YAMADA

AMERICA

ARLINGTON HEIGHTS, ILLINOIS

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DESIGN DRAWINGS:
NOT FOR CONSTRUCTION

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project number
1808/216063

Project Description
Office addition & conversion of portion of existing office to warehouse use.

Date
01/11/19

Revision/update date

VAH Review 1-11-2019
Des.Dev. 12-7-2018

Drawing type

- ■ Review
- ☐ Permit
- ☐ Construction

Sheet title
COVER SHEET

Sheet
A0.0

_ of _ sheets

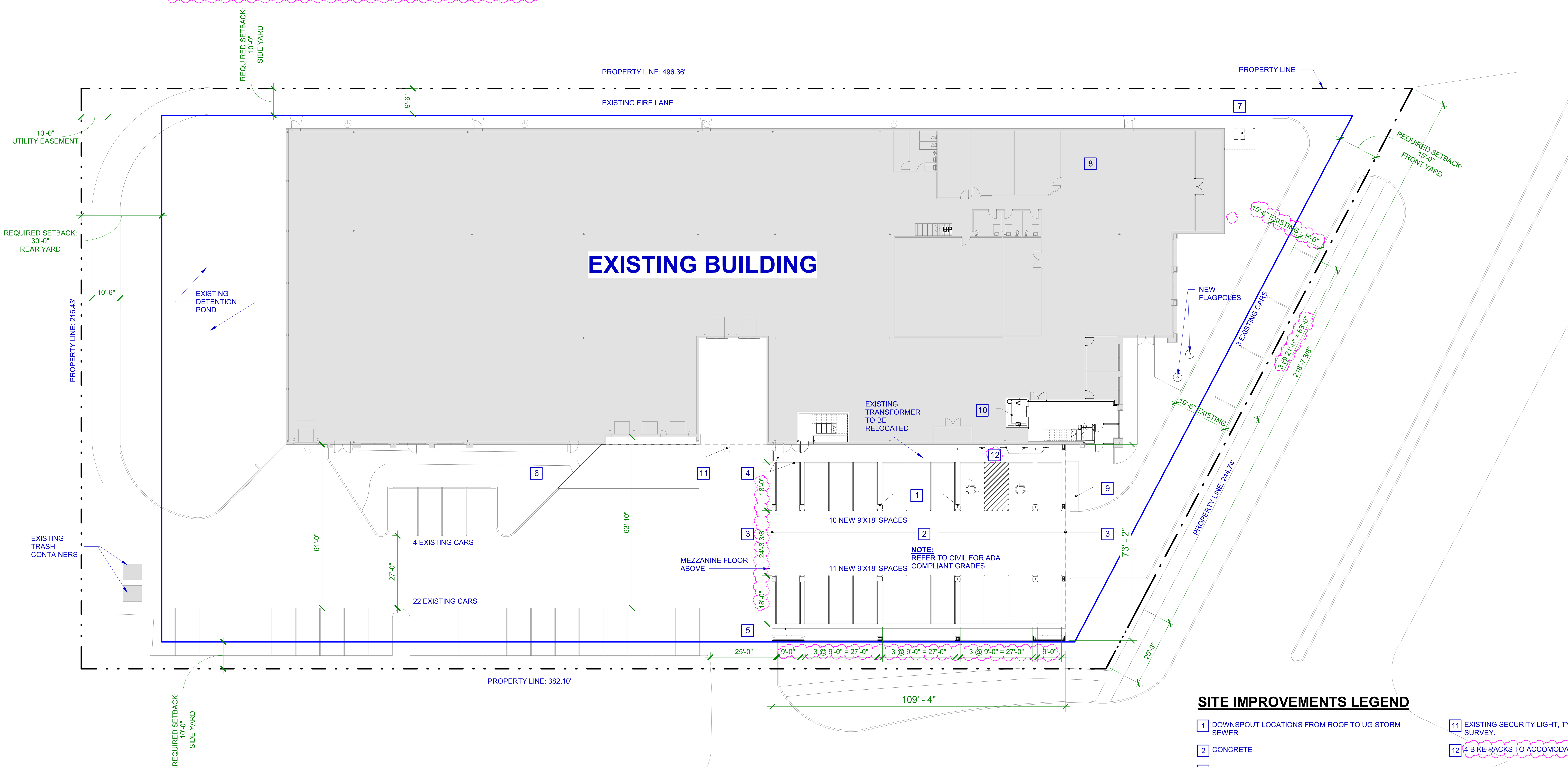
BUILDING DATA

BUILDING DATA	EXIST SF	PROPOSED TOTAL
BUILDING FOOTPRINT AREA	38,709	46,772
BUILDING GROSS FLOOR AREA	42,422	50,485
WAREHOUSE GROSS FLOOR AREA	28,891	36,862
WAREHOUSE STORAGE MEZZANINE	2,230	2,230
FACTORY GROSS FLOOR AREA	2,000	2,000
LOADING DOCK GROSS AREA	1,101	1,101
FIRST FLOOR GROSS OFFICE AREA	8,947	976
MEZZANINE OFFICE AREA	1,483	1,483
BUILDING HEIGHT (ABOVE 1ST FLOOR LEVEL)	21'-5"	22'-7"
FAR	45% EXISTING	54% PROPOSED

PARKING CALCULATIONS

1. TOTAL OFFICE AREA(NEW 2ND FLOOR OFFICE+EXISTING TO REMAIN 1ST FLOOR OFFICE+EXISTING OFFICE MEZZANINE)/300 = (8000+843+1870+244+186)=11,143/300=37.14"
2. WAREHOUSE = 15 EMPLOYEES/2 + 1 COMPANY VEHICLE = 7.5+1 = 8.5

TOTAL = 46 SPACES MIN. REQUIRED. 50 PROVIDED.



SITE IMPROVEMENTS LEGEND

1. DOWNSPOUT LOCATIONS FROM ROOF TO UG STORM SEWER
2. CONCRETE
3. ASPHALT
4. RETAINING WALL
5. CONCRETE CURB
6. LOCATION OF NEW COMED SERVICE TRANSFORMER. TBD AFTER REVIEW WITH COMED
7. ALTERNATE COMED TRANSFORMER LOCATION. TBD WITH COMED IF SIDEYARD LOCATION NOT POSSIBLE. BRICK SCREEN WALL FINISH TO MATCH THE EXISTING BUILDING AND TRANSFORMER HEIGHT, TBD
8. SEE X1.0 FOR EXISTING LAYOUT
9. PLANTING BED 5'X18'
10. ELEVATOR CAR SHALL BE OF SUCH SIZE AND ARRANGEMENT TO ACCOMODATE AN AMBULANCE STRETCHER 24-INCH BY 76-INCH WITH NOTLESS THAN 5-INCH RADIUS CORNERS, IN THE HORIZONTAL, OPEN POSITION. MINIMUM CAB INTERIOR DIMENSION 60"X85".
11. EXISTING SECURITY LIGHT, TYP. SEE ALTA LAND TITLE SURVEY.
12. 4 BIKE RACKS TO ACCOMODATE A MINIMUM OF 4 BIKES

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1 / A1.0 **SITE PLAN**
1" = 20'-0"

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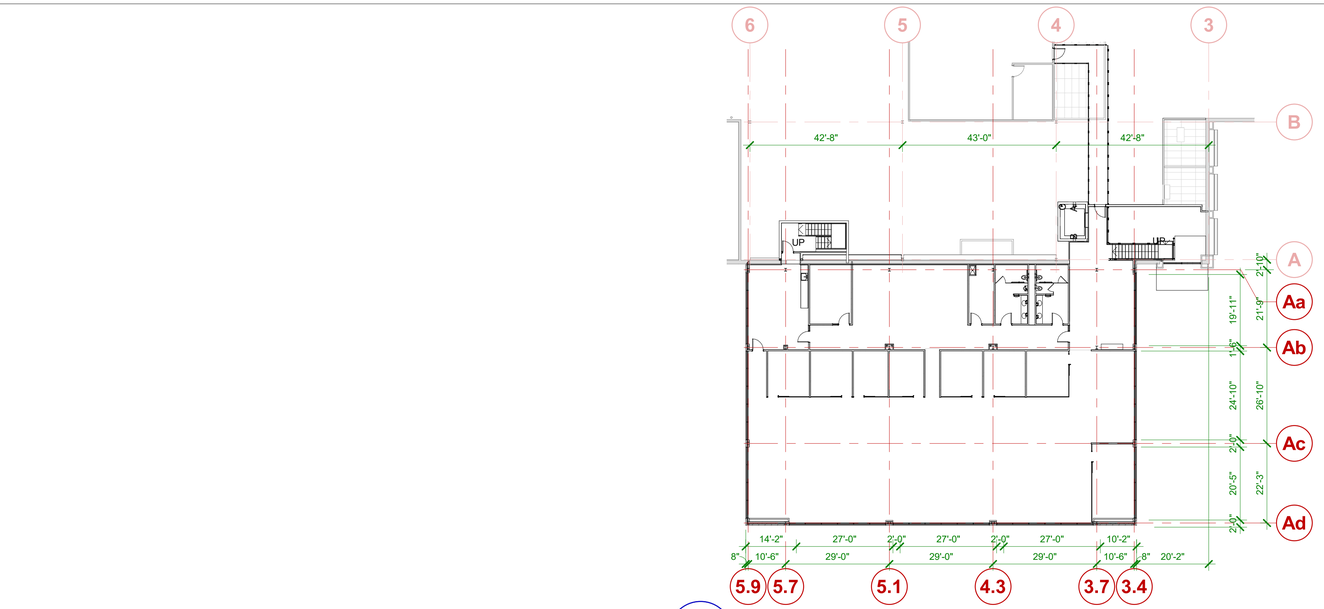
Sheet title: SITE PLAN

Sheet **A1.0**

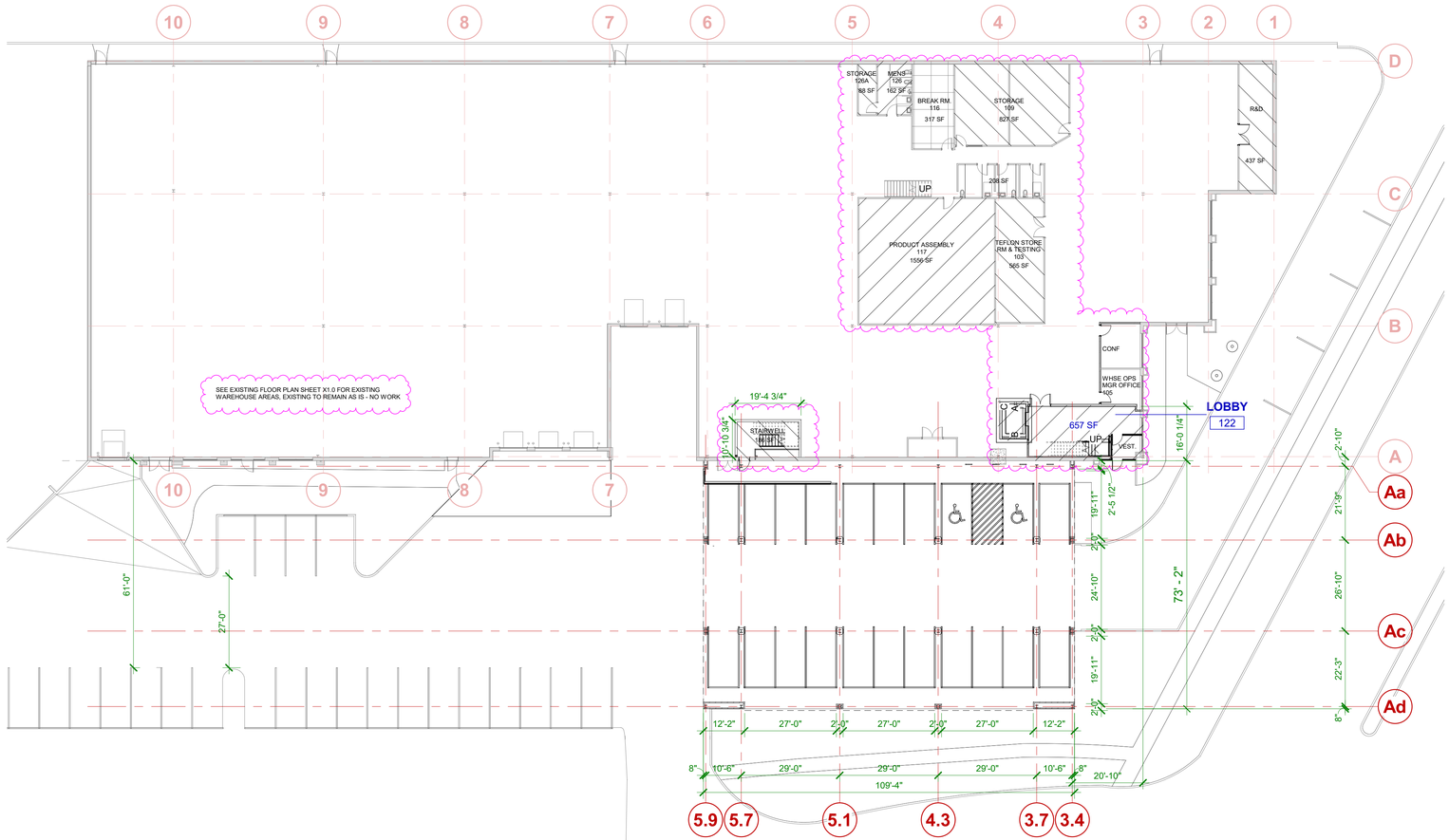
_ of _ sheets



1 / A2.0 **2ND FLOOR PLAN**

1" = 20'-0"

N



2 / A2.0 **COMPOSITE FIRST FLOOR PLAN**

1" = 20'-0"

N

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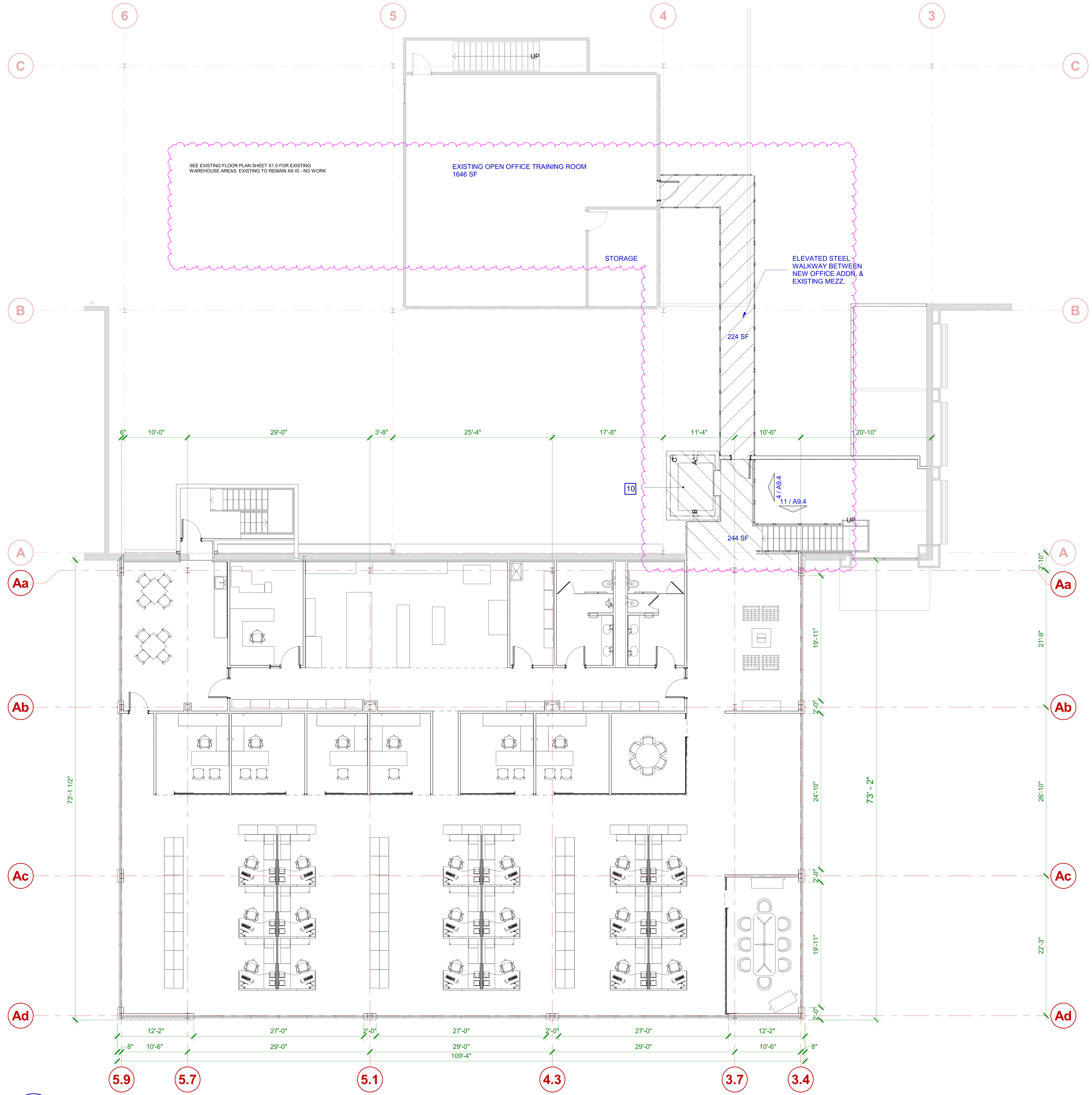
- [ ] Construction

Sheet title
COMPOSITE FIRST FLOOR PLAN

Sheet
A2.0

_ of _ sheets



1 SECOND FLOOR PLAN ENLARGED

A2.1 — 1/8" = 1'-0"

(FURNITURE SHOWN FOR REFERENCE ONLY)

N

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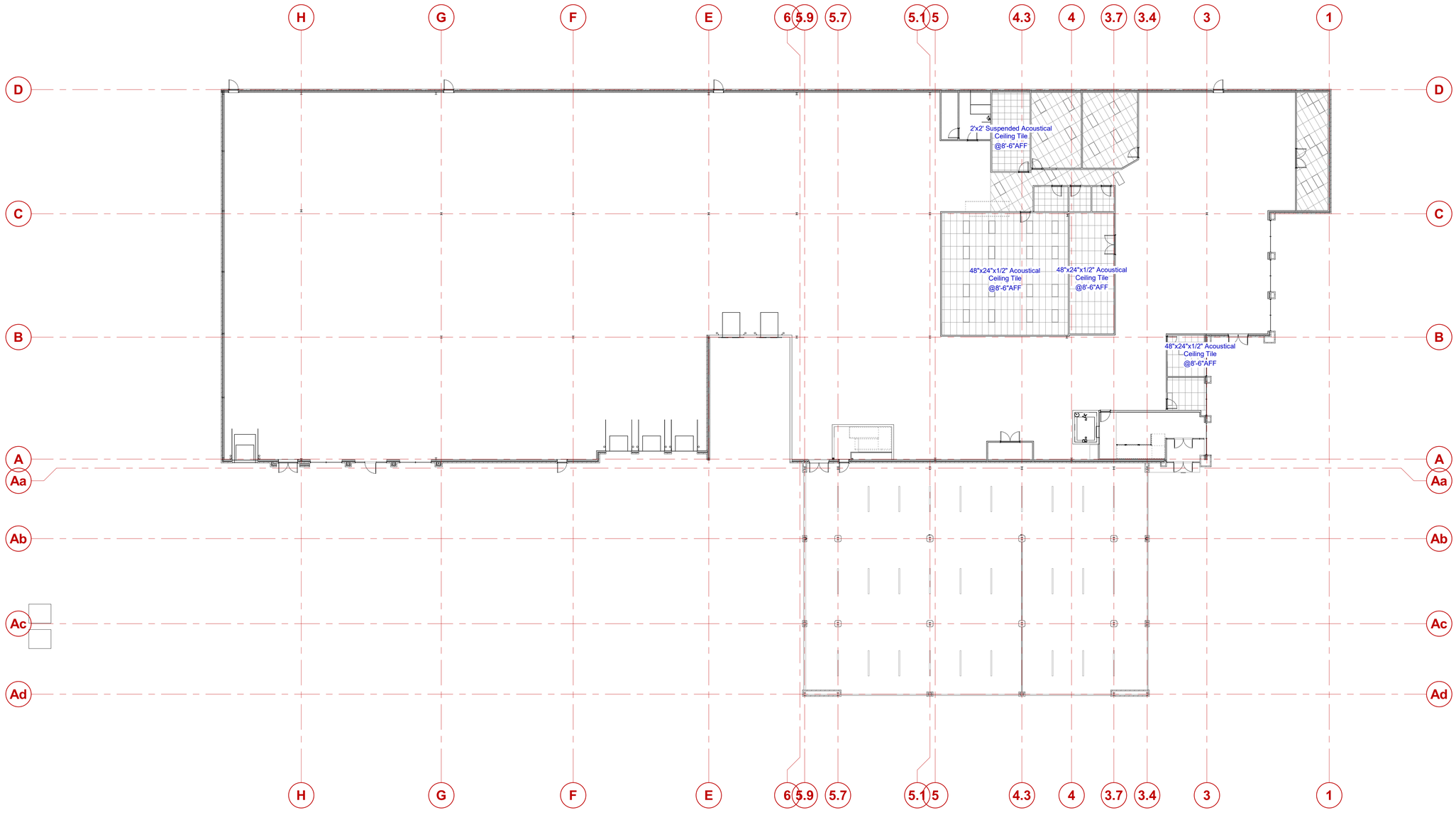
Sheet title
MEZZ PLAN WITH FURNITURE

Sheet
A2.1

_ of _ sheets



1 A3.0 **FIRST FLOOR REFLECTED CEILING PLAN**
1/16" = 1'-0"

N

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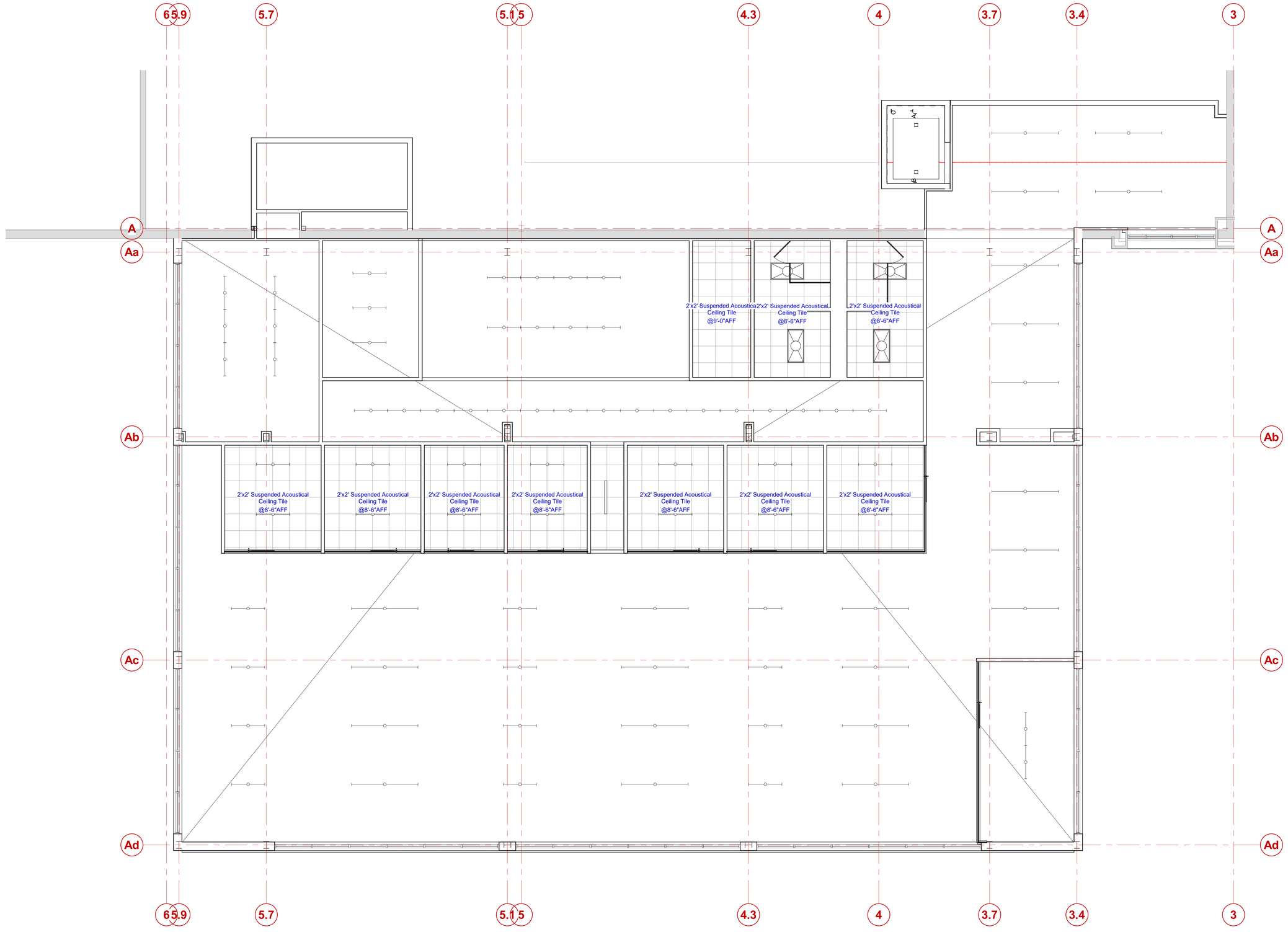
Sheet title
FIRST FLOOR - REFLECTED CEILING PLAN

Sheet
A3.0

_ of _ sheets



1 A3.1 **MEZZANINE REFLECTED CEILING PLAN**

3/16" = 1'-0"

N

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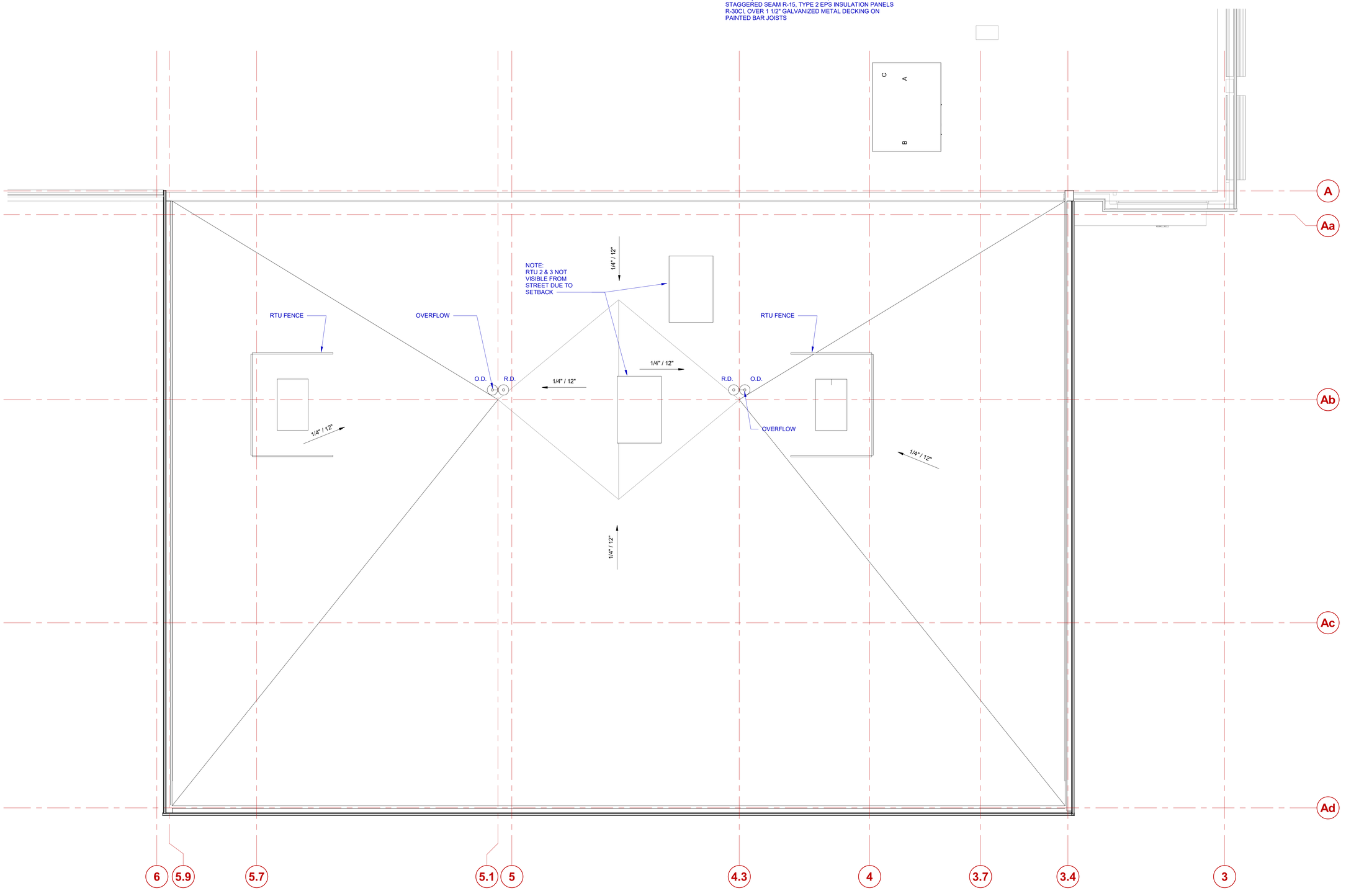
Sheet title
MEZZANINE - REFLECTED CEILING PLAN

Sheet
A3.1

_ of _ sheets

ADDITION ROOF ASSEMBLY:

60 MIL WHITE TOP SINGLE ROOF PLY ROOF MEMBRANE
SYSTEM (20YR MANUF. WARRANTY, OVER 2 LAYERS
STAGGERED SEAM R-15, TYPE 2 EPS INSULATION PANELS
R-30CI, OVER 1 1/2" GALVANIZED METAL DECKING ON
PAINTED BAR JOISTS



1 A4.0 **ROOF PLAN**
3/16" = 1'-0"

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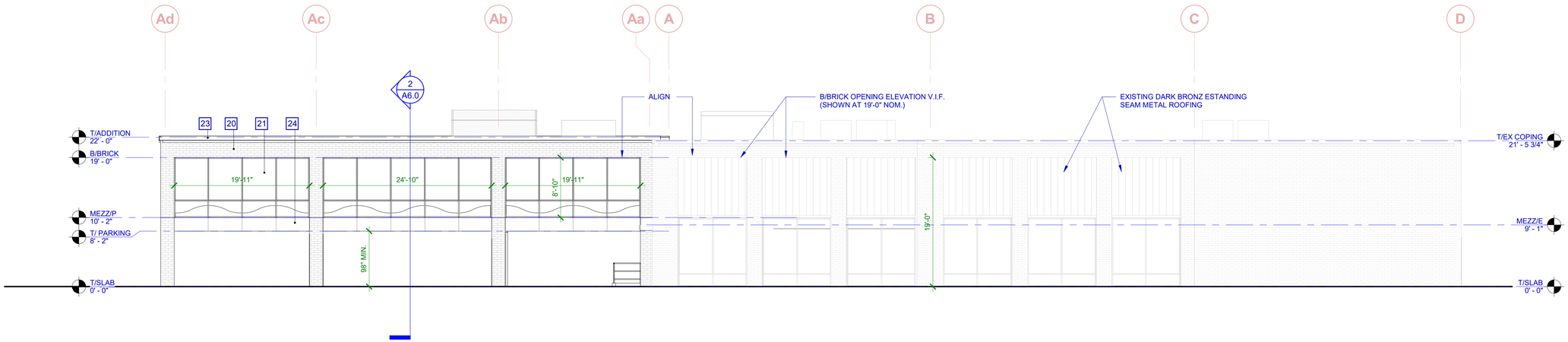
- [x] Review
- [ ] Permit
- [ ] Construction

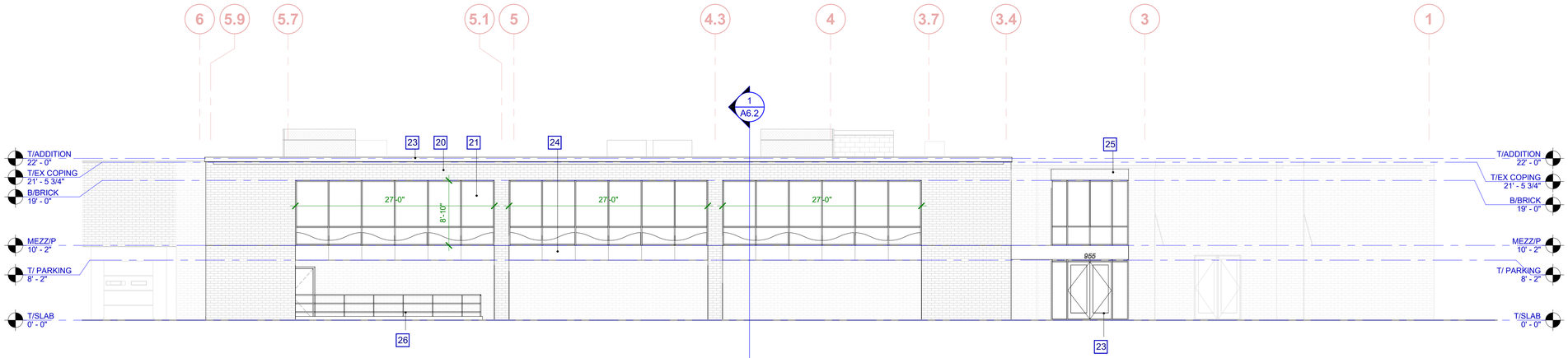
Sheet title
ROOF PLAN

Sheet
A4.0
_ of _ sheets



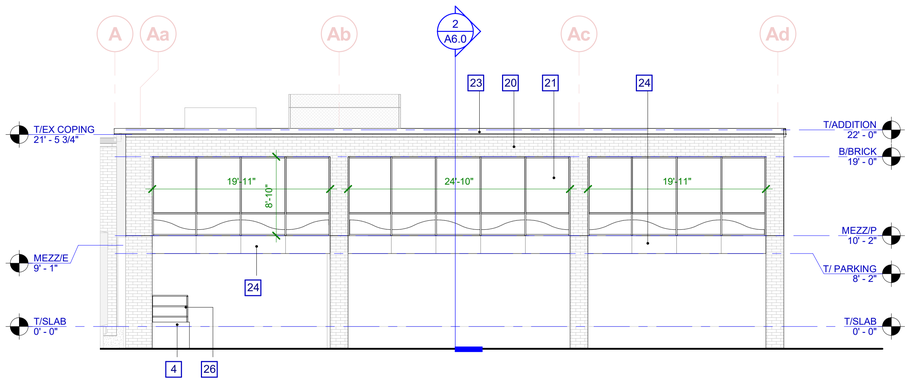
1 A5.0 ELEVATION NORTH

1/8" = 1'-0"



2 A5.0 EAST ELEVATION

1/8" = 1'-0"



3 A5.0 ELEVATION SOUTH

1/8" = 1'-0"

EXTERIOR ELEVATION LEGEND

20 BRICK TO MATCH EXISTING (BOWERSTON #7210 DARK WC F/R I.S. UTILITY (3 5/8"x 3 5/8" x 11 5/8"). COLOR: REDS & BROWNS.

21 CURTAINWALL: TUBELITE 400 SERIES CURTAINWALL 2 1/2"x5 5/8" BUTT GLAZED VERTICALS AND CLEAR LOW-E INSULATED GLASS (VITRO SOLARBAN 60, VLT=70%, EXT REFLECTANCE11%, INTERIOR REFLECTANCE 12%, U-VALUE 0.29, SHGC 0.39). DARK BRONZE ANODIZED EXTERIOR ALUMINUM ON EXTERIOR & CLEAR ANODIZED ON INTERIOR.

22 STOREFRONT (ENTRY VESTIBULE) & WINDOW ABOVE: TUBELITE 4500 SERIES 1 3/4"X4 1/2" (DARK BRONZE ANODIZED ON EXTERIOR & CLEAR ANODIZED INTERIOR) WITH INSULATED CLEAR EXTERIOR TEMPERED GLASS & 1/4" CLEAR TEMPERED INTERIOR GLASS. MEDIUM STILE DOORS WITH 10" BOTTOM RAILS AND STANDARD EXIT DEVICES, CLOSERS, AND MISC. HARDWARE.

23 METAL ROOF FASCIA: SMOOTH DARK BRONZE ANODIZED ALUMINUM (ECONOSNAP - SAME AS EXISTING).

24 METAL SKIRT PANELS UNDER WINDOWS & ENTRY CANOPY FASCIA: SMOOTH DARK BRONZE ANODIZED ALUMINUM (ALUCOBOND-PE).

25 LED BACKLIT DARK BRONZE ANODIZED SIGNAGE BOX SURFACE MOUNTED ON FACADE

26 PAINTED STEEL RAILING AND GUARD RAIL

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- ☐ Construction

Sheet title
EXTERIOR ELEVATIONS

Sheet
A5.0

_ of _ sheets

3D VIEW - NORTH EAST CORNER - ENTRANCE

3D VIEW - NORTH EAST CORNER - AERIAL

3D VIEW - SOUTH EAST CORNER - DOCKS

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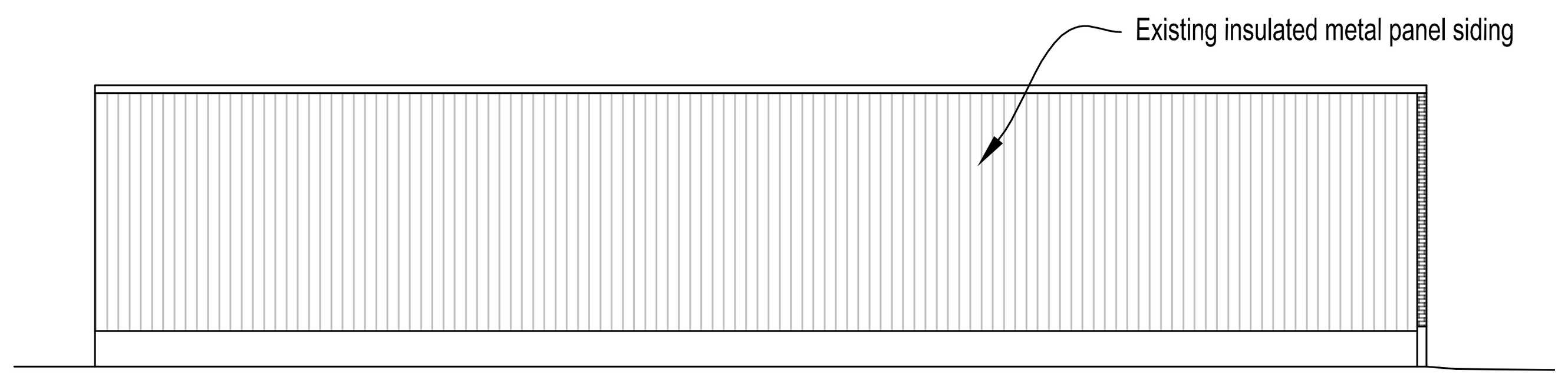
- [ ] Construction

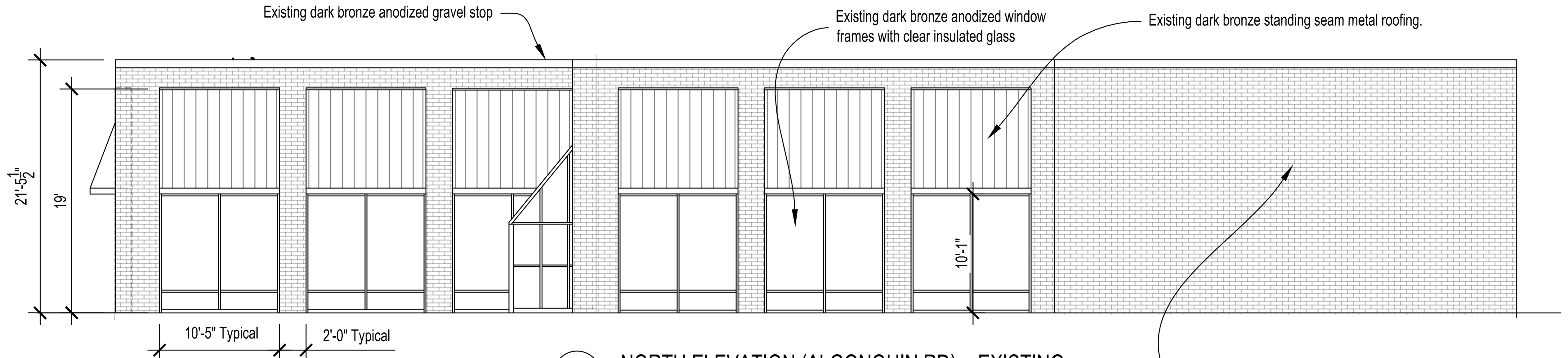
Sheet title
3D PERSPECTIVES

Sheet
A14.1

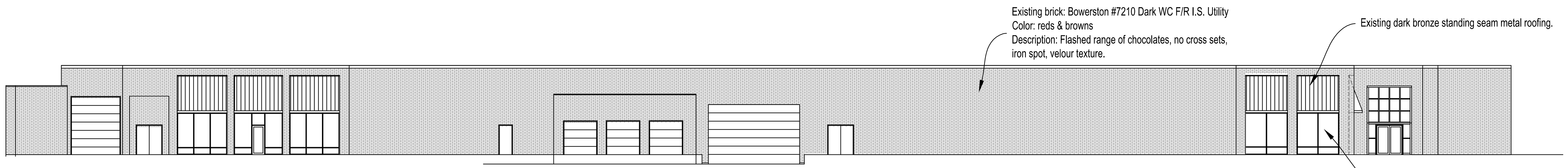
_ of _ sheets



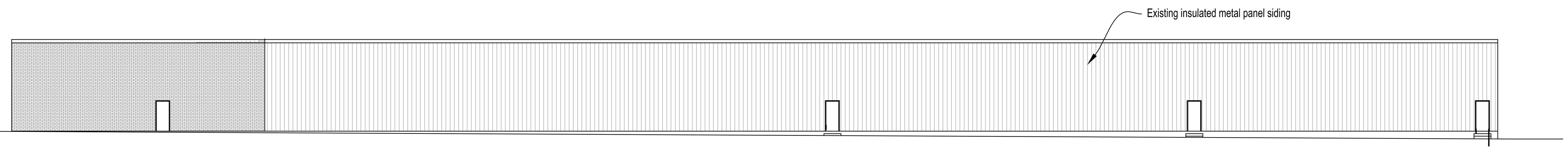
1 SOUTH ELEVATION - EXISTING
$\frac{1}{16}$"=1'-0"



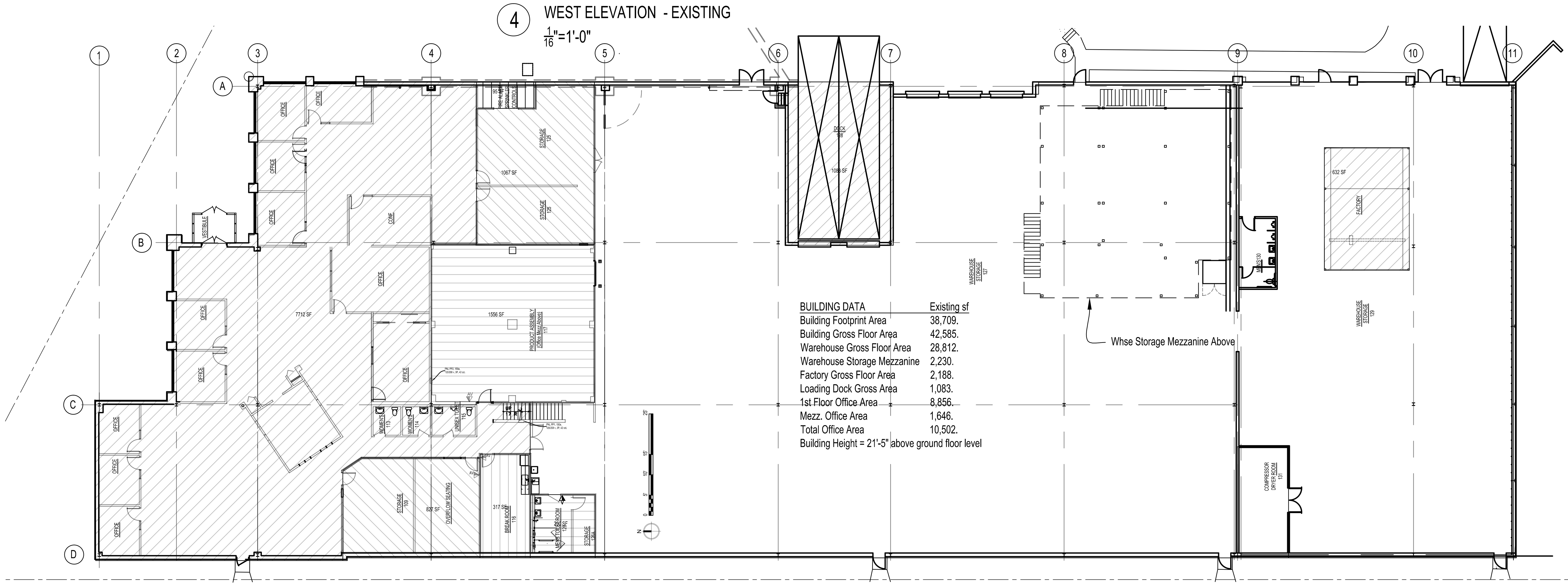
2 NORTH ELEVATION (ALGONQUIN RD) - EXISTING
$\frac{1}{8}$"=1'-0"



3 EAST ELEVATION - EXISTING
$\frac{1}{16}$"=1'-0"

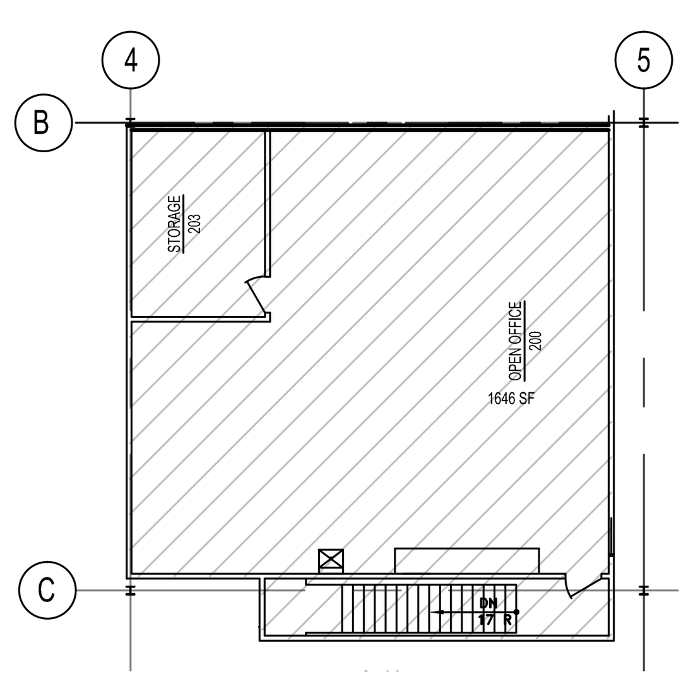


4 WEST ELEVATION - EXISTING
$\frac{1}{16}$"=1'-0"



BUILDING DATA	Existing sf
Building Footprint Area	38,709.
Building Gross Floor Area	42,585.
Warehouse Gross Floor Area	28,812.
Warehouse Storage Mezzanine	2,230.
Factory Gross Floor Area	2,188.
Loading Dock Gross Area	1,083.
1st Floor Office Area	8,856.
Mezz. Office Area	1,646.
Total Office Area	10,502.
Building Height = 21'-5" above ground floor level	

5 FIRST FLOOR PLAN - EXISTING
$\frac{1}{16}$"=1'-0"



6 OFFICE MEZZ. FLOOR PLAN - EXISTING
$\frac{1}{16}$"=1'-0"

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Rev 2-11-2019
1-11-2019 DC Review

Drawing type

■	Review
□	Permit
□	Construction

Sheet title
EXISTING FLOOR PLAN & EXTERIOR ELEVATIONS

Sheet
X1.0

1 of 1 sheets

Proposed Improvements
for

YAMADA AMERICA BUILDING EXPANSION

955 EAST ALGONQUIN ROAD
VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS

STANDARD SYMBOLS

06-01-16

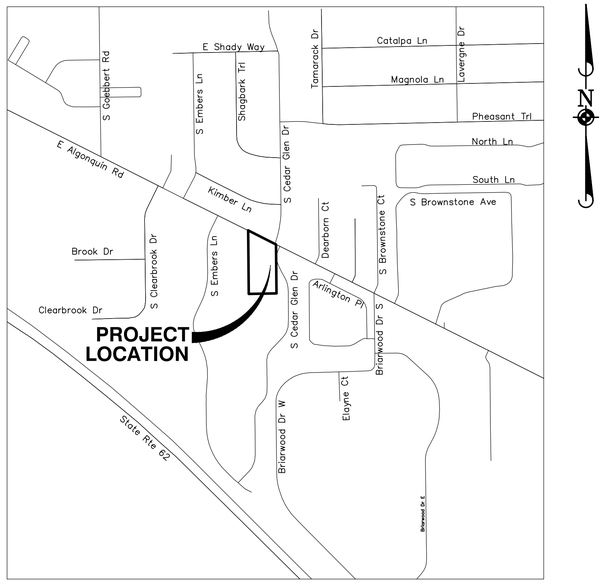
EXISTING		PROPOSED
	STORM SEWER	
	SANITARY SEWER	
	COMBINED SEWER	
FM	FORCEMAIN	FM
	DRAINTILE	
W	WATER MAIN	W
E	ELECTRIC	E
G	GAS	G
T	TELEPHONE	T
OH	OVERHEAD WIRES	OH
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	STORM INLET	
	CLEANOUT	
	HAY BALES	
	RIP RAP	
	VALVE IN VAULT	
	VALVE IN BOX	
	FIRE HYDRANT	
	BUFFALO BOX	
	FLARED END SECTION	
	STREET LIGHT	
	SUMMIT / LOW POINT	S/L
795.20 / 790.25	RIM ELEVATION / INVERT ELEVATION	795.25 / 790.20
	DITCH OR SWALE	
	DIRECTION OF FLOW	
	OVERFLOW RELIEF SWALE	
764	1 FOOT CONTOURS	764
	CURB AND GUTTER	
	DEPRESSED CURB AND GUTTER	
	REVERSE CURB AND GUTTER	
	SIDEWALK	
	DETECTABLE WARNINGS	
	PROPERTY LINE	
	EASEMENT LINE	
	SETBACK LINE	
	MAIL BOX	
	SIGN	
	TRAFFIC SIGNAL	
	POWER POLE	
	GUY WIRE	
	GAS VALVE	
	HANDHOLE	
E	ELECTRICAL EQUIPMENT	
T	TELEPHONE EQUIPMENT	
	CHAIN-LINK FENCE	
792.8	SPOT ELEVATION	792.8 G
	BRUSH/TREE LINE	
16"	DECIDUOUS TREE WITH TRUNK DIA. IN INCHES (TBR)	16"
25'	CONIFEROUS TREE WITH HEIGHT IN FEET (TBR)	25'
S	SILT FENCE	S
	RETAINING WALL	
	WETLAND	

ABBREVIATIONS

06-01-16

ADJ	ADJUST	F/L	FLOW LINE	R.O.W.	RIGHT-OF-WAY
AGG.	AGGREGATE	FM	FORCE MAIN	RCP	REINFORCED CONCRETE PIPE
ARCH	ARCHITECT	G	GROUND	REM	REMOVAL
B.A.M.	BITUMINOUS AGGREGATE MIXTURE	G/F	GRADE AT FOUNDATION	REV	REVERSE
B-B	BACK TO BACK	GW	GUY WIRE	RR	RAILROAD
B/C	BACK OF CURB	HDWL	HEADWALL	RT	RIGHT
B/P	BOTTOM OF PIPE	HH	HANDHOLE	SAN	SANITARY
B/W	BACK OF WALK	HWL	HIGH WATER LEVEL	SF	SQUARE FOOT
B-BOX	BUFFALO BOX	HYD.	HYDRANT	SHLD.	SHOULDER
BIT.	BITUMINOUS	INL.	INLET	SL	STREET LIGHT
BM	BENCHMARK	INV.	INVERT	SMH	SANITARY MANHOLE
B.O.	BY OTHERS	IP	IRON PIPE	ST	STORM
C.E.	COMMERCIAL ENTRANCE	LT	LEFT	STA.	STATION
CB	CATCH BASIN	MAX.	MAXIMUM	STD	STANDARD
℄	CENTERLINE	MB	MAILBOX	SW	SIDEWALK
CMP	CORRUGATED METAL PIPE	M/E	MEET EXISTING	SY	SQUARE YARDS
CNTRL	CONTROL	MH	MANHOLE	TBR	TO BE REMOVED
C.O.	CLEANOUT	MIN.	MINIMUM	T	TELEPHONE
CONC.	CONCRETE	NWL	NORMAL WATER LEVEL	T-A	TYPE A
CY	CUBIC YARD	P.E.	PRIVATE ENTRANCE	T/C	TOP OF CURB
D	DITCH	PC	POINT OF CURVATURE	T/F	TOP OF FOUNDATION
DIA.	DIAMETER	PCC	POINT OF COMPOUND CURVE	T/P	TOP OF PIPE
DIP	DUCTILE IRON PIPE	PGL	PROFILE GRADE LINE	T/W	TOP OF WALK
DIWM	DUCTILE IRON WATER MAIN	PI	POINT OF INTERSECTION	T/WALL	TOP OF WALL
DS	DOWNSPOUT	ℙ	PROPERTY LINE	TEMP	TEMPORARY
DT	DRAIN TILE	PP	POWER POLE	TRANS	TRANSFORMER
E	ELECTRIC	PROP.	PROPOSED	V.B.	VALVE BOX
E-E	EDGE TO EDGE	PT	POINT OF TANGENCY	VCP	VITRIFIED CLAY PIPE
ELEV.	ELEVATION	PVC	POLYVINYL CHLORIDE PIPE	V.V.	VALVE VAULT
E/P	EDGE OF PAVEMENT	PVC	POINT OF VERTICAL CURVATURE	WL	WATER LEVEL
EX.	EXISTING	PVI	POINT OF VERTICAL INTERSECTION	WM	WATER MAIN
F.E.	FIELD ENTRANCE	PVT	POINT OF VERTICAL TANGENCY		
F-F	FACE TO FACE	P	PAVEMENT		
F.F.	FINISHED FLOOR	P.U.D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT		
FES	FLARED END SECTION	R	RADIUS		

MANHARD CONSULTING, LTD. IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF PERSONS ENGAGED IN THE WORK OR THE MEANS OR METHODS OF CONSTRUCTION.



LOCATION MAP
N.T.S.

CLIENT:
SHERMAN CONSTRUCTION LLC
62 E. SURREY LANE
BARRINGTON HILLS, IL 60010
(847) 858-6083

Manhard CONSULTING LTD
900 Woodlands Parkway, Vernon Hills, IL 60061 ph:847.634.5550 fx:847.634.0095 manhard.com
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INDEX OF SHEETS

NOTES:

1. THE BOUNDARY LINES AND TOPOGRAPHY FOR THIS PROJECT ARE BASED ON A FIELD SURVEY COMPLETED BY MANHARD CONSULTING, LTD. ON MAY 16, 2018. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY MANHARD CONSULTING AND THE CLIENT IN WRITING OF ANY DIFFERING CONDITIONS.

BENCHMARKS:

REFERENCE BENCHMARK: (NGS PID:DM3900)
BRASS SURVEY DISK SET IN THE EAST ABUTMENT ON THE SOUTH SIDE OF A LARGE BRIDGE ON GOLF ROAD OVER SALT CREEK MORE PARTICULARLY LOCATED 1744 FEET WEST OF THE CENTERLINE OF SOUTH NEW WILKE ROAD AND 48' SOUTH OF THE CENTERLINE OF GOLF ROAD .

ELEVATION=695.85 DATUM=NAVD88-GEOID 12B

SITE BENCHMARK#1:
NORTH FLANGE BOLT ON HYDRANT LOCATED ON THE WEST SIDE OF SOUTH CEDAR GLEN DRIVE MORE PARTICULARLY LOCATED 20 FEET WEST OF THE CENTERLINE OF CEDAR GLEN DRIVE AND 177 FEET SOUTH OF THE CENTERLINE OF EAST ALGONQUIN ROAD.
ELEVATION= 694.49 DATUM=NAVD88-GEOID 12B

SITE BENCHMARK#2:
NORTH FLANGE BOLT ON HYDRANT LOCATED ON THE SOUTH SIDE OF EAST ALGONQUIN ROAD MORE PARTICULARLY LOCATED 209 FEET WEST OF THE CENTERLINE OF SOUTH EMBERS LANE AND 50 FEET SOUTH OF THE CENTERLINE OF EAST ALGONQUIN ROAD.
ELEVATION= 697.02 DATUM=NAVD88-GEOID 12B

UTILITY CONTACTS

ELECTRIC	WATER
COMED 1N423 SWIFT ROAD LOMBARD, IL 60148 (630) 691-4862	ARLINGTON HEIGHTS PUBLIC WORKS 222 N RIDGE AVENUE ARLINGTON HEIGHTS, IL 60005 (847) 368-5309 CONTACT: STEVE MULLANY
GAS	
NICOR 1844 FERRY ROAD NAPERVILLE, IL 60563 (630) 388-2362	
SEWER	
ARLINGTON HEIGHTS PUBLIC WORKS 222 N RIDGE AVENUE ARLINGTON HEIGHTS, IL 60005 (847) 368-5809 CONTACT: STEVE MULLANY	

SEAL

DATE	REVISIONS	DRAWN BY
02-11-19	REVISED PER VILLAGE COMMENTS	KRK

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YAMADA AMERICA BUILDING EXPANSION
VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS
TITLE SHEET

PROJ. MGR.:	JSP
PROJ. ASSOC.:	KRK
DRAWN BY:	KRK
DATE:	01-15-19
SCALE:	N.T.S.

SHEET 1 OF 6
SHR.AHIL01

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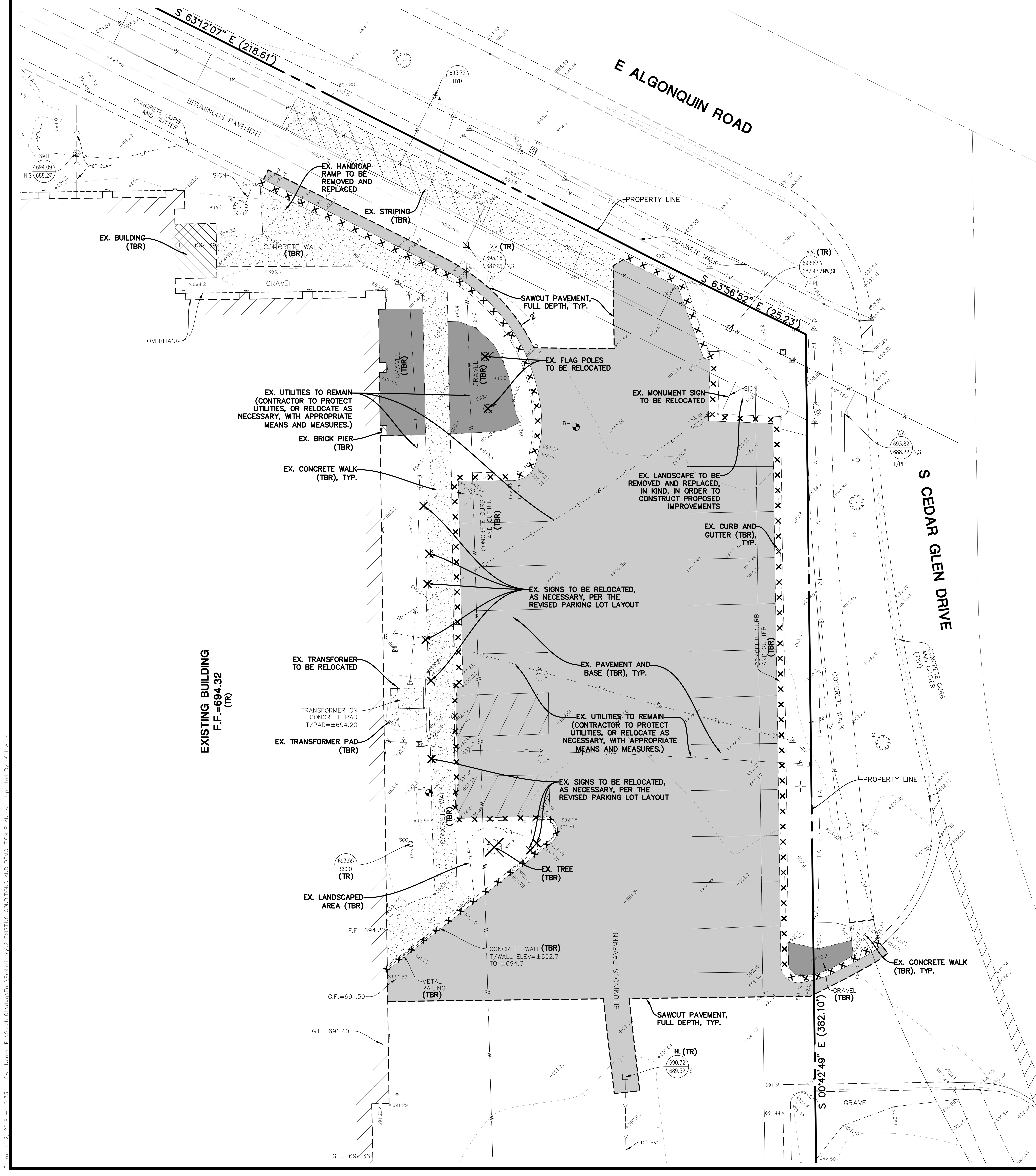
February 12, 2019 - 09:50 Dwg Name: P:\Shrahil01\dwg\Eng\Preliminary\1 TITLE SHEET.dwg Updated By: KKlawans



GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft.

06-01-16

EXISTING CONDITIONS AND DEMOLITION NOTES:

1. EXISTING CONDITIONS AND DEMOLITION PLAN REPRESENT SITE CONDITIONS AS OF MAY 16, 2018. CONTRACTOR SHALL INSPECT SITE PRIOR TO BIDDING WORK TO VERIFY ACTUAL FIELD CONDITIONS AS PORTIONS OF THE DEMOLITION WORK MAY HAVE SINCE BEEN COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE ALL DEMOLITION WORK AS PER PLANS TO PREPARE THE SITE FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS.
2. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.
3. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION, REMOVAL AND DISPOSAL (IN A LOCATION APPROVED BY ALL JURISDICTIONAL GOVERNING ENTITIES) OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, ROAD, PARKING LOTS, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THESE PLANS CAN BE CONSTRUCTED. ALL DEMOLITION WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
4. REFER TO SPECIFICATIONS SHEET FOR DEMOLITION NOTES.

DEMOLITION LEGEND

- BITUMINOUS PAVEMENT AND BASE TO BE REMOVED
- CONCRETE SIDEWALK TO BE REMOVED
- GRAVEL TO BE REMOVED
- STRIPING TO BE REMOVED
- BUILDING TO BE REMOVED
- SAWCUT LINE
- FENCE, RETAINING WALL, RAILROAD TIES, POLES, CURB AND GUTTER, ETC. TO BE REMOVED
- UTILITY STRUCTURE TO BE REMOVED
- UTILITY LINE REMOVAL, FILL OR ABANDONMENT (REFER TO SPECIFICATIONS)
- TREE TO BE REMOVED
- (TBR) TO BE REMOVED
- (TR) TO REMAIN

SOIL BORING LOCATIONS PER GEOTECHNIAL REPORT PREPARED BY SOIL AND MATERIAL CONSULTANTS, INC. DATED MAY 15, 2018.

DATE	REVISIONS	DRAWN BY
02-11-19	REVISED PER VILLAGE COMMENTS	KRK

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YAMADA AMERICA BUILDING EXPANSION
VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS
EXISTING CONDITIONS AND DEMOLITION PLAN

PROJ. MGR.: JSP
PROJ. ASSOC.: KRK
DRAWN BY: KRK
DATE: 01-15-19
SCALE: 1"=10'

SHEET 2 OF 6

SHR.AHIL01

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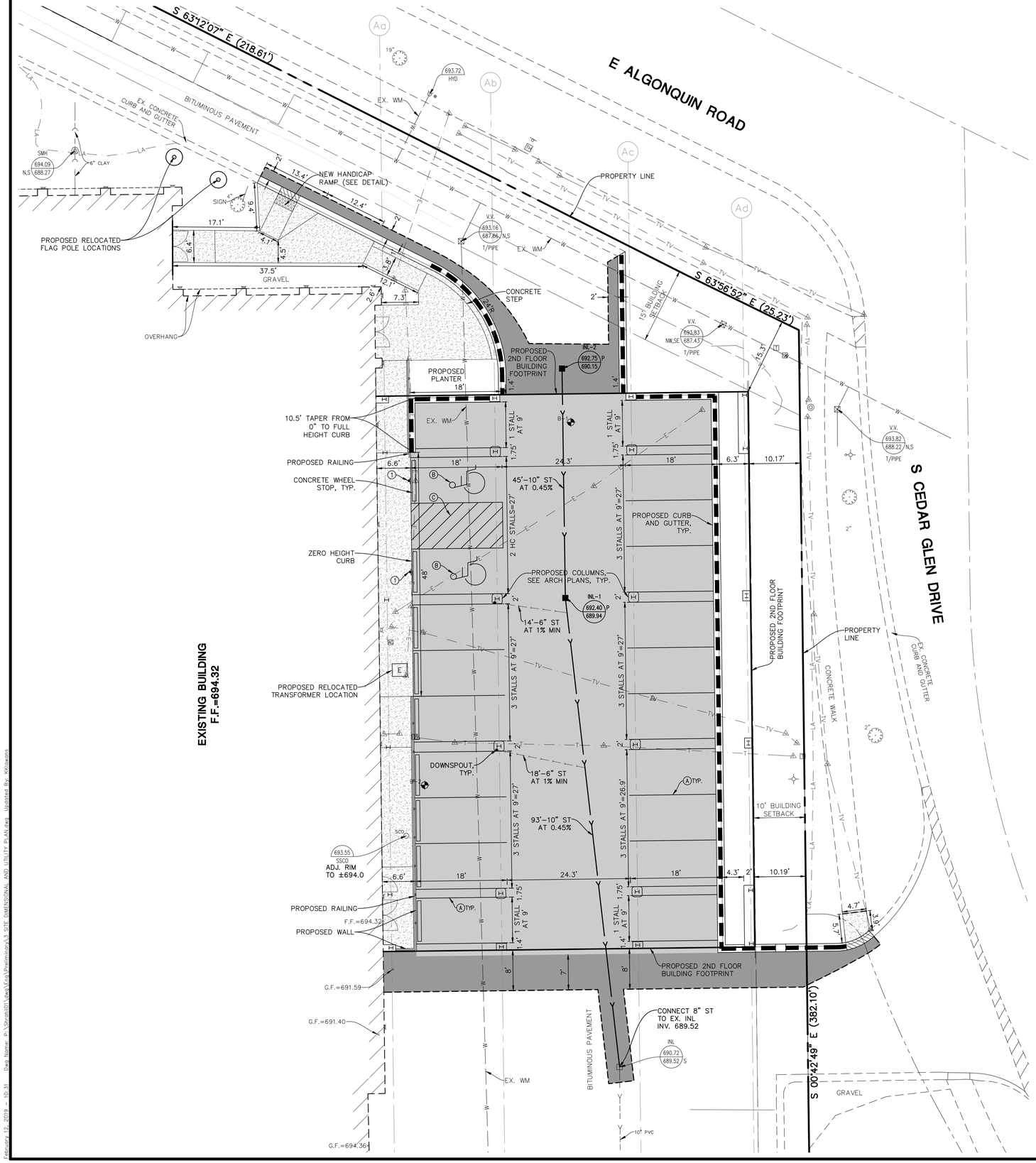

EXISTING BUILDING
F.F.=694.32

06-01-16

UTILITY NOTES:

1. ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS AND ADJACENT UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
4. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF SHOWN ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER, WATER MAIN AND DRY UTILITY LOCATIONS, SIZES, CONDITIONS & ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
6. LIGHTING AND UNDERGROUND CABLE IF SHOWN ON PLANS ARE FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS AND DETAILS.
7. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
8. CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATION OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
9. ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
10. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HERE ON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED.
11. ALL STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
12. PROVIDE CONCRETE COLLAR FOR ALL DRAINAGE STRUCTURES IN PAVEMENT, NOT ADJACENT TO CURB. SEE CONCRETE COLLAR DETAIL ON DETAIL SHEET..
13. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

06-01-16

SITE DIMENSIONAL AND PAVING NOTES:

1. ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE.
2. ALL PROPOSED CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
3. TIE ALL PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER WITH 2-#6 BARS x 18" LONG DOWELED INTO EXISTING CURB.
4. BUILDING DIMENSIONS AND ADJACENT PARKING HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. BUILDING DIMENSIONS SHOWN SHOULD NOT BE USED FOR CONSTRUCTION LAYOUT OF BUILDING.
5. IMPROVEMENTS ADJACENT TO BUILDING, IF SHOWN, SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS, AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS AND DETAILS.
6. ALL ROADWAY AND PARKING LOT SIGNAGE, STRIPING, SYMBOLS, ETC. SHALL BE IN ACCORDANCE WITH LATEST JURISDICTIONAL GOVERNMENTAL ENTITY DETAILS.
7. PROVIDE DEPRESSED CURB AND RAMP AT ALL HANDICAP ACCESSIBLE SIDEWALK AND PATH LOCATIONS PER FEDERAL AND STATE STANDARDS.
8. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.

SITE DATA

TOTAL PROPERTY AREA	2.18 ACRES
EXISTING PARKING LOT AREA	0.16 ACRES
NEW PARKING LOT AREA	0.17 ACRES
DISTURBED AREA	0.28 ACRES
EXISTING PARKING PROVIDED	18 SPACES
EXISTING HANDICAP PROVIDED	2 SPACES
NEW PARKING PROVIDED	21 SPACES
NEW HANDICAP PROVIDED	2 SPACES
NET PARKING CHANGE	+3 SPACES

PAVEMENT LEGEND

STANDARD DUTY PAVEMENT
1 1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50
2 1/4" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50
8" AGGREGATE BASE COURSE, TYPE B

CONCRETE PAVEMENT
6" PORTLAND CEMENT CONCRETE PAVEMENT W/ 6 X 6 W1.4 WWF
4" COMPACTED AGGREGATE BASE, TYPE B

CONCRETE SIDEWALK
5" PORTLAND CEMENT CONCRETE SIDEWALK
4" COMPACTED AGGREGATE BASE, TYPE B

PAVEMENT MARKING LEGEND

- (A) 4" YELLOW LINE
- (B) LETTERS AND SYMBOLS PAVEMENT MARKINGS
- (C) 4" YELLOW DIAGONAL AT 45° SPACED 2' O.C. W/ 4" YELLOW BORDER

SIGN LEGEND

- (1) R7-8 HANDICAP PARKING SIGN

DATE	REVISIONS	DRAWN BY
02-11-19	REVISED PER VILLAGE COMMENTS	KRK

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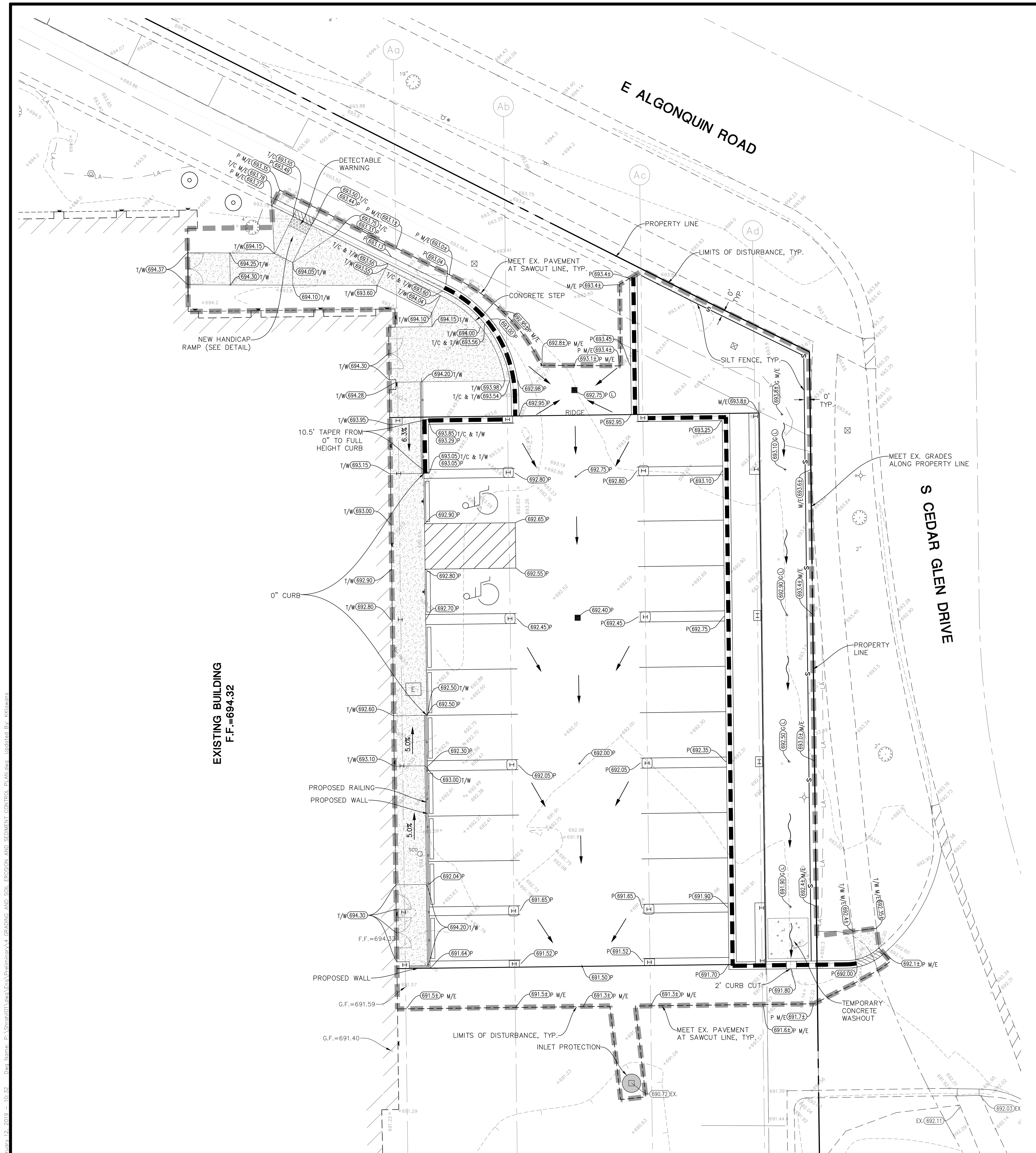
YAMADA AMERICA BUILDING EXPANSION
VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS
SITE DIMENSIONAL AND UTILITY PLAN

PROJ. MGR.: JSP
PROJ. ASSOC.: KRK
DRAWN BY: KRK
DATE: 01-15-19
SCALE: 1"=10'

SHEET
3 OF 6
SHR.AHIL01

PRELIMINARY SET, FOR REVIEW ONLY

February 12, 2019 - 10:31 Dwg Name: P:\Shrahil01\dwg\Eng\Preliminary\1 SITE DIMENSIONAL AND UTILITY PLAN.dwg Updated By: Kkrawns



06-01-16

GRADING NOTES:

1. RETAINING WALL DESIGN TO BE PROVIDED BY OTHERS.
2. PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
3. ALL HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% OR LESS.
4. MEET EXISTING GRADE AT PROPERTY LIMITS UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
6. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
9. ALL UNPAVED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 6 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
10. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY MANHARD CONSULTING ON MAY 16, 2018. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
11. TRANSITIONS FROM DEPRESSED CURB TO FULL HEIGHT CURB SHALL BE TAPERED AT 2H:1V UNLESS OTHERWISE NOTED.

GRADING PLAN LEGEND

764	PROPOSED 1 FOOT CONTOURS
792.8 G	PROPOSED SPOT ELEVATION
F.F.	PROPOSED FINISHED FLOOR ELEVATION
G/F	PROPOSED GRADE AT FOUNDATION
P	PROPOSED PAVEMENT ELEVATION
T/C	PROPOSED TOP OF CURB
T/W	PROPOSED TOP OF WALK
T/WALL	PROPOSED TOP OF WALL
M/E	MEET EXISTING
G	PROPOSED GROUND GRADE OR GROUND AT BASE OF RETAINING WALL
	PROPOSED DITCH OR SWALE
	PROPOSED DIRECTION OF FLOW
	OVERFLOW RELIEF SWALE
RIDGE	PROPOSED RIDGE LINE
0.5	PROPOSED DEPTH OF PONDING
	RETAINING WALL
L	PROPOSED SWALE LOW POINT
S	PROPOSED SWALE SUMMIT

LEGEND

—S——S—	TEMPORARY SILT FENCE (PERIMETER EROSION BARRIER)
—SD——SD—	TEMPORARY SILT DIKE
	EROSION CONTROL BLANKET (NORTH AMERICAN GREEN DS 75) (SEEDING PER LANDSCAPE PLAN)
	TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
	TEMPORARY STORM STRUCTURE PROTECTION
	TEMPORARY PERFORATED RISER
	PAVEMENT DRAINAGE FLOW
	SWALE DRAINAGE FLOW
	LIMITS OF DISTURBANCE/CONSTRUCTION

SOIL PROTECTION CHART

STABILIZATION CHART	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
PERMANENT SEEDINGS			A →	→	→	* →	* →	→	* →			
DORMANT SEEDINGS	B →	→	→								B →	→
TEMPORARY SEEDINGS			C →	→	→	→	→	→	→			
TEMPORARY SEEDINGS	D →	→	→	→	→	→	→	→	→	→	→	→
SODDING			E** →	→	→	→	→	→	→			
MULCHING	F →	→	→	→	→	→	→	→	→	→	→	→

A – KENTUCKY BLUEGRASS 90 LBS./AC. MIXED WITH PERENNIAL RYEGRASS 30 LBS./AC.
B – KENTUCKY BLUEGRASS 135 LBS./AC. MIXED WITH PERENNIAL RYEGRASS 45 LBS./AC. 2 TONS STRAW MULCH PER ACRE
C – SPRING OATS
D – WHEAT OR CEREAL RYE
E – SOD (NURSERY GROWN KENTUCKY BLUEGRASS)
F – STRAW MULCH 2 TONS PER ACRE
* IRRIGATION NEEDED DURING JUNE, JULY AND SEPTEMBER
** IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SODDING

NOTE: THIS CHART IS A GUIDE TO ASSISTS THE CONTRACTOR IN UNDERSTANDING OPTIONS FOR SOIL STABILIZATION. THE LANDSCAPE PLAN SHALL TAKE PRECEDENCE OVER THIS CHART. ANY CONFLICT SHALL BE DISCUSSED WITH THE LANDSCAPE ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

"THESE EROSION CONTROL PLANS ARE A PORTION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) TOTAL REQUIREMENTS FOR A COMPLETE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AS REQUIRED BY THE GENERAL NPDES PERMIT NO. ILR10. CLIENT AND/OR CONTRACTOR WILL BE RESPONSIBLE FOR COMPLIANCE WITH ALL REQUIREMENTS OF THE GENERAL NPDES PERMIT AND COMPILATION OF THE COMPLETE SWPPP."

N

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

06-01-16

SOIL EROSION AND SEDIMENTATION CONTROL GENERAL NOTES:

1. ALL VEGETATIVE AND STRUCTURAL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "ILLINOIS URBAN MANUAL".
2. MAINTENANCE AND REPLACEMENT OF EROSION CONTROL ITEMS, WHEN DIRECTED BY THE OWNER, SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.
3. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER OR EQUIVALENT SNOWFALL. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF SAID MEASURES SHALL BE MADE IMMEDIATELY.
4. INSTALL ALL PERIMETER SILT FENCING PRIOR TO ANY CLEARING OR GRADING. ONSITE SEDIMENT CONTROL MEASURES AS SHOWN AND SPECIFIED BY THIS EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE CONSTRUCTED AND FUNCTIONAL PRIOR TO INITIATING CLEARING, GRADING, STRIPPING, EXCAVATION OR FILLING ACTIVITIES ON THE SITE.
5. PRIOR TO BEGINNING MASS EXCAVATION, THE CONTRACTOR SHALL CONSTRUCT DITCHES, SWALES, SEDIMENTATION TRAPS AND SILTATION CONTROL MEASURES AS REQUIRED TO INTERCEPT SURFACE WATERS BEFORE THEY FLOW ONTO ADJACENT PROPERTY.
6. IF STORMWATER DETENTION IS NOT REQUIRED THE CONTRACTOR SHALL CONSTRUCT DITCHES, SWALES, SEDIMENT TRAPS AND SILTATION CONTROL MEASURES AS REQUIRED TO INTERCEPT SURFACE WATERS BEFORE THEY FLOW ONTO ADJACENT PROPERTY.
7. DISTURBED AREA SHALL BE STABILIZED BY SEEDING AT A MINIMUM, WITHIN SEVEN (7) DAYS OF COMPLETION OF DISTURBANCE UNLESS THE AREA WILL BE DISTURBED WITHIN FOURTEEN (14) DAYS AND GRASS SOWN AS NECESSARY TO RE- ESTABLISH VEGETATION FOR CONTROL OF SILTATION AND SOIL EROSION.
8. TEMPORARY SEED MIXTURE SHALL BE APPLIED AT 64 LBS/ACRE.
9. INLET PROTECTION SHALL BE INSTALLED UNDER THE GRATING OF EACH DRAINAGE STRUCTURE.
10. TOPSOIL STOCKPILES SHALL BE SEEDED WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETION FOR EROSION CONTROL UNLESS THEY WILL BE DISTURBED WITHIN FOURTEEN (14) CALENDAR DAYS. ALL SOIL STORAGE PILES SHALL BE PROTECTED FROM EROSION WITH SILT FENCE ON THE DOWN SLOPE SIDE OF THE PILES.
11. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. DEWATERING DIRECTLY INTO FIELD TILES OR STORMWATER STRUCTURES IS PROHIBITED.
12. WATER PUMPED DURING CONSTRUCTION OPERATION SHALL BE FILTERED.
13. DUST CONTROL SHALL BE PERFORMED ON A DAILY BASIS USING WATER DISPERSED FROM A TRUCK MOUNTED TANK WITH STANDARD DISCHARGE HEADER TO PROVIDE A UNIFORM RATE OF APPLICATION.
14. TEMPORARY GRAVEL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED, ADJUSTED OR RELOCATED AS NECESSARY TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC ROADWAYS. ANY SEDIMENT REACHING A PUBLIC ROAD SHALL BE REMOVED BY SHOVELING OR STREET CLEANING BEFORE THE END OF EACH WORKING DAY.
15. ANY LOOSE MATERIAL THAT IS DEPOSITED IN THE FLOW LINE OF ANY GUTTER OR DRAINAGE STRUCTURE DURING CONSTRUCTION OPERATIONS SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY.
16. OVERLAND FLOW SHALL BE DIRECTED TO THE STORM INLETS PRIOR TO LEAVING THE SITE.
17. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE CLIENT OR OTHER JURISDICTIONAL GOVERNMENTAL ENTITIES.
18. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL JURISDICTIONAL GOVERNMENTAL AGENCY REQUIREMENTS WITHIN 30 DAYS OF FINAL STABILIZATION.

06-01-16

CONSTRUCTION SEQUENCE:

1. INSTALL SILT FENCE AT LOCATIONS AS INDICATED ON THE PLANS.
2. PROVIDE STABILIZED CONSTRUCTION ENTRANCE.
3. CONSTRUCT TEMPORARY SEDIMENT TRAPS AND/OR BASINS.
4. STRIP EXISTING TOPSOIL FROM PROPOSED LIMITS OF DISTURBANCE AND STOCKPILE WHERE SHOWN ON PLANS.
5. PROVIDE SILT FENCE AROUND THE BASE OF THE STOCKPILES.
6. CUT AND FILL SITE TO PLAN SUB-GRADE.
7. CONSTRUCT UNDERGROUND IMPROVEMENTS, STORM SEWER**, ETC.
8. CONSTRUCT PAVEMENT IMPROVEMENTS PER PLAN.
9. COMPLETE CONSTRUCTION OF SITE WITH PERMANENT STABILIZATION.
10. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.

** INSTALL INLET PROTECTION AROUND DRAINAGE STRUCTURES AS CONSTRUCTED.

DATE	REVISIONS	DRAWN BY
02-11-19	REVISED PER VILLAGE COMMENTS	KRK

Manhard CONSULTING™
900 Woodlands Parkway, Vernon Hills, IL 60061 ph:847.634.5550 fx:847.634.0095 manhard.com
Civil Engineers | Surveyors | Water Resource Engineers | Water & Waste Water Engineers
Construction Managers | Environmental Scientists | Landscape Architects | Planners

YAMADA AMERICA BUILDING EXPANSION

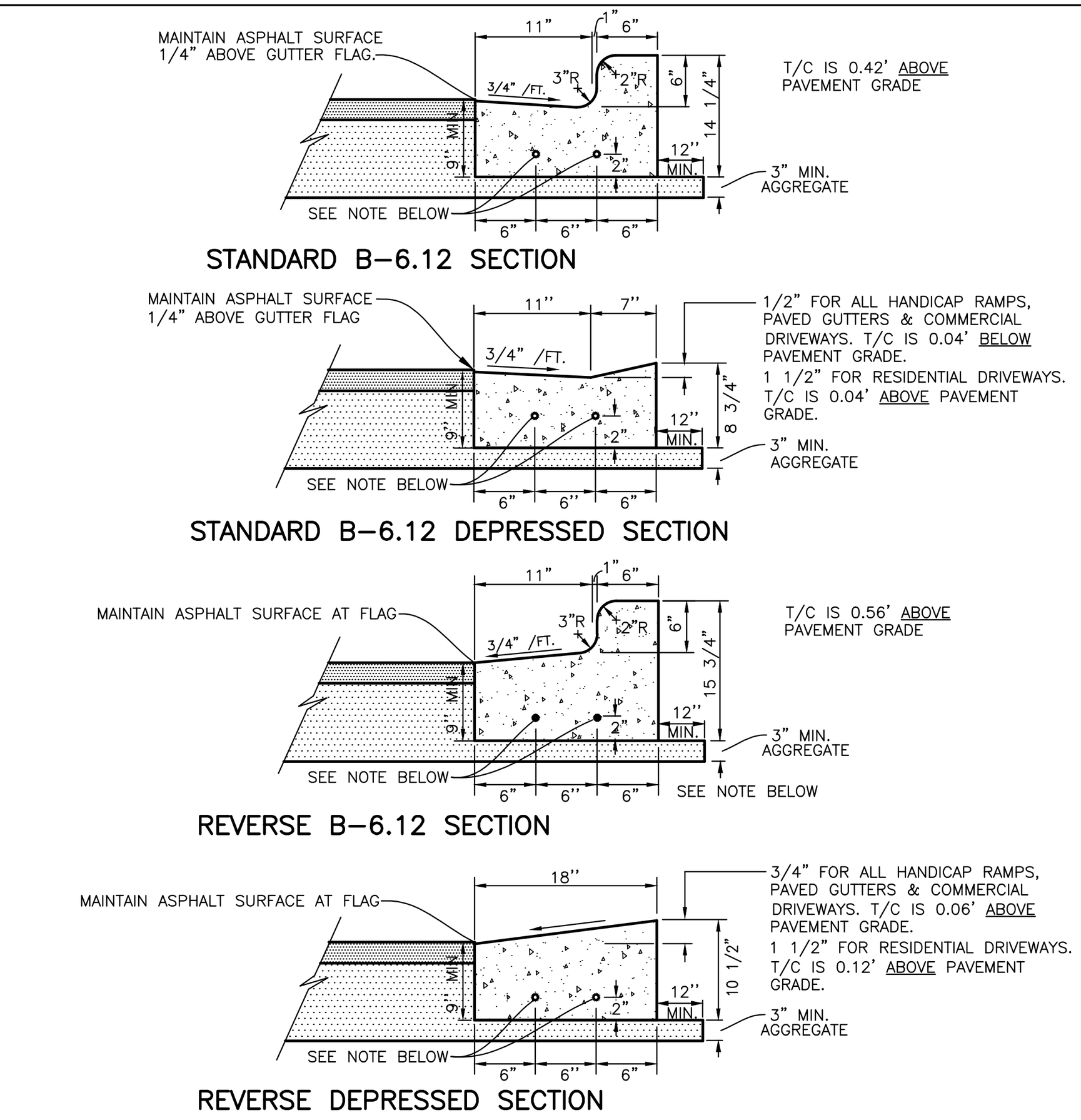
VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS

GRADING AND SOIL EROSION AND SEDIMENT CONTROL PLAN

PROJ. MGR.:	JSP
PROJ. ASSOC.:	KRK
DRAWN BY:	KRK
DATE:	01-15-19
SCALE:	1"=10'

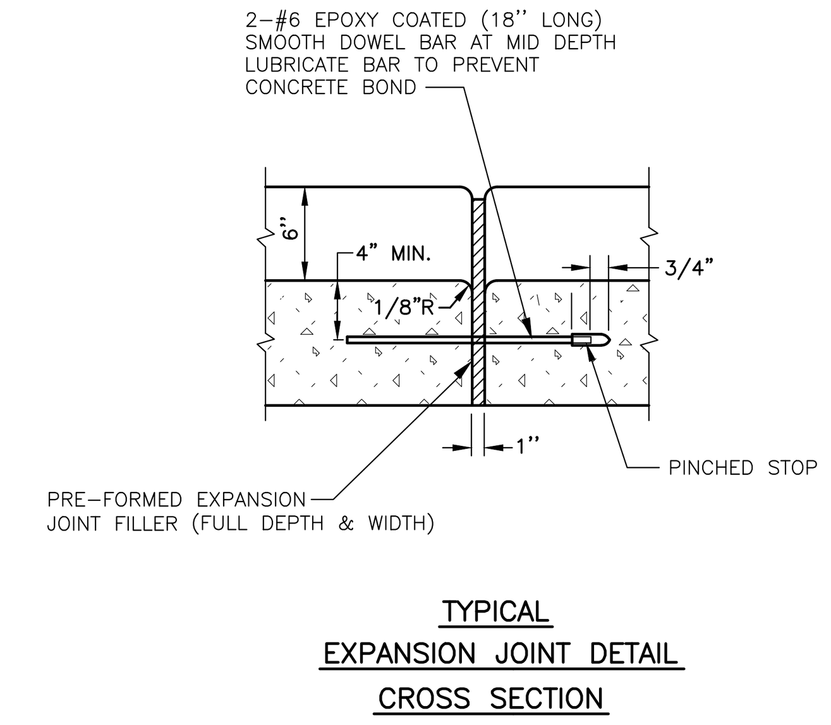
SHEET
4 OF 6
SHR.AHIL01

PRELIMINARY SET, FOR REVIEW ONLY

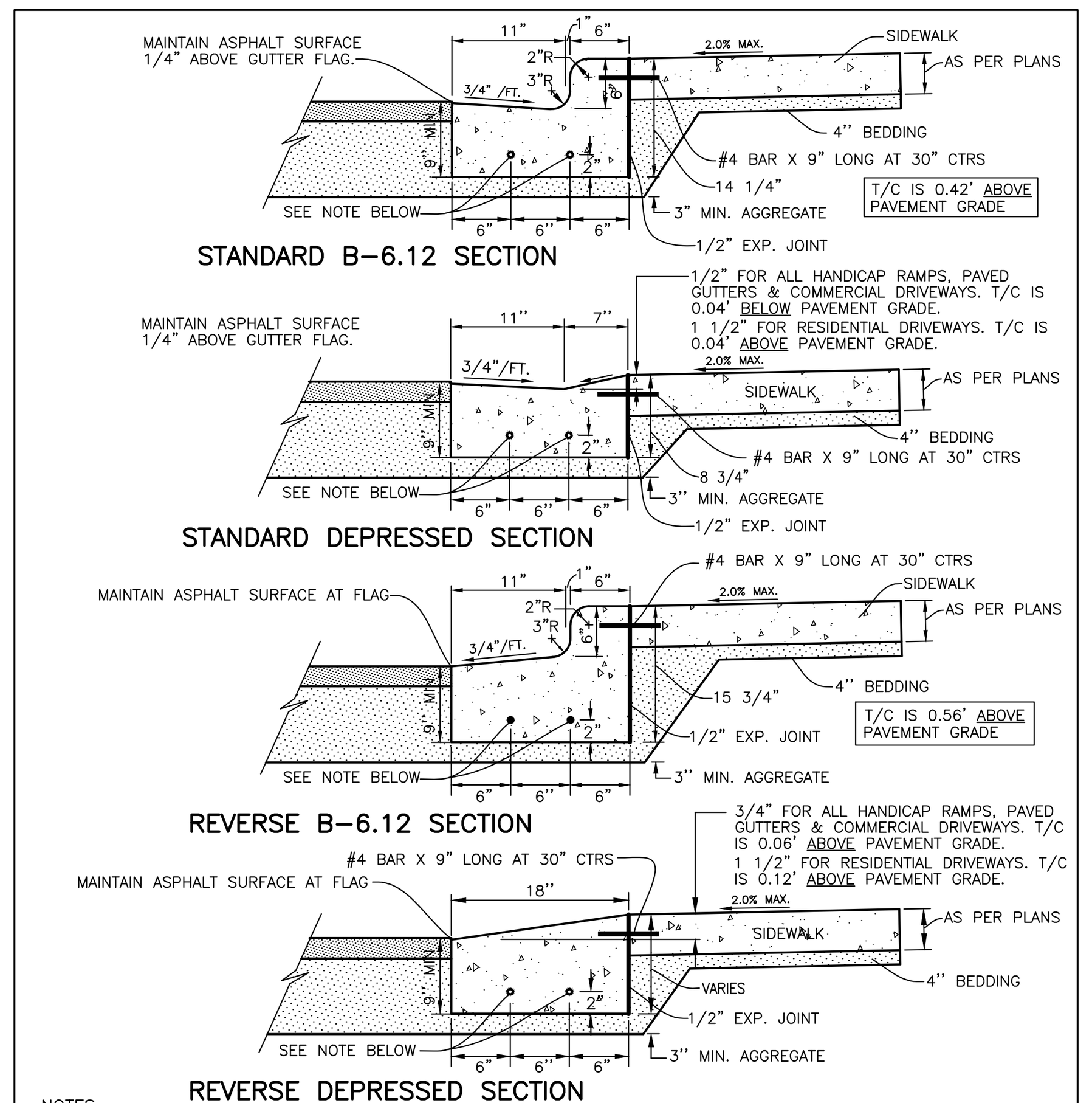


NOTE:
1. EXPANSION JOINTS TO BE LOCATED AT HIGH POINTS, UTILITY STRUCTURES, CURB RETURNS, COLD JOINTS OR 60' MAX. (SEE DETAIL)
2. CONTRACTION JOINTS ARE TO BE SAW CUT 2" DEEP AT 20' INTERVALS MAX.
3. INSTALL 2-#4 DEFORMED BARS X 10'-0" LONG OVER ALL TRENCHES.
4. TRANSITION CURB AND GUTTER AS NECESSARY TO MEET DRAINAGE STRUCTURE FRAME AND GRATE

06-01-17
MODIFIED B-6.12 CURB & GUTTER DETAIL
S-RD-B612-CURB
SHEET 1 OF 2

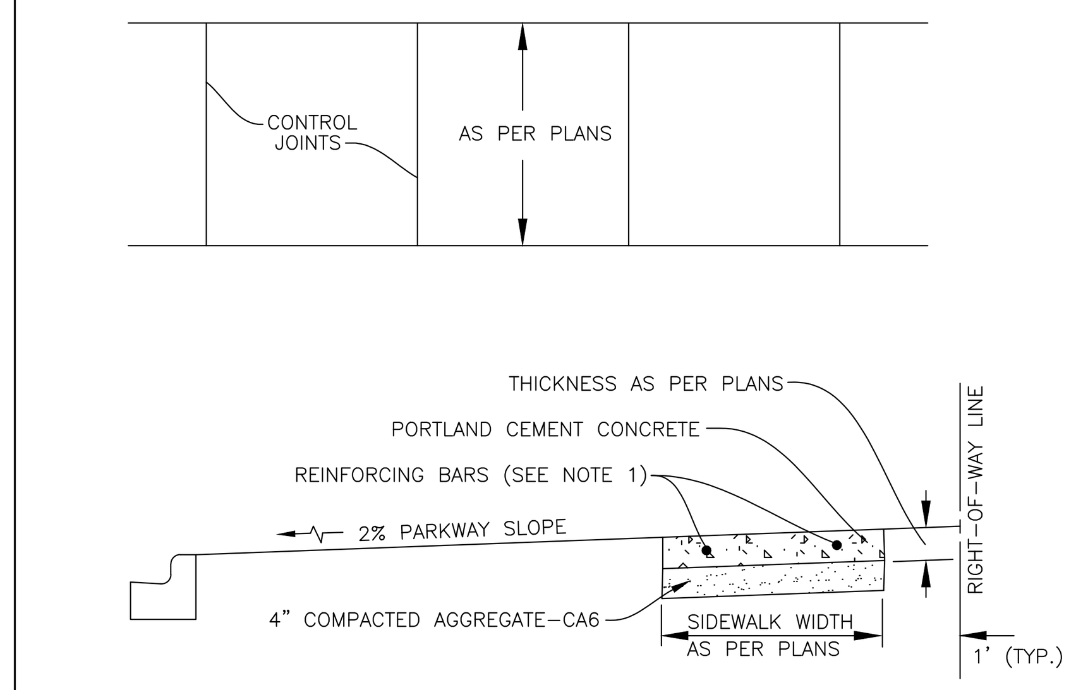


06-01-17
CURB EXPANSION JOINT
S-RD-EXPANSION-JOINT



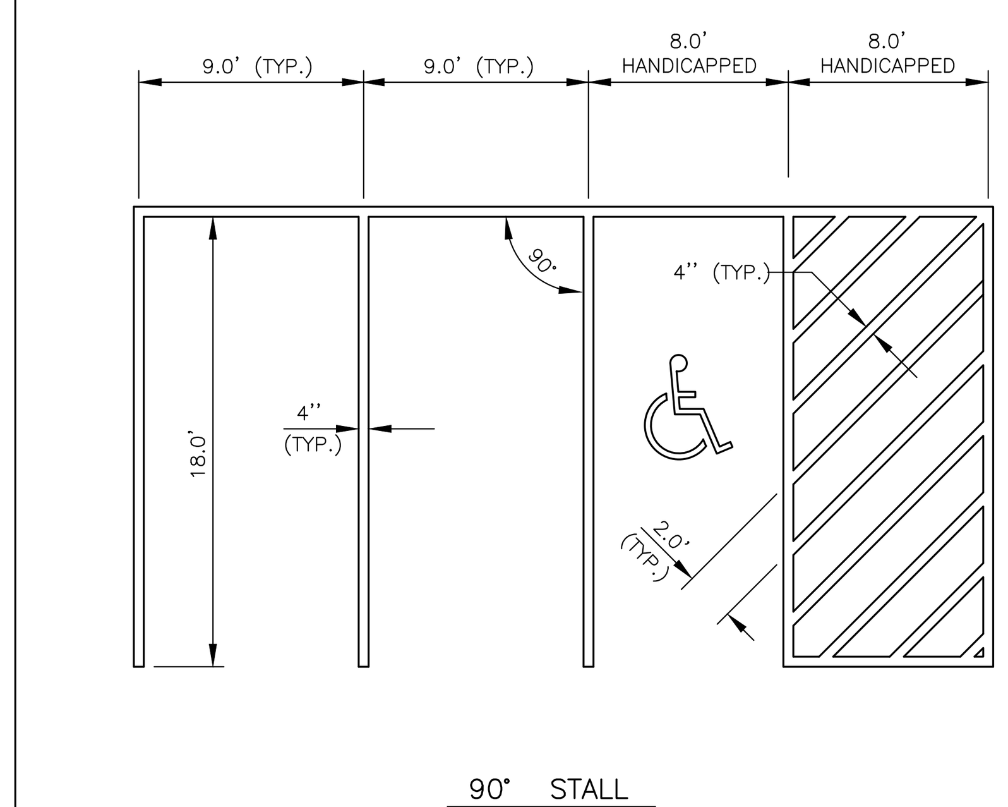
NOTES:
1. EXPANSION JOINTS TO BE LOCATED AT HIGH POINTS, UTILITY STRUCTURES, CURB RETURNS, COLD JOINTS OR 50' MAX. (SEE DETAIL)
2. CONTRACTION JOINTS ARE TO BE SAW CUT 2" DEEP AT 20' INTERVALS MAX.
3. INSTALL 2-#4 DEFORMED BARS X 10'-0" LONG OVER ALL TRENCHES.
4. TRANSITION CURB AND GUTTER AS NECESSARY TO MEET DRAINAGE STRUCTURE FRAME AND GRATE
5. IF CURB & GUTTER & SIDEWALK ARE POURED MONOLITHICALLY, NO #4x9" LONG REINFORCING BARS ARE REQUIRED.

06-01-17
MODIFIED B-6.12 CURB & GUTTER W/ADJACENT SIDEWALK DETAIL
S-RD-B612-CURB-SW



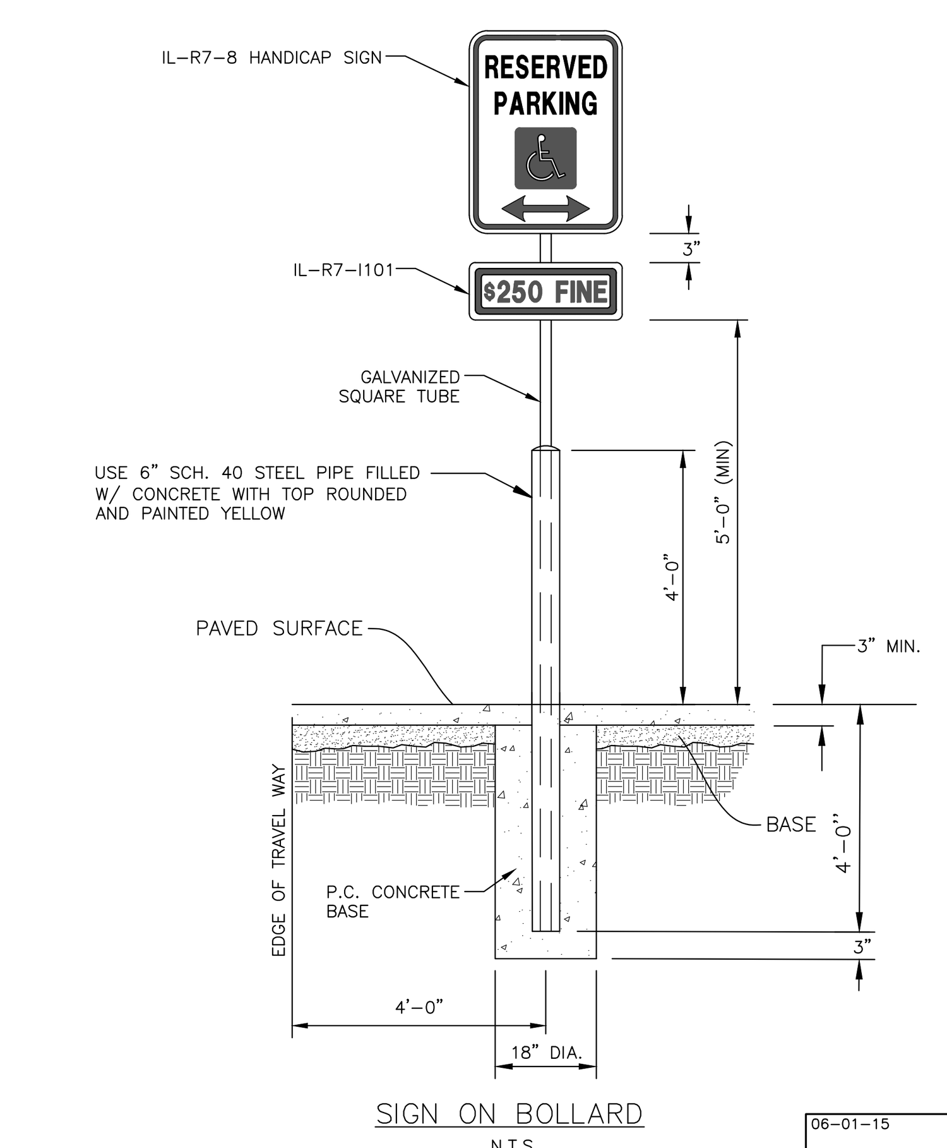
NOTES:
1. AT ALL TRENCH CROSSINGS, 2-#4 REFORMED REINFORCING BARS (10' LONG) SHALL BE PLACED OVER THE TRENCH.
2. CONCRETE THICKNESS SHALL BE 6" ACROSS DRIVEWAYS AND TRENCH CROSSINGS.
3. 3/4" EXPANSION JOINTS SHALL BE CONSTRUCTED AT A MAXIMUM SPACING OF 50'.
4. CONTROL JOINTS SHALL BE SPACED THE SAME AS THE SIDEWALK WIDTH AND 1/4" IN DEPTH.

06-01-15
SIDEWALK DETAIL
S-RD-SIDEWALK



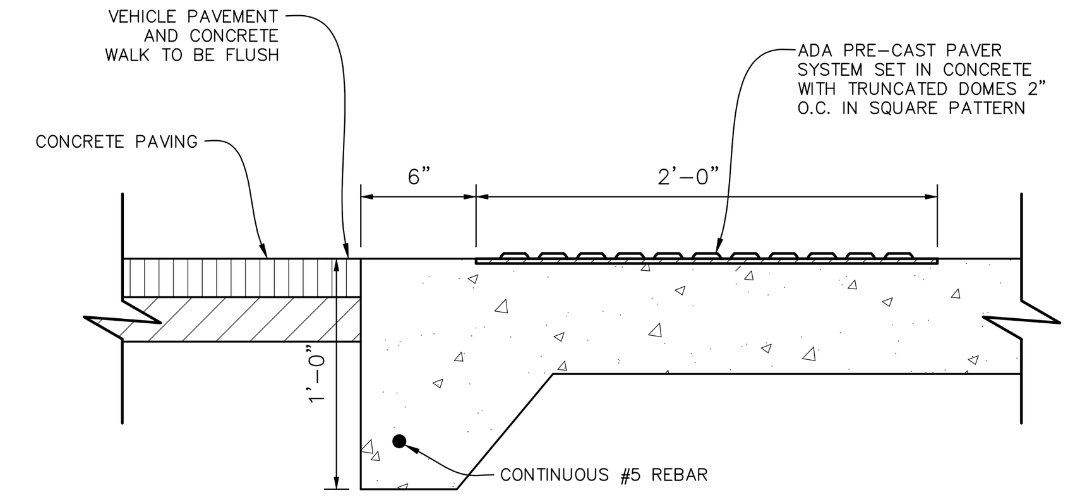
NOTE:
1. HANDICAPPED STALL AND SYMBOL STRIPING TO BE PER JURISDICTION GOVERNMENT AGENCY STANDARDS.
2. STANDARD PARKING STALL STRIPING TO BE TWO COATS YELLOW PAINT UNLESS OTHERWISE NOTED.

06-01-15
TYPICAL 90° PARKING STRIPING DETAIL
S-MS-90PARKING



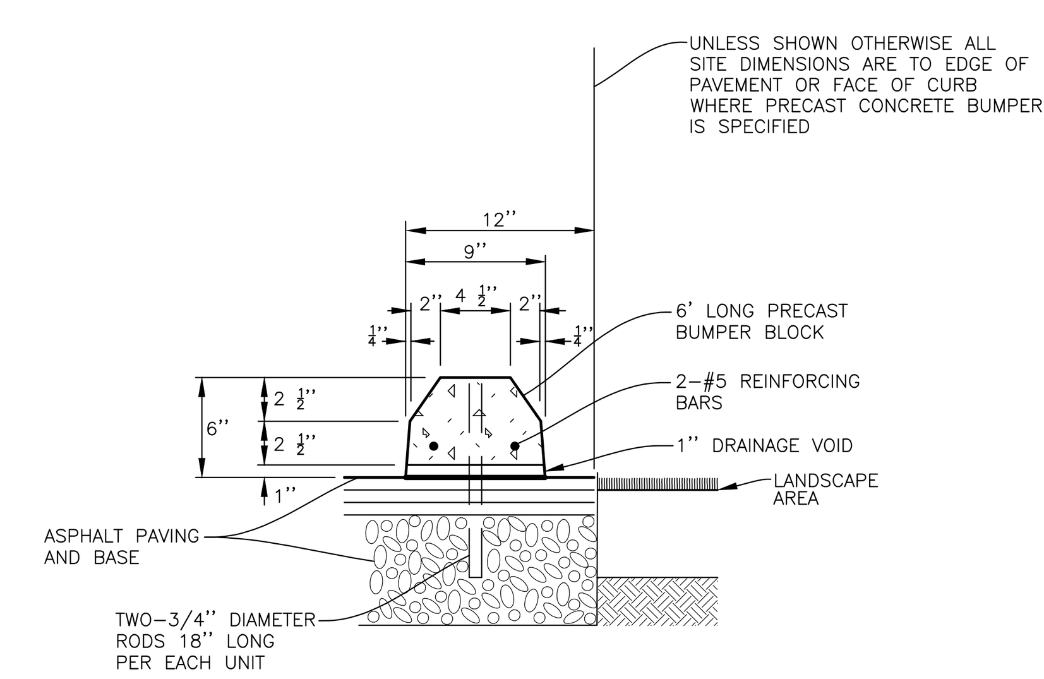
NOTE:
1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

06-01-15
SIGN ON BOLLARD AND BASE
S-RD-BOLLARD-SIGN



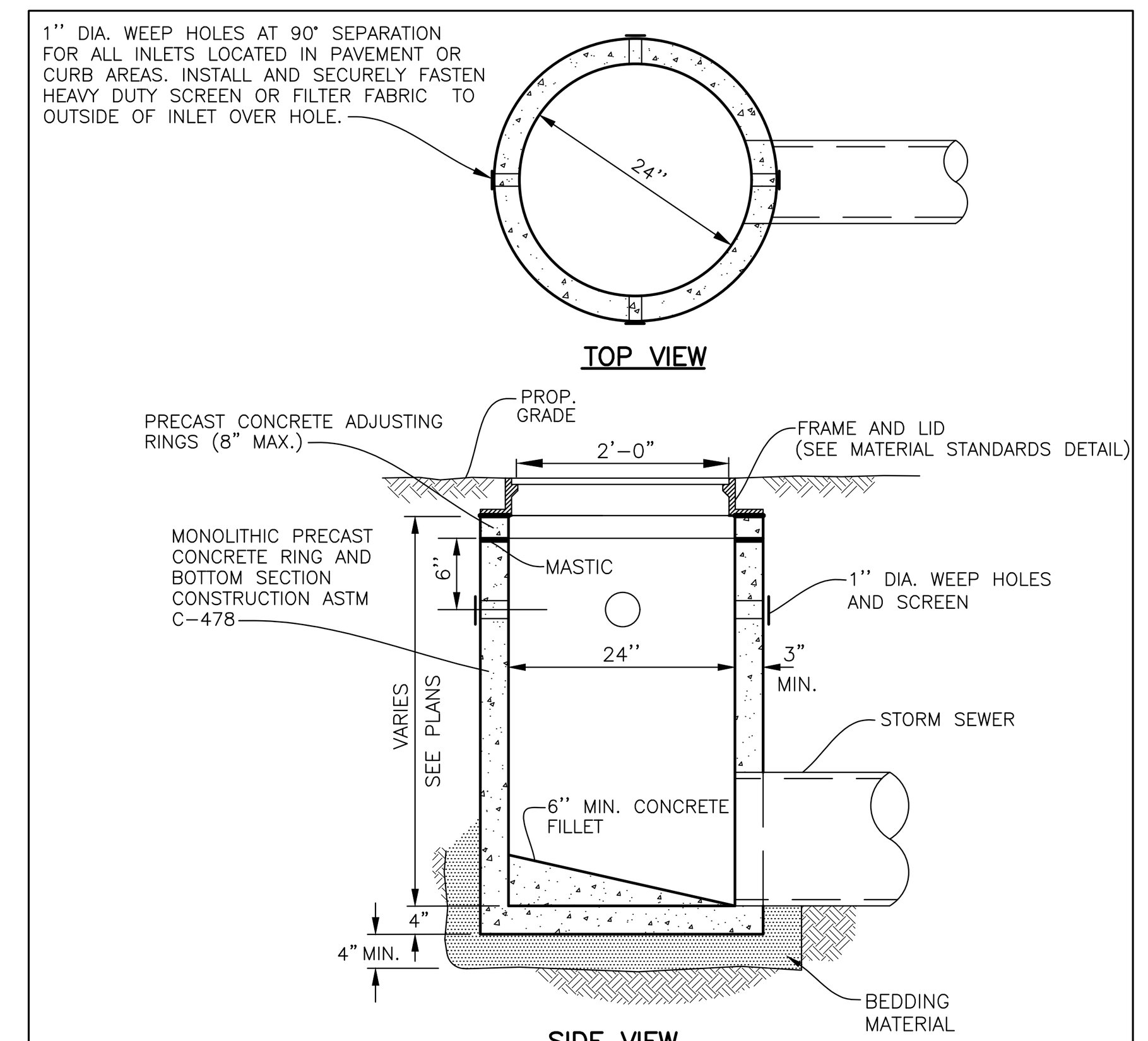
NOTE:
1. SIDEWALK SHALL BE 4" THICK WITH FIBERMESH REINFORCING ON 4" MIN. COMPACTED AGGREGATE SUBBASE.
2. EXPANSION JOINTS TO BE LOCATED AT HIGH POINTS, UTILITY STRUCTURES, CURB RETURNS, COLD JOINTS OR 60' MAX. (SEE DETAIL)
3. CONTRACTION JOINTS ARE TO BE SAW CUT 2" DEEP AT 20' INTERVALS MAX.
4. INSTALL 2-#4 DEFORMED BARS X 10'-0" LONG OVER ALL TRENCHES.
5. TRANSITION CURB AND GUTTER AS NECESSARY TO MEET DRAINAGE STRUCTURE FRAME AND GRATE

06-01-15
ZERO HEIGHT COMBINATION CURB & SIDEWALK DETAIL
S-RD-ZEROCURB-SW



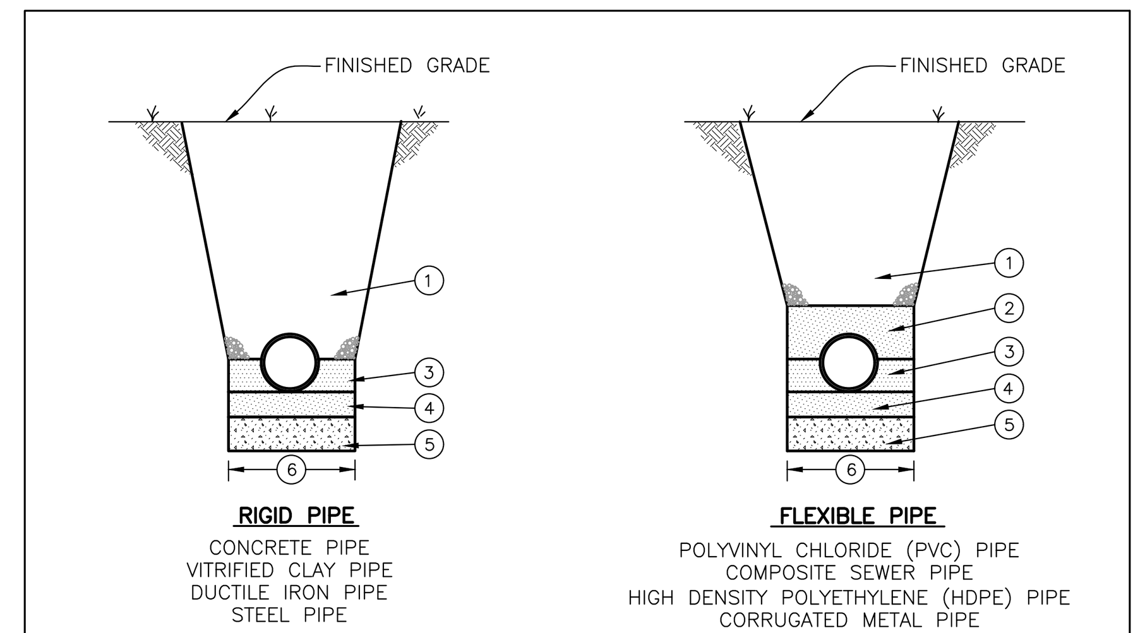
06-01-15
PRECAST CONCRETE WHEEL STOP DETAIL
S-MS-WHEELSTOP

1" DIA. WEEP HOLES AT 90° SEPARATION FOR ALL INLETS LOCATED IN PAVEMENT OR CURB AREAS. INSTALL AND SECURELY FASTEN HEAVY DUTY SCREEN OR FILTER FABRIC TO OUTSIDE OF INLET OVER HOLE.



NOTES:
1. INSTALL MINIMUM 4" OF BEDDING MATERIAL UNDER STRUCTURE BOTTOM SECTION & FILL ENTIRE EXCAVATION ALL AROUND STRUCTURE UP TO C.L. OF PIPE WITH BEDDING AND HAUNCHING MATERIAL.
2. PIPE OPENINGS SHALL BE CAST IN TO WALL.
3. STRUCTURE FRAME, ADJUSTING RINGS, AND ALL CONCRETE SECTIONS SHALL BE SET ON AND SEALED WITH BITUMINOUS MASTIC JOINT MATERIAL AND MORTARED ON INSIDE IF STRUCTURE LIES IN PAVEMENT.
4. FILL LUG HOLES WITH BITUMINOUS JOINING COMPOUND.
5. CURB & GUTTER TYPE FRAME AND GRATES OF INLETS IN PARKING LOT CORNERS SHALL BE LOCATED 2'-0" FROM THE FACE OF ADJACENT CURB TO CENTERLINE OF FRAME & GRATE.

06-01-15
INLET DETAIL
S-ST-INLET

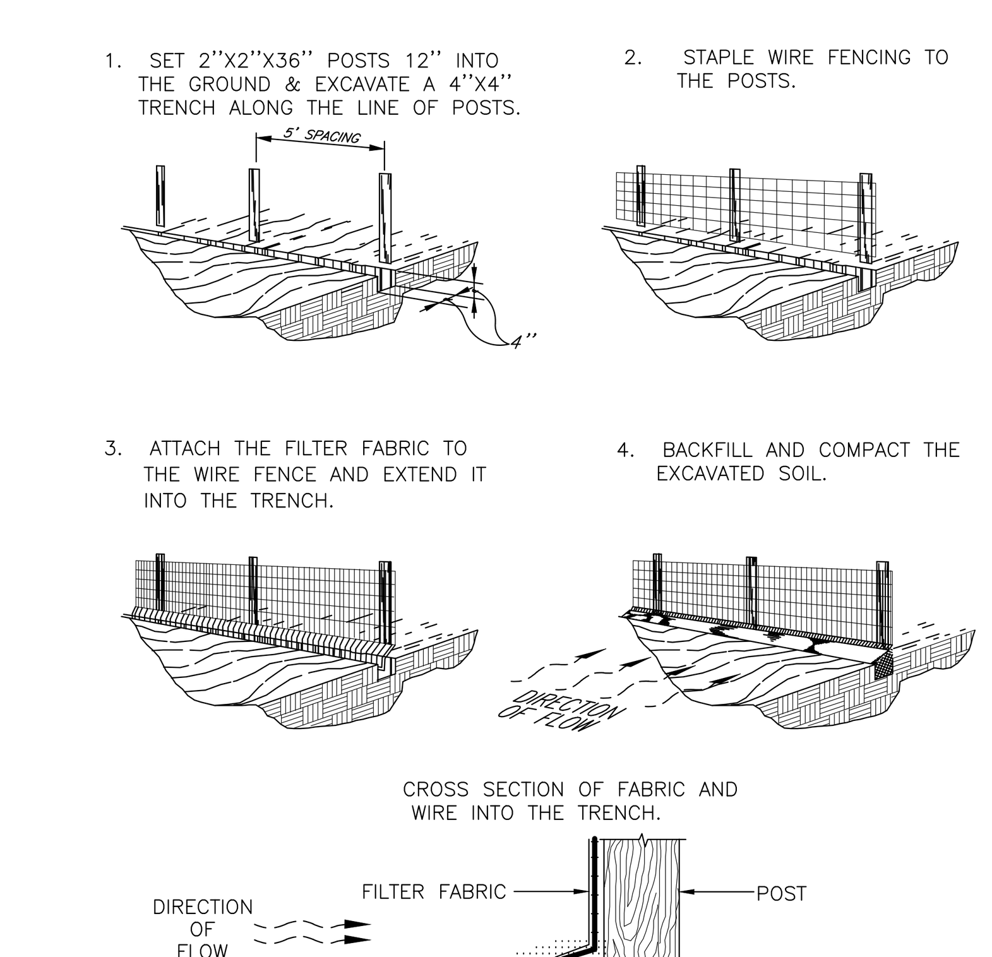


RIGID PIPE: CONCRETE PIPE, VITRIFIED CLAY PIPE, DUCTILE IRON PIPE, STEEL PIPE

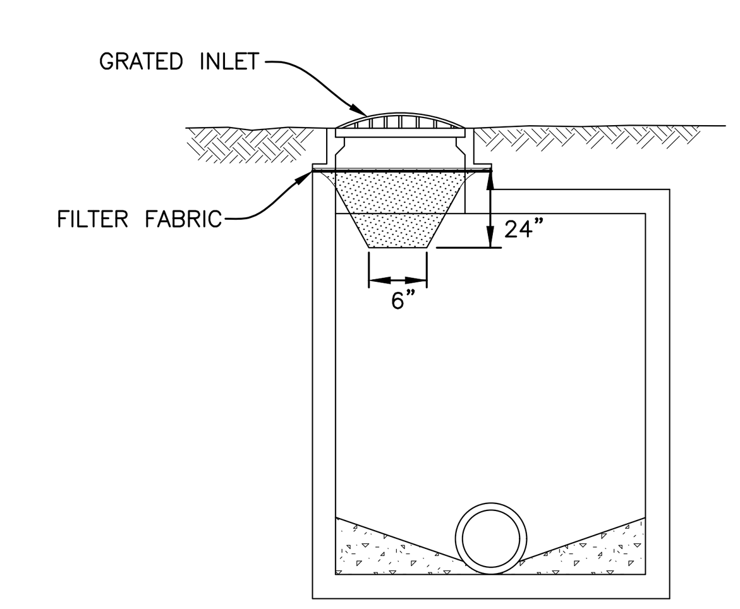
FLEXIBLE PIPE: POLYVINYL CHLORIDE (PVC) PIPE, COMPOSITE SEWER PIPE, HIGH DENSITY POLYETHYLENE (HDPE) PIPE, CORRUGATED METAL PIPE

1. MECHANICALLY COMPACTED SELECTED GRANULAR BACKFILL IN 6 INCH LIFTS UNDER OR WITHIN 2 FEET OF ANY PAVEMENT, CURB & GUTTER OR SIDEWALK. MACHINE COMPACTION OF EXCAVATED MATERIAL IN OTHER LOCATIONS WHERE SUITABLE.
2. MECHANICALLY COMPACTED SELECTED GRANULAR BACKFILL IN 6 INCH LIFTS TO 12" ABOVE TOP OF PIPE.
3. RIGID PIPE: WELL-COMPACTED HAUNCHING MATERIAL PLACED IN MAXIMUM 6 INCH LIFTS TO SPRING LINE OF PIPE
   FLEXIBLE PIPE: WELL-COMPACTED HAUNCHING MATERIAL PLACED IN MAXIMUM 6 INCH LIFTS TO SPRING LINE OF PIPE.
4. 4" WELL-COMPACTED BEDDING MATERIAL
5. UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED WITH GRANULAR FOUNDATION MATERIAL WHERE SOIL CONDITIONS WARRANT
6. TRENCH WIDTH:
   TRENCH DEPTH OF 5 FEET AND LESS, WITHOUT PROTECTION: OUTSIDE DIAMETER + 12 INCHES ON EACH SIDE OF THE PIPE.
   TRENCH DEPTH OF 5 FEET AND LESS, WITH PROTECTION: OUTSIDE DIAMETER + 18 INCHES ON EACH SIDE OF THE PIPE.
   TRENCH DEPTH OF GREATER THAN 5 FEET: OUTSIDE DIAMETER + 18 INCHES ON EACH SIDE OF THE PIPE.

06-01-15
PIPE INSTALLATION DETAIL
S-MS-PIPEINSTALL

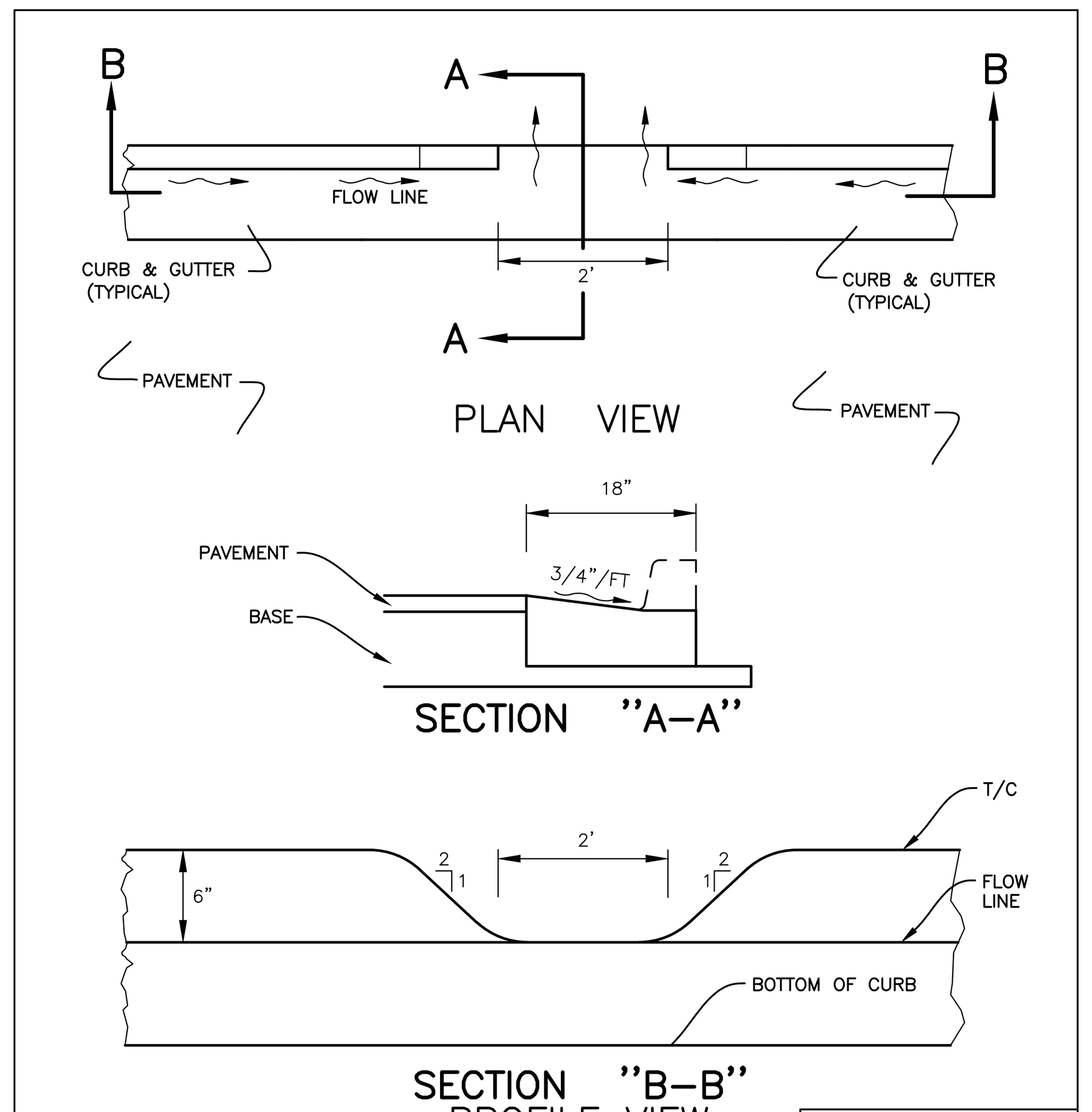


06-01-17
SILT FENCE DETAIL
S-EC-SILT FENCE



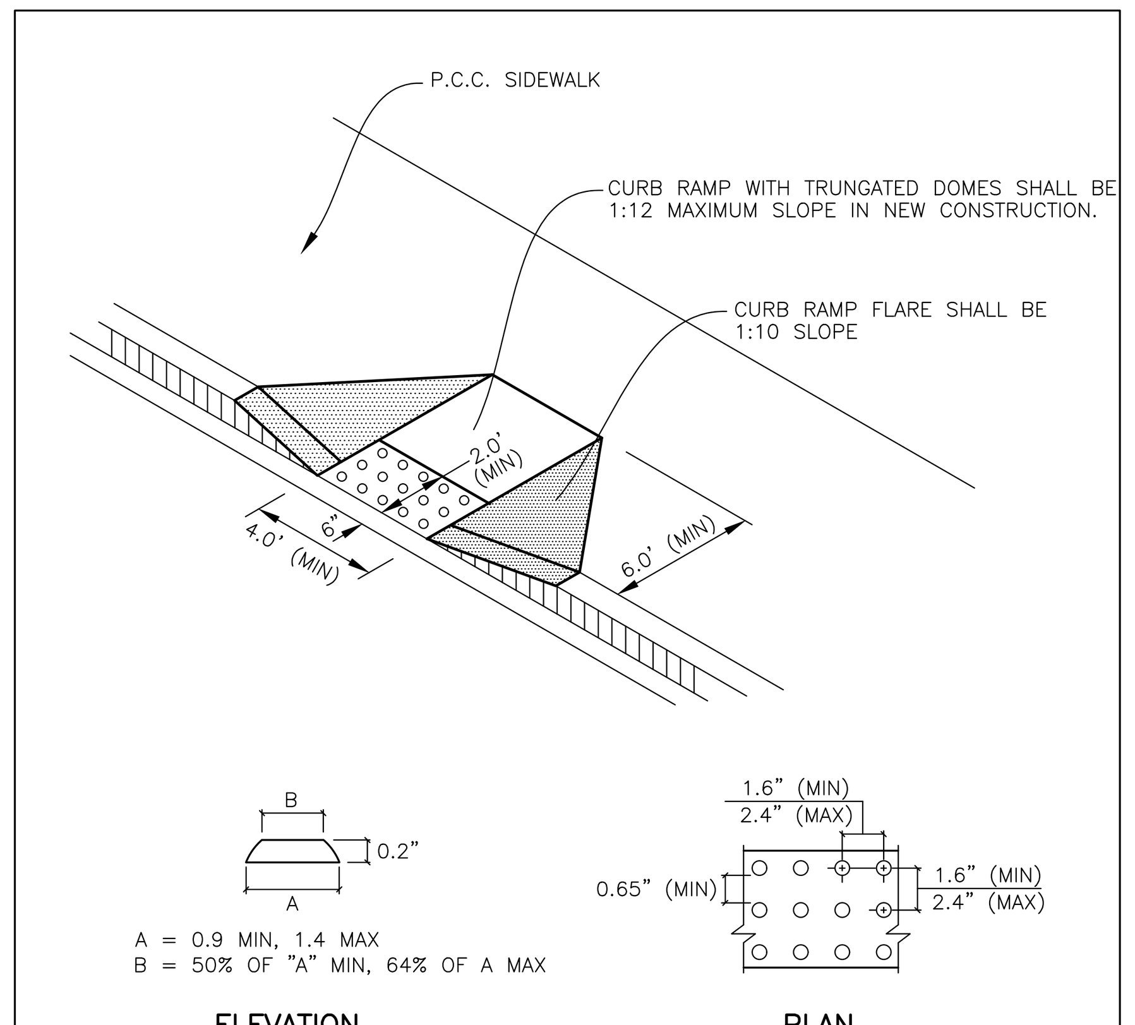
NOTE:
1. CONTRACTOR HAS THE OPTION OF USING A MANUFACTURED PRODUCT SUCH AS DANDY BAG, IPP INLET FILTER, FLEXSTORM OR APPROVED EQUAL.
2. FOR CURB STRUCTURES, CONTRACTOR HAS THE OPTION OF USING A MANUFACTURED PRODUCT SUCH AS DANDY CURB SACK OR APPROVED EQUAL.

06-01-15
FILTER BASKET INLET SEDIMENT FILTER
C-ST-FB-INLETPROTECT



NOTE:
CONSTRUCT AS PER CURB & GUTTER DETAIL.

01-01-16
CURB CUT DETAIL
N-RD-CURB CUT



NOTES:
1. DETECTABLE WARNINGS SHALL COMPLY WITH CHAPER 7, SECTION 705 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
2. DETECTABLE WARNINGS SHALL BE REQUIRED FOR THE FULL WIDTH OF RAMP.
3. WARNING SURFACE SHALL BE TRUNCATED DOMES (SEE DETAIL).
4. SURFACE SHALL CONTRAST VISUALLY WITH ADJOINING SURFACE.

06-01-17
HANDICAPPED RAMP DETAIL
N-RD-HANDICAP-RAMP

DATE	REVISIONS	DRAWN BY
02-11-19	REVISED PER VILLAGE COMMENTS	KRK

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Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

YAMADA AMERICA BUILDING EXPANSION
VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS
CONSTRUCTION DETAILS

PROJ. MGR.: JSP
PROJ. ASSOC.: KRK
DRAWN BY: KRK
DATE: 01-15-19
SCALE: N.T.S.

SHEET 5 OF 6
SHR.AHIL01

PRELIMINARY SET, FOR REVIEW ONLY

06-01-16

MANHARD CONSULTING, LTD.
STANDARD SPECIFICATIONS

GENERAL CONDITIONS

CONTRACTOR acknowledges and agrees that the use and reliance of these Plans and Specifications is sufficient consideration for CONTRACTOR'S covenants stated herein.

DEFINITION OF TERMS

a. "CLIENT" shall mean Sherman Construction LLC, which is the person or entity with whom Manhard Consulting, Ltd. has contracted with to prepare Civil Engineering PLANS and SPECIFICATIONS.
b. "ENGINEER" shall mean Manhard Consulting, Ltd., a Civil Engineering consultant on the subject project.
c. "PLANS and SPECIFICATIONS" shall mean the Civil Engineering PLANS and SPECIFICATIONS prepared by the ENGINEER, which may be a part of the contract documents for the subject project.
d. "CONTRACTOR" shall mean any person or entity performing any work described in the PLANS and SPECIFICATIONS.
e. "JURISDICTIONAL GOVERNMENTAL ENTITY" shall mean any municipal, county, state or federal unit of government from whom an approval, permit and/or review is required for any aspect of the subject project.

INTENT OF THE PLANS AND SPECIFICATIONS

The intent of the PLANS and SPECIFICATIONS is to set forth certain requirements of performance, type of equipment and structures, and standards of materials and construction. They may also identify labor and materials, equipment and transportation necessary for the proper execution of the work but are not intended to be infinitely determined so as to include minor items obviously required as part of the work. The PLANS and SPECIFICATIONS require new material and equipment unless otherwise indicated, and to require complete performance of the work in spite of omissions of specific references to any minor component part. It is not intended, however, that materials or work not covered by or properly inferred from any heading, branch, class or trade of the SPECIFICATIONS shall be supplied unless distinctly so noted. Materials or work described in words, which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.

INTERPRETATION OF PLANS AND SPECIFICATIONS

a. The CLIENT and/or CONTRACTOR shall promptly report any errors or ambiguities in the PLANS and SPECIFICATIONS to the ENGINEER. Questions as to meaning of PLANS and SPECIFICATIONS shall be interpreted by the ENGINEER, whose decision shall be final and binding on all parties concerned.
b. The ENGINEER will provide the CLIENT with such information as may be required to show revised or additional details of construction.
c. Should any discrepancies or conflicts on the PLANS or SPECIFICATIONS be discovered either prior to or after award of the contract, the ENGINEER's attention shall be called to the same before the work is begun thereon and the proper corrections made. Neither the CLIENT nor the CONTRACTOR may take advantage of any error or omissions in the PLANS and SPECIFICATIONS. The ENGINEER will provide information when errors or omissions are discovered.

GOVERNING BODIES

All works herein proposed shall be completed in accordance with all requirements of any JURISDICTIONAL GOVERNMENTAL ENTITY, and all such pertinent laws, directives, ordinances and the like shall be considered to be a part of these SPECIFICATIONS. If a discrepancy is noted between the PLANS and SPECIFICATIONS and requirements of any JURISDICTIONAL GOVERNMENTAL ENTITY, the CLIENT and/or the CONTRACTOR shall immediately notify the ENGINEER in writing.

LOCATION OF UNDERGROUND FACILITIES AND UTILITIES

When the PLANS and SPECIFICATIONS include information pertaining to the location of existing underground facilities and utilities (including but not limited to water mains, sanitary sewers, storm sewers, electric, telephone, gas and cable TV lines), such information represents only the opinion of the ENGINEER as to the approximate location and elevation of such facilities and utilities. At the locations wherein detailed positions of these facilities and utilities become necessary to the new construction, including all points of connection, the CONTRACTOR shall furnish all labor and tools to verify or definitely establish the horizontal location, elevation, size and material (if appropriate) of the facilities and utilities. The CONTRACTOR shall notify the ENGINEER at least 48 hours prior to construction if any discrepancies in existing utility information or conflicts with existing utilities exist. The ENGINEER assumes no responsibility whatever with respect to the sufficiency or accuracy of the information shown on the PLANS and SPECIFICATIONS relative to the location of underground facilities and utilities, nor the manner in which they are removed or adjusted.

It shall be the CONTRACTOR's responsibility prior to construction, to notify all Utility Companies of the intent to begin construction and to verify the actual location of all such facilities and utilities. The CONTRACTOR shall also obtain from the respective Utility Companies the working schedules for removing or adjusting these facilities.

UNSUITABLE SOILS

The PLANS have been prepared by the ENGINEER based on the assumption that all soils on the project are suitable to support the proposed improvements shown. The CLIENT or CONTRACTOR shall immediately notify the ENGINEER if he discovers or encounters an obstruction that prevents the installation of the improvement according to the line and grades shown on the PLANS.

PROTECTION OF TREES

All trees that are not to be removed shall be protected from damage. Trees shall not be removed unless requested to do so in writing by the CLIENT.

NOTIFICATION OF OWNERS OF FACILITIES AND UTILITIES

The CONTRACTOR shall notify all applicable Jurisdictional Governmental Entities or utility companies, i.e., water, sewer, electric, telephone, gas and cable TV prior to beginning any construction so that said entity or company can establish the location and elevation of underground pipes, conduits or cables adjoining or crossing proposed construction.

TRAFFIC CONTROL

The CONTRACTOR shall provide when required by any JURISDICTIONAL GOVERNMENTAL ENTITY, all signs, equipment, and personnel necessary to provide for safe and efficient traffic flow in all areas where the work will interrupt, interfere or cause to change in any form, the conditions of traffic flow that existed prior to the commencement of any portions of the work. The CLIENT may, at his discretion, require the CONTRACTOR to furnish traffic control under these or other circumstances where in his opinion it is necessary for the protection of life and property. Emergency vehicle access shall be maintained at all times. Unless authorized by the CLIENT or CLIENT's construction representative, all existing access points shall be maintained at all times by the CONTRACTOR. The need for traffic control shall be anticipated by the CLIENT.

WORK AREA

The CONTRACTOR, his agents and employees and their employees and all equipment, machinery and vehicles shall confine their work within the boundaries of the project or work area specified by the Client. The CONTRACTOR shall be solely liable for damage caused by him or his agents and employees and their equipment, machinery and vehicles on adjacent property or areas outside designated work areas.

***UTILITY POLES** - INTENTIONALLY OMITTED

RESTORATION

It is the intent of these SPECIFICATIONS that clean-up and final restoration shall be performed immediately upon completion of each phase of the work, both inside and outside the Project, or when so directed by the CLIENT so that these areas will be restored as nearly as possible to their original condition or better, and shall include but not be limited to, restoration of maintained lawns and rights-of-way, roadways, driveways, sidewalks, ditches, bushes, hedges, trees, shrubs, fences, mailboxes, sewers, drain tiles, water mains, etc.

CLEANING UP

The CONTRACTOR shall at all times keep the premises free from accumulations of waste material or rubbish caused by his employees or work, and at the completion of the work he shall remove all his rubbish, tools, scaffolding and surplus materials and shall leave his work "broom clean" or its equivalent, unless more exactly specified.

ROAD CLEANING

The CONTRACTOR shall maintain roadways adjoining the project site free from mud and debris at all times. If mud and/or debris is carried onto the roadways from vehicles entering onto the highway from either the CONTRACTOR's trucks, his employees' vehicles, or his material suppliers, the CONTRACTOR shall immediately remove said mud and/or debris.

SAFETY AND PROTECTION

The CONTRACTOR shall be solely and completely responsible for the conditions of the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. The CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR's duties and responsibilities for safety and for protection of the work shall continue until such time as all work is completed and the CLIENT has notified CONTRACTOR that the work is acceptable. The duties of the ENGINEER do not include review of the adequacy of either the CONTRACTOR's or the general public's safety in, on, or near the construction site.

HOLD HARMLESS

To the fullest extent permitted by law, any CONTRACTOR; material supplier or other entity by use of these plans and specifications hereby waives any right of contribution and agrees to indemnify, defend, save and hold harmless the CLIENT and ENGINEER and its agents, employees and consultants from and against all manner of claims, causes, causes of action, damages, losses and expenses, including but not limited to, attorneys' fees arising out of, resulting from or in connection with the performance of any work, pursuant to or with respect to these plans and specifications. However, this indemnity shall not be construed to indemnify ENGINEER, its consultants, agents or employees against its own negligence.

Claims, damages, losses and expenses as these words are used in the Agreement shall mean and include, but not be limited to (1) injury or damage occurring by reason of the failure of or use or misuse of any hoist, riggings, blocking, scaffolding or any and all other kinds of items of equipment, whether or not the same be owned, furnished or loaned by any part or entity, including any contractor; (2) all attorneys' fees and costs incurred in bringing an action to enforce the provisions of this indemnity; (3) costs for time expended by the indemnified party and its employees, at its usual rates plus costs or travel, long distance telephone and reproduction of documents and (4) consequential damages.

In any and all claims against the CLIENT or ENGINEER or any of their agents or employees and consultants by any party, including any employee of the CONTRACTOR or any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount of type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts or any insurance maintained by CONTRACTOR or any Subcontractor or any other party.

INSURANCE

Any party using or relying on these plans, including any contractor, material supplier, or other entity shall obtain, (prior to commencing any work) general public liability insurance insuring against all damages and claims for any bodily injuries, death or property damage arising out of any work, including the construction work provided for in these plans, and shall name the CLIENT and ENGINEER and its consultants, agents and representatives as additional insureds under such insurance policy; provided that any party using or relying on these plans having obligations to maintain specific insurance by reason of any agreement with CLIENT or any CONTRACTOR or ENGINEER shall provide evidence and certificates of insurance as required by such contract or agreement. Such insurance must contain a clause stating that the insurance is primary coverage for ENGINEER and ENGINEER's other applicable coverage is considered secondary. Such insurance shall not limit any liability of any party providing work or services or providing materials.

THIRD PARTY BENEFICIARY

Manhard Consulting, Ltd., the ENGINEER, is intended to be a third party beneficiary of this willing agreement and requirement.

Note: These Specifications are for Northern Illinois.

DETAILED SPECIFICATIONS

I. *DEMOLITION

The CONTRACTOR shall coordinate with respective utility companies prior to the removal and/or relocation of utilities. The CONTRACTOR shall coordinate with the utility company concerning portions of work which may be performed by the Utility Company's forces and any fees which are to be paid to the utility company for their services. The CONTRACTOR is responsible for paying for all fees and charges.

Should removal and/or relocation activities damage features indicated to remain, the CONTRACTOR shall provide new materials/structures in accordance with the contract documents. Except for materials designed to be relocated on this plan, all other construction materials shall be new.

Prior to demolition occurring, all erosion control devices are to be installed.

The CONTRACTOR is responsible for demolition, removal and disposal (in a location approved by all JURISDICTIONAL GOVERNING ENTITIES) of all structures, pads, walls, flumes, foundations, road, parking lots, drives, drainage structures, utilities, etc., such that the improvements shown on these plans can be constructed. All demolition work shall be in accordance with all applicable federal, state and local requirements. All facilities to be removed shall be undercut to suitable material and brought to grade with suitable compacted fill material per the specifications.

The CONTRACTOR is responsible for obtaining all permits required for demolition and disposal.

Electrical, telephone, cable, water, fiber optic cable and/or gas lines needing to be removed shall be coordinated by the CONTRACTOR with the affected utility company.

CONTRACTOR must protect the public at all times with fencing, barricades, enclosures, and other appropriate best management practices.

Continuous access shall be maintained for surrounding properties at all times during demolition.

All fire access lanes within the project area shall remain in service, clean of debris, and accessible for use by emergency vehicles.

CONTRACTOR shall maintain all existing parking areas, sidewalks, drives, etc. clear and free from any construction activity and/or material to ensure easy and safe pedestrian and vehicular traffic to and from the site. CONTRACTOR shall coordinate/phase all construction activity within proximity of the building and utility interruptions with the facility manager to minimize disturbance and inconvenience to facility operations.

CONTRACTOR may limit saw-cut and pavement removal to only those areas where it is required as shown on these construction plans, however if any damage is incurred on any of the surrounding pavement, etc. the CONTRACTOR shall be responsible for ITS removal and repair.

Any existing septic tanks and grease traps encountered shall have all liquids and solids removed and disposed of by a licensed commercial hauler in accordance with JURISDICTIONAL GOVERNING ENTITY regulations, and the tank and grease traps shall then be filled with suitable materials or removed from the site and disposed of by the CONTRACTOR.

Voids left by any item removed under any proposed building, pavement, walk, etc. or within 24" thereof shall be filled and compacted with suitable materials by the CONTRACTOR.

The CONTRACTOR shall be responsible for the disconnection of utility services to the existing buildings prior to demolition of the buildings.

Any material containing asbestos found within existing structures shall be removed from the site and disposed of off-site by the CONTRACTOR in accordance with County, State and Federal regulations.

CONTRACTOR shall develop and implement a daily program of dust control and shall submit and obtain JURISDICTIONAL GOVERNING ENTITY approval of dust control procedures prior to demolition of any structures. Modification of dust control procedures shall be performed by the CONTRACTOR to the satisfaction of the JURISDICTIONAL GOVERNING ENTITY as requested.

The CONTRACTOR shall coordinate all demolition with the JURISDICTIONAL GOVERNING ENTITY and CLIENT to ensure protection and maintenance of sanitary sewer and water utilities as necessary and to provide stormwater conveyance until new facilities are constructed, tested and placed into operation.

The locations of all existing utilities shown on this plan have been determined from the best information available and are given for the convenience of the CONTRACTOR and are not to be interpreted as the exact location, or as the only obstacles that may occur on the site. The ENGINEER assumes no responsibility for their accuracy. Prior to the start of any demolition activity, the CONTRACTOR shall notify the utility companies for location of existing utilities and shall verify existing conditions and proceed with caution around any anticipated features.

II. EARTHWORK

STANDARDS

This work shall be completed in conformance with the applicable sections of the Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition except as modified below.

SOIL BORING DATA

Copies of results of soil boring and reports, if such borings were taken by the CLIENT in the vicinity of the proposed construction site, should be made available by the CLIENT to the CONTRACTOR. These borings are presented for whatever purpose the CONTRACTOR chooses to make of them. The ENGINEER makes no representation or warranty regarding the number, location, spacing or depth of borings taken, nor of the accuracy or reliability of the information given in the results thereof.

Further, the ENGINEER does not assume responsibility for the possibility that during construction, the soil and groundwater condition may be different than indicated. Neither does the ENGINEER assume responsibility for variations of soil and groundwater at location between borings. The CONTRACTOR is required to make its own borings, explorations and observations to determine soil and groundwater conditions.

EARTHWORK CALCULATIONS AND CROSS SECTIONS

The CONTRACTOR understands that any earthwork calculations, quantities or cross sections that have been furnished by the ENGINEER are for information only and are provided without any guarantee by the CLIENT or ENGINEER whatsoever as to their sufficiency or accuracy. CONTRACTOR warrants that he has performed his own subsurface investigations as necessary and his own calculations and cross sections to determine site soil conditions and earthwork volumes. The ENGINEER makes no representation or guarantee regarding earthwork quantities or that the earthwork for this project will balance due to the varying field conditions, changing soil types, allowable construction to tolerances and construction methods that are beyond the control of the ENGINEER.

CLEARING, GRUBBING AND TREE REMOVAL

The site shall be cleared, grubbed, and trees and stumps removed where designated on the PLANS. Trees designated to remain shall be protected from damage.

TOPSOIL STRIPPING

Upon completion of demolition, clearing, grubbing and tree removal, all topsoil shall be stripped from under all buildings and pavements areas, and other areas necessary to complete the work. Topsoil stripped shall be placed in stockpiles in locations as designated by the CLIENT.

TOPSOIL RESPREAD

Upon completion of roadway and/or parking lot improvements and installation of underground utilities a minimum of six inches (6") of topsoil shall be respread over all unpaved areas which have been disturbed by earthwork construction, except building pads and other designated areas, which shall be kept free from topsoil.

SEEDING

Upon completion of topsoil respread, the CONTRACTOR shall apply seed and fertilizer to all respread areas in accordance with IDOT standards or as designated on landscape drawings and specifications provided by the CLIENT.

SODDING

Upon completion of topsoil respread, the CONTRACTOR shall install sod to all areas designated on the plans or as designated on the landscape drawings and specifications provided by the CLIENT.

EXCAVATION AND EMBANKMENT

Upon completion of topsoil stripping, all excavation and embankments shall be completed as shown on the PLANS. All suitable excavated materials shall be hauled, placed (moisture conditioned if necessary) and compacted in the embankment areas. The CONTRACTOR shall include all dewatering, temporary ditching and culverts necessary to complete the excavation and embankment.

Specifically included in the scope of Excavation and Embankments is grading and shaping of all cut or fill areas including swales and ditches; handling of sewer spoil, etc., and all work required to provide positive drainage at the end of each working day and upon completion of a section.

The CONTRACTOR shall be responsible for the excavation of all swales and ditches and for the excavation or filling of the roads, building pads and parking lots within the work limits to lines & grades shown on the plans. He shall be responsible for obtaining compaction in accordance with the minimum values listed in the table below for all embankments unless more stringent values are listed in the soils report or are approved by the CLIENT, and to use any method approved by the CLIENT necessary to obtain this compaction (i.e., soil fabric or any undercutting that may be required).

Type Material	Percent Compaction Standard	Pavement & Floor Slabs	Grass Areas
Sandy Soils	Modified Proctor	95%	90%
Clayey Soils	Standard Proctor	95%	90%

The CONTRACTOR shall notify the CLIENT if proper compaction cannot be obtained so that the CLIENT may determine what remedial measures may be needed.

A soils testing firm employed by the CLIENT shall determine which soils are unsuitable. Materials in their natural state being defined as unsuitable that would be suitable material if moisture conditioned, shall be conditioned by the CONTRACTOR and used as suitable embankment material or hauled from the site.

For purposes of definition, unsuitable material shall be as follows unless determined otherwise by the Soils Engineer:

1. Any soil whose optimum moisture content exceeds 25%.
2. Any cohesive soil with an unconfined compressive strength of 1.5 tons per square foot or less.
3. Any soil whose silt content exceeds 60% by weight.
4. Any soil whose maximum density is less than 100 pounds per cubic foot.
5. Any soil containing organic, deleterious, or hazardous material.

Upon completion of excavation and shaping of the water retention areas intended to maintain a permanent pool of water, all silt seams and granular or sandy soils shall be removed to a minimum depth of three feet below the subgrade and replaced with an impermeable clay liner, including adjacent to and under storm sewer inlets and outlets. It is the intent of these PLANS and SPECIFICATIONS that the CONTRACTOR shall prepare the lake bottoms, side slopes, and compaction thereof such that the lakes will maintain the proposed normal water level and that leakage does not exceed ½ inch per week.

Ditches and swales are to be excavated to the lines and grades indicated on the PLANS. All suitable materials excavated from the ditches shall be used in construction of the embankments.

The CONTRACTOR shall notify the CLIENT immediately upon encountering groundwater during excavation. If in the opinion of the CLIENT or the JURISDICTIONAL GOVERNING ENTITY this condition necessitates the installation of perforated drain tile bedded in washed gravel or open storm sewer joints wrapped with fabric, the CONTRACTOR shall install the same.

During excavation and embankment, grades may be adjusted to achieve an overall site earthwork balance. The CONTRACTOR shall cooperate fully with the CLIENT in adjustment of grades, construction methods and placement of material to meet the above goals and shall immediately advise CLIENT if he believes that the earthwork will not balance.

It is the intent of these PLANS that storm waters falling on the site be diverted into sedimentation / lake / detention basins during construction. The CONTRACTOR shall construct and maintain any temporary ditches or swales that are necessary to accomplish this prior to beginning mass excavation.

EROSION CONTROL

Suitable erosion control practices shall be maintained by the CONTRACTOR in accordance with Illinois Urban Manual and all applicable Soil Erosion and Sedimentation Control ordinances and the PLANS.

UNDERCUTTING DURING EARTHWORK

If the subgrade cannot be dried adequately by discing as outlined above for placement of material to planned grades and if the CLIENT determines that the subgrade does not meet the standards set forth above, the CLIENT may require undercutting.

MISCELLANEOUS CONTRACT ITEMS

The following items may be required at the CLIENT's option, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY:

(1) **GEOTEXTILE FABRIC**

Geotextile fabric or approved equal shall be provided in areas as designated by the CLIENT, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY where proper compaction of embankments over existing soft soils is not possible. Geotextile fabric shall meet the material specifications of and shall be installed in accordance with the above standards.

(2) **EROSION CONTROL BLANKET**

Erosion control blanket or approved equal shall be provided in areas as designated by the CLIENT, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY for the stabilization of disturbed areas. Erosion control blanket shall meet the material specifications of and shall be installed in accordance with the above standards, the Illinois Urban Manual and/or the details shown on the PLANS.

III. UNDERGROUND IMPROVEMENTS

A. GENERAL

STANDARDS

All underground improvements shall be constructed and tested in accordance with the Standard Specifications for Water and Sewer Construction in Illinois and Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition. In the event of conflicting guidelines, the more restrictive shall govern.

SELECTED GRANULAR BACKFILL

Selected Granular Backfill shall be required for all sewer and water main trenches lying under existing or proposed streets, driveways, parking lots and within 24" thereof, and where noted on PLANS. All material placed in such trenches shall be in accordance with the above standards.

MANHOLES, CATCH BASIN, INLETS & VALVE VAULTS

All Manholes, Catch Basins, Inlets, and Valve Vaults shall be constructed of reinforced precast concrete ring construction with tongue and groove joints in conformance with the latest revision of ASTM designation C-478. All joints between sections and frames (except sanitary manholes, see Section IIIB Manholes, below) shall be sealed with mastic type bituminous jointing compound. CONTRACTOR shall remove all excess mastic on inside of structure and butter joints with mortar. Manholes are to have offset cones except that no cone shall be used on storm manholes 6'-0" deep or less in which case a reinforced concrete flat top section shall be used, and Valve Vaults shall have concentric cones. Only concrete adjustment rings will be permitted where necessary and shall be limited to two adjustment rings totaling not more than 8" in height. All manholes and catch basin steps shall be copolymer polypropylene with continuous ½" steel reinforcement as manufactured by MA Industries, or approved equal.

***AUGER/BORING AND CASING** - INTENTIONALLY OMITTED

***AUGER (OPEN BORE)** - INTENTIONALLY OMITTED

HORIZONTAL AND VERTICAL SEPARATION OF WATER AND SEWER MAINS

Horizontal and vertical separation of water and sewer mains shall be in accordance with Standard Specifications for Water and Sewer Construction in Illinois Section 41-2.01A and 41-2.01B and Standard Drawing 18, 19, 20, 21, 22, 23 and 24.

STRUCTURE ADJUSTMENTS

Structures shall be adjusted to the finished grade as shown on PLANS.

B. SANITARY SEWERS AND APPURTENANCES

***SANITARY SEWER PIPE** - INTENTIONALLY OMITTED

***MANHOLES** - INTENTIONALLY OMITTED

***FOUNDATION, BEDDING AND HAUNCHING** - INTENTIONALLY OMITTED

***TESTING** - INTENTIONALLY OMITTED

***SERVICES** - INTENTIONALLY OMITTED

***RISERS** - INTENTIONALLY OMITTED

***DROP MANHOLE CONNECTIONS** - INTENTIONALLY OMITTED

***SANITARY SEWER FORCE MAIN** - INTENTIONALLY OMITTED

***TELEVISION INSPECTION** - INTENTIONALLY OMITTED

***MISCELLANEOUS** - INTENTIONALLY OMITTED

C. WATER MAINS AND APPURTENANCES

***WATER MAIN PIPE (3" AND LARGER)** - INTENTIONALLY OMITTED

***WATER VALVES** - INTENTIONALLY OMITTED

***VALVE VAULTS** - INTENTIONALLY OMITTED

***VALVE BOXES** - INTENTIONALLY OMITTED

***FIRE HYDRANTS** - INTENTIONALLY OMITTED

***TAP, STOPS AND BOX** - INTENTIONALLY OMITTED

***SMALL WATER SERVICES (2" DIAMETER OR LESS)** - INTENTIONALLY OMITTED

***DISINFECTION** - INTENTIONALLY OMITTED

***PRESSURE TEST** - INTENTIONALLY OMITTED

***PRESSURE CONNECTION TO EXISTING WATER MAIN** - INTENTIONALLY OMITTED

***DRY CONNECTION TO EXISTING WATER MAIN** - INTENTIONALLY OMITTED

***POLYETHYLENE ENCASEMENT (FOR DUCTILE IRON WATER MAIN ONLY)** - INTENTIONALLY OMITTED

***FOUNDATION, BEDDING AND HAUNCHING**

***TRACER WIRE** - INTENTIONALLY OMITTED

D. STORM SEWERS AND APPURTENANCES

***STORM SEWER PIPE**

Storm sewer pipe shall conform to the following:

(1) Reinforced concrete pipe minimum Class IV in conformance with the latest revision of ASTM designation C76 with C361 or C443 flexible gasket joints, except that bituminous mastic joints may be used in grass areas.

(2) Polyvinyl Chloride (PVC) Pipe: ASTM D3034 (4-inch thru 15-inch) or ASTM F679 (18-inch thru 36-inch), rated SDR 35, continually marked with manufacturer's name, pipe size, cell classification, SDR rating. Joints shall be flexible elastomeric seals conforming to ASTM D3212.

Precast tees, bends, and manholes may be used if permitted by the JURISDICTIONAL GOVERNMENTAL ENTITY.

Storm sewer shall include bedding and trench backfill.

MANHOLES, INLETS & CATCH BASINS

Manholes, Inlets and Catch Basins shall be constructed in conformance with Section IIIA Manholes, etc. above. The space between connecting pipes and the wall of the manhole shall be completely filled with non-shrink hydraulic cement mortar. Frames and lids shall be Neenah or approved equal unless specified otherwise on the PLANS. All frames and grates shall be provided such that the flange fully covers the opening plus 2" of the structure as a minimum.
* Provide **"Vane"** Type frame & grate for all structures located in curb where gradient exceed 2.0%. Manholes shall include steps, frame & grate, bedding and trench backfill.

***FLARED END SECTION** - INTENTIONALLY OMITTED

***RIP RAP** - INTENTIONALLY OMITTED

FOUNDATION, BEDDING AND HAUNCHING

Foundation, Bedding and Haunching shall be wet coarse aggregate or moist fine aggregate in accordance with the above standards and placed as shown on the detail.

***UNDERDRAINS** - INTENTIONALLY OMITTED

MISCELLANEOUS

(1) All existing field drainage tile or storm sewers encountered or damaged during construction shall either be restored to their original condition, properly rerouted and/or connected to the storm sewer system.

(2) Footing drains shall be connected to sump pumps or discharged directly into storm sewers. Footing drains or drainage tile shall not be connected to the sanitary sewer.

CONNECTION FOR STORM SERVICE TO STORM MAIN

Connections of storm sewer services to storm sewer mains should be made with manufactured tees when available. Availability of manufactured tees will be a function of the storm sewer material and pipe diameter size of the service sewer and main. If manufactured tees are not reasonably available, connections should be made in accordance with manufacturer's recommendations for all storm sewer other than concrete pipe. For concrete pipe connections without manufactured tees the storm sewer main shall be machine cored and the service sewer connected using non-shrink grout for the void between pipes. The service sewer shall be cut flush with the inside wall of the sewer main and not extend into the inside flow area of the main or otherwise impede flow.

IV. ROADWAY AND PARKING LOT IMPROVEMENTS

STANDARDS

Work shall be completed in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition (hereinafter referred to collectively as the "Standard Specifications") except as modified below and except that payment will be defined as detailed in the contract documents between the CLIENT and the CONTRACTOR. Supplementing the Standard Specifications shall be the applicable sections of the latest editions of the "Supplemental Specifications and Recurring Special Provisions", the "Manual on Uniform Traffic Control Devices for Streets and Highways" and the Illinois Supplement thereto, (hereinafter referred to collectively as the "MUTCD"). Any references to "ENGINEER" in the "Standard Specifications" shall be interpreted as the CLIENT or CLIENT's Construction Representative.

SUBGRADE PREPARATION

The CONTRACTOR shall be responsible for all subgrade compaction and preparation to the lines and grades shown on the plans.

AGGREGATE BASE COURSE TYPE 'B'

Aggregate Base Course Type B shall be limited to CA-6 or CA-10 gradation. Aggregate base courses shall be proof rolled as outlined below.

PROOF ROLL

The CONTRACTOR shall proof roll the subgrade with either a 2-axle truck loaded to 27,000 lbs. Or a 3-axle truck loaded to 45,000 lbs. or as specified by the JURISDICTIONAL GOVERNING ENTITY. The CLIENT and JURISDICTIONAL GOVERNING ENTITY shall observe and approve the proof rolling of the subgrade and the base course. Proof rolling tolerances shall be a maximum deflection of 1" for the subgrade and ½" for the base course. The above criteria is intended as a maximum deflection standard and that proof rolling of a majority of the area will have less deflection than specified above. In any case of deficiency, the subgrade and/or base course shall be repaired and retested before proceeding with the pavement construction.

Pavement subgrade material shall not be removed, placed or disturbed after proof roll testing has been completed prior to the pavement construction. Additional testing will be required if the pavement subgrade is disturbed and/or material is removed from or placed on the pavement subgrade after proof rolling approval.

Trucks or heavy equipment shall not travel on any pavement subgrade after final testing prior to pavement construction.

***HOT-MIX ASPHALT BASE COURSE** - INTENTIONALLY OMITTED

HOT-MIX ASPHALT BINDER AND SURFACE COURSE

HMA binder and surface courses, shall be constructed to the compacted thickness as shown on the PLANS. The base course shall be cleaned and primed in accordance with the JURISDICTIONAL GOVERNING ENTITY. The surface course shall be placed after the base and courses have gone through one winter season, or as directed by the CLIENT. Before applying the surface course, the binder course shall be thoroughly cleaned and primed in accordance with the JURISDICTIONAL GOVERNING ENTITY. Prior to the placement of the surface course, the JURISDICTIONAL GOVERNING ENTITY shall examine the completed pavement, including curb and gutter, and all failures shall be corrected by the CONTRACTOR.

CONCRETE PAVEMENTS

Concrete pavements shall be constructed in accordance with American Concrete Institute Standard ACI330R-08 and as shown on the PLANS.

Slabs and driveway aprons shall be constructed with 6" x 6" - W1.4 x W1.4 welded wire fabric positioned on steel chair supports. Placing fabric during the concrete pouring operation will not be allowed.

Sawing of joints shall commence as soon as the concrete has cured and hardened sufficiently to permit sawing without excessive raveling, but no later than eight hours after the concrete has been placed. All joints shall be sawed to a depth equal to 1/3 of the pavement thickness before uncontrolled shrinkage cracking take place. If necessary, the sawing operation shall occur during the day or at night, regardless of weekends, holidays or weather conditions. The CONTRACTOR shall be aware of jurisdictional noise ordinances and holiday restrictions for scheduling purposes.

The CONTRACTOR is responsible to guard fresh concrete until it sets and hardens sufficiently to prevent people from writing, walking, riding bicycles or otherwise permanently marking, defacing or causing depressions of any type in the concrete. Any concrete so marked will be removed and replaced by the CONTRACTOR at the CONTRACTOR's expense.

The CONTRACTOR shall protect the pavement against all traffic, including that of their own employees or other workers, until test specimens have attained the specified strength.

SIDEWALKS

Concrete sidewalks shall be constructed to width and thickness as shown on the PLANS. Sidewalks shall be thickened to a minimum of 6" at all driveways. All sidewalks shall be IDOT Class SI concrete, on aggregate base as shown on the detail. A ¾" expansion joint shall be provided when meeting existing sidewalk.

CURB AND GUTTER

Curb and gutter shall be as per the detail shown on the PLANS, which shall include compacted aggregate base course under the curb and gutter. All contraction and expansion joints shall be constructed as per the detail.

CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT

The CONTRACTOR shall saw cut and remove the existing concrete curb where shown on the PLANS and install a curb of similar cross section and pavement to that removed (or depressed curb and gutter if shown on the PLANS). Upon completion of the curb and gutter any voids between the existing pavement and the new curb shall be filled with concrete to within 2" of the final surface, which is to be filled with bituminous pavement. The area behind the curb shall be filled and compacted with embankment material within 6" of the top of the new curb. The CONTRACTOR shall then restore the remaining 6" to its original condition (i.e., sod, gravel, topsoil). Where proposed curb connects to an existing curb, the existing curb shall be saw cut and then two 18" long x ¾" (#6) dowel bars shall be drilled and installed 9" into the existing and proposed curb. Bars shall be installed in a location similar to the expansion joint in the curb.

FRAME ADJUSTMENTS

The road contractor shall be responsible for making final adjustments and the setting on a bituminous mastic jointing compound all castings located in the roadway, sidewalks, and parking areas prior to construction of any curbing, sidewalk, or final surface. Any structures that need to be lowered, or raised in excess of 4" shall be completed and the work backcharged against the underground contractor. This Contractor shall also be responsible for cleaning all of the above structures immediately upon completion of his phase of work. This work shall be incidental to the cost of the pavement.

PAVEMENT MARKING - PAINT

The CONTRACTOR shall furnish and apply painted marking lines, letters & symbols of the patterns, sizes and colors where shown on the PLANS. Paint pavement marking shall be applied in accordance with the IDOT Standard Specifications.

***PAVEMENT MARKING - THERMOPLASTIC** - INTENTIONALLY OMITTED

QUALITY CONTROL

The CONTRACTOR shall provide all testing necessary to ensure improvements are in accordance with the project specifications and provide testing documentation that specifications were met.

DATE	REVISIONS	DRAWN BY
02-11-19	REVISED PER VILLAGE COMMENTS	KRK

Manhard CONSULTING LTD
900 Woodlands Parkway, Vernon Hills, IL 60061 ph:847.634.5550 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

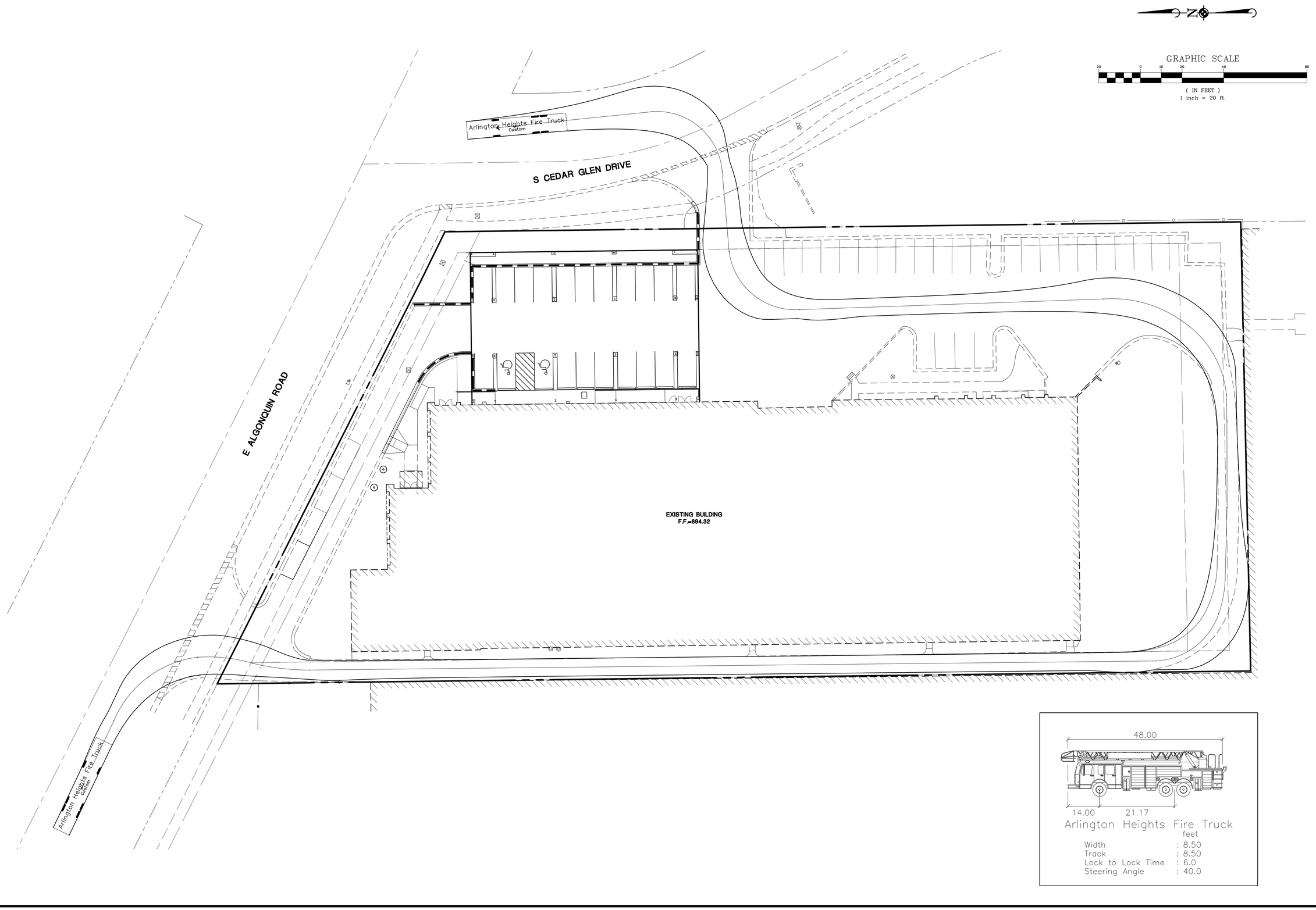
YAMADA AMERICA BUILDING EXPANSION
VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS
CONSTRUCTION SPECIFICATIONS

PROJ. MGR.: JSP
PROJ. ASSOC.: KRK
DRAWN BY: KRK
DATE: 01-15-19
SCALE: N.T.S.

SHEET 6 OF 6
SHR.AHIL01

PRELIMINARY SET, FOR REVIEW ONLY

February 11, 2019 – 15:22 Dwg Name: P:\Shrahil01\dwg\Eng\Preliminary\6 CONSTRUCTION SPECIFICATIONS.dwg Updated By: KKlawans



February 11, 2019 - 15:06 Dwg Name: P:\Shah\01\dwg\Eng\Final Drawings\Exhibits Eng\Fire Truck Turn Exhibit.dwg Updated By: KKhawani

DRAWN BY | REVISIONS | DATE

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YAMADA AMERICA BUILDING EXPANSION

VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS

FIRE TRUCK TURN EXHIBIT

PROJ. MGR.:	JSP
PROJ. ASSOC.:	KRK
DRAWN BY:	KRK
DATE:	02-11-19
SCALE:	1"=20'

SHEET 1

SHR.AHIL01

BOUNDARY AND TOPOGRAPHIC SURVEY

LEGAL DESCRIPTION

LOT 1 IN ALGONQUIN ROAD COMMERCE CENTER RESUBDIVISION, BEING A RESUBDIVISION OF LOT 4 IN OWNER'S SUBDIVISION OF THE WEST 15 RODS OF THE SOUTHEAST QUARTER AND THE EAST 46/80THS(AS MEASURED ON THE NORTH AND SOUTH LINES) OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 15, TOWNSHIP 41 NORTH, RANGE 11 ALSO THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 41, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN ACCORDING TO THE PLAT THEREOF RECORDED JUNE 16, 1982 AS DOCUMENT NUMBER 26261911 IN COOK COUNTY, ILLINOIS.

ABBREVIATIONS

RCP	=	REINFORCED CONCRETE PIPE
CMP	=	CORRUGATED METAL PIPE
DIP	=	DUCTILE IRON PIPE
CPP	=	CORRUGATED PLASTIC PIPE
FOW	=	FULL OF WATER
CES	=	CONCRETE END SECTION
MES	=	METAL END SECTION
PES	=	PLASTIC END SECTION
TP	=	TOP OF PIPE
FF	=	FINISHED FLOOR
TF	=	TOP OF FOUNDATION

PROPERTY AREA

94,875 SQ. FT. (2.178 ACRES)

PIN'S

08-15-303-013

BASIS OF BEARINGS

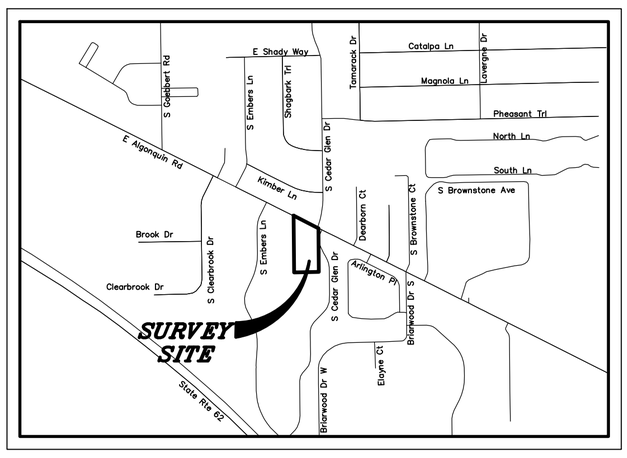
COORDINATES AND BEARINGS ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (NAD 83), ADJUSTED TO GROUND VALUES, AS ESTABLISHED BY A REAL-TIME KINEMATIC (RTK) GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) UTILIZING THE TRIMBLE VRS NOW NETWORK.

SURVEY PREPARED FOR

SHERMAN CONSTRUCTION LLC
62 E. SURREY LANE
BARRINGTON HILLS, IL 60010

LEGEND

- = EX. PROPERTY LINE
- = EX. SIDEWALK
- = EX. CONCRETE CURB & GUTTER
- = EX. DEPRESSED CURB
- = EX. CHAIN-LINK FENCE
- = EX. WROUGHT IRON FENCE
- = EX. STORM LINE
- = EX. SANITARY LINE
- FM = EX. FORCEMAIN LINE
- W = EX. WATERMAIN LINE
- E = EX. UNDERGROUND ELECTRIC
- TV = EX. UNDERGROUND CABLE TELEVISION
- T = EX. UNDERGROUND TELEPHONE
- G = EX. UNDERGROUND GAS
- OH = EX. OVERHEAD WIRES
- = EX. TREE/BRUSH LINE
- 780 = EX. 1 FOOT CONTOURS
- LA = EX. LANDSCAPE AREA
- = EX. STORM MANHOLE (MH)
- = EX. STORM CATCH BASIN (CB)
- = EX. STORM INLET (INL)
- = EX. FLARED END SECTION (FES)
- = EX. RIP-RAP
- STS = EX. STORM SERVICE POST
- STCO = EX. STORM CLEANOUT
- SC = EX. SUMP CONNECTION
- = EX. SANITARY MANHOLE (SMH)
- SS = EX. SANITARY SERVICE POST
- SCO = EX. SANITARY CLEANOUT
- = EX. FIRE HYDRANT/AUX. VALVE
- = EX. VALVE BOX
- = EX. VALVE VAULT (V.V.)
- = EX. WATER METER
- = EX. BUFFALO BOX
- W = EX. WATER MARKER
- = EX. GAS METER
- G = EX. GAS MANHOLE
- G = EX. JULIE GAS MARKER
- = EX. ELECTRICAL METER
- E = EX. ELECTRICAL MANHOLE
- EH = EX. ELECTRIC HANDHOLE
- E = EX. ELECTRIC PEDESTAL/BOX
- E = EX. JULIE ELECTRIC MARKER
- ET = EX. ELECTRIC TRANSFORMER
- TS = EX. TRAFFIC SIGNAL MANHOLE
- TS = EX. TRAFFIC SIGNAL HANDHOLE
- TC = EX. TRAFFIC SIGNAL CONTROL BOX
- H = EX. HANDHOLE
- T = EX. TELEPHONE MANHOLE
- TH = EX. TELEPHONE HANDHOLE
- T = EX. TELEPHONE PEDESTAL
- = EX. TELEPHONE MARKER
- TV = EX. TELEVISION MANHOLE
- TV = EX. TELEVISION PEDESTAL
- TV = EX. TELEVISION LINE MARKER
- FO = EX. FIBER OPTIC MANHOLE
- FH = EX. FIBER OPTIC HANDHOLE
- FO = EX. FIBER OPTIC LINE MARKER
- P = EX. PETROLEUM MARKER
- = EX. UTILITY POLE
- = EX. UTILITY POLE WITH LIGHT
- = EX. GUY WIRE
- = EX. LIGHT STANDARD
- = EX. STREET LIGHT
- = EX. BOLLARD LIGHT
- = EX. SIGN
- = EX. MAILBOX
- = EX. BOLLARD
- = EX. FLAG POLE
- = EX. FIRE SIAMESE/ALARM BOX
- = EX. AIR CONDITIONING UNIT
- = EX. TEST/SOIL BORING
- = EX. HANDICAPPED PARKING
- 700.00 = EX. SPOT ELEVATION
- = EX. BUSHES
- 8" = EX. DECIDUOUS TREE WITH TRUNK DIAMETER IN INCHES
- 16' = EX. CONIFEROUS TREE WITH HEIGHT IN FEET
- 756.00 / 754.00 = EX. RIM ELEVATION / EX. INVERT ELEVATION
- = EX. BITUMINOUS PAVEMENT
- = EX. CONCRETE
- = EX. AGGREGATE



LOCATION MAP

NOT TO SCALE

BENCHMARKS

REFERENCE BENCHMARK: (NGS PID:DM3900)
BRASS SURVEY DISK SET IN THE EAST ABUTMENT ON THE SOUTH SIDE OF A LARGE BRIDGE ON GOLF ROAD OVER SALT CREEK MORE PARTICULARLY LOCATED 1744 FEET WEST OF THE CENTERLINE OF SOUTH NEW WILKE ROAD AND 48' SOUTH OF THE CENTERLINE OF GOLF ROAD .

ELEVATION=695.85 DATUM=NAVD88-GEOID 12B

SITE BENCHMARK#1:
NORTH FLANGE BOLT ON HYDRANT LOCATED ON THE WEST SIDE OF SOUTH CEDAR GLEN DRIVE MORE PARTICULARLY LOCATED 20 FEET WEST OF THE CENTERLINE OF CEDAR GLEN DRIVE AND 177 FEET SOUTH OF THE CENTERLINE OF EAST ALGONQUIN ROAD.
ELEVATION= 694.49 DATUM=NAVD88-GEOID 12B

SITE BENCHMARK#2:
NORTH FLANGE BOLT ON HYDRANT LOCATED ON THE SOUTH SIDE OF EAST ALGONQUIN ROAD MORE PARTICULARLY LOCATED 209 FEET WEST OF THE CENTERLINE OF SOUTH EMBERS LANE AND 50 FEET SOUTH OF THE CENTERLINE OF EAST ALGONQUIN ROAD.
ELEVATION= 697.02 DATUM=NAVD88-GEOID 12B

TOPOGRAPHIC FIELD WORK COMPLETED ON 05/16/2018

SURVEYOR'S NOTES

1. DISTANCES ARE MARKED IN FEET AND DECIMAL PLACES THEREOF. NO DIMENSION SHALL BE ASSUMED BY SCALE MEASUREMENT HEREON. DISTANCES AND/OR BEARINGS SHOWN IN PARENTHESIS (456.67') ARE RECORD OR DEED VALUES, NOT FIELD MEASURED.

2. COMPARE THIS PLAT, BENCHMARKS AND ALL SURVEY MONUMENTS BEFORE BUILDING, AND IMMEDIATELY REPORT ANY DISCREPANCIES TO THE SURVEYOR.

3. THIS SURVEY IS SUBJECT TO MATTERS OF TITLE, WHICH MAY BE REVEALED BY A CURRENT TITLE REPORT. EASEMENTS, SETBACKS AND OTHER RESTRICTIONS WHICH MAY BE FOUND IN A CURRENT TITLE REPORT, LOCAL ORDINANCES, DEEDS OR OTHER INSTRUMENTS OF RECORD HAVE NOT BEEN SHOWN.

4. ONLY THE IMPROVEMENTS WHICH WERE VISIBLE FROM ABOVE GROUND AT THE TIME OF SURVEY AND THROUGH A NORMAL SEARCH AND WALK THROUGH OF THE SITE ARE SHOWN ON THE FACE OF THIS PLAT. LAWN SPRINKLER SYSTEMS, IF ANY, ARE NOT SHOWN ON THIS SURVEY.

5. THIS SURVEY MAY NOT REFLECT ALL UTILITIES, OR IMPROVEMENTS, IF SUCH ITEMS ARE HIDDEN BY LANDSCAPING OR ARE COVERED BY LEAVES OR OTHER OBSTRUCTIONS. THERE MAY BE ADDITIONAL UTILITIES OR IMPROVEMENTS THAT HAVE NOT BEEN SHOWN.

6. UNDERGROUND UTILITIES INCLUDING, BUT NOT LIMITED TO, STORM AND SANITARY SEWERS, WATER MAINS, TELEPHONE AND ELECTRIC CABLES OR CONDUITS, GAS MAINS AND ALL SERVICE LINES SHOWN HEREON ARE BASED ON ACTUAL OBSERVED LOCATION AT AN OPEN MANHOLE. THE EXACT LOCATION MAY BE DIFFERENT FROM THE LOCATION SHOWN HEREON.

7. OTHER THAN VISIBLE OBSERVATIONS NOTED HEREON, THIS SURVEY MAKES NO STATEMENT REGARDING THE ACTUAL PRESENCE OR ABSENCE OF ANY SERVICE OR UTILITY LINE. CONTROLLED UNDERGROUND EXPLORATORY EFFORT TOGETHER WITH "J.U.L.I.E." MARKINGS IS RECOMMENDED TO DETERMINE THE FULL EXTENT OF UNDERGROUND SERVICE AND UTILITY LINES. CONTACT J.U.L.I.E. AT 1-800-892-0123.

8. MUNICIPAL ZONING SETBACKS ARE SHOWN PER ARLINGTON HEIGHTS MUNICIPAL CODE LAST REVISED APRIL 16, 2018.

9. THIS SURVEY WAS PREPARED FOR SHERMAN CONSTRUCTION LLC BASED ON A FIELD SURVEY COMPLETED ON MAY 16, 2018 AND JANUARY 16, 2019. EASEMENTS HAVE BEEN SHOWN BASED ON ALGONQUIN ROAD COMMERCE CENTER RESUBDIVISION.

10. AT THE CLIENTS REQUEST MISSING LOT CORNERS WERE NOT SET.

11. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY AND TOPOGRAPHIC SURVEY. MANHARD CONSULTING, LTD. IS A PROFESSIONAL DESIGN FIRM, REGISTRATION NUMBER 184003350, EXPIRES APRIL 30, 2019.

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF LAKE)

WE, MANHARD CONSULTING LTD., DO HEREBY DECLARE THAT WE HAVE SURVEYED THE HEREON DESCRIBED PROPERTY AND THAT THE PLAT HEREON DRAWN IS A CORRECT REPRESENTATION OF SAID SURVEY.

GIVEN UNDER MY HAND AND SEAL THIS 23RD DAY OF JANUARY, A.D., 2019.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3855
LICENSE EXPIRES: NOVEMBER 30, 2020

DESIGN FIRM PROFESSIONAL REGISTRATION NO. 184003350
EXPIRES APRIL 30, 2019

ERIC R. VESELY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3855
VERNON HILLS, ILLINOIS

SHEET 1 OF 2
SHRAHIL01

PROJ. MGR.: ERV
PROJ. ASSOC.: ERV
DRAWN BY: SJK
DATE: 05/16/18
SCALE: 1" = 20'

955 E. ALGONQUIN ROAD
VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS
BOUNDARY AND TOPOGRAPHIC SURVEY

Manhard CONSULTING LTD
900 Woodlands Parkway, Vernon Hills, IL 60061 ph:847.634.5550 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

DATE	REVISIONS	DRAWN BY
01/23/19	ADD BOUNDARY TO SURVEY	SJK

BOUNDARY AND TOPOGRAPHIC SURVEY

LEGAL DESCRIPTION

LOT 1 IN ALGONQUIN ROAD COMMERCE CENTER RESUBDIVISION, BEING A RESUBDIVISION OF LOT 4 IN OWNER'S SUBDIVISION OF THE WEST 15 RODS OF THE SOUTHEAST QUARTER AND THE EAST 46/80THS(AS MEASURED ON THE NORTH AND SOUTH LINES) OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 15, TOWNSHIP 41 NORTH, RANGE 11 ALSO THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 41, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN ACCORDING TO THE PLAT THEREOF RECORDED JUNE 16, 1982 AS DOCUMENT NUMBER 26261911 IN COOK COUNTY, ILLINOIS.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

FOUND 3/4" IRON PIPE AT CORNER
(94.88')
SITE BENCHMARK #2
SOUTH RIGHT-OF-WAY LINE OF ALGONQUIN ROAD AS MONUMENTED
(124.59')
NORTH RIGHT-OF-WAY LINE OF ALGONQUIN ROAD AS MONUMENTED
EAST ALGONQUIN ROAD
CENTERLINE OF EAST ALGONQUIN ROAD
VARIES (50.00)
VARIES (100.00')
15' BUILDING SETBACK LINE
10' PUBLIC UTILITY EASEMENT PER DOCUMENT NUMBER 26261911
FOUND BENT 5/8" IRON PIPE ON-LINE AND 0.12' E
WIRE FENCE
CORNER OF FENCE IS ON-LINE
CHAIN-LINK FENCE
CONCRETE CURB AND GUTTER
CONCRETE WALK
CONCRETE APRON
INL 694.17 SE 690.72
S 63°12'14" E 218.61'
50.00'
100.00'
LANDSCAPE AREA
BUILDING CORNER IS 0.12' W
ROOF HEIGHT = ±21.4
GRAVEL
FLOOD LIGHT
F.F.=694.30
CONCRETE STOOP
OVERHANG
SMH 694.09 N,S 688.27
CLAY
SIGN
F.F.=694.39
CONCRETE WALK
ROOF HEIGHT = ±22.3
693.72 HYD
CURB CORNER IS 1.2' S
693.16 V.V. 687.66 N,S T/PIPE
693.83 V.V. 687.43 NW,SE T/PIPE
693.82 V.V. 688.22 N,S T/PIPE
S 63°56'21" E 24.75' (25.23')
WALK CORNER IS 2.0' N AND 0.7' E
FOUND LEANING N-S 3/4" IRON PIPE 1.01' S AND ON-LINE
EDGE OF WALK IS 0.1' E
66.00'
SOUTH CEDAR GLEN DRIVE
S 00°42'56" E 496.54'
N 00°42'56" W 382.32' (382.10')
BITUMINOUS PAVEMENT
10' BUILDING SETBACK LINE
288.07'
10.00'
0.70'
F.F.=694.32
F.F.=694.36
F.F.=694.31
F.F.=694.38
F.F.=694.26
G.F.=694.30
G.F.=694.36
G.F.=694.38
G.F.=691.59
G.F.=691.40
ONE STORY BRICK & METAL BUILDING
LOT 1
ALGONQUIN ROAD COMMERCE CENTER
PER DOCUMENT NUMBER 26261911
ONE STORY CONCRETE BLOCK BUILDING
LOT 2 ALGONQUIN ROAD COMMERCE CENTER PER DOCUMENT NUMBER 26261911
TRANSFORMER ON CONCRETE PAD T/PAD=±694.20
SCO
693.55 SSCO
CONCRETE WALL T/WALL ELEV=±692.7 TO ±694.3
METAL RAILING
CONCRETE WALL T/WALL ELEV=±691.1 TO ±694.3
WOODEN STEPS
10" PVC
10" CI
12" CI
12" CES 688.26
12" RCP
STMH 690.86 687.53 N 687.41 NW
CB 689.97 688.39 N 688.35 S,NW
INL 690.72 689.52 S
BRICK BUILDING WALL
691.33 HYD
692.47 HYD
BRICK WALL T/WALL=±693.3
BRICK WALL T/WALL=±693.8
BRUSH LINE
CHAIN-LINK FENCE
SITE BENCHMARK #1
CENTERLINE OF SOUTH CEDAR GLEN DRIVE
10' PUBLIC UTILITY EASEMENT PER DOCUMENT NUMBER 26261911
LOT 2 LOST CREEK PER DOCUMENT NUMBER 92611672
117.05'
81.44'
80.33'
30' BUILDING SETBACK LINE
N 88°43'49" E 215.99' (216.43')
BUILDING CORNER IS 0.78' W & 0.25' S
BUILDING CORNER IS 0.46' S AND 3.49' W
FOUND THICK WALL 3/4" IRON PIPE 0.07' N AND 0.14' W
ONE STORY CONCRETE BLOCK BUILDING
STORM SEWER AND DRAINAGE EASEMENT FOR THE BENEFIT OF LOT 1 PER DOCUMENT NUMBER 26261911
5.00'
10.00'
LOT 2 ALGONQUIN ROAD COMMERCE CENTER PER DOCUMENT NUMBER 26261911

SHEET 2 OF 2
SHRAHIL01

PROJ. MGR.: ERV
PROJ. ASSOC.: ERV
DRAWN BY: SJK
DATE: 05/16/18
SCALE: 1" = 20'

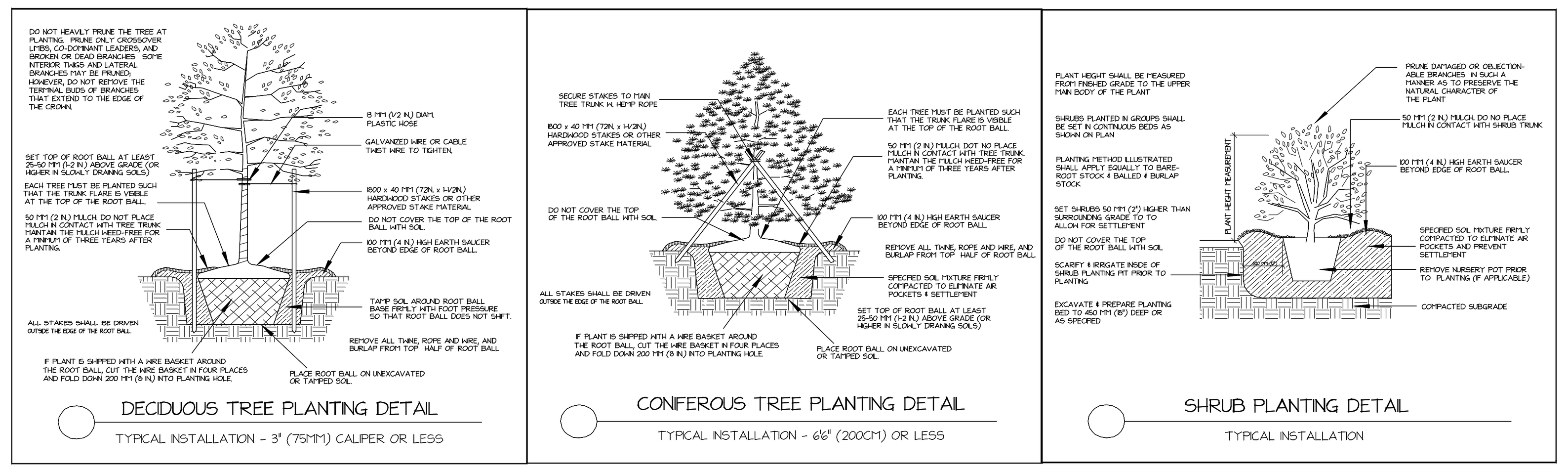
955 E. ALGONQUIN ROAD

VILLAGE OF ARLINGTON HEIGHTS, ILLINOIS

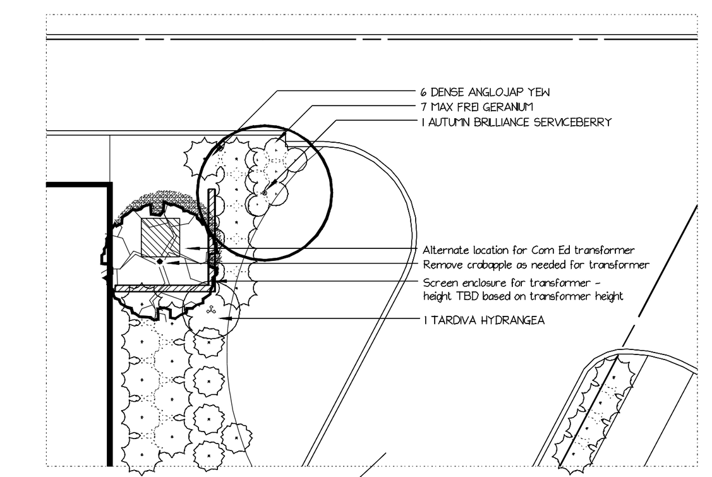
BOUNDARY AND TOPOGRAPHIC SURVEY

Manhard CONSULTING LTD
900 Woodlands Parkway, Vernon Hills, IL 60061 ph:847.634.5550 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

DATE	REVISIONS	DRAWN BY
01/23/19	ADD BOUNDARY TO SURVEY	SJK



Landscape & Tree Preservation Plan



NOTES

Tree Preservation Notes

1) Temporary barriers necessary for the preservation of existing plant materials as approved by the Dept. of Building and Zoning shall be installed prior to the issuance of any permit.

2) Grading and construction equipment is prohibited from encroaching on the drip line of any tree to be preserved.

3) Any material which may be detrimental to trees shall not be discarded or placed within the drip line of any trees nor shall material be located at an elevation which would contribute runoff toward trees.

4) Materials or vehicals shall not be stored driven or parked within the drip line of any trees.

5) Barrier approved by the Commissioner of Building and Zoning shall be installed at the periphery of the trees drip line or beyond.

6) The barrier shall be a minumim of 48 inches in height and be secured to fence posts at no less than 5 feet on center.

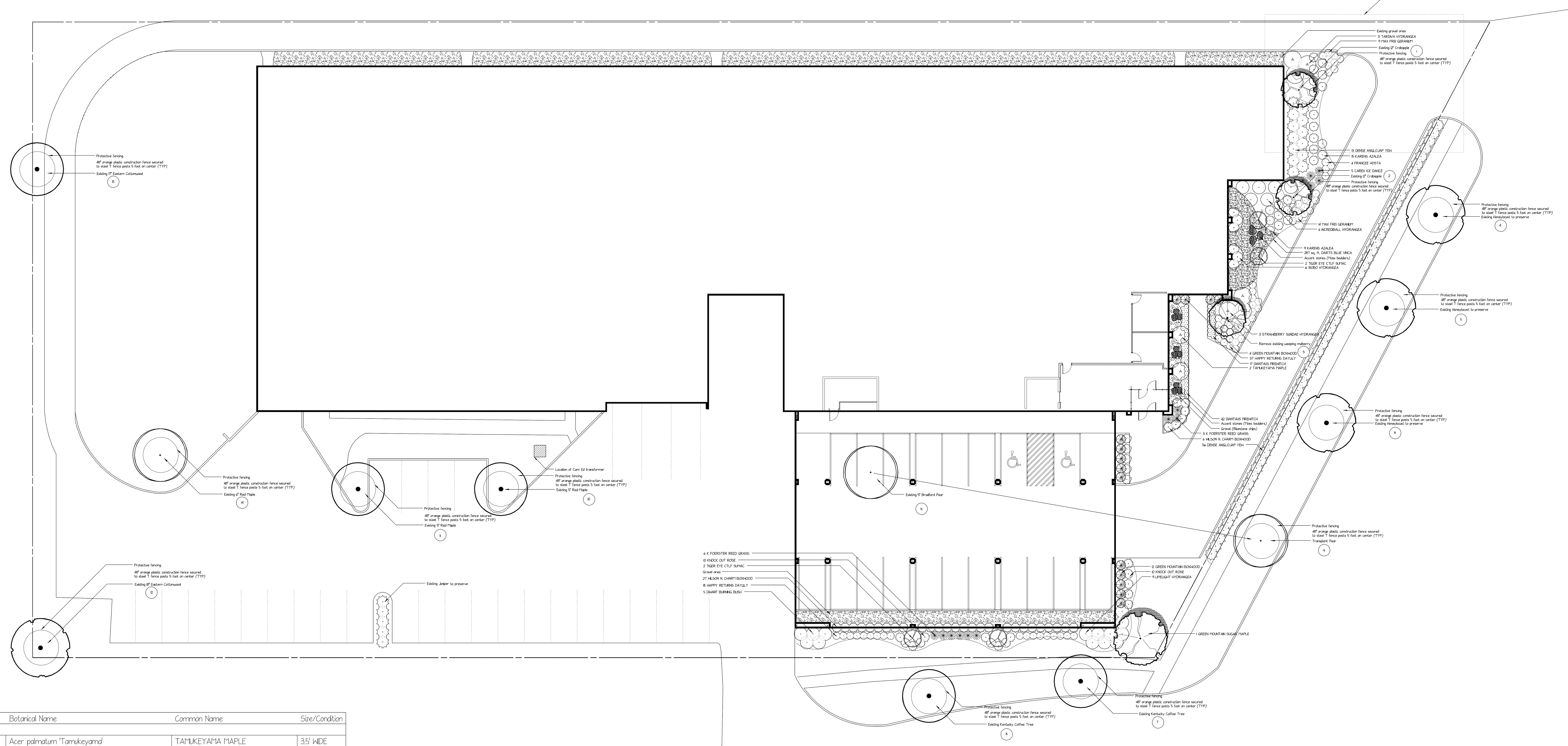
7) Utility lines shall be augured to prevent damage to tree root systems when an underground utility is located within 5 feet of the trunk of a tree designated for preservation.

8) Trees to be preserved which have been subjected to activity within the drip line should be selectivly pruned or thinned ten percent by an Arborist.

Condition Rating	
Excellent	1
Good	2
Fair	3
Poor	4
Dead	5

On site tree details

Tree #	Species	DBH	Condition	Form
1	Crabapple	12"	3	Fair
2	Crabapple	12"	2	Good
3	Weeping Mulberry	5.5"	2	Good
4	Honeylocust	19"	1	Excellent
5	Honeylocust	18"	1	Excellent
6	Honeylocust	21"	1	Excellent
7	Kentucky Coffee Tree	3"	1	Excellent
8	Kentucky Coffee Tree	3"	1	Excellent
9	Bradford Pear	5"	1	Excellent
10	Red Maple	5"	2	Good
11	Red Maple	5"	4	Poor
12	Eastern Cottonwood	18"	2	Good
13	Eastern Cottonwood	17"	2	Good
14	Red Maple	6"	1	Excellent



Qty	Botanical Name	Common Name	Size/Condition
Trees			
2	Acer palmatum 'Tamukeyama'	TAMUKEYAMA MAPLE	3.5' WIDE
1	Acer saccharum 'Green Mountain'	GREEN MOUNTAIN SUGAR MAPLE	4.00"
1	Amelanchier grandiflora 'Autumn Brilliance'	AUTUMN BRILLIANCE SERVICEBERRY	10.0'
4	Rhus typhina 'Bailtiger'	TIGER EYE CTLF SUMAC	# 10
Shrubs			
33	Buxus microphylla B. sempervirens 'Wilson N Charm'	WILSON N. CHARM BOXWOOD	18" - # 5
16	Buxus microphylla x. B.sempervirens 'Grn Mountain'	GREEN MOUNTAIN BOXWOOD	36" - #10
5	Euonymus alatus 'Compacta'	DWARF BURNING BUSH	# 05
6	Hydrangea arborescens 'Abetwo'	INCREDIBALL HYDRANGEA	# 05
6	Hydrangea paniculata 'ILVOBO'	BOBO HYDRANGEA	# 05
9	Hydrangea paniculata 'Limelight'	LIMELIGHT HYDRANGEA	# 05
3	Hydrangea paniculata 'Rensun'	STRAWBERRY SUNDAE HYDRANGEA	# 05
4	Hydrangea paniculata 'Tardiva'	TARDIVA HYDRANGEA	# 10
24	Rhododendron x. 'Karen'	KARENS AZALEA	# 03
20	Rosa x. 'Radrazz 2000'	KNOCK OUT ROSE	# 03
56	Taxus media 'Densiformis'	DENSE ANGLOJAP YEW	30"
19	Taxus media 'Densiformis'	DENSE ANGLOJAP YEW	18"
Ornamental Grasses			
9	Calamagrostis acutiflora 'Karl Foerster'	K FOERSTER REED GRASS	# 01
5	Carex morrowii 'Ice Dance'	CAREX ICE DANCE	# 01
Perennials and Annuals			
59	Dianthus gratianopolitanus 'Firewitch'	DIANTHUS FIREWITCH	# 01
30	Geranium sanguineum 'Max Frei'	MAX FREI GERANIUM	# 01
55	Hemerocallis x. 'Happy Returns'	HAPPY RETURNS DAYLILY	# 01
4	Hosta fortunei 'Francee'	FRANCEE HOSTA	# 01
Groundcovers			
287 sq. ft	Vinca minor 'Dart's Blue'	DARTS BLUE VINCA	FLAT / 24

GP Landscaping

No.	Date	Description
1	2/11/19	Per village comments

REVISIONS

GREG FRICK
LANDSCAPE DESIGN
PHONE: 847-951-9699 | FAX: 888-506-6601
EMAIL: Greg@Gregfricklandscapedesign.com

Landscape & Tree Preservation Plan

Yamada America

955 E. Algonquin Rd.

Arlington Heights, IL

SCALE	1"=20'-0"
DRAWN BY	GF
CHECKED BY	
DATE	1/11/2019
DATE OF PRINT	

PROJECT NO.

SHEET NO. L1.0