



Substantially Equivalent Stormwater Management Plan

This document is being submitted as a substantially equivalent Stormwater Management Plan for the Washington Pad Form 2A. This stormwater management plan was developed as a part of the operator agreement process with City of Thornton. This document complies with all requirements outlined in Colorado Oil and Gas Conservation Commission Rule 304.c.(15). For this reason, Extraction believes this satisfies the substantially equivalent information requirements and requests that it is accepted pursuant to Rule 304.e.

Best Management Practices

1. To the extent practicable, erosion and sediment control measures shall be installed prior to grading activities. At all times during project construction, all temporary and permanent erosion and sediment control measures shall be maintained and repaired as needed to prevent accelerated erosion on the site and on any adjacent properties.
2. The following storm water quality structural BMPs will be utilized during construction: VTC Pad, Ditch & Berm System, Inlet protection, culvert outlet protection, silt fencing, rip rap, erosion control mat, and sediment control log.
3. The following storm water quality structural BMPs will be utilized during production phase: culvert outlet protection, rip rap, and revegetation.
4. All topsoil, where physically practicable, shall be salvaged and no topsoil shall be removed from site except as set forth in the approved plans. Topsoil and overburden shall be segregated and stockpiled separately. Topsoil and overburden shall be redistributed within the graded area after rough grading to provide a suitable base for areas which will be seeded and planted. runoff from stockpiled area shall be controlled to prevent erosion and resultant sedimentation of receiving water.
5. Permanent or temporary soil stabilization measures shall be applied to disturbed areas within 14 days after final grade is reached on any portion of the site. Soil stabilization measures shall be applied within 14 days to disturbed areas which may not be at final grade, but will be left dormant for longer than 30 days. It is recommended that the permanent seed mix be planted after October to keep seedlings from developing before winter. Temporary vegetative cover consisting of annual rye grass shall be hydro seeded at 20 pounds pure live seed per acre.
6. Fugitive dust emissions resulting from drilling access road construction activities and /or wind shall be controlled using water.
7. Additional erosion control measures may be required during construction and shall be installed as soon as practical if required by the stormwater administrator or their representative.
8. Areas where sediment control logs are not indicated may require some form of sediment control. Straw mulch and/or temporary seeding may be utilized as necessary.
9. Inspection will be performed every 14 days following a weather event causing runoff during the construction phase. Inspections will be performed every 30 days during the completed and interim phases. An inspection report will be filled out & filed for each inspection performed.
10. Maintenance and repairs will be performed as soon as possible on items or areas identified in the inspection report. Maintenance will be performed as indicated in the Urban Drainage & Flood Control District, Urban Storm Drainage Criteria Manual, Vol 3, per manufacturer's specifications or other sources determined to be acceptable.

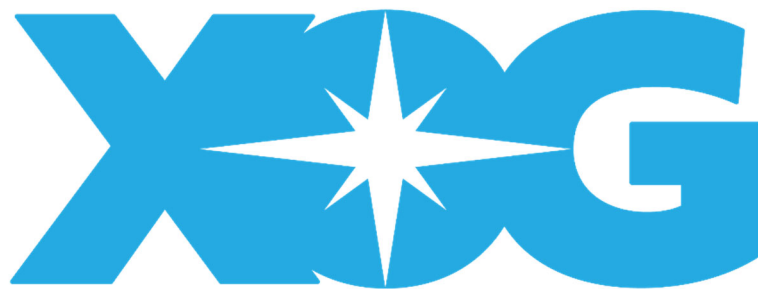
**Thornton Operator Agreement Application
Materials**

Section 18 - 870

Section f (4)

Stormwater Management Plan

Washington Pad



EXTRACTION OIL & GAS

1.0 INTRODUCTION

The following document provides Extraction Oil & Gas, Inc.’s (“Extraction”, “Operator”, or “The Operator”) vicinity maps associated with the proposed development of minerals within the municipal boundaries of the City and County of Thornton (“Thornton”, “City”, or “The City”) at the location described as the proposed Washington Pad Site (“Washington”, “The Development”).

Thornton sets forth the content requirements for stormwater management in Thornton City Code, Article X, Division 2, Section 18-870(4) as follows:

Stormwater management plan. A copy of the stormwater management plan submitted to the Colorado Water Quality Control Division, and a description of the measures proposed to comply with the applicable COGCC stormwater control requirements in Rule 1002(f)

This document fulfills the above requirements with respect to The Development and is submitted as part of Extraction’s pursuit of an Operator Agreement with the City.

CITY OF THORNTON GENERAL NOTES:

- THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING, SAFETY OF PERSONS AND PROPERTY DURING THE PERFORMANCE OF WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CITY CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.
- THE TYPE, SIZE, LOCATION, AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO DATE OF CONSTRUCTION. FOR INFORMATION CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) - 1- 800-922-1987. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY SIZE AND HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION AND NOTIFY THE CITY OF ANY DISCREPANCIES.
- MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CITY OF THORNTON STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS AND WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY AUTHORIZED CITY OF THORNTON PERSONNEL.
- ALL TRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SAFETY OF WORKERS PROVIDED FOR AS REQUIRED BY THE MOST RECENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION." THESE REGULATIONS ARE DESCRIBED IN SUBPART P, PART 1926 OF THE CODE OF FEDERAL REGULATIONS. SHEETING AND SHORING SHALL BE UTILIZED WHERE NECESSARY TO PREVENT ANY EXCESSIVE WIDENING OR SLOUGHING OF THE TRENCH WHICH MAY BE DETRIMENTAL TO HUMAN SAFETY, TO THE PIPE BEING PLACED, TO TREES, OR TO ANY EXISTING STRUCTURE WHERE EXCAVATIONS ARE MADE UNDER SEVERE WATER CONDITIONS. THE CONTRACTOR MAY BE REQUIRED TO USE AN APPROVED PILING INSTEAD OF SHEETING AND SHORING.
- THE CONTRACTOR SHALL FURNISH THE ENGINEER THE "AS CONSTRUCTED" LOCATIONS OF FACILITIES INSTALLED AND, THIS IN TURN, SHALL BE SUBMITTED TO THE CITY OF THORNTON ON AS-BUILT MYLAR DRAWINGS AND ELECTRONIC FILES PREPARED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING NEARBY PUBLIC STREETS OF MUD OR DEBRIS DUE TO CONSTRUCTION ACTIVITY INITIATED BY SAID CONTRACTOR ON A DAILY BASIS OR AS OTHERWISE DIRECTED BY AUTHORIZED CITY PERSONNEL.
- PRIOR TO THE BEGINNING OF WORK, A PRECONSTRUCTION CONFERENCE SHALL BE HELD BETWEEN THE CITY, THE RESPONSIBLE PARTY WHO IS SCHEDULED TO PERFORM THE WORK, THE DESIGNATED ON-SITE FIELD REPRESENTATIVE, THE CONSULTING ENGINEER OR LANDSCAPE PROFESSIONAL, AND ANY OTHER ENTITIES INVOLVED IN THE CONSTRUCTION.
- DEVELOPMENT PHASING OF ANY PROJECT MUST BE SHOWN ON THE CONSTRUCTION PLANS AND MADE A PART OF THE APPLICATION PROCEDURE. NO PHASING SHALL BE PERMITTED UNLESS THIS REQUIREMENT HAS BEEN ADHERED TO.
- NO WORK SHALL BEGIN UNTIL THE INSTALLING RESPONSIBLE PARTY IS IN POSSESSION OF AN APPROVED SET OF PLANS AND THE CITY OF THORNTON STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS, AND ALL NECESSARY PERMITS FOR THE IMPROVEMENTS HAS BEEN ISSUED BY THE CITY. DEVELOPMENT ENGINEERING'S APPROVAL SHALL BE FOR GENERAL CONFORMANCE TO THE UTILITY SPECIFICATIONS AND SHALL NOT CONSTITUTE BLANKET APPROVAL OF ALL DIMENSIONS, QUANTITIES AND DETAILS OF THE MATERIAL OR EQUIPMENT SHOWN. NOR SHALL SUCH APPROVAL RELIEVE THE RESPONSIBLE PARTY, CONSULTING ENGINEER, OR LANDSCAPE ARCHITECT OF THEIR RESPONSIBILITY FOR ERRORS CONTAINED IN THE DRAWINGS. A COPY OF THE APPROVED PLANS AND ALL PERMITS SHALL BE ONSITE AT ALL TIMES.
- THE RESPONSIBLE PARTY SHALL FURNISH REASONABLE AID AND ASSISTANCE REQUIRED BY DEVELOPMENT ENGINEERING FOR THE PROPER EXAMINATION OF THE MATERIALS AND WORK. WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACCEPTED WORKMANSHIP PRACTICES AND THE CITY OF THORNTON STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS. ANY WORK NOT ACCEPTED BY DEVELOPMENT ENGINEERING SHALL BE REDONE UNTIL COMPLIANCE WITH THESE STANDARDS IS ACHIEVED. INSTRUCTIONS GIVEN BY DEVELOPMENT ENGINEERING RELATING TO QUALITY OF MATERIALS AND WORKMANSHIP MUST BE OBEYED AT ONCE BY THE RESPONSIBLE PARTY. DEVELOPMENT ENGINEERING SHALL NOT SUPERVISE SET OUT WORK, OR GIVE LINE AND GRADE STAKES.
- THE MATERIALS USED IN PROJECTS SHALL BE NEW AND SUBJECT TO THE INSPECTION AND APPROVAL OF THE INSPECTOR AT ALL TIMES. THE INSPECTOR HAS THE RIGHT TO PERFORM ANY TESTING DEEMED NECESSARY TO ENSURE COMPLIANCE OF THE MATERIAL WITH THESE STANDARDS. NO MATERIAL SHALL BE USED BEFORE BEING INSPECTED AND APPROVED BY THE INSPECTOR. FAILURE OR NEGLIGENCE ON THE PART OF THE INSPECTOR TO CONDEMN OR REJECT INFERIOR MATERIALS OR WORK SHALL NOT BE CONSTRUED TO IMPLY THEIR ACCEPTANCE SHOULD THEIR INFERIORITY BECOME EVIDENT AT ANY TIME PRIOR TO FINAL ACCEPTANCE OF THE WORK. INSPECTORS HAVE THE AUTHORITY TO REJECT DEFECTIVE OR INFERIOR MATERIALS AND/OR DEFECTIVE WORKMANSHIP AND TO SUSPEND WORK UNTIL SUCH TIME AS THE RESPONSIBLE PARTY SHALL CORRECT THE DISCREPANCIES IN QUESTION.
- WHENEVER DEFECTIVE MATERIALS AND WORK ARE REJECTED, THE RESPONSIBLE PARTY SHALL PROMPTLY REMOVE SUCH DEFECTIVE MATERIALS AND CONSTRUCTION FROM THE JOB SITE AND REPLACE ALL DEFECTIVE PORTIONS TO THE SATISFACTION OF DEVELOPMENT ENGINEERING. IN THE EVENT THE RESPONSIBLE PARTY FAILS TO REMOVE REJECTED ITEMS FROM THE JOB SITE WITHIN A REASONABLE LENGTH OF TIME, DEVELOPMENT ENGINEERING MAY ARRANGE FOR SUCH REMOVAL AT THE EXPENSE OF THE RESPONSIBLE PARTY.
- INSPECTION SHALL NOT RELIEVE THE RESPONSIBLE PARTY FROM ANY OBLIGATION TO PERFORM THE WORK STRICTLY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS OR ANY MODIFICATIONS THEREOF. WORK NOT SO CONSTRUCTED SHALL BE REMOVED AND CORRECTED BY THE RESPONSIBLE PARTY AT HIS SOLE EXPENSE, WHENEVER SO ORDERED BY DEVELOPMENT ENGINEERING, WITHOUT REFERENCE TO ANY PREVIOUS ERROR OR OVERSIGHT IN INSPECTION.
- EXCEPT IN CASES OF EMERGENCY, MAINTENANCE, OR PROTECTION OF WORK ALREADY COMPLETED, NO WORK SHALL BE ALLOWED BETWEEN THE HOURS OF 7 P.M. AND 7 A.M.; NOR ON SATURDAY, SUNDAY, OR LEGAL HOLIDAYS UNLESS APPROVED BY DEVELOPMENT ENGINEERING IN EACH CASE. WHEN ANY INSPECTOR IS REQUIRED TO WORK OUTSIDE THE HOURS OF 7 A.M. TO 4 P.M. ON REGULAR CITY BUSINESS DAYS, OVERTIME SHALL BE CHARGED TO THE RESPONSIBLE PARTY. HOWEVER, SUCH INSPECTORS SHALL REMAIN EMPLOYEES OF THE CITY FOR ALL PURPOSES. REQUESTS FOR OVERTIME SHALL BE MADE TO DEVELOPMENT ENGINEERING AT LEAST 48 HOURS IN ADVANCE. PAYMENT FOR SUCH OVERTIME WORK SHALL BE MADE TO THE CITY PRIOR TO FINAL ACCEPTANCE.
- IN THE EVENT ONE OR MORE INSPECTORS REPRESENTING PRIVATE CONSULTING ENGINEERING FIRMS ARE ALSO INSPECTING A PROJECT ALONG WITH DEVELOPMENT ENGINEERING, THE INSTRUCTIONS GIVEN BY DEVELOPMENT ENGINEERING SHALL PREVAIL IN THE EVENT OF CONFLICTING INSTRUCTIONS.
- THE WORK SHALL BE SURVEYED AND STAKED UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR IN ACCORDANCE WITH THE APPROVED PLANS.
- IF IRRIGATION DITCHES ARE INVOLVED, AN APPROVAL BLOCK FOR THE DITCH COMPANY SHALL BE PROVIDED.
- IF A FOUNDATION UNDERDRAIN SYSTEM IS INSTALLED IN THE PUBLIC RIGHT-OF-WAY, THE FOLLOWING STATEMENT SHALL BE INCLUDED IN THE AS-BUILT DRAWINGS:
 - "THE FOUNDATION UNDERDRAIN SYSTEM IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER OR ITS ASSIGNS. THE CITY IS NOT RESPONSIBLE FOR THE MAINTENANCE OR REPAIR OF SAID SYSTEM."
- CONSTRUCTION SHALL ADHERE TO THE FOLLOWING SEQUENCE UNLESS OTHERWISE SPECIFIED BY THE DEVELOPMENT ENGINEERING MANAGER: SANITARY SEWER INSTALLATION, WATER MAIN INSTALLATION, CURB AND GUTTER INSTALLATION, WATER SERVICE INSTALLATION.
- COMPACTION OF ALL TRENCHES MUST BE ATTAINED AND COMPACTION TEST RESULTS SUBMITTED TO THE ENGINEER AND THE CITY OF THORNTON PRIOR TO FINAL ACCEPTANCE.
- ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY A CITY REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN STANDARD CONSTRUCTION PRACTICES ARE NOT BEING ADHERED TO.

- DEVELOPER AND BUILDER SHALL REGULARLY PATROL THE PUBLIC LANDS ADJACENT TO THE DEVELOPMENT TO REMOVE CONSTRUCTION DEBRIS AND KEEP THE SITE CLEAN AND SAFE.
- ALL SITE GRADING (EXCAVATION, EMBANKMENT, AND COMPACTION) SHALL CONFORM TO THE RECOMMENDATIONS OF THE LATEST SOILS INVESTIGATION FOR THIS PROPERTY AND SHALL FURTHER BE IN CONFORMANCE WITH THE CITY OF THORNTON STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS, LATEST EDITION. A CDPS GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES SHALL BE OBTAINED PRIOR TO ANY GRADING BEING PERFORMED ON SITES ONE (1) ACRE OR LARGER IN SIZE. THESE PERMITS CAN BE OBTAINED FROM THE STATE WATER QUALITY CONTROL DIVISION.
- NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATION AND FOR THE SHORTEST PRACTICAL PERIOD OF TIME.
- TOPSOIL SHALL BE STOCKPILED TO THE EXTENT PRACTICABLE ON THE SITE FOR USE ON AREAS TO BE REVEGETATED. ANY AND ALL STOCKPILES SHALL BE LOCATED AND PROPER MEASURES TAKEN TO CONTROL EROSION AND SEDIMENT MOVEMENT.
- AT ALL TIMES, THE PROPERTY SHALL BE MAINTAINED AND/OR WATERED TO PREVENT WIND-CAUSED EROSION. EARTHWORK OPERATIONS SHALL BE DISCONTINUED WHEN DUST SIGNIFICANTLY IMPACTS ADJACENT PROPERTY. IF EARTHWORK IS COMPLETE OR DISCONTINUED AND DUST FROM THE SITE CONTINUES TO CREATE PROBLEMS, THE OWNER/DEVELOPER SHALL IMMEDIATELY INSTITUTE MITIGATIVE MEASURES AND SHALL CORRECT DAMAGE TO ADJACENT PROPERTY.
- PERMANENT SLOPES SHALL NOT EXCEED 4:1 (H:V) IN AREAS TO BE SEEDED OR SODDED. RETAINING WALLS SHALL BE REVIEWED AND APPROVED BY SEPARATE APPLICATION TO THE DEVELOPMENT ENGINEERING DIVISION.
- THIS EROSION AND SEDIMENT CONTROL PLAN HAS BEEN SUBMITTED TO THE CITY OF THORNTON AND IS IN GENERAL CONFORMANCE WITH THE CITY'S EROSION CONTROL STANDARDS. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURE MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEM OR IF THE PROPOSED EROSION CONTROL MEASURES DO NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS EROSION CONTROL PLAN AND THE OBLIGATION OF THE LANDOWNER SHALL RUN WITH THE LAND UNTIL SUCH TIME AS THE EROSION CONTROL PLAN IS PROPERLY COMPLETED, OFFICIALLY MODIFIED, OR VOIDED.
- INSTALLATION OF WATER MAINS SHALL NOT BE PERMITTED UNTIL ALL COMPACTION RESULTS FOR SANITARY SEWERS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY. ALL DESIGN SLOPES FOR SANITARY SEWER INSTALLATIONS HAVE BEEN VERIFIED AND APPROVED BY THE CITY, AND ALL APPLICABLE TESTING PROCEDURES HAVE BEEN CONDUCTED AND APPROVED IN WRITING.
- NEW WATER MAINS 12 INCHES OR LESS SHALL BE AWWA STANDARD C-900-07 PVC DR -25 PRESSURE PIPE. WATER MAINS LARGER THAN 12 INCHES SHALL MEET AWWA C-905 PVC DR-21 OR DR-18 AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER. HYDRANT LEADS SHALL ONLY BE DIP.
 - MUELLER COMPANY - 5-1/4" SUPER CENTURION
 - WATEROUS COMPANY - MODEL WB-250-PACER
- THERE SHALL BE A MINIMUM OF FOUR AND ONE HALF (4.5) FEET OF COVER FROM FINISHED GRADE TO THE TOP OF WATERLINES.
- BEDDING AND BACKFILL MATERIALS FOR BOTH WATER AND SEWER SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF THORNTON STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS.
- THRUSTBLOCKS SHALL BE PLACED AT FITTINGS, TEES, BENDS, CROSSES, PLUGS, ETC., IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF THORNTON STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS.
- IN ALL CASES, 10 FEET OF HORIZONTAL DISTANCE, AS MEASURED FROM EDGE OF PIPE TO EDGE OF PIPE, SHALL BE MAINTAINED BETWEEN WATER AND ANY SANITARY OR STORM SEWER.
- CONTRACTOR SHALL NOTIFY ALL RESIDENTS AND/OR BUSINESSES IN WRITING 48 HOURS PRIOR TO ANY SHUT-OFF IN SERVICE. THE NOTICES MUST HAVE CONTRACTOR'S PHONE NUMBER AND NAME OF CONTACT PERSON, AND EMERGENCY PHONE NUMBER FOR AFTERHOURS CALLS. ALL SHUT-OFFS MUST BE APPROVED BY THE CITY'S INFRASTRUCTURE DEPARTMENT, AND CITY VALVES AND APPURTENANCES SHALL BE OPERATED BY CITY PERSONNEL, UNLESS WRITTEN PERMISSION IS GIVEN OTHERWISE.
- RIM ELEVATIONS OF MANHOLE SHOWN ON THE PLAN AND PROFILE SHEETS ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE PIPELINE CONTRACTOR SHOULD ALLOW APPROXIMATELY THE TOP ONE (1) FOOT OF RIM ELEVATION TO BE ADJUSTED EITHER UP OR DOWN IN ORDER TO MATCH FINAL PAVEMENT ELEVATION. THE MAXIMUM ADJUSTMENT TO FINAL GRADE IS 12 INCHES WITH CONCRETE RINGS.
- DURING CONSTRUCTION, CARE MUST BE TAKEN TO AVOID ANY GROUND WATER, STORM WATER, CONSTRUCTION DEBRIS, SOIL, OR ANY OTHER FOREIGN MATERIALS FROM ENTERING ANY ACTIVE CITY OF THORNTON SEWER. THE USE OF THE SANITARY SEWER SYSTEM FOR THE PURPOSES OF DEWATERING IS STRICTLY PROHIBITED.
- ALL CONSTRUCTION ACTIVITIES DEWATERING MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY." FOR INFORMATION, PLEASE CONTACT COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION.
- AFTER ANY OVERLAY OF AN EXISTING ROADWAY, WHERE CITY UTILITIES ARE PRESENT, THE DEVELOPER SHALL OPEN ALL MANHOLES AND VALVE BOXES FOLLOWING THE PAVING OPERATION TO ENSURE THAT MANHOLE AND VALVES WERE NOT PAVED OVER NOR FILLED WITH ASPHALT.
- WHEN AN EXISTING ASPHALT STREET IS CUT, THE STREET MUST BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. THE EXISTING STREET CONDITION SHALL BE DOCUMENTED BY THE CITY OF THORNTON'S CONSTRUCTION INSPECTOR BEFORE ANY CUTS ARE MADE. PATCHING SHALL BE DONE IN CONFORMANCE WITH THE CITY OF THORNTON STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS. THE FINISHED PATCH SHALL BLEND SMOOTHLY INTO THE EXISTING SURFACE. ALL LARGE PATCHES SHALL BE PAVED WITH AN ASPHALT LAY-DOWN MACHINE. IN STREETS WHERE MORE THAN ONE CUT IS MADE, AN OVERLAY OF THE ENTIRE STREET WIDTH, INCLUDING THE PATCHED AREAS, MAY BE REQUIRED. THE DETERMINATION OF NEED FOR A COMPLETE OVERLAY SHALL BE MADE BY THE DEVELOPMENT ENGINEERING MANAGER.
- PAVING SHALL NOT START UNTIL A GEOTECHNICAL REPORT AND PAVEMENT DESIGN HAVE BEEN APPROVED BY THE CITY OF THORNTON'S DEVELOPMENT ENGINEERING DIVISION AND SUBGRADE COMPACTION TEST AND PROOF ROLL HAVE BEEN PERFORMED AND THE RESULTS HAVE MET WITH THE APPROVAL OF THE CITY OF THORNTON. THE PAVEMENT DESIGN REPORT MUST BE SUBMITTED THREE (3) WEEKS PRIOR TO THE ANTICIPATED DATE OF PAVING.
- ALL DAMAGED EXISTING CURB, GUTTER, AND SIDEWALK SHALL BE REPAIRED PRIOR TO ACCEPTANCE OF COMPLETED IMPROVEMENTS.
- ALL CURB RETURNS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED WITH SIDEWALK RAMPS IN ACCORDANCE WITH THE CITY OF THORNTON STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS. ALL SIDEWALK RAMPS SHALL INCLUDE A TRUNCATED DOME DETECTABLE WARNING PATTERN AS SHOWN ON THE DETAIL SHEETS.
- THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN PROPER TRAFFIC CONTROL DEVICES UNTIL THE SITE IS OPEN TO TRAFFIC. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY OF THORNTON FOR APPROVAL PRIOR TO CONSTRUCTION.
- REPAIR OF ANY DAMAGE TO EXISTING IMPROVEMENTS OR LANDSCAPING IS THE RESPONSIBILITY OF THE CONTRACTOR.

CITY OF THORNTON STORM WATER MANAGEMENT PLAN (SWMP)


- PURSUANT TO CITY'S AUTHORITY THROUGH ORDINANCE NO. 2935 AND THE MS4 PERMIT FROM THE CDPHE, WOOD, THROUGH THE MS4 PERMIT ISSUED TO THE CITY, REQUIRES THE CITY TO CONTROL AND REDUCE THE DISCHARGE OF POLLUTANTS TO PROTECT STORMWATER QUALITY AND TO SATISFY THE APPROPRIATE WATER QUALITY REQUIREMENTS OF THE COLORADO WATER QUALITY CONTROL ACT AND THE COLORADO DISCHARGE PERMIT REGULATIONS (COLORADO REGULATION 61). THE MS4 PERMIT REQUIRES THE IMPLEMENTATION OF A PROGRAM TO REDUCE THE DISCHARGE FROM PUBLIC AND PRIVATE CONSTRUCTION SITES.
- ALL NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS ARE REQUIRED TO DEVELOP AND IMPLEMENT A SWMP TO REDUCE AND ENSURE THAT BMP'S ARE IN PLACE TO PREVENT OR MINIMIZE POLLUTANTS IN STORMWATER RUNOFF FROM CONSTRUCTION ACTIVITIES THAT DISTURB ONE OR MORE ACRES; OR LESS THAN ONE ACRE IF PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE THAT DISCHARGE STORM WATER INTO THE CITY'S STORM WATER SYSTEM.
- STORMWATER MANAGEMENT ANALYSIS AND DESIGN SHALL MEET OR EXCEED THESE STANDARDS AND SPECIFICATIONS WHICH WERE DEVELOPED TO SUPPORT AND SUPPLEMENT THE POLICIES AND STANDARDS SET FORTH BY THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) AND URBAN DRAINAGE FLOOD CONTROL DISTRICT (UDFCD). POLICIES AND TECHNICAL CRITERIA NOT SPECIFICALLY ADDRESSED IN THIS DOCUMENT SHALL FOLLOW THE PROVISIONS OF THE CDPHE COLORADO WATER QUALITY CONTROL DIVISION (CWQCD) AND THE CRITERIA MANUAL (UDFCD MANUAL). THE RESPONSIBLE PARTY IS ALSO REFERRED TO THE COLORADO DEPARTMENT OF TRANSPORTATION'S STANDARD PLANS ("M-STANDARDS") FOR ADDITIONAL DESIGN DETAILS NOT COVERED IN THESE STANDARDS AND SPECIFICATIONS OR THE UDFCD MANUAL.
- DEVELOPMENT OR REDEVELOPMENT PROJECTS WHICH DISTURB ONE (1) OR MORE ACRES WILL REQUIRE BOTH SEDIMENT AND EROSION CONTROL PLANS AND A CDPS GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES AT LEAST 10 CALENDAR DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. IN FILL LOTS OR SITES LESS THAN ONE ACRE OF DISTURBANCE WILL REQUIRE A SEDIMENT AND EROSION CONTROL PLAN.
- THE SWMP SHALL FOLLOW ALL THE APPLICABLE REQUIREMENTS DEFINED IN THE CDPS GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (PERMIT NO. COR-30000) SECTION "C. STORMWATER MANAGEMENT PLAN (SWMP) - CONTENTS".
 - SITE DESCRIPTION
 - SITE MAP
 - STORMWATER MANAGEMENT CONTROLS
 - FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT
 - INSPECTION AND MAINTENANCE
- THE SWMP SHALL CONTAIN A BAR SCALE SCHEDULE OF THE EARTH DISTURBING ACTIVITIES FOR THE CONSTRUCTION SITE (IN MONTHLY INCREMENTS). MAJOR EARTH-DISTURBING ACTIVITIES AND STABILIZATION MEASURES SHOULD BE INCLUDED.
- THE SWMP SHALL DELINEATE THE LIMITS OF DISTURBANCE FOR THE PROJECT SITE INCLUDING ALL EARTH DISTURBING ACTIVITIES, STAGING AREAS, AND CONSTRUCTION EXITS.
- THE SWMP SHALL BE SHOWN IN A MINIMUM OF TWO (2) PHASES. PHASE I SHALL SHOW THE EXISTING CONDITIONS OF THE SITE WITH THE INITIAL BMP'S REQUIRED FOR CONSTRUCTION. PHASE II SHALL SHOW THE PROPOSED CONDITIONS OF THE SITE WITH THE BMP'S REQUIRED FOR STABILIZATION. FOR COMPLEX PROJECTS, ADDITIONAL PHASES MAY BE ADDED TO PROPERLY MANAGE THE STORMWATER.
- PERMIT COVERAGE
 - THE OWNER/CONTRACTOR IS RESPONSIBLE FOR OBTAINING A PERMIT FROM THE CDPHE AT LEAST 10 CALENDAR DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES FOR ANY EARTH DISTURBANCE OF ONE (1) ACRE OR GREATER. THE OWNER/CONTRACTOR SHALL PROVIDE THE CITY WITH A COPY OF PERMIT PRIOR TO RECEIVING A GRADING/CONSTRUCTION PERMIT. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THE PERMIT.
 - IF THE OWNER/CONTRACTOR TRANSFERS RESPONSIBILITY FOR STORMWATER DISCHARGES TO ANOTHER ENTITY, A NOTICE OF TRANSFER AND ACCEPTANCE OF TERMS FORM SHALL BE SUBMITTED TO THE CDPHE AND A COPY TO THE CITY.
 - IF THE OWNER/CONTRACTOR NO LONGER HAS CONTROL OF A SPECIFIC PORTION OF A PERMITTED SITE AND WISHES TO TRANSFER COVERAGE OF THAT PORTION OF SITE TO ANOTHER, THE OWNER/CONTRACTOR SHALL SUBMIT A NOTICE OF REASSIGNMENT OF PERMIT COVERAGE FORM TO THE CDPHE AND A COPY TO THE CITY.
 - THE OWNER/CONTRACTOR IS RESPONSIBLE FOR SUBMITTING AN INACTIVATION NOTICE FORM TO THE CDPHE WHEN THE SITE HAS BEEN FINALLY STABILIZED IN ACCORDANCE WITH THE SWMP. A COPY OF THE INACTIVATION NOTICE SHALL ALSO BE SUBMITTED TO THE CITY.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

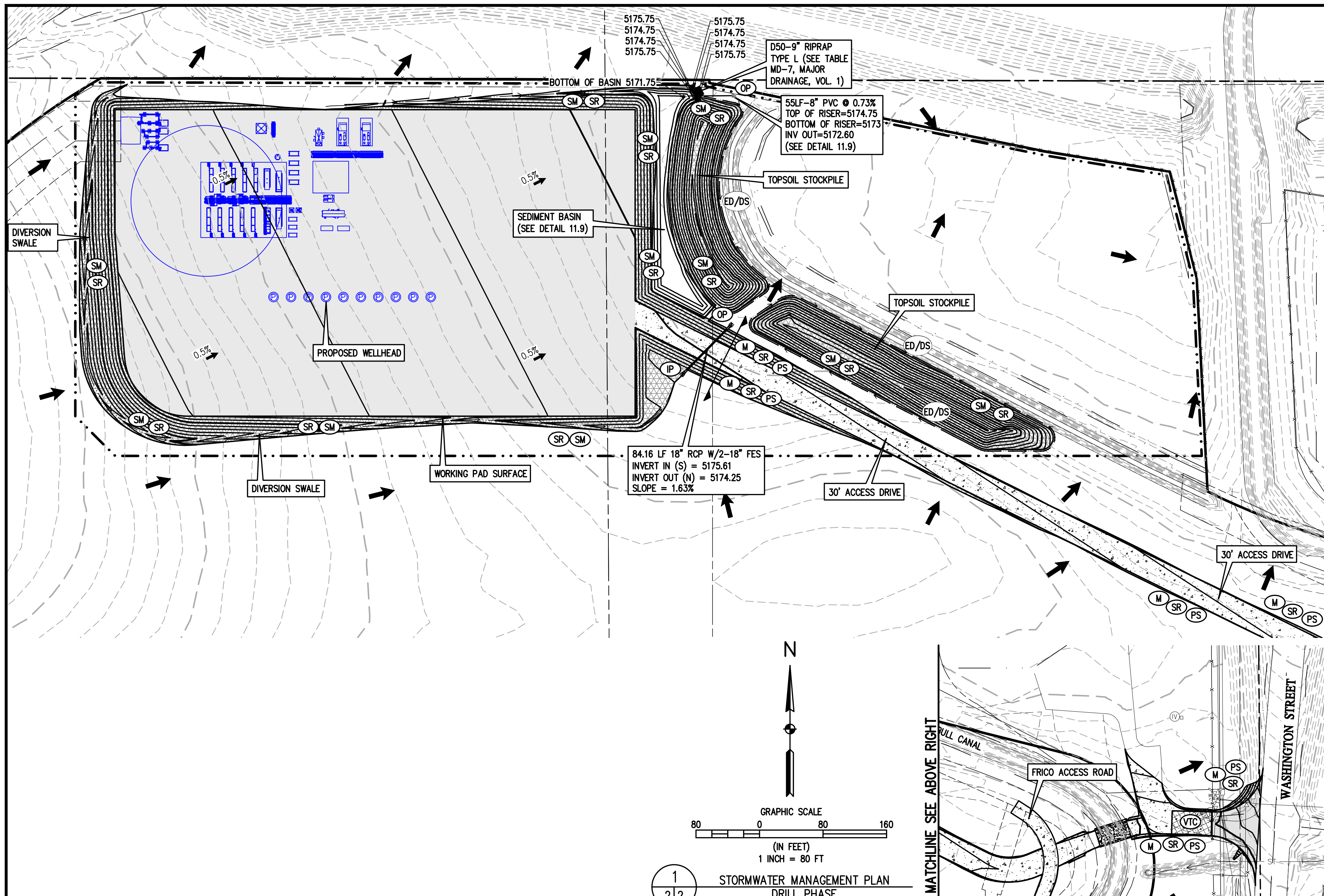
- BMP'S SHALL BE INSTALLED BEFORE ANY EARTH DISTURBING ACTIVITIES COMMENCE.
- STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES SHALL NOT CAUSE, HAVE THE REASONABLE POTENTIAL TO CAUSE, OR MEASURABLY CONTRIBUTE TO AN EXCEEDANCE OF ANY WATER QUALITY STANDARD.
- CONSTRUCTION SHALL BE PHASED IN A MANNER TO LIMIT EARTH DISTURBING ACTIVITIES (I.E. THE ENTIRE PROJECT SITE SHOULD NOT BE DISTURBED IF CONSTRUCTION WILL ONLY BE OCCURRING IN ONE PARTICULAR SECTION).
- SEDIMENT CAUSED BY ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE IT LEAVES THE CONSTRUCTION SITE.
- BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND ANY OTHER CHEMICALS SHALL HAVE SECONDARY CONTAINMENT OR EQUIVALENT PROTECTION TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS.
- A COPY OF THE SWMP AND SITE MAPS MUST BE AVAILABLE AT ALL TIMES ON THE CONSTRUCTION SITE UNLESS OTHERWISE APPROVED BY CDPHE OR THE CITY.
- THE SWMP AND SITE MAPS SHALL BE CONTINUOUSLY UPDATED TO REFLECT NEW OR REVISED BEST MANAGEMENT PRACTICES (BMP'S) DUE TO CHANGES IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE CONSTRUCTION SITE. UPDATES MUST BE MADE WITHIN 72-HOURS FOLLOWING THE CHANGE IN BMP'S.
- THE OWNER/CONTRACTOR SHALL INSPECT THE CONSTRUCTION SITE (INCLUDING ALL BMP'S, STORAGE CONTAINERS, AND CONSTRUCTION EQUIPMENT) A MINIMUM OF EVERY 14 CALENDAR DAYS AND WITHIN 24-HOURS AFTER A PRECIPITATION EVENT OR SNOW MELT THAT CAUSE SURFACE EROSION. INSPECTIONS SHALL CONTINUE UNTIL AN INACTIVATION NOTICE IS FILED WITH CDPHE.
- THE OWNER/CONTRACTOR SHALL KEEP A RECORD OF ALL INSPECTIONS ON SITE AND AVAILABLE FOR REVIEW BY CDPHE OR CITY STAFF. INSPECTION REPORTS MUST IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE PERMIT.
- BMP'S REQUIRING MAINTENANCE OR ADJUSTMENT SHALL BE REPAIRED IMMEDIATELY AFTER OBSERVATION OF THE FAILING BMP.
- FOR ALL INSTANCES OF NONCOMPLIANCE BASED ON ENVIRONMENTAL HAZARDS AND CHEMICAL SPILLS AND RELEASES, ALL NEEDED INFORMATION MUST BE PROVIDED ORALLY TO CDPHE SPILL REPORTING LINE (24-HOUR NUMBER FOR ENVIRONMENTAL HAZARDS AND CHEMICAL SPILLS AND RELEASES: 1-877-518-5608) WITHIN 24-HOURS FROM THE TIME THE OWNER/CONTRACTOR COMES

AWARE OF THE CIRCUMSTANCES.

- STRAW BALES SHALL NOT BE USED FOR PRIMARY EROSION OR SEDIMENT CONTROL (I.E. STRAW BALES MAY BE USED FOR REINFORCEMENT BEHIND ANOTHER BMP SUCH AS SILT FENCE).
- BMP'S INTENDED FOR SHEET FLOW SEDIMENT RUNOFF SHALL BE PLACED PARALLEL TO THE SLOPE.
- ALL BMP'S SHALL BE CLEANED WHEN SEDIMENT LEVELS ACCUMULATE TO HALF THE DESIGN OF THE BMP UNLESS OTHERWISE SPECIFIED.
- A VEHICLE TRACKING PAD (VTP) SHALL BE PLACED AT ALL EXITS FROM THE SITE TO PREVENT TRACK-OUT ONTO CITY STREETS. IF TRACK-OUT DOES OCCUR, THE OWNER/CONTRACTOR SHALL IMMEDIATELY SWEEP THE STREET OF DEBRIS. RECYCLED CRUSHED CONCRETE OR ASPHALT SHALL NOT BE USED FOR VEHICLE TRACKING PADS.
- ALL SEDIMENT COLLECTED IN BMP'S SHALL BE REMOVED UPON INITIAL ACCEPTANCE.
- PERMANENT EROSION CONTROL MEASURES FOR SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH DISTURBANCE HAS BEEN COMPLETED. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH DISTURBANCE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH DISTURBANCE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED WITHIN 14 CALENDAR DAYS. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION MEASURES ARE IMPLEMENTED.
- FINAL STABILIZATION HAS BEEN ACHIEVED WHEN ALL EARTH DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, AND UNIFORM VEGETATIVE COVER HAS BEEN ESTABLISHED WITH AN INDIVIDUAL PLANT DENSITY OF AT LEAST 70 PERCENT OF PRE-DISTURBANCE LEVELS, OR EQUIVALENT PERMANENT, PHYSICAL EROSION REDUCTION METHODS HAVE BEEN EMPLOYED.
- ALL TEMPORARY BMP'S SHALL BE REMOVED FROM THE SITE UPON SUBMITTING THE INACTIVATION NOTICE.
- ALL SITE WASTES (INCLUDING TRASH AND BUILDING MATERIALS) MUST BE PROPERLY MANAGED TO PREVENT POTENTIAL POLLUTION OF STATE WATERS.
- STREET REPAIR OPERATIONS SUCH AS ROTOR MILLING, SLURRY SEAL AND CHIP SEAL. THE MINIMUM BMP'S REQUIRED ARE; INLET PROTECTION, CURB SOCKS AND STREET SWEEPING.

 <p>Engineering • Planning • Surveying</p> <p>112 N. RUBY DRIVE, SUITE 210 • GOLDEN, COLORADO 80403 P: 303.426.8669 • F: 303.426.8659 • www.baselinecorp.com</p>	DESIGNED BY	JDD
	DRAWN BY	JDD
	CHECKED BY	LDS
REVISION	DESCRIPTION	DATE
PREPARED BY	ADAMS COUNTY	
EXTRACTION OIL & GAS	WASHINGTON PAD	
CITY OF THORNTON	SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 68 WEST	
	GENERAL NOTES	
<p>PREPARED UNDER THE DIRECT SUPERVISION OF</p> <p>PRELIMINARY NOT FOR CONSTRUCTION</p> <p>FOR AND ON BEHALF OF BASELINE CORPORATION</p> <p>INITIAL SUBMITTAL 05/25/2022</p> <p>DRAWING SIZE 22" x 34"</p> <p>SURVEY FROM SURVEY DATE BASELINE 02/25/2022</p> <p>JOB NO. EXT01568W10-02</p> <p>DRAWING NAME EXT01568W10-02 (WASHINGTON W) GENERAL NOTES.MXD</p> <p>SHEET 2 OF 27</p>		
<p>WORK SHALL BE CONSTRUCTED TO CITY OF THORNTON STANDARDS AND SPECIFICATIONS. THIS APPROVAL IS FOR CONFORMANCE TO THESE STANDARDS AND SPECIFICATIONS AND OTHER CITY REQUIREMENTS. THE DESIGN AND CONCEPT REMAINS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER OR LANDSCAPE PROFESSIONAL.</p>		
4.2		

M:\co - Well Head Staking\EXTD1568W10-02 (WASHINGTON W)\Drawings\Construction Documents North\EXTD1568W10-02 (WASHINGTON W) SWMP DRILL.dwg, 6/31/2023 9:48:14 AM, Joy Davis



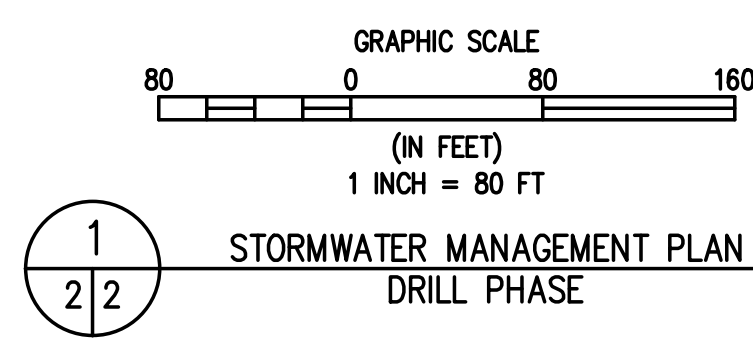
MATCHLINE SEE BELOW LEFT

MATCHLINE SEE ABOVE RIGHT

SITE DESCRIPTION	
CONSTRUCTION ACTIVITY	DRILLING OF 10 OIL & GAS WELLS, CONSTRUCTION OF ASSOCIATED PRODUCTION EQUIPMENT, CONSTRUCTION OF ACCESS ROAD AND DITCH CROSSING.
CONSTRUCTION DATES	TBD
AREA OF SITE	±14.2 ACRES
LOCATION OF SITE	LATITUDE: 39°58'46" N LONGITUDE: 104°58'51" W
EXISTING VEGETATION	AGRICULTURAL
SOIL CONDITION	ACCORDING TO THE FEDERAL RESOURCES SURVEY OF SOILS, THIS SITE IS 90% PLATER LOAM AND 10% ULM LOAM. THE PROPERTY SLOPES NORTH AT GRADES OF 1 TO 4%.
POTENTIAL POLLUTION SOURCES	DUST FROM DRILLING & ACCESS ROAD CONSTRUCTION, NON-VEGETATED SOILS, FUEL, OIL, AND FLUIDS UTILIZED DURING DRILLING, CONCRETE WASHOUTS, OUTDOOR STORAGE ACTIVITIES, PORTABLE RESTROOMS, GENERAL REFUSE.
LOCATION OF NON-STORMWATER DISCHARGE	NONE
SITE FEATURES & SENSITIVE AREAS TO BE PROTECTED	THE SITE INCLUDES A WELL PAD, PRODUCTION FACILITIES, ONE MLVT, AN ENTRANCE ROAD, AND SIDE SLOPES THAT MATCH INTO EXISTING TOPOGRAPHY. SURROUNDING AREAS TO BE PROTECTED INCLUDE THE FIELD, BULL CANAL, AND AN EXISTING POND TO THE NORTH.
NAME AND LOCATION OF RECEIVING WATERS	STORMWATER RUNOFF WILL BE RECEIVED IN METZGER RESERVOIR TO THE EAST.
OVERALL SCOPE / PROJECT CHARACTERISTICS	
INDUSTRIAL ACTIVITIES	OIL AND GAS PRODUCTION
FINAL SITE DISPOSITION	ONCE THE PRODUCTION PHASE FOR THE SITE IS COMPLETE, THE PRODUCTION SITE WILL BE RECLAIMED, THE WELLS WILL BE PLUGGED, CAPPED, & ABANDONED. THE TANK BATTERY WILL BE REMOVED. ANY UNNECESSARY PORTIONS OF THE ACCESS ROAD WILL BE REMOVED. SOILS WILL BE CONTOURED TO THE EXISTING SURROUNDING TERRAIN. (STOCKPILED TOPSOIL WILL BE REDISTRIBUTED ALONG WITH THE SEEDING ACROSS THE DISTURBED SOIL AREA IN ORDER TO REESTABLISH VEGETATION COVERAGE)
BEST MANAGEMENT PRACTICES (BMP'S)	
STORM WATER QUALITY BEST MANAGEMENT PRACTICE SHALL BE IMPLEMENTED TO MINIMIZE SOIL EROSION, SEDIMENTATION, INCREASED POLLUTION LOADS AND CHANGED WATER FLOW CHARACTERISTICS RESULTING FROM LAND DISTURBING ACTIVITY TO THE MAXIMUM EXTENT PRACTICAL, AS TO MINIMIZE POLLUTION OF RECEIVING WATERS.	
IMPLEMENTED BMP'S	
CONSTRUCTION STRUCTURAL BMP'S	PERMANENT STRUCTURAL BMP'S
<input checked="" type="checkbox"/> VTC PAD <input checked="" type="checkbox"/> DITCH & BERM SYSTEM <input checked="" type="checkbox"/> INLET PROTECTION <input checked="" type="checkbox"/> CULVERT OUTLET PROTECTION <input type="checkbox"/> WASH WATER SEDIMENTATION POND <input type="checkbox"/> SILT FENCING <input checked="" type="checkbox"/> RIP RAP <input type="checkbox"/> EROSION CONTROL MAT <input type="checkbox"/> SEDIMENT CONTROL LOG <input checked="" type="checkbox"/> SURFACE ROUGHENING ADDITIONAL BMP'S: _____	<input type="checkbox"/> VTC PAD <input type="checkbox"/> DITCH & BERM SYSTEM <input checked="" type="checkbox"/> CULVERT OUTLET PROTECTION <input type="checkbox"/> WASH WATER SEDIMENTATION POND <input type="checkbox"/> COGCC APPROVED CONTAINMENT BERM <input checked="" type="checkbox"/> RIP RAP <input checked="" type="checkbox"/> REVEGETATION ADDITIONAL BMP'S: _____
EROSION AND SEDIMENT CONTROL	
<ol style="list-style-type: none"> TO THE EXTENT PRACTICABLE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING ACTIVITIES. AT ALL TIMES DURING PROJECT CONSTRUCTION, ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO PREVENT ACCELERATED EROSION ON THE SITE AND ON ANY ADJACENT PROPERTIES. ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED AND NO TOPSOIL SHALL BE REMOVED FROM SITE EXCEPT AS SET FORTH IN THE APPROVED PLANS. TOPSOIL AND OVERBURDEN SHALL BE SEGREGATED AND STOCKPILED SEPARATELY. TOPSOIL AND OVERBURDEN SHALL BE REDISTRIBUTED WITHIN THE GRADED AREA AFTER ROUGH GRADING TO PROVIDE A SUITABLE BASE FOR AREAS WHICH WILL BE SEEDED AND PLANTED. RUNOFF FROM STOCKPILED AREA SHALL BE CONTROLLED TO PREVENT EROSION AND RESULTANT SEDIMENTATION OF RECEIVING WATER. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN 14 DAYS TO DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL BE LEFT DORMANT FOR LONGER THAN 30 DAYS. IT IS RECOMMENDED THAT THE PERMANENT SEED MIX BE PLANTED AFTER OCTOBER TO KEEP SEEDLINGS FROM DEVELOPING BEFORE WINTER. TEMPORARY VEGETATIVE COVER CONSISTING OF ANNUAL RYE GRASS SHALL BE HYDRO SEEDED AT 20 POUNDS PURE LIVE SEED PER ACRE. FUGITIVE DUST EMISSIONS RESULTING FROM DRILLING & ACCESS ROAD CONSTRUCTION ACTIVITIES AND/OR WIND SHALL BE CONTROLLED USING WATER. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION AND SHALL BE INSTALLED AS SOON AS PRACTICAL IF REQUIRED BY THE STORMWATER ADMINISTRATOR OR THEIR REPRESENTATIVE. AREAS WHERE SEDIMENT CONTROL LOGS ARE NOT INDICATED MAY REQUIRE SOME FORM OF SEDIMENT CONTROL. STRAW MULCH AND/OR TEMPORARY SEEDING MAY BE UTILIZED AS NECESSARY. 	
INSPECTION AND MAINTENANCE	INSPECTIONS: <ol style="list-style-type: none"> PERFORM EVERY 14 DAYS, AND FOLLOWING A WEATHER EVENT CAUSING RUNOFF DURING THE CONSTRUCTION PHASE. PERFORM EVERY 30 DAYS DURING THE COMPLETED AND INTERIM PHASES. AN INSPECTION REPORT WILL BE FILLED OUT, & FILED FOR EACH INSPECTION PERFORMED. MAKE A COPY OF EACH INSPECTION REPORT AVAILABLE TO THE COUNTY UPON REQUEST. MAINTENANCE: <ol style="list-style-type: none"> PERFORM MAINTENANCE AND REPAIRS AS SOON AS POSSIBLE ON ITEMS OR AREAS IDENTIFIED IN THE INSPECTION REPORT PERFORM MAINTENANCE AS INDICATED IN THE URBAN DRAINAGE & FLOOD CONTROL DISTRICT, URBAN STORM DRAINAGE CRITERIA MANUAL, VOL. 3, PER MANUFACTURER'S SPECIFICATIONS OR OTHER SOURCES DETERMINED TO BE ACCEPTABLE. AN EFFICIENT RECORD-KEEPING SYSTEM IS A HELPFUL TOOL IN MANAGING INSPECTION AND MAINTENANCE REPORTS. INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING LOGS, AND OTHER SITE RELATED CORRESPONDENCE WILL BE MAINTAINED IN THE MASTER EROSION CONTROL PLAN.

LEGEND

EXISTING LINETYPES	PROPOSED LINETYPES	EXISTING SYMBOLS	PROPOSED SYMBOLS	DESCRIPTION
---	---			DISTURBANCE AREA
---	---			LOT LINE
---	---			RIGHT-OF-WAY
---	---			MINOR CONTOUR (1' INTERVAL)
---	---			MAJOR CONTOUR (5' INTERVAL)
---	---			EDGE OF GRAVEL
---	---			FENCE
---	---			DITCH FLOWLINE
---	---			STORM SEWER
		25.4	25.36	SPOT ELEVATION
		3:1	3:1	NOMINAL SLOPE ON CUT OR FILL
		→	→	FLOW DIRECTION, %
		▽	▽	CONCRETE FLARED END SECTION
		▭	▭	EXISTING GRAVEL ROAD
		⊙	⊙	FIRE HYDRANT
		▭	▭	DRILL PAD
		⊙	⊙	RIPRAP
		⊕	⊕	SURFACE ROUGHENING
		⊙	⊙	MULCHING AND SEEDING
		⊙	⊙	MULCHING
		⊙	⊙	INLET PROTECTION
		⊙	⊙	OUTLET PROTECTION
		⊙	⊙	VEHICLE TRACKING CONTROL
		ED/DS	ED/DS	EARTH DIKE AND DRAINAGE SWALE
		⊙	⊙	PERMANENT SEEDING



STORMWATER MANAGEMENT PLAN
DRILL PHASE

WORK SHALL BE CONSTRUCTED TO CITY OF THORNTON STANDARDS AND SPECIFICATIONS. THIS APPROVAL IS FOR CONFORMANCE TO THESE STANDARDS AND SPECIFICATIONS AND OTHER CITY REQUIREMENTS. THE DESIGN AND CONCEPT REMAINS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER OR LANDSCAPE PROFESSIONAL.

Engineering • Planning • Surveying

112 W. RUBEY DRIVE, SUITE 210 • GOLDEN, COLORADO 80403
P: 303.426.8666 • F: 303.426.8659 • www.baselinecorp.com

DESIGNED BY: JDD

DRAWN BY: JDD

CHECKED BY: LDS

PREPARED BY: _____

DATE: _____

REVISION DESCRIPTION

NO.	DATE	DESCRIPTION

EXTRACTION OIL & GAS

ADAMS COUNTY

WASHINGTON PAD

CITY OF THORNTON

SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 68 WEST

DRILL SWMP PLAN

FOR AND ON BEHALF OF
BASELINE CORPORATION

INITIAL SUBMITTAL: 05/25/2022

DRAWING SIZE: 22" x 34"

SURVEY FIRM: BASELINE

SURVEY DATE: 02/25/2022

JOB NO.: EXTD1568W10-02

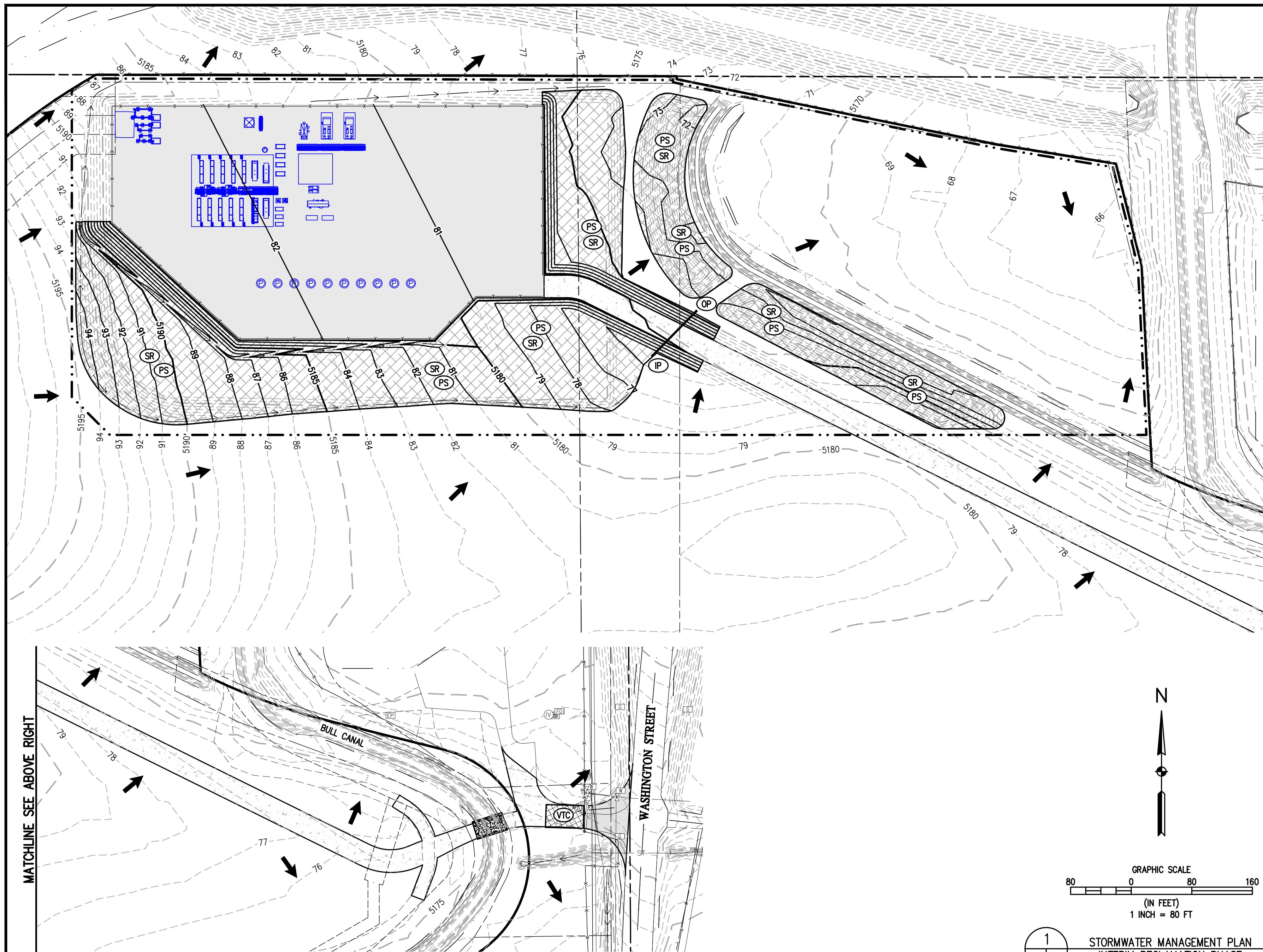
DRAWING NAME: EXTD1568W10-02 (WASHINGTON W) SWMP DRILL.dwg

SHEET: 2 OF 25

PRELIMINARY
NOT FOR
CONSTRUCTION

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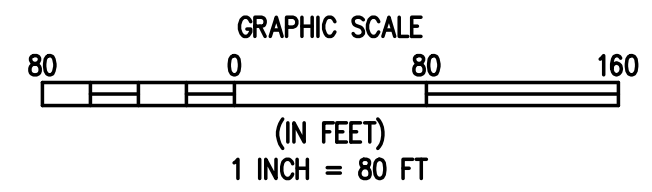


MATCHLINE SEE BELOW LEFT

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LEGEND

EXISTING LINETYPES	PROPOSED LINETYPES	EXISTING SYMBOLS	PROPOSED SYMBOLS	DESCRIPTION
---	---			SUA BOUNDARY
---	---			LOT LINE
---	---			RIGHT-OF-WAY
81	81			MINOR CONTOUR (1' INTERVAL)
5280	5280			MAJOR CONTOUR (5' INTERVAL)
---	---			EDGE OF GRAVEL
---	---			FENCE
---	---			DITCH FLOWLINE
ST	ST			STORM SEWER
		25.44	25.36	SPOT ELEVATION
		3:1	3:1	NOMINAL SLOPE ON CUT OR FILL
				FLOW DIRECTION, %
				CONCRETE FLARED END SECTION
				EXISTING GRAVEL ROAD
				FIRE HYDRANT
		R		RIPRAP
		PS		PERMANENT SEEDING
		IP		INLET PROTECTION
		OP		OUTLET PROTECTION
		VTC		VEHICLE TRACKING CONTROL
		SR		SURFACE ROUGHENING



1
4.4 4.4
**STORMWATER MANAGEMENT PLAN
INTERIM RECLAMATION PHASE**

WORK SHALL BE CONSTRUCTED TO CITY OF THORNTON STANDARDS AND SPECIFICATIONS. THIS APPROVAL IS FOR CONFORMANCE TO THESE STANDARDS AND SPECIFICATIONS AND OTHER CITY REQUIREMENTS. THE DESIGN AND CONCEPT REMAINS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER OR LANDSCAPE PROFESSIONAL.

SITE DESCRIPTION	
CONSTRUCTION ACTIVITY	RECLAMATION OF PAD LIMITS FOR PRODUCTION OPERATIONS. CONSTRUCTION OF A LANDSCAPING BERM AND RECONSTRUCTION OF THE POND BOTTOM.
CONSTRUCTION DATES	TBD
AREA OF SITE	±14.2 ACRES
LOCATION OF SITE	LATITUDE: 39°58'46" N LONGITUDE: 104°58'51" W
EXISTING VEGETATION	AGRICULTURAL
SOIL CONDITION	ACCORDING TO THE NEPAL BUSINESS DEVELOPMENT SERVICES, THIS SITE IS 90% PLATER LOAM AND 10% ULM LOAM. THE PROPERTY SLOPES NORTH AT GRADES OF 1 TO 4%.
POTENTIAL POLLUTION SOURCES	DUST FROM RECLAMATION AND POND CONSTRUCTION, NON-VEGETATED SOILS, FUEL, OIL, AND FLUIDS UTILIZED DURING PRODUCTION, OUTDOOR STORAGE ACTIVITIES, PORTABLE RESTROOMS, GENERAL REFUSE.
LOCATION OF NON-STORMWATER DISCHARGE	NONE
SITE FEATURES & SENSITIVE AREAS TO BE PROTECTED	THE SITE INCLUDES A WELL PAD, PRODUCTION FACILITIES, ONE MLVT, AN ENTRANCE ROAD, AND SLOPES THAT MATCH INTO EXISTING TOPOGRAPHY. SURROUNDING AREAS TO BE PROTECTED INCLUDE THE FIELD, BULL CANAL, AND AN EXISTING POND TO THE NORTH.
NAME AND LOCATION OF RECEIVING WATERS	STORMWATER RUNOFF WILL BE RECEIVED IN METZGER RESERVOIR TO THE EAST.
OVERALL SCOPE / PROJECT CHARACTERISTICS	
INDUSTRIAL ACTIVITIES	OIL AND GAS PRODUCTION
FINAL SITE DISPOSITION	ONCE THE PRODUCTION PHASE FOR THE SITE IS COMPLETE, THE PRODUCTION SITE WILL BE RECLAIMED, THE WELLS WILL BE PLUGGED, CAPPED, & ABANDONED. THE TANK BATTERY WILL BE REMOVED. ANY UNNECESSARY PORTIONS OF THE ACCESS ROAD WILL BE REMOVED. SOILS WILL BE CONTOURED TO THE EXISTING SURROUNDING TERRAIN. (STOCKPILED TOPSOIL WILL BE REDISTRIBUTED ALONG WITH THE SEEDING ACROSS THE DISTURBED SOIL AREA IN ORDER TO REESTABLISH VEGETATION COVERAGE)
BEST MANAGEMENT PRACTICES (BMP'S)	
STORM WATER QUALITY BEST MANAGEMENT PRACTICE SHALL BE IMPLEMENTED TO MINIMIZE SOIL EROSION, SEDIMENTATION, INCREASED POLLUTION LOADS AND CHANGED WATER FLOW CHARACTERISTICS RESULTING FROM LAND DISTURBING ACTIVITY TO THE MAXIMUM EXTENT PRACTICAL, AS TO MINIMIZE POLLUTION OF RECEIVING WATERS.	
IMPLEMENTED BMP'S	
CONSTRUCTION STRUCTURAL BMP'S	PERMANENT STRUCTURAL BMP'S
<input checked="" type="checkbox"/> VTC PAD <input type="checkbox"/> DITCH & BERM SYSTEM <input checked="" type="checkbox"/> INLET PROTECTION <input checked="" type="checkbox"/> CULVERT OUTLET PROTECTION <input type="checkbox"/> WASH WATER SEDIMENTATION POND <input type="checkbox"/> SILT FENCING <input checked="" type="checkbox"/> RIP RAP <input type="checkbox"/> EROSION CONTROL MAT <input type="checkbox"/> SEDIMENT CONTROL LOG <input type="checkbox"/> SURFACE ROUGHENING ADDITIONAL BMP'S: _____	<input type="checkbox"/> VTC PAD <input type="checkbox"/> DITCH & BERM SYSTEM <input checked="" type="checkbox"/> CULVERT OUTLET PROTECTION <input type="checkbox"/> WASH WATER SEDIMENTATION POND <input type="checkbox"/> COGCC APPROVED CONTAINMENT BERM <input checked="" type="checkbox"/> RIP RAP <input checked="" type="checkbox"/> REVEGETATION ADDITIONAL BMP'S: _____
EROSION AND SEDIMENT CONTROL	
<ol style="list-style-type: none"> TO THE EXTENT PRACTICABLE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING ACTIVITIES. AT ALL TIMES DURING PROJECT CONSTRUCTION, ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO PREVENT ACCELERATED EROSION ON THE SITE AND ON ANY ADJACENT PROPERTIES. ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED AND NO TOPSOIL SHALL BE REMOVED FROM SITE EXCEPT AS SET FORTH IN THE APPROVED PLANS. TOPSOIL AND OVERBURDEN SHALL BE SEGREGATED AND STOCKPILED SEPARATELY. TOPSOIL AND OVERBURDEN SHALL BE REDISTRIBUTED WITHIN THE GRADED AREA AFTER ROUGH GRADING TO PROVIDE A SUITABLE BASE FOR AREAS WHICH WILL BE SEEDED AND PLANTED. RUNOFF FROM STOCKPILED AREA SHALL BE CONTROLLED TO PREVENT EROSION AND RESULTANT SEDIMENTATION OF RECEIVING WATER. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN 14 DAYS TO DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL BE LEFT DORMANT FOR LONGER THAN 30 DAYS. IT IS RECOMMENDED THAT THE PERMANENT SEED MIX BE PLANTED AFTER OCTOBER TO KEEP SEEDLINGS FROM DEVELOPING BEFORE WINTER. TEMPORARY VEGETATIVE COVER CONSISTING OF ANNUAL RYE GRASS SHALL BE HYDRO SEEDED AT 20 POUNDS PURE LIVE SEED PER ACRE. FUGITIVE DUST EMISSIONS RESULTING FROM DRILLING & ACCESS ROAD CONSTRUCTION ACTIVITIES AND/OR WIND SHALL BE CONTROLLED USING WATER. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION AND SHALL BE INSTALLED AS SOON AS PRACTICAL IF REQUIRED BY THE STORMWATER ADMINISTRATOR OR THEIR REPRESENTATIVE. AREAS WHERE SEDIMENT CONTROL LOGS ARE NOT INDICATED MAY REQUIRE SOME FORM OF SEDIMENT CONTROL. STRAW MULCH AND/OR TEMPORARY SEEDING MAY BE UTILIZED AS NECESSARY. 	
INSPECTION AND MAINTENANCE	INSPECTIONS: <ol style="list-style-type: none"> PERFORM EVERY 14 DAYS, AND FOLLOWING A WEATHER EVENT CAUSING RUNOFF DURING THE CONSTRUCTION PHASE. PERFORM EVERY 30 DAYS DURING THE COMPLETED AND INTERIM PHASES. AN INSPECTION REPORT WILL BE FILLED OUT, & FILED FOR EACH INSPECTION PERFORMED. MAKE A COPY OF EACH INSPECTION REPORT AVAILABLE TO THE COUNTY UPON REQUEST. MAINTENANCE: <ol style="list-style-type: none"> PERFORM MAINTENANCE AND REPAIRS AS SOON AS POSSIBLE ON ITEMS OR AREAS IDENTIFIED IN THE INSPECTION REPORT PERFORM MAINTENANCE AS INDICATED IN THE URBAN DRAINAGE & FLOOD CONTROL DISTRICT, URBAN STORM DRAINAGE CRITERIA MANUAL, VOL. 3, PER MANUFACTURER'S SPECIFICATIONS OR OTHER SOURCES DETERMINED TO BE ACCEPTABLE. AN EFFICIENT RECORD-KEEPING SYSTEM IS A HELPFUL TOOL IN MANAGING INSPECTION AND MAINTENANCE REPORTS. INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING LOGS, AND OTHER SITE RELATED CORRESPONDENCE WILL BE MAINTAINED IN THE MASTER EROSION CONTROL PLAN.

BASELINE
Engineering • Planning • Surveying

112 N. RUBEY DRIVE, SUITE 210 • GOLDEN, COLORADO 80403
P: 303.949.8666 • F: 303.949.8669 • www.baselinecorp.com

DESIGNED BY: JDD
DRAWN BY: JDD
CHECKED BY: LDS

PREPARED BY: DATE

REVISION DESCRIPTION

EXTRACTION OIL & GAS

ADAMS COUNTY

CITY OF THORNTON

WASHINGTON PAD

SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 68 WEST

STORMWATER MANAGEMENT PLAN - INTERIM RECLAMATION PHASE

PREPARED UNDER THE DIRECT SUPERVISION OF

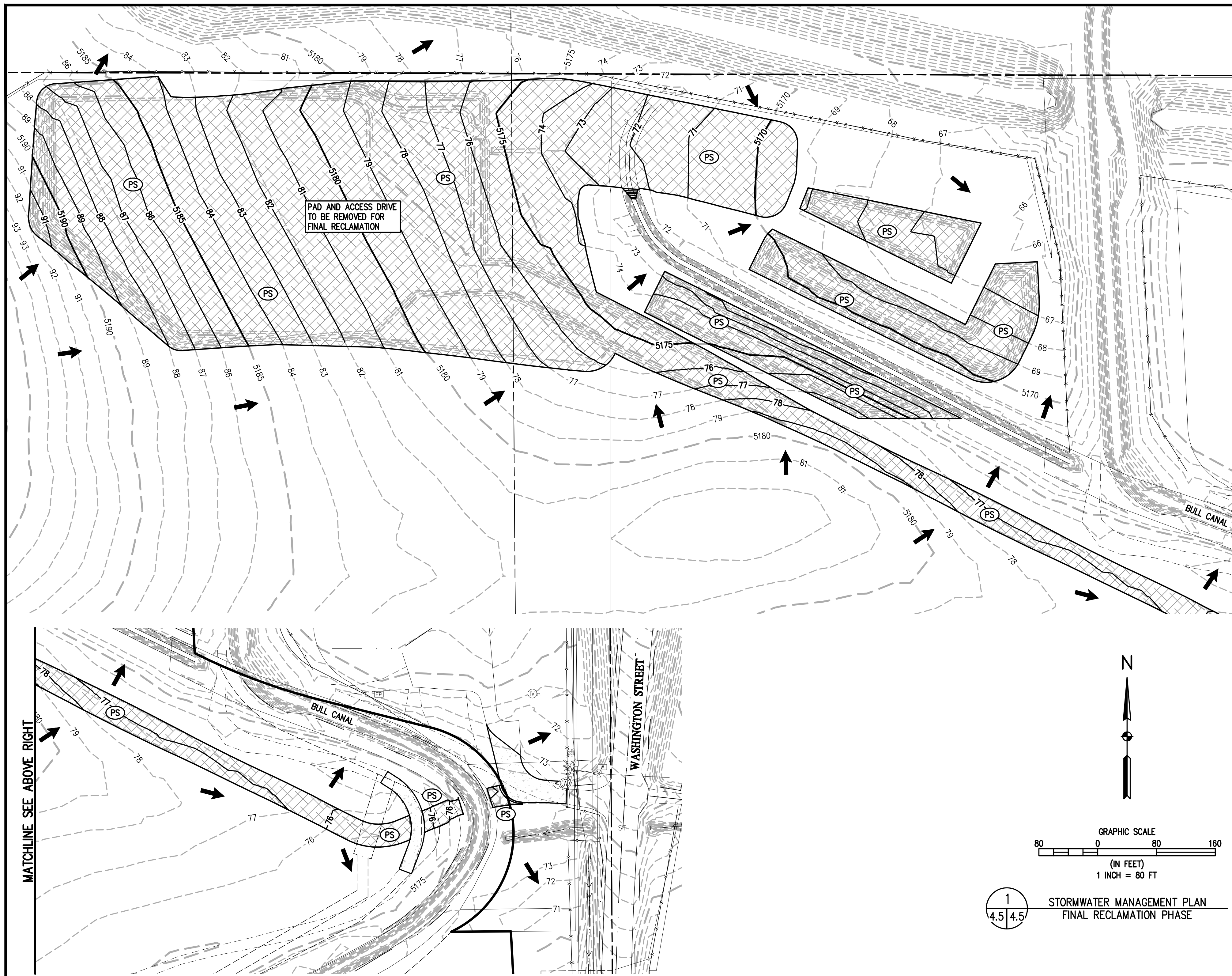
**PRELIMINARY
NOT FOR
CONSTRUCTION**

FOR AND ON BEHALF OF
BASELINE CORPORATION

INITIAL SUBMITTAL: 05/25/2022
DRAWING SIZE: 22" x 34"
SURVEY FROM: SURVEY DATE: 02/25/2022
BASELINE
JOB NO.: EXTD1568W10-02
DRAWING NAME: EXTD1568W10-02 (WASHINGTON W) SWMP INTERIM.dwg
SHEET: 4 OF 25

4.4

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LEGEND

EXISTING LINTYPES	PROPOSED LINTYPES	EXISTING SYMBOLS	PROPOSED SYMBOLS	DESCRIPTION
---	---	---	---	SUA BOUNDARY
---	---	---	---	LOT LINE
---	---	---	---	RIGHT-OF-WAY
81	81	81	81	MINOR CONTOUR (1' INTERVAL)
5280	5280	5280	5280	MAJOR CONTOUR (5' INTERVAL)
---	---	---	---	EDGE OF GRAVEL
---	---	---	---	FENCE
---	---	---	---	DITCH FLOWLINE
ST	ST	---	---	STORM SEWER
---	---	25.4±	25.36	SPOT ELEVATION
---	---	3:1	3:1	NOMINAL SLOPE ON CUT OR FILL
---	---	---	---	FLOW DIRECTION, %
---	---	---	---	CONCRETE FLARED END SECTION
---	---	---	---	EXISTING GRAVEL ROAD
---	---	---	---	FIRE HYDRANT
---	---	PS	PS	PERMANENT SEEDING

WORK SHALL BE CONSTRUCTED TO CITY OF THORNTON STANDARDS AND SPECIFICATIONS. THIS APPROVAL IS FOR CONFORMANCE TO THESE STANDARDS AND SPECIFICATIONS AND OTHER CITY REQUIREMENTS. THE DESIGN AND CONCEPT REMAINS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER OR LANDSCAPE PROFESSIONAL.

SITE DESCRIPTION	
CONSTRUCTION ACTIVITY	RECLAMATION OF PAD LIMITS FOR PRODUCTION OPERATIONS. CONSTRUCTION OF A LANDSCAPING BERM AND RECONSTRUCTION OF THE POND BOTTOM.
CONSTRUCTION DATES	TBD
AREA OF SITE	±14.2 ACRES
LOCATION OF SITE	LATITUDE: 39°58'46" N LONGITUDE: 104°58'51" W
EXISTING VEGETATION	AGRICULTURAL
SOIL CONDITION	ACCORDING TO THE <u>FEDERAL RESOURCES SURVEY REPORT</u> , THIS SITE IS 90% PLATER LOAM AND 10% ULM LOAM. THE PROPERTY SLOPES NORTH AT GRADES OF 1 TO 4%.
POTENTIAL POLLUTION SOURCES	DUST FROM PAD AND ACCESS REMOVAL, NON-VEGETATED SOILS, FUEL, OIL, AND FLUIDS UTILIZED DURING DECONSTRUCTION, OUTDOOR STORAGE ACTIVITIES, PORTABLE RESTROOMS, GENERAL REFUSE.
LOCATION OF NON-STORMWATER DISCHARGE	NONE
SITE FEATURES & SENSITIVE AREAS TO BE PROTECTED	AREAS OUTSIDE THE DISTURBANCE LIMITS SHALL BE PROTECTED DURING PAD AND ACCESS DECONSTRUCTION.
NAME AND LOCATION OF RECEIVING WATERS	STORMWATER RUNOFF WILL BE RECEIVED IN METZGER RESERVOIR TO THE EAST.
OVERALL SCOPE / PROJECT CHARACTERISTICS	
INDUSTRIAL ACTIVITIES	OIL AND GAS PRODUCTION
FINAL SITE DISPOSITION	ONCE THE PRODUCTION PHASE FOR THE SITE IS COMPLETE, THE PRODUCTION SITE WILL BE RECLAIMED, THE WELLS WILL BE PLUGGED, CAPPED, & ABANDONED. THE TANK BATTERY WILL BE REMOVED. ANY UNNECESSARY PORTIONS OF THE UPGRADED ACCESS ROAD WILL BE REMOVED. SOILS WILL BE CONTOURED TO THE EXISTING SURROUNDING TERRAIN. (STOCKPILED TOPSOIL WILL BE REDISTRIBUTED ALONG WITH THE SEEDING ACROSS THE DISTURBED SOIL AREA IN ORDER TO REESTABLISH VEGETATION COVERAGE)
BEST MANAGEMENT PRACTICES (BMP'S)	
STORM WATER QUALITY BEST MANAGEMENT PRACTICE SHALL BE IMPLEMENTED TO MINIMIZE SOIL EROSION, SEDIMENTATION, INCREASED POLLUTION LOADS AND CHANGED WATER FLOW CHARACTERISTICS RESULTING FROM LAND DISTURBING ACTIVITY TO THE MAXIMUM EXTENT PRACTICAL, AS TO MINIMIZE POLLUTION OF RECEIVING WATERS.	
IMPLEMENTED BMP'S	
CONSTRUCTION STRUCTURAL BMP'S	PERMANENT STRUCTURAL BMP'S
<input type="checkbox"/> VTC PAD <input type="checkbox"/> DITCH & BERM SYSTEM <input type="checkbox"/> INLET PROTECTION <input type="checkbox"/> CULVERT OUTLET PROTECTION <input type="checkbox"/> WASH WATER SEDIMENTATION POND <input type="checkbox"/> SILT FENCING <input type="checkbox"/> RIP RAP <input type="checkbox"/> EROSION CONTROL MAT <input type="checkbox"/> SEDIMENT CONTROL LOG <input type="checkbox"/> SURFACE ROUGHENING ADDITIONAL BMP'S: _____	<input type="checkbox"/> VTC PAD <input type="checkbox"/> DITCH & BERM SYSTEM <input type="checkbox"/> CULVERT OUTLET PROTECTION <input type="checkbox"/> WASH WATER SEDIMENTATION POND <input type="checkbox"/> COGCC APPROVED CONTAINMENT BERM <input type="checkbox"/> RIP RAP <input checked="" type="checkbox"/> REVEGETATION ADDITIONAL BMP'S: _____
EROSION AND SEDIMENT CONTROL	
1. TO THE EXTENT PRACTICABLE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING ACTIVITIES. AT ALL TIMES DURING PROJECT CONSTRUCTION, ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO PREVENT ACCELERATED EROSION ON THE SITE AND ON ANY ADJACENT PROPERTIES. 2. ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED AND NO TOPSOIL SHALL BE REMOVED FROM SITE EXCEPT AS SET FORTH IN THE APPROVED PLANS. TOPSOIL AND OVERBURDEN SHALL BE SEGREGATED AND STOCKPILED SEPARATELY. TOPSOIL AND OVERBURDEN SHALL BE REDISTRIBUTED WITHIN THE GRADED AREA AFTER ROUGH GRADING TO PROVIDE A SUITABLE BASE FOR AREAS WHICH WILL BE SEED AND PLANTED. RUNOFF FROM STOCKPILED AREA SHALL BE CONTROLLED TO PREVENT EROSION AND RESULTANT SEDIMENTATION OF RECEIVING WATER. 3. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN 14 DAYS TO DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL BE LEFT DORMANT FOR LONGER THAN 30 DAYS. IT IS RECOMMENDED THAT THE PERMANENT SEED MIX BE PLANTED AFTER OCTOBER TO KEEP SEEDLINGS FROM DEVELOPING BEFORE WINTER. TEMPORARY VEGETATIVE COVER CONSISTING OF ANNUAL RYE GRASS SHALL BE HYDRO SEEDED AT 20 POUNDS PURE LIVE SEED PER ACRE. 4. FUGITIVE DUST EMISSIONS RESULTING FROM DRILLING & ACCESS ROAD CONSTRUCTION ACTIVITIES AND/OR WIND SHALL BE CONTROLLED USING WATER. 5. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION AND SHALL BE INSTALLED AS SOON AS PRACTICAL IF REQUIRED BY THE STORMWATER ADMINISTRATOR OR THEIR REPRESENTATIVE. 6. AREAS WHERE SEDIMENT CONTROL LOGS ARE NOT INDICATED MAY REQUIRE SOME FORM OF SEDIMENT CONTROL. STRAW MULCH AND/OR TEMPORARY SEEDING MAY BE UTILIZED AS NECESSARY.	
INSPECTION AND MAINTENANCE	INSPECTIONS: 1. PERFORM EVERY 14 DAYS, AND FOLLOWING A WEATHER EVENT CAUSING RUNOFF DURING THE CONSTRUCTION PHASE. PERFORM EVERY 30 DAYS DURING THE COMPLETED AND INTERIM PHASES. 2. AN INSPECTION REPORT WILL BE FILLED OUT, & FILED FOR EACH INSPECTION PERFORMED. 3. MAKE A COPY OF EACH INSPECTION REPORT AVAILABLE TO THE COUNTY UPON REQUEST. MAINTENANCE: 1. PERFORM MAINTENANCE AND REPAIRS AS SOON AS POSSIBLE ON ITEMS OR AREAS IDENTIFIED IN THE INSPECTION REPORT 2. PERFORM MAINTENANCE AS INDICATED IN THE URBAN DRAINAGE & FLOOD CONTROL DISTRICT, URBAN STORM DRAINAGE CRITERIA MANUAL, VOL. 3, PER MANUFACTURER'S SPECIFICATIONS OR OTHER SOURCES DETERMINED TO BE ACCEPTABLE. AN EFFICIENT RECORD-KEEPING SYSTEM IS A HELPFUL TOOL IN MANAGING INSPECTION AND MAINTENANCE REPORTS. INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING LOGS, AND OTHER SITE RELATED CORRESPONDENCE WILL BE MAINTAINED IN THE MASTER EROSION CONTROL PLAN.

Engineering • Planning • Surveying

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DESIGNED BY: JDD

DRAWN BY: JDD

CHECKED BY: LOS

REVISION DESCRIPTION

NO.	DATE	DESCRIPTION

EXTRACTION OIL & GAS

ADAMS COUNTY

CITY OF THORNTON

WASHINGTON PAD

SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 68 WEST

STORMWATER MANAGEMENT PLAN - FINAL RECLAMATION PHASE

PREPARED UNDER THE DIRECT SUPERVISION OF

PRELIMINARY
NOT FOR
CONSTRUCTION

FOR AND ON BEHALF OF
BASELINE CORPORATION

INITIAL SUBMITTAL: 05/25/2022

DRAWING SIZE: 22" x 34"

DRAWING NAME: EXT01568W10-02 (WASHINGTON W) SWMP FINAL.dwg

SHEET: 5 OF 27