

DRAWINGS FOR:

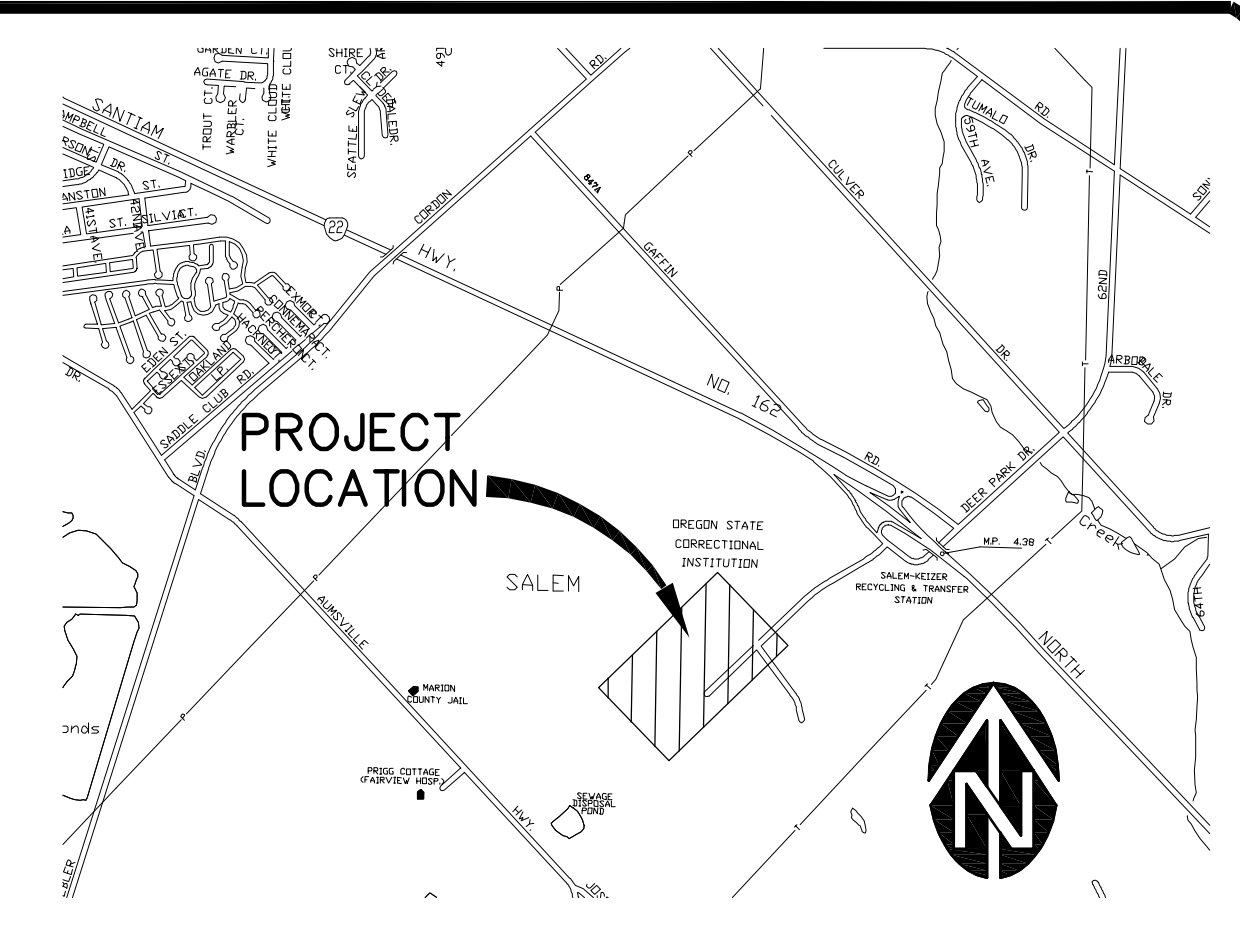
OREGON STATE CORRECTIONAL INSTITUTION SITE FIRE LINE UPGRADE SALEM, OREGON

FOR:

Oregon Department of Corrections
Attn: Paul Stanley
~~1793 13th Street SE~~
3601 State Street
Salem, OR 97302 97301
(503) 480-6281

AS-BUILT
COMPILED FROM:
FINAL PROOF SURVEY _____
DATA FURNISHED BY CONTRACTOR X
FIELD INSPECTION RECORDS _____
WESTECH ENGINEERING, INC.
DATE: 03/28/13 BY: RCE

SHEET INDEX	
SHT NO	DESCRIPTION
1	Cover Sheet
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3	Erosion Control Notes & Details
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5	Overall Plan
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10	Details
11	Details
12	-
13	-
14	-
15	-
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17	-



GENERAL LEGEND

EXISTING	PROPOSED	ITEM
		CROSS
		TEE
		PLUG
		REDUCER
		FIRE HYDRANT
		FIRE HYDRANT ASSEMBLY
		VALVE
		THRUST BLOCKING
		WATER METER
		BLOW-OFF
		TYPE III CATCH BASIN
		CURB CATCH BASIN
		PARKING LOT CATCH BASIN
		JUNCTION BOX
		AREA DRAIN
		STORM SEWER MANHOLE
		SANITARY SEWER MANHOLE
		CLEANOUT
		TELEPHONE MANHOLE
		TELEPHONE PEDESTAL
		CABLE TV PEDESTAL
		DITCH/CHANNEL
		SMALL CULVERT (<36" DIA.)
		LARGE CULVERT (>36" DIA.)
		MAIL BOX
		SIGN
		LIGHT POLE
		UTILITY POLE
		UTILITY POLE W/LIGHT
		UTILITY POLE WITH GUY
		UTILITY VAULT
		BUILDING
		HEDGE OR BRUSH
		TREES
		8" SS
		10" SD
		8" W
		G
		TEL
		PWR
		TV
		R/W
		P/L
		E/P
		C/L
		0+00
		FENCE

VERIFY SCALE
BASE IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON SCALES ACCORDINGLY

NO.	DATE	DESCRIPTION	BY
1	07/19/12	Final Design	RCE
2	05/24/13	As-Built Per Contractor Information	RCE

DATE: SEP 11

REVISIONS

REGISTERED PROFESSIONAL ENGINEER
AS-CONSTRUCTED
12/15/2013
RENEWALS: 12/31/2013

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
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Oregon, Oregon
OSCI Site Fire Line Upgrade
Cover Sheet

SHEET
1 OF 11
JOB NUMBER
2664.3000.0

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5/24/2013 3:28:43 PM
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GENERAL NOTES:

1. Contractor shall procure and conform to all construction permits required by the City of Salem.
 2. ATTENTION: 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 the rules by calling the center. (Note: the telephone number for the Oregon Utility Notification Center is (503) 232-1987).
 3. Contractor to notify City and all utility companies a minimum of 48 business hours (2 business days) prior to start of construction, and comply with all other notification requirements of agencies with jurisdiction over the work.
 4. For City construction permits, contact Salem Public Works Engineering Construction Management at 588-6211. For City building permits, contact Salem Permit Application Center at 588-6256.
 5. Elevations shown on the drawings are based from City of Salem benchmark 470260, Elevation 244.69 (NGVD 1929 datum), consisting of a aluminum cap located at the southwest corner of a bridge on Kuebler Blvd over Mill Creek, in the top of a concrete barrier, 4 feet west of the end of the barrier. Surveying for design was completed by Barker Surveying at (503) 588-8800.
 6. The contractor shall pay for the services of a registered Civil Engineer and/or Land Surveyor licensed in the State of Oregon to establish construction control and perform initial construction surveys to establish the lines and grades of improvements as indicated on the drawings. Staking for buildings, structures, curbs, gravity drainage pipes/structures and other critical improvements shall be completed using equipment accurate to 0.04 feet horizontally and 0.02 feet vertically, or better. Use of GPS equipment for construction staking of these improvements is prohibited. The registered professional surveyor shall provide the design engineer with copies of all grade sheets for construction staking performed for the project.
- TRAFFIC CONTROL**
7. Contractor shall erect and maintain barricades, warning signs, traffic cones (and all other traffic control devices required) per Owner and requirements in accordance with the current MUTCD (including Oregon amendments). Access to driveways shall be maintained at all times. All traffic control measures shall be approved and in place prior to any construction activity.
- EXISTING UTILITIES & FACILITIES:**
8. The location and descriptions of existing utilities shown on the drawings are compiled from available records and/or field surveys. The Engineer or utility companies do not guarantee the accuracy or the completeness of such records. Contractor shall field verify locations and sizes of all existing utilities prior to construction.
 9. Utility locations are based on record information and should be field-verified. Call 1-800-332-2344 at least 48 hours prior to construction for on-site locating of utilities.
 10. The Contractor shall be responsible for locating and marking all existing survey monuments of record (including but not limited to property and street monuments) prior to construction. If any survey monuments are removed, disturbed or destroyed during construction of the project, the Contractor shall retain and pay for the services of a Registered Professional Surveyor licensed in the State of Oregon to reference and replace all such monuments prior to final payment. The monuments shall be replaced within a maximum of 90 days, and the County Surveyor shall be notified in writing as required by per ORS 209.150.
 11. Contractor shall field verify location and depth of all existing utilities where new facilities cross. All utility crossings marked or shown on the drawings shall be potholed using hand tools or other non-invasive methods prior to excavating or boring. Contractor shall be responsible for exposing potential utility conflicts far enough ahead of construction to make necessary grade or alignment modifications without delaying the work. If grade or alignment modification is necessary, Contractor shall notify the Design Engineer, and the Design Engineer or the Owner's Representative shall obtain approval from the City prior to construction.
 12. Utilities or interfering portions of utilities that are abandoned in place shall be removed by the Contractor to the extent necessary to accomplish the work. The Contractor shall plug the remaining exposed ends of abandoned utilities after appropriate verification procedures have taken place.

13. Contractor shall remove all existing signs, mailboxes, fences, landscaping, etc., as required to avoid damage during construction and replace them to existing or better condition.
 14. The Contractor shall be responsible for managing construction activities to ensure that public streets and right-of-ways are kept clean of mud, dust or debris. Dust abatement shall be maintained by adequate watering of the site by the Contractor.
- GRADING, PAVING & DRAINAGE:**
15. Unless otherwise noted, all grading, rocking and paving to conform to Oregon Standard Specifications for Construction (OSSC/ODOT/APWA), 2008 edition.
 16. Clear and grub within work limits all surface vegetation, trees, stumps, brush, roots, etc. Do not damage or remove trees except as approved by the Owner's Representative or as shown on the drawings. Protect all roots two inches in diameter or larger.
 17. Strip work limits, removing all organic matter, which cannot be compacted into a stable mass. All trees, brush, and debris associated with clearing, stripping or grading shall be removed and disposed of off-site.
 18. Immediately following stripping and grading operations, compact subgrade to 95% of the maximum dry density per AASHTO T-180 test method (Modified Proctor). Subgrade must be inspected and approved by the Owner's authorized representative before placing embankments, engineered fills or fine grading for base rock.
 19. Granular baserock shall conform to the requirements of OSSC (ODOT/APWA) 02630.10 (Dense Graded Base Aggregate). Compact baserock to 95% of the maximum dry density per AASHTO T-180 test method (Modified Proctor). Written baserock compaction test results from an independent testing laboratory must be received by the Owner's authorized representative before placing AC pavement.
 20. A.C. pavement shall conform to OSSC (ODOT/APWA) 00744 (Hot Mixed Asphalt Concrete Pavement). Unless otherwise specified or shown on the drawings, base lifts shall be 3/4" dense graded mix, while wearing courses shall be 1/2" dense graded mix. Unless otherwise specified or shown on the drawings, A.C. pavement for parking lots and streets shall be Level 2 mix (50 blow Marshall) per OSSC (ODOT/APWA) 00744.13. A.C. Pavement shall be compacted to a minimum of 91% of maximum density as determined by the Rice standard method. Written AC pavement compaction test results from an independent testing laboratory must be received by the Owner's authorized representative before final payment.
 21. Unless otherwise shown on the drawings, straight grades shall be run between all finish grade elevations and/or finish contour lines shown.
 22. Finish pavement grades at transition to existing pavement shall match existing pavement grades or be feathered past joints with existing pavement as required to provide a smooth, free draining surface.
 23. All existing or constructed manholes, cleanouts, monument boxes, gas valves, water valves and similar structures shall be adjusted to match finish grade of the pavement, sidewalk, landscaped area or median strip wherein they lie. Verify that all valve boxes and risers are clean and centered over the operating nut.
 24. Unless otherwise shown on the drawings, no cut or fill slopes shall be constructed steeper than 4H:1V.
 25. Contractor shall seed and mulch (uniformly by hand or hydroseed) all exposed slopes and disturbed areas which are not scheduled to be landscaped, including trench restoration areas.
- CURBS & SIDEWALKS:**
26. Where trench excavation requires removal of PCC curbs and/or sidewalks, the curbs and/or sidewalks shall be sawcut and removed at a toled joint unless otherwise authorized in writing by the City. The sawcut lines shown on the drawings are schematic and not intended to show the exact alignment of such cuts.

PIPED UTILITIES:

27. The Contractor shall have appropriate equipment on site to produce a firm, smooth, undisturbed subgrade at the trench bottom, true to grade. The bottom of the trench excavation shall be smooth, free of loose materials or tooth grooves for the entire width of the trench prior to placing the granular bedding material.
 28. All pipes shall be bedded with minimum 6-inches of 3/4"-0 crushed rock bedding and backfilled with compacted 3/4"-0 crushed rock in the pipe zone (crushed rock shall extend a minimum of 12-inches over the top of the pipe in all cases). Unless CDF or other backfill is shown or noted on the drawings, crushed rock trench backfill shall be used under all improved areas, including pavement, sidewalks, foundation slabs, buildings, etc.
 29. Granular trench bedding and backfill shall conform to the requirements of OSSC (ODOT/APWA) 02630.10 (Dense Graded Base Aggregate), 3/4"-0. Unless otherwise shown on the drawings, compact granular backfill to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor).
 30. All piped utilities abandoned in place shall have all openings closed with concrete plugs with a minimum length equal to 2 times the diameter of the abandoned pipe.
 31. No trenches in sidewalks, roads, or driveways shall be left in an open condition overnight. All such trenches shall be closed before the end of each workday and normal traffic and pedestrian flows restored.
- WATER SYSTEM:**
32. All water mains shall be Class 52 ductile iron. All fittings 4-inches through 24-inches in diameter shall be ductile iron fittings in conformance with AWWA C-153 or AWWA C-110. The minimum working pressure for all MJ cast iron or ductile iron fittings 4-inches through 24-inch in diameter shall be 350 psi for MJ fittings and 250 psi for flanged fittings.
 33. All water mains to be installed with a minimum 36 inch cover to finish grade unless otherwise noted or directed. Water service lines shall be installed with a minimum 30-inch cover. Deeper depths may be required as shown on the drawings or to avoid obstructions.
 34. Thrust restraint shall be provided on all bends, tees and other direction changes per local jurisdiction requirements and as specified or shown on the drawings. Unless otherwise shown or approved by the Engineer, all valves shall be flange connected to adjacent tees or crosses.
 35. Provisions for thrust restraint shall be provided on any fire line at the point where it enters the building envelope. Unless fire line ends under the building with a vertical bend (with retainer glands & a vertical thrust block), a straddle block shall be installed 6 feet minimum from the building foundation wall (with no unrestrained joints between the straddle block & the pipe end inside the building wall).
 36. Contractor shall provide all necessary equipment and materials (including plugs, blowoffs, valves, service taps, etc.) required to flush, test and disinfect waterlines per public agency requirements.
 37. The work shall be performed in a manner designated to maintain water service to buildings supplied from the existing waterlines. In no case shall service to any main line or building be interrupted for more than four (4) hours in any one-day. Contractor shall notify the City and all affected residents and businesses a minimum of 24 business hours (1 business day) before any interruption of service.
 38. Pressure Testing. All waterlines, services and appurtenances shall be pressure tested for leakage. All testing shall conform to requirements as outlined in the specifications, City standards and/or testing forms. The hydrostatic test shall be performed with all service line corporation stops open and meter stops closed, and with all hydrant line valves open. Prior to the start of each pressure test, the position of all mainline valves, hydrant line valves and service line corporation stops in the test segment shall verified.
 39. Cleaning & Flushing. After the pressure test, the water lines shall be thoroughly flushed through hydrants, blow offs or by other approved means.

AS-BUILT

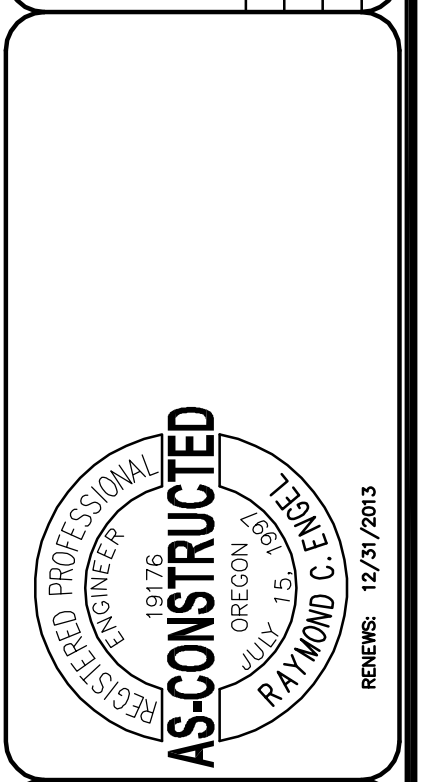
COMPILED FROM:

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 DATA FURNISHED BY CONTRACTOR X
 FIELD INSPECTION RECORDS _____

WESTECH ENGINEERING, INC.

DATE: 03/28/13 BY: RCE

VERIFY SCALE	DATE: SEP 11
BASE IS ONE INCH ON ORIGINAL DRAWING	
IF NOT ONE INCH ON BASES ACCORDINGLY	
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1"	
DRN. RCE	05/24/13
DSN. RCE	07/19/12
CKD. RCE	
NO. 1	
DESCRIPTION	As-Built Per Contractor Information
REV. RCE	Final Design
BY	
REVISIONS	



WESTECH ENGINEERING, INC.
 CONSULTING ENGINEERS AND PLANNERS

WE

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 Phone: (503) 585-2474 Fax: (503) 585-3966
 E-mail: westech@westech-eng.com

OR Dept. of Corrections Salem, Oregon
 OSCJ Site Fire Line Upgrade

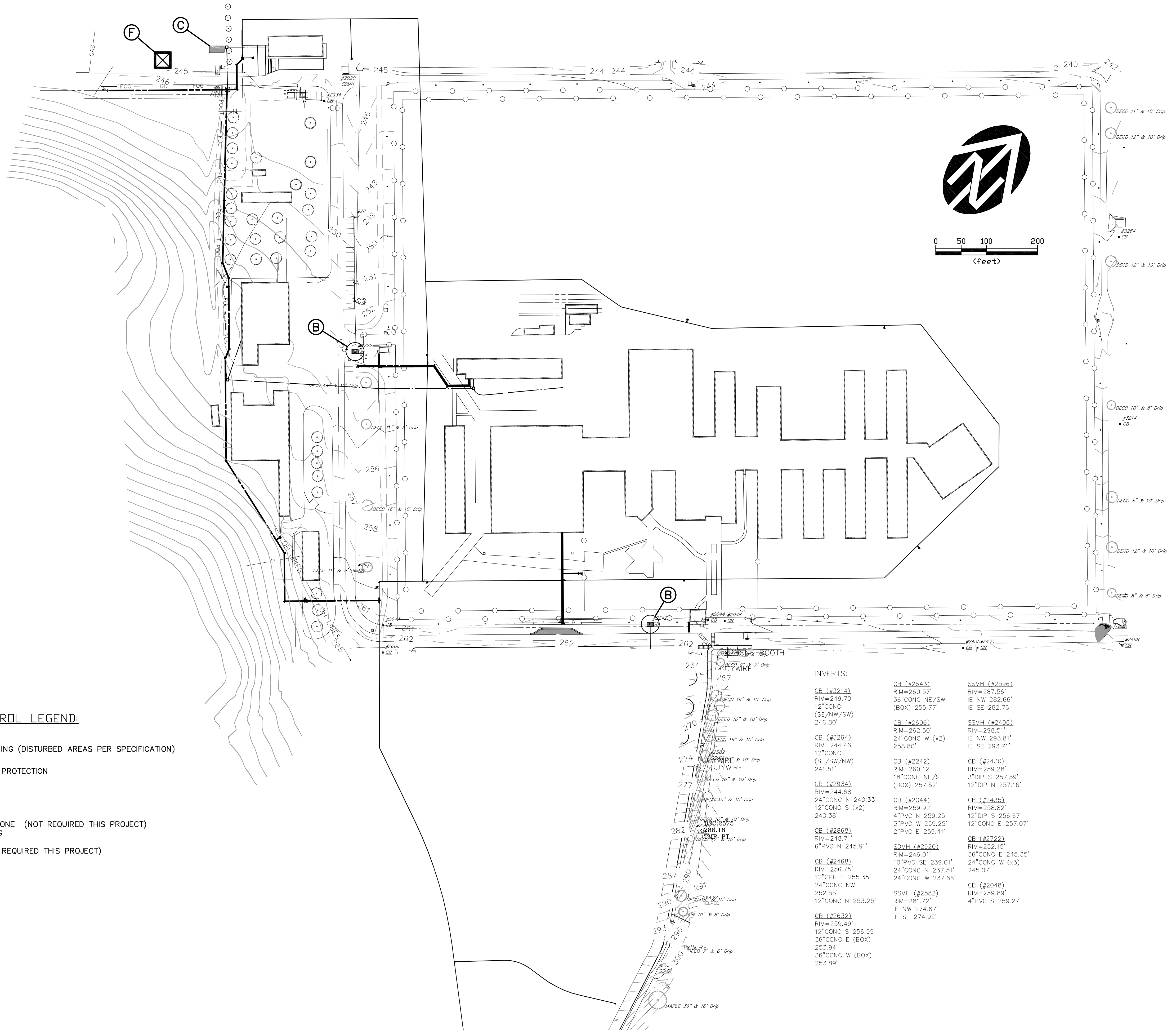
Notes

SHEET
 2 OF 11
 JOB NUMBER
 2664.3000.0

AS-BUILT
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 FINAL PROOF SURVEY _____
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 FIELD INSPECTION RECORDS _____
WESTTECH ENGINEERING, INC.
 DATE: 03/28/13 BY: RCE

EROSION CONTROL LEGEND:

- (A) SEEDING AND MULCHING (DISTURBED AREAS PER SPECIFICATION)
- (B) CATCH BASIN/INLET PROTECTION
- (C) SEDIMENT BARRIER
- (D) PEDESTRIAN WORK ZONE (NOT REQUIRED THIS PROJECT)
 DELINEATION FENCING
- (E) SILT FENCING (NOT REQUIRED THIS PROJECT)
- (F) CONCRETE TRUCK WASH-OUT AREA



INVERTS:

CB (#3214) RIM=249.70' 12"CONC (SE/NW/SW) 246.80'	CB (#2643) RIM=260.57' 36"CONC NE/SW (BOX) 255.77'	SSMH (#2596) RIM=287.56' IE NW 282.66' IE SE 282.76'
CB (#3264) RIM=244.46' 12"CONC (SE/SW/NW) 241.51'	CB (#2606) RIM=262.50' 24"CONC W (x2) 258.80'	SSMH (#2496) RIM=298.51' IE NW 293.81' IE SE 293.71'
CB (#2934) RIM=244.65' 24"CONC N 240.33' 12"CONC S (x2) 240.38'	CB (#2242) RIM=260.12' 18"CONC NE/S (BOX) 257.52'	CB (#2430) RIM=259.28' 3"DIP S 257.59' 12"DIP N 257.16'
CB (#2888) RIM=248.71' 6"PVC N 245.91'	CB (#2044) RIM=259.92' 4"PVC N 259.25' 3"PVC W 259.25' 2"PVC E 259.41'	CB (#2435) RIM=258.82' 12"DIP S 256.67' 12"CONC E 257.07'
CB (#2488) RIM=256.75' 12"CONC E 255.35' 24"CONC NW 252.55' 12"CONC N 253.25'	SDMH (#2920) RIM=246.01' 10"PVC SE 239.01' 24"CONC W 237.51' 24"CONC S 237.66'	CB (#2722) RIM=252.15' 36"CONC E 245.35' 24"CONC W (x3) 245.07'
CB (#2632) RIM=259.49' 12"CONC S 256.99' 36"CONC E (BOX) 253.94' 36"CONC W (BOX) 253.89'	SSMH (#2582) RIM=281.72' IE NW 274.67' IE SE 274.92'	CB (#2048) RIM=259.89' 4"PVC S 259.27'

OR Dept. of Corrections Salem, Oregon

OSCI Site Fire Line Upgrade

Erosion Control Plan

SHEET 4 OF 11

JOB NUMBER 2664.3000.0

VERIFY SCALE
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DATE: SEP 11

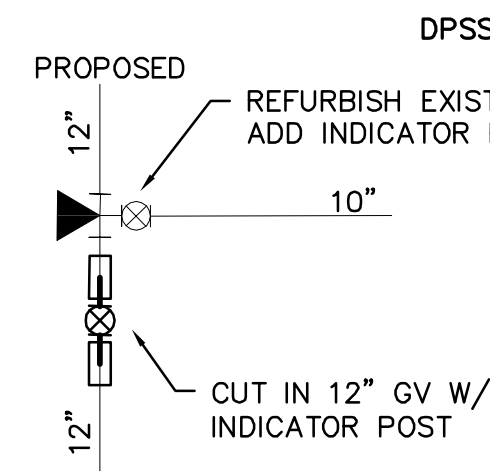
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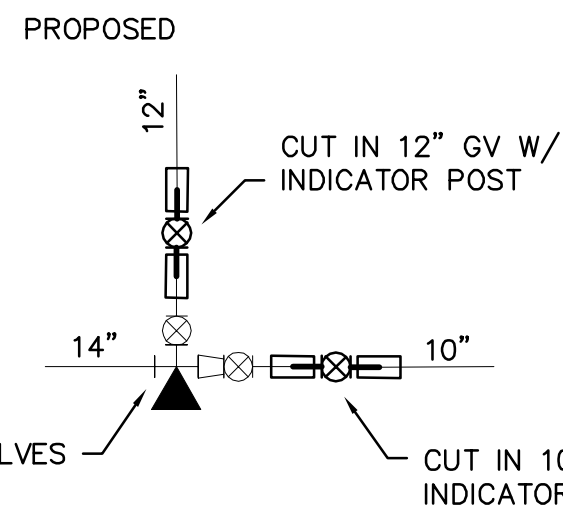
AS-CONSTRUCTED
 REGISTERED PROFESSIONAL ENGINEER
 OREGON
 No. 15,151
 EXPIRES 12/31/2013

MAINLINE VALVE REPLACEMENT (ALL IN BASE BID)

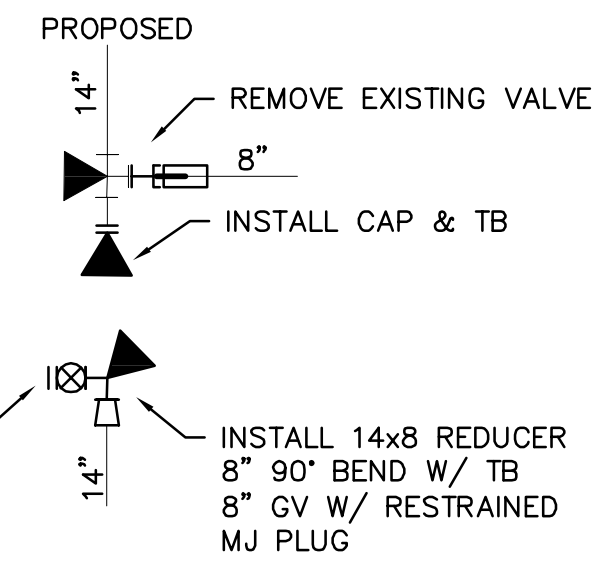
MAIN VALVE 1
EXISTING



MAIN VALVES 2 & 3
EXISTING



MAIN VALVE 5
EXISTING



MAINLINE VALVE REPLACEMENT NOTES

- INDICATOR POSTS TO BE MUELLER A20806 ADJUSTABLE VERTICAL POST OR APPROVED EQUAL.
- EACH INDICATOR POST TO BE HAVE 3'x3'x4" THICK PCC CONCRETE PAD CENTERED ON THE POST.

EXISTING FIRE HYDRANT NOTES

- ALL EXISTING FIRE HYDRANT VALVES TO BE REPLACED WITH NEW GATE VALVES.
- ALL EXISTING FIRE HYDRANTS TO BE INSPECTED TO DETERMINE IF REPAIR/REFURBISHMENT IS POSSIBLE.
- AS PART OF THE SCOPE OF WORK FOR THIS PROJECT CONTRACTOR SHALL PROVIDE OWNER WITH A REPORT ON THE CONDITION OF EACH HYDRANT. THE WORK NECESSARY TO REPAIR OR REFURBISH THE HYDRANT TO LIKE NEW CONDITION AND THE COST FOR REPAIR/REFURBISHMENT FOR EACH HYDRANT.
- THE BASE BID SHALL INCLUDE REPLACING ALL NINE (9) EXISTING FIRE HYDRANTS W/ M&H MODEL 129 HYDRANTS OR APPROVED EQUAL. AS PART OF THE BASE BID, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A UNIT COST FOR A SINGLE FIRE HYDRANT, INSTALLED.
- ASSUME AN AVERAGE OF FIVE (05) FT OF COVER OVER THE FIRE LINE FOR HYDRANT BURY DEPTH. THE CONTRACTOR SHALL FIELD VERIFY ACTUAL DEPTH OF BURY FOR EACH HYDRANT PRIOR TO ORDERING HYDRANTS.
- DURING CONSTRUCTION THE OWNER MAY ELECT TO REQUIRE THE CONTRACTOR TO REPAIR/REFURBISH ANY OR ALL FIRE HYDRANTS FOR THE INDIVIDUAL PRICE(S) DETERMINED IN ITEM 3 ABOVE, AND REDUCE THE NUMBER OF NEW HYDRANTS TO BE INSTALLED BY THE NUMBER OF REPAIRED/REFURBISHED HYDRANTS USED. ALL EXISTING FIRE HYDRANTS REPLACED W/ NEW FIRE HYDRANTS.

GENERAL CONSTRUCTION SEQUENCE

- THE FOLLOWING IS THE SUGGESTED SEQUENCE OF CONSTRUCTION. THE CONTRACTOR MAY, WITH OWNER APPROVAL, ADJUST THE SEQUENCE AS NECESSARY FOR CONSTRUCTION.
- REPLACE OR REPAIR/REFURBISH AND REINSTALL ALL EXISTING FIRE HYDRANTS WITH NEW HYDRANT VALVES.
 - INSTALL NEW MAIN LINE VALVES AND ABANDON EXISTING VALVES WHERE INDICATED.
 - CONSTRUCT THE NEW FIRE LINE FROM THE DPSST CONNECTION TO BY THE BOILER PLANT.
 - CONSTRUCT THE IMPROVEMENTS ASSOCIATED WITH THE CONNECTION TO BUILDING 19, INCLUDING THE CUT IN CONNECTION, FIRE LINE, FDC LINE, FIRE HYDRANTS AND FDC.
 - CONNECT THE IMPROVEMENTS ASSOCIATED WITH THE CONNECTION TO THE PHYSICAL PLANT.
 - FLUSH, TEST THE NEW FIRE LINE AND COMPLETE THE CONNECTION TO THE EXISTING FIRE LINE BY THE BOILER PLANT.
 - CONDUCT PRESSURE TESTS ON THE EXISTING MAIN IN SECTIONS AS FOLLOWS:
 - FROM THE NEW VALVE ON THE TEE BY THE BOILER PLANT TO THE TEE WITH EXISTING MAIN VALVE 1.
 - FROM THE TEE WITH EXISTING MAIN VALVE 1 TO THE NEW VALVE BY THE GYM AT THE NE END OF THE MAIN BUILDING.
 - FROM THE NEW VALVE BY THE GYM TO THE TEE WITH EXISTING VALVES 2 AND 3.
 - FROM THE TEE WITH EXISTING VALVE 1 TO THE TEE WITH EXISTING VALVES 2 AND 3.
 - FROM THE TEE WITH EXISTING VALVES 2 AND 3 TO EXISTING FIRE HYDRANT 9.
 - CONSTRUCT THE ALTERNATE FIRE LINE, IF AWARDED.

CONNECTION TO
OSCI FIRE LINE

NEW 12" CL 52 DI
FIRE MAIN
SEE SHEET 6

EXISTING 12"
DI FIRE LINE

EXISTING
FH 1
DEPTH 4'

EXISTING
FH 15

EXIST
STRADDLE BLOCK
16" BFV & BO

CONNECTION TO
DPSST
FIRE LINE

ALTERNATE 12" CL 52 DI
FIRE MAIN
SEE SHEETS 7 & 8

EXISTING 12"
DI FIRE LINE

EXISTING
FH 2
DEPTH 5'

PROPOSED
FH 14

SEE SHT 5A FOR
COMM CONDUIT FROM
BOILER PLANT TO
PHYSICAL PLANT

PROPOSED
FH 13

EXISTING 12"
DI FIRE LINE

EXISTING
FH 2
DEPTH 5'

NEW PHYSICAL PLANT
FIRE LINE CONNECTIONS
SEE SHEET 6

EXISTING
FH 3
DEPTH 4'

EXISTING
FH 4
DEPTH 4.5'

EXISTING 10"
DI FIRE LINE

EXISTING
FH 5
DEPTH 4'

EXISTING 10"
DI FIRE LINE

EXISTING
FH 6
DEPTH 3.5'

EXISTING
FH 7
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FH 8
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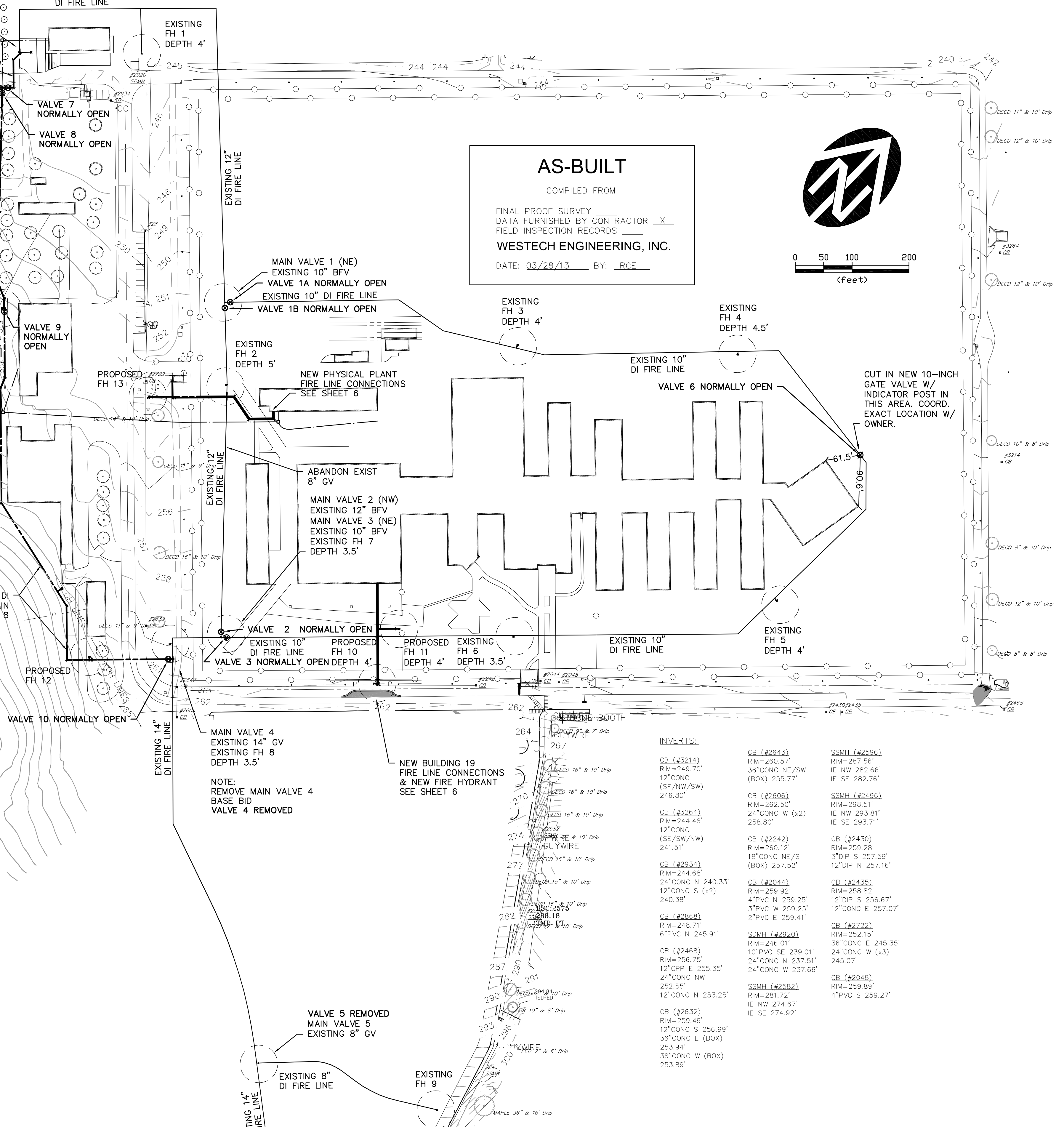
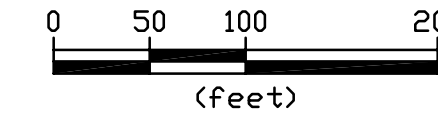
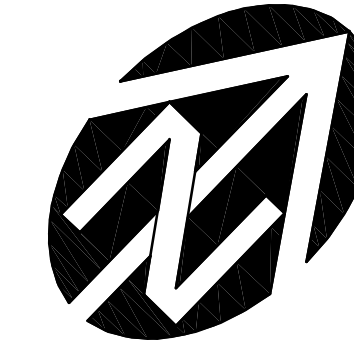
EXISTING
FH 70
DEPTH 4'

AS-BUILT

COMPILED FROM:

FINAL PROOF SURVEY _____
DATA FURNISHED BY CONTRACTOR X
FIELD INSPECTION RECORDS _____
WESTECH ENGINEERING, INC.

DATE: 03/28/13 BY: RCE



INVERTS:

CB (#2643)	SSMH (#2596)
RIM=260.57'	RIM=287.56'
36"CONC NE/SW	IE NW 282.66'
(BOX) 255.77'	IE SE 282.76'
CB (#2606)	SSMH (#2496)
RIM=262.50'	RIM=298.51'
24"CONC W (x2)	IE NW 293.81'
258.80'	IE SE 293.71'
CB (#2264)	CB (#2430)
RIM=244.46'	RIM=259.28'
12"CONC	3"DIP S 257.59'
(SE/SW/NW)	12"DIP N 257.16'
241.51'	CB (#2435)
CB (#2934)	RIM=258.82'
RIM=244.68'	4"PVC N 259.25'
24"CONC N 240.33'	3"PVC W 259.25'
12"CONC S (x2)	2"PVC E 259.41'
240.38'	SDMH (#2920)
CB (#2888)	RIM=246.01'
RIM=248.71'	10"PVC SE 239.01'
6"PVC N 245.91'	24"CONC N 237.51'
CB (#2488)	24"CONC W (x3)
RIM=256.75'	245.07'
12"CONC E 255.35'	CB (#2048)
24"CONC NW	RIM=259.89'
252.55'	4"PVC S 259.27'
12"CONC N 253.25'	
SSMH (#2582)	
RIM=281.72'	
IE NW 274.67'	
IE SE 274.92'	
CB (#2632)	
RIM=259.49'	
12"CONC S 256.99'	
36"CONC E (BOX)	
253.94'	
36"CONC W (BOX)	
253.89'	

NOTE:
REMOVE MAIN VALVE 4
BASE BID
VALVE 4 REMOVED

NEW BUILDING 19
FIRE LINE CONNECTIONS
& NEW FIRE HYDRANT
SEE SHEET 6

NO.	DATE	DESCRIPTION	BY
1	07/19/12	Final Design	RCE
2	05/24/13	As-Built Per Contractor Information	RCE

VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING
IF NOT ONE INCH ON
THIS DRAWING, SCALE
APPROPRIATELY

AS-CONSTRUCTED
REGISTERED PROFESSIONAL ENGINEER
STATE OF OREGON
PAUL M. WOOD, C.E.
RENEWALS: 12/31/2013

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS

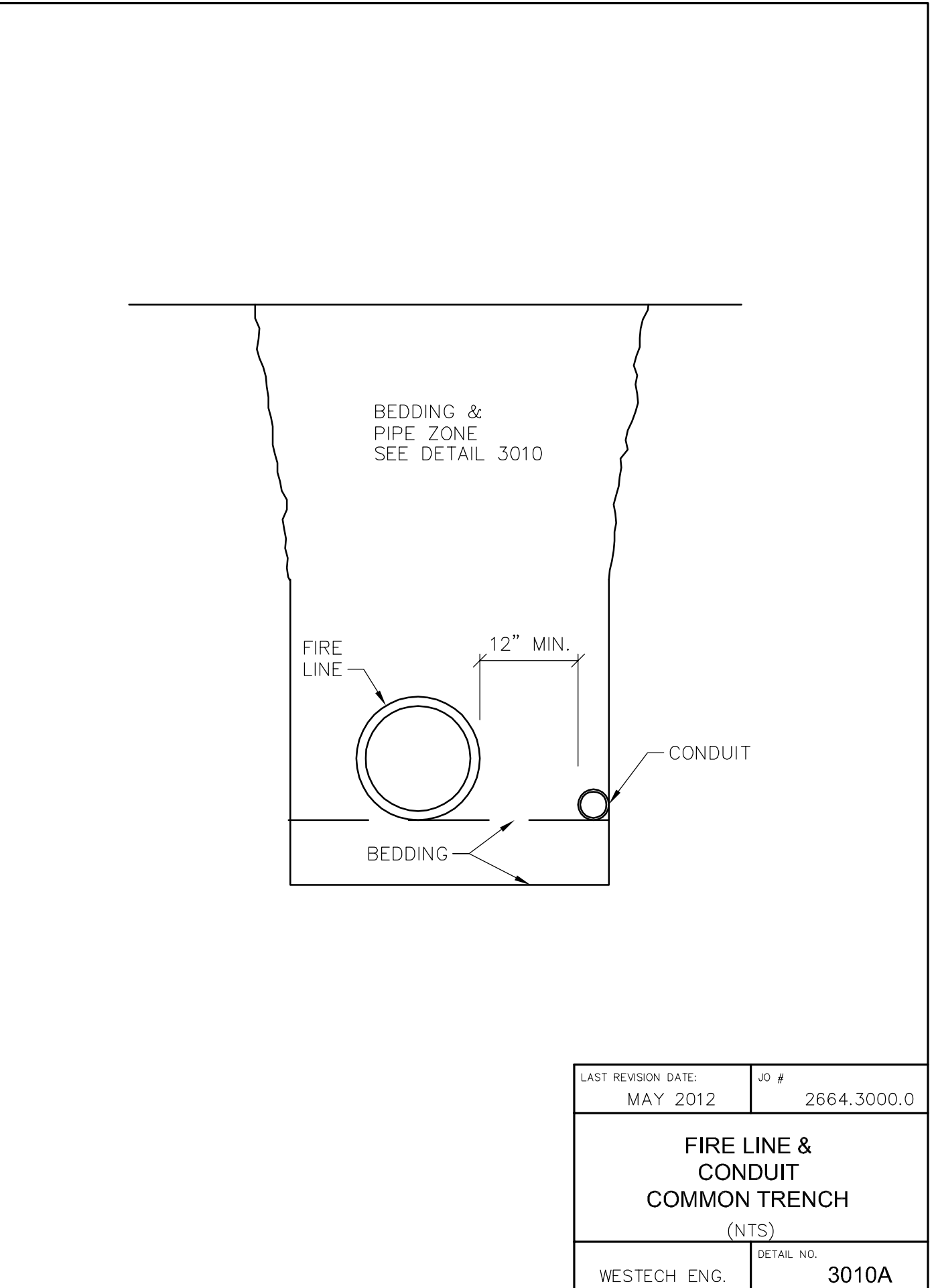
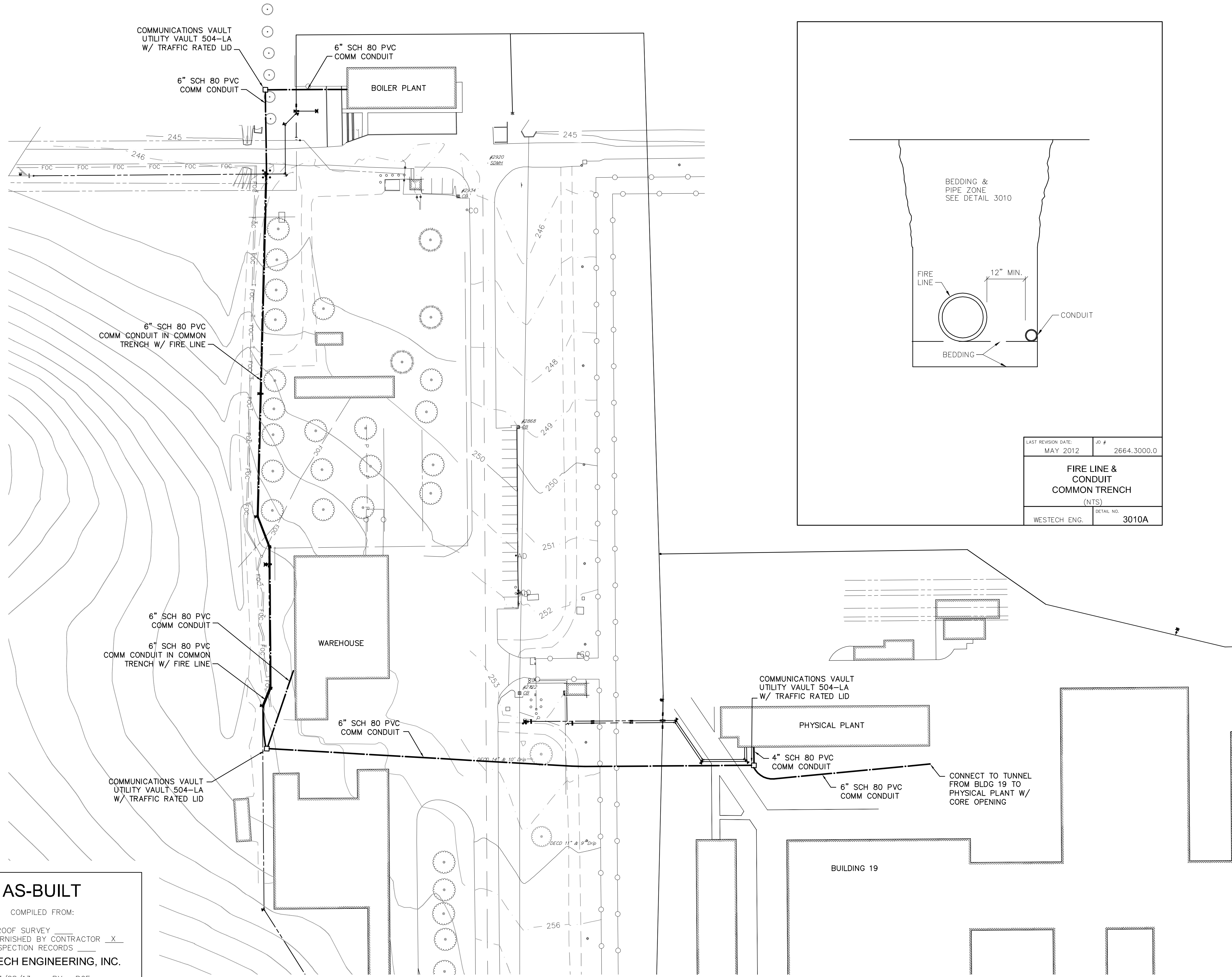
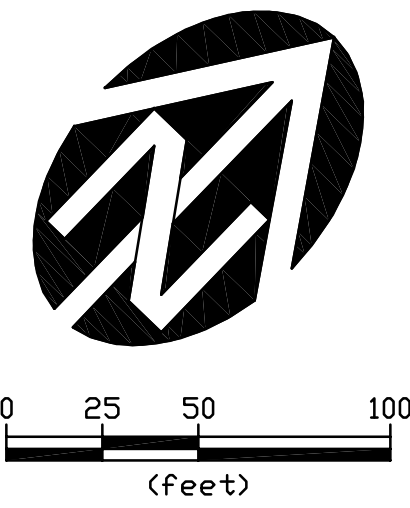
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

OR Dept. of Corrections Salem, Oregon

OSCI Site Fire Line Upgrade

Overall Plan

SHEET
5 OF 11
JOB NUMBER
2664.3000.0



LAST REVISION DATE:	JO #
MAY 2012	2664.3000.0
FIRE LINE & CONDUIT COMMON TRENCH	
(NTS)	
WESTECH ENG.	DETAIL NO. 3010A

AS-BUILT

COMPILED FROM:

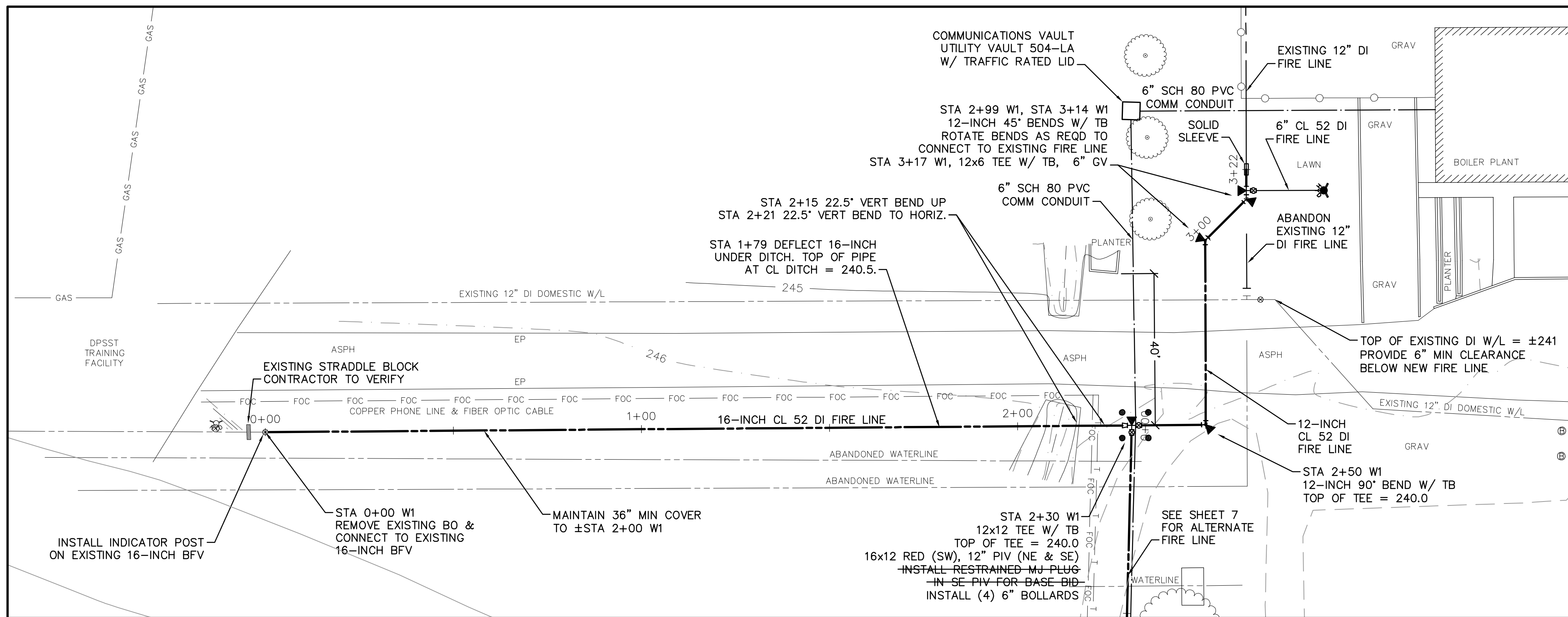
FINAL PROOF SURVEY _____
 DATA FURNISHED BY CONTRACTOR X
 FIELD INSPECTION RECORDS _____

WESTECH ENGINEERING, INC.

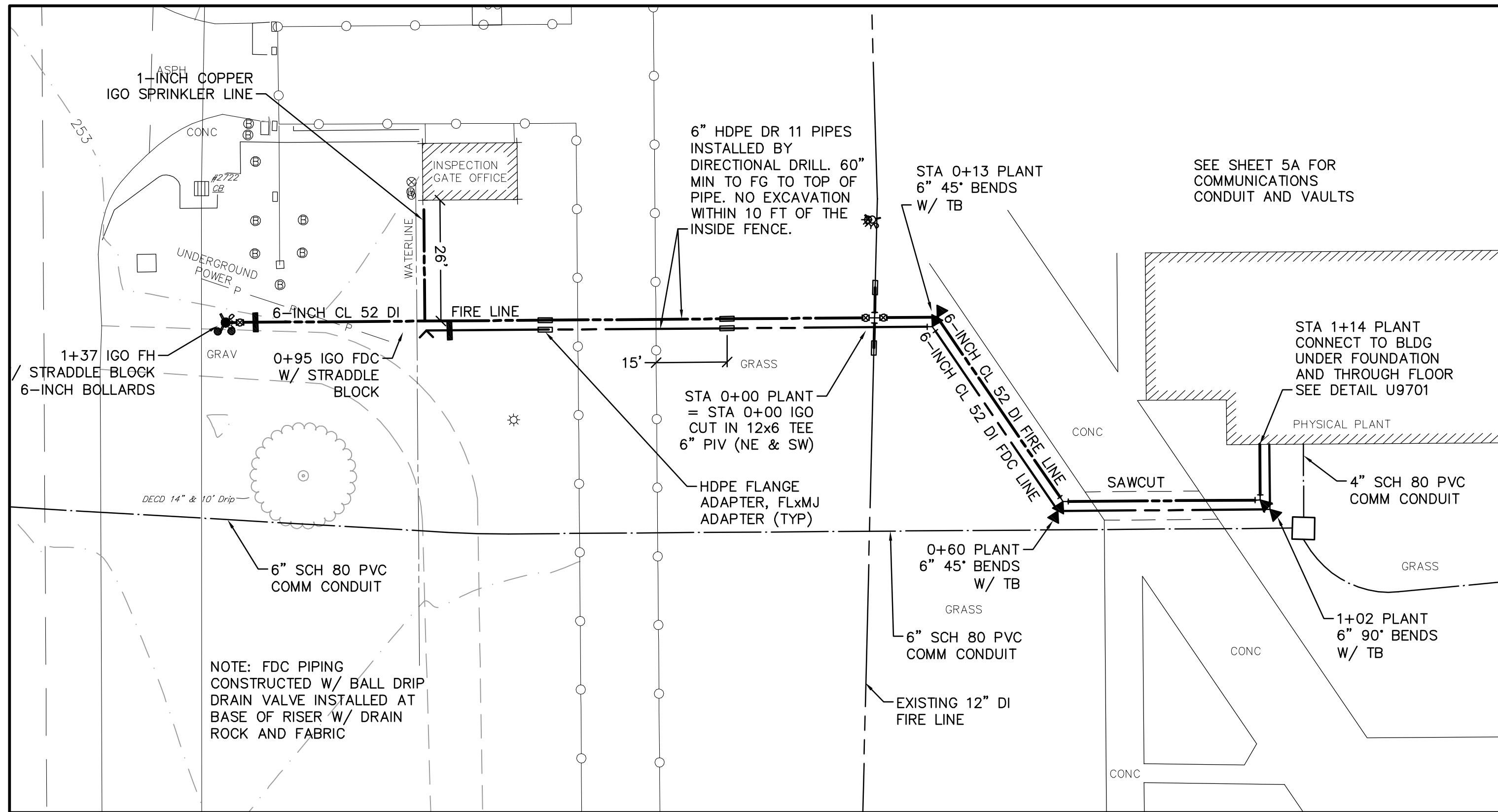
DATE: 03/28/13 BY: RCE

5/24/2013 3:29:18 PM R:\Dwg\000\OSCI Fire System\Design\Plot\05A Conduit.dwg (Plot tab)

AS-CONSTRUCTED	AS-BUILT
WESTECH ENGINEERING, INC. CONSULTING ENGINEERS AND PLANNERS <small>3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302 Phone: (503) 585-2474 Fax: (503) 585-3986 E-mail: westech@westech-eng.com</small>	
OR Dept. of Corrections	Salem, Oregon
OSCI Site Fire Line Upgrade	
Communications Conduit Plan	
SHEET 5A OF 11	
JOB NUMBER 2664.3000.0	

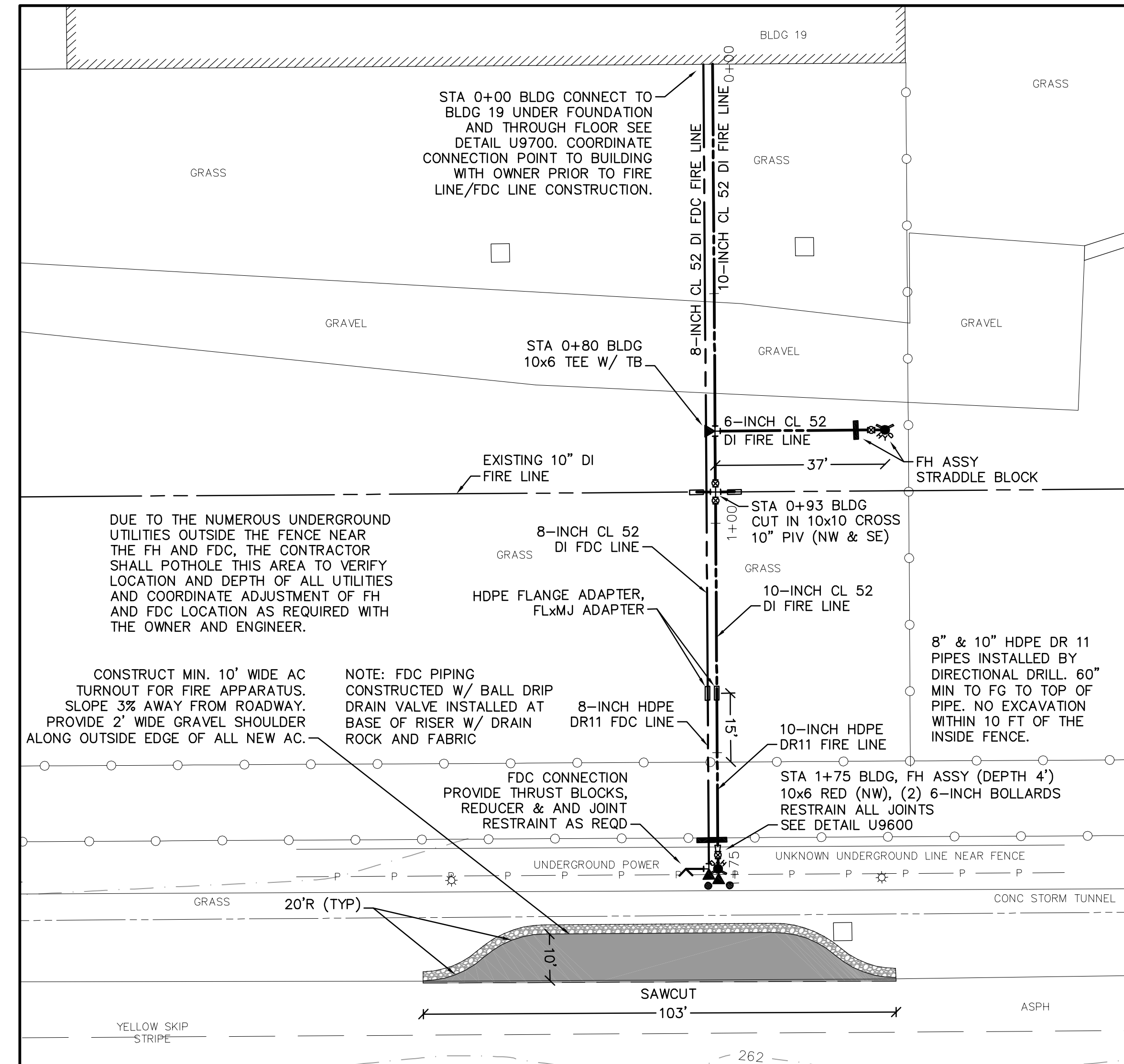


SEE SHEETS 7 & 8 FOR ALTERNATE BID FIRE LINE



AS-BUILT
 COMPILED FROM:
 FINAL PROOF SURVEY _____
 DATA FURNISHED BY CONTRACTOR X
 FIELD INSPECTION RECORDS _____
WESTTECH ENGINEERING, INC.
 DATE: 03/28/13 BY: RCE

NOTE:
 CONTRACTOR TO COORDINATE WORK AT THE MAIN SECURITY FENCE SO THAT ALL WORK ASSOCIATED WITH INSTALLATION OF THE HDPE PIPE IS COMPLETED IN ONE DAY. THIS SHALL INCLUDE EXCAVATION, DIRECTIONAL DRILLING, AND PIPE INSTALLATION.



NO.	DATE	DESCRIPTION	BY
1	07/19/12	Final Design	RCE
2	05/24/13	As-Built Per Contractor Information	RCE

VERIFY SCALE
 BASE IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON SCALES ACCORDINGLY

1"

0 10 20 40
(feet)

REGISTERED PROFESSIONAL ENGINEER
AS-CONSTRUCTED
 STATE OF OREGON
 P. #111010 C
 RENEWS: 12/31/2013

WESTTECH ENGINEERING, INC.
 CONSULTING ENGINEERS AND PLANNERS

WE

3841 Fairview Industrial Dr., S.E., Suite 100, Salem, OR 97302
 Phone: (503) 585-2474 Fax: (503) 585-3986
 E-mail: westtech@westtech-eng.com

OR Dept. of Corrections Salem, Oregon

OSCI Site Fire Line Upgrade

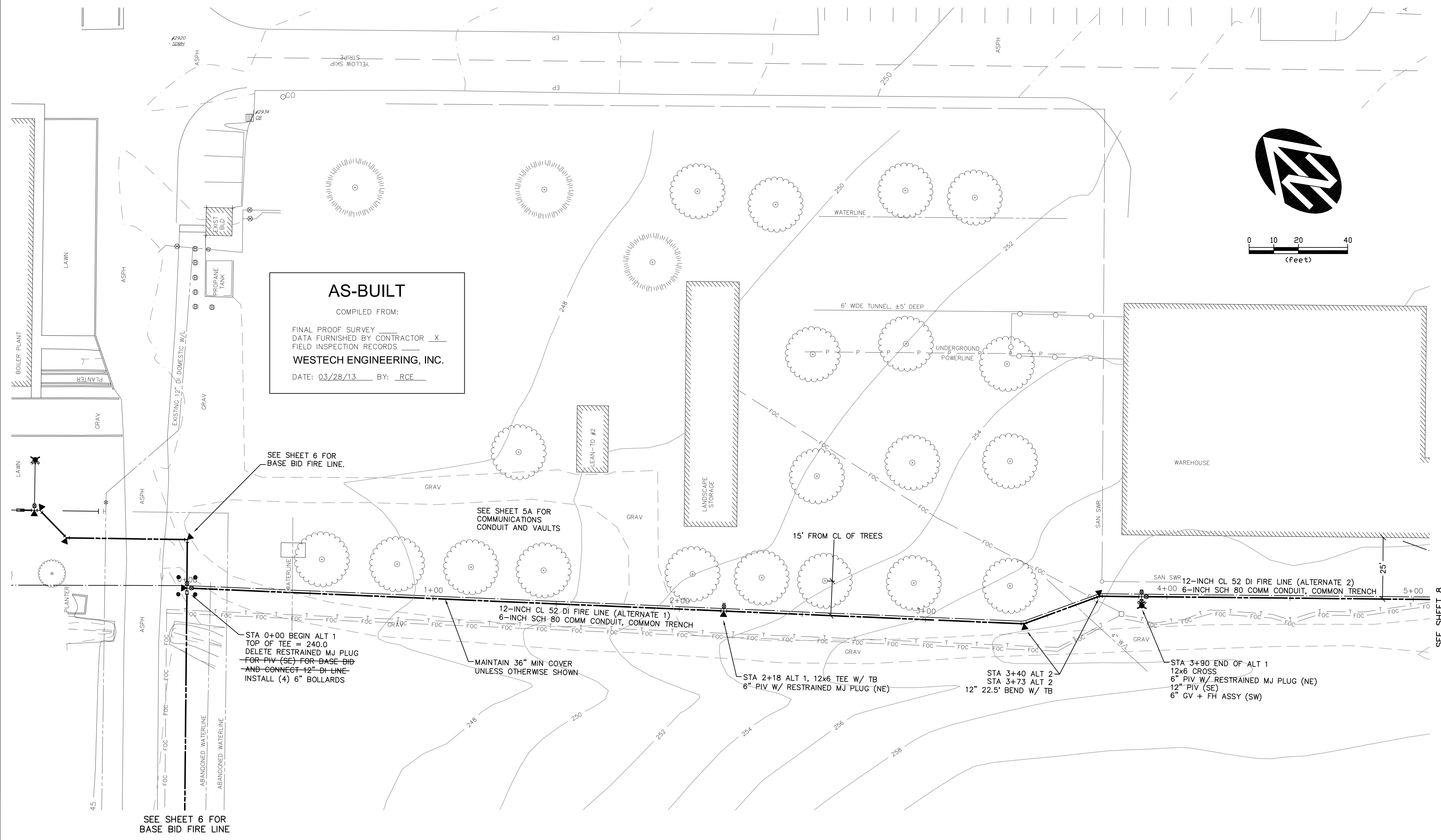
Base Bid Design

SHEET
6 OF 11

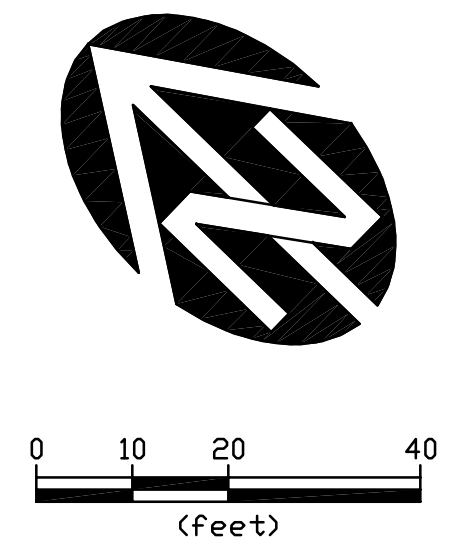
JOB NUMBER
2664.3000.0

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5/24/2013 3:29:40 PM
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AS-BUILT
 COMPILED FROM:
 FINAL PROOF SURVEY _____
 DATA FURNISHED BY CONTRACTOR X
 FIELD INSPECTION RECORDS _____
WESTECH ENGINEERING, INC.
 DATE: 03/28/13 BY: RCE



SEE SHEET 6 FOR
 BASE BID FIRE LINE.

SEE SHEET 5A FOR
 COMMUNICATIONS
 CONDUIT AND VAULTS

STA 0+00 BEGIN ALT 1
 TOP OF TEE = 240.0
 DELETE RESTRAINED MJ PLUG
 FOR PIV (SE) FOR BASE BID
 AND CONNECT 12" DI LINE
 INSTALL (4) 6" BOLLARDS

MAINTAIN 36" MIN COVER
 UNLESS OTHERWISE SHOWN

STA 2+18 ALT 1, 12x6 TEE W/ TB
 6" PIV W/ RESTRAINED MJ PLUG (NE)

STA 3+40 ALT 2
 STA 3+73 ALT 2
 12" 22.5' BEND W/ TB

STA 3+90 END OF ALT 1
 12x6 CROSS
 6" PIV W/ RESTRAINED MJ PLUG (NE)
 12" PIV (SE)
 6" GV + FH ASSY (SW)

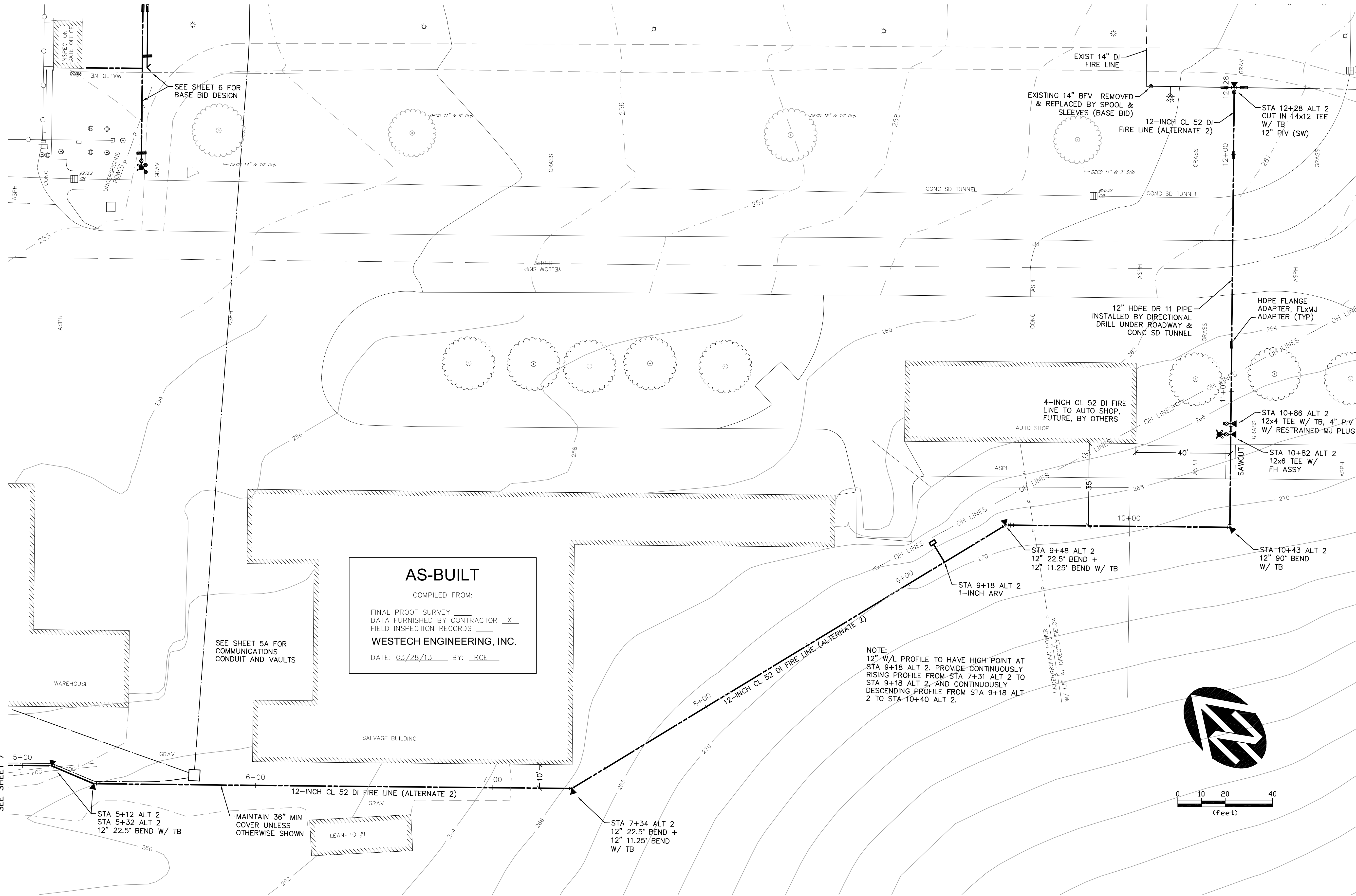
SEE SHEET 6 FOR
 BASE BID FIRE LINE

SEE SHEET 8

OR Dept. of Corrections		Salem, Oregon	
OSCI Site Fire Line Upgrade		Alternate Fire Line Design	
SHEET		7 OF 11	
JOB NUMBER		2664.3000.0	

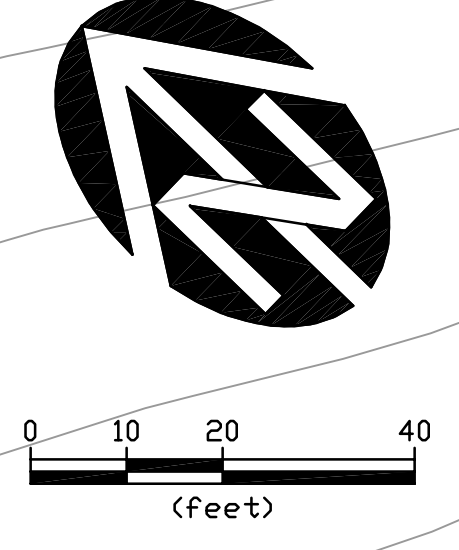
WESTECH ENGINEERING, INC. CONSULTING ENGINEERS AND PLANNERS		3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302 Phone: (503) 585-2474 Fax: (503) 585-3986 E-mail: westech@westech-eng.com	
REVISIONS		DATE: SEP 11	
NO.	DATE	DESCRIPTION	BY
1	07/19/12	Final Design	RCE
2	05/24/13	As-Built Per Contractor Information	RCE

5/24/2013 3:29:51 PM
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AS-BUILT
 COMPILED FROM:
 FINAL PROOF SURVEY _____
 DATA FURNISHED BY CONTRACTOR X
 FIELD INSPECTION RECORDS _____
WESTECH ENGINEERING, INC.
 DATE: 03/28/13 BY: RCE

NOTE:
 12" W/L PROFILE TO HAVE HIGH POINT AT STA 9+18 ALT 2. PROVIDE CONTINUOUSLY RISING PROFILE FROM STA 7+31 ALT 2 TO STA 9+18 ALT 2, AND CONTINUOUSLY DESCENDING PROFILE FROM STA 9+18 ALT 2 TO STA 10+40 ALT 2.



VERIFY SCALE
 BASE IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON SCALES ACCORDINGLY

NO.	DATE	DESCRIPTION	BY
1	07/19/12	Final Design	RCE
2	05/24/13	As-Built Per Contractor Information	RCE

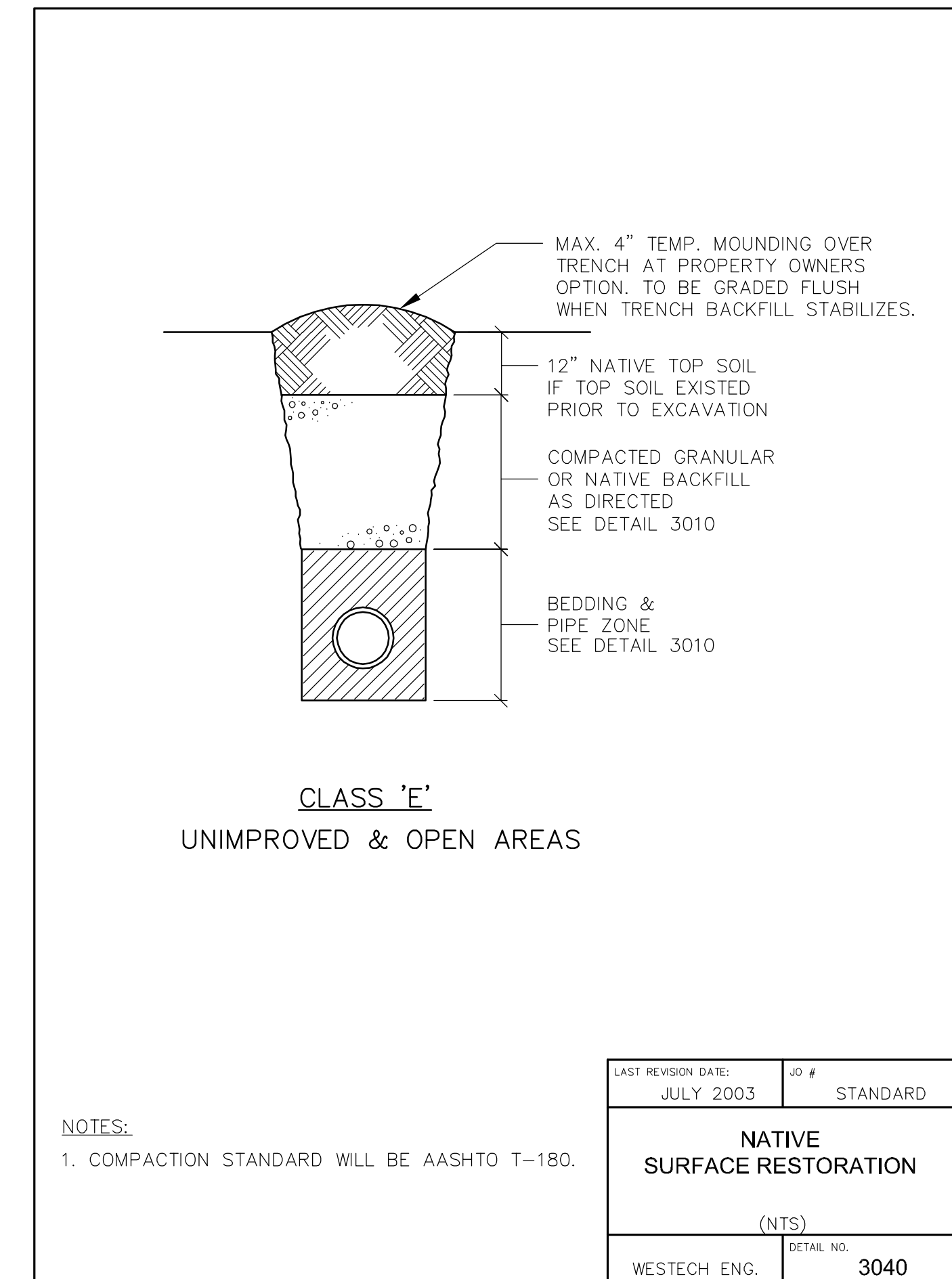
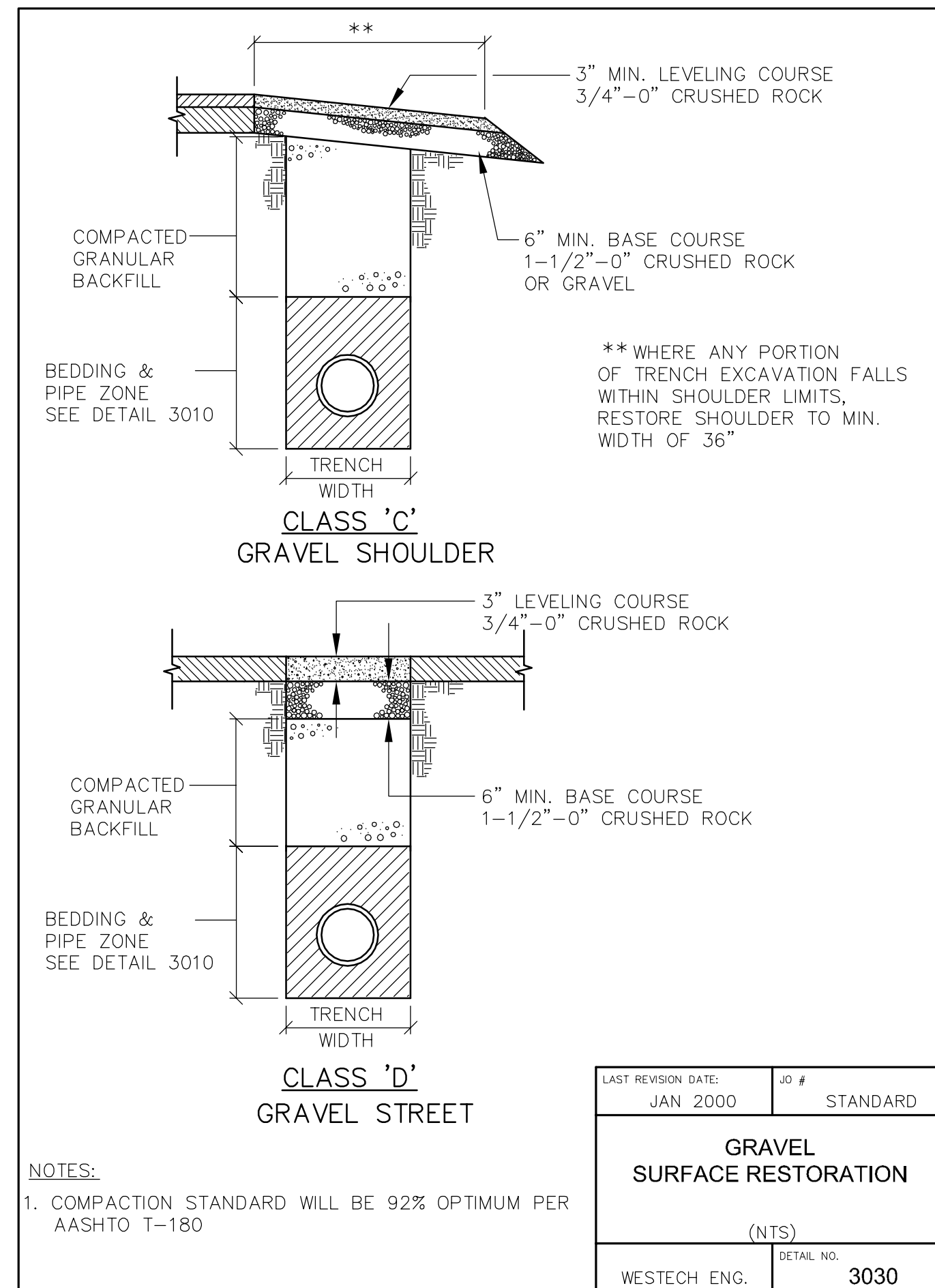
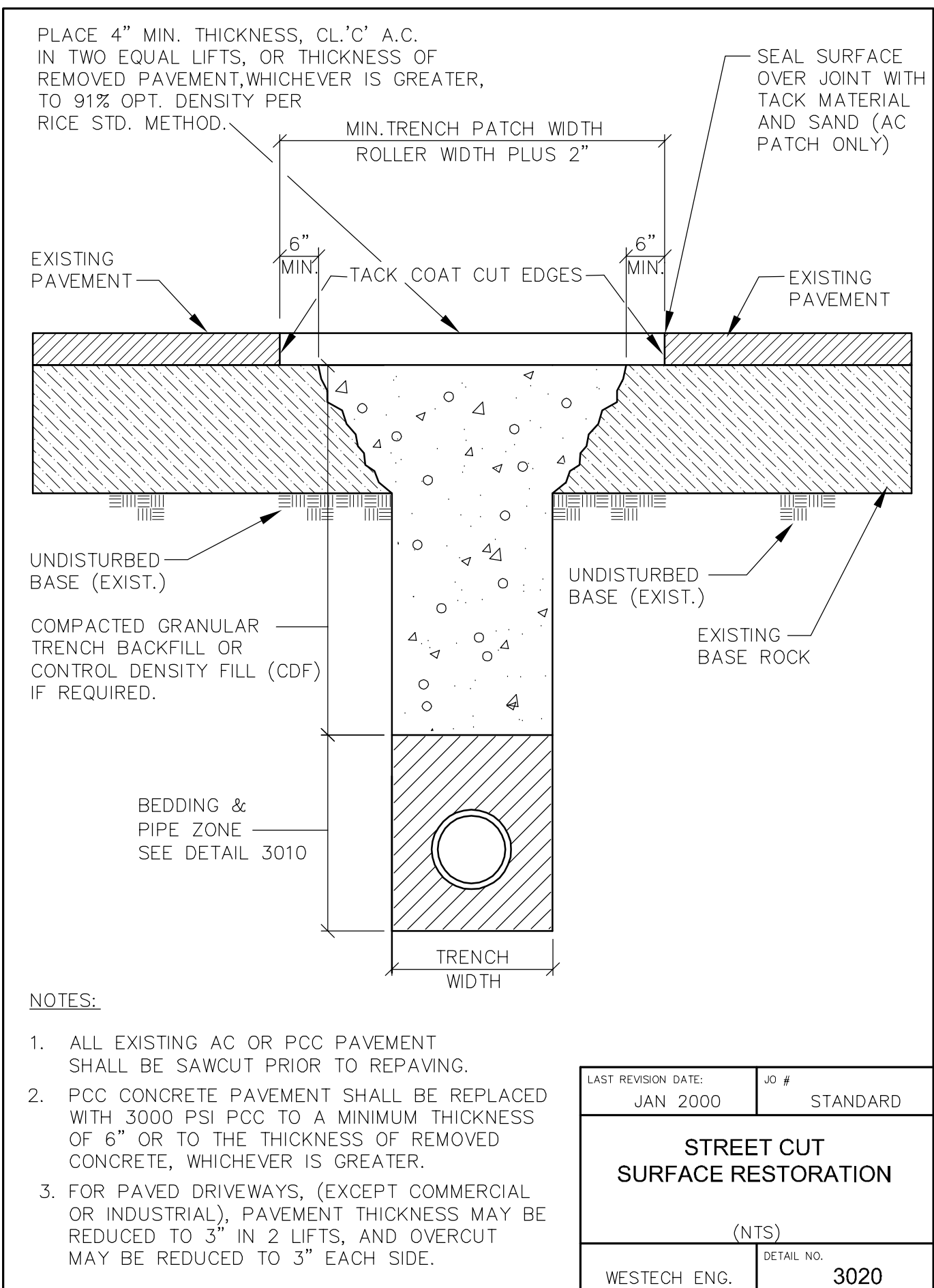
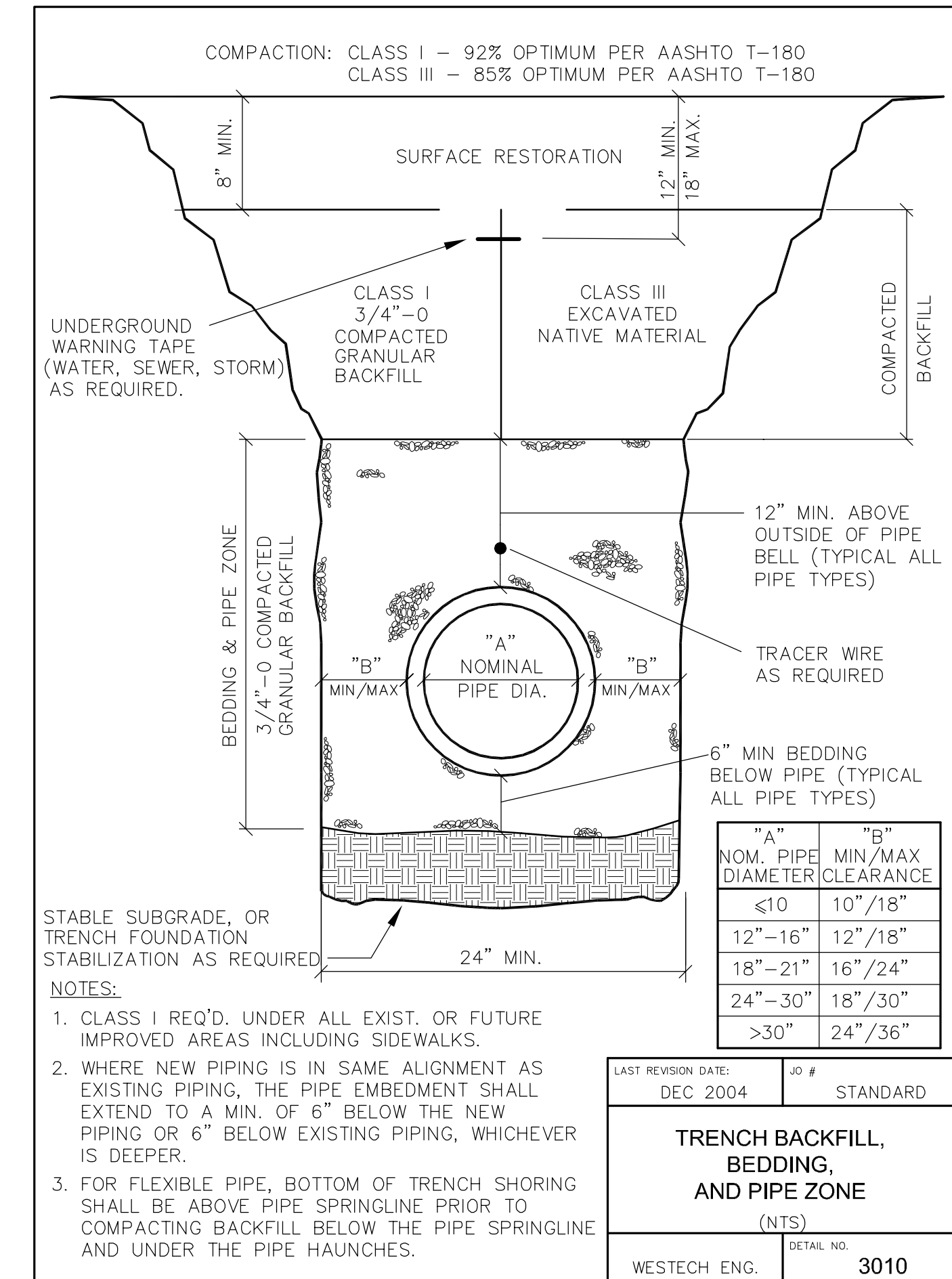
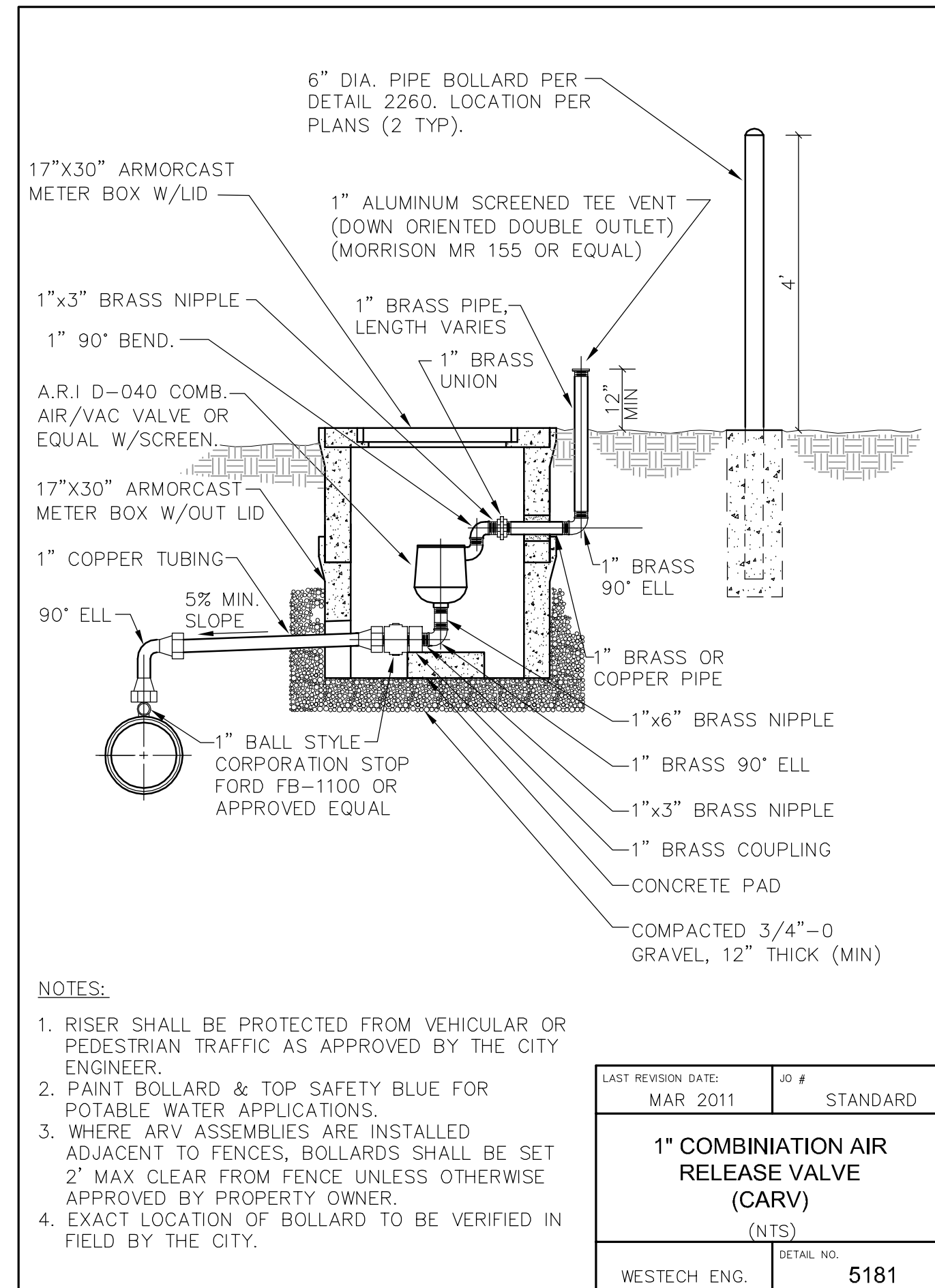
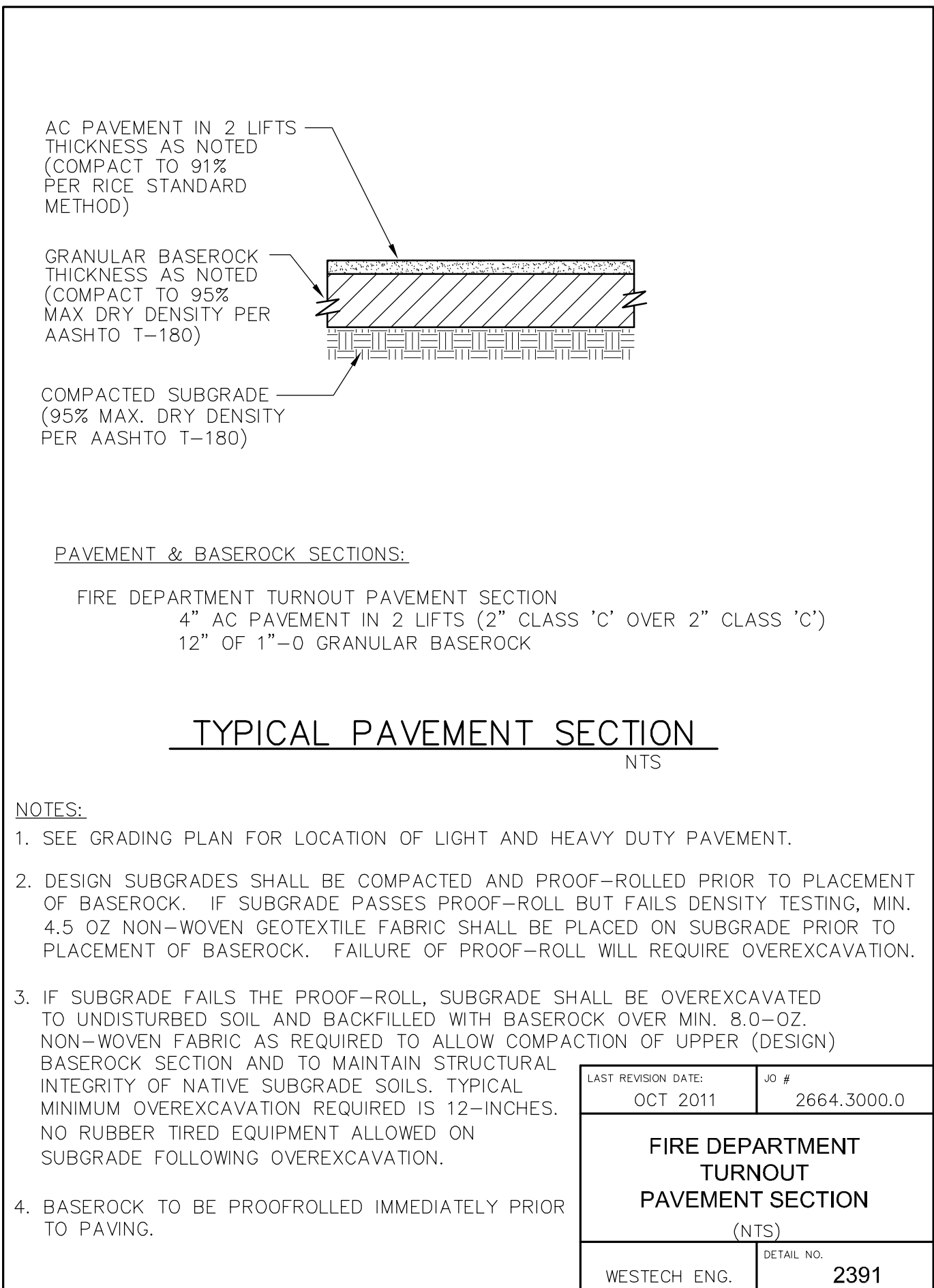
DATE: SEP 11

REGISTERED PROFESSIONAL ENGINEER
 STATE OF OREGON
AS-CONSTRUCTED
 PA # 10000 C U 15
 RENEWS: 12/31/2013

WE
WESTECH ENGINEERING, INC.
 CONSULTING ENGINEERS AND PLANNERS
 3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
 Phone: (503) 585-2474 Fax: (503) 585-3966
 E-mail: westech@westech-eng.com

OR Dept. of Corrections Salem, Oregon
 OSCI Site Fire Line Upgrade
Alternate Fire Line Design

SHEET
8 OF **11**
 JOB NUMBER
 2664.3000.0



AS-BUILT

COMPILED FROM:

FINAL PROOF SURVEY _____
 DATA FURNISHED BY CONTRACTOR X
 FIELD INSPECTION RECORDS _____

WESTECH ENGINEERING, INC.

DATE: 03/28/13 BY: RCE

VERIFY SCALE BASE IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON SCALES ACCORDINGLY	1"
DSN. RCE	2
DRN. RCE	1
CKD. RCE	1
DATE: SEP 11	NO. DATE
AS-Built Per Contractor Information	Final Design
RCE	RCE
BY	BY

REVISIONS

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS

AS-CONSTRUCTED

3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
 Phone: (503) 585-2474 Fax: (503) 585-3986
 E-mail: westech@westech-eng.com

OR Dept. of Corrections Salem, Oregon

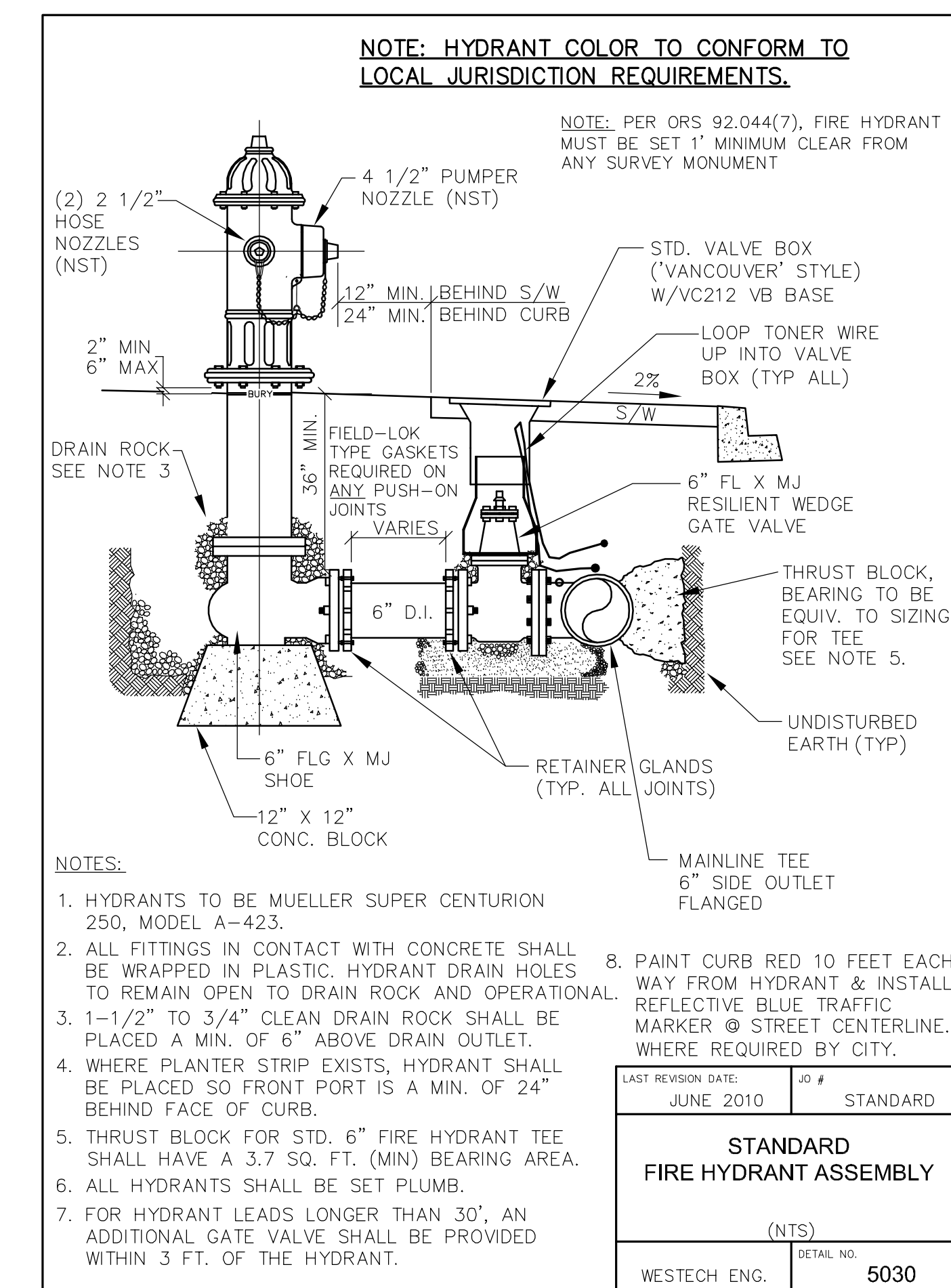
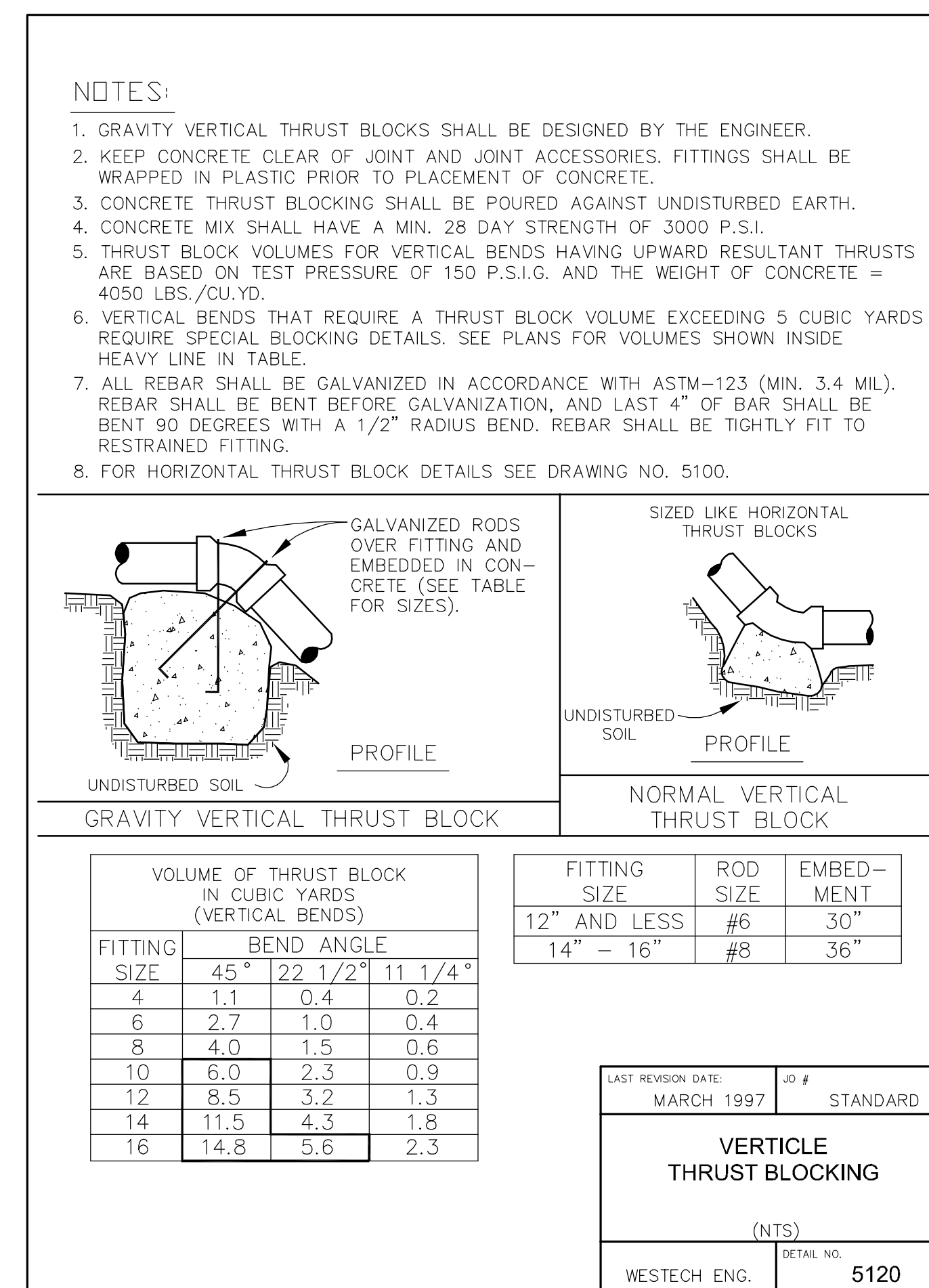
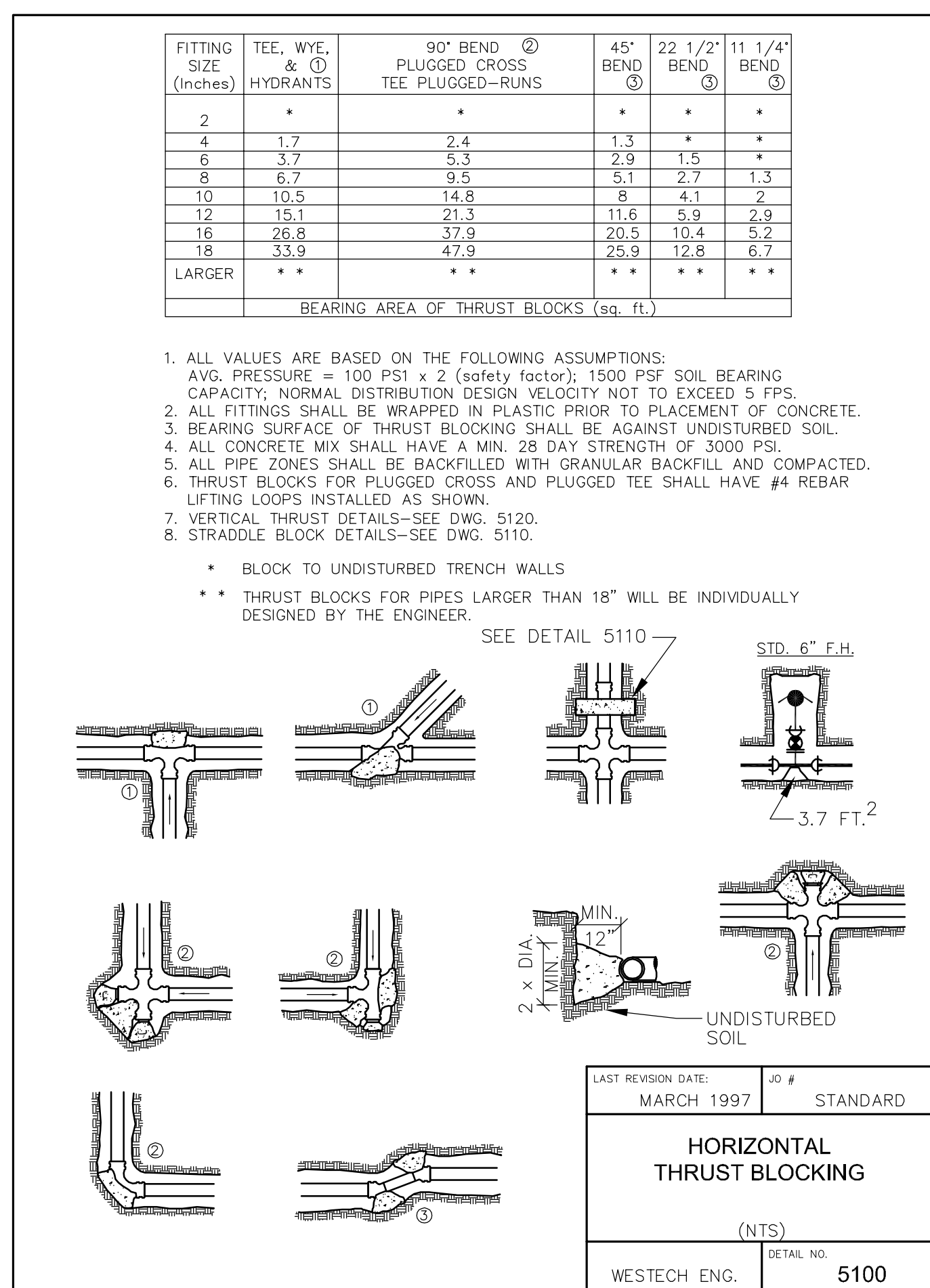
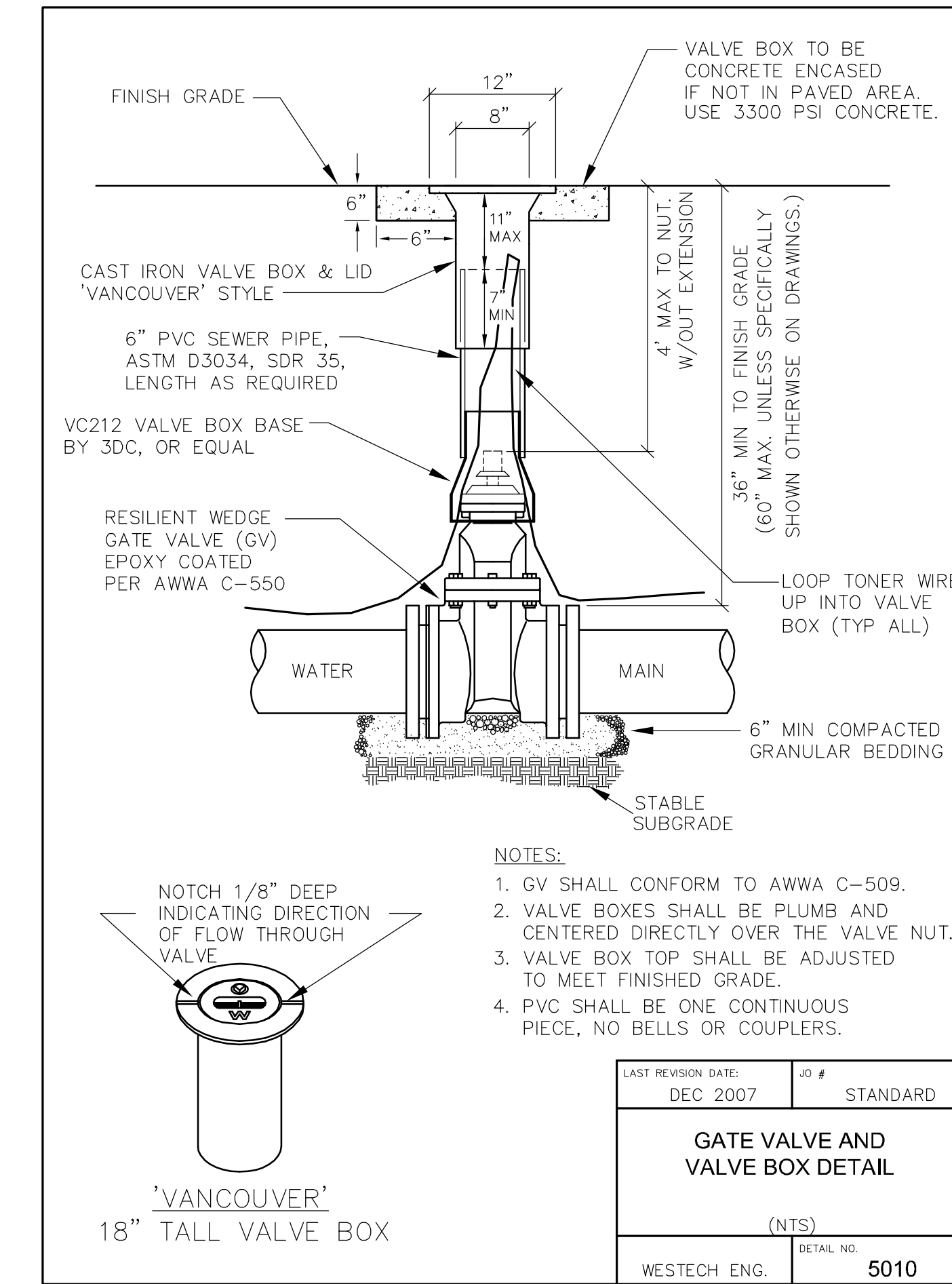
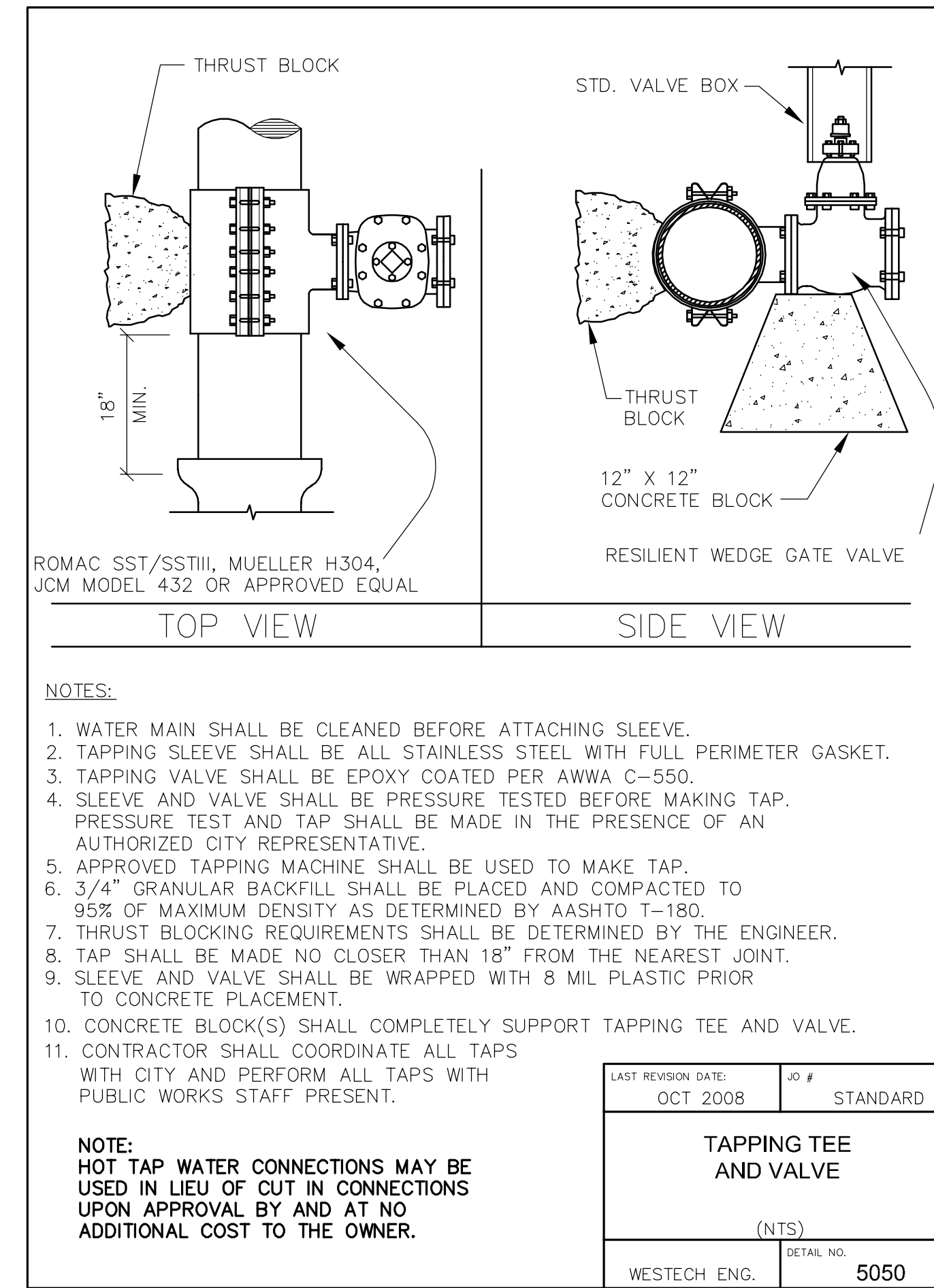
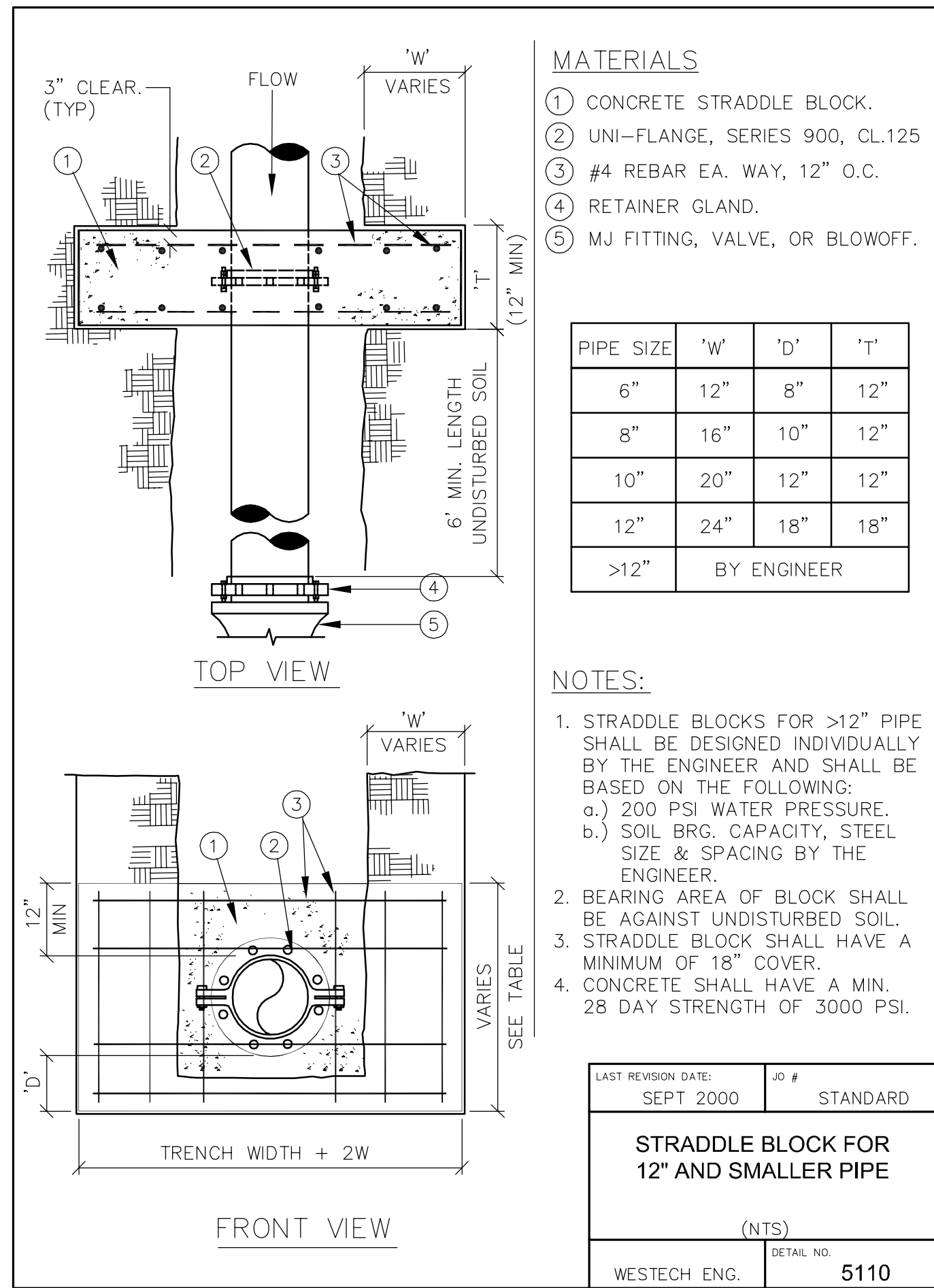
OSCI Site Fire Line Upgrade

Details

SHEET 9 OF 11

JOB NUMBER 2664.3000.0

5/24/2013 3:28:23 PM
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AS-BUILT

COMPILED FROM:

FINAL PROOF SURVEY _____
 DATA FURNISHED BY CONTRACTOR _X_
 FIELD INSPECTION RECORDS _____
WESTECH ENGINEERING, INC.
 DATE: 03/28/13 BY: RCE

VERIFY SCALE
 0 1" = 10' (AS SHOWN)
 IF NOT ONE INCH ON ORIGINAL DRAWING, SCALES ACCORDINGLY

NO.	DATE	DESCRIPTION	BY
1	07/19/12	Final Design	RCE
2	05/24/13	As-Built Per Contractor Information	RCE

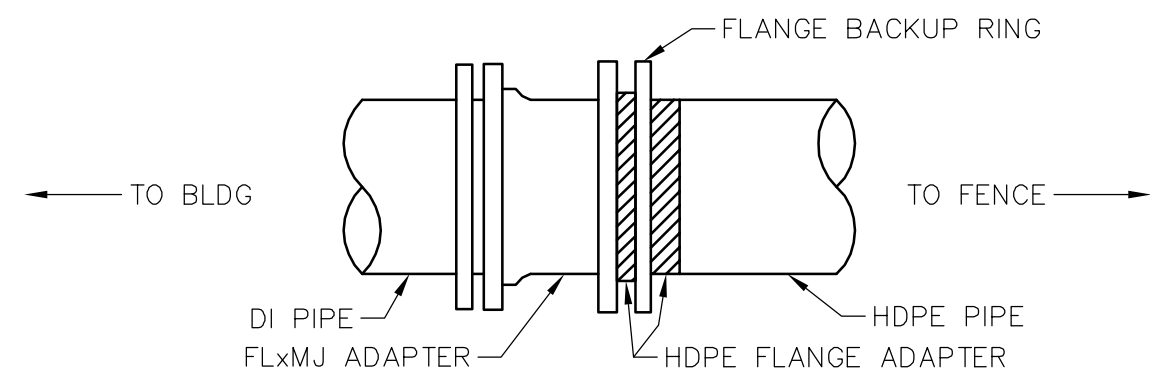
DATE: SEP 11

WESTECH ENGINEERING, INC.
 CONSULTING ENGINEERS AND PLANNERS
AS-CONSTRUCTED
 REGISTERED PROFESSIONAL ENGINEER
 OREGON
 No. 15,151
 P.A. 11/10/2013
 RENEWS 12/31/2013

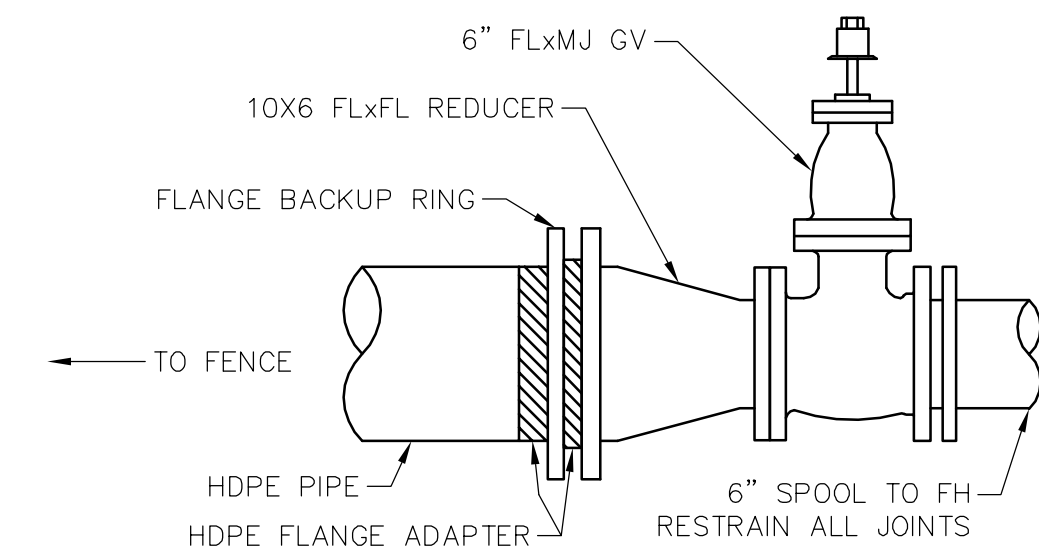
OR Dept. of Corrections Salem, Oregon
 OSC Site Fire Line Upgrade
Details

SHEET 10 OF 11
 JOB NUMBER 2664.3000.0

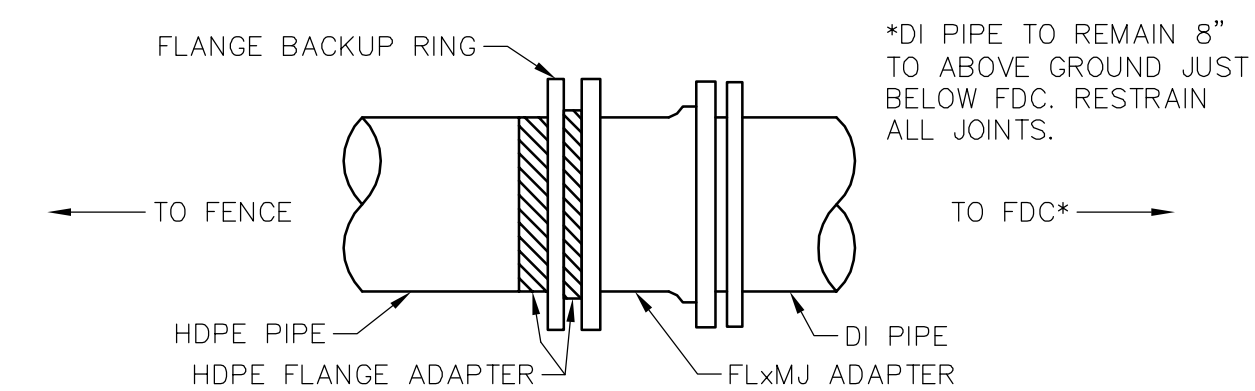
HDPE PIPE END CONNECTIONS (BLDG 19)



INSIDE THE FENCE (FH & FDC PIPES)



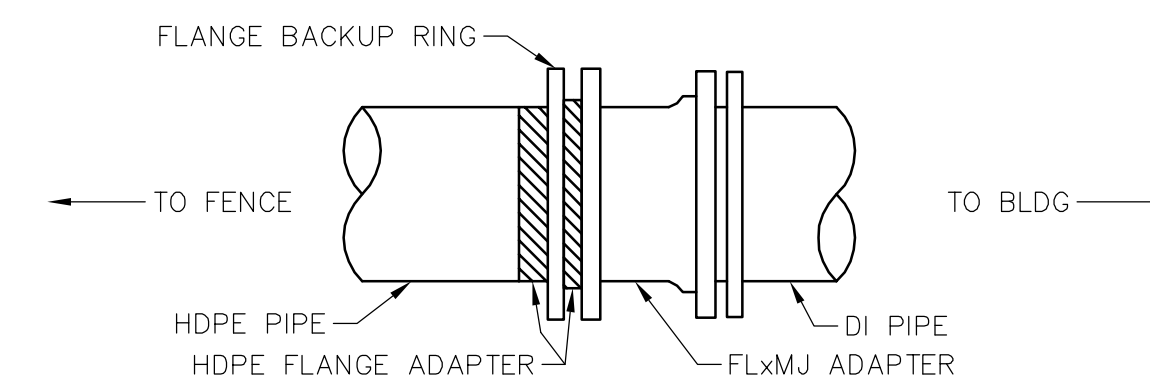
OUTSIDE THE FENCE (FH PIPE)



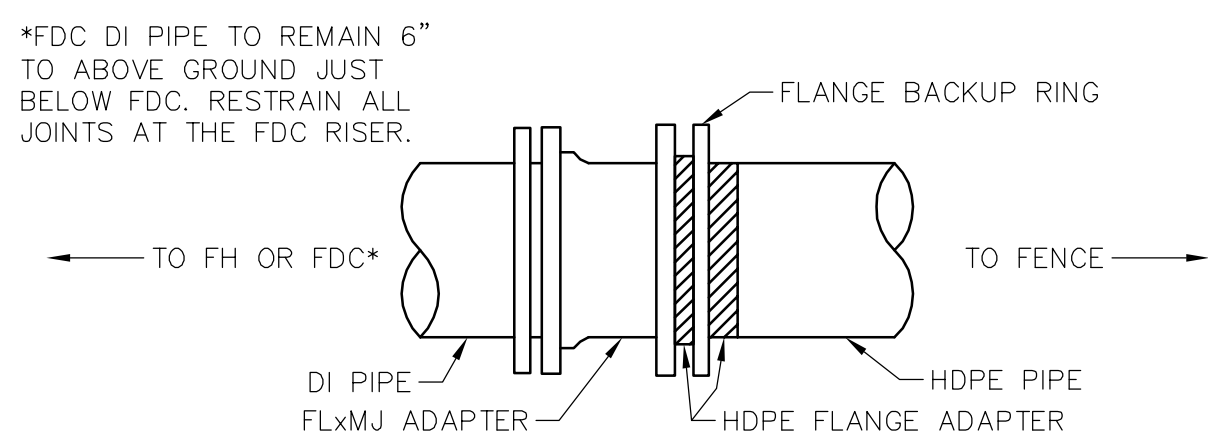
OUTSIDE THE FENCE (FDC PIPE)

PAGE 1 OF 2

HDPE PIPE END CONNECTIONS (PHYSICAL PLANT)



INSIDE THE FENCE (FH & FDC PIPES)



OUTSIDE THE FENCE (FH & FDC PIPES)

AS-BUILT

COMPILED FROM:

FINAL PROOF SURVEY _____
DATA FURNISHED BY CONTRACTOR X
FIELD INSPECTION RECORDS _____

WESTECH ENGINEERING, INC.

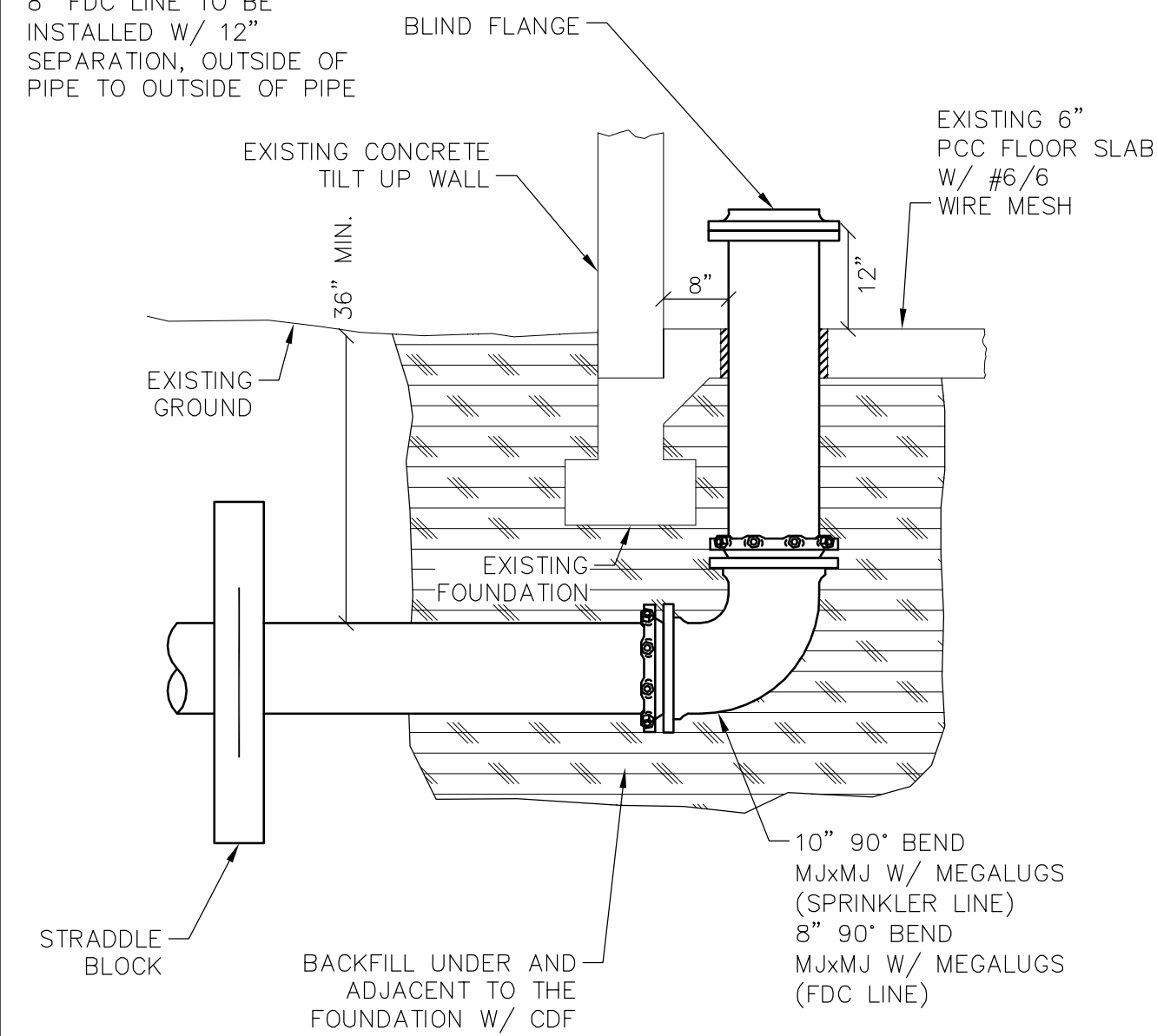
DATE: 03/28/13 BY: RCE



RENEWS: 12/31/2013

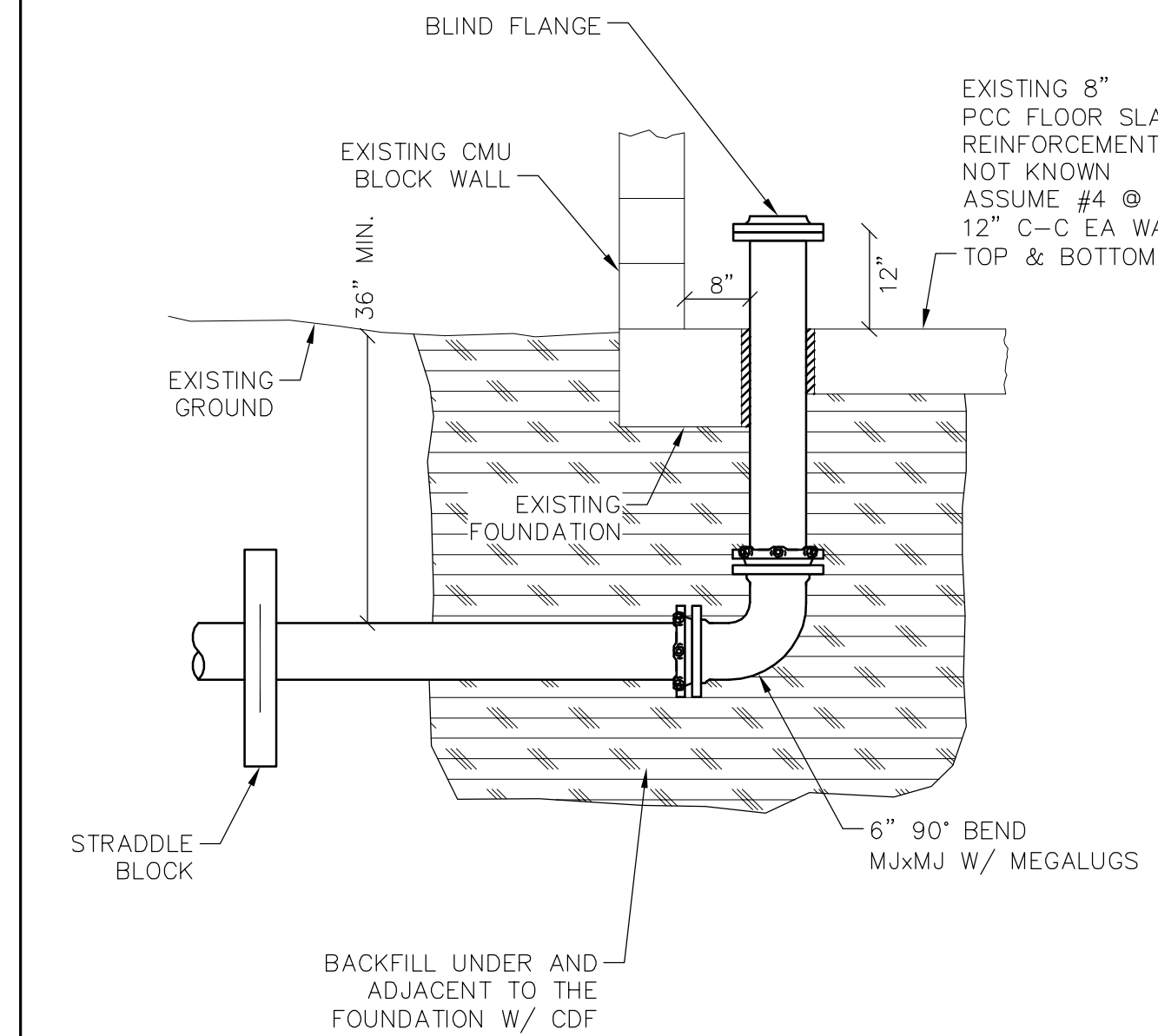
PAGE 2 OF 2

NOTE:
10" SPRINKLER LINE &
8" FDC LINE TO BE
INSTALLED W/ 12"
SEPARATION, OUTSIDE OF
PIPE TO OUTSIDE OF
PIPE



NOTES:
1. COORDINATE EXACT LOCATION FOR PIPEPENETRATIONS W/ OWNER BEFORE STARTING ANY PIPE INSTALLATION IN THIS AREA.
2. PIPE INSTALLATIONS TO BE PRESSURE TESTED BEFORE PLACING CDF FILL.
3. SEAL FLOOR PENETRATIONS W/ NON-HARDENING MASTIC.

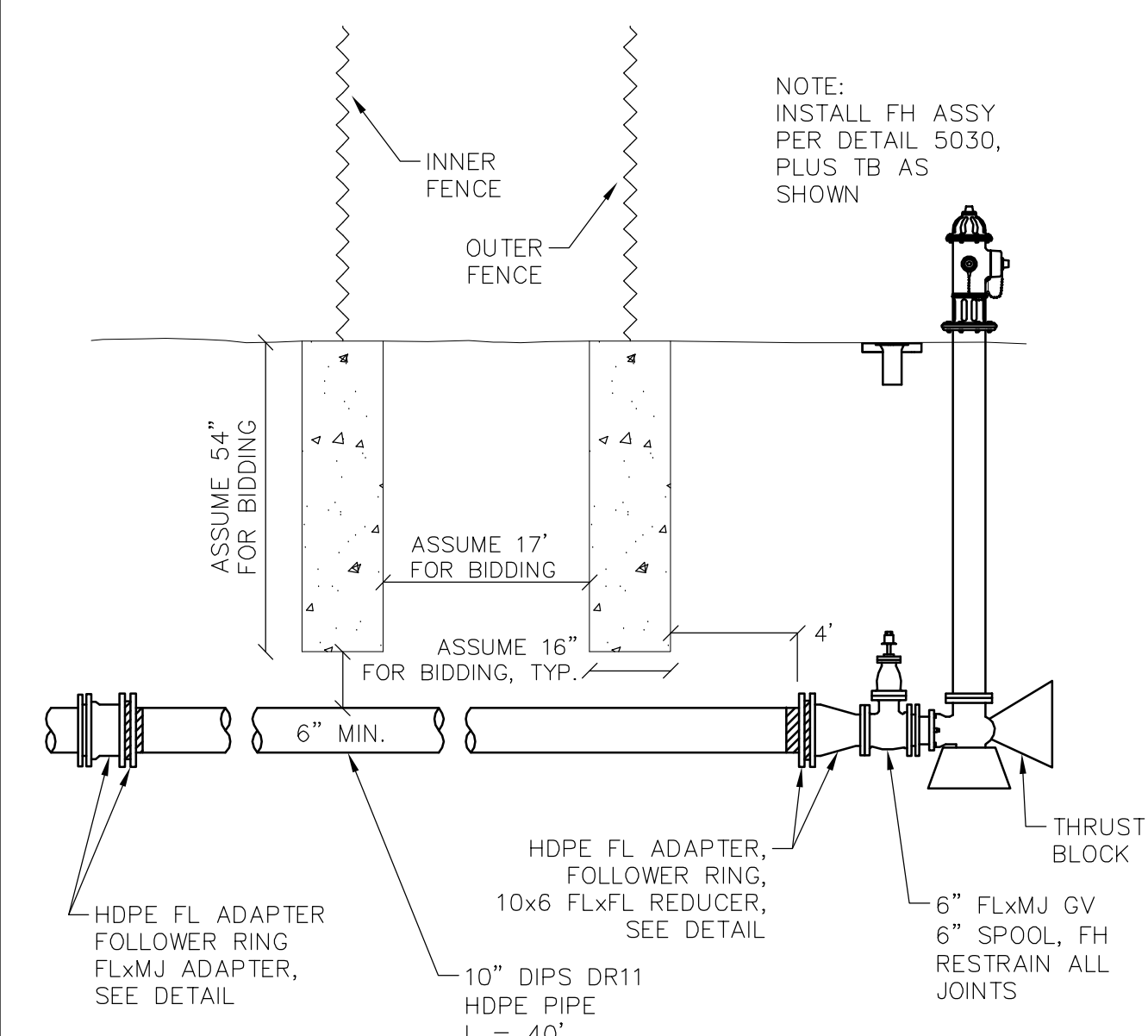
LAST REVISION DATE:	JO #
SEP 2011	2664.3000.0
BUILDING 19 PIPE CONNECTIONS	
(NTS)	
WESTECH ENG.	DETAIL NO. U9700



NOTES:
1. COORDINATE EXACT LOCATION FOR PIPEPENETRATIONS W/ OWNER BEFORE STARTING ANY PIPE INSTALLATION IN THIS AREA.
2. PIPE INSTALLATIONS TO BE PRESSURE TESTED BEFORE PLACING CDF FILL.
3. SEAL FLOOR PENETRATIONS W/ NON-HARDENING MASTIC.

LAST REVISION DATE:	JO #
SEP 2011	2664.3000.0
PHYSICAL PLANT PIPE CONNECTIONS	
(NTS)	
WESTECH ENG.	DETAIL NO. U9701

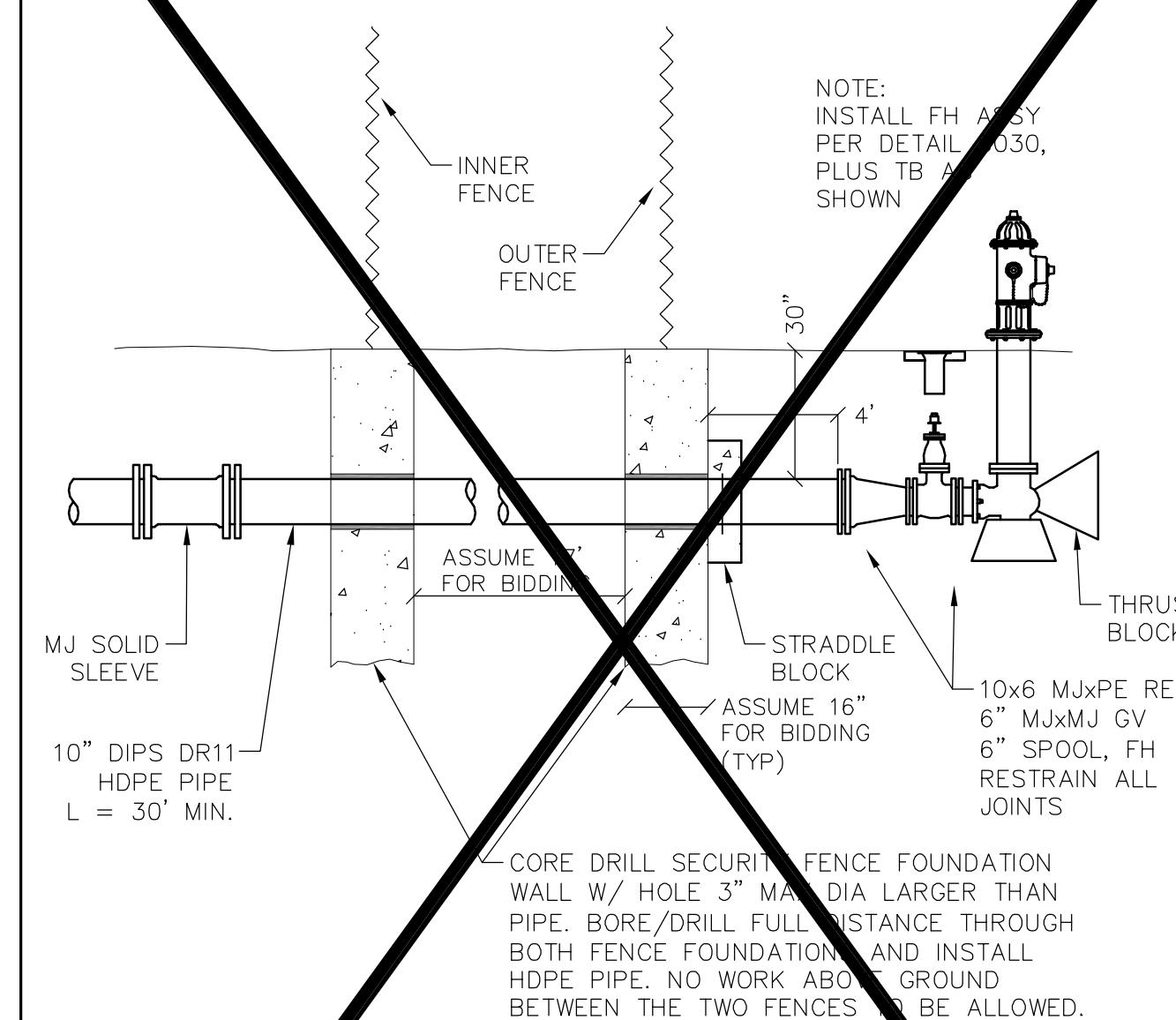
NOTE:
THE 10" FH LINE IS SHOWN.
CONTRACTOR CONSTRUCT THE OTHER
HDPE PIPE CROSSINGS PER THE
SAME REQUIREMENTS.



NOTES:
1. CONTRACTOR SHALL PROVIDE A MINIMUM OF 3 WORKING DAYS ADVANCE NOTICE PRIOR TO INSTALLING THE HDPE PIPE UNDER THE MAIN SECURITY FENCE.
2. ALL WORK IN INSTALLING THE HDPE PIPE UNDER THE MAIN SECURITY FENCE SHALL BE COMPLETED WITHIN A 10-HOUR WORKING DAY. THIS SHALL INCLUDE EXCAVATION, DIRECTIONAL DRILLING, AND PIPE INSTALLATION.

LAST REVISION DATE:	JO #
MAR 2013	2664.3000.0
BASE BID MAIN SECURITY FENCE CROSSING	
(NTS)	
WESTECH ENG.	DETAIL NO. U9600A

NOTE:
THE 10" FH LINE IS SHOWN.
CONTRACTOR CONSTRUCT THE OTHER
HDPE PIPE CROSSINGS PER THE
SAME REQUIREMENTS.



NOTES:
1. THIS DETAIL SHALL BE FOLLOWED IF THE BOTTOM OF THE CONCRETE FENCE FOUNDATION IS FOUND TO BE DEEPER THAN 72" BELOW GROUND LEVEL.
1. CONTRACTOR SHALL PROVIDE A MINIMUM OF 3 WORKING DAYS ADVANCE NOTICE PRIOR TO INSTALLING THE HDPE PIPE UNDER THE MAIN SECURITY FENCE.
2. ALL WORK IN INSTALLING THE HDPE PIPE UNDER THE MAIN SECURITY FENCE SHALL BE COMPLETED WITHIN A 10-HOUR WORKING DAY. THIS SHALL INCLUDE EXCAVATION, CORE DRILLING, PIPE INSTALLATION, GROUTING, STRADDLE BLOCK CONSTRUCTION, AND BACKFILLING ADJACENT TO THE FENCE.

LAST REVISION DATE:	JO #
MAR 2012	2664.3000.0
ALTERNATE MAIN SECURITY FENCE CROSSING	
(NTS)	
WESTECH ENG.	DETAIL NO. U9600B

VERIFY SCALE	1"
BASE IS ONE INCH ON ORIGINAL DRAWING	0
IF NOT ONE INCH ON SCALE, ACCURACY	
DSN. RCE	05/24/13
DRN. RCE	07/19/12
CKD. RCE	
DATE	
NO.	
DESCRIPTION	
BY	
REVISIONS	

AS-CONSTRUCTED

REGISTERED PROFESSIONAL ENGINEER
STATE OF OREGON
RAYMOND C. ENGEL
LICENSE NO. 19176
RENEW 12/31/2013

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS

WE

3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

OR Dept. of Corrections Salem, Oregon

OSCI Site Fire Line Upgrade

Details

SHEET
11 OF 11
JOB NUMBER
2664.3000.0