

### **INDEX OF SHEETS**

- COVER SHEET, NOTES AND LEGEND
- SUMMARY OF QUANTITIES
- OVERALL SITE PLAN
- PLAN AND PROFILE STA 10+00 TO STA 15+00
- PLAN AND PROFILE STA 15+00 TO STA 20+00
- PLAN AND PROFILE STA 20+00 TO STA 24+50
- 7. PLAN AND PROFILE STA 24+50 TO STA 29+00
- PLAN AND PROFILE STA 50+00 TO STA 55+00

9. PLAN AND PROFILE - STA 60+00 TO STA 64+00

11. STORMWATER POLLUTION PREVENTION DETAILS

- 10. STORMWATER POLLUTION PREVENTION PLAN
- 12. CITY OF AURORA WATER DETAILS
- 13. SITE DETAILS
- 14. STORM DETAILS
- 15. TRAFFIC CONTROL DETAILS

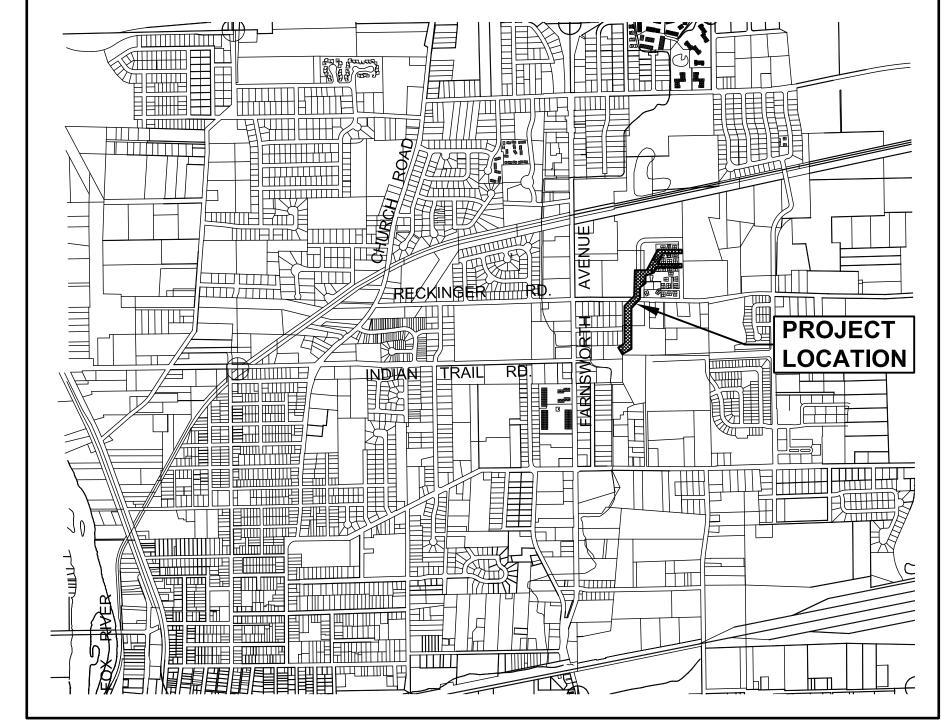
## IMPROVEMENT PLANS

# FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS

# CITY OF AURORA

KANE COUNTY, ILLINOIS

**PERMIT ISSUE: MARCH 2015 BID ISSUE: TBD 2016** 





**CLIENT:** CITY OF AURORA 44 E. DOWNER PLACE **AURORA, ILLINOIS 60507** 



Engineering Enterprises, Inc. **Consulting Engineers** 

> 52 Wheeler Road Sugar Grove, Illinois 60554 630.466.6700 / www.eeiweb.com

**LEGEND** 

**DESCRIPTION** 

<u>PROPOSED</u>

SANITARY SEWER STORM SEWER END SECTION WATER MAIN & SIZE WATER SERVICE & BOX SEWER SERVICE CONTOUR GAS MAIN TELEPHONE CABLE SILT FENCE MANHOLE CATCH BASIN HYDRANT VALVE VAULT **ELEVATION** TRENCH BACKFILL 7///// STREET LIGHT SIGNS FOUND IRON PIPE

> GUY WIRE FLAG POLE

UTILITY POLE UTILITY PEDESTAL

HANDHOLE

ITEM DESIGNATED FOR REMOVAL

BITUMINOUS PAVEMENT CONCRETE **GRAVEL** 

TREE PROTECTION REQUIRED

SITE REFERENCE MARK 1

SOUTHWEST TAG BOLT ON THE 2ND HYDRANT NORTH OF RECKINGER ROAD ON THE WEST SIDE OF MCCLURE

ELEV = 720.26.

SITE REFERENCE MARK 2

SOUTHEAST TAG BOLT ON FIRE HYDRANT 156' WEST OF McCLURE ROAD ON THE SOUTH SIDE OF RECKINGER

ELEVATION = 712.59

**Before** 

You Dig

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GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2012, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" SIXTH ADDITION, DATED JULY, 2009, THE ORDINANCES AND CODES OF THE CITY OF AURORA, THE SPECIFICATIONS OF FOX METRO WATER RECLAMATION DISTRICT, AND THESE IMPROVEMENT PLANS AND DETAILS.
- 2. HOLD HARMLESS: THE CONTRACTOR, AS A CONDITION OF THE CONTRACT, HEREBY AGREES TO ASSUME THE ENTIRE RESPONSIBILITY AND LIABILITY FOR, AND DEFENSE OF, AND TO PAY AND INDEMNIFY AND HOLD THE OWNER, THEIR ENGINEERS, ARCHITECTS. LANDSCAPE ARCHITECTS AND EMPLOYEES; AND THE MUNICIPALITY, THEIR ENGINEERS, AGENTS AND EMPLOYEES HARMLESS FROM ALL CLAIMS FOR DAMAGES OR INJURY (OR DEATH RESULTING THEREFROM) TO ANY AND ALL PERSONS. INCLUDING EMPLOYEES OR AGENTS OR ANY PERSON OR FIRM ENGAGED IN WORK UPON THE PROJECT, ARISING OUT OF THE CONDUCT OF THE CONTRACTOR ARISING OUT OF THE PERFORMANCE OF THIS AGREEMENT OR ANY WORK RELEVANT THERETO, OR ARISING OUT OF ANY PROVISIONS OF THE OCCUPATIONS SAFETY AND HEALTH STANDARDS ACT.
- 3. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND HEALTHFUL WORKING CONDITIONS THROUGHOUT THE CONSTRUCTION
- 5. THE CONTRACTOR SHALL EXAMINE THE PLANS AND SPECIFICATIONS, VISIT THE SITE OF THE WORK AND INFORM HIMSELF FULLY WITH THE WORK INVOLVED, GENERAL AND LOCAL CONDITIONS, ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, RULES AND REGULATIONS AND ALL OTHER PERTINENT ITEMS WHICH MAY AFFECT THE COST AND TIME OF COMPLETION OF THIS PROJECT BEFORE SUBMITTING A
- 6. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR SHALL CALL THE ATTENTION OF THE ENGINEER TO ANY MATERIAL OR EQUIPMENT HE DEEMS INADEQUATE AND TO ANY ITEM OF WORK OMITTED.
- 7. PERMITS AND LICENSES OF A TEMPORARY NATURE NECESSARY FOR THE PROSECUTION OF THE WORK SHALL BE SECURED AND PAID FOR
- 8. IF ANY APPROVED EQUAL ITEMS ARE REQUIRED THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR APPROVAL AT LEAST ONE WEEK PRIOR TO INSTALLATION.
- 9. THE CONTRACTOR SHALL HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION OPERATIONS.
- 10. THE CONTRACTOR WILL HAVE IN HIS POSSESSION ON THE JOB SITE A COPY OF THE PLANS AND SPECIFICATIONS DURING CONSTRUCTION.
- 11. ALL ELEVATIONS ARE BASED BENCHMARKS AS SHOWN.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY REQUIRED INSPECTIONS WITH CITY OF AURORA, FOX METRO AND OTHER
- 13. THE CONTRACTOR SHALL KEEP ALL ADJOINING STREETS PAVEMENT CLEAN OF MUD, DIRT AND DEBRIS, AND WHEN NECESSARY SHALL
- 14. THE CONTRACTOR SHALL OBTAIN, ERECT, MAINTAIN AND REMOVE ALL SIGNS, BARRICADES, FLAGMEN AND OTHER CONTROL DEVICES AS MAY BE NECESSARY FOR THE PURPOSE OF REGULATING, WARNING OR GUIDING TRAFFIC. PLACEMENT AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE CITY OF AURORA REQUIREMENTS AND THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
- 15. ALL ROAD SIGNS, STREET SIGNS AND TRAFFIC SIGNS WHICH NEED TO BE RELOCATED OR MOVED DUE TO CONSTRUCTION SHALL BE TAKEN DOWN AND STORED BY THE CONTRACTOR AT HIS OWN EXPENSE, EXCEPT THOSE THAT ARE NECESSARY FOR PROPER TRAFFIC CONTROL WHICH SHALL BE TEMPORARILY RESET UNTIL COMPLETION OF CONSTRUCTION OPERATIONS. AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL RESET, AT HIS EXPENSE, ALL SAID SIGNS.
- 16. THE CONTRACTOR SHALL BE REQUIRED TO MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS, STRUCTURES, POLES, CABLES AND PIPE LINES, BEFORE CONSTRUCTION BEGINS. HE SHALL BE RESPONSIBLE FOR ANY
- 17. LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE ONLY, AND ARE NOT NECESSARILY COMPLETE. CONTRACTOR SHALL MAKE HIS OWN INVESTIGATIONS AS TO LOCATION OF ALL EXISTING UNDERGROUND STRUCTURES, CABLES AND PIPE LINES.
- 18. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER SO THAT THE CONFLICT MAY BE RESOLVED.
- 19. THE CONTRACTOR SHALL NOTIFY THE J.U.L.I.E. (1-800-892-0123) AT LEAST THREE DAYS PRIOR TO CONSTRUCTION SO THAT EACH UTILITY COMPANY CAN STAKE OUT ANY UNDERGROUND IMPROVEMENTS THAT THEY MAY HAVE WHICH MIGHT INTERFERE WITH THE
- SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AND OWNER BY THE CONTRACTOR AT HIS OWN EXPENSE. 21. ALL TRENCHES CAUSED BY THE CONSTRUCTION OF SEWERS, SERVICE SEWERS, WATER MAINS, WATER SERVICE PIPES AND THE EXCAVATION

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE

- AROUND CATCH BASINS, MANHOLES, INLETS AND OTHER APPURTENANCES WHICH OCCUR WITHIN THE LIMITS OF EXISTING OR PROPOSED PAVEMENTS, SIDEWALKS AND CURB AND GUTTERS OR WHERE THE EDGE OF THE TRENCH SHALL BE WITHIN TWO FEET (2') OF SAID IMPROVEMENTS SHALL BE BACKFILLED WITH APPROVED SUITABLE SELECT MATERIAL AND PROPERLY COMPACTED.
- 22. THE CONTRACTOR SHALL RESTORE ANY AREA DISTURBED OUTSIDE THE CONSTRUCTION SITE TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL USE. THIS SHALL INCLUDE FINISH GRADING, ESTABLISHMENT OF A VEGETATIVE COVER (SEEDING OR SOD), GENERAL CLEANUP AND PAVEMENT REPLACEMENT.

23. ALL LOT IRONS DAMAGED OR REMOVED DURING CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED BY THE ENGINEER AND SAID COST

- 24. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER. FINAL
- PAYMENT SHALL BE MADE AFTER ALL OF THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.
- 25. CAD FILES FOR THIS PROJECT ARE THE PROPERTY OF ENGINEERING ENTERPRISES, INC. EEI CAN PROVIDE CAD FILES FOR BIDDING PURPOSES UPON REQUEST. TO OBTAIN A CAD FILE FOR BIDDING, THE CONTRACTOR MUST SIGN AN ELECTRONIC FILE AGREEMENT AND PAY A \$25 CAD FILE FEE. CAD FILES OBTAINED FOR BIDDING PURPOSES CANNOT BE USED FOR CONSTRUCTION STAKING AS THEY WILL NOT REFLECT ANY CHANGES OR ADDENDUMS DURING THE BIDDING PROCESS.

### **ENGINEER'S CERTIFICATION**

OF REPLACEMENT SHALL BE PAID BY THE CONTRACTOR.

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION.

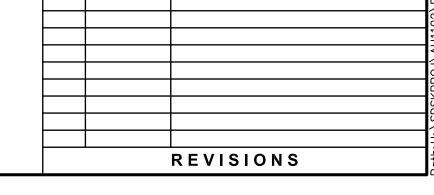
DATED AT SUGAR GROVE, ILLINOIS,

THIS \_\_\_\_\_ DAY OF \_\_\_\_\_

EXPIRATION DATE: 11/30/17

TIMOTHY N. PAULSON, P.E.

ILLINOIS LICENSED PROFESSIONAL ENGINEER NO. 062-059993



	UPSTREAM OF MANHOLE 12		
ITEM NO.	ITEM	UNIT	QUANTITY
32	TREE REMOVAL (6-15 UNITS)	UNIT	44
33	TREE PRUNING	EACH	1
34	BRUSH REMOVAL	LSUM	1
35	INLET FILTERS	EACH	6
36	INLET PROTECTION	EACH	2
37	HYDRANT AND VALVE BOX ADJUSTMENT	EACH	2
38	SIGN REMOVAL AND RESET	EACH	6
39	PAVEMENT REMOVAL	SY	3381
40	SIDEWALK REMOVAL AND REPLACEMENT (EX 3' W)	SF	940
41	CONCRETE DUMPSTER PAD REMOVAL	SY	12
42	LOWER WATER MAIN	EACH	3
43	WATER MAIN INSULATION	EACH	3
44	STRIP TOPSOIL AND RESPREAD	CY	250
45	EARTH EXCAVATION	CY	1895
46	AGGREGATE BASE COURSE, TYPE B, CA-6, 8"	SY	3390
47	BITUMINOUS MATERIALS (PRIME COAT)	GAL	1695
48	AGGREGATE (PRIME COAT)	TON	42
49	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 2.25" (DRIVEWAYS) & 3.25" (DRIV	TON	525
50	HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 1.75"	TON	332
51	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SF	58
52	PORTLAND CEMENT CONCRETE DUMPSTER PAD, 8 INCH	SF	100
53	PORTLAND CEMENT CONCRETE FLUME, 2.5' WIDE	LF	656
54	TRENCH DRAIN, 5" WIDE X 5" DEEP W/ATTACHMENTS, SET IN CONCRETE FLUME	LF	656
55	INLET, 3' DIA WITH FRAME AND GRATE	EACH	4
56	TRENCH DRAIN RISER (W/ PVC WYE, 45° BEND, 4" RISER, AND CONNECTION)	EACH	7
57	MANHOLE, 4' DIAMETER WITH FRAME AND LID	EACH	2
58	STORM SEWER, 8" PVC SDR-26	LACIT	150
59	STORM SEWER, 12" PVC SDR-26	LF	482
60	STORM SEWER, 12" ADS N-12	LF	247
61	STORM SEWER, 12" ADS N-12  STORM SEWER, 15" PERFORRATED ADS N-12 W/SOCK AND TRENCH BACKFILL	LF	206
62	STORM SEWER, 13 PERFORMATED ADS N-12 W/SOCK AND TRENCH BACKFILL	LF	107
63	24" FLARED END SECTION W/GRATE, RCP	EACH	2
64	RIP RAP, IDOT GRADATION RR3	SY	27
65	TRAFFIC CONTROL	LSUM	1
66	RESTORATION - W/6" TOPSOIL, SEED, FERTILIZE AND BLANKET	SY	2176
		U1	2170
BID ALTE 67	STRIP AND RESPREAD EXISTING AGGREGATE BASE COURSE	SY	3,008
68	AGGREGATE BASE COURSE, TYPE B, CA-6	TON	150

ACCEPTANCE OF BID ALTERNATE WOULD INCLUDE A REDUCTION IN EARTH EXCAVATION DEPENDING ON THICKNESS OF EXISTING AGGREGATE, ELIMINATION OF BID ITEM 46 (AGGREGATE BASE COURSE), AND ADJUSTMENT IN ASSUMED QUANTITY FOR BID ITEM 68 BASED ON MATERIAL NEEDED TO INSTALL 8" OF AGGREGATE BASE COURSE

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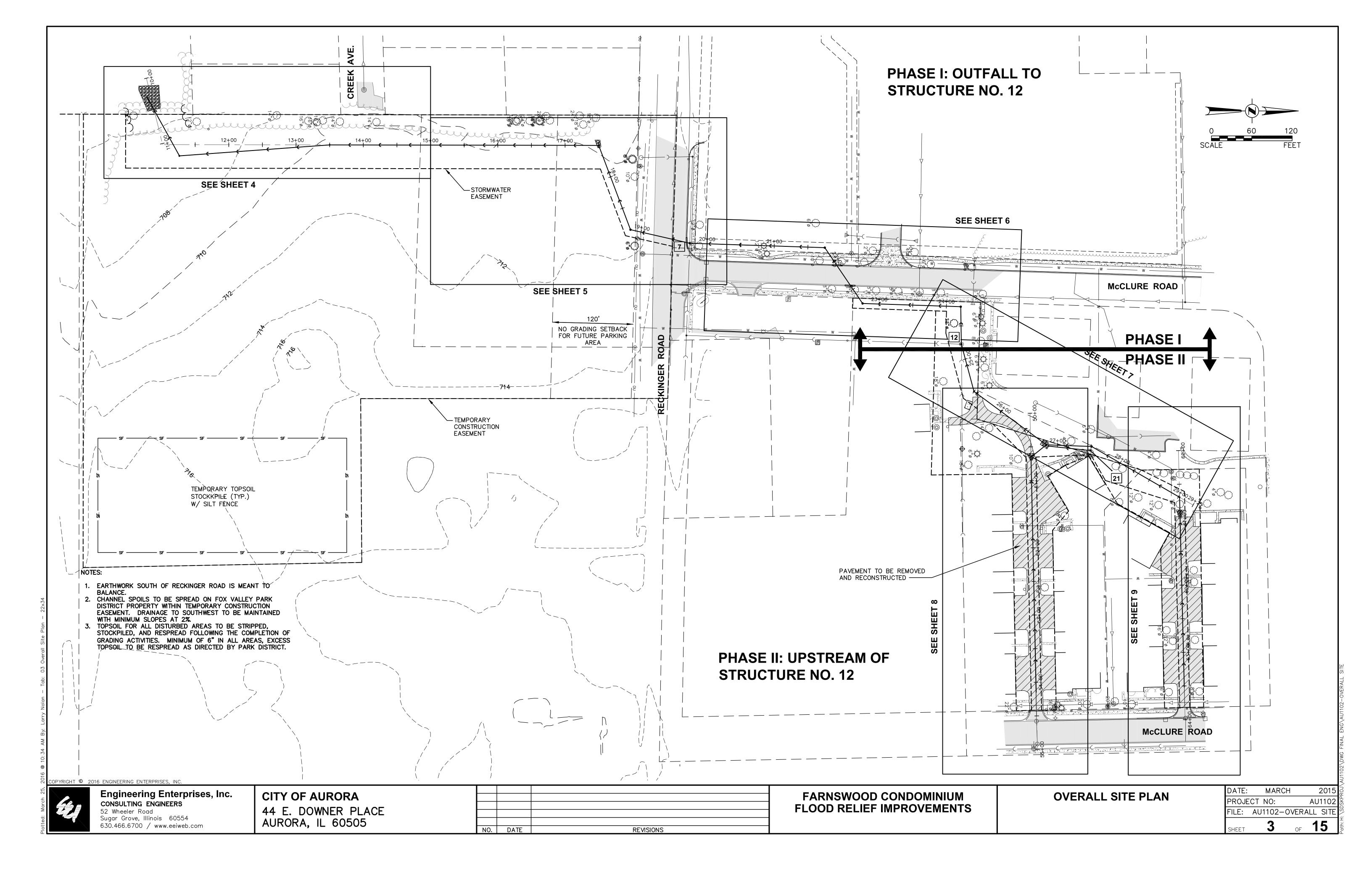
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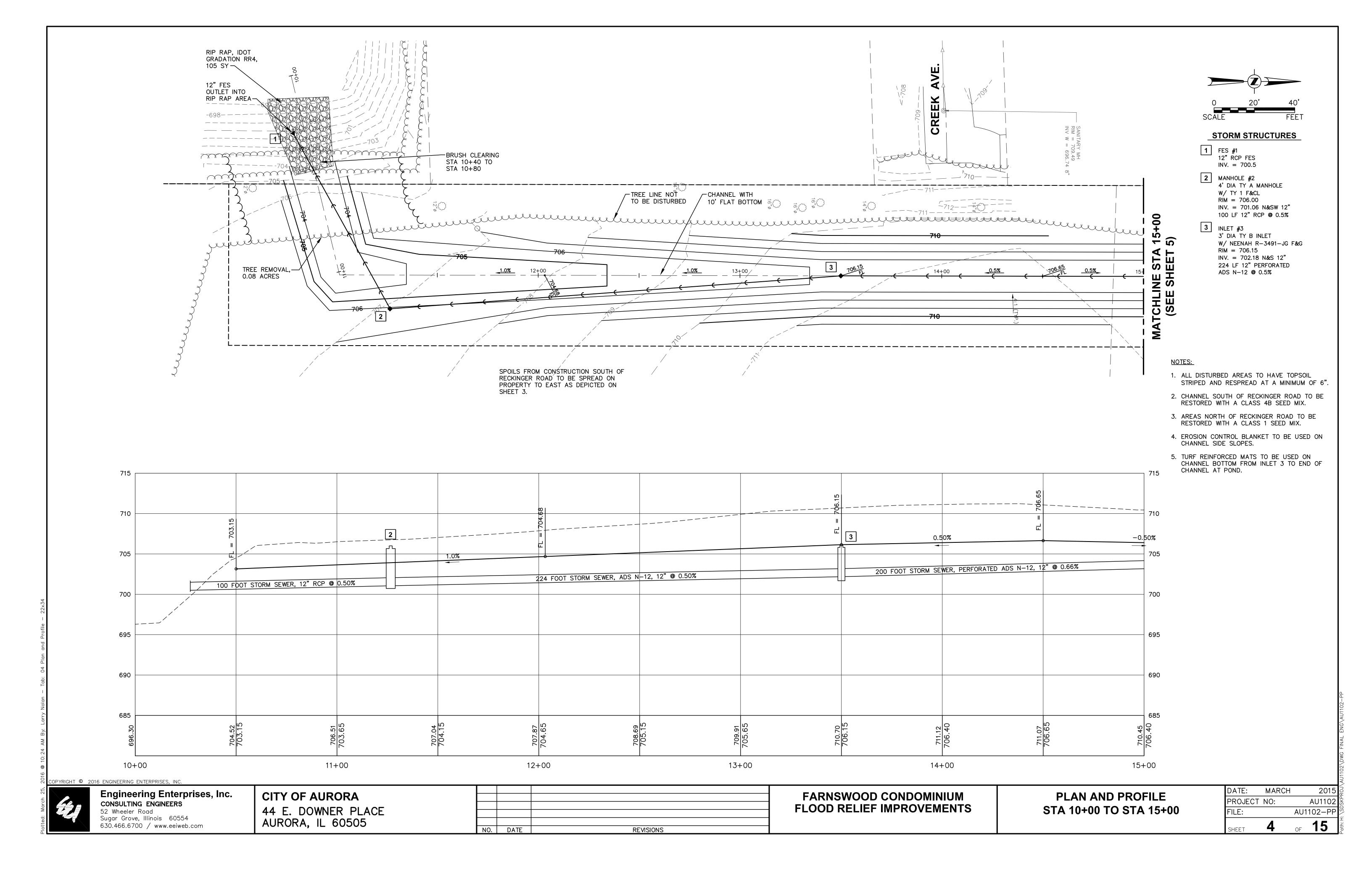
**CITY OF AURORA** 44 E. DOWNER PLACE AURORA, IL 60505

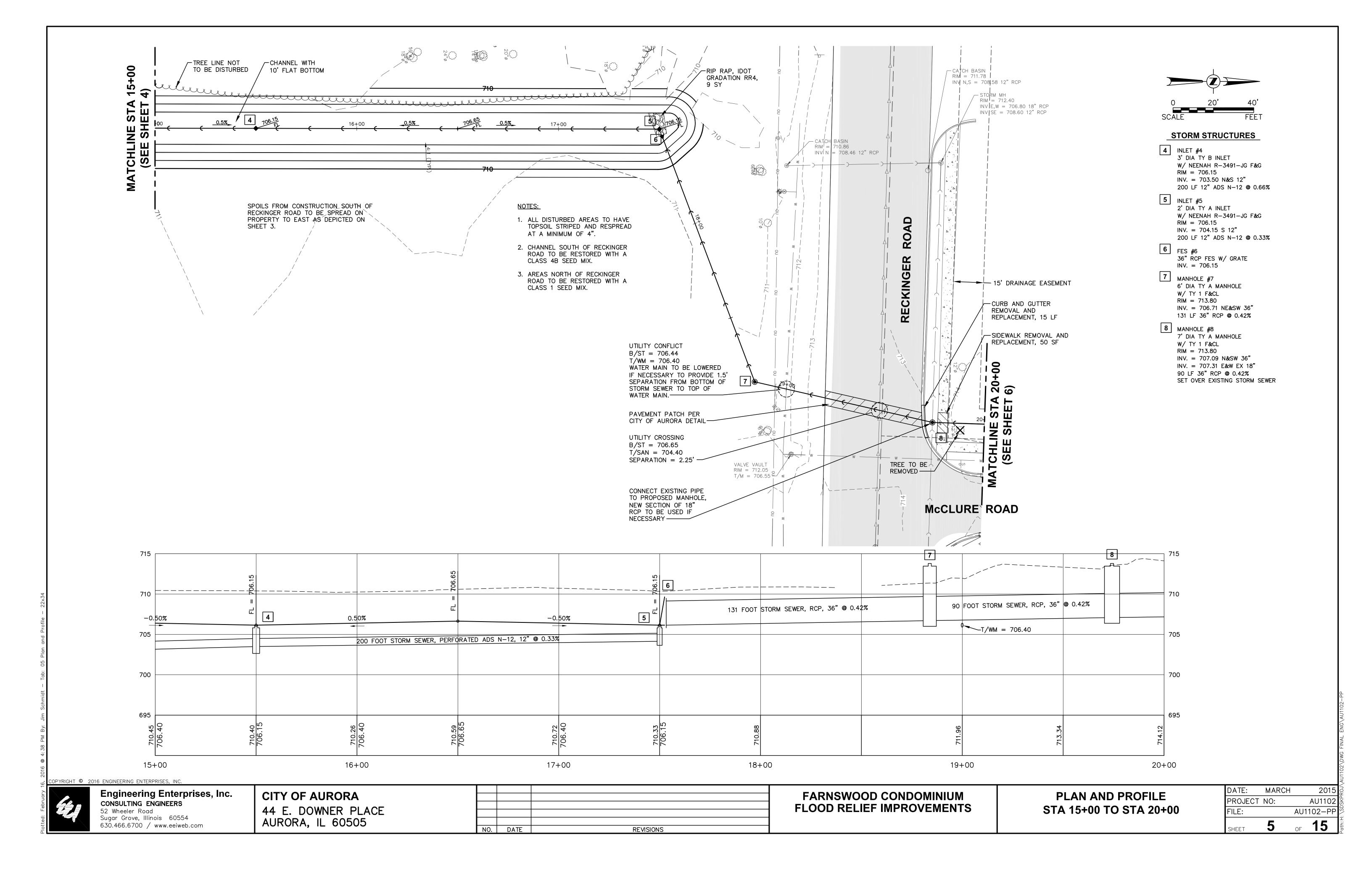
NO. DATE REVISIONS

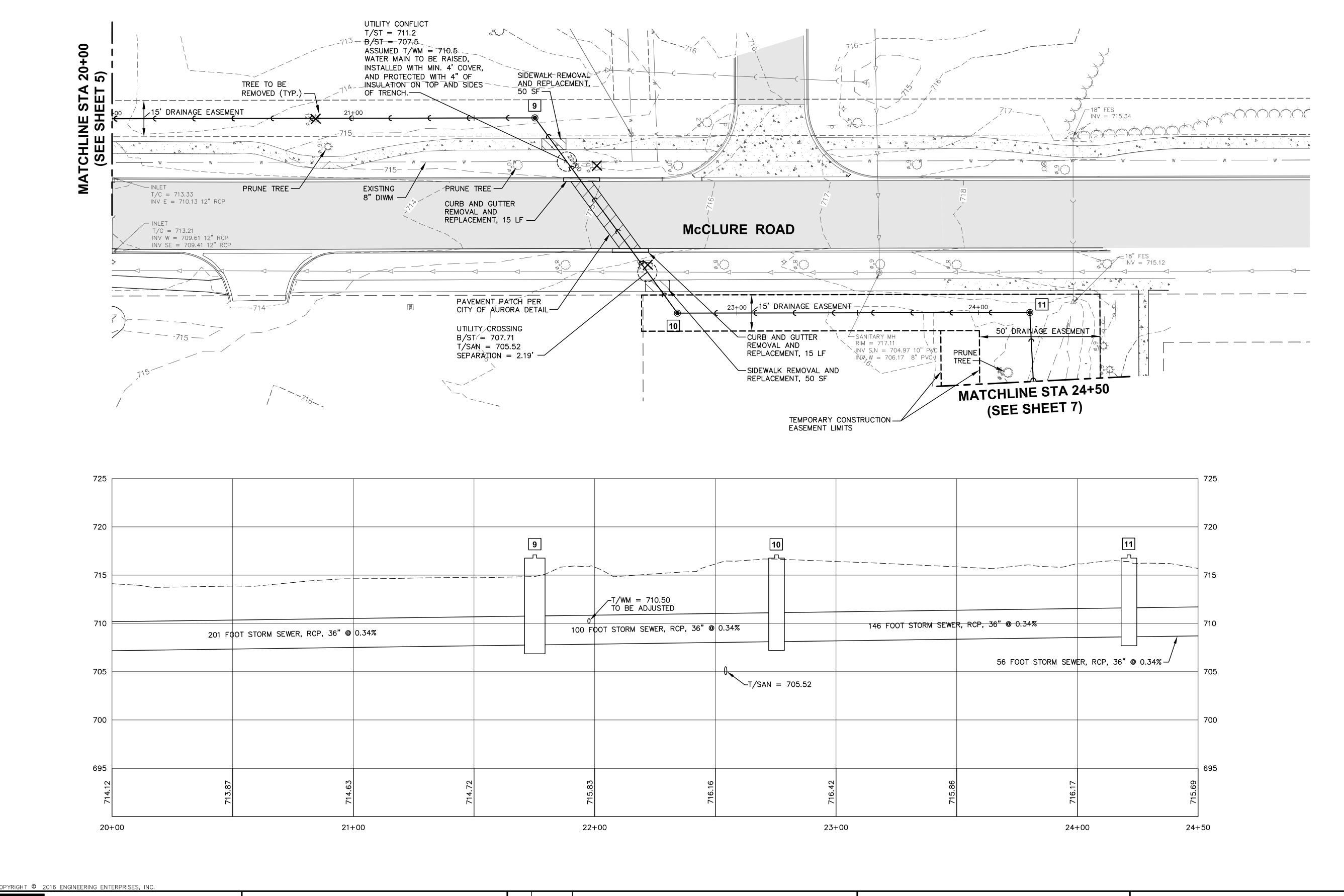
FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS **SUMMARY OF QUANTITIES** 

DATE: MARCH AU1102 PROJECT NO: AU1102-COVER









MARCH 2015 AU1102 AU1102-PP of **15** 6

STORM STRUCTURES

6' DIA TY A MANHOLE

INV. = 707.77 NE&S 201 LF 36" RCP @ 0.34%

6' DIA TY A MANHOLE

100 LF 36" RCP @ 0.34%

146 LF 36" RCP @ 0.34%

1. ALL DISTURBED AREAS TO HAVE TOPSOIL STRIPED AND RESPREAD

2. CHANNEL SOUTH OF RECKINGER

3. AREAS NORTH OF RECKINGER

ROAD TO BE RESTORED WITH A

ROAD TO BE RESTORED WITH A

AT A MINIMUM OF 4".

CLASS 4B SEED MIX.

CLASS 1 SEED MIX.

6' DIA TY A MANHOLE

W/ TY 1 F&CL RIM = 717.10

W/ TY 1 F&CL

RIM = 717.10

INV. = 708.11

W/ TY 1 F&CL RIM = 717.10INV. = 708.61

9 MANHOLE #9

10 MANHOLE #10

11 MANHOLE #11

NOTES:

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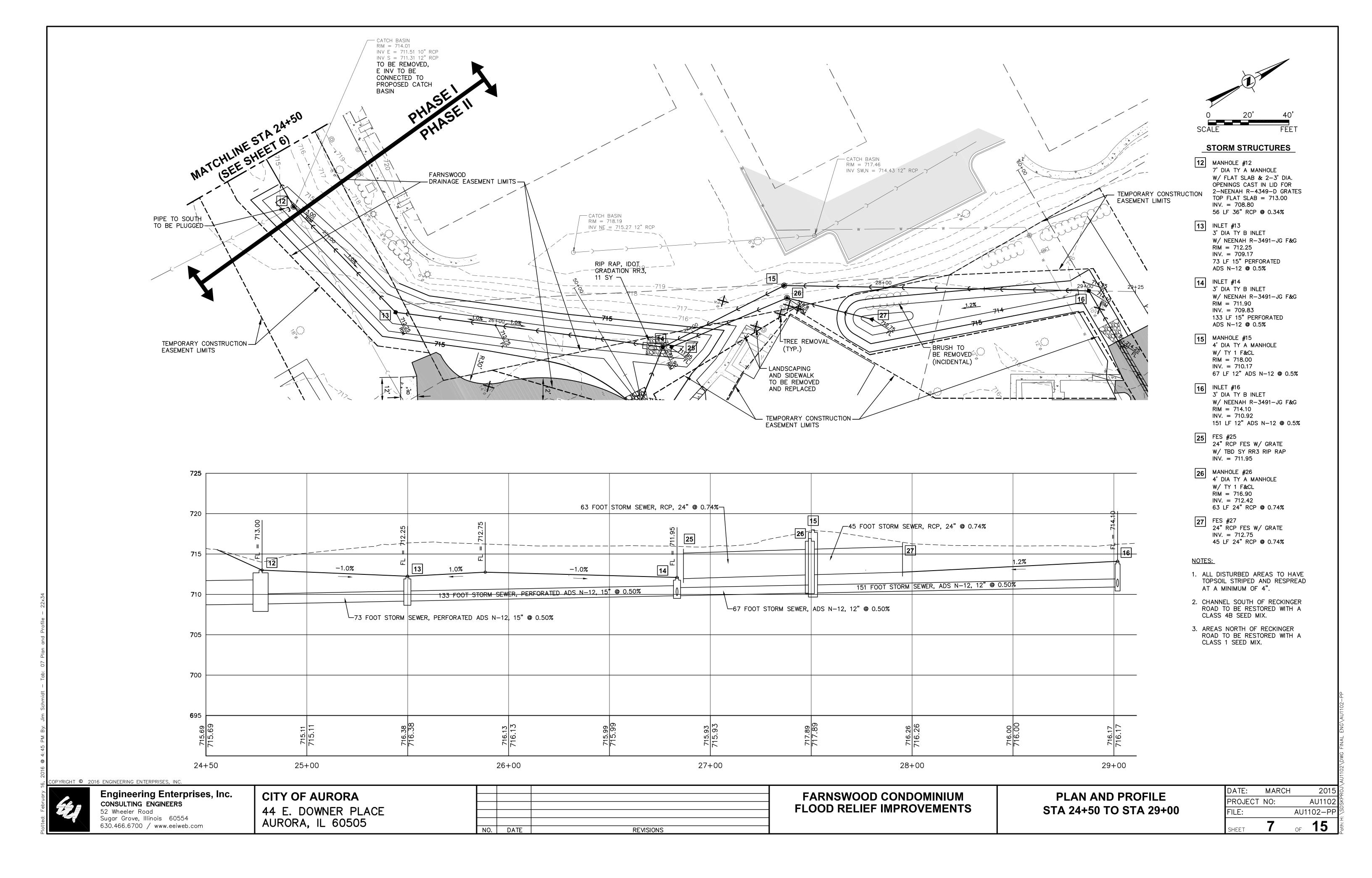
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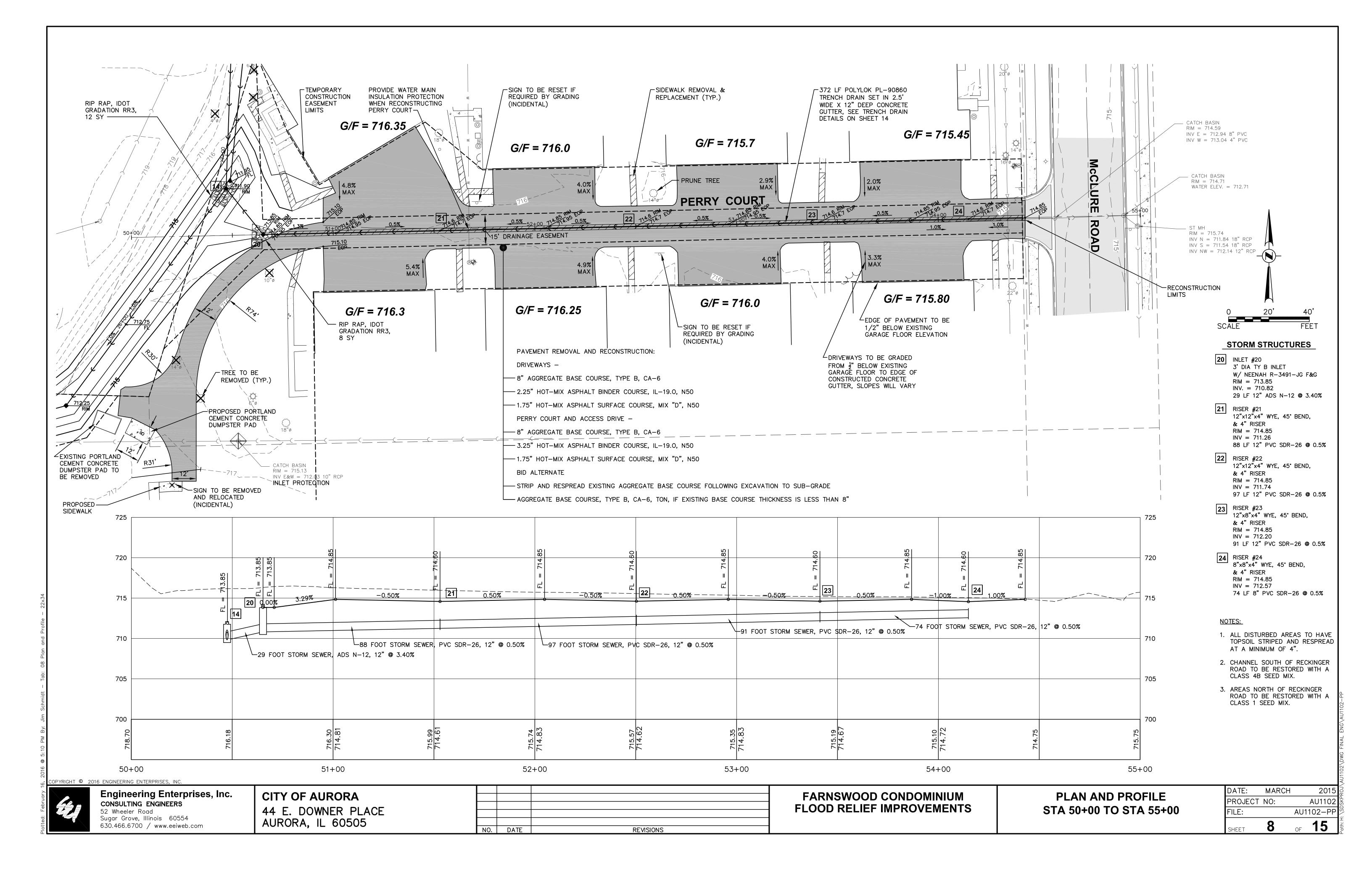
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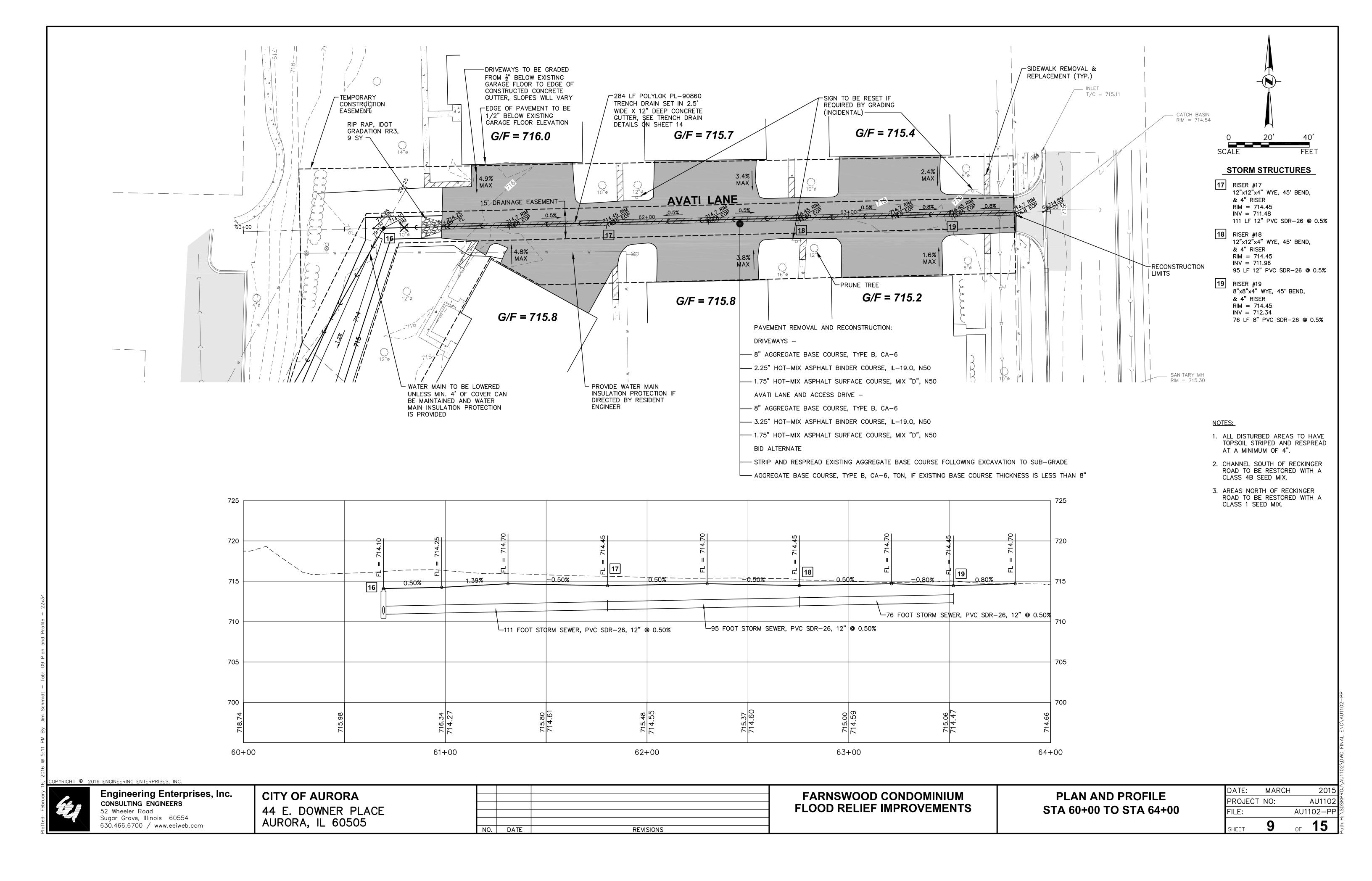
**CITY OF AURORA** 44 E. DOWNER PLACE AURORA, IL 60505

FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS NO. DATE REVISIONS

PLAN AND PROFILE STA 20+00 TO STA 24+50 PROJECT NO:







### STORMWATER POLLUTION PREVENTION PLAN

A COPY OF THIS PLAN, ALONG WITH ALL INSPECTION REPORTS, WILL BE KEPT AT THE SITE AT ALL TIMES. THE PERMITEE SHALL RETAIN COPIES OF STORMWATER POLLUTION PREVENTION PLANS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THE PERMIT COVERAGE EXPIRES OR IS TERMINATED.

### SITE DESCRIPTION:

PROJECT NAME AND LOCATION: FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS LOCATED AT THE CORNER OF McCLURE ROAD AND AVATI LANE. NORTHEAST OF FARNSWORTH ROAD AND RECKINGER

AURORA, KANE COUNTY, ILLINOIS

PROJECT DESCRIPTION: INTENT TO PROVIDE A STORM SEWER/FLOOD ROUTE UNDER McCLURE ROAD AND INTO THE EAST AURORA SCHOOL DISTRICT DETENTION BASIN.

TOTAL SITE AREA = 4.6 ACRES

TOTAL AREA DISTURBED = 4.6 ACRES

RUNOFF COEFFICIENT OF SITE AFTER CONSTRUCTION = 0.54 (INCLUDING PERMEABLE PAVERS)

SOILS: 69A - MILFORD SILTY CLAY LOAM - HSG C/D 152A - DRUMMER SILTY CLAY LOAM - HSG B/D 219A - MILLBROOK SILT LOAM - HSG C/D 530B - OZAUKEE SILT LOAM - HSG C 668B - SOMONAUK SILT LOAM - HSG C

RECEIVING WATERS: FOX RIVER VIA CITY OF AURORA STORM

EXISTING SITE CONDITIONS: THE EXISTING SITE IS AGRICULTURAL/RESIDENTIAL.

ADJACENT/OFFSITE AREAS: REFER TO IMPROVEMENT PLANS FOR ADDITIONAL SITE INFORMATION.

### EROSION AND SEDIMENT CONTROLS

REFER TO THE IMPROVEMENT PLANS FOR FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS, AND THIS SWPPP.

### STABILIZATION PRACTICES:

ANY AREAS WITHIN OR ADJACENT TO THE SITE PERIMETER THAT HAVE BEEN DISTURBED DURING THE COURSE OF CONSTRUCTION WILL BE STABILIZED PRIOR TO PROJECT COMPLETION.

### STRUCTURAL PRACTICES:

SILT FENCE SHALL BE INSTALLED AS DIRECTED ON THE IMPROVEMENT PLANS.

INLET FILTERS SHALL BE INSTALLED IN EXISTING DRAINAGE STRUCTURES PRIOR TO ANY GROUND DISTURBING ACTIVITIES.

INLET FILTERS SHALL BE INSTALLED IN PROPOSED DRAINAGE STRUCTURES AS SOON AS THEY ARE INSTALLED. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE ESTABLISHMENT OF PROPOSED GRADES AT THE ENTRANCE LOCATION.

THE IMPROVEMENTS WHICH THE MAJORITY OF THE PARKING LOT IMPROVEMENTS DRAIN TO MIDDLE AVENUE, SO THE BMP MEASURES ARE ALREADY IN PLACE ALONG MIDDLE AVENUE WILL BE UTILIZED.

INSTALL DITCH CHECK PER IMPROVEMENT PLANS.

### STORM WATER MANAGEMENT

REFER TO THE IMPROVEMENT PLANS FOR FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS AND THE STORMWATER MANAGEMENT CALCULATIONS INCLUDED IN THE KANE COUNTY STORMWATER PERMIT APPLICATION FOR ADDITIONAL INFORMATION

### RUNOFF:

THE SITE IS URBAN AND THE RUNOFF WILL SHEET FLOW TO THE APPROPRIATE STORM STRUCTURE OR PERMEABLE PAVERS.

### **DETENTION:**

NO STORMWATER DETENTION IS PROPOSED FOR THIS PROJECT

### VELOCITY DISSIPATION

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THERE WILL BE NO POINT SOURCE FLOWS EXITING THE SITE OVERLAND.

### WASTE DISPOSAL

ALL WASTES COMPOSED OF BUILDING MATERIALS MUST BE REMOVED FROM THE SITE FOR DISPOSAL IN PERMITTED DISPOSAL FACILITIES. THE PROJECT SITE WILL BE KEPT CLEAR OF ALL HUMAN AND CONSTRUCTION DEBRIS. NO BUILDING MATERIALS, GAS OR OIL SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE. A SECURELY LIDDED DUMPSTER WILL BE PROVIDED FOR STANDARD SOLID WASTE.

HAZARDOUS WASTE WILL BE DISPOSED OF AS SPECIFIED BY THE CITY OF AURORA, THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, OR THE MANUFACTURER OF THE MATERIAL, WHICH EVER IS STRICTER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL HAZARDOUS WASTE PRODUCED AS A PART OF THIS CONSTRUCTION PROJECT.

SANITARY WASTE WILL BE COLLECTED IN PORTABLE UNITS AND DRAINED AS SPECIFIED BY THE CITY OF AURORA AND THE FOX METRO WATER RECLAMATION DISTRICT

ANY SPILLED OIL, GAS, OR OTHER CONSTRUCTION MATERIAL WILL BE CONTAINED AND CLEANED IMMEDIATELY. CONTAMINATED SOIL WILL BE DISPOSED OF IN AN APPROVED MANNER AT A LICENSED LANDFILL.

A SINGLE CONCRETE WASHOUT AREA WILL BE DESIGNATED BY THE CONTRACTOR FOR USE DURING THE DURATION OF THE PROJECT. THE WASHOUT AREA WILL BE DUG OUT OR BERMED UP TO CONTAIN ALL WASHOUT MATERIAL. ALL AFFECTED SOILS AND CONCRETE SPOILS WILL BE REMOVED FROM THE SITE UPON COMPLETION OF THE CONCRETE PLACEMENT ACTIVITIES.

### OTHER REQUIREMENTS

THE CITY OF AURORA SUBDIVISION REGULATIONS AND THE KANE COUNTY STORMWATER MANAGEMENT ORDINANCE WILL GOVERN ALL EROSION CONTROL AND STORMWATER MANAGEMENT OPERATIONS.

THE KANE DUPAGE SOIL AND WATER CONSERVATION DISTRICT WILL INSPECT THE EROSION CONTROL MEASURES.

IF ANY SITE AREA IS TO REMAIN DISTURBED FOR OVER 14 DAYS THEN 7 DAYS AFTER THE LAST DISTURBANCE THE CONTRACTOR MUST INITIATE STABILIZATION MEASURES.

NO FUEL OR OIL WILL BE STORED ON-SITE WITHOUT PROPER CONTAINMENT AND WRITTEN PERMISSION FROM THE CITY OF AURORA.

THE CONTRACTOR WILL PREVENT OFF-SITE TRACKING OF SEDIMENTS. IF THE STABILIZED CONSTRUCTION ENTRANCE IS NOT SUFFICIENT, FURTHER MEASURES MUST BE IMPLEMENTED. ANY SEDIMENT LEFT ON THE PUBLIC ROADWAY WILL BE CLEANED OFF EVERY NIGHT.

DUST CONTROL. IF DEEMED NECESSARY BY THE CITY ENGINEER. WILL BE DONE BY MEANS OF A WATER TRUCK SPRAYING WATER ON THE SURFACE OF THE SITE.

### NON-STORMWATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THIS SITE DURING THE CONSTRUCTION PERIOD:

- WATER FROM WATER MAIN AND FIRE HYDRANT FLUSHING. ■ PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF
- TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED) ■ UNCONTAMINATED GROUND AND SURFACE WATER FROM DEWATERING EXCAVATIONS AND DETENTION BASINS
- DUST CONTROL WATER

ALL NON-STORMWATER DISCHARGES WILL BE DIRECTED TO THE EXISTING DETENTION BASIN.

FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS SCHEDULE OF CONSTRUCTION

- 1. INSTALL SILT FENCE AND EROSION CONTROL MEASURES.
- 2. INSTALL PROPOSED STORM SEWER
- 3. COMPLETE EARTH EXCAVATION FOR CHANNEL EXCAVATION.
- 4. DRIVEWAY REMOVAL
- 5. POUR CURB & GUTTER AND SIDEWALK.
- 6. PAVE DRIVEWAYS.
- 7. FINISH REMAINING RESTORATION W/ PERMANENT SEEDING
- 8. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE RESTORATION IS ESTABLISHED.

### MAINTENANCE AND INSPECTION PROCEDURES

THE GENERAL CONTRACTOR FOR THIS PROJECT IS RESPONSIBLE FOR MAINTAINING THE EROSION AND SEDIMENT CONTROL MEASURES IN GOOD AND EFFECTIVE OPERATING CONDITIONS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL REGULAR INSPECTIONS REQUIRED BY THE NPDES GENERAL PERMIT #2 INCLUDING RECORDING AND KEEPING A RECORD OF EACH INSPECTION. THIS PROCESS WILL CONTINUE UNTIL FINAL STABILIZATION IS ACHIEVED AND A NOTICE OF TERMINATION IS RECEIVED BY THE OWNER. INSPECTIONS WILL BE PERFORMED AND RECORDED BY QUALIFIED INDIVIDUALS TRAINED BY THE GENERAL CONTRACTOR AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR

DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.

BASED ON THE RESULTS OF THE INSPECTIONS, MODIFICATIONS NECESSARY SHALL BE IMPLEMENTED WITHIN 7 DAYS OF THE INSPECTION.

ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. ANY NECESSARY REPAIRS WILL BE INITIATED IMMEDIATELY.

SEDIMENT BUILDUP WILL BE REMOVED FROM SILT FENCES WHEN IT HAS REACHED 1/3 THE HEIGHT OF THE FABRIC.

SEDIMENT BUILDUP WILL BE REMOVED FROM OTHER EROSION CONTROLS AS NEEDED TO MAINTAIN STORMWATER FLOW THROUGH THE SITE AND AVOID SEDIMENT FROM BYPASSING THE EROSION CONTROLS.

EROSION CONTROL MEASURES WILL BE REPAIRED, MAINTAINED, OR INCREASED AT THE DIRECTION OF THE KANE/DUPAGE SOIL AND WATER CONSERVATION DISTRICT, THE CITY OF AURORA OR THE SCHOOL DISTRICT'S ENGINEER.

A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. THE REPORT SHALL SUMMARIZE THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORMWATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN TO SOLVE ANY PROBLEMS OBSERVED. THE INSPECTION REPORT SHALL BE SIGNED BY A QUALIFIED INDIVIDUAL PER NPDES GENERAL PERMIT NO. 2.

INSPECTION REPORTS SHALL BE RETAINED AS A PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS AFTER FINAL STABILIZATION AND A NOTICE OF DISCONTINUATION HAS BEEN SUBMITTED TO THE DEPARTMENT.

ALL TEMPORARY SEEDING SHALL BE INSTALLED PER THE ILLINOIS URBAN MANUAL

HYDROSEEDING - PER MANUFACTURE'S RECOMMENDATIONS, SEED MIX MUST BE

ALL MULCH SHALL BE INSTALLED PER THE ILLINOIS URBAN MANUAL

STRAW OR HAY MULCH - 2 TONS PER ACRE ANCHORED TO SOIL

FERTILIZER MIXTURE FOR PROPOSED SEEDING AREAS

(N) 120 LBS./AC.

TEMPORARY SEEDING AND MULCHING INFORMATION & SCHEDULE

8/24/94

HYDRAULIC MULCH - 1 1/2 TONS PER ACRE APPLIED PER MANUFACTURER'S

RECOMMENDATIONS, HYDRAULIC MULCH MUST BE SUITABLE FOR 4:1 SLOPES

IT IS PERMITTED TO APPLY SEED, FERTILIZER AND MULCH AT THE SAME TIME

FOR PERMANENT SEEDING SEE GRADING PLAN

SPRING OATS - 100 LBS/AC

WINTER WHEAT - 100 LBS/AC

SUDANGRASS - 100 LBS/AC

APPROPRIATE FOR DATE OF APPLICATION

SEEDING MIXTURE

SEEDING SCHEDULE

WINTER WHEAT

SUDAN GRASS

52 Wheeler Road

SPRING OATS

MULCHING ONLY

TEMPORARY SEEDING AND MULCHING

NITROGEN

**PHOSPHORUS** 

POTASSIUM

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### CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS A PART OF THIS CERTIFICATION.

GENERAL CONTRACTOR

GENERAL CONTRACTOR
COMPANY NAME
COMPANY ADDRESS
COMPANY PHONE NUMBER
PRINTED NAME AND TITLE
SIGNATURE
DATE
SUB-CONTRACTOR #1

SUB-CONTRACTORS RESPONSIBILITY

COMPANY NAME

COMPANY ADDRESS

COMPANY PHONE NUMBER

PRINTED NAME AND TITLE

**SIGNATURE** 

USE ADDITIONAL SHEETS FOR ADDITIONAL SUB-CONTRACTORS. EACH SHEET WILL HAVE THE PROJECT NAME AND LOCATION AS DESCRIBED IN THE SITE DESCRIPTION ON THIS SHEET. EACH ADDITIONAL SUB-CONTRACTOR WILL PROVIDE THEIR RESPONSIBILITY, COMPANY NAME, ADDRESS AND PHONE NUMBER. PRINTED NAME AND TITLE, SIGNATURE AND DATE. THIS INFORMATION WILL BE KEPT WITH THIS PLAN.

# 

INLET FILTER SYSTEM SHALL CONSIST OF A REPLACEABLE REINFORCED FILTER BAG

- SUSPENDED FROM A RETAINER RING OR FRAME . INLET FILTER APPROVED MANUFACTURERS: MARATHON MATERIALS - CATCH-ALL FILTERS,
- LANG INDUSTRIES DRAIN FILTERS, IPP - INLET FILTERS. OR ENGINEER APPROVED EQUAL. 5. THE FILTER BAG SHALL BE CONSTRUCTED OF A NON-WOVEN POLYPROPYLENE FILTER

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- GEOTEXTILE FABRIC WITH A MINIMUM WEIGHT OF 4 OZ./SQ.YD., A MINIMUM FLOW RATE OF 145 GAL./MIN./SQ.FT., AND DESIGNED FOR A MINIMUM SILT AND DEBRIS CAPACITY OF 2 CU. FT. THE FILTER BAG SHALL BE REINFORCED WITH A POLYESTER MESH FABRIC WITH A MINIMUM WEIGHT OF 4 OZ./SQ.YD.
- 4. THE FILTER BAG SHALL BE SUSPENDED FROM A GALVANIZED STEEL RING OR FRAME, CONFORMING TO ASTM-A36. UTILIZING A STAINLESS STEEL BAND AND LOCKING CLAMP THE FRAME SHALL BE DESIGNED WITH AN OVERFLOW FEATURE TO PREVENT ANY PONDING

INLET PROTECTOR				
Engineering Enterprises, Inc.	SCALE: N.T.S.	FOLDER:	DRAWING NUMBER:	
Sugar Grove, Illinois 60554 Phone: (630) 466-9350	8/03/06	EE-MI	10	

KANE-DUPAGE SOIL AND WATER CONSERVATION

DISTRICT NOTES:

STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF THE STABILIZATION WORK IN AN AREA.

STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE).

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL REVISED JUNE

THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO. ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OF WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW BY THE KDSWCD.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KDSWCD.

DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. DEWATERING DIRECTLY INTO FIELD TILES OR STORMWATER STRUCTURES IS PROHIBITED.

THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.

BERMS MUST BE STABILIZED IMMEDIATELY UPON RECEIVING FINAL GRADING. STRAW MULCH WITH NETTING OR EROSION CONTROL BLANKET SHALL BE USED ON SIDE SLOPES AND SUMMIT.

PRIORITY SHALL BE GIVEN TO THE COMPLETION AND STABILIZATION OF THE DETENTION AREAS. WORK IN THESE AREAS SHALL NOT BE PROLONGED IN ATTEMPT THAT ALL FINAL GRADING AND STABILIZATION CAN TAKE PLACE AT ONE TIME.

ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS. INSPECTED DAILY, AND CLEANED WHEN NECESSARY.

IT IS THE RESPONSIBILITY OF THE LAND OWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUBCONTRACTORS WHO MAY PERFORM WORK ON THIS PROJECT. OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS ÈPA.

### NOTES:

WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL.

2. STRAW BALES SHALL NOT BE USED AS A SUBSTITUTE FOR THE PROPOSED INLET PROTECTORS.

### NOTES:

1. INLET FILTERS SHALL BE EMPTIED ON A MONTHLY BASIS.

2. DEBRIS FROM INLET FILTERS SHALL BE DISPOSED OF IN A LANDFILL.

3. INLET FILTERS SHALL REMAIN IN PLACE FOR THE DURATION OF THE CONSTRUCTION AND SHALL BECOME PROPERTY OF THE FOX VALLEY PARK DISTRICT.

Engineering Enterprises, Inc. CONSULTING ENGINEERS 52 Wheeler Road Sugar Grove, Illinois 60554

630.466.6700 / www.eeiweb.com

**CITY OF AURORA** 44 E. DOWNER PLACE AURORA, IL 60505

NO. DATE

**FARNSWOOD CONDOMINIUM** FLOOD RELIEF IMPROVEMENTS

DRAWN BY

CLN

STORMWATER POLLUTION **PREVENTION PLAN** 

2015 DATE: MARCH PROJECT NO: AU1102 AU1102-COVER

REVISIONS

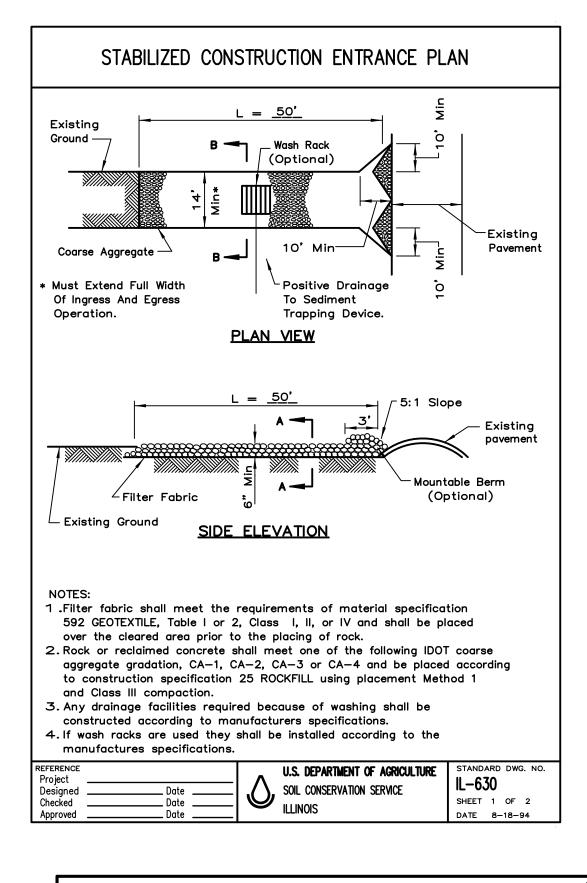
52 LBS./AC. OR 120 LBS./AC. P2O5

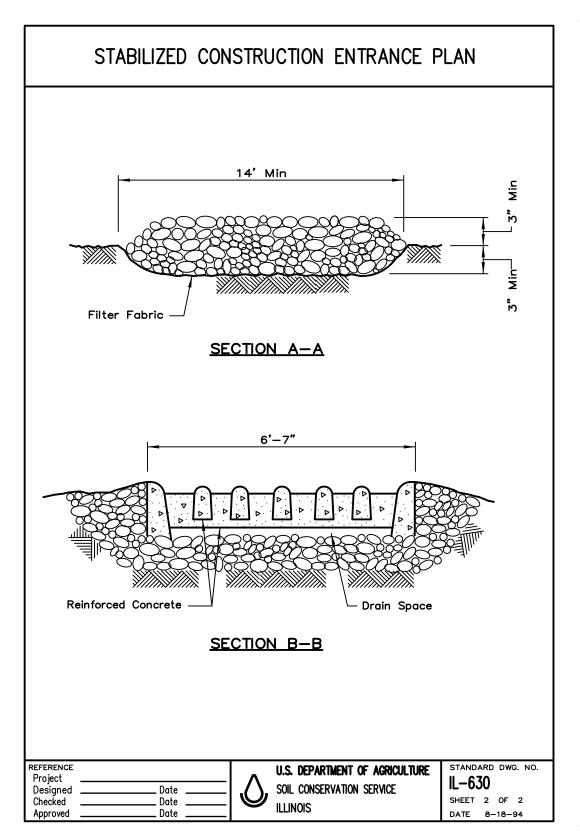
(K) 100 LBS./AC. OR 120 LBS./AC. K<sub>2</sub>O

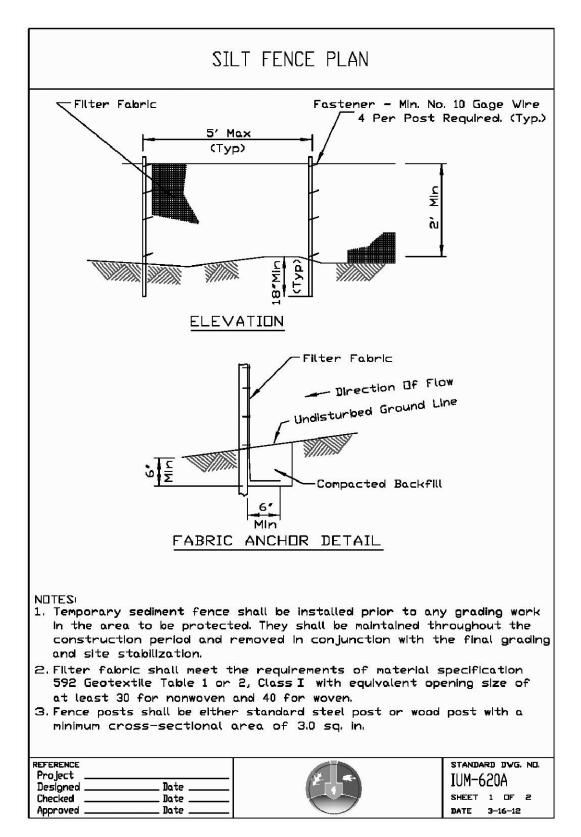
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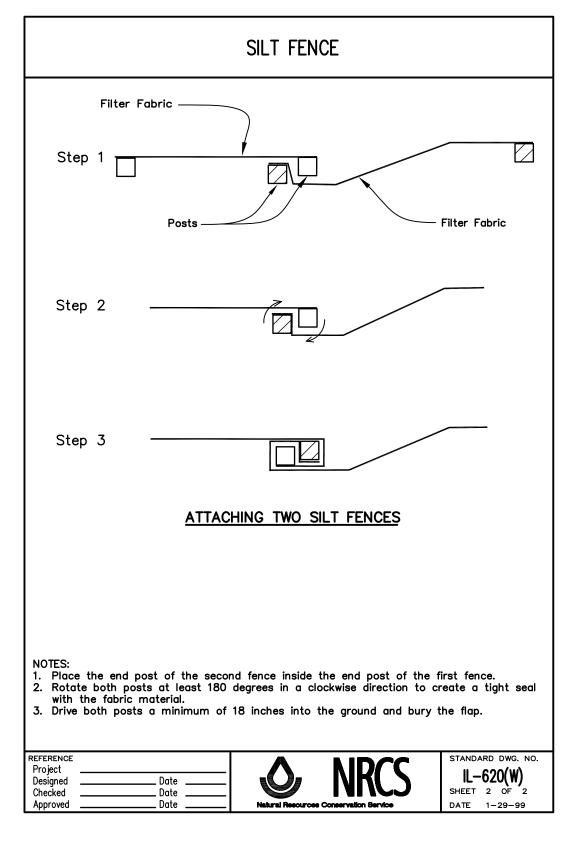
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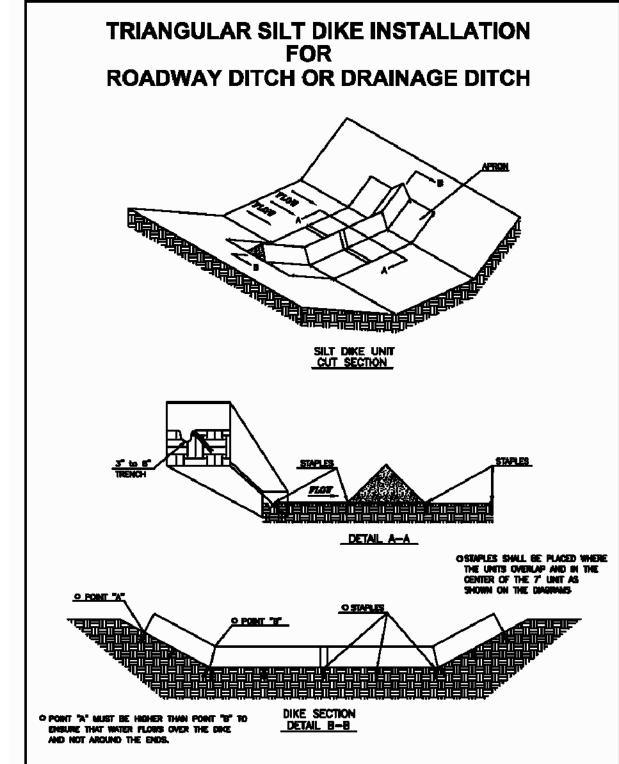
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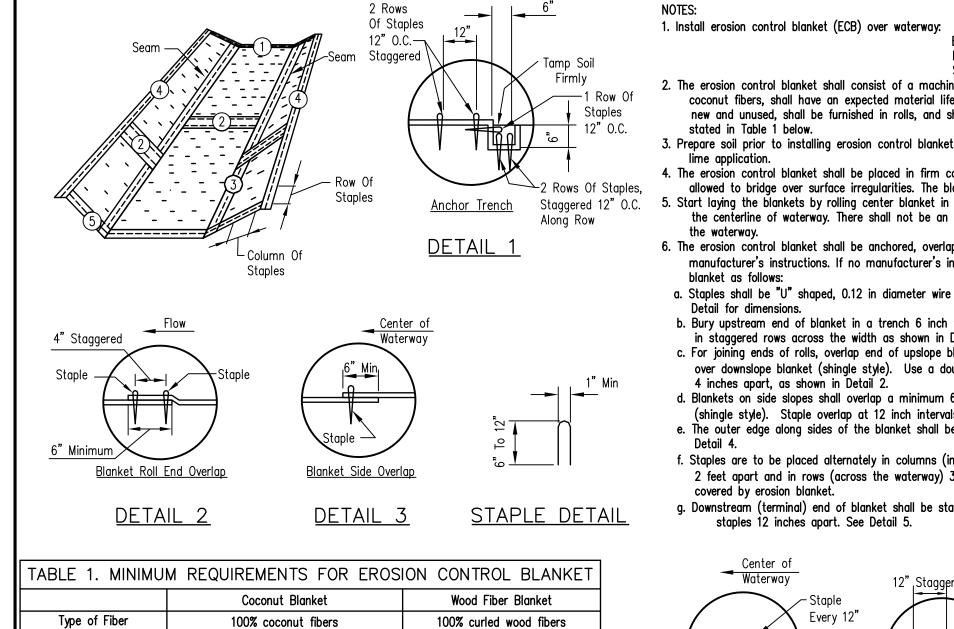


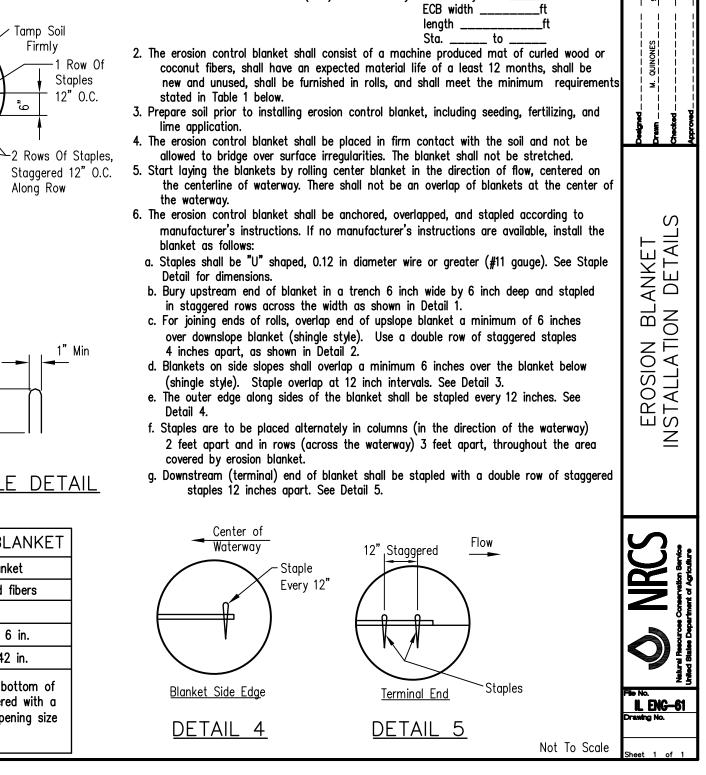




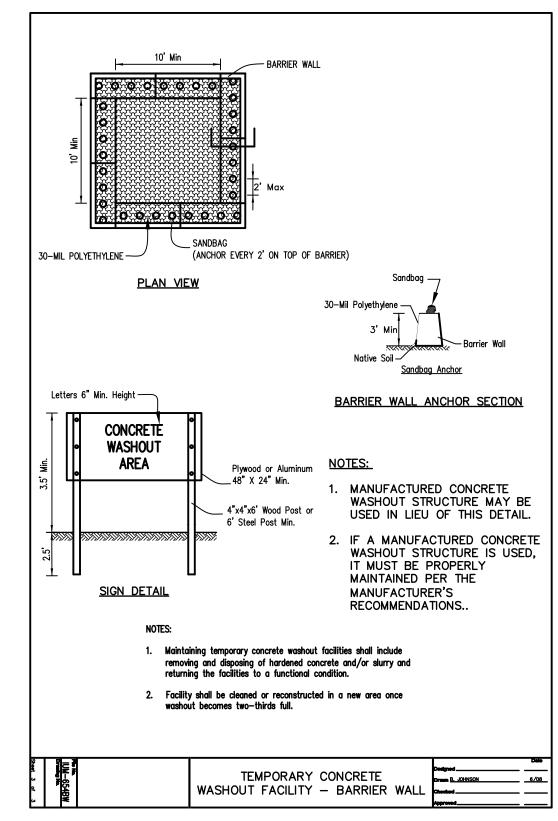




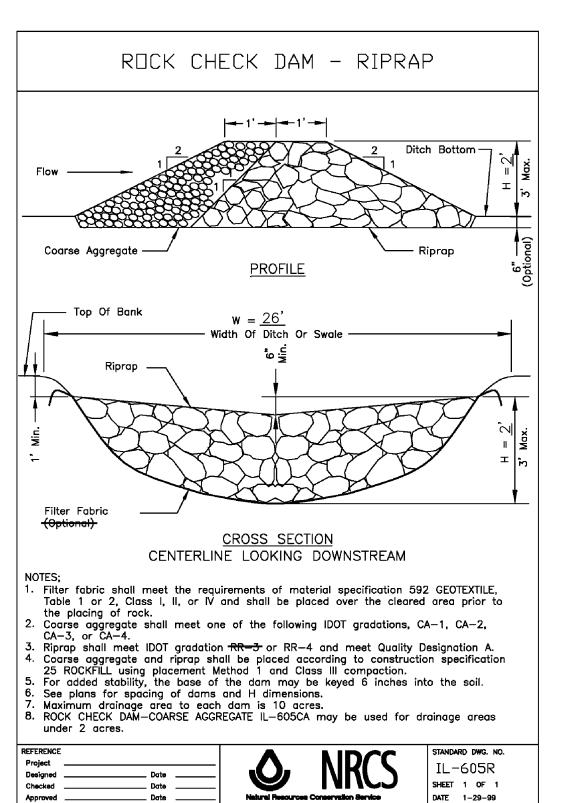




NO. DATE



REVISIONS



SEE SHEET 13 FOR RIP RAP DETAIL

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Weight, lbs/sq. yd

Fiber Length

Fiber Dimensions

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Sugar Grove, Illinois 60554

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0.50

N/A

N/A

Optional — Top and bottom of

blanket may be covered with a max.

5/8" x 5/8" opening size netting,

bound to the mat on max. 1.5" centers.

**CITY OF AURORA** 

0.63

80% of fibers > 6 in.

0.021 in. x 0.042 in.

Optional — Top and bottom of

blanket may be covered with a

max. 5/8" x 5/8" opening size

44 E. DOWNER PLACE AURORA, IL 60505

FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS STORMWATER POLLUTION **PREVENTION DETAILS** 

DATE:	MAF	RCH			201	5
PROJECT					110	_
FILE:		AU1	102	-C(	OVE	R
SHEET	11		OF	1	5	

### WATER MAIN DISINFECTION PROCEDURES

PLANS SHOWING PROPOSED SAMPLE POINTS, CHLORINE INJECTION POINTS, AND THE FLUSHING OPERATION SHALL BE SUBMITTED TO THE ENGINEERING DIVISION OF THE DEPARTMENT OF PUBLIC WORKS WITH THE APPLICATION FOR A CONSTRUCTION PERMIT. UPON APPROVAL THIS PLAN MUST BE DISTRIBUTED TO THE CONTRACTORS AND CHLORINATORS.

PRESSURE TESTING, PRELIMINARY FLUSHING, AND CHLORINATING THE WATER MAIN SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE CITY OF AURORA'S ENGINEERING DIVISION OR ITS DESIGNATED REPRESENTATIVE.

THE CONTRACTOR SHALL NOTIFY THE CITY OF AURORA'S ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE REGARDING DATES OF PRESSURE TESTING, PRELIMINARY FLUSHING AND CHLORINATION APPOINTMENTS.

### PRELIMINARY FLUSHING:

COMPLETED WATER MAINS SHALL BE FILLED SLOWLY TO ELIMINATE AIR POCKETS BEFORE

AFTER SATISFACTORY COMPLETION OF PRESSURE TESTING, THE WATER MAIN SHALL RECEIVE A PRELIMINARY FLUSH.

FLUSHING OF WATER MAINS SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE CITY OF AURORA'S ENGINEERING DIVISION, OR ITS DESIGNEE, IN ACCORDANCE WITH THE APPROVED FLUSHING PLAN. THE FLUSHING SHALL INCLUDE 100% OF THE NEWLY INSTALLED WATER MAIN AS WELL AS EVERY FIRE HYDRANT INSTALLED. DURING THE FLUSHING OPERATION THE DIRECTION OF FLOW THROUGH THE MAINS SHALL BE REVERSED. ALL MAIN LINE AND HYDRANT VALVES SHALL BE OPENED AND CLOSED WHILE FLUSHING IN EACH DIRECTION.

THE FLUSHING VELOCITY IN THE MAIN SHALL NOT BE LESS THAN 2.5 FEET/SECOND. (SEE TABLE "A") NOTE: FLUSHING IS NO SUBSTITUTE FOR PREVENTIVE MEASURES DURING CONSTRUCTION. CERTAIN CONTAMINANTS, SUCH AS CAKED DEPOSITS, RESIST FLUSHING AT ANY FEASIBLE VELOCITY.

### TABLE "A"

REQUIRED FLOW AND OPENINGS TO FLUSH PIPELINES (40 PSI RESIDUAL PRESSURE IN WATER MAIN)\*

PIPE DIAMETER INCHES	FLOW REQUIRED TO PRODUCE 2.5 FT/S (APPROX.) VELOCITY IN MAIN GPM	1 1 1 1 NU	OF T NCHES -1/2 MBER ON P	<u>2</u> OF	NUMBER OF 2-1/2 INCH HYDRANT OUTLETS*
4 6 8 10 12 16	100 200 400 600 900 1600	1 - - - -	- 1 2 3 -	- 1 2 2 4	1 1 1 1 2 2

\*WITH A 40-PSI PRESSURE IN THE MAIN WITH THE HYDRANT FLOWING TO ATMOSPHERE, A 2-1/2 IN. HYDRANT OUTLET WILL DISCHARGE APPROXIMATELY 1000 GPM AND A 4-1/2 IN. HYDRANT OUTLET WILL DISCHARGE APPROXIMATELY 2500 GPM. \*NUMBER OF TAPS ON PIPE BASED ON DISCHARGE THROUGH 5 FT. OF GALVANIZED IRON (GI) PIPE WITH ONE 90 DEGREE ELBOW.

### CHLORINATING THE MAIN:

THE CHLORINATION OF THE WATER MAIN WILL BE WITNESSED BY THE CITY OF AURORA'S ENGINEERING DEPARTMENT OR THEIR DESIGNEE. THE CITY'S DESIGNEE SHALL NOTIFY THE WATER PRODUCTION DIVISION IMMEDIATELY FOLLOWING THE CHLORINATION.

THE CHLORINATION OF THE PROJECT SHALL NOT BE PERMITTED UNTIL A PRELIMINARY FLUSH HAS BEEN PERFORMED AND WITNESSED.

UNDER THE SUPERVISION OF THE PROJECT INSPECTOR, WATER FROM THE EXISTING DISTRIBUTION SYSTEM SHALL BE MADE TO FLOW AT A CONSTANT RATE INTO THE NEWLY LAID WATER MAIN. AT A POINT NOT MORE THAN 10 FEET DOWNSTREAM FROM THE BEGINNING OF THE NEW MAIN, WATER ENTERING

THE NEW MAIN SHALL RECEIVE A DOSE OF CHLORINE FED AT A CONSTANT RATE SUCH THAT THE WATER WILL RECEIVE NOT LESS THAN 50 MG/L FREE CHLORINE. (SEE TABLE

ALL MAIN LINE AND HYDRANT VALVES (EXCEPT FOR VALVES AT THE CONNECTION BETWEEN THE NEW AND EXISTING SYSTEMS) SHALL BE OPERATED AFTER THE MAIN HAS BEEN CHLORINATED IN ORDER TO ALLOW THE VALVE DISK TO MAKE CONTACT WITH THE CHLORINE SOLUTION.

### CHLORINE REQUIRED TO PRODUCT 50 MG/L CONCENTRATION IN 100 FT. OF PIPE BY

TABLE "B"

IN.	PIPE DIAMETER	LB.	100 PERCENT CHLORINE	
	4 6 8 10 12 16		.026 .060 .108 .170 .240 .434	

### BACTERIOLOGICAL TESTING:

AFTER A MINIMUM OF 48 HOURS AFTER THE WATER MAIN HAS BEEN PROPERLY CHLORINATED, THE CONTRACTOR SHALL SCHEDULE AN APPOINTMENT FOR BACTERIOLOGICAL TESTING WITH THE CITY OF AURORA'S ENGINEERING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE. JUST PRIOR TO SAMPLING, THE MAIN SHALL BE FLUSHED TO REDUCE THE CHLORINE CONCENTRATION TO NO MORE THAN 3.5 MG/L. ALL BACTERIOLOGICAL SAMPLES SHALL BE COLLECTED BY WATER PRODUCTION DIVISION

PER THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, "ALL WATER MAINS SHALL BE SATISFACTORILY DISINFECTED PRIOR TO USE. IN ACCORDANCE WITH THE REQUIREMENTS OF A.W.W.A. C651-99, AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FEET OF NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. SATISFACTORY DISINFECTION SHALL BE DEMONSTRATED IN ACCORDANCE WITH THE REQUIREMENTS OF 35 ILL.ADM.CODE 652.203."

SAMPLE POINTS SHALL CONSIST OF COPPER WHIPS ATTACHED TO THE MAIN. SAMPLES SHALL NOT BE DRAWN FROM FIRE HYDRANTS.

ALL OF THE WATER MAIN THAT IS LISTED UNDER THE SAME IEPA PERMIT MUST BE TESTED AS A COMPLETE PROJECT. BACTERIOLOGICAL TESTING WILL NOT START UNTIL THE ENTIRE LENGTH OF MAIN.

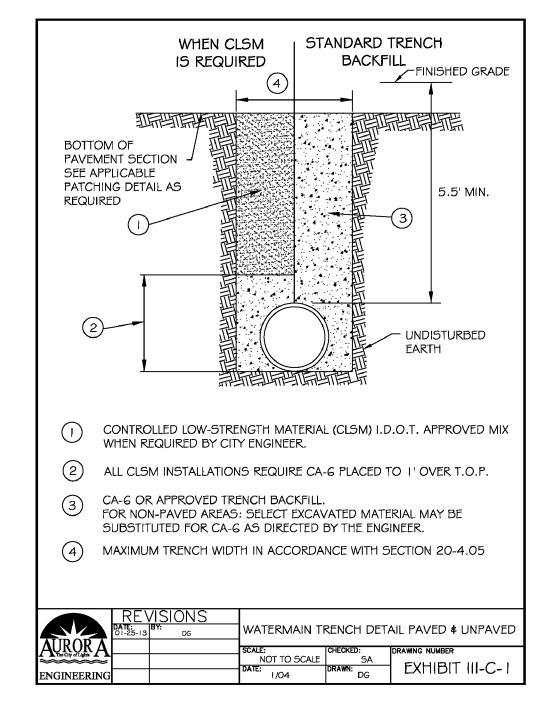
BEING PERMITTED BY THE IEPA FOR THAT PARTICULAR PROJECT, HAS BEEN INSTALLED AND PRESSURE TESTED.

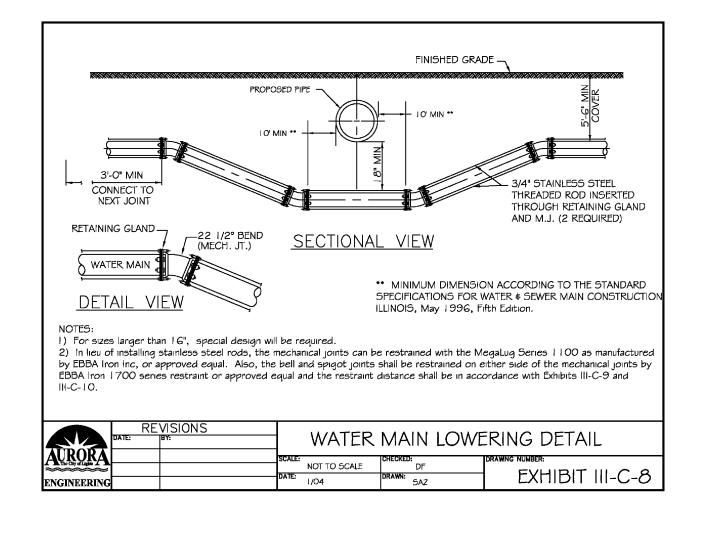
AFTER SAMPLES ARE DRAWN, THE CONTRACTOR, UNDER SUPERVISION OF THE CITY OF AURORA'S REPRESENTATIVE, SHALL CLOSE THE VALVE FEEDING THE NEW WATER MAIN. UNLESS OTHERWISE DIRECTED BY CITY OF AURORA PERSONNEL, THE VALVE(S) FEEDING THE NEW MAIN SHALL REMAIN CLOSED UNTIL THE WATER MAIN PROJECT RECEIVES APPROVAL FROM THE WATER PRODUCTION DIVISION.

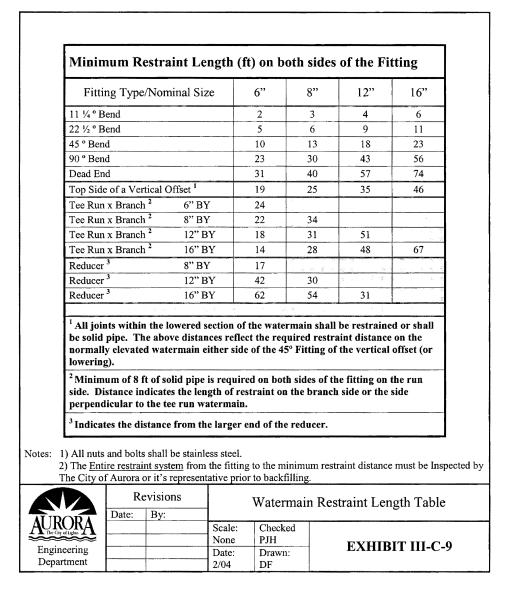
IN THE CASE OF UNSATISFACTORY WATER SAMPLES, THE WATER PRODUCTION DIVISION WILL REVIEW AND ADVISE THE CONTRACTOR AS TO WHAT PROCEDURES WILL BE REQUIRED FOR FURTHER TESTING.

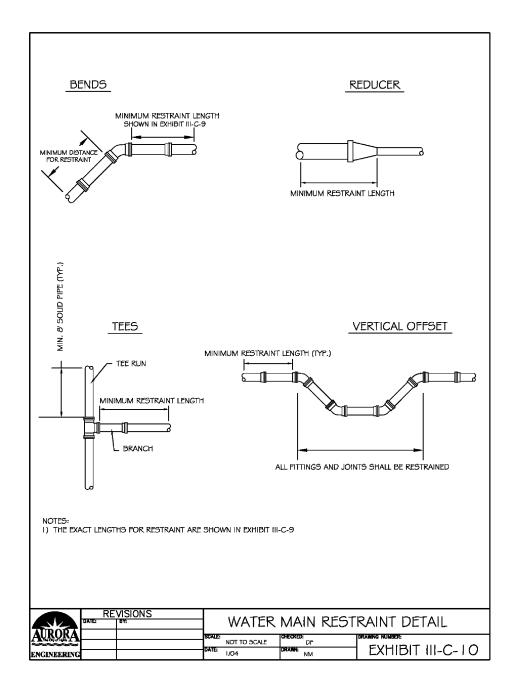
SERVICE CONNECTIONS AND TAPS WILL NOT BE PERMITTED UNTIL THE NEW WATER MAIN HAS SATISFACTORILY PASSED THE BACTERIOLOGICAL TESTS.

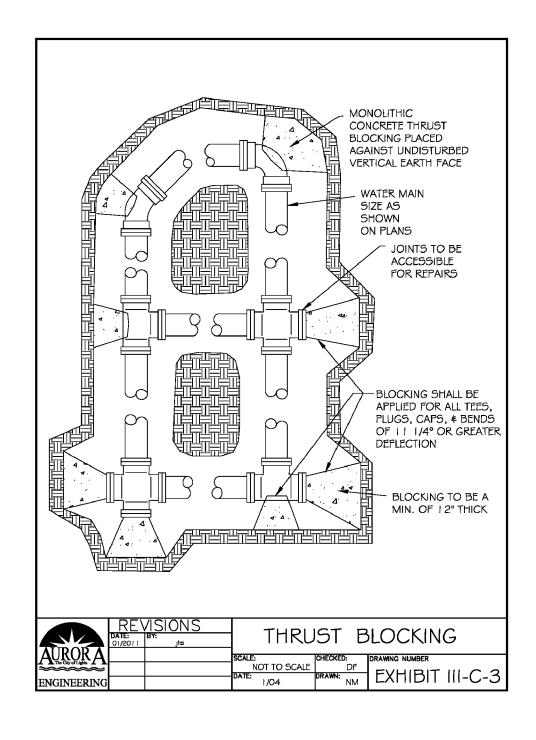
ANY QUESTIONS CONCERNING DISINFECTION PROCEDURES SHOULD BE DIRECTED TO THE MANAGER OF WATER SYSTEM ENGINEERING AT (630) 859-7622, OR THE CITY OF AURORA'S ENGINEERING DEPARTMENT AT (630) 844-3620.











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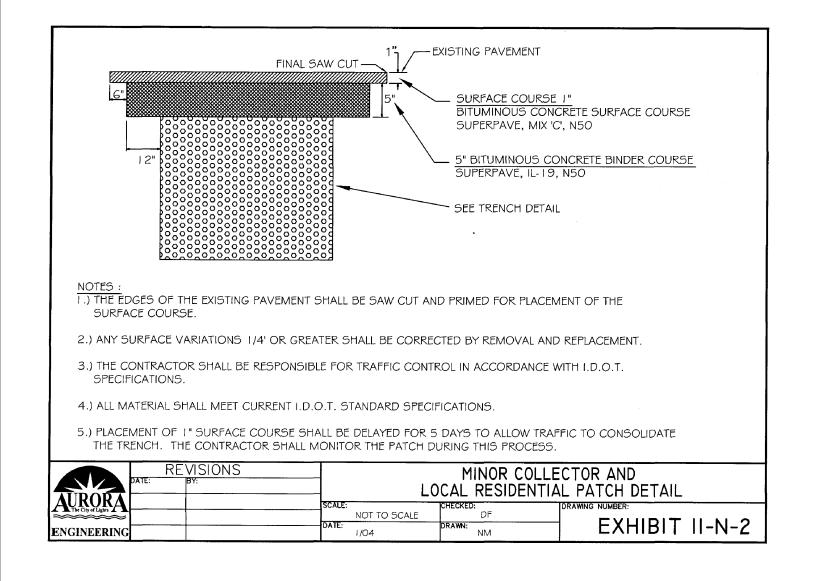
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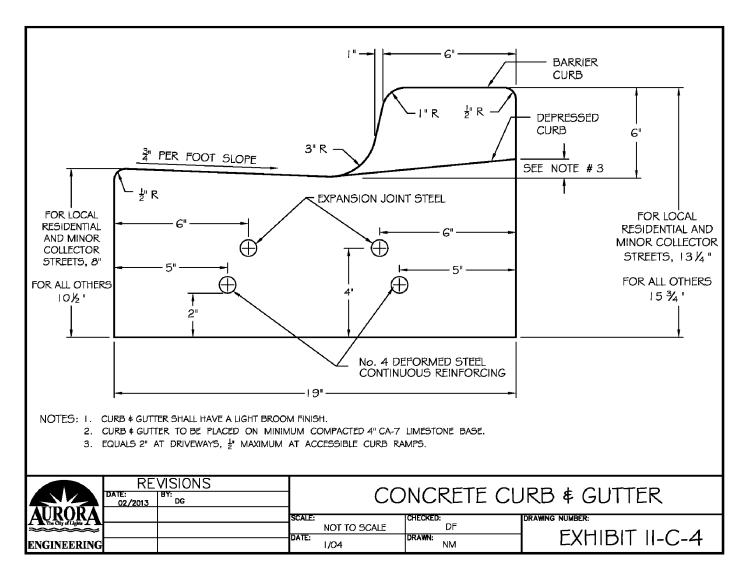
**CITY OF AURORA** 44 E. DOWNER PLACE AURORA, IL 60505

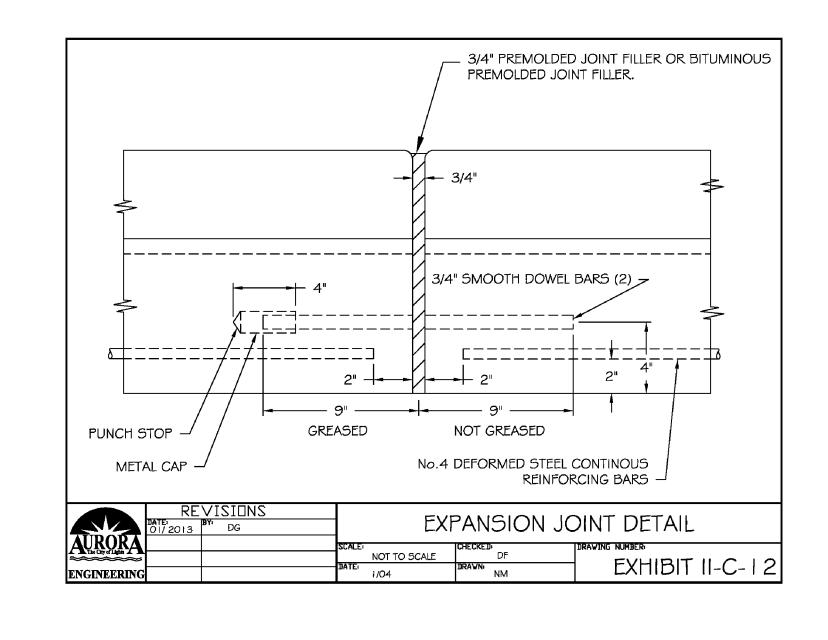
NO. DATE REVISIONS

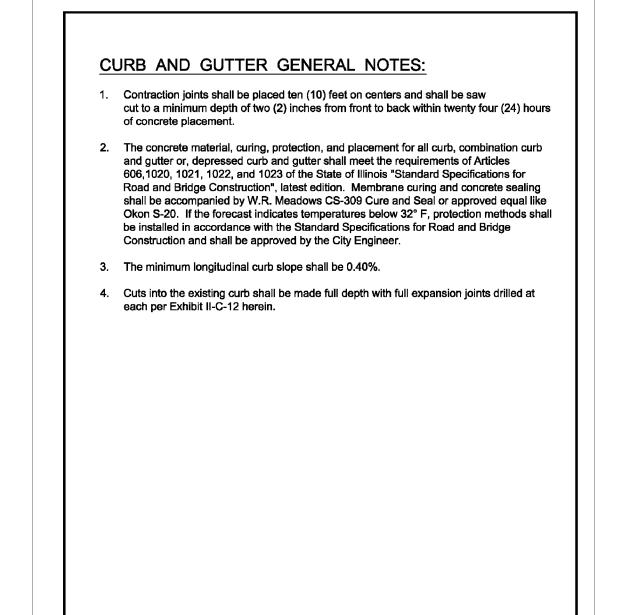
FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS CITY OF AURORA WATER DETAILS

	SHEET	12	OF	15
	FILE:		AU1102	-COVER
	PROJECT	NO:		AU1102
	DATE:	MAF	RCH	2015
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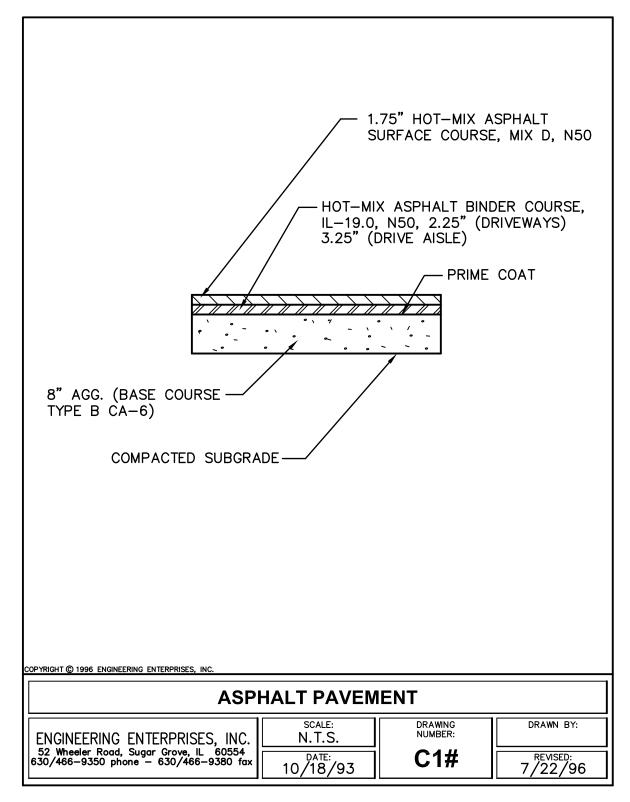


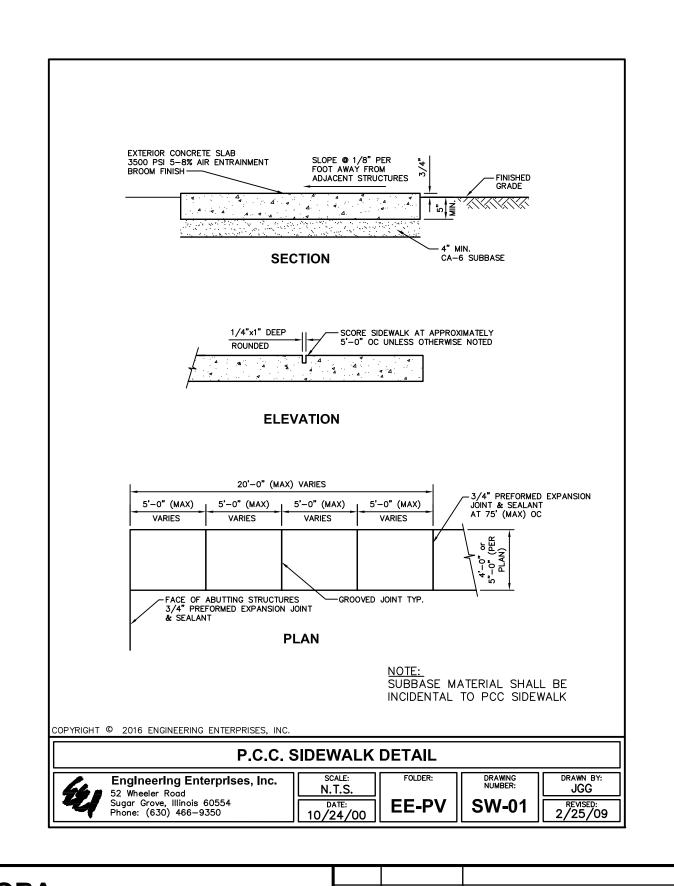


CURB AND GUTTER GENERAL NOTES

03/08 DRAWN: J. MOORE

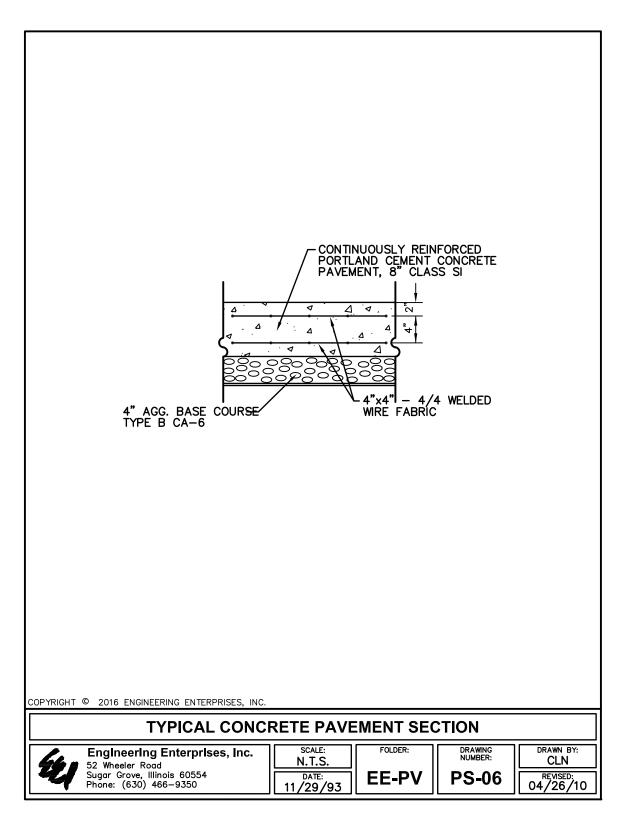
EXHIBIT II-C-5

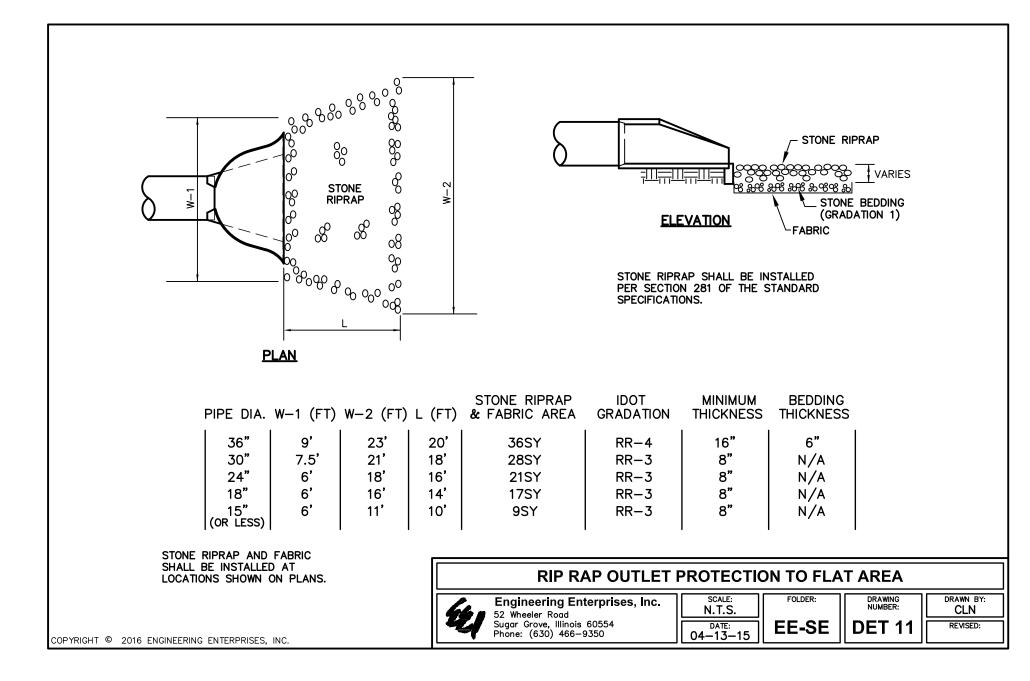




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REVISIONS







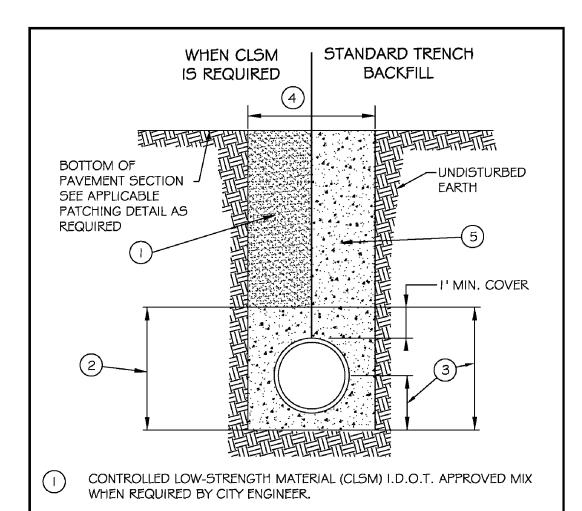
**Engineering Enterprises, Inc.** CONSULTING ENGINEERS 52 Wheeler Road Sugar Grove, Illinois 60554 630.466.6700 / www.eeiweb.com

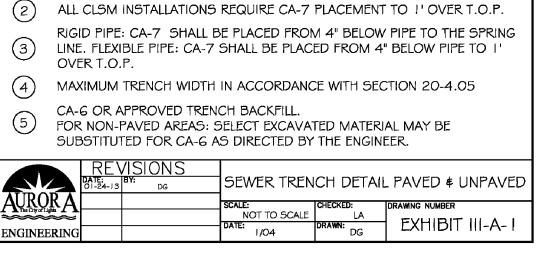
**CITY OF AURORA** 44 E. DOWNER PLACE AURORA, IL 60505

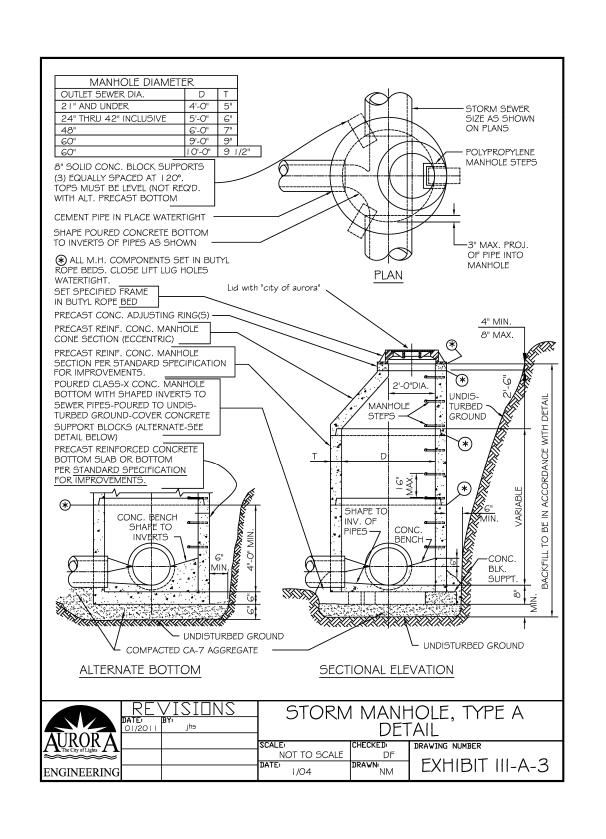
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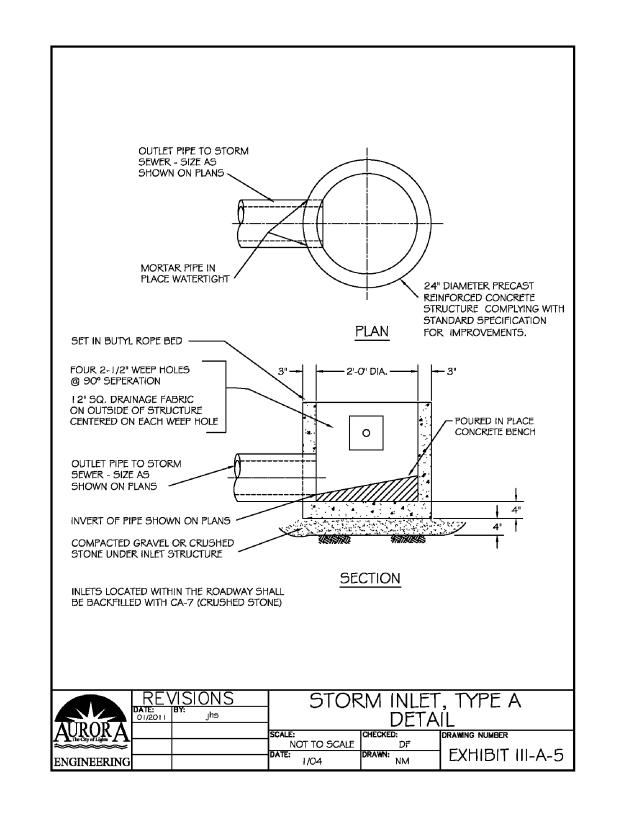
DATE: MARCH 2015 PROJECT NO: AU1102 FILE: AU1102—COVEF	CHEET	13	٥٢	15
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DATE: MARCH 2015	PROJECT	NO:		AU1102
	DATE:	MAF	RCH	2015

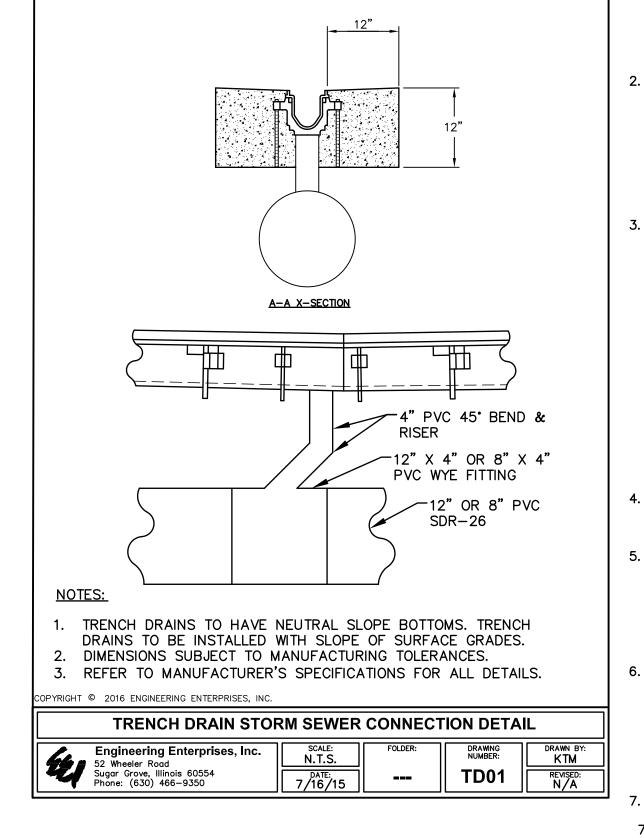
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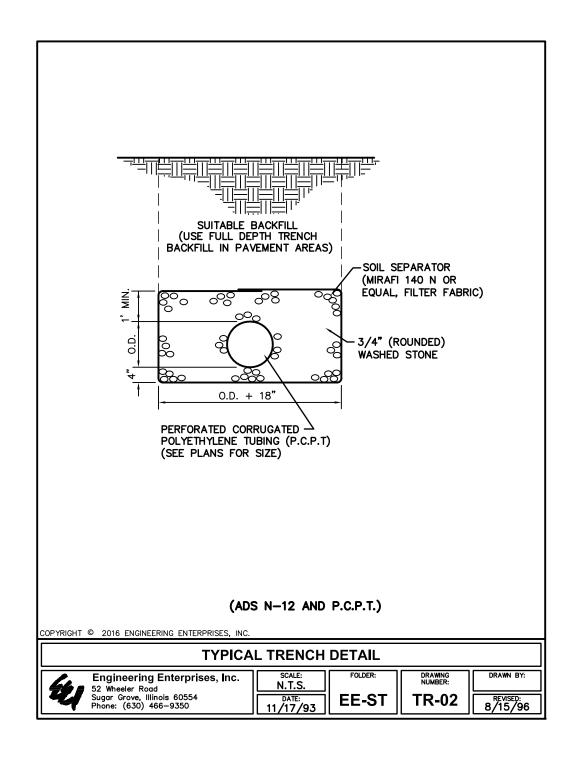


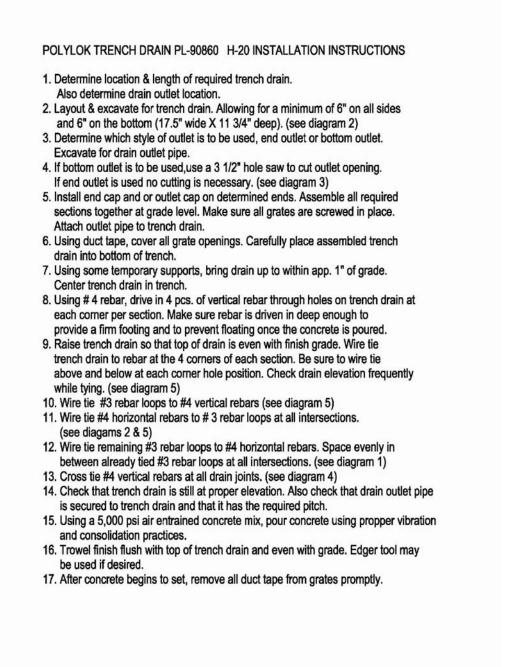
### STORM SEWER SPECIFICATIONS AND GENERAL NOTES

- 1. ALL STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, ADOPTED JANUARY 1, 2012, AND REVISIONS THERETO, THE NOTES IN THE PLANS, AND IN ACCORDANCE WITH CODES AND ORDINANCES OF THE CITY OF AURORA, ILLINOIS.
- 2. REINFORCED CONCRETE PIPE (RCP) SHALL FOLLOW ASTM DESIGNATION C-76 AND C-14, CLASS III AND IV WITH BELL AND SPIGOT OR TONGUE AND GROOVE ENDS UTILIZING CEMENT MORTAR, MASTIC COMPOUND JOINTS, OR EXCEPT WHERE DESIGNATED OTHERWISE ON THE PLANS AT LOCATIONS WHERE THE STORM SEWER CROSSES WATER MAINS, THE RCP SHALL BE FURNISHED WITH RUBBER-GASKETED (O-RINGS) JOINTS MEETING THE REQUIREMENTS OF ASTM-361.
- . HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE ADS MEGA GREEN OR ENGINEER APPROVÉD RECYCLED HDPE PIPE. HDPE PIPE AND JOINTS SHALL MEET MEET THE STRUCTURAL AND JOINT REQUIREMENTS OF AASHTO M294, TYPE S. JOINTS TO BE SOIL-TIGHT USING PLAIN END PIPE JOINED WITH EXTERNAL COUPLERS OR COUPLING BANDS COVERING AT LEAST TWO FULL CORRUGATIONS ON EACH END OF THE PIPE. STANDARD CONNECTIONS SHALL MEET THE SOIL—TIGHTNESS REQUIREMENTS OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, PARAGRAPH 26.4.2.4(e). INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321 AND MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES. THE PIPE SHALL BE BEDDED IN A MINIMUM 6 INCHES OF COMPACTED CA-7, HAUNCHED WITH COMPACTED CA-7 AND BACKFILLED WITH A MINIMUM 6 INCHES OF COMPACTED CA-7. TRENCH SHALL BE A MINIMUM OF 18" WIDER THAN THE OUTSIDE DIAMETER OF THE PIPE.
- 4. ALL MANHOLES AND INLETS SHALL BE PRECAST REINFORCED CONCRETE ASTM DESIGNATION C-478. PLEASE REFER TO
- 5. EXISTING FIELD TILE ENCOUNTERED AT AN ELEVATION ABOVE THE PROPOSED DRAINAGE SYSTEM SHALL BE CONNECTED TO THE DRAINAGE SYSTEM BY A METHOD APPROVED BY THE ENGINEER. PLEASE CONTACT THE DESIGN ENGINEER AT ENGINEERING ENTERPRISES, INC. PRIOR TO MAKING ANY CONNECTIONS. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION.
- 6. EXISTING FIELD TILE ENCOUNTERED AT AN ELEVATION BELOW THE PROPOSED DRAINAGE SYSTEM SHALL BE REPLACED BY A METHOD APPROVED BY THE ENGINEER. (THE USUAL METHOD WILL BE TO SLEEVE THE FIELD TILE WITH RIGID PIPE AND BED THE SLEEVE.) PLEASE CONTACT THE DESIGN ENGINEER AT ENGINEERING ENTERPRISES, INC. PRIOR TO MAKING ANY REPLACEMENTS. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION.

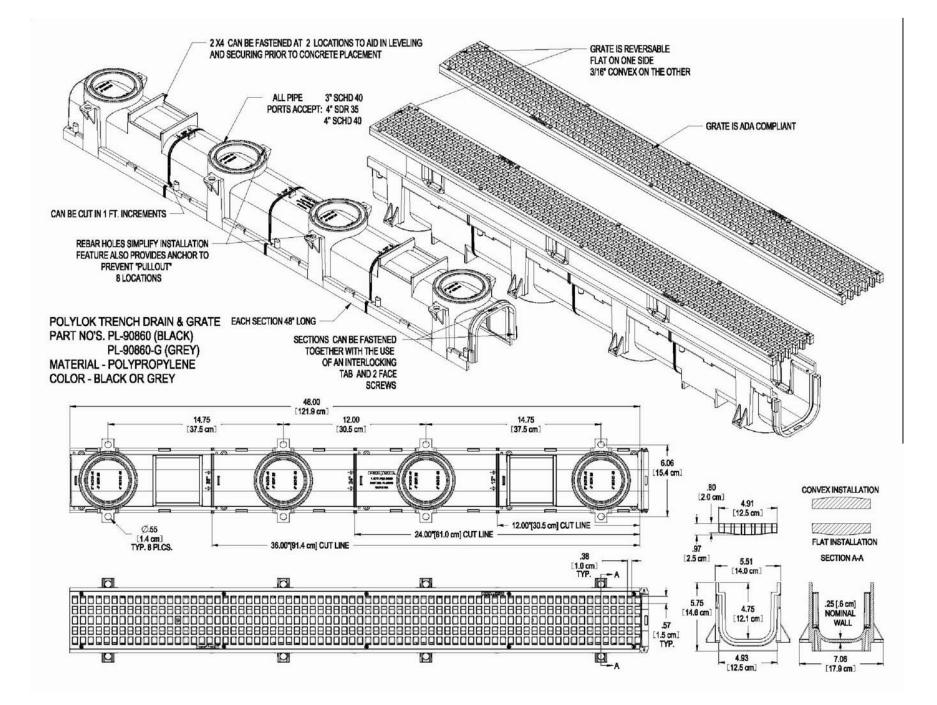
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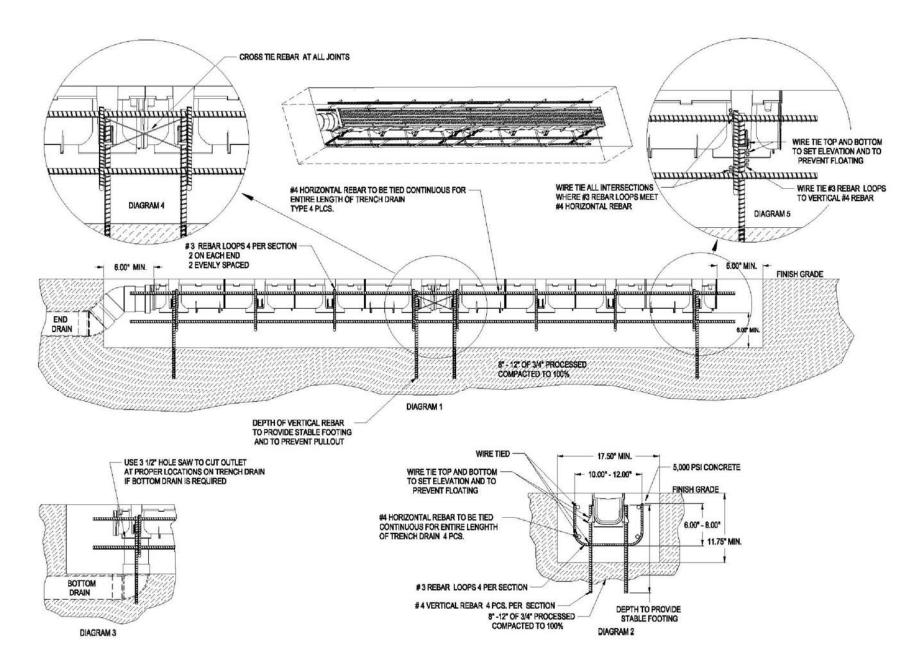
- 7.1. SUBMIT CUT SHEETS FOR EACH STORM STRUCTURE, CLEARLY NOTING APPROPRIATE ELEVATIONS AND DIMENSIONS.
- 7.2. SUBMIT CUT SHEETS FOR EACH PIPE TYPE, CLEARLY NOTING WHAT THE PIPE WILL BE USED FOR AND IN THE CASE OF CUT SHEETS WITH MULTIPLE ITEMS, CLEARLY INDICATE WHICH ITEM IS APPLICABLE.





NO. DATE





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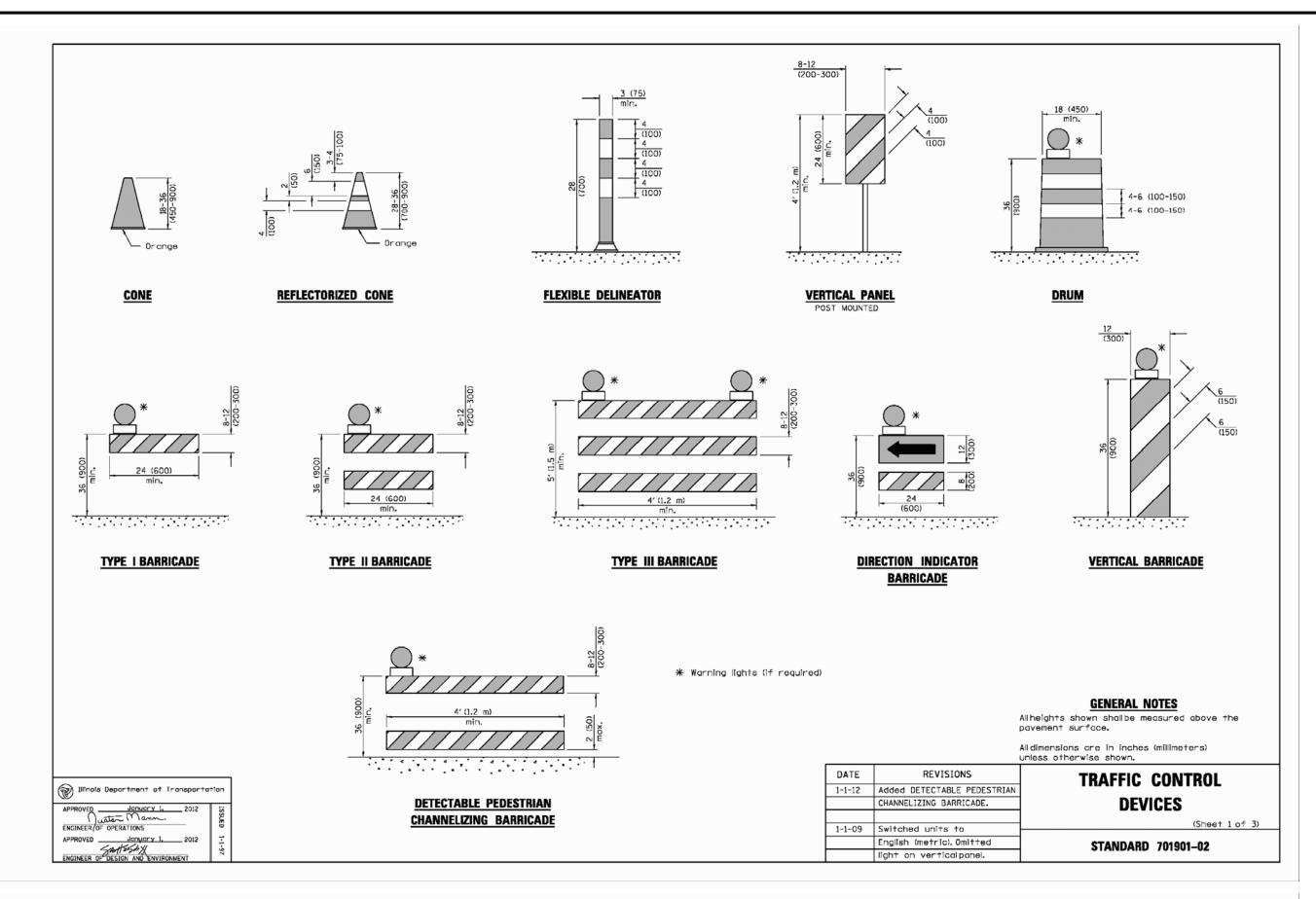
FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS

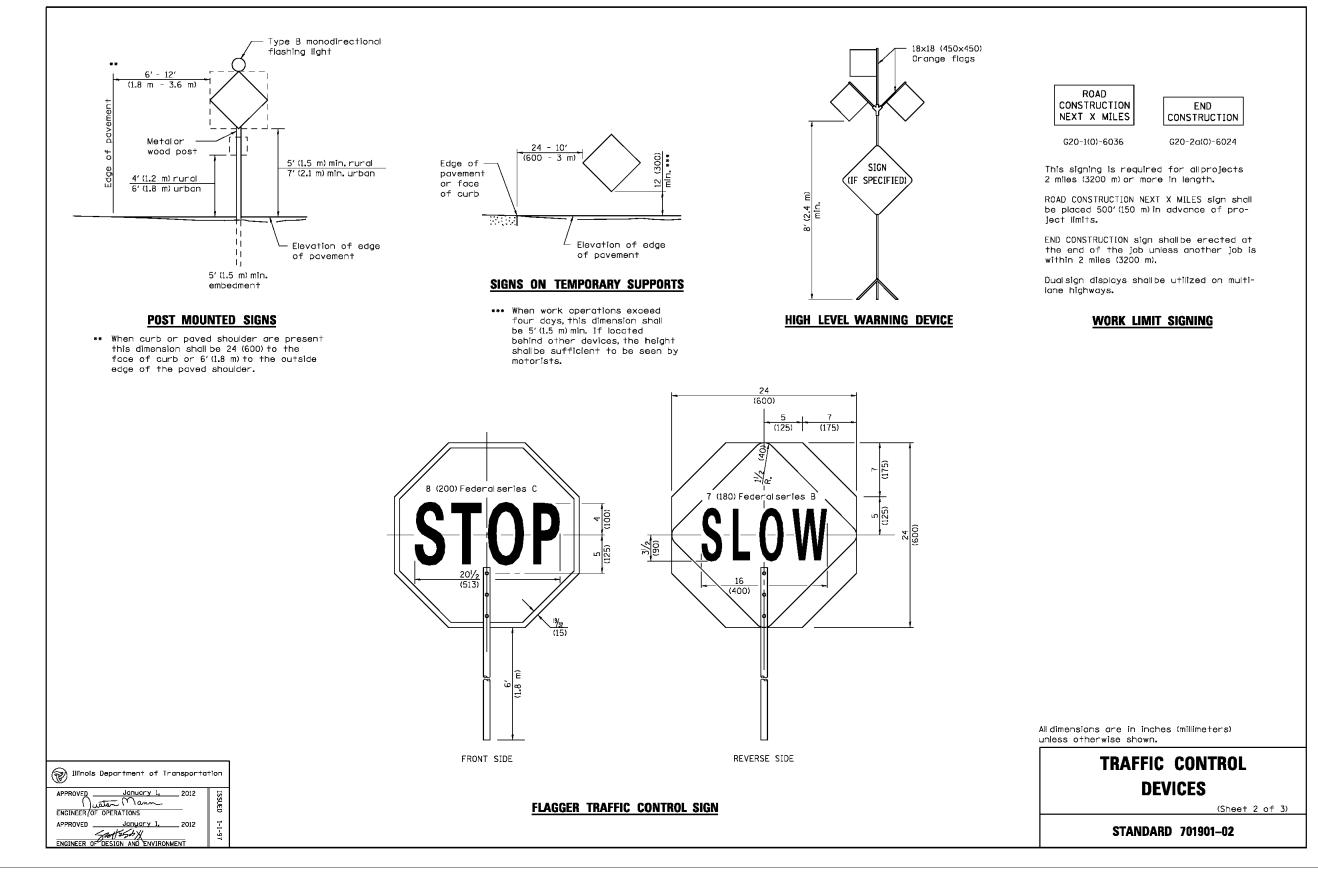
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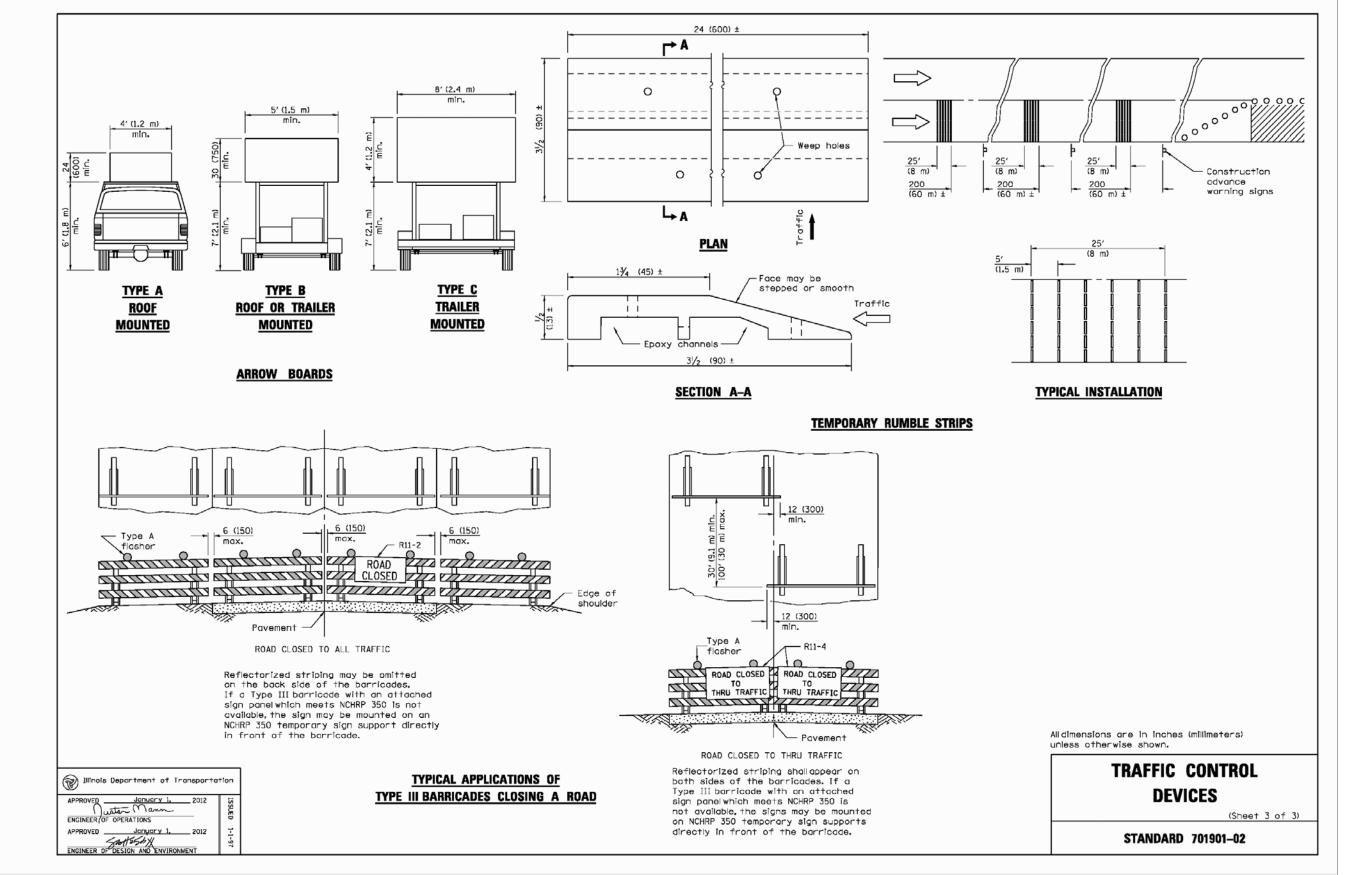
**CITY OF AURORA** 44 E. DOWNER PLACE

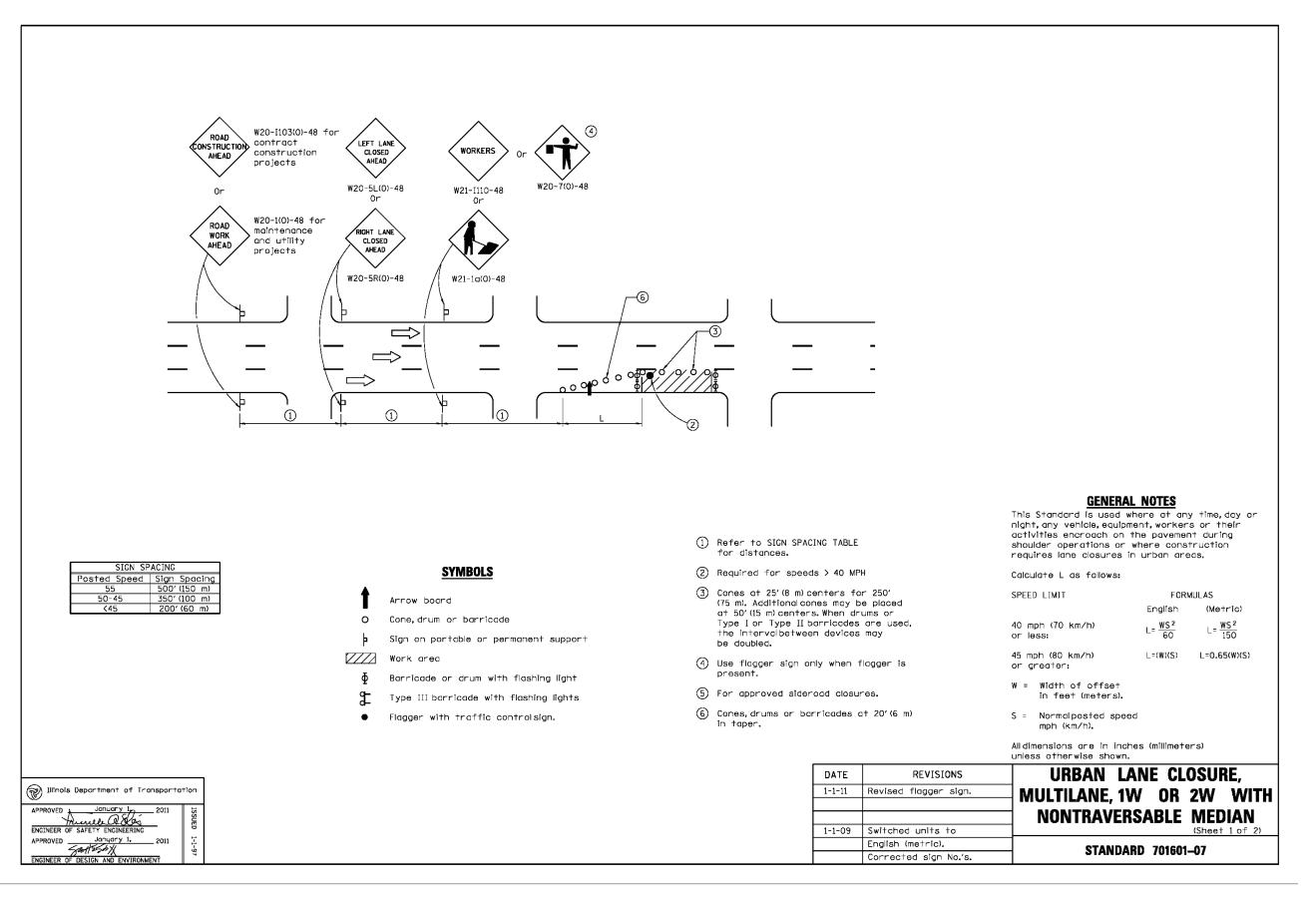
REVISIONS

SITE DETAILS

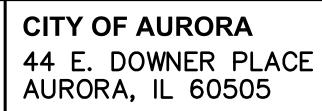












FARNSWOOD CONDOMINIUM FLOOD RELIEF IMPROVEMENTS TRAFFIC CONTROL DETAILS

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REVISIONS

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