

ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS

FOR

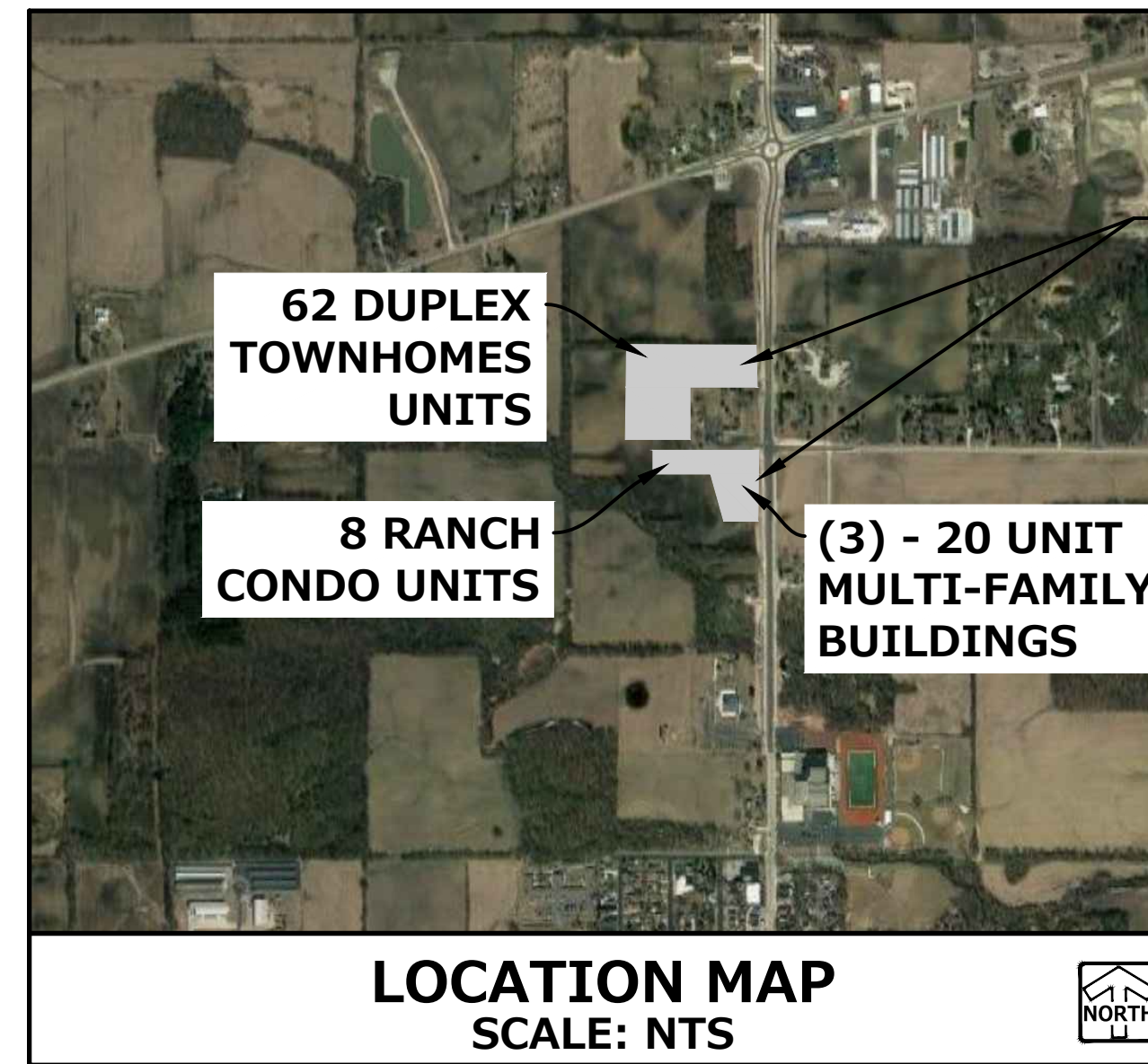
CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

PLANS PREPARED FOR

BEAR DEVELOPMENT

4011 80TH STREET KENOSHA, WI 53142



PROJECT LOCATION

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PROJECT TEAM CONTACTS	
CIVIL ENGINEER: AARON KOCH, P.E. PINNACLE ENGINEERING GROUP 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 (262) 754-8888	ARCHITECT: TAMI MCCULLOUGH JLA ARCHITECTS 311 EAST CHICAGO STREET, SUITE 240 MILWAUKEE, WI 53202 (414) 988-7520
SURVEYOR: JOHN KONOPACKI, PLS PINNACLE ENGINEERING GROUP 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 (262) 754-8888	DEVELOPER: BEAR DEVELOPMENT 4011 80TH STREET KENOSHA, WI 53142 (262) 308-2656 CRAIG BARTSCH AND DAN SZCZAP
LANDSCAPE: DALE BUNDERSON PINNACLE ENGINEERING GROUP 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 (262) 754-8888	

LEGEND	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	⊙	⊙
STORM SEWER MANHOLE	⊙	⊙
STORM SEWER AREA DRAIN		▬
STORM SEWER INLET (ROUND CASTING)	○	●
STORM SEWER INLET (RECTANGULAR CASTING)	□	■
PRECAST FLARED END SECTION	◻	◻
CONCRETE HEADWALL	∩	∩
AIR RELEASE ASSEMBLY	⊗	⊗
VALVE BOX	⊕	⊕
FIRE HYDRANT	⊕	⊕
BUFFALO BOX	⊕	⊕
CLEANOUT	⊕	⊕
SANITARY SEWER	—	—
FORCE MAIN	—	—
STORM SEWER	—	—
DRAIN TILE	—	—
WATER MAIN	—	—
UTILITY CROSSING		⊗
LIGHTING		⊗
ELECTRICAL CABLE	—	—
OVERHEAD WIRES	—	—
CAUTION EXISTING UTILITIES NEARBY		⊗
ELECTRICAL TRANSFORMER OR PEDESTAL	⊕	⊕
POWER POLE	⊕	⊕
POWER POLE WITH LIGHT	⊕	⊕
STREET SIGN	⊕	⊕
GAS MAIN	—	—
TELEPHONE LINE	—	—
CONTOUR	749	749
SPOT ELEVATION	⊕(750.00)	⊕750.00
WETLANDS	—	—
FLOODWAY	—	—
FLOODPLAIN	—	—
HIGH WATER LEVEL (HWL)	—	—
NORMAL WATER LEVEL (NWL)	—	—
DIRECTION OF SURFACE FLOW	→	→
DITCH OR SWALE	—	—
DIVERSION SWALE	→	→
OVERFLOW RELIEF ROUTING	→	→
TREE WITH TRUNK SIZE	⊕	⊕
SOIL BORING	⊕	⊕
TOPSOIL PROBE	⊕	⊕
FENCE LINE, TEMPORARY SILT	—	—
FENCE LINE, WIRE	—	—
FENCE LINE, CHAIN LINK OR IRON	—	—
FENCE LINE, WOOD OR PLASTIC	—	—
CONCRETE SIDEWALK	—	—
CURB AND GUTTER	—	—
DEPRESSED CURB	—	—
REVERSE PITCH CURB & GUTTER	—	—
EASEMENT LINE	—	—

ABBREVIATIONS			
BL	BASE LINE	NWL	NORMAL WATER LEVEL
C	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FF	FINISHED FLOOR	ST	STORM SEWER
FG	FINISHED GRADE	T	TANGENCY OF CURVE
FL	FLOW LINE	TB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FOUNDATION
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
L	LENGTH OF CURVE	WM	WATER MAIN
MH	MANHOLE	∆	INTERSECTION ANGLE

GENERAL NOTES

- THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
- A GEOTECHNICAL REPORT HAS BEEN PREPARED BY GEOSTRA ENGINEERING INC DATED APRIL 15, 2021, FOR THE PROJECT SITE. THE DATA ON SUB-SURFACE SOIL CONDITIONS IS NOT INTENDED AS A REPRESENTATION OR WARRANTY OF THE CONTINUITY OF SUCH CONDITIONS BETWEEN BORINGS OR INDICATED SAMPLING LOCATIONS. IT SHALL BE EXPRESSLY UNDERSTOOD THAT OWNER WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN THERE BY THE CONTRACTOR. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL ARE NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
- THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN COMPUTATIONS AND IN NO SUCH INSTANCE RELY ON THE ENGINEER'S ESTIMATE.
- QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
- PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.
- COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
- SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
- THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
- THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.
- SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
- CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

Toll Free (800) 242-8511
 Milwaukee Area (414) 259-1181
 Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

PINNACLE ENGINEERING GROUP, LLC
 ENGINEER'S LIMITATION

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

DESIGNED: HJJ
 DRAFTED: ABE
 REVIEWED: ABE

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 BROOKFIELD, WI 53186
 (262) 754-8888
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CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

COVER SHEET

REVISIONS		SHEET
1	BID SET	
2	PER VILLAGE COMMENTS	C-22
3	ADDENDUM #1	
4	PER VILLAGE COMMENTS	

REG. JOB NO. 959.00-WI
 PEG. PM. ABE
 START DATE 11/06/2020
 SCALE: NTS

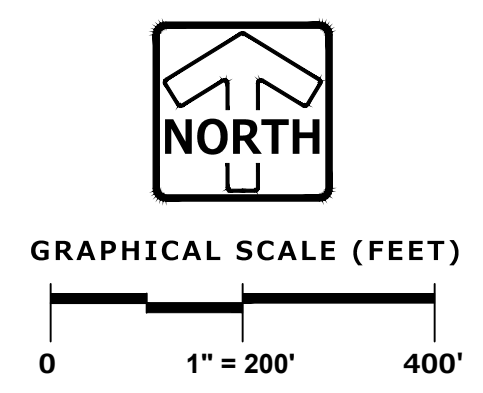
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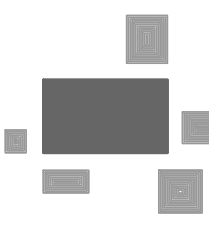
DESIGNED: AEK

BRACKETED: HLJ



LEGEND			
SANITARY MANHOLE	⊙	STORM SEWER	—
STORM MANHOLE	⊙	WATER MAIN	—
CATCH BASIN	○	LIGHTING	⊕
INLET	□	ELECTRICAL CABLE	—
PRECAST FLARED END SECTION	∧	ELECTRICAL TRANSFORMER OR PEDESTAL	⊞
CONCRETE HEADWALL	∧	POWER POLE	⊕
VALVE VAULT	⊗	POWER POLE WITH LIGHT	⊕
VALVE BOX	⊞	GUY WIRE	—
FIRE HYDRANT	⊕	STREET SIGN	⊞
BUFFALO BOX	⊞	GAS MAIN	—
CLEANOUT	⊞	TELEPHONE LINE	—
SANITARY SEWER	—	CONTOUR	749
FORCE MAIN	—	TREE WITH TRUNK SIZE	⊕ 6" 8"
CONCRETE SIDEWALK	—	EASEMENT LINE	—




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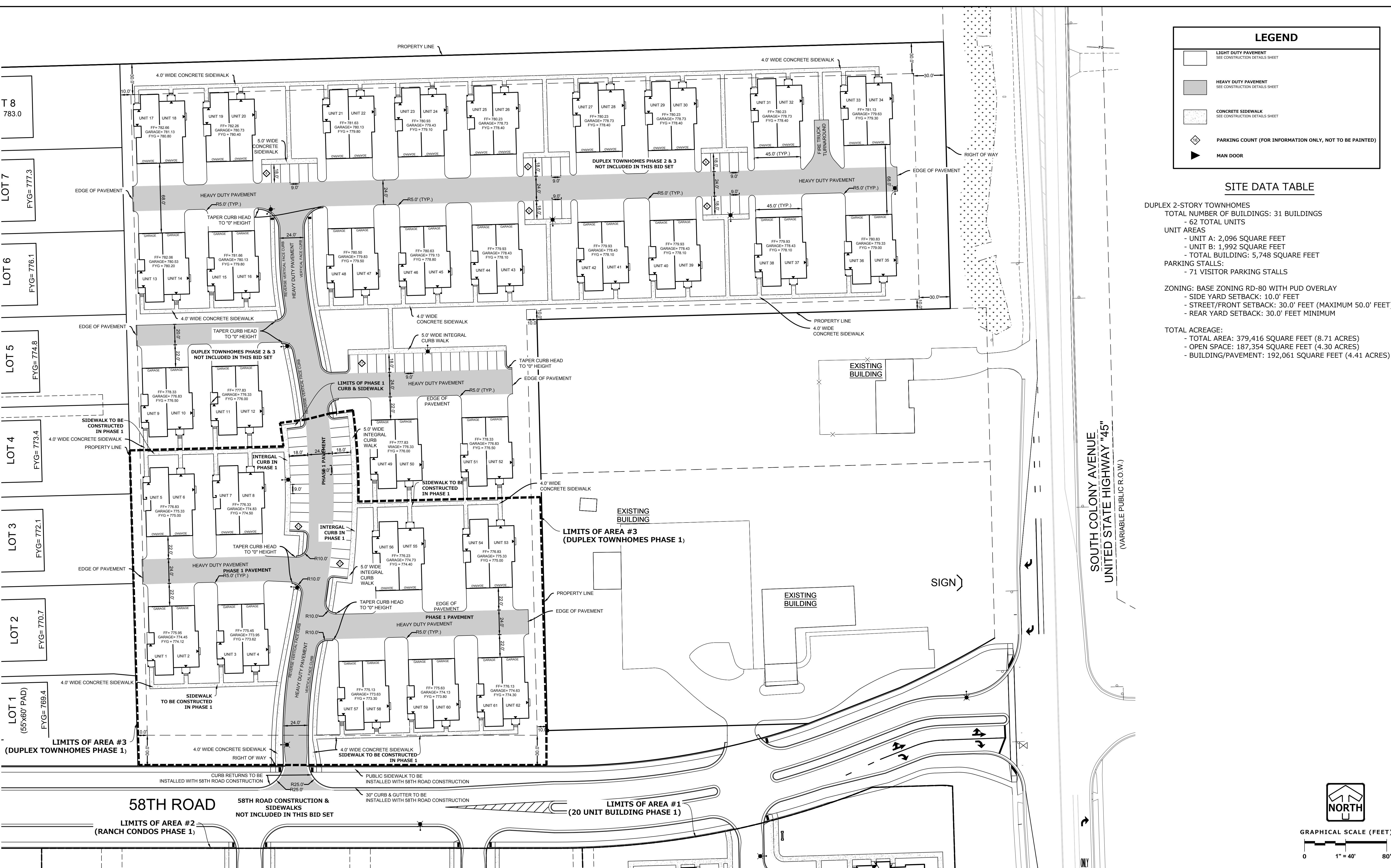
EXISTING CONDITIONS

REVISIONS	
1. BID SET	03/17/21
2. PER VILLAGE COMMENTS	05/03/21
3. APPENDUM #1	05/17/21
4. PER VILLAGE COMMENTS	06/22/21

SHEET
C-2
C-22
 PEG JOB No. 959-00-WI
 AEK
 START DATE 1/05/2020
 SCALE 1"=200'

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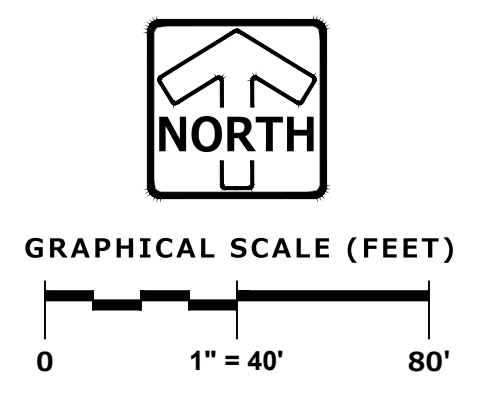
LEGEND

- LIGHT DUTY PAVEMENT
SEE CONSTRUCTION DETAILS SHEET
- HEAVY DUTY PAVEMENT
SEE CONSTRUCTION DETAILS SHEET
- CONCRETE SIDEWALK
SEE CONSTRUCTION DETAILS SHEET
- PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)
- MAN DOOR

SITE DATA TABLE

DUPLEX 2-STORY TOWNHOMES

- TOTAL NUMBER OF BUILDINGS: 31 BUILDINGS
- 62 TOTAL UNITS
- UNIT AREAS
 - UNIT A: 2,096 SQUARE FEET
 - UNIT B: 1,992 SQUARE FEET
 - TOTAL BUILDING: 5,748 SQUARE FEET
- PARKING STALLS:
 - 71 VISITOR PARKING STALLS
- ZONING: BASE ZONING RD-80 WITH PUD OVERLAY
 - SIDE YARD SETBACK: 10.0' FEET
 - STREET/FRONT SETBACK: 30.0' FEET (MAXIMUM 50.0' FEET)
 - REAR YARD SETBACK: 30.0' FEET MINIMUM
- TOTAL ACREAGE:
 - TOTAL AREA: 379,416 SQUARE FEET (8.71 ACRES)
 - OPEN SPACE: 187,354 SQUARE FEET (4.30 ACRES)
 - BUILDING/PAVEMENT: 192,061 SQUARE FEET (4.41 ACRES)



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CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

SITE PLAN

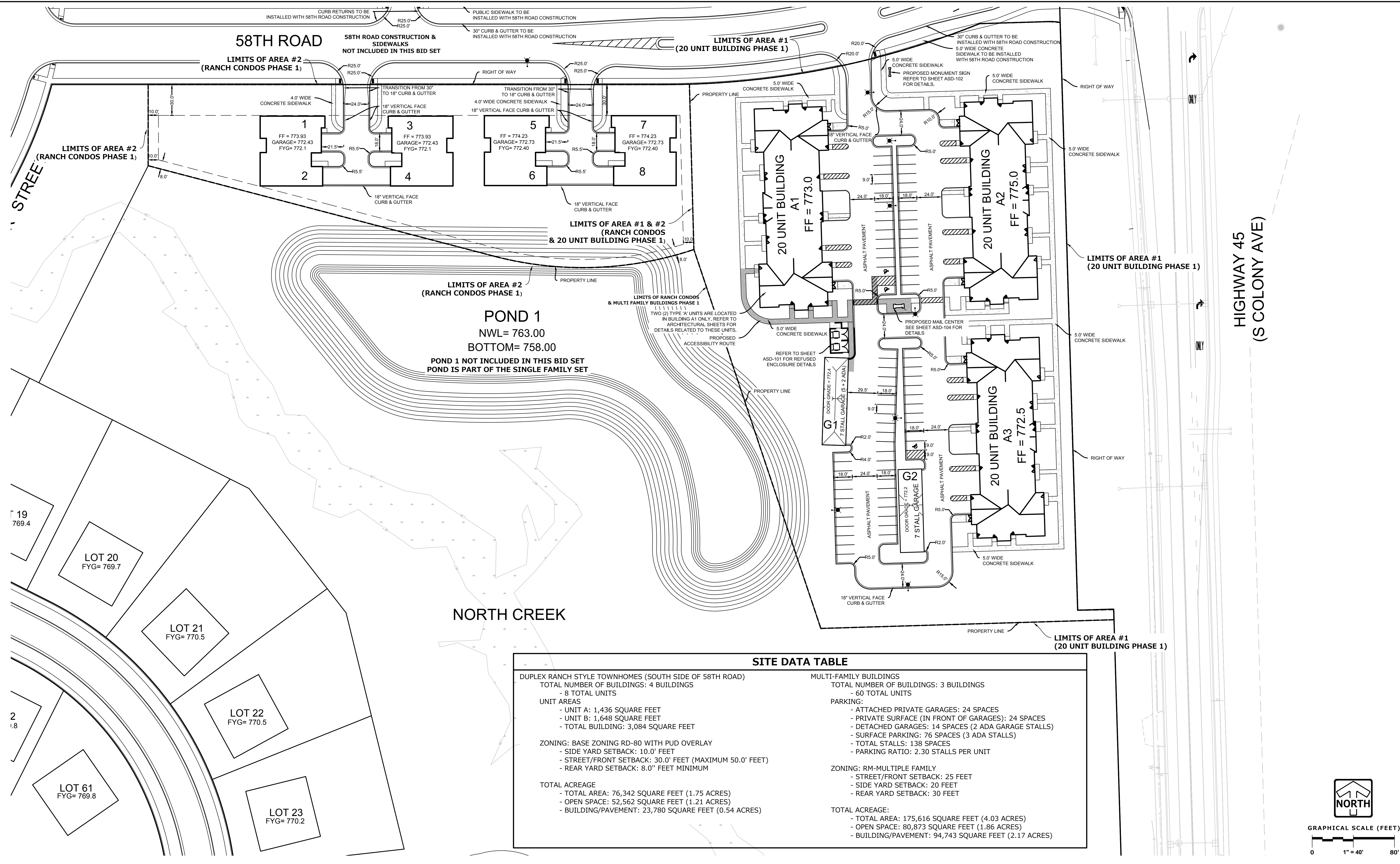
REVISIONS	
1. BID SET	03/17/21
2. PER VILLAGE COMMENTS	05/03/21
3. ADDENDUM #1	05/17/21
4. PER VILLAGE COMMENTS	06/22/21

SHEET
C-3
 C-22
 SCALE: 1"=40'
 PEG JOB No. 959.00-WI-AEK
 START DATE: 11/06/2020
 DATE: 06/22/21

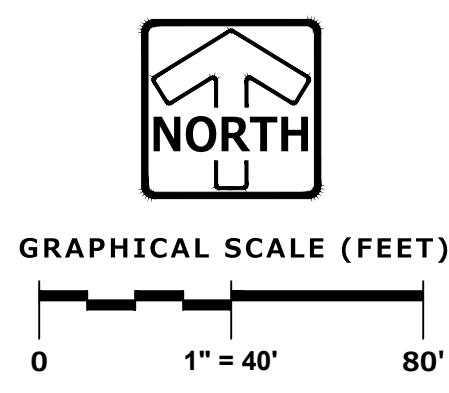
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DESIGNED: HLJ
DRAWN: HLJ
CHECKED: AEC
REVIEWED: AEC

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SITE DATA TABLE	
<p>DUPLEX RANCH STYLE TOWNHOMES (SOUTH SIDE OF 58TH ROAD)</p> <p>TOTAL NUMBER OF BUILDINGS: 4 BUILDINGS</p> <p>- 8 TOTAL UNITS</p> <p>UNIT AREAS</p> <ul style="list-style-type: none"> - UNIT A: 1,436 SQUARE FEET - UNIT B: 1,648 SQUARE FEET - TOTAL BUILDING: 3,084 SQUARE FEET <p>ZONING: BASE ZONING RD-80 WITH PUD OVERLAY</p> <ul style="list-style-type: none"> - SIDE YARD SETBACK: 10.0' FEET - STREET/FRONT SETBACK: 30.0' FEET (MAXIMUM 50.0' FEET) - REAR YARD SETBACK: 8.0" FEET MINIMUM <p>TOTAL ACREAGE</p> <ul style="list-style-type: none"> - TOTAL AREA: 76,342 SQUARE FEET (1.75 ACRES) - OPEN SPACE: 52,562 SQUARE FEET (1.21 ACRES) - BUILDING/PAVEMENT: 23,780 SQUARE FEET (0.54 ACRES) 	<p>MULTI-FAMILY BUILDINGS</p> <p>TOTAL NUMBER OF BUILDINGS: 3 BUILDINGS</p> <p>- 60 TOTAL UNITS</p> <p>PARKING:</p> <ul style="list-style-type: none"> - ATTACHED PRIVATE GARAGES: 24 SPACES - PRIVATE SURFACE (IN FRONT OF GARAGES): 24 SPACES - DETACHED GARAGES: 14 SPACES (2 ADA GARAGE STALLS) - SURFACE PARKING: 76 SPACES (3 ADA STALLS) - TOTAL STALLS: 138 SPACES - PARKING RATIO: 2.30 STALLS PER UNIT <p>ZONING: RM-MULTIPLE FAMILY</p> <ul style="list-style-type: none"> - STREET/FRONT SETBACK: 25 FEET - SIDE YARD SETBACK: 20 FEET - REAR YARD SETBACK: 30 FEET <p>TOTAL ACREAGE:</p> <ul style="list-style-type: none"> - TOTAL AREA: 175,616 SQUARE FEET (4.03 ACRES) - OPEN SPACE: 80,873 SQUARE FEET (1.86 ACRES) - BUILDING/PAVEMENT: 94,743 SQUARE FEET (2.17 ACRES)



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VILLAGE OF UNION GROVE

SITE PLAN

REVISIONS	
1	BID SET 03/17/21
2	PER VILLAGE COMMENTS 05/03/21
3	APPENDUM #1 05/17/21
4	PER VILLAGE COMMENTS 06/22/21

REG. JOB No. 959.00-WI
 PEG PM
 START DATE 11/05/2020
 SCALE 1"=40'
 SHEET C-4
 C-22

SHEET PLAN
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 DESIGNED: HEJ
 CHECKED: ASK
 REVIEWED: ASK
 DATE: 05/17/21

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 GRADING & EROSION CONTROL PLAN



LEGEND

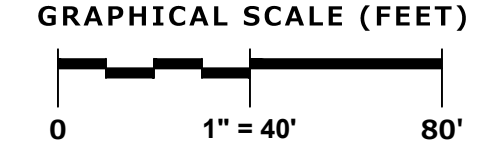
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM CATCH BASIN (ROUND CASTING)
- STORM CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- PROPOSED CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- OVERFLOW RELIEF ROUTING
- SILT FENCE
- INLET PROTECTION
- CONSTRUCTION ENTRANCE
- HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
- EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S75 OR EQUAL)

CONSTRUCTION SEQUENCE

ALL WORK SHALL BE IN CONFORMANCE WITH THE DNR WPDES PERMIT AND VILLAGE OF UNION GROVE EROSION CONTROL PERMIT. SITE SEQUENCING IS ANTICIPATED BASED ON THE BEST INFORMATION AVAILABLE PRIOR TO CONSTRUCTION, DEVIATIONS FROM THE SEQUENCE MAY OCCUR WHEN THERE IS GOOD REASON TO DO SO. ALL CHANGES SHALL BE DOCUMENTED IN WRITING AND REVIEWED/APPROVED BY THE OWNER AND/OR ENGINEER IF NECESSARY.

1. INSTALL PERIMETER SILT FENCE, INLET PROTECTION AND TEMPORARY CONSTRUCTION ENTRANCE.
2. REMOVAL OF ALL SITE FEATURES THAT INTERFERE WITH NEW DEVELOPMENT INCLUDING ASPHALT, CONCRETE, CURB & GUTTER, FENCES, LIGHT POLES, UTILITIES, TREES, LANDSCAPING & ANY FOUNDATIONS.
3. STRIP AND STOCKPILE TOPSOIL. INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
4. CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS OR TEMPORARY SEDIMENT BASIN/TRAP AS NEEDED.
5. BEGIN BUILDING CONSTRUCTION.
6. INSTALL UTILITY PIPING AND STRUCTURES. IMMEDIATELY INSTALL INLET PROTECTION.
7. COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSE, PLACEMENT OF CURBS, PAVEMENT, WALKS, ETC
8. PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
9. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.

SOUTH COLONY AVENUE
 UNITED STATE HIGHWAY "45"



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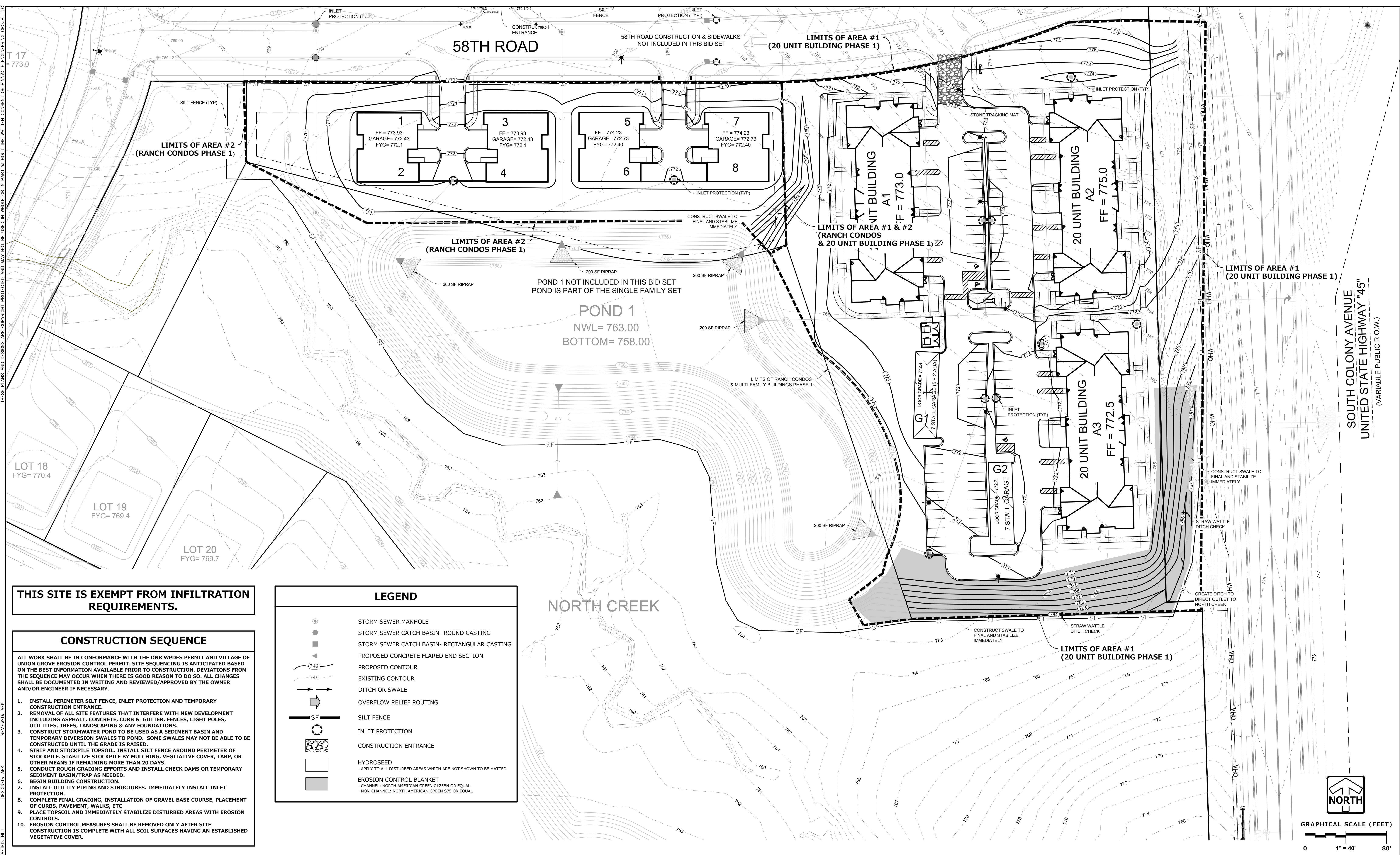
CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

GRADING & EROSION CONTROL PLAN

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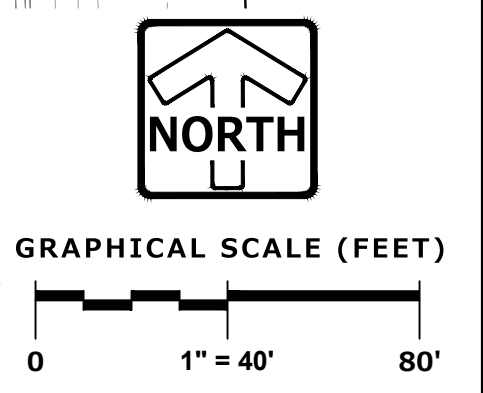
SHEET
C-5
C-22
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THIS SITE IS EXEMPT FROM INFILTRATION REQUIREMENTS.

- CONSTRUCTION SEQUENCE**
- ALL WORK SHALL BE IN CONFORMANCE WITH THE DNR WPDES PERMIT AND VILLAGE OF UNION GROVE EROSION CONTROL PERMIT. SITE SEQUENCING IS ANTICIPATED BASED ON THE BEST INFORMATION AVAILABLE PRIOR TO CONSTRUCTION. DEVIATIONS FROM THE SEQUENCE MAY OCCUR WHEN THERE IS GOOD REASON TO DO SO. ALL CHANGES SHALL BE DOCUMENTED IN WRITING AND REVIEWED/APPROVED BY THE OWNER AND/OR ENGINEER IF NECESSARY.
1. INSTALL PERIMETER SILT FENCE, INLET PROTECTION AND TEMPORARY CONSTRUCTION ENTRANCE.
 2. REMOVAL OF ALL SITE FEATURES THAT INTERFERE WITH NEW DEVELOPMENT INCLUDING ASPHALT, CONCRETE, CURB & GUTTER, FENCES, LIGHT POLES, UTILITIES, TREES, LANDSCAPING & ANY FOUNDATIONS.
 3. CONSTRUCT STORMWATER POND TO BE USED AS A SEDIMENT BASIN AND TEMPORARY DIVERSION SWALES TO POND. SOME SWALES MAY NOT BE ABLE TO BE CONSTRUCTED UNTIL THE GRADE IS RAISED.
 4. STRIP AND STOCKPILE TOPSOIL. INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE. STABILIZE STOCKPILE BY MULCHING, VEGETATIVE COVER, TARP, OR OTHER MEANS IF REMAINING MORE THAN 20 DAYS.
 5. CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS OR TEMPORARY SEDIMENT BASIN/TRAP AS NEEDED.
 6. BEGIN BUILDING CONSTRUCTION.
 7. INSTALL UTILITY PIPING AND STRUCTURES. IMMEDIATELY INSTALL INLET PROTECTION.
 8. COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSE, PLACEMENT OF CURBS, PAVEMENT, WALKS, ETC.
 9. PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
 10. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.

LEGEND	
	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN- ROUND CASTING
	STORM SEWER CATCH BASIN- RECTANGULAR CASTING
	PROPOSED CONCRETE FLARED END SECTION
	PROPOSED CONTOUR
	EXISTING CONTOUR
	DITCH OR SWALE
	OVERFLOW RELIEF ROUTING
	SILT FENCE
	INLET PROTECTION
	CONSTRUCTION ENTRANCE
	HYDROSEED - APPLY TO ALL DISTURBED AREAS WHICH ARE NOT SHOWN TO BE MATTED
	EROSION CONTROL BLANKET - CHANNEL: NORTH AMERICAN GREEN C125M OR EQUAL - NON-CANNEL: NORTH AMERICAN GREEN S75 OR EQUAL



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CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

GRADING & EROSION CONTROL PLAN

REVISIONS	
1. BID SET	03/17/21
2. PER VILLAGE COMMENTS	05/03/21
3. ADDENDUM #1	05/17/21
4. PER VILLAGE COMMENTS	06/22/21

REG. JOB No. 959.00-WI
REG. No. AREK
START DATE 11/06/2020
SCALE 1"=40'

SHEET C-6 C-22

DESIGNED: AREK
DRAFTED: HJ
CHECKED: AREK
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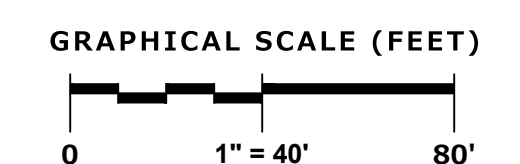
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LEGEND	
	SANITARY SEWER MANHOLE
	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN (ROUND CASTING)
	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
	PRECAST CONCRETE FLARED END SECTION
	VALVE BOX
	FIRE HYDRANT
	SANITARY SEWER
	STORM SEWER
	DRAIN TILE
	WATER MAIN
	UTILITY CROSSING
	ELECTRICAL CABLE
	GAS MAIN
	TELEPHONE LINE
	OVERHEAD WIRES
	LIGHTING
	ELECTRICAL TRANSFORMER OR PESTADAL

STORM SEWER TABLE							
Upstream Structure	Downstream Structure	Length (ft)	Diameter (in)	Slope (%)	Manning Coefficient	Rim/Top Up	Invert Up
MH 11.0	CB 10.0	92.3	24	0.50	0.012	777.90	771.87
CB 10.0	MH 9.0	86.6	24	0.50	0.012	776.90	771.41
MH 9.0	CB 8.0	86.7	24	0.50	0.012	777.70	770.98
CB 8.0	MH 7.0	155.8	24	0.50	0.012	776.90	770.55
MH 7.0	MH 6.0	84.8	30	0.50	0.012	778.50	769.77
MH 6.0	MH 5.0	130.8	30	0.80	0.012	779.00	769.34
MH 5.0	MH 4.0	57.3	30	0.80	0.012	777.10	768.30
MH 4.0	CB 3.0	179.8	30	0.80	0.012	775.60	767.84
CB 3.0	MH 2.0	54.6	30	0.80	0.012	772.50	766.40
MH 2.0	CB 1.0	104.6	30	1.00	0.012	771.50	765.96
CB 1.0	STUB	21.8	42	0.30	0.013	769.90	763.92
STUB	MH 4.1	53.9	42	0.30	0.013	771.23	763.85
CB 11.1	MH 11.0	128.74	18	0.70	0.012	776.00	772.77
AD 11.3	BC 11.2	78.83	8	0.50	0.012	776.80	773.86
BC 11.2	MH 11.0	11.99	8	0.50	0.012	777.70	773.26
AD 9.2	BC 9.1	73.91	8	0.50	0.012	777.60	774.10
BC 9.1	MH 9.0	36.00	8	0.50	0.012	777.90	773.73
AD 9.4	BC 9.3	80.09	8	0.50	0.012	776.80	773.81
BC 9.3	MH 9.0	11.99	8	0.50	0.012	777.60	773.41
CB 7.3	AD 7.2	21.65	18	1.40	0.012	775.80	772.18
AD 7.2	BC 7.1	73.75	18	1.40	0.012	777.86	771.88
BC 7.1	MH 7.0	36.02	18	1.40	0.012	778.60	770.85
AD 7.5	BC 7.4	78.35	8	1.00	0.012	777.50	774.25
BC 7.4	MH 6	11.98	8	1.00	0.012	778.30	773.46
BC 6.2	CB 6.1	36.01	8	0.50	0.012	780.00	774.65
CB 6.1	MH 6.0	67.22	12	1.00	0.012	778.80	774.47
BC 6.3	CB 6.1	12.00	8	0.50	0.012	779.50	774.86
BC 5.2	CB 5.1	12.00	8	0.50	0.012	776.00	771.51
CB 5.1	MH 5.0	81.04	8	1.00	0.012	775.50	771.45
BC 4.2	CB 4.1	12.14	8	1.00	0.012	775.80	771.40
CB 4.1	MH 4.0	62.69	12	0.50	0.012	775.10	770.95
BC 3.2	CB 3.1	36.00	8	1.00	0.012	774.20	769.32
CB 3.1	CB 3.0	82.93	12	0.80	0.012	773.20	768.63
BC 3.3	CB 3.0	12.00	8	0.50	0.012	773.80	768.69
BC 2.2	CB 2.1	33.42	8	1.00	0.012	773.00	768.71
CB 2.1	MH 2.0	41.24	8	1.00	0.012	772.30	768.37
BC 2.3	CB 2.1	11.11	8	1.00	0.012	773.60	768.49

SOUTH COLONY AVENUE
UNITED STATE HIGHWAY "45"
(VARIABLE PUBLIC R.O.W.)



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CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

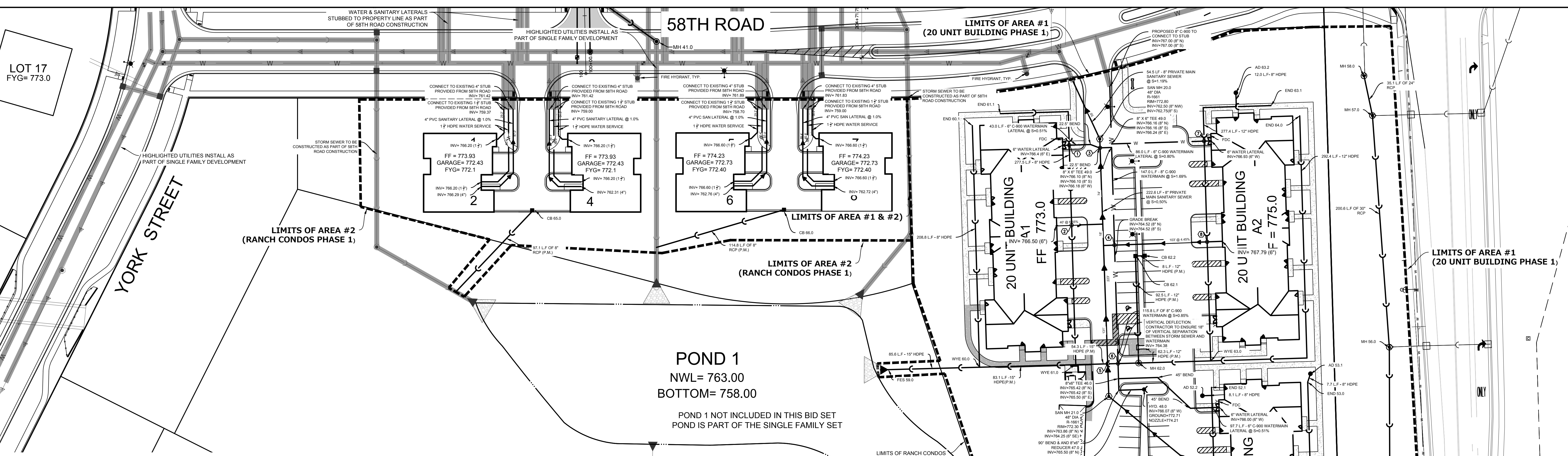
UTILITY PLAN

REVISIONS	
1 - BID SET	03/17/21
2 - PER VILLAGE COMMENTS	05/03/21
3 - ADDENDUM #1	05/17/21
4 - PER VILLAGE COMMENTS	06/22/21

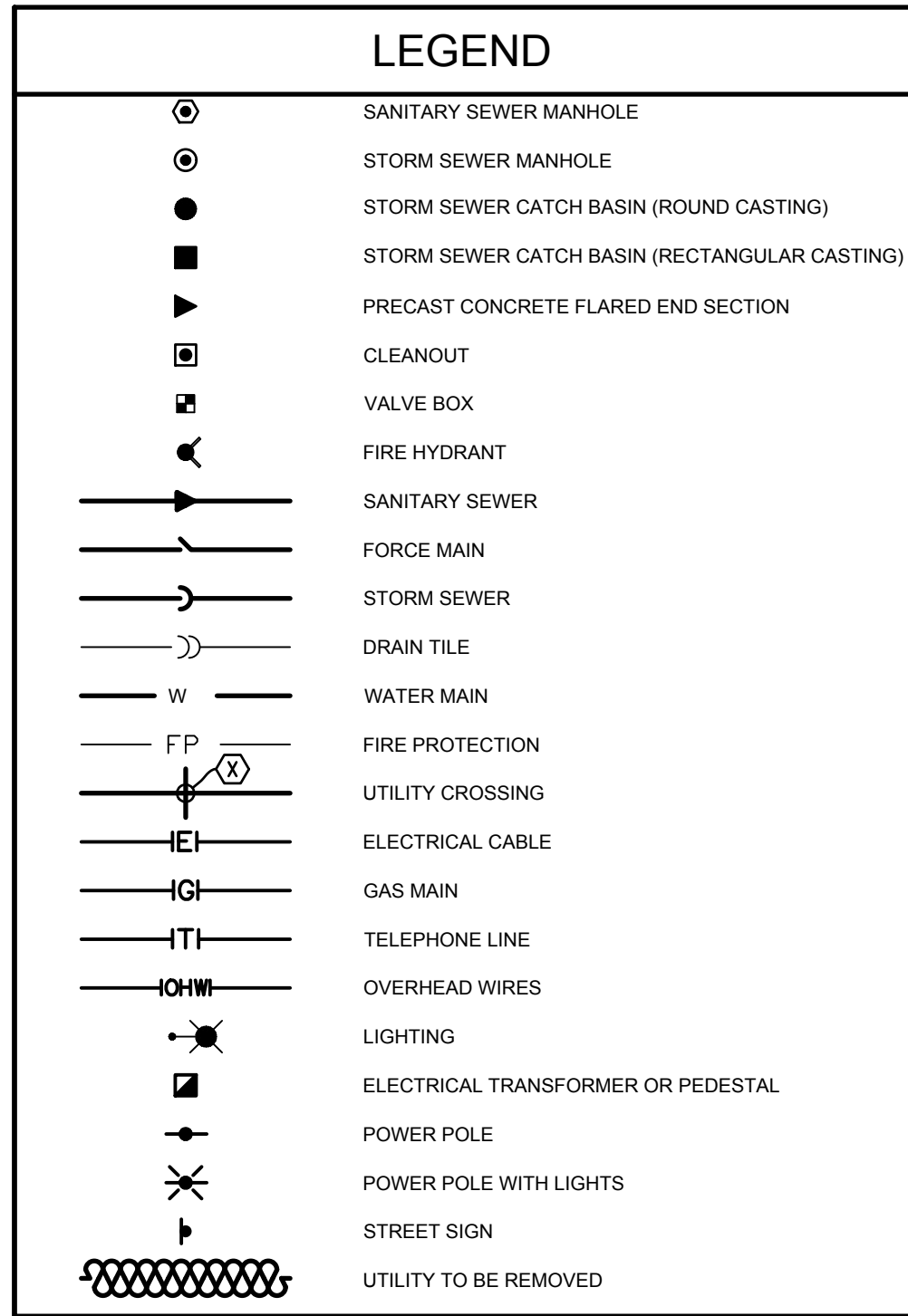
SHEET
C-7
C-22
 SCALE: 1"=40'
 PEG JOB No. 959.00-WT
 AEG
 START DATE: 11/06/2020
 DATE: 11/06/2020

DESIGNED: AEC
DRAWN: HJL
CHECKED: AEC
REVIEWED: AEC
DATE: 05/17/21
PROJECT: 2017\959.00-W\CAD\SHETS\CANOPY HILL MULTIFAMILY SHEETS\C-8 UTILITY PLAN.DWG

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UTILITY PLAN
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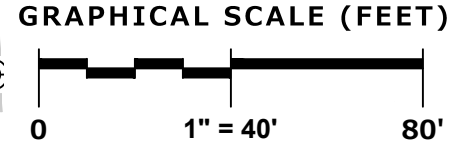
STRUCTURE DATA		PIPE DATA				ELEVATIONS		
Upstream Structure	Downstream Structure	Length (ft)	Diameter (in)	Slope (%)	Manning Coefficient	Rim/Toc Up	Invert Up	Invert Down
AD 53.1	END 53.0	7.7	8	0.85	0.012	771.25	769.01	768.94
END 53.0	WYE 52.0	295.5	8	0.85	0.012	772.30	768.94	766.43
WYE 52.0	CB 51.0	125.0	12	1.00	0.012	771.45	766.10	764.85
CB 51.0	FES 50.0	61.5	12	3.00	0.012	769.80	764.85	763.00
AD 52.2	END 52.1	8.1	8	2.00	0.012	771.60	768.69	768.53
END 52.1	WYE 52.0	210.4	8	1.00	0.012	772.30	768.53	766.43
CB 51.2	CB 51.1	11.3	8	1.50	0.012	771.90	767.78	767.61
CB 51.1	CB 51.0	162.2	12	1.50	0.012	771.30	767.28	764.85
MH 58.0	MH 57.0	35.1	24	0.90	0.013	775.00	770.91	770.59
MH 57.0	MH 56.0	200.6	30	0.90	0.013	775.00	770.09	768.29
MH 56.0	MH 55.0	177.7	36	0.90	0.013	773.50	767.79	766.19
MH 55.0	FES 54.0	78.6	36	1.00	0.013	773.25	766.19	765.40
END 64.0	WYE 63.0	292.4	12	0.70	0.012	774.80	769.75	767.70
WYE 63.0	MH 62.0	62.3	12	0.70	0.012	773.40	767.70	767.26
MH 62.0	WYE 61.0	54.3	15	1.80	0.012	772.60	767.01	766.04
WYE 61.0	WYE 60.0	83.1	15	1.80	0.012	772.20	766.04	764.54
WYE 60.0	FES 59.0	85.6	15	1.80	0.012	772.20	764.54	763.00
AD 63.2	END 63.1	12.0	8	2.00	0.012	773.55	770.22	769.98
END 63.1	WYE 63.0	277.4	12	0.70	0.012	774.80	769.64	767.70
CB 62.2	CB 62.1	8.0	12	1.00	0.012	772.55	767.99	767.91
CB 62.1	MH 62.0	92.5	12	0.70	0.012	771.15	767.91	767.26
END 61.1	WYE 61.0	277.5	8	1.00	0.012	772.80	769.39	766.62
END 60.1	WYE 60.0	208.8	8	1.00	0.012	772.80	767.21	765.12
CB 66.0	FES 40.0	114.8	8	4.00	0.013	771.62	767.72	763.13
CB 65.0	FES 32.0	97.1	8	5.00	0.013	771.20	767.91	763.05



REFER TO CONSTRUCTION DETAILS SHEET FOR ALL UTILITY RELATED CONSTRUCTION DETAILS

CROSSINGS

1	8" STM OVER 6" WAT 6" WAT T.O.P. 766.97 8" STM B.O.P. 768.47	2	6" SAN OVER 8" STM 8" STM B.O.P. 767.78 6" SAN T.O.P. 766.15
3	8" SAN OVER 6" WAT 6" WAT B.O.P. 766.21 8" SAN T.O.P. 763.47	4	8" WAT OVER 6" SAN 8" STM B.O.P. 764.65 8" WAT T.O.P. 764.15
5	15" STM OVER 8" SAN 15" STM B.O.P. 766.46 8" SAN T.O.P. 764.40	6	15" STM OVER 8" WAT 15" STM B.O.P. 766.62 8" WAT T.O.P. 765.10
7	12" STM OVER 6" WAT 12" STM B.O.P. 768.97 6" WAT T.O.P. 767.43	8	12" STM OVER 6" SAN 12" STM B.O.P. 768.36 6" SAN T.O.P. 767.71
9	8" STM OVER 6" SAN 8" STM B.O.P. 767.64 6" SAN T.O.P. 766.29		



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VILLAGE OF UNION GROVE

UTILITY PLAN

REVISIONS

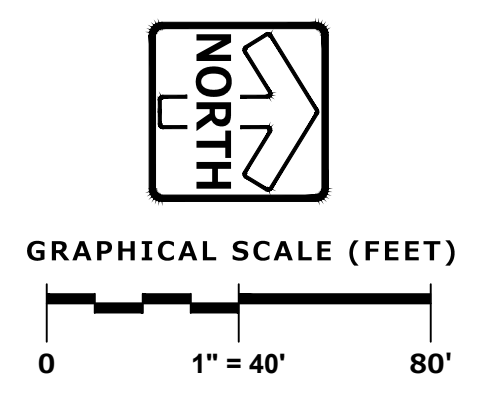
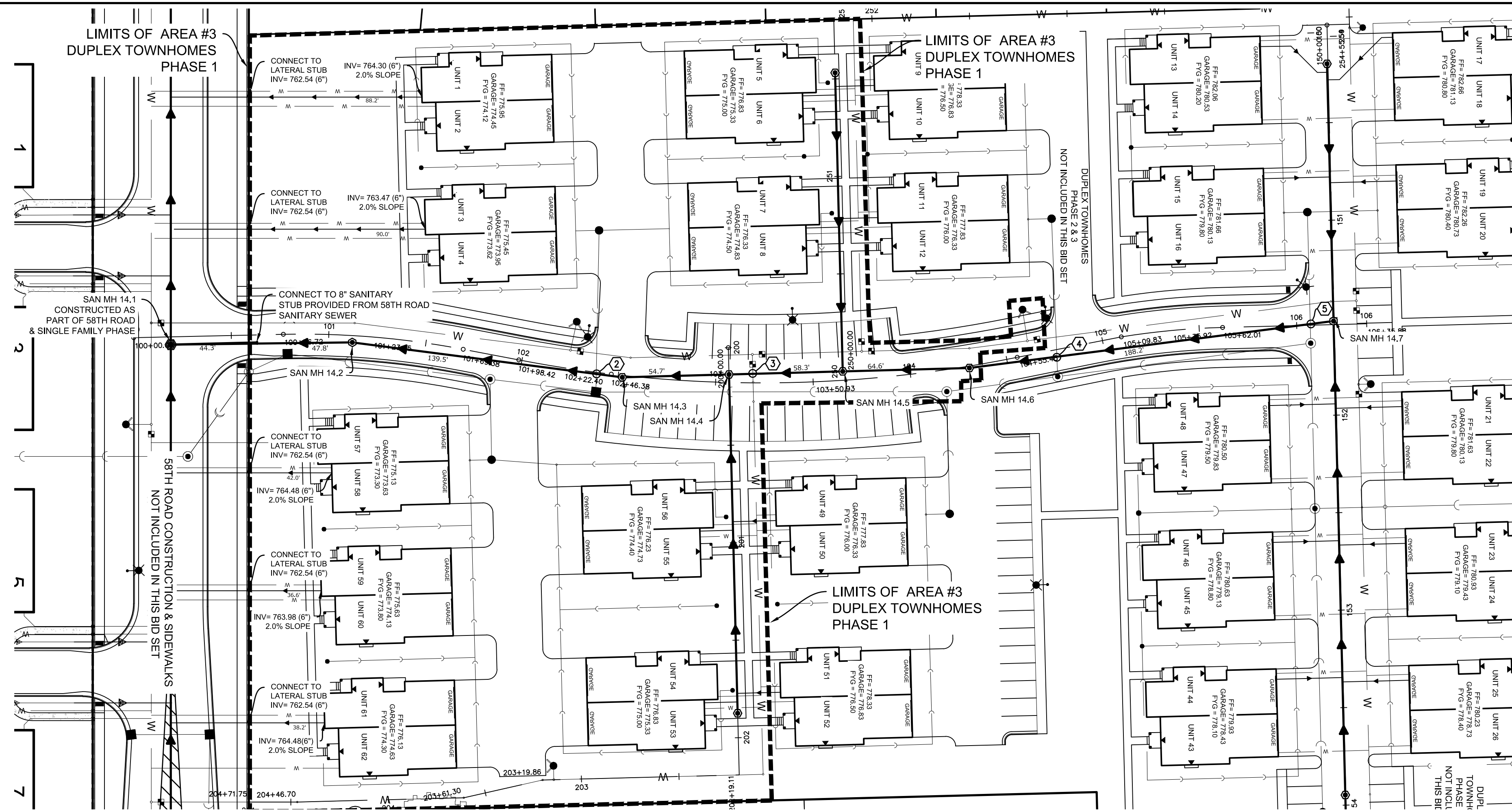
1	BID SET	03/17/21	
2	PER VILLAGE COMMENTS	05/03/21	
3	APPENDUM #1	05/17/21	
4	PER VILLAGE COMMENTS	06/22/21	

REG. JOB No. 959.00-WT
AEC
START DATE 11/05/2020
SCALE 1"=40'

SHEET **C-8**
C-22

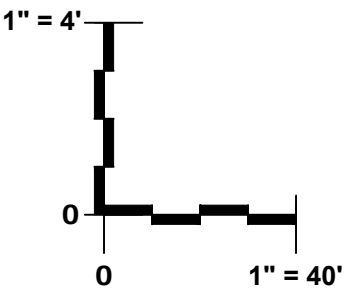
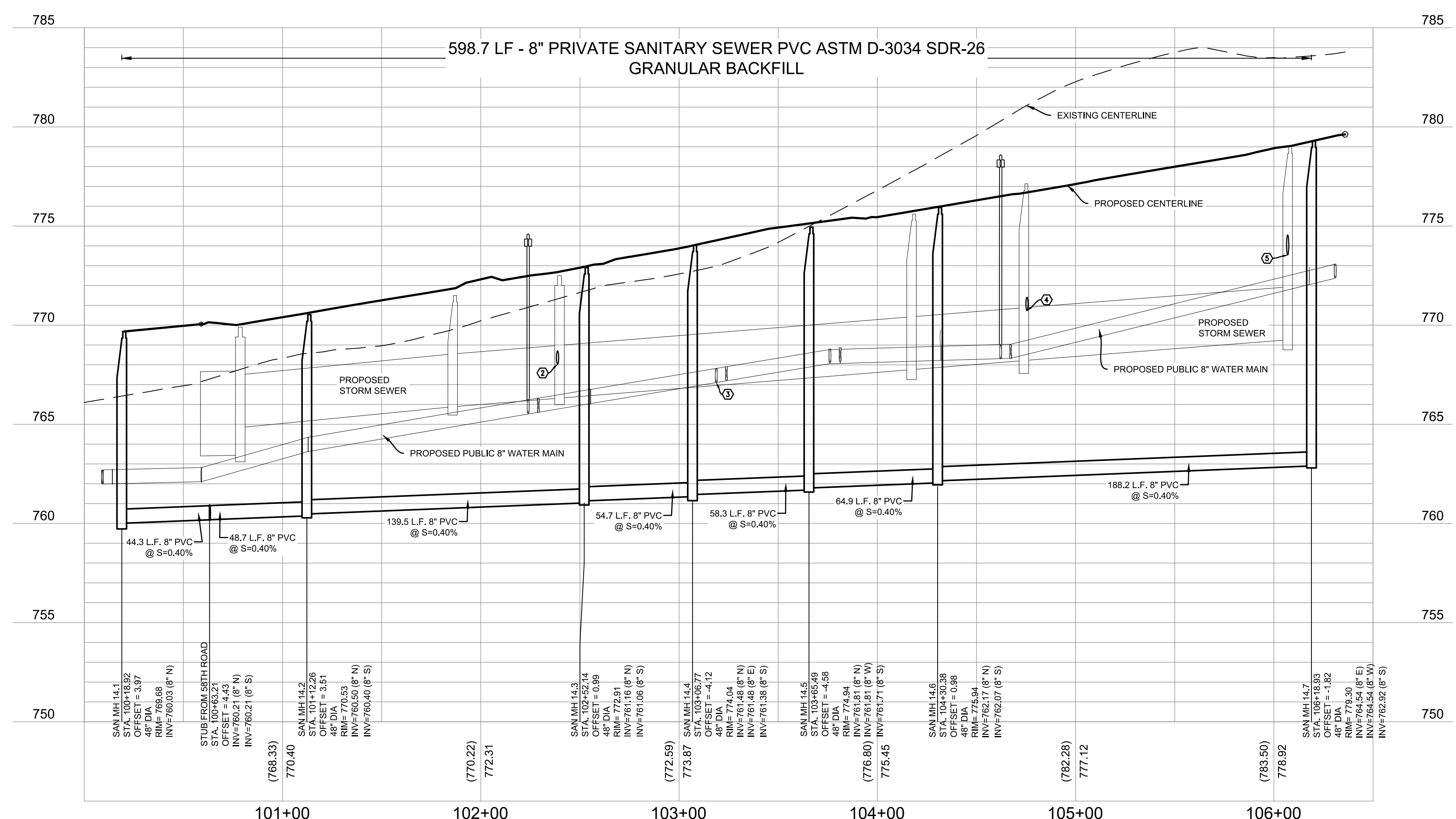
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DESIGNED: MEJ
CHECKED: AEX
DRAWN: MEJ



CROSSINGS	
2	8" STORM OVER 8" SANITARY 8" ST B/PIPE= 768.03 8" SAN T/PIPE= 761.67
3	8" WATER OVER 8" SANITARY 8" WM B/PIPE= 767.14 8" SAN T/PIPE= 762.20
4	8" STORM OVER 8" SANITARY 8" ST B/PIPE= 770.74 8" SAN T/PIPE= 763.02
5	12" STORM OVER 8" SANITARY 12" STM B/PIPE= 773.50 8" SAN T/PIPE= 763.54

ALL SANITARY
LATERALS ARE 6" PVC
SDR 26



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VILLAGE OF UNION GROVE

SANITARY SEWER PLAN & PROFILE

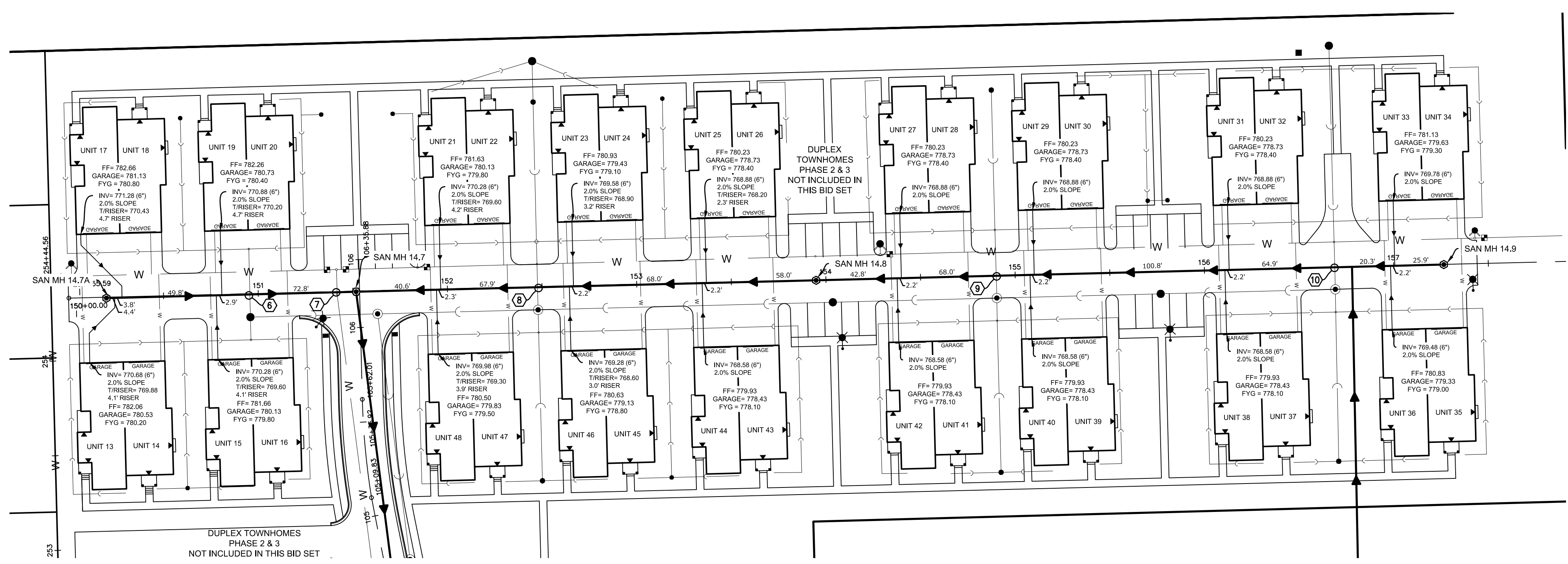
REVISIONS	
1. BID SET	03/17/21
2. PER VILLAGE COMMENTS	05/03/21
3. ADDENDUM #1	05/17/21
4. PER VILLAGE COMMENTS	06/22/21

PROJECT No. 959-00-WI	DATE 05/17/21
SCALE 1"=40'	
SHEET C-9	
C-22	

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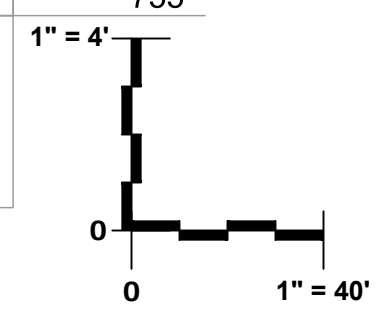
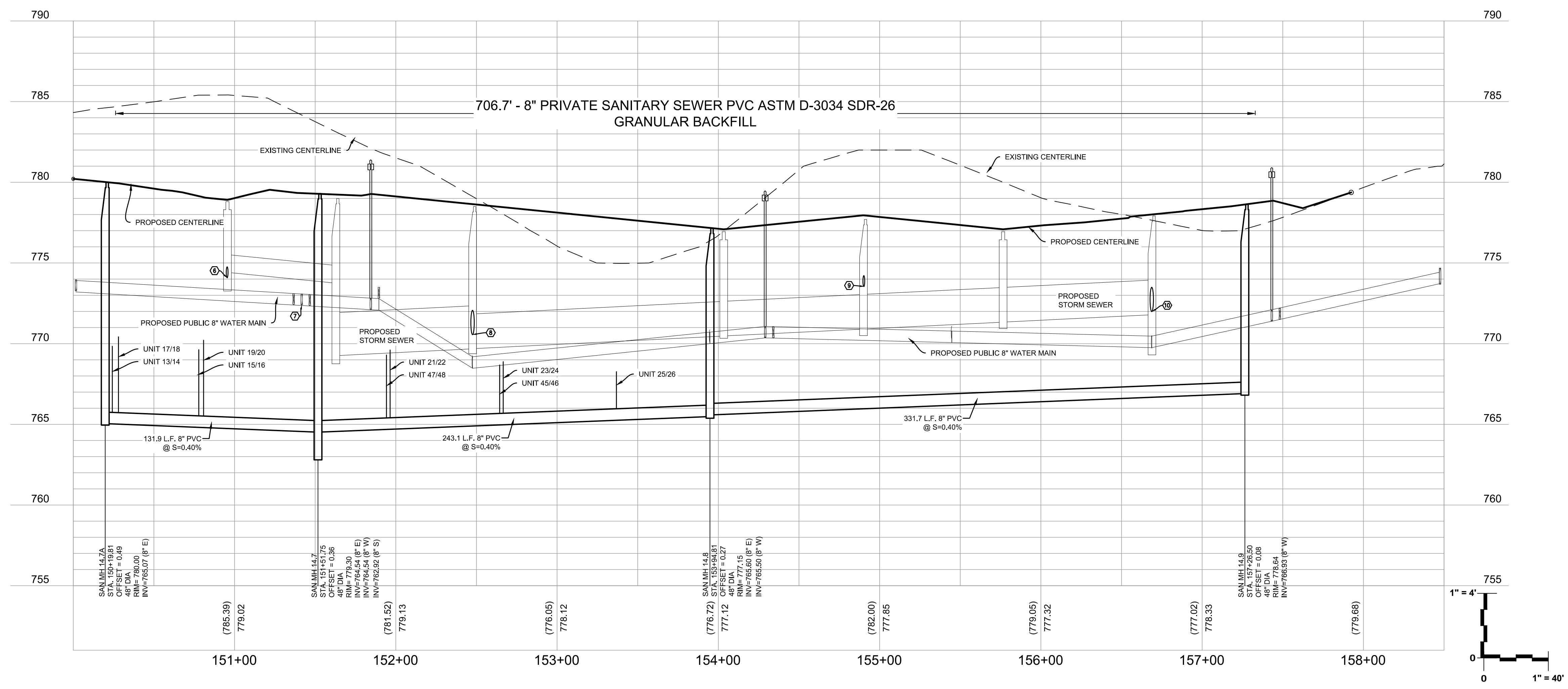
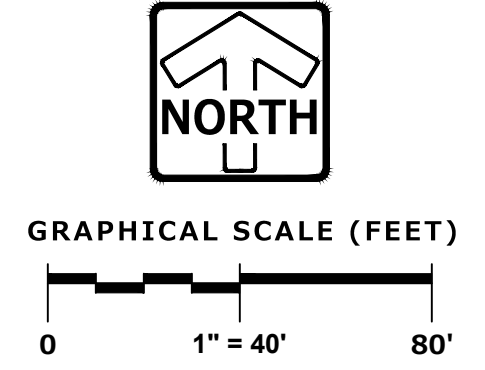
DESIGNED: HLU
DRAFTED: AEX
REVIEWED: AEX

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CROSSINGS	
6	8" STORM OVER 8" SANITARY 8" STM B/PIPE = 774.03 8" SAN T/PIPE = 765.44
7	8" WATER OVER 8" SANITARY 8" WM B/PIPE = 772.21 8" SAN T/PIPE = 765.25
8	18" STORM OVER 8" SANITARY 18" ST B/PIPE = 770.56 8" SAN T/PIPE = 765.59
9	8" STORM OVER 8" SANITARY 8" STM B/PIPE = 773.68 8" SAN T/PIPE = 766.66
10	18" STORM OVER 8" SANITARY 18" STM B/PIPE = 771.95 8" SAN T/PIPE = 767.37

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SANITARY SEWER PLAN & PROFILE

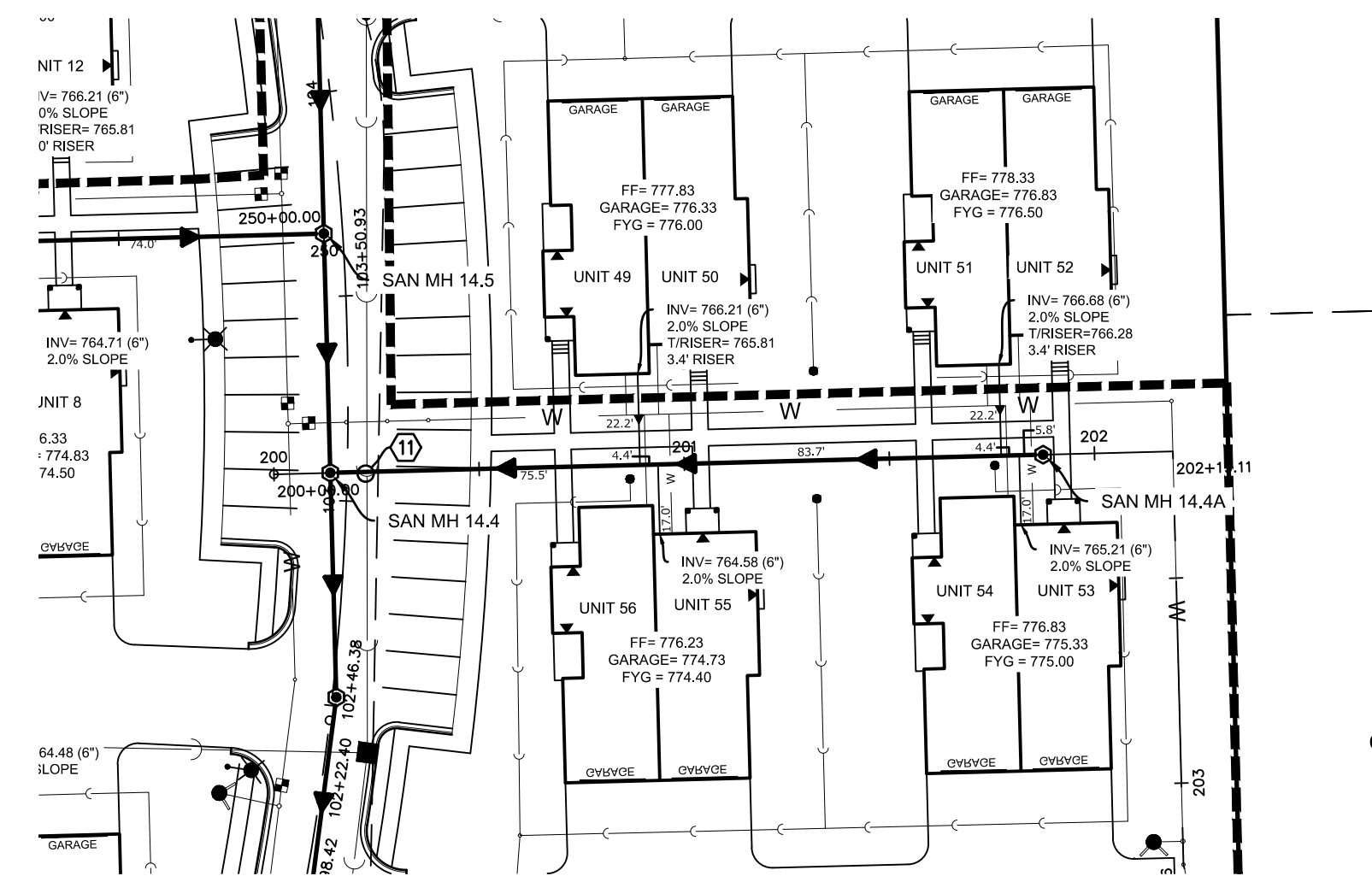
REVISIONS	
1	BID SET 03/17/21
2	PER VILLAGE COMMENTS 05/03/21
3	ADDENDUM #1 05/17/21
4	PER VILLAGE COMMENTS 06/22/21

PROJECT No. 959-00-W1	DATE 05/17/21	SHEET C-10
DESIGNED: HLU	DRAWN: AEX	CHECKED: AEX
START DATE: 05/20/20	SCALE: 1"=40'	SHEET C-22

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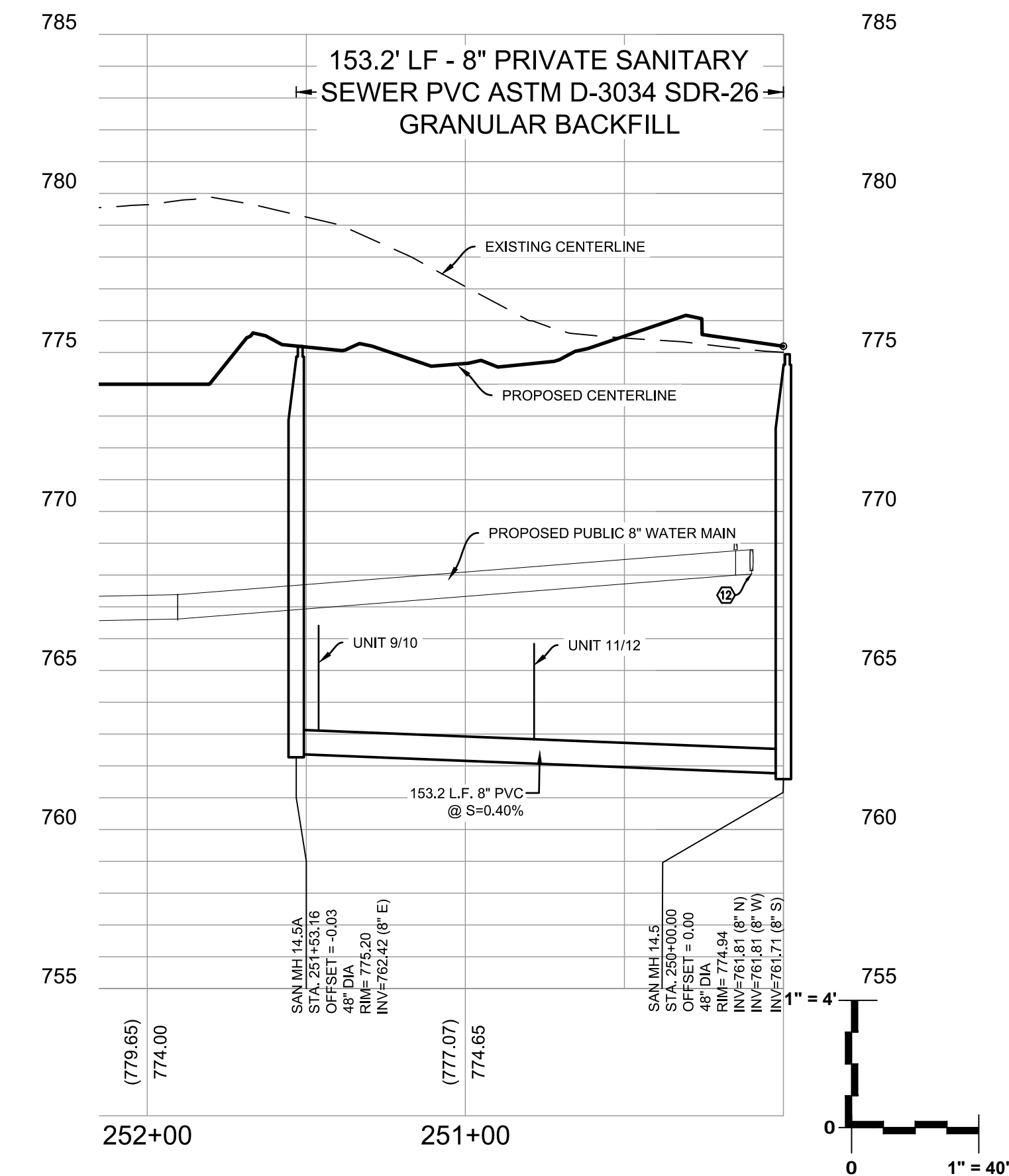
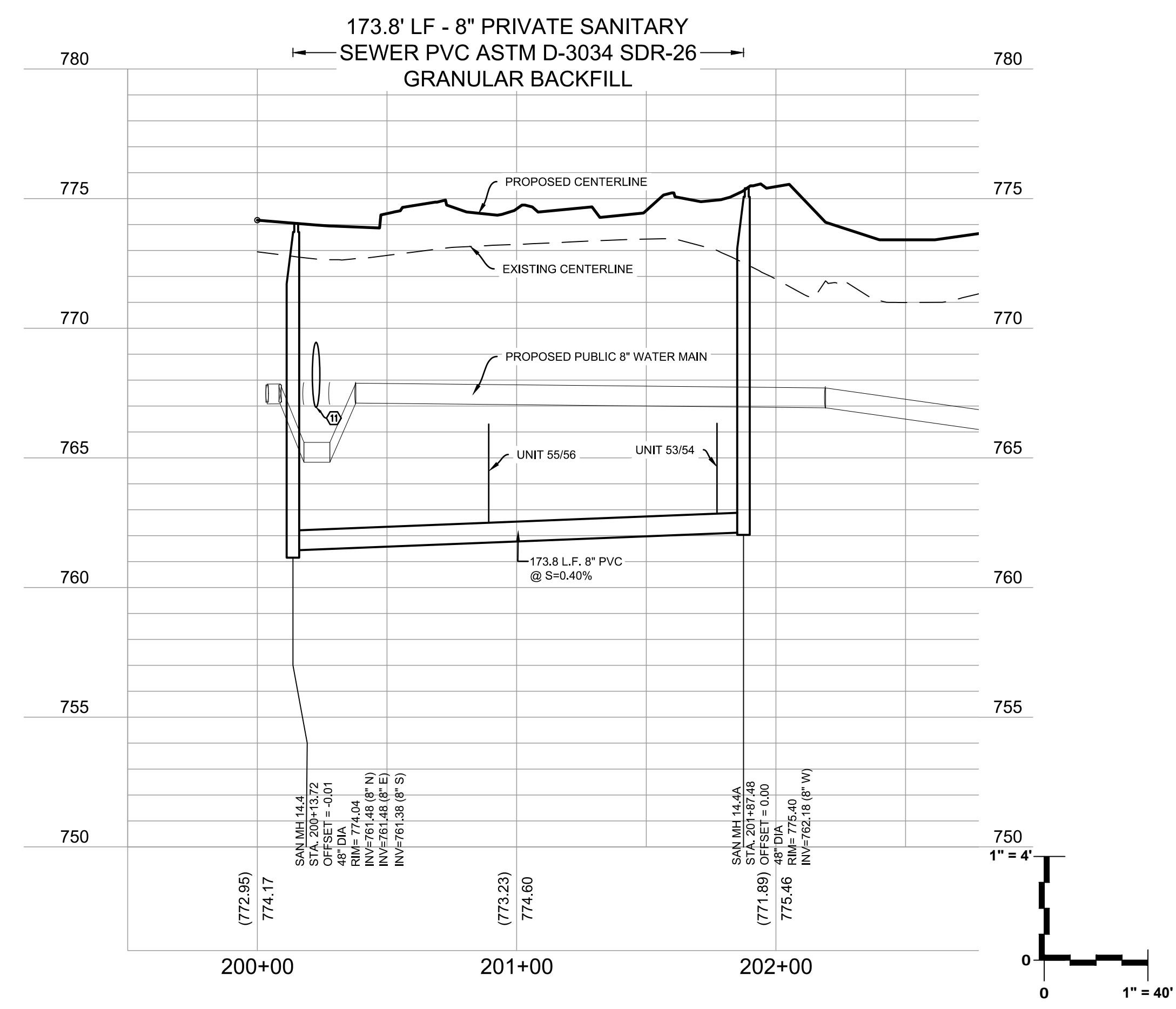
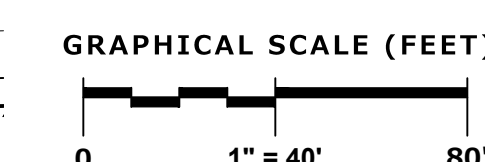
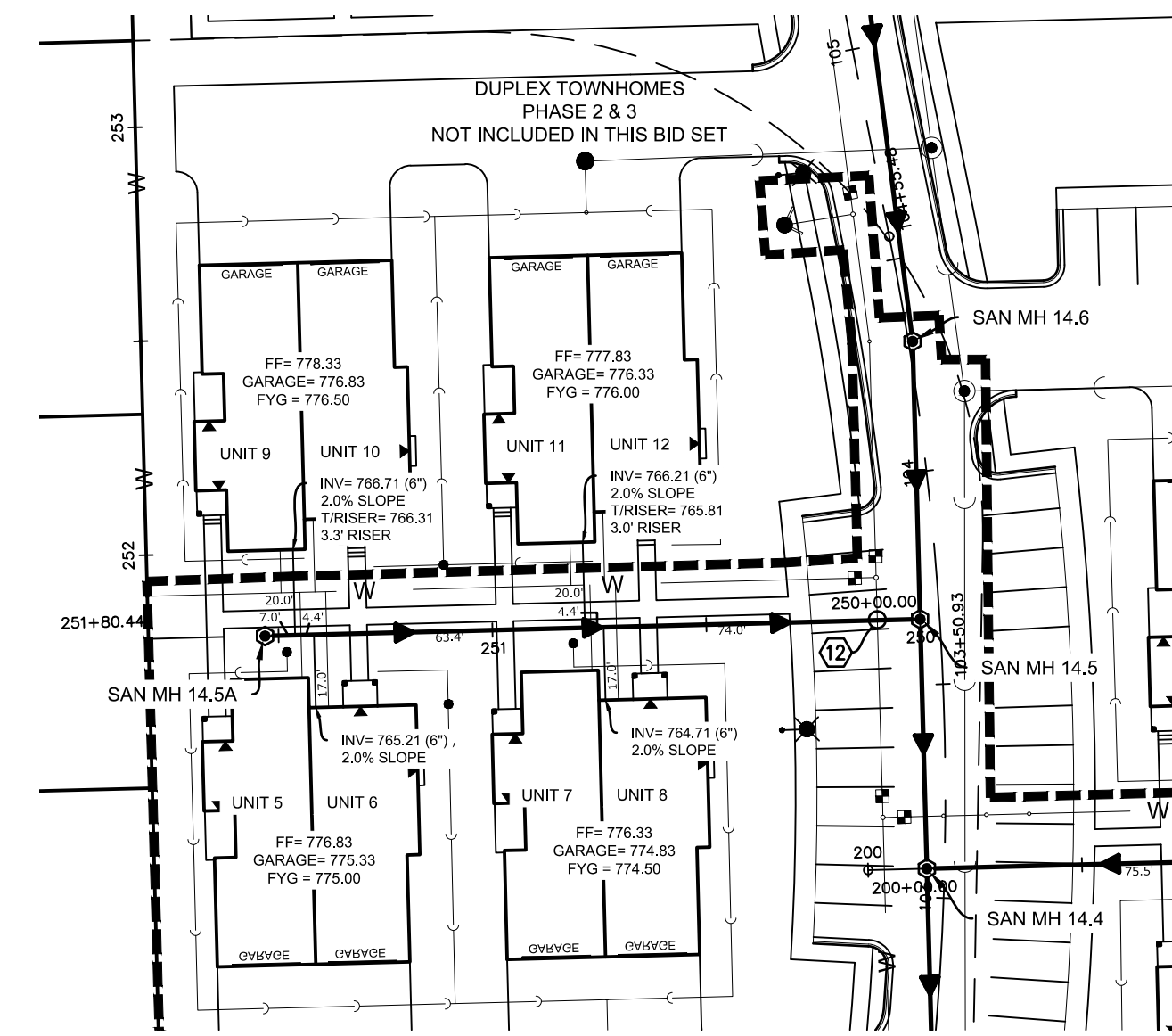
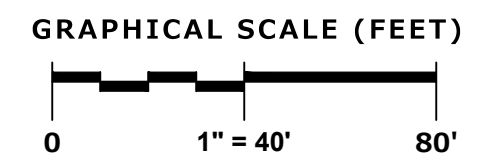
DESIGNED: HLU
DRAFTED: HLU
REVIEWED: AEK

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SANITARY SEWER PLAN & PROFILE
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- CROSSINGS**
- 11 30" STORM OVER
8" SANITARY
30" STM B/PIPE = 766.95
8" SAN T/PIPE = 762.19
 - 12 8" WATER OVER
8" SANITARY
8" WM B/PIPE = 767.91
8" SAN T/PIPE = 762.52

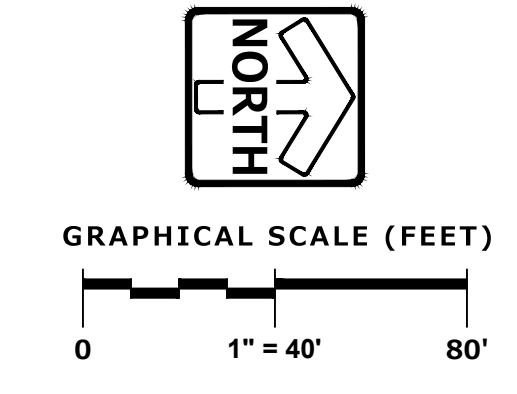
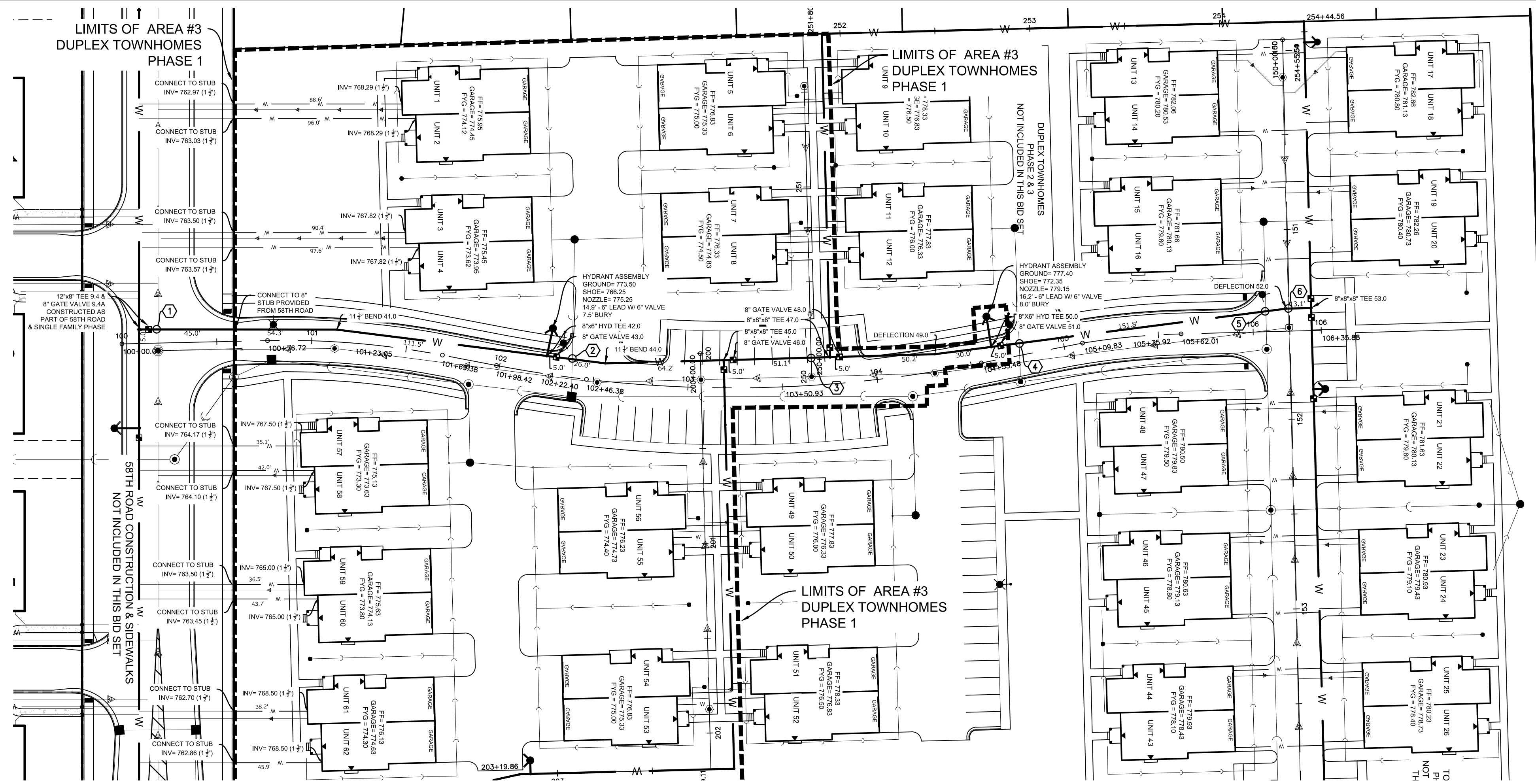
ALL SANITARY
LATERALS ARE 6" PVC
SDR 26



REVISIONS

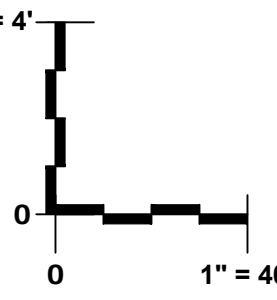
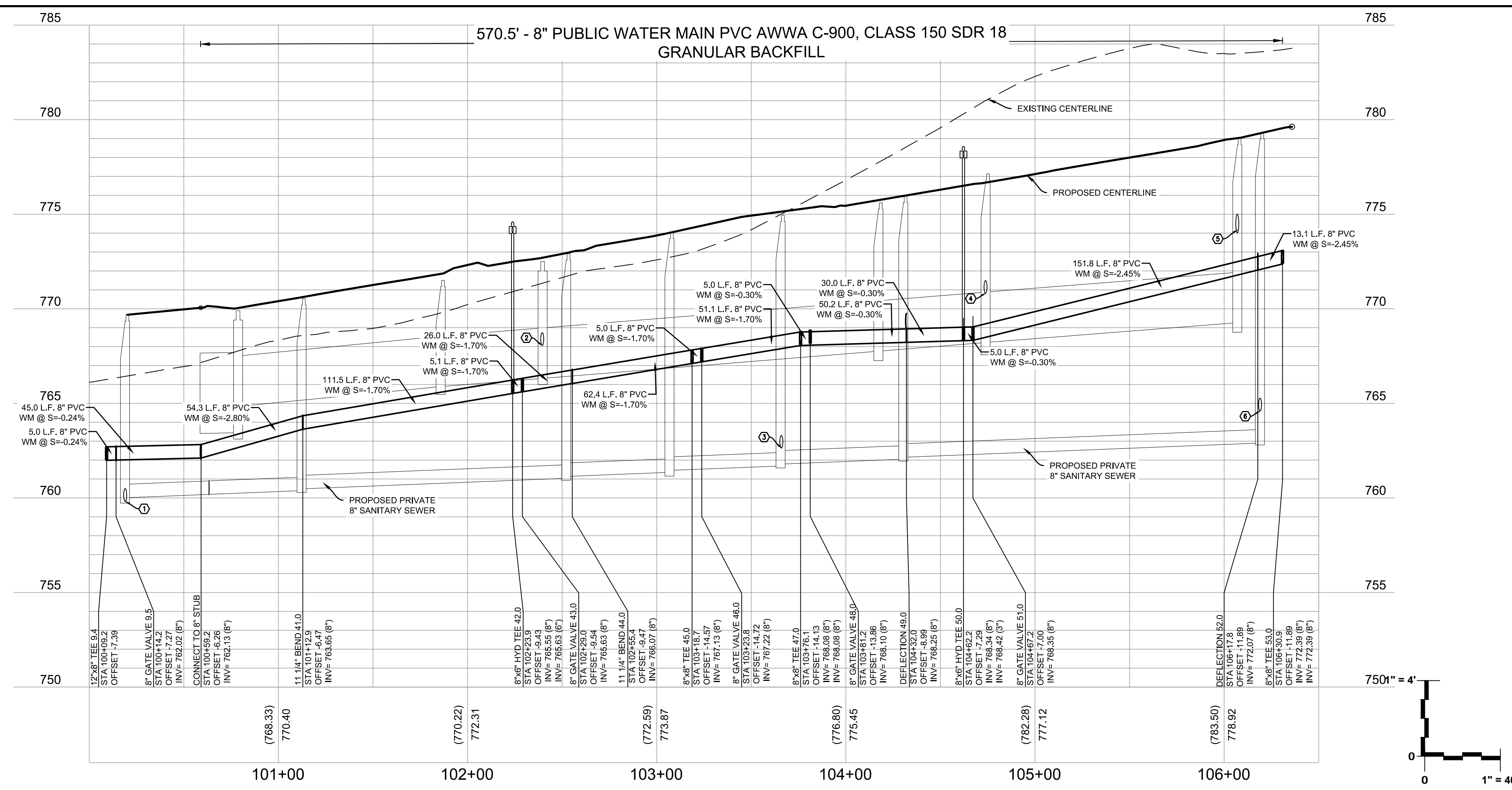
NO.	DESCRIPTION	DATE
1	BID SET	03/17/21
2	PER VILLAGE COMMENTS	05/03/21
3	ADDENDUM #1	05/17/21
4	PER VILLAGE COMMENTS	06/22/21

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CROSSINGS	
1	12" WATER OVER 8" SANITARY 12" WM B/PIPE= 762.03 8" SAN T/PIPE= 760.05
2	8" WATER OVER 8" SANITARY 8" WM B/PIPE= 768.12 8" SAN T/PIPE= 766.44
3	8" WATER OVER 8" SANITARY 8" WM B/PIPE= 767.91 8" SAN T/PIPE= 762.52
4	8" STORM OVER 8" WATER 8" ST B/PIPE= 770.84 8" WM T/PIPE= 769.27
5	12" STORM OVER 8" WATER 12" ST B/PIPE= 774.00 8" WM T/PIPE= 772.47
6	8" WATER OVER 8" SANITARY 8" WM B/PIPE= 772.07 8" SAN T/PIPE= 764.58

ALL WATER LATERALS
ARE 1 1/2" HDPE TUBING,
SDR 9, 200 PSI



DESIGNED: HJJ
REVIEWED: AEK

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CANOPY HILL MULTI-FAMILY DEVELOPMENT VILLAGE OF UNION GROVE

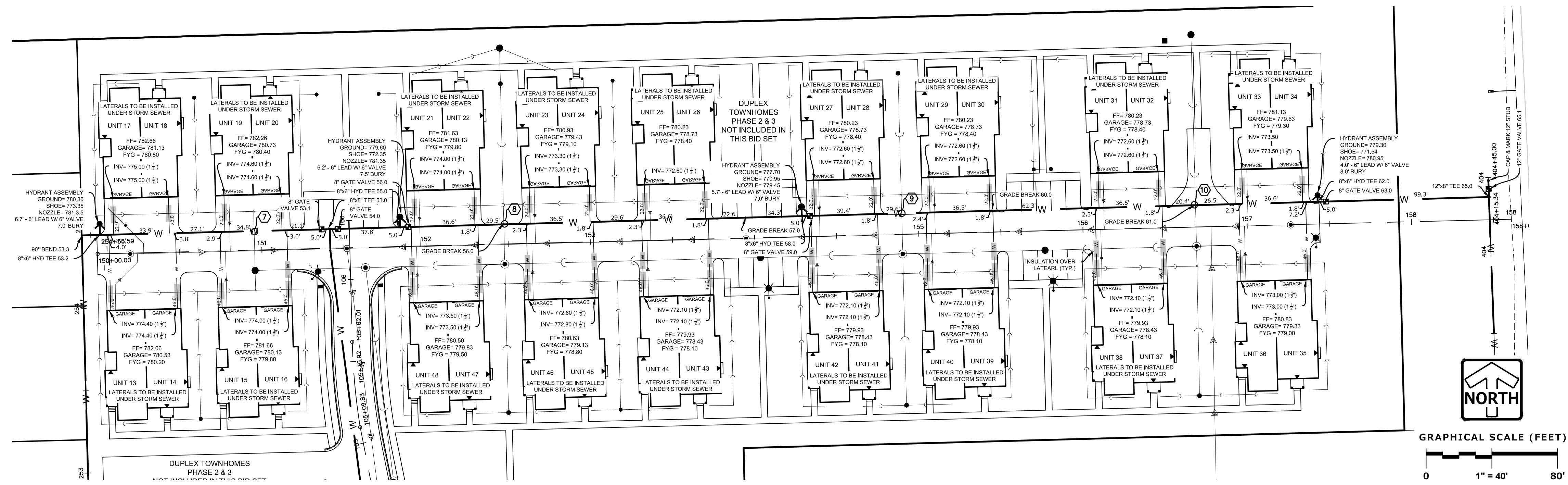
WATER MAIN PLAN & PROFILE

REVISIONS	
1	BID SET 03/17/21
2	PER VILLAGE COMMENTS 05/03/21
3	ADDENDUM #1 05/17/21
4	PER VILLAGE COMMENTS 06/22/21

REG JOB NO. 9959.00-W1	REG PM A/E/K	START DATE 11/06/2020	SCALE 1"=40'
SHEET C-12		SHEET C-22	

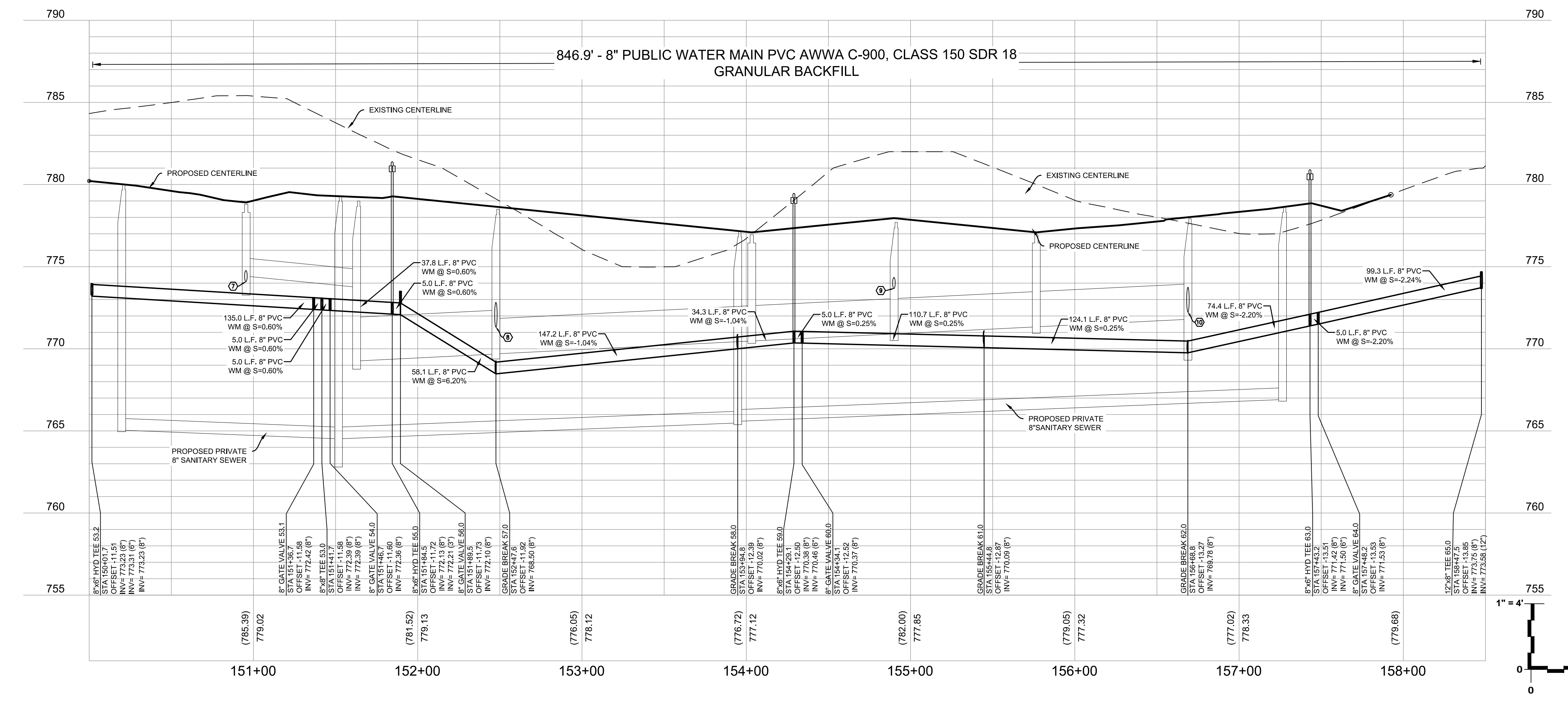
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WATER MAIN PLAN & PROFILE
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REVIEWED: AEK
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CROSSINGS	
7	8" STORM OVER 8" WATER 8" ST B/PIPE= 774.09 8" WM T/PIPE= 772.34
8	18" STORM OVER 8" WATER 18" ST B/PIPE= 770.68 8" WM T/PIPE= 769.17
9	8" STORM OVER 8" WATER 8" ST B/PIPE= 773.67 8" WM T/PIPE= 770.90
10	18" STORM OVER 18" WATER 18" ST B/PIPE= 772.04 8" WM T/PIPE= 770.45

ALL WATER LATERALS ARE 1 1/2" HDPE TUBING, SDR 9, 200 PSI



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CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

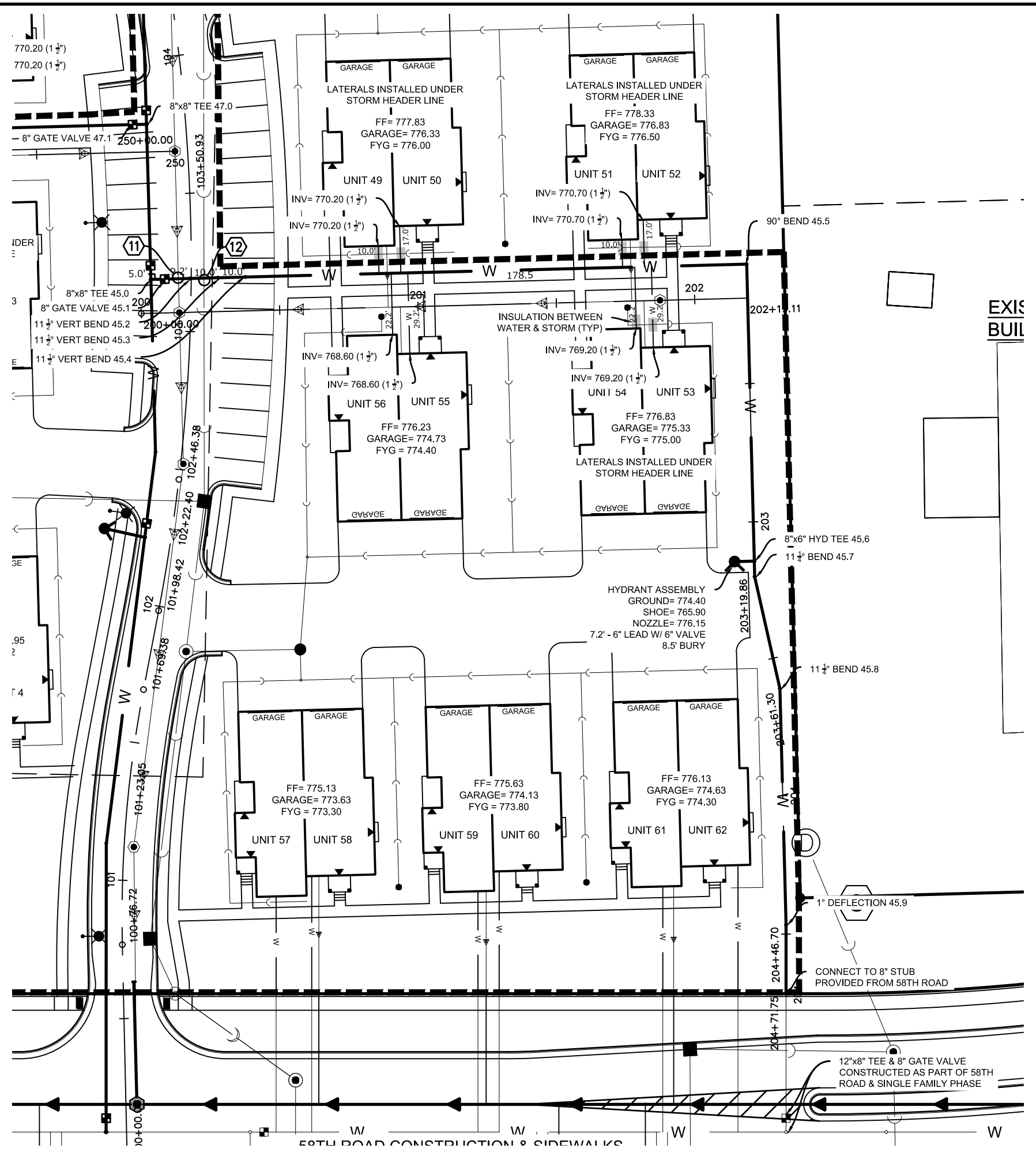
WATER MAIN PLAN & PROFILE

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REG JOB NO.	955.00-WI	SHEET	C-13
REG PM	AEK	SHEET	C-22
START DATE	11/06/2020	SCALE	1"=40'
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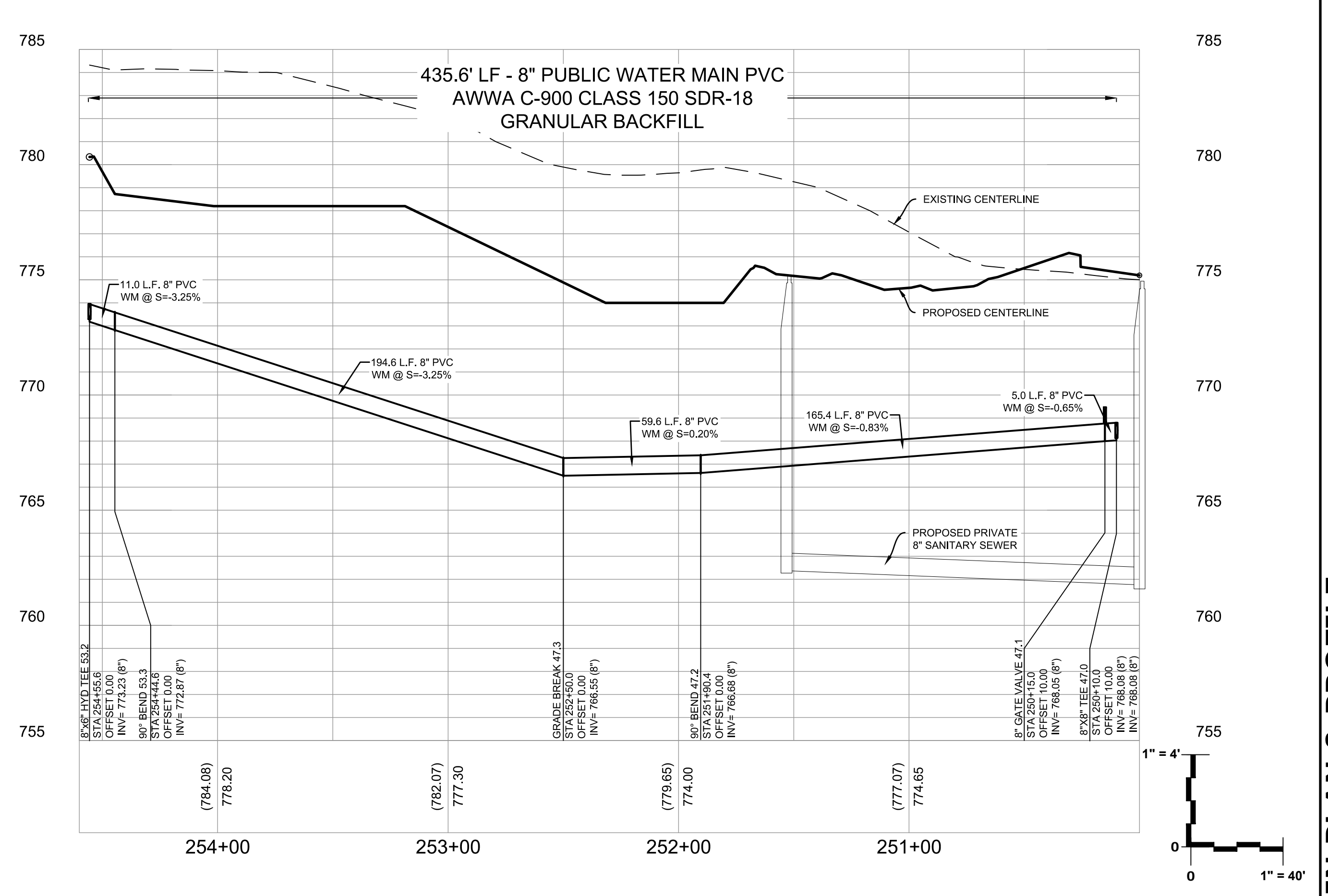
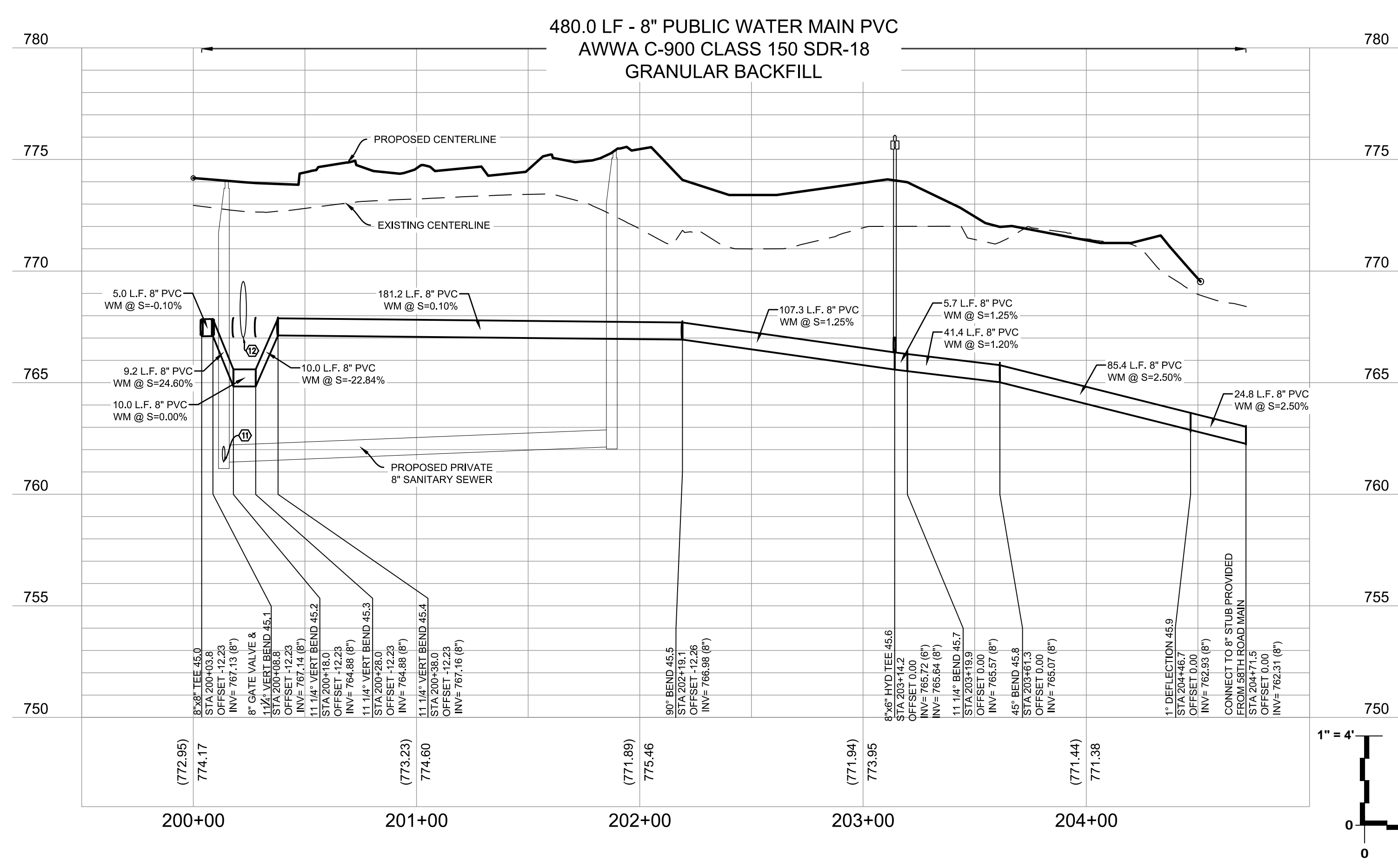
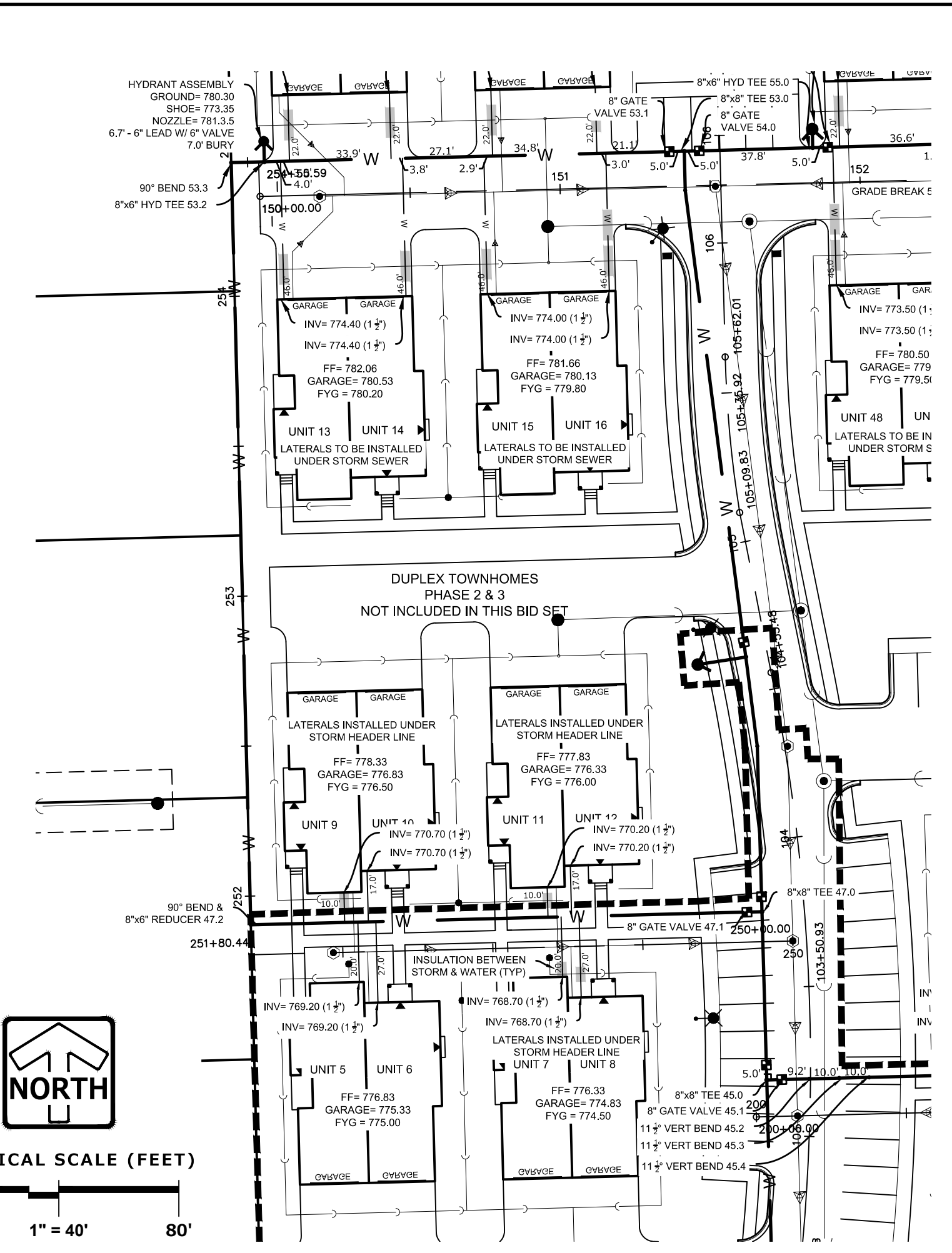
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CROSSINGS	
11	8" WATER OVER 8" SANITARY 8" WM B/PIPE= 767.14 8" SAN T/PIPE= 762.20
12	30" STORM OVER 8" WATER 30" ST B/PIPE= 767.05 8" WM T/PIPE= 765.55

ALL WATER LATERALS ARE 1 1/2" HDPE TUBING, SDR 9, 200 PSI



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REVIEWED: AEK

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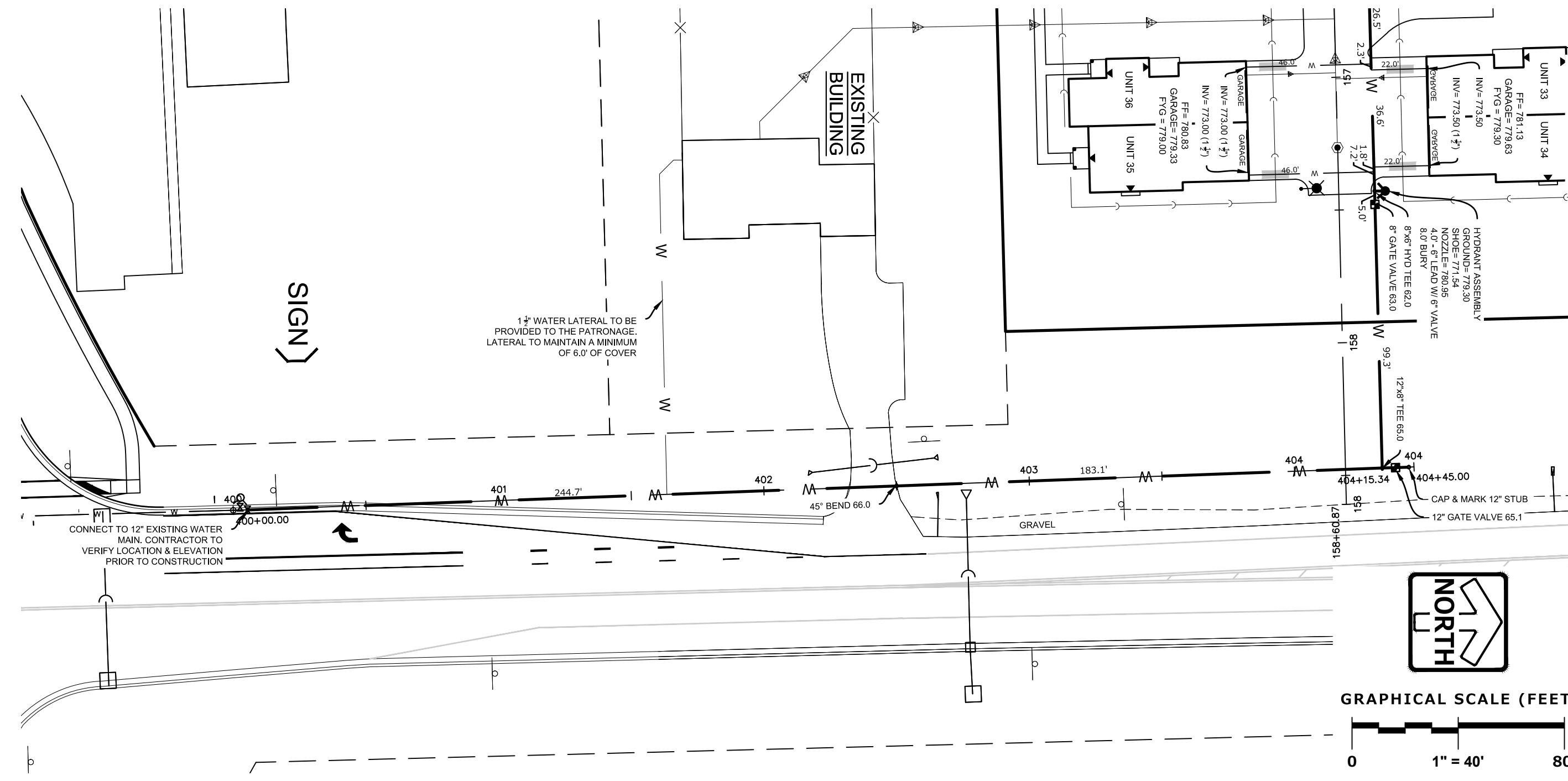
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REG JOB No. 959.00-WI
 AEK
 SCALE 1"=40'
 SHEET C-14
 C-22
 START DATE 11/06/2020
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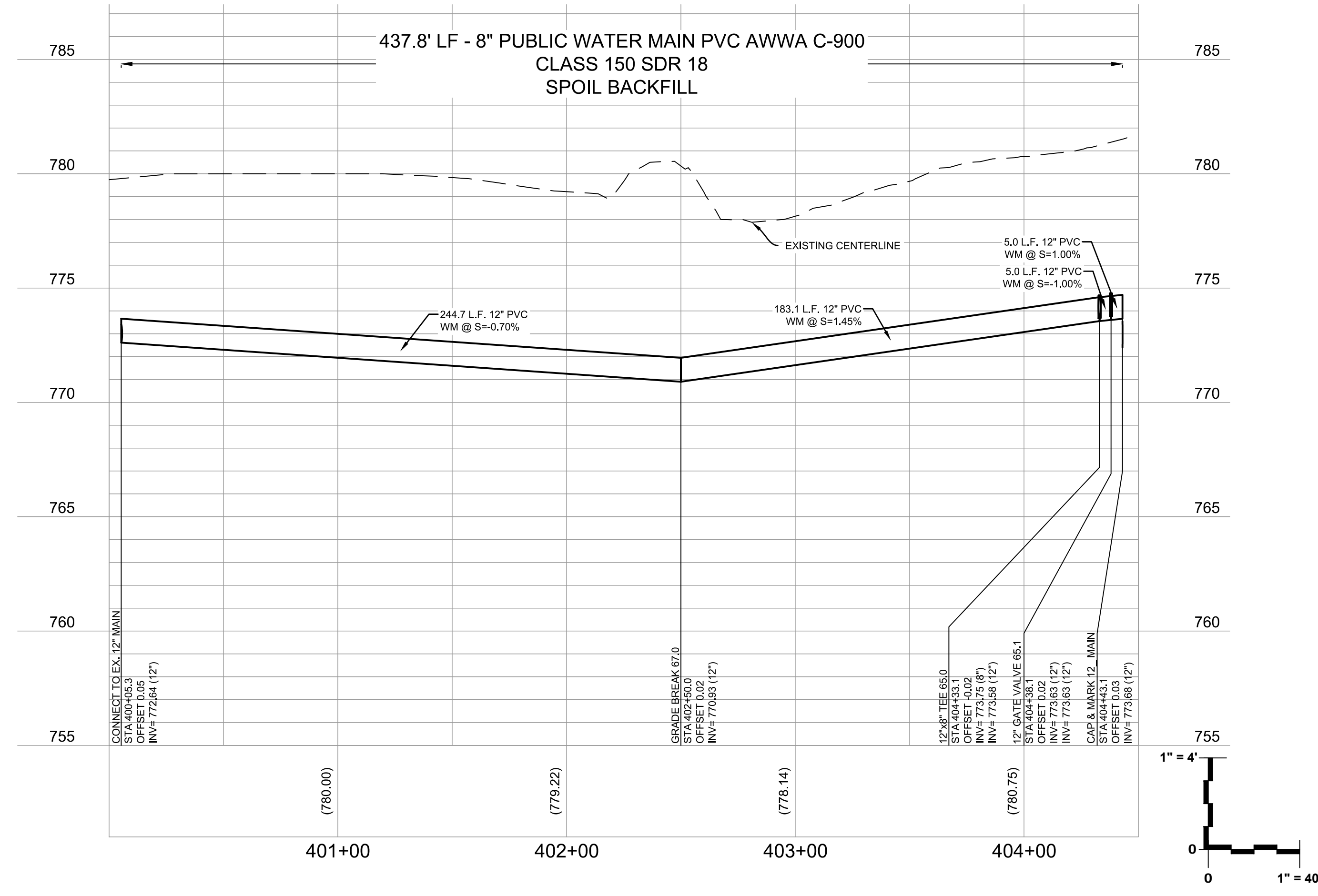
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DESIGNED: AEK
REVIEWED: AEK

DRAFTED: HLJ



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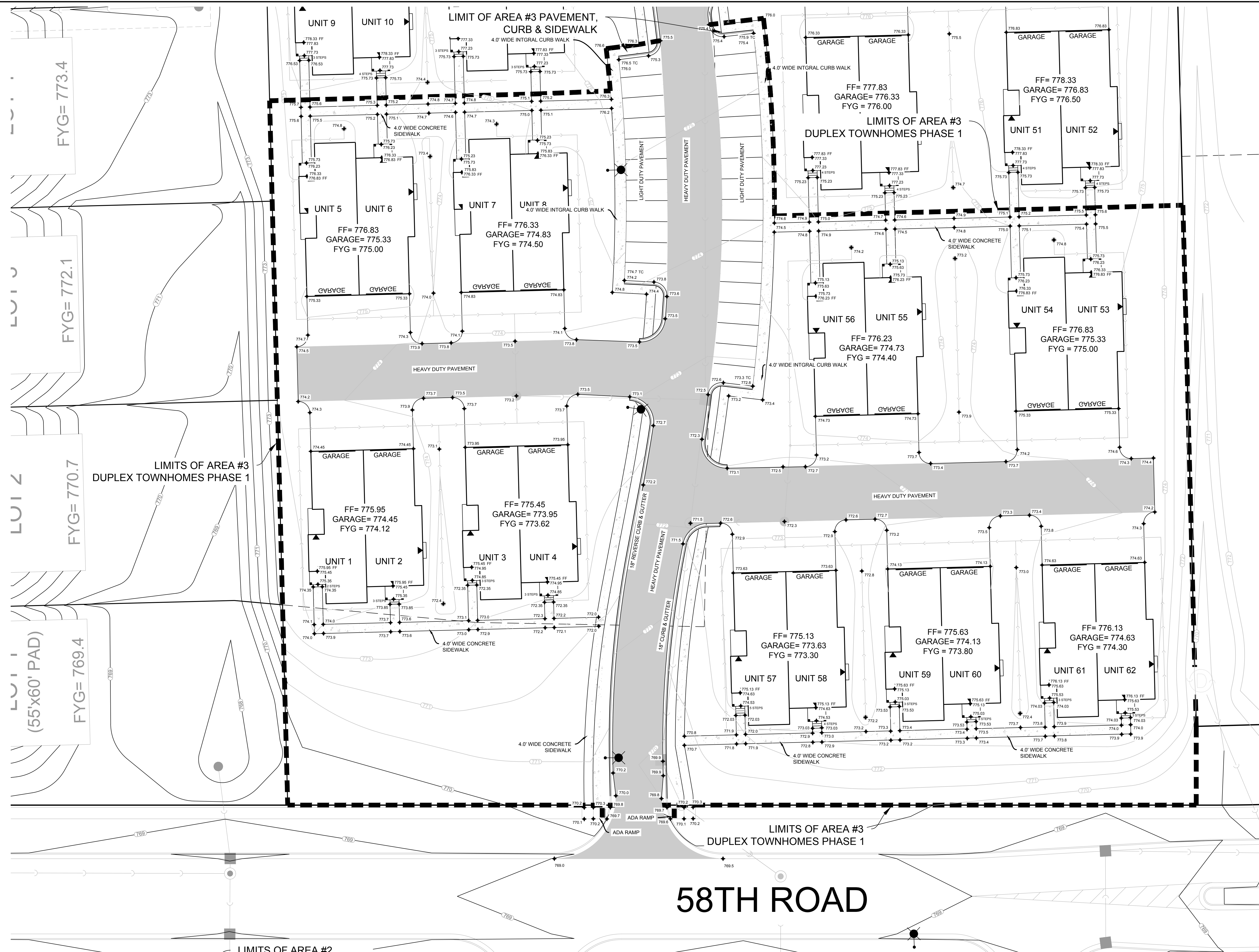
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REG JOB NO.	959.00-WI	SHEET	C-15
REG PM	AEK	SHEET	C-22
START DATE	11/06/2020		
SCALE	1"=40'		

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VILLAGE OF UNION GROVE

PAVING PLAN

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REG JOB NO. 959-00-WI
REG PM A/EK
START DATE 11/06/2020
SCALE 1"=40'

SHEET
C-16
C-22

PAVING PLAN

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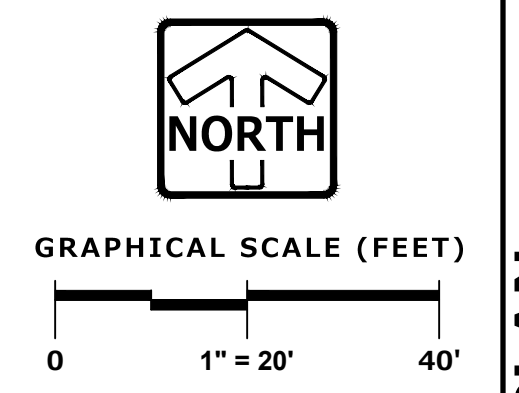
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FYG= 777.3

FYG= 776.1

FYG= 774.8

FYG= 773.4



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VILLAGE OF UNION GROVE

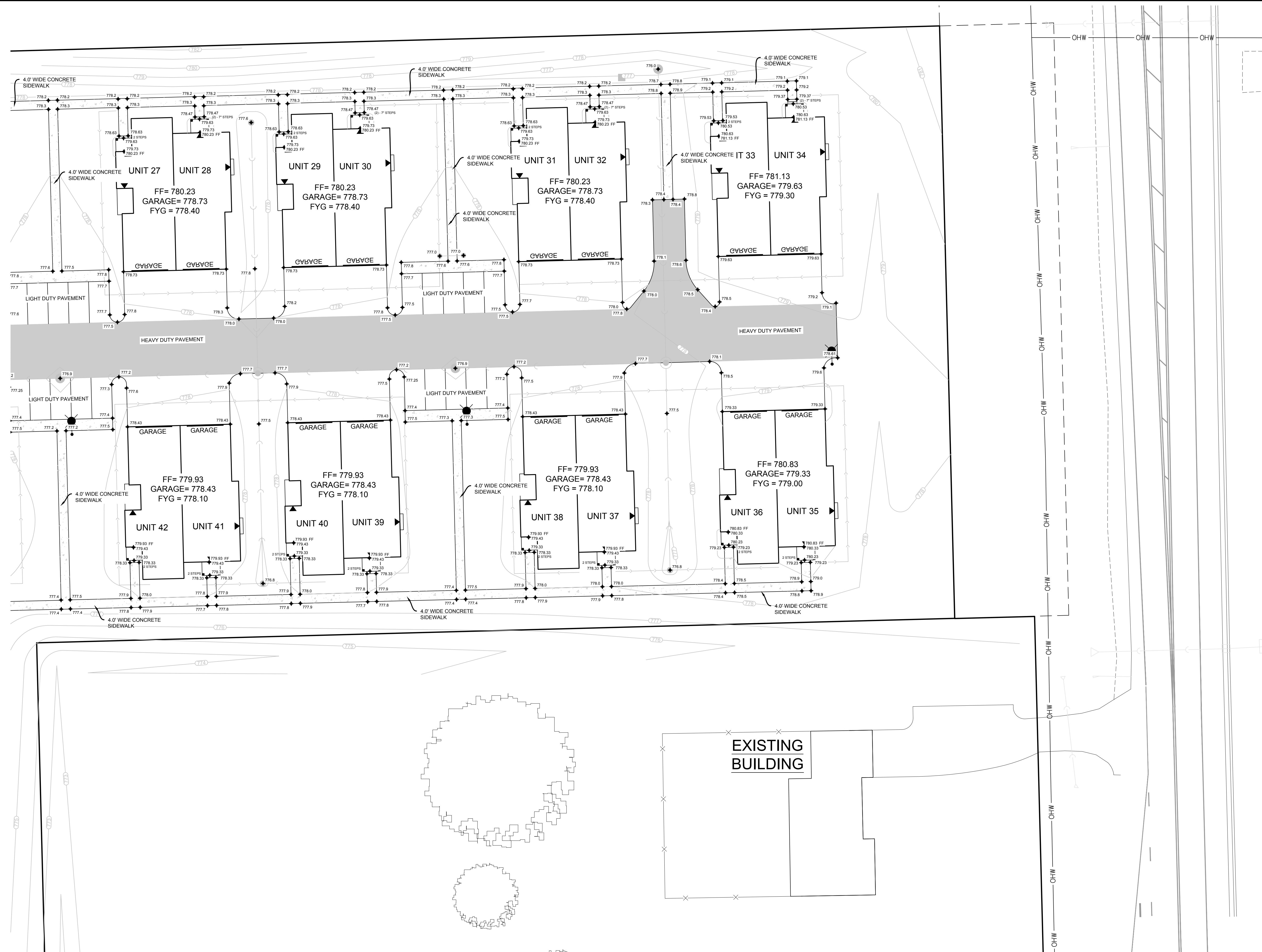
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REG JOB No.	959-00-WI	SHEET	C-17
REG PM	AJK	SHEET	C-22
START DATE	11/06/2020		
SCALE	1"=20'		

PAVING PLAN

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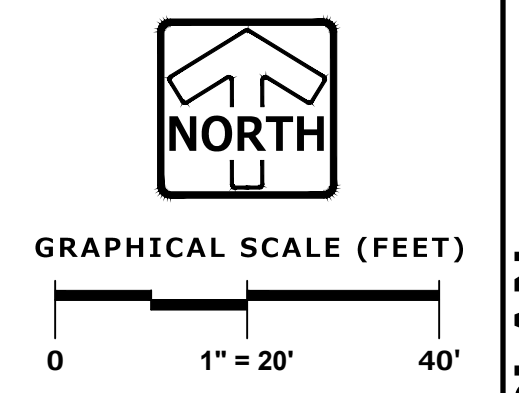


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 DEVELOPMENT
 VILLAGE OF UNION GROVE**

PAVING PLAN

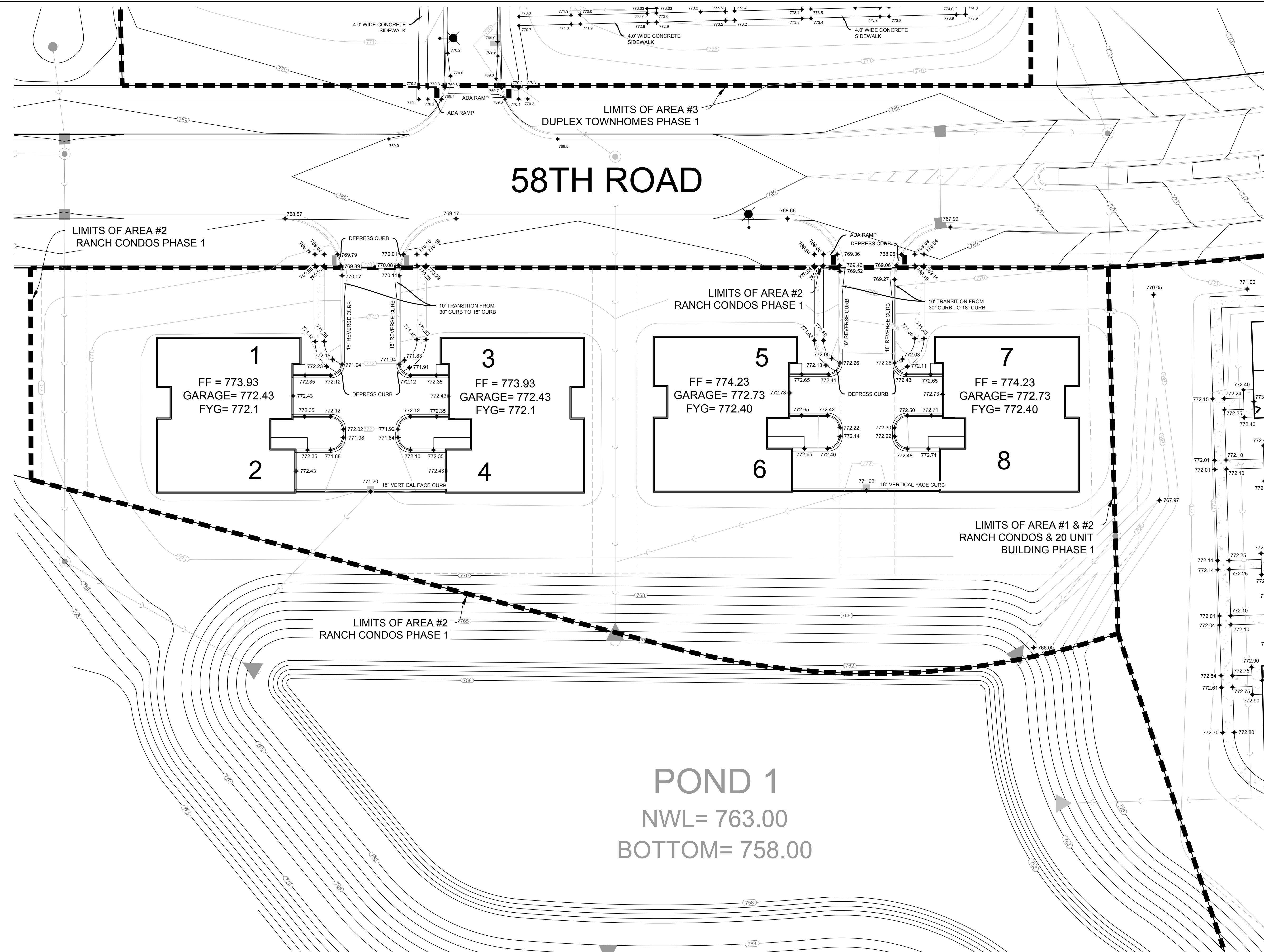
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REG JOB No. 959-00-WI	REG PM ALEK	START DATE 11/06/2020	SCALE 1"=20'
SHEET			C-18
SHEET			C-22

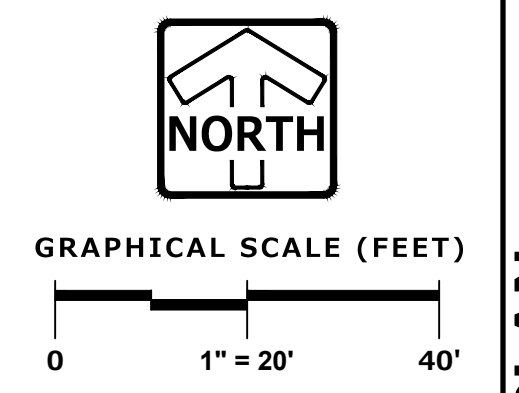
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58TH ROAD

POND 1
NWL= 763.00
BOTTOM= 758.00



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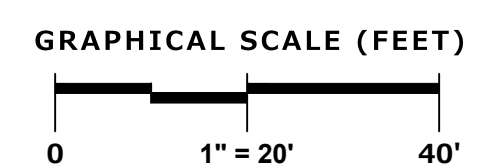
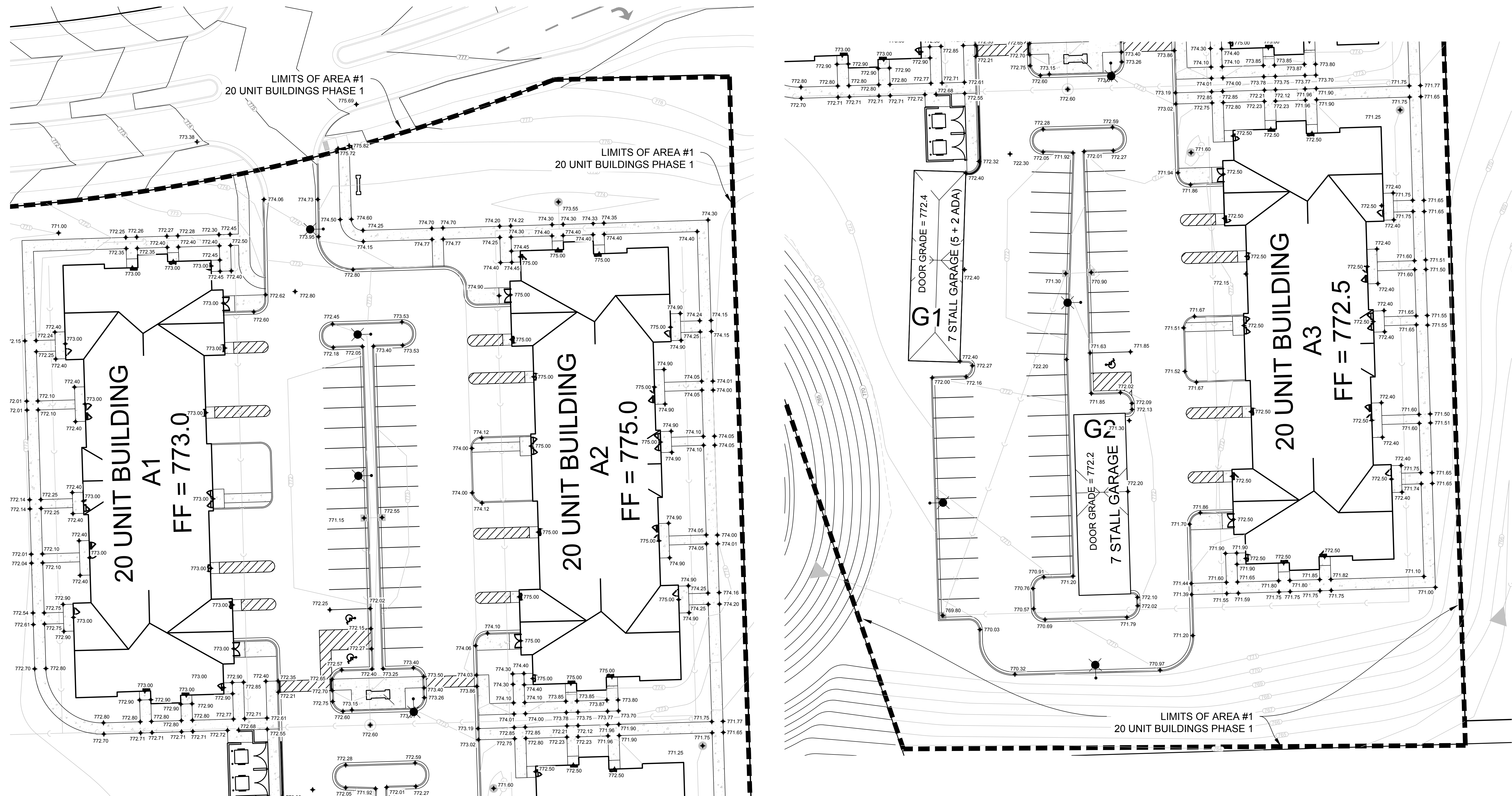
VILLAGE OF UNION GROVE

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REG JOB No. 959.00-WI
REG PM: A/E/K
START DATE: 11/06/2020
SCALE: 1"=20'
SHEET C-19
C-22

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REG. PM	START DATE 11/06/2020	C-20
SCALE 1"=20'		C-22

GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES

- THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODES, SPS 382.385, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY-EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK.
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGER'S HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.
- SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE EROSION CONTROL PLAN FOR MORE DETAILS. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE. REPAIRS SHALL BE MADE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.
- ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.
- TRASH AND DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.
- THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS.

SPECIFICATIONS FOR GRADING & EROSION CONTROL

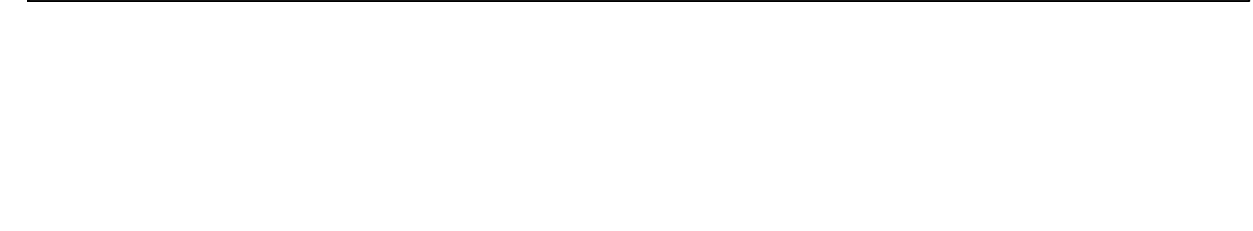
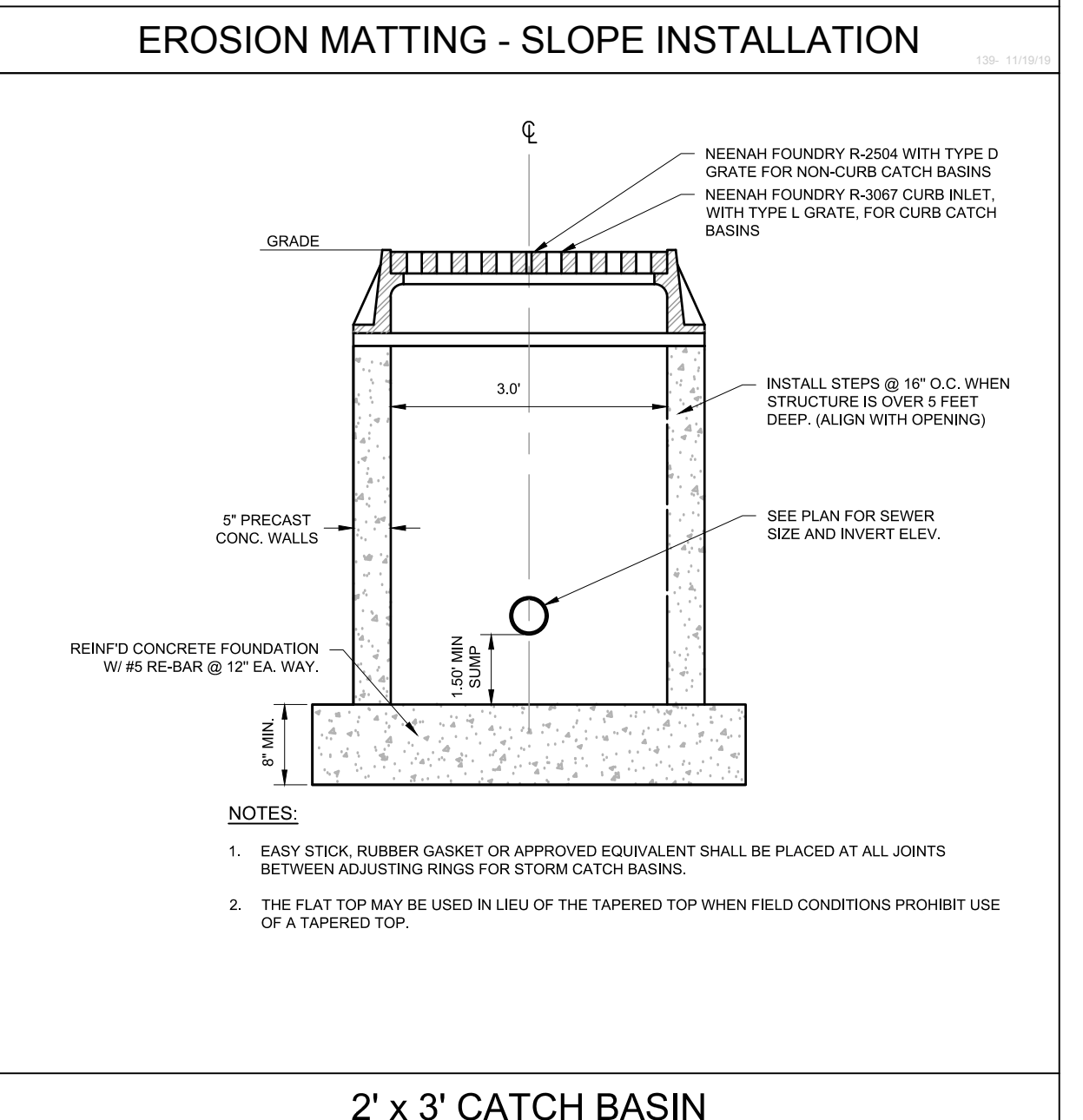
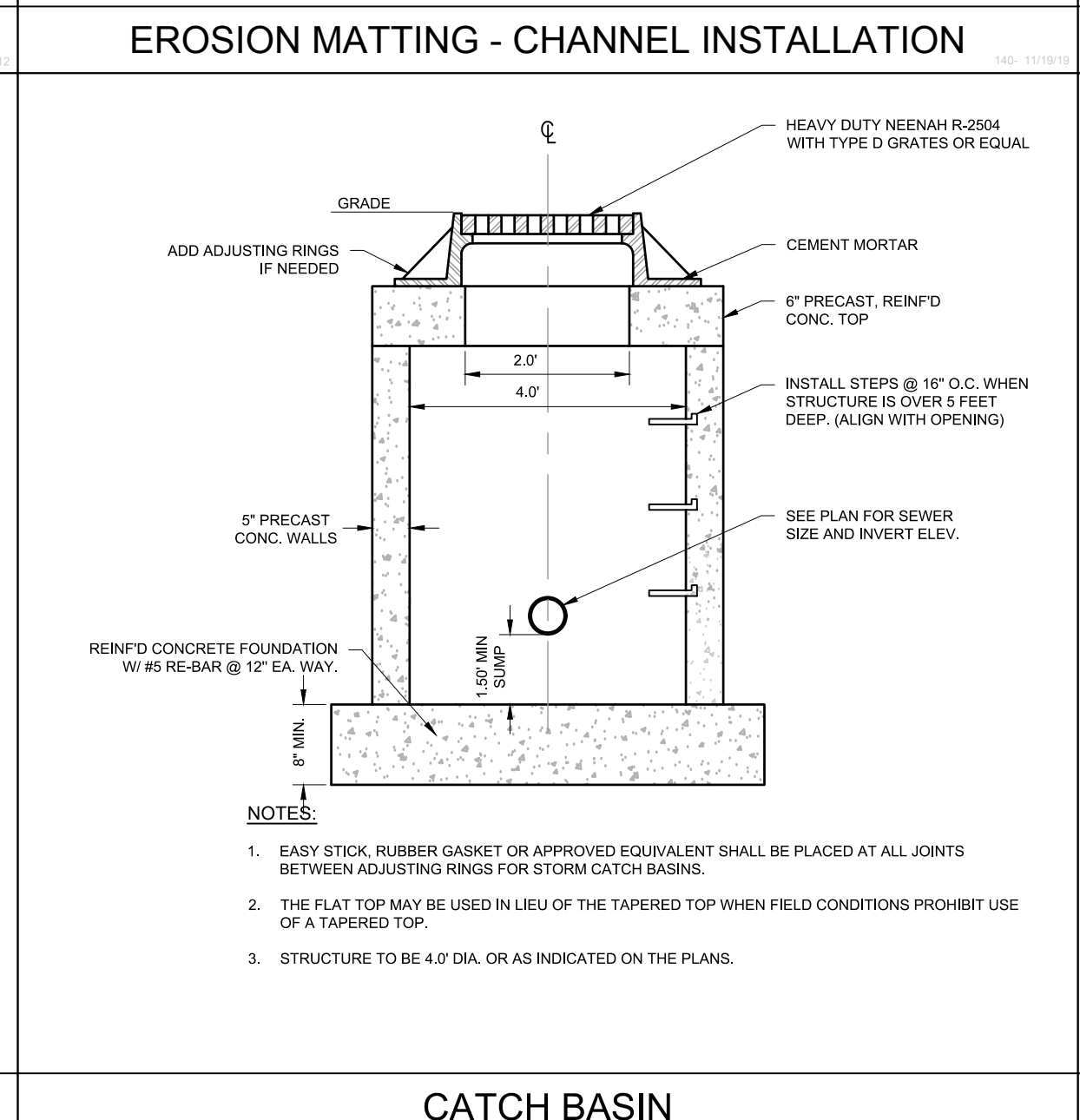
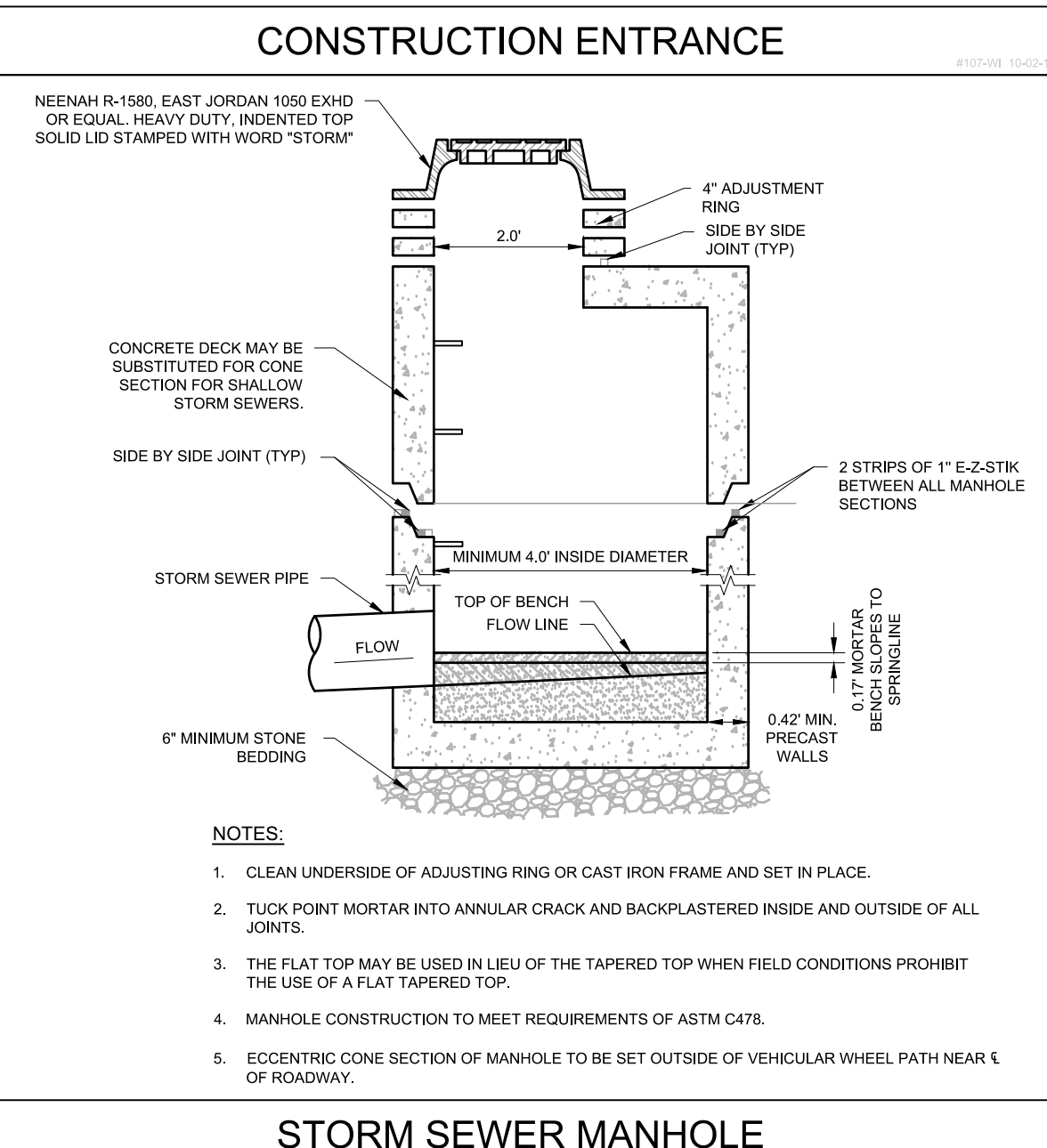
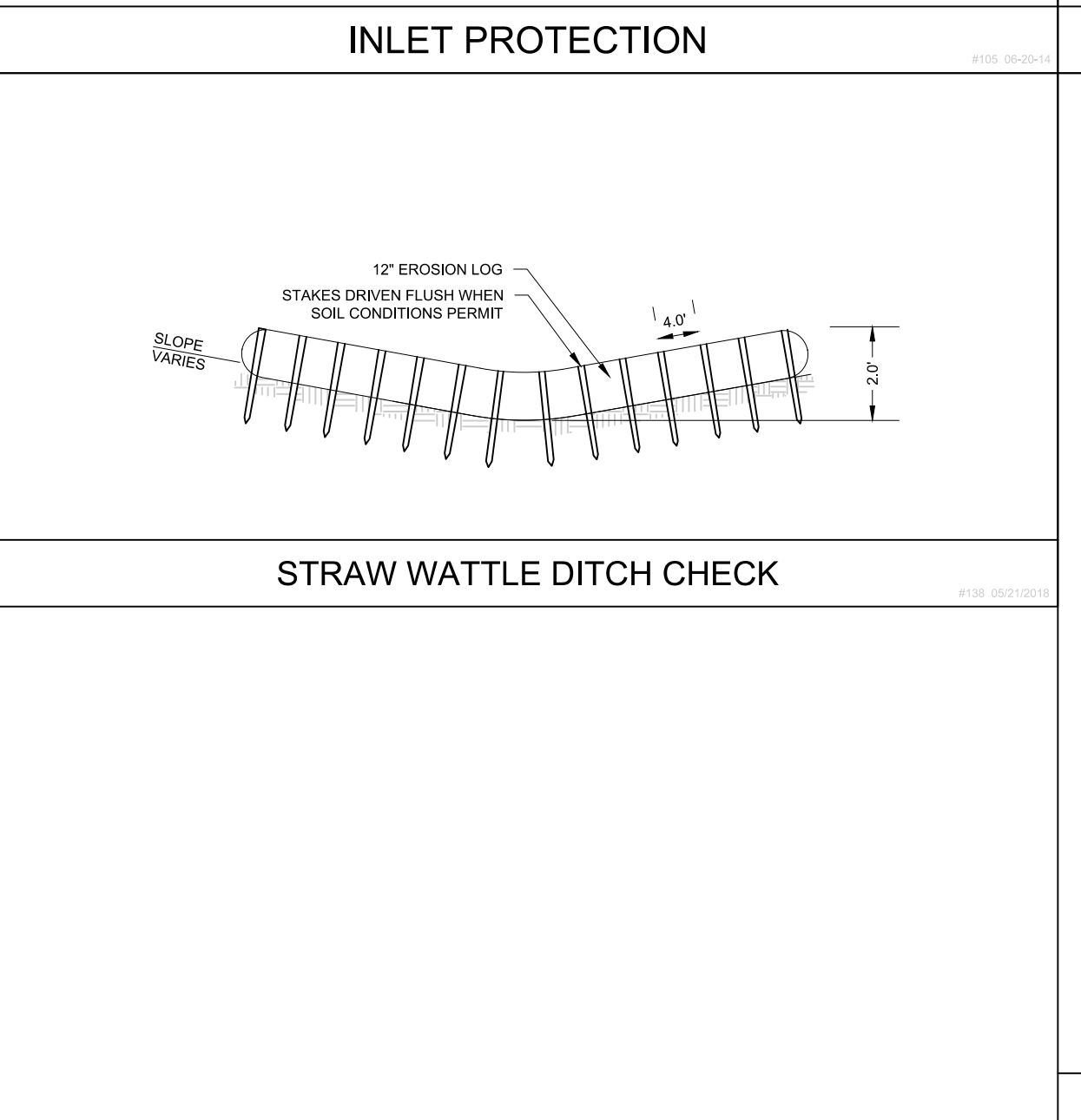
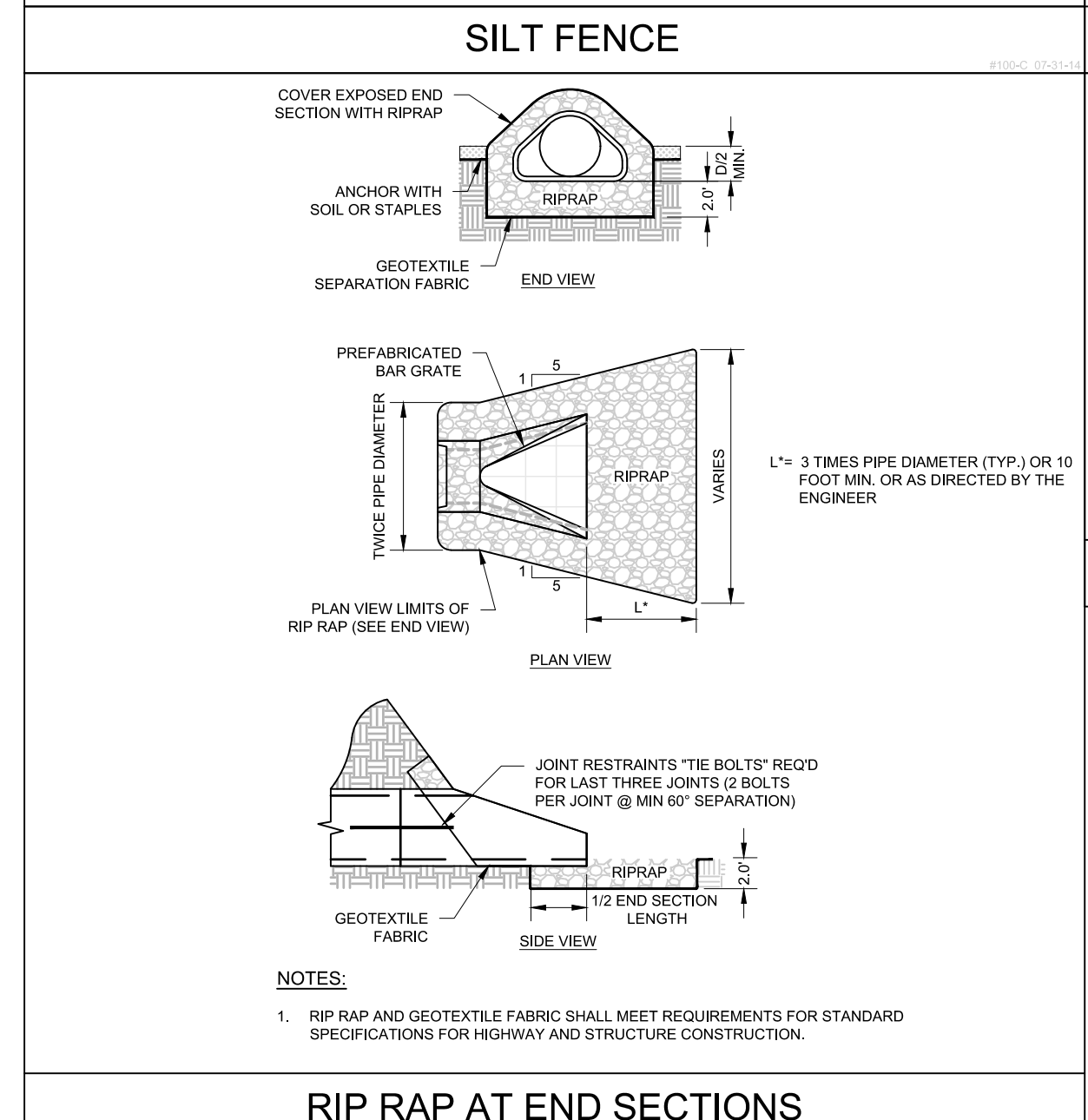
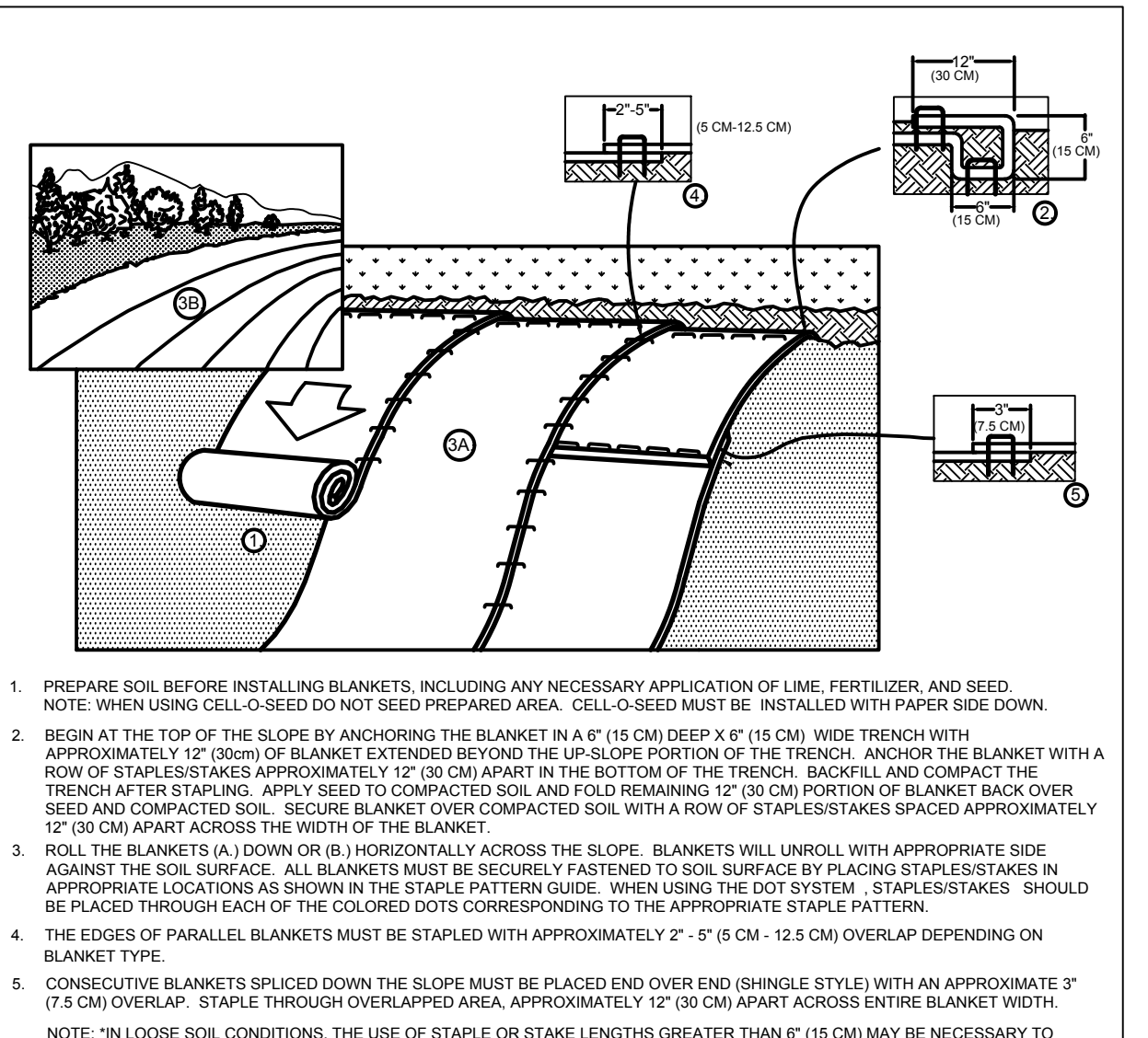
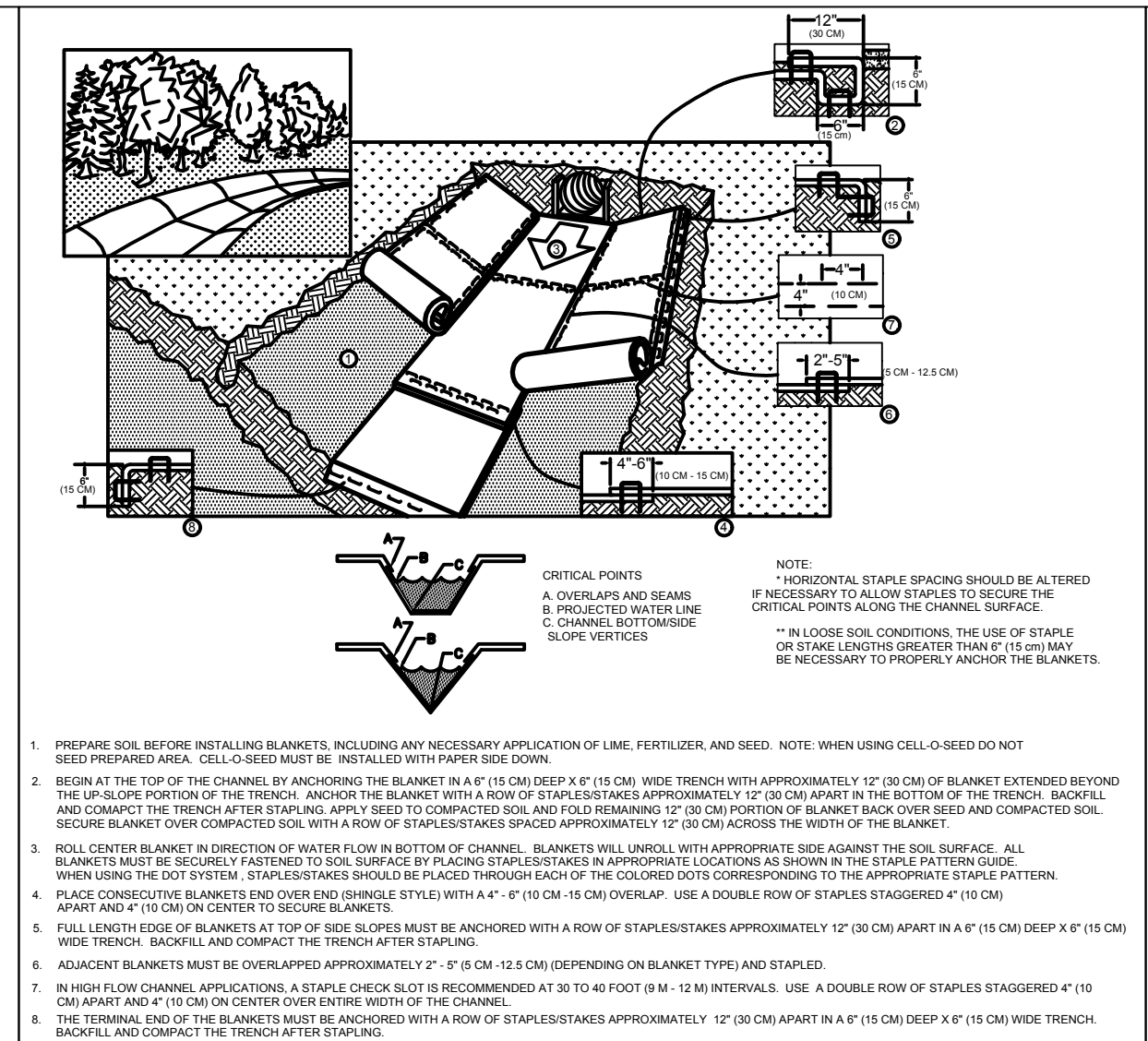
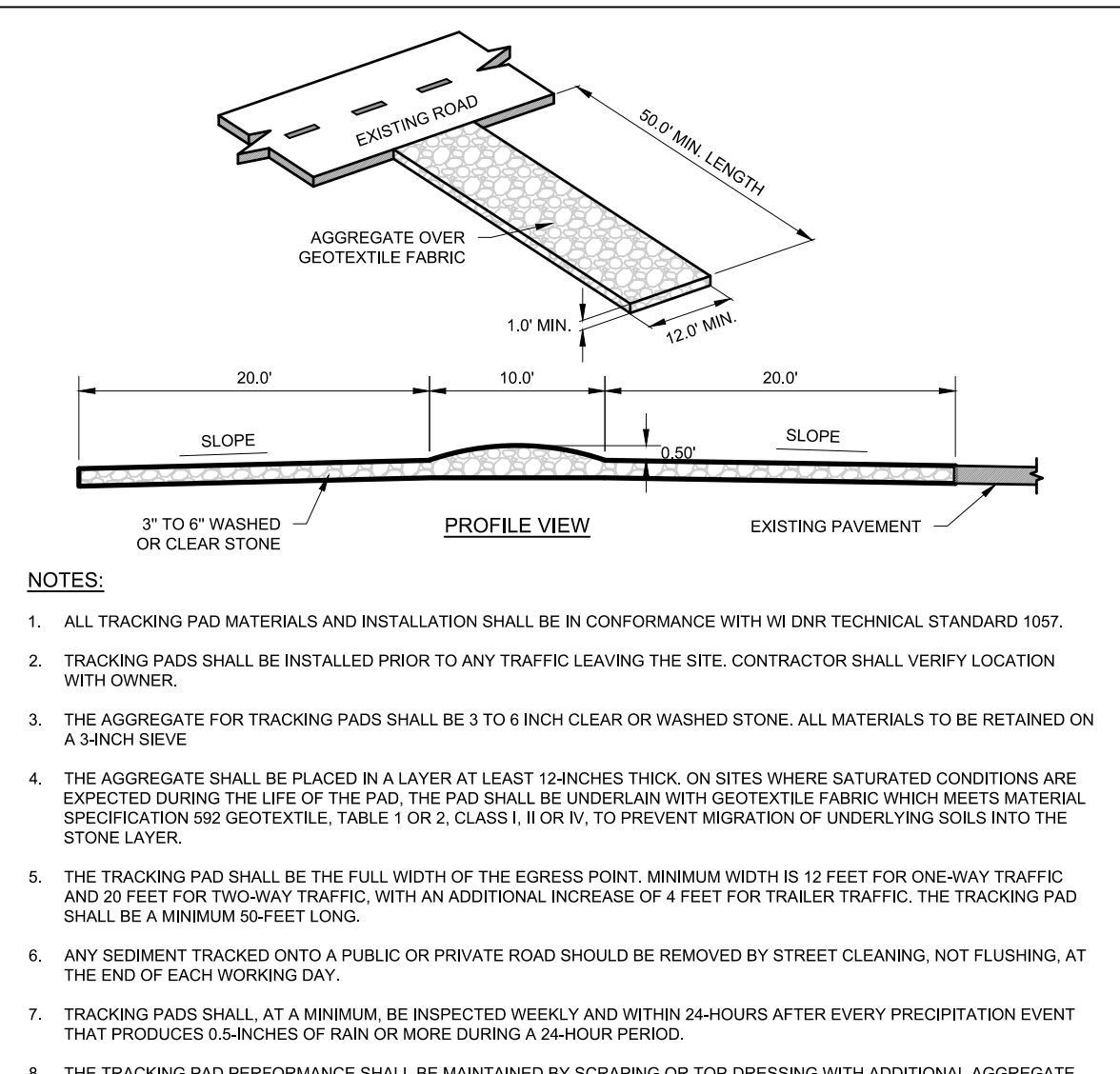
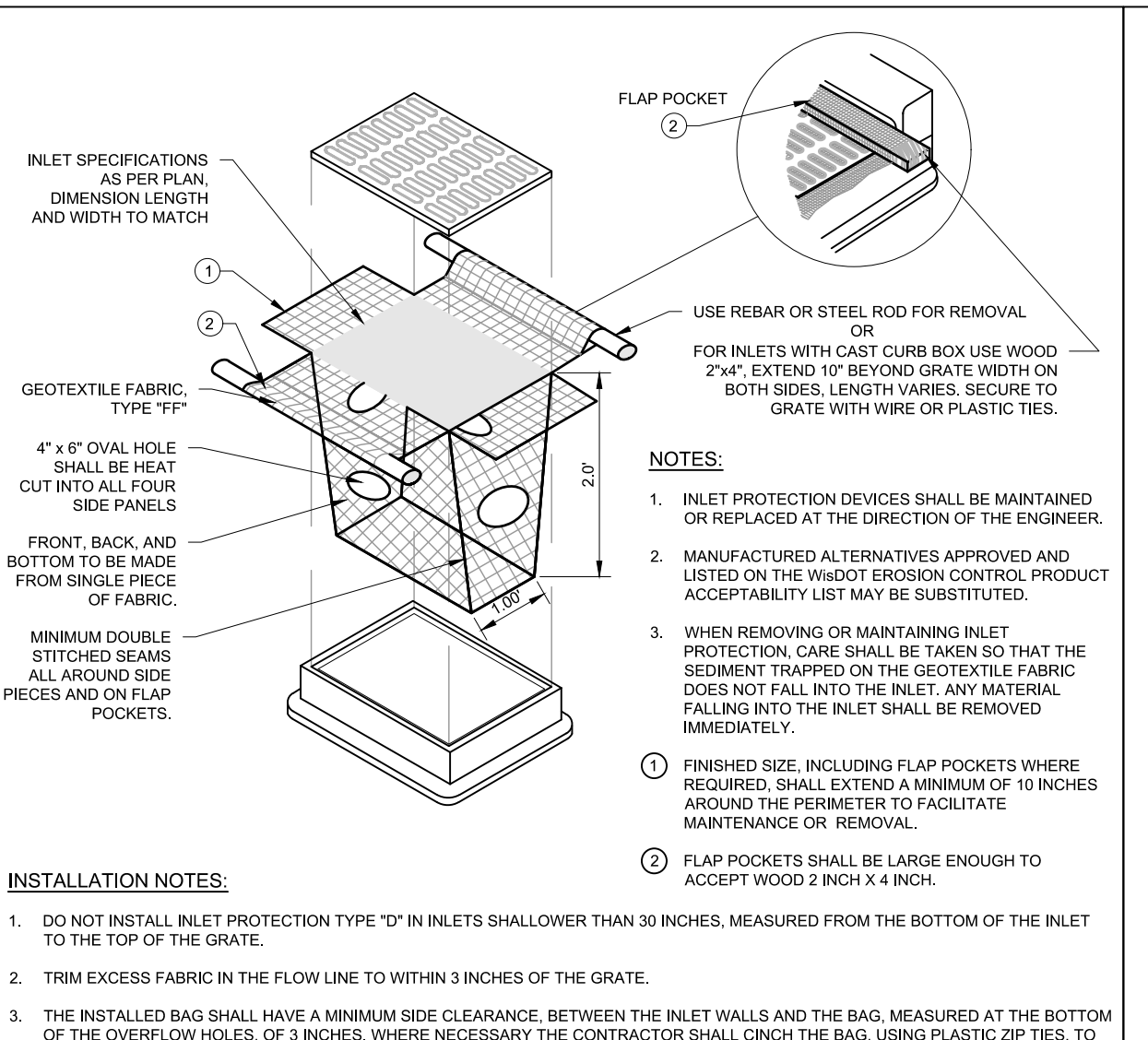
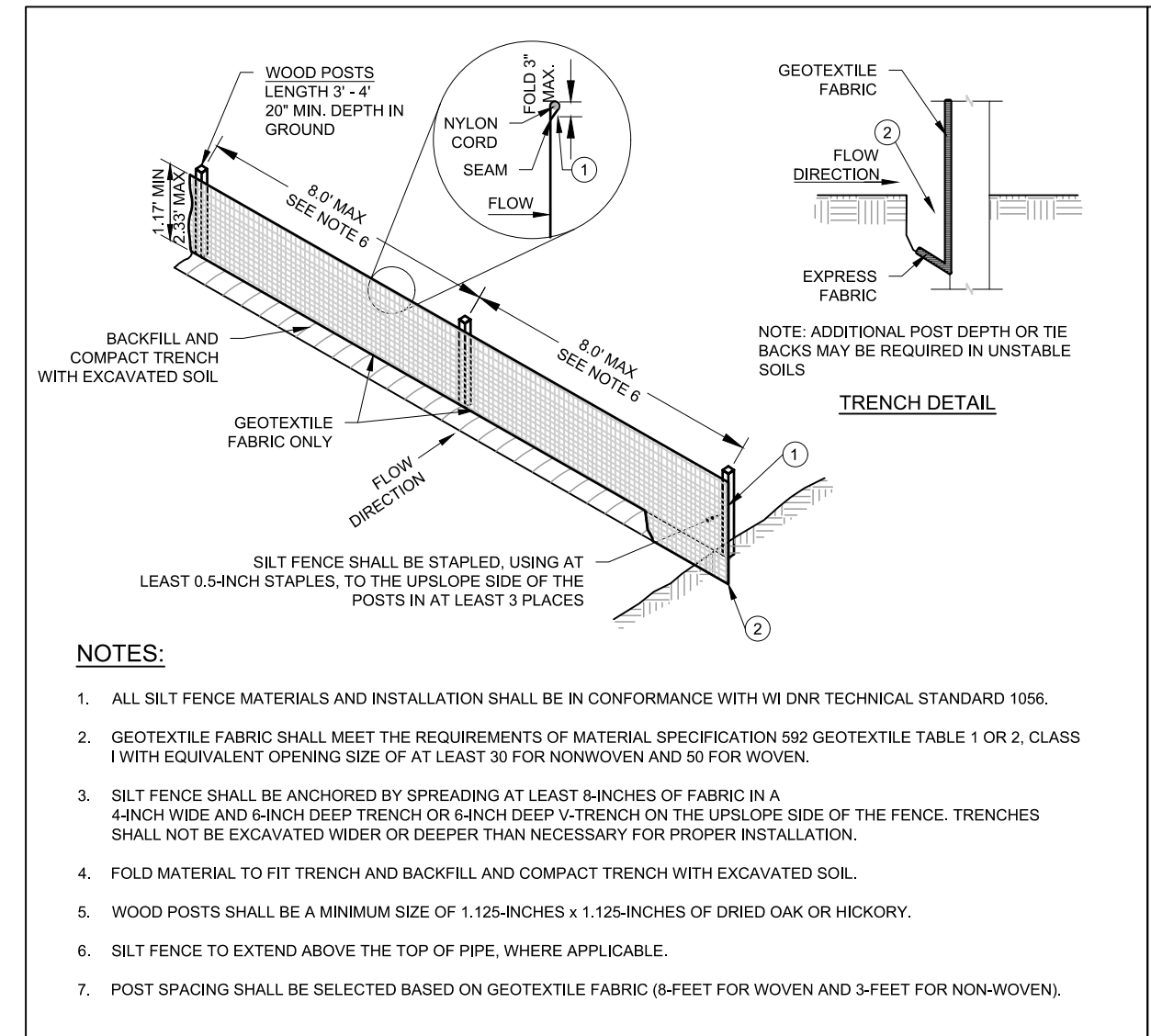
- THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE. INCLUDING UTILITY TRENCH SPOL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF THE NEED TO IMPORT OR HAUL OFF SOIL. ON-SITE LOCATIONS SUITABLE FOR BORROW OR FILL MAY BE PRESENT. COORDINATE WITH OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER.
- SITE SHALL BE CLEARED TO THE LIMITS SHOWN ON THE PLANS. REMOVE VEGETATION FROM THE SITE. BURNING IS NOT PERMITTED. PROTECT TREES AND OTHER FEATURES FROM DAMAGE WITH FENCING. STOCKPILES SHALL NOT BE LOCATED CLOSER THAN 25' TO A DRAINAGE STRUCTURE OR FEATURE AND SHALL BE SURROUNDED WITH SILT FENCE.
- THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERCEDE THESE SPECIFICATIONS IF THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER IN WRITING BEFORE ANY DEVIATIONS ARE MADE.
- IF NO GEOTECHNICAL RECOMMENDATION IS AVAILABLE, THEN THE FOLLOWING SPECIFICATIONS SHALL APPLY. ALL FILL SHALL BE INSPECTED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING: THE COMPACTED FILL SUBGRADE SHALL CONSIST OF AND SHALL BE UNDERLAIN BY SUITABLE BEARING MATERIALS, FREE OF ALL ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIAL AND INSPECTED AND APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER. PREPARATION OF THE SUBGRADE, AFTER STRIPPING, SHALL CONSIST OF: PROOF-ROLLING TO DETECT UNSTABLE AREAS THAT MIGHT BE UNDERCUT, AND COMPACTION TO THE SAME MINIMUM DENSITY INDICATED BELOW. THE COMPACTED FILL MATERIALS SHALL BE FREE OF ANY DELETERIOUS, ORGANIC OR FROZEN WATER AND SHALL HAVE A MAXIMUM LIQUID LIMIT (ASTM D-423) AND PLASTICITY INDEX (ASTM D-424) IF 30 AND 10 RESPECTIVELY, UNLESS SPECIFICALLY TESTED AND FOUND TO HAVE LOW EXPANSIVE PROPERTIES AND APPROVED BY AN EXPERIENCED SOILS ENGINEER. THE TOP TWELVE (12") INCHES OF COMPACTED FILL SHOULD HAVE A MAXIMUM THREE (3") INCH PARTICLE DIAMETER AND ALL UNDERLYING COMPACTED FILL A MAXIMUM SIX (6") INCH PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN EXPERIENCED SOILS ENGINEER. ALL FILL MATERIAL MUST BE TESTED AND APPROVED UNDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER PRIOR TO PLACEMENT. IT MUST BE CLASSIFIED AS A CLEAN GW, GP, SW, OR SP PER UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D-2487). FOR STRUCTURAL FILL, THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D-998) WITH THE MAXIMUM DRY DENSITY OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL 3 PERCENT OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER TAKING INTO CONSIDERATION THE TYPE OF MATERIALS AND COMPACTION EQUIPMENT BEING USED. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. LIQUIDATORS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION. MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON THE FILL AND PERMITTED TO DRY. DISCING, HARROWING OR LAZERING MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY LEVEL, AFTER WHICH IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OF THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D-398) MAXIMUM DENSITY.
- NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.
- SUBGRADE TOLERANCES ARE +1/2" FOR LANDSCAPE AREAS AND +/- 2" FOR ALL PAVEMENT AND BUILDING AREAS.
- TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4" ARE ACCEPTABLE. TOPSOIL MAY BE AMENDED AS NEEDED WITH SAND OR COMPOST TO BE LOOSE WHEN SPREAD.
- THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. ANY DEWATERING SHALL NOT GO DIRECTLY TO STREAMS, CREEKS, WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS WITHOUT BEING TREATED FIRST. A DIRT BAG OR OTHER DEWATERING TREATMENT DEVICE MAY BE USED TO CAPTURE SEDIMENT FROM THE PUMPED WATER.
- CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES. IN THE EVENT THIS OCCURS, THE ROADWAYS SHALL BE POWER SWEEP IMMEDIATELY AND ALL SEDIMENT REMOVED FROM DOWNSTREAM FACILITIES.

SPECIFICATIONS FOR PRIVATE UTILITIES

- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS. CONNECTIONS TO WATERMAIN SHALL BE WET TAPED WITH A STAINLESS STEEP TAPPING SLEEVE.
- PROPOSED SANITARY SEWER AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. THE EXACT LOCATION OF ALL DOWN SPOUTS CONNECTIONS SHALL BE PER THE ARCHITECTURAL PLANS.
- CONTRACTOR SHALL NOT SHUT OFF WATER OR FLOW SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL.
- MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS: STORM SEWER PIPE 48" OR LESS SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS ADS N-12. FOR PIPE 10" OR LESS IN DIAMETER, PVC, ASTM D-3034, SDR-26, MAY ALSO BE USED, WHERE SPECIFICALLY REQUIRED. REINFORCED CONCRETE PIPE (RCP), ASTM C-76, CLASS III OR HIGHER, MAY BE USED. TRENCH SECTION SHALL BE CLASS "B" FOR PVC AND HDPE AND CLASS "C" FOR CONCRETE (PER STANDARD SPECIFICATIONS). MANHOLES, INLETS AND CATCH BASINS SHALL BE PRECAST CAST CONCRETE, ASTM C-478. CASTINGS SHALL BE HEAVY DUTY CAST IRON. AREA DRAINS SHALL BE PER DETAIL ON PLAN OR EQUIVALENT AND SHALL BE A MINIMUM OF 24" IN DIAMETER. CONNECTIONS TO EXISTING PIPES SHALL BE MADE WITH INSERTA WYE OR EQUIVALENT. LAST (3) THREE JOINTS SHALL BE RESTRAINED WITH RODS.
- MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTIONS SHALL BE MADE WITH AN INSERTA WYE OR EQUIVALENT. A MINIMUM OF 6" OF COVER IS REQUIRED FOR ALL SANITARY SEWER.
- MATERIALS FOR WATER SERVICES AND PRIVATE HYDRANTS SHALL BE AS FOLLOWS: WATER SERVICES SHALL BE PVC, HDPE, OR DI AS ALLOWED BY MUNICIPAL CODE. PVC SHALL BE AWWA C-900. DI SHALL BE AWWA C151, CLASS 52 (OR AS REQUIRED BY LOCAL CODE). TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTION SHALL BE MADE WITH A WET TAP, CORROSE STOP AND VALVE BOX PER MUNICIPAL STANDARDS. A MINIMUM OF 6" COVER IS REQUIRED FOR ALL WATERMAIN. VALVES SHALL BE NONRISING STEM, RESILIENT SEATED GATE VALVES COMPLYING WITH AWWA C509 WITH AN ALLOWED BY MUNICIPAL CODE. THREE PIECE CAST IRON VALVE BOX. INSTALL THRUST BLOCKS AT ALL BENDS AND TEES. DISINFECT ALL NEW LINES AND OBTAIN SAFE WATER SAMPLE PRIOR TO USE.
- EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
- TRACER WIRE (NO. 8 SINGLE STRAND COPPER) AND WARNING TAPE SHALL BE INSTALLED ON ALL UTILITIES IN ACCORDANCE WITH THE LOCAL AND STATE CODES. TRACER WIRE SHALL TERMINATE IN A VALVEO TERMINAL BOX AT EACH END.
- MANHOLE TESTING ON SANITARY LINES AND PRESSURE TESTING ON WATERMAIN MAY BE REQUIRED BY THE OWNER OR MUNICIPALITY.
- UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.

SPECIFICATIONS FOR PAVING

- AGGREGATES USED IN THE CRUSHED STONE BASE SHALL CONFORM TO THE GRADATION REQUIREMENTS SECTIONS 301.2 AND 305.2.2 OF THE STANDARD SPECIFICATIONS. THICKNESS SHALL BE PER THE DETAIL ON THE PLANS. BASE SHALL BE 1 1/2" INCH DIAMETER LIMESTONE TRAFFIC BOND AGGREGATE BASE COURSE UNLESS NOTED OTHERWISE. SUBSTITUTION AND/OR RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE OWNER.
- SUBGRADE SHALL BE PROOFROLLED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF STONE BASE. EXCAVATE UNSUITABLE AREAS AND REPLACE WITH BREAKER RUN STONE AND RECOMPACT. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL SPECIFICATIONS.
- EXISTING PAVEMENT SHALL BE SAWCUT IN NEAT STRAIGHT LINES TO FULL DEPTH AT ANY POINT WHERE EXISTING PAVEMENT IS REMOVED. CURB AND WALK SHALL BE REMOVED TO THE NEAREST JOINT. REMOVED PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK.
- ASPHALT FOR PARKING AREAS AND THE PRIVATE ROAD SHALL BE PER THE DETAILS MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 450 AND 460. LT 58-28 S IS REQUIRED UNLESS NOTED OTHERWISE. A COMMERCIAL GRADE MIX MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER.
- CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS. GRADE A, ASTM C-94, 6 BAG MIX, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI. JOINTING SHALL BE PER SECTION 415.3.7, 802.3.2.5, AND 801.3.4.6, OF THE STANDARD SPECIFICATIONS. CONSTRUCTION JOINTS SHALL BE SPACED NOT FURTHER THAN 10' FOR PAVEMENT, 10' FOR SIDEWALKS (OR THE WIDTH OF THE WALK), AND 15' FOR CURB. EXPANSION JOINTS SHALL BE SPACED NO FURTHER THAN 50' FOR PAVEMENT, 300' FOR CURB, AND 100' FOR WALKS. CONCRETE SHALL BE FINISHED PER SECTION 415.3.8 WITH A MEDIUM BROOM TEXTURE. A CURING MEMBRANE IN CONFORMANCE WITH SECTION 415.3.12 IS REQUIRED.



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CANOPY HILL MULTI-FAMILY DEVELOPMENT
VILLAGE OF UNION GROVE

CONSTRUCTION DETAILS AND SPECIFICATIONS

REVISIONS

1	BID SET	03/17/21	
2	PER VILLAGE COMMENTS	05/03/21	
3	ADDENDUM #1	05/17/21	
4	PER VILLAGE COMMENTS	06/22/21	

REG. JOB NO. 1959-00-WI
REG. PM. ALEK
START DATE 11/06/2020
SCALE

SHEET
C-21
C-22

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REVIEWED: ALEK

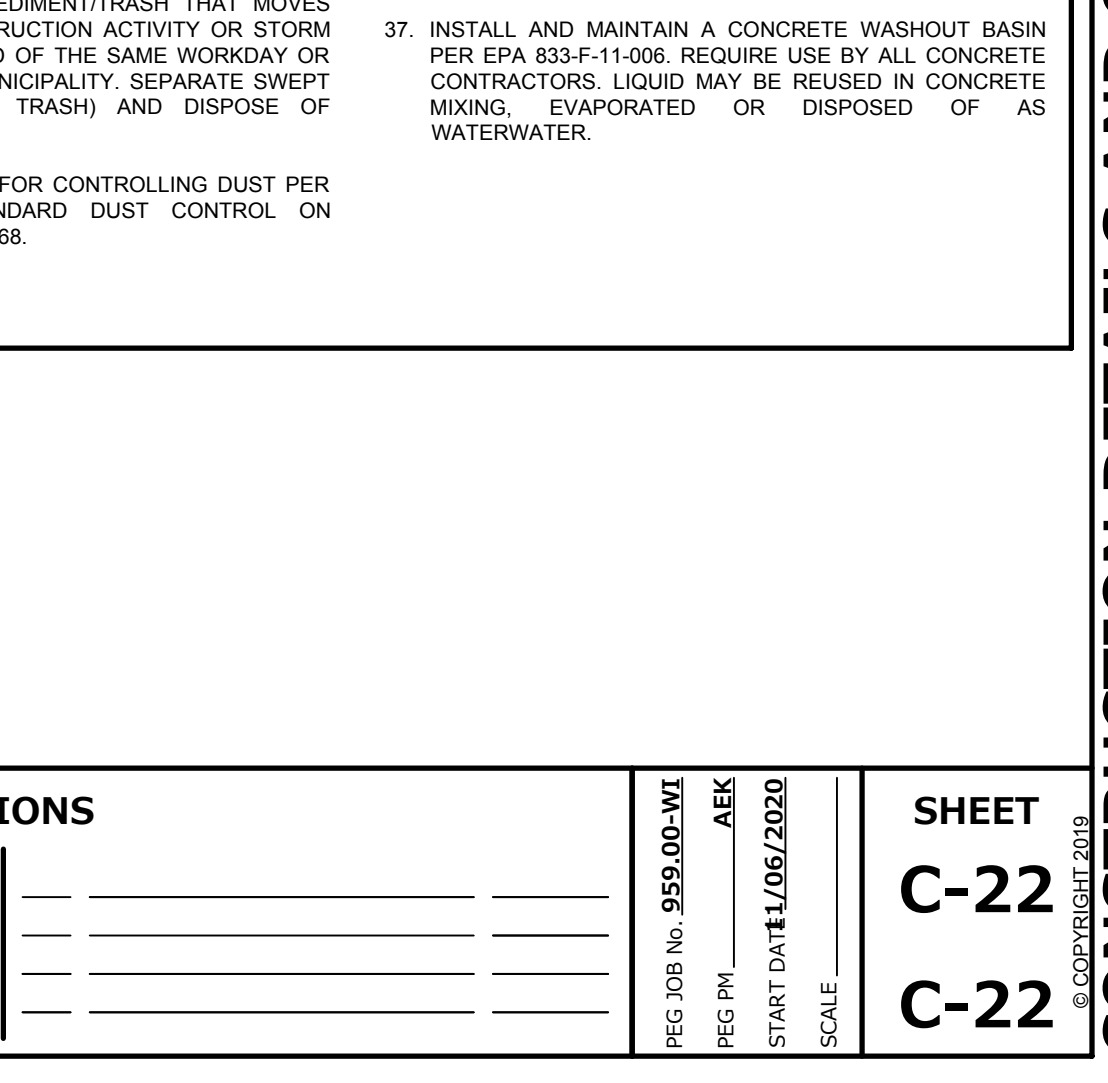
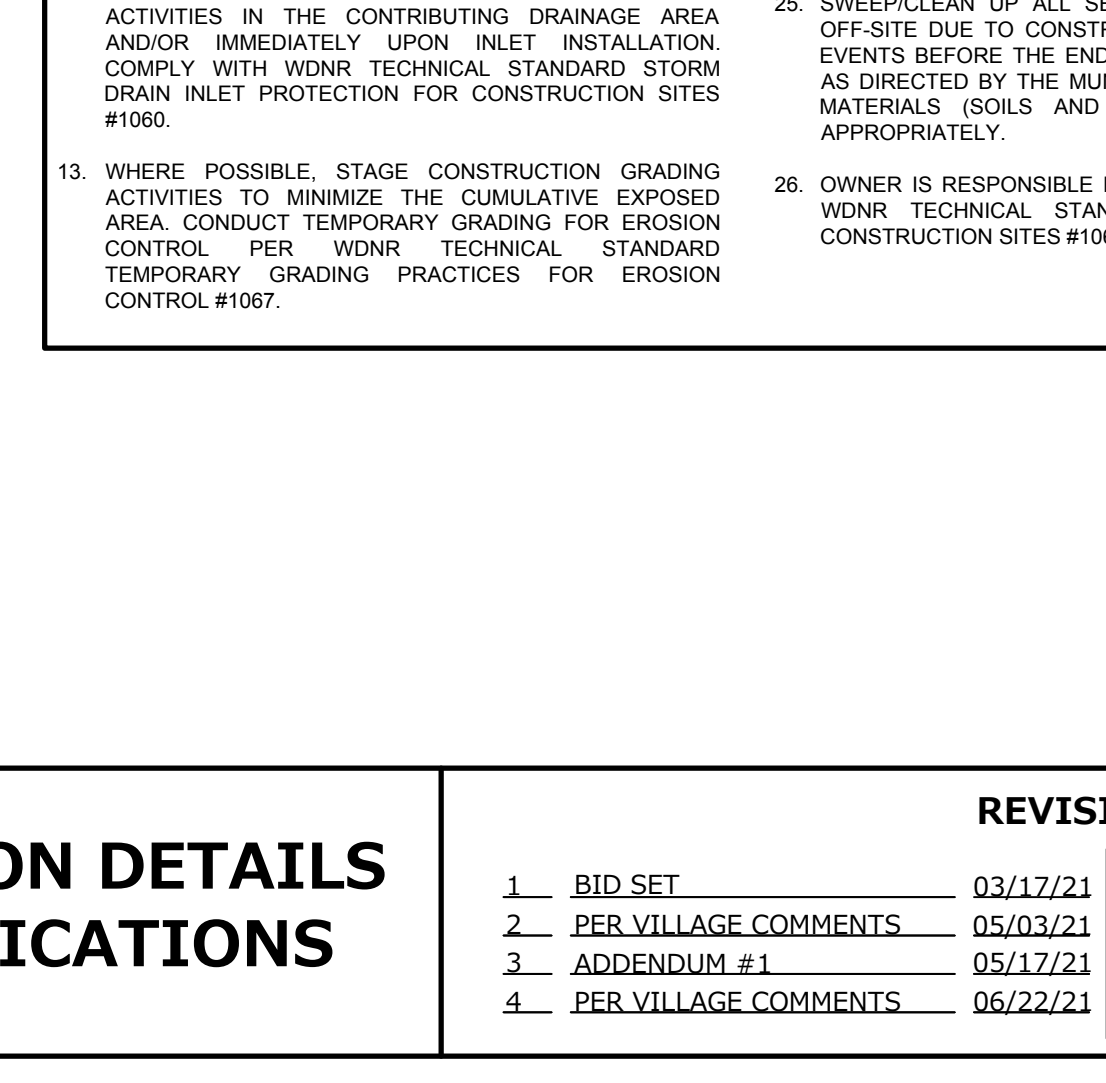
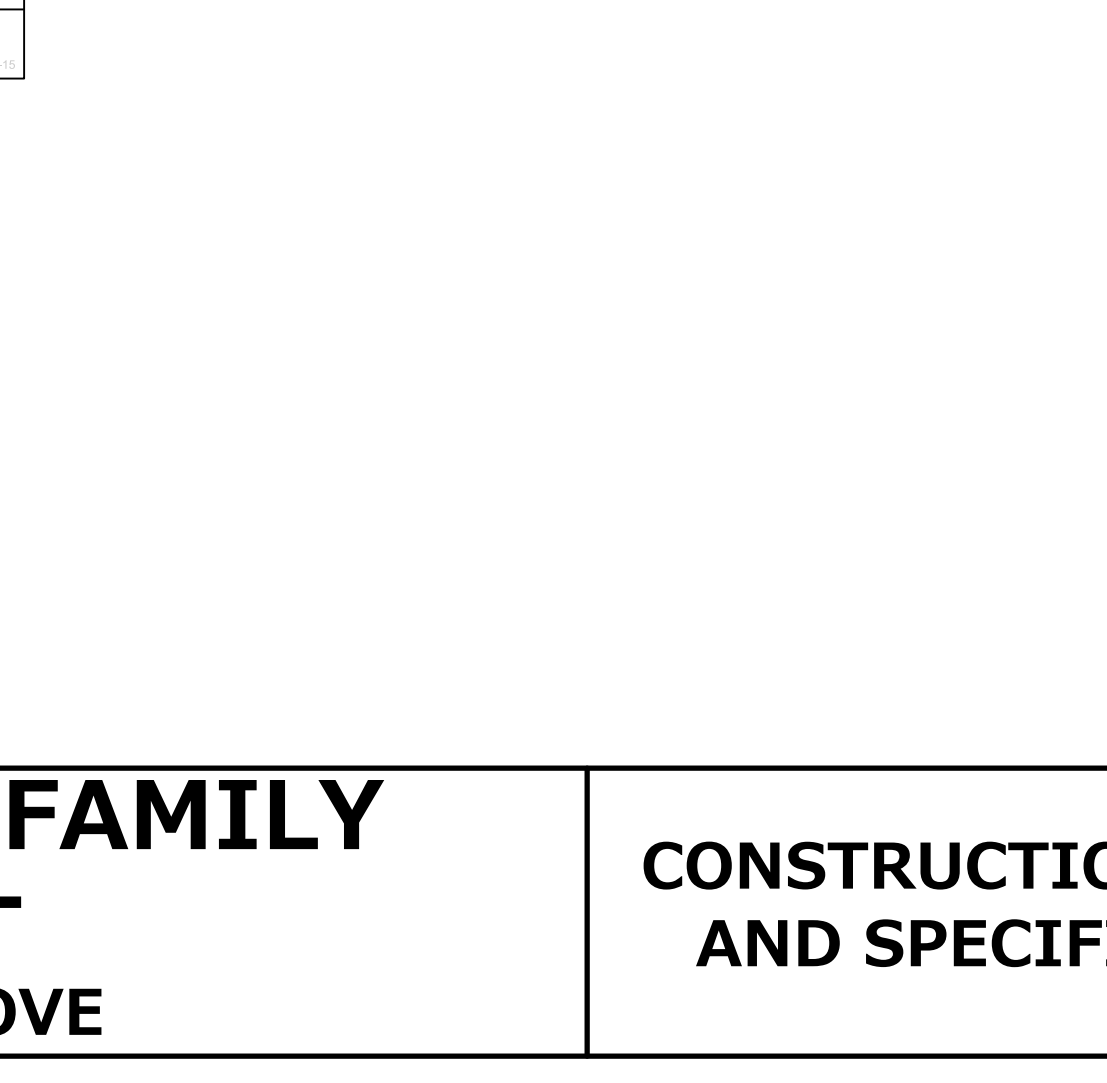
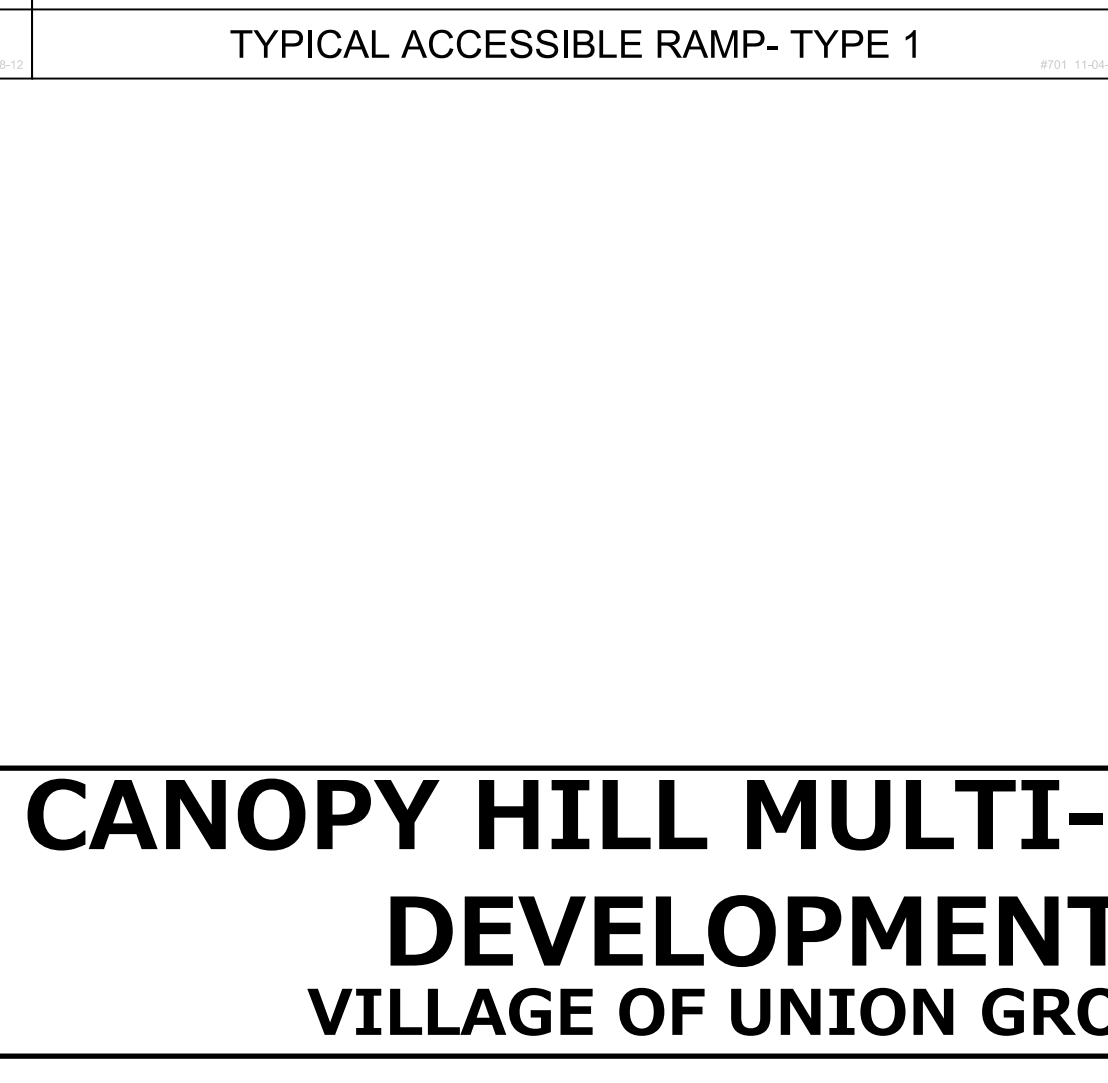
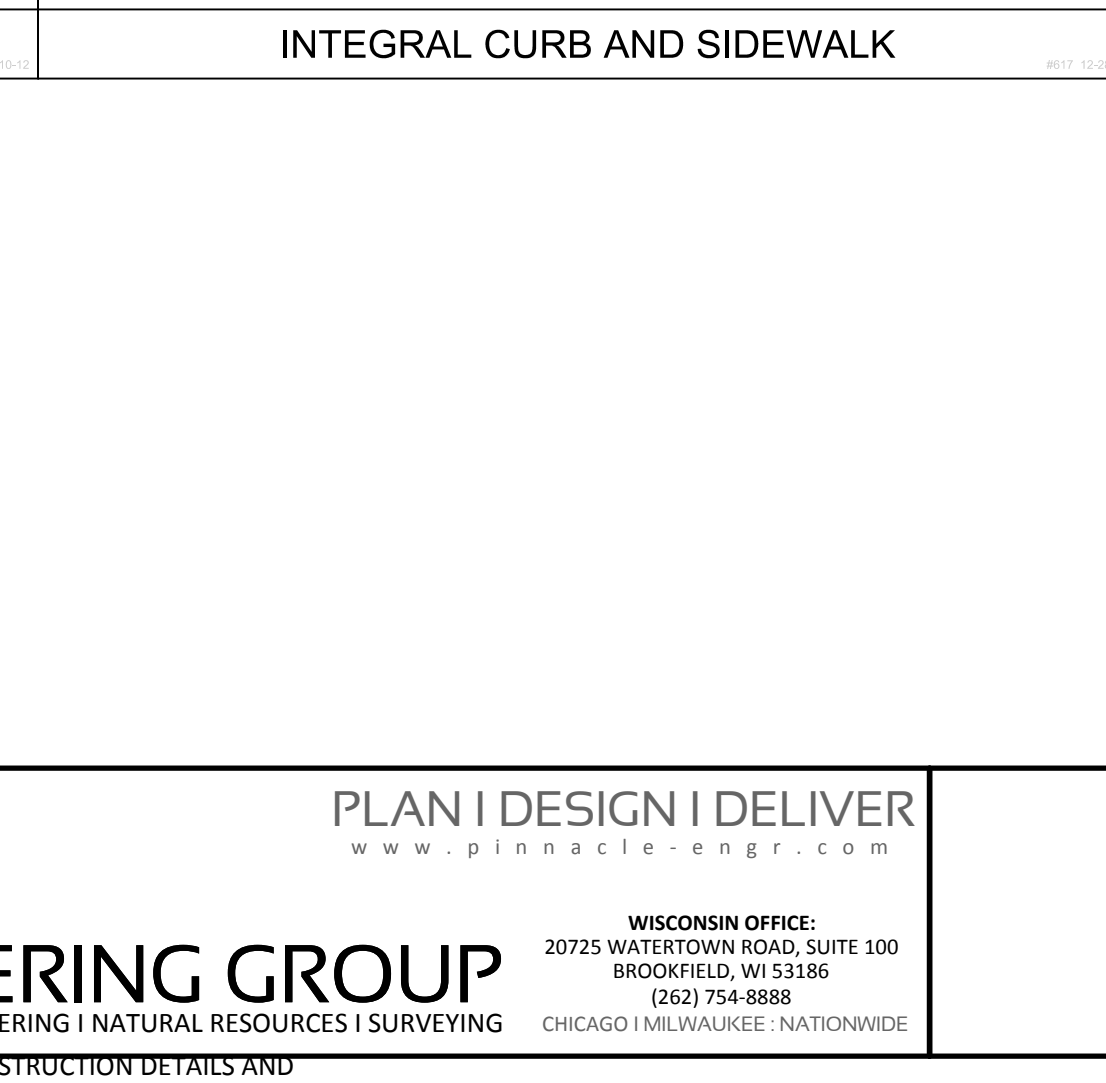
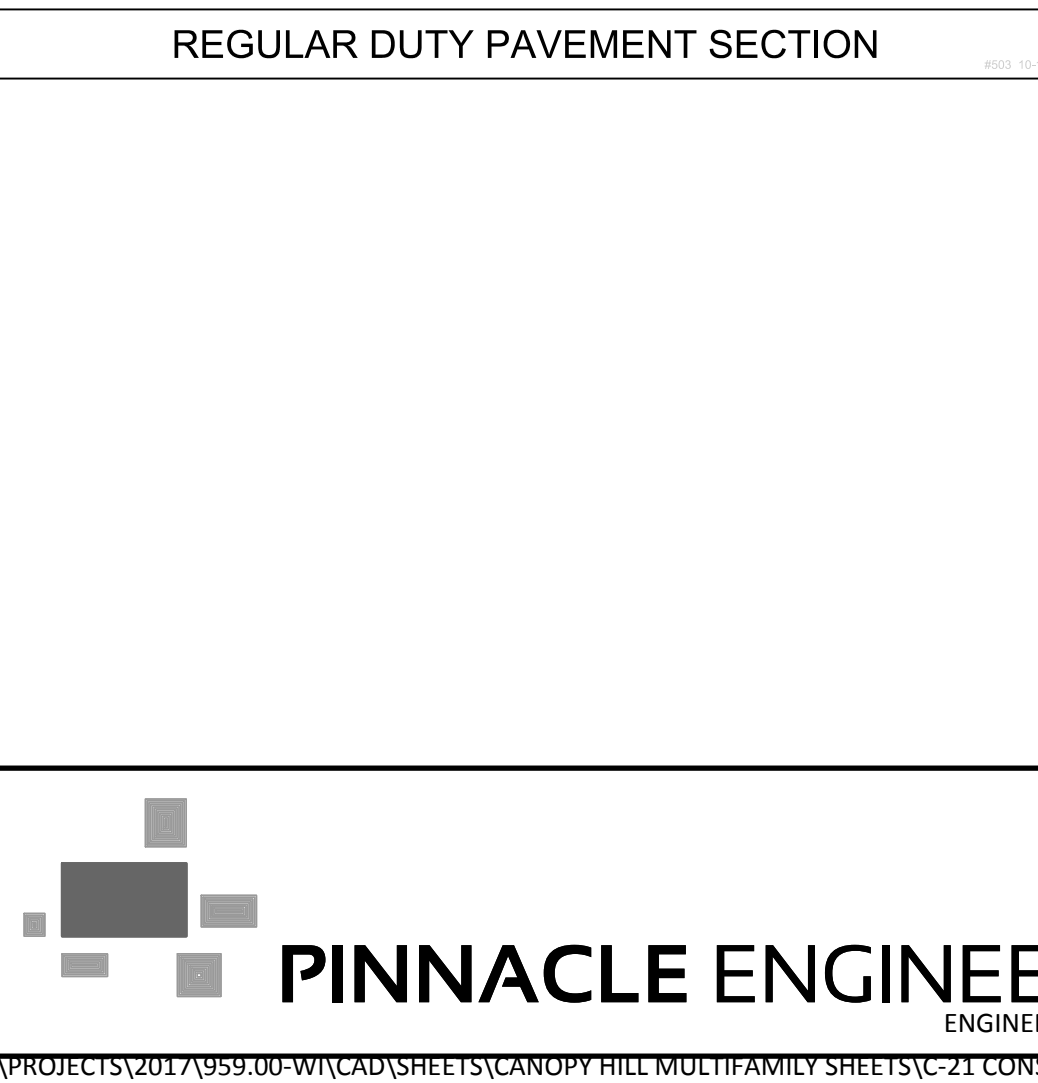
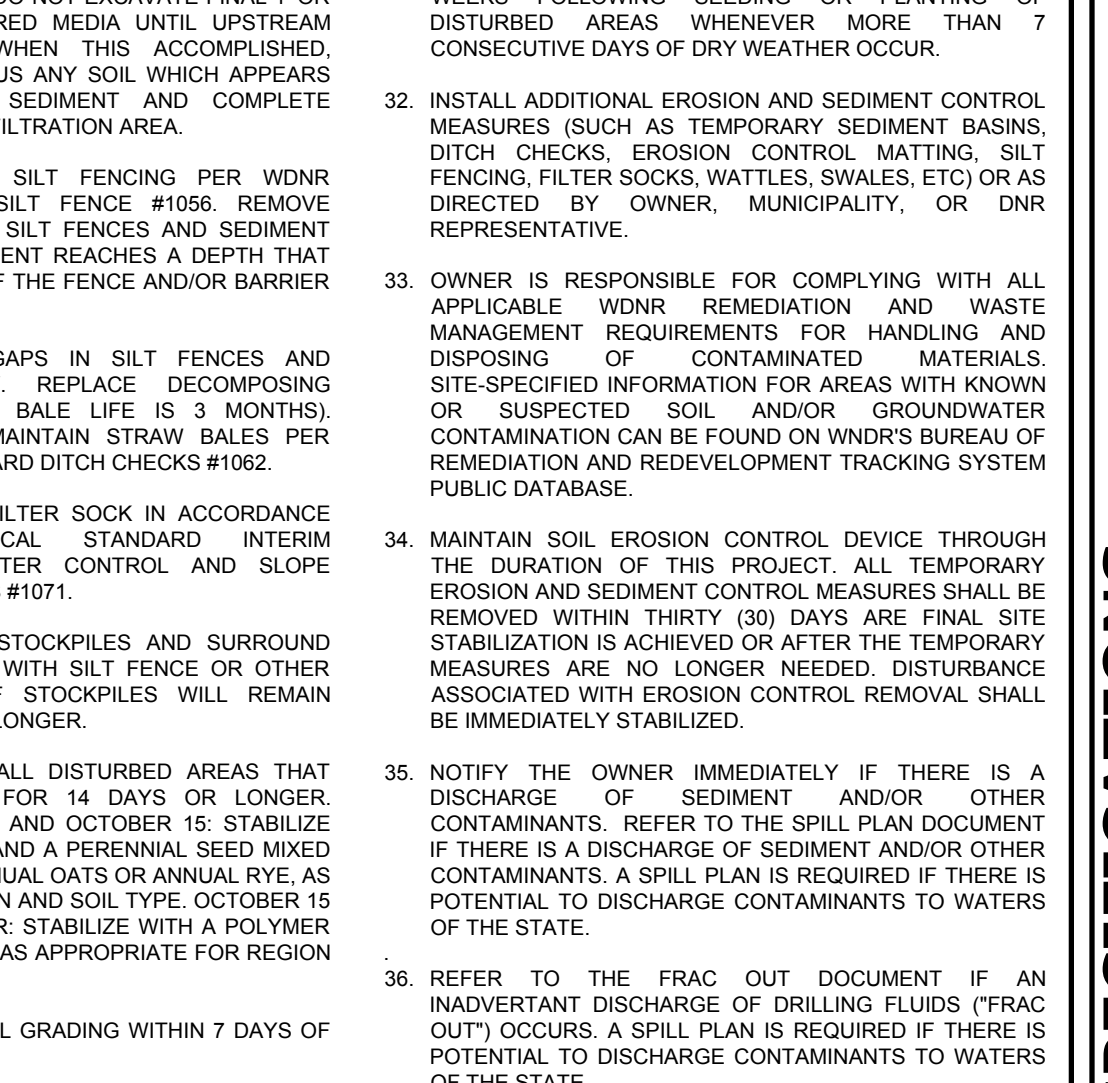
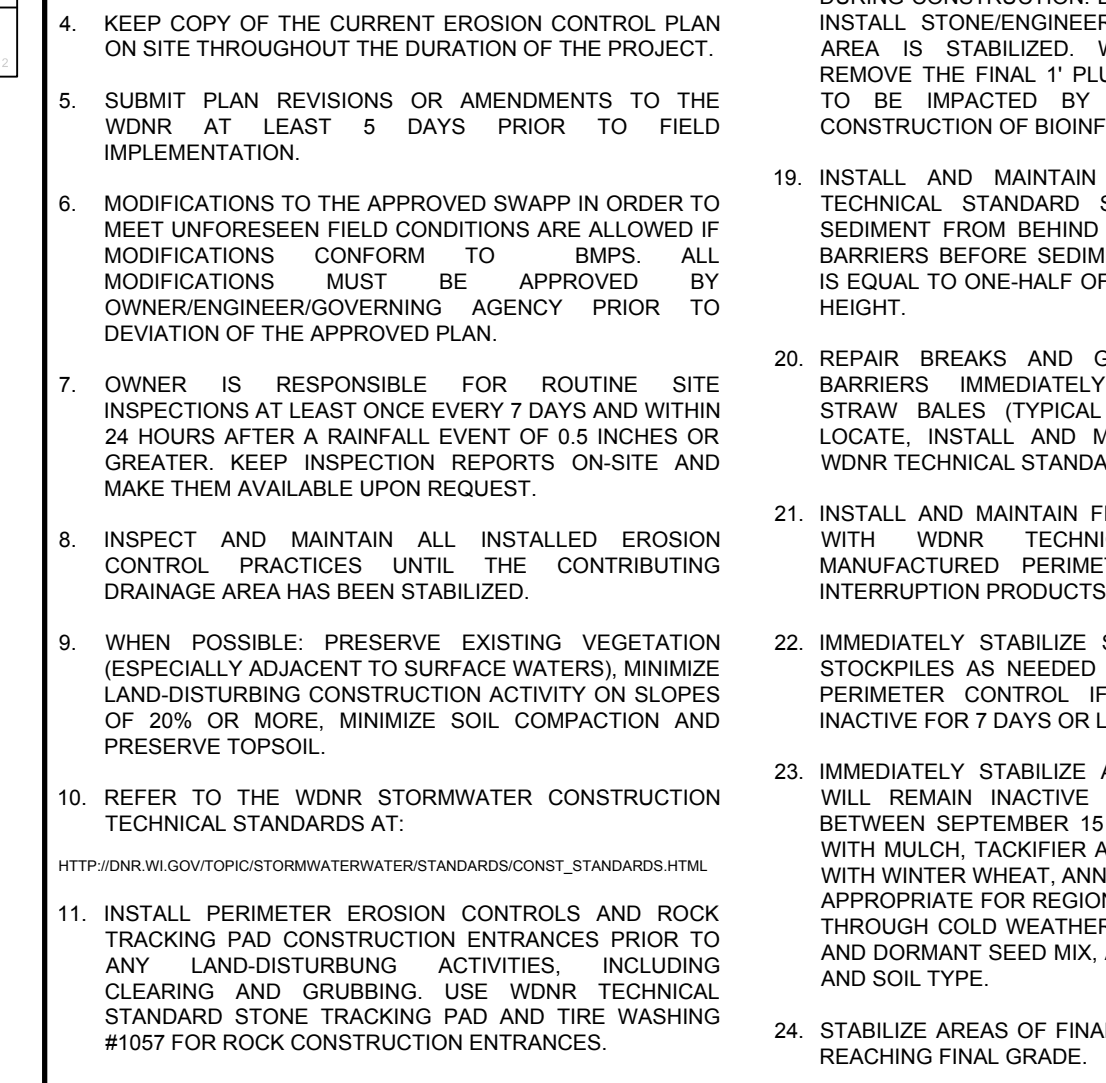
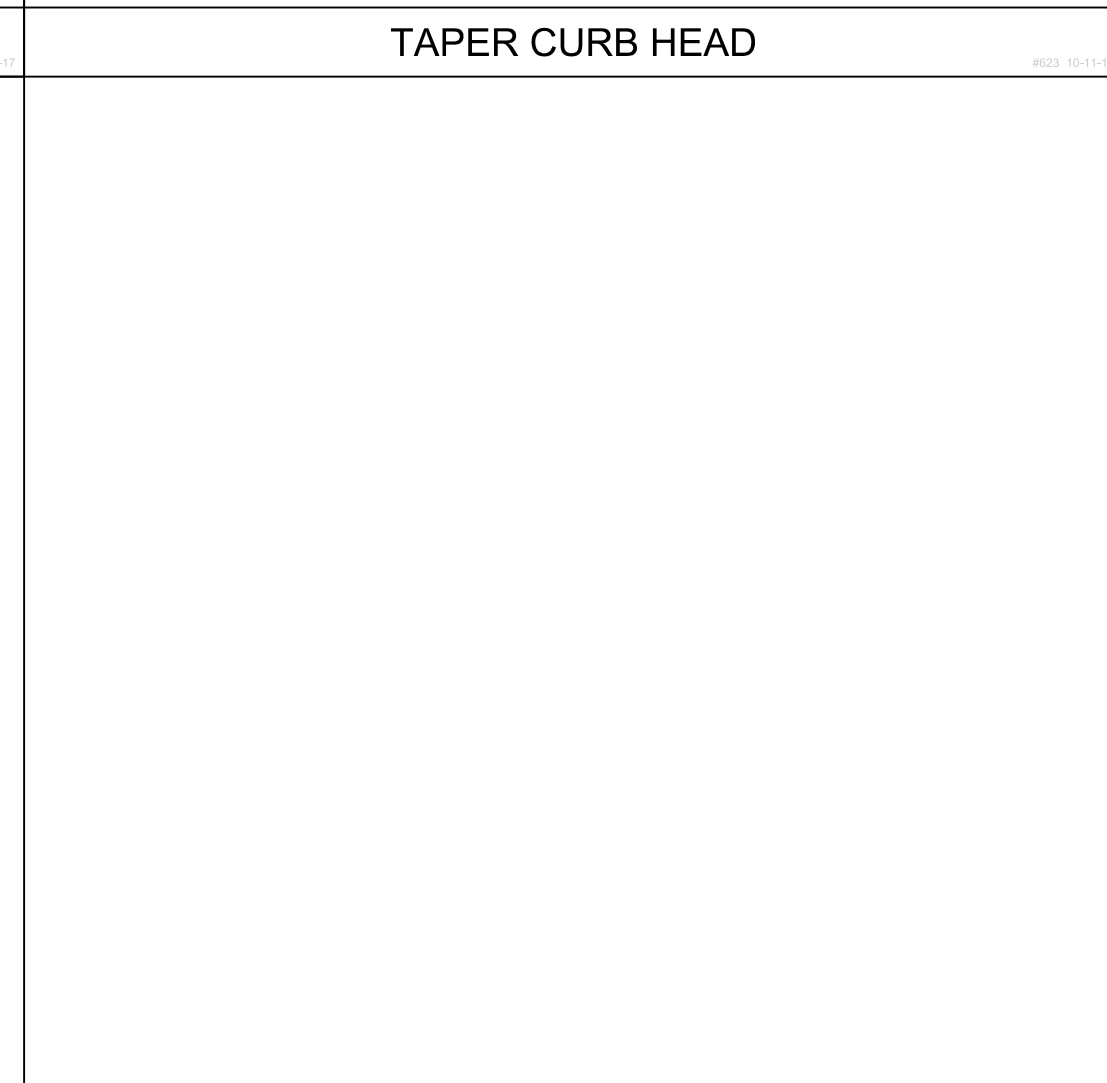
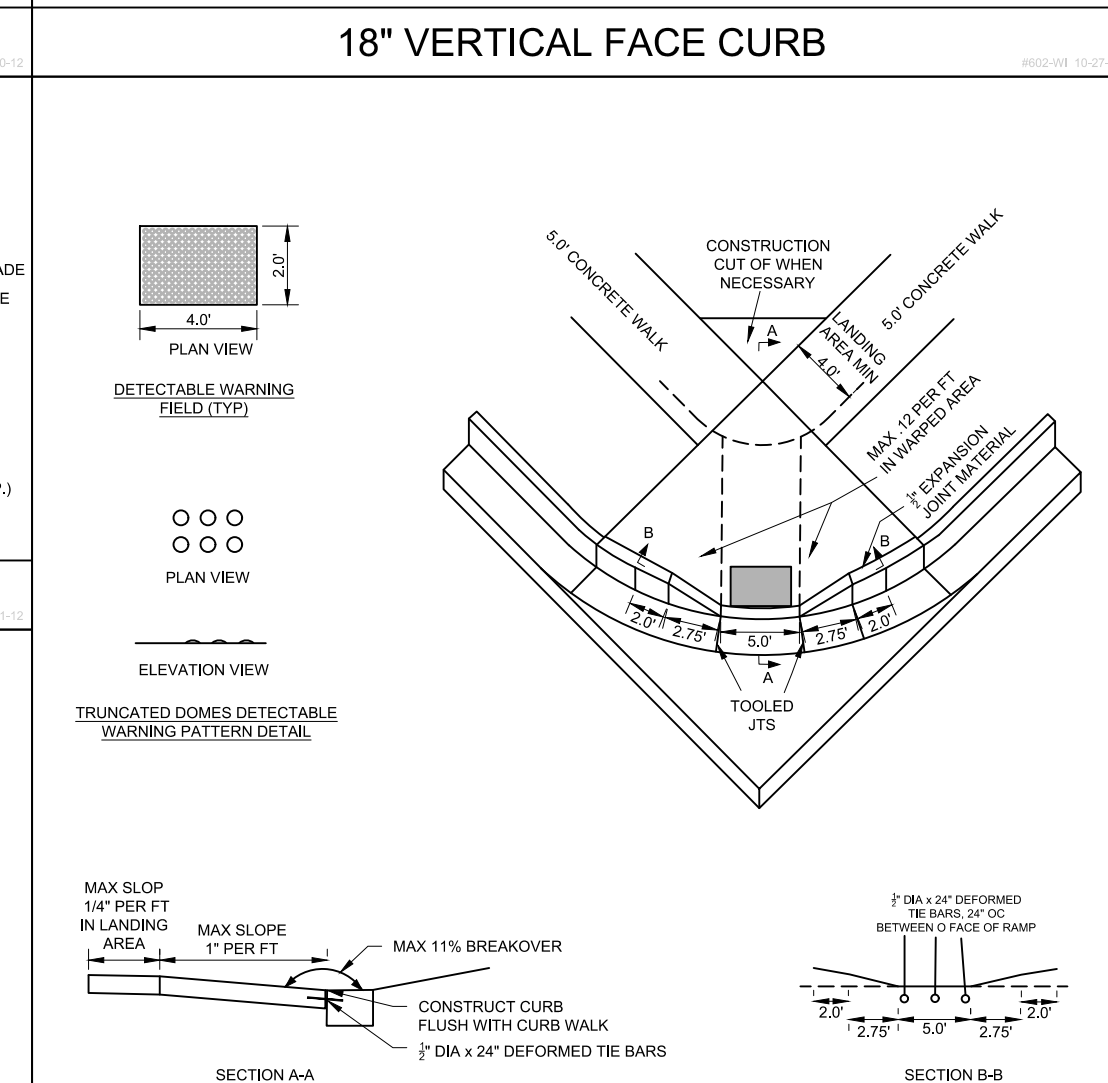
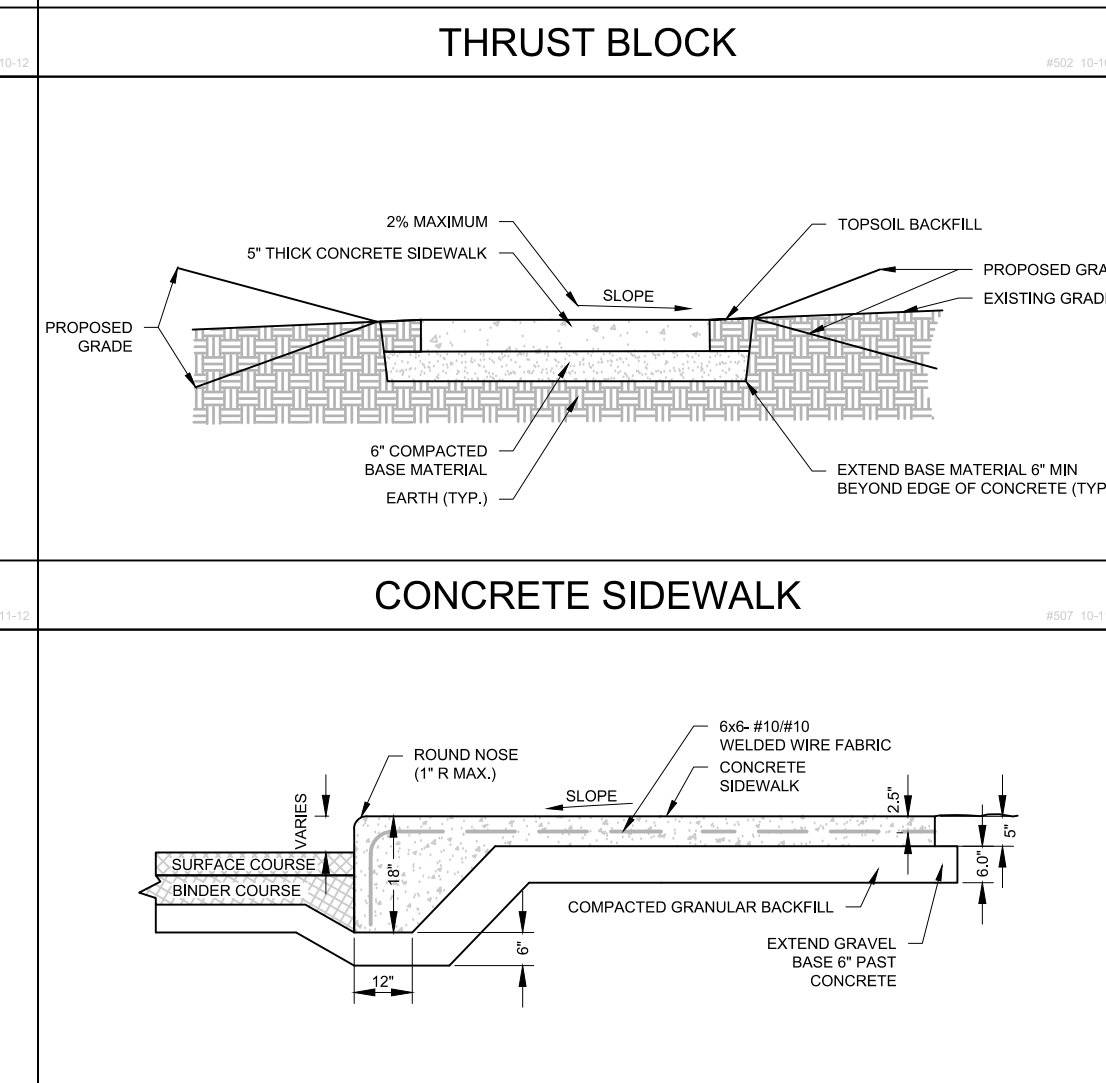
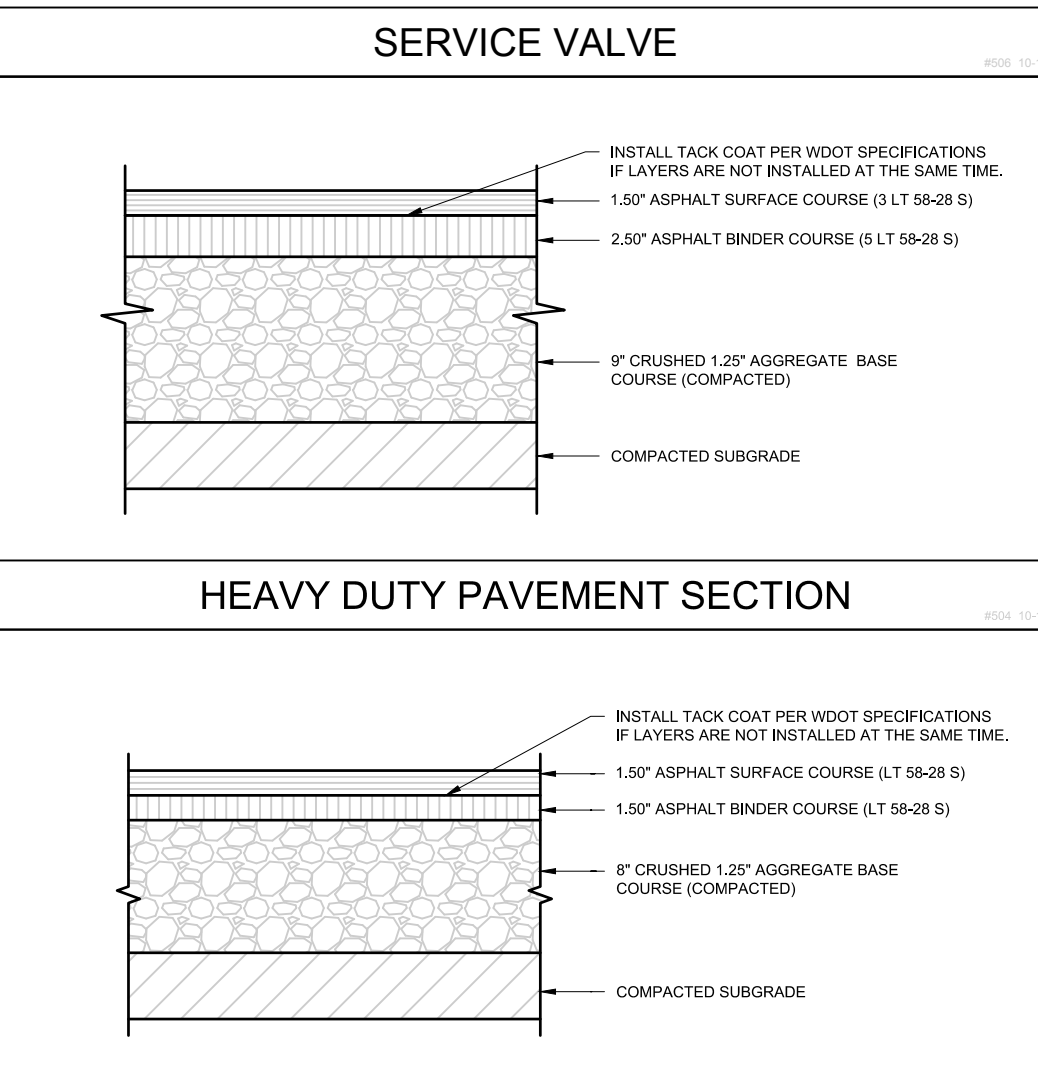
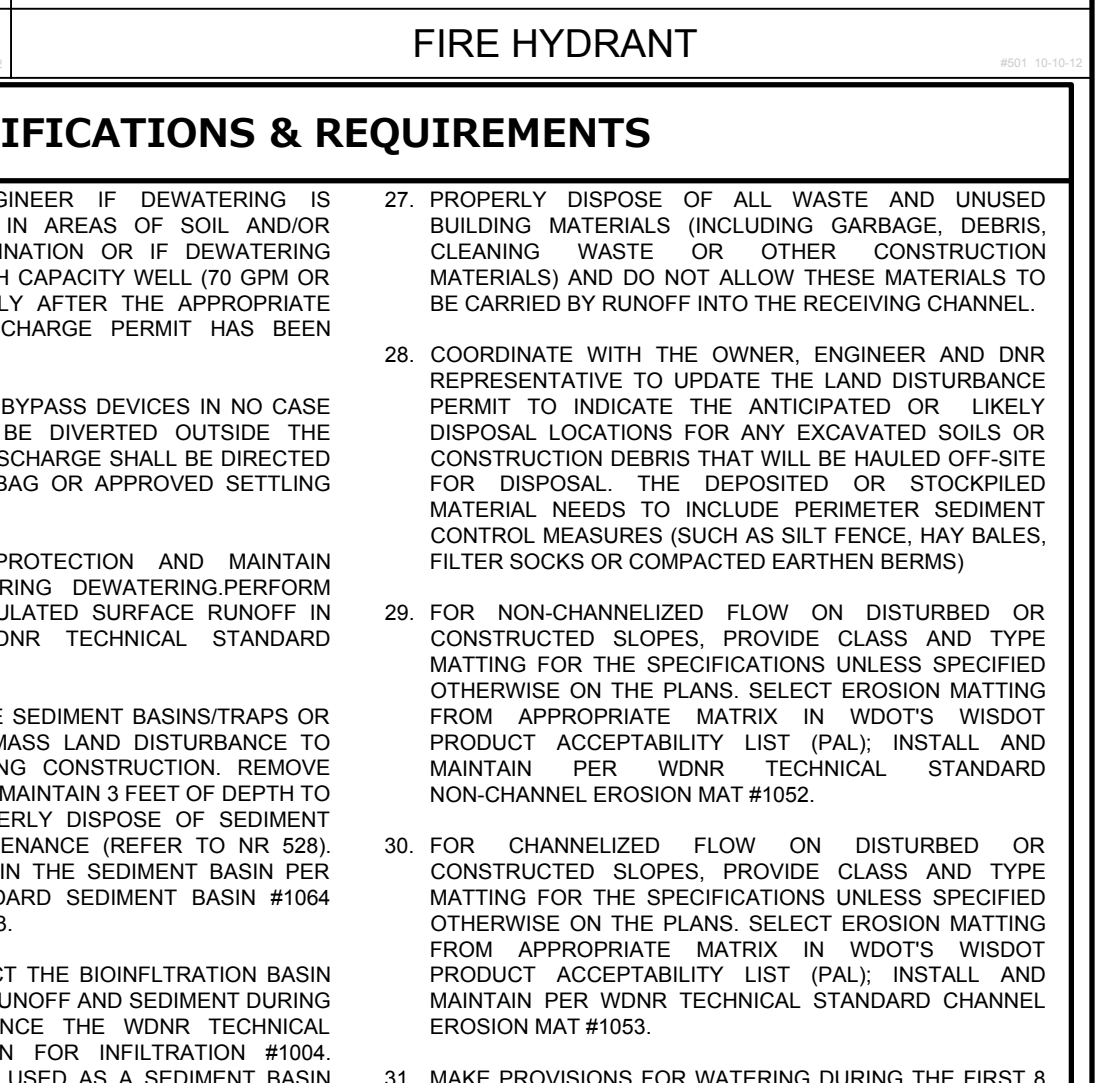
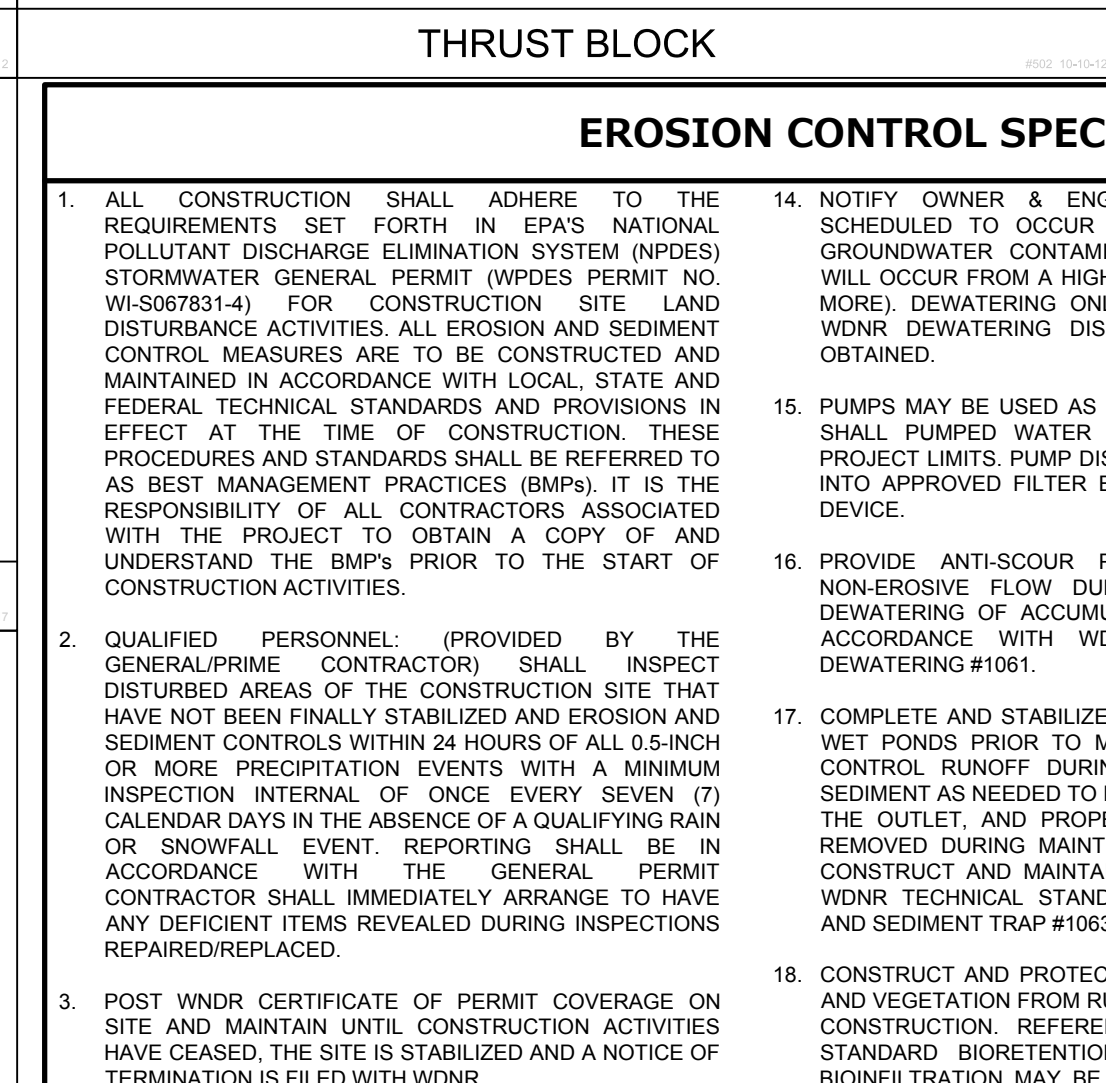
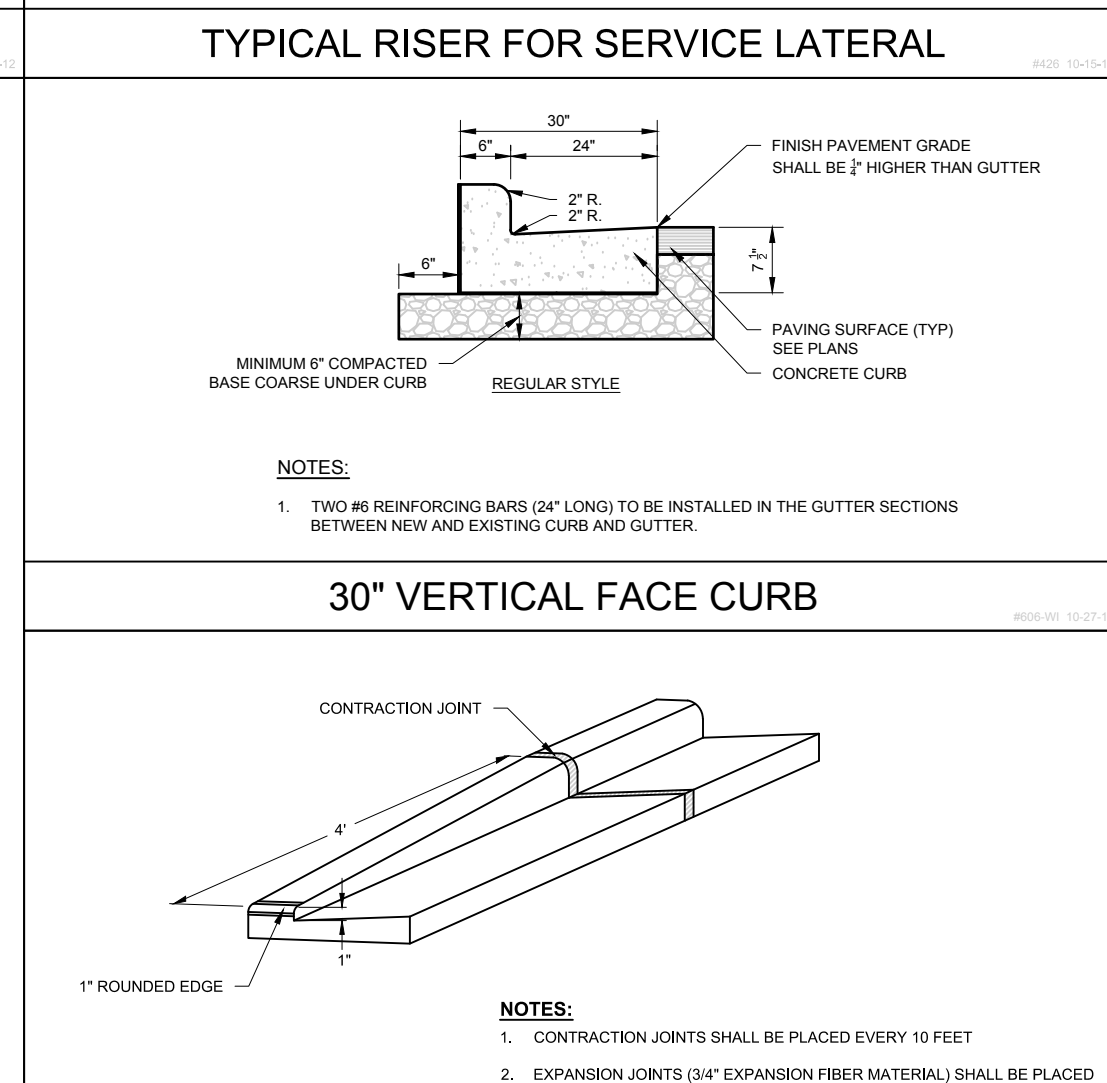
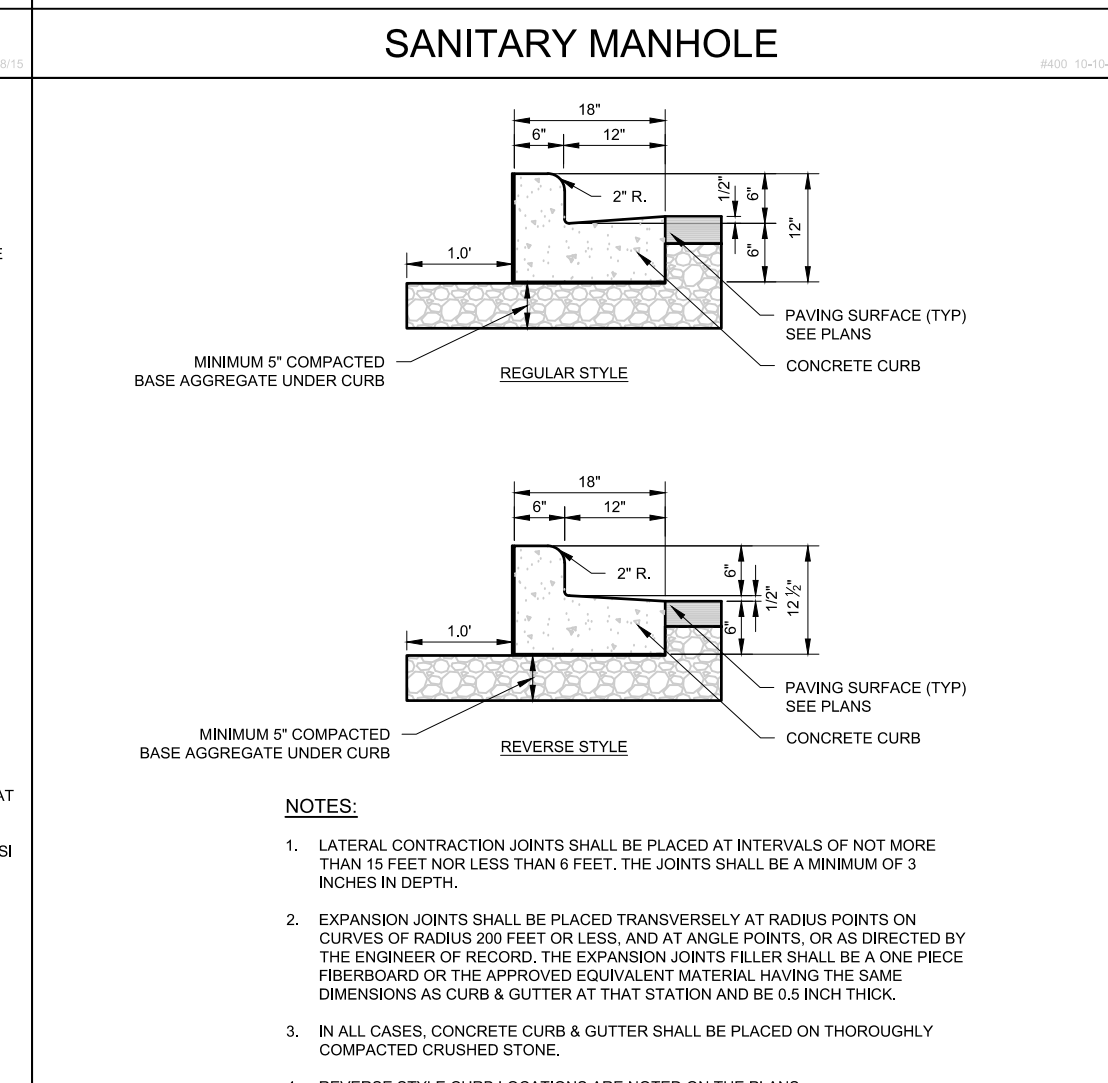
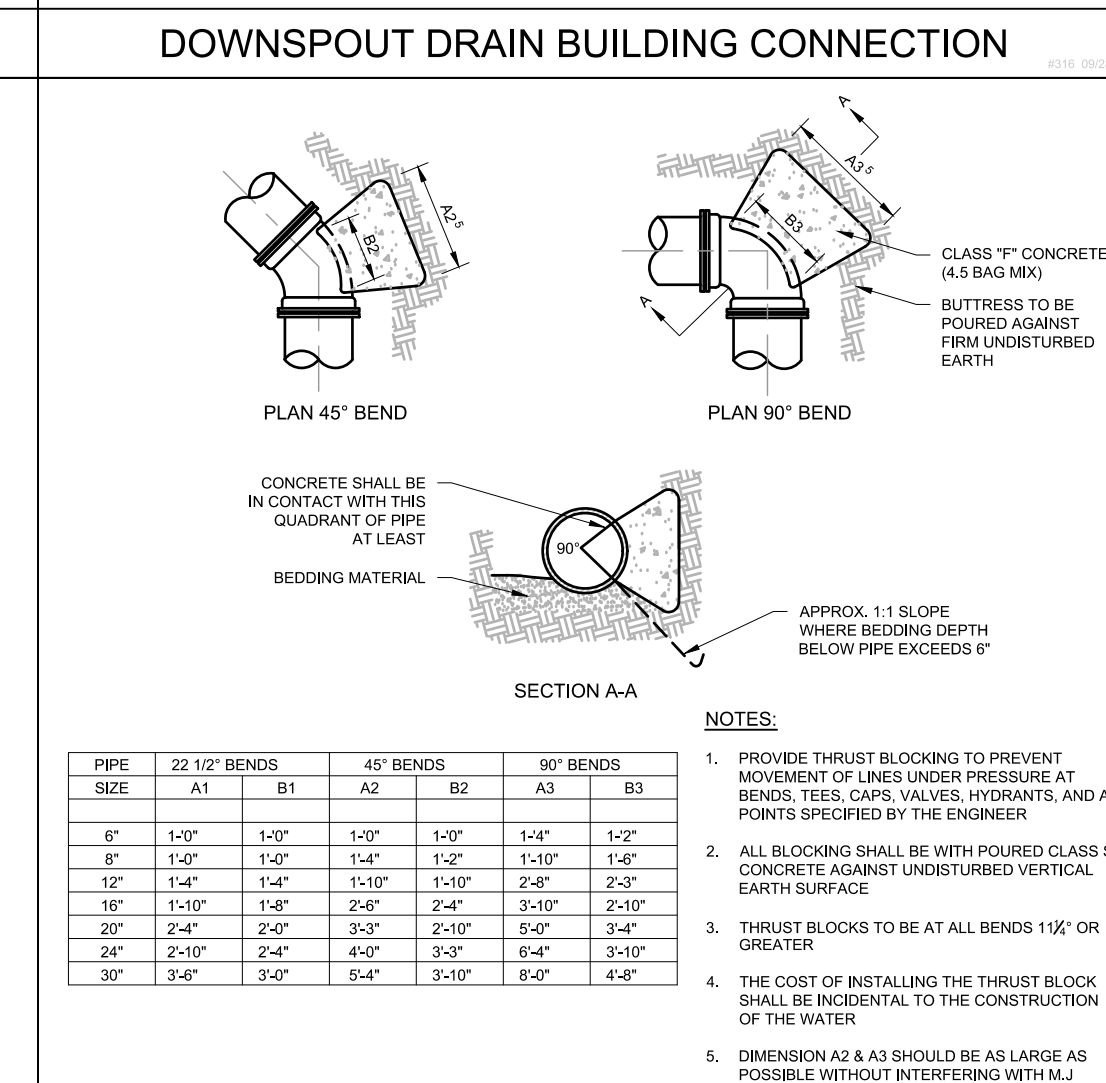
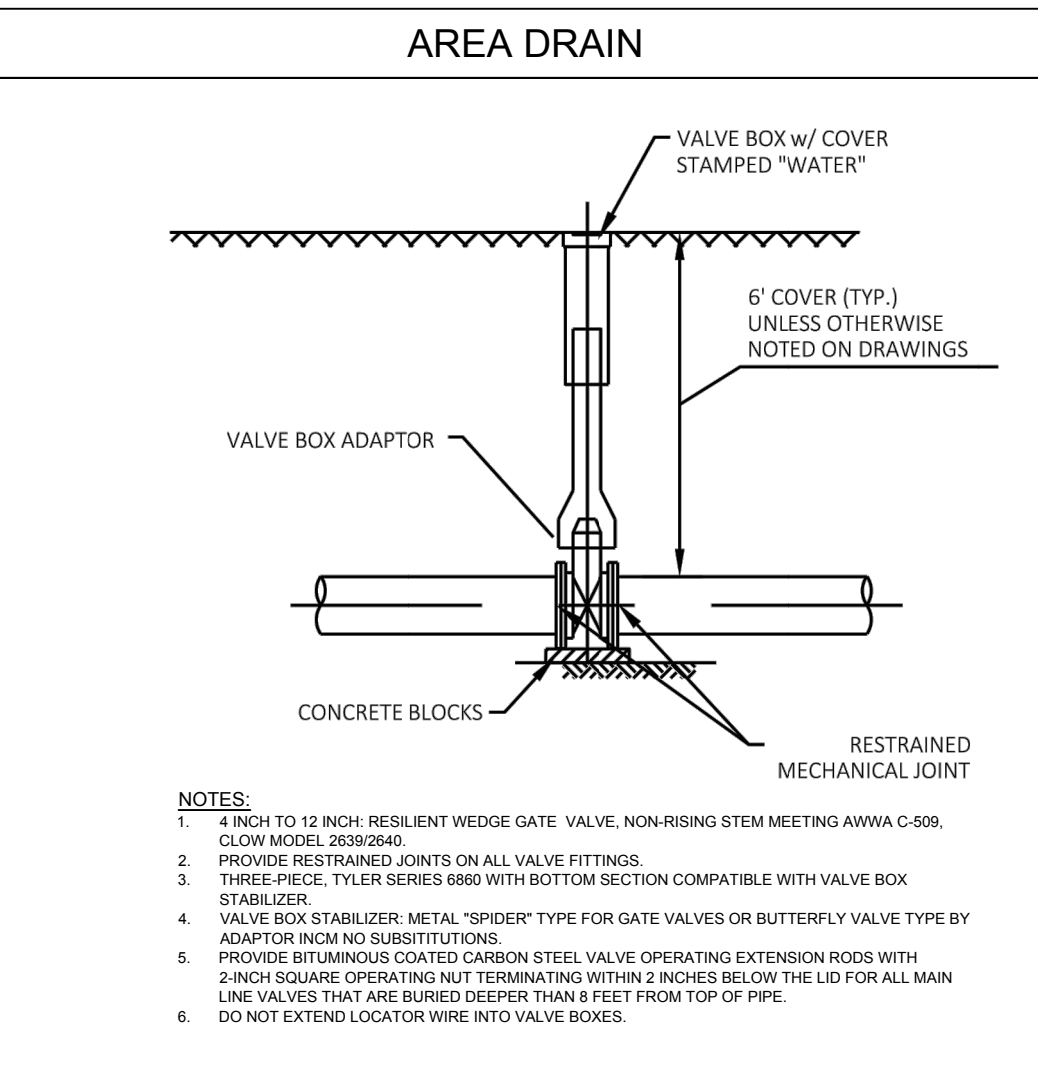
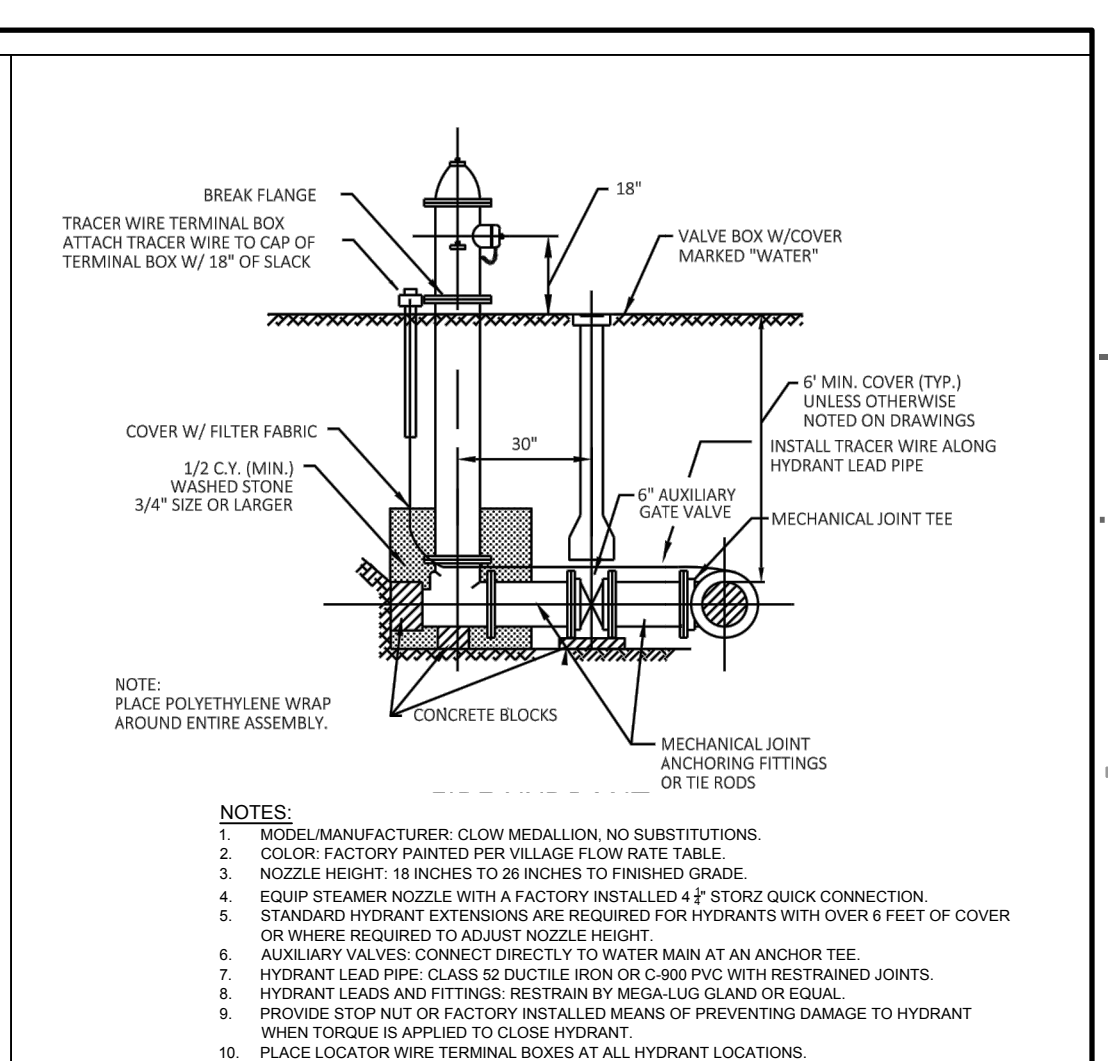
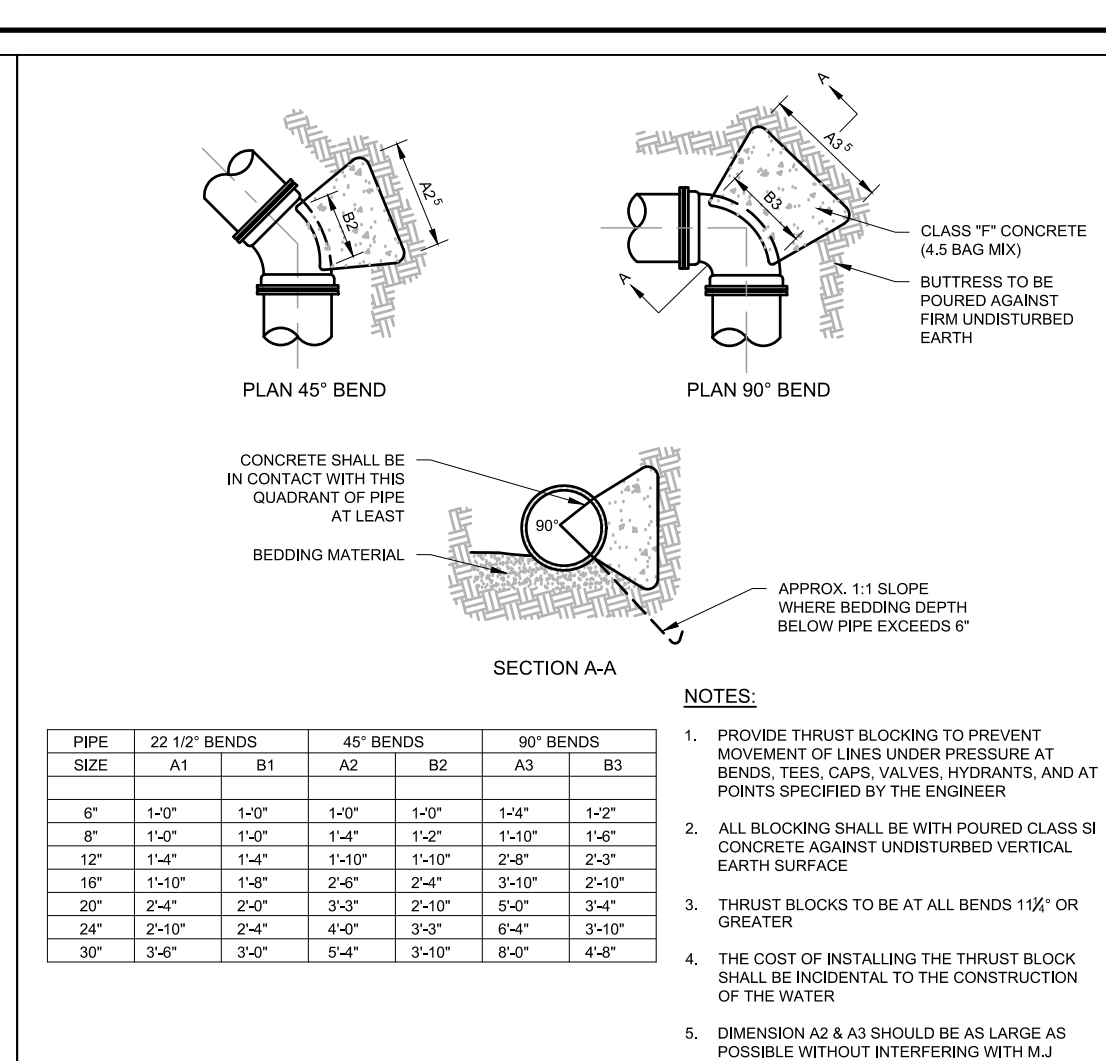
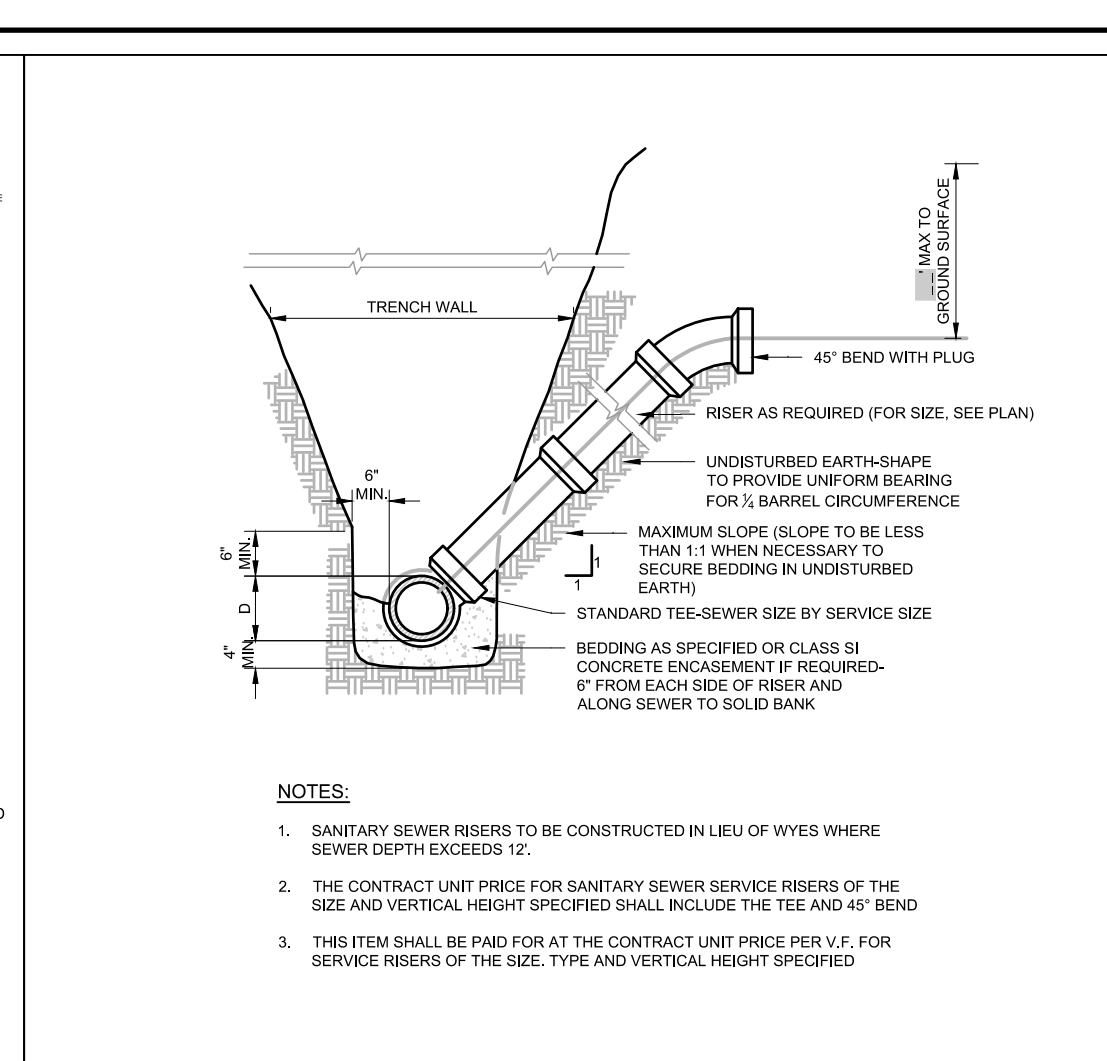
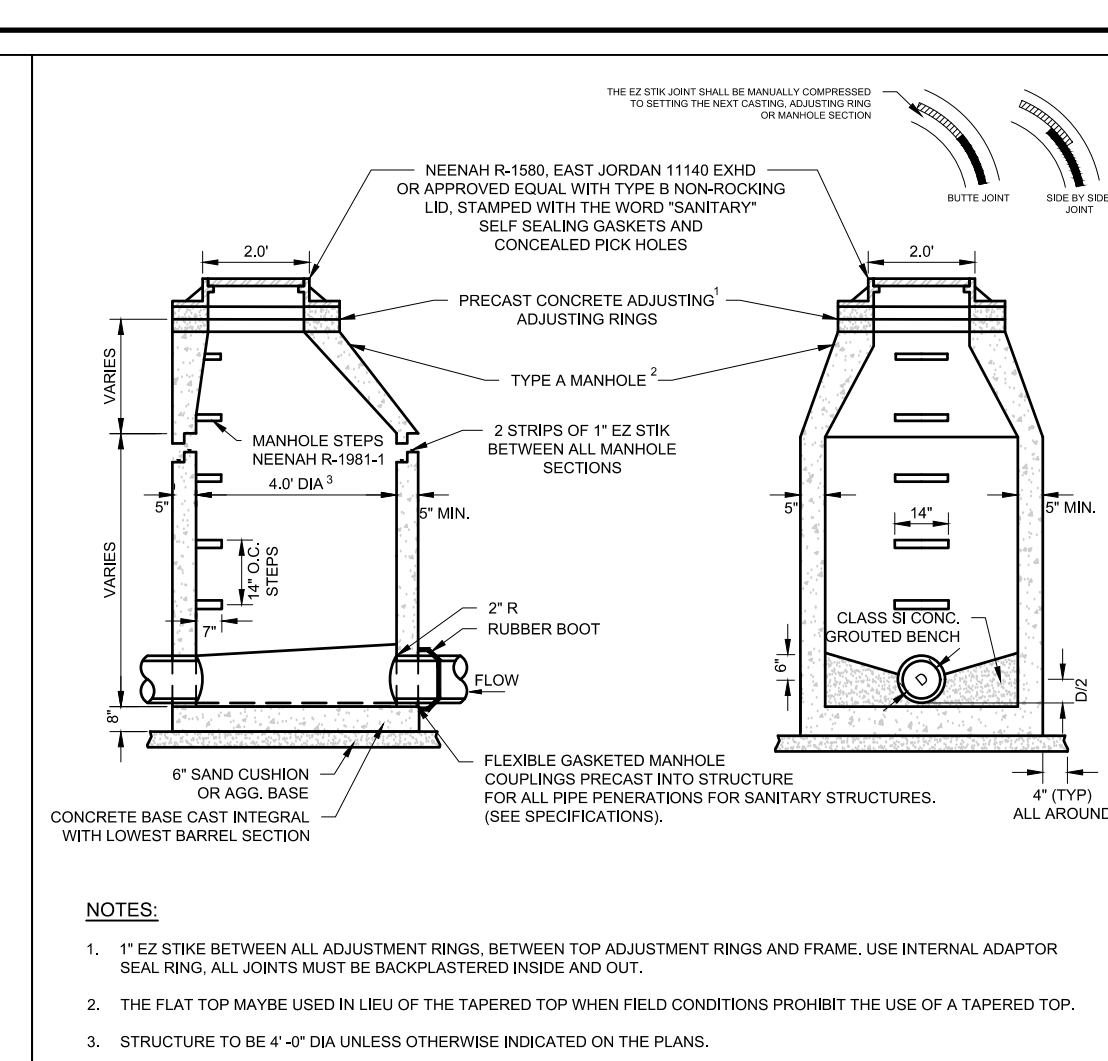
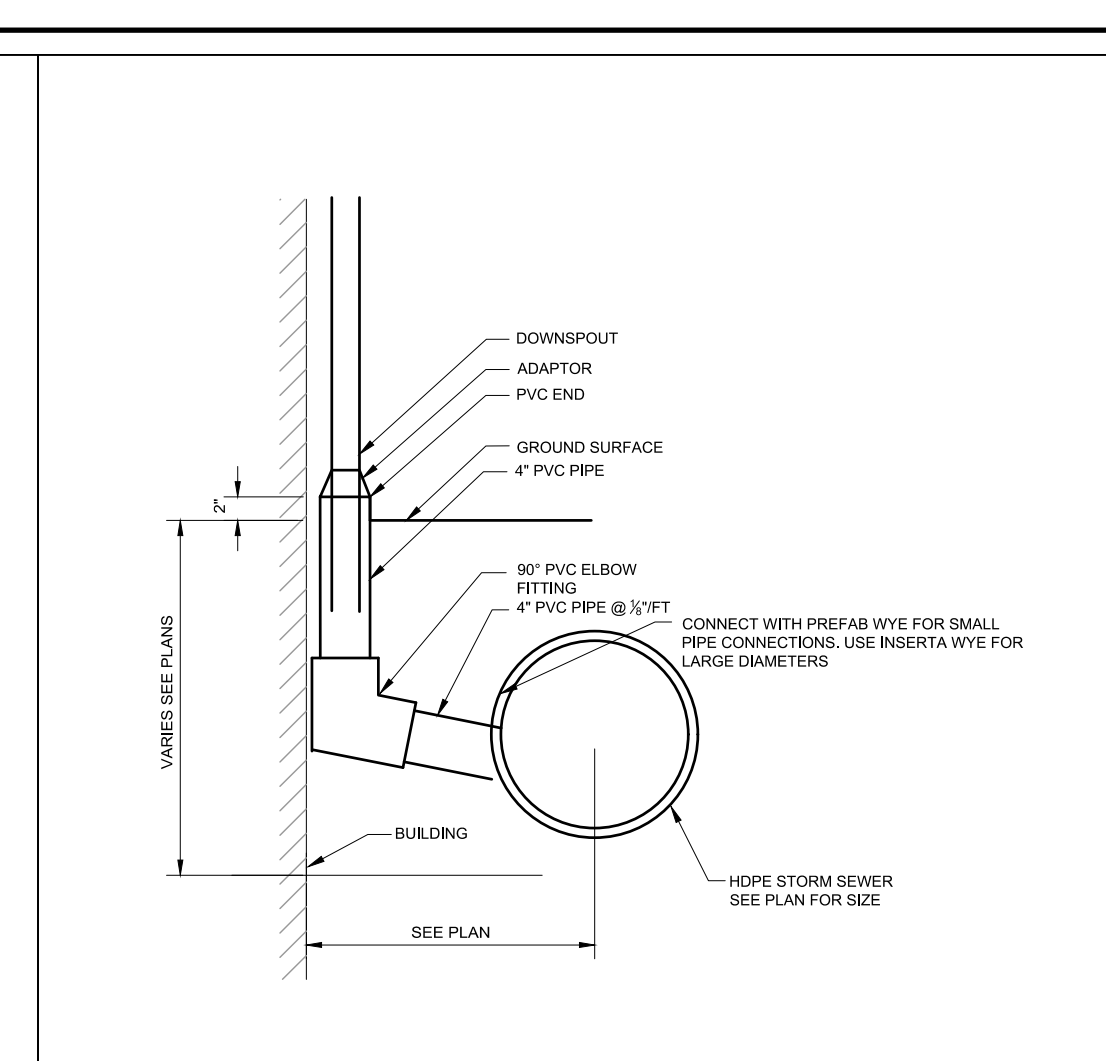
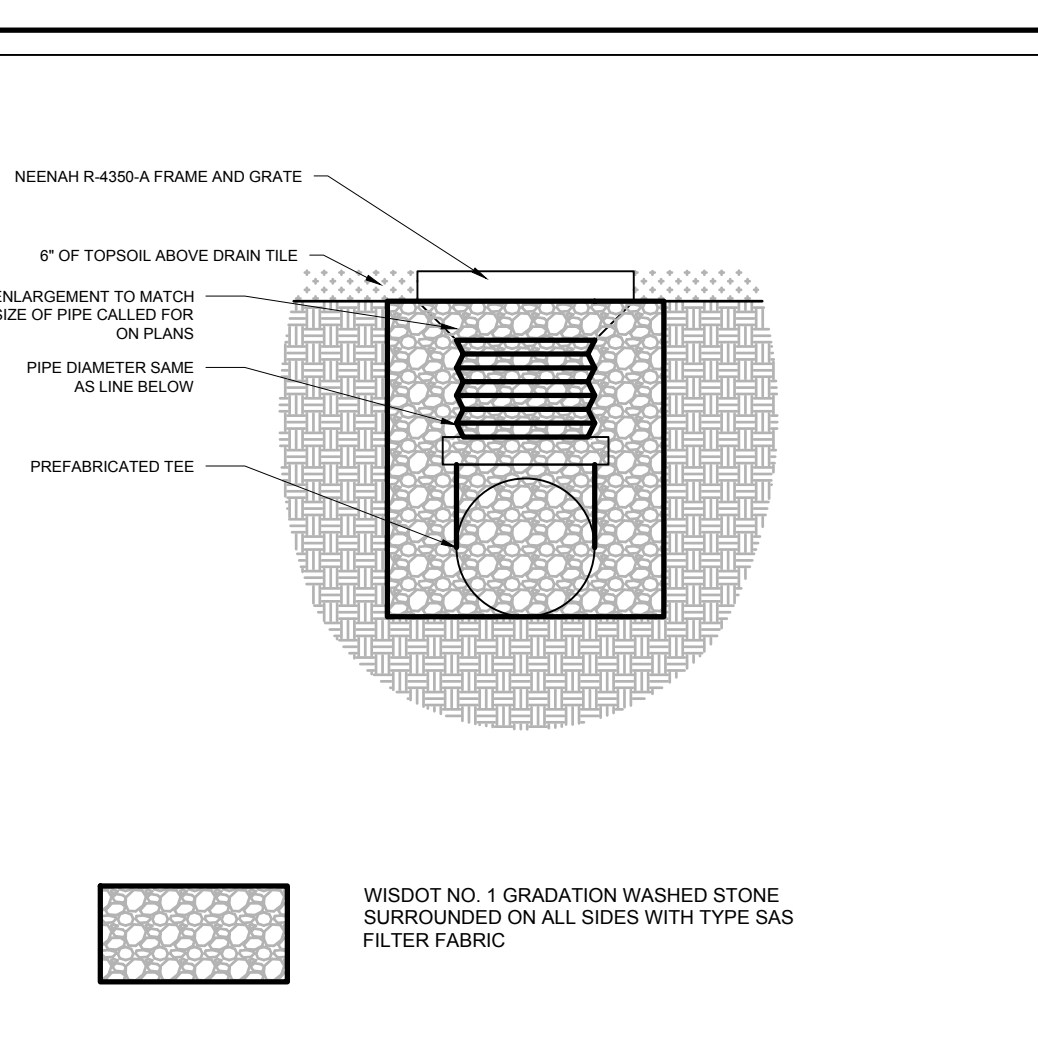
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CONSTRUCTION DETAILS AND SPECIFICATIONS

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DESIGNED: HLJ

REVIEWED: AAK

DESIGNED: AAK

REVIEWED: HLJ

DESIGNED: HLJ

REVIEWED: AAK

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CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

CONSTRUCTION DETAILS AND SPECIFICATIONS

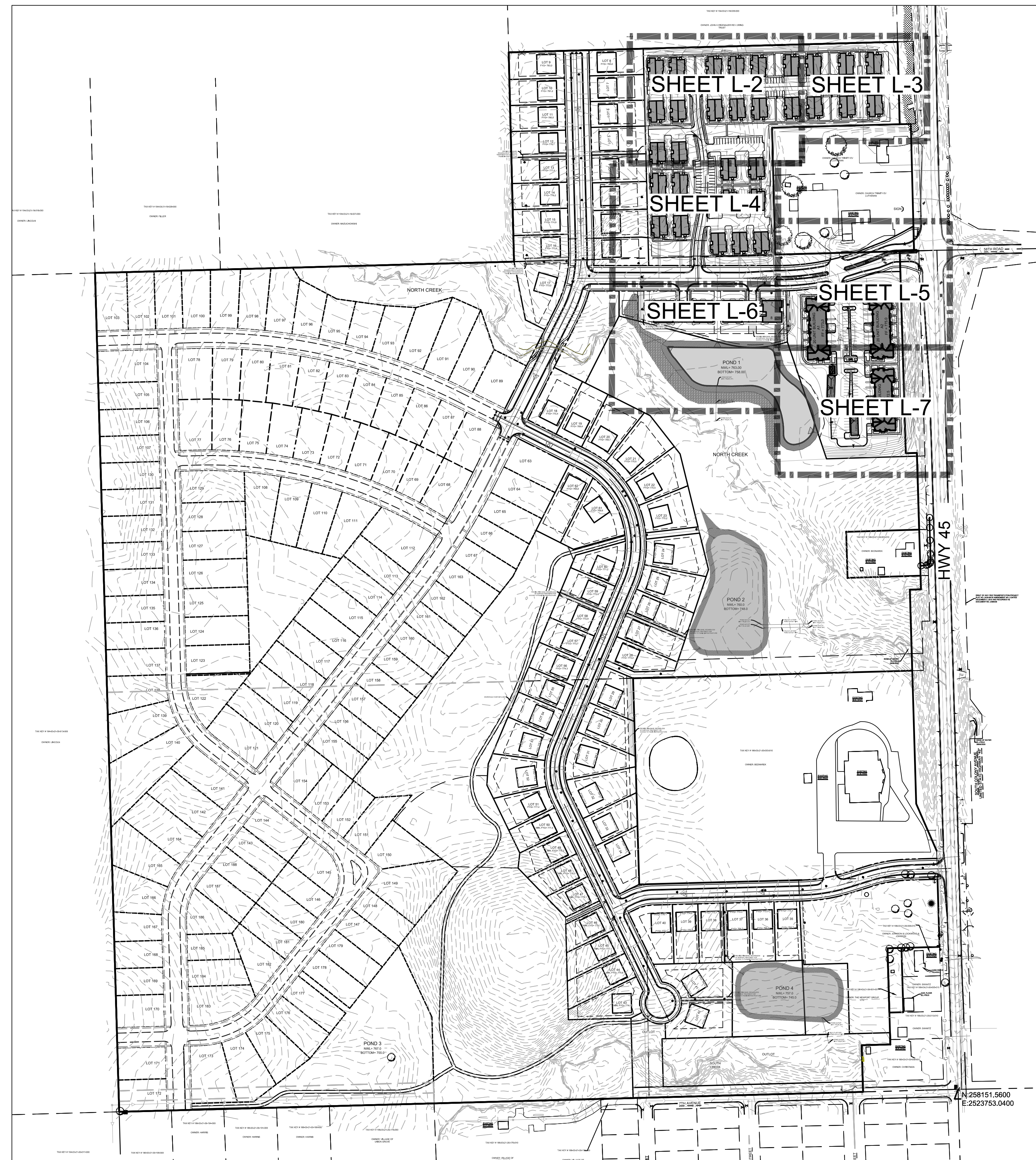
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1. BID SET	03/17/21
2. PER VILLAGE COMMENTS	05/03/21
3. ADDENDUM #1	05/17/21
4. PER VILLAGE COMMENTS	06/22/21

REG. JOB No.	DATE	SCALE	SHEET
955-00-01	06/20/20	AS SHOWN	C-22
START DATE	06/20/20		C-22

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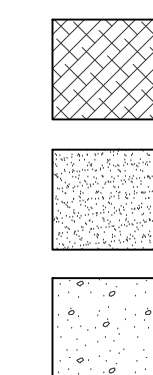
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DRAFTED: JSJ
REVIEWED: DUB



PLANT SCHEDULE

TREES	COMMON NAME	SIZE	QTY	
Acer freemanii 'Autumn Fantasy'	Autumn Fantasy Maple	2' Cal.	17	
Acer rubrum 'Red Sunset'	Red Sunset Maple	2' Cal.	6	
Aesculus x arnoldiana 'Autumn Splendor'	Autumn Splendor Buckeye	1.5' Cal.	6	
Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	1.5' Cal.	11	
Betula nigra 'Heritage'	Heritage River Birch	2' Cal.	6	
Crataegus crus-galli inermis	Thornless Cocksbur Hawthorn	1.5' Cal.	12	
Gleditsia triacanthos inermis 'Shademaster'	Shademaster Locust	2' Cal.	4	
Gymnocladus dioica	Kentucky Coffee Tree	2' Cal.	1	
Malus x 'Prairie Maid'	Prairie Maid Crabapple	1.5' Cal.	14	
Malus x 'Sugar Tyme'	Sugar Tyme Crabapple	1.5' Cal.	17	
Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac	1.5' Cal.	17	
EVERGREEN TREES	COMMON NAME	SIZE	QTY	
Abies concolor	White Fir	5' Ht.	10	
Picea glauca 'Densata'	Black Hills Spruce	5' Ht.	12	
Pinus strobus	White Pine	5' Ht.	15	
Pinus sylvestris	Scotch Pine	5' Ht.	3	
SHRUBS	COMMON NAME	SIZE	QTY	
Aronia melanocarpa 'Eлата'	Glossy Black Chokeberry	3 gal.	131	
Cephalanthus occidentalis 'Ping Pong'	Ping Pong Buttonbush	3 gal.	2	
Cornus stolonifera 'Arctic Fire'	Arctic Fire Dogwood	2 gal.	174	
Diervilla lonicera	Dwarf Bush Honeysuckle	2 gal.	24	
Diervilla sessilifolia 'Cool Splash'	Cool Splash Dwarf Honeysuckle	2 gal.	120	
Hydrangea p 'Vanilla Strawberry'	Vanilla Strawberry Hydrangea	3 gal.	39	
Hydrangea paniculata 'Bobo'	Bobo Hydrangea	2 gal.	72	
Hydrangea paniculata 'Tardiva'	Tardiva Panicle Hydrangea-TF	5' Ht.	27	
Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry	3 gal.	16	
Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	3 gal.	32	
Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark	3 gal.	16	
Rosa rugosa 'Purple Pavement'	Purple Pavement Rugosa Rose	2 gal.	35	
Spiraea japonica 'Anthony Waterer'	Anthony Waterer Spiraea	2 gal.	9	
Spiraea japonica 'Magic Carpet'	Magic Carpet Spirea	2 gal.	146	
Syringa meyeri 'Palibin'	Dwarf Korean Lilac	3 gal.	124	
Viburnum prunifolium 'Blackhaw'	Blackhaw Viburnum	5 gal.	30	
EVERGREEN SHRUBS	COMMON NAME	SIZE	QTY	
Juniperus chinensis 'J.N. Select Blue'	Star Power Juniper	4' Ht.	42	
Juniperus chinensis 'Mountbatten'	Mountbatten Juniper	4' Ht.	67	
Juniperus chinensis 'Pfitzeriana Kallays'	Kalloy Compact Juniper	3 gal.	126	
Juniperus horizontalis 'Youngstown'	Andorra Juniper	2 gal.	24	
Juniperus sabina 'Buffalo'	Buffalo Juniper	3 gal.	4	
Juniperus virginiana 'Grey Owl'	Eastern Redcedar Juniper	2 gal.	101	
Picea abies 'Pumila'	Pumila Spruce	3 gal.	38	
Pinus mugo 'Slowmound'	Slowmound Mugo Pine	3 gal.	18	
Taxus x media 'Densiformis'	Dense Yew	3 gal.	53	
Taxus x media 'Everlow'	Everlow Yew	3 gal.	126	
Taxus x media 'Tauntonii'	Tauntun Yew	3 gal.	39	
ORNAMENTAL GRASSES	COMMON NAME	SIZE	QTY	
Calamagrostis x a 'Karl Foerster'	Karl Foerster Reed Grass	1 gal.	152	
Calamagrostis x a 'Overdam'	Overdam Reed Grass	1 gal.	130	
Eragrostis spectabilis	Purple Love Grass	1 gal.	181	
Miscanthus sinensis 'Oktoberfest'	Oktoberfest Miscanthus	1 gal.	90	
Panicum virgatum 'Northwind'	Northwind Switch Grass	1 gal.	245	
Schizachyrium scoparium 'Blue Heaven'	Blue Heaven Little Bluestem Grass	1 gal.	10	
Sporobolus heterolepis 'Tara'	Prairie Dropseed	1 gal.	224	
PERENNIALS	COMMON NAME	SIZE	SPACING	QTY
Astilbe chinensis 'Vision in Red'	Vision in Red Astilbe	4.5" cont.	18" o.c.	140
Coreopsis verticillata 'Zagreb'	Zagreb Coreopsis	4.5" cont.	16" o.c.	313
Echinacea purpurea 'Magnus Superior'	Magnus Superior Coneflower	4.5" cont.	18" o.c.	134
Hemerocallis 'Stella De Oro'	Stella De Oro Daylily	4.5" cont.	20" o.c.	154
Hemerocallis 'Summer Wine'	Summer Wine Daylily	4.5" cont.	24" o.c.	108
Heuchera m 'Palace Purple'	Palace Purple Coral Bells	4.5" cont.	18" o.c.	82
Hosta x 'Frances Williams'	Frances Williams Hosta	4.5" cont.	50" o.c.	12
Hosta x 'Patric'	Patric Hosta	4.5" cont.	36" o.c.	20
Hosta x 'Sum & Substance'	Sum & Substance Hosta	4.5" cont.	50" o.c.	7
Leucanthemum x 'Becky'	Becky Shasta Daisy	4.5" cont.	15" o.c.	232
Nepeta x 'Walker's Low'	Walker's Low Catmint	4.5" cont.	28" o.c.	156
Rudbeckia f 'Viette's Little Suzy'	Viette's Little Suzy Showy Coneflower	4.5" cont.	12" o.c.	573
Salvia nemorosa 'May Night'	May Night Sage	4.5" cont.	18" o.c.	79
Sedum 'Autumn Joy'	Autumn Joy Sedum	4.5" cont.	24" o.c.	194

GROUND COVERS



BOTANICAL NAME	COMMON NAME	QTY
AGRECOL RAINWATER RENEWAL	AGRECOL RAINWATER RENEWAL MIX	32,744 sf
Turf Hydroseed	Drought Tolerant Fescue Blend	250,507 sf
Turf Hydroseed Low Grow	Low Grow Mix	104,515 sf

NOTES

- STREET TREES SHALL BE PLANTED ALONG ROADWAYS THROUGHOUT THE SITE. (REFER TO THE SINGLE FAMILY STREET TREE PLAN.)
- ALL PROPOSED STREETS SHALL HAVE STREET TREES PLANTED 40 - 50 FT APART
- STREET TREES SHALL BE PLANTED WHERE POSSIBLE JUST OUTSIDE OF THE ROW
- ALL STORM WATER PONDS SHALL HAVE RAINWATER RENEWAL SEED MIX INSTALLED FROM NORMAL WATER LEVEL TO HIGH WATER LEVEL



GRAPHICAL SCALE (FEET)



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CANOPY HILL MULTI-FAMILY DEVELOPMENT
VILLAGE OF UNION GROVE

LANDSCAPE OVERVIEW

REVISIONS

1	BID SET	03/17/21	
2	PER VILLAGE COMMENTS	05/03/21	
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SHEET
L-1
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DRAWN: JSJ
CHECKED: DUB
REVIEWED: DUB

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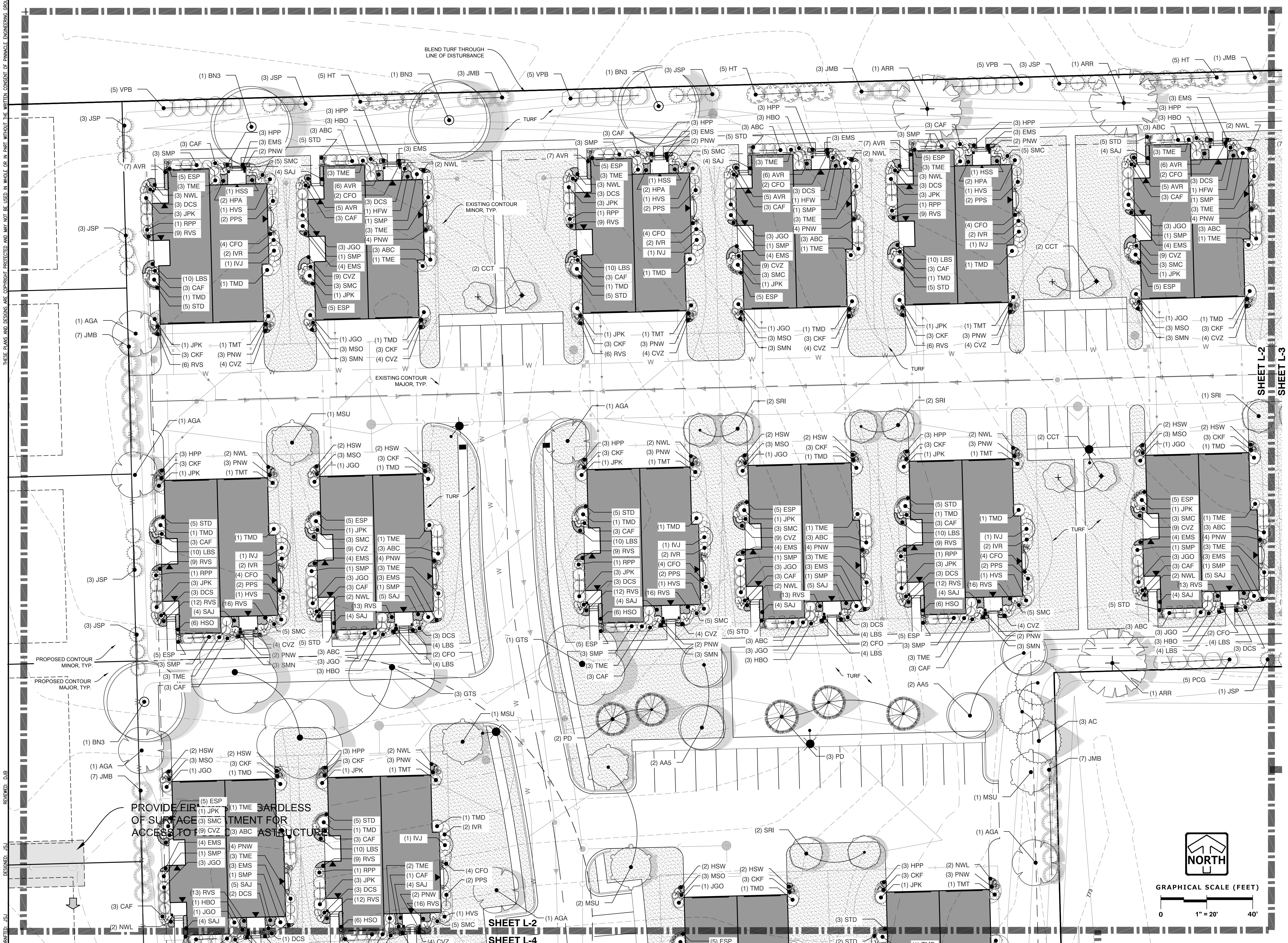
CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

LANDSCAPE ENLARGEMENT

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REG. JOB No.	REG. No.	REG. PM	START DATE	SCALE	SHEET
959.00-01	AEK		11/06/2020	1" = 20'	L-2
					L-9



PLANT KEY

TREES	BOTANICAL NAME	COMMON NAME
AFA	Acer freemanii 'Autumn Fantasy'	Autumn Fantasy Maple
ARR	Acer rubrum 'Red Sunset'	Red Sunset Maple
AAS	Aesculus x arnoldiana 'Autumn Splendor'	Autumn Splendor Buckeye
AGA	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry
BN3	Betula nigra 'Heritage'	Heritage River Birch
CCT	Cristatus crux-galli inermis	Thornless Cockspur Hawthorn
GTS	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Locust
GDK	Gymnocladus dioica	Kentucky Coffee Tree
NPM	Malus x 'Prairie Maid'	Prairie Maid Crabapple
MSU	Malus x 'Sugar Tyme'	Sugar Tyme Crabapple
SRI	Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac

EVERGREEN TREES	BOTANICAL NAME	COMMON NAME
AC	Abies concolor	White Fir
PD	Picea glauca 'Densata'	Black Hills Spruce
PS	Pinus strobus	White Pine
PS2	Pinus sylvestris	Scotch Pine

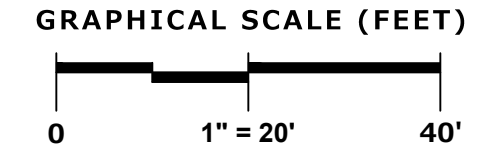
SHRUBS	BOTANICAL NAME	COMMON NAME
ABC	Aronia melanocarpa 'Eleta'	Glossy Black Chokeberry
CPF	Cephalanthus occidentalis 'Ping Pong'	Ping Pong Buttonbush
CAF	Cornus stolonifera 'Arctic Fire'	Arctic Fire Dogwood
DLH	Diervilla lonicera	Dwarf Bush Honeysuckle
DCS	Diervilla sessiliflora 'Cool Splash'	Cool Splash Dwarf Honeysuckle
HVS	Hydrangea p. 'Vanilla Strawberry'	Vanilla Strawberry Hydrangea
HBO	Hydrangea paniculata 'Bobo'	Bobo Hydrangea
HT	Hydrangea paniculata 'Tardiva'	Tardiva Panicle Hydrangea-TF
RJL	Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
PCG	Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark
RFP	Rosa rugosa 'Purple Pavement'	Purple Pavement Rugosa Rose
SAW	Spiraea japonica 'Anthony Waterer'	Anthony Waterer Spirea
SMC	Spiraea japonica 'Magic Carpet'	Magic Carpet Spirea
VPS	Syringa meyeri 'Paloin'	Dwarf Korean Lilac
VPS	Viburnum prunifolium 'Blackhaw'	Blackhaw Viburnum

EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME
JSP	Juniperus chinensis 'J.N. Select Blue'	Star Power Juniper
JMB	Juniperus chinensis 'Mountain Blue'	Mountain Blue Juniper
JPK	Juniperus chinensis 'Pfitzeriana Kallays'	Kelly Compact Juniper
JYA	Juniperus horizontalis 'Youngstown'	Arctic Juniper
JSB	Juniperus sibirica 'Buffalo'	Buffalo Juniper
JGO	Juniperus virginiana 'Grey Owl'	Eastern Redcedar Juniper
PFS	Picea abies 'Pumila'	Pumila Spruce
PMS	Pinus mugo 'Stowmound'	Stowmound Mugo Pine
TMD	Taxus x media 'Densiformis'	Dense Yew
TME	Taxus x media 'Everlow'	Everlow Yew
TMT	Taxus x media 'Tauntonii'	Taunton Yew

ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME
CFO	Calamagrostis x 'Karl Foerster'	Karl Foerster Reed Grass
ESP	Eragrostis spectabilis	Overdam Reed Grass
MSO	Miscanthus sinensis 'Octoberfest'	Purple Low Grass
PNW	Panicum virgatum 'Northwind'	Octoberfest Miscanthus
SLB	Schizachyrium scoparium 'Blue Heaven'	Northwind Switch Grass
STD	Sporobolus heterolepis 'Tara'	Blue Heaven Little Bluestem Grass

PERENNIALS	BOTANICAL NAME	COMMON NAME
AVR	Asilabe chinensis 'Vision in Red'	Vision in Red Astilbe
CVZ	Carexps verticillata 'Zebra'	Zebra Carex
EMS	Echinacea purpurea 'Magnus Superior'	Magnus Superior Coneflower
HSD	Hemerocallis 'Stella De Oro'	Stella De Oro Daylily
HSW	Hemerocallis 'Summer Wine'	Summer Wine Daylily
HPP	Heuchera m. 'Palace Purple'	Palace Purple Coral Bells
HPA	Hosta x 'Patriot'	Patriot Hosta
HPW	Hosta x 'Sum & Substance'	Sum & Substance Hosta
HSS	Hosta x 'Frances Williams'	Frances Williams Hosta
LBS	Leucanthemum x 'Becky'	Becky Shasta Daisy
NWL	Nepeta x 'Walker s Low'	Walker s Low Catmint
RVS	Rubiacos 1 'Violet s Little Suzy'	Violet s Little Suzy Showy Coneflower
SMN	Salvia nemorosa 'May Night'	May Night Sage
SAJ	Sedum 'Autumn Joy'	Autumn Joy Sedum

GROUND COVERS	BOTANICAL NAME	COMMON NAME
(Pattern)	AGRECOL RAINWATER RENEWAL	AGRECOL RAINWATER RENEWAL MIX
(Pattern)	Turf Hydroseed	Drought Tolerant Fescue Blend
(Pattern)	Turf Hydroseed Low Grow	Low Grow Mix



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REVIEWED: DJE
 DESIGNED: JSJ
 DRAFTED: JSJ

Z:\PROJECTS\2017\959.00-WI\CAD\SHETS\959.00-WI-CANOPY HILL LANDSCAPE SET.DWG


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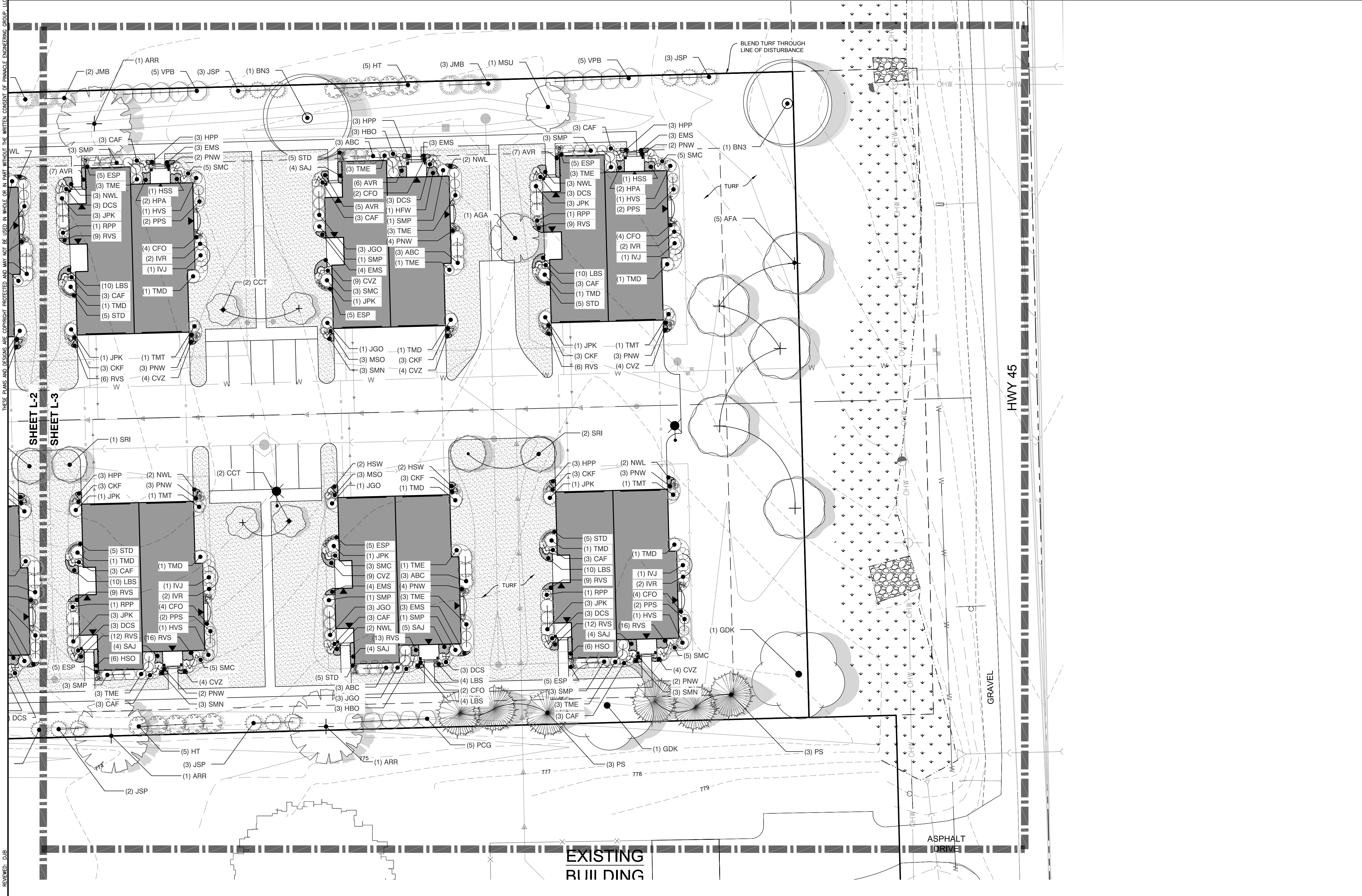
CANOPY HILL MULTI-FAMILY DEVELOPMENT

VILLAGE OF UNION GROVE

LANDSCAPE ENLARGEMENT

REVISIONS	
1. BID SET	03/17/21
2. PER VILLAGE COMMENTS	05/03/21
3. ADDENDUM #1	05/17/21
4. PER VILLAGE COMMENTS	06/22/21

REG. JOB No.	DATE	SCALE	SHEET
959.00-WI	05/20/20	1" = 20'	L-3
			L-9



PLANT KEY

TREES	BOTANICAL NAME	COMMON NAME
AFA	Acer rupestris 'Autumn Fantasy'	Autumn Fantasy Maple
ARR	Acer rubrum 'Red Sunset'	Red Sunset Maple
AAS	Aesculus x arnoldiana 'Autumn Splendor'	Autumn Splendor Buckeye
AGA	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry
BNS	Betula nigra 'Heritage'	Heritage River Birch
CCT	Crataegus crus-galli inermis	Thornless Cockspur Hawthorn
GTS	Gleditsia tricanthos inermis 'Shademaster'	Shademaster Locust
GDK	Gymnocladus dioica	Kentucky Coffee Tree
MPM	Malus x 'Prairie Maid'	Prairie Maid Crabapple
MSU	Malus x 'Sugar Tyme'	Sugar Tyme Crabapple
SRI	Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac

EVERGREEN TREES	BOTANICAL NAME	COMMON NAME
AC	Abies concolor	White Fir
PD	Picea glauca 'Densata'	Black Hills Spruce
PS	Pinus strobus	White Pine
PS2	Pinus sylvestris	Scotch Pine

SHRUBS	BOTANICAL NAME	COMMON NAME
ABC	Aronia melanocarpa 'Elate'	Glossy Black Chokeberry
CPP	Cephalanthus occidentalis 'Ping Pong'	Ping Pong Buttonbush
CAF	Cornus stolonifera 'Arctic Fire'	Arctic Fire Dogwood
DLH	Diervilla lonicera	Dwarf Bush Honeysuckle
BNS	Diervilla sessilifolia 'Cool Splash'	Cool Splash Dwarf Honeysuckle
HVS	Hydrangea p. 'Vanilla Strawberry'	Vanilla Strawberry Hydrangea
HBO	Hydrangea paniculata 'Bobo'	Bobo Hydrangea
HT	Hydrangea paniculata 'Tardiva'	Tardiva Panicle Hydrangea-TF
IVJ	Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
PCG	Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark
RFP	Rosa rugosa 'Purple Pavement'	Purple Pavement Rugosa Rose
SAW	Spiraea japonica 'Anthony Waterer'	Anthony Waterer Spiraea
SMC	Spiraea japonica 'Magic Carpet'	Magic Carpet Spiraea
SMP	Syringa meyeri 'Palibin'	Swing Korean Lilac
VPB	Viburnum prunifolium 'Blackhaw'	Blackhaw Viburnum

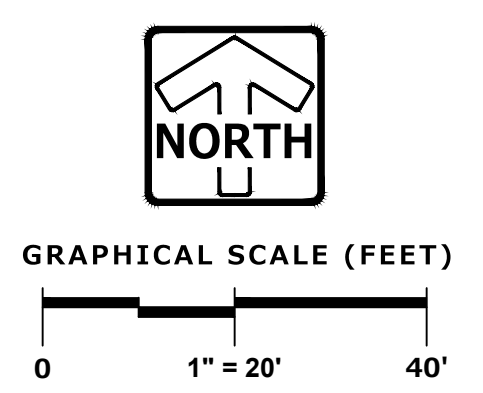
EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME
JSP	Juniperus chinensis 'J.N. Select Blue'	Star Power Juniper
JMB	Juniperus chinensis 'Mountbatten'	Mountbatten Juniper
JPK	Juniperus chinensis 'Pfitzingeriana Kallies'	Kallies Compact Juniper
JVA	Juniperus horizontalis 'Youngstown'	Andorra Juniper
JSB	Juniperus sabina 'Buffalo'	Buffalo Juniper
JGO	Juniperus virginiana 'Grey Owl'	Eastern Redcedar Juniper
PPS	Pinus strobus 'Pumila'	Pumila Spruce
PMS	Pinus mugo 'Slowmound'	Slowmound Mugo Pine
TMD	Taxus x media 'Densaformis'	Dense Yew
TME	Taxus x media 'Everlow'	Everlow Yew
TMT	Taxus x media 'Taurtonii'	Taurton Yew

ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME
CKF	Calamagrostis x a 'Karl Foerster'	Karl Foerster Reed Grass
CFO	Calamagrostis x a 'Overdam'	Overdam Reed Grass
ESP	Eragrostis spectabilis	Purple Love Grass
MSO	Miscanthus sinensis 'Oktoberfest'	Oktoberfest Miscanthus
PNW	Panicum virgatum 'Northwind'	Northwind Switch Grass
SLB	Schizachyrium scoparium 'Blue Heaven'	Blue Heaven Little Bluestem Grass
STD	Sporobolus heterolepis 'Tara'	Prairie Dropseed

PERENNIALS	BOTANICAL NAME	COMMON NAME
AVR	Asilbe chinensis 'Vision in Red'	Vision in Red Asilbe
CVZ	Coreopsis verticillata 'Zagreb'	Zagreb Coreopsis
EMS	Echinacea purpurea 'Magnus Superior'	Magnus Superior Coneflower
HSD	Hemerocallis 'Steels De Oro'	Steels De Oro Daylily
HSW	Hemerocallis 'Summer Wine'	Summer Wine Daylily
HPP	Heuchera m 'Palace Purple'	Palace Purple Coral Bells
HPW	Hosta x 'Frances Williams'	Frances Williams Hosta
HPA	Hosta x 'Patriot'	Patriot Hosta
HSS	Hosta x 'Sum & Substance'	Sum & Substance Hosta
LBS	Leucanthemum x 'Becky'	Becky Shasta Daisy
NWL	Nepeta x 'Walker's Low'	Walker's Low Catmint
RVS	Rudbeckia l 'Vette's Little Suzy'	Vette's Little Suzy Showy Coneflower
SMN	Salvia nemorosa 'May Night'	May Night Sage
SAJ	Sedum 'Autumn Joy'	Autumn Joy Sedum

GROUND COVERS	BOTANICAL NAME	COMMON NAME
[Pattern]	AGREGOL RAINWATER RENEWAL	AGREGOL RAINWATER RENEWAL MIX
[Pattern]	Turf Hydrosseed	Drought Tolerant Fescue Blend
[Pattern]	Turf Hydrosseed Low Grow	Low Grow Mix

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PLANT KEY		
TREES	BOTANICAL NAME	COMMON NAME
AFA	Acer freemanii 'Autumn Fantasy'	Autumn Fantasy Maple
ARR	Acer rubrum 'Red Sunset'	Red Sunset Maple
AAS	Aesculus x arrioidiana 'Autumn Splendor'	Autumn Splendor Buckeye
AGA	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry
PN3	Betula nigra 'Heritage'	Heritage River Birch
CCT	Crataegus crus-galli inermis	Thornless Cockspur Hawthorn
GTS	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Locust
GDK	Gymnocladus dioica	Kentucky Coffee Tree
MPM	Malus x 'Prarie Maid'	Prarie Maid Crabapple
MSU	Malus x 'Sugar Tyme'	Sugar Tyme Crabapple
SRI	Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac
EVERGREEN TREES	BOTANICAL NAME	COMMON NAME
AC	Abies concolor	White Fir
PD	Picea glauca 'Densata'	Black Hills Spruce
PS	Pinus strobus	White Pine
PS2	Pinus sylvestris	Scotch Pine
SHRUBS	BOTANICAL NAME	COMMON NAME
ABC	Aronia melanocarpa 'Eleta'	Glossy Black Chokeberry
CPP	Cephalanthus occidentalis 'Ping Pong'	Ping Pong Buttonbush
CAF	Cornus stolonifera 'Arctic Fire'	Arctic Fire Dogwood
DLH	Diervilla lonicera	Diervilla Bush Honeysuckle
DCS	Diervilla sessilifolia 'Cool Splash'	Cool Splash Dwarf Honeysuckle
HVS	Hydrangea p 'Vanilla Strawberry'	Vanilla Strawberry Hydrangea
HBO	Hydrangea paniculata 'Bobo'	Bobo Hydrangea
HT	Hydrangea paniculata 'Tardiva'	Tardiva Panicle Hydrangea-TF
IVJ	Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
PCG	Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark
RFP	Rosa rugosa 'Purple Pavement'	Purple Pavement Rugosa Rose
SAW	Spiraea japonica 'Anthony Waterer'	Anthony Waterer Spiraea
SMC	Spiraea japonica 'Magic Carpet'	Magic Carpet Spiraea
SMP	Syringa meyeri 'Palibin'	Dwarf Korean Lilac
VBP	Viburnum parnobile 'Blackhaw'	Blackhaw Viburnum
EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME
JSP	Juniperus chinensis 'J.N. Select Blue'	Star Power Juniper
JMB	Juniperus chinensis 'Moundbatten'	Moundbatten Juniper
JPK	Juniperus chinensis 'Pfitzeriana Kallays'	Kallay Compact Juniper
JJA	Juniperus horizontalis 'Youngstown'	Youngstown Juniper
JSB	Juniperus sabina 'Buffalo'	Buffalo Juniper
JGO	Juniperus virginiana 'Grey Owl'	Eastern Redcedar Juniper
PPS	Picea abies 'Pumila'	Pumila Spruce
PMS	Pinus mugo 'Stowdown'	Stowdown Mugo Pine
TMD	Taxus x media 'Densiformis'	Dense Yew
TME	Taxus x media 'Evelow'	Evelow Yew
TMT	Taxus x media 'Taunton'	Taunton Yew
ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME
CFE	Karl Foerster Reed Grass	Karl Foerster Reed Grass
CFO	Calamagrostis x a 'Overdam'	Overdam Reed Grass
ESP	Eragrostis spectabilis	Purple Love Grass
MSC	Miscanthus sinensis 'Obsidian'	Obsidian Miscanthus
PNW	Panicum virgatum 'Northwind'	Northwind Switch Grass
SLB	Schizachyrium scoparium 'Blue Heaven'	Blue Heaven Little Bluestem Grass
STD	Sporobolus heteropus 'Tara'	Prairie Dropseed
PERENNIALS	BOTANICAL NAME	COMMON NAME
AVR	Astilbe chinensis 'Vision in Red'	Vision in Red Astilbe
CVZ	Coreopsis verticillata 'Zagreb'	Zagreb Coreopsis
EMS	Echinacea purpurea 'Magnus Superior'	Magnus Superior Coneflower
HMO	Hemerocallis 'Stella De Oro'	Stella De Oro Daylily
HSW	Hemerocallis 'Summer Wine'	Summer Wine Daylily
HPP	Heuchera m 'Palace Purple'	Palace Purple Coral Bells
HPW	Hosta x 'Frances Williams'	Frances Williams Hosta
HFA	Hosta x 'Patriot'	Patriot Hosta
HSS	Hosta x 'Sum & Substance'	Sum & Substance Hosta
LBS	Leucanthemum x 'Becky'	Becky Shasta Daisy
NWL	Neptis x 'Walker's Low'	Walker's Low Catmint
RVS	Rubus x 'Vivette's Little Suzy'	Vivette's Little Suzy Showy Coneflower
SMN	Salvia nemorosa 'May Night'	May Night Sage
SAJ	Sedum 'Autumn Joy'	Autumn Joy Sedum
GROUND COVERS	BOTANICAL NAME	COMMON NAME
[Pattern]	AGRECOL RAINWATER RENEWAL	AGRECOL RAINWATER RENEWAL MIX
[Pattern]	Turf Hydroseed	Drought Tolerant Fescue Blend
[Pattern]	Turf Hydroseed Low Grow	Low Grow Mix

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CANOPY HILL MULTI-FAMILY DEVELOPMENT

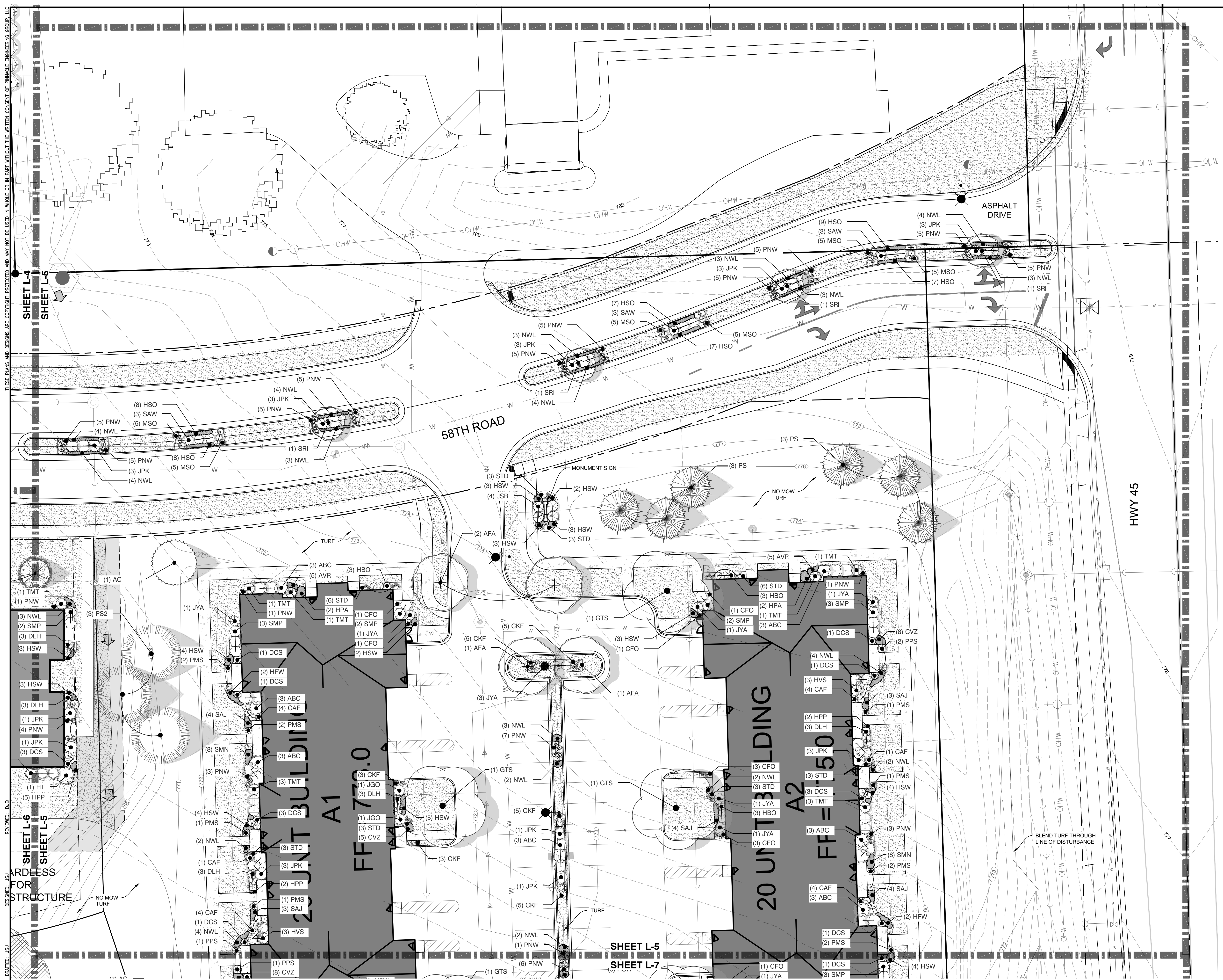
VILLAGE OF UNION GROVE

LANDSCAPE ENLARGEMENT

REVISIONS	
1	BID SET 03/17/21
2	PER VILLAGE COMMENTS 05/03/21
3	APPENDIX #1 05/17/21
4	PER VILLAGE COMMENTS 06/22/21

SHEET L-4
 SHEET L-9

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PLANT KEY		
TREES	BOTANICAL NAME	COMMON NAME
AFA	Acer freemanii 'Autumn Fantasy'	Autumn Fantasy Maple
AFR	Acer rubrum 'Red Sunset'	Red Sunset Maple
AAS	Aesculus x arnoldiana 'Autumn Splendor'	Autumn Splendor Buckeye
AGA	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry
BNS	Betula nigra 'Heritage'	Heritage River Birch
CCT	Crategeus crus-galli inermis	Thornless Cockspur Hawthorn
GTS	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Locust
GDK	Gymnocladus dioica	Kentucky Coffee Tree
MPM	Malus x 'Prairie Maid'	Prairie Maid Crabapple
MSU	Malus x 'Sugar Tyme'	Sugar Tyme Crabapple
SRI	Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac
EVERGREEN TREES	BOTANICAL NAME	COMMON NAME
AC	Abies concolor	White Fir
PD	Picea glauca 'Densata'	Black Hills Spruce
PS	Pinus strobus	White Pine
PS2	Pinus sylvestris	Scotch Pine
SHRUBS	BOTANICAL NAME	COMMON NAME
ABC	Aronia melanocarpa 'Eliata'	Glossy Black Chokeberry
CPP	Cephalanthus occidentalis 'Ping Pong'	Ping Pong Butterflybush
CAF	Cornus stolonifera 'Arctic Fire'	Arctic Fire Dogwood
DLH	Diervilla lonicera	Dwarf Bush Honeysuckle
DCS	Diervilla sessilifolia 'Cool Splash'	Cool Splash Dwarf Honeysuckle
HVS	Hydrangea p 'Vanilla Strawberry'	Vanilla Strawberry Hydrangea
HBO	Hydrangea paniculata 'Bobo'	Bobo Hydrangea
HT	Hydrangea paniculata 'Tardiva'	Tardiva Panicle Hydrangea-TF
IVR	Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
PCG	Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark
RFPP	Rosa rugosa 'Purple Pavement'	Purple Pavement Rugosa Rose
SAW	Spiraea japonica 'Anthony Waterer'	Anthony Waterer Spiraea
SMP	Spiraea japonica 'Magic Carpet'	Magic Carpet Spiraea
SMP	Syringia meyeri 'Pallid'	Dwarf Korean Lilac
VFB	Viburnum pumilifolium 'Blackhaw'	Blackhaw Viburnum
EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME
JSP	Juniperus chinensis 'J.N. Select Blue'	Star Power Juniper
JMB	Juniperus chinensis 'Mountain Blue'	Mountain Juniper
JPK	Juniperus chinensis 'Pfitzeriana Kallays'	Kalloy Compact Juniper
JYA	Juniperus horizontalis 'Youngstown'	Youngstown Juniper
JSB	Juniperus sabinna 'Buffalo'	Buffalo Juniper
JOO	Juniperus virginiana 'Grey Owl'	Eastern Redcedar Juniper
PPS	Juniperus horizontalis 'Pumila'	Pumila Spruce
PMS	Pinus mugo 'Slowmound'	Slowmound Mugo Pine
TMD	Taxus x media 'Densaformis'	Dense Yew
TME	Taxus x media 'Evelow'	Evelow Yew
TMT	Taxus x media 'Taunton'	Taunton Yew
ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME
CFE	Calamagrostis x 'Karl Foerster'	Karl Foerster Reed Grass
CFO	Calamagrostis x 'Overdam'	Overdam Reed Grass
ESP	Eragrostis spectabilis	Purple Love Grass
MSO	Miscanthus sinensis 'Obtoberfest'	Obtoberfest Miscanthus
PNW	Panicum virgatum 'Northwind'	Northwind Switch Grass
SLB	Schizachyrium scoparium 'Blue Heaven'	Blue Heaven Little Bluestem Grass
STD	Sporobolus heterolepis 'Tara'	Prairie Dropseed
PERENNIALS	BOTANICAL NAME	COMMON NAME
AVR	Asiatic chinenensis 'Vision in Red'	Vision in Red Astilbe
CVZ	Cornopsis verticillata 'Zagreb'	Zagreb Coreopsis
EMS	Echinacea purpurea 'Magnus Superior'	Magnus Superior Coneflower
HSD	Hemerocallis 'Stella De Oro'	Stella De Oro Daylily
HSW	Hemerocallis 'Summer Wine'	Summer Wine Daylily
HPP	Heuchera m 'Palace Purple'	Palace Purple Coral Bells
HFA	Hosta x 'Patriot'	Patriot Hosta
HSW	Hosta x 'Frances Williams'	Frances Williams Hosta
LBS	Hosta x 'Sum & Substance'	Sum & Substance Hosta
NWL	Leucanthemum x 'Becky'	Becky Shasta Daisy
NWL	Napaea x 'Walker's Low'	Walker's Low Calamint
RVS	Rudbeckia f 'Vette's Little Suzy'	Vette's Little Suzy Showy Coneflower
SMN	Salvia nemorosa 'May Night'	May Night Sage
SAJ	Sedum 'Autumn Joy'	Autumn Joy Sedum
GROUND COVERS	BOTANICAL NAME	COMMON NAME
	AGRECOL RAINWATER RENEWAL	AGRECOL RAINWATER RENEWAL MIX
	Turf Hydroseed	Drought Tolerant Fescue Blend
	Turf Hydroseed Low Grow	Low Grow Mix

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CANOPY HILL MULTI-FAMILY DEVELOPMENT
VILLAGE OF UNION GROVE

LANDSCAPE ENLARGEMENT

REVISIONS	
1	BID SET 03/17/21
2	PER VILLAGE COMMENTS 05/03/21
3	ADDENDUM #1 05/17/21
4	PER VILLAGE COMMENTS 06/22/21

1" = 20'

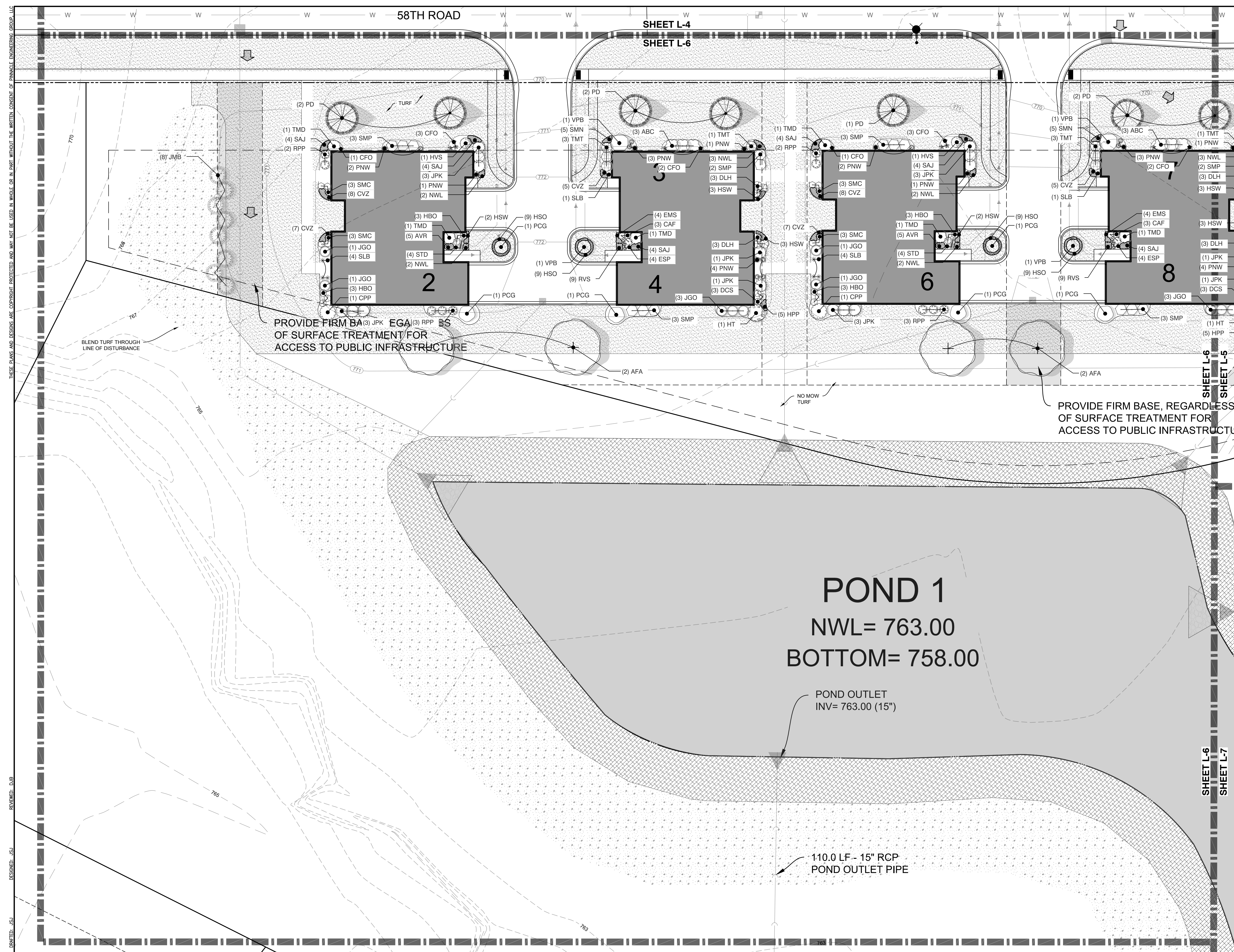
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LANDSCAPE ENLARGEMENT

SHEET L-5

L-9

REVISED DATE: 05/17/21
SCALE: 1" = 20'



PLANT KEY		
TREES	BOTANICAL NAME	COMMON NAME
AFA	Acer freemanii 'Autumn Fantasy'	Autumn Fantasy Maple
AFR	Acer rubrum 'Red Sunset'	Red Sunset Maple
AAS	Aesculus x arnoldiana 'Autumn Splendor'	Autumn Splendor Buckeye
AGA	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry
BNG	Betula nigra 'Heritage'	Heritage River Birch
CCT	Crataegus crus-galli inermis	Thornless Cockspur Hawthorn
GTS	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Locust
GDK	Gymnocladus dioica	Kentucky Coffee Tree
MPM	Malus x 'Prairie Maid'	Prairie Maid Crabapple
MSU	Malus x 'Sugar Tyme'	Sugar Tyme Crabapple
SRI	Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac
EVERGREEN TREES	BOTANICAL NAME	COMMON NAME
AC	Abies concolor	White Fir
PD	Picea glauca 'Densata'	Black Hills Spruce
PS	Pinus strobus	White Pine
PS2	Pinus sylvestris	Scotch Pine
SHRUBS	BOTANICAL NAME	COMMON NAME
ABC	Aronia melanocarpa 'Elate'	Glossy Black Chokeberry
CPP	Cephaelis occidentalis 'Pung Pong'	Pung Pong Butterbush
CAF	Cornus stolonifera 'Arctic Fire'	Arctic Fire Dogwood
DLH	Diervilla lonicera	Dwarf Bush Honeysuckle
DCS	Diervilla sessifolia 'Cool Splash'	Cool Splash Dwarf Honeysuckle
HVS	Hydrangea p. 'Vanilla Strawberry'	Vanilla Strawberry Hydrangea
HBO	Hydrangea paniculata 'Bobo'	Bobo Hydrangea
HT	Hydrangea paniculata 'Tardiva'	Tardiva Panicle Hydrangea-TF
IWJ	Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
PCG	Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark
RFP	Rosa rugosa 'Purple Pavement'	Purple Pavement Rugosa Rose
SAW	Spiraea japonica 'Anthony Waterer'	Anthony Waterer Spiraea
SMP	Spiraea japonica 'Magic Carpet'	Magic Carpet Spiraea
SMP	Syringa meyeri 'Palibin'	Dwarf Meyer Lilac
VPB	Viburnum pumilum 'Blackhaw'	Blackhaw Viburnum
EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME
JSP	Juniperus chinensis 'J.N. Select Blue'	Star Power Juniper
JMB	Juniperus chinensis 'Mountbatten'	Mountbatten Juniper
JPK	Juniperus chinensis 'Pfitzeriana Kallays'	Kallay Compact Juniper
JYA	Juniperus horizontalis 'Youngstown'	Youngstown Juniper
JSB	Juniperus sabiniana 'Buffalo'	Buffalo Juniper
JGO	Juniperus virginiana 'Grey Owl'	Eastern Redcedar Juniper
PPS	Picea abies 'Pumila'	Pumila Spruce
PMS	Pinus mugo 'Slowmound'	Slowmound Mugo Pine
TMD	Taxus x media 'Densiformis'	Dense Yew
TME	Taxus x media 'Everflow'	Everflow Yew
TMT	Taxus x media 'Tautonia'	Tautonia Yew
ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME
CKF	Calamagrostis x 'a. Karl Foerster'	Karl Foerster Reed Grass
CFO	Calamagrostis x 'a. Overdam'	Overdam Reed Grass
ESP	Eragrostis spectabilis	Purple Love Grass
MSO	Miscanthus sinensis 'Oktoberrfest'	Oktoberrfest Miscanthus
PNW	Panicum virgatum 'Northwind'	Northwind Switch Grass
SLB	Schizachyrium scoparium 'Blue Heaven'	Blue Heaven Little Bluestem Grass
STD	Sporobolus heterolepis 'Tara'	Prairie Dropseed
PERENNIALS	BOTANICAL NAME	COMMON NAME
AVR	Astilbe chinensis 'Vision in Red'	Vision in Red Astilbe
CVZ	Carexpsis verticillata 'Zagreb'	Zagreb Careopsis
EMS	Echinacea purpurea 'Magnus Superior'	Magnus Superior Coneflower
HSD	Hemerocallis 'Stella De Oro'	Stella De Oro Daylily
HSW	Hemerocallis 'Summer Wine'	Summer Wine Daylily
HPP	Heuchera m 'Palace Purple'	Palace Purple Coral Bells
HPW	Hosta x 'Frances Williams'	Frances Williams Hosta
HFA	Hosta x 'Patriot'	Patriot Hosta
HSS	Hosta x 'Sum & Substance'	Sum & Substance Hosta
LBS	Leucanthemum x 'Becky'	Becky Shasta Daisy
NWL	Nepeta x 'Walker's Low'	Walker's Low Catmint
RVS	Rudbeckia l. 'Vette's Little Suzy'	Vette's Little Suzy Showy Coneflower
SMN	Salvia nemorosa 'May Night'	May Night Sage
SAJ	Sedum 'Autumn Joy'	Autumn Joy Sedum
GROUND COVERS	BOTANICAL NAME	COMMON NAME
[Pattern]	AGRECOL RAINWATER RENEWAL	AGRECOL RAINWATER RENEWAL MIX
[Pattern]	Turf Hydroseed	Drought Tolerant Fescue Blend
[Pattern]	Turf Hydroseed Low Grow	Low Grow Mix

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CANOPY HILL MULTI-FAMILY DEVELOPMENT
VILLAGE OF UNION GROVE

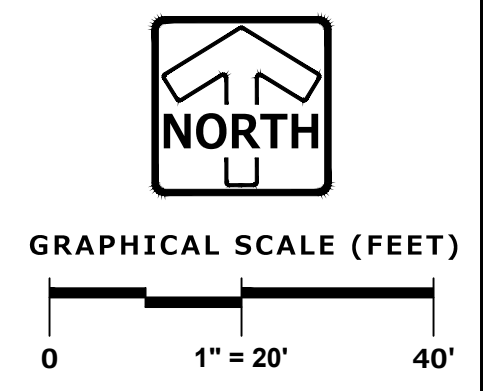
LANDSCAPE ENLARGEMENT

REVISIONS	
1. BID SET	03/17/21
2. PER VILLAGE COMMENTS	05/03/21
3. ADDENDUM #1	05/17/21
4. PER VILLAGE COMMENTS	06/22/21

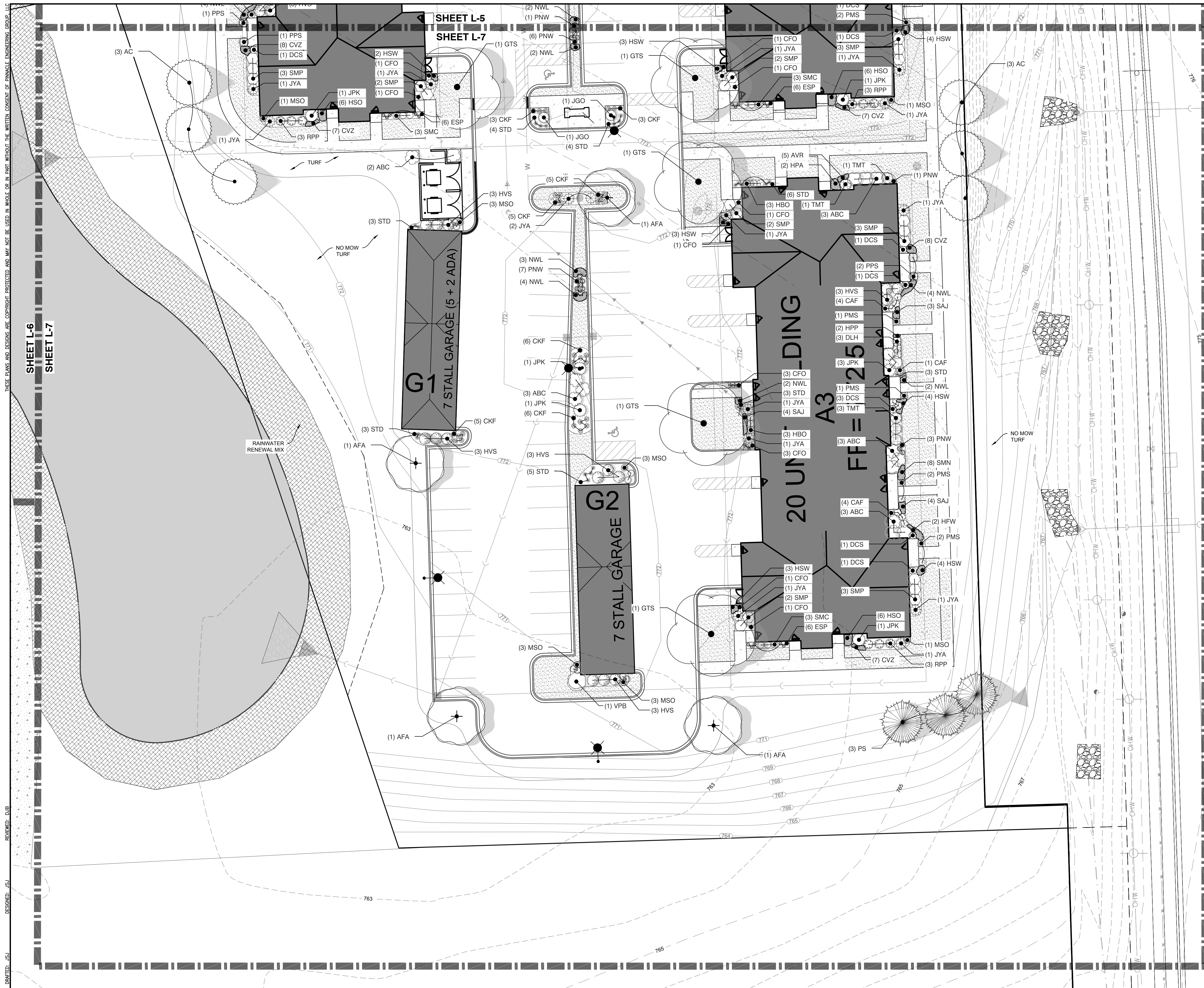
REG. JOB No. 959.00-WI
REG. No. A-EK
START DATE 11/06/2020
SCALE 1" = 20'

SHEET L-6

SHEET L-9



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PLANT KEY		
TREES	BOTANICAL NAME	COMMON NAME
APA	Acer freemanii 'Autumn Fantasy'	Autumn Fantasy Maple
APR	Acer rubrum 'Red Sunset'	Red Sunset Maple
AA5	Aesculus x arnoldiana 'Autumn Splendor'	Autumn Splendor Buckeye
AGA	Amanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry
BNB	Betula nigra 'Heritage'	Heritage River Birch
CCT	Crataegus crus-galli inermis	Thornless Cockspur Hawthorn
GTS	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Locust
GDK	Gymnocladus dioica	Kentucky Coffee Tree
MPM	Malus x 'Praise Maid'	Praise Maid Crabapple
MSU	Malus x 'Sugar Tyme'	Sugar Tyme Crabapple
SRI	Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac
EVERGREEN TREES	BOTANICAL NAME	COMMON NAME
AC	Abies concolor	White Fir
PD	Picea glauca 'Densata'	Black Hills Spruce
PS	Pinus strobus	White Pine
PS2	Pinus sylvestris	Scotch Pine
SHRUBS	BOTANICAL NAME	COMMON NAME
ABC	Aronia melanocarpa 'Eliata'	Glossy Black Chokeberry
CPP	Cephalanthus occidentalis 'Ping Pong'	Ping Pong Buttonbush
CAF	Cornus stolonifera 'Arctic Fire'	Arctic Fire Dogwood
DLH	Diervilla lonicera	Dwarf Bush Honeysuckle
DCS	Diervilla sessilifolia 'Cool Splash'	Cool Splash Dwarf Honeysuckle
HVS	Hydrangea sp. 'Vanilla Strawberry'	Vanilla Strawberry Hydrangea
HBO	Hydrangea paniculata 'Bobo'	Bobo Hydrangea
HT	Hydrangea paniculata 'Tardiva'	Tardiva Panicle Hydrangea-TF
WJ	Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
PCG	Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark
RPP	Rosa rugosa 'Purple Pavement'	Purple Pavement Rugosa Rose
SAW	Spiraea japonica 'Anthony Waterer'	Anthony Waterer Spiraea
SMC	Spiraea japonica 'Magic Carpet'	Magic Carpet Spiraea
SMP	Syringa meyeri 'Palibin'	Dwarf Korean Lilac
VPB	Viburnum parvifolium 'Blackhaw'	Blackhaw Viburnum
EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME
JSP	Juniperus chinensis 'J.N. Select Blue'	Star Power Juniper
JMB	Juniperus chinensis 'Mountbatten'	Mountbatten Juniper
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MSC	Miscanthus sinensis 'Octoberfest'	Octoberfest Miscanthus
PNW	Panicum virgatum 'Northwind'	Northwind Switch Grass
SLB	Schizachyrium scoparium 'Blue Heaven'	Blue Heaven Little Bluestem Grass
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	Turf Hydroseed	Drought Tolerant Fescue Blend
	Turf Hydroseed Low Grow	Low Grow Mix

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REVISIONS	
1	BID SET 03/17/21
2	PER VILLAGE COMMENTS 05/03/21
3	ADDENDUM #1 05/17/21
4	PER VILLAGE COMMENTS 06/22/21

REG. JOB No. 959.00-WI	DATE 05/17/2020	SHEET L-7
DESIGNED: JSJ	SCALE 1" = 20'	L-9
DRAWN: JSJ		
CHECKED: JSJ		
DATE 05/17/2020		

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 DESIGNED: JSJ
 REVIEWED: DUB
 DATED: JSJ
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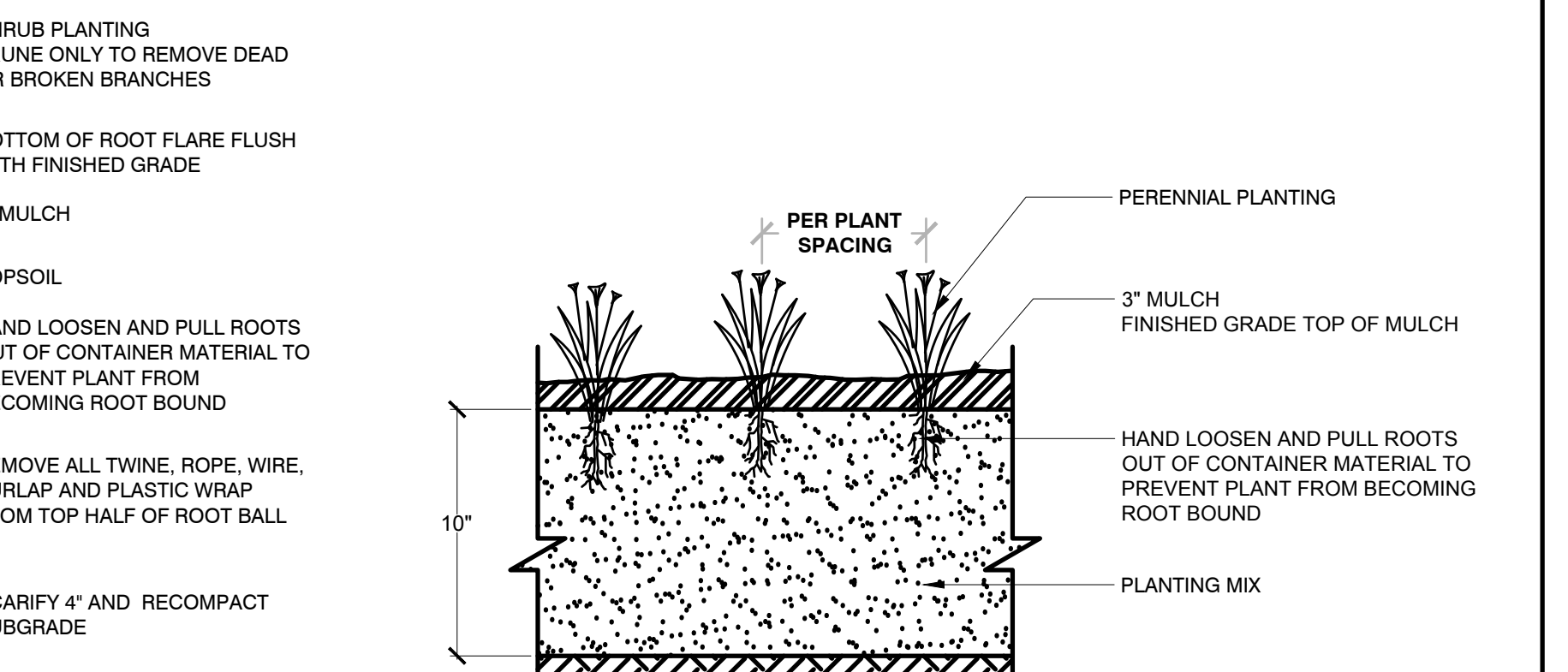
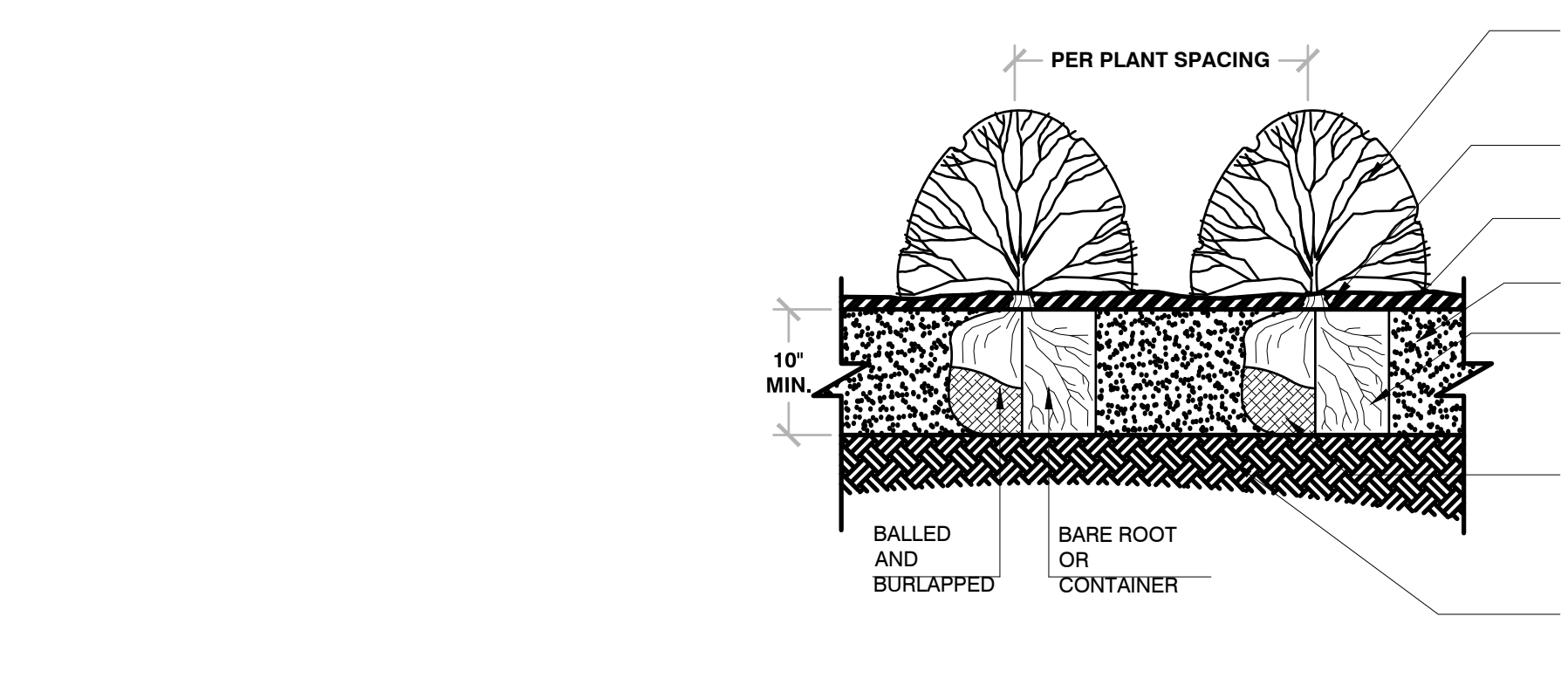
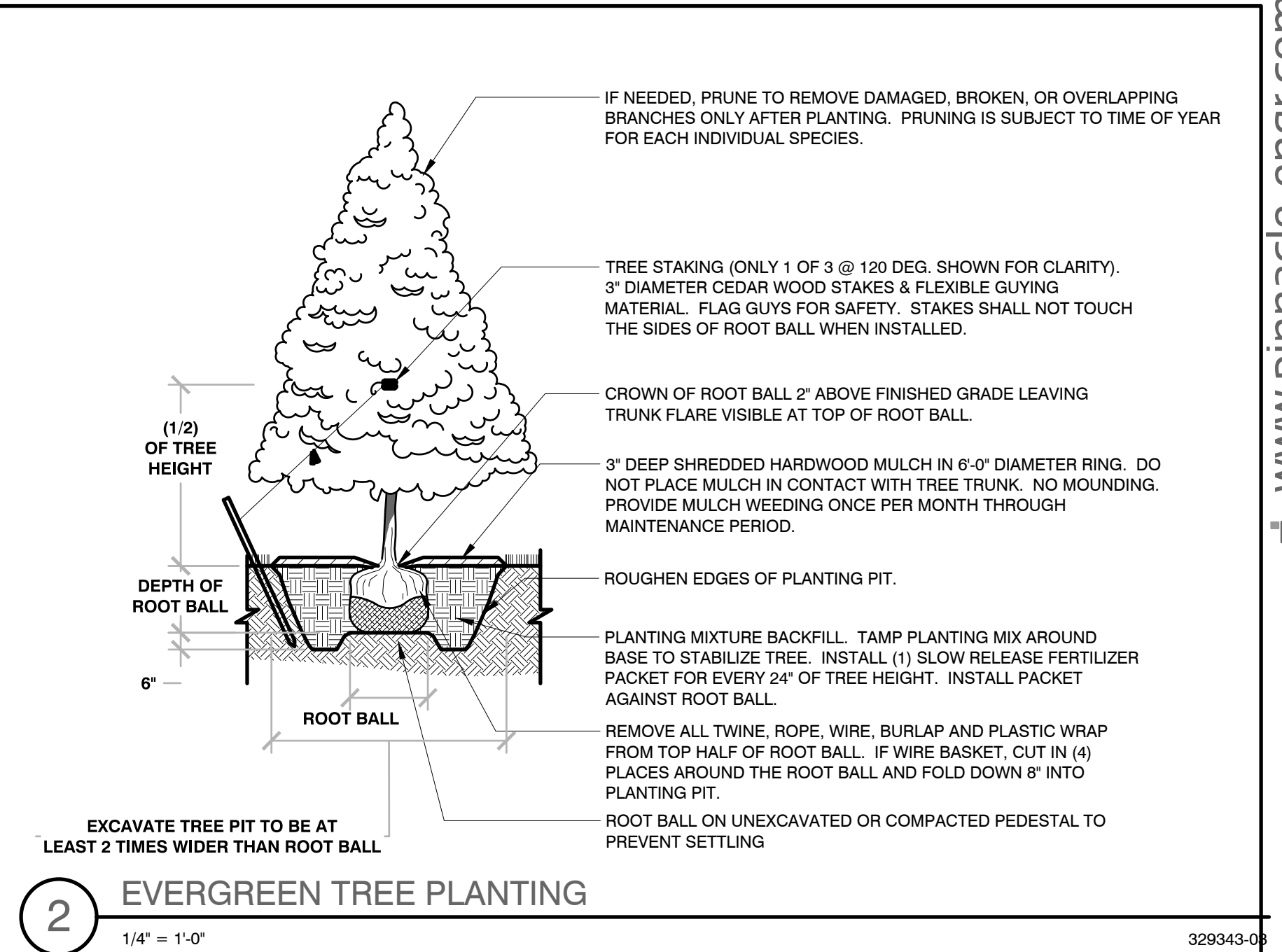
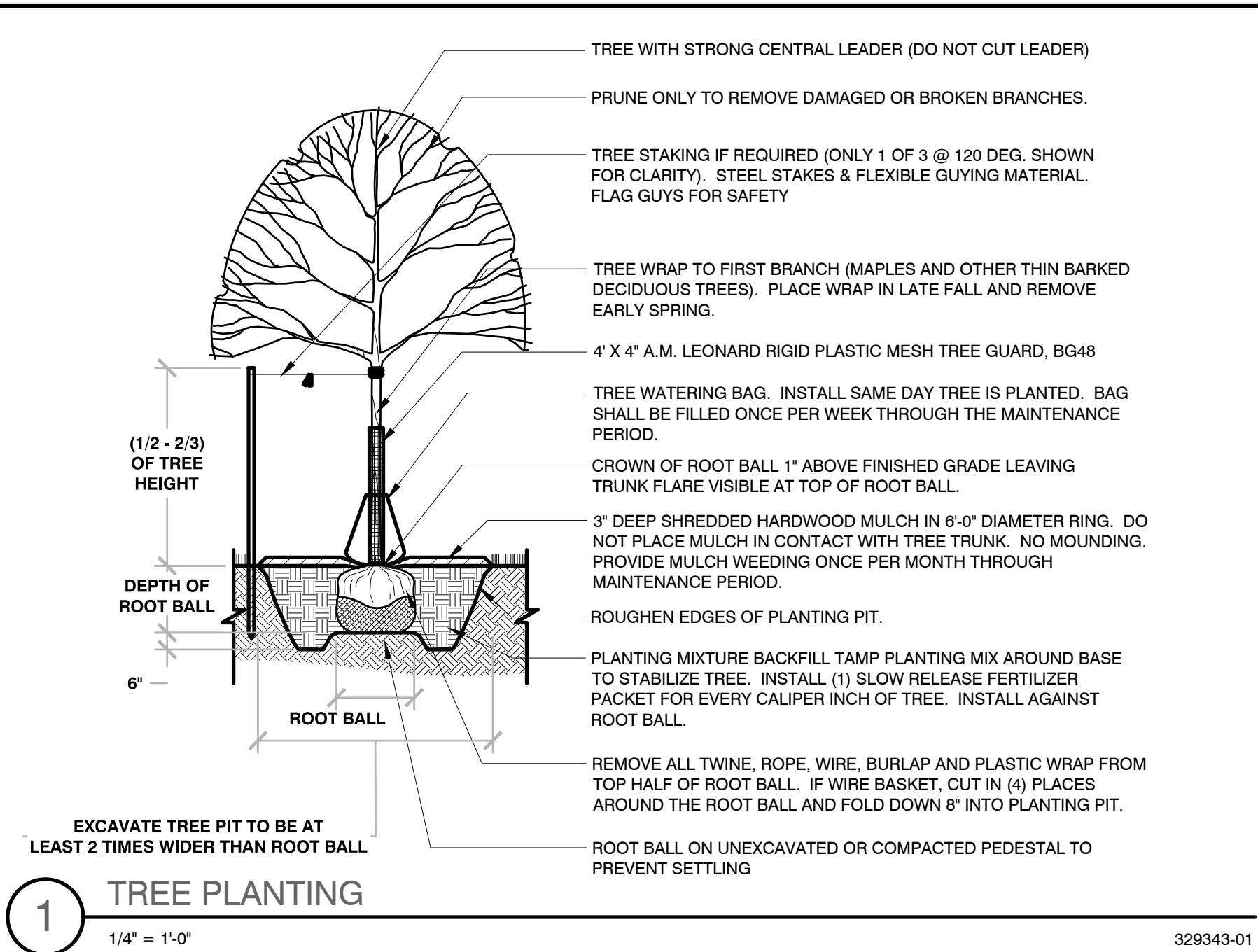
GENERAL PLANTING NOTES

- THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
- THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
- ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
- ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
- ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
- TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
- ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1.
- BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
- ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
- ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
- TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY.
- ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
- ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
- WHILE PLANTING TREES AND SHRUBS, BACKFILL $\frac{2}{3}$ OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
- THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
- OAK TREES SHALL BE TREATED FOR TWO-LINE CHESTNUT BORER BOTH AT THE TIME OF INSTALLATION AND DURING THE SECOND GROWING SEASON.
- ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
- ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
- ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 3" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
- FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
- THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X 6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEEDD AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE,

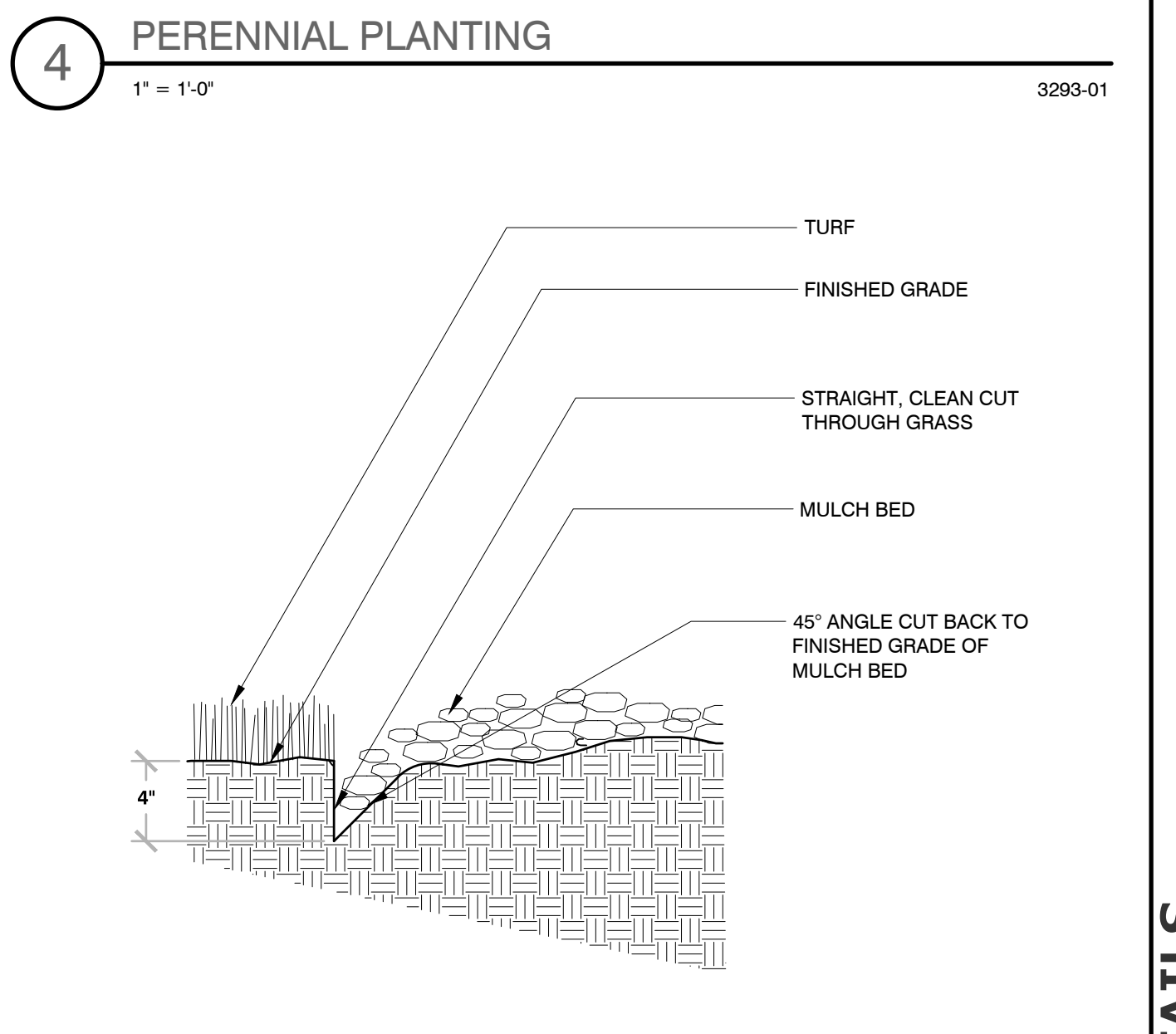
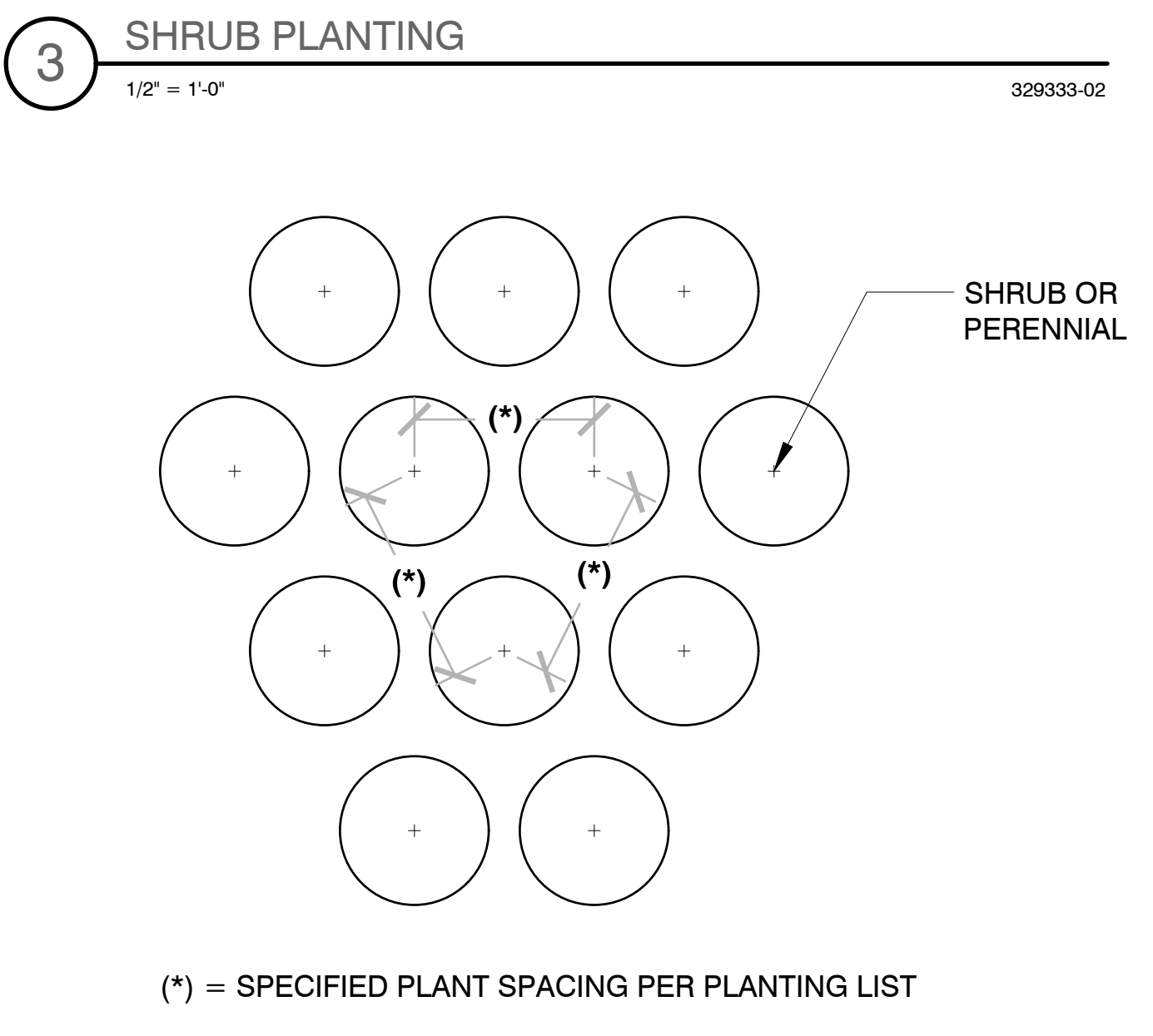
- UNIFORM LAWN.
- ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
- ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
- ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
- TREES SHALL BE INSTALLED NO CLOSER THAN:
- 10 FEET FROM ANY FIRE HYDRANT
- 7 FEET FROM DRIVEWAYS, STORM SEWER, SANITARY SEWER LATERALS, AND WATER SERVICE
- THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
- THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
- THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
- THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
- PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

SOIL PLACEMENT NOTES

- LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEIOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENEED TO A DEPTH OF 30".
- THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
- TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
- SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
- PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENEED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
- DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
- ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
- RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.



- BAREROOT PLANTING NOTES:**
- SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
 - SCARIFY SIDES AND BOTTOMS OF HOLE.
 - PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS.
 - TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
 - WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
 - BACKFILL VOIDS AND WATER SECOND TIME.
 - PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.



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CANOPY HILL MULTI-FAMILY DEVELOPMENT
VILLAGE OF UNION GROVE

LANDSCAPE DETAILS

REVISIONS	
1 - BID SET	03/17/21
2 - PER VILLAGE COMMENTS	05/03/21
3 - APPENDUM #1	05/17/21
4 - PER VILLAGE COMMENTS	06/22/21

SHEET L-8 L-9
 REG. JOB No. 959-00-WI
 PEG. No. ABEK
 START DATE 11/06/2020
 SCALE VARIETIES

