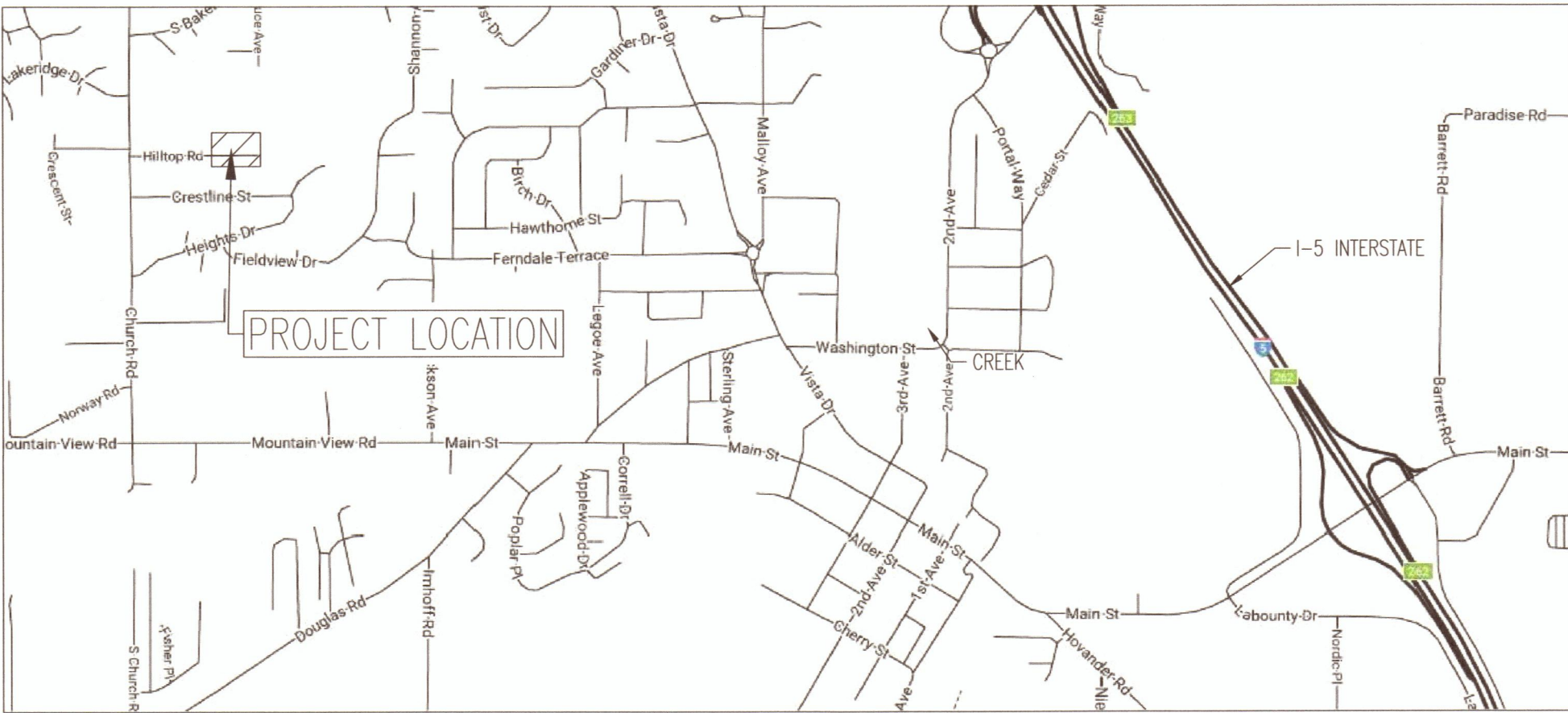


MANTHEY SHORT PLAT - CIVIL SITE IMPROVEMENT PLANS

2433 & 2437 HILLTOP RD, FERNDAL, WA. WHATCOM COUNTY



VICINITY MAP

NO SCALE



DRAWING INDEX

DRAWING

C.100
C.101
C.200
C.300
C.400
C.500 & C.501

DESCRIPTION

INDEX SHEET AND GENERAL NOTES
GENERAL NOTES AND SWPPP NARRATIVE
SITE PLAN
SITE DRAINAGE AND GRADING PLAN
RIGHT OF WAY IMPROVEMENT PLAN & PROFILE
DETAILS AND NOTES

ATTACHMENT -A-

EXISTING CONDITIONS AND TOPOGRAPHY SURVEY

PROJECT CONTACTS

OWNER:

RANDY MANTHEY
2410 HILLTOP RD
FERNDAL, WA. 98248
OFFICE: 206.305.5479

CIVIL ENGINEER:

STEVEN STAPP, P.E.
A2E INC.
15 LUPINE CIRCLE
ROBERTS, MT 59070
OFFICE: 406-426-1966

SITE ADDRESS

2433, 2437 HILLTOP RD
FERNDAL, WA. 98248

LEGAL DESCRIPTION

PARCEL DESCRIPTION

A TRACT OF LAND IN THE SOUTHWEST QUARTER OF SECTION 19, TOWNSHIP 39 NORTH, RANGE 2 EAST, W.M., BOUNDED AND DESCRIBED AS FOLLOWS:
ON THE SOUTH BY THE PROJECTION EASTERLY OF THE EAST-WEST CENTERLINE OF BLOCK 2 OF ALL VIEW HEIGHTS, ACCORDING TO THE PLAT THEREOF, RECORDED IN BOOK 8 OF PLATS, PAGE 32, RECORDS OF WHATCOM COUNTY, WASHINGTON; ON THE NORTH BY THE SOUTH BOUNDARY OF HILLTOP ROAD, BEING THE EASTERLY EXTENSION IF THE SOUTHERLY BOUNDARY OF HILLTOP ROAD, AS THE SAME IS SHOWN AND DESIGNATED ON THE AFORESAID PLAT OF ALL VIEW HEIGHTS; ON THE WEST AND EAST BY LINES PARALLEL TO AND 125 FEET AND 250 FEET RESPECTIVELY EAST OF THE EAST LINE OF SAID BLOCK 2, OF ALL VIEW HEIGHTS, AS MEASURED ON THE AFORESAID SOUTH BOUNDARY, AND THE SAID SOUTH BOUNDARY BEING IDENTICAL TO THE NORTH BOUNDARY OF THE TRACT CONVEYED BY EUGENE MCSORLEY AND DALLENE MCSORLEY, HIS WIFE, AND NEWMAN NUBGAARD AND VIOLA NUBGAARD, HIS WIFE, TO DON MOUNT AND LOIS MOUNT IN FEBRUARY, 1955.

SURVEYOR:

CHRISTIE + CHRISTIE
LAND SURVEYING, INC.
222 GRAND AVE STE D
BELLINGHAM, WA 98225
OFFICE: 360.671.8855

GENERAL REQUIREMENTS

- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE "STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION" (WSDOT SPECS.), THE CITY OF FERNDAL DEVELOPMENT STANDARDS (COFDS) AND THE 2012 VERSION OF THE DEPARTMENT OF ECOLOGY STORM WATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (DOE MANUAL). IN CASE OF A CONFLICT BETWEEN PLANS, REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER CONSTRUCTION DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. THROUGHOUT THE PERIOD OF CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING SUB-SURFACE CONDITIONS AND PROPER CONSTRUCTION TECHNIQUES TO PERFORM THE WORK.
- THESE NOTES ARE A PART OF ALL DRAWINGS THAT REFER TO THESE GENERAL NOTES. IN CASE OF CONFLICT THE ORDER OF AUTHORITY SHALL BE FIRST THE DESIGN DRAWINGS, SECOND THESE NOTES, AND THIRD THE SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AND NOTIFY OWNER & ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE APPROXIMATE AND MUST BE VERIFIED.
- CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AS REQUIRED TO PERFORM THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.
- CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE OWNER AND ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE OWNER AND THE ENGINEER OF RECORD.
- THE SURVEYOR SHALL CONSTRUCTION STAKE AS REQUIRED TO ESTABLISH THE LINES, GRADES, SLOPES OR CROSS-SECTIONS AS SHOWN ON THE PLANS OR AS DIRECT BY ENGINEER.
- THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.
- THE CONTRACTOR SHALL REQUEST WITH THE CITY INSPECTOR TO SCHEDULE A FINAL INSPECTION. THE INSPECTOR WILL MAKE A FINAL INSPECTION AND NOTIFY THE CONTRACTOR IN WRITING OF ALL REQUIRED REMEDIATION (IF REQUIRED) IN WHICH THE FINAL INSPECTION REVEALS THE WORK INCOMPLETE OR UNACCEPTABLE. THE CONTRACTOR SHALL IMMEDIATELY TAKE SUCH CORRECTIVE MEASURES AS ARE NECESSARY TO REMEDY THE LISTED DEFICIENCIES.
- BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE CONTRACTOR, OWNER, CITY ENGINEER AND ENGINEER.
- THE CONTRACTOR MUST HAVE A FULL SET OF CITY CONTRACT DOCUMENTS ON THE SITE WHENEVER CONSTRUCTION IS IN PROGRESS. A COPY OF THE APPROVED PLANS MUST REMAIN AT THE JOB SITE DURING THE PROJECT DURATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, TRAFFIC CONTROL, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL HAVE AN APPROVE TRAFFIC CONTROL PLAN. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07.23-PUBLIC CONVENIENCE AND SAFETY, SHALL APPLY.
- PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO THE PRE-CONSTRUCTION MEETING.
- CONSTRUCTION NOISE SHALL BE LIMITED TO BETWEEN 7 A.M. TO 8 P.M., MONDAY THROUGH FRIDAY WEEKEND WORK REQUIRES 2 WEEKS NOTICE WITH NO GUARANTEE OF APPROVAL.
- ALL HARD SURFACED PAVEMENTS MUST BE REPAIRED AT THE CLOSE OF EACH WORKDAY. THE REPAIRS CAN BE TEMPORARY WITH ASPHALT COLD MIX OR PERMANENT WITH HOT MIX ASPHALT OR CONCRETE. ALL REPAIRS SHALL BE ACCORDING TO THE CITY OF FERNDAL DRAWING STANDARDS.
- ALL WORK MUST BE INSPECTED BY A REPRESENTATIVE OF THE CITY OF FERNDAL ENGINEERING DIVISION, AND 24 HOURS NOTICE MUST BE GIVEN PRIOR TO STARTING WORK OR TO SCHEDULE INSPECTIONS IN ACCORDANCE WITH DEVELOPMENT STANDARDS.
- THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDAL PUBLIC WORKS DIRECTOR OF ANY PROPOSED DEVIATION FROM THE APPROVED PLANS PRIOR TO CONSTRUCTION OF THE REVISED IMPROVEMENTS. THE CONTRACTOR SHALL KEEP RECORDS OF ALL DEVIATIONS AND SHALL FORWARD THEM TO THE ENGINEER AND TO THE CITY OF FERNDAL PUBLIC WORKS DEPARTMENT.
- AS-BUILT DATA SHALL BE PROVIDED TO THE CITY OF FERNDAL UPON COMPLETION OF CONSTRUCTION AND PROVIDED TO THE CITY OF FERNDAL DATUM-VERTICAL (NGVD-29) AND HORIZONTAL (NAD 83/91). CONTACT THE CITY FOR MORE INFORMATION ON SUBMITTAL REQUIREMENTS.
- THE CONTRACTOR SHALL CONTACT THE UTILITIES UNDERGROUND LOCATION CENTER AT LEAST 72 HOURS PRIOR TO STARTING CONSTRUCTION. PHONE: 1-800-424-5555. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL OF THE VARIOUS UTILITY COMPANIES TO ARRANGE FOR FIELD LOCATIONS OF ALL EXISTING UTILITY FACILITIES PRIOR TO STARTING CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COSTS INCURRED BECAUSE OF DAMAGE DONE TO EXISTING FACILITIES BY THE CONTRACTOR'S WORK FORCE, INCLUDING COSTS FOR REPAIRS, WHICH WILL BE CONTRACTOR'S SOLE RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EXISTING UTILITIES AND TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE LOCATION OF ANY EXISTING UTILITIES. 6. THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION
- THE CONTRACTOR SHALL OBTAIN REVOCABLE ENCROACHMENT PERMITS FROM THE CITY OF FERNDAL AND/OR WHATCOM COUNTY PRIOR TO COMMENCING WORK WITHIN THE PUBLIC RIGHTS-OF-WAY
- A MINIMUM OF 5-FT. SEPARATION IS REQUIRED BETWEEN THE WET UTILITIES (WATER, SEWER, STORM) SHOWN ON THE PLANS AND UTILITIES (GAS, POWER, CABLE, AND PHONE).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE ONSITE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES
- SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE PRESENT.
- THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE CITY OF FERNDAL PUBLIC WORKS DEPARTMENT AND THE ENGINEER OF RECORD A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE CITY WILL SCHEDULE THE MEETING.
- ALL WORK AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDAL PUBLIC WORKS DEPARTMENT, REPRESENTATIVES FROM THE CITY OF FERNDAL PUBLIC WORKS DEPARTMENT MUST INSPECT ALL WORK IDENTIFIED ON THE PLANS, BOTH PUBLIC AND PRIVATE. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS AS FOLLOW:
 - PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.
 - CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.
 - PLACEMENT OF WATER MAIN AND BACKFILLING OF WATER MAIN TRENCH WITHIN ROAD RIGHTS-OF-WAY OR IN WATERLINE EASEMENT TO BE DEDICATED TO THE CITY OF FERNDAL.
 - PLACEMENT AND BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHTS-OF-WAY, IN EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDAL. OR OTHER PUBLICLY SHARED FACILITIES.
 - GRADING OF PUBLIC OR PRIVATE ROADWAY AT THE COMPLETION OF EXCAVATION TO SUBGRADE, COMPLETION OF BALLAST COURSE PLACEMENT AND COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT.
 - POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC OR PRIVATE ROADWAY.
 - ASPHALT PAVING IN PROGRESS IN PUBLIC OR PRIVATE ROADWAY.
 - OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.
 - END OF MAINTENANCE PERIOD.
- PER CITY STANDARDS AS BUILT DRAWINGS WILL BE REQUIRED AT TIME OF PROJECT COMPLETION THEREFORE FOR ASSURANCE OF ACCURACY THE CITY REQUIRES SURVEY TIES TO CITY MONUMENTS 04 AND 07.
- A 10 FOOT MINIMUM VEGETATED BUFFER SHALL BE INSTALLED WHERE FEASIBLE FROM THE NEW ROADWAY SHOULDERS DOWN GRADIENT WHERE POSSIBLE/FEASIBLE. REFER TO CIVIL DETAIL SHEET(S) AND BMP T5.13 OF THE 2014 STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (SWMWMW).
- ALL DISTURBED AND PROPOSED LANDSCAPE AREAS THAT ARE TO BE DEVELOPED SHALL USE BMP T5.13 OF THE 2014 STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (SWMWMW).

SANITARY SEWER SYSTEM

- THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING SANITARY SEWER IMPROVEMENTS:
 - PIPE BEDDING COFSD SS-1
 - TRENCH BACKFILL COFSD SS-15 & COFSD SS-1 & WSDOT SPEC. 9-03.12
 - SS MANHOLE, TYPE 1-48" WSDOT STD. PLAN B-15.20-01
 - SSMH RING & COVER, TYPE 2 WSDOT STD. PLAN B-30.70-03
 - SS CLEANOUTS COFSD SS-5
 - SIDE SEWERS COFSD SS-6, SS-8 & SS-13
- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF FERNDAL STANDARD SPECIFICATIONS AND DETAILS, AND WSDOT SPECS. SANITARY SEWER SYSTEM INSTALLATION, BOTH PUBLIC AND PRIVATE, IS SUBJECT TO CITY REVIEW AND APPROVAL.
- ALL WORK MUST BE INSPECTED TO THE SATISFACTION OF THE CITY OF FERNDAL. 24 HOUR NOTICE MUST BE GIVEN PRIOR TO STARTING WORK. TESTING OF THE SEWER SYSTEM AND ALL CONNECTIONS TO EXISTING MAINS SHALL BE PERFORMED IN THE PRESENCE AND UNDER THE SUPERVISION OF A CITY OF FERNDAL REPRESENTATIVE. SANITARY SEWERS SHALL BE TESTED AT 5 LBS. FOR 15 MINUTES
- SANITARY SEWER MAINS SHALL BE A MINIMUM 8 INCH DIAMETER PVC PIPE CONFORMING TO WSDOT SPEC 9-05.12(1) AND INSTALLED TO CITY SPECIFICATIONS.
- SANITARY SEWER PIPE BEDDING SHALL BE PEA GRAVEL PER COFSD SS-1. ALL TRENCHES SHALL BE BACKFILLED WITH CLASS B BANK RUN GRAVEL WITHIN CITY RIGHT OF WAY AND TRAVELED WAYS OUTSIDE OF RIGHT OF WAY (ACCESS EASEMENTS) AND SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% MODIFIED PROCTOR. USE OF SUITABLE NATIVE BACKFILL OUTSIDE OF TRAVELED WAY SHALL BE SUBJECT TO APPROVAL BY THE CITY.
- ALL MANHOLES SHALL BE INSTALLED PER CITY OF FERNDAL STANDARD DETAILS AND SHALL BE PRE-CHANNELED. MANHOLE CONES ARE TO BE OFFSET SUCH THAT LADDER RUNGS ARE PARALLEL TO THE FLOW.
- ALL SIDE SEWERS SHALL BE INSTALLED PER CITY OF FERNDAL STANDARD DETAILS SS-6, SS-8 OR SS-13, EXCEPT THAT SINGLE SIDE SEWERS SHALL HAVE A MINIMUM DIAMETER OF 4".
- CONTRACTOR SHALL EXTEND SEWER STUBS 5 FEET BEYOND UTILITY CORRIDOR OR 15 FEET BEYOND RIGHT-OF-WAY LINE.
- EACH SIDE SEWER STUB SHALL BE CAPPED WITH A WATERTIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2" DIA. PVC PIPE (MIN. SCHEDULE 40) WITH THE TOP 18" PAINTED GREEN AND STENCILED WITH THE WORD "SEWER" AND THE PIPE INVERT INDICATED. THE LOCATION MARKER SHALL BE CONNECTED TO THE SERVICE STUB BY A #12 COPPER WIRE.

STORM DRAINAGE

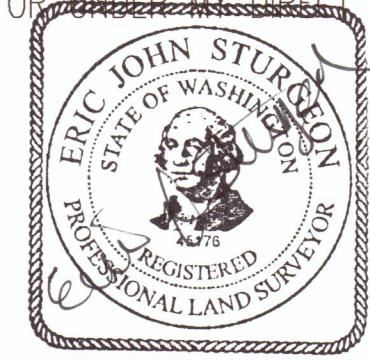
- THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF STORM DRAIN IMPROVEMENTS:
 - CATCH BASINS TYPE 1, 1L OR 2 WSDOT STD. DETAILS B-5.20, B-5.40 OR B-10.20
 - "RESIDENTIAL SERVICE LINE" CATCH BASINS COFSD ST-7
 - THRU-CURB INLET FRAME & GRATE COFSD R-8
 - SIDEWALK DRAINS COFSD ST-15
 - POSITIVE LOT DRAINS COFSD ST-16
 - CHAIN LINK FENCE WITH TOP RAIL WSDOT FS-2
- STORM SEWER PIPE HAVING DIAMETERS GREATER THAN 8" SHALL BE CORRUGATED POLYETHYLENE PIPE (CPEP) OR SOLID WALL POLYVINYL CHLORIDE (PVC) PER SECTION 7-04 OF THE WSDOT SPECS. ALL OTHER STORM SEWER PIPE SHALL BE PVC UNLESS OTHERWISE SPECIFIED ON PLANS.
- ALL DRAINAGE STRUCTURES, INCLUDING THOSE INSTALLED FOR A STORMWATER POND, SHALL HAVE A LOCKING GRATE OR SOLID LOCKING LID.
- ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS".
- CONTROL DENSITY FILL SHALL BE USED IN AREAS WHERE LESS THAN 18" OF COVER IS MAINTAINED OVER THE PROPOSED STORM PIPES (PIPE IS IN ROAD BASE SECTION), AS SHOWN IN THE PLANS. DUCTILE IRON PIPE MAY BE USED FOR STORM PIPES WITH LESS THAN 18" OF COVER IF APPROVED BY THE CITY.
- COVER OVER PIPES SHALL BE MAINTAINED DURING CONSTRUCTION. DEPTH OF COVER REQUIRED SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS AND WILL VARY WITH THE VEHICLE LOADS TRAVELING OVER THE PIPE. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR DAMAGE TO PIPE DURING CONSTRUCTION ACTIVITIES.
- AT THE END OF ALL SITE CONSTRUCTION, THE CONTRACTOR SHALL CLEAN DEBRIS FROM ALL NEW AND AFFECTED CATCH BASINS AND STORMWATER CONVEYANCES. DEBRIS SHALL NOT BE ALLOWED TO ENTER STREAMS OR OFF-SITE STORMWATER SYSTEMS.

UNDERGROUND UTILITIES CONSTRUCTION

- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ENGINEER OF RECORD TO ASSURE ACCURATE AND TIMELY COLLECTION OF ALL REQUIRED AS-BUILT DATA. THIS DATA MUST ACCURATELY REFLECT THE LOCATIONS OF ALL UNDERGROUND UTILITIES, BOTTOM OF PIPE ELEVATIONS, INVERT ELEVATIONS, MANHOLE LOCATIONS, WATER SERVICE TAPS, BLOW-OFF LOCATIONS AND INVERTS OF SERVICE CONNECTIONS (BOTH AT PIPE AND AT PROPERTY LINE). VERTICAL AND HORIZONTAL BENDS, SERVICE BOXES AND METERS, VALVES AND HYDRANTS. CALL THE ENGINEER OF RECORD AT LEAST 48-HOURS BEFORE BURYING UNDERGROUND PIPE TO ASSURE AND FACILITATE REQUIRED AS-BUILT SURVEY.
- THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:
 - NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.
 - WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF DITCHES.
 - TRENCH DEWATERING DEVICES SHALL DISCHARGE INTO SEDIMENT TRAPS OR SEDIMENT PONDS.
 - WHERE PRACTICAL, INSTALL GRAVITY PIPE UTILITIES PRIOR TO INSTALLATION OF OTHER UTILITIES.
- UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FERNDAL DEVELOPMENT STANDARDS.
- TESTING OF NEW WATER AND SANITARY SEWER MAINS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN INSTALLED.
- OPEN CUTTING OF EXISTING ROADWAYS IS ONLY ALLOWED AS APPROVED AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH THE COF STANDARD TRENCH DETAIL.
- POT HOLE ALL EXISTING UTILITIES IS REQUIRED PRIOR TO CONSTRUCTION TO VERIFY DESIGN FEASIBILITY. THE CITY DOES NOT GUARANTEE AS BUILT INFORMATION IN THE CITY DATA BASE IS ACCURATE AND WILL NOT BE HELD RESPONSIBLE IF FIELD MODIFICATIONS ARE REQUIRED BECAUSE POTHOLES WAS NOT DONE PRIOR TO DESIGN.



Electrically signed by
STEVE STAPP
Date: 2020.01.26
19:27:45-07'00'



SURVEYOR'S CERTIFICATION:

"I HEREBY CERTIFY THAT THE IMPROVEMENTS IN MANTHEY SHORT PLAT HAVE BEEN INSPECTED BY A2E INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDAL DEVELOPMENT STANDARDS, THE CITY OF FERNDAL MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE."

OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 2-05-2020.

APPROVED

FEB 04 2020

For Kevin Rantz
CITY OF FERNDAL
PUBLIC WORKS DEPARTMENT

AB = BASED ON SURVEYOR'S AS BUILT DATA

RECORD DRAWINGS

DRAWN BY: SRS CHECKED BY: SRS ISSUE DATE: 1-27-2020	REVISIONS		
	NO.	DATE	DESCRIPTION
	AB	1/27/2020	AS-BUILT

MANTHEY SHORT PLAT
2433 & 2437 HILLTOP RD
Ferndale, WA 98248

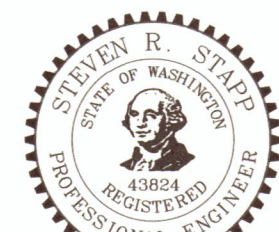
THESE DOCUMENTS
ARE PREPARED FOR
EXCLUSIVE USE BY:
RANDY MANTHEY
2410 HILLTOP RD
Ferndale, WA 98248



PH: 406-426-1966
a2einc.com

ARCHITECTURE
TO
ENGINEERING
A2Einc.com

15 Lupine Circle
Roberts, MT. 59070



Electrically signed by
STEVE STAPP
Date: 2020.01.26
19:27:59-07'00'

SHEET NO.

C.100

GENERAL NOTES

PLAN NO: 17-008

EARTHWORK

1. THE CONTRACTOR SHALL CLEAR, GRUB AND CLEAN UP THOSE AREAS SHOWN ON THE PLANS.
2. THE CONTRACTOR SHALL RAZE, REMOVE AND DISPOSE OF ALL BUILDING AND FOUNDATIONS, STRUCTURES, FENCES AND OTHER OBSTRUCTIONS THAT LIE WHOLLY OR PARTIALLY WITHIN THE PROJECT LIMITS.
3. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL EXISTING UN-COMPACTED OR POORLY COMPACTED FILL SOILS WITHIN THE ROAD PRISM AT THE DIRECTION OF THE ENGINEER.
4. THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT, GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS OR ESTABLISHED BY THE ENGINEER.
5. UNSUITABLE MATERIAL FOUND AND NOT FIT FOR USE AS A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY THE ENGINEER AND REPLACED WITH A SUITABLE BACKFILL MATERIAL.
6. THE ENGINEER IS REQUIRED TO CERTIFY SUBGRADE, IN WRITING, PRIOR TO PAVING.

BASE COURSES & CRUSHED SURFACING

1. GRAVEL BASES AND BALLAST MATERIAL GRADATION SHALL MEET THE CURRENT EDITION OF WSDOT STANDARD SPECIFICATIONS.
2. BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.
3. THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN 1/8 INCH OF FINISHED GRADE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL AND COMPACTION TESTING. PRIOR TO IMPORTING OF MATERIAL FOR BASE AND CRUSHED SURFACING TOP COURSE THE CONTRACTOR SHALL PROVIDE EVIDENCE OF SATISFACTORY PASSING GRADING AND DEGRADATION TEST RESULTS TO THE ENGINEER.

ROAD

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF THE STANDARD STREET SECTION:

A. TYPICAL STREET SECTION

PER PROJECT

B. PCC CURB AND GUTTER

COFSD R-9

C. PCC SIDEWALKS

COFSD R-12 (SEE CONSTRUCTION DOCUMENTS TYP. SECTION)

D. PCC CURB RAMPS

WSDOT STD. DETAIL F-40
2. ROADWAY EXCAVATION WITHIN THE ROADWAY PRISM SHALL BE CUT TO A UNIFORM GRADE. THE COMPLETED SUBGRADE SURFACE SHALL NOT VARY MORE THAN 0.10-FOOT FROM THE LOWER EDGE OF A 15-FOOT STRAIGHTEDGE PLACED ON THE SUBGRADE PARALLEL TO THE CENTERLINE UNLESS APPROVED BY THE ENGINEER.
3. THE OWNER SHALL PROVIDE TO THE ENGINEER A REPORT FROM A QUALIFIED GEOTECHNICAL FIRM CERTIFYING THE COMPACTION OF THE GRAVEL BASE UNDER ALL PAVING AREAS.
4. HOT MIX ASPHALT WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 5-04 OF THE WSDOT SPECS., EXCEPT AS MODIFIED HEREIN. CONNECTION TO EXISTING PAVEMENT SHALL BE TO A STRAIGHT NEATLY-TRIMMED LINE.
5. CRUSHED ROCK SURFACING FOR PAVEMENT SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 9-03.9(3); BALLAST PER SECTION 9-03.9(1).
6. CEMENT CONCRETE SHALL BE CLASS 3000 (WITH AIR ENTRAINMENT) IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 6-02.3(2)B.
7. CEMENT CONCRETE SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH CITY STANDARDS, COFSD R-12.
8. CEMENT CONCRETE DRIVEWAYS SHALL BE 6 INCHES THICK AND CONSTRUCTED WHERE SHOWN ON THE PLANS OR DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH COFSD R-15. A 2-INCH LAYER OF 3/4 INCH DRAIN ROCK SHALL BE USED FOR DRIVEWAY BEDDING.
9. CEMENT CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS DESIGNED BY THE ENGINEER, IN ACCORDANCE WITH WSDOT STANDARDS SPECIFICATIONS, SECTION 8-04 AND COFSD R-9. HANDICAP RAMPS SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS F-40. WHERE NEW CEMENT CONCRETE CURB AND GUTTER IS TO CONNECTION TO EXISTING CURB AND GUTTER, ASSURE THAT NO ABRUPT OFFSETS IN LINE OR GRADE SHALL BE CONSTRUCTED WHICH WILL BE UNSIGHTLY OR IMPEDE FLOW IN THE GUTTER LINE.
10. PAVEMENT:

a. SOIL RESIDUAL HERBICIDE SHALL BE PLACED WITHIN 24 HOURS OF PAVING.

b. A TACK COAT OF ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF ASPHALT.

c. ALL PAVEMENT REPAIR SHALL BE SAW-CUT BEFORE REMOVAL. AR-4000W SHALL BE APPLIED TO ALL EDGES OF EXISTING PAVEMENT. WHERE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING, THE APPLICANT SHALL PROVIDE A SMOOTH TRANSITION FROM EXISTING TO PROPOSED PAVING. CONTRACTOR SHALL COLD PLANE PER DIMENSIONS SPECIFIED ON THE PLANS, AND INSTALL A MINIMUM 2-FOOT WIDE PETROTAC PAVING FABRIC, OR EQUIVALENT, OVER JOINT BETWEEN PAVING LIFTS.

MISC. MATERIALS

1. RIPRAP/QUARRY SPALLS REFER TO: STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION 2012 (M 41-10) SECTION 9-13.6 QUARRY SPALLS
2. FLOWABLE FILL STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION 2012 (M 41-10) SECTION 2-09.3(1)E BACKFILLING
3. GEOFABRIC/GEOTEXTILE TRIAX TX140 GEOGRID OR EQUAL
4. FILTER FABRIC MIRAFI 700X OR EQUAL
5. WINTER CONSTRUCTION OF EMBANKMENTS NO EMBANKMENTS SHALL BE CONSTRUCTED ON FROZEN EARTH MATERIALS. FILL PLACED WHEN THE AMBIENT TEMPERATURE FALLS BELOW 32°F SHALL HAVE A MAXIMUM PARTICLE SIZE OF AT LEAST 2.5 INCHES, AND SHALL CONTAIN LESS THAN 3 PERCENT PASSING THE NO. 200 SIEVE. EACH LAYER OF FILL SHALL BE FREE OF ICE, SNOW, OR FROZEN MATERIALS, AND SHALL BE COMPACTED TO THE REQUIRED DENSITY BEFORE IT FREEZES. ALL FROZEN MATERIAL SHALL BE REMOVED FROM THE TOP OF EMBANKMENTS PRIOR TO PLACING ADDITIONAL MATERIAL. IN NO CASE SHALL THE SCARIFYING OR BREAKING UP OF FROZEN MATERIAL BE ACCEPTED INSTEAD OF REMOVAL. DO NOT ALLOW STOCKPILES OF FILL TO FREEZE; PROTECT WITH INSULATING BLANKETS, HAY, A MINIMUM 6-INCH-THICK LAYER OF SACRIFICIAL FILL, OR OTHER MEANS TO KEEP FILL FROM FREEZING. SIMILAR FROST PROTECTION IS ALSO RECOMMENDED TO PROTECT SUBGRADES AND/OR FILL ALREADY PLACED. IF RUTTING AND/OR PUMPING IS OBSERVED IN FILL FOLLOWING PLACEMENT, THE FILL SHALL BE REMOVED AND REPLACED, AND REVISED ADATION LIMITS CONSIDERED.

SWPPP NARRATIVE

ELEMENT #1: MARK CLEARING LIMITS

CLEARING LIMITS AND NEARBY SENSITIVE AREAS AND THEIR BUFFERS, WILL BE CLEARLY MARKED PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES, WHICH INCLUDES CLEARING AND GRADING. THESE AREAS WILL BE CLEARLY MARKED; BOTH IN THE FIELD AND ONSITE PLANS, TO PREVENT DAMAGE AND OFFSITE IMPACTS. WASHINGTON STATE DEPARTMENT OF ECOLOGY BMP’S CONSIDERED FOR ELEMENT #1 INCLUDE: BMP C101: PRESERVING NATURAL VEGETATION BMP C103: HIGH VISIBILITY PLASTIC OR METAL FENCE

ELEMENT #2: ESTABLISH CONSTRUCTION ACCESS

CONSTRUCTION ACCESS TO THE PROPOSED ONSITE IMPROVEMENTS WILL USE THE EXISTING ENTRANCE AND A POSSIBLE 2ND ENTRANCE WHICH WILL BE A STABILIZED CONSTRUCTION ENTRANCE WHICH WILL BE INSTALLED AT THE END OF THE EXISTING ASPHALT TO MINIMIZE TRACKING OF SEDIMENT AND DEBRIS ONTO THE PAVEMENT. EARTHWORK EQUIPMENT WILL REMAIN WITHIN THE DISTURBED AREA TO THE MAXIMUM EXTENT PRACTICABLE. CONSTRUCTION TRAFFIC THAT WILL ROUTINELY LEAVE THE SITE (E.G. WORK TRUCKS, PERSONAL VEHICLES) SHALL REMAIN ON PAVED SURFACES TO THE MAXIMUM EXTENT PRACTICABLE. PAVED ROADS AND PARKING AREAS SHALL BE CLEANED AT THE END OF EACH DAY. SEDIMENT TRANSPORTED TO ROADS FROM THE SITE SHALL BE SWEEP AND DISPOSED OF AT A CONTROLLED SEDIMENT DISPOSAL AREA ON SITE OR REMOVED OFF-SITE AND DISPOSED AT AN APPROVED FILL SITE. IF STREET WASHING IS NEEDED, IT WILL ONLY OCCUR AFTER SEDIMENT HAS BEEN REMOVED AS DESCRIBED. THE RESULTING WASTEWATER WOULD THEN BE CONTROLLED BY PUMPING IT BACK ON SITE. ALL CONSTRUCTION ACCESS POINTS WILL BE RESTORED TO PRE-CONSTRUCTION OR PROPOSED CONDITIONS. WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #2 INCLUDE: BMP C105: STABILIZED CONSTRUCTION ENTRANCE HOUSEKEEPING/MAINTENANCE BMP: DAILY STREET SWEEPING HOUSEKEEPING/MAINTENANCE BMP: BMP C140 DUST CONTROL

ELEMENT #3: CONTROL FLOW RATES

FLOW RATES SHALL BE CONTROLLED TO THE MAXIMUM EXTENT PRACTICAL. CONTRACTOR SHALL PRESERVE VEGETATED AREAS ON THE SITE AS ALLOWABLE THROUGHOUT THE CONSTRUCTION PROCESS. TEMPORARY SEDIMENT TRAPS OR PONDS MAY BE DESIGNED, LOCATED, AND INSTALLED IF THE PROJECT ENGINEER OR CESCL DEEMS NECESSARY. WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #3 INCLUDE: BMP C241: TEMPORARY SEDIMENT POND

ELEMENT #4 INSTALL SEDIMENT CONTROLS

THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL AND EXISTING VEGETATION WILL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT PRACTICABLE. ELEMENT #1 OF THIS PLAN, INCLUDING IMPLEMENTING PRESERVING NATURAL VEGETATION, WILL HELP RETAIN SOME AREAS IN AN UNDISTURBED STATE. SILT FENCING WILL BE INSTALLED DOWNHILL FROM DISTURBED AREAS TO TRAP AND RETAIN SEDIMENT ON SITE. OTHER SEDIMENT CONTROLS, SUCH AS TEMPORARY SEDIMENT TRAPS, SUMPS, GRAVEL FILTER BERMS, STRAW WATTLES, ETC. MAY BE INSTALLED IF WARRANTED AS CONDITIONS CHANGE ON SITE DURING CONSTRUCTION. WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #4 INCLUDE: BMP C233: SILT FENCE BMP C207: STRAW WATTLE

ELEMENT #5: STABILIZE SOILS

IF CONSTRUCTION OCCURS IN THE DRY SEASON, (5/1 THROUGH 9/30) SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 7 DAYS. IF CONSTRUCTION OCCURS IN THE WET SEASON (10/1 THROUGH 4/30) SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 2 DAYS. WHEN ACTIVE GRADING IS IN PROGRESS, THE DEADLINE FOR SOIL STABILIZATION MAY BE EXTENDED UPON DETERMINING THAT THE LIKELIHOOD OF EROSION IMPACTS IS LOW BASED ON THE TYPE AND AMOUNT OF SOIL EXPOSED, SITE TOPOGRAPHY, POTENTIAL FOR DISCHARGE TO CRITICAL AREAS AND LAKES, AND OTHER FACTORS. IN ADDITION, WEATHER CONDITIONS WILL CONTINUALLY BE MONITORED, INCLUDING BEFORE HOLIDAYS AND WEEKENDS, FOR PURPOSES OF PREPARING THE SITE FOR PREDICTED WEATHER CONDITIONS. BMPS THAT ARE EFFECTIVE IN STABILIZING SOILS AND PROTECTING THEM FROM EXPOSURE TO RAIN AND WIND OR OTHER CLIMATIC CONDITIONS WILL BE IMPLEMENTED THROUGHOUT THE PROJECT. EVALUATION AND MONITORING OF BMP EFFECTIVENESS WILL OCCUR ON A DAILY BASIS. IN ADDITION, IN THE EVENT OF FORECASTED PRECIPITATION EVENTS, ADDITIONAL MEASURES TO STABILIZE SOILS WILL BE TAKEN. BMPS THAT WILL BE CONSIDERED THROUGHOUT CONSTRUCTION INCLUDE BUT ARE NOT LIMITED TO TEMPORARY AND PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, EROSION CONTROL FABRICS AND MATTING, THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED, AND DUST CONTROL. WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #5 INCLUDE: BMP C120: TEMPORARY AND PERMANENT SEEDING BMPC121: MULCHING BMP C122: NETS AND BLANKETS BMP C123: PLASTIC COVERING BMP C124: SODDING BMP C140: DUST CONTROL

ELEMENT #6: PROTECT SLOPES

THERE ARE NO SIGNIFICANT CUT OR FILL SLOPES PROPOSED AS PART OF THIS PROJECT.

ELEMENT #7: PROTECT DRAIN INLETS

NEW STORM DRAIN INLETS ARE NOT PROPOSED AS PART OF THIS PROJECT. OPERABLE STORM DRAIN INLETS ON THE SITE AND WITHIN 500 FEET DOWNSTREAM OF THE CONSTRUCTION AREA ROADS WILL BE PROTECTED SO THAT STORMWATER RUNOFF DOES NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FILTRATION OR OTHER TREATMENT FOR SEDIMENT. STORM DRAIN INLET PROTECTION WILL BE USED TO DETERMINE THE MOST APPROPRIATE INLET PROTECTION DESIGN FOR THE SITE AND THE DOWNSTREAM AREA. INLETS WILL BE INSPECTED WEEKLY AT A MINIMUM AND DAILY DURING STORM EVENTS. INLET PROTECTION DEVICES SHALL BE CLEANED OR REMOVED AND REPLACED BEFORE SIX INCHES OF SEDIMENT CAN ACCUMULATE. CONSTRUCTION ACCESS POINTS AND APPROACHES WILL BE MONITORED AND SWEEP TO MINIMIZE THE POTENTIAL OF SEDIMENT TRANSPORT. IF STREET WASHING OCCURS, THE WASH WASTEWATER WILL BE PUMPED BACK ON SITE. WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #7 INCLUDE: BMP C220: STORM DRAIN INLET PROTECTION

ELEMENT 8: STABILIZE CHANNELS AND OUTLETS

A PERMANENT/TEMPORARY DRAINAGE SWALE/CHANNEL IS PROPOSED AS A PART OF THIS PROJECT. IF A TEMPORARY ON-SITE CONVEYANCE CHANNEL BECOMES NECESSARY, IT WILL BE DESIGNED, CONSTRUCTED, AND STABILIZED TO PREVENT EROSION FROM THE EXPECTED FLOW VELOCITY OF A 2-YEAR, 24-HOUR FREQUENCY STORM. OUTLETS OF ALL CONVEYANCE SYSTEMS WILL BE PROTECTED AND STABILIZED TO PREVENT EROSION OF OUTLETS AND SWALES. OUTLET PROTECTION WILL BE CONSIDERED FOR PURPOSES OF DESIGNING AND IMPLEMENTING THE MOST EFFECTIVE OUTLET PROTECTION APPROACH. WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #8 INCLUDE: BMP C202: CHANNEL LINING BMP C209: OUTLET PROTECTION

ELEMENT #9: CONTROL POLLUTANTS

WASTE MATERIALS GENERATED ON SITE WILL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER; INCLUDING COVERING SOIL STOCKPILES. ROUTINE INSPECTIONS OF THE WASTE MATERIAL STORAGE AREAS WILL BE CONDUCTED TO MAKE SURE THAT LEAKS OR SPILLS DO NOT OCCUR. ANY LEAKAGE OR SPILLS WILL BE CLEANED UP IMMEDIATELY. MAINTENANCE OF HEAVY EQUIPMENT INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, SOLVENT AND DE-GREASING CLEANING AND/OR OTHER ACTIVITIES THAT MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF WILL BE CONDUCTED WITH SPILL PREVENTION MEASURES IN PLACE, INCLUDING CONDUCTING MAINTENANCE ON A TEMPORARY PAD THAT CAN BE USED TO CAPTURE LARGE SPILLS AND THE USE OF DRIP PANS. IN THE EVENT THAT EMERGENCY REPAIRS NEED TO BE PERFORMED AND CLIMATIC CONDITIONS MAY RESULT IN A PRECIPITATION EVENT PRIOR TO THE REPAIR BEING COMPLETED, THE REPAIR AREA, WHICH INCLUDES THE VEHICLE, WILL BE COVERED WITH TARPS OR OTHER PLASTIC SHEETING. DISCHARGES, SPILLS, OR LEAKS WILL BE CLEANED IMMEDIATELY. ALL SPILLS WILL BE REPORTED TO THE DEPARTMENT OF ECOLOGY, SPILL RESPONSE PROGRAM 649-7000. BMPS CONSIDERED FOR ELEMENT #9 INCLUDE: SPILL CLEANUP AND RESPONSE PRACTICES.

ELEMENT #10: CONTROL DE-WATERING

DE-WATERING OF UTILITY TRENCHES MAY BE REQUIRED FOR THIS PROJECT. IF NECESSARY, CLEAN, NON-TURBID DE-WATERING WATER, SUCH AS WELL-POINT GROUND WATER, CAN BE DISCHARGED TO SYSTEMS TRIBUTARY TO STATE SURFACE WATERS, PROVIDED THE DE-WATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF RECEIVING WATERS. THESE CLEAN WATERS SHOULD NOT BE ROUTED THROUGH A STORMWATER SEDIMENT POND. HIGHLY TURBID OR CONTAMINATED DEWATERING WATER FROM CONSTRUCTION EQUIPMENT OPERATION, CONCRETE POUR, OR WORK INSIDE A COFFERDAM SHALL BE HANDLED SEPARATELY FROM STORMWATER. OTHER DISPOSAL OPTIONS, DEPENDING ON SITE CONSTRAINTS, MAY INCLUDE: PUMPING TURBID WATER TO AN ON-SITE SEDIMENTATION POND. INFILTRATION TRANSPORT OFF SITE IN VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS, ON-SITE TREATMENT USING CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES, USE OF A SEDIMENTATION BAG WITH OUTFALL TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DEWATERING.

ELEMENT #11: MAINTAIN BMPS

ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMPS WILL BE INSPECTED BY THE CESCL, AND SHALL BE MAINTAINED, AND REPAIRED BY THE CONTRACTOR TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. MAINTENANCE AND REPAIR SHALL BE CONDUCTED IN ACCORDANCE WITH THE RELEVANT BMP IDENTIFIED IN ELEMENTS #1 THROUGH #10. TEMPORARY EROSION AND SEDIMENT CONTROLS IDENTIFIED ABOVE WILL BE INSPECTED DAILY DURING THE WET SEASON. NEEDED REPAIRS AND MAINTENANCE WILL OCCUR AS SOON AS PRACTICABLE OR, IN THE EVENT OF A FORECAST OF INCLEMENT WEATHER, REPAIRS AND MAINTENANCE WILL OCCUR IMMEDIATELY. TEMPORARY EROSION AND SEDIMENT CONTROL BMPS WILL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED. TRAPPED SEDIMENT WILL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL RESULTING FROM REMOVAL OF BMPS OR VEGETATION SHALL BE PERMANENTLY STABILIZED.

ELEMENT #12: MANAGE THE PROJECT

CONSTRUCTION EXPOSED AREAS DURING THE CLEARING AND GRADING PROCESS WILL BE MULCHED AS PART OF THE CLEARING AND GRADING ACTIVITIES. CLEARING AND GRADING ACTIVITIES WILL OCCUR AFTER THE APPLICABLE PERMITS HAVE BEEN OBTAINED. REVEGETATION OF EXPOSED AREAS AND MAINTENANCE OF THAT VEGETATION WILL OCCUR AS PART OF THE PLANTING PHASE OF THE PROJECT TO BE INSTALLED AFTER SUB-GRADE ROAD BASE MATERIAL HAS BEEN INSTALLED AND PRIOR TO FINAL GRAVEL SURFACING. SEASONAL WORK LIMITATIONS FROM MAY 1 THROUGH SEPTEMBER 30, SOIL WILL NOT BE EXPOSED/UNWORKED FOR 7 DAYS. FROM OCTOBER 1 THROUGH APRIL 30, SOIL WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 2 DAYS. IN ADDITION, WEATHER CONDITIONS WILL CONTINUALLY BE MONITORED INCLUDING BEFORE HOLIDAYS AND WEEKENDS FOR PURPOSES OF PREPARING THE SITE FOR PREDICTED WEATHER CONDITIONS. BMPS THAT ARE EFFECTIVE IN STABILIZING SOILS AND PROTECTING THEM FROM EXPOSURE TO RAIN AND WIND OR OTHER CLIMATIC CONDITIONS WILL BE IMPLEMENTED THROUGHOUT THE PROJECT. INSPECTION AND EVALUATION OF THE EFFECTIVENESS OF THE BMPS WILL OCCUR ON A DAILY BASIS. IN ADDITION, IN THE EVENT OF FORECASTED PRECIPITATION EVENTS, ADDITIONAL MEASURES TO STABILIZE SOILS WILL BE TAKEN. COORDINATION WITH UTILITIES AND OTHER CONTRACTORS THE STORMWATER MANAGEMENT REQUIREMENTS FOR ALL ASPECTS OF THE CONSTRUCTION PROJECT, INCLUDING UTILITIES, WERE CONSIDERED IN PREPARING THE CONSTRUCTION SWPPP. INSPECTION AND MONITORING AS PREVIOUSLY MENTIONED, ALL BMPS WILL BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. IN THE EVENT THAT INSPECTION AND/OR MONITORING REVEALS THAT THE BMPS IDENTIFIED IN THIS CONSTRUCTION SWPPP ARE INADEQUATE, DUE TO THE ACTUAL DISCHARGE OF OR POTENTIAL DISCHARGE OF A SIGNIFICANT AMOUNT OF ANY POLLUTANT, THIS SWPPP SHALL BE MODIFIED, AS APPROPRIATE, IN A TIMELY MANNER. MAINTENANCE OF THE CONSTRUCTION SWPPP THE CONSTRUCTION SWPPP WILL BE RETAINED ON-SITE AND WILL BE UPDATED ON A REGULAR BASIS. MODIFICATIONS TO THE CONSTRUCTION SWPPP WILL BE MADE WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.

ELEMENT #13: PROTECT BMPS

THE FOLLOWING ITEMS SHOULD BE INCORPORATED INTO THE ON-SITE MAINTENANCE PROGRAM TO ENSURE PROPER FUNCTIONALITY OF THE VEGETATED BUFFERS, DISPERSION AREAS AND NATURAL AREAS.

- VEGETATION AND TREES SHOULD NOT BE REMOVED FROM THE NATURAL GROWTH RETENTION AREA, EXCEPT FOR APPROVED TIMBER HARVEST ACTIVITIES AND THE REMOVAL OF DANGEROUS AND DISEASED TREES.
- TRASH OR DEBRIS WHICH IS LOCATED IMMEDIATELY IN FRONT OF THE CATCH BASIN OPENING OR IS BLOCKING INLETING CAPACITY OF THE BASIN BY MORE THAN 10%.
- TRASH OR DEBRIS (IN THE BASIN) THAT EXCEEDS 60 PERCENT OF THE SUMP DEPTH AS MEASURED FROM THE BOTTOM OF BASIN TO INVERT OF THE LOWEST PIPE INTO OR OUT OF THE BASIN, BUT IN NO CASE LESS THAN A MINIMUM OF SIX INCHES CLEARANCE FROM THE DEBRIS SURFACE TO THE INVERT OF THE LOWEST PIPE.
- TRASH OR DEBRIS IN ANY INLET OR OUTLET PIPE BLOCKING MORE THAN 1/3 OF ITS HEIGHT.
- DEAD ANIMALS OR VEGETATION THAT COULD GENERATE ODORS THAT COULD CAUSE COMPLAINTS OR DANGEROUS GASES (E.G., METHANE).
- REFER TO V-4.6 MAINTENANCE STANDARDS FOR DRAINAGE FACILITIES
- THE FACILITY-SPECIFIC MAINTENANCE STANDARDS CONTAINED IN THIS SECTION ARE INTENDED TO BE CONDITIONS FOR DETERMINING IF MAINTENANCE ACTIONS ARE REQUIRED AS IDENTIFIED THROUGH INSPECTION
- REFER TO THE 2014 STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (SWMWW) VOLUME V, V-4.6 MAINTENANCE STANDARDS FOR DRAINAGE FACILITIES FOR ADDITIONAL REQUIREMENT AND RECOMMENDATIONS.

GENERAL SEQUENCING:

- A. INSTALL TEMPORARY FENCING TO PREVENT UNAUTHORIZED ACCESS.

B. INSTALL HIGH VISIBILITY FENCE AND SILT FENCE TO DELINEATE DISTURBANCE LIMITS BEFORE STARTING ANY SOIL DISTURBING OR SEDIMENT GENERATING ACTIVITIES IN AN AREA.

C. INSTALL STABILIZED CONSTRUCTION ENTRANCE(S).

D. GRADE PER PLAN. PHASE WORK TO MINIMIZE DISTURBED AREA SUSCEPTIBLE TO EROSION AT ANY ONE TIME.

E. COVER/STABILIZE ALL AREAS THAT WILL BE UNWORKED IN ACCORDANCE WITH TESC GENERAL NOTES.

F. MAINTAIN BMP MEASURES. SEED ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.

G. REMOVE HIGH VISIBILITY FENCE, SILT FENCE, AND OTHER TESC MEASURES AFTER THE WORK IS COMPLETED AND AS DIRECTED BY THE ENGINEER/OWNER EXCEPT AS NOTED.

APPROVED

FEB 04 2020
Steve Stapp
CITY OF FERNDALE
PUBLIC WORKS DEPARTMENT

AB = BASED ON SURVEYOR’S AS BUILT DATA RECORD DRAWINGS

DRAWN BY:SRS

CHECKED BY:SRS

ISSUE DATE:1-27-2020

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NO.	DATE	DESCRIPTION	
AB	1/27/2020	AS-BUILT	

MANTHEY SHORT PLAT

2433 & 2437 HILLTOP RD

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REGISTERED PROFESSIONAL ENGINEER

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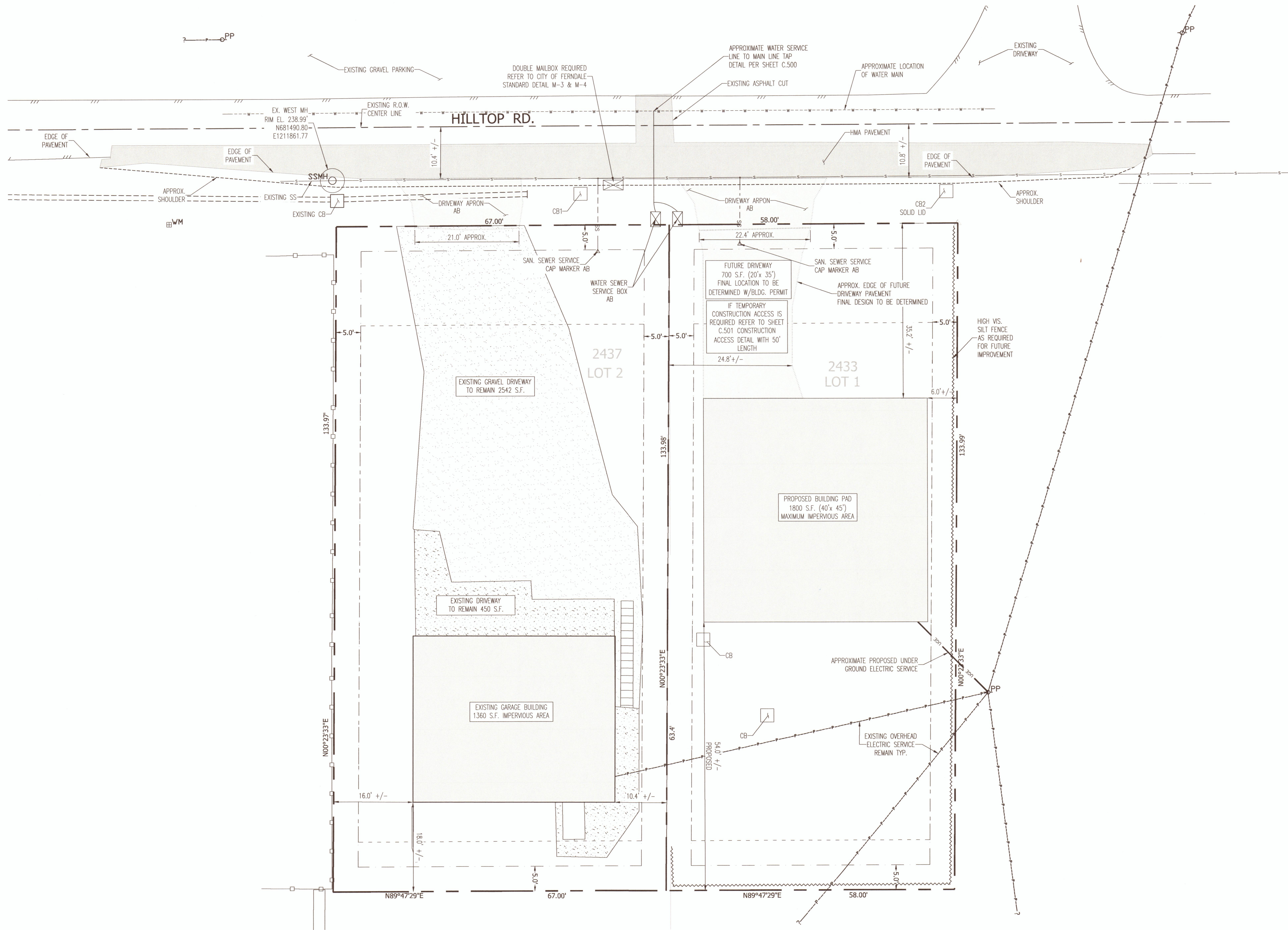
Roberts, MT. 59070

SHEET NO.

C.101

GENERAL NOTES

PLAN NO: 17-008



LINE LEGEND

- PROPERTY LINE
- - - 5 FOOT SETBACK LINE
- - - EXISTING FENCE LINE
- - - OVERHEAD POWER LINE
- - - EXISTING SANITARY SEWER
- - - WATER SERVICE LINE
- - - EDGE OF PAVEMENT
- - - DRIVE/DRAINAGE CONTAINERS
- - - CHECK DMS PER SHEET C-201 (WEIGHT STD PLAN I-3613-41)
- - - HIGH VISIBILITY SILENT FORCE PER SHEET C-201 (WEIGHT STD PLAN I-3613-41)

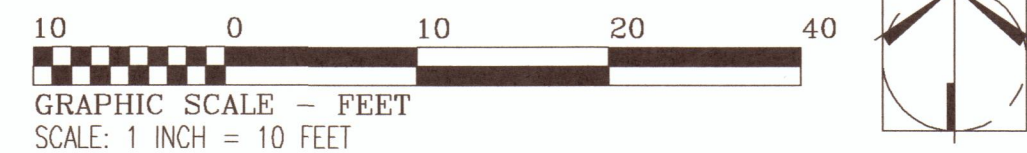
HATCH LEGEND

- [Pattern] PROPOSED/EXISTING BUILDING & DRIVEWAY AREAS
- [Pattern] EXISTING GRAVEL SURFACING
- [Pattern] PROPOSED STORMWATER DISPOSITION FIELD, REFER TO SHEET C-202

SYMBOL LEGEND

- [Symbol] EXISTING TREES/STAMPS
- [Symbol] POWER POLE
- [Symbol] WATER VALVE
- [Symbol] WATER METER
- [Symbol] FIRE HYDRANT
- [Symbol] SANITARY SEWER MANHOLE

SITE PLAN



APPROVED

FEB 04 2020

By *Steve Stapp* Kevin Renz
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PUBLIC WORKS DEPARTMENT

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NOTES:
1. REFER TO SHEET C-100 FOR GENERAL NOTES AND SHEET INDEX

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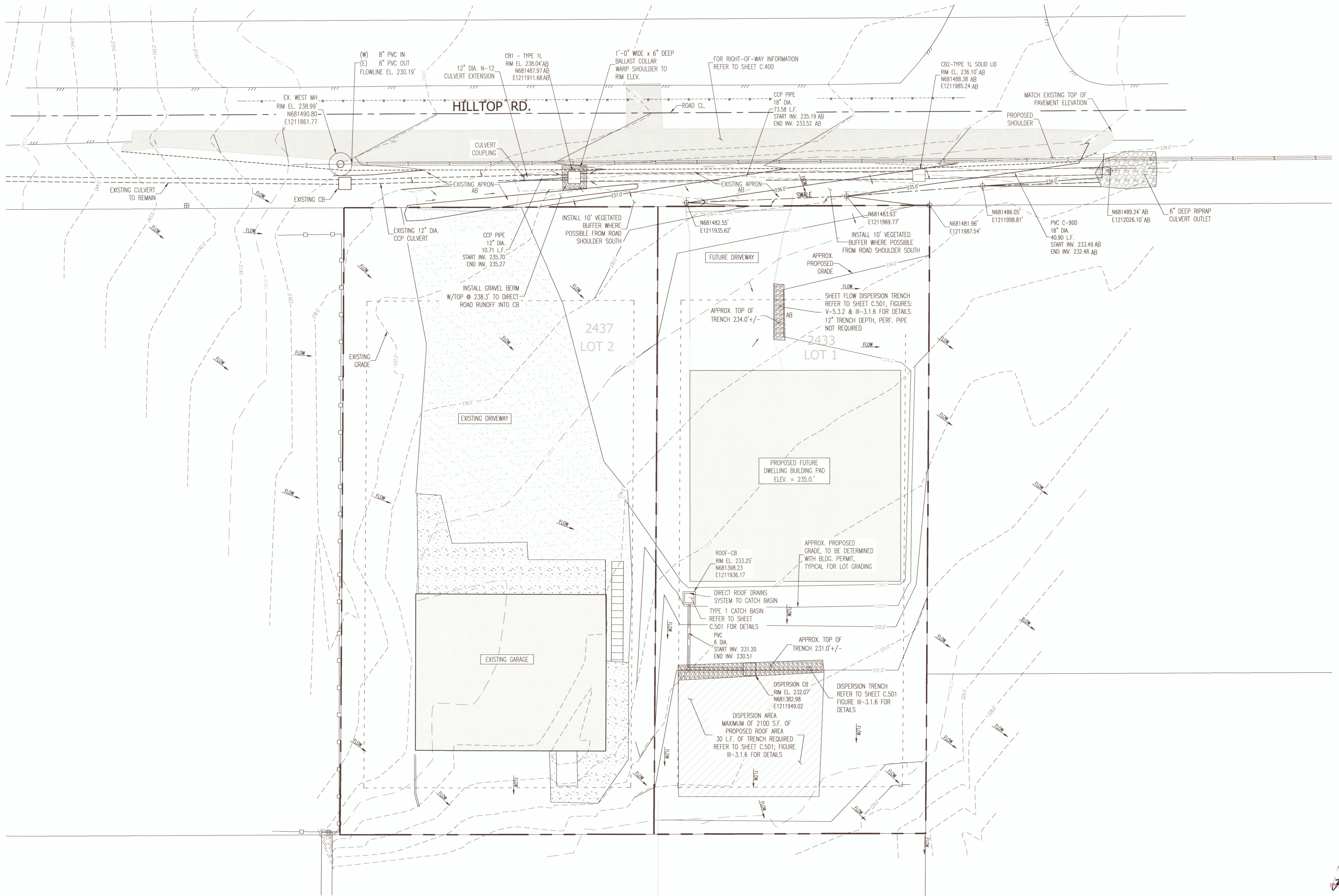
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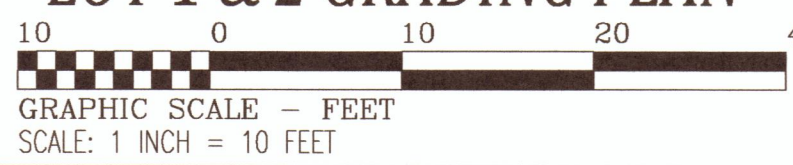
signed by
STEVE STAPP
Date: 2020.02.03
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SHEET NO.
C.200
SITE PLAN
SHEET 3 OF 7

PLAN NO: 17-017



LOT 1 & 2 GRADING PLAN

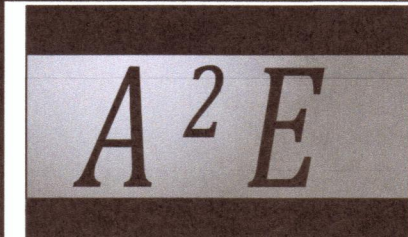


REVISIONS		
NO.	DATE	DESCRIPTION
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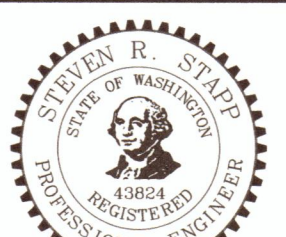
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Digitally signed by STEVE STAPP
Date: 2020.01.31 12:13:00-0700

SHEET NO.
C.300
GRADING PLAN
SHEET 4 OF 7

PLAN NO: 17-017

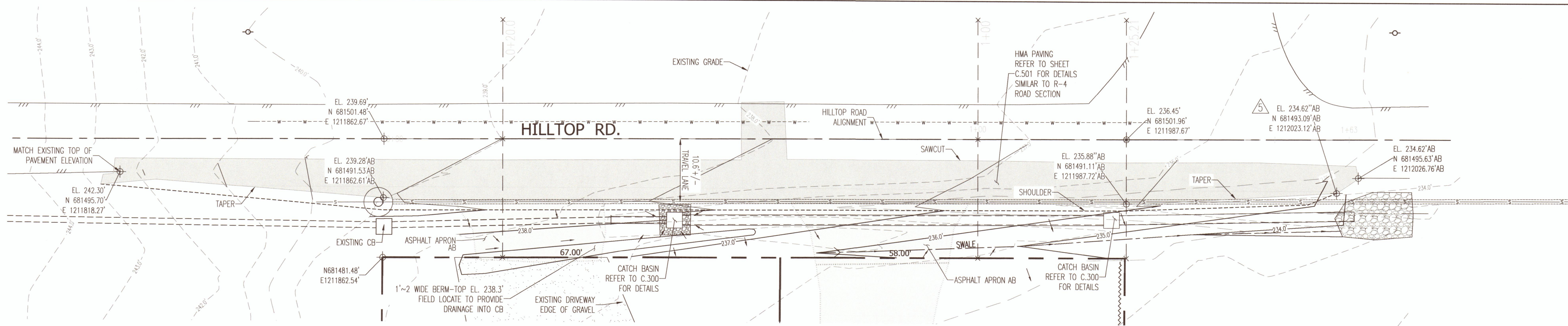
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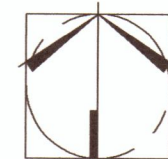
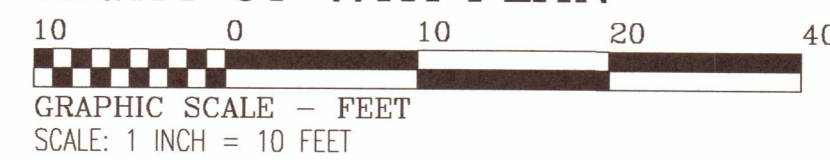
By *Kevin Rere*
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PUBLIC WORKS DEPARTMENT

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NOTES:
1. REFER TO SHEET C.100 FOR GENERAL NOTES AND SHEET INDEX

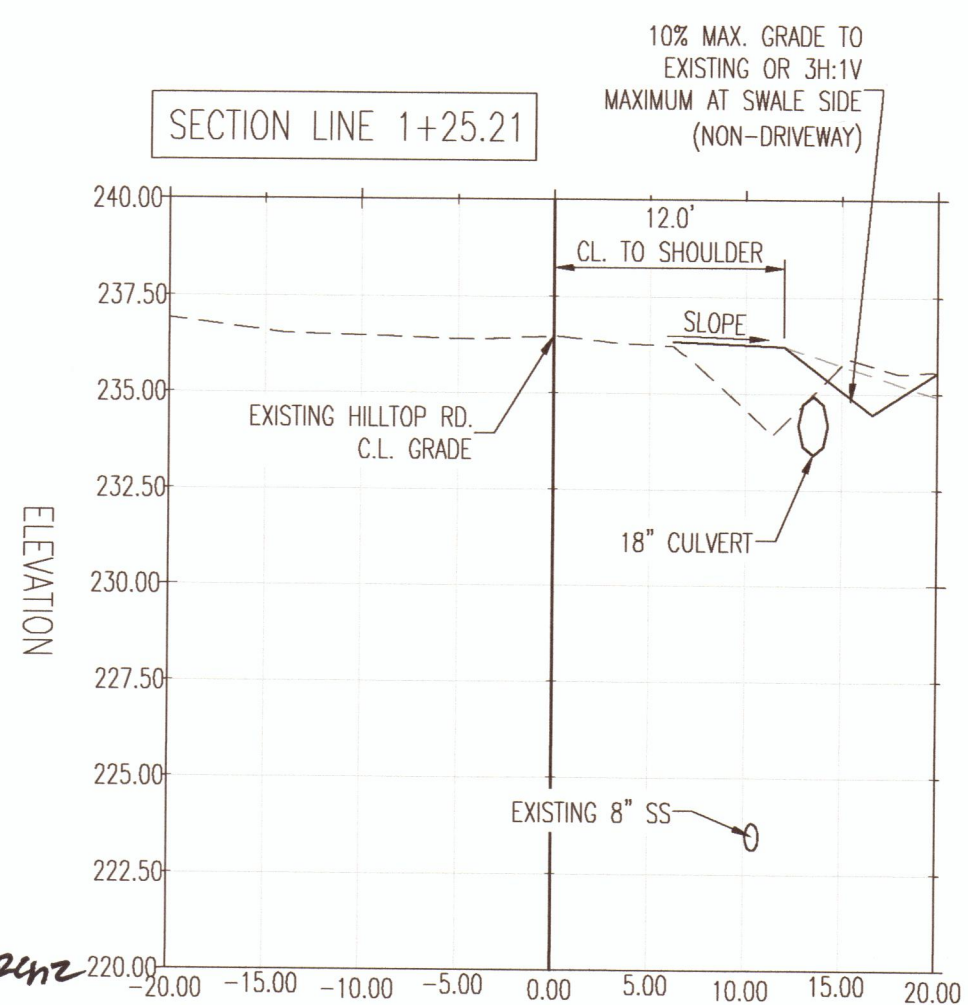
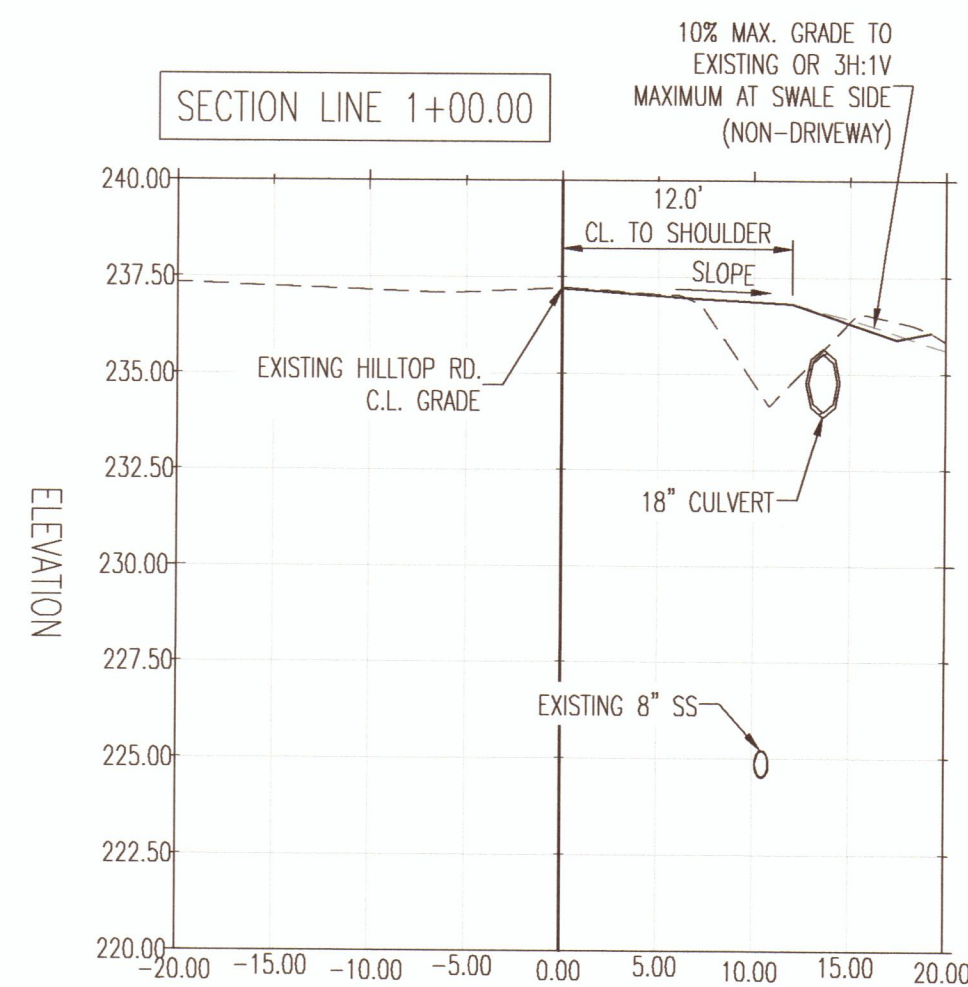
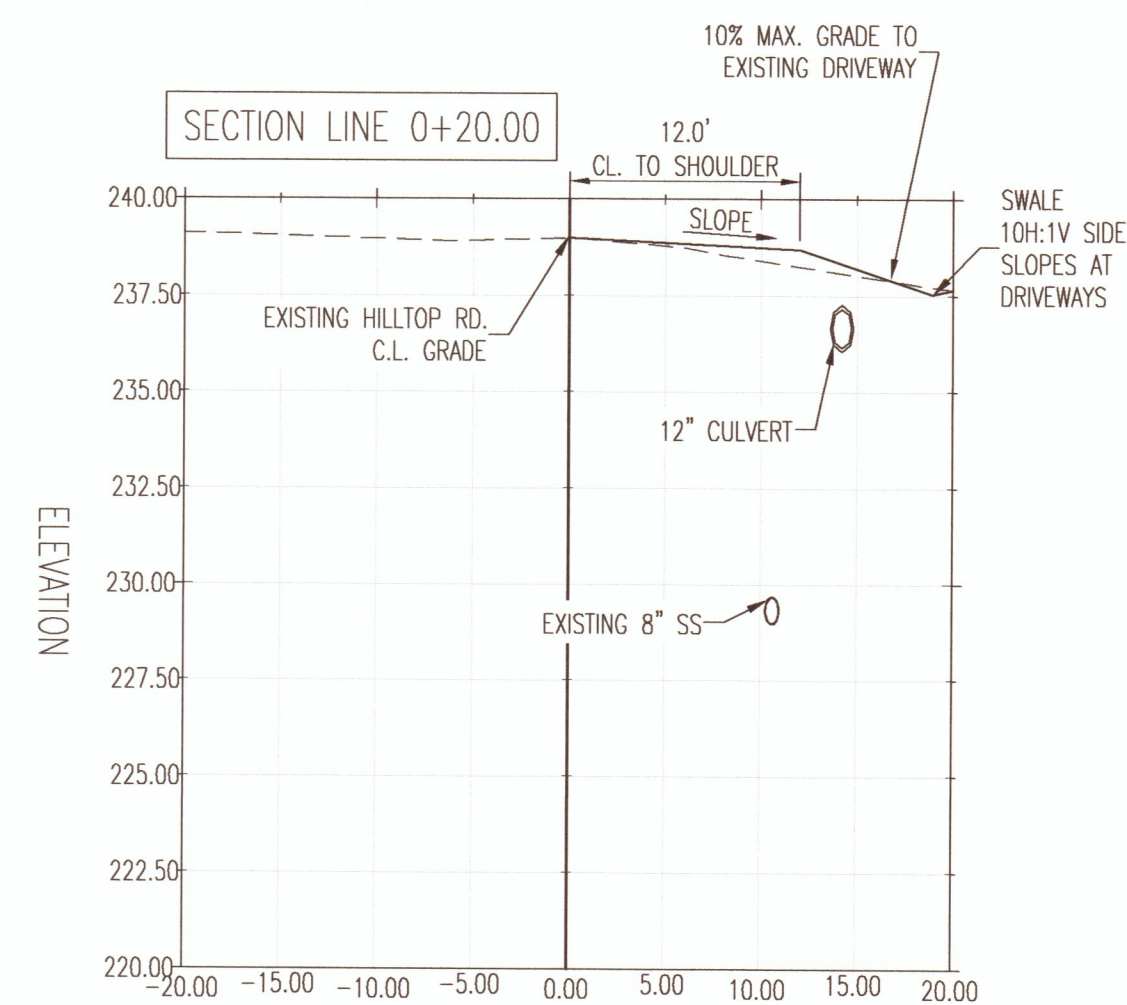
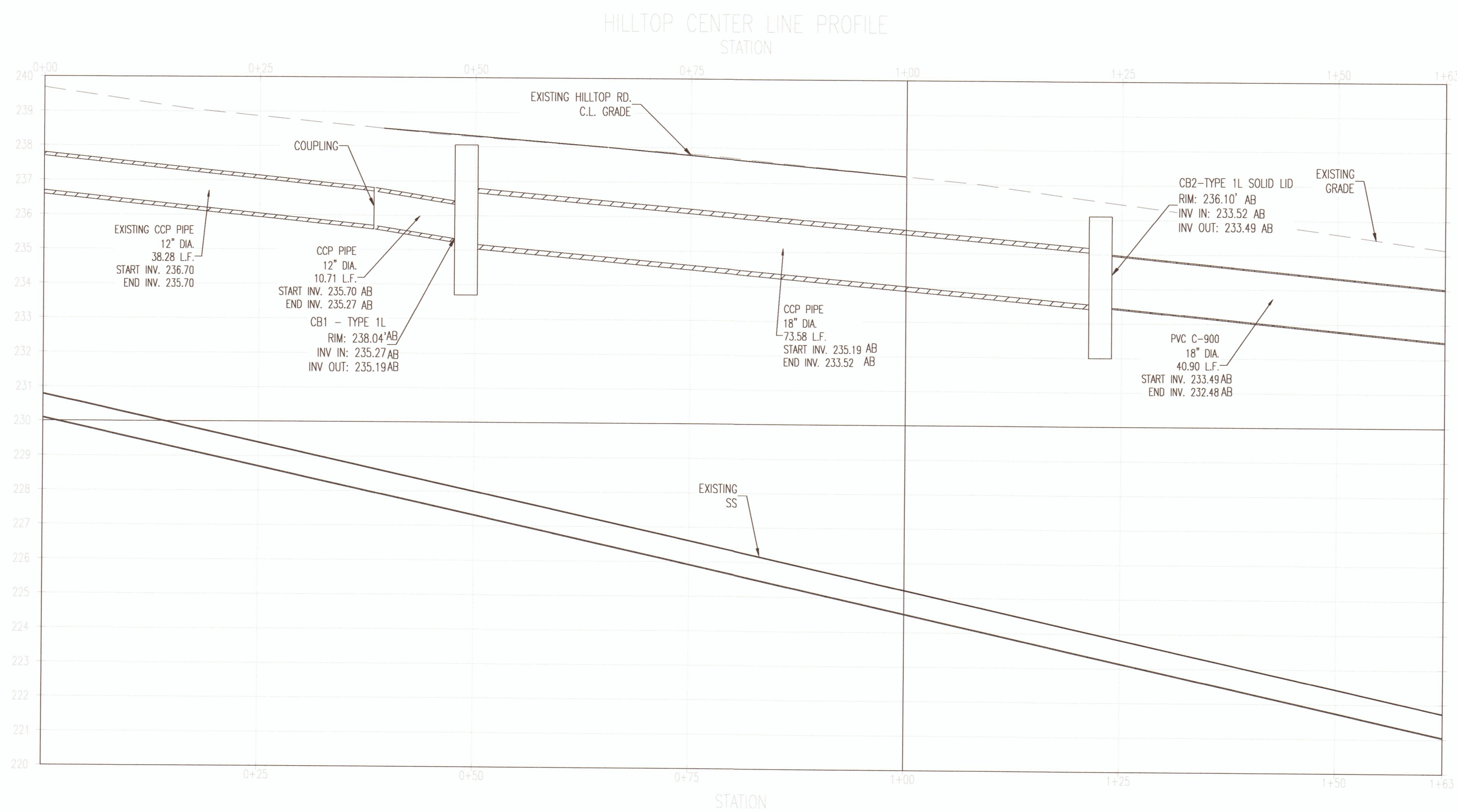


RIGHT-OF-WAY PLAN



NOTE:

PAVEMENT AND ROAD WAY SECTION WILL BE CONSTRUCTED TO CITY R-4 STANDARDS. SUB GRADE MODIFICATION MAY BE REQUIRED TO COMPLY. ALL REQUIRED ROW ROAD WORK IMPROVEMENTS WILL BE INSPECTED AND APPROVED BY A LICENSED GEO-TECHNICAL ENGINEER FOR SUB GRADE CONDITION AND COMPACTION TESTING. CERTIFIED BY THE ENGINEER OF RECORD FOR ALL WORK INSIDE AND OUTSIDE CITY ROW WILL BE REQUIRED PRIOR TO FINAL PROJECT APPROVAL.



APPROVED

FEB 04 2020

Steve Stapp
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PUBLIC WORKS DEPARTMENT

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NOTES:
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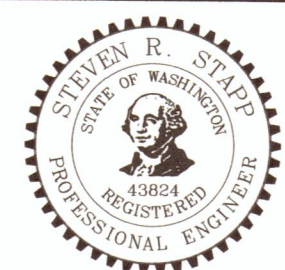
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SHEET NO.
C.400
R.O.W. PLAN

SHEET 5 OF 7

PLAN NO: 17-00B

Figure III-3.1.6
Standard Dispersion Trench with
Notched Grade Board

Revised November 2015

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Figure V-5.3.3
Planting Bed Cross-Section

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Figure V-5.3.2
Sheet Flow Dispersion for Driveways

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Figure V-5.3.1
Sheet Flow Dispersion for Driveways

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Figure V-5.3.1
Sheet Flow Dispersion for Driveways

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NOTES:
1. REFER TO SHEET C.100 FOR GENERAL NOTES AND SHEET INDEX