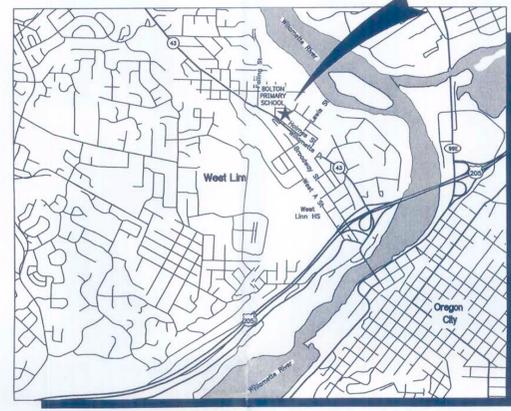
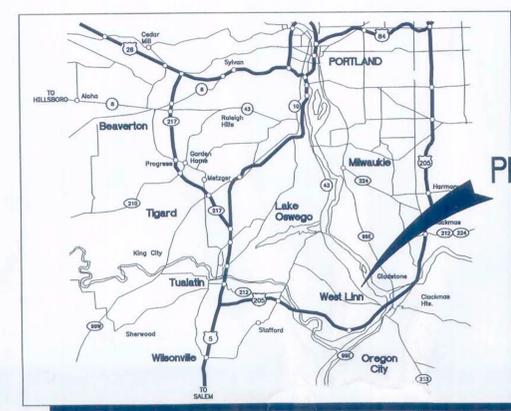
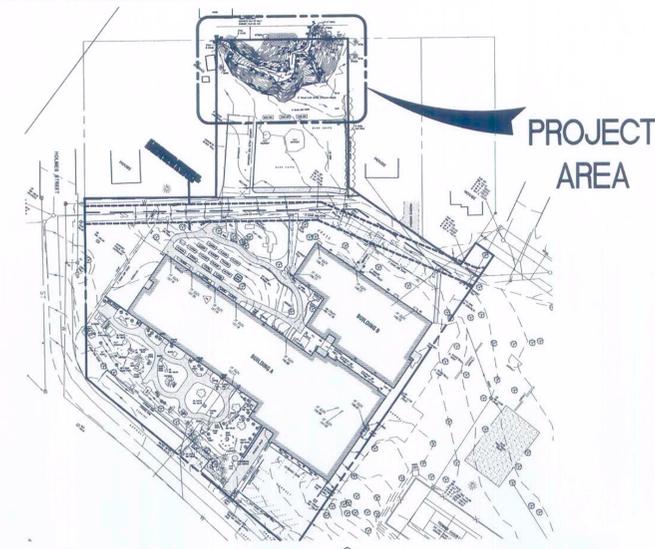


# WEST LINN - WILSONVILLE SCHOOL DISTRICT BOLTON PRIMARY SCHOOL STREAMBANK REMEDIATION



LOCATION MAP  
NOT TO SCALE

VICINITY MAP  
NOT TO SCALE

**PROJECT LOCATION:**

BOLTON PRIMARY SCHOOL  
5933 SW HOLMES STREET  
WEST LINN, OR 97068-2773

**DEVELOPER:**

WEST LINN-WILSONVILLE SCHOOL DISTRICT #3JT  
CONTACT:  
22210 SW STAFFORD RD  
TUALATIN, OREGON 97062  
PHONE: (503) 673-7000  
FAX: (503) 673-7001

**ENGINEERING FIRMS:**

GHD  
CONTACT: PATRICK TORTORA, P.E.  
15575 SW SEQUOIA PARKWAY, SUITE 140  
PORTLAND, OR 97224  
PHONE: (503) 226-3921  
FAX: (503) 226-3926

**PERMITTEE'S SITE INSPECTOR:**

NAME: PATRICK TORTORA, P.E.  
GHD  
15575 SW SEQUOIA PARKWAY, SUITE 140  
PORTLAND, OR 97224  
PHONE: (503) 226-3921  
FAX: (503) 226-3926

EXPERIENCE: PAT TORTORA HAS OVER 18 YEARS EXPERIENCE WITH EARTHWORK PROJECTS INSTALLING, INSPECTING, AND MAINTAINING EROSION CONTROL MEASURES DURING CONSTRUCTION.

**NARRATIVE DESCRIPTIONS:**

**EXISTING SITE CONDITIONS**

- EXISTING DEGRADED SLOPE.

**DEVELOPED CONDITIONS**

- NEW STABILIZED SLOPE.

**NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE**

- TOPSOIL REMOVAL / EXCAVATION: (JUNE - JULY 2012)
- TOPSOIL PLACEMENT: (JULY - AUGUST 2012)
- FINAL STABILIZATION: (AUGUST 2012)

TOTAL SITE AREA = APPROX 3.3 ACRES

TOTAL DISTURBED AREA = 6,184 SF

TOTAL SEEP/SWALE AREA FILLED = 114 SF

**SITE SOIL CLASSIFICATION**

- ALOHA SILT LOAM 3 TO 6 PERCENT SLOPES.

**RECEIVING WATER BODIES**

LOCAL DRAINAGE PUBLIC STORM SYSTEM IN PUBLIC RIGHT-OF-WAY WHICH DRAINS TO BOLTON CREEK.

**PROPERTY DESCRIPTION:**

TAX LOT 22300 TAX MAP 22E30BC IN THE SOUTHWEST ONE QUARTER OF THE NORTH WEST ONE QUARTER OF SECTION 30, TOWNSHIP 2 SOUTH, RANGE 2 EAST, W. M., CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

**DRAWING LIST:**

SHEET INDEX:	
C100	TITLE SHEET
C101	GENERAL NOTES
C102	EROSION CONTROL NOTES
C200	EXISTING CONDITIONS AND DEMOLITION PLAN
C201	SLOPE ANALYSIS
C300	SITE, STORM DRAINAGE, GRADING AND EROSION CONTROL
C400	CROSS SECTIONS & STORM DRAINAGE OUTFALL PROFILE
C500	DETAILS
C501	DETAILS
L101	LANDSCAPE RESTORATION PLANTING PLAN
L801	LANDSCAPE RESTORATION PLANTING DETAILS

*EROSION CONTROL WILL BE REVIEWED WHEN PUBLIC IMPROVEMENT PLANS ARE SUBMITTED TO THE ENGINEERING DEPARTMENT*

This Plan has been Reviewed & Complies w/  
By: *DWD* Date: *6-14-12*  
Building: *IS* *6-14-12*  
Planning: *KL* *6-18-12*  
Engineering: *KL* *6-18-12*  
Parks: *hp* *6-20-12*

**APPROVED PLUMBING PLAN**  
City of West Linn  
Building Department  
DATE: *6-14-12*  
BY: *[Signature]*

**APPROVED PLAN**  
City of West Linn  
Building Department  
DATE: *6-14-12*  
BY: *[Signature]*

**CIVIL SYMBOLS**

	MANHOLE
	DIRECTION OF FLOW
	FENCING
	EROSION CONTROL FENCING
	TREE
	ORDINARY HIGH WATER
	CREEK CENTERLINE
	PROPERTY LINE

**CIVIL ABBREVIATIONS**

AB	ANCHOR BOLT	NIC	NOT IN CONTRACT
AC	ASPHALTIC CONCRETE	NO	NUMBER
ACP	ASBESTOS CONCRETE PIPE	NOM	NOMINAL
		NTS	NOT TO SCALE
BLDG	BUILDING	OC	ON CENTER
BOT	BOTTOM OF TRENCH	OH	OVERHEAD
BOC	BOTTOM OF CONCRETE	OW	OIL/WATER SEPARATOR
BOS	BOTTOM OF SUMP		
CA	COMPRESSED AIR	PD	POLYDRAIN
CB	CATCH BASIN	ERF	PERFORATED STORM DRAIN
CJ	CONSTRUCTION JOINT	PIV	POST INDICATOR VALVE
CI	CURB INLET	POC	POINT OF CONNECTION
CIP	CAST IRON PIPE	PVC	POLYVINYL CHLORIDE
CMP	CORRUGATED METAL PIPE	PVMT	PAVEMENT
CND	CONDUIT	PW	POTABLE WATER
CO	CLEANOUT		
CONC	CONCRETE	R	RADIUS
CR	CONDENSATE RETURN	RCP	REINFORCED CONCRETE PIPE
		RM	RIM ELEVATION
		RR	RAILROAD
DIA	DIAMETER	S	SLOPE
DIP	DUCTILE IRON PIPE	SAN	SANITARY
DS	DOWNSPOUTS	SB	SPLASH BLOCK
DW	DRYWELL	SD	STORM DRAIN
DWG	DRAWING	SS	SANITARY SEWER
		STM	STEAM
E	ELECTRICAL POWER	TB	THRUST BLOCK
ELEV	ELEVATION	TBM	TEMPORARY BENCH MARK
ELEC	ELECTRICAL	TC	TOP OF CURB
EXIST	EXISTING	TEL	TELEPHONE
		TOB	TOP OF BERM
FA	FIRE ALARM	TOC	TOP OF CONCRETE
FD	FOUNDATION DRAIN	TOG	TOP OF GRADE
FF	FINISH FLOOR	TOP	TOP OF PIPE
FH	FIRE HYDRANT	TYP	TYPICAL
FW	FIRE WATER		
		UGND	UNDERGROUND
G	GUTTER	UNO	UNLESS NOTED OTHERWISE
GR	GRADE		
GV	GATE VALVE	VCP	VITRIFIED CLAY PIPE
HB	HOSE BIBB	VT	VENT
HDPE	HIGH DENSITY POLYETHYLENE	VV	VALVE VAULT
HH	HAND HOLE		
HPG	HIGH PRESSURE GAS	WM	WATER METER
HC	HANDICAPPED	WTR	WATER
HYD	HYDRANT	WV	WATER VALVE
IE	INVERT ELEVATION	WWF	WELDED WIRE FABRIC
IRR	IRRIGATION		
L	LENGTH	XFMR	TRANSFORMER
LP	LIGHT POLE		
MAX	MAXIMUM		
MH	MANHOLE		
MIN	MINIMUM		

THIS PLAN REVIEW APPROVAL DOES NOT PREVENT THE FIELD INSPECTOR FROM REQUIRING FURTHER CODE CORRECTIONS.

				Drawn KPT Designer PRT Drafting Check Design Check DMW Approved (Project Director) Date 04/20/12 Scale AS SHOWN		Client WEST LINN WILSONVILLE SCHOOL DISTRICT Project BOLTON PRIMARY SCHOOL Title STREAMBANK REMEDIATION TITLESHEET Contract No. 11456-11012 Original Size Ansi D Drawing No: <b>C100</b>	
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**GENERAL SITE NOTES**

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE SITE CONDITIONS PRIOR TO BIDDING.
2. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THAT NEW FEATURES TIE INTO EXISTING SITE DEVELOPMENT, PAVEMENT JOINTS MATCH CORRECTLY, AND THAT GENERAL DESIGN ELEVATIONS FOR NEW CONSTRUCTION PROVIDE PROPER PAVEMENT AND DRAINAGE SLOPES FROM EXISTING TIE IN POINTS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
3. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH CITY INSPECTOR(S). CONTRACTOR SHALL NOTIFY CITY INSPECTOR(S) 48 HOURS PRIOR TO START OF CONSTRUCTION.
4. DURING CONSTRUCTION, THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL HAVE A MINIMUM OF ONE (1) SET OF PERMIT APPROVED PLANS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
5. UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL. ALL DAMAGE CAUSED BY THE CONTRACTOR SHALL BE RESTORED TO AN "AS GOOD OR BETTER" CONDITION.

**DEMOLITION NOTES**

1. DEMOLITION REQUIREMENTS ARE NOT SHOWN ON THESE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING SCOPE OF DEMOLITION WORK AND FOR EXAMINATION OF EXISTING SITE CONDITIONS. CONTRACTOR SHALL SUBMIT A DEMOLITION PLAN PRIOR TO CONSTRUCTION OUTLINING PROPOSED SCHEDULE, SEQUENCE AND ITEMS TO BE REMOVED. ALL UTILITY LINES AND STRUCTURES SHOWN WITHIN THE LIMITS OF PROJECT SHALL BE PROTECTED OR MODIFIED TO MAINTAIN FUNCTION.
2. DEMOLITION SHALL BE REMOVED EXCEPT THOSE ITEMS INDICATED AS "TO REMAIN". ALL LINES THAT ARE CUT AT LIMITS OF DEMOLITION OR POINTS OF DISCONNECTION WITHIN THE WORK AREA, ARE TO BE CAPPED OR PLUGGED. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TEMPORARY ACCESS.
3. DURING CONSTRUCTION, UTILITY OUTAGES AND ACCESS CLOSURES REQUIRE A MINIMUM OF 24 HOURS NOTICE TO OWNER OR SITE TENANTS.
4. ALL BASE ESC. MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
5. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.
6. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
7. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
8. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAWS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.

**TREE PROTECTION NOTES**

1. CITY ARBORIST SHALL BE ON SITE TO DISCUSS METHODS OF TREE REMOVAL AND TREE PROTECTION PRIOR TO START OF ANY CONSTRUCTION.
2. CONTRACTOR SHALL DESIGNATE WITH THE CITY ARBORIST THE TREE PROTECTION ZONE. WHERE FEASIBLE, THE TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIPLINE OF THE TREE OR GROVE AT A MINIMUM. IF PROPOSED SLOPE MUST BE INSTALLED CLOSER TO THE TREE(S), THE TREE PROTECTION ZONE MAY BE ESTABLISHED WITHIN THE DRIPLINE AREA IF THE CITY ARBORIST DETERMINES THAT THE TREE(S) WILL NOT BE UNDULY DAMAGED.
3. CONTRACTOR SHALL PROVIDE TREE PROTECTION FENCING AT LEAST AT THE EDGE OF THE ROOT ZONE OF EACH TREE OR GROUP OF TREES. THE FENCE SHALL BE PLACED BEFORE CONSTRUCTION STARTS AND REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE. THE FENCE SHALL BE FOUR (4) FOOT TALL ORANGE PLASTIC OR SNOW FENCE.
4. CONTRACTOR SHALL CLEARLY MARK ALL TREES TO BE REMOVED WITH CONSTRUCTION FLAGGING, TREE-MARKING PAINT, OR OTHER METHODS APPROVED IN ADVANCE BY THE CITY ARBORIST.
5. CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT WITHIN THE TREE PROTECTION ZONE.
6. CONTRACTOR SHALL AVOID EXCAVATION WITHIN THE TREE PROTECTION ZONE IF ALTERNATIVES ARE AVAILABLE. IF EXCAVATION IS UNAVOIDABLE WITHIN THE TREE PROTECTION ZONE, THE CITY ARBORIST SHALL EVALUATE THE PROPOSED EXCAVATION TO DETERMINE METHODS TO MINIMIZE THE IMPACTS TO TREES. THIS CAN INCLUDE TUNNELING, HAND DIGGING, OR OTHER APPROACHES. ALL CONSTRUCTION WITHIN THE TREE PROTECTION ZONE SHALL BE UNDER THE ON-SITE TECHNICAL SUPERVISION OF THE CITY ARBORIST.
7. CITY ARBORIST TO MONITOR CONSTRUCTION ACTIVITIES AND PROGRESS, AND PROVIDE WRITTEN REPORTS TO THE DEVELOPER AND THE CITY'S PROJECT PLANNER AT REGULAR INTERVALS.

**GRADING NOTES**

1. SURVEY OF EXISTING CONDITIONS PREPARED BY COMPASS ENGINEERING DATED 1/9/2012. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL SURVEY DATA. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING WORK LIMITS, RIGHT-OF-WAY LINES, SLOPE EASEMENTS, AND ALL HORIZONTAL AND VERTICAL CONTROL PRIOR TO CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND SHALL ARRANGE FOR STAKING WITH A LICENSED SURVEYOR. STAKING WILL BE REVIEWED BY OWNER FOR CONFORMANCE TO DESIGN PRIOR TO CONSTRUCTION.
3. ALL GRADES BETWEEN SPOT ELEVATIONS SHALL HAVE UNIFORM SLOPE UNLESS OTHERWISE INDICATED. MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING WALLS AND DOORS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION. ADEQUATE SHORING BRACING, TIES, AND SUPPORTS SHALL BE USED TO PROVIDE PROPER TEMPORARY INTEGRITY DURING ALL PHASES OF CONSTRUCTION.
5. UNLESS OTHERWISE NOTED ON THE PROJECT LANDSCAPE PLAN, ALL EXISTING LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE HAND RAKED SMOOTH AND RETURNED TO ORIGINAL EXISTING CONDITIONS. DISTURBED LANDSCAPED AREAS SHALL RECEIVE BARK DUST AND REPLACEMENT PLANTINGS. DISTURBED NATURAL AREAS SHALL BE HYDROSEEDED TO REPLACE NATIVE COVER. DISTURBED GRAVEL AREAS SHALL RECEIVE REPLACEMENT GRAVEL OR CRUSHED ROCK SURFACING.
6. ALL DITCHES, SWALES, GUTTERS, ETC. SHALL BE CONSIDERED ACTIVE STORM CONVEYANCES UNLESS OTHERWISE INDICATED. CONTRACTOR IS RESPONSIBLE FOR ADDRESSING STORM WATER DRAINAGE AND DEWATERING OF WORK AREAS DURING CONSTRUCTION.
7. DURING WET WEATHER PERIODS, CONTRACTOR IS RESPONSIBLE FOR SEQUENCING CONSTRUCTION IN A MANNER TO MINIMIZE IMPACT ON OPEN EARTHWORK AND COMPACTION OPERATIONS.
8. ALL EXISTING MONUMENTS SHALL BE PROTECTED DURING CONSTRUCTION. IF ANY MONUMENTS ARE DISTURBED OR DESTROYED DURING CONSTRUCTION, CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED LAND SURVEYOR TO RESTORE THE MONUMENT TO ITS ORIGINAL CONDITION AND FILE THE NECESSARY SURVEYS AS REQUIRED BY STATE LAW.
9. COMPLETELY COVER ANY SOIL STOCKPILES WITH 6 MIL BLACK PLASTIC AND PROVIDE RESTRAINTS TO HOLD PLASTIC IN PLACE. MONITOR PLASTIC COVER AS PART OF CONTINUOUS EROSION CONTROL PLAN. PLACE SILT FENCE COMPLETELY AROUND STOCKPILE.

**UTILITY NOTES**

1. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM RECORD DRAWINGS AND INTERPOLATION OF PHYSICAL EVIDENCE ON THE SITE AND ARE SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR.
2. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION UNDER THIS SECTION OR ANY OTHER SECTION.
3. THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, OR FITTING REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE AND WORKING SYSTEM.
4. CONTRACTOR SHALL COORDINATE A UTILITY LOCATE 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION FOR LOCATION MARK-UP OF ALL EXISTING UTILITIES IN THE RIGHT-OF-WAY, ON SCHOOL PROPERTY AND ON PRIVATE PROPERTY. CONTRACTOR SHALL COORDINATE THE UTILITY LOCAL WITH MUNICIPALITY HAVING JURISDICTION FOR ALL UTILITY WORK WITHIN A PUBLIC RIGHT-OF-WAY. INFORM ENGINEER IMMEDIATELY IF LOCATE INDICATES THAT EXISTING UTILITIES ARE DIFFERENT THAN SHOWN ON DRAWINGS.
5. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES, FEATURES, AND STRUCTURES LOCATED ON THE SITE. LOCATE, PROTECT, AND AVOID DISRUPTION OF ALL ABOVE AND BELOW GRADE UTILITIES DURING CONSTRUCTION.
6. ALL UTILITY CONSTRUCTION ON PRIVATE PROPERTY SHALL CONFORM TO THE LATEST EDITION OF THE STATE OF OREGON PLUMBING SPECIALTY CODE. ALL UTILITY CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE STANDARD REQUIREMENTS OF THE MUNICIPALITY HAVING JURISDICTION.
7. ALL BURIED LINES TO HAVE 2 FEET MINIMUM COVER, UNLESS NOTED OTHERWISE.
8. SEE LANDSCAPE DRAWINGS FOR PLANTING AND IRRIGATION LINES.
9. ALL EXISTING UTILITIES AND TIE-IN POINTS SHOULD BE CONSIDERED ACTIVE UTILITIES UNLESS OTHERWISE INDICATED.

**SUBMITTALS**

1. THE SUBMITTALS SHALL BE PROPERLY BOUND WITH SECTIONS CLEARLY IDENTIFIED. SUBMITTALS FOR EACH SECTION NEED TO BE COMPLETE. PARTIAL SUBMITTALS FOR A SECTION SHALL BE RETURNED UNREVIEWED.
2. THE SUBMITTALS SHALL CONTAIN PERFORMANCE DATA AND TECHNICAL SPECIFICATIONS ON ALL MATERIALS AND EQUIPMENT TO BE USED ON THE PROJECT.
3. SHOP DRAWINGS SHALL BE INCLUDED WITH THE SUBMITTALS WHERE SPECIFICALLY REQUESTED IN THE SPECIFICATIONS, WHERE NECESSARY TO DETERMINE CLEARANCE, WHERE THE CONTRACTOR PROPOSES ALTERNATE EQUIPMENT OR MATERIAL ARRANGEMENTS, AND WHEN REQUESTED BY THE OWNER.
4. ALL SHOP DRAWINGS MUST BE REVIEWED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO BEING SUBMITTED TO THE ENGINEER. ANY SHOP DRAWINGS SUBMITTED WITHOUT CONTRACTOR'S APPROVAL STAMP SHALL BE REJECTED.
5. REVIEW OF SUBMITTALS OR SHOP DRAWINGS BY THE OWNER AND ENGINEER DOES NOT RELIEVE THE CONTRACTOR FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS SPECIFICALLY WRITTEN APPROVAL HAS BEEN REQUESTED FOR A GIVEN DEVIATION OR DESIGN EXCEPTION.
6. BY SUBMITTING, THE CONTRACTOR/SUPPLIER CERTIFIES THAT THE MATERIALS OR EQUIPMENT PROPOSED IS SATISFACTORY FOR THE APPLICATION INTENDED.
7. FABRICATION OF MATERIALS AND INSTALLATION OF EQUIPMENT IS NOT AUTHORIZED PRIOR TO APPROVAL OF SHOP DRAWINGS AND VENDOR DATA.
8. ALTERNATE ITEMS INSTALLED WITHOUT THE OWNERS APPROVAL SHALL BE REPLACED WITH THE SPECIFIED MATERIALS AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY THAT ALTERNATE ITEMS OR PROCEDURES WILL MEET THE JOB REQUIREMENTS AND IS RESPONSIBLE FOR COST OF REDESIGN AND OF MODIFICATION TO THIS AND OTHER PARTIES' WORK CAUSED BY ALTERNATE ITEMS FURNISHED UNDER WORK OF THIS SECTION.

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0		ISSUE FOR BID AND PERMIT	KPT	PRT	DMW	04/20/12

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Drafting Check		Design Check	DMW
Approved (Project Director)		Date	04/20/12
Scale	AS SHOWN	This Drawing shall not be used for Construction unless Signed and Sealed For Construction	

Client **WEST LINN WILSONVILLE SCHOOL DISTRICT**  
Project **BOLTON PRIMARY SCHOOL**  
Title **STREAMBANK REMEDIATION GENERAL NOTES**  
Contract No. **11456-11012**

Original Size **C101**  
Ansi D Drawing No: **C101**  
Rev: \_\_\_\_\_ of \_\_\_\_\_

**LOCAL AGENCY EROSION CONTROL NOTES:**

- ALL EROSION, SEDIMENT, AND POLLUTION CONTROL PLAN (ESPCP) MEASURES SHALL BE INSTALLED AS PER THE EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (CLACKAMAS COUNTY WATER ENVIRONMENT SERVICES REVISED DECEMBER 2000).
- PRIOR TO GROUND BREAKING TEMPORARY ESCP MEASURES SHALL BE INSTALLED, INSPECTED, AND APPROVED BY A CITY OF WEST LINN INSPECTOR BEFORE STARTING GROUND DISTURBING ACTIVITIES. CONTACT THE CITY AT 503-722-5509 24 HOURS IN ADVANCE FOR AN INSPECTION.
- ESCP MEASURES SHALL NOT BE REMOVED UNTIL PERMANENT LANDSCAPING HAS BEEN INSTALLED AND FINAL INSPECTION HAS BEEN REQUESTED AND APPROVED BY A CITY OF WEST LINN INSPECTOR.
- INSPECTIONS MAY BE REQUESTED BY TELEPHONING CITY OF WEST LINN ONE DAY PRIOR TO THE TIME OF INSPECTION. NO HOLIDAYS OR WEEKENDS.
- APPROVAL OF THIS ESCP PLAN DOES NOT CONSTITUTE APPROVAL OF PERMANENT OR DRAINAGE DESIGN (I.E. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
- THE IMPLEMENTATION OF THIS ESCP AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESCP FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR AND OWNER UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- THE BOUNDARIES OF THE CLEARING LIMITS SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION.
- THE ESCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESCP FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- ESCP FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF EVERY TWO WEEKS OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
- EXPPOSED SOILS THAT REMAIN UNWORKED FOR 14 DAYS OR MORE SHALL BE IMMEDIATELY PROTECTED BY APPROPRIATE GROUND COVER. DISTURBED LAND THAT WILL REMAIN UNWORKED FOR 2 MONTHS OR LONGER SHALL ALSO BE SEEDED WITH AN APPROVED SEED MIXTURE.
- PUBLIC STREETS WILL BE SWEEP DAILY, IF NECESSARY, TO ALLEVIATE SEDIMENT DISCHARGE TO THE STORM WATER MANAGEMENT SYSTEM. UNFILTERED WASH WATER CANNOT BE DISCHARGED TO STORM DRAINS.
- ALL EROSION CONTROL SEEDING FOR SITE STABILIZATION WILL BE PERFORMED NO LATER THAN SEPTEMBER 1ST TO ALLOW TIME FOR VEGETATIVE ESTABLISHMENT PRIOR TO THE ONSET OF THE WET WEATHER SEASON.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THEY ARE NO LONGER NEEDED.
- TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE REPAIRED AND PROTECTED WITH ADEQUATE GROUND COVER (2" STRAW, COMPOST, MULCH, ETC.)
- SEEDING SHALL BE SUPPLIED WITH ADEQUATE MOISTURE. SUPPLY WATER AS NEEDED. WATER SHOULD BE CONTROLLED TO PREVENT RUNOFF. AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT EROSION SHALL BE RESEDED AS SOON AS AREAS ARE IDENTIFIED.
- DISTURBED AREAS OF SLOPE GREATER THAN 2:1 WILL BE STABILIZED THROUGH SEEDING AND THE INSTALLATION EROSION BLANKET.
- THE PROPOSED EROSION CONTROL MEASURES ARE A MINIMUM BEST MANAGEMENT PRACTICE. THE CONTRACTOR MAY BE REQUIRED TO MAKE ADDITIONAL EROSION CONTROL MEASURES TO ENSURE THAT NO SEDIMENT LADEN WATER EXITS THE SITE OR ENTERS THE EXISTING STORMWATER SYSTEM.
- IN THE CASE OF STABILIZATION SEEDING AND PLANTINGS FOR SWALES & SLOPES, IT IS THE CONTRACTORS RESPONSIBILITY TO SEQUENCE THE WORK SUCH THAT THE PLANTINGS ARE ESTABLISHED AS FAR AS POSSIBLE PRIOR TO OCTOBER 1.
- CONTRACTOR SHALL DESIGNATE AN ONSITE EROSION & SEDIMENT CONTROL INSPECTOR AND SHALL SUBMIT THE NAME TO THE OWNER'S REPRESENTATIVE FOR SUBMITTAL TO DEQ AS PART OF THE DEQ 1200C PERMIT REQUIREMENTS.
- AN EROSION AND SEDIMENT CONTROL PERMIT HAS BEEN ISSUED BY OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ 1200C PERMIT). CONTRACTOR IS RESPONSIBLE FOR ADMINISTRATION AND CONFORMANCE OF ALL EROSION AND SEDIMENT CONTROL REQUIREMENTS STIPULATED IN THIS PERMIT INCLUDING MAINTENANCE & MONITORING.
- A MINIMUM OF ONE WATER TRUCK IS REQUIRED ON SITE AT ALL TIMES.

**STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES (DEQ):**

- HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3))
- ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS.
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS.
- RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION. (SCHEDULE B.2.A)
- ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A 8.A)
- THE ESCP MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE MEASURES AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS. (SCHEDULE A.8.C.II.(1)(C))
- SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISIONS TO DEQ OR AGENT. (SCHEDULE A.12.C.III)
- PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A 8.C.II.(1)(D))
- IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1) & (2))
- PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.B.III(1) AND A.7.B.III(3))
- EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS. (SCHEDULE A.7.D.I AND A.8.C)
- ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS. (SCHEDULE A.8.C.II.(2))
- ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
- PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SCHEDULE A 7.D.II.(1) AND A.8.C.(4))
- WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.D.II.(3))
- USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
- IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCH A 7.E.III)
- USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A 7.B.II)
- THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.III)

- IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.D)
- TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A 7.B)
- AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A 7.E.II.(2))
- CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER. (SCHEDULE A.7.A.I)
- SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I)
- OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT. AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.II)
- CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
- WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
- THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II)
- THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
- PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
- PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. HOWEVER, DO REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BY TEMPORARY BMPS. (SCHEDULE A.7.B.II(2) AND A.8.C.III)

**ATTENTION EXCAVATORS:**

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS BEFORE COMMENCING ANY EXCAVATION.

TEMPORARY/PERMANENT SEED MIX:  
SEE LANDSCAPE PLANS AND SPECIFICATIONS.

**INSPECTION FREQUENCY:**

SITE CONDITION	MINIMUM FREQUENCY
1. ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING. AT LEAST ONCE EVERY TWO WEEKS, REGARDLESS OF WHETHER OR NOT RUNOFF IS OCCURRING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3. INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	ONCE EVERY TWO (2) WEEKS.
4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.

- HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE EROSION CONTROL INSPECTOR.
- ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200 C PERMIT REQUIREMENTS.
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ 1200 C PERMIT REQUIREMENTS.
- CHANGES TO THE APPROVED SEC PLAN MUST BE SUBMITTED TO DEQ IN THE FORM OF AN ACTION PLAN.

**BMP MATRIX FOR CONSTRUCTION PHASES:**

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S.

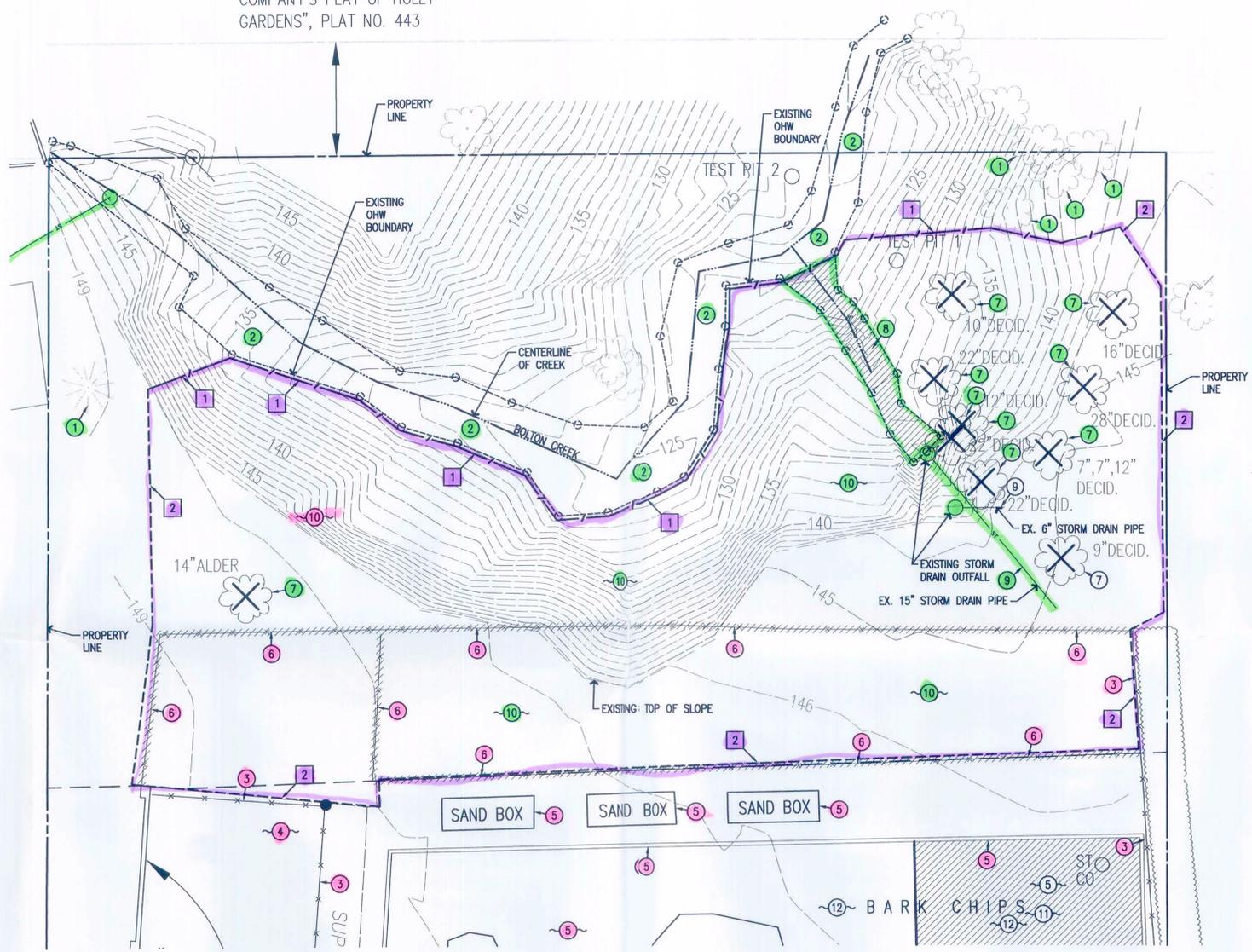
	CLEARING	MASS GRADING	UTILITY INSTALLATION	STREET CONSTRUCTION	FINAL STABILIZATION	WET WEATHER (OCT. 1 - MAY 31)
<b>EROSION PROTECTION</b>						
<b>PRESERVE NATURAL VEGETATION</b>	**X	X	X		X	X
<b>GROUND COVER</b>					X	
<b>HYDRAULIC APPLICATIONS</b>						
<b>PLASTIC SHEETING</b>						
<b>MATTING</b>		X			X	
<b>DUST CONTROL</b>	X	X	X		X	
<b>TEMPORARY / PERMANENT SEEDING</b>		X			X	
<b>BUFFER ZONE</b>						
<b>OTHER:</b>						
<b>SEDIMENT CONTROL</b>						
<b>SEDIMENT FENCE (PERIMETER)</b>	X	X	X			X
<b>SEDIMENT FENCE (INTERIOR)</b>						
<b>STRAW WATTLES</b>						
<b>FILTER BERM</b>						
<b>INLET PROTECTION</b>						
<b>CURB SEDIMENT TRAPS</b>						
<b>DEWATERING</b>						
<b>SEDIMENT TRAP</b>						
<b>COMPOST BLANKET</b>						
<b>OTHER:</b>						
<b>RUN OFF CONTROL</b>						
<b>CONSTRUCTION ENTRANCE</b>	**X	X	X			X
<b>PIPE SLOPE DRAIN</b>						
<b>OUTLET PROTECTION</b>						
<b>SURFACE ROUGHENING</b>						
<b>CHECK DAMS</b>						
<b>WHEEL WASH</b>						
<b>OTHER:</b>						
<b>POLLUTION PREVENTION</b>						
<b>PROPER SIGNAGE</b>	**X	X	X		X	
<b>HAZ WASTE MGMT</b>						
<b>SPILL KIT ON-SITE</b>	**X	X	X		X	
<b>CONCRETE WASHOUT AREA</b>						
<b>OTHER:</b>						

\*\* SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY.

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0	ISSUE FOR BID AND PERMIT	KPT	PRT	DMW	04/20/12	Scale AS SHOWN This Drawing shall not be used for Construction unless Signed and Sealed For Construction Original Size Ansi D Drawing No: <b>C102</b>		Sheet _____ of _____ Rev: _____	

HOUSE

15' ALLEY PER THE PLAT OF "MOODY INVESTMENT COMPANY'S PLAT OF HOLLY GARDENS", PLAT NO. 443



**DEMOLITION NOTES**

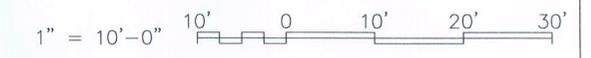
- 1 SAVE AND PROTECT EXISTING TREE
- 2 SAVE AND PROTECT EXISTING CREEK
- 3 SAVE AND PROTECT EXISTING FENCE
- 4 SAVE AND PROTECT EXISTING STRUCTURE
- 5 SAVE AND PROTECT EXISTING PLAYGROUND SURFACING, PLAY STRUCTURES, SAND BOXES AND BANDING CURB
- 6 REMOVE EXISTING CHAIN LINK FENCE
- 7 REMOVE EXISTING TREES, COORDINATE WITH CITY ARBORIST
- 8 EXISTING DRAINAGE WAY TO BE FILLED (APPROXIMATELY 114 SF)
- 9 SAVE AND PROTECT EXISTING STORM DRAINAGE PIPE
- 10 REMOVE EXISTING VEGETATION, BRUSH, BLACKBERRIES, SMALL TREES, ETC.
- 11 CONTRACTOR TO PROTECT AND PRESERVE THE EXISTING PLAYGROUND AND UNDERDRAIN SYSTEM. DESIGN DRAWINGS AVAILABLE UPON REQUEST. CONTRACTOR TO PROVIDE CONSTRUCTION, STAGING AND ACCESS PLAN TO SHOW HOW THE PLAYGROUND AND UNDERDRAIN SYSTEM WILL BE PROTECTED FROM DAMAGE. PLAN SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
- 12 REMOVE, PROVIDE TEMPORARY STORAGE AND REINSTALL EXISTING PLAYGROUND EQUIPMENT THAT IS NECESSARY TO ACCESS CONSTRUCTION SITE.

**EROSION CONTROL NOTES**

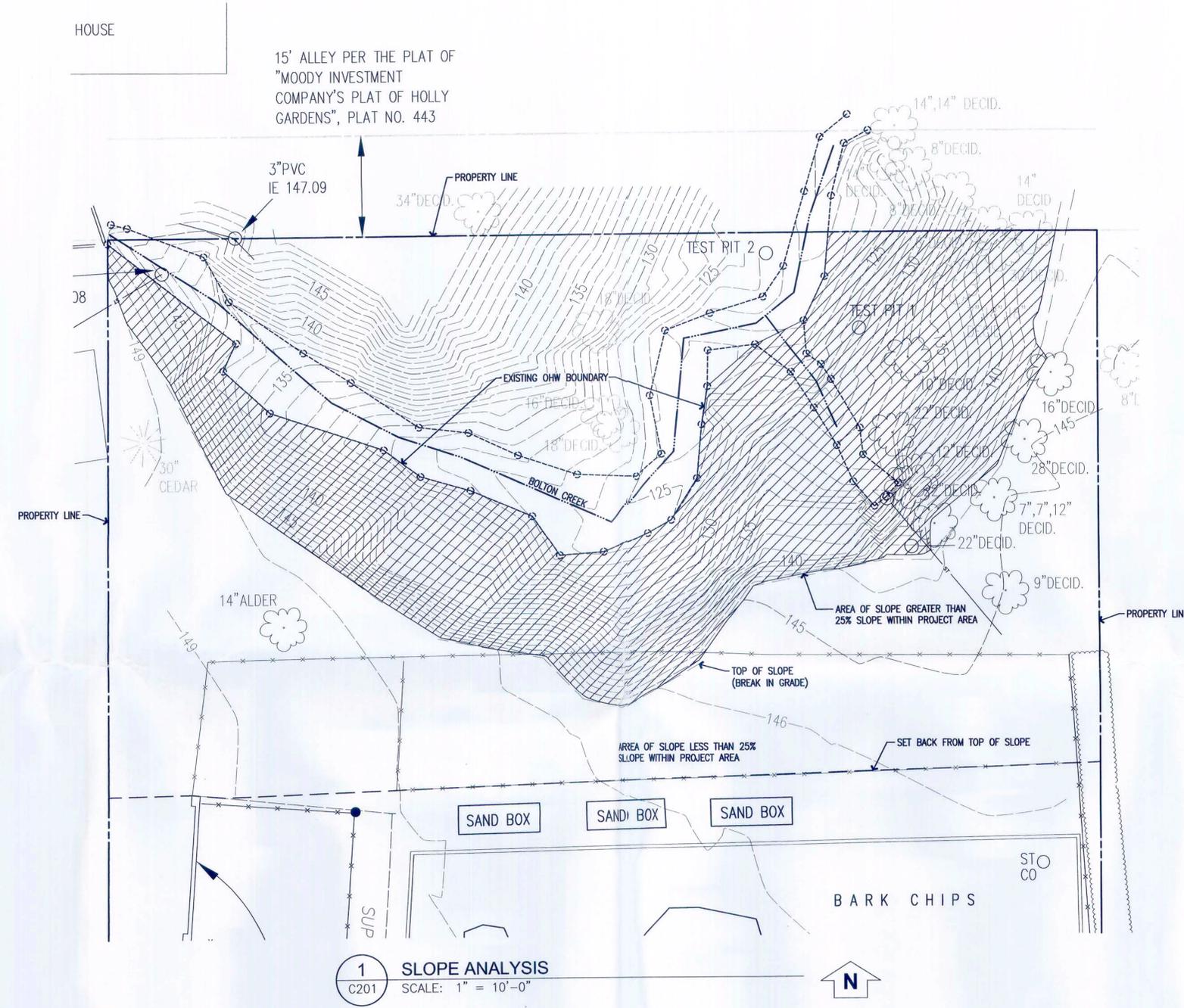
- 1 INSTALL ORANGE SEDIMENTATION FENCE. WHEN SEDIMENTATION FENCE IS PARALLEL TO ORDINARY HIGH WATER (OHW) BOUNDARY INSTALL 6" FROM OHW BOUNDARY LINE.
- 2 LIMITS OF CONSTRUCTION INSTALL ORANGE CONSTRUCTION FENCE.

1  
C501

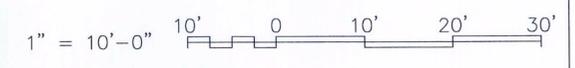
**1 EXISTING CONDITIONS AND DEMOLITION PLAN**  
C200 SCALE: 1" = 10'-0"



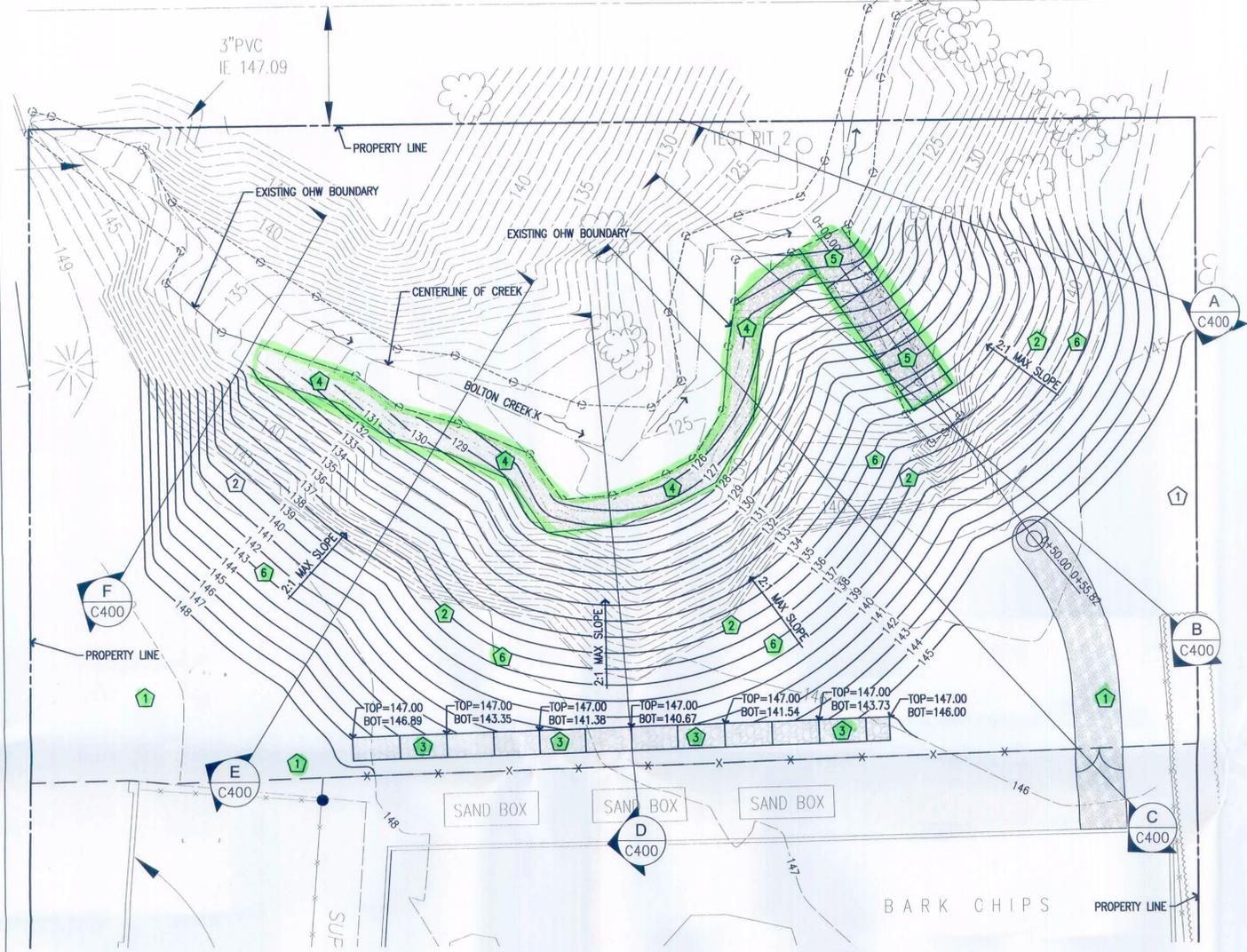
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<p>0 ISSUE FOR BID AND PERMIT</p>	<p>KPT</p>	<p>PRT</p>	<p>DMW</p>	<p>04/20/12</p>			<p>Drafting Check</p>	<p>Design Check DMW</p>	<p>Title</p>
<p>No Revision Note: * Indicates signatures on original issue of drawing or last revision of drawing</p>	<p>Drawn</p>	<p>Job Manager</p>	<p>Project Director</p>	<p>Date</p>	<p>Approved (Project Director) Date 04/20/12</p>	<p>Scale AS SHOWN</p>	<p>This Drawing shall not be used for Construction unless Signed and Sealed For Construction</p>	<p>Contract No. 11456-11012</p>	<p>Original Size Ansi D Drawing No: <b>C200</b></p>
<p>Plot Date: 20 April 2012 - 1:27 PM Plotted by: Keith Tolle Cad File No: O:\11456 - WLWSD (West Linn-Wilsonville School District)\11456-11012 WLWSD Bolton Primary School\06-CAD\Sheets\11456-11012_C200 EXIST-DEMO.dwg</p>									



**1 SLOPE ANALYSIS**  
 C201 SCALE: 1" = 10'-0"  
 N



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0 ISSUE FOR BID AND PERMIT KPT PRT DMW 04/20/12	Approved (Project Director) Date 04/20/12	Title <b>STREAMBANK REMEDIATION SLOPE ANALYSIS</b> Contract No. 11456-11012						
No Revision Note: * Indicates signatures on original issue of drawing or last revision of drawing Drawn Job Manager Project Director Date							Scale AS SHOWN <small>This Drawing shall not be used for Construction unless Signed and Sealed For Construction</small>	Original Size <b>Ansi D Drawing No: C201</b> Rev:



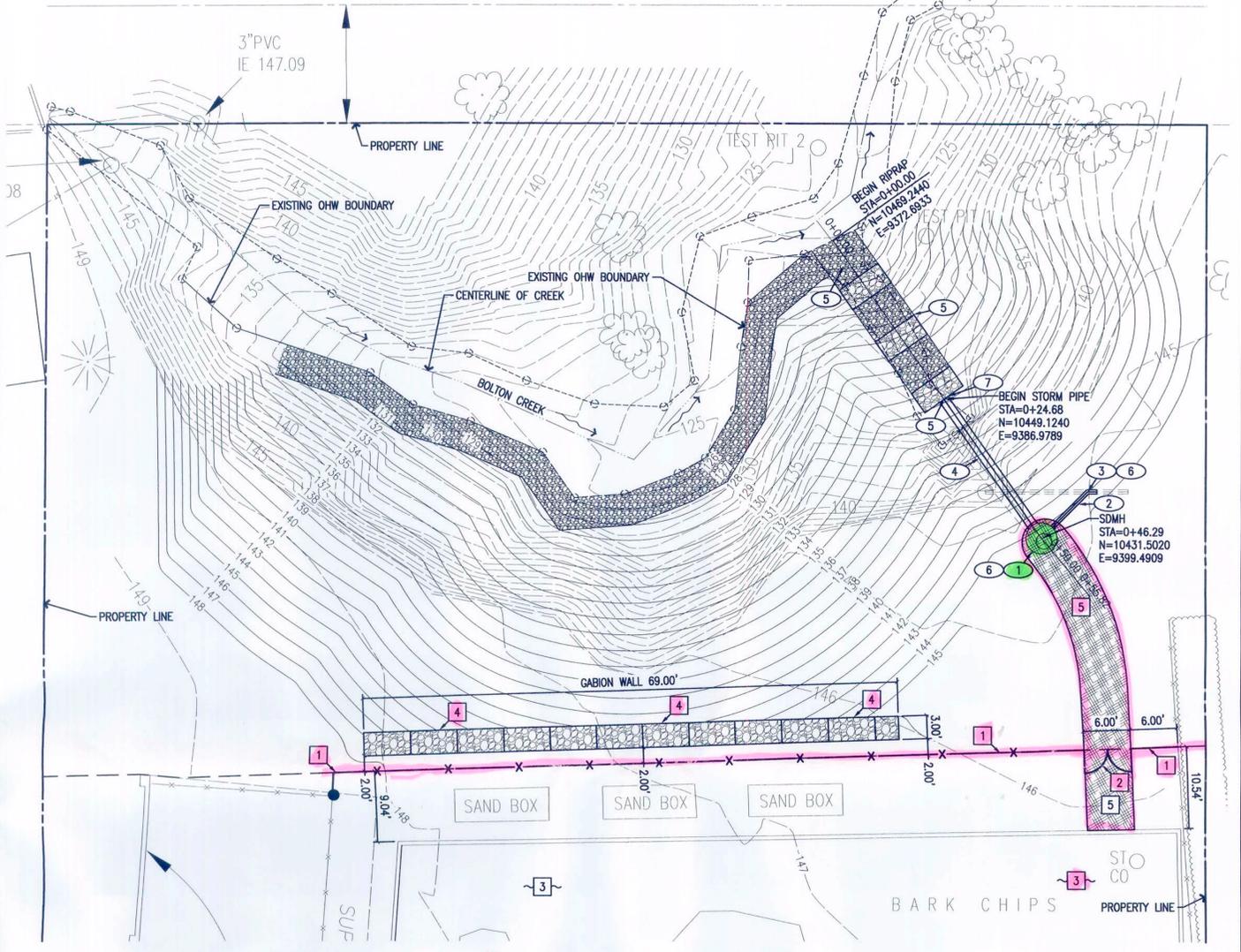
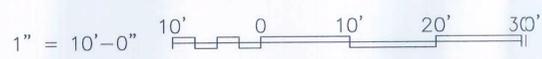
**2 GRADING AND EROSION CONTROL PLAN**  
C300 SCALE: 1" = 10'-0"

**GRADING NOTES**

- 1 THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TOWARD ALL EXISTING STORM WATER FEATURES.
- 2 STRIP, STOCK PILE AND REUSE TOPSOIL AND PROVIDE EXCAVATION AS NEEDED TO ACHIEVE SUBGRADE. PROVIDE STRUCTURAL FILL AND REPLACE TOPSOIL AS NECESSARY TO ACHIEVE FINISHED GRADE ELEVATIONS.
- 3 CONSTRUCT GABION WALL. SEE DETAIL.
- 4 CONSTRUCT RIPRAP ARMORING AT ORDINARY HIGH WATER BOUNDARY. SEE DETAIL.
- 5 CONSTRUCT STORM DRAINAGE OUTFALL. SEE PROFILE ON SHEET C400.
- 6 INSTALL EROSION CONTROL BLANKET/TURF REINFORCEMENT MATS ON ALL DISTURBED SLOPE SURFACES. SEE DETAIL.

**DEFINITIONS**

- TOP FINISHED GRADE AT TOP OF GABION WALL
- BOT FINISHED GRADE AT BOTTOM OF GABION WALL (NOT THE ACTUAL BOTTOM OF WALL)



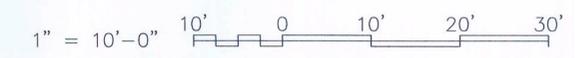
**1 SITE AND STORM DRAINAGE PLAN**  
C300 SCALE: 1" = 10'-0"

**SITE CONSTRUCTION NOTES**

- 1 INSTALL NEW CHAIN LINK FENCE, TIE INTO EXISTING FENCE.
- 2 INSTALL NEW 6" WIDE DOUBLE LEAF GATE.
- 3 INSTALL BARK CHIPS AS NEEDED TO RESTORE SURFACE. MATCH EXISTING THICKNESS. PROVIDE A MINIMUM OF NEW 2" TOP LAYER BARK CHIP OVER ENTIRE PLAYGROUND AREA.
- 4 INSTALL GABION WALL SEE GRADING PLAN THIS SHEET.
- 5 CONSTRUCT BARK ACCESS PATH. PROVIDE A MINIMUM OF 4" LAYER OF BARK CHIPS.

**STORM DRAIN NOTES**

- 1 INSTALL NEW STORM DRAIN MANHOLE OVER EXISTING 15" STORM DRAIN PIPE. SEE PROFILE ON SHEET C400.
- 2 CONSTRUCT 10 LF 6" PVC STORM DRAIN PIPE.
- 3 CONNECT NEW STORM DRAIN PIPE TO EXISTING STORM DRAIN PIPE WITH A WYE AND CLEANOUT.
- 4 CONSTRUCT 25 LF 15" PVC STORM DRAIN. SEE PROFILE ON SHEET C400.
- 5 CONSTRUCT STORM DRAIN OUTFALL. SEE PROFILE ON SHEET C400.
- 6 CONTRACTOR TO FIELD LOCATE EXISTING STORM PIPE AND VERIFY EXACT LOCATION SIZE AND MATERIAL. REPORT FINDING TO ENGINEER.
- 7 INSTALL STORM DRAIN OUTFALL AND RODENT SCREEN.

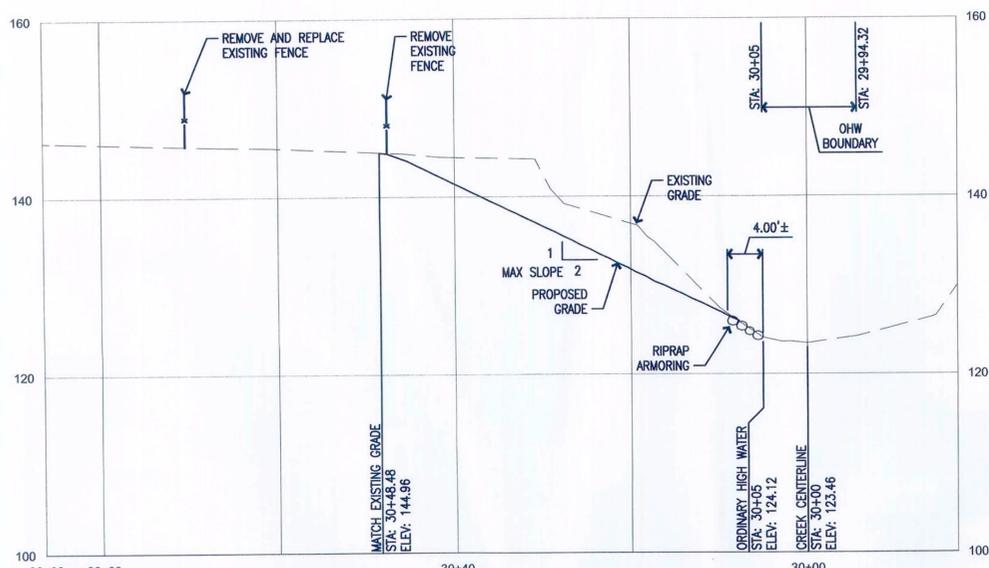


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No	Revision	Note: * Indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date

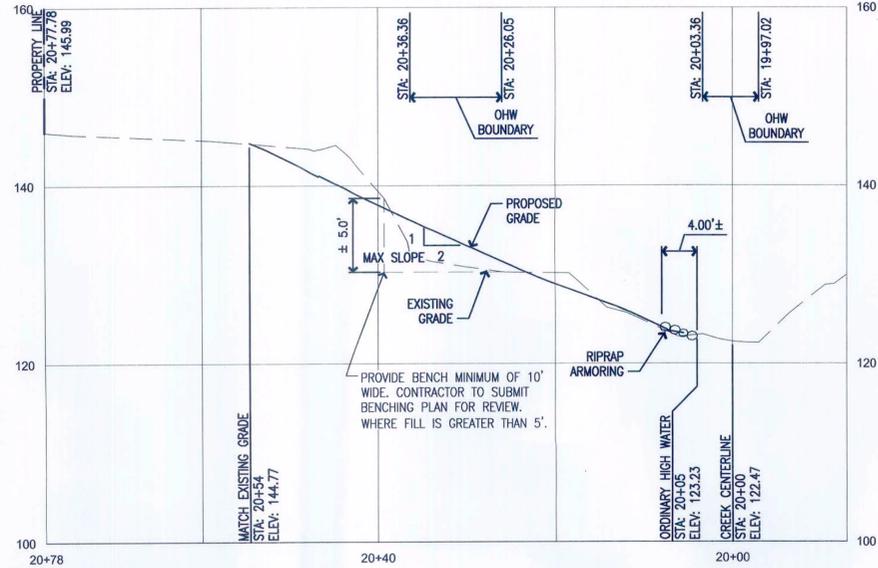
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Drawn	KPT	Designer	PRT
Drafting Check		Design Check	DMW
Approved (Project Director)		Date	04/20/12
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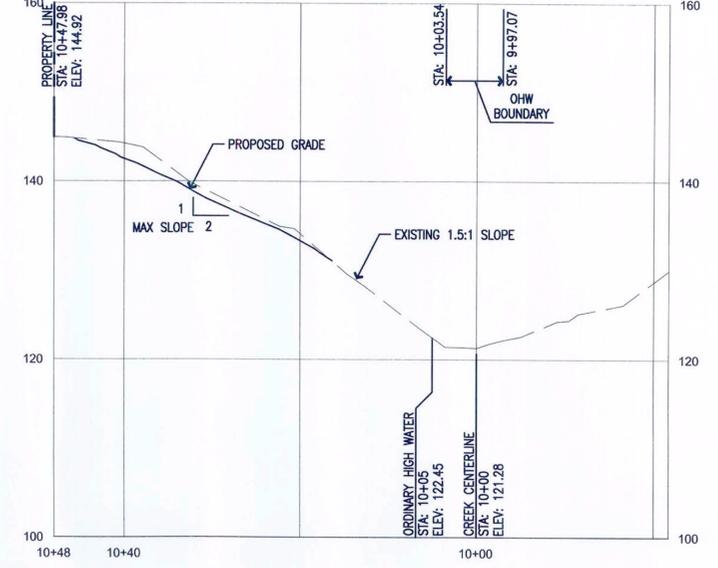
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Project	BOLTON PRIMARY SCHOOL		
Title	STREAMBANK REMEDIATION - SITE, STORM DRAINAGE, GRADING & EROSION CONTROL PLAN		
Contract No.	11456-11012		
Original Size	ANSI D	Drawing No:	C300
Rev:			



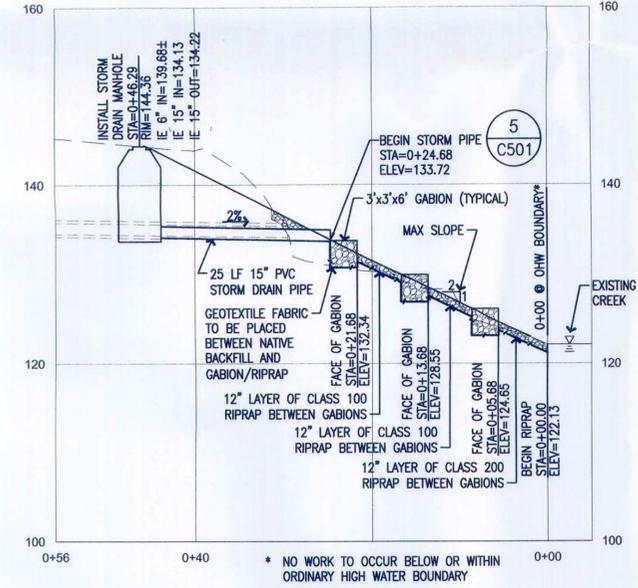
**C SECTION - C**  
C400 SCALE: VERT 1"=10'-0"  
HORZ 1"=10'-0"



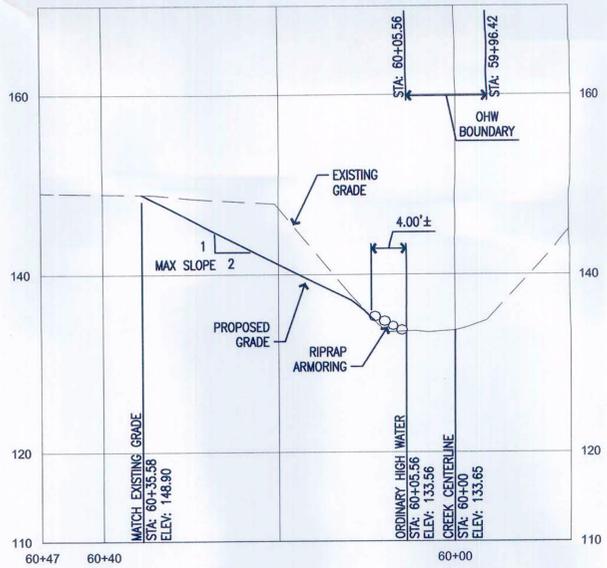
**B SECTION - B**  
C400 SCALE: VERT 1"=10'-0"  
HORZ 1"=10'-0"



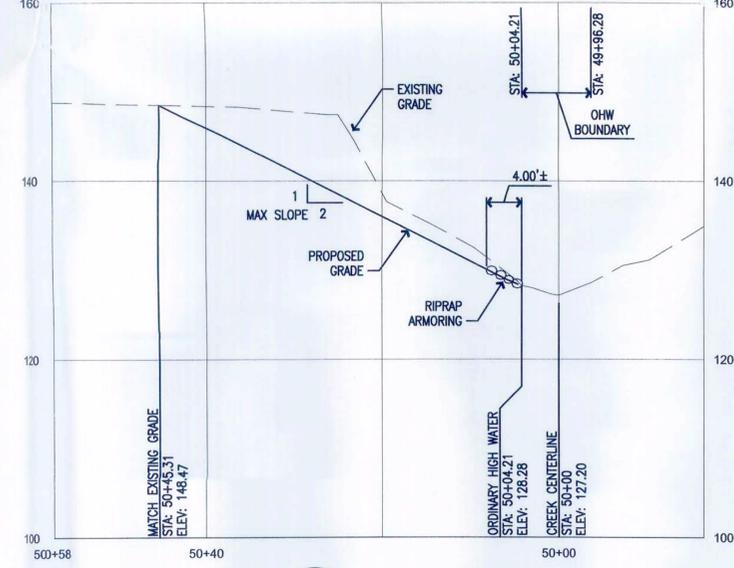
**A SECTION - A**  
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HORZ 1"=10'-0"



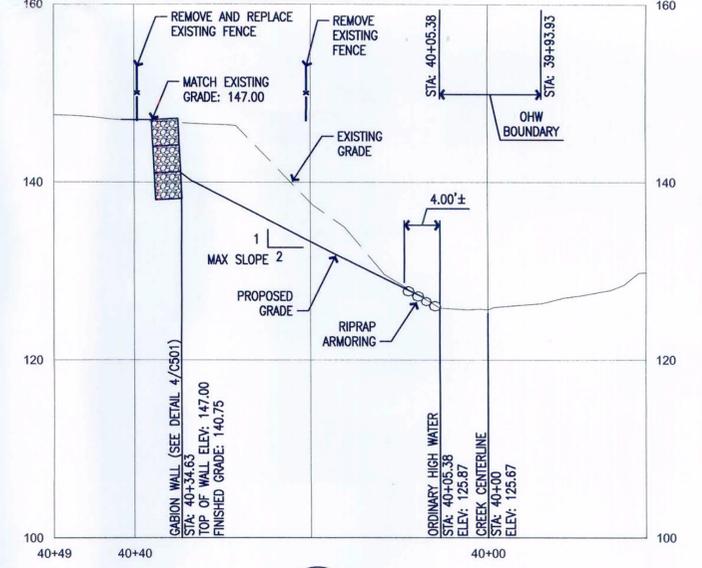
**1 STORM DRAINAGE OUTFALL PROFILE**  
C400 SCALE: VERT 1"=10'-0"  
HORZ 1"=10'-0"



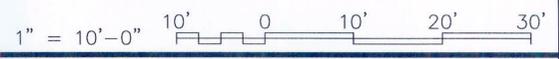
**F SECTION - F**  
C400 SCALE: VERT 1"=10'-0"  
HORZ 1"=10'-0"



**E SECTION - E**  
C400 SCALE: VERT 1"=10'-0"  
HORZ 1"=10'-0"



**D SECTION - D**  
C400 SCALE: VERT 1"=10'-0"  
HORZ 1"=10'-0"



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No	Revision	Drawn	Job Manager	Project Director	Date

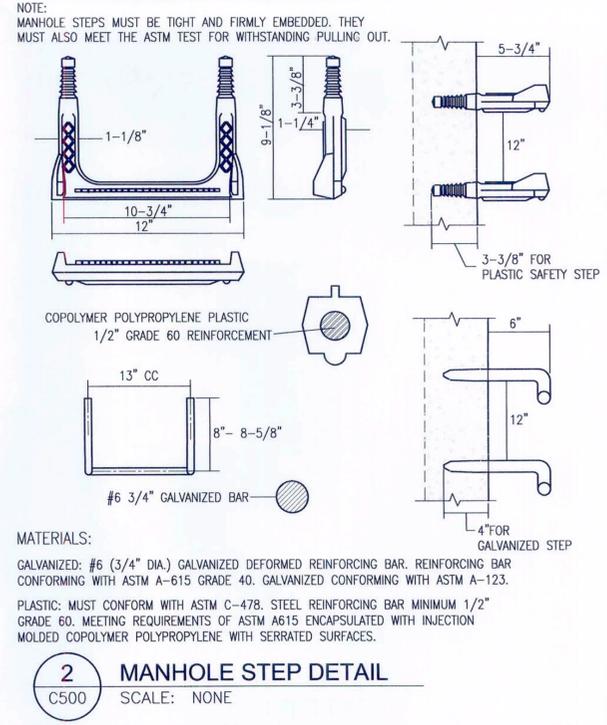
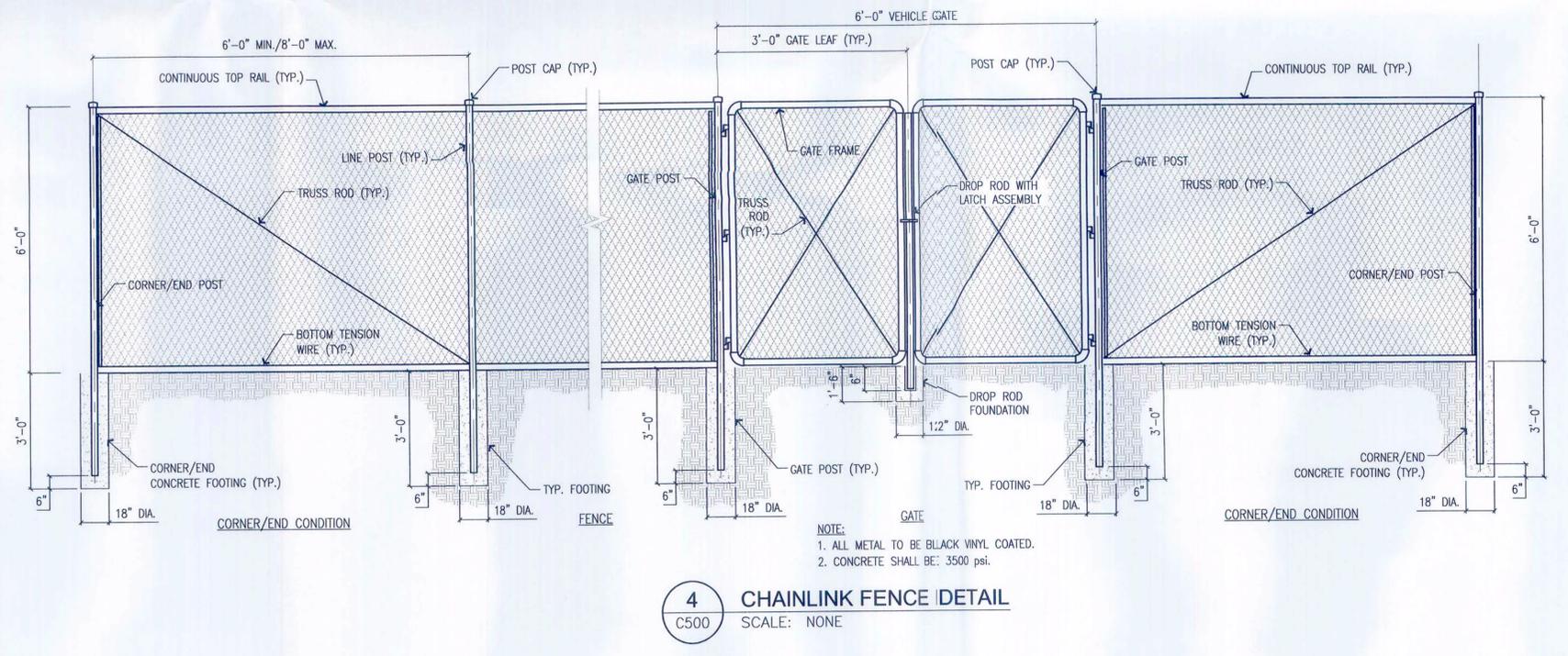
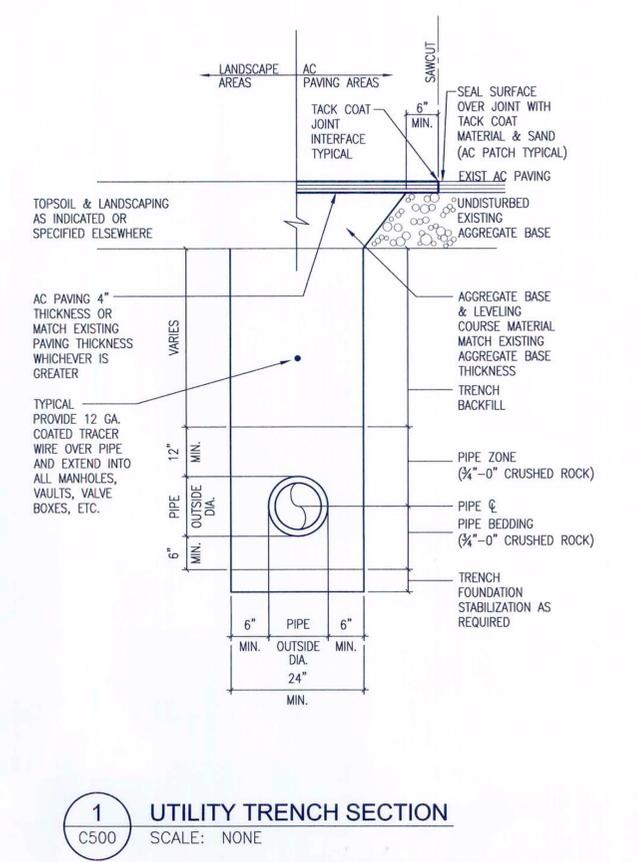
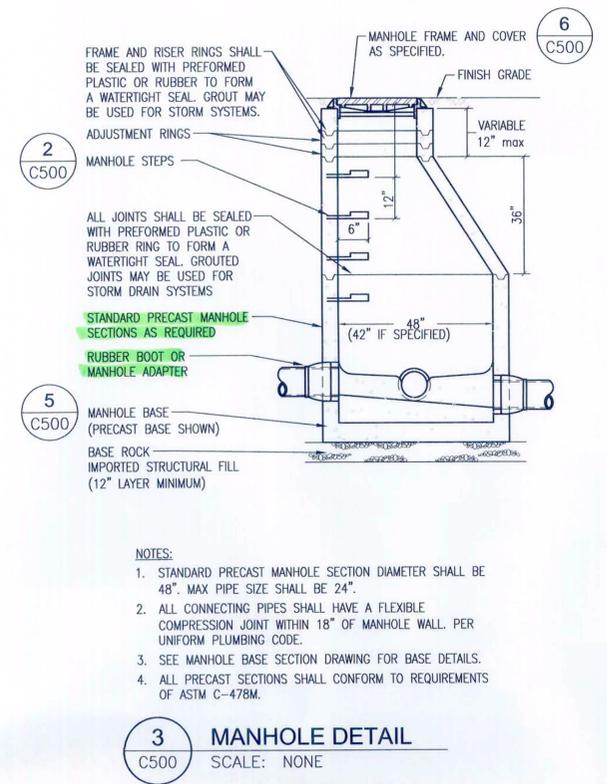
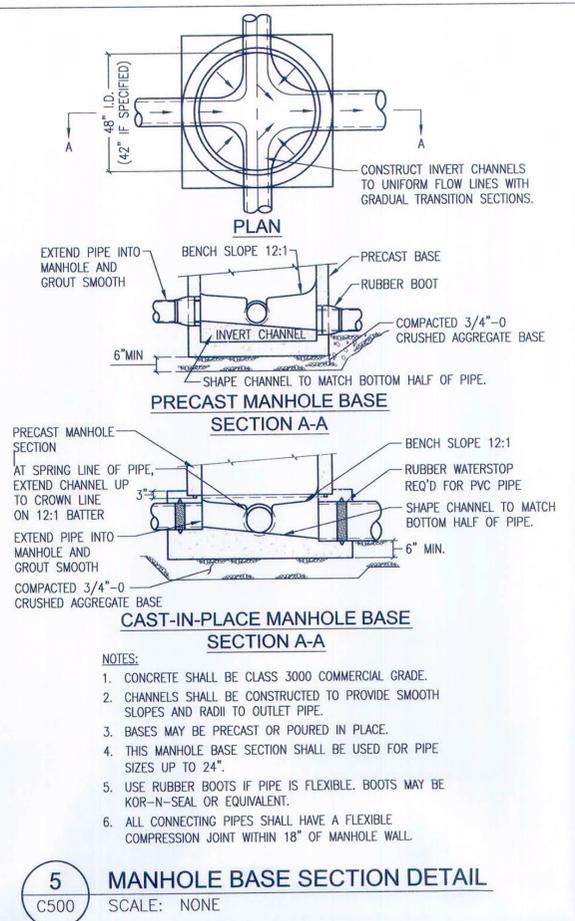
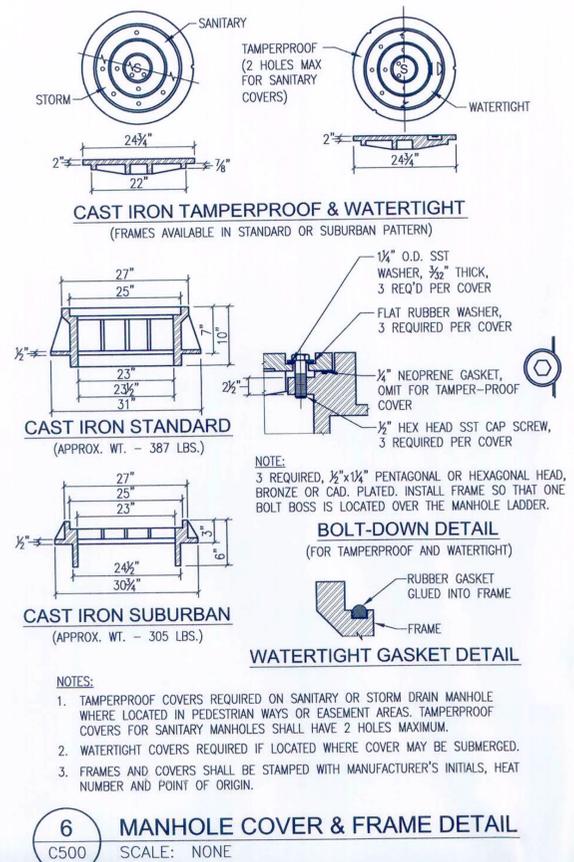
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Drawn KPT Designer PRT  
Drafting Check Design Check DMW  
Approved (Project Director) Date 04/20/12  
Scale AS SHOWN

Client **WEST LINN WILSONVILLE SCHOOL DISTRICT**  
Project **BOLTON PRIMARY SCHOOL**  
Title **STREAMBANK REMEDIATION CROSS SECTIONS AND STORM DRAINAGE OUTFALL PROFILE**  
Contract No. 11456-11012  
Original Size  
Ansi D Drawing No: **C400**  
Rev:



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No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date

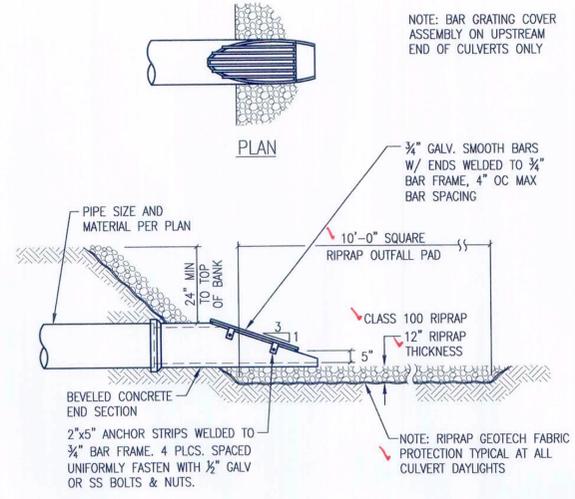
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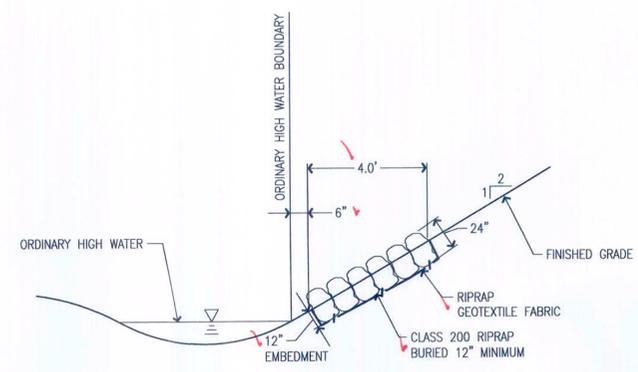
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Drawn	KPT	Designer	PRT
Drafting Check		Design Check	DMW
Approved (Project Director)		Date	04/20/12
Scale	AS SHOWN	This Drawing shall not be used for Construction unless Signed and Sealed For Construction	

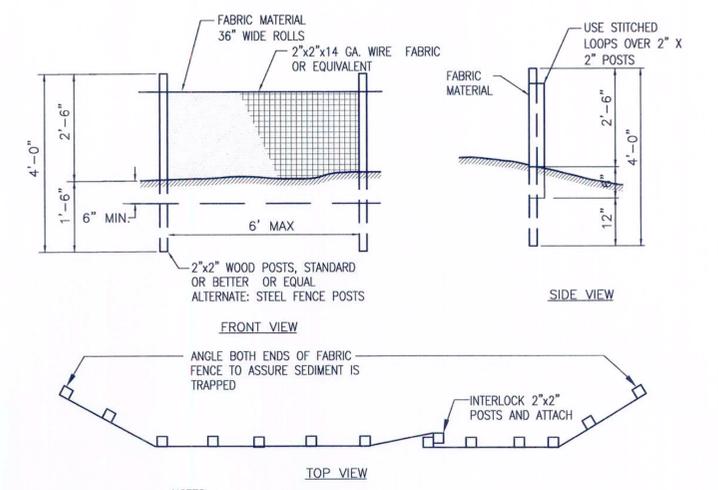
Client **WEST LINN WILSONVILLE SCHOOL DISTRICT**  
Project **BOLTON PRIMARY SCHOOL**  
Title **STREAMBANK REMEDIATION DETAILS**  
Contract No. **11456-11012**  
Original Size **Ansi D Drawing No: C500**  
Rev: \_\_\_\_\_



**5** STORM DRAIN OUTFALL AND RODENT SCREEN  
C501 SCALE: NONE

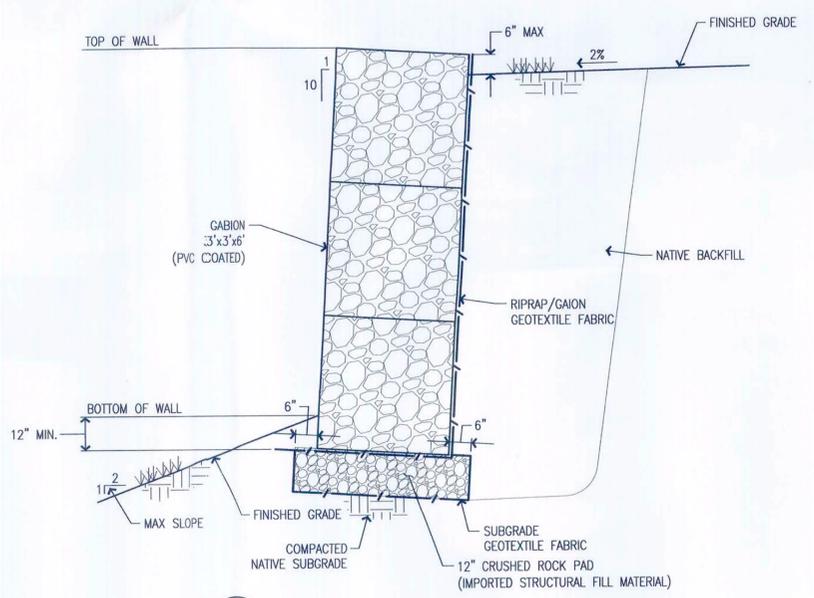


**3** RIPRAP ARMORING AT ORDINARY HIGH WATER BOUNDARY  
C501 SCALE: NONE

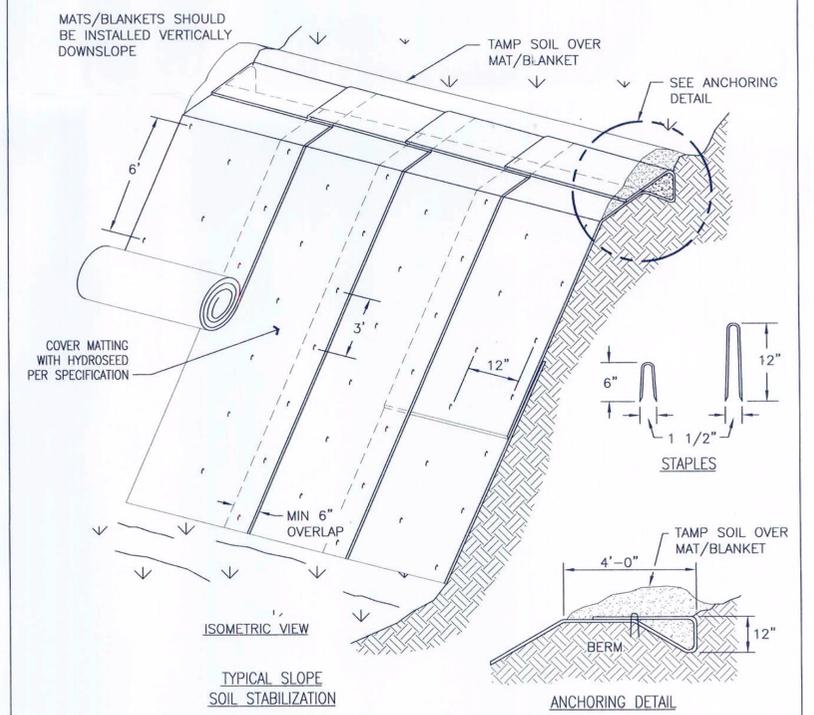


**1** SEDIMENT FENCE DETAILS  
C501 SCALE: NONE

NOTES:  
1. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.  
2. 2" x 2" FIR, PINE, OR STEEL FENCE POSTS.  
3. STITCHED LOOPS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.  
4. COMPACT ALL AREAS OF FABRIC TRENCH.



**4** GABION WALL DETAIL  
C501 SCALE: NONE



**2** EROSION BLANKETS / TURF REINFORCEMENT MATS  
C501 SCALE: NONE

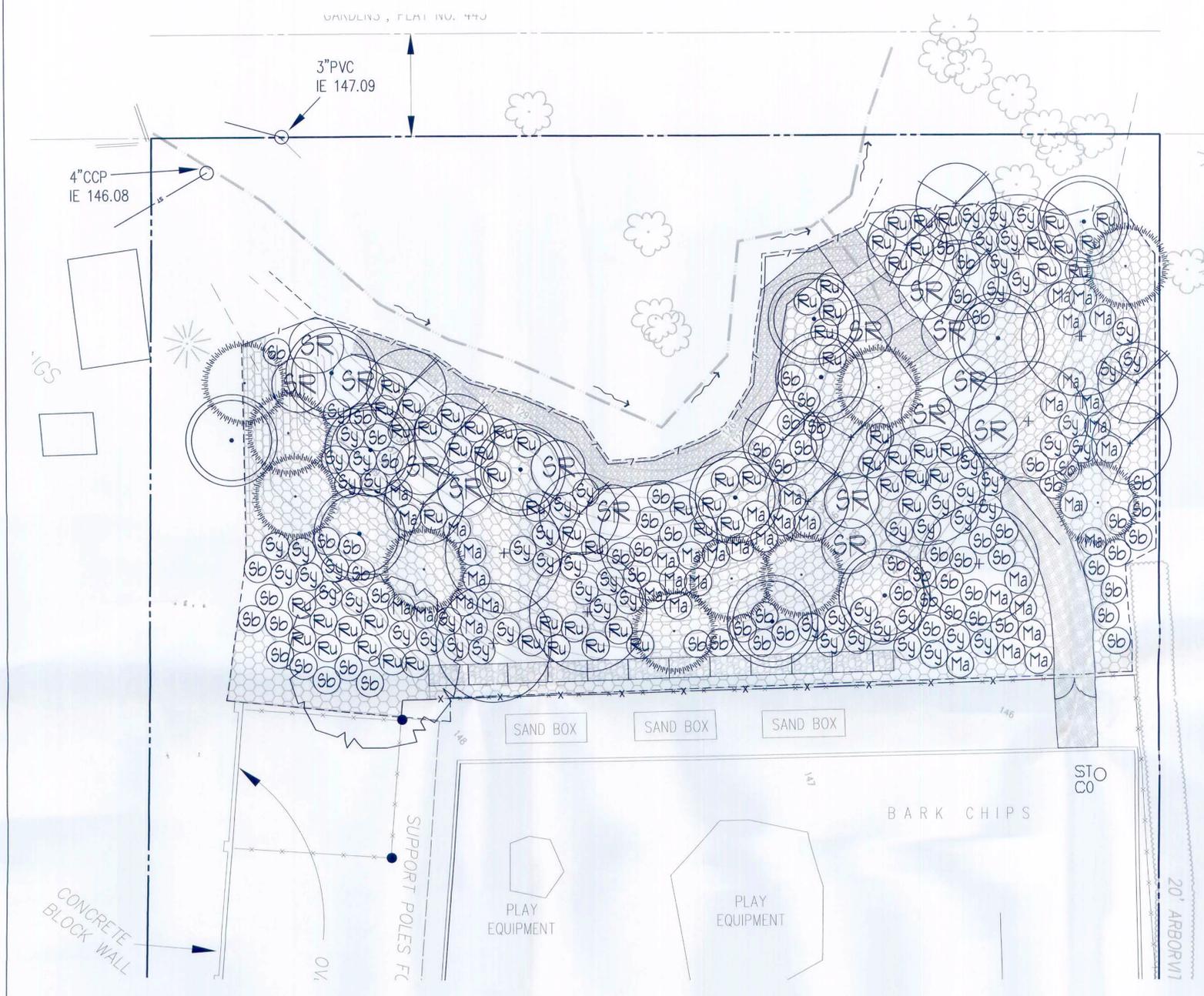
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No	Revision	Note: * Indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date

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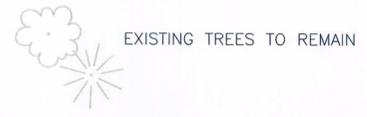


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Approved (Project Director)		Date	04/20/12
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Client **WEST LINN WILSONVILLE SCHOOL DISTRICT**  
Project **BOLTON PRIMARY SCHOOL**  
Title **STREAMBANK REMEDIATION DETAILS**  
Contract No. **11456-11012**  
Original Size  
Ansi D Drawing No: **C501**  
Sht of  
Rev:



**PLANTING AND IRRIGATION LEGEND**



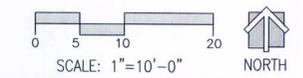
*Submit new version per COA-3 FS*

**PLANTING NOTES:**

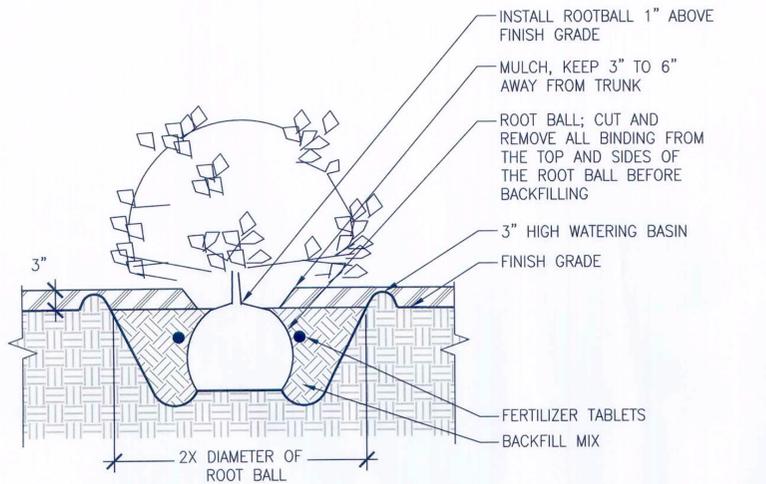
1. CONTRACTOR TO VERIFY LOCATION OF EXISTING TREES INDICATED TO REMAIN PRIOR TO SOIL PREPARATION. PROTECT ALL TREES AND SHRUBS INDICATED TO REMAIN. COORDINATE WITH THE OWNER'S REPRESENTATIVE.
2. PLANTING AREAS TO BE SUFFICIENTLY CLEANED OF ALL CONSTRUCTION MATERIALS, INCLUDING IMPORTED ROCK, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE BEFORE BEGINNING ANY LANDSCAPE WORK.
3. IDENTIFY ALL PLANTING AREAS IN FIELD WITH WHITE FIELD-MARKING CHALK OR APPROVED EQUAL. PLANTING BEDS TO BE ADJUSTED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLANT LOCATION.
4. FOR PLANTING OCCURRING IN MASSES OF SAME SPECIES PLANT, LABELING REFERS TO ALL ADJACENT IDENTICAL SYMBOLS. REFER TO DETAILS AND LEGEND FOR SPACING INFORMATION.
5. THE OWNER'S REPRESENTATIVE WILL APPROVE INDIVIDUAL PLANT MATERIAL AND LOCATION OF PLANT MATERIAL PRIOR TO INSTALLATION. REFER TO SPECIFICATIONS FOR PROCEDURE.
6. PLANT QUANTITIES INDICATED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANTS IN QUANTITIES AND LOCATIONS SHOWN ON DRAWINGS.
7. PROVIDE GEOTEXTILE FABRIC AS DIRECTED BY THE CIVIL ENGINEER OR JUTE NETTING ON ALL SLOPES WITH GRADIENT OF 3:1 OR GREATER. STAPLE FABRIC TO GROUND PER MANUFACTURERS RECOMMENDATIONS OR WITH METAL STAKES AT 4' O.C.
8. VERIFY ALL EROSION CONTROL MEASURES ARE INSTALLED IN PLACE PRIOR TO START OF PLANTING.
9. ALL AREAS TO BE HYDROSEEDING AND HYDROMULCHED WITH SPECIFIED SEED MIX PRIOR TO INSTALLING EROSION CONTROL FABRIC.
10. FOLLOWING COMPLETION OF GRADING AND PLANTING OPERATIONS CONTRACTOR SHALL SOIL PREP, SEED AND MULCH ALL AREAS OF DISTURBANCE.

**PLANT SCHEDULE**

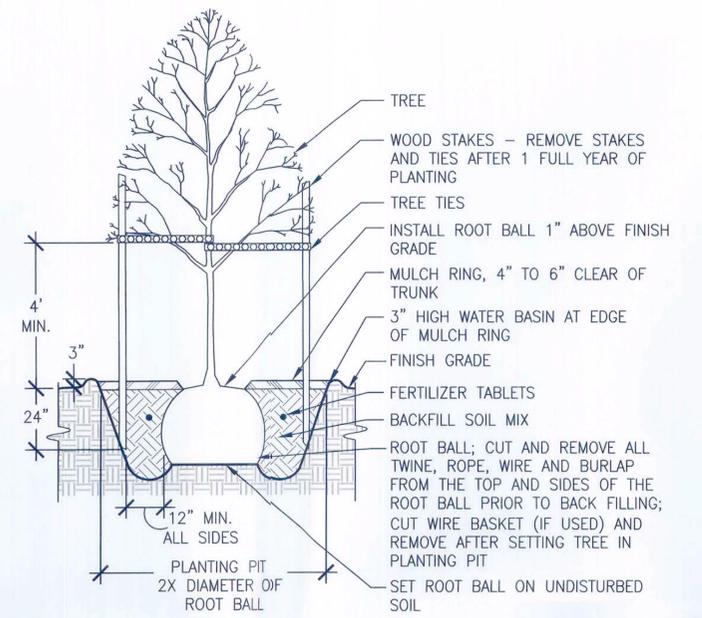
SYMB	KEY	BOTANICAL NAME	COMMON NAME	SIZE/CONDITION	SPACING
		<b>EVERGREEN TREES</b>			
THPL		THUJA PLICATA	WESTERN RED CEDAR	5'-6' HT	AS SHOWN
		<b>NATIVE/ADAPTIVE TREES</b>			
ALRU		ALNUS RUBRA	RED ALDER	2 GAL. CONT.	AS SHOWN
AMAL		AMELANCHIER ALNIFOLIA	WESTERN SERVICEBERRY	5-6' HT/MULTI	AS SHOWN
FRLA		FRAXINUS LATIFOLIA	OREGON ASH	1" CAL./B&B	AS SHOWN
QUGA		QUERCUS GARRYANA	OREGON WHITE OAK	1" CAL./B&B	AS SHOWN
		<b>SHRUBS -NATIVE AREAS ONLY</b>			
SYAL		SYMPHORICARPOS ALBUS	SNOWBERRY	1 GAL. CONT.	AS SHOWN
RUPA		RUBUS PARVIFOLIA	THIMBLEBERRY	1 GAL. CONT.	AS SHOWN
SARA		SAMBUCUS RACEMOSA	RED ELDERBERRY	1 GAL. CONT.	AS SHOWN
SPBE		SPIRAEA BETULIFOLIA	BIRCH LEAF SPIREA	1 GAL. CONT.	AS SHOWN
MAAQ		MAHONIA AQUIFOLIUM	TALL OREGON GRAPE	1 GAL. CONT.	AS SHOWN
		<b>GROUND COVER</b>			
FRVE		FRAGARIA VESCA	WOODLAND STRAWBERRY	1 GAL. CONT.	18" O.C. - 15% OF MIX
MARE		MAHONIA REPENS	CASCADE OREGON GRAPE	1 GAL. CONT.	24" O.C. - 35% OF MIX
POMU		POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL. CONT.	24" O.C. - 50% OF MIX



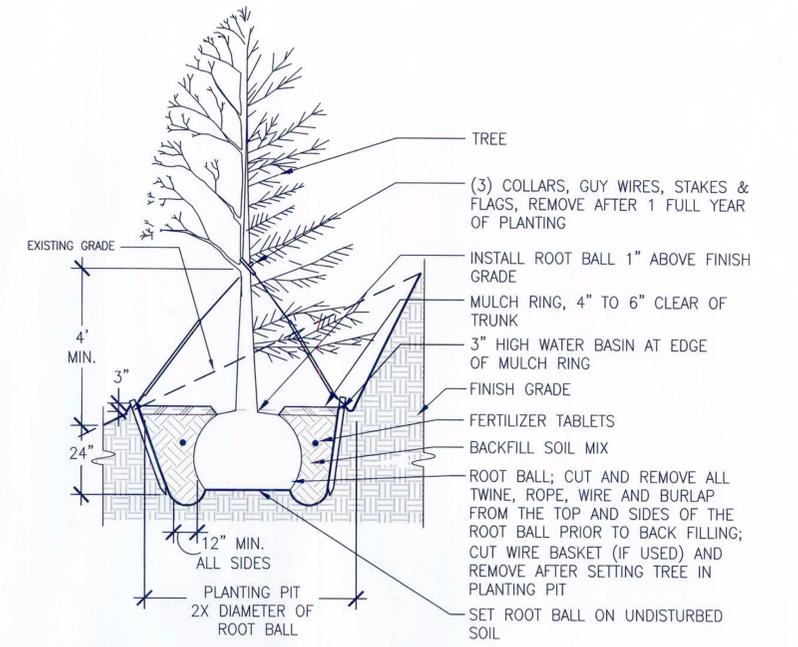
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0	ISSUE FOR BID AND PERMIT	GD	GD	DO	04/20/12	<p>This Drawing shall not be used for Construction unless Signed and Sealed For Construction</p>		<p>Rev:</p>	



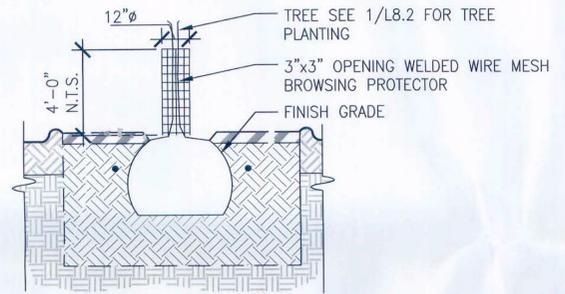
5 SHRUB AND GROUND PLANTING  
SCALE: NTS SECTION



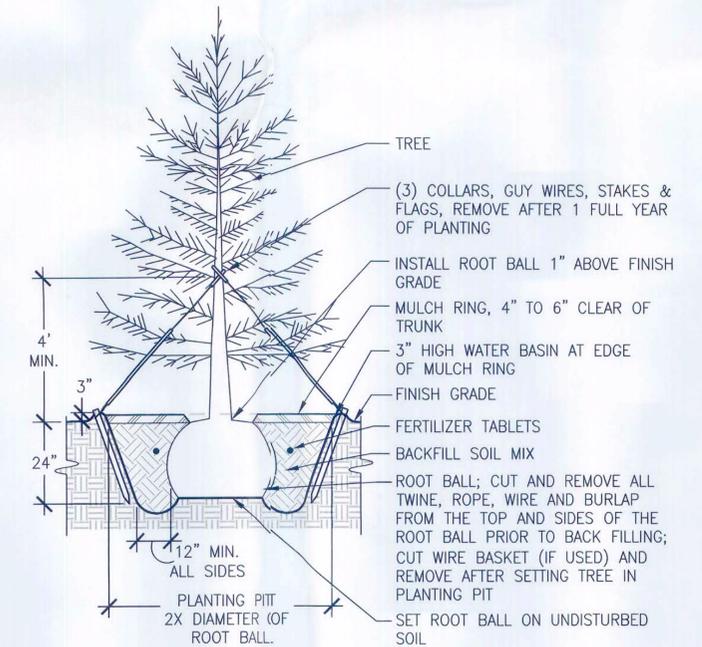
3 DECIDUOUS TREE PLANTING  
SCALE: NTS SECTION



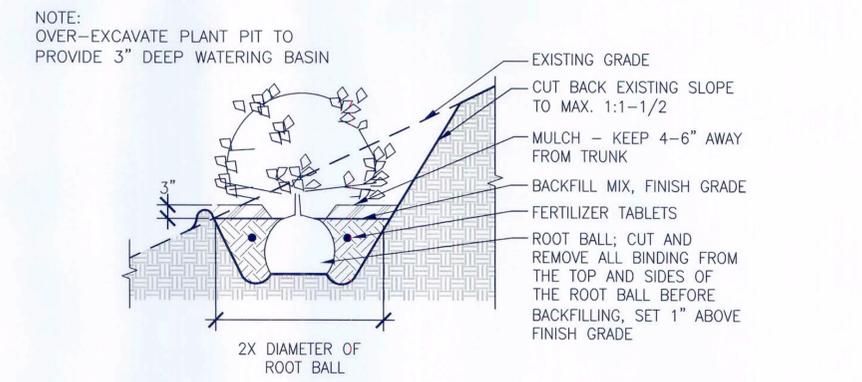
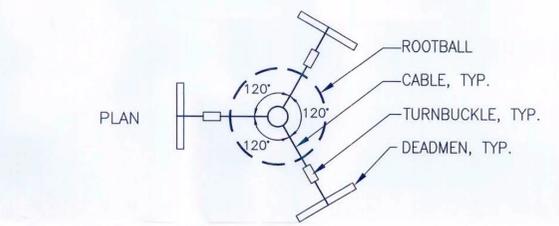
1 DECIDUOUS AND EVERGREEN TREE PLANTING ON SLOPE  
SCALE: NTS SECTION



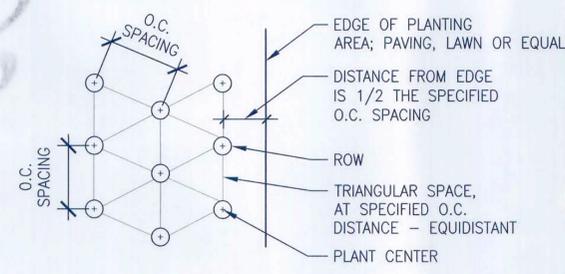
6 TREE BROWSING PROTECTION  
SCALE: NTS SECTION



4 EVERGREEN TREE PLANTING  
SCALE: NTS SECTION



2 SHRUB AND GROUND COVER PLANTING ON SLOPE  
SCALE: NTS SECTION



7 SHRUB AND GROUND COVER SPACING  
SCALE: NTS SECTION

NOTE:  
- SEE PLANT SCHEDULE FOR EACH PLANT'S APPROPRIATE O.C. SPACING.  
- PLANTING PLAN SHOWING INDIVIDUAL LOCATION OF A SHRUB AND OR GROUND COVER TAKE PRECEDENT OVER THIS DETAIL.

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No	Revision	Drawn	Job Manager	Project Director	Date
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Drawn GD		Designer GD		Client WEST LINN WILSONVILLE SCHOOL DISTRICT	
Drafting DO		Design DO		Project BOLTON PRIMARY SCHOOL	
Approved (Project Director)		Date 04/20/12		Title STREAMBANK REMEDIATION LANDSCAPE RESTORATION PLANTING DETAILS	
Scale AS SHOWN		This Drawing shall not be used for Construction unless Signed and Sealed For Construction		Contract No. 11456-11012	
				Original Size	
				Ansi D Drawing No: L801	
				Sheet of	
				Rev:	