


















































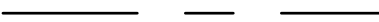

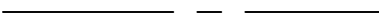



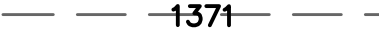
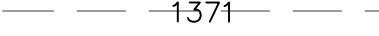
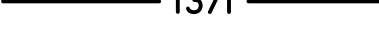



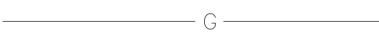

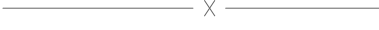

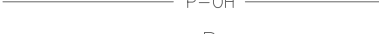


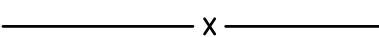
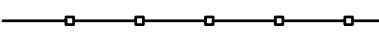




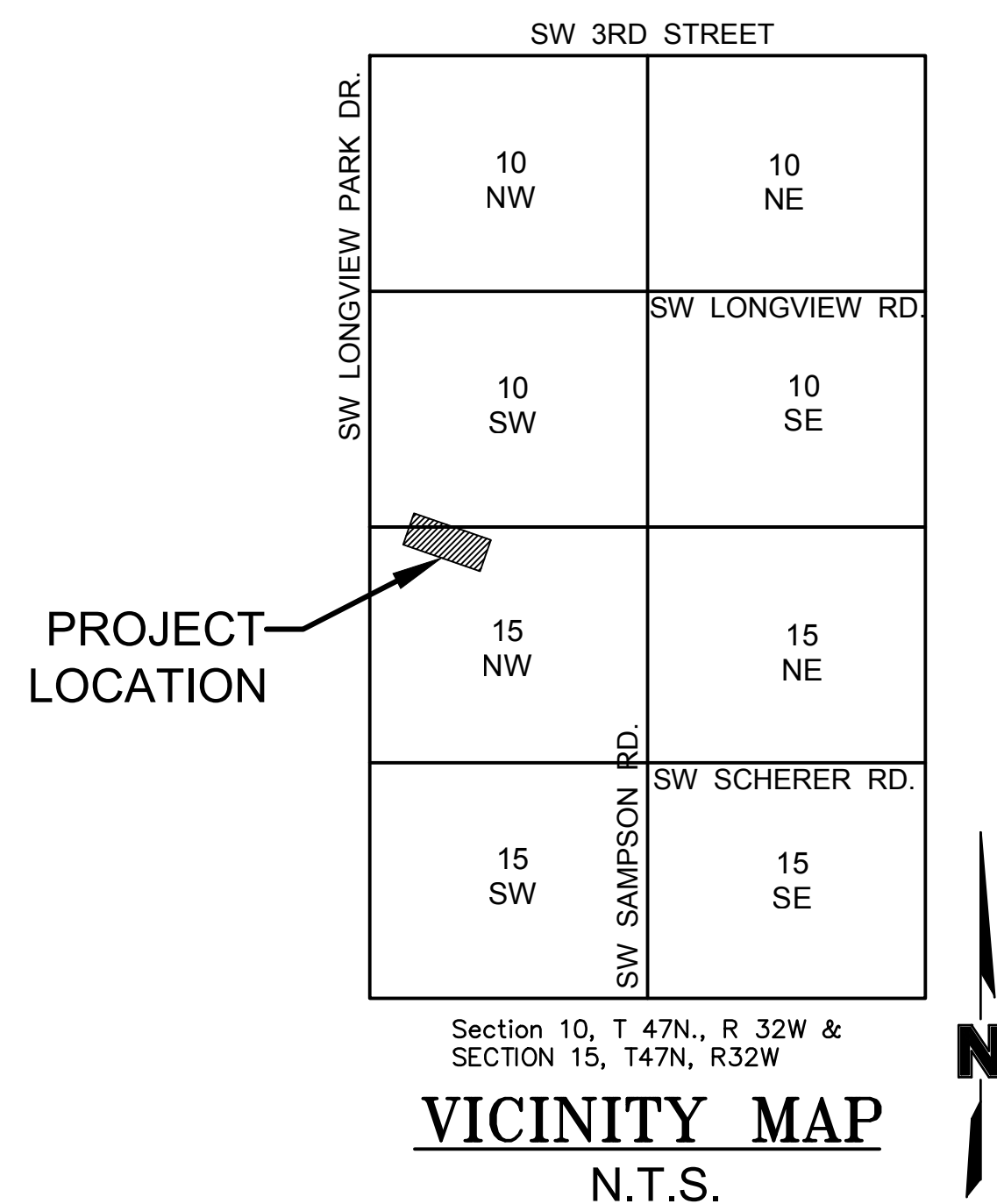
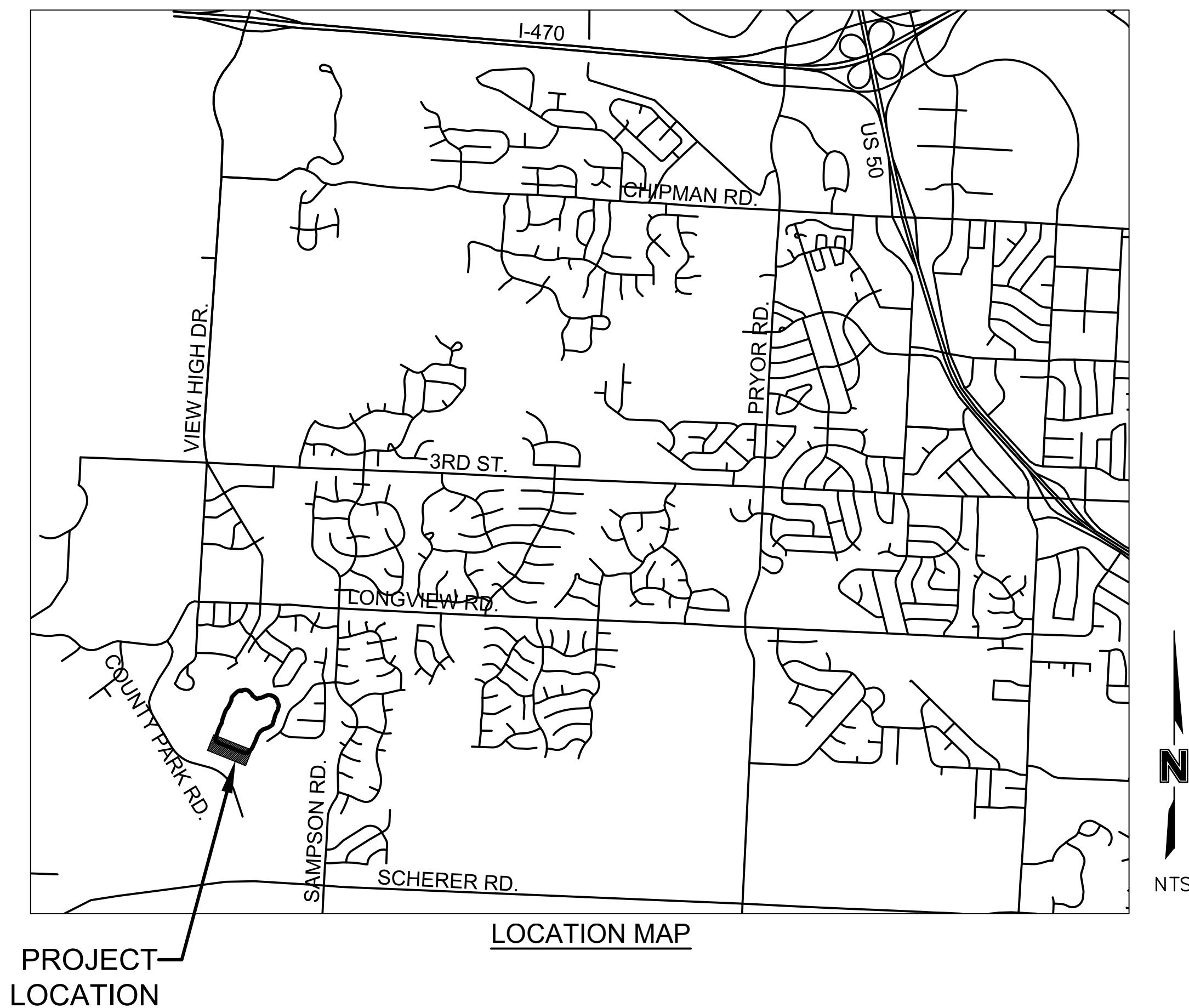


LEGEND

- | | | | |
|---|----------------------------|---|---------------------|
|  | TRAFFIC SIGNAL BOX |  | GAS METER |
|  | TRAFFIC SIGNAL MANHOLE |  | GAS RISER |
|  | TRAFFIC SIGNAL POLE W/ ARM |  | GAS MANHOLE |
|  | TRAFFIC SIGNAL POLE |  | GAS REGULATOR |
|  | TRAFFIC SIGNAL CONTROL BOX |  | TELEVISION PEDESTAL |
|  | TRAFFIC SIGNAL PEDESTAL |  | FIBER BOX |
|  | ELECTRIC MANHOLE |  | FIBER PEDESTAL |
|  | ELECTRIC METER |  | CABLE BOX |
|  | ELECTRIC RISER |  | CABLE VAULT |
|  | ELECTRIC BOX |  | TELEPHONE PEDESTAL |
|  | ELECTRIC CABINET |  | STORM MANHOLE |
|  | ELECTRIC JUNCTION BOX |  | STORM GRATE |
|  | SPRINKLER HEAD |  | SANITARY MANHOLE |
|  | SPRINKLER CONTROL VALVE |  | YARD LIGHT |
|  | WATER METER PIT |  | LIGHT POLE |
|  | FIRE HYDRANT |  | POWER POLE |
|  | WATER METER |  | POWER POLE W/ LIGHT |
|  | WATER VALVE |  | GUY WIRE |
|  | FLAG POLE |  | STUMP |
|  | SIGN |  | BUSH |
|  | BOLLARD |  | EVERGREEN TREE |
|  | WOOD POST |  | DECIDUOUS TREE |
|  | STEEL POST |  | TREE TO BE REMOVED |
|  | COLUMN | | |
|  | BORE HOLE | | |
|  | SURVEY CONTROL POINT | | |
|  | SURVEY BENCHMARK | | |
|  | SURVEY TEMPORARY BENCHMARK | | |
-
- | | |
|---|---------------------------------|
|  | SECTION LINE |
|  | PROPERTY LINE |
|  | CENTER LINE |
|  | PROPOSED ROW LINE |
|  | EXISTING ROW LINE |
|  | UTILITY EASEMENT |
|  | EXISTING CONTOUR |
|  | PROPOSED MINOR CONTOUR |
|  | PROPOSED MAJOR CONTOUR |
|  | EXISTING TELEPHONE LINE |
|  | EXISTING SANITARY LINE |
|  | EXISTING STORM LINE |
|  | EXISTING GAS LINE |
|  | EXISTING WATER LINE |
|  | EXISTING CHAIN LINK FENCE |
|  | EXISTING WOOD PRIVACY FENCE |
|  | EXISTING OVERHEAD ELECTRIC |
|  | EXISTING PIPE LINE |
|  | CONSTRUCTION LIMITS |
|  | TEMPORARY CONSTRUCTION EASEMENT |
|  | PROPOSED CHAIN LINK FENCE |
|  | PROPOSED WOOD PRIVACY FENCE |
|  | EXISTING TREELINE |
|  | PROPOSED HANDRAIL |
|  | PROPOSED STORM SEWER ID |

FINAL PLANS FOR OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS

LOCATED IN THE SW QTR. SECTION 10, TOWNSHIP 47N, RANGE 32W
AND THE NW QTR. SECTION 15, TOWNSHIP 47N, RANGE 32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



INDEX OF SHEETS	
Sheet Number	Sheet Title
1	TITLE SHEET
2	GENERAL NOTES AND SUMMARY OF QUANTITIES
3	GENERAL LAYOUT PLAN
4	DRAINAGE AREA MAP
5	DAM PLAN & PROFILE
6	DAM CROSS SECTIONS
7	DAM CROSS SECTIONS
8	DAM CROSS SECTIONS
9	DAM CROSS SECTIONS
10	CHANNEL PLAN & PROFILE
11	CHANNEL CROSS SECTIONS
12	CHANNEL CROSS SECTIONS
13	CONCRETE CHANNEL DETAIL
14	ENERGY DISSIPATION BASIN
15	OVERALL GRADING PLAN
16	LAKE SEDIMENT REMOVAL PLAN
17	SEDIMENT FOREBAY PLAN
18	SEDIMENT REMOVAL EROSION CONTROL PLAN
19	SURFACE RESTORATION AND EROSION CONTROL PLAN
20	EROSION CONTROL DETAILS
21	EROSION CONTROL DETAILS

UTILITY SERVICE NUMBERS

NAME: LEE'S SUMMIT PUBLIC WORKS
PHONE: 816-969-1800

NAME: LEE'S SUMMIT WATER & SERVICES
DEPARTMENT
PHONE: 816-969-1940

NAME: MISSOURI GAS ENERGY
PHONE: 816-756-5252

NAME: AT&T
PHONE: 800-286-8313

NAME: KCP&L
PHONE: 816-471-5275

NAME: TIME WARNER CABLE:
816-358-5360

NAME: GOOGLE FIBER
PHONE: 877-454-6959



1-800-DIG-RITE or 811
www.mo1call.com

THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL LINES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL "1-800-DIG-RITE", AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING GRADING ACTIVITIES. !!STOP!! CALL BEFORE YOU DIG!!

PREPARED & SUBMITTED BY:
OLSSON ASSOCIATES
7301 W. 133RD STREET, SUITE 200
OVERLAND PARK, KANSAS 66213

BRIAN H. LADD, P.E.

DATE _____

I CERTIFY THESE PLANS WERE PREPARED BY ME
OR UNDER MY IMMEDIATE PERSONAL SUPERVISION.

OLSSON[®]
ASSOCIATES

7301 West 133rd Street, Suite 200
Overland Park, KS 66213-4750
TEL 913.381.1170
FAX 913.381.1174
www.olssonassociates.com



TITLE SHEET		REV. NO.	DATE	REVISIONS DESCRIPTION	BY
OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS					
LEE'S SUMMIT, MISSOURI		2018	REVISIONS		

C.O.A. NO.: _____
DRAWN BY: _____ KTF
CHECKED BY: _____ BHL
APPROVED BY: _____ BMJ
QA/QC BY: _____ CPJ
PROJECT NO.: _____ 017-0305
DWG NO.: _____
DATE: _____ 08.09.2018

SHEET
1 OF 21

DWG: F:\2017\0001-0500\017-0305\40-Design\AutoCAD\Final Plans\Streets\WTRS\DWG\GENERAL\W_GEN-NOT_70305.dwg
DATE: Aug 09, 2018 5:11pm XREFS: W_IBLK_70305 USER: kfluton

GENERAL NOTES:

1. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE LEE'S SUMMIT, MISSOURI DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.
2. ALL MANHOLES, CATCH BASINS, UTILITY VALVES, AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
3. ALL SIGNS (I.E. STREET NAME AND STOP SIGNS) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT, DESIGN AND CONSTRUCTION MANUAL, PRIOR TO SUBSTANTIAL COMPLETION.
4. THE ASPHALTIC CONCRETE SURFACES ON ALL PERMITTED STREETS SHALL BE VIRGIN MATERIAL.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL DOWNSTREAM EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION. EROSION CONTROL PLANS AND PROCEDURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION.
6. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.
7. CONTRACTOR SHALL PROVIDE EARTHWORK AND MATERIAL TESTING TO COMPLY WITH THE STANDARD SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OR AS REQUIRED BY THE CITY'S FIELD REPRESENTATIVE.

SITE DISTURBANCE NOTES:

1. THE INTENT OF THIS EROSION CONTROL PLAN IS TO ASSIST THE CONTRACTOR IN HIS RESPONSIBILITY TO PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR NECESSARY TO CONTROL EROSION, SILTATION AND DISCHARGES OF SOIL MATERIAL (SEDIMENT) INTO DOWNSTREAM SYSTEMS OR RECEIVING CHANNELS. THIS SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION UNTIL A STABLE GROUND COVER IS ESTABLISHED FOR ALL DISTURBED AREAS. IF ANY METHOD OF CONTROL FAILS, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY, SO THAT THE OWNER OR HIS AGENT CAN REVIEW THE CONTRACTOR'S PROPOSED METHOD OF REPAIR.

THIS PLAN INDICATES THE CRITICAL AREA(S) OF CONCERN AND THESE AREA(S) WILL BE CONTROLLED AS A MINIMUM. THE CONTROL MAY CONSIST OF TEMPORARY CONTROL MEASURES AS SHOWN ON THE PLANS OR ORDERED BY THE OWNER DURING THE LIFE OF THE CONTRACT TO CONTROL EROSION OR WATER POLLUTION, THROUGH THE USE OF BERMS, DIKES, DAMS, SEDIMENT BASINS, FIBER MATS, NETTING, GRAVEL, MULCHES, GRASSES, SLOPE DRAINS, DIVERSION SWALES OR OTHER EROSION CONTROL DEVICES OR METHODS. THE OWNER HAS THE AUTHORITY TO LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY THE CONSTRUCTION OPERATIONS AND TO DIRECT THE CONTRACTOR TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, OR OTHER AREAS OF WATER IMPOUNDMENT OR CONVEYANCES.

THE TEMPORARY POLLUTION CONTROL PROVISIONS CONTAINED HEREIN SHALL BE COORDINATED WITH ANY PERMANENT EROSION CONTROL FEATURES SPECIFIED ELSEWHERE IN THE CONTRACT TO THE EXTENT PRACTICAL TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS EROSION CONTROL THROUGHOUT THE CONSTRUCTION AND POST CONSTRUCTION PERIOD.

2. THIS SEDIMENTATION CONTROL PLAN MAKES USE OF THE FOLLOWING APPLICATIONS:
- | | |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> | PRESERVATION OF EXISTING VEGETATION |
| <input checked="" type="checkbox"/> | SEDIMENT BARRIERS |
| <input checked="" type="checkbox"/> | SEDIMENT TRAPS |
| <input type="checkbox"/> | INLET PROTECTION |
| <input type="checkbox"/> | OUTLET PROTECTION |
| <input type="checkbox"/> | SOIL RETAINING SYSTEMS |
| <input type="checkbox"/> | SLOPE DRAINS |
| <input checked="" type="checkbox"/> | SUBSURFACE DRAINS |

PHYSICAL DESCRIPTION OF EACH SPECIFIC SEDIMENT CONTROL DEVICE TO BE UTILIZED IS CALLED OUT ON THE PLANS WITH INSTALLATION PROCEDURES, CONSTRUCTION SPECIFICATIONS AND MAINTENANCE ARRANGEMENT AS CALLED FOR ON THE DETAIL SHEET. IN ADDITION TO THE MEASURES SPECIFIED, THE FOLLOWING GENERAL PRACTICES SHALL BE ADHERED TO WHEN APPLICABLE.

- A) CLEARING AND GRUBBING WITHIN 50' OF A DEFINED DRAINAGE COURSE SHOULD BE AVOIDED WHEN POSSIBLE. WHEN CHANGES TO A DEFINED DRAINAGE COURSE OCCUR, WORK SHOULD BE DELAYED UNTIL ALL MATERIALS AND EQUIPMENT NECESSARY TO PROTECT AND COMPLETE THE DRAINAGE CHANGE ARE ON SITE. CHANGES SHALL BE COMPLETED AS QUICKLY AS POSSIBLE ONCE THE WORK HAS BEEN INITIATED. THE AREA IMPACTED BY THE CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED OR PROTECTED FROM EROSION AS SOON AS POSSIBLE, AREAS WITHIN 50' OF A DEFINED DRAINAGE WAYS SHOULD BE RECONTOURED AS NEEDED OR OTHERWISE PROTECTED WITHIN FIVE (5) WORKING DAYS AFTER GRADING HAS CEASED.
- B) WHERE SOIL DISTURBING ACTIVITIES CEASE IN AN AREA FOR MORE THAN 14 DAYS, THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL MEASURES. IF THE SLOPE OF THE AREA IS GREATER THAN 3:1 OR IF THE SLOPE IS GREATER THAN 3% AND GREATER THAN 150 FEET IN LENGTH, THEN THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL MEASURES IF ACTIVITIES CEASE FOR MORE THAN SEVEN (7) DAYS.
- C) EXISTING VEGETATION SHALL BE PRESERVED TO THE EXTENT AND WHERE PRACTICAL. IN NO CASE SHALL DISTURBED AREAS REMAIN WITHOUT VEGETATIVE GROUND COVER FOR A PERIOD IN EXCESS OF 60 DAYS.
- D) ADDITIONAL SITE MANAGEMENT PRACTICES WHICH SHALL BE ADHERED TO DURING THE CONSTRUCTION PROCESS SHALL INCLUDE:

SOLID AND HAZARDOUS WASTE MANAGEMENT INCLUDING PROVIDING TRASH CONTAINERS AND REGULAR SITE CLEAN UP FOR PROPER DISPOSAL OF SOLID WASTE SUCH AS BUILDING MATERIAL, PRODUCT/MATERIAL SHIPPING WASTE, FOOD CONTAINERS AND CUPS, AND PROVIDING CONTAINERS FOR THE PROPER DISPOSAL OF WASTE PAINTS SOLVENTS, AND CLEANING COMPOUNDS.

PROVISIONS OF PORTABLE TOILETS FOR PROPER DISPOSAL OF SANITARY SEWAGE.

STORAGE OF CONSTRUCTION MATERIALS AWAY FROM DRAINAGE COURSES AND LOW AREAS.

INSTALLATION OF CONTAINMENT BERMS AND USE OF DRIP PANS AT PETROLEUM
PRODUCT AND LIQUID STORAGE TANKS AND CONTAINERS.

3. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED AND MULCHED, OR SODDED, IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS ADOPTED BY THE REVIEWING GOVERNING AGENCY AND GOOD ENGINEERING PRACTICES. THIS SHALL BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER COMPLETING THE WORK, IN ANY AREA. IF THIS IS OUTSIDE OF THE SEEDING PERIOD, SILT BARRIERS OR OTHER SIMILARLY EFFECTIVE MEASURES SHALL BE PROVIDED UNTIL SUCH TIME THAT THE AREAS CAN BE SEEDED.
4. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL CURRENT STANDARDS AND SPECIFICATIONS ADOPTED BY THE REVIEWING GOVERNING AGENCY. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING ALL ADDITIONAL STANDARDS, SPECIFICATIONS OR REQUIREMENTS WHICH ARE REQUIRED BY GOVERNING AGENCIES (INCLUDING LOCAL, STATE AND FEDERAL AUTHORITIES) HAVING JURISDICTION OVER THE WORK PROPOSED BY THESE CONSTRUCTION DRAWINGS.
5. ALL EROSION CONTROL MEASURES, TEMPORARY OR PERMANENT, REQUIRE MAINTENANCE TO PRESERVE THEIR EFFECTIVENESS. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED IMMEDIATELY AFTER EACH HEAVY RAINSTORM AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY. ALL COSTS ASSOCIATED WITH THE REPAIR WORK INCLUDING RELATED INCIDENTALS WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE INCLUDED IN THE CONTRACTOR'S BID FOR THE PROPOSED WORK.

SUMMARY OF QUANTITIES

1	ITEM	QUANTITY	UNIT
2	Clearing & Grubbing	1	LS
3	Erosion Control	1	LS
4	Concrete Channel	390	SY
5	Forebay Concrete	1015	SY
6	Weir Wall	1	EA
7	Toe Wall	2	EA
8	KDOT 1/4 Ton Riprap	1281	SY
9	MODOT Type 3 Ditch Liner	1796	SY
10	Propex Pyramat 25	2656	SY
11	Propex Landlok S2	3118	SY
12	Seeding	0.85	AC
13	Wetland Seeding Mix	3680	SY
14	4" Lateral Drain	370	LF
15	Estimated Non-shrink Grout	2.32	CY
16	Sediment Depth Markers	2	EA
17	Stone Outlets	134	CY
18	Structural Dam Cut	491	CY
19	Structural Dam Fill	3597	CY
20	Lake Sediment Removal Cut	46,333	CY
21	Lake Sediment Removal Fill	228	CY
22	Sediment Forebays Cut	2547	CY
23	Sediment Forebays Fill	296	CY

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GENERAL NOTES AND SUMMARY OF QUANTITIES

OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS

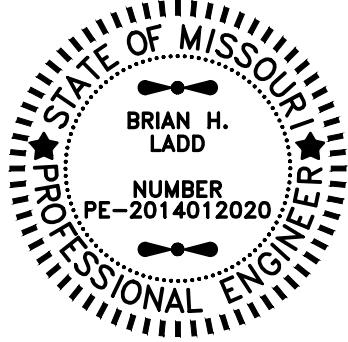
LEE'S SUMMIT, MISSOURI

DEVIATIONS

2018

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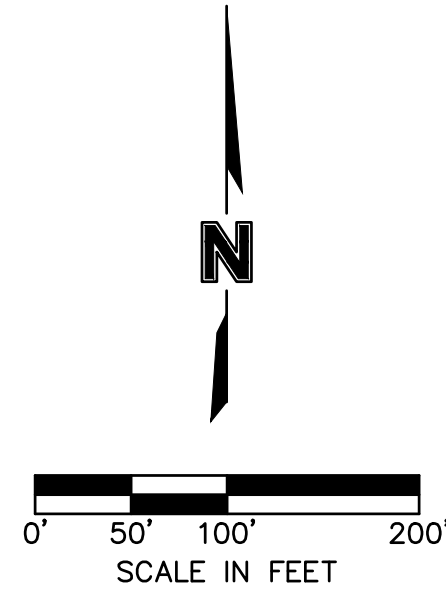
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OF 21



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Overland Park KS 66213-4750
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www.olsennassociates.com

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DATE: Aug 09, 2018 5:12pm XREFS: w_tblk_70305 01_C_PUTIL W_PBASE_70305 V_XBASE_70264





Point Number	Northing	Easting	Point elevation	Raw Description
7371	995767.520	2803980.470	948.83	Set 3/8" IB/ Cap at the S.E. corner of SW. Pergola Park Drive and SW. Grandstand Circle. 5.0' N to back of curb, 14.0' W to FH, 43.0' E to MH
1000	996699.785	2803643.760	960.32	Set 3/8" IB/ Cap N.W. corner of SW. Rockbridge Drive and SW. Redbuck Circle. 3' S to back of curb, 19.1' E to stop sign, 37.4' NE to MH
1001	996444.728	2802574.000	970.72	Set 3/8" IB/ Cap N.E. corner of SW. Longview Park Drive and SW. Areana Street. 11.7' W to Stop Sign, 10.4' S.E. to back of curb at pc return, 6.6' N to sidewalk
1002	995493.880	2802676.202	953.54	Set 3/8" IB/ Cap off of the S.E. corner of the parking lot on the East side to the Longview Lake Mansion House. 9.0' W to S.E. corner gravel parking lots, 58.5' W-N.W. to S.E. for asphalt parking lot, 69.5' S.W. to 50' +/- tree

PROJECT CONTROL

3/8" IB Cap at the S.W. corner of SW Pergola park Drive and SW Grandstand Circle.
Elevation= 948.83

3/8" IB Cap N.E. corner of SW Longview Park Drive and SW Arena Street.
Elevation= 970.720

<p>GENERAL LAYOUT PLAN</p>		<p>REV. NO.</p>	<p>DATE</p>	<p>REVISIONS DESCRIPTION</p>	<p>BY</p>			<p>7301 West 133rd Street, Suite 200 Overland Park, KS 66213-4750</p> <p>TEL 913.381.1170 FAX 913.381.1174</p> <p>www.o'neilssonassociates.com</p>
<p>OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS</p>								
<p>LEE'S SUMMIT, MISSOURI</p>		<p>2018</p>						
<p>C.O.A. NO.: _____</p> <p>DRAWN BY: _____ KTF</p> <p>CHECKED BY: _____ BHL</p> <p>APPROVED BY: _____ BMJ</p> <p>QA/QC BY: _____ CPJ</p> <p>PROJECT NO.: _____ 017-0305</p> <p>DWG NO.: _____</p> <p>DATE: _____ 08.09.2018</p>								
<p>SHEET 3 OF 21</p>								

ES 01_C_PUTIL W_PBASE_70305




DRAINAGE AREA - 207 AC
EXISTING CONDITIONS CURVE NUMBER - 86
FUTURE CONDITIONS CURVE NUMBER - 88
TIME OF CONCENTRATION - 16.5 MINUTES

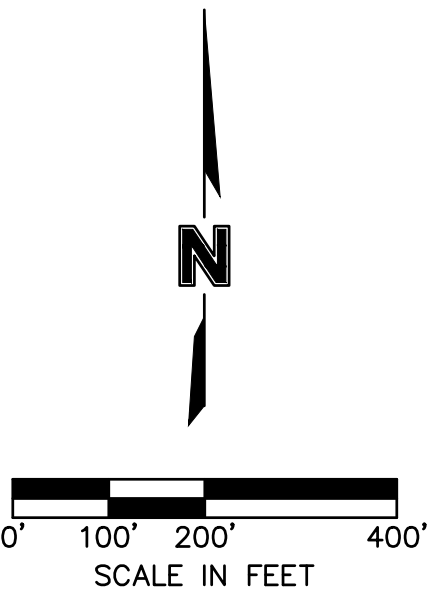
RAINFALL (24 HOUR EVENT)	
RETURN EVENT (YR)	RAINFALL DEPTH (IN)
2	3.50
10	5.30
100	7.70

100-YEAR 24 HOUR
PROPOSED SPILLWAY ELEVATION - 929.00
PROPOSED TOP OF DAM - 934.5

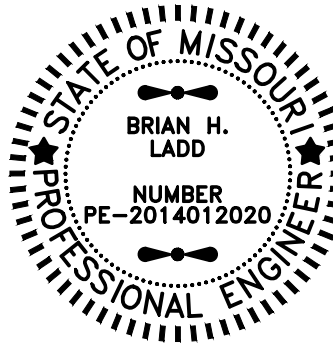
PEAK INFLOW - 1,440 CFS
PEAK OUTFLOW - 312 CFS
PEAK WATER SURFACE ELEVATION - 931.52 FEET

EMERGENCY SPILLWAY ELEVATION - 932.1 FEET
PEAK FLOW - 1,440 CFS
PEAK WATER SURFACE ELEVATION - 933.43 FEET





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[illegible]

DRAINAGE AREA MAP

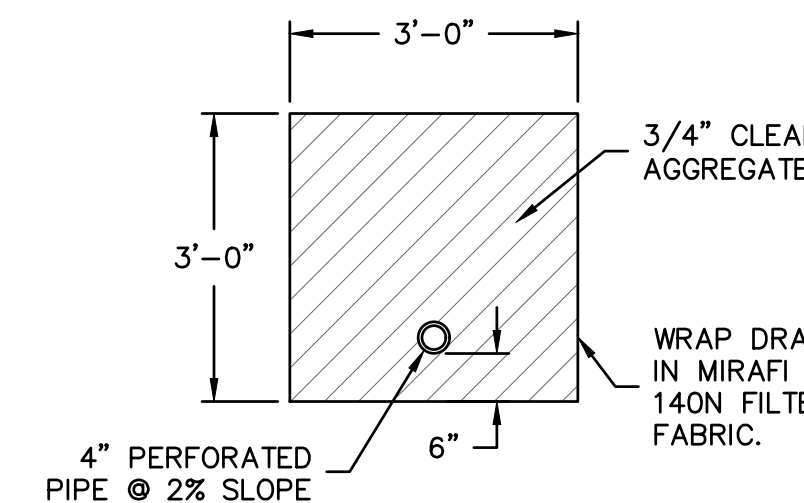
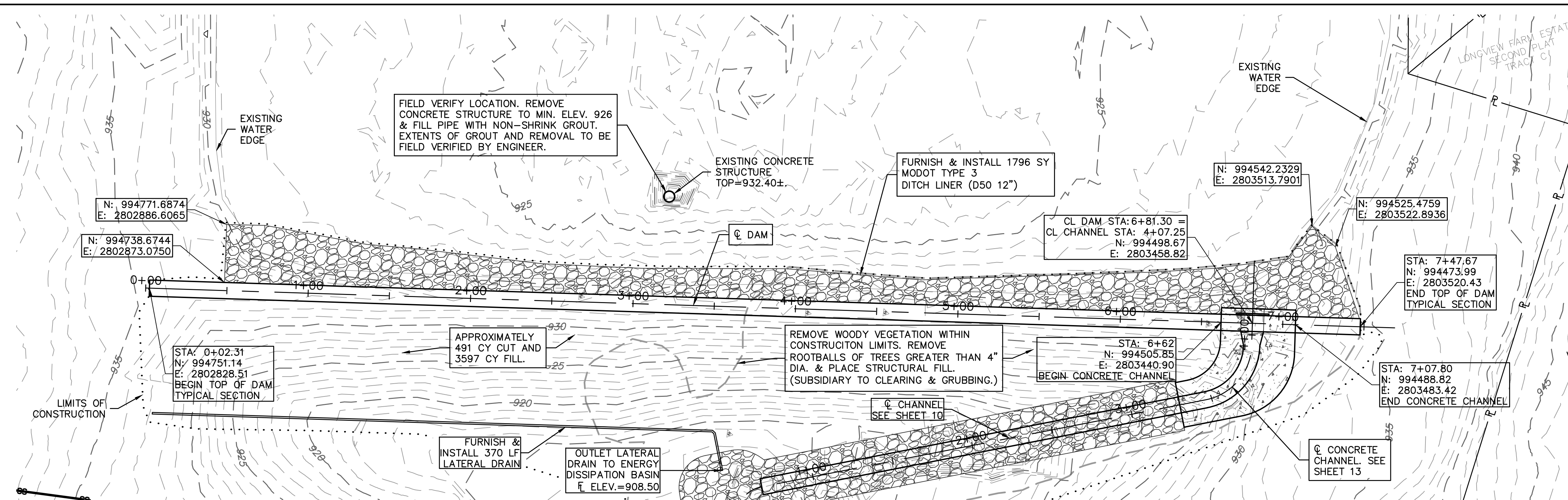
OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

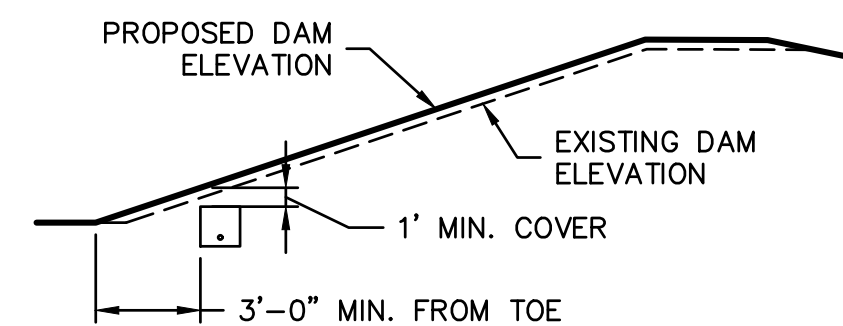
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 CHECKED BY: _____ BHL
 APPROVED BY: _____ BMJ
 QA/QC BY: _____ CPJ
 PROJECT NO.: _____ 017-0305
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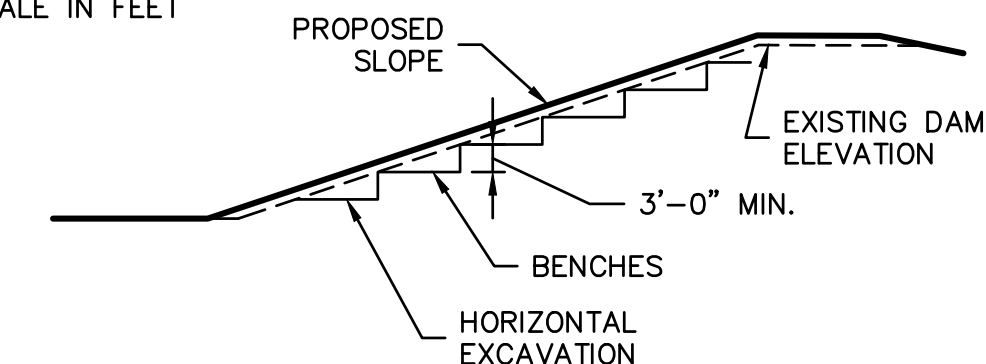
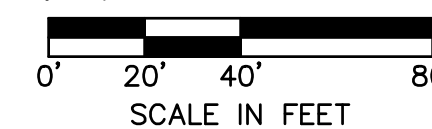
SHEET
4 OF 21



LATERAL DRAIN SECTION
NOT TO SCALE



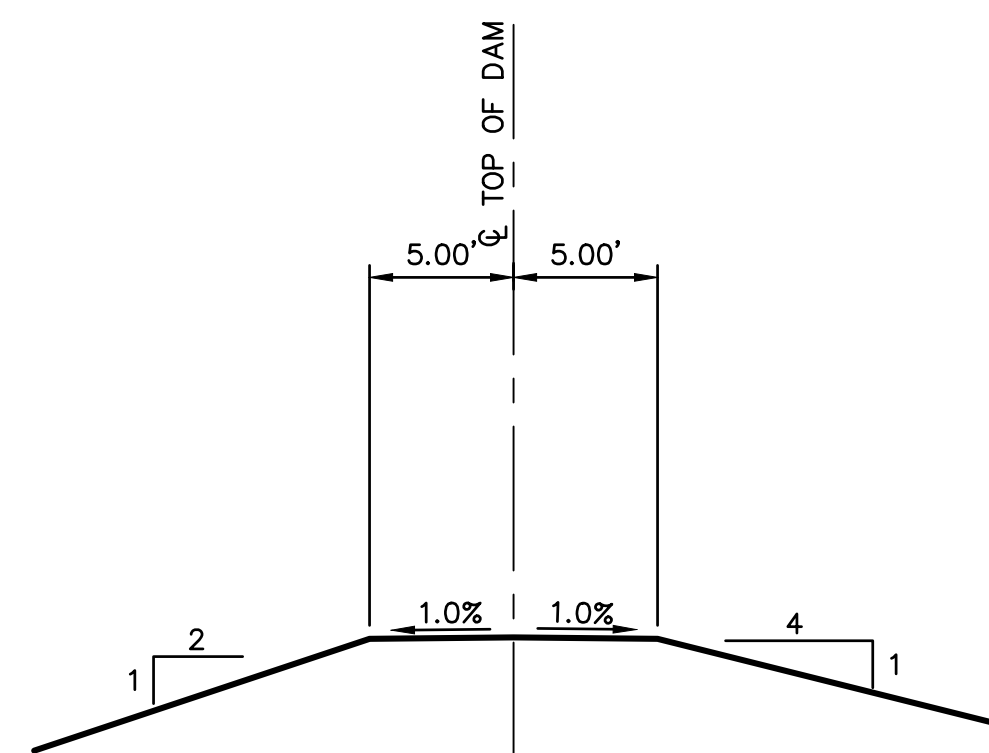
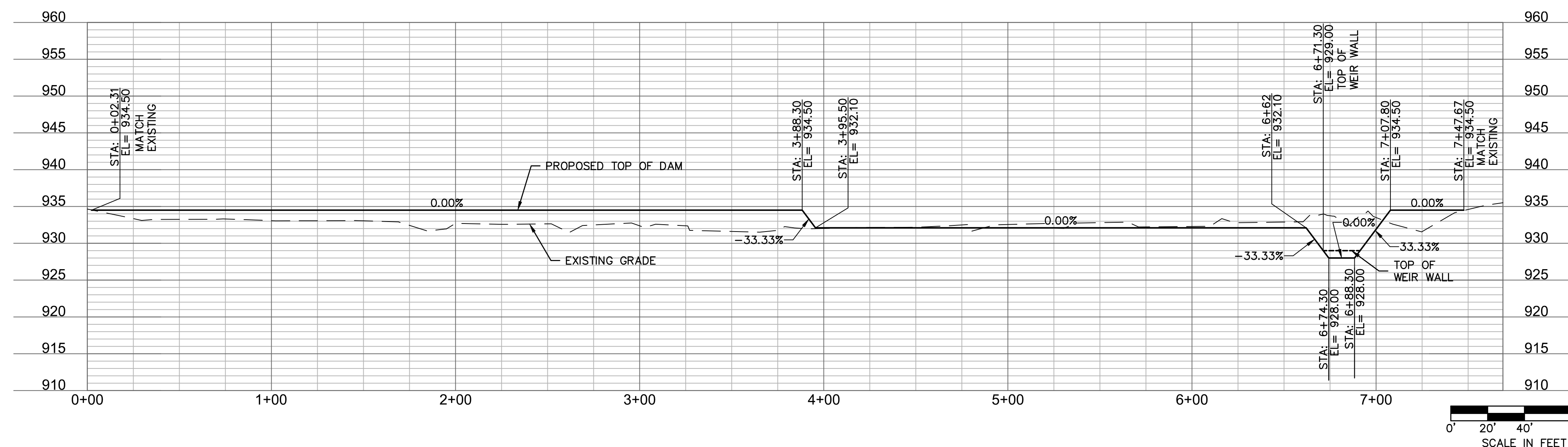
LATERAL DRAIN IN DAM SECTION
NOT TO SCALE



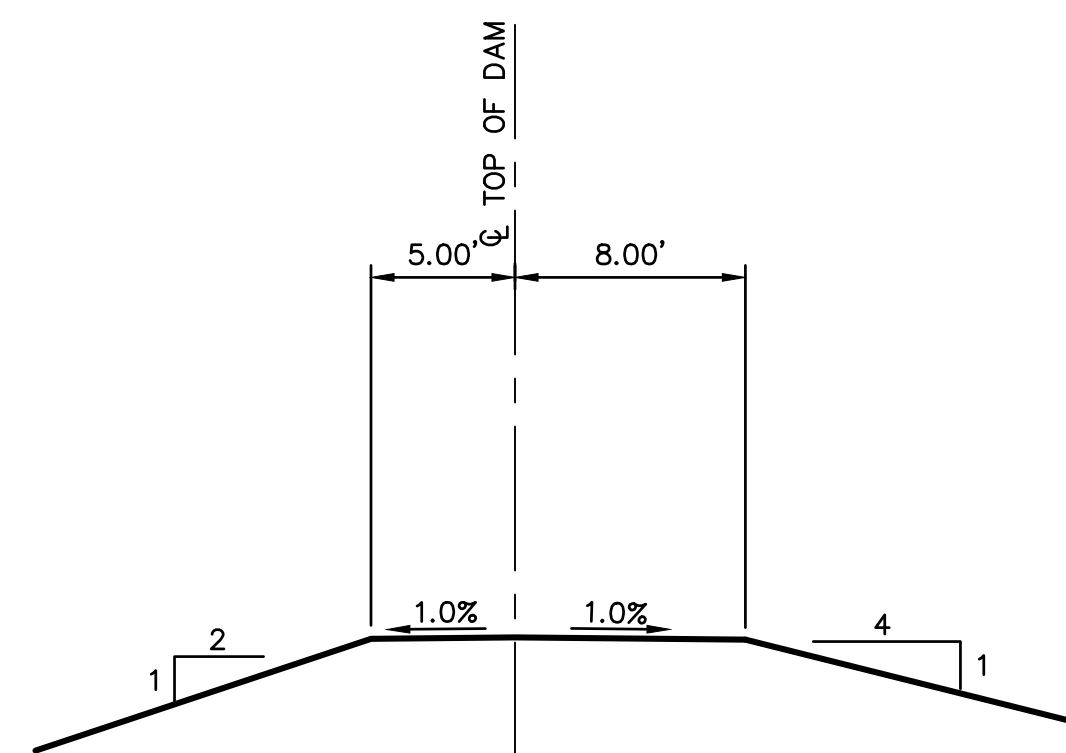
BENCHING DETAIL
NOT TO SCALE

NOTES:

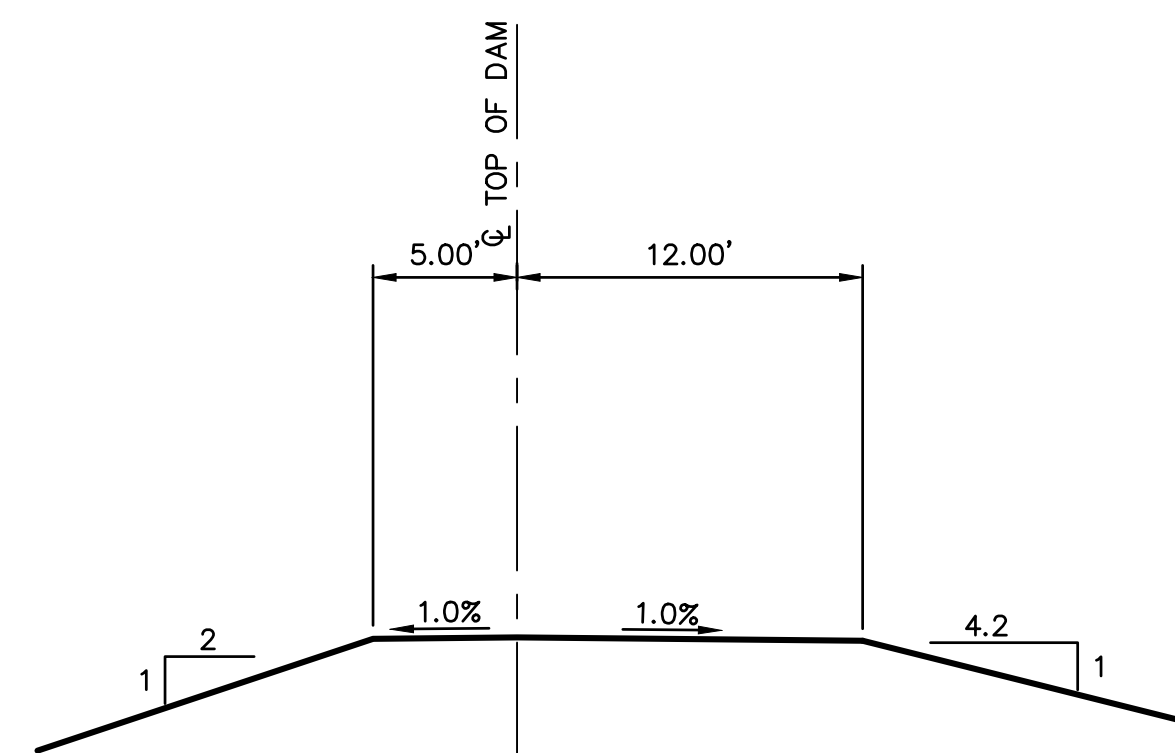
1. BENCHING OF THE EXISTING DAM SHOULD BE PERFORMED WHERE NEW FILL IS TO BE PLACED.
2. BENCHES SHOULD EXTEND A MAX. VERTICAL DEPTH OF 3 FEET.
3. NEW FILL SHOULD CONSIST OF FAT CLAY SOILS (CH) WITH LIQUID LIMIT > 50 & PLASTICITY INDEX > 25 PLACED AND COMPACTED TO 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AT 0 TO 4% OF OPTIMUM MOISTURE CONTENT.
4. FILL SHOULD BE PLACED AT MAX. 9" LOOSE LIFTS.
5. UPPER 6" OF SOIL SHOULD BE SUITABLE TO GROW VEGETATION.



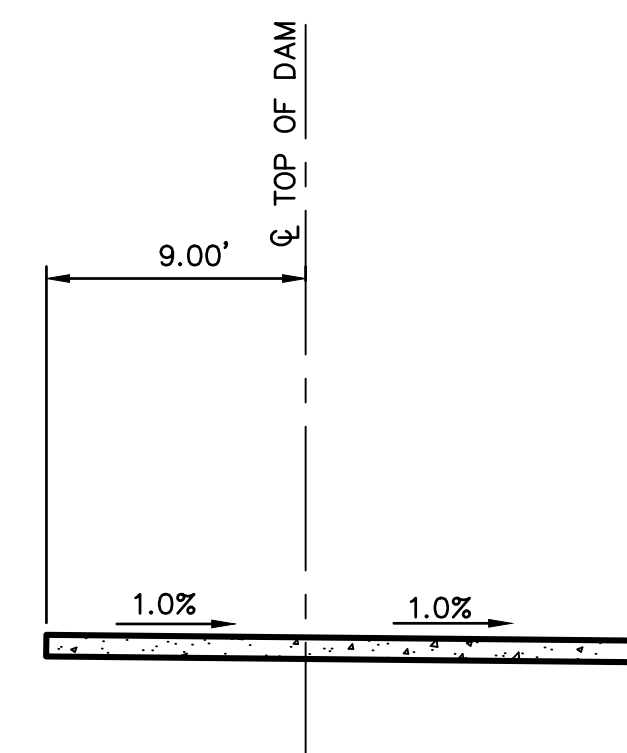
TOP OF DAM TYPICAL SECTION
STA. 0+2.31 TO 3+60
STA. 6+88.30 TO 7+47.67



TOP OF DAM TYPICAL SECTION
STA. 3+60 TO 3+95

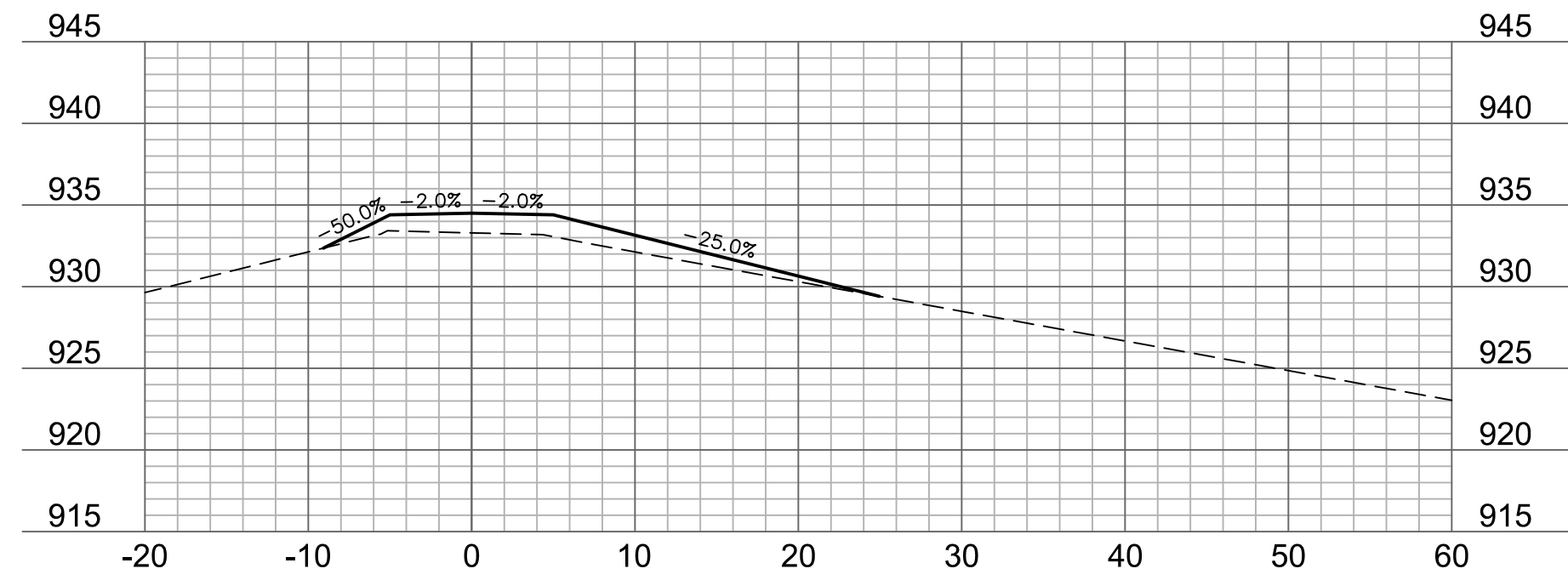


TOP OF DAM TYPICAL SECTION
STA. 4+00 TO 6+74.30

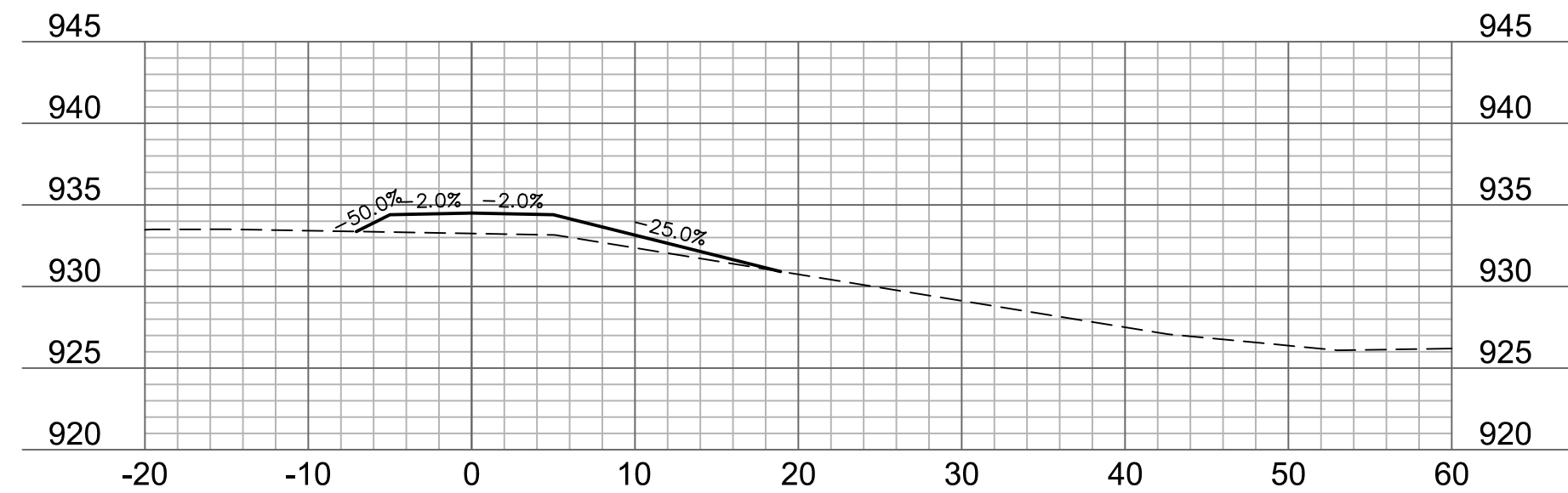


TOP OF DAM TYPICAL SECTION
STA. 6+74.30 TO 6+88.30
SEE BLOWUP OF CONCRETE
CHANNEL

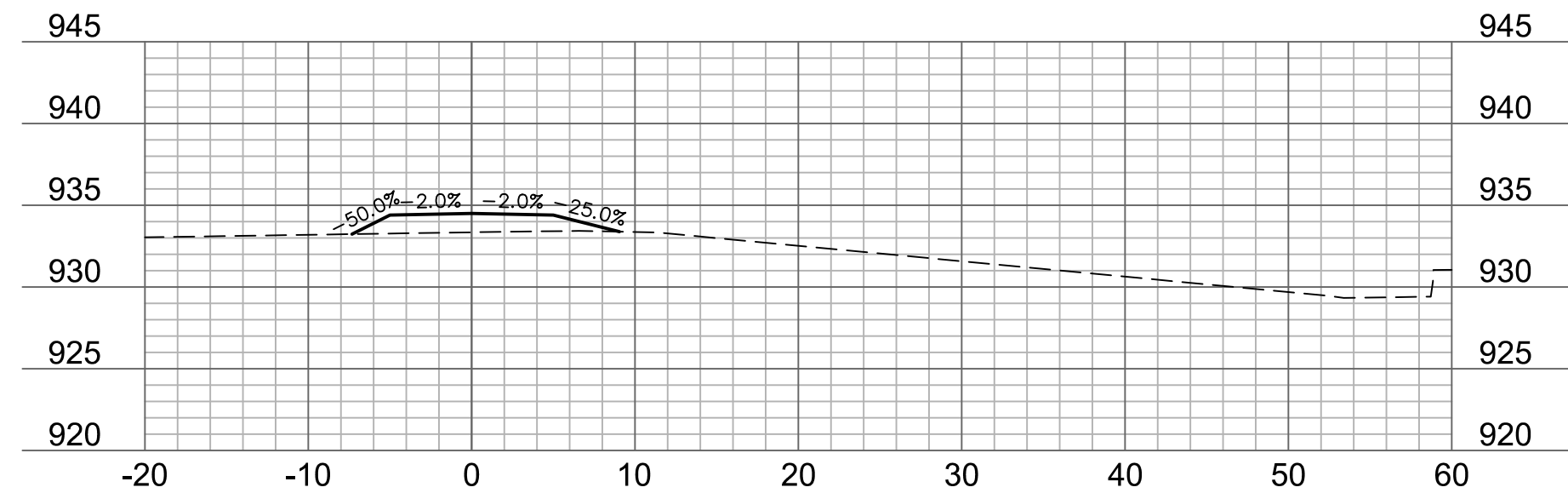
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DATE: Aug 09, 2018 5:13pm
USER: kfluton



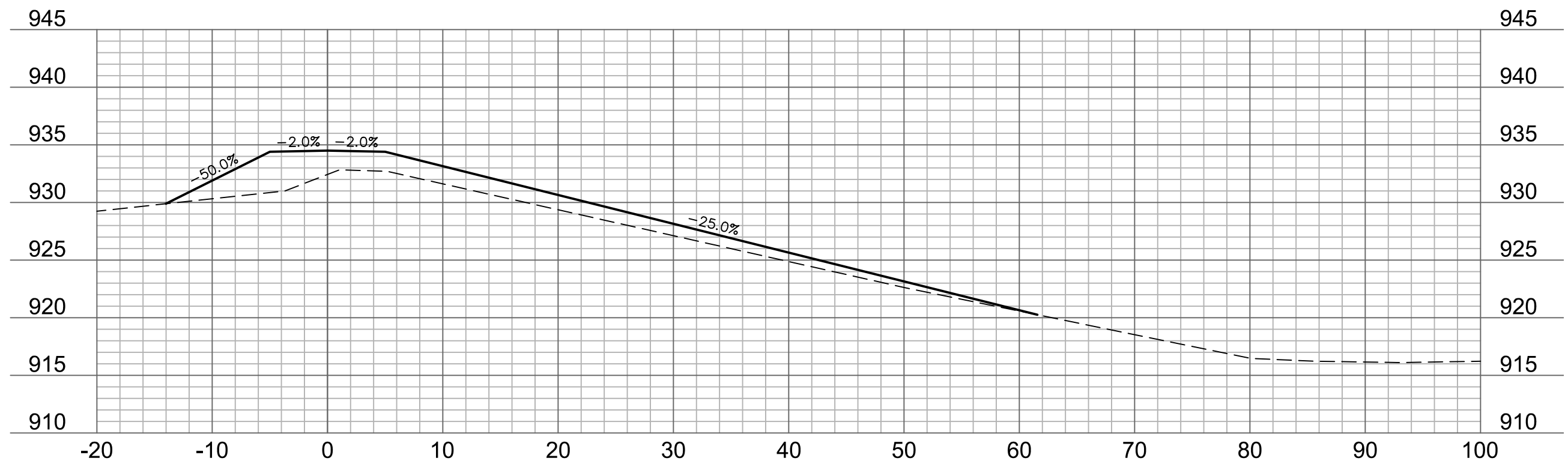
0+75



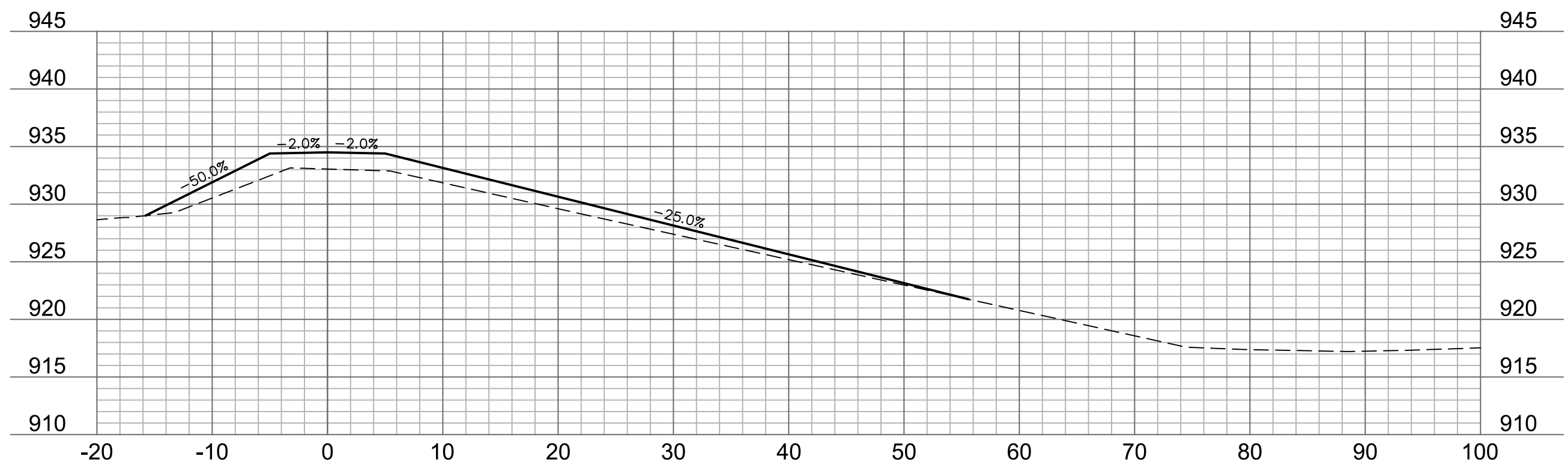
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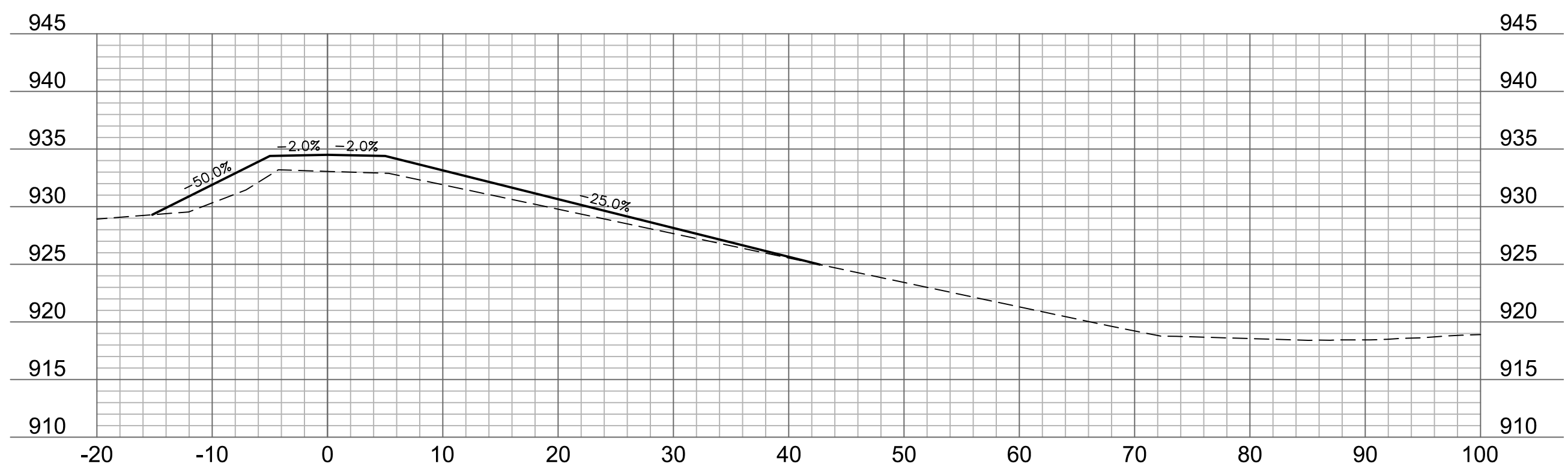
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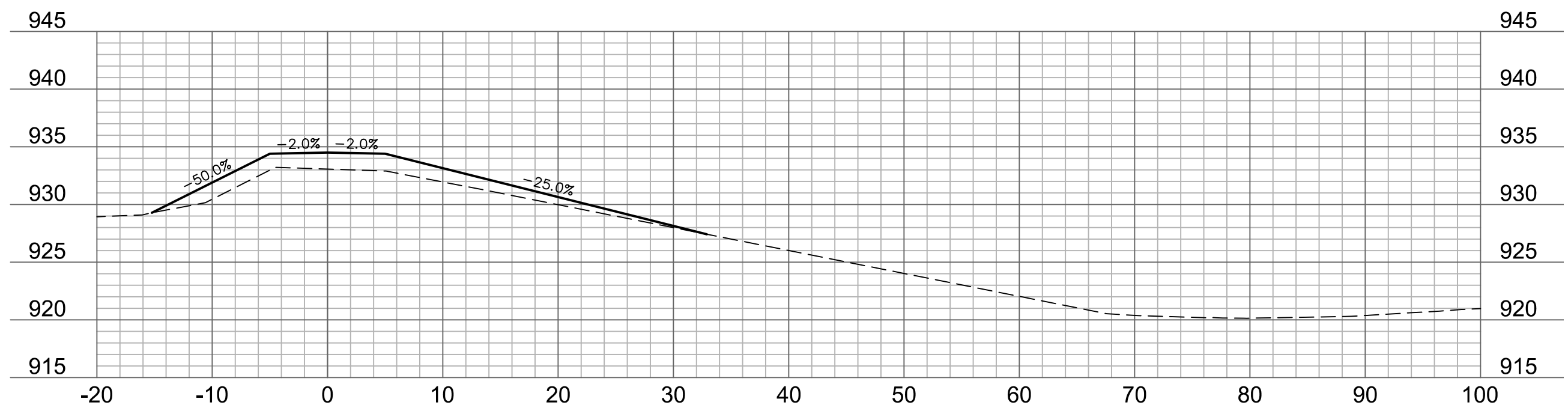
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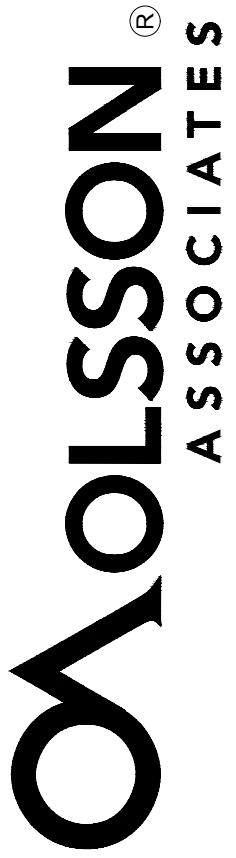
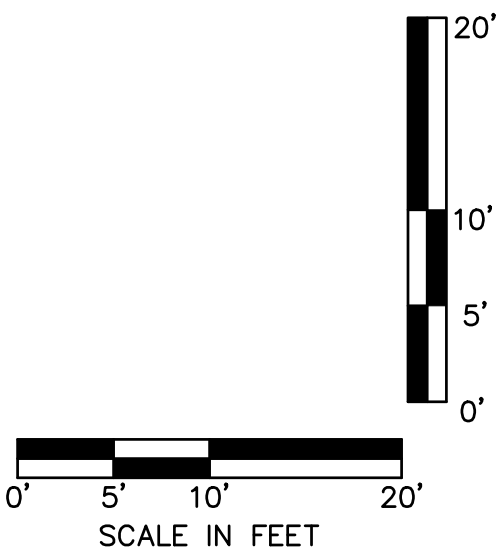
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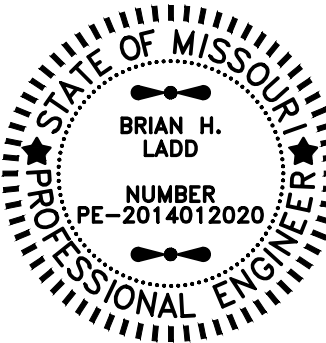
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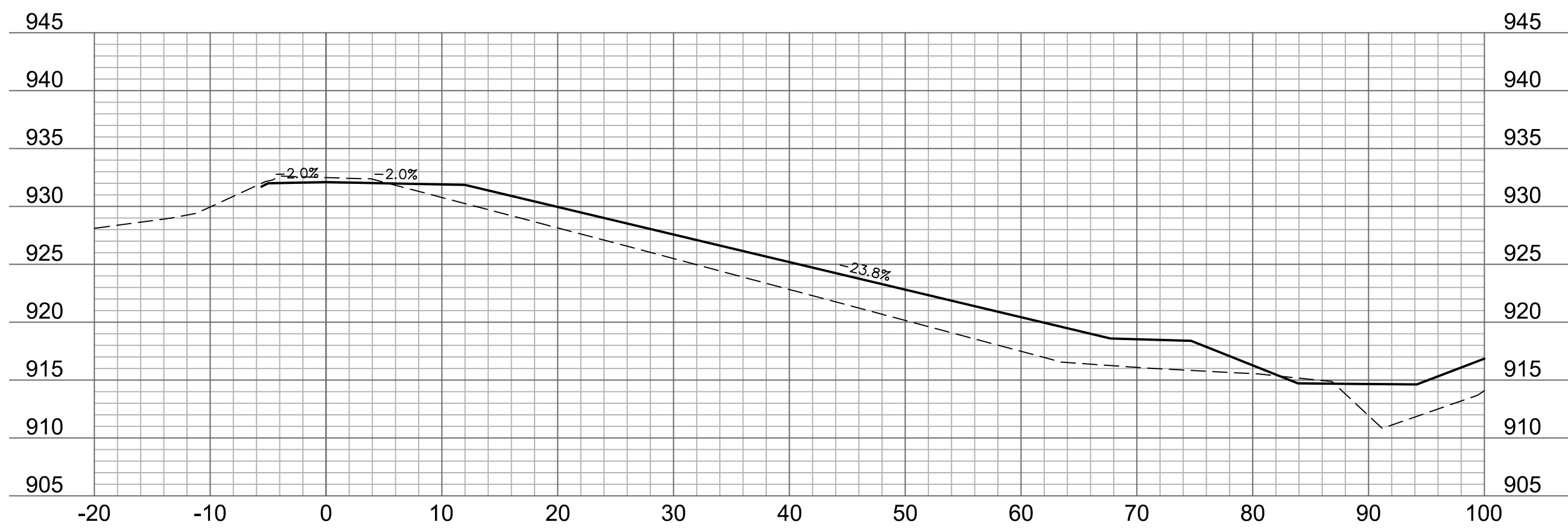


1+00

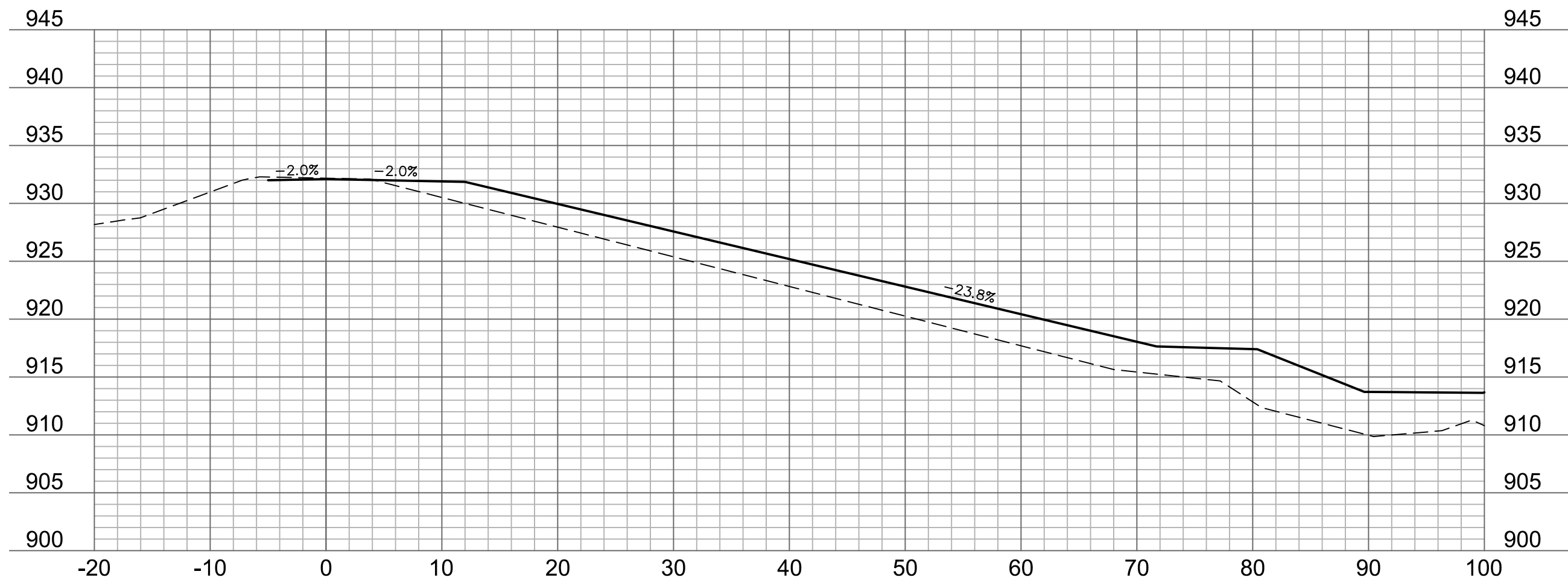


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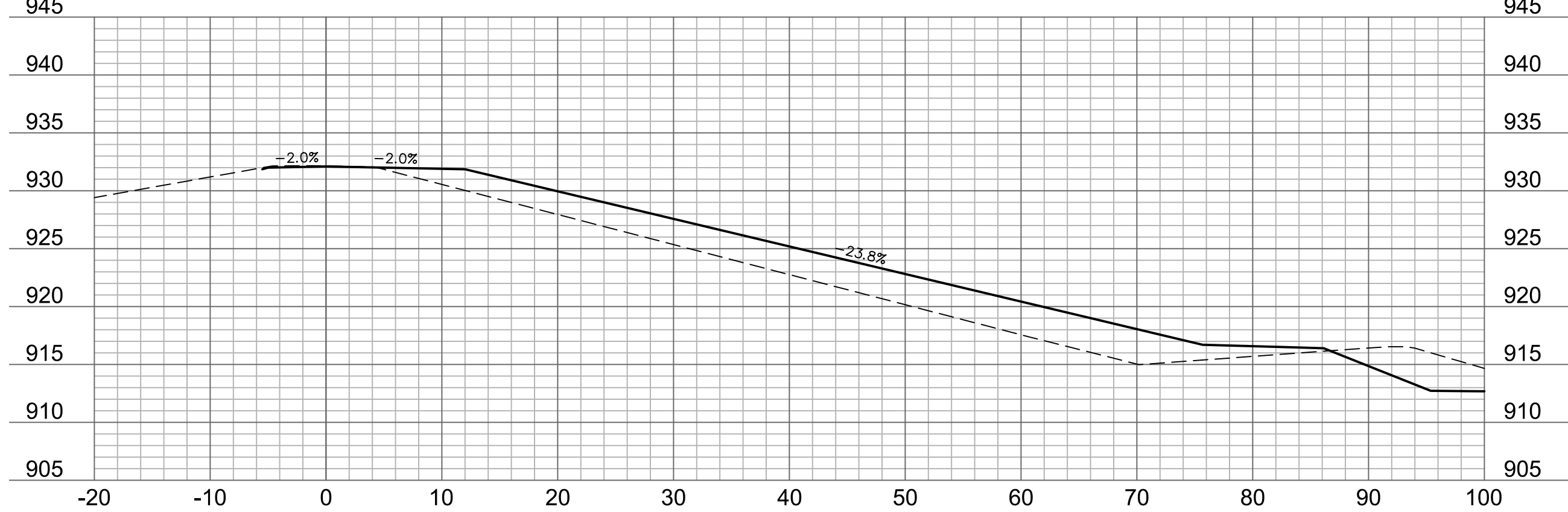
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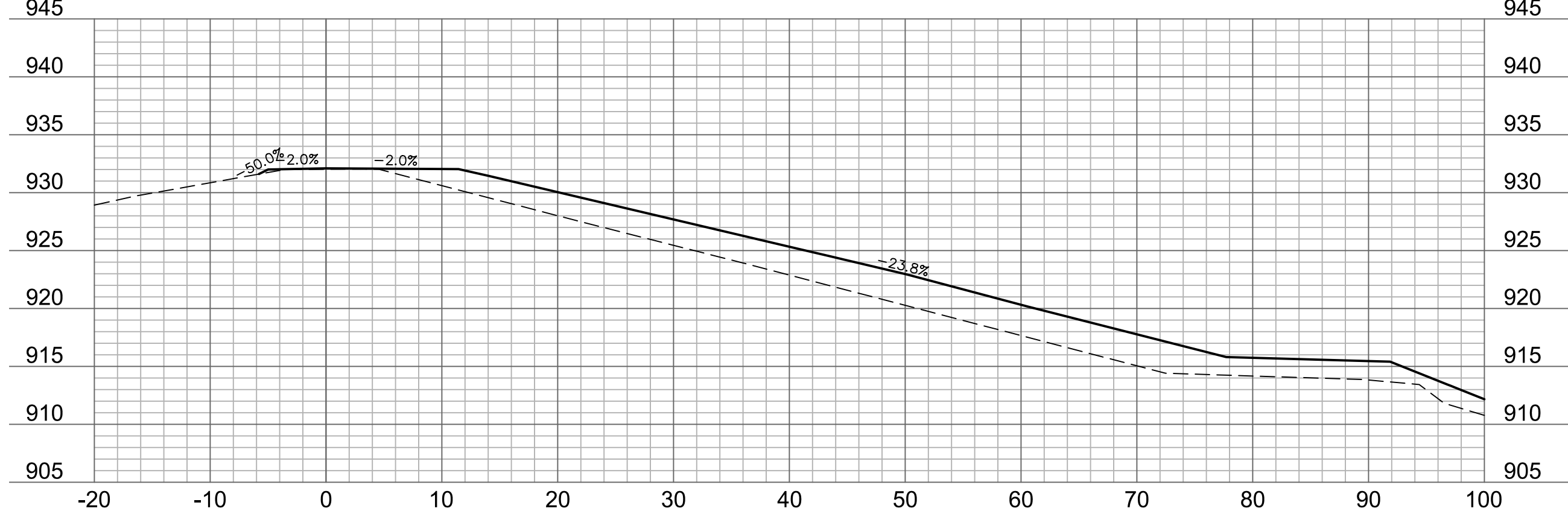
4+75



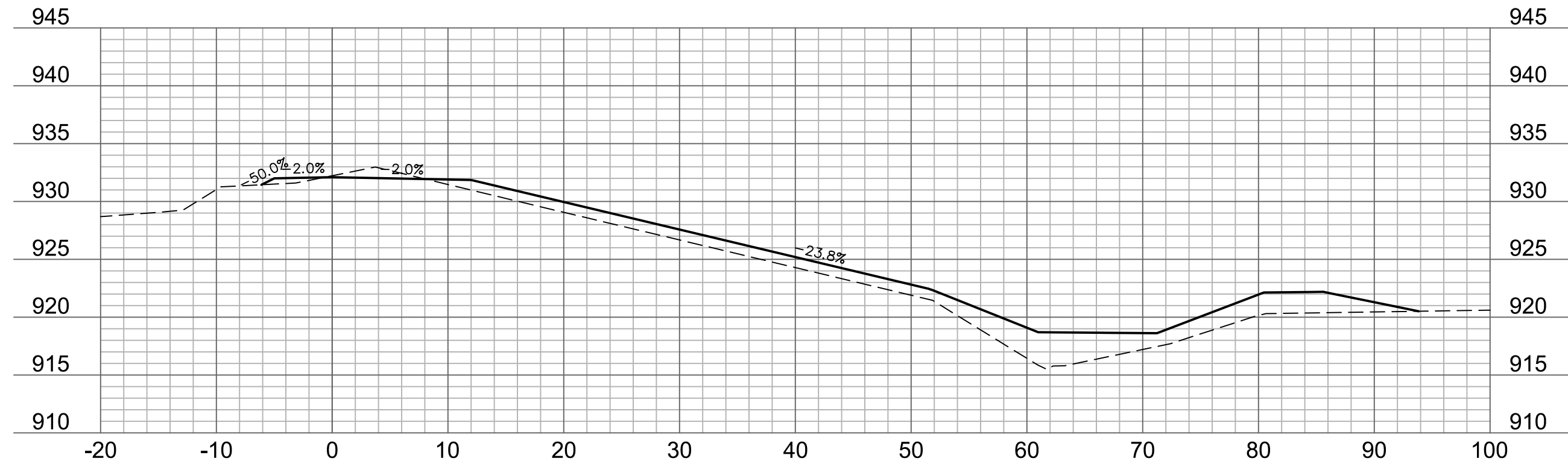
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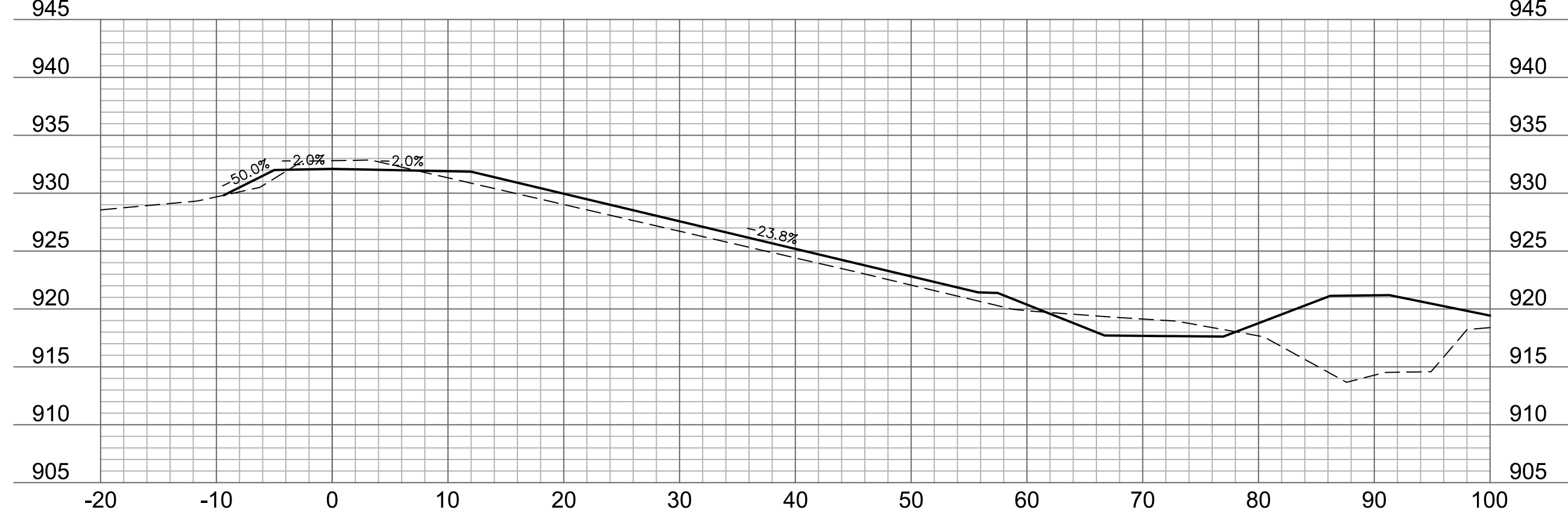
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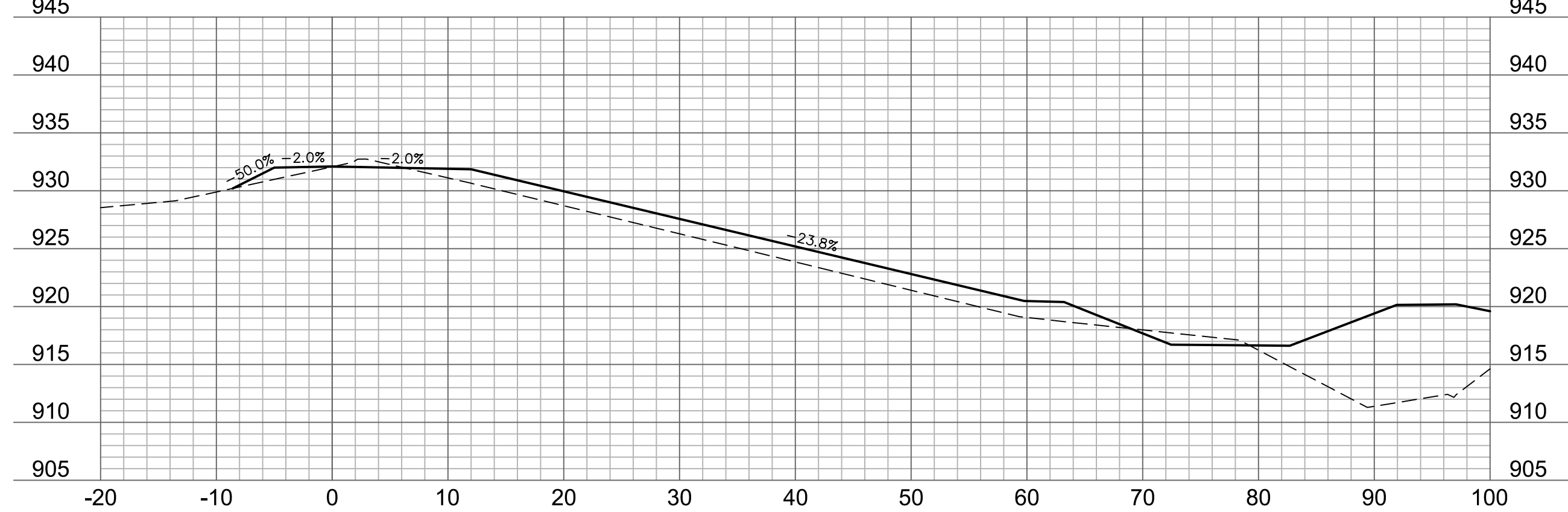
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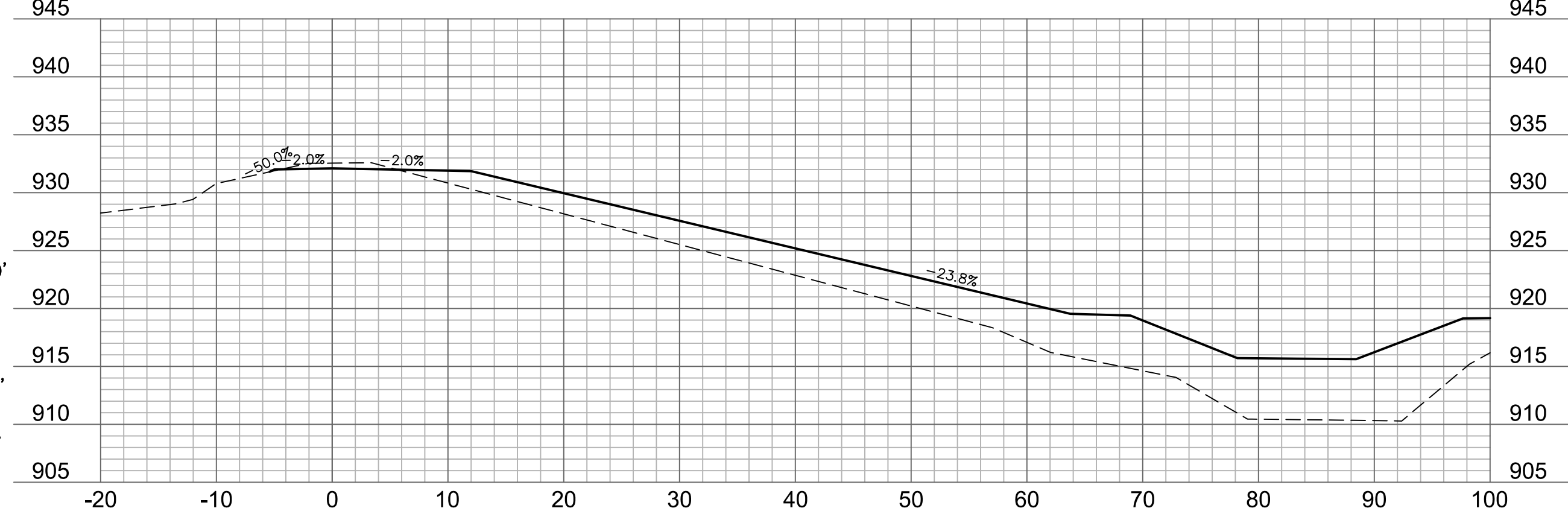
5+75



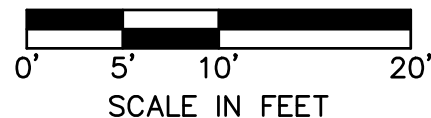
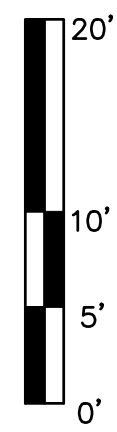
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5+25



5+00



USER: kfulton

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The seal is circular with a dashed outer border. Inside the border, the words "STATE OF MISSOURI" are written in an arc at the top, and "PROFESSIONAL ENGINEER" is written in an arc at the bottom. Two five-pointed stars are positioned on the left and right sides, separating the top and bottom text. In the center of the seal, the name "BRIAN H. LADD" is printed above the license number "NUMBER PE-2014012020".

[illegible]

DAM CROSS SECTIONS

OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS

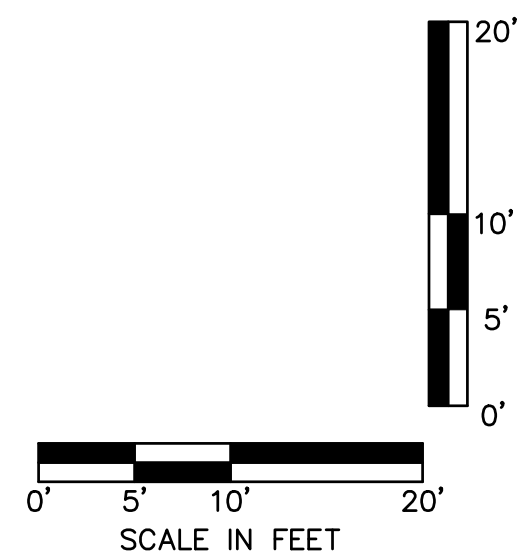
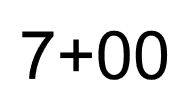
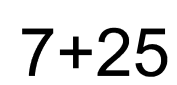
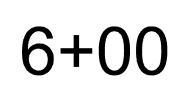
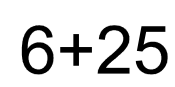
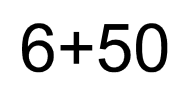
LEE'S SUMMIT, MISSOURI

2018

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 CHECKED BY: _____ BHL
 APPROVED BY: _____ BMJ
 QA/QC BY: _____ CPJ
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 DWG NO.: _____
 DATE: _____ 08.09.2018

SHEET
8 OF 21

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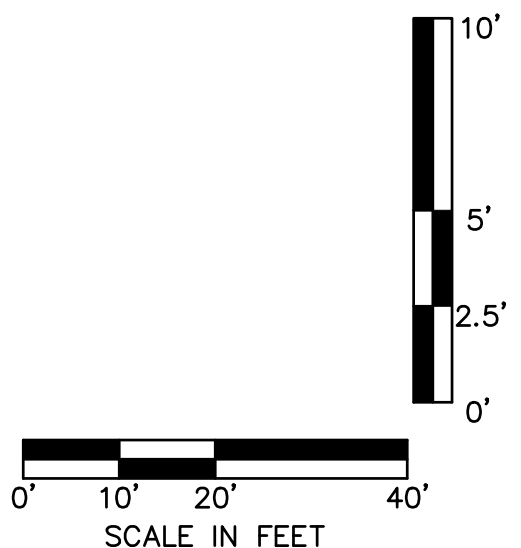
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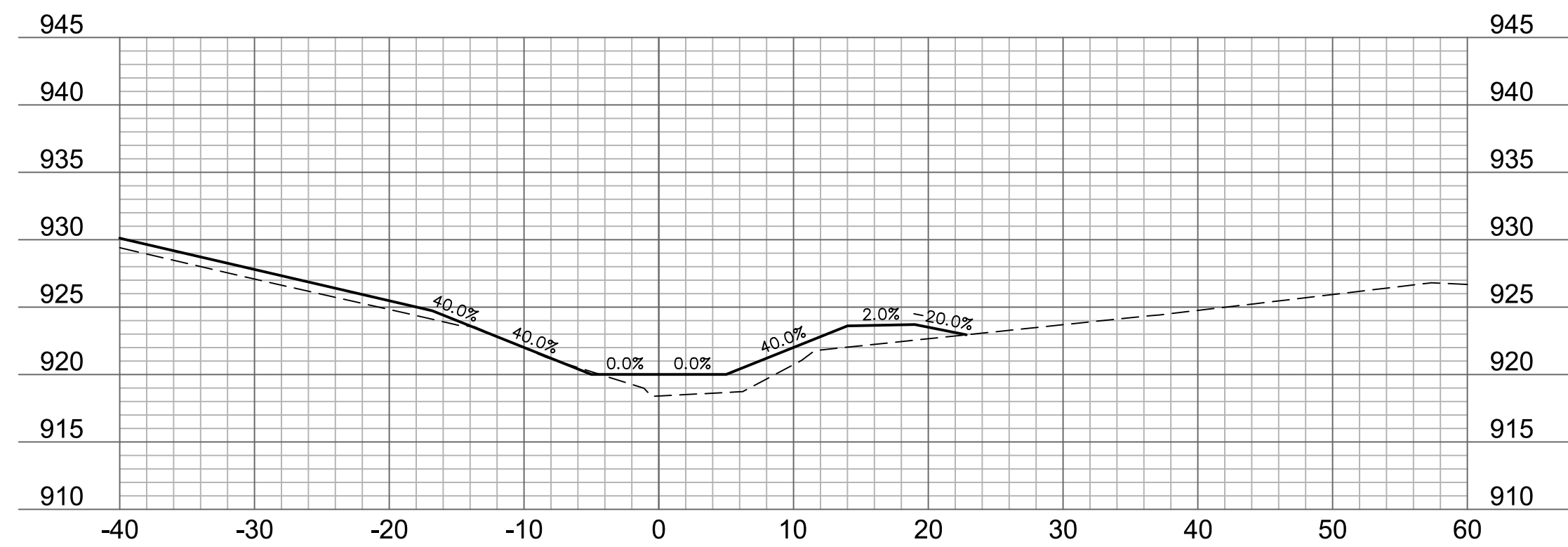
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OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS	
LEE'S SUMMIT, MISSOURI	2018

C.O.A. NO.: _____
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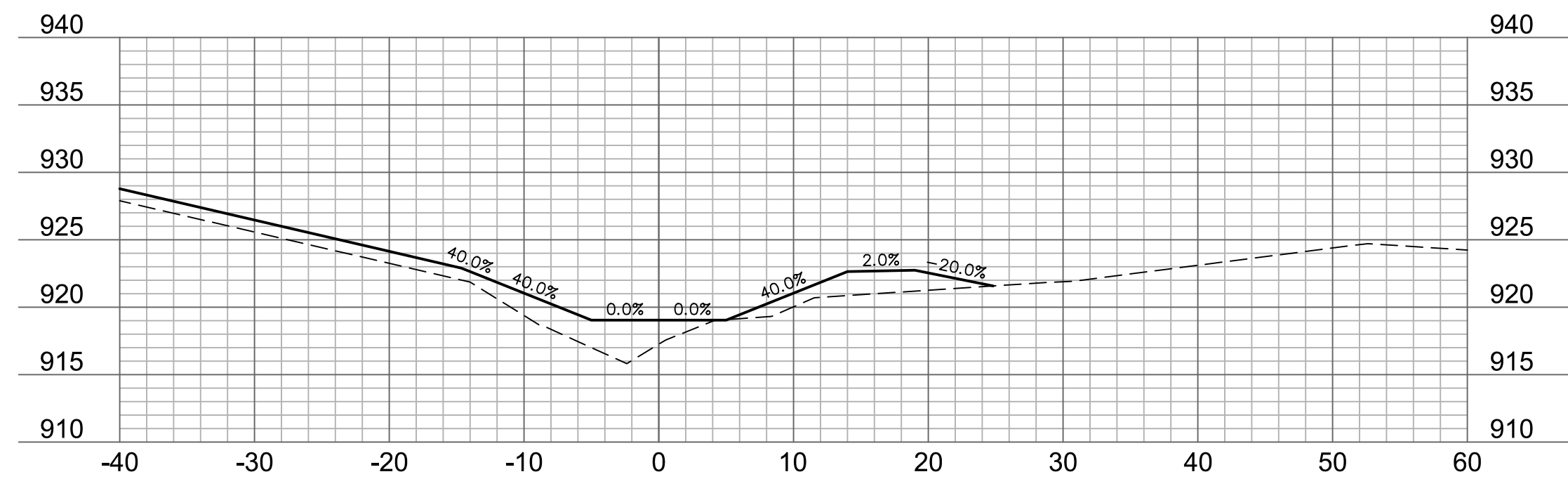
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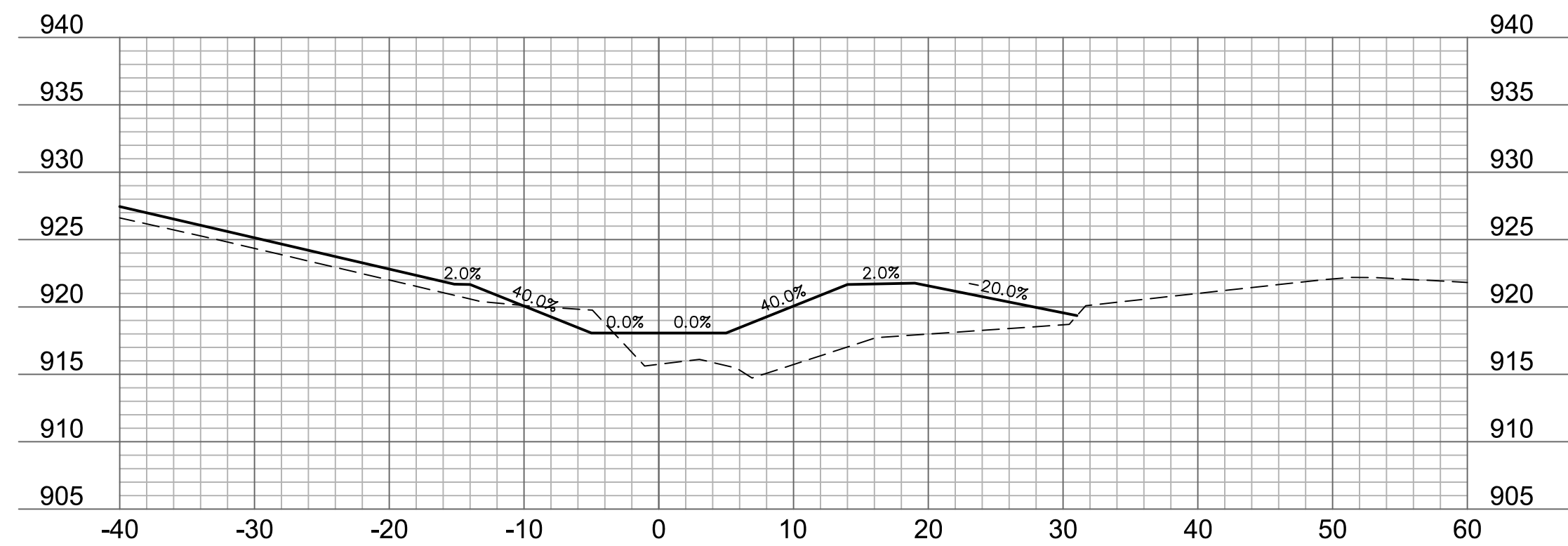
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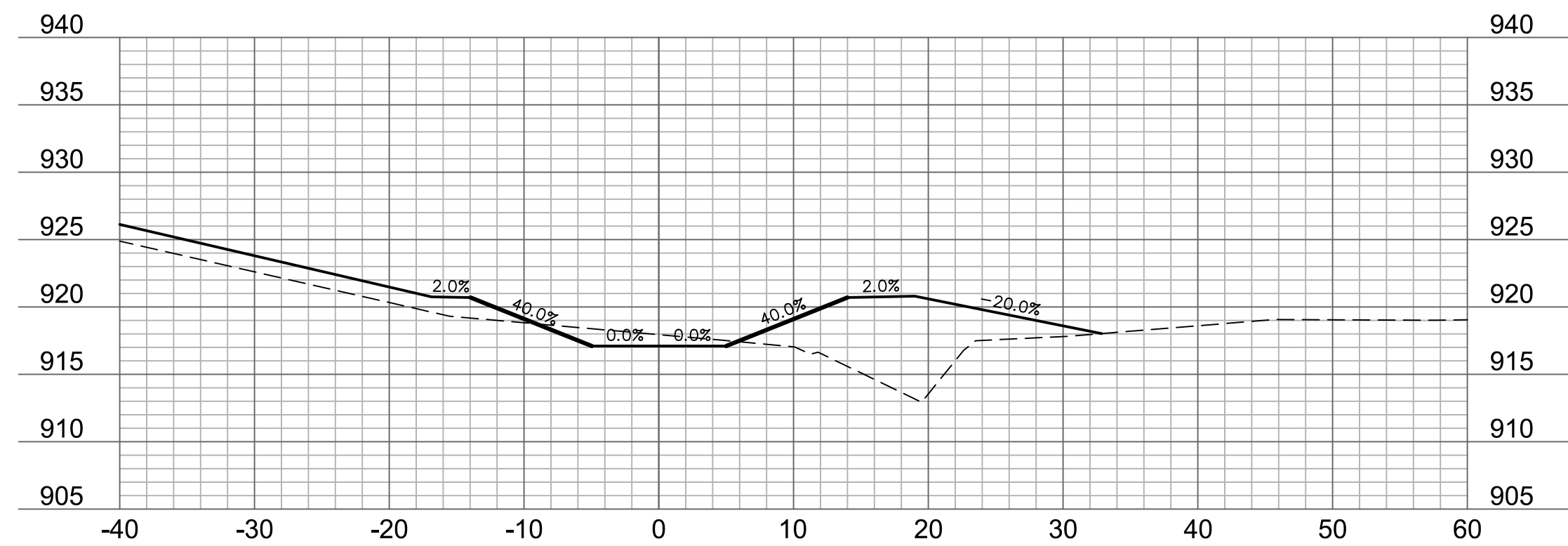
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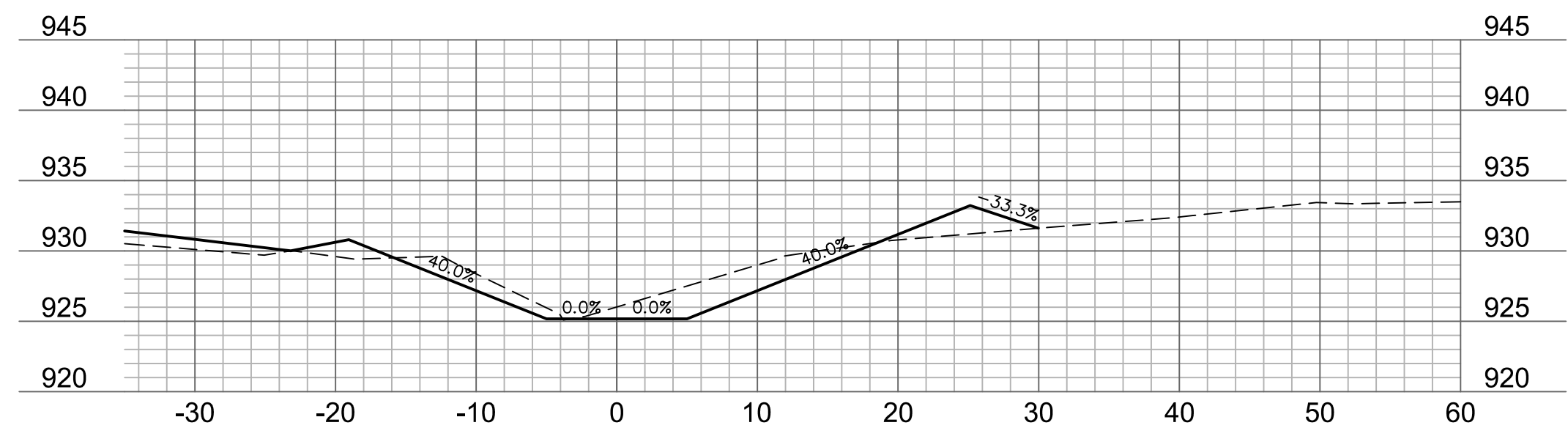
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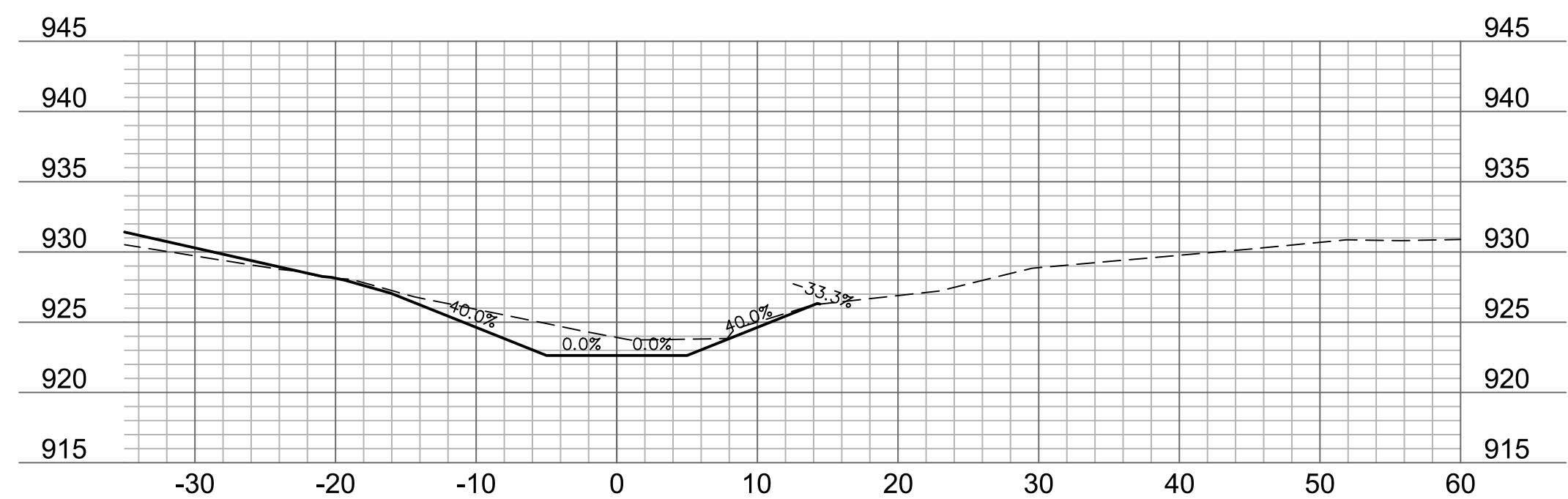
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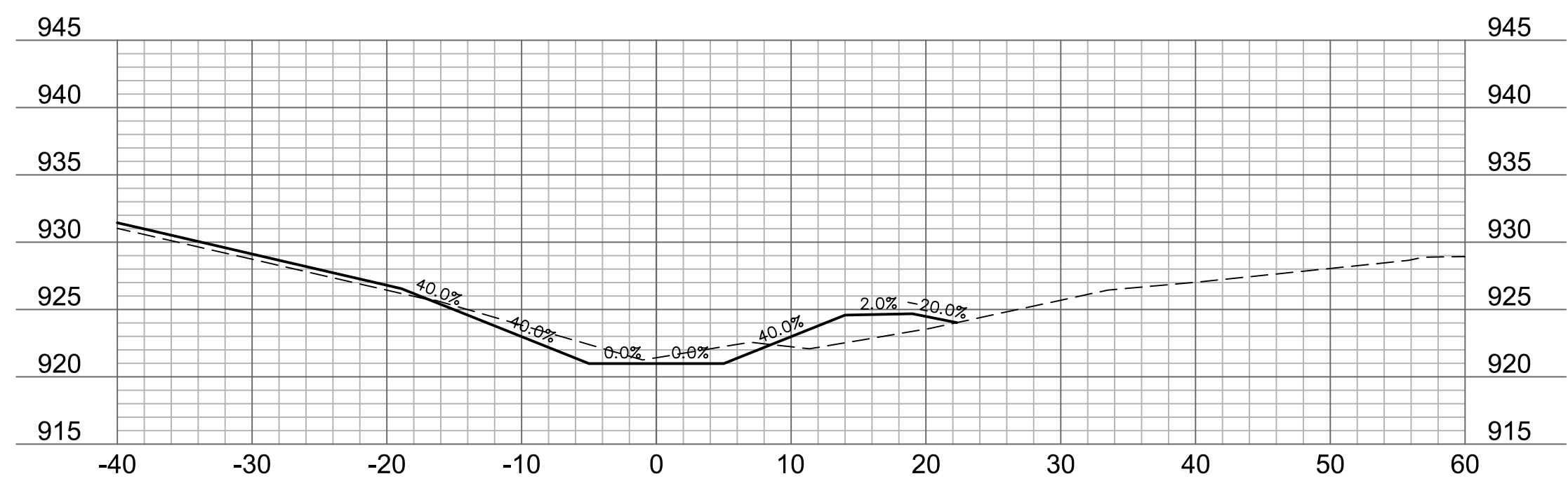
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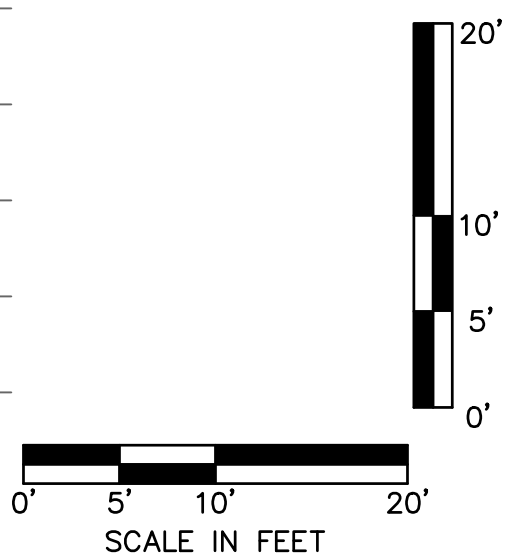
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3+50



3+25

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REVISIONS

2018

CHANNEL CROSS SECTIONS

OLD LONGVIEW LAKE

DAM & SPILLWAY IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

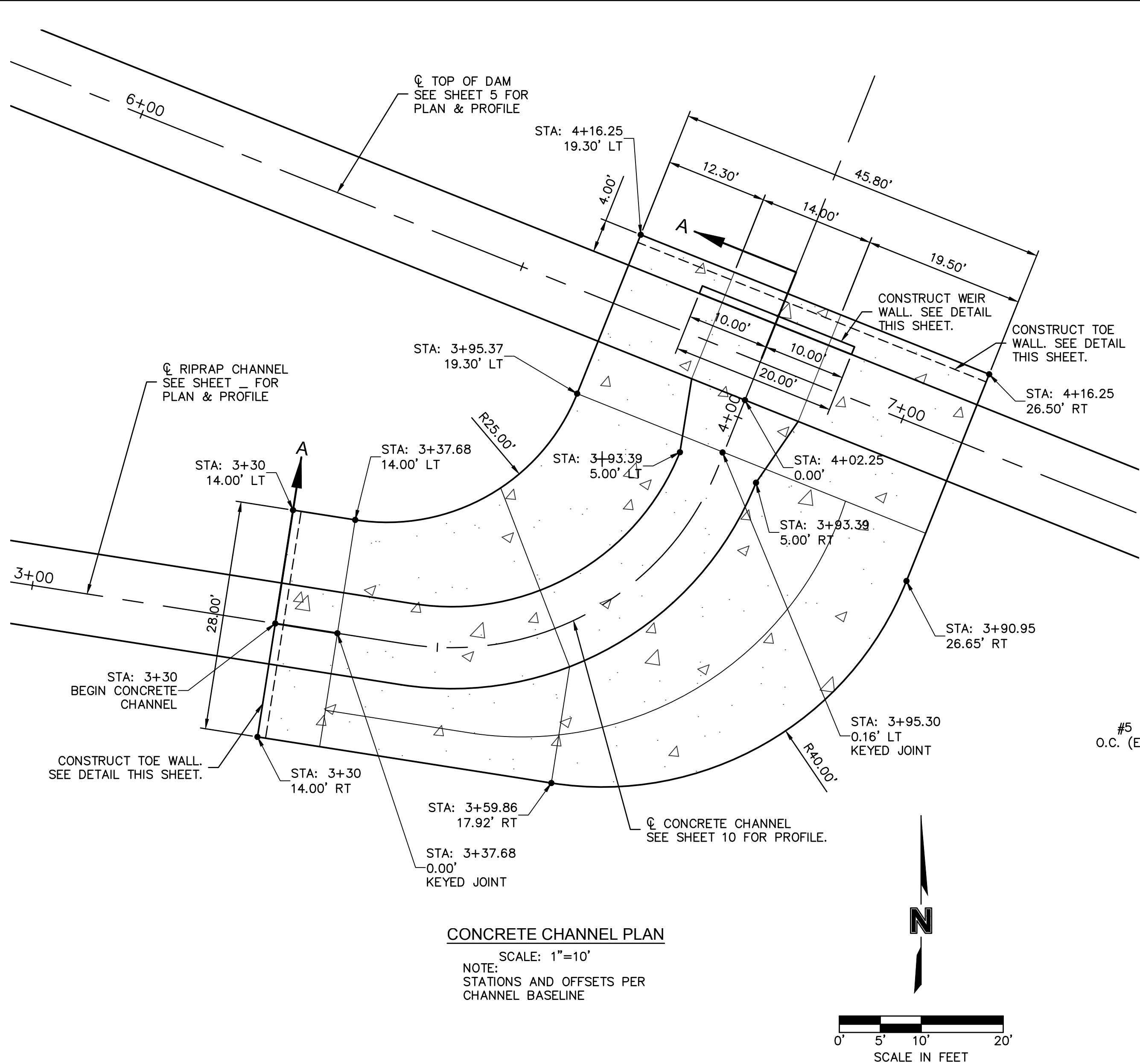
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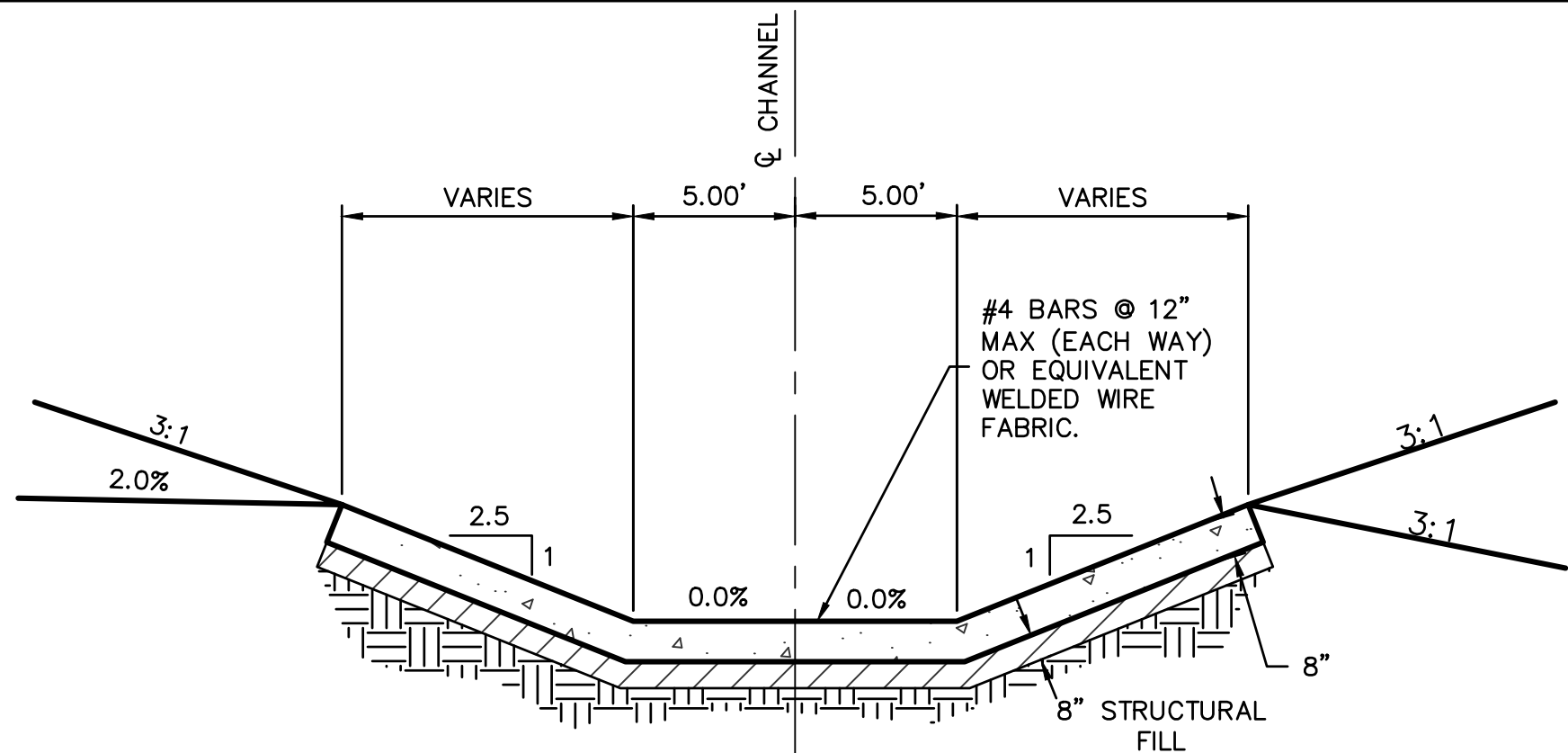
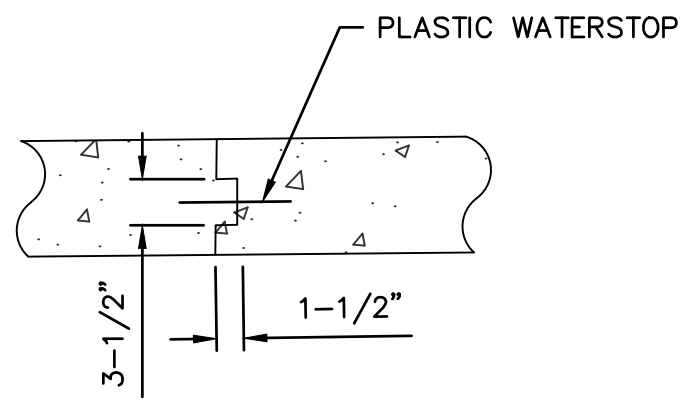
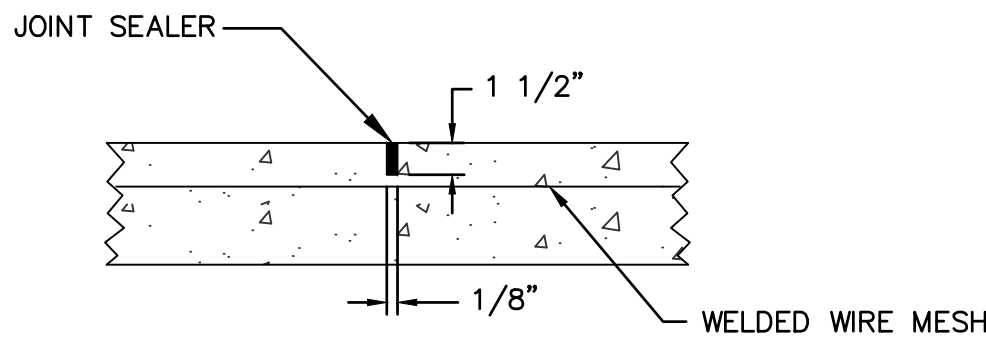
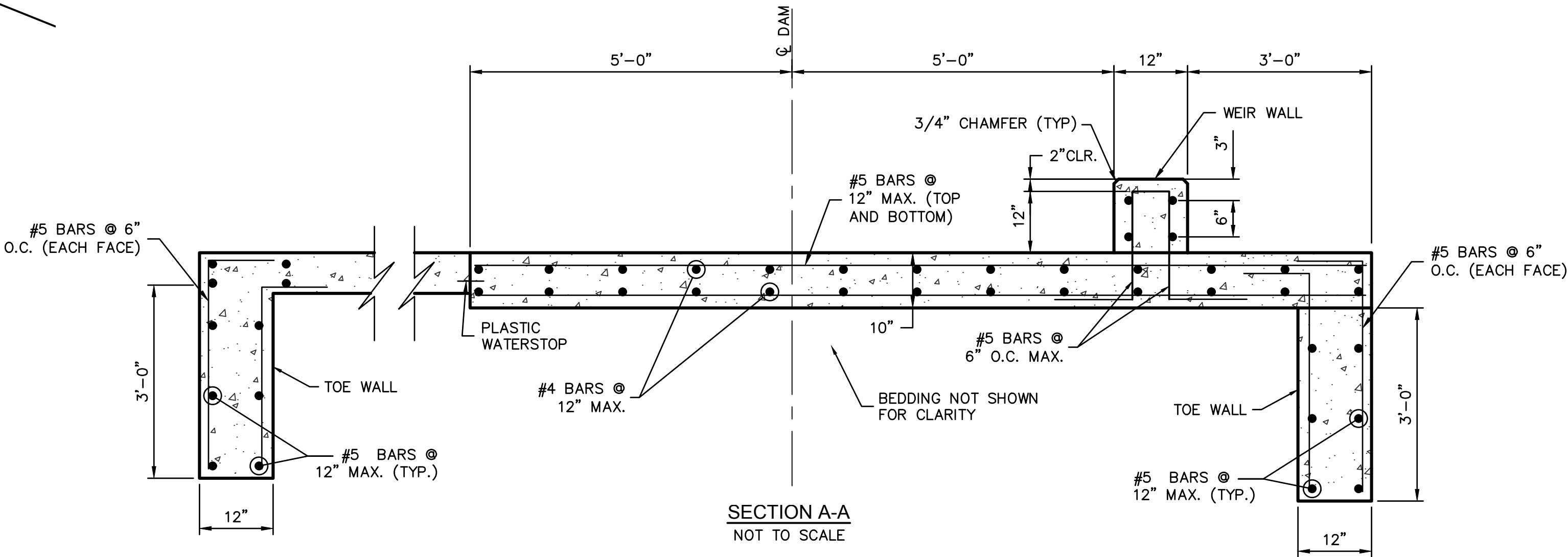
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DATE: Aug 09, 2018 5:15pm XREFS: w_phase_70305 w_tblk_70305



CONCRETE DITCH LINING NOTES

1. EXPANSION JOINTS SHALL BE PLACED WHERE DITCH LINER ABUTS ANOTHER STRUCTURE, AT 250' CTRS. MAXIMUM, AND AT POINTS OF CURVATURE. TRANSVERSE CONTRACTION JOINTS SHALL BE PLACED AT 10' INTERVALS. IF A POUR IS DELAYED 30 MINUTES OR MORE A TRANSVERSE CONSTRUCTION JOINT SHALL BE SUBSTITUTED FOR A CONTRACTION JOINT AND EXCESS CONCRETE WASTED.
2. DITCH LINER CONSTRUCTION TO BE MINIMUM 8" KCMMB4K CONCRETE.
3. LONGITUDINAL CONSTRUCTION JOINTS SHALL BE PLACED AS SHOWN WHEN WIDTH IS GREATER THAN 10'. DISTANCE BETWEEN JOINTS SHALL NOT EXCEED 10'.
4. ALL CONCRETE USED IN THIS WORK SHALL MEET THE REQUIREMENTS OF THE LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
5. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF $\pm \frac{1}{8}$ " SHALL BE PERMITTED.
6. ALL CONCRETE CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENT OF STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION, MISSOURI DEPARTMENT OF TRANSPORTATION, LATEST EDITION, EXCEPT AS MODIFIED IN LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
7. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.
8. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY ENGINEER PRIOR TO CONSTRUCTION.
9. ALL CONTRACTION JOINTS SHALL BE SEALED WITH A NON-EXTRUDING JOINT SEALER.



STA. 3+30 TO STA. 3+93.39
NOT TO SCALE

NOTE:
PRIOR TO INSTALLATION OF CONCRETE CHANNEL, SUBBASE
SHALL BE CLEARED OF ANY STONE AND SURFACE DEBRIS.

GENERAL NOTES:

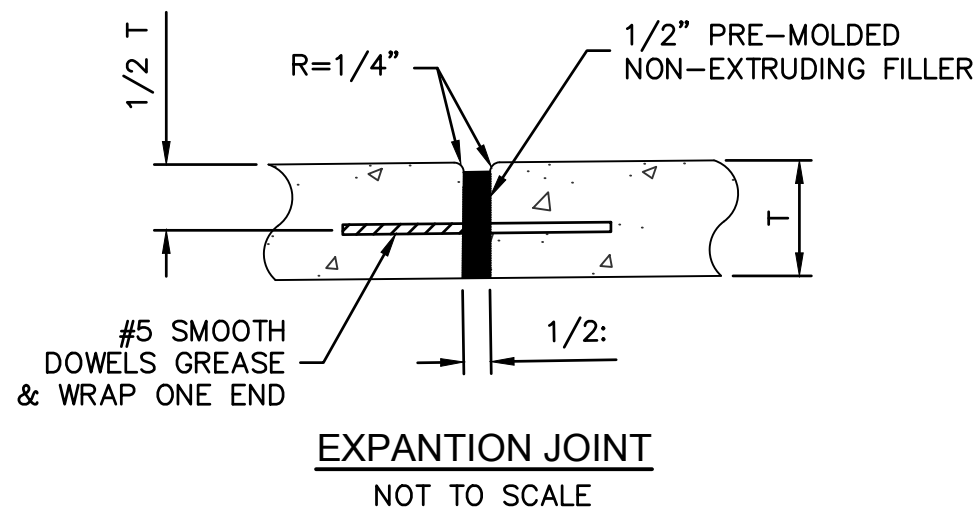
DESIGN CRITERIA: U.S. CORPS OF ENGINEERS STRUCTURAL DESIGN OF CONCRETE LINED FLOOD CONTROL CHANNELS, 1995.

MATERIALS:
CONCRETE, F'C = 3,000 PSI (MIN)
REINFORCING, F_y = 60,000 PSI

BENDS IN REINFORCING SHALL CONFORM TO CRSI MANUAL OF STANDARD PRACTICE.

MINIMUM CLEAR COVER SHALL BE 2" UNLESS OTHERWISE SHOWN.

CONSTRUCTION JOINTS SHALL BE SEALED WITH AN APPROVED PLASTIC JOINT WATERSTOP AND JOINT SEALANT.



NOTES:

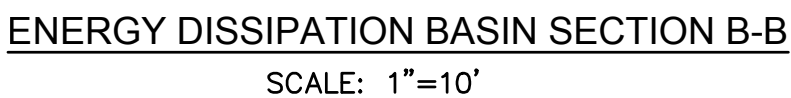
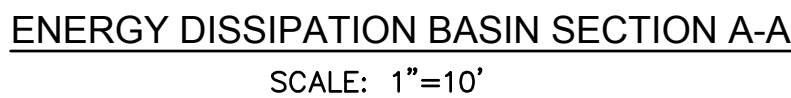
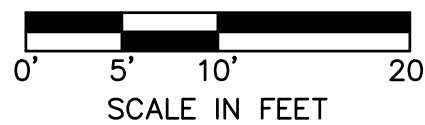
1. JOINTS SHALL BE PLACED AT ALL P.C.'s, P.T.'s AND TRANSITIONS.
2. SMOOTH BARS SHALL BE 24" LONG
3. DOWEL BARS SHALL BE LEVEL WHEN PLACED.

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

CONCRETE CHANNEL DETAIL	OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS	2018

C.O.A. NO.:
DRAWN BY: KTE
CHECKED BY: BHL
APPROVED BY: BMJ
QA/QC BY: CPJ
PROJECT NO.: 017-0305
DWG NO.:
DATE: 08.09.2018

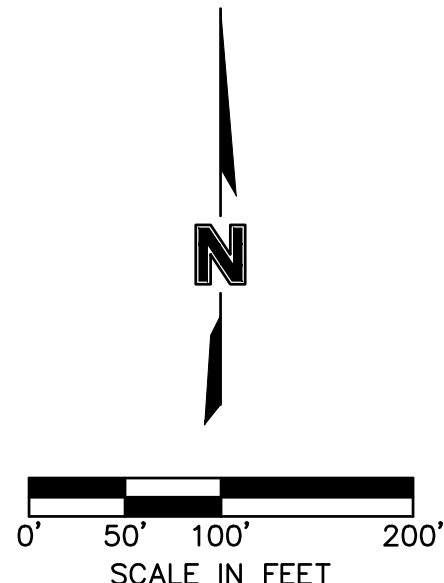
DWG:



ENERGY DISSIPATION BASIN	2019
OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS	FEIS SUMMIT, MISSOURI

C.O.A. NO.: _____
 DRAWN BY: _____ KTH
 CHECKED BY: _____ BHI
 APPROVED BY: _____ BM
 QA/QC BY: _____ CP
 PROJECT NO.: _____ 017-030
 DWG NO.: _____
 DATE: _____ 08.09.2018

DWG
DATA



EARTHWORK QUANTITIES NOTES:

1. EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
2. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.

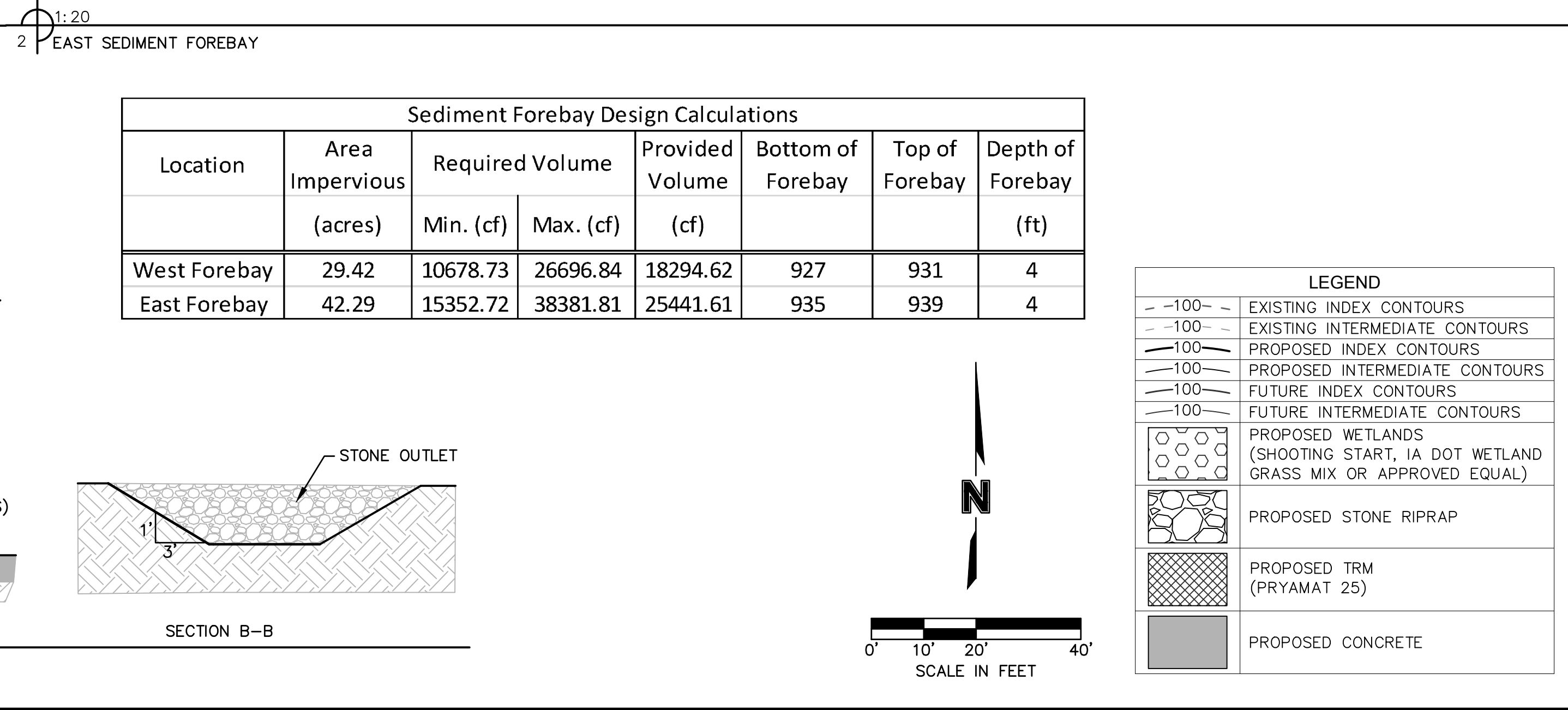
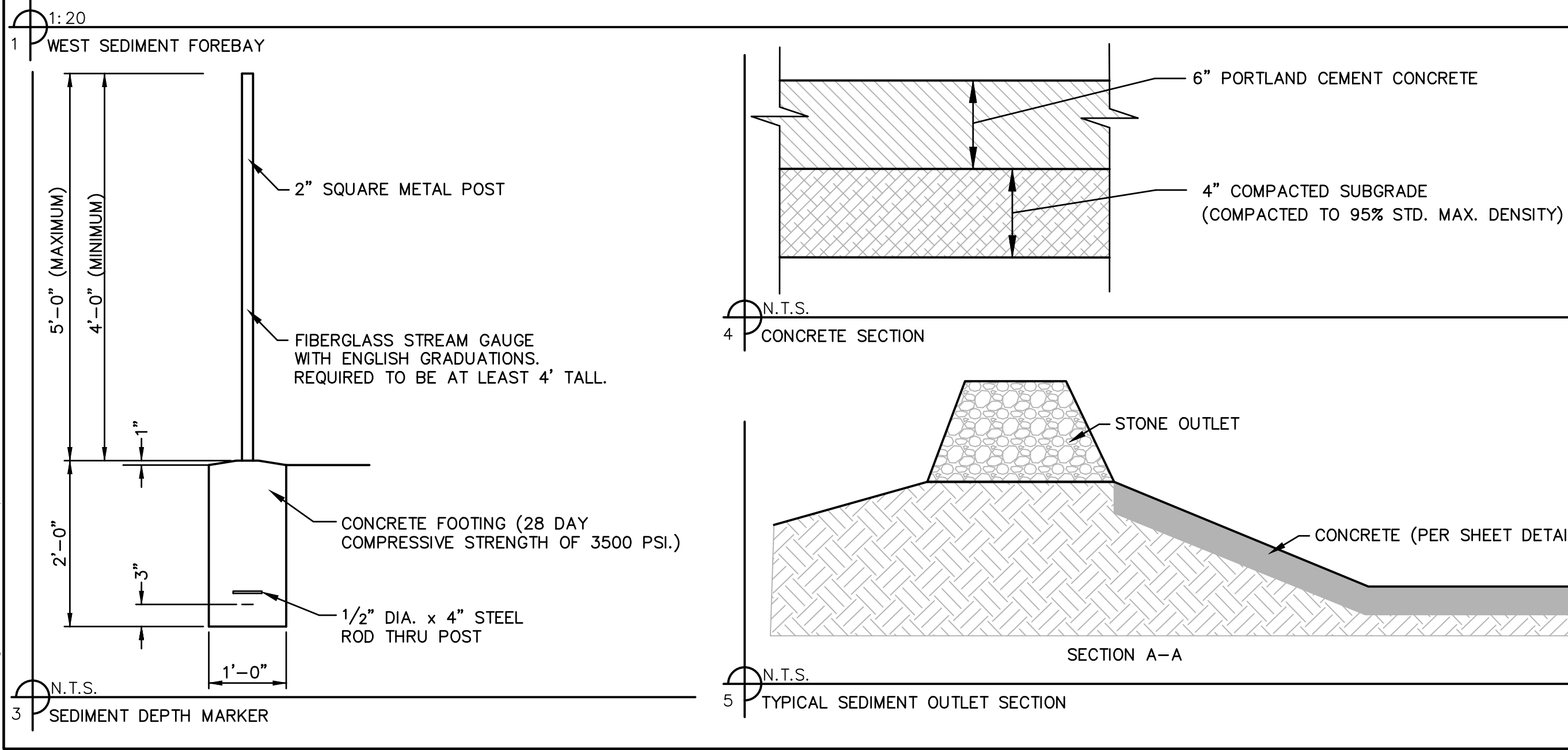
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 APPROVED BY: _____ BMJ
 QA/QC BY: _____ CPJ
 PROJECT NO.: _____ 017-0305
 DWG NO.: _____
 DATE: _____ 08.09.2018

01_C_PPATT



LAKE SEDIMENT REMOVAL PLAN OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS		REV. NO.	DATE	REVISIONS DESCRIPTION	BY
LEE'S SUMMIT, MISSOURI		2018			
C.O.A. NO.: _____ DRAWN BY: _____ KTF CHECKED BY: _____ BHL QA/QC BY: _____ BMJ PROJECT NO.: _____ 017-0305 DWG NO.: _____ DATE: _____ 08.09.2018					
SHEET 16 OF 21					

S: F:\2017\0
E: Aug 09, 2



Sediment Forebay Design Calculations							
Location	Area Impervious	Required Volume		Provided Volume	Bottom of Forebay	Top of Forebay	Depth of Forebay
	(acres)	Min. (cf)	Max. (cf)	(cf)			(ft)
West Forebay	29.42	10678.73	26696.84	18294.62	927	931	4
East Forebay	42.29	15352.72	38381.81	25441.61	935	939	4

SEDIMENT FOREBAY PLAN OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS		REV. NO.	DATE	REVISIONS DESCRIPTION	BY
LEE'S SUMMIT, MISSOURI		REVISIONS			
		2018			
C.O.A. NO.: _____ DRAWN BY: _____ KTE CHECKED BY: _____ BHL APPROVED BY: _____ BMJ QA/QC BY: _____ CPJ PROJECT NO.: _____ 017-0305 DWG NO.: _____ DATE: _____ 08.09.2018					
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SEED & MULCH NOTES:
SEEDING SHALL BE DONE BEFORE THE PROPOSED SEEDBED BECOMES
ERODED, CRUSTED OVER, OR DRIED OUT AND SHALL NOT BE DONE WHEN
THE GROUND IS FROZEN, OR COVERED WITH SNOW. THE SEED SHALL
COMPLY WITH THE REQUIREMENTS OF THE MISSOURI SEED LAW AND THE
FEDERAL SEED ACT. ALSO, IT SHALL CONTAIN NO SEED OF ANY PLANT
ON THE FEDERAL NOXIOUS WEED LIST. OTHER WEED SEED SHALL NOT
EXCEED ONE PERCENT BY WEIGHT OF MIX.

MIX I - RYE GRASS / BLUE GRASS -----100 LBS. PER ACRE
MIX II - TALL FESCUE / BLUE GRASS -----195 LBS. PER ACRE
LIME -----2000 LBS. PER ACRE (50 LBS.
PER 1000 SQ. FT.)
FERTILIZER -----800 TO 1200 LBS. PER
ACRE (25 LBS. PER 1000 SQ. FT.)

DURING THE DATES DECEMBER 15TH THROUGH MAY 31 ALL LIME, FERTILIZER, SEED, AND MULCH SHALL BE APPLIED TO FINISHED SLOPES OF DISTURBED AREAS. DURING THE MONTHS OF JUNE, JULY, OCTOBER, AND NOVEMBER 1ST THROUGH DECEMBER 15TH, LIME, FERTILIZER, SEED, AND MULCH SHALL BE APPLIED AT THE FOLLOWING RATES:

LIME - 100 % OF SPECIFIED QUANTITY

FERTILIZER - 75 % OF THE SPECIFIED QUANTITY

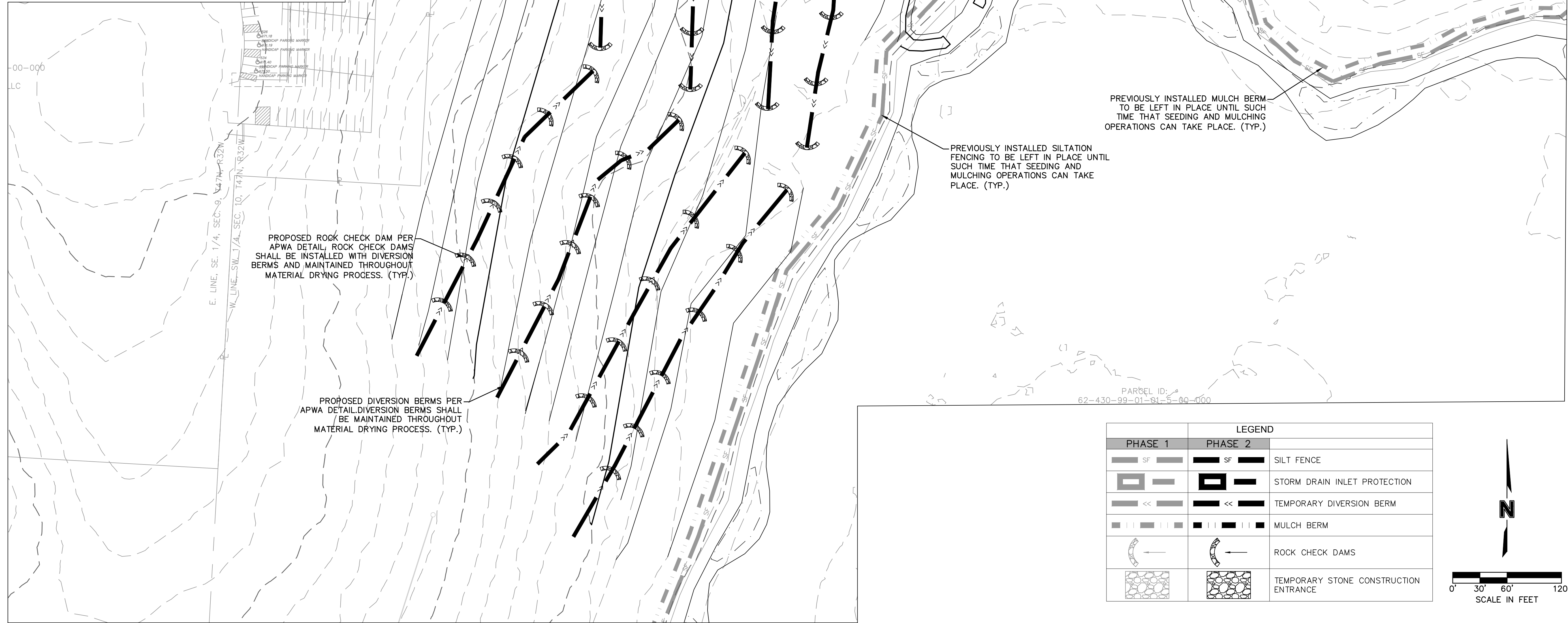
SEED - 50 % OF THE SPECIFIED QUANTITY

MULCH - 100 % OF THE SPECIFIED QUANTITY

MULCH SHALL BE VEGETATIVE TYPE, CEREAL STRAW FROM STALKS OF OATS, RYE, OR BARLEY, OR APPROVED EQUAL. THE STRAW SHALL BE FREE OF PROHIBITED WEED SEED AND RELATIVELY FREE OF ALL OTHER NOXIOUS AND UNDESIRABLE SEED. MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE, (70 TO 90 LBS. PER 100 SQ. FT.).

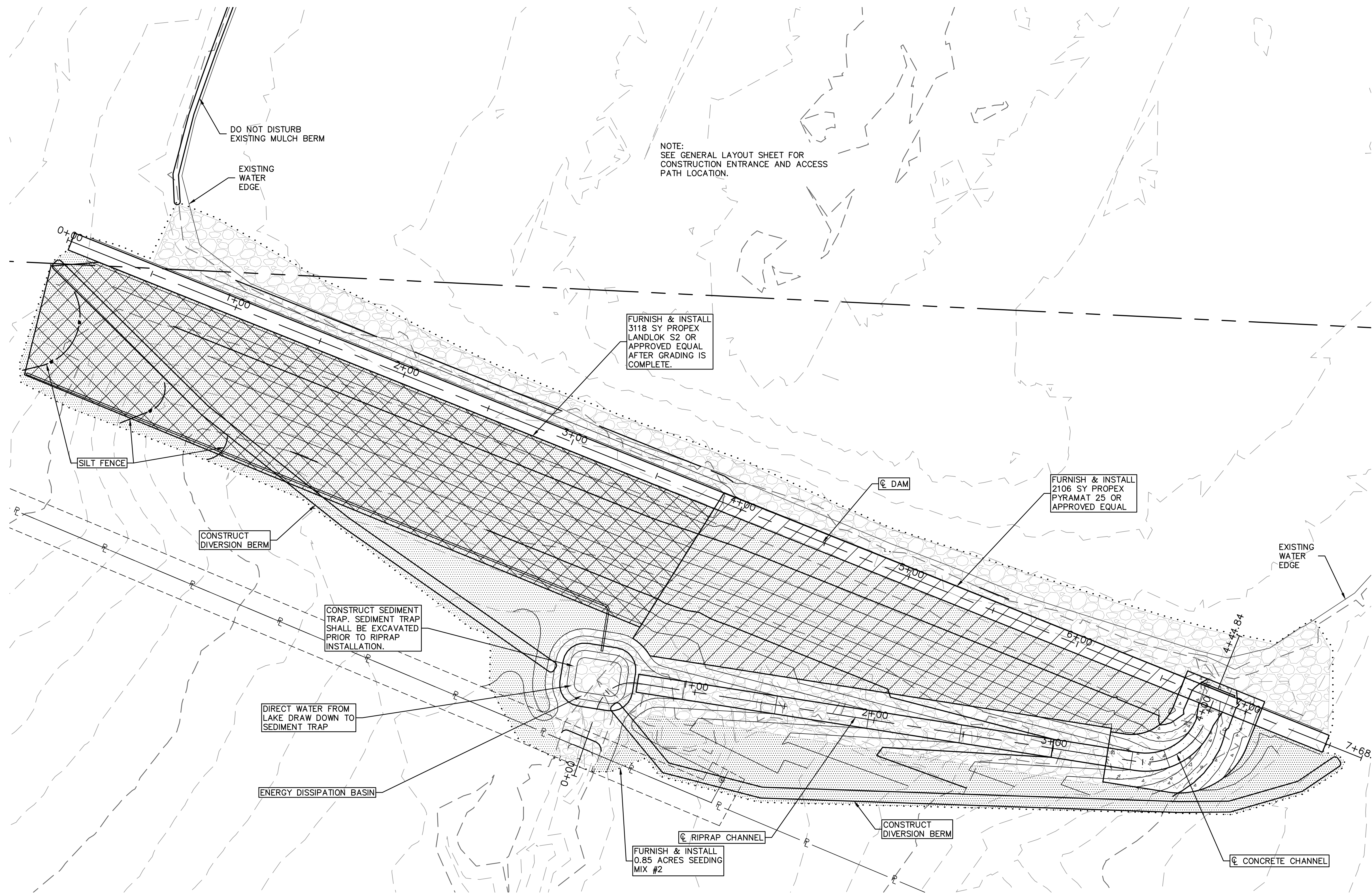
MULCH SHALL BE EMBEDDED BY A MULCH ANCHORING TOOL OR DISK TYPE ROLLER HAVING FLAT SERRATED DISKS SPACED NOT MORE THAN 10 INCHES APART AND CLEANING SCRAPERS SHALL BE PROVIDED.

THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.



SEDIMENT REMOVAL EROSION CONTROL PLAN OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS		REV. NO.	DATE	REVISIONS DESCRIPTION	BY
C.O.A. NO.: _____ DRAWN BY: _____ KTF CHECKED BY: _____ BHL APPROVED BY: _____ BMJ QA/QC BY: _____ CPJ PROJECT NO.: 017-0305 DWG NO.: _____ DATE: 08.09.2018		REVISIONS			
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XREFS: w_pbase_70305 w_tblk_70305 v_xbase_70264



LEGEND

-
- EXISTING CONTOUR
- PROPOSED RIPRAP
- SEEDING
- DIVERSION BERM
- SILT FENCE

NOTE:
SEE GENERAL LAYOUT SHEET FOR
CONSTRUCTION ENTRANCE AND ACCESS
PATH LOCATION.

FURNISH & INSTALL
3118 SY PROPEX
LANDLOK S2 OR
APPROVED EQUAL
AFTER GRADING IS
COMPLETE.

FURNISH & INSTALL
2106 SY PROPEX
PYRAMAT 25 OR
APPROVED EQUAL

CONSTRUCT SEDIMENT TRAP. SEDIMENT TRAP SHALL BE EXCAVATED PRIOR TO RIPRAP INSTALLATION.

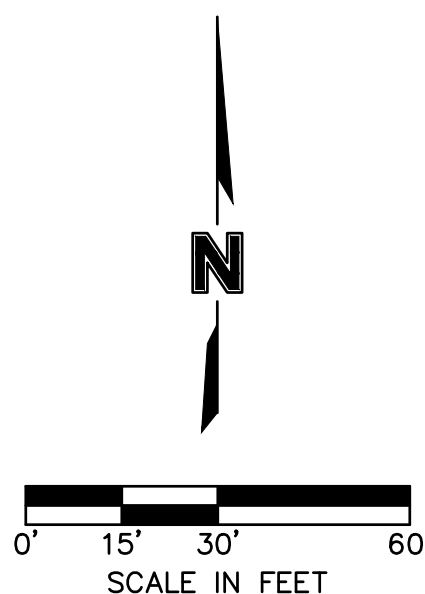
DIRECT WATER FROM
LAKE DRAW DOWN TO
SEDIMENT TRAP

ENERGY DISSIPATION BASIN

FURNISH & INSTALL 0.85 ACRES SEEDING MIX #2	
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CONSTRUCT
DIVERSION BERM

Q CONCRETE CHANNEL



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SURFACE RESTORATION AND EROSION CONTROL PLAN

OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS

LEE'S SUMMIT, MISSOURI	2018
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C.O.A. NO.: _____
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