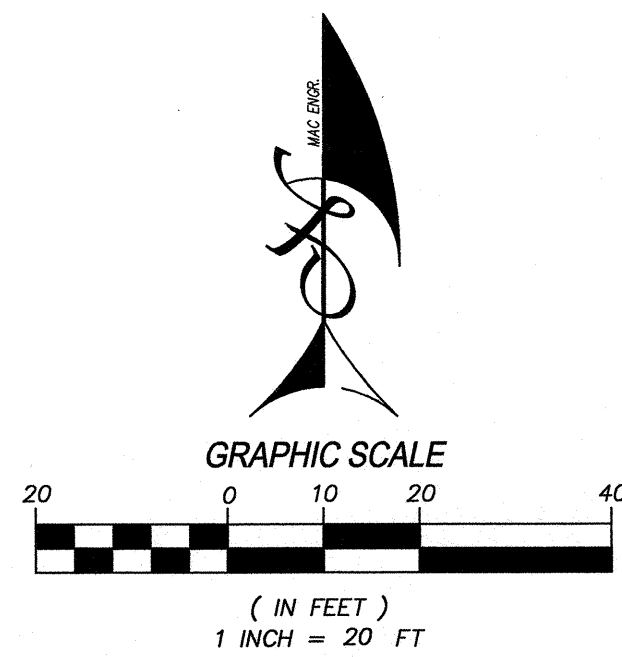


SECTION 28, TOWNSHIP 30 NORTH, RANGE 05 EAST, W.M., SNOHOMISH COUNTY, WA



BMP LEGEND

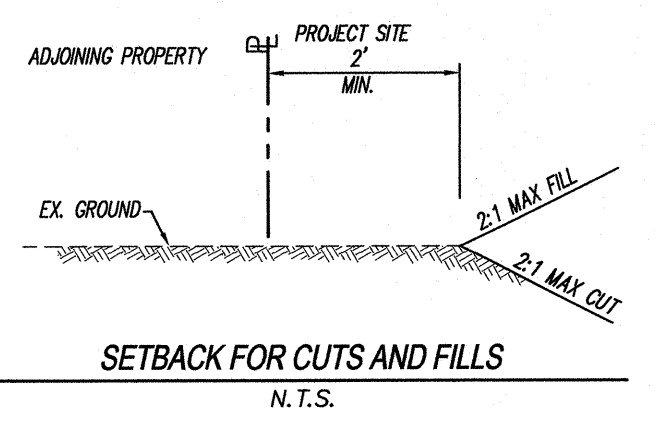
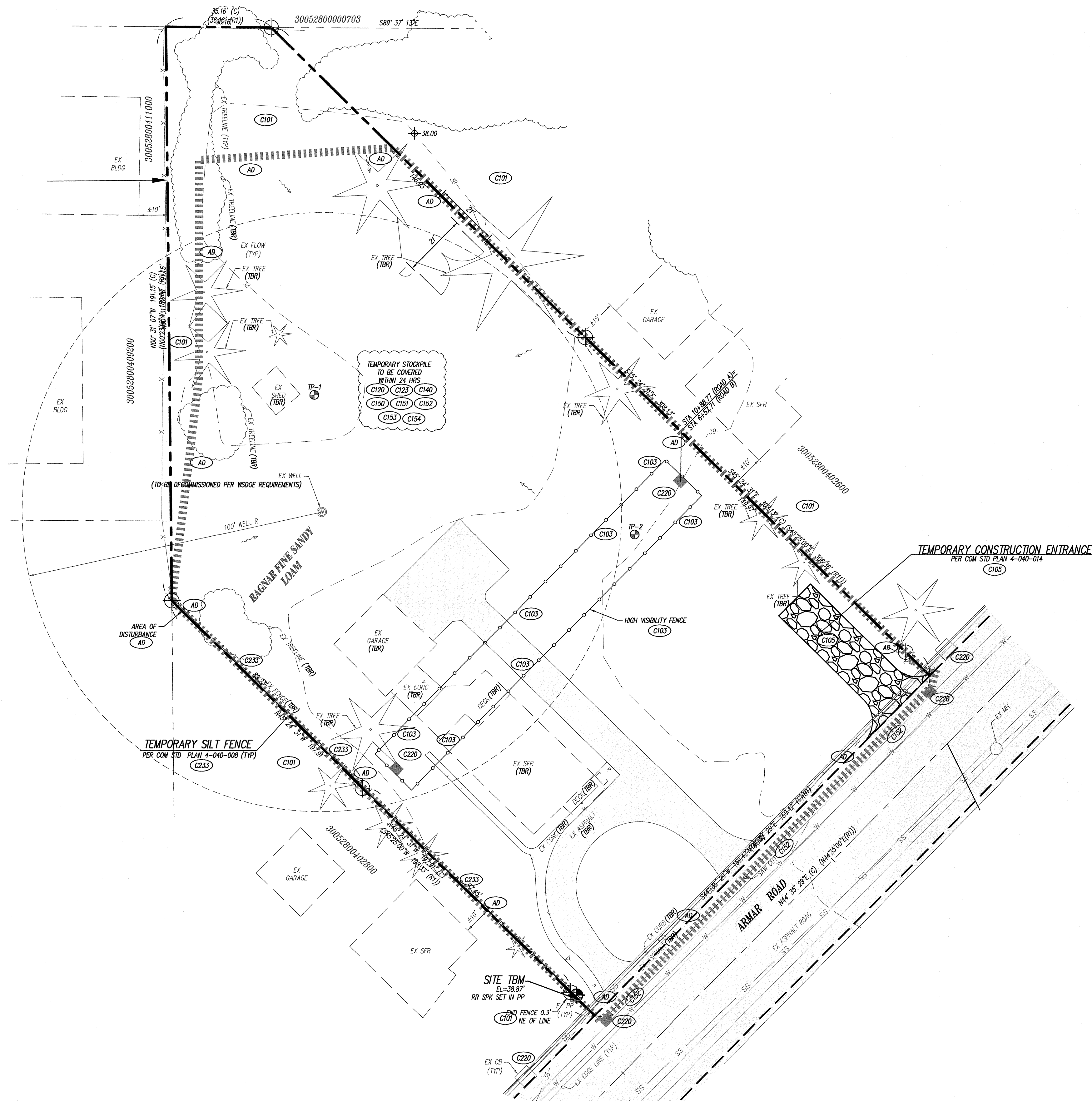
- (C101) = PRESERVE NATURAL VEGETATION
- (C103) = HIGH VISIBILITY PLASTIC OR METAL FENCE
- (C105) = TEMPORARY CONSTRUCTION ENTRANCE
- (C120) = TEMPORARY AND PERMANENT SEEDING
- (C123) = PLASTIC COVERING
- (C125) = TOPSOILING/COMPOSTING
- (C140) = DUST CONTROL
- (C150) = MATERIALS ON HAND
- (C151) = CONCRETE HANDLING
- (C152) = SAWCUTTING AND SURFACE POLLUTION PREVENTION
- (C153) = MATERIAL DELIVERY, STORAGE AND CONTAINMENT
- (C154) = CONCRETE WASHOUT AREA
- (C220) = STORM DRAIN INLET PROTECTION
- (C233) = TEMPORARY SILT FENCE
- (AD) = AREA OF DISTURBANCE

EROSION CONTROL CONCEPT

ALL DISTURBED AREAS SHALL BE PREPARED AND MAINTAINED TO CONTROL EROSION. LEAVE VEGETATIVE BUFFER AROUND PERIMETER OF SITE AND EXISTING GROUND COVER AS LONG AS POSSIBLE.

TEMPORARY EROSION CONTROL NOTE:

TEMPORARY EROSION CONTROL MEASURES ON THIS PLAN ARE INTENDED AS A GUIDE. ADDITIONAL BMP'S MAY BE REQUIRED FOR THIS DEVELOPMENT AS SITE & WEATHER CONDITIONS CHANGE IN THE FIELD. THE CONTRACTOR/DEVELOPER SHALL COORDINATE WITH THE CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL) & THE PROJECT ENGINEER AS NEEDED FOR EROSION CONTROL RECOMMENDATIONS.



NOTE:
APPLIES TO GRADING ONLY

MAC ENGINEERING, LLC
 P.O. BOX 177, SILVANA, WA 98287
 TEL: (360) 652-5820
 EMAIL: macengineering@frontier.com

DATE: 11/18/22

SURVEY PROVIDED BY:
 CASCADE SURVEYING & ENGINEERING, INC.
 105 EAST DIVISION STREET
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 ARLINGTON, WA 98223
 TEL: (360) 435-5551

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CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

PFN:
GHAG-ARMAR RD
 PRELIMINARY
 EXISTING CONDITIONS & SWPP PLAN

PROJECT NO.
 220638
DWG
P2
 OF 6

EROSION, SEDIMENTATION AND WATER QUALITY SITE INSPECTIONS

PRIOR TO ANY SITE DEVELOPMENT WORK TAKING PLACE, A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR, OWNER, CESCL, AND CITY INSPECTOR SHALL BE HELD.

THE DEPARTMENT OF ECOLOGY REQUIRES THAT LAND DISTURBANCE CONSTRUCTION PROJECTS ONE ACRE OR LARGER RETAIN A CESCL TO ENSURE THAT THE PROJECT IS IN COMPLIANCE WITH THE CURRENT EROSION, SEDIMENTATION AND WATER QUALITY STANDARDS. FOR EMERGENCY PURPOSES, THE CESCL CONTACT PER FOR THIS PROJECT IS ELDEN D. McCALL, (425) 903-1399.

ON LAND DISTURBANCE CONSTRUCTION PROJECTS OF ONE ACRE OR LARGER THE CESCL IS RESPONSIBLE FOR:
 A. INSPECTING THE CONSTRUCTION SITE TO ENSURE THAT ALL CONSTRUCTION SWPPP MEASURES ARE FUNCTIONING AS INTENDED.
 B. ALLOCATING RESOURCES TO REPAIR ALL EROSION CONTROL STRUCTURES THAT ARE IN NEED OF MAINTENANCE.
 C. MONITORING WATER QUALITY FOR ANY STORM DRAINAGE THAT LEAKS THE SITE.
 D. AND HAVE THE AUTHORITY TO STOP AND/OR REDIRECT CONSTRUCTION ACTIVITIES DEEMED NECESSARY TO PROTECT THE ENVIRONMENT.

SHOULD BMP PERFORMANCE GOALS NOT BE ACHIEVED, THE ONLY CONSTRUCTION ACTIVITIES THAT SHALL BE ALLOWED ARE THE REPAIR OF EXISTING EROSION CONTROL STRUCTURES, INSTALLATION OF ADDITIONAL BMP'S TO MINIMIZE THE TRANSPORT OF SEDIMENT OFFSITE, OR THOSE ACTIVITIES THAT DO NOT DISTURB EXPOSED EARTH AND DO NOT HAVE THE POTENTIAL TO GENERATE ADDITIONAL SEDIMENT.

THE THIRTEEN ELEMENTS OF A CONSTRUCTION SWPPP
ALL NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS WILL COMPLY WITH THE SWPPP ELEMENTS HIGH LIGHTED BELOW.

FOR ADDITIONAL INFORMATION TO THE RELEVANT BMP'S INDICATED BELOW REFER TO THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (2015), VOLUME 1, CHAPTER 4. THE ADDITIONAL IDENTIFIED BMP'S ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR OR CESCL SHOULD SITE CONDITIONS CHANGE THUS REQUIRING USE ON ALTERNATIVE BMP MEASURES.

1. MARK CLEARING LIMITS:
LAND DISTURBING ACTIVITIES ARE DELINEATED AND QUANTIFIED IN THE SWPPP NARRATIVE AND SWPP PLANS PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES WITHIN THE CONSTRUCTION AREA THE CLEARING LIMITS ARE INDICATED ON THE SWPPP SHEET WILL BE DELINEATED. FURTHERMORE, CLEARING AND GRADING WILL BE LIMITED TO ONLY AREAS THAT NEED TO BE DISTURBED FOR GRADING, PLACING OR STOCK PILING FILL AND TO PRESERVE AS MUCH NATURAL VEGETATION AND THE DUMP LATER AS POSSIBLE.

- BMP'S: C101 PRESERVING NATURAL VEGETATION
 C102 BUFFER ZONES
 C104 HIGH VISIBILITY PLASTIC OR METAL FENCE
 C233 SILT FENCE

2. ESTABLISH CONSTRUCTION ACCESS:
ACCESS TO THE CONSTRUCTION SITE SHALL BE LIMITED TO ONE ROUTE IF POSSIBLE. STREET CLEANING SHALL BE REQUIRED WHEN SEDIMENT IS TRACKED OFF SITE.

- BMP'S: C105 STABILIZED CONSTRUCTION ENTRANCE
 C106 WHEEL WASH
 C107 CONSTRUCTION ROAD/PARKING AREA STABILIZATION

3. CONTROL FLOW RATES:
 PROPERTIES AND WATERWAYS DOWNSTREAM FROM THE PROJECT SITE SHALL BE PROTECTED FROM SOIL EROSION DUE TO INCREASES IN THE VOLUMETRIC FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE.

- BMP'S: C203 WATER BARS
 C207 CHECK DAMS
 C208 OUTLET PROTECTION
 C235 WATTLES
 C240 SEDIMENT TRAP
 C241 TEMPORARY SEDIMENT POND

4. INSTALL SEDIMENT CONTROLS:
IF THERE IS RUNOFF FROM THE CONSTRUCTION SITE, SEDIMENT SHALL BE REMOVED FROM THE RUNOFF.

- BMP'S: C231 BRUSH BARRIER
 C232 GRAVEL FILTER BERM
 C233 SILT FENCE
 C234 VEGETATED STRIP
 C235 STRAW WATTLES
 C240 SEDIMENT TRAP
 C241 TEMPORARY SEDIMENT TRAP
 C250 CONSTRUCTION STORMWATER CHEMICAL TREATMENT
 C251 CONSTRUCTION STORMWATER FILTRATION

5. STABILIZED SOILS:
PROVIDE TEMPORARY AND PERMANENT SOIL STABILIZATION TO ALL EXPOSED AND UNWORKED SOILS WITHIN THE PROJECT SITE. FROM OCTOBER 1 UNTIL APRIL 30, NO EXPOSED SOIL MAY REMAIN EXPOSED AND UNWORKED FOR MORE THAN TWO DAYS; AFTER MAY 1, NO EXPOSED SOIL MAY REMAIN EXPOSED AND UNWORKED FOR MORE THAN SEVEN DAYS.

- BMP'S: C120 TEMPORARY AND PERMANENT SEEDING
 C121 MULCHING
 C122 NETS AND BLANKETS
 C123 PLASTIC COVERING
 C124 SODDING
 C125 TOPSOILING/COMPOSTING
 C126 POLYPROPYLENE GEOTEXTILE FOR SOIL EROSION PROTECTION
 C130 SURFACE ROUGHENING
 C131 GRADIENT TERRACES
 C140 DUST CONTROL

6. PROTECT SLOPES:
 CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION AND CONCENTRATED FLOWS UNTIL PERMANENT COVER AND DRAINAGE CONVEYANCE SYSTEM ARE IN PLACE.

- BMP'S: C120 TEMPORARY AND PERMANENT SEEDING
 C121 MULCHING
 C122 NETS AND BLANKETS
 C123 PLASTIC COVERING
 C124 SODDING
 C130 SURFACE ROUGHENING
 C131 GRADIENT TERRACES
 C200 INTERCEPTOR DIKE AND SWALE
 C201 GRASS-LINED CHANNELS
 C203 WATER BARS
 C204 PIPE SLOPE DRAINS
 C205 SUBSURFACE DRAINS
 C206 LEVEL SPREADER
 C207 CHECK DAMS
 C208 TRIANGULAR SILT DIKE (GEOTEXTILE-ENCASED CHECK DAM)

7. PROTECT PERMANENT DRAIN INLETS:
ALL PERMANENT STORM DRAIN INLETS WILL BE PROTECTED FROM SEDIMENT AND SILT-LADEN WATER.

- BMP'S: C220 STORM DRAIN INLET PROTECTION

8. STABILIZE CHANNELS AND OUTLETS:
 TEMPORARY AND PERMANENT CONVEYANCE SYSTEMS SHALL BE STABILIZED TO PREVENT EROSION DURING AND AFTER CONSTRUCTION.

- BMP'S: C122 NETS AND BLANKETS
 C202 CHANNEL LINING
 C207 CHECK DAMS
 C209 OUTLET PROTECTION

9. CONTROL POLLUTANTS:
ALL POLLUTANTS, INCLUDING WASTE MATERIAL, FERTILIZERS/CHEMICALS, ON-SITE FUELING TANKS AND DEMOLITION DEBRIS SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CONTAMINATE STORMWATER.

- BMP'S: C151 CONCRETE HANDLING
 C152 SAWCUTTING AND SURFACE POLLUTION PREVENTION
 C153 MATERIAL DELIVERY, STORAGE AND CONTAMINATION
 C154 CONCRETE WASTEWATER AREA
 C252 CONSTRUCTION STORMWATER CHEMICAL TREATMENT
 C251 CONSTRUCTION STORMWATER FILTRATION
 C252 HIGH PH NEUTRALIZATION USING CO2
 C253 PH CONTROL FOR HIGH PH WATER

10. CONTROL DEWATERING:
 CLEAN, NON-TURBID DE-WATERING WATER CAN BE DISCHARGED TO SYSTEMS TRIBUTARY TO OR DIRECTLY INTO SURFACE WATERS OF THE STATE, PROVIDED THE DE-WATERING FLOW DOES NOT CAUSE EROSION OR FLOODING TO RECEIVING WATERS. HIGHLY TURBID OR CONTAMINATED DE-WATERING WATER SHALL BE HANDLED SEPARATELY FROM STORMWATER.

- BMP'S: C203 WATER BARS
 C236 VEGETATIVE FILTRATION

11. MAINTAIN BMP'S:
THE CONTRACTOR WILL PROVIDE INSPECTION AND MAINTENANCE OF THE CONSTRUCTED BMP'S AND WILL COMPLY WITH THEIR REMOVAL AT THE END OF THE PROJECT.

- BMP'S: C150 MATERIALS ON HAND
 C160 CERTIFIED EROSION AND SEDIMENT CONTROL LEAD

12. MANAGE THE PROJECT:
THE PROJECT SHALL BE MANAGED IN A COOPERATIVE EFFORT BY THE PROJECT MANAGER, CONTRACTOR, ENGINEER, AND THE CITY INSPECTOR. SWPPP'S SHALL BE MODIFIED WHENEVER THERE IS A CHANGE AT THE CONSTRUCTION SITE THAT HAS OR COULD HAVE A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO WATERS OF THE STATE. DURING THE CONSTRUCTION PROCESS, IF UNFORESEEN ISSUES ARISE THAT CANNOT BE RESOLVED ON SITE, CONSTRUCTION ACTIVITY (OTHER THAN SWPPP MAINTENANCE) SHALL BE HALTED AND THE CITY INSPECTOR AND THE PROJECT ENGINEER ARE TO BE CONTACTED AND INFORMED OF THE SITUATION.

- BMP'S: C150 MATERIALS ON HAND
 C160 CERTIFIED EROSION AND SEDIMENT CONTROL LEAD
 C162 SCHEDULING

13. PROTECT ON-SITE BMP'S:
ON-SITE STORMWATER MANAGEMENT BMP'S USED FOR RUNOFF FROM ROOFS AND OTHER HARD SURFACES INCLUDES FILL DISPERSION, ROOF DOWNSPOUT FILL INFILTRATION OR DISPERSION SYSTEMS, PERFORATED STUBOUT CONNECTIONS, RAIN GARDENS, BIORETENTION SYSTEMS, PERMEABLE PAVEMENT, SHEET FLOW DISPERSION, AND CONCENTRATED FLOW DISPERSION. THE AREAS ON THE SITE TO BE USED FOR THESE BMP'S SHALL BE PROTECTED FROM SILTATION AND COMPACTION DURING CONSTRUCTION BY SEQUENCING THE CONSTRUCTION IN A FASHION TO INSTALL THESE BMP'S AT THE LATTER PART OF THE CONSTRUCTION GRADING OPERATIONS, BY EXCLUDING EQUIPMENT FROM THE BMP'S AND THE ASSOCIATED AREAS, AND BY USING THE EROSION AND SEDIMENTATION CONTROL BMP'S LISTED BELOW. ADDITIONAL REQUIREMENTS FOR PROTECTING THESE BMP'S DURING THE CONSTRUCTION PROCESS, TESTING FUNCTIONALITY, AND RESTORING FUNCTIONALITY, AND RESTORING FUNCTIONALITY ARE NEEDED AT THE FINAL STAGE OF THE CONSTRUCTION PROCESS AND ARE INCLUDED IN THE SPECIFIC BMP SECTIONS IN VOLUME 1 OF THIS MANUAL.

- BMP'S: C102 BUFFER ZONE
 C103 HIGH VISIBILITY FENCE
 C200 INTERCEPTOR DIKE AND SWALE
 C201 GRASS LINED CHANNELS
 C207 CHECK DAMS
 C208 TRIANGULAR SILT DIKE (TSO) (GEOTEXTILE-ENCASED CHECK DAM)
 C231 BRUSH BARRIER
 C233 SILT FENCE
 C234 VEGETATED STRIP

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE NOTES

- THE TEMPORARY CONSTRUCTION ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHOULD BE CONSTRUCTED ACCORDING TO SPECIFICATIONS IN THE PLAN. IF WASH ROCKS ARE USED, THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- GRAVEL SHALL BE CRUSHED BALLAST ROCK, 12" IN DEPTH AND INSTALLED TO THE SPECIFIED DIMENSIONS AT THE ENTRANCE.
- THE GRAVEL BALLAST ROCK SHALL BE 4" TO 8" IN DIAMETER AND PLACED ACROSS THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH SHALL BE A MINIMUM OF 100 FEET.
- IF CONDITIONS ON THE SITE ARE SUCH THAT MOST OF THE MUD IS NOT REMOVED FROM VEHICLE TIRES BY CONTACT WITH THE GRAVEL, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER ONTO A PUBLIC ROAD. WASH WATER MUST BE CARRIED AWAY FROM ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRED PERIODIC TOP DRESSING WITH 2" STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

GRADING, EROSION AND SEDIMENTATION CONTROL NOTES:

- ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS DESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.
- ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION BEFORE ANY LAND CLEARING AND/OR CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION. ALL EROSION SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY INSPECTOR. ANY AND/OR CONSTRUCTION IS COMPLETED AND FINAL STABILIZATION HAS OCCURRED, THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.
- THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO MEET MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESS AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.
- APPROVAL OF THESE PLANS IS FOR GRADING, TEMPORARY DRAINAGE, EROSION AND SEDIMENTATION CONTROL ONLY. IT DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT STORM DRAINAGE DESIGN, SIZE OR LOCATION OF PIPES, RESTRICTIONS, CHANNELS, OR RETENTION FACILITIES.
- ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED BY THE PERMITTEE SHALL BE IMMEDIATELY REVEGETATED. ALL AREAS WHICH ARE NOT MULCHED, GRASS PLANTED, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION, DURING THE DRY SEASON (MAY 1 - SEPTEMBER 30) SOILS MAY BE EXPOSED AND UNWORKED FOR 7 DAYS, DURING THE WET SEASON (OCTOBER 1 - APRIL 30) SOILS MAY BE EXPOSED AND UNWORKED FOR 14 DAYS. GRASS SEEDING ALONG WITH BE ACCEPTABLE ONLY DURING DRY SEASON, SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITTEE BUT MUST BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.
- IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTY, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE AND THE OWNER/CONTRACTOR WILL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.
- STOCKPILES ARE TO BE LOCATED IN SAFE AREAS AND ADEQUATELY PROTECTED BY TEMPORARY SEEDING AND MULCHING. HYDROSEEDING IS PREFERRED. NO TEMPORARY OR PERMANENT STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN CRITICAL AREAS OR ASSOCIATED BUFFERS, OR THE CRITICAL ROOT ZONE FOR VEGETATION PROPOSED FOR RETENTION.
- NON-COMPLIANCE WITH THE REQUIREMENTS FOR EROSION CONTROLS, WATER QUALITY, AND CLEARING LIMITS MAY RESULT IN REVOCATION OF PROJECT PERMIT, PLAN APPROVAL AND BOND FORFEITURES.
- ALL EARTH WORK SHALL BE PERFORMED IN ACCORDANCE WITH CITY STANDARD. PRECONSTRUCTION SOILS INVESTIGATION MAY BE REQUIRED TO EVALUATE SOILS STABILITY.
- IF CUT AND FILL SLOPES EXCEED A MAXIMUM OF TWO FEET HORIZONTAL TO ONE FOOT VERTICAL, A BANK OR CONCRETE RETAINING WALL MAY BE REQUIRED. ALL SLOPES GREATER THAN FOUR (4) FEET IN HEIGHT ARE TO BE DESIGNED AND CERTIFIED BY A PROFESSIONAL ENGINEER EXPERIENCED IN SOIL MECHANICS.
- THE SURFACE OF ALL SLOPES SHALL BE COMPACTED. THIS MAY BE ACCOMPLISHED BY OVER-BUILDING THE SLOPES, THEN CUTTING BACK TO FINAL GRADES; OR BY COMPACTING EACH LIFT AS THE SLOPE IS BEING CONSTRUCTED. ALL SLOPES SHALL BE COMPACTED BY THE END OF EACH WORKING DAY.
- UPON COMPLETION OF WORK, FINAL MUST BE SUBMITTED TO THE CITY IN CONFORMANCE WITH THE CURRENT CITY ADOPTED INTERNATIONAL BUILDING CODE.

WET WEATHER GRADING NOTES

- THE CONSTRUCTION SEQUENCE SHALL BE MODIFIED TO MINIMIZE THE AREA OF SOIL EXPOSURE.
- EARTHEN AREAS THAT ARE SUBJECT TO CONTRIBUTING SEDIMENTS DURING STORM EVENTS AND WHERE EARTH MOVEMENT IS NOT ANTICIPATED FOR 48-HOURS, SHALL BE STABILIZED USING THE FOLLOWING BMP'S: HYDROSEEDING & MULCHING (4" THICK STRAW) OR COVERING DISTURBED AREAS AND STOCK PILES WITH PLASTIC SHEETING.
- WET WEATHER TESC MEASURES WILL BE EXPANDED TO INCLUDE CONSTRUCTION AREA STABILIZATION (EXTEND CONSTRUCTION ENTRANCE), SEDIMENT TRAPS, AND ADDITIONAL SILT FENCES, IF NECESSARY. WINTER CONDITIONS TEMPORARY EROSION & SEDIMENT CONTROL BMP'S: FROM OCTOBER 1 TO APRIL 30, NO SOIL MAY REMAIN EXPOSED FOR MORE THAN 2 DAYS; OTHERWISE NO SOIL MAY REMAIN EXPOSED FOR MORE THAN 7 DAYS. COVER PRACTICES: THE EXISTING VEGETATION SHOULD BE LEFT UNDISTURBED WHERE POSSIBLE TO LIMIT EROSION. DISTURBED AREAS SHALL BE COVERED WITH MULCH, SOIL, PLASTIC OR MATTING. STOCKPILES OR SLOPES STEEPER THAN 2:1 SHALL BE STABILIZED BY PROTECTING WITH SEDIMENT RETENTION BMP'S WITHIN 24 HOURS OF FORMATION. STRUCTURAL PRACTICES: SILT FENCES AROUND THE PERMETER WILL PREVENT SEDIMENT LOADED WHERE ACTIVE GRADING IS IN PROGRESS. THE DIRECTOR MAY EXTEND THE DEADLINE FOR SOIL STABILIZATION UPON DETERMINING THAT THE LIKELIHOOD OF EROSION IMPACTS IS LOW BASED ON THE TYPE AND AMOUNT OF SOIL EXPOSED, SITE TOPOGRAPHY, THE POTENTIAL FOR DISCHARGE TO CRITICAL AREAS AND LAKES, AND OTHER FACTORS. DISTURBED AREAS SHALL BE COVERED WITH MULCH, SOIL, PLASTIC OR MATTING. GRADING CONSTRUCTION SHALL BE TIMED AND CONDUCTED IN STAGES TO MINIMIZE SOIL EXPOSURE.
- SOILS SHALL NOT BE DISTURBED EXCEPT FOR ACTUAL CONSTRUCTION ACTIVITIES. PAVING IS ALLOWED ONLY ON PAVED AND/OR GRAVEL SURFACES.
- SLOPES 8% AND GREATER WITHOUT ESTABLISHED GROUND COVER WILL BE STABILIZED WITH PLASTIC SHEETING, 6-MIL (MINIMUM). THE SHEETING SHALL BE ANCHORED WITH SAND BAGS LOCATED 5-FEET APART ON THE PERMETER AND 10-FEET ON CENTER ON THE REMAINDER OF THE SHEETING. A MINIMUM OF 2'-FEET OVERLAP IS REQUIRED FOR OVERLAPPING SHEETS.
- WATER DISCHARGED FROM THE SITE WILL BE MONITORED FOR TURBIDITY. THE MAXIMUM ALLOWABLE TURBIDITY OF DISCHARGED WATER WILL BE 5 NTU OVER BACKGROUND.
- WHEN RAINFALL IS HEAVY (DEFINED AS RAINFALL HARD ENOUGH TO PRODUCE SEDIMENT RUN-OFF FROM EXPOSED DIRT), ALL EXPOSED EARTHWORK SHALL BE COVERED. NO OTHER CONSTRUCTION ACTIVITY SHALL OCCUR ON PERVIOUS SURFACES DURING THESE PERIODS OF HEAVY RAIN.
- ALL DRAINAGE SWALES SHALL BE FULLY VEGETATED. SWALES SHALL BE SODDED IF THE VEGETATION GROWING IN THE SWALE IS INSUFFICIENT TO PROVIDE WATER QUALITY AND TO PREVENT EROSION OF THE SWALE.
- FILTER FABRIC (GEOTEXTILE FABRIC) SHALL BE INSTALLED BENEATH THE ENTIRE CONSTRUCTION ENTRANCE.
- IF THERE IS A MEASURABLE INCREASE IN THE TURBIDITY OF THE RECEIVING WATER GREATER THAN 5 NTU/S, THE WATER IN THE TEMPORARY SEDIMENTATION POND SHALL BE PUMPED TO UNDISTURBED VEGETATION ON SITE.

BMP NOTES:

- COVER PRACTICES:
 THE EXISTING VEGETATION SHOULD BE LEFT UNDISTURBED WHERE POSSIBLE TO LIMIT EROSION. DISTURBED AREAS SHALL BE COVERED WITH MULCH AND/OR MATTING. STOCKPILES OR SLOPES STEEPER THAN 2:1 SHALL BE COVERED WITH PLASTIC SHEETING HELD IN PLACE WITH SAND BAGS.

INFILTRATION FACILITY NOTES

- INFILTRATION FACILITY INSTALLATIONS SHALL BE DIRECTED/OVERSEEN BY A LICENSED GEOTECHNICAL ENGINEER IF DIRECTED BY THE CITY ENGINEER OR DESIGNER. THE GEOTECHNICAL ENGINEER SHALL CERTIFY THAT THE UNDERLYING SOIL TYPE AND CONDITION (NATIVE OR FILL SOIL) MEETS THE DESIGN SPECIFICATION PRIOR TO BACKFILLING.
- THE GEOTECHNICAL ENGINEER WILL PRESCRIBE CORRECTIVE ACTION FOR SOIL THAT DOES NOT MEET THE DESIGN SPECIFICATION PRIOR TO CONSTRUCTION OF OTHER PROJECT IMPROVEMENTS OR RECORDING OF A SUBDIVISION AS REQUIRED BY MMC 14.15.120. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING CORRECTIONS TO ENSURE THE STORMWATER SYSTEM FUNCTIONS AS DESIGNED.

HYDROSEEDING GENERAL NOTES

- CONSTRUCTION ACCEPTANCE WILL BE SUBJECT TO WELL ESTABLISHED GROUND COVER THAT FULFILLS THE REQUIREMENTS OF THE APPROVED CONSTRUCTION PLANS AND THE CITY OF MARYSVILLE STANDARDS.
- ALL LAND DISTURBANCE AREAS SUCH AS RETENTION FACILITIES, ROADWAY BACK-SLOPES, ETC., SHALL BE SEEDING WITH A PERENNIAL GROUND COVER GRASS TO MINIMIZE EROSION. GRASS SEEDING WILL BE DONE USING AN APPROVED HYDROSEEDER OR AS OTHERWISE APPROVED BY THE CITY OF MARYSVILLE.
- PREPARATION OF SURFACE: ALL AREAS TO BE SEEDING SHALL BE PREPARED IN A MANNER CONSISTENT WITH BMP TS.13 POST CONSTRUCTION SOIL QUALITY AND DEPTH IN CHAPTER 5 OF VOLUME V OF THE STORMWATER MANUAL.
- IMMEDIATELY FOLLOWING FINISH GRADING, PERMANENT VEGETATION SHALL BE APPLIED CONSISTENT WITH THE DESIGN AND MAINTENANCE STANDARDS FOR TEMPORARY AND PERMANENT SEEDING IN THE CITY ADOPTED DEPARTMENT OF ECOLOGY STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON.
- ALL HYDROSEEDING FIRMS SHALL HAVE A PRINTOUT OF THE APPLICATION RATE FOR EACH JOB READILY AVAILABLE FOR INSPECTION BY THE CONSTRUCTION INSPECTION DIVISION OF COMMUNITY DEVELOPMENT.
- THE CITY OF MARYSVILLE CONSTRUCTION INSPECTION DIVISION OF COMMUNITY DEVELOPMENT SHALL BE NOTIFIED OF POTENTIAL HYDROSEEDING PRIOR TO THE COMMENCEMENT OF SAME TO ENSURE COMPLIANCE WITH THESE SPECIFICATIONS.

POTENTIAL POLLUTANTS

THERE ARE THREE TYPES OF POTENTIAL POLLUTANTS THAT THIS SWPPP IS INTENDED TO ADDRESS:

- HAZARDOUS CHEMICALS
- PETROLEUM PRODUCTS
- SEDIMENT

REASONABLE CARE AND DISCRETION SHALL BE EXERCISED TO PREVENT DAMAGING THE ENVIRONMENT THROUGH A RELEASE OF ANY OF THE THREE TYPES OF POLLUTION. THIS SWPPP IS TO BE CONSIDERED A GUIDE, AND REPRESENTS ONLY THE MINIMUM STANDARD OF CARE TO BE PRACTICED DURING THE CONSTRUCTION PHASE OF THIS PROJECT. A CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL) SHALL BE RESPONSIBLE FOR EVALUATING THE CONDITIONS AND POLLUTION POTENTIAL ON THE PROJECT SITE AT ALL TIMES AND DETERMINING WHAT ADDITIONAL MEASURES NEED TO BE ENACTED TO PROTECT THE ENVIRONMENT. THIS MAY INCLUDE STOPPING CONSTRUCTION UNTIL CONDITIONS CHANGE SUCH THAT THE DANGER TO THE ENVIRONMENT HAS BEEN MINIMIZED.

HAZARDOUS CHEMICALS

HAZARDOUS CHEMICALS, SUCH AS CLEANING AGENTS AND SOLVENTS, SHALL BE STORED IN AN APPROVED CHEMICAL STORAGE FACILITY(IES), LOCATED IN THE EQUIPMENT STAGING AREA. WHEN USING CHEMICALS DURING CONSTRUCTION ACTIVITY, CARE SHALL BE TAKEN TO GUARD AGAINST SPILLAGE. IN THE EVENT OF A CHEMICAL RELEASE, THE APPROPRIATE AUTHORITIES ARE TO BE NOTIFIED AND THE SPILL IS TO BE CLEANED UP IMMEDIATELY.

PETROLEUM PRODUCTS

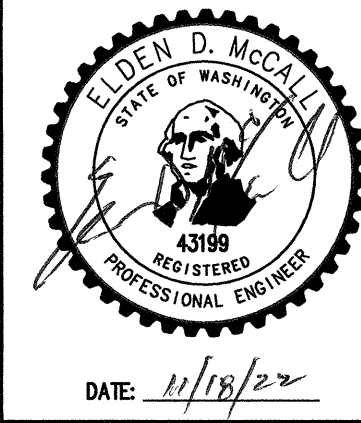
THE CONSTRUCTION SITE IS TO BE PROTECTED AGAINST EXCESSIVE PETROLEUM POLLUTION. ALL CONSTRUCTION EQUIPMENT AND VEHICLES SHALL HAVE A REGULAR MAINTENANCE SCHEDULE, AS RECOMMENDED BY THE PRODUCT MANUFACTURER, WITH PARTICULAR ATTENTION/CARE BEING PAID TO LOCATIONS THAT ARE COMMONLY KNOWN TO LEAK LUBRICANTS. UPON DISCOVERY OF AN UNSATISFACTORY PART, THAT VEHICLE/EQUIPMENT SHALL NOT BE OPERATED UNTIL IT HAS BEEN FIRED. ADDITIONALLY, ALL OIL AND REFUELING OPERATIONS ARE TO BE CONDUCTED IN A DESIGNATED AREA THAT HAS BEEN PREPARED TO PREVENT THE LOSS OF SPILLED OIL/FUEL TO THE ENVIRONMENT THROUGH THE USE OF A LINER, SPILL TRAP OR OTHER MEANS.

SEDIMENT

THE RELEASE OF SEDIMENT TO THE ENVIRONMENT SHALL BE PREVENTED AT ALL TIMES. THE FOLLOWING BMP'S ARE TO BE CONSIDERED THE MINIMUM PROTECTION MEASURES:

- THE DISTRIBUTION/TRACKING OF MUD/SEDIMENT ONTO ROADS FROM CONSTRUCTION EQUIPMENT/VEHICLES SHALL BE PREVENTED. THE CONSTRUCTION SITE SHALL BE ACCESSED VIA A ROCK CONSTRUCTION ENTRANCE, UNDERLAIN BY A GEO-TEXTILE FABRIC. THE CONSTRUCTION ENTRANCE SHALL BE EXTENDED IF NECESSARY TO PROVIDE ACCESS TO THE EMPLOYEE PARKING AND EQUIPMENT STAGING AREAS. PRIOR TO LEAVING THE CONSTRUCTION SITE, CONSTRUCTION EQUIPMENT/VEHICLES SHALL BE INSPECTED FOR MUD/SEDIMENT AND ALL WHEELS AND SURFACES ARE TO BE BRUSHED/CLEANED/WASHED AS NECESSARY PRIOR TO LEAVING THE CONSTRUCTION SITE. ADDITIONALLY, THE EXISTING PAVEMENT OF ROAD SYSTEMS ADJACENT TO THE PROJECT SITE WILL BE SWEEP DAILY WHEN SEDIMENT IS TRACKED OFF SITE.
- COVER MATERIALS (I.E. STRAW, MULCH OR PLASTIC SHEETING) SHALL BE STORED ON SITE IN SUFFICIENT QUANTITIES SUCH THAT ALL PORTIONS OF EXPOSED EARTH CAN BE COMPLETELY COVERED TO PREVENT EROSION. RUNOFF FROM THE AREA THAT IS PROPOSED TO BE COVERED SHALL BE INTERCEPTED BY INTERCEPTOR CHANNELS, AND CONVEYED TO A TEMPORARY SEDIMENTATION POND. DISCHARGE FROM THE TEMPORARY POND WILL BE THROUGH A GRAVEL FILTER COME TO THE EXISTING STORM SYSTEM.
- THE PLANNED CONSTRUCTION ACTIVITIES SHALL BE EVALUATED ON A DAILY BASIS, TAKING INTO CONSIDERATION THE LATEST WEATHER FORECAST. THE WEATHER FORECAST SHALL DICTATE WHETHER LARGE-SCALE EARTH MOVING OPERATIONS SHALL COMMENCE OR CONTINUE. IF PRECIPITATION OCCURS DURING CONSTRUCTION ACTIVITY, AND IS INTENSE ENOUGH TO GENERATE RUNOFF, ALL EARTH MOVING ACTIVITIES SHALL CEASE AND EXPOSED EARTH SHALL BE COVERED TO PREVENT EROSION. WHILE PRECIPITATION PERSISTS, THE ONLY CONSTRUCTION ACTIVITY THAT SHALL BE ALLOWED ARE THOSE ACTIVITIES REQUIRED TO MAINTAIN EXISTING EROSION CONTROL MEASURES, INSTALL NEW EROSION CONTROL BMP'S AS NECESSARY AND NON-EROSION/SEDIMENT GENERATING ACTIVITIES.
- CONSTRUCTION ACTIVITIES SHALL BE PHASED TO MINIMIZE THE SURFACE AREA OF EXPOSED EARTH AT ANY GIVEN TIME. THE CLEARING/GRADING LIMITS ARE IDENTIFIED ON THE PLAN SHEET.
- SPECIFY BMP FOR CLEANING PAVEMENT SURFACES AT THE END OF EACH WORKING DAY.

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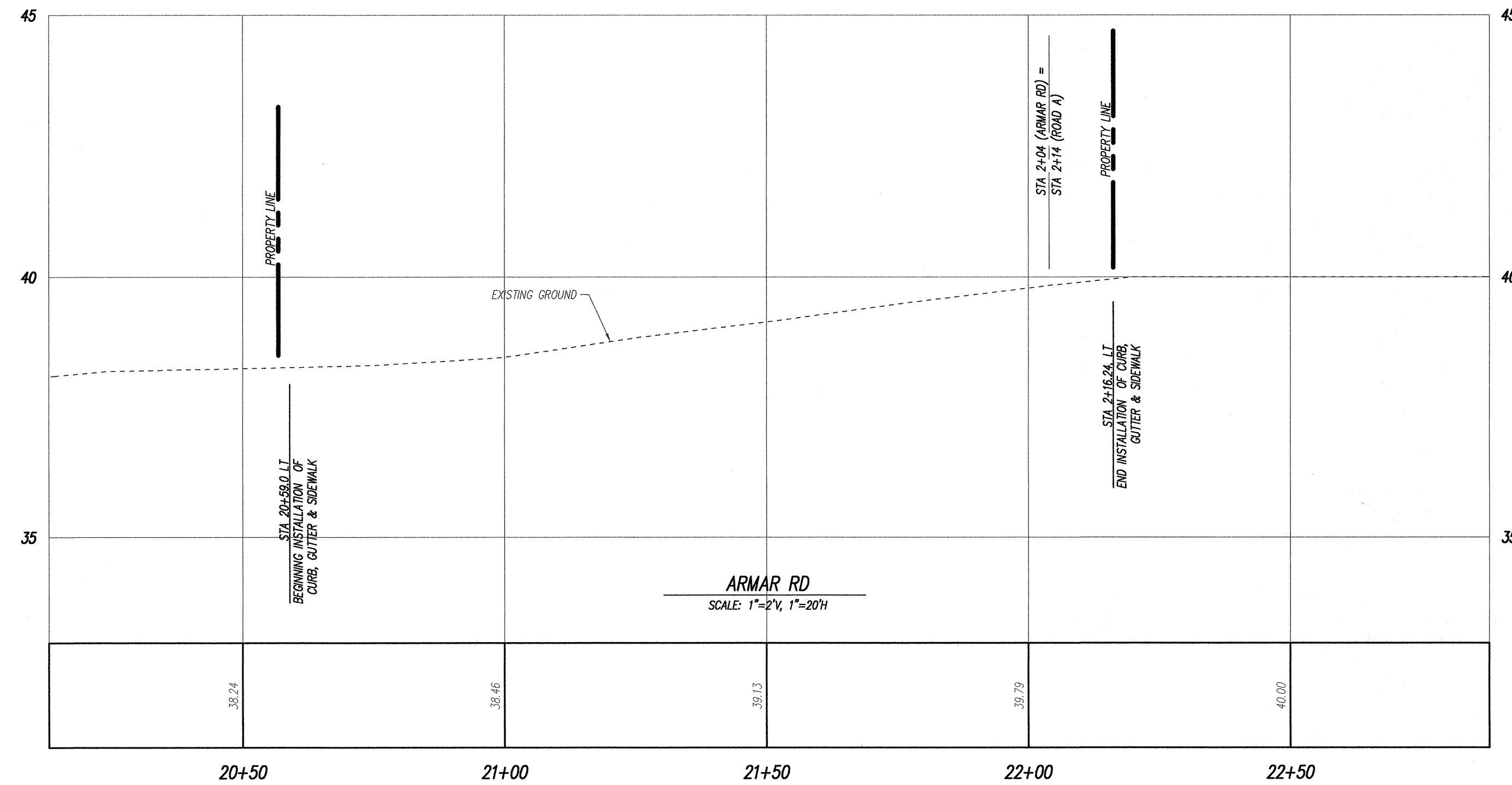
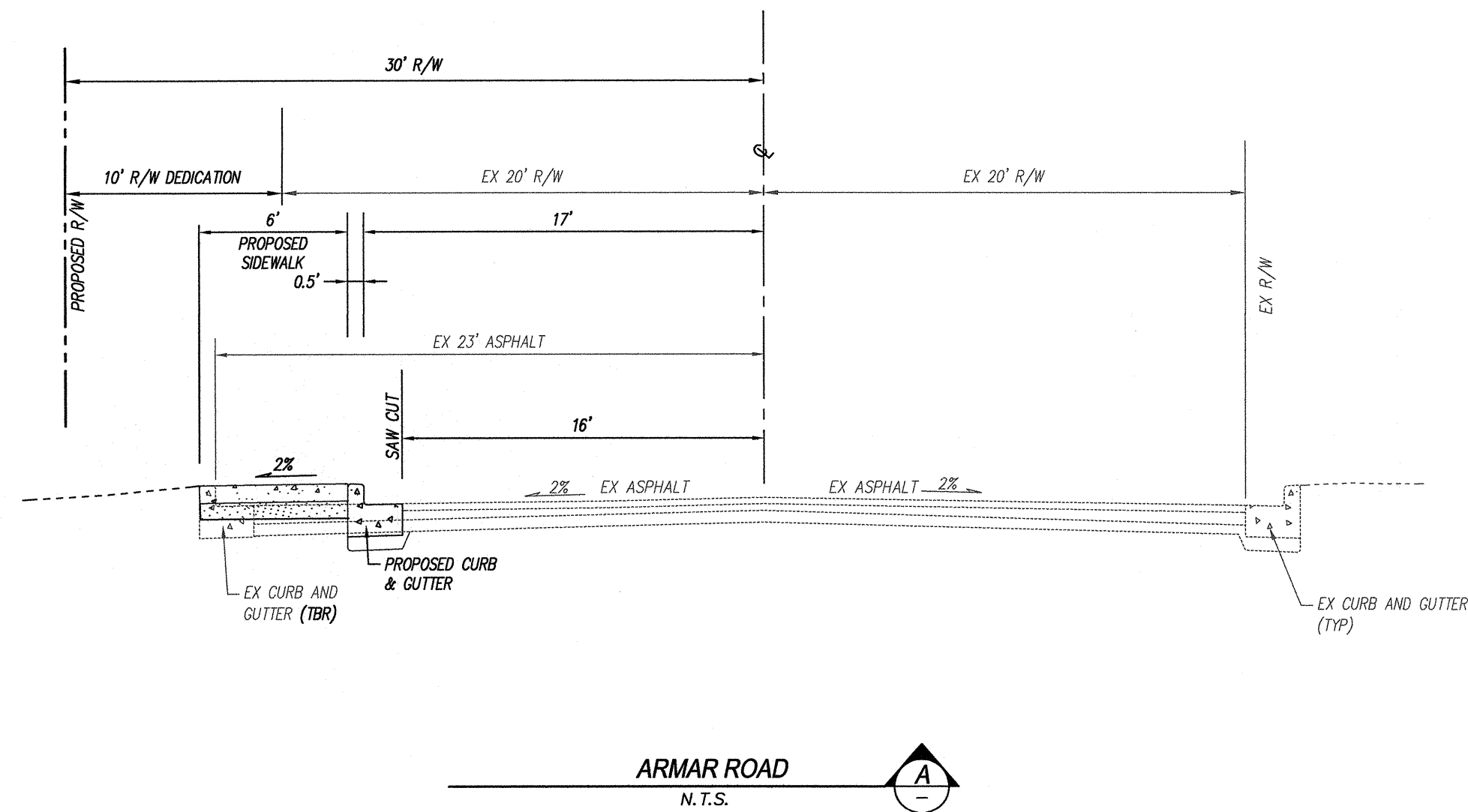
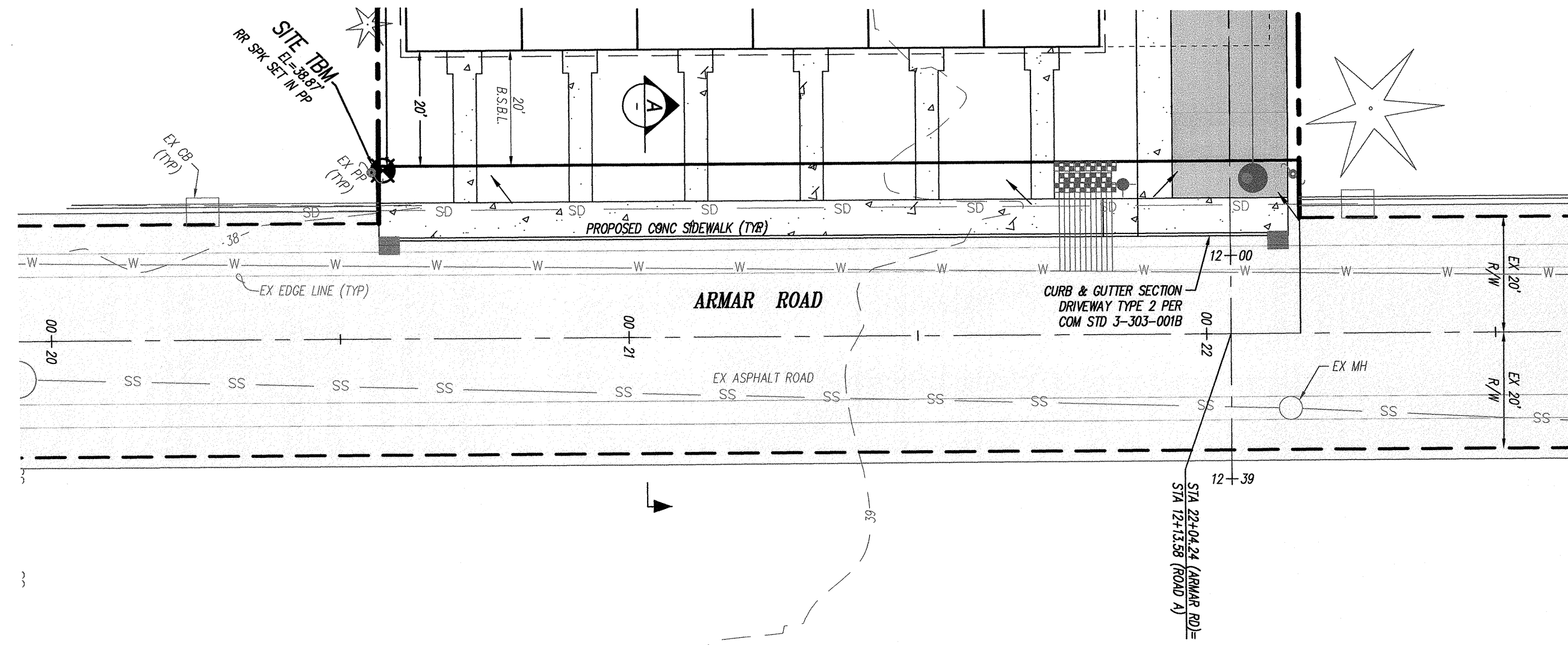
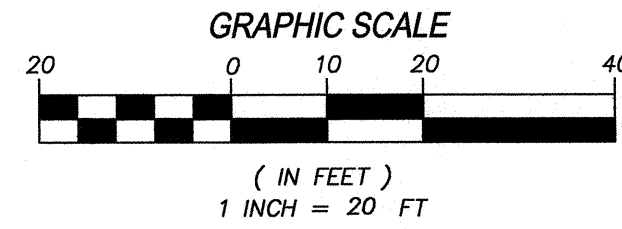
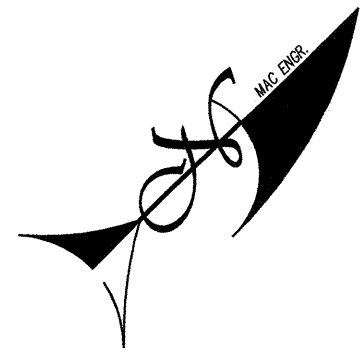
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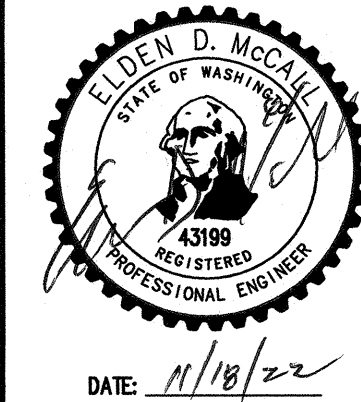
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| CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 | THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITH A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION. |

GHAG-ARMAR RD
PRELIMINARY SWPPP NOTES

PROJECT NO.
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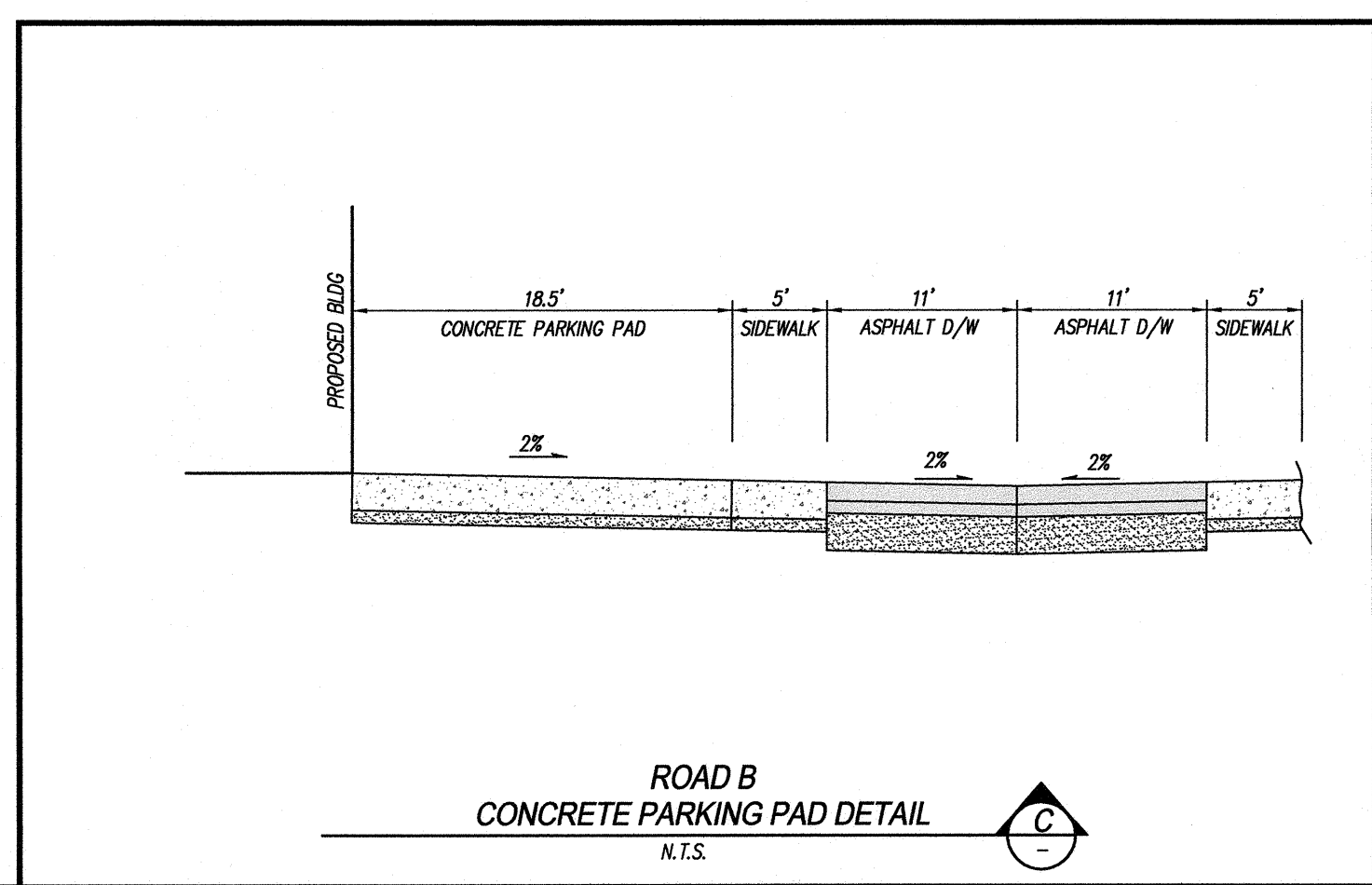
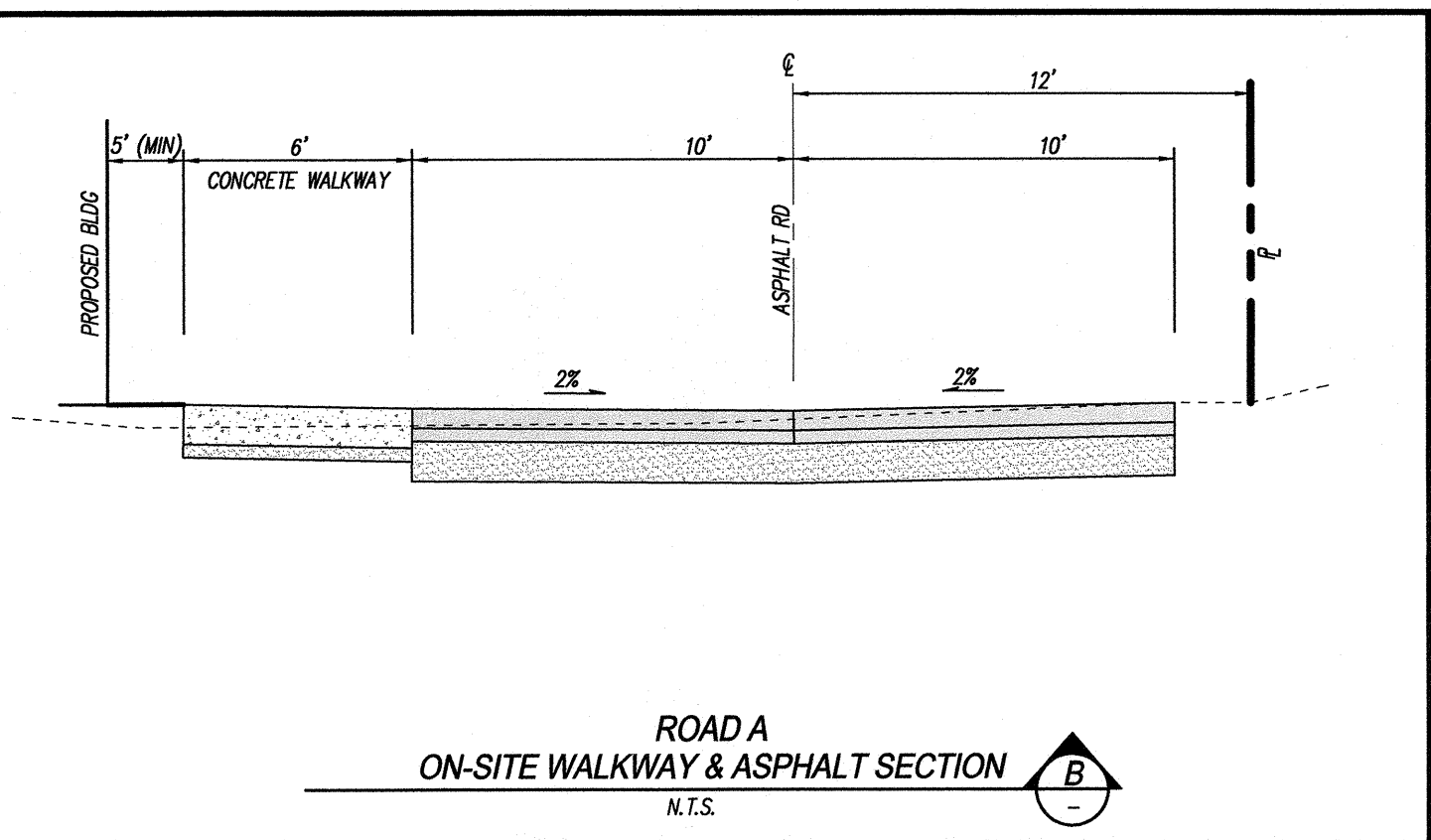
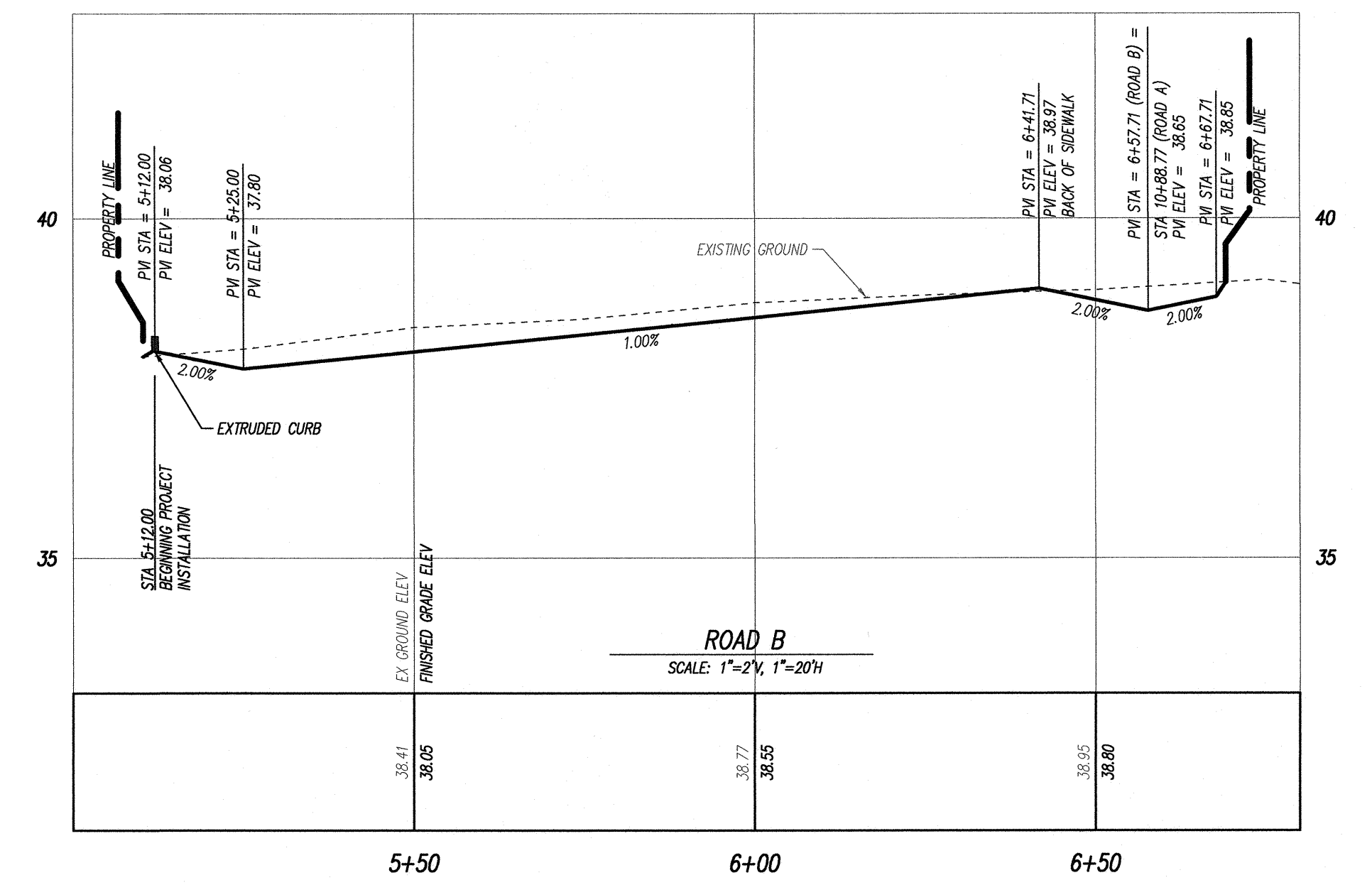
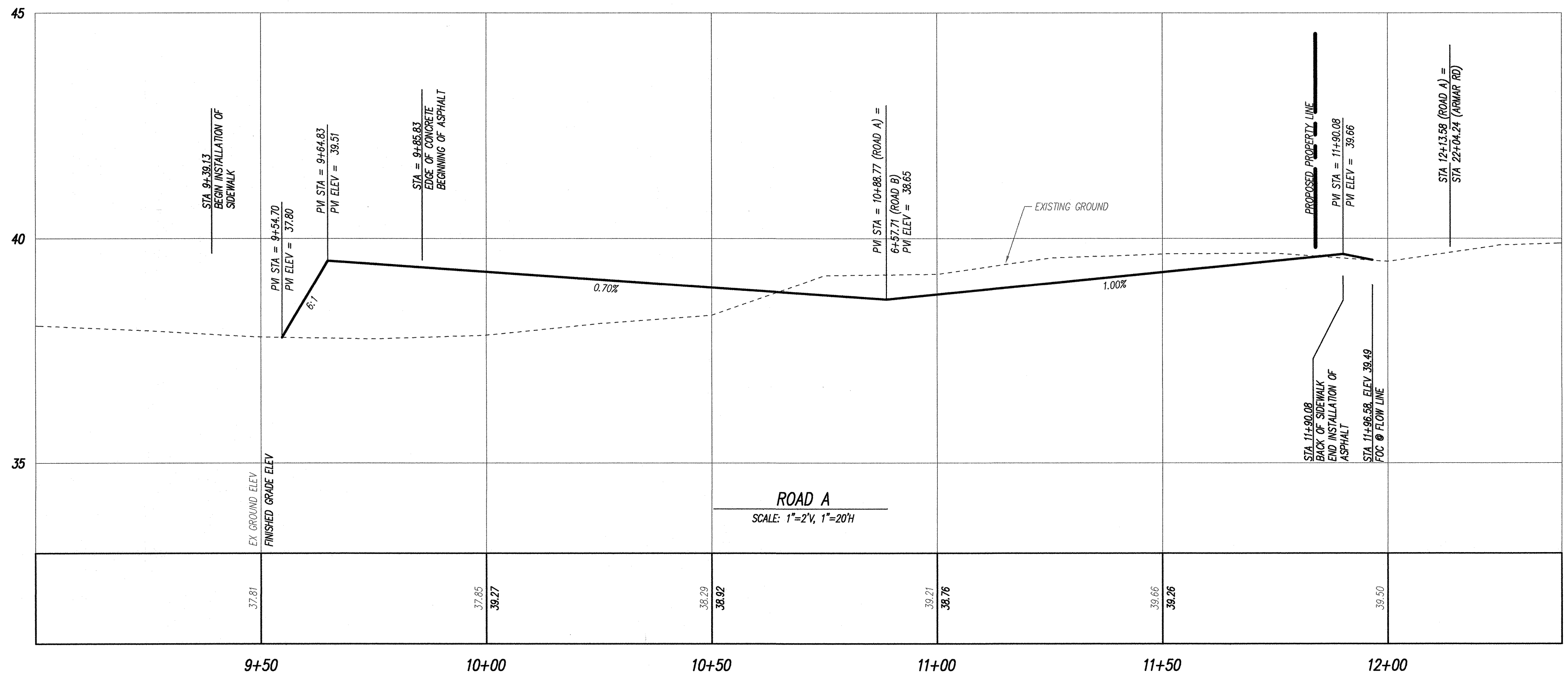
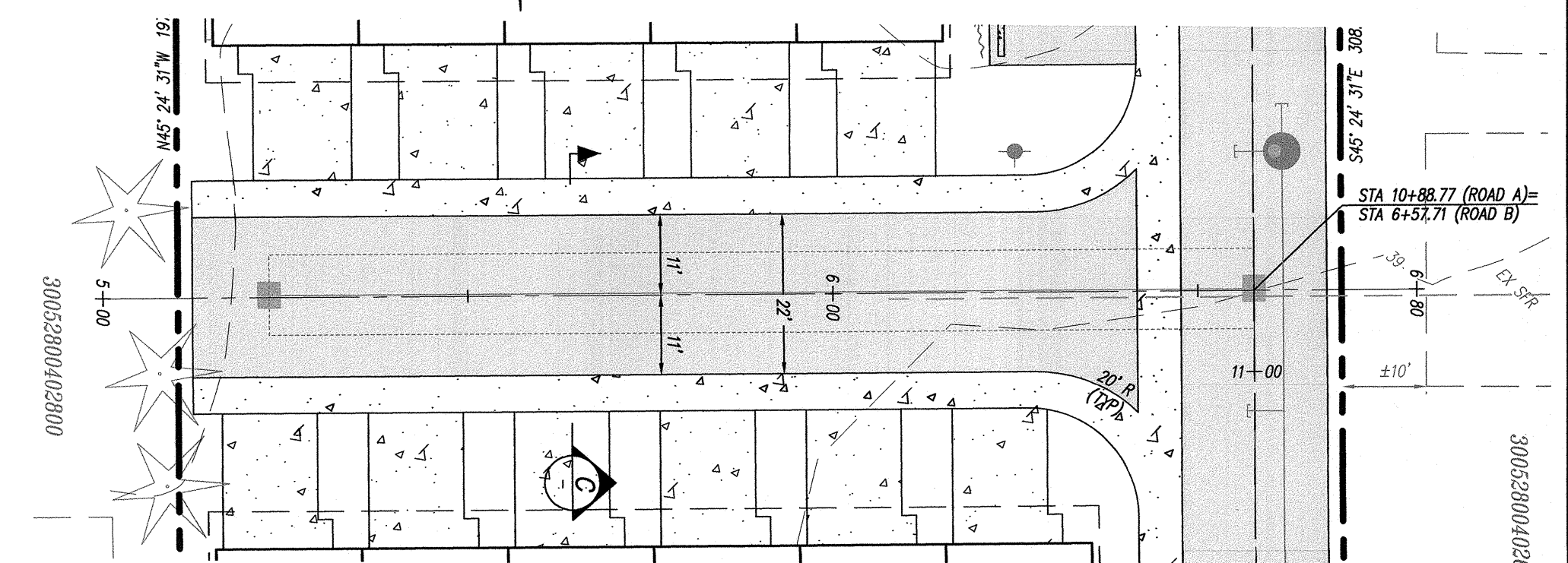
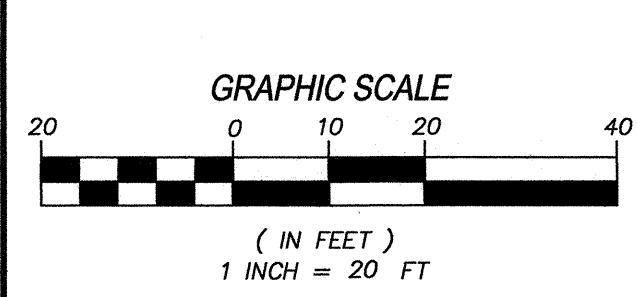
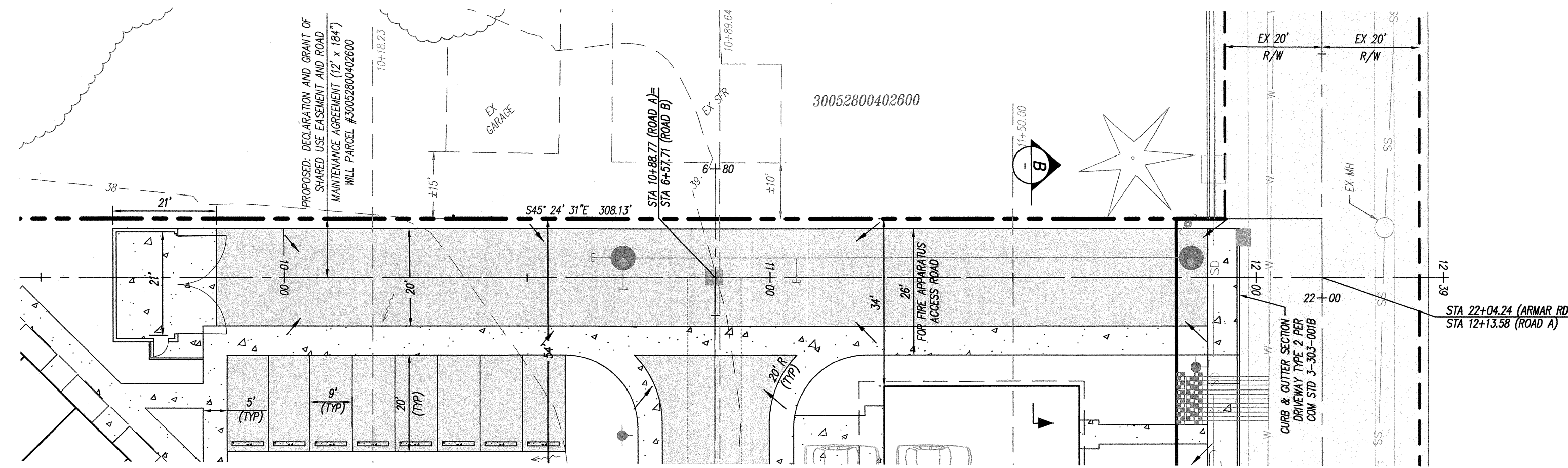
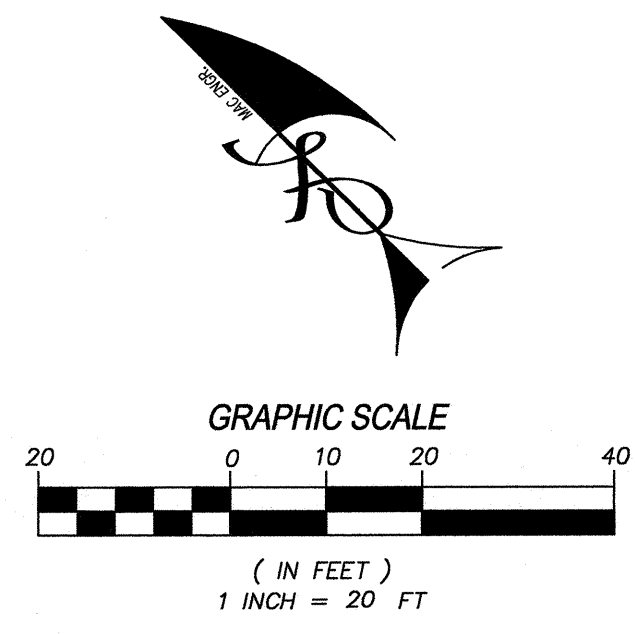
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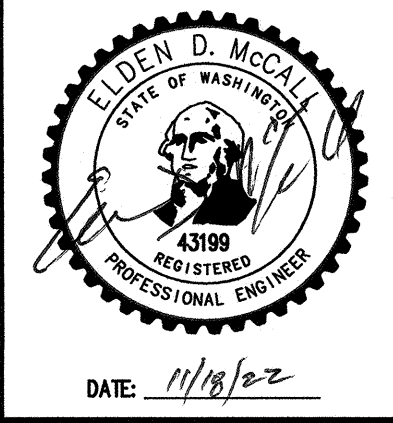
CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

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 ARMAR ROAD - PLAN & PROFILE

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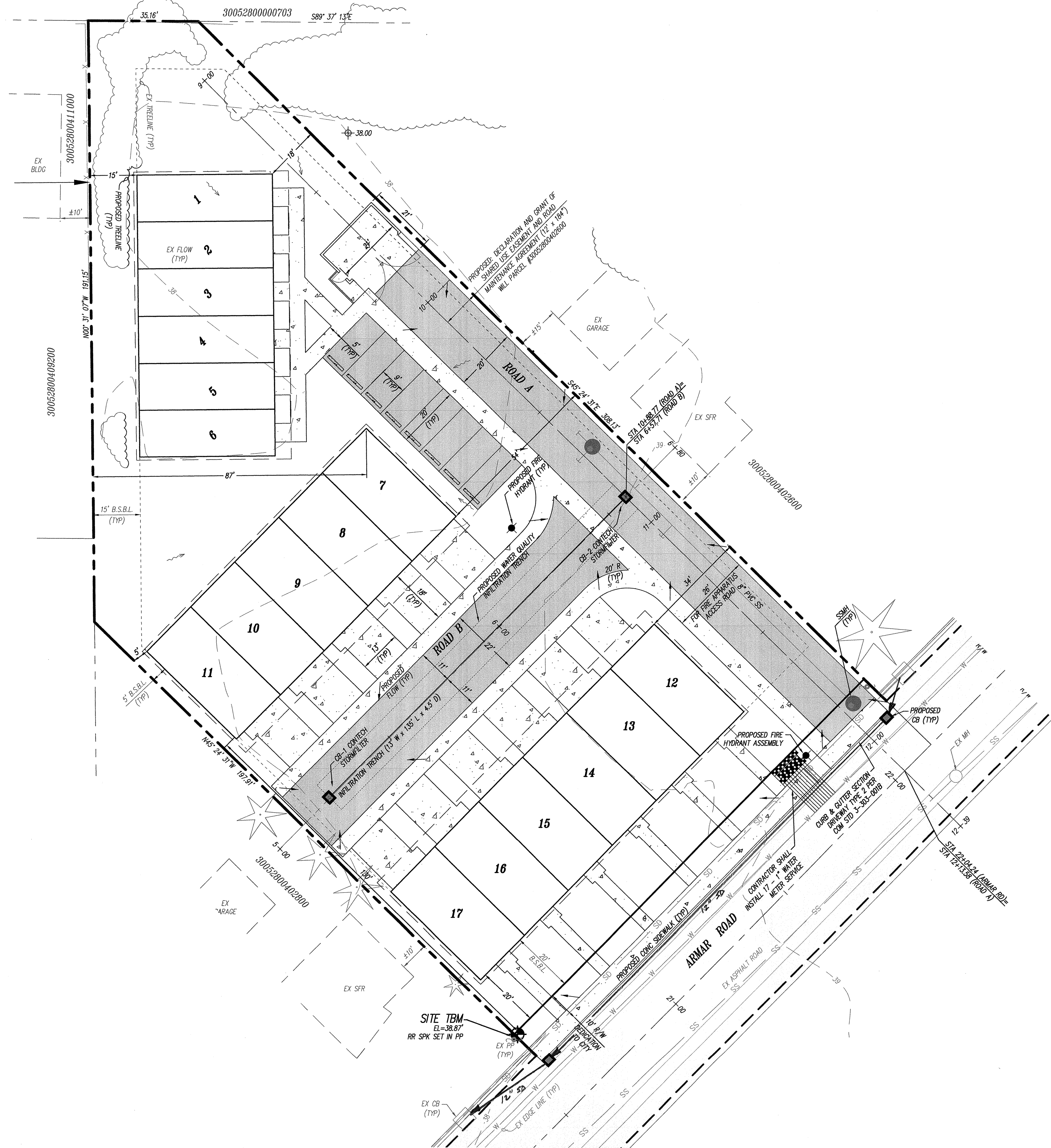
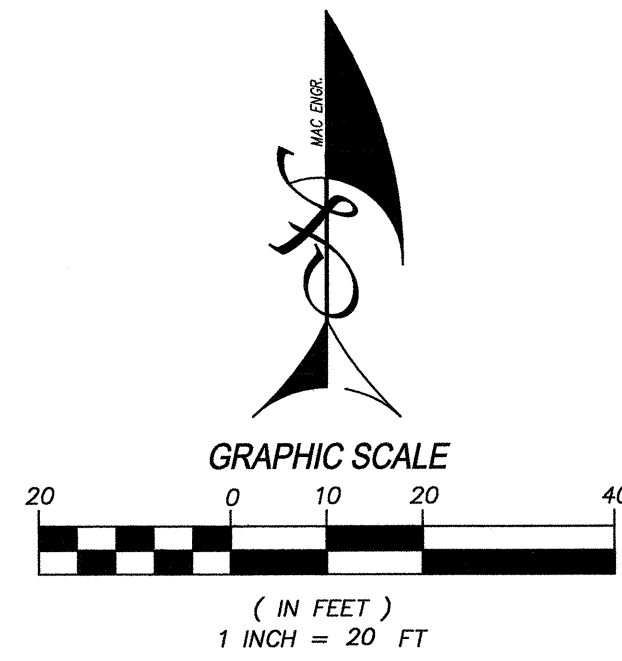
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DRIVEWAY - PLAN & PROFILES

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