation:
Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box). Designed for direct j-box mount. Optional 1/2" conduit hubs available (standard for sensor, SiteSync and battery versions).

Options/Controls:
- Universal button photocontrol
- Occupancy sensor options available for complete on/off and dimming control
- SiteSync pre-commissioned wireless controls (with or without sensor)
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Dual Driver and Dual Power Feed option for 18L-070 versions

Listings:
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations
- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Made-to-order versions are IP-65 rated

Warranty:
Five year limited warranty (for more information visit: https://www.hubbell.com/hubbelllighting/en/resources/warranty

PRODUCT IMAGE(S)

*Shown with CS acrylic diffuser

DIMENSIONS

A	B	C	D	E
5.54" 40.7 mm	10.16" 258 mm	6.33" 160.7 mm	7.64" 194 mm	9.10" 231 mm

BASE MODEL 7.0 lbs / 3.2 kg
PC SENSOR 7.5 lbs / 3.4 kg • **IBU MODELS** 9.5 lbs / 4.3 kg

SHIPPING INFORMATION (Stock)

Catalog Number	G.Wt(kg)/ CTN	Carton Dimensions Length inch (cm)	Width inch (cm)	Height inch (cm)	Carton Qty. per Master Pack
LNC2-12LU	14.3 (6.5)	14.5 (37)	11.4 (29)	8.4 (21.5)	2
LNC2-18LU	14.8 (6.7)	14.5 (36)	11.4 (29)	8.4 (21.5)	2

CERTIFICATIONS/LISTINGS

c UL us ; Turtle Friendly ; IP66 ; IDA ; DLC *2000K and warmer CCTs only

ORDERING INFORMATION – ORDERING EXAMPLE: LNC2-12L-4K-070-3-1-DB-PCU-EH-CS

LNC2 – – – –