

**STANDARD CONSTRUCTION NOTES:**

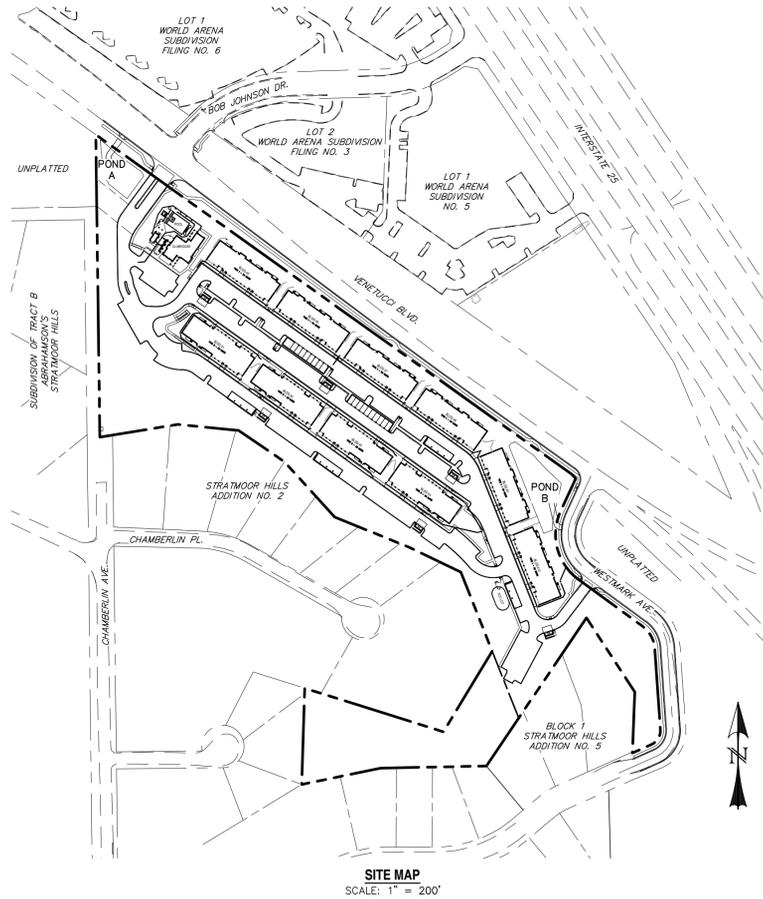
- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF 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 HORIZONTAL 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

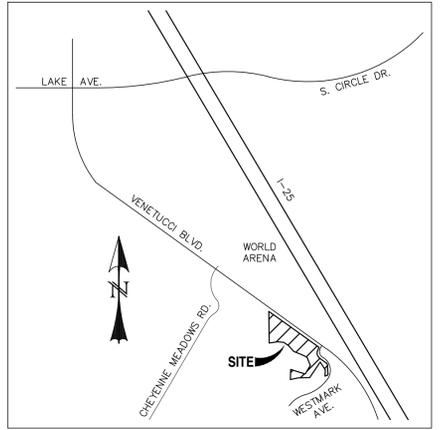
# ELDORADO SPRINGS GRADING & EROSION CONTROL PLAN

## 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.

**APPROVED**

Engineering Department  
05/10/2021 10:24:18 AM  
cdnjrkamp

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

DATE

EPC Planning & Community  
Development Department

**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     | ---S---S---     |
| (E) WATER MAIN, VALVE, FH | ---W---W---     |
| (E) UG ELECTRIC           | ---E---E---     |
| (E) FIBER OPTIC           | ---FO---FO---   |
| (E) GAS MAIN              | ---G---G---     |
| (E) OVERHEAD UTILITY      | ---OHU---OHU--- |
| (E) UG TELEPHONE          | ---T---T---     |
| (E) STORM SEWER           | ---SS---SS---   |
| (P) SANITARY MAIN, MH     | ---S---S---     |
| (P) WATER MAIN, VALVE, FH | ---W---W---     |
| (P) FIRE SERVICE, VALVE   | ---F---F---     |
| (P) STORM SEWER, MH       | ---SS---SS---   |

**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 "COCS 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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1	ADDRESS AGENCY COMMENTS	01/22/20
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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  
WESTWORKS ENGINEERING.  
CHAD D. KUZBEK, COLORADO PE #35751



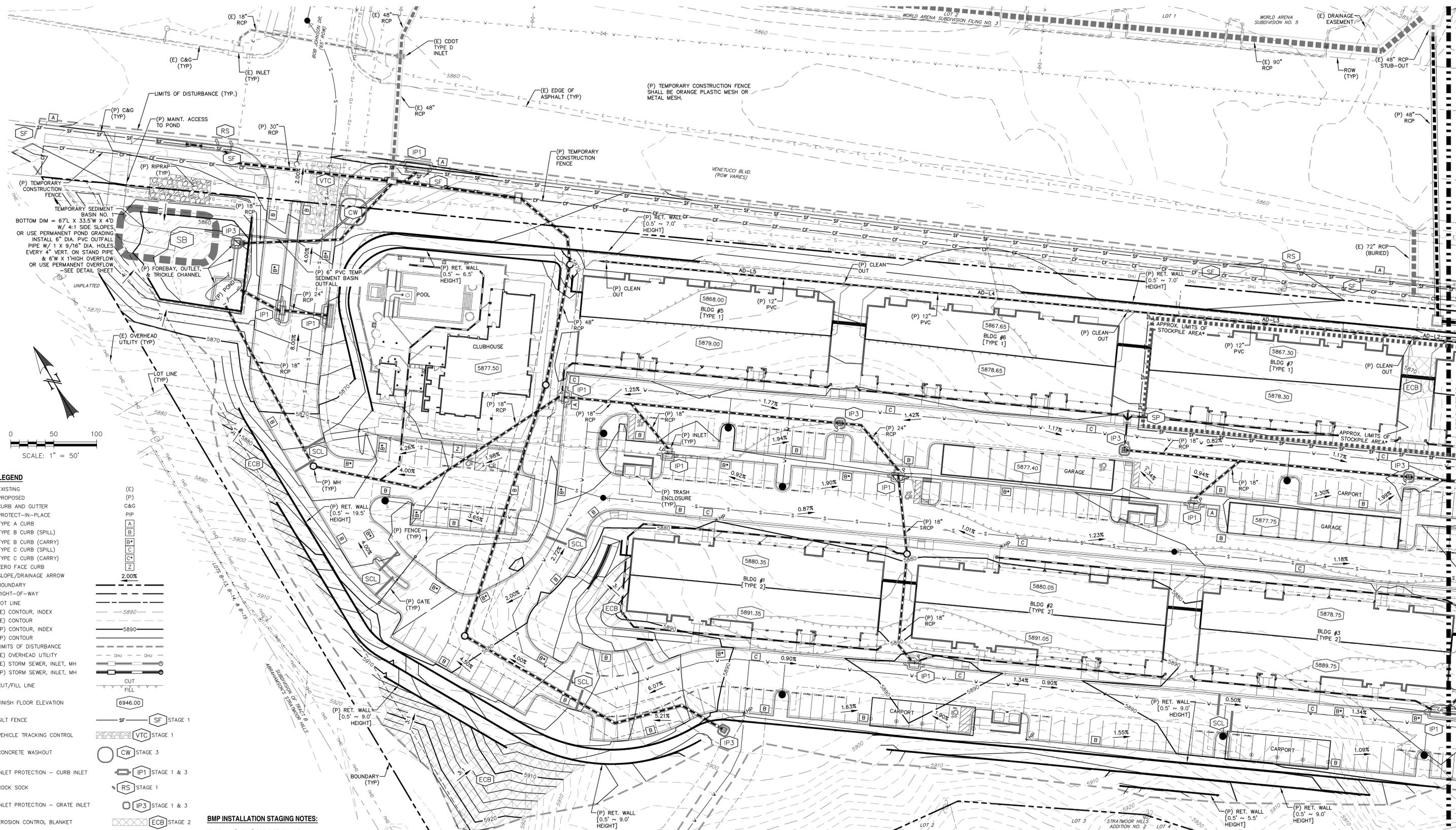
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**ELDORADO SPRINGS**  
**GRADING & EROSION CONTROL PLAN**  
**TITLE SHEET**

PCD FILE NO. PPR1932

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

**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 RESEEDING.

- NOTES:**
- 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.
  - EXISTING VEGETATION CONSISTS MOSTLY OF GRASSES/WEEDS WITH SOME SMALL TREES IN THE NORTHEAST CORNER.
  - 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.
  - NO CONCRETE OR ASPHALT BATCH PLANTS TO BE USED ON THIS SITE.

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3	ADDRESS AGENCY COMMENTS	08/18/20
4	ADDRESS AGENCY COMMENTS	03/26/21
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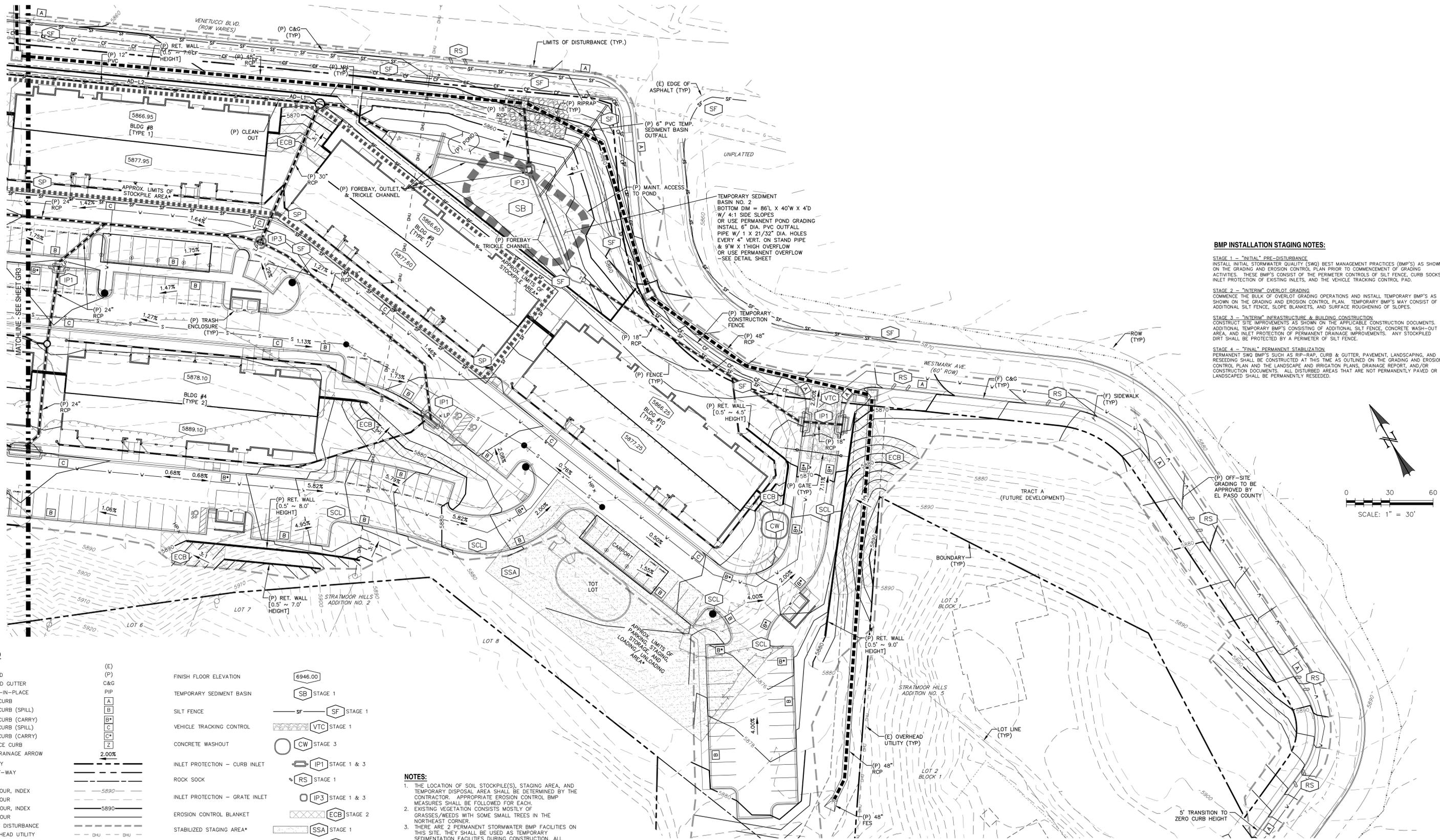


PREPARED FOR:  
**ESH DEVELOPMENT, LLC**  
 5671 NORTH ORACLE ROAD  
 SUITE #102  
 TUSCON, AZ 85704  
 (520) 742-2114

PREPARED UNDER MY DIRECT SUPERVISION  
**WESTWORKS ENGINEERING**  
 CHAD D. KUZBEK, COLORADO PE #30721



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



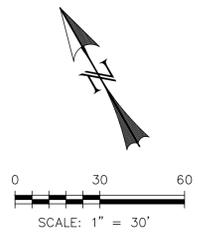
**BMP INSTALLATION STAGING NOTES:**

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**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.

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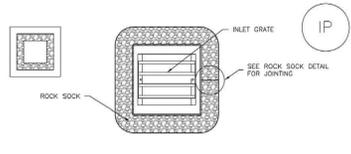
PREPARED UNDER MY DIRECT SUPERVISION  
**WESTWORKS ENGINEERING.**  
 CHAD D. KUZBEK, COLORADO PE #35751  
 DATE: 4/21/21



**ELDORADO SPRINGS**  
**GRADING & EROSION CONTROL PLAN**

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SCALE: 1" = 30'	DATE: 04/21/21
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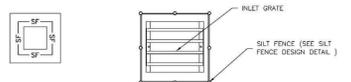
EPC 5/10/2021



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

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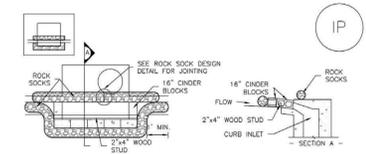
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**IP-1. BLOCK AND ROCK SOCK SUMP OR ON-GRADE INLET PROTECTION**

**BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES**

- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
- CONCRETE "TONGUE" 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 BARS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINED 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.
- COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTOR 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 "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').
- 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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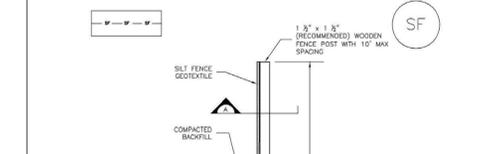
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**VEHICLE TRACKING CONTROL**

**VEHICLE TRACKING CONTROL INSTALLATION REQUIREMENTS**

- ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION.
- 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 DUNE.
- CONSTRUCTION ROAD, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
- CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADING, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD SHOULD BE 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 BEEPERS. 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

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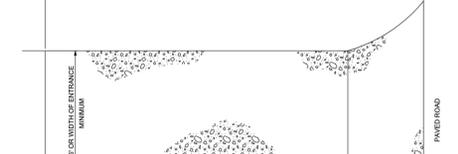
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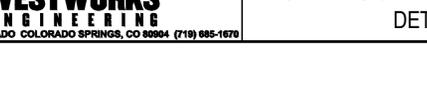
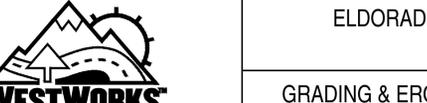
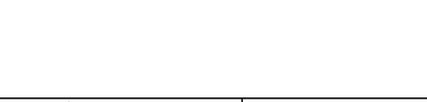
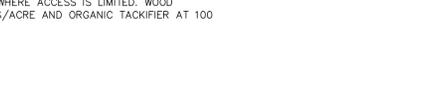
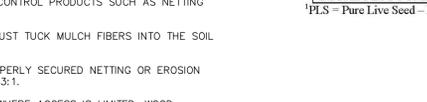
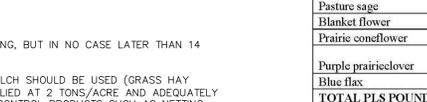
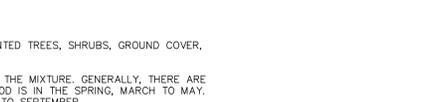
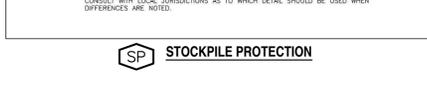
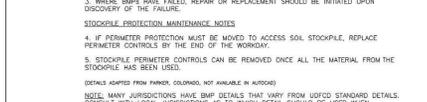
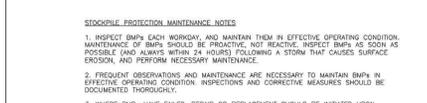
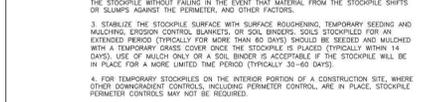
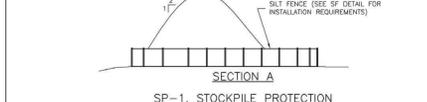
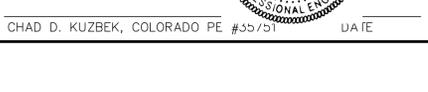
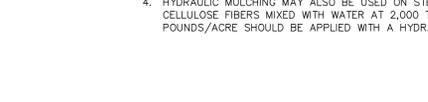
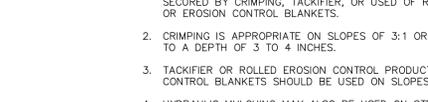
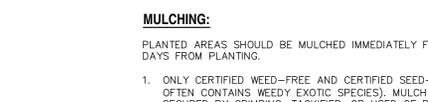
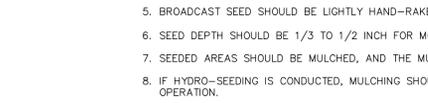
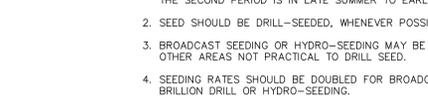
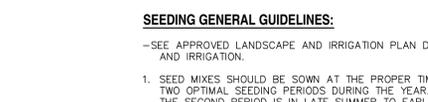
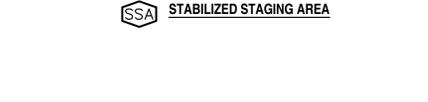
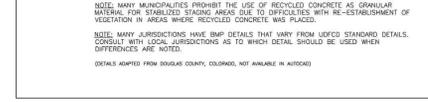
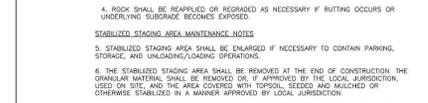
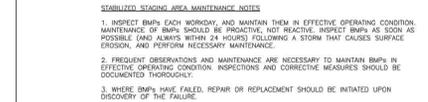
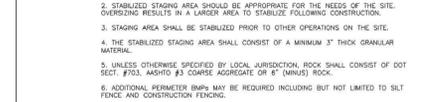
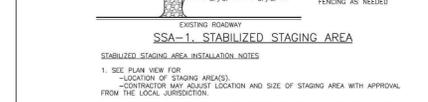
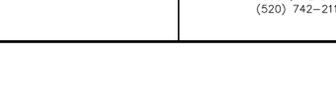
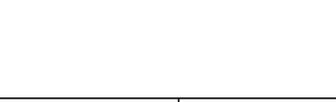
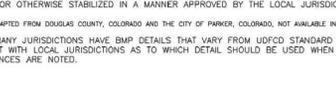
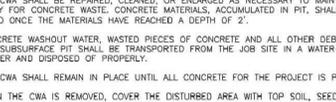
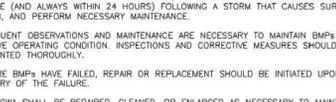
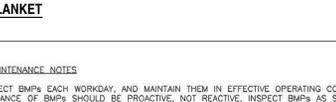
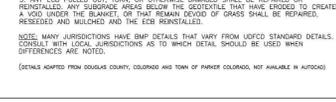
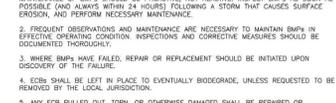
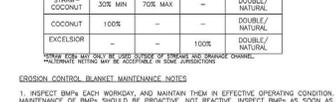
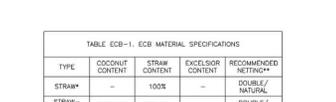
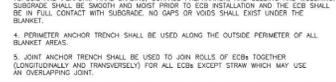
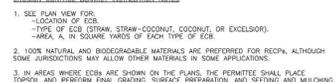
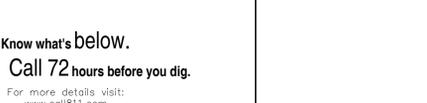
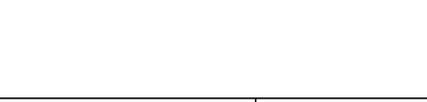
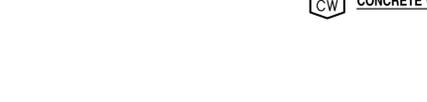
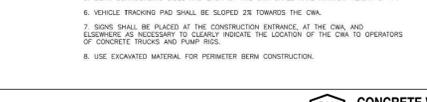
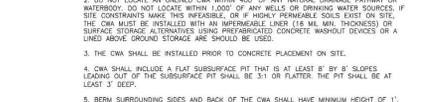
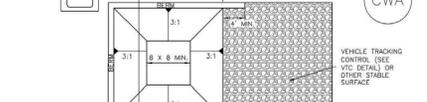
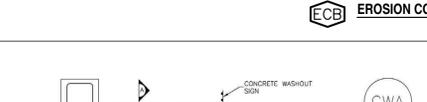
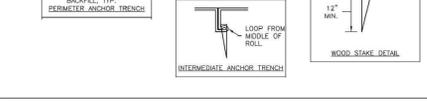
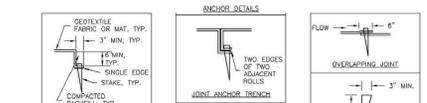
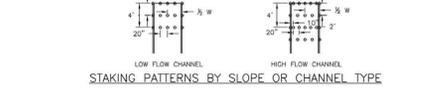
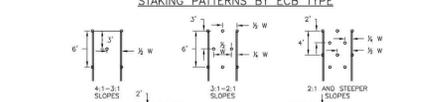
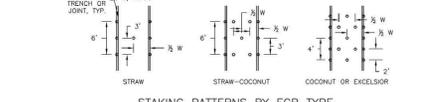
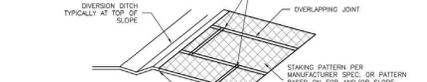
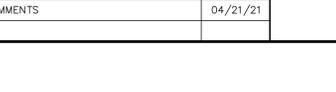
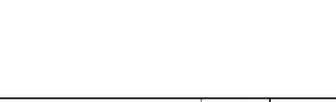
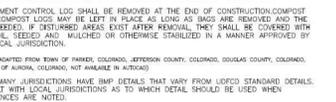
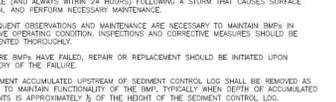
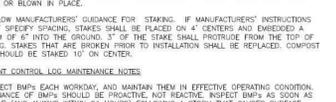
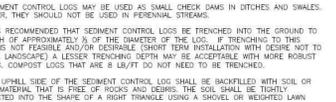
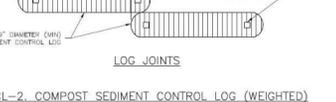
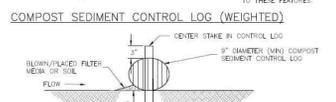
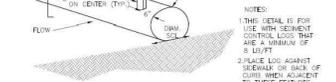


**ROCK SOCK SECTION**

**ROCK SOCK SECTION**

**ROCK SOCK PLAN**

**ROCK SOCK JOINTING**



**SEEDING GENERAL GUIDELINES:**

- 1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
- 2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADEMENT LAND-RESTORING ACTIVITIES.
- 3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCLESOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
- 4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.
- 5. 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.
- 6. THE UPBELL 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.
- 7. 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.

**SEEDING GENERAL GUIDELINES:**

- 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 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.
- 5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION/COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BARRS 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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- 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 SURFACE 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.

**SEEDING GENERAL GUIDELINES:**

- 1. 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.
- 2. 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.
- 3. TACKIFIER OR ROLLED EROSION CONTROL PRODUCTS SUCH AS PROPERLY SECURED NETTING OR EROSION CONTROL BLANKETS SHOULD BE USED ON SLOPES STEEPER THAN 3:1.
- 4. 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.

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

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- 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 FILLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REPLACED. ANY REPAIRS ARE BELOW THE SURFACE OF THE ECB THAT HAVE EXPOSED TO BE CREATED A HOOD UNDER THE BLANKET. IF THAT REMAIN DEBRIS OF GRASS SHALL BE REPAIRED, RESEDED AND MULCHED AND THE ECB REINSTALLED.

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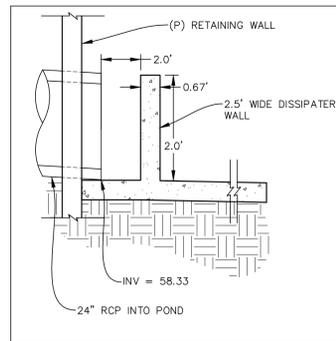
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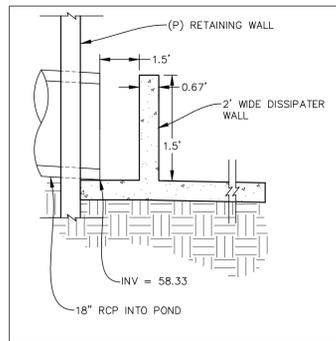
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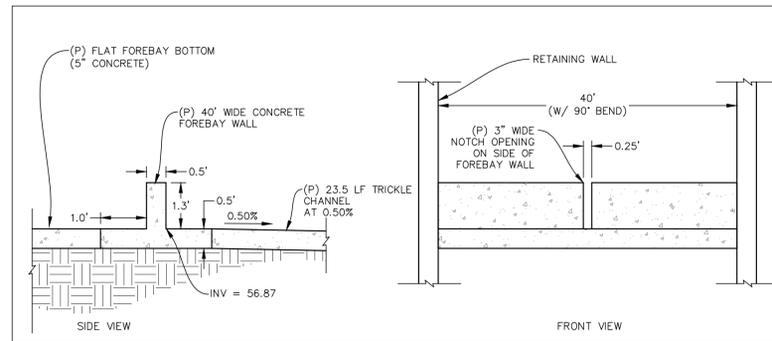
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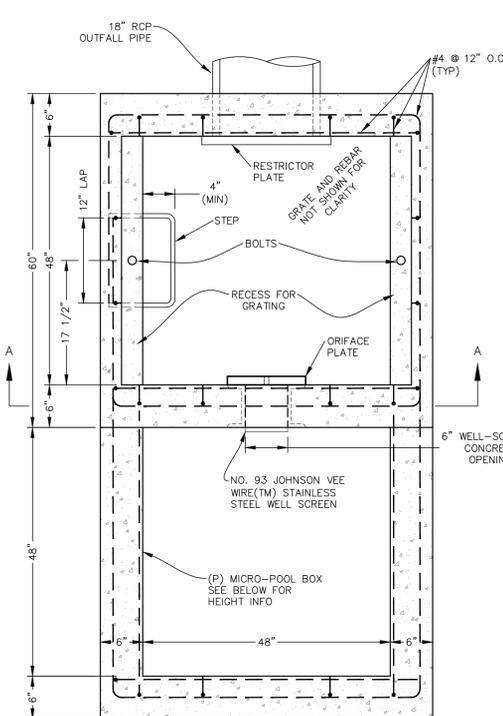
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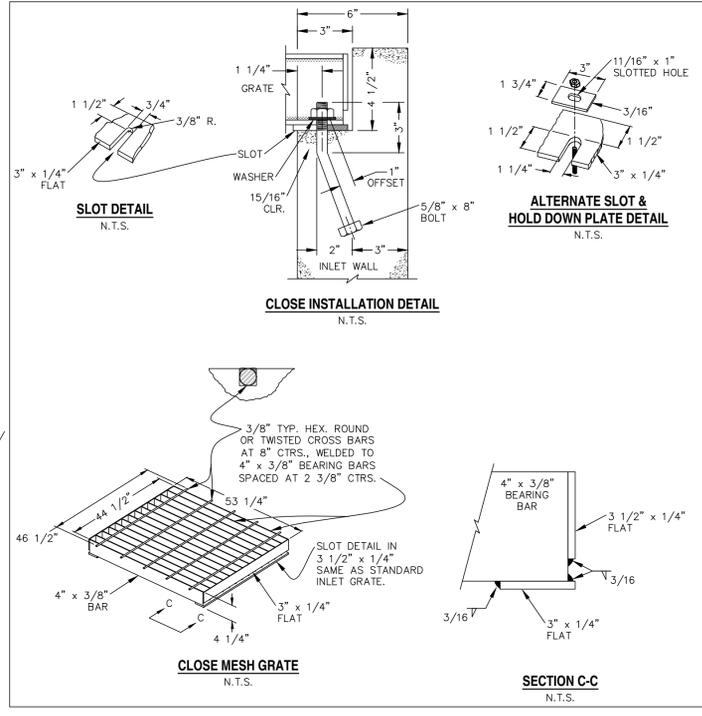
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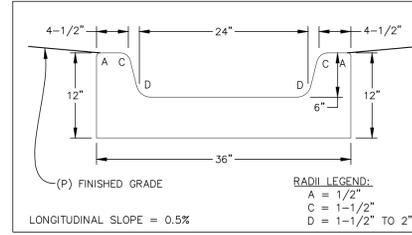
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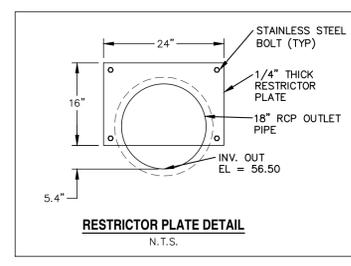
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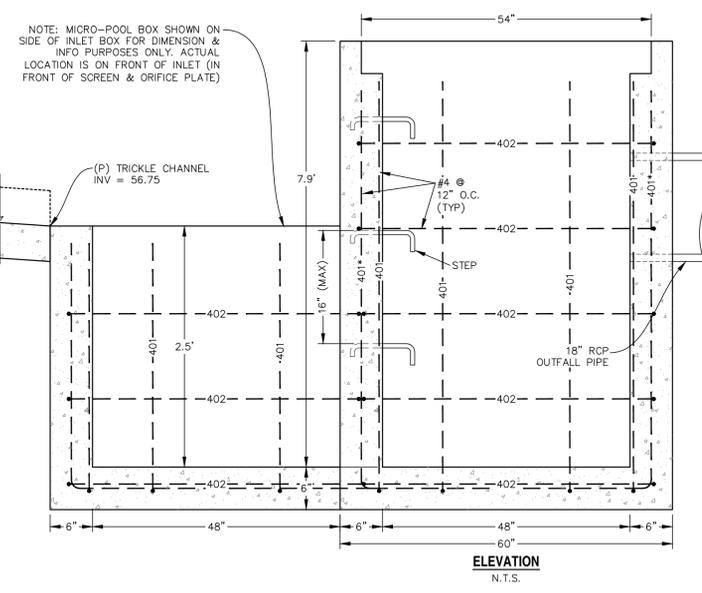
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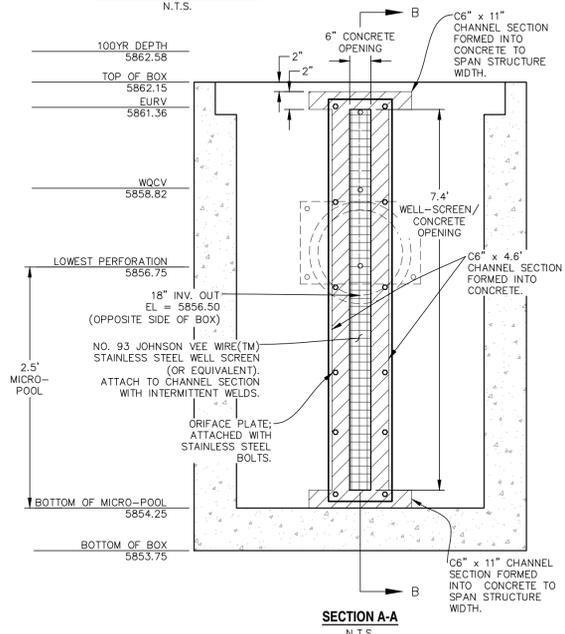
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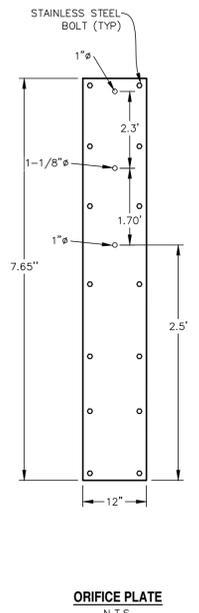
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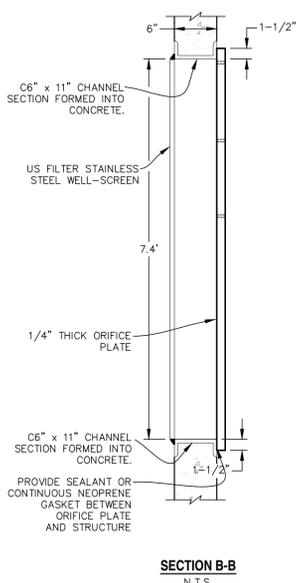
**ELEVATION**  
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**SECTION A-A**  
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**ORIFICE PLATE**  
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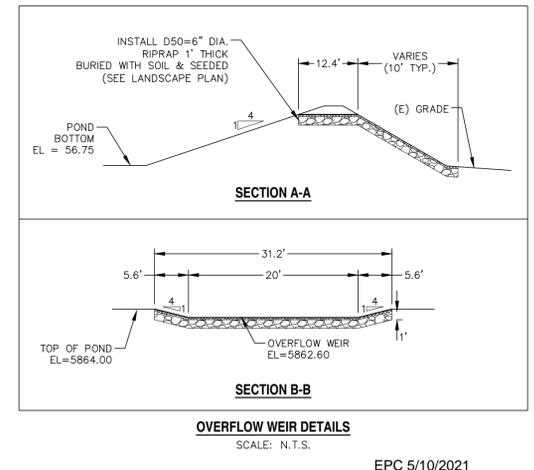


**SECTION B-B**  
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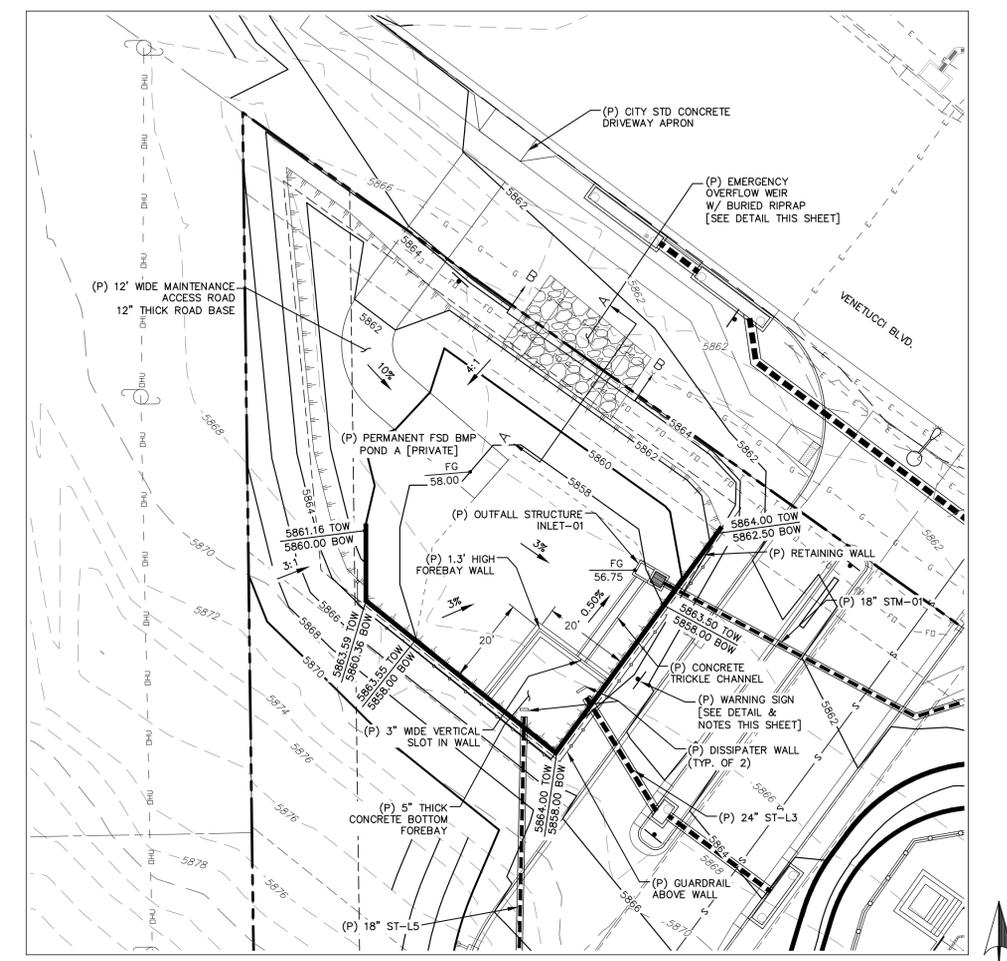
- CDOT GENERAL NOTES:**
- CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
  - REINFORCING BARS SHALL HAVE A MINIMUM 2 IN. CLEARANCE.
  - CONCRETE SLOPE AND DITCH PAVING SHALL CONFORM TO SECTION 507. REINFORCEMENT FOR CONCRETE SLOPE PAVING SHALL BE 6 X 6 - W1.4 X W1.4 OR 6 X 6 - W2.1 X W2.1.
  - STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH 712.06.
  - THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS CLOSE MESH GRATES ARE SPECIFIED ON THE PLANS.
  - STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" EXCEEDS 3 FT.-6 IN. AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
  - SEE SHEET M-604-11, INLET, TYPE D, FOR REINFORCEMENT AROUND THE PIPE OPENING.



- WARNING SIGN NOTES:**
- SIGN SHALL BE A MINIMUM OF 3 SQ.FT.
  - SIGN SHALL BE FABRICATED OF DURABLE MATERIALS SUCH AS METAL OR PLASTIC.
  - SIGN SHALL HAVE RED LETTERING ON A WHITE BACKGROUND.



**OVERFLOW WEIR DETAILS**  
SCALE: N.T.S.



**POND A**  
SCALE: 1" = 20'

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 #102  
TUSCON, AZ 85704  
(520) 742-2114

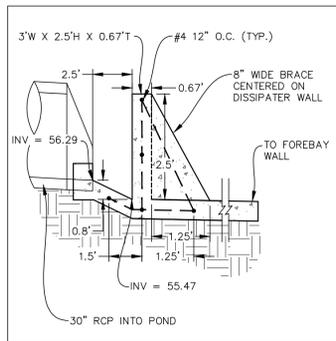
PREPARED UNDER MY DIRECT  
WESTWORKS ENGINEERING.  
CHAD D. KUZBEK, COLORADOC  
DATE: 5/10/2021



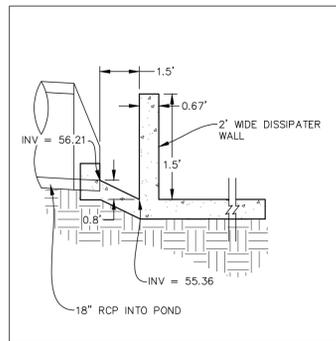
**ELDORADO SPRINGS**  
**PERMANENT BMP PLANS & DETAILS**  
**POND A**

DESIGNED BY: CDK	DRAWN BY: CDK
SCALE: AS SHOWN	DATE: 04/21/21
JOB NUMBER: 91807	SHEET: GR6 OF 10

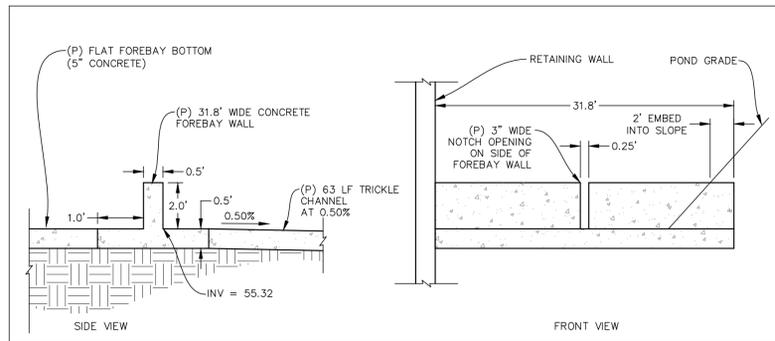
EPC 5/10/2021



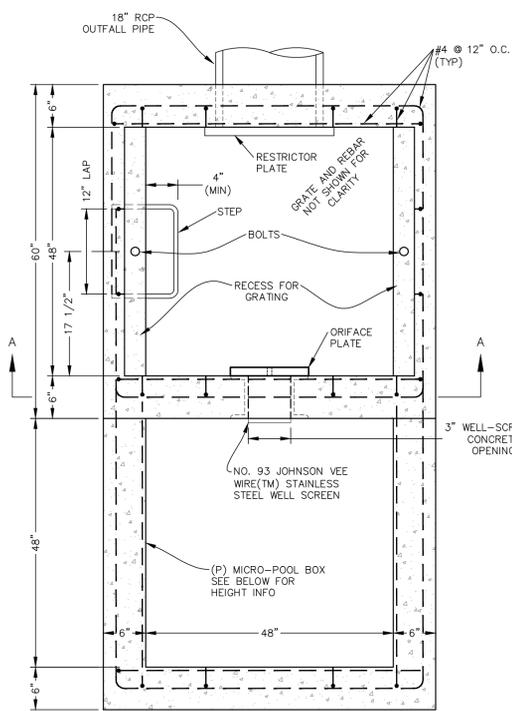
**FOREBAY DISSIPATER STM-05**  
SCALE: N.T.S.



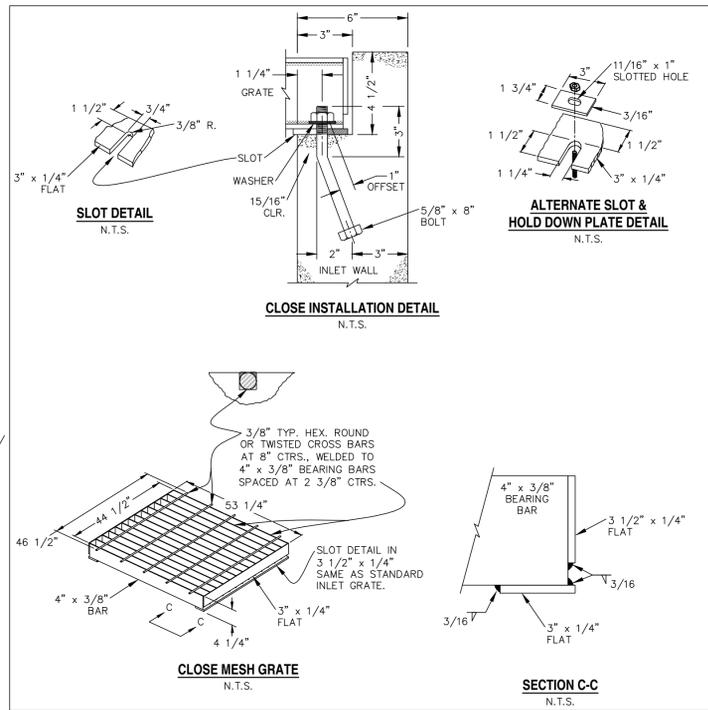
**FOREBAY DISSIPATER STM-07**  
SCALE: N.T.S.



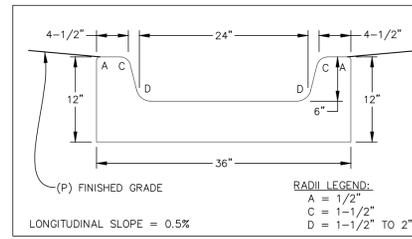
**FOREBAY WALL DETAILS - STM-05 DISCHARGE**  
SCALE: N.T.S.



**PLAN VIEW**  
N.T.S.



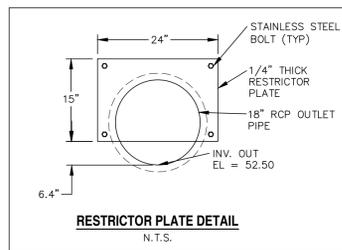
**CLOSE MESH GRATE DETAILS**  
N.T.S.



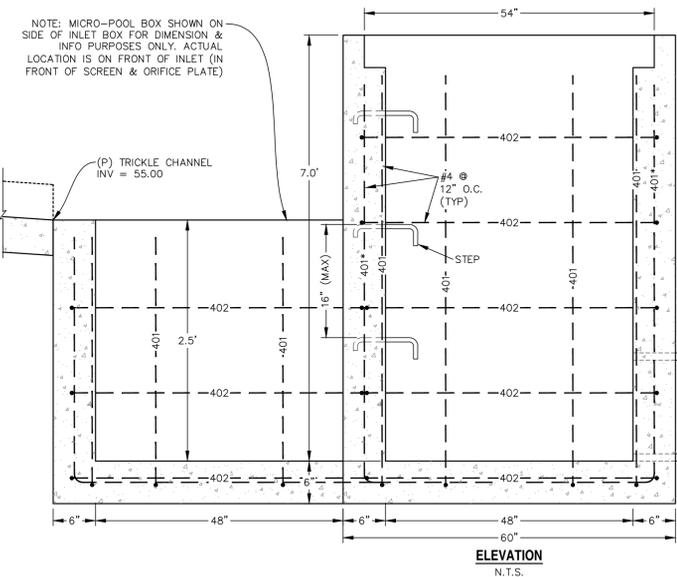
**CONCRETE TRICKLE CHANNEL**  
SCALE: N.T.S.

FOREBAY SIZE (NORTH):  
-REQUIRED = 0.03 AC-FT  
-PROVIDED = 0.05 AC-FT

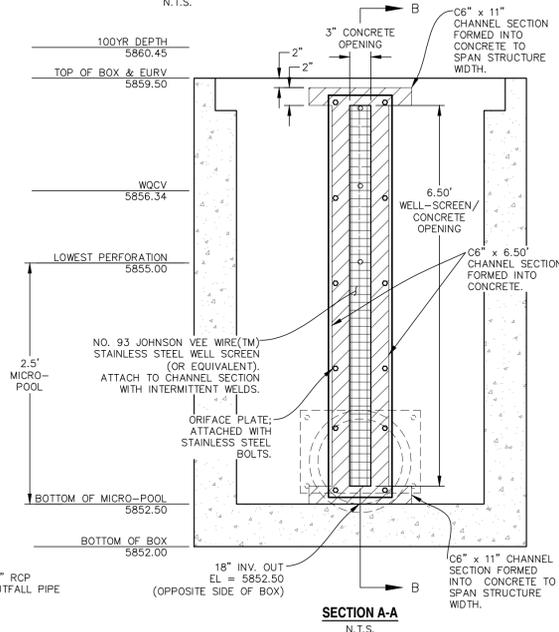
FOREBAY SIZE (SOUTH):  
-REQUIRED = 0.005 AC-FT  
-PROVIDED = 0.01 AC-FT



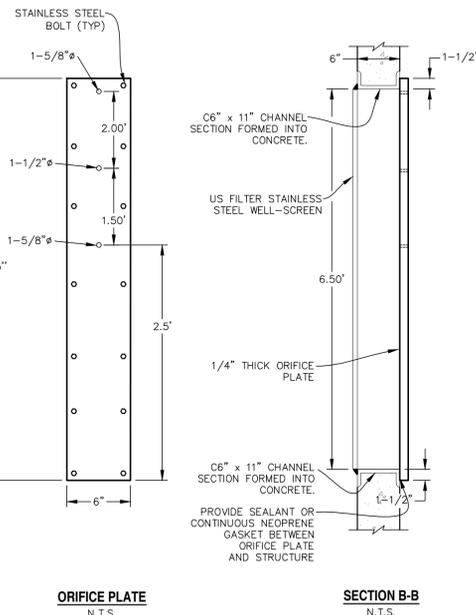
**RESTRICTOR PLATE DETAIL**  
N.T.S.



**ELEVATION**  
N.T.S.



**SECTION A-A**  
N.T.S.



**ORIFICE PLATE**  
N.T.S.

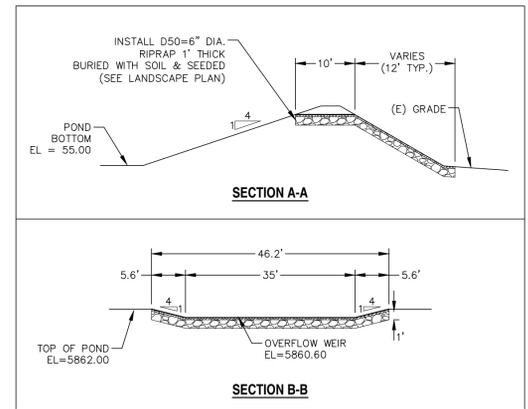
**SECTION B-B**  
N.T.S.

**CDOT GENERAL NOTES:**

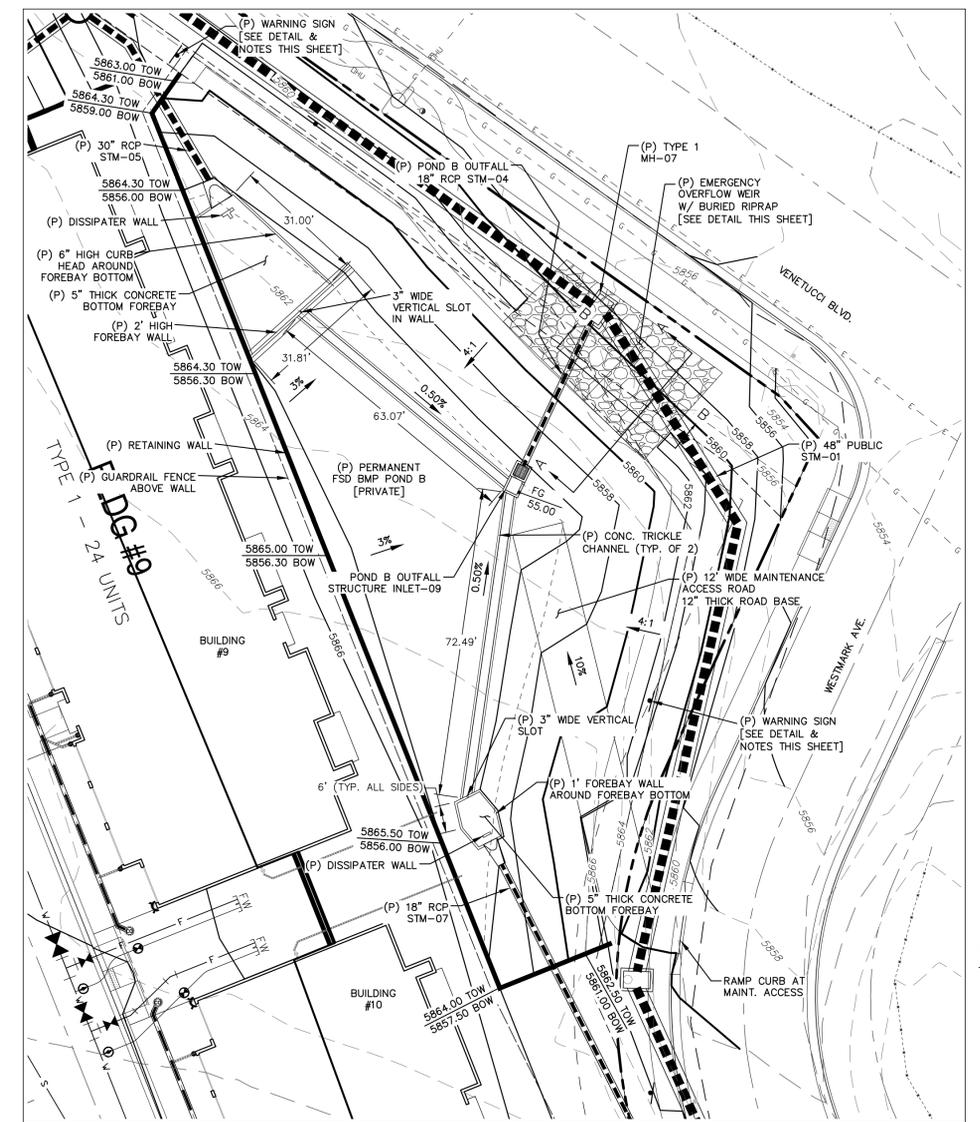
- CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
- REINFORCING BARS SHALL HAVE A MINIMUM 2 IN. CLEARANCE.
- CONCRETE SLOPE AND DITCH PAVING SHALL CONFORM TO SECTION 507. REINFORCEMENT FOR CONCRETE SLOPE PAVING SHALL BE 6 X 6 - W1.4 X W1.4 OR 6 X 6 - W2.1 X W2.1.
- STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH 712.06.
- THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS CLOSE MESH GRATES ARE SPECIFIED ON THE PLANS.
- STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" EXCEEDS 3 FT.-6 IN. AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
- 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.



**OVERFLOW WEIR DETAILS**  
SCALE: N.T.S.



**POND B**  
SCALE: 1" = 20'

REV.	DESCRIPTION	DATE
1	ADDRESS AGENCY COMMENTS	01/22/20
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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

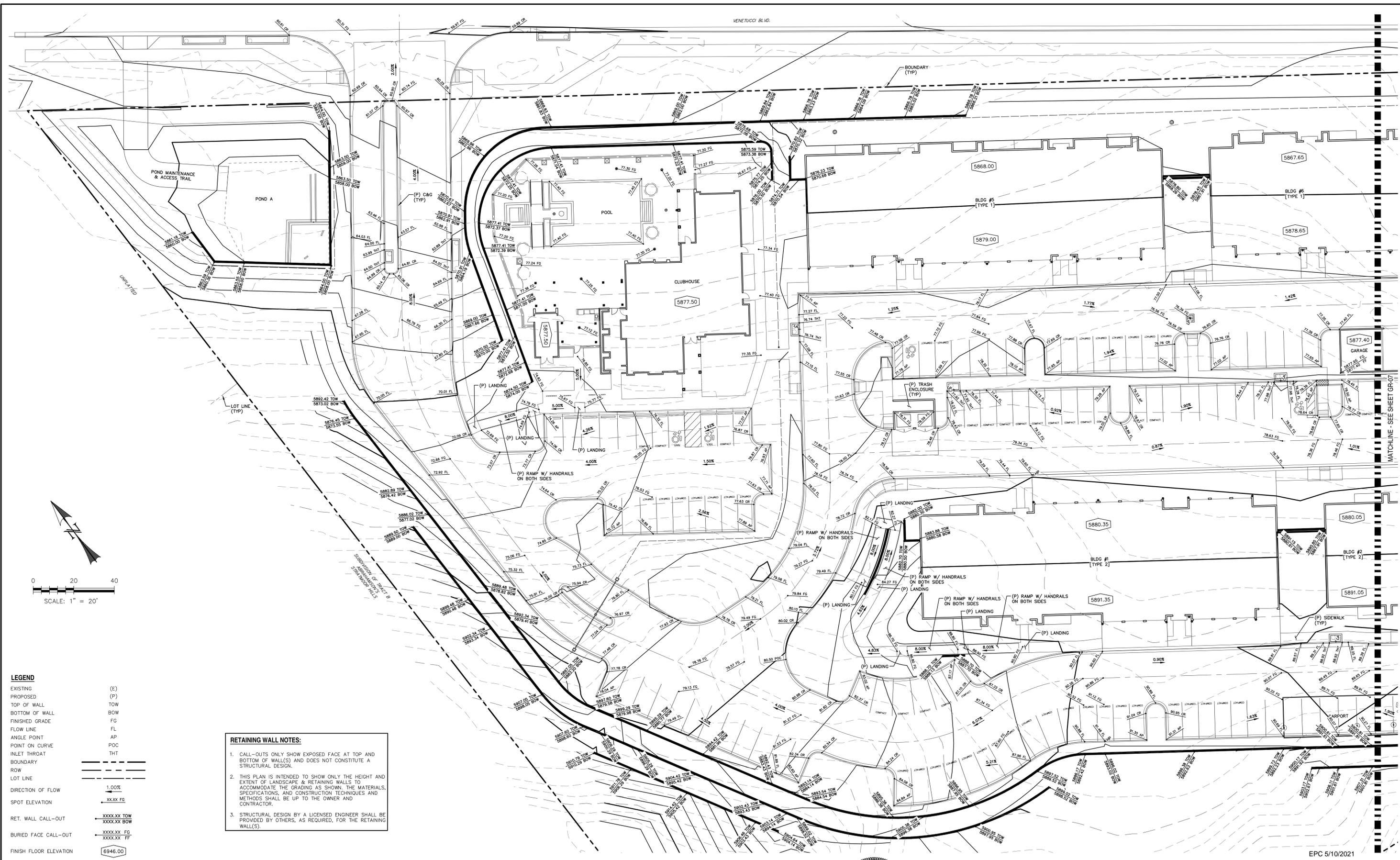
PREPARED UNDER MY DIRECT SUPERVISION  
**WESTWORKS ENGINEERING**  
CHAD D. KUZBEK, COLORADO PE #55751  
4/21/21



**ELDORADO SPRINGS**  
**PERMANENT BMP PLANS & DETAILS**  
**POND B**

DESIGNED BY:	CDK	DRAWN BY:	CDK
SCALE:	AS SHOWN	DATE:	04/21/21
JOB NUMBER:	91807	SHEET:	GR7 OF 10

EPC 5/10/2021



**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
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 #1102  
 TUSCON, AZ 85704  
 (520) 742-2114

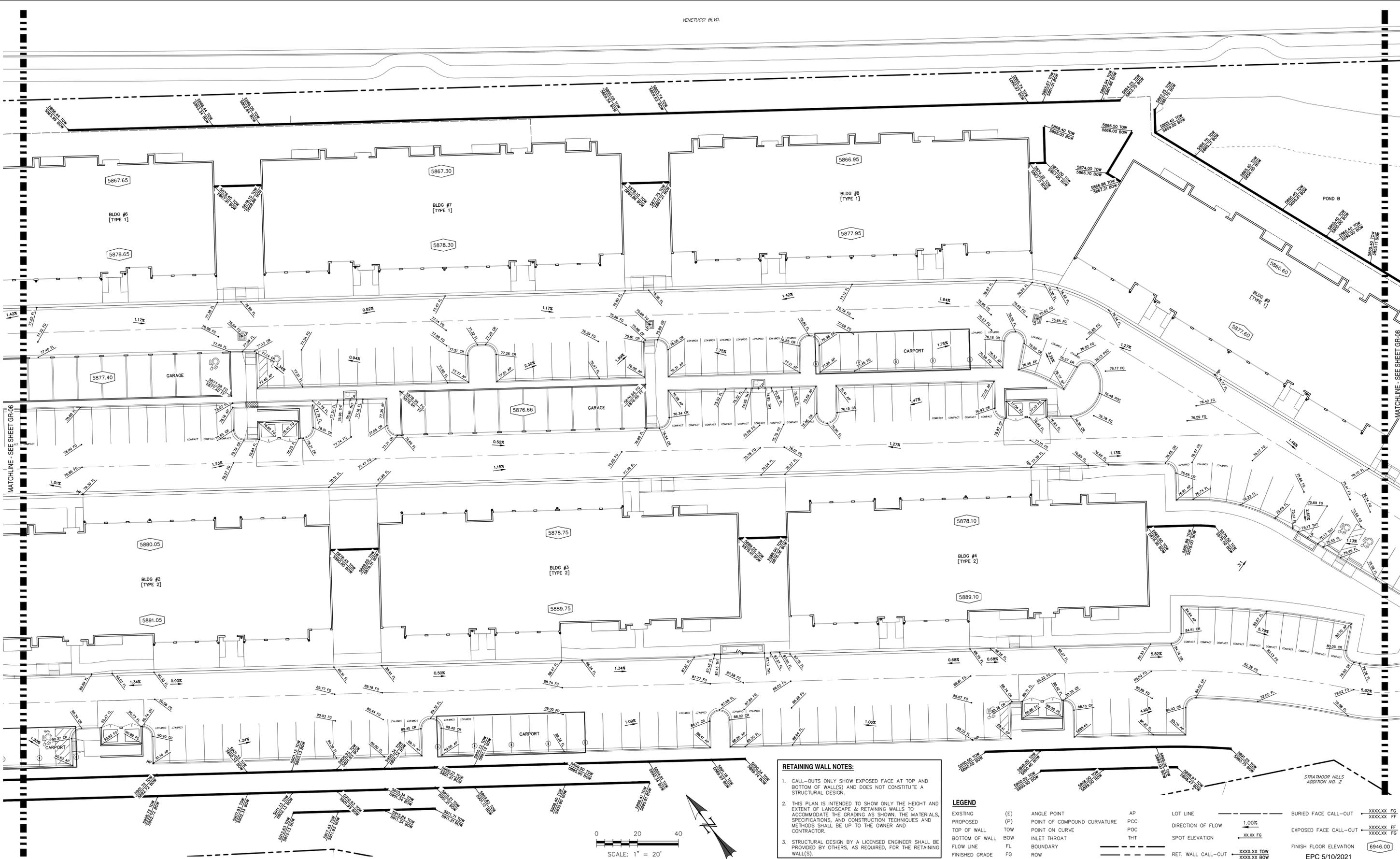
PREPARED UNDER MY DIRECT SUPERVISION OF:  
**WESTWORKS ENGINEERING.**  
 CHAD D. KUZBEK, COLORADO PE #35751  
 DATE: 04/21/21



ELDERADO SPRINGS  
**DETAILED GRADING PLAN**

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

EPC 5/10/2021

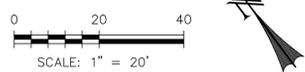


**RETAINING WALL NOTES:**

- 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).

**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	XXXXXX TOW	XXXXXX TOW
FLOW LINE	FL	BOUNDARY	ROW	RET. WALL CALL-OUT	XXXXXX BOW	XXXXXX BOW
FINISHED GRADE	FG					



REV.	DESCRIPTION	DATE
1	ADDRESS AGENCY COMMENTS	01/22/20
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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 #102  
TUSCON, AZ 85704  
(520) 742-2114

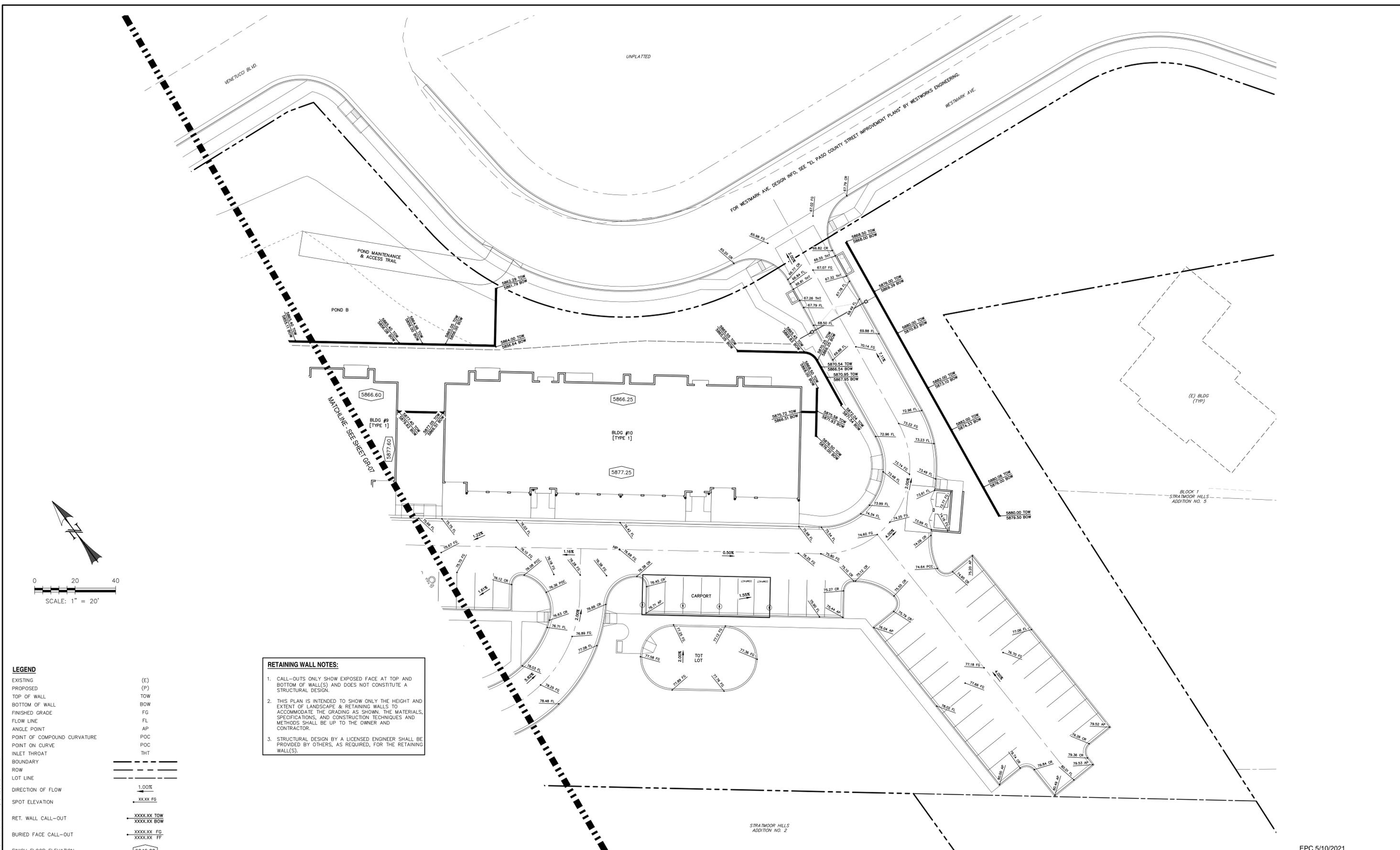
PREPARED UNDER MY DIRECT SUPERVISION AND SEAL AS A PROFESSIONAL ENGINEER  
**CHAD D. KUZBEK, COLORADO PE #35751**  
DATE: \_\_\_\_\_



**ELDORADO SPRINGS**  
**DETAILED GRADING PLAN**

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

EPC 5/10/2021



**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).

**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.XX 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

EPC 5/10/2021

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 #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