

STANDARD CONSTRUCTION NOTES:

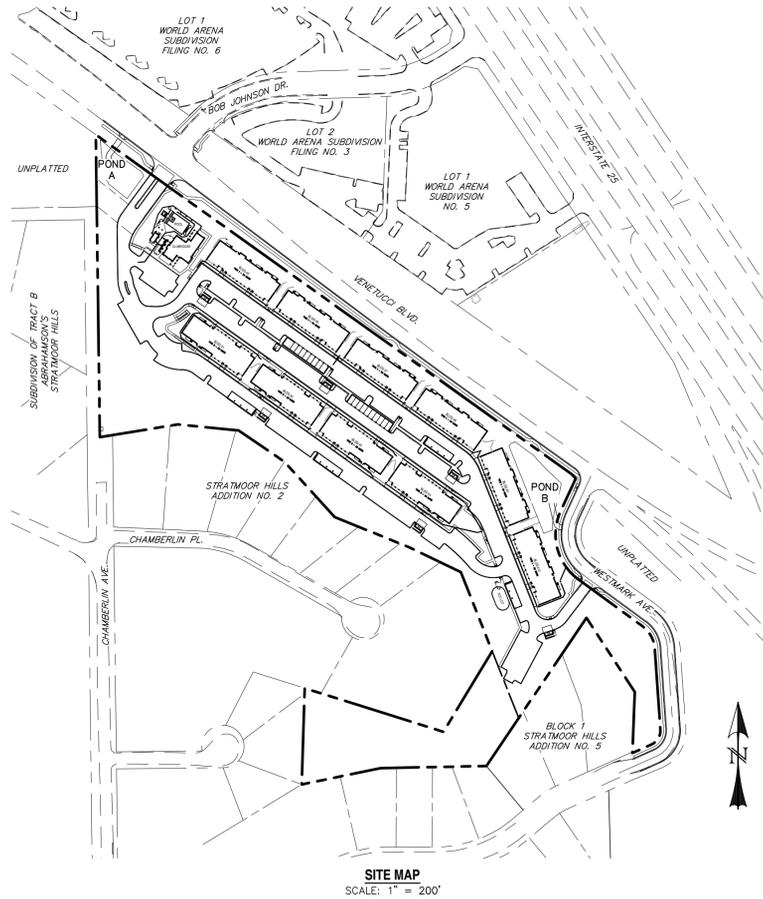
- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
 - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - CDOT M & S STANDARDS
- 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. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DPW AND MUTCD CRITERIA.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DPW, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

GRADING NOTES:

- 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.
- 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.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) 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.
- 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 DEC. A PRE-CONSTRUCTION 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.
- 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.
- 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.
- 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.
- 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.
- ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE EGM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 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 LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- 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).
- 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.
- 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.
- 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.
- EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 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.
- 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.
- TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 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.
- 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.
- 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 EGM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 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.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 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, DOM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (041, 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.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 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.
- THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. AND SHALL BE CONSIDERED A PART OF THESE PLANS. ENTECH ENGINEERING, INC. WILL ALSO DESIGN THE PROPOSED RETAINING WALLS AND ANY SLOPE STABILIZATION.
- 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
 WOOD - PERMITS
 4300 CHERRY CREEK DRIVE SOUTH
 DENVER, CO 80246-1530
 ATTN: PERMITS UNIT

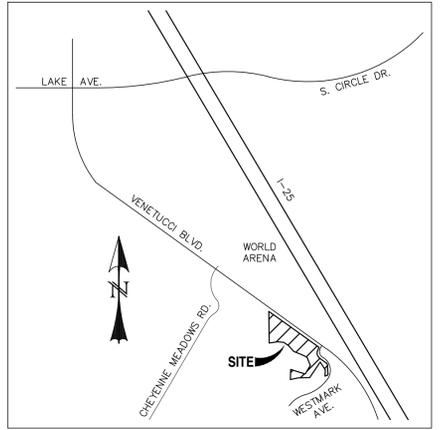
ELDORADO SPRINGS GRADING & EROSION CONTROL PLAN

EL PASO COUNTY, COLORADO



AGENCIES:

- DEVELOPER:** ESH DEVELOPMENT, LLC
5671 NORTH ORACLE ROAD, SUITE 1102
TUSCON, AZ 85704
EMERY CHUKLY (520) 742-2114
- ENGINEER:** WESTWORKS ENGINEERING
1023 W. COLORADO AVENUE
COLORADO SPRINGS, CO 80904
CHAD D. KUZBEK, P.E. (719) 685-1670
- EL PASO COUNTY:** PLANNING AND COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, CO 80910
(719) 520-7959
- UTILITIES: (WATER & SANITARY)** STRATMOOR HILLS WATER & SANITATION DISTRICT
1811 B STREET
COLORADO SPRINGS, CO 80906
KIRK MEDINA (719) 576-0311
- UTILITIES: (GAS)** COLORADO SPRINGS UTILITIES
111 S. CASCADE AVENUE
COLORADO SPRINGS, CO 80903
(719) 448-4800
- FIRE:** STRATMOOR HILLS FIRE PROTECTION DISTRICT
2160 B STREET
COLORADO SPRINGS, CO 80906
DOTTIE BARRETT (719) 576-1200



VICINITY MAP
SCALE: N.T.S.

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.



CHAD D. KUZBEK, COLORADO PE #35751

DATE

OWNER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

OWNER SIGNATURE
Michael E. Winterfeld
Michael E. Winterfeld

10-8-2020
DATE

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.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JENNIFER IRVINE, P.E.
COUNTY ENGINEER/EGM ADMINISTRATOR

DATE

LEGEND

- EXISTING (E)
- PROPOSED (P)
- CURB AND GUTTER C&G
- EASEMENT ESMT
- BUILDING BLDG
- DRAINAGE DR
- PUBLIC PUB
- PRIVATE PVT
- UNDERGROUND UG
- UTILITY UT
- SANITARY SAN
- SEWER SWR
- WATER WTR
- CITY OF COLORADO SPRINGS COCS
- EL PASO COUNTY EPC
- BOUNDARY
- RIGHT-OF-WAY
- LOT LINE
- EASEMENT
- LIMITS OF DISTURBANCE
- (E) SANITARY MAIN, MH
- (E) WATER MAIN, VALVE, FH
- (E) UG ELECTRIC
- (E) FIBER OPTIC
- (E) GAS MAIN
- (E) OVERHEAD UTILITY
- (E) UG TELEPHONE
- (E) STORM SEWER
- (P) SANITARY MAIN, MH
- (P) WATER MAIN, VALVE, FH
- (P) FIRE SERVICE, VALVE
- (P) STORM SEWER, MH

GENERAL NOTES:

- ALL PAVING AND CURB & GUTTER SHALL BE CONSTRUCTED SO AS NOT TO OBSTRUCT THE DRAINAGE PATHS. GRADES SHALL BE MAINTAINED AS SHOWN IN THESE PLANS FOR THE DRAINAGE PATHS. IF THIS CANNOT BE ACCOMPLISHED, THEN THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CORRECTION.
- POSITIVE DRAINAGE AWAY FROM THE BUILDING SHALL BE MAINTAINED DURING AND AFTER SITE CONSTRUCTION. SWALES SHALL BE CONSTRUCTED AROUND BUILDINGS TO DIRECT DRAINAGE AWAY FROM STRUCTURES.
- SITE CONSTRUCTION INCLUDING PAVING AND CURB & GUTTER INSTALLATION SHALL MAINTAIN POSITIVE DRAINAGE AS SHOWN ON THIS PLAN. STANDING WATER OR PONDING ANYWHERE ON THE SITE IS UNACCEPTABLE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.

BENCHMARKS:

- THE MOST NORTHERLY CORNER OF THE SITE MONUMENTED BY A 1" YELLOW PLASTIC CAP STAMPED "23890." EL = 5865.58
- THE MOST SOUTHERLY CORNER ALONG US HIGHWAY 85-87 BEING MONUMENTED BY A 1-1/2" ALUMINUM SURVEYORS CAP STAMPED "CCCS LLC PLS 30118" LOCATED AT THE WESTERLY CORNER OF THE INTERSECTION OF WESTMARK AVENUE AND US HIGHWAY 85-87. EL = 5854.18

BASIS OF BEARING:

THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 14 SOUTH, RANGE 66 WEST OF THE 6TH P.M. BEING MONUMENTED AT THE NORTH END BY A 2-1/2" ALUMINUM SURVEYORS CAP WITH APPROPRIATE MARKINGS AND AT THE SOUTH END BY A 3-1/4" ALUMINUM SURVEYORS CAP WITH APPROPRIATE MARKINGS IS ASSUMED TO BEAR N00°44'35"W, A DISTANCE OF 1320.61 FEET.

RETAINING WALL NOTES:

- CALL-OUTS ONLY SHOW EXPOSED FACE AT TOP AND BOTTOM OF WALL(S) AND DOES NOT CONSTITUTE A STRUCTURAL DESIGN.
- THIS PLAN IS INTENDED TO SHOW ONLY THE HEIGHT AND EXTENT OF LANDSCAPE & RETAINING WALLS TO ACCOMMODATE THE GRADING AS SHOWN. THE MATERIALS, SPECIFICATIONS, AND CONSTRUCTION TECHNIQUES AND METHODS SHALL BE UP TO THE OWNER AND CONTRACTOR.
- STRUCTURAL DESIGN BY A LICENSED ENGINEER SHALL BE PROVIDED BY OTHERS, AS REQUIRED, FOR THE RETAINING WALL(S).

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PCD FILE NO. PPR1932

REV.	DESCRIPTION	DATE
1	ADDRESS AGENCY COMMENTS	01/22/20
2	ADDRESS AGENCY COMMENTS	05/05/20
3	ADDRESS AGENCY COMMENTS	08/18/20
4	ADDRESS AGENCY COMMENTS	03/26/21
5	ADDRESS AGENCY COMMENTS	04/21/21



PREPARED FOR:
ESH DEVELOPMENT, LLC
5671 NORTH ORACLE ROAD
SUITE #1102
TUSCON, AZ 85704
(520) 742-2114

PREPARED UNDER MY DIRECTORSHIP BY:
WESTWORKS ENGINEERING.
CHAD D. KUZBEK, COLORADO PE #35751

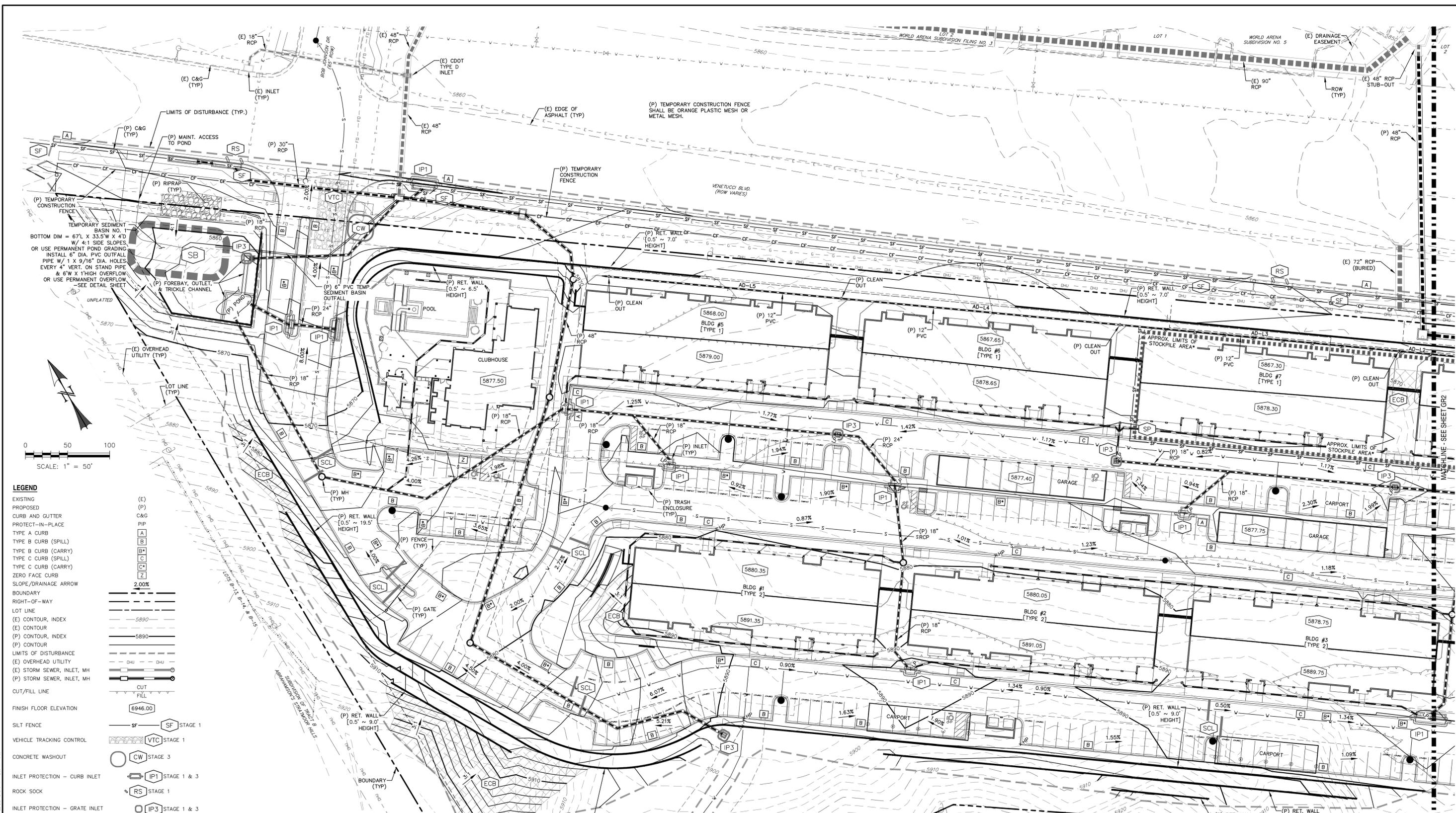


DATE



ELDORADO SPRINGS
GRADING & EROSION CONTROL PLAN
TITLE SHEET

DESIGNED BY: MGP	DRAWN BY: MGP
SCALE: 1"=200'	DATE: 04/21/21
JOB NUMBER: 91807	SHEET: GR1 OF 10



LEGEND

EXISTING
PROPOSED

CURB AND GUTTER
PROTECT-IN-PLACE

TYPE A CURB
TYPE B CURB (SPILL)
TYPE B CURB (CARRY)
TYPE C CURB (SPILL)
TYPE C CURB (CARRY)
ZERO FACE CURB

SLOPE/DRAINAGE ARROW
BOUNDARY
RIGHT-OF-WAY

LOT LINE

(E) CONTOUR, INDEX
(E) CONTOUR
(P) CONTOUR, INDEX
(P) CONTOUR

LIMITS OF DISTURBANCE
(E) OVERHEAD UTILITY
(E) STORM SEWER, INLET, MH
(P) STORM SEWER, INLET, MH

CUT
FILL

FINISH FLOOR ELEVATION

SILT FENCE

VEHICLE TRACKING CONTROL

CONCRETE WASHOUT

INLET PROTECTION - CURB INLET

ROCK SOCK

INLET PROTECTION - GRATE INLET

EROSION CONTROL BLANKET

STABILIZED STAGING AREA*

SEDIMENT CONTROL LOG

STOCKPILE PROTECTION*

TEMPORARY SEDIMENT BASIN

(E) C&G (TYP)
(P) C&G (TYP)
(P) MAINT. ACCESS TO POND
(P) RIPRAP (TYP)
(P) TEMPORARY CONSTRUCTION FENCE
(P) FOREBAY, OUTLET, & TRICKLE CHANNEL
(P) POND
(P) 6" PVC TEMP. SEDIMENT BASIN OUTFALL
(P) 24" RCP
(P) RET. WALL [0.5' ~ 19.5' HEIGHT]
(P) MH (TYP)
(P) RET. WALL (TYP)
(P) RET. WALL [0.5' ~ 9.0' HEIGHT]
(P) RET. WALL [0.5' ~ 5.5' HEIGHT]
(P) RET. WALL [0.5' ~ 9.0' HEIGHT]
(P) RET. WALL [0.5' ~ 9.0' HEIGHT]

[A] CURB
[B] CURB (SPILL)
[B+] CURB (CARRY)
[C] CURB (SPILL)
[C+] CURB (CARRY)
[Z] ZERO FACE CURB

2.00%

5890
5890

DHW DHU

6946.00

SF SF STAGE 1

VTC VTC STAGE 1

CW CW STAGE 3

IP1 IP1 STAGE 1 & 3

RS RS STAGE 1

IP3 IP3 STAGE 1 & 3

ECB ECB STAGE 2

SSA SSA STAGE 1

SCL SCL STAGE 3

SP SP STAGE 2

SB SB STAGE 1

BMP INSTALLATION STAGING NOTES:

STAGE 1 - "INITIAL" PRE-DISTURBANCE
INSTALL INITIAL STORMWATER QUALITY (SWQ) BEST MANAGEMENT PRACTICES (BMP'S) AS SHOWN ON THE GRADING AND EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES. THESE BMP'S CONSIST OF THE PERIMETER CONTROLS OF SILT FENCE, CURB SOCKS, INLET PROTECTION OF EXISTING INLETS, AND THE VEHICLE TRACKING CONTROL PAD.

STAGE 2 - "INTERIM" OVERLOT GRADING
COMMENCE THE BULK OF OVERLOT GRADING OPERATIONS AND INSTALL TEMPORARY BMP'S AS SHOWN ON THE GRADING AND EROSION CONTROL PLAN. TEMPORARY BMP'S MAY CONSIST OF ADDITIONAL SILT FENCE, SLOPE BLANKETS, AND SURFACE ROUGHENING OF SLOPES.

STAGE 3 - "INTERIM" INFRASTRUCTURE & BUILDING CONSTRUCTION
CONSTRUCT SITE IMPROVEMENTS AS SHOWN ON THE APPLICABLE CONSTRUCTION DOCUMENTS. ADDITIONAL TEMPORARY BMP'S CONSISTING OF ADDITIONAL SILT FENCE, CONCRETE WASH-OUT AREA, AND INLET PROTECTION OF PERMANENT DRAINAGE IMPROVEMENTS. ANY STOCKPILED DIRT SHALL BE PROTECTED BY A PERIMETER OF SILT FENCE.

STAGE 4 - "FINAL" PERMANENT STABILIZATION
PERMANENT SWQ BMP'S SUCH AS RIP-RAP, CURB & GUTTER, PAVEMENT, LANDSCAPING, AND RESEEDING SHALL BE CONSTRUCTED AT THIS TIME AS OUTLINED ON THE GRADING AND EROSION CONTROL PLAN AND THE LANDSCAPE AND IRRIGATION PLANS, DRAINAGE REPORT, AND/OR CONSTRUCTION DOCUMENTS. ALL DISTURBED AREAS THAT ARE NOT PERMANENTLY PAVED OR LANDSCAPED SHALL BE PERMANENTLY RESEED.

- NOTES:**
1. THE LOCATION OF SOIL STOCKPILE(S), STAGING AREA, AND TEMPORARY DISPOSAL AREA SHALL BE DETERMINED BY THE CONTRACTOR. APPROPRIATE EROSION CONTROL BMP MEASURES SHALL BE FOLLOWED FOR EACH.
 2. EXISTING VEGETATION CONSISTS MOSTLY OF GRASSES/WEEDES WITH SOME SMALL TREES IN THE NORTHEAST CORNER.
 3. THERE ARE 2 PERMANENT STORMWATER BMP FACILITIES ON THIS SITE. THEY SHALL BE USED AS TEMPORARY SEDIMENTATION FACILITIES DURING CONSTRUCTION. ALL ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO FINAL LANDSCAPING.
 4. NO CONCRETE OR ASPHALT BATCH PLANTS TO BE USED ON THIS SITE.

REV.	DESCRIPTION	DATE
1	ADDRESS AGENCY COMMENTS	01/22/20
2	ADDRESS AGENCY COMMENTS	05/05/20
3	ADDRESS AGENCY COMMENTS	08/18/20
4	ADDRESS AGENCY COMMENTS	03/26/21
5	ADDRESS AGENCY COMMENTS	04/21/21



PREPARED FOR:
ESH DEVELOPMENT, LLC

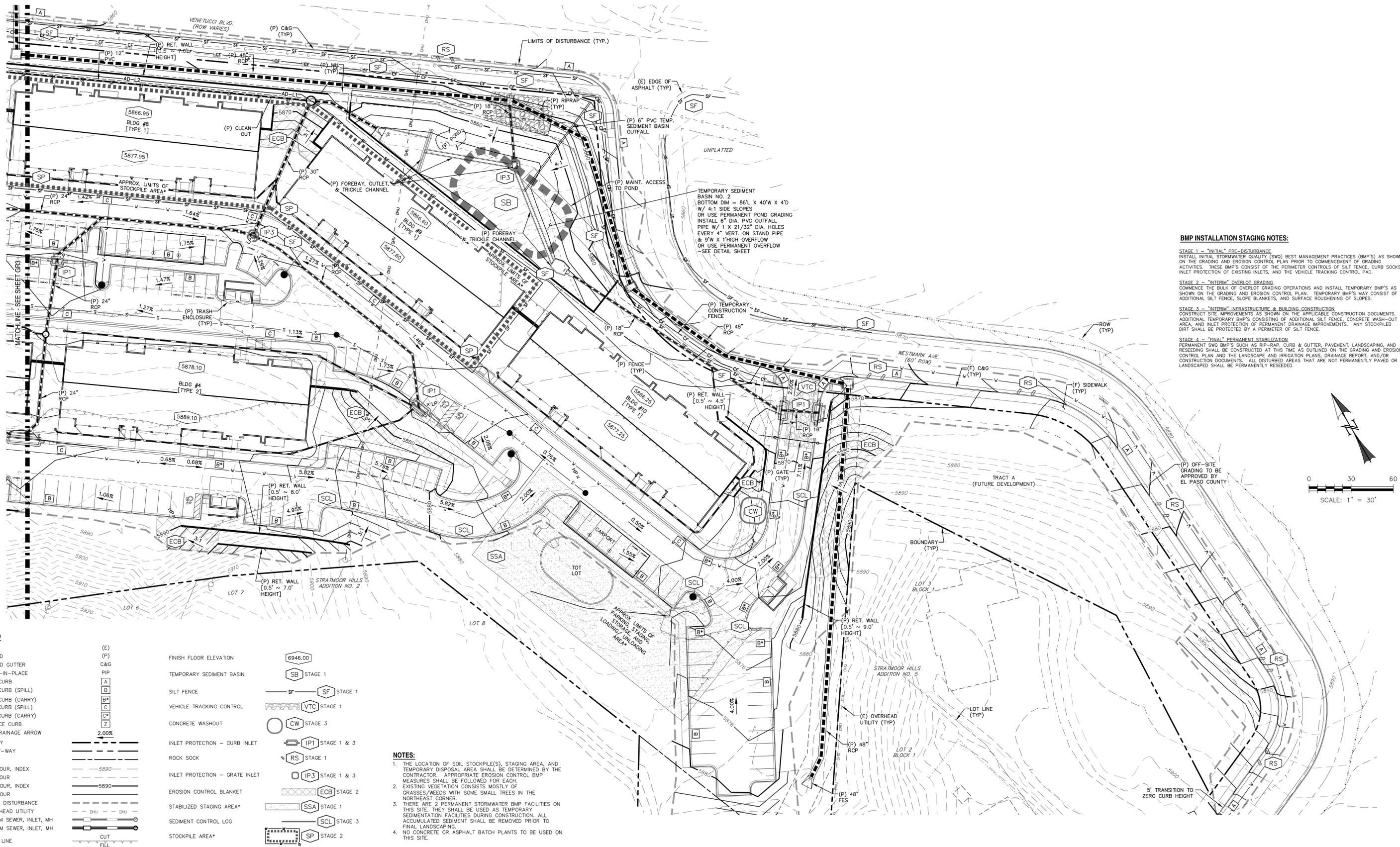
5671 NORTH ORACLE ROAD
SUITE #1102
TUSCON, AZ 85704
(520) 742-2114

PREPARED UNDER MY DIRECT SUPERVISION
WESTWORKS ENGINEERING.

CHAD D. KUZBEK, COLORADO PE #30721



ELDORADO SPRINGS		DESIGNED BY: MGP	DRAWN BY: MGP
		SCALE: 1" = 30'	DATE: 04/21/21
GRADING & EROSION CONTROL PLAN		JOB NUMBER: 91807	SHEET: GR2 OF 10



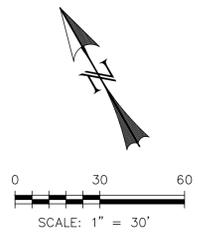
BMP INSTALLATION STAGING NOTES:

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STAGE 2 - "INTERIM" OVERLOT GRADING
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LEGEND

(E) EXISTING	(P) PROPOSED	(E) FINISH FLOOR ELEVATION	6946.00
C&G CURB AND GUTTER	PIP PROTECT-IN-PLACE	TEMPORARY SEDIMENT BASIN	SB STAGE 1
A TYPE A CURB	B TYPE B CURB (SPILL)	SILT FENCE	SF STAGE 1
B+ TYPE B CURB (CARRY)	C TYPE C CURB (SPILL)	VEHICLE TRACKING CONTROL	VTC STAGE 1
C+ TYPE C CURB (CARRY)	Z ZERO FACE CURB	CONCRETE WASHOUT	CW STAGE 3
SLOPE/DRAINAGE ARROW		INLET PROTECTION - CURB INLET	IP1 STAGE 1 & 3
BOUNDARY		ROCK SOCK	RS STAGE 1
RIGHT-OF-WAY		INLET PROTECTION - GRATE INLET	IP3 STAGE 1 & 3
LOT LINE		EROSION CONTROL BLANKET	ECB STAGE 2
(E) CONTOUR, INDEX		STABILIZED STAGING AREA*	SSA STAGE 1
(E) CONTOUR		SEDIMENT CONTROL LOG	SCL STAGE 3
(P) CONTOUR, INDEX		STOCKPILE AREA*	SP STAGE 2
(P) CONTOUR			
LIMITS OF DISTURBANCE			
(E) OVERHEAD UTILITY			
(E) STORM SEWER, INLET, MH			
(P) STORM SEWER, INLET, MH			
CUT/FILL LINE			

NOTES:

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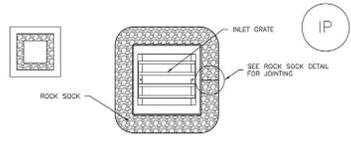
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PREPARED UNDER MY DIRECT SUPERVISION
WESTWORKS ENGINEERING.
 CHAD D. KUZBEK, COLORADO PE #35751
 DATE: 4/21/21



ELDORADO SPRINGS
GRADING & EROSION CONTROL PLAN

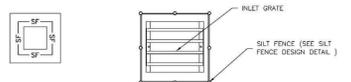
DESIGNED BY:	MGP	DRAWN BY:	MGP
SCALE:	1" = 30'	DATE:	04/21/21
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IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES

- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
- STRAW MATS/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PAVEMENT AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP-4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

- SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
- POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MINIMUM SPACING OF 3 FEET.
- STRAW MATS/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PAVEMENT AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

GENERAL INLET PROTECTION INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION OF INLET PROTECTION.
 - TYPE OF INLET PROTECTION (IP-1, IP-2, IP-3, IP-4, IP-5, IP-6)
 - 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.
 - 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**
- 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.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - 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 1/4 OF THE HEIGHT FOR STRAW BALES.
 - 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.
 - 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.

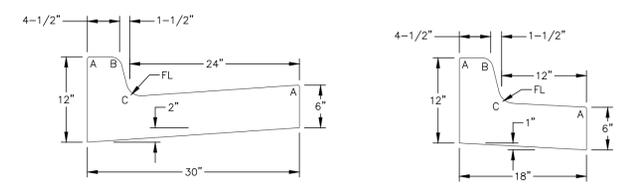
(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.

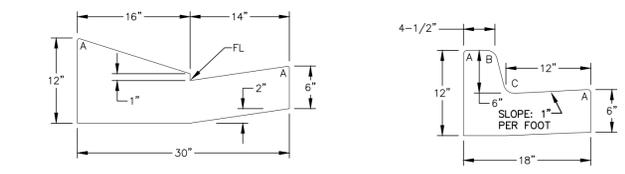
NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

IP-3. INLET PROTECTION



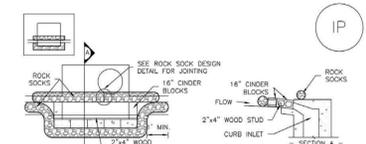
TYPE A VERTICAL CURB & GUTTER SCALE: N.T.S.

TYPE B MEDIAN CURB & GUTTER SCALE: N.T.S.



TYPE C RAMP CURB & GUTTER SCALE: N.T.S.

TYPE B' MEDIAN CURB & GUTTER [CARRY] SCALE: N.T.S.



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

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
- CONCRETE "TONGER" 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.
- GRAVEL BAYS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



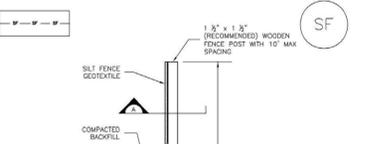
SILT FENCE INSTALLATION NOTES

- SILT FENCE SHALL BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER POOLING. 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 POOLING AND SEDIMENTATION.
- 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.
- CONTACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE NEEDS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
- SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICABLE GAP BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
- 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.
- 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 "3-HOOK" OR "2-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').
- SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

- 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.
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- (DETAILS 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.

IP-1. INLET PROTECTION



SILT FENCE DETAIL

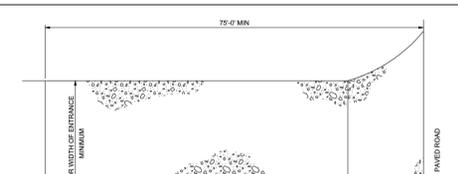
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SILT FENCE MAINTENANCE NOTES

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 - SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENT IS APPROXIMATELY 6".
 - REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
 - 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.
 - WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.
- (DETAILS 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.

SF. SILT FENCE DETAIL



VEHICLE TRACKING CONTROL

VEHICLE TRACKING CONTROL INSTALLATION REQUIREMENTS

- ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
- CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
- AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO APPLYING DOWN.
- CONSTRUCTION ROADWAYS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
- CONSTRUCTION ROADWAYS ARE TO BE BUILT TO CONFORM TO SITE GRADERS, BUT SHOULD NOT HAVE SIDE SLOPES OR BOARD WALKS THAT ARE EXCESSIVELY STEEP.

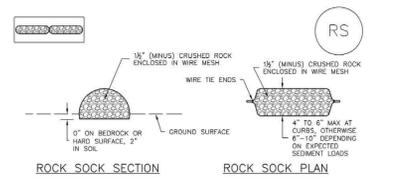
VEHICLE TRACKING CONTROL MAINTENANCE REQUIREMENTS

- REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
- STONES ARE TO BE REPLACED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
- SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOULDER OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
- STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
- OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

City of Colorado Springs Stormwater Quality Figure VT-2 Vehicle Tracking

354

VTC. VEHICLE TRACKING CONTROL



ROCK SOCK SECTION



ROCK SOCK PLAN

ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE AMOUNT OF 1/2" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOAK. AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE OVERLAPPED (TYPICALLY 12-INCH OVERLAP) TO AVOID GAPS.

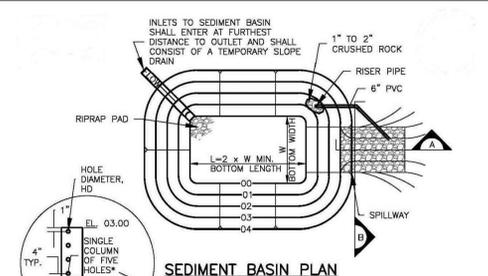
ROCK SOCK JOINTING

GRAVEL TABLE	NO. 4
SIZE	MASS PERCENT PASSING SQUARE HOLE SIEVES
2"	100
1 1/2"	80 - 100
1"	20 - 50
3/4"	0 - 15
3/8"	0 - 5

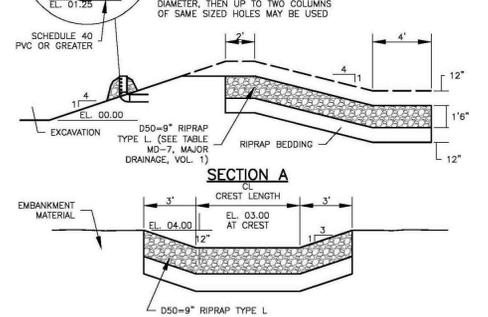
ROCK SOCK MAINTENANCE NOTES

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 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.
 - SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENT IS APPROXIMATELY 1/3 OF THE HEIGHT OF THE ROCK SOCK.
 - ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
 - WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.
- (DETAILS 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.

RS. ROCK SOCK



SEDIMENT BASIN PLAN



SECTION A

TEMPORARY SEDIMENT BASIN

Upstream Drainage Area (rounded to nearest acre), (ac)	TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN		
	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 1/2	2	9 1/2
2	21	3	13 1/2
3	28	5	15
4	33 1/2	6	16
5	38 1/2	8	17 1/2
6	43	9	18 1/2
7	47 1/2	11	19 1/2
8	51	12	20 1/2
9	55	13	21 1/2
10	58 1/2	15	22 1/2
11	61	16	23 1/2
12	64	18	24 1/2
13	67 1/2	19	25 1/2
14	70 1/2	21	26 1/2
15	73 1/2	22	27 1/2

SEDIMENT BASIN INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION OF SEDIMENT BASIN.
 - TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
 - FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
 - FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.
- FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
- SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON BASIN AS A STORMWATER CONTROL.
- EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 1 1/2 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
- EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
- PIPE SCH 40 OR GREATER SHALL BE USED.

SEDIMENT BASIN MAINTENANCE NOTES

- 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.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS. TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).
 - SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.
 - WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)
- 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.

TEMPORARY SEDIMENT BASIN (CONT.)

REV.	DESCRIPTION	DATE
1	ADDRESS AGENCY COMMENTS	01/22/20
2	ADDRESS AGENCY COMMENTS	05/05/20
3	ADDRESS AGENCY COMMENTS	08/18/20
4	ADDRESS AGENCY COMMENTS	03/26/21
5	ADDRESS AGENCY COMMENTS	04/21/21

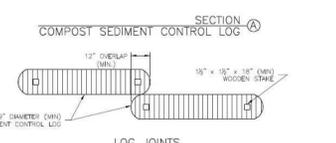
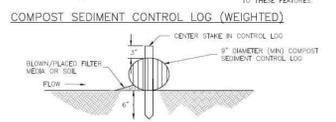
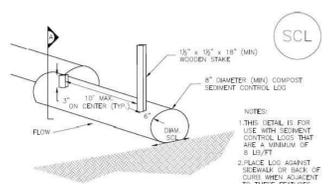
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PREPARED FOR:
ESH DEVELOPMENT, LLC
5671 NORTH ORACLE ROAD
SUITE #102
TUSCON, AZ 85704
(520) 742-2114

PREPARED UNDER MY DIRECT SUPERVISION
WESTWORKS ENGINEERING.
CHAD D. KUZBEK, COLORADO PE # 35751

WESTWORKS ENGINEERING
1023 W. COLORADO COLORADO SPRINGS, CO 80904 (719) 885-1670

ELDORADO SPRINGS
GRADING & EROSION CONTROL DETAILS
DESIGNED BY: MGP
SCALE: N/A
JOB NUMBER: 91807
DRAWN BY: MGP
DATE: 04/21/21
SHEET: GR4 OF 10



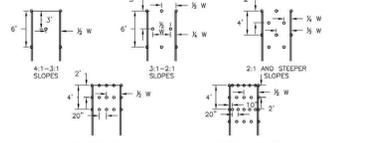
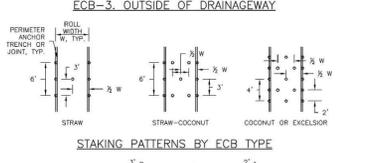
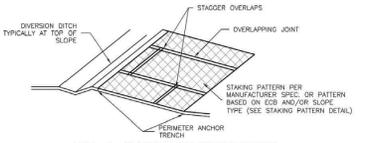
SCL-2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

- SEDIMENT CONTROL LOG INSTALLATION NOTES**
- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
 - SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADE/LAND-RESTORING ACTIVITIES.
 - SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCERLOSOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
 - SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STRAINS.
 - IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY 1/3 OF THE PERIMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSEY TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.
 - THE UPSTREAM SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.
 - FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

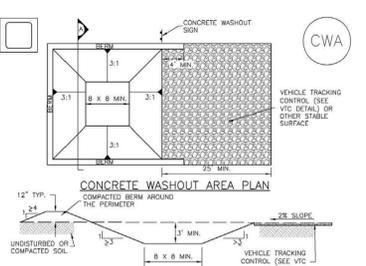
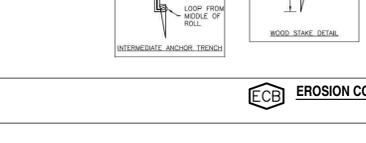
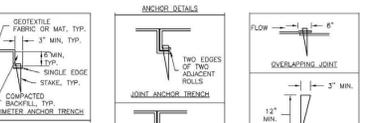
- SEDIMENT CONTROL LOG MAINTENANCE NOTES**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/3 OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
 - SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION/COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BIODOMES ARE REMOVED AND THE AREA SEEDS. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

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SCL SEDIMENT CONTROL LOG



ECB-3. OUTSIDE OF DRAINAGEWAY



ECB EROSION CONTROL BLANKET

- ECB-3. OUTSIDE OF DRAINAGEWAY**
- EROSION CONTROL BLANKET INSTALLATION NOTES**
- SEE PLAN VIEW FOR LOCATION OF ECB.
 - 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECYCLE, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.
 - IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SURFACE 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.
 - PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.
 - 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.
 - INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF ROLL LENGTH FOR COCONUT AND EXCERLOSOR ECBs.
 - OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.
 - MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB-1.
 - ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBs SHALL BE RESEEDED AND MULCHED.
 - DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCERLOSOR CONTENT	RECOMMENDED NETTING*
STRAW	—	100%	—	DOUBLE/NATURAL
STRAW/COCONUT	30% MIN	70% MAX	—	DOUBLE/NATURAL
COCONUT	100%	—	—	DOUBLE/NATURAL
EXCERLOSOR	—	—	100%	DOUBLE/NATURAL

- EROSION CONTROL BLANKET MAINTENANCE NOTES**
- 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.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.
 - ANY ECB FILLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REPLACED. ANY REPAIRS SHALL BE BELOW THE SEEDS/STAKES THAT HAVE EXPOSED TO BE CREATED A HOOD UNDER THE BLANKET. IF THAT REMAIN DIVIDE OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

- EROSION CONTROL BLANKET MAINTENANCE NOTES**
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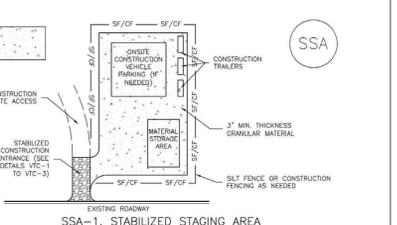
- CONCRETE WASHOUT AREA (CWA) MAINTENANCE NOTES**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
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 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - 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'.
 - 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.
 - THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
 - 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.

- CONCRETE WASHOUT AREA (CWA) MAINTENANCE NOTES**
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 - THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
 - 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.

CWA-1. CONCRETE WASHOUT AREA

- CWA INSTALLATION NOTES**
- SEE PLAN VIEW FOR CWA INSTALLATION LOCATION.
 - DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 100' 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 (1/8 IN. MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
 - THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
 - 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.
 - BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
 - VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
 - SOILS 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 TRIS.
 - USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CW CONCRETE WASHOUT DETAIL

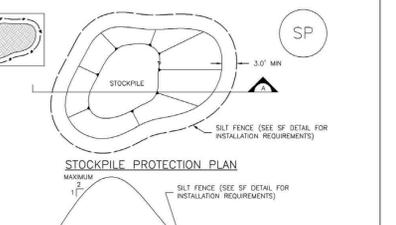


SSA-1. STABILIZED STAGING AREA

- STABILIZED STAGING AREA INSTALLATION NOTES**
- SEE PLAN VIEW FOR LOCATION OF STAGING AREA(S).
 - STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSEEDING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
 - STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
 - THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
 - UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT #703, AASHO #3 COURSE AGGREGATE OR #3 (MANUS) ROCK.
 - ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.
- STABILIZED STAGING AREA MAINTENANCE NOTES**
- 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.
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 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - ROCK SHALL BE REPAIRED OR REGRABBED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SURFACE BECOMES EXPOSED.

- STABILIZED STAGING AREA MAINTENANCE NOTES**
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SSA STABILIZED STAGING AREA



SP-1. STOCKPILE PROTECTION

- STOCKPILE PROTECTION INSTALLATION NOTES**
- SEE PLAN VIEW FOR LOCATION OF STOCKPILES.
 - INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE USABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERMEABLE OR IMPERMEABLE SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL, AND STOCKPILE. THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
 - STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOLID STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS) USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
 - FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER CONFORMANCE CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

- STOCKPILE PROTECTION MAINTENANCE NOTES**
- 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.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.
 - STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

SP STOCKPILE PROTECTION

SEEDING GENERAL GUIDELINES:

- SEE APPROVED LANDSCAPE AND IRRIGATION PLAN DETAILS FOR PLANTED TREES, SHRUBS, GROUND COVER, AND IRRIGATION.
- SEED MIXES SHOULD BE SOWN AT THE PROPER TIME OF YEAR FOR THE MIXTURE. GENERALLY, THERE ARE TWO OPTIMAL SEEDING PERIODS DURING THE YEAR. THE FIRST PERIOD IS IN THE SPRING, MARCH TO MAY. THE SECOND PERIOD IS IN LATE SUMMER TO EARLY FALL, AUGUST TO SEPTEMBER.
- BROADCAST SEEDING OR HYDRO-SEEDING MAY BE SUBSTITUTED ON SLOPES STEEPER THAN 3:1 OR ON OTHER AREAS NOT PRACTICAL TO DRILL SEED.
- SEEDING RATES SHOULD BE DOUBLED FOR BROADCAST SEEDING OR INCREASED BY 50% IF USING A BRILLION DRILL OR HYDRO-SEEDING.
- BROADCAST SEED SHOULD BE LIGHTLY HAND-RAKED INTO THE SOIL.
- SEED DEPTH SHOULD BE 1/3 TO 1/2 INCH FOR MOST MIXTURES.
- SEEDED AREAS SHOULD BE MULCHED, AND THE MULCH SHOULD BE ADEQUATELY SECURED.
- IF HYDRO-SEEDING IS CONDUCTED, MULCHING SHOULD BE CONDUCTED AS A SEPARATE, SECOND OPERATION.

MULCHING:

- PLANTED AREAS SHOULD BE MULCHED IMMEDIATELY FOLLOWING PLANTING, BUT IN NO CASE LATER THAN 14 DAYS FROM PLANTING.
- ONLY CERTIFIED WEED-FREE AND CERTIFIED SEED-FREE STRAW MULCH SHOULD BE USED (GRASS HAY OFTEN CONTAINS WEEDY EXOTIC SPECIES). MULCH SHOULD BE APPLIED AT 2 TONS/ACRE AND ADEQUATELY SECURED BY CRIMPING, TACKIFIER, OR USED OF ROLLED EROSION CONTROL PRODUCTS SUCH AS NETTING OR EROSION CONTROL BLANKETS.
 - CRIMPING IS APPROPRIATE ON SLOPES OF 3:1 OR FLATTER AND MUST TUCK MULCH FIBERS INTO THE SOIL TO A DEPTH OF 3 TO 4 INCHES.
 - TACKIFIER OR ROLLED EROSION CONTROL PRODUCTS SUCH AS PROPERLY SECURED NETTING OR EROSION CONTROL BLANKETS SHOULD BE USED ON SLOPES STEEPER THAN 3:1.
 - HYDRAULIC MULCHING MAY ALSO BE USED ON STEEP SLOPES OR WHERE ACCESS IS LIMITED. WOOD CELLULOSE FIBERS MIXED WITH WATER AT 2,000 TO 2,500 POUNDS/ACRE AND ORGANIC TACKIFIER AT 100 POUNDS/ACRE SHOULD BE APPLIED WITH A HYDRAULIC MULCHER.

Table A-1. Upland area seed mix - loamy to clay soils

Common Name	Scientific Name	Growth Season	Growth Form	% Mix	Lb/ac (PLS)
Grasses					
Blue grama	<i>Bouteloua gracilis</i>	Warm	Sod	25	1.8
Sand dropseed	<i>Sporobolus cryptandrus</i>	Warm	Bunch	20	0.2
Sideoats grama	<i>Bouteloua curtipendula</i>	Warm	Sod	20	6.3
Western wheatgrass	<i>Pascopyrum smithii</i>	Cool	Sod	15	8.2
Buffalograss	<i>Bouteloua dactyloides</i>	Warm	Sod	10	10.7
Inland saltgrass	<i>Distichlis spicata</i>	Warm	Sod	5	0.6
Herbaceous/Wildflowers					
Pasture sage	<i>Artemisia frigida</i>			1	0.01
Blanket flower	<i>Gaillardia aristata</i>			1	0.5
Prairie coneflower	<i>Ratibida columnifera</i>			1	0.1
Purple prairieclover	<i>Dalea (Petalostemum) purpurea</i>			1	0.3
Blue flax	<i>Linum lewisii</i>			1	0.4
TOTAL PLS POUNDS/ACRE				100	29.11

PLS = Pure Live Seed - If broadcast seeding, double the rate

REV.	DESCRIPTION	DATE
1	ADDRESS AGENCY COMMENTS	01/22/20
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4	ADDRESS AGENCY COMMENTS	03/26/21
5	ADDRESS AGENCY COMMENTS	04/21/21



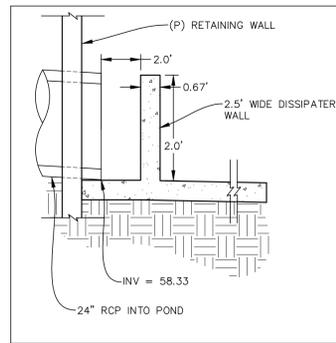
PREPARED FOR:
ESH DEVELOPMENT, LLC
5671 NORTH ORACLE ROAD
SUITE #1102
TUSCON, AZ 85704
(520) 742-2114

PREPARED UNDER MY DIRECT SUPERVISION AND SEAL OF WESTWORKS ENGINEERING.
CHAD D. KUZBEK, COLORADO PE #50151
DATE: 4/21/21

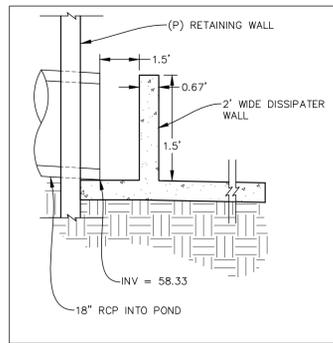


DESIGNED BY: MGP
SCALE: N/A
JOB NUMBER: 91807
DRAWN BY: MGP
DATE: 04/21/21
SHEET: GR5 OF 10

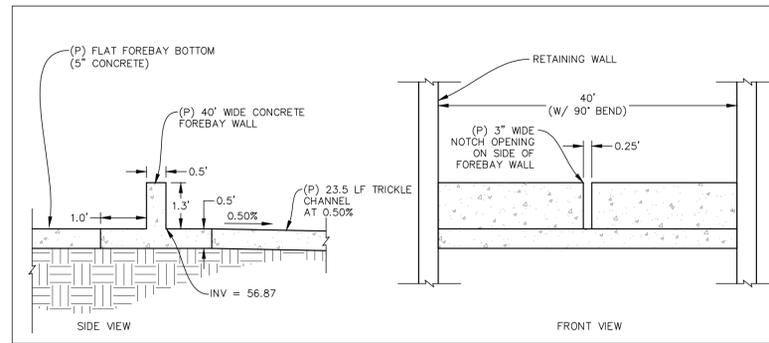
ELDORADO SPRINGS GRADING & EROSION CONTROL DETAILS



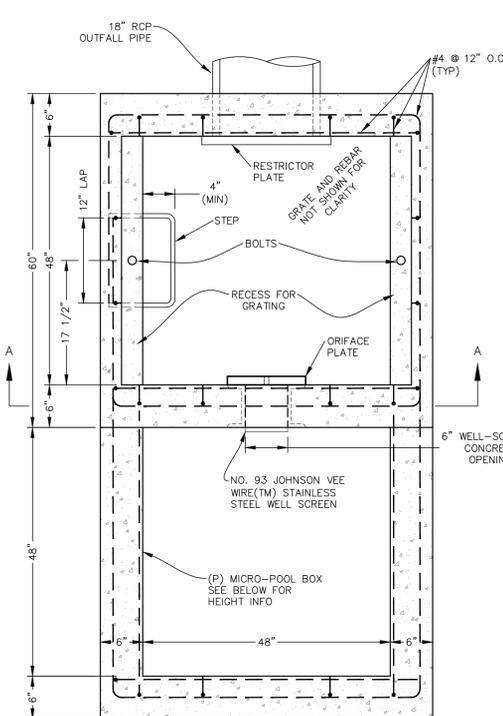
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SCALE: N.T.S.



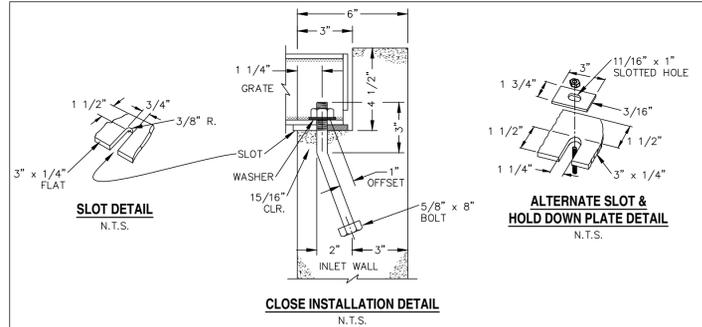
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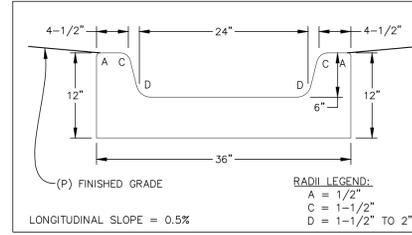
FOREBAY WALL DETAILS
SCALE: N.T.S.



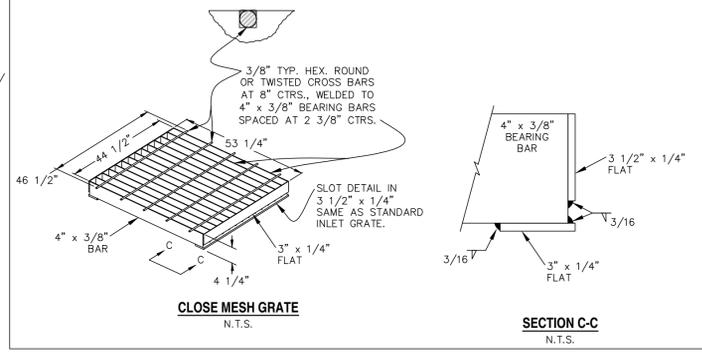
PLAN VIEW
N.T.S.



CLOSE MESH GRATE DETAILS
N.T.S.

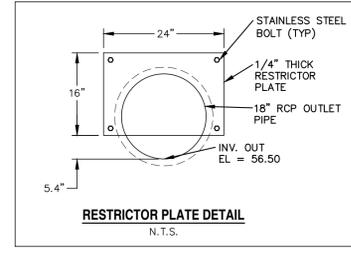


CONCRETE TRICKLE CHANNEL
SCALE: N.T.S.



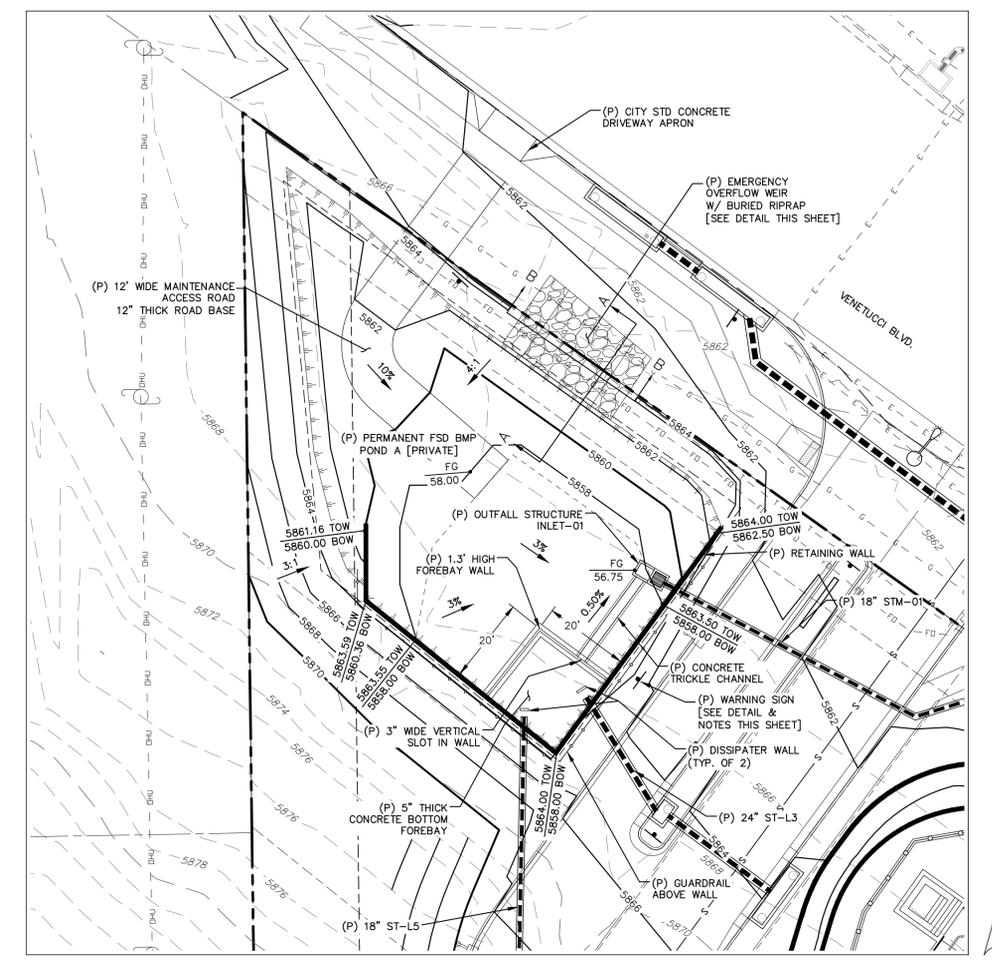
CLOSE MESH GRATE
N.T.S.

SECTION C-C
N.T.S.

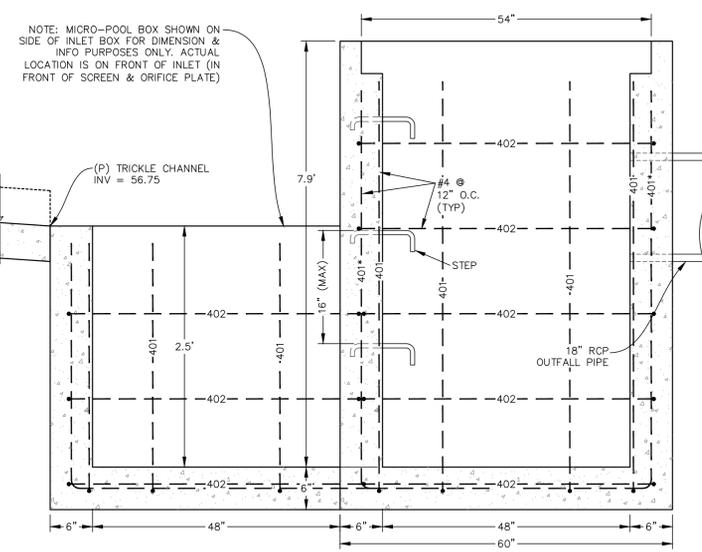


RESTRICTOR PLATE DETAIL
N.T.S.

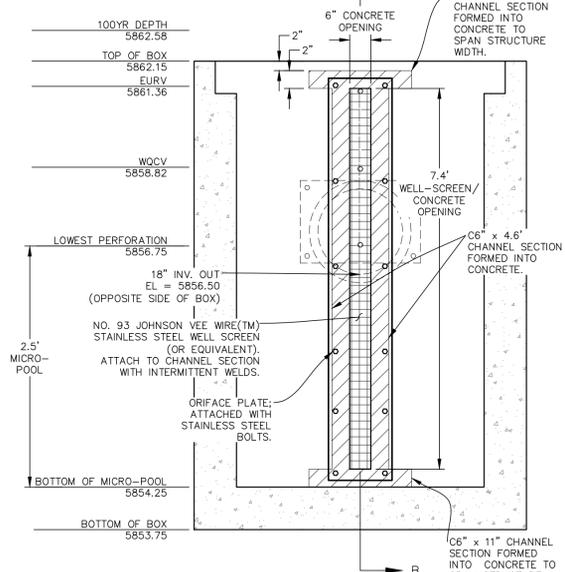
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-PROVIDED = 0.01 AC-FT



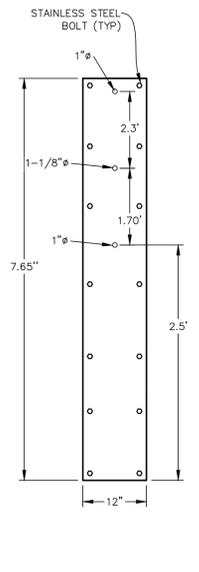
POND A
SCALE: 1" = 20'



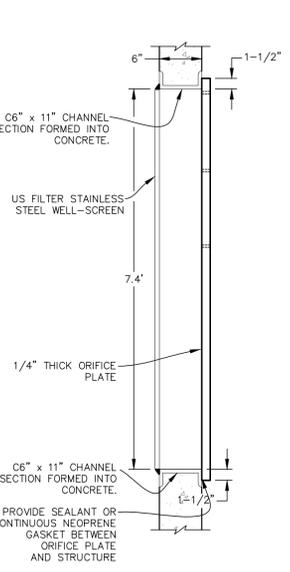
ELEVATION
N.T.S.



SECTION A-A
N.T.S.

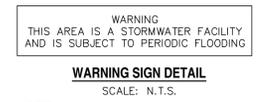


ORIFICE PLATE
N.T.S.

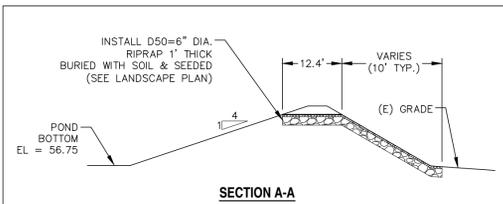


SECTION B-B
N.T.S.

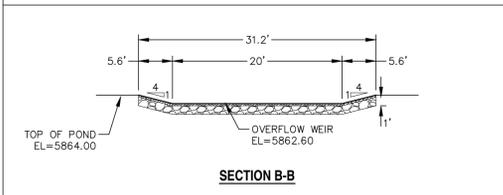
- CDOT GENERAL NOTES:**
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 - SEE SHEET M-604-11, INLET, TYPE D, FOR REINFORCEMENT AROUND THE PIPE OPENING.
 - CONCRETE SLOPE AND DITCH PAVING WILL BE REQUIRED WHEN SHOWN ON PLANS.



WARNING SIGN DETAIL
SCALE: N.T.S.



SECTION A-A



SECTION B-B
OVERFLOW WEIR DETAILS
SCALE: N.T.S.

REV.	DESCRIPTION	DATE
1	ADDRESS AGENCY COMMENTS	01/22/20
2	ADDRESS AGENCY COMMENTS	05/05/20
3	ADDRESS AGENCY COMMENTS	08/18/20
4	ADDRESS AGENCY COMMENTS	03/26/21
5	ADDRESS AGENCY COMMENTS	04/21/21

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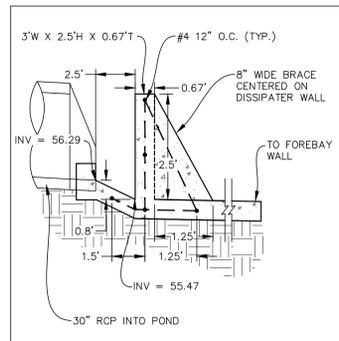
PREPARED FOR:
ESH DEVELOPMENT, LLC
5671 NORTH ORACLE ROAD
SUITE #102
TUSCON, AZ 85704
(520) 742-2114

PREPARED UNDER MY DIRECT
WESTWORKS ENGINEERING.
CHAD D. KUZBEK, COLORADOC
DATE: 04/21/21

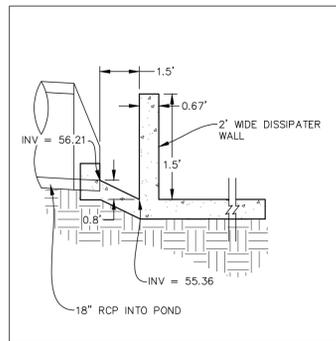
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1023 W. COLORADO COLORADO SPRINGS, CO 80904 (719) 685-1670

ELDORADO SPRINGS
PERMANENT BMP PLANS & DETAILS
POND A

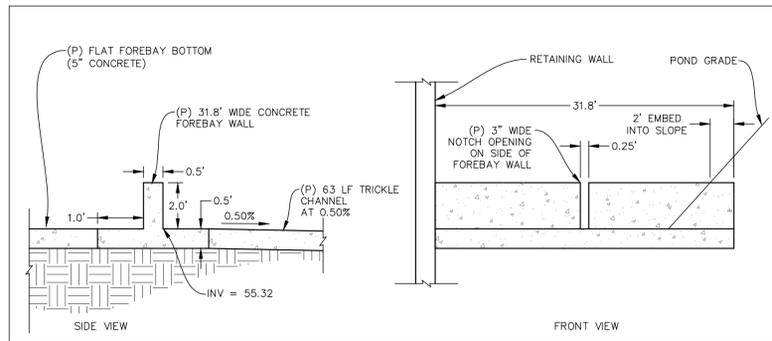
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SCALE: AS SHOWN	DATE: 04/21/21
JOB NUMBER: 91807	SHEET: GR6 OF 10



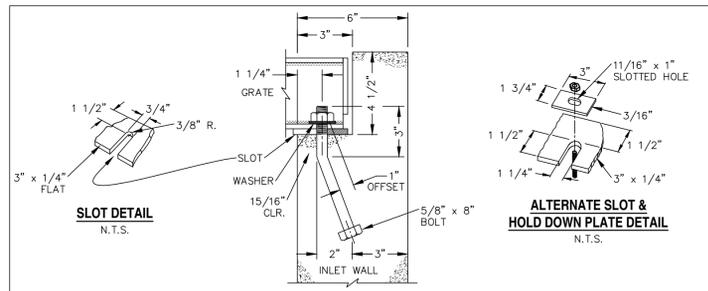
FOREBAY DISSIPATER STM-05
SCALE: N.T.S.



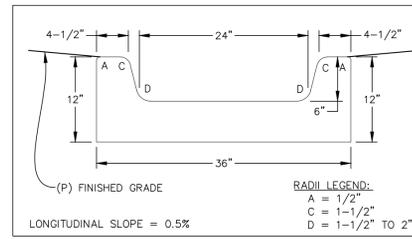
FOREBAY DISSIPATER STM-07
SCALE: N.T.S.



FOREBAY WALL DETAILS - STM-05 DISCHARGE
SCALE: N.T.S.



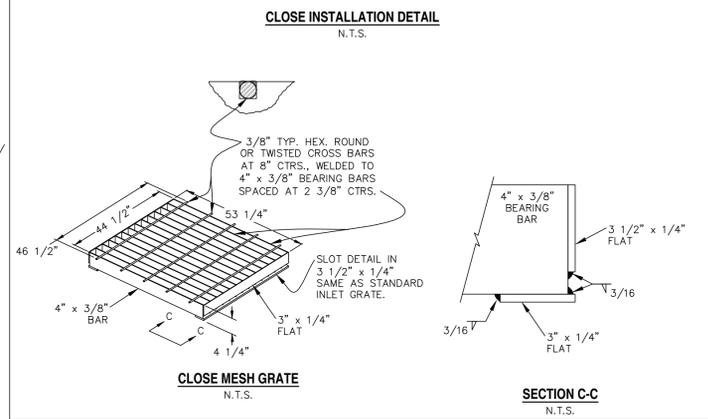
CLOSE MESH GRATE DETAILS
SCALE: N.T.S.



CONCRETE TRICKLE CHANNEL
SCALE: N.T.S.

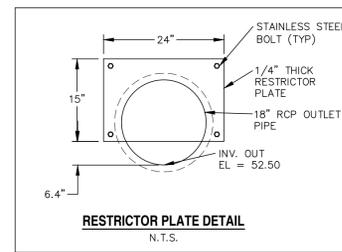
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-PROVIDED = 0.05 AC-FT

FOREBAY SIZE (SOUTH):
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-PROVIDED = 0.01 AC-FT

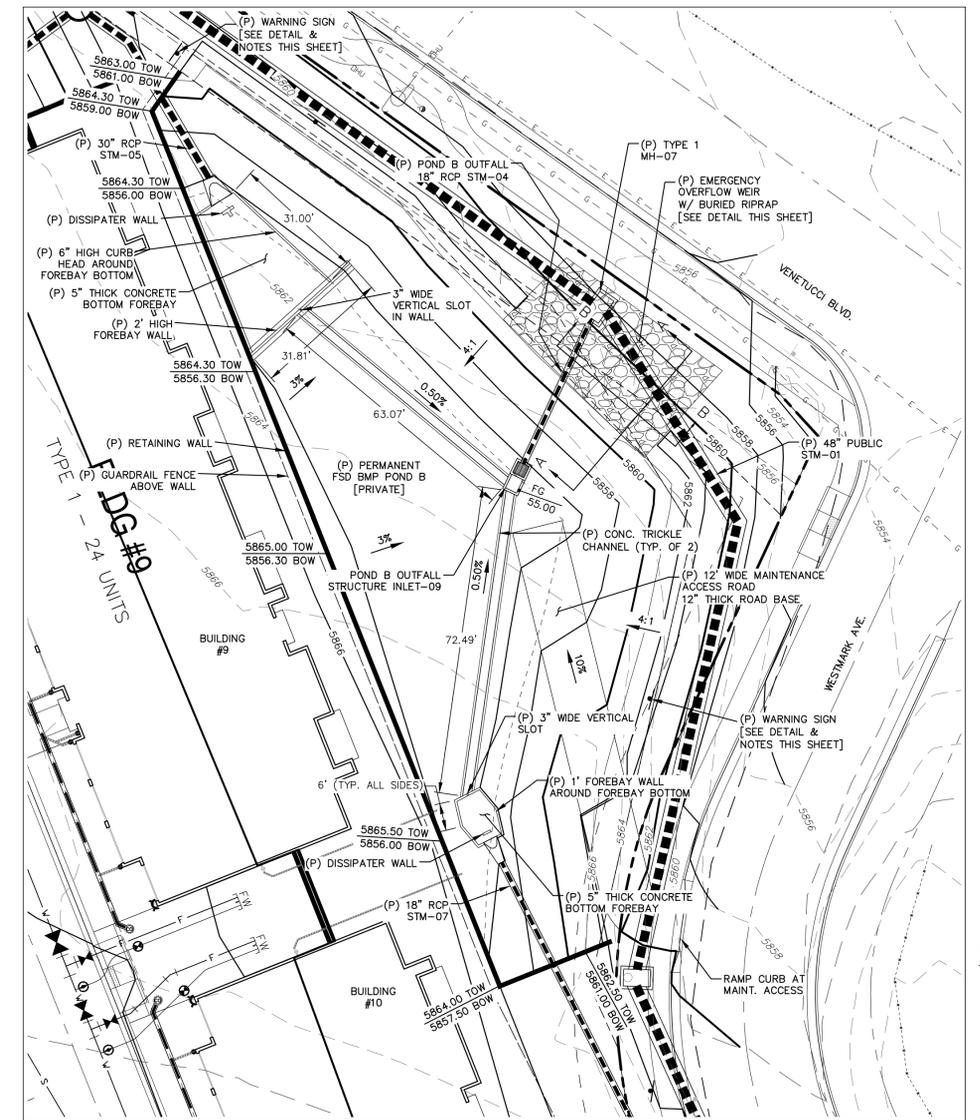


CLOSE MESH GRATE
SCALE: N.T.S.

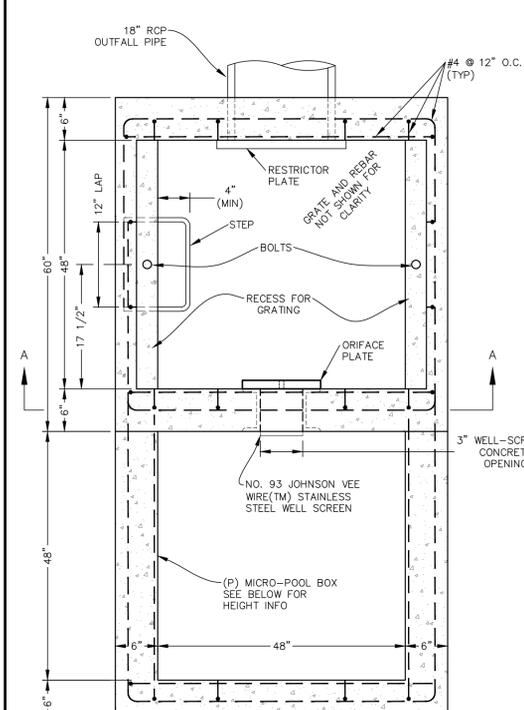
SECTION C-C
SCALE: N.T.S.



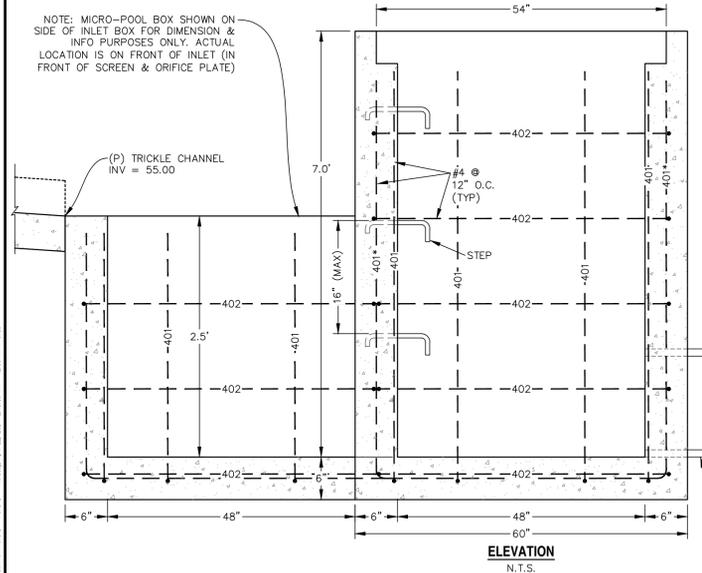
RESTRICTOR PLATE DETAIL
SCALE: N.T.S.



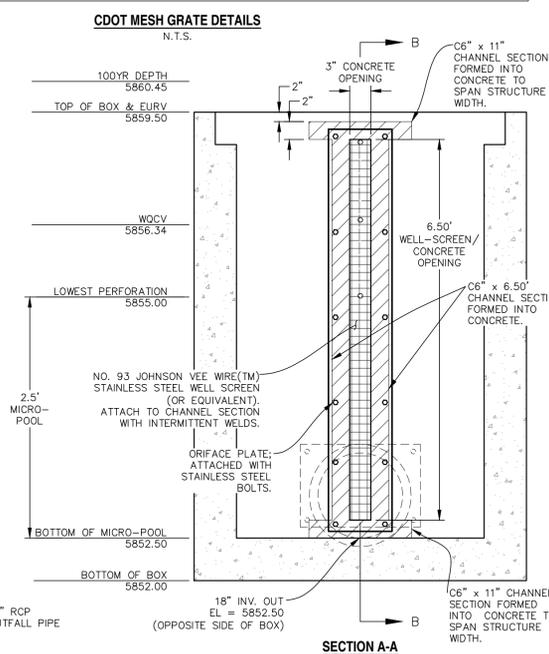
POND B
SCALE: 1" = 20'



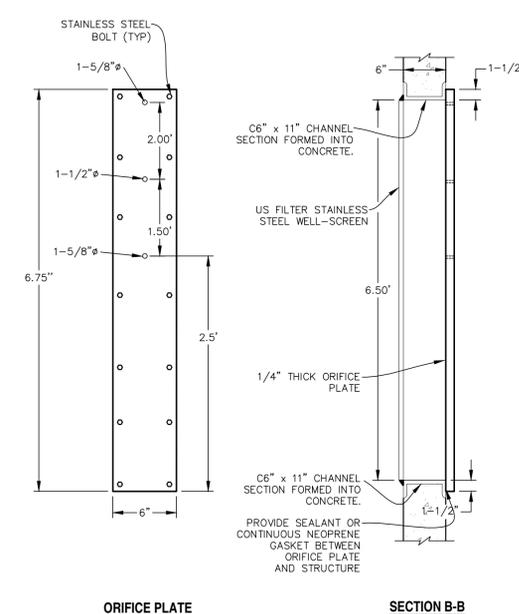
PLAN VIEW
SCALE: N.T.S.



ELEVATION
SCALE: N.T.S.



SECTION A-A
SCALE: N.T.S.



ORIFICE PLATE
SCALE: N.T.S.

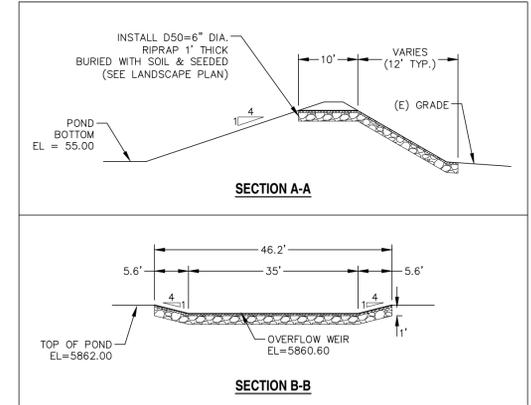
SECTION B-B
SCALE: N.T.S.

CDOT GENERAL NOTES:

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WARNING SIGN DETAIL
SCALE: N.T.S.



OVERFLOW WEIR DETAILS
SCALE: N.T.S.

REV.	DESCRIPTION	DATE
1	ADDRESS AGENCY COMMENTS	01/22/20
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3	ADDRESS AGENCY COMMENTS	08/18/20
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5	ADDRESS AGENCY COMMENTS	04/21/21



PREPARED FOR:
ESH DEVELOPMENT, LLC
5671 NORTH ORACLE ROAD
SUITE #102
TUSCON, AZ 85704
(520) 742-2114

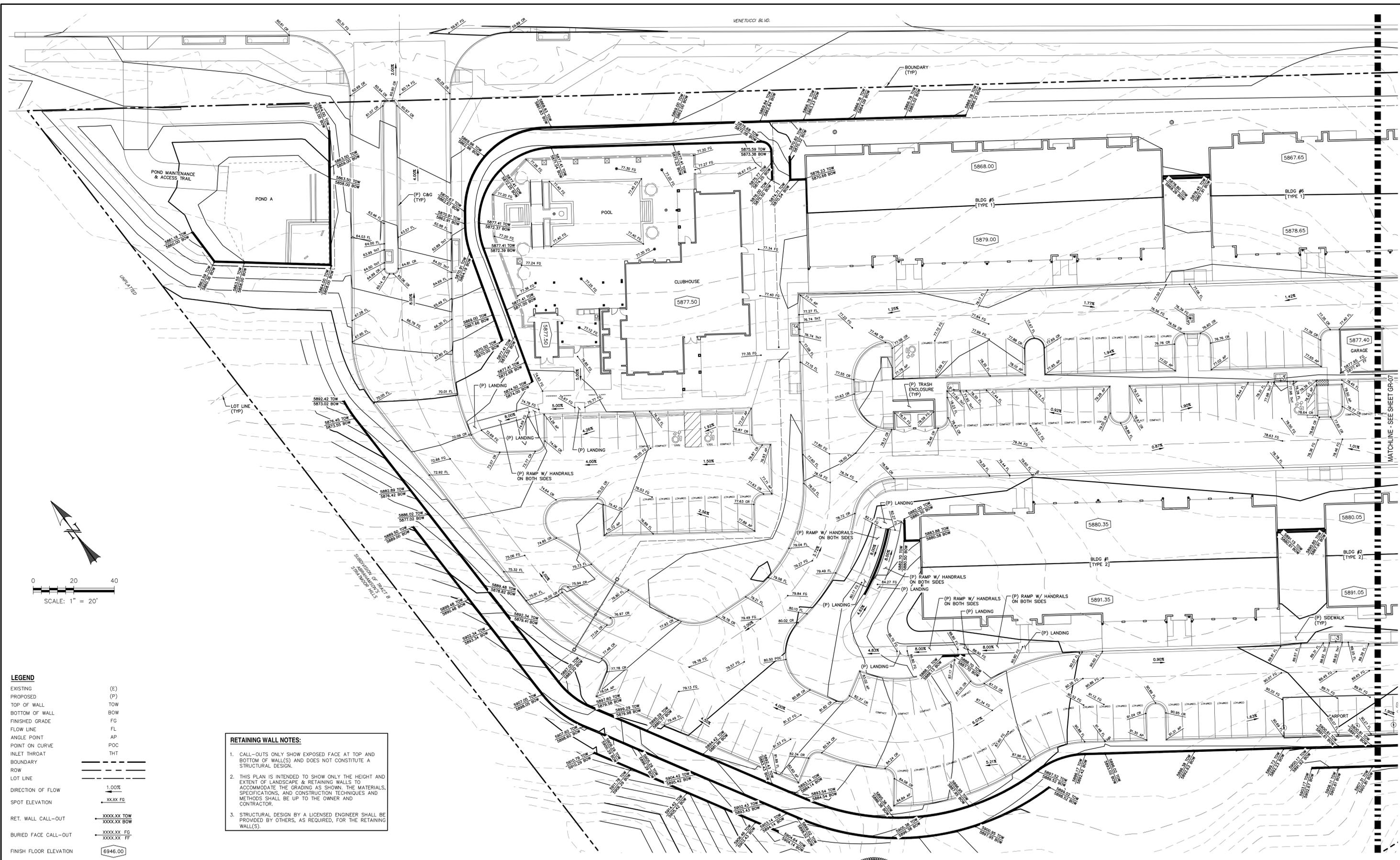
PREPARED UNDER MY DIRECT SUPERVISION
WESTWORKS ENGINEERING
CHAD D. KUZBEK, COLORADO PE #55751



ELDORADO SPRINGS
PERMANENT BMP PLANS & DETAILS
POND B

DESIGNED BY: CDK
SCALE: AS SHOWN
JOB NUMBER: 91807

DRAWN BY: CDK
DATE: 04/21/21
SHEET: GR7 OF 10



LEGEND

EXISTING	(E)
PROPOSED	(P)
TOP OF WALL	TOW
BOTTOM OF WALL	BOW
FINISHED GRADE	FL
FLOW LINE	FL
ANGLE POINT	AP
POINT ON CURVE	POC
INLET THROAT	THT
BOUNDARY	---
ROW	---
LOT LINE	---
DIRECTION OF FLOW	1.00%
SPOT ELEVATION	XXXX.FG
RET. WALL CALL-OUT	XXXX.XX TOW XXXX.XX BOW
BURIED FACE CALL-OUT	XXXX.XX FG XXXX.XX FF
FINISH FLOOR ELEVATION	6946.00

RETAINING WALL NOTES:

1. CALL-OUTS ONLY SHOW EXPOSED FACE AT TOP AND BOTTOM OF WALL(S) AND DOES NOT CONSTITUTE A STRUCTURAL DESIGN.
2. THIS PLAN IS INTENDED TO SHOW ONLY THE HEIGHT AND EXTENT OF LANDSCAPE & RETAINING WALLS TO ACCOMMODATE THE GRADING AS SHOWN. THE MATERIALS, SPECIFICATIONS, AND CONSTRUCTION TECHNIQUES AND METHODS SHALL BE UP TO THE OWNER AND CONTRACTOR.
3. STRUCTURAL DESIGN BY A LICENSED ENGINEER SHALL BE PROVIDED BY OTHERS, AS REQUIRED, FOR THE RETAINING WALL(S).

REV.	DESCRIPTION	DATE
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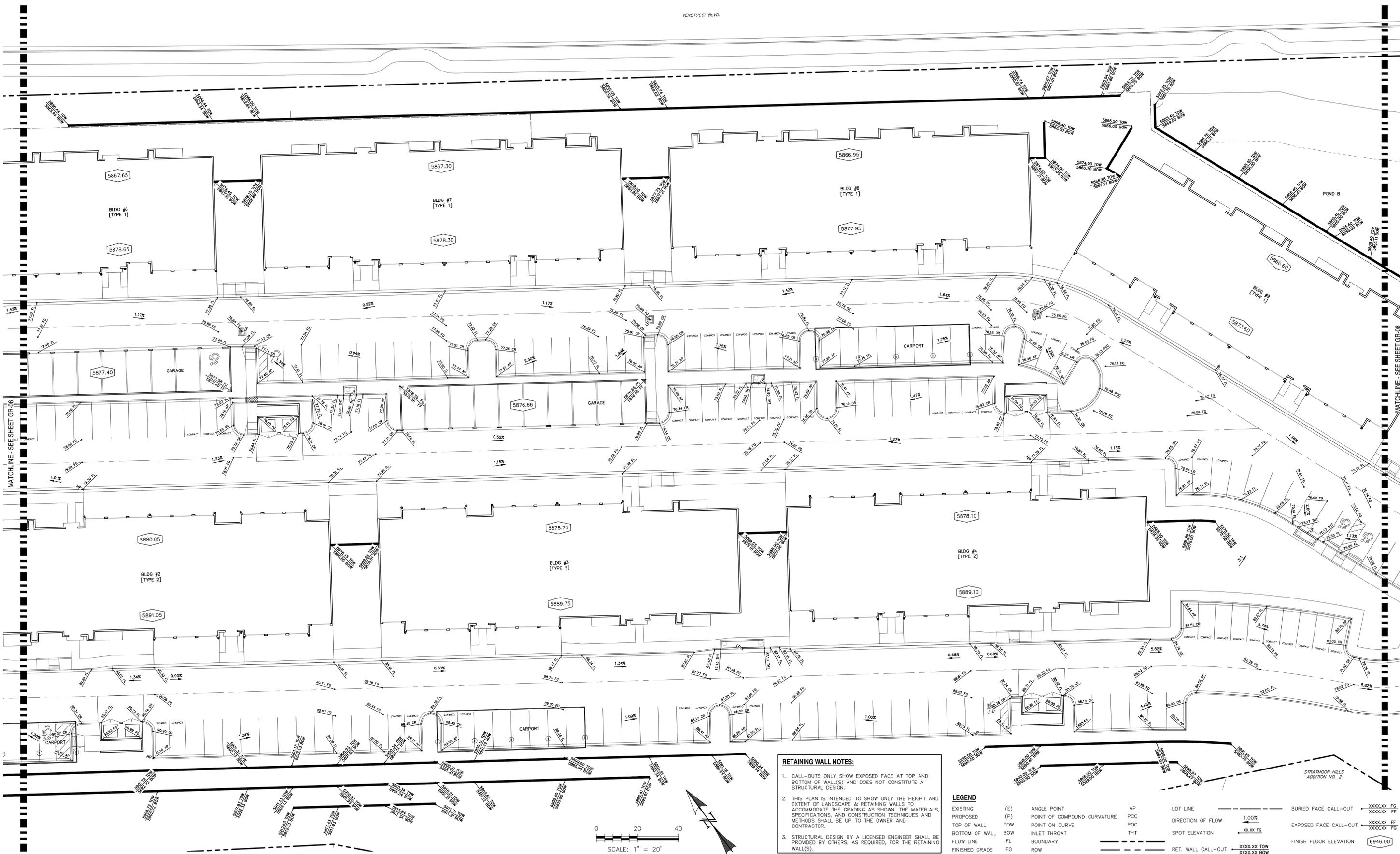
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 5671 NORTH ORACLE ROAD
 SUITE #1102
 TUSCON, AZ 85704
 (520) 742-2114

PREPARED UNDER MY DIRECT SUPERVISION OF
WESTWORKS ENGINEERING.
 CHAD D. KUZBEK, COLORADO PE #35751
 DATE: 04/21/21



ELDORADO SPRINGS
DETAILED GRADING PLAN

DESIGNED BY:	MGP	DRAWN BY:	MGP
SCALE:	1"=20'	DATE:	04/21/21
JOB NUMBER:	91807	SHEET:	GR8 OF 10



RETAINING WALL NOTES:

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LEGEND

EXISTING	(E)	ANGLE POINT	AP	LOT LINE	BURIED FACE CALL-OUT	XXXXXX FG
PROPOSED	(P)	POINT OF COMPOUND CURVATURE	PCC	DIRECTION OF FLOW	EXPOSED FACE CALL-OUT	XXXXXX FF
TOP OF WALL	TOW	POINT ON CURVE	POC	SPOT ELEVATION	XXXXXX FG	XXXXXX FG
BOTTOM OF WALL	BOW	INLET THROAT	THT	FINISH FLOOR ELEVATION	6946.00	
FLOW LINE	FL	BOUNDARY	ROW	RET. WALL CALL-OUT	XXXXXX TOW	XXXXXX BOW
FINISHED GRADE	FG					

REV.	DESCRIPTION	DATE
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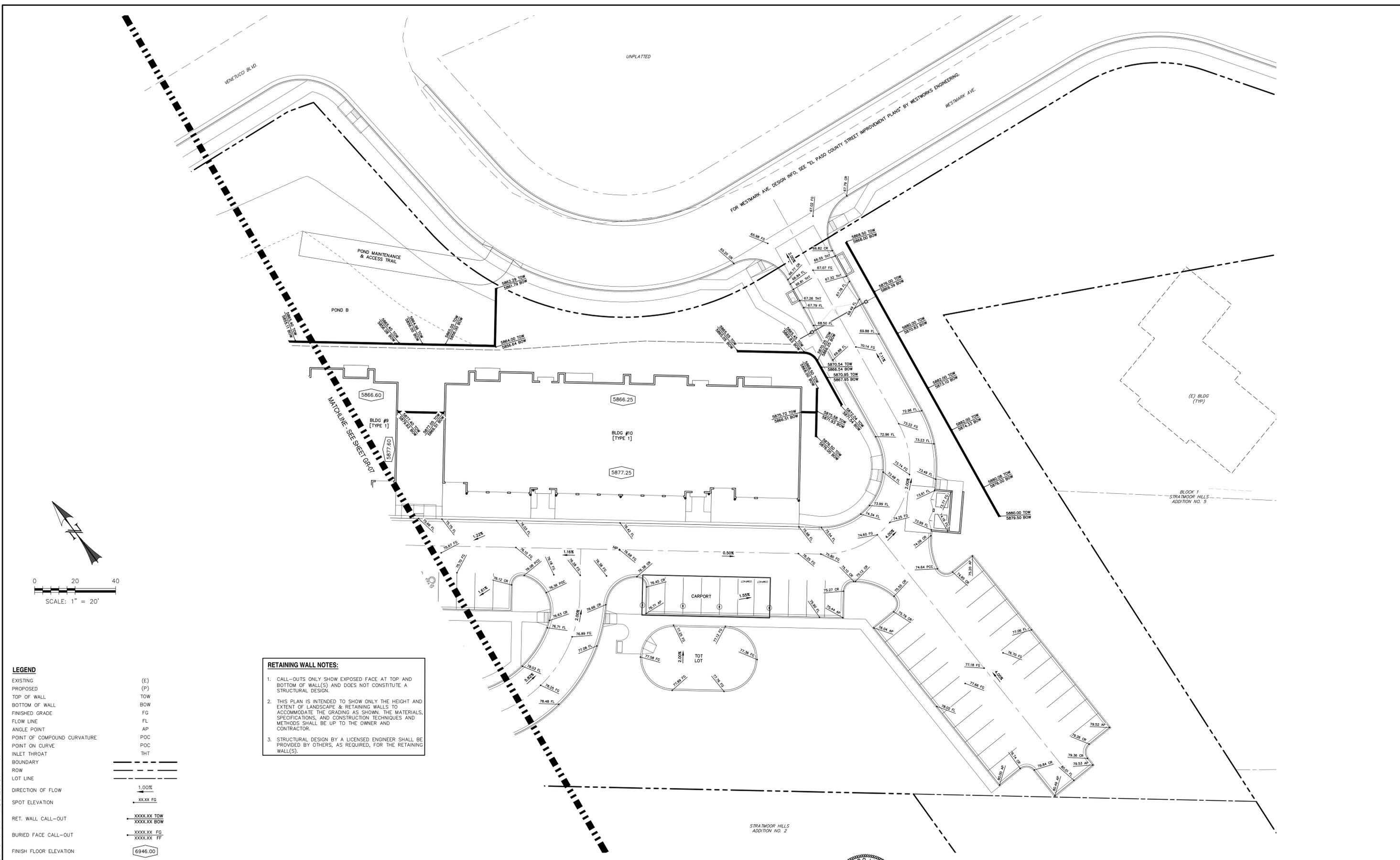
PREPARED FOR:
ESH DEVELOPMENT, LLC
 5671 NORTH ORACLE ROAD
 SUITE #102
 TUSCON, AZ 85704
 (520) 742-2114

PREPARED UNDER MY DIRECT SUPERVISION AND SEAL AS A LICENSED PROFESSIONAL ENGINEER
CHAD D. KUZBEK
 LICENSE NO. 35751
 DATE: 4/21/21



ELDORADO SPRINGS
DETAILED GRADING PLAN

DESIGNED BY:	MGP	DRAWN BY:	MGP
SCALE:	1"=20'	DATE:	04/21/21
JOB NUMBER:	91807	SHEET:	GR9 OF 10



RETAINING WALL NOTES:

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LEGEND

EXISTING	(E)
PROPOSED	(P)
TOP OF WALL	TOW
BOTTOM OF WALL	BOW
FINISHED GRADE	FG
FLOW LINE	FL
ANGLE POINT	AP
POINT OF COMPOUND CURVATURE	POC
POINT ON CURVE	POC
INLET THROAT	THT
BOUNDARY	
ROW	
LOT LINE	
DIRECTION OF FLOW	1.00%
SPOT ELEVATION	XXXX.FG
RET. WALL CALL-OUT	XXXX.XX TOW XXXX.XX BOW
BURIED FACE CALL-OUT	XXXX.XX FG XXXX.XX FF
FINISH FLOOR ELEVATION	6946.00

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PREPARED FOR:
ESH DEVELOPMENT, LLC
 5671 NORTH ORACLE ROAD
 SUITE #102
 TUSCON, AZ 85704
 (520) 742-2114

PREPARED UNDER MY DIRECT SUP
 WESTWORKS ENGINEERING.
 CHAD D. KUZBEK, COLORADO PE #35751
 DATE



ELDORADO SPRINGS
DETAILED GRADING PLAN

DESIGNED BY:	MGP	DRAWN BY:	MGP
SCALE:	1"=20'	DATE:	04/21/21
JOB NUMBER	91807	SHEET	GR10 OF 10

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