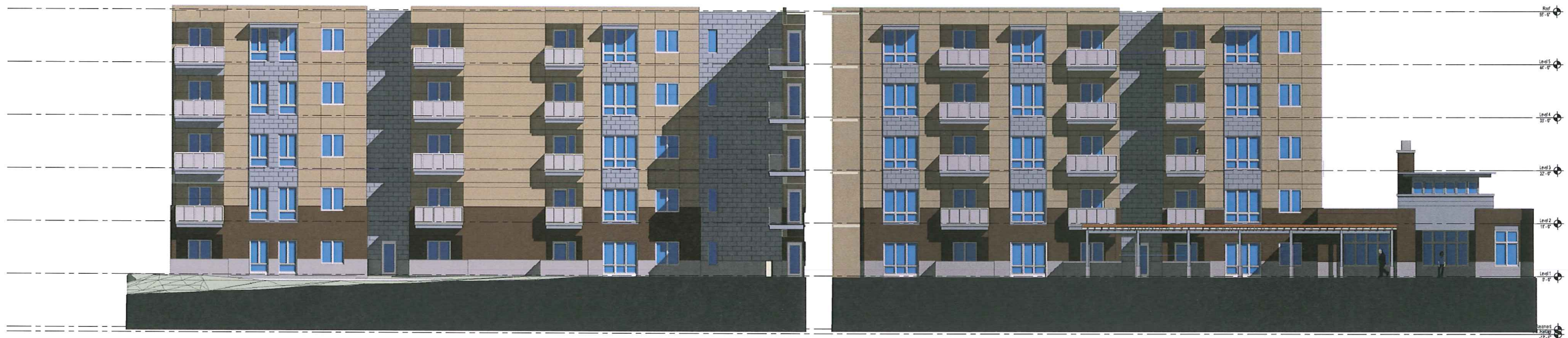


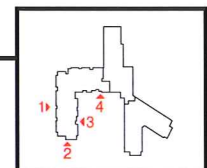
1 Independent Living - West Elevation  
SCALE: 1/8" = 1'-0"

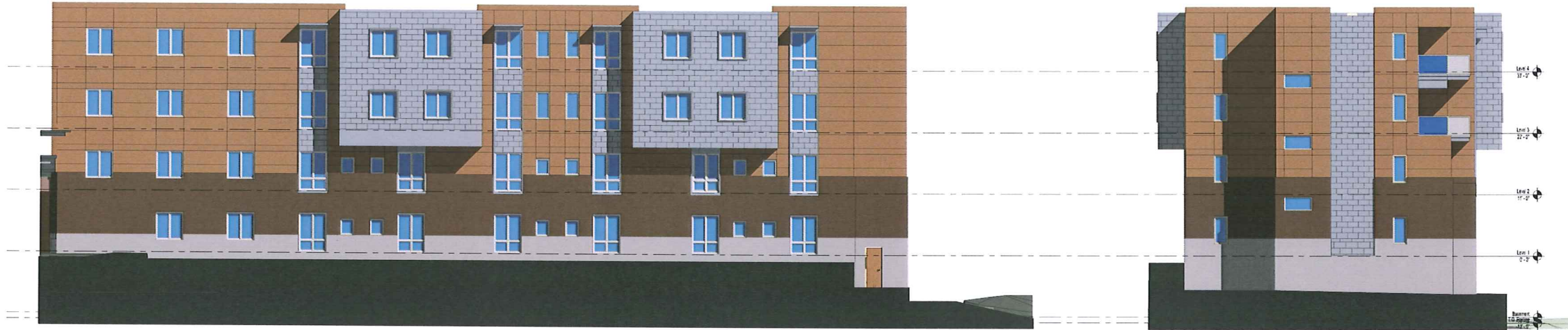
2 Independent Living - South Elevation  
SCALE: 1/8" = 1'-0"



3 Independent Living - East Elevation  
SCALE: 1/8" = 1'-0"

4 Independent Living & Center - South Elevation  
SCALE: 1/8" = 1'-0"





1 Assisted Living - West Elevation  
SCALE: 1/8" = 1'-0"

2 Assisted Living - South Elevation  
SCALE: 1/8" = 1'-0"



3 Assisted Living Courtyard - East Elevation  
SCALE: 1/8" = 1'-0"

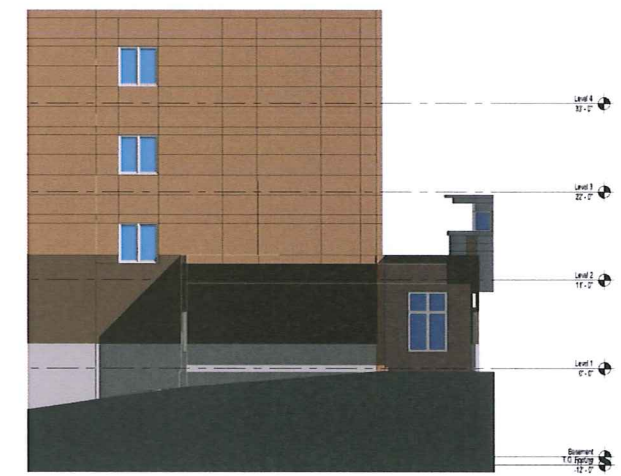
4 Assisted Living Courtyard - South Elevation  
SCALE: 1/8" = 1'-0"

5 Assisted Living Courtyard - Southwest Elevation  
SCALE: 1/8" = 1'-0"

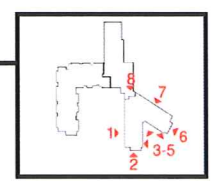
6 Assisted Living - Southeast Elevation  
SCALE: 1/8" = 1'-0"

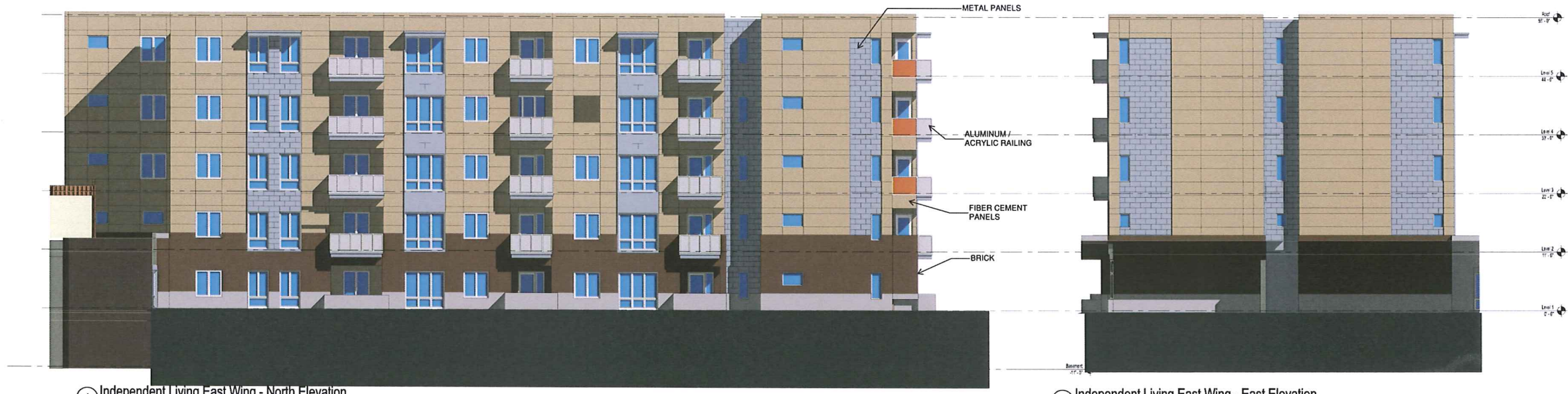


7 Assisted Living - Northeast Elevation  
SCALE: 1/8" = 1'-0"



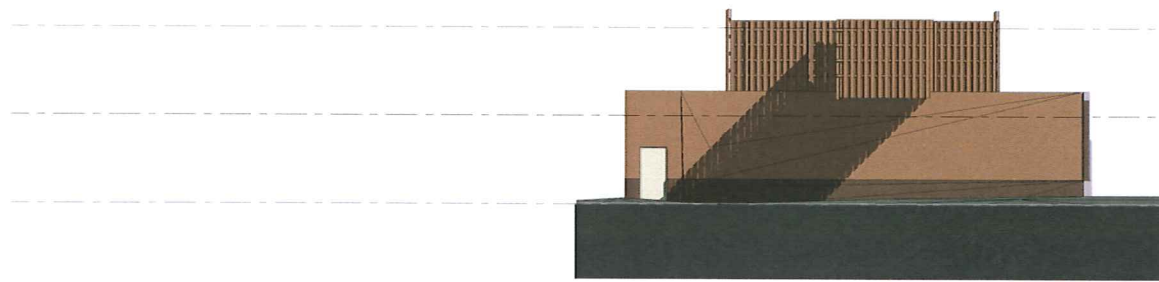
8 Assisted Living - North Elevation  
SCALE: 1/8" = 1'-0"





① Independent Living East Wing - North Elevation  
SCALE: 1/8" = 1'-0"

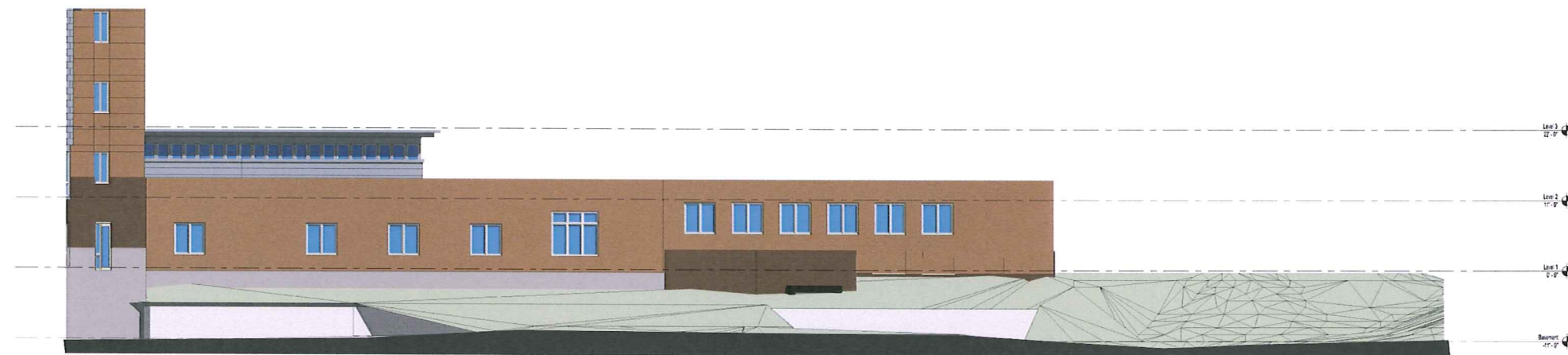
② Independent Living East Wing - East Elevation  
SCALE: 1/8" = 1'-0"



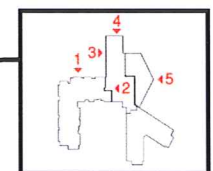
④ Community Center - North Elevation  
SCALE: 1/8" = 1'-0"

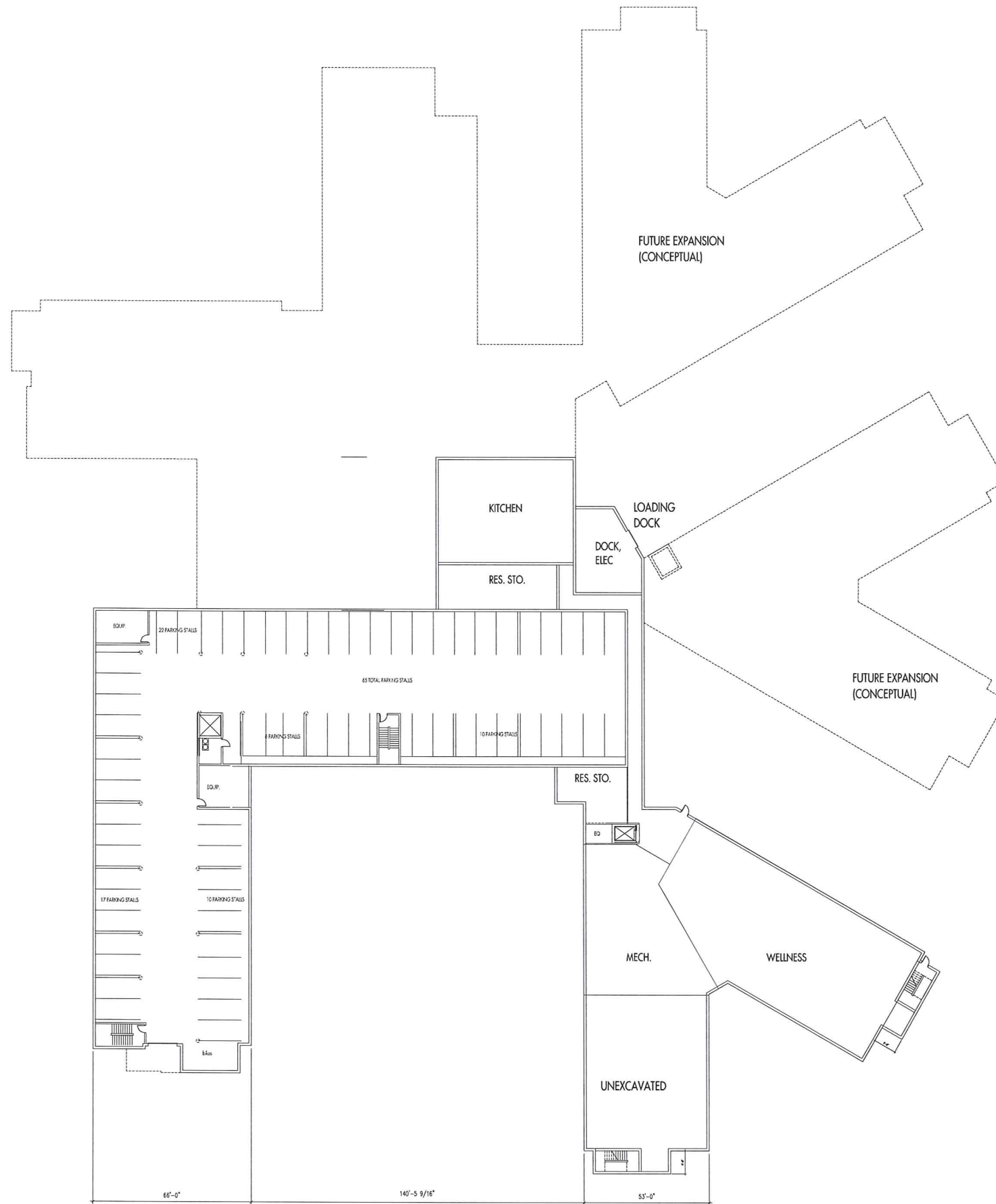


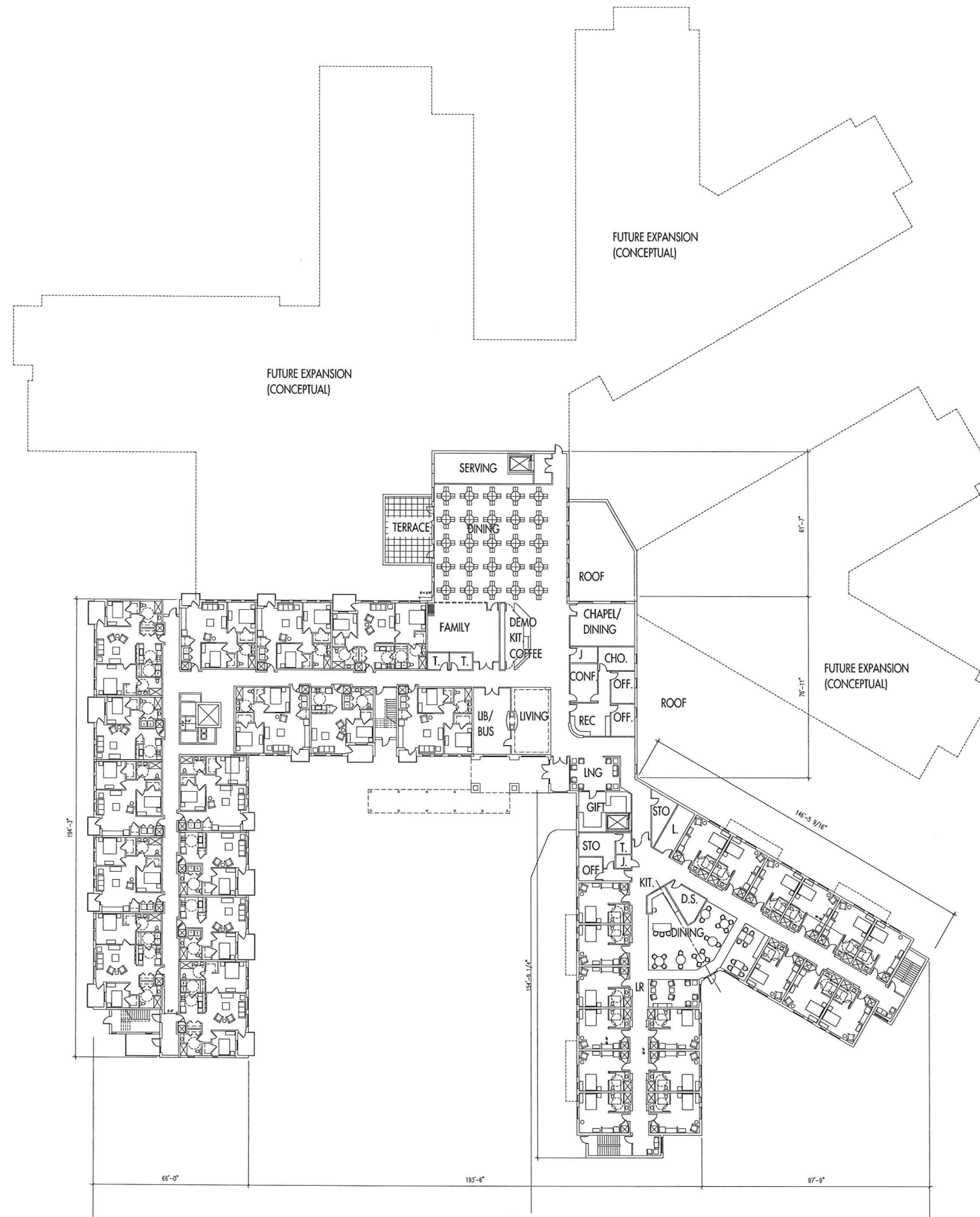
③ Community Center - West Elevation  
SCALE: 1/8" = 1'-0"

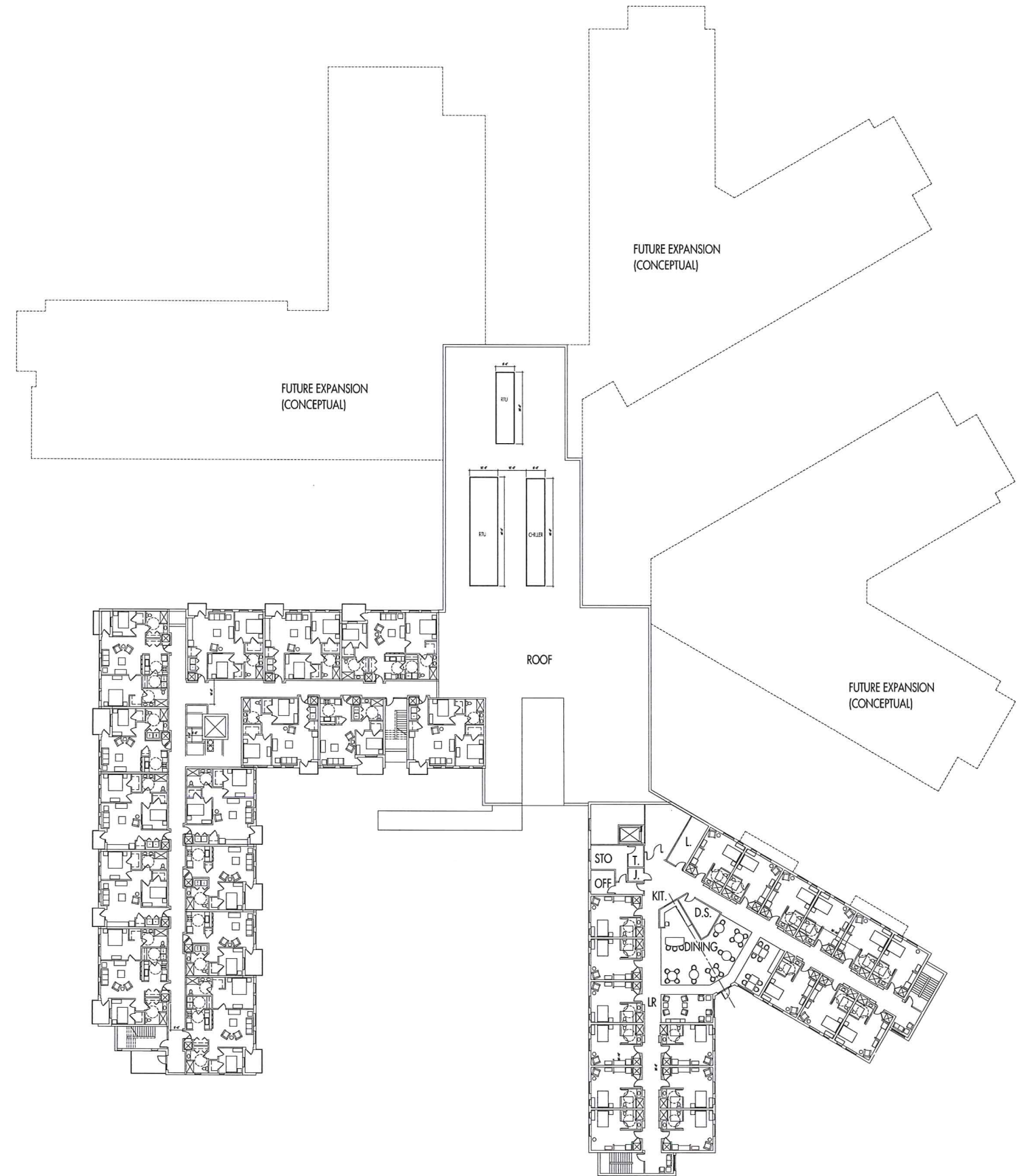


⑤ Community Center - East Elevation  
SCALE: 1/8" = 1'-0"









# Tennyson Senior Living Community

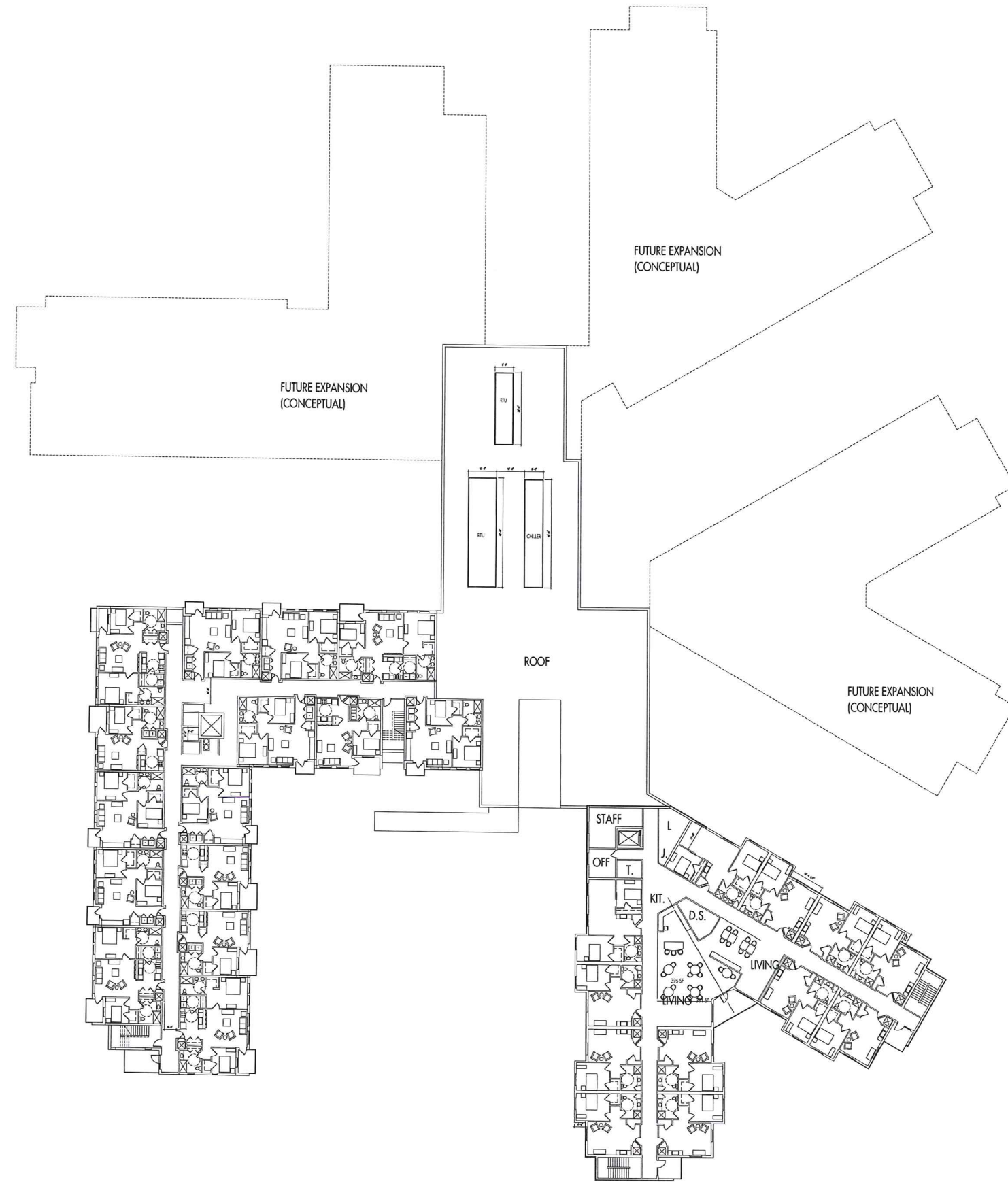
SECOND FLOOR PLAN

1" = 20'-0"

June 18, 2014

Engberg Anderson Project No. 132290





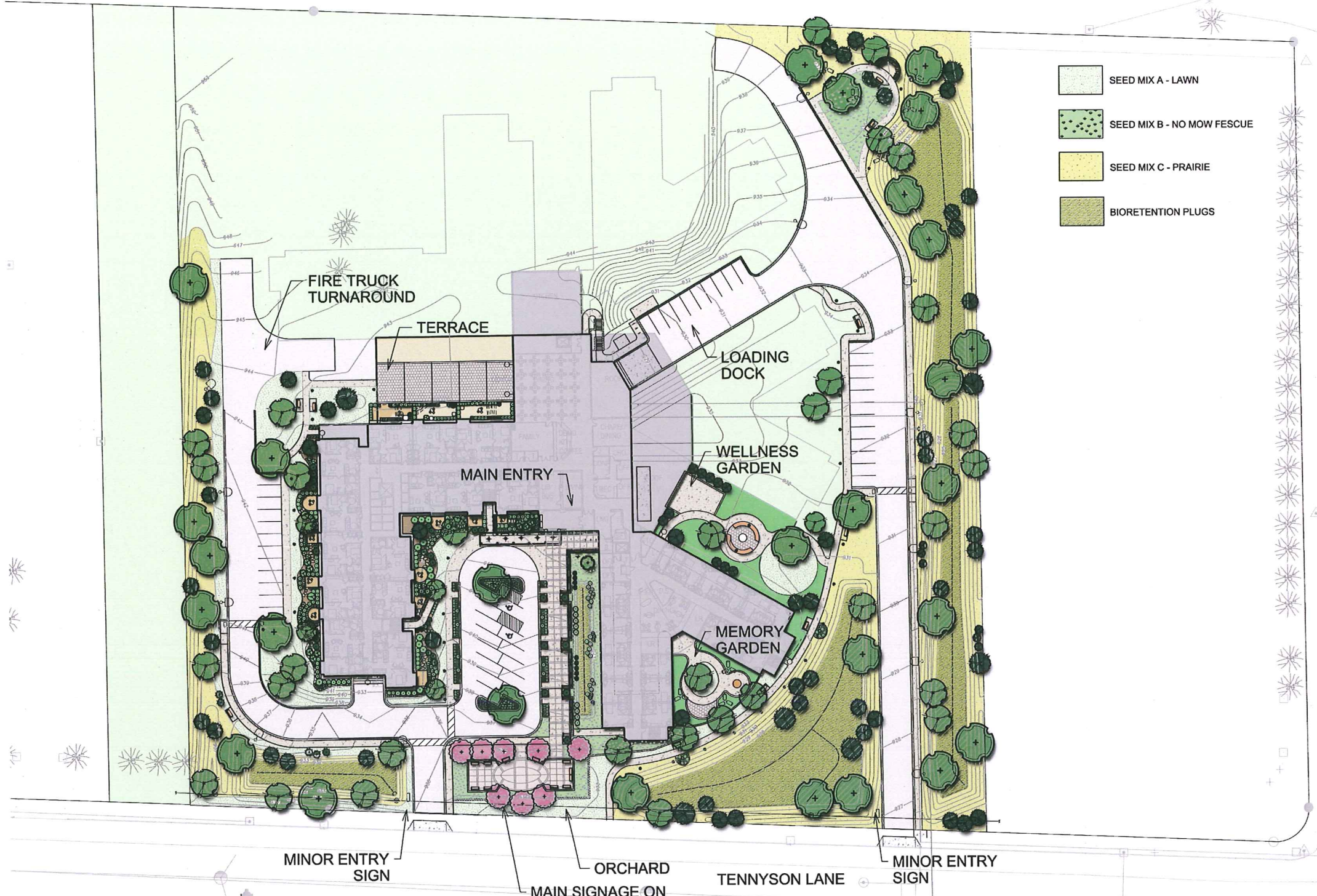
## Tennyson Senior Living Community

THIRD, FOURTH AND FIFTH FLOOR PLAN (NO CBRF AT 5TH FLOOR)

1" = 20'-0"  
June 18, 2014

Enabera Anderson Project No. 132290





Key	Botanical Name	Common Name	Size	Root	Comments
<b>Large Shade Trees</b>					
AR	<i>Acer balsamifera 'Amstelora'</i>	Aristocrat Freeman Maple	2 1/2' Cal	B&B	
AS	<i>Acer x freemanii 'Siena' PP11322</i>	Siena Glen Maple	5' 2 1/2' Cal	B&B	
AP	<i>Acer saccharum 'Apollo'</i>	Apollo Sugar Maple	1' 2 1/2' Cal	B&B	
GB	<i>Garrya lindleyi 'JFS-LG2'</i>	Golden Colomade Garrya	6' 2 1/2' Cal	B&B	
CO	<i>Quercus douglasii 'Espresso'</i>	Espresso Kentucky Coffee Tree	7' 1 1/2' Cal	B&B	
OS	<i>Quercus schubertii</i>	Shubert's Oak Hybrid Swamp Bur Oak	11' 2 1/2' Cal	B&B	
<b>Evergreen Trees</b>					
AC	<i>Abies concolor</i>	White Fir	3' 8" H	B&B	
JV	<i>Juniperus virginiana 'Carolin'</i>	Carolin Juniper	15' 8" H	B&B	
JS	<i>Juniperus x 'JIN Select Blue'</i>	Star Power Juniper	7' 8" H	B&B	
LL	<i>Larix laricina</i>	American Larch	9' 8" H	B&B	
PG	<i>Picea glauca 'Conestoga'</i>	Black Hills Spruce	4' 8" H	B&B	
PS	<i>Picea pungens 'Sester Dwarf'</i>	Sester Blue Dwarf Colorado Spruce	8' 8" H	B&B	
PE	<i>Pinus laeodensis 'Emerald Aweil'</i>	Emerald Aweil Bosnian Pine	18' 8" H	B&B	
PM	<i>Pinus laeodensis 'Mini Tuffel'</i>	Mini Tuffel Bosnian Pine	5' 8" H	B&B	
PT	<i>Pinus murrayi 'Tamarack'</i>	Tamarack Murray Pine	5' 8" H	B&B	
TD	<i>Taxodium distichum var. distichum</i>	Bald Cypress	2' 8" H	B&B	
<b>Ornamental Trees</b>					
AB	<i>Acer palmatum 'Bloodgood'</i>	Bloodgood Japanese Maple	3' 1 1/2' Cal	B&B	
AA	<i>Amelanchier alnifolia 'Obelisk'</i>	Standing Ovation Serviceberry	16' 1 1/2' Cal	B&B	
AD	<i>Amelanchier grandiflora 'Princess Diana'</i>	Princess Diana Serviceberry	7' 1 1/2' Cal	B&B	
AL	<i>Amelanchier x laevis 'Carnegie'</i>	Carnegie Allegheny Serviceberry	2' 1 1/2' Cal	B&B	Single-stem Tree-form
CJ	<i>Carpinus cordata 'J.N. Stewart'</i>	J.N. Stewart Honeysuckle	3' 1 1/2' Cal	B&B	
CC	<i>Cercis canadensis 'Columbus Strain'</i>	Columbus Strain Eastern Redbud	8' 1 1/2' Cal	B&B	
CV	<i>Chionodoxa virginiana</i>	Fringe Tree	5' 1 1/2' Cal	B&B	
HM	<i>Hippocrepis emerusoides</i>	Sensation Flower	2' 1 1/2' Cal	B&B	
HA	<i>Hamamelis virginica</i>	Hamamelis	12' H	B&B	
IR	<i>Malus 'Royal Raindrops'</i>	Royal Raindrops Crabapple	5' 1 1/2' Cal	B&B	
PF	<i>Pyrus bursalis 'Westwood'</i>	Korean Sun Pear	3' 1 1/2' Cal	B&B	*Only for replacement of edible orchard plants. See below.
SS	<i>Salix 'Scotsort'</i>	Scotsort Willow	5' 1 1/2' Cal	B&B	
<b>Edible Orchard Plants</b>					
MC	<i>Malus x 'Goldrush'</i>	Goldrush Semi-dwarf Apple	1' 1 1/2' Cal	B&B	
FP	<i>Pyrus pyracantha</i>	Pearch	1' 1 1/2' Cal	B&B	*Substitute with Pyrus bursalis 'Westwood' if edible fruit trees not desired.
PY	<i>Pyrus 'Flamingo Beauty'</i>	Flamingo Beauty Dwarf Pear	1' 1 1/2' Cal	B&B	
<b>Deciduous Shrubs</b>					
Am	<i>Amelanchier canadensis 'Mikolaj' 'Princess Diana'</i>	Princess Diana Black Chokeberry	25' 2 1/2' H	Cont.	Space 3'-0" O.C., 3 Gal. min.
Ch	<i>Cotoneaster 'Himes'</i>	Himes Cotoneaster	12' 18" spr.	Cont.	Space 3'-0" O.C.
Hs	<i>Hedera helix 'Hibernica'</i>	Smooth Hedera	14' 2 1/2' H	Cont.	Space 3'-0" O.C.
St	<i>Staphylea trifolia 'Yule'</i>	Yule Butterfly Spirea	2' 30" H	Cont.	Space 2'-6" O.C.
Vt	<i>Viburnum dentatum 'Christina'</i>	Blue Muffin Arrowwood Viburnum	2' 30" H	Cont.	Space 6'-0" O.C.
<b>Evergreen Shrubs</b>					
Ba	<i>Buxa x 'Green Myrtle'</i>	Green Myrtle Boxwood	26'	Cont.	Space 2'-6" O.C.
Ja	<i>Juniperus sabina 'Arcadia'</i>	Arcadia Juniper	9' 18-24" Spr.	Cont.	Space 4'-6" O.C., 3 Gal. min.
Ms	<i>Micropetalum dillense</i>	Siberian Cypress	14' 24-30" Spr.	Cont.	Space 5'-0" O.C., 5 Gal. min.
Pa	<i>Pinus mugo 'Smoosung'</i>	Smoosung Mugo Pine	32'	Cont.	Space 3'-0" O.C.
Tm	<i>Taxus x media 'Sawtooth'</i>	Sawtooth Blue Pine	6' 24-30" Spr.	Cont.	Space 2'-6" O.C.
To	<i>Thuja occidentalis 'DeGroot's Spire'</i>	DeGroot's Spire Arborvitae	22' 8" H	Cont.	Select for matching form
<b>Perennials &amp; Groundcovers</b>					
Ar	<i>Arenaria racemosa (Arenaria racemosa)</i>	Fairy Carlines	14' 4 1/2"	Cont.	Space 18" O.C.
Br	<i>Agastache 'Blue Fortune'</i>	Blue Fortune Anise Hyssop	13' 4 1/2"	Cont.	Space 18" O.C.
At	<i>Allium longicum 'Summer Beauty'</i>	Summer Beauty Allium	191' 1 1/2"	Cont.	Space 20" O.C.
Ar	<i>Anemone 'Blue'</i>	Blue Anemone	5' 4 1/2"	Cont.	Space 36" O.C.
Al	<i>Alcea 'Purple'</i>	Alcea Purple	63' 4 1/2"	Cont.	Space Variety only 18" o.c.
Ec	<i>Echinacea 'Purple Meadobrite'</i>	Purple Meadobrite Purple Coneflower	7' 4 1/2"	Cont.	Space 18" O.C.
Ed	<i>Echinacea purpurea 'Magnus'</i>	Purple Coneflower	49' 4 1/2"	Cont.	Space 18" O.C.
Eu	<i>Eupatorium 'Phantom'</i>	Phantom Joe Pye Weed	6' 4 1/2"	Cont.	Space 30" O.C.
Ba	<i>Barbarea 'Carmine Bicolor'</i>	Carmine Bicolor	60' 4 1/2"	Cont.	Space 15" O.C.
Hh	<i>Hebe 'Happy Returns'</i>	Happy Returns Hebe	41' 4 1/2"	Cont.	Space 18" O.C.
Hu	<i>Hieracium 'Fragrantis'</i>	Raspberry Ice Hieracium	29' 1 1/2"	Cont.	Space 18" O.C.
Kr	<i>Koeleria 'Koeleria'</i>	Koeleria Ragwort	15' 1 1/2"	Cont.	Space 30" O.C.
Ls	<i>Liatris 'Liatris'</i>	Liatris Blister Star	14' 4 1/2"	Cont.	Space 18" O.C.
Ma	<i>Morandea 'dijima'</i>	Bea Balm	12' 4 1/2"	Cont.	Space 18" O.C.
Nl	<i>Nipeta 'Wagner's Low'</i>	Wagner's Low Calamintha	11' 4 1/2"	Cont.	Space 30" O.C.
Pa	<i>Panicleum 'digitale'</i>	Ragwort Beardedragon	12' 4 1/2"	Cont.	Space 15" O.C.
Pb	<i>Polypodium 'Bifurcatum'</i>	Scholar's Seal	17' 4 1/2"	Cont.	Space 15" O.C.
Sn	<i>Salvia nemorosa 'Caradonna'</i>	Caradonna Salvia	33' 4 1/2"	Cont.	Space 18" O.C.
<b>Grasses &amp; Sodas</b>					
Ar	<i>Andropogon 'gentilis'</i>	Big Bluestem	6' 4 1/2"	Cont.	Space 30" O.C.
Ar	<i>Andropogon 'oculatus' 'Karl Foerster'</i>	Karl Foerster Feather Reed Grass	20' 4 1/2"	Cont.	Space 30" O.C.
Di	<i>Deschampsia 'coccinea'</i>	Tufted Hair Grass	50' 4 1/2"	Cont.	Space 30" O.C.
Ar	<i>Andropogon 'serotinus' 'Waterford'</i>	Waterford Silver Grass	7' 4 1/2"	Cont.	Space 42" O.C.
Ar	<i>Andropogon 'variegatus' 'Cloud Nine'</i>	Cloud Nine Switch Grass	9' 4 1/2"	Cont.	Space 36" O.C.
Ar	<i>Andropogon 'virgatus' 'Ruby Ribbons'</i>	Ruby Ribbons Switch Grass	29' 4 1/2"	Cont.	Space 30" O.C.
Ar	<i>Andropogon 'virgatus' 'Shenandoah'</i>	Shenandoah Switch Grass	63' 4 1/2"	Cont.	Space 30" O.C.
Ar	<i>Andropogon 'virgatus' 'Hemlock'</i>	Hemlock Switch Grass	39' 4 1/2"	Cont.	Space 30" O.C.
Ar	<i>Andropogon 'virgatus' 'Autumn Moor'</i>	Autumn Moor Grass	12' 4 1/2"	Cont.	Space 12" O.C.
Ar	<i>Andropogon 'virgatus' 'Prairie Dropseed'</i>	Prairie Dropseed	19' 4 1/2"	Cont.	Space 24" O.C.
<b>Ferns</b>					
Ar	<i>Osmunda cinnamomea</i>	Cinnamon Fern	17' 4 1/2"	Cont.	Space 24" O.C.
<b>Vines</b>					
Ar	<i>Wisteria 'Innocent's Beauty'</i>	Innocent's Beauty American Wisteria	26' 5 gal	Cont.	Other varieties of lavender-purple flowering. Kentucky Wisteria acceptable. Train up pergola columns, prune trimmally.
<b>Seed Mix A - Lawn (Boulevard Blend by Earth Carpet)</b>					
	<i>Festuca arundinacea</i>	Turf-type Tall Fescue			30%
	<i>Festuca rubra L. var. rubra</i>	Crested Red Fescue			25%
	<i>Poa annua</i>	Annual Bluegrass			25%
	<i>Lolium hybridum 'Hueslet'</i>	Hybrid Tall Fescue			20%
<b>Seed Mix B - No Mow Fescue Mix (Care Free Blend by Earth Carpet)</b>					
	<i>Festuca glauca</i>	Blue Fescue			10%
	<i>Festuca rubra L. var. rubra</i>	Crested Red Fescue			30%
	<i>Festuca rubra L. var. commutata</i>	Crested Fescue			35%
	<i>Festuca longifolia</i>	Hard Fescue			25%
<b>Seed Mix C - Prairie Mix (Butterfly Prairie Seed Mix by Prairie Nursery)</b>					
	<i>Aster laevis</i>	Smooth Aster			
	<i>Agastache foeniculum</i>	Lavender Hyssop			
	<i>Anemone canadensis</i>	Wood Anemone			
	<i>Asclepias tuberosa</i>	Butterflyweed			
	<i>Bursera cubensis</i>	Bursera Gum			
	<i>Delosmea purpurea</i>	Purple Prairie Clover			
	<i>Echinacea pallida</i>	Pale Purple Coneflower			
	<i>Elymus canadensis</i>	Canada Wild Rye			
	<i>Hibiscus syriacus</i>	Downy Burlflower			
	<i>Koeleria macrantha</i>	Joe Pye			
	<i>Liatris scarpia</i>	Bursera Gum			
	<i>Lupinus texensis</i>	Black-eyed Susan			
	<i>Morandea 'dijima'</i>	Bea Balm			
	<i>Morandea 'punctata'</i>	Black-eyed Susan			
	<i>Parthenocissis vitacea</i>	Black-eyed Susan			
	<i>Rubus humilis</i>	Wild Petunia			
	<i>Schizanthus luteus</i>	Little Bluestem			
	<i>Solidago rigida</i>	Self-Cleaned			
	<i>Solidago serotina</i>	Shaw Goldenrod			
	<i>Sporobolus heterophyllus</i>	Prairie Dropseed			
	<i>Verbena stricta</i>	Hoary Verbena			
<b>Bioretention &amp; Rain Garden Plant Mix</b>					
	<i>Aster laevis</i>	Smooth Aster	515'	2 1/2'	pot
	<i>Asclepias incarnata</i>	Swamp Milkweed	515'	2 1/2'	pot
	<i>Carex lasiocarpa</i>	Blue Sedge	1800'	2 1/2'	pot
	<i>Carex vulpinoidea</i>	Fox Sedge	1800'	2 1/2'	pot
	<i>Echinacea purpurea</i>	Purple Coneflower	515'	2 1/2'	pot
	<i>Glycyrrhiza glabra</i>	Fowl Manne Grass	1800'	2 1/2'	pot
	<i>Liatris scarpia</i>	Marsh Blister Star	515'	2 1/2'	pot
	<i>Rubus humilis</i>	Black-eyed Susan	515'	2 1/2'	pot
	<i>Solidago rigida</i>	Self-Cleaned	515'	2 1/2'	pot
	<i>Sporobolus heterophyllus</i>	Prairie Dropseed	1800'	2 1/2'	pot



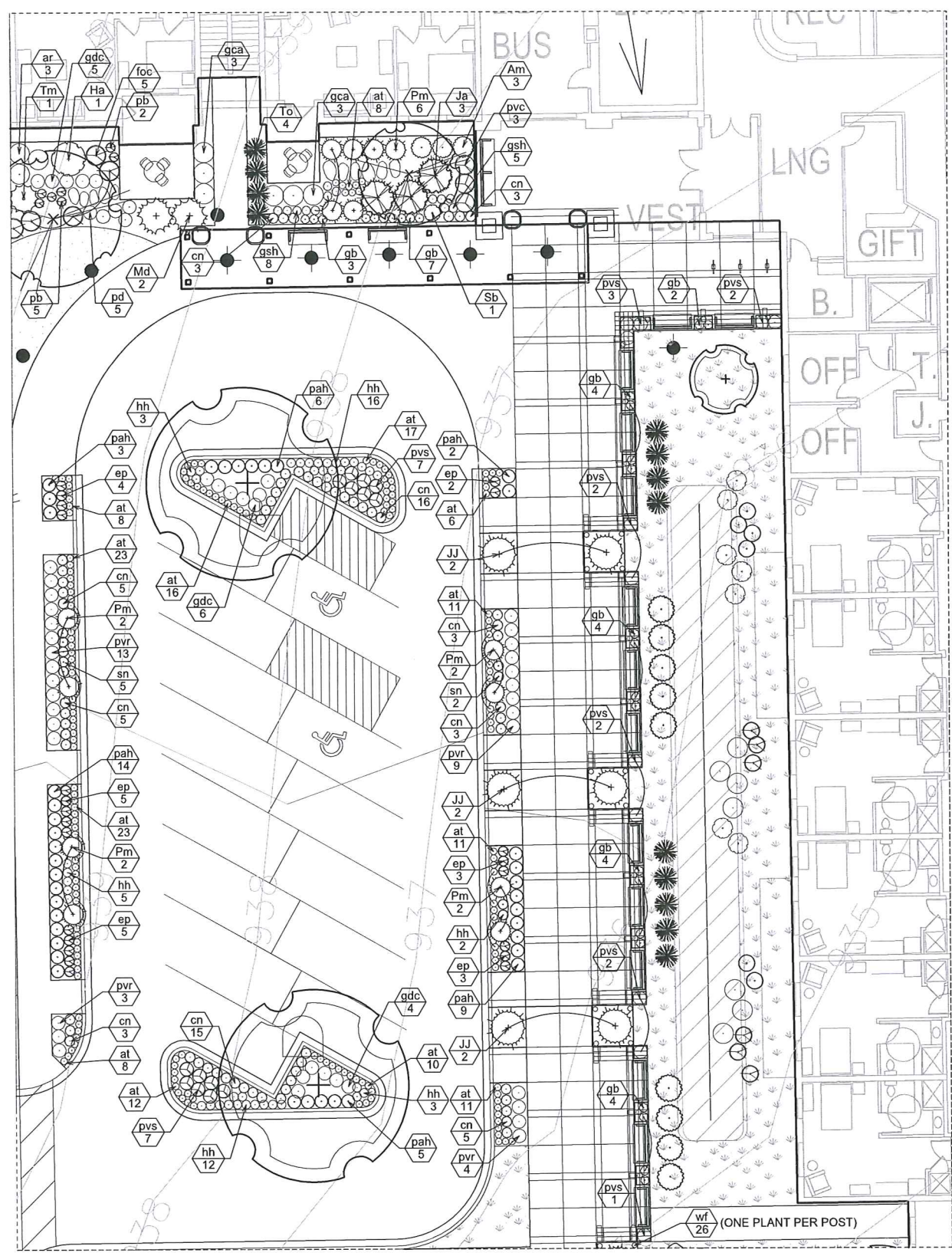
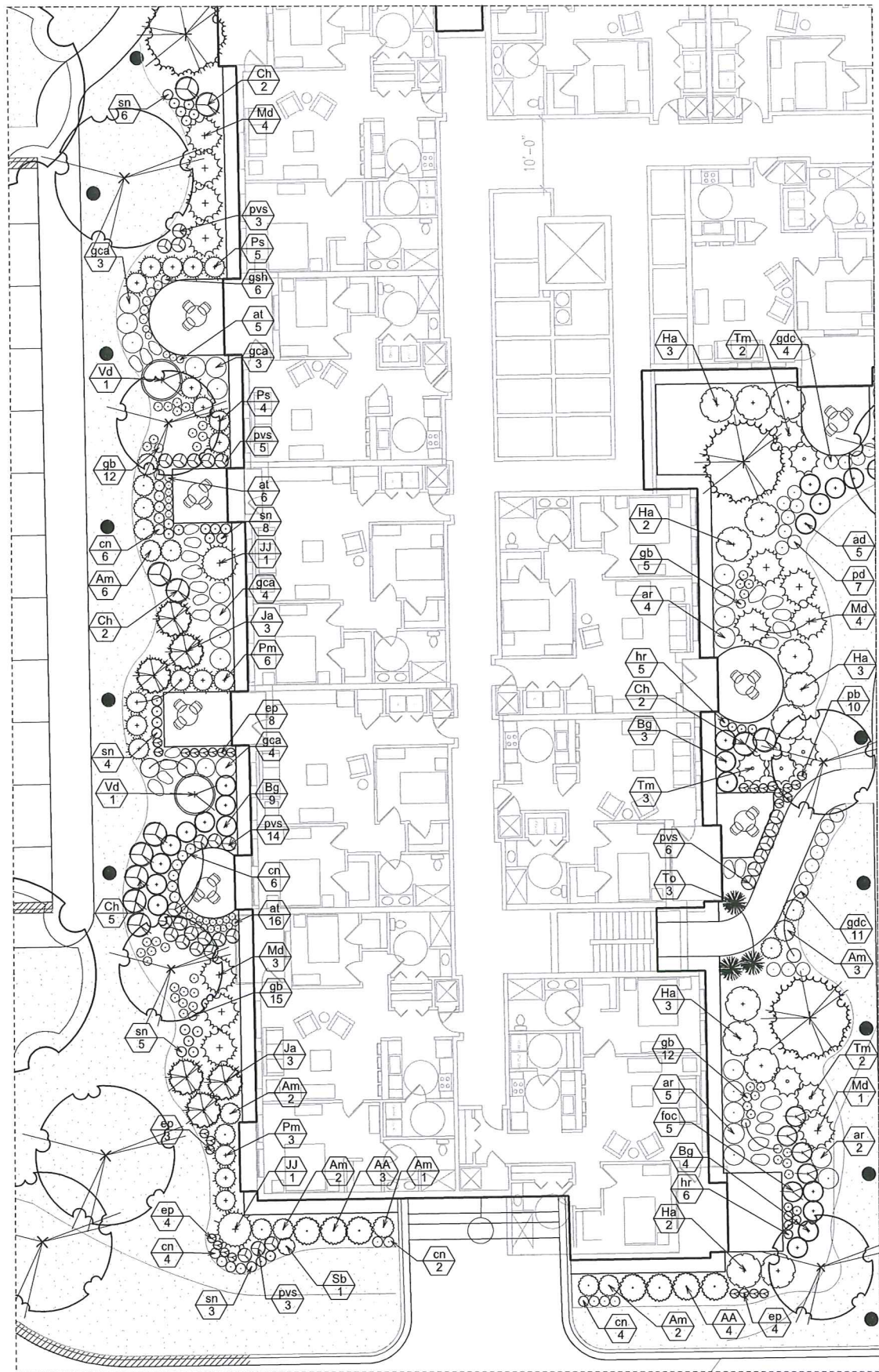
# Tennyson Senior Living Community





LANDSCAPE PLAN  
 1" = 40'-0"  
 June 17, 2014  
 Engberg Anderson Project No. 132290









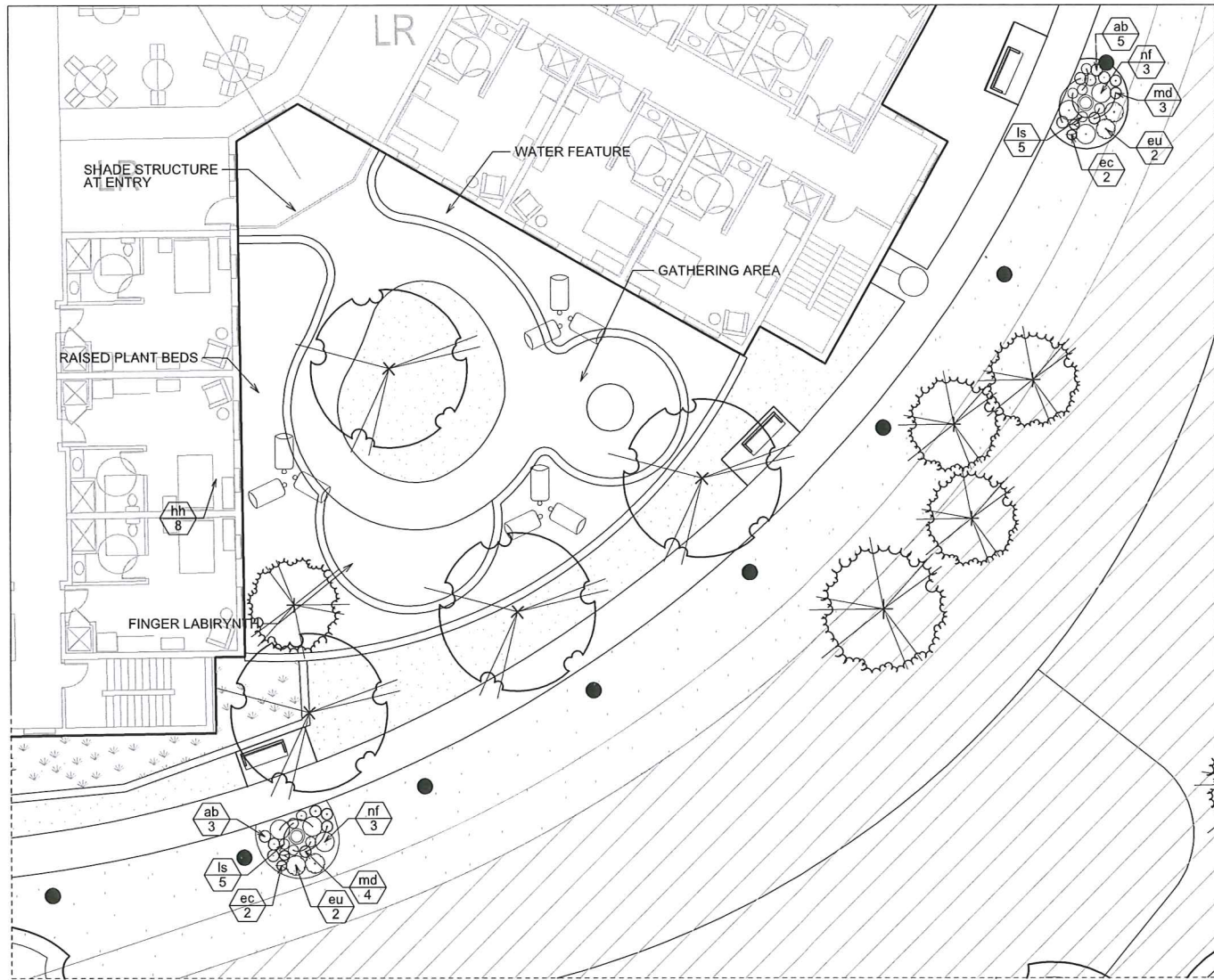
-  SEED MIX A - LAWN
-  SEED MIX B - NO MOW FESCUE
-  SEED MIX C - PRAIRIE
-  BIORETENTION PLUGS







# Tennyson Senior Living Community

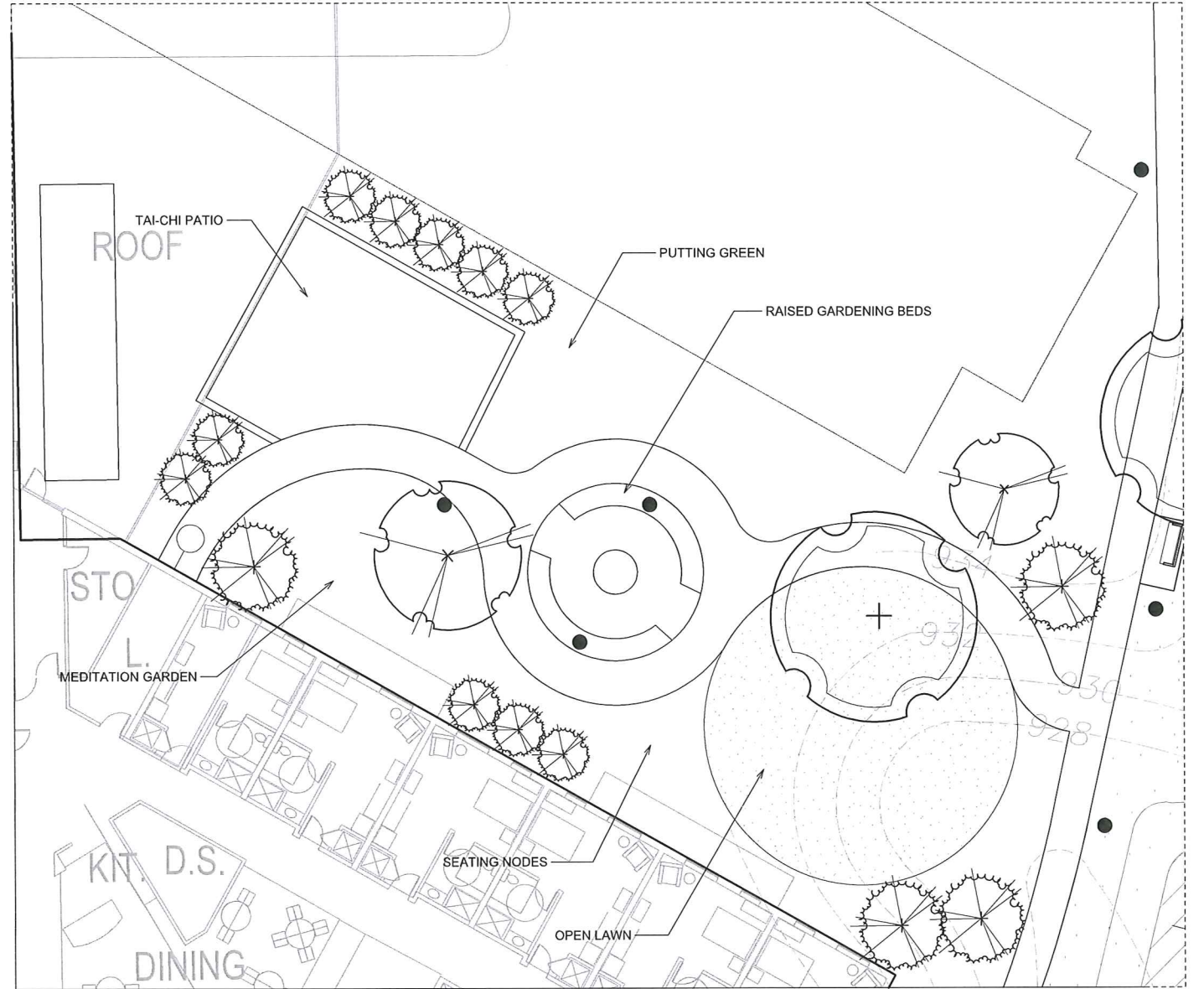
LANDSCAPE PLAN ENLARGEMENT  
1" = 10'-0"  
June 17, 2014  
Enghera Anderson Project No. 132290





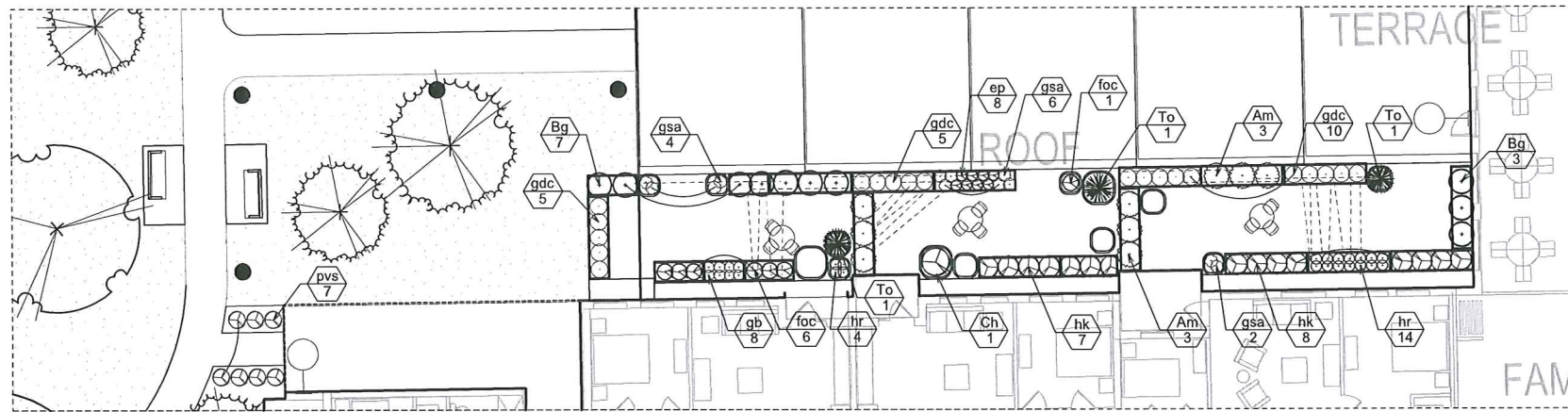
3 MEMORY GARDEN CONCEPT  
1"=10'-0" @ FULL SIZE SHEET (24X36)

-  SEED MIX A - LAWN
-  SEED MIX B - NO MOW FESCUE
-  SEED MIX C - PRAIRIE
-  BIORETENTION PLUGS

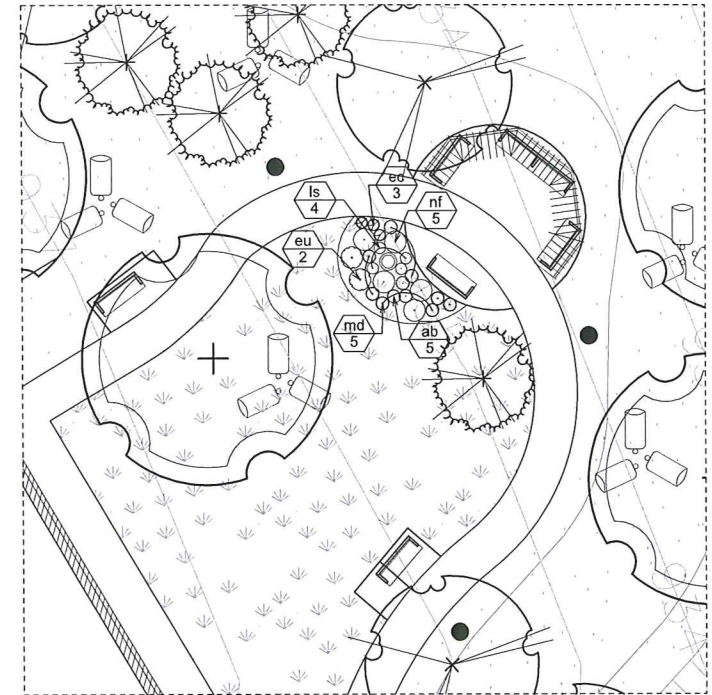


4 WELLNESS GARDEN CONCEPT  
1"=10'-0" @ FULL SIZE SHEET (24X36)

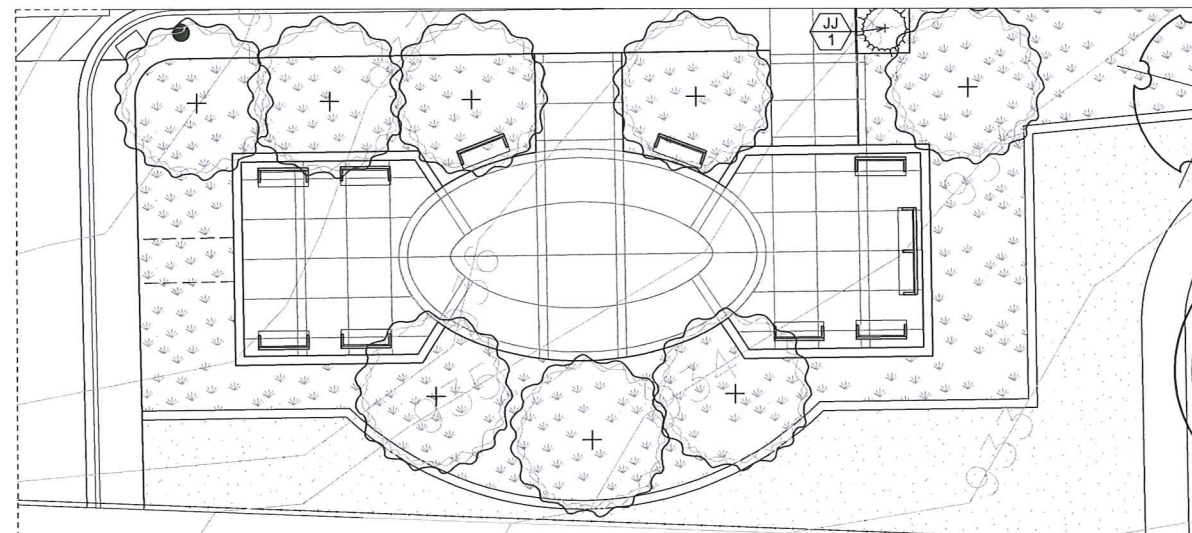








5 TERRACE  
1"=10'-0" @ FULL SIZE SHEET (24X36)



7 NORTHEAST PATHWAY  
1"=10'-0" @ FULL SIZE SHEET (24X36)



6 ORCHARD  
1"=10'-0" @ FULL SIZE SHEET (24X36)

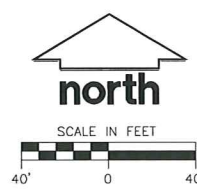
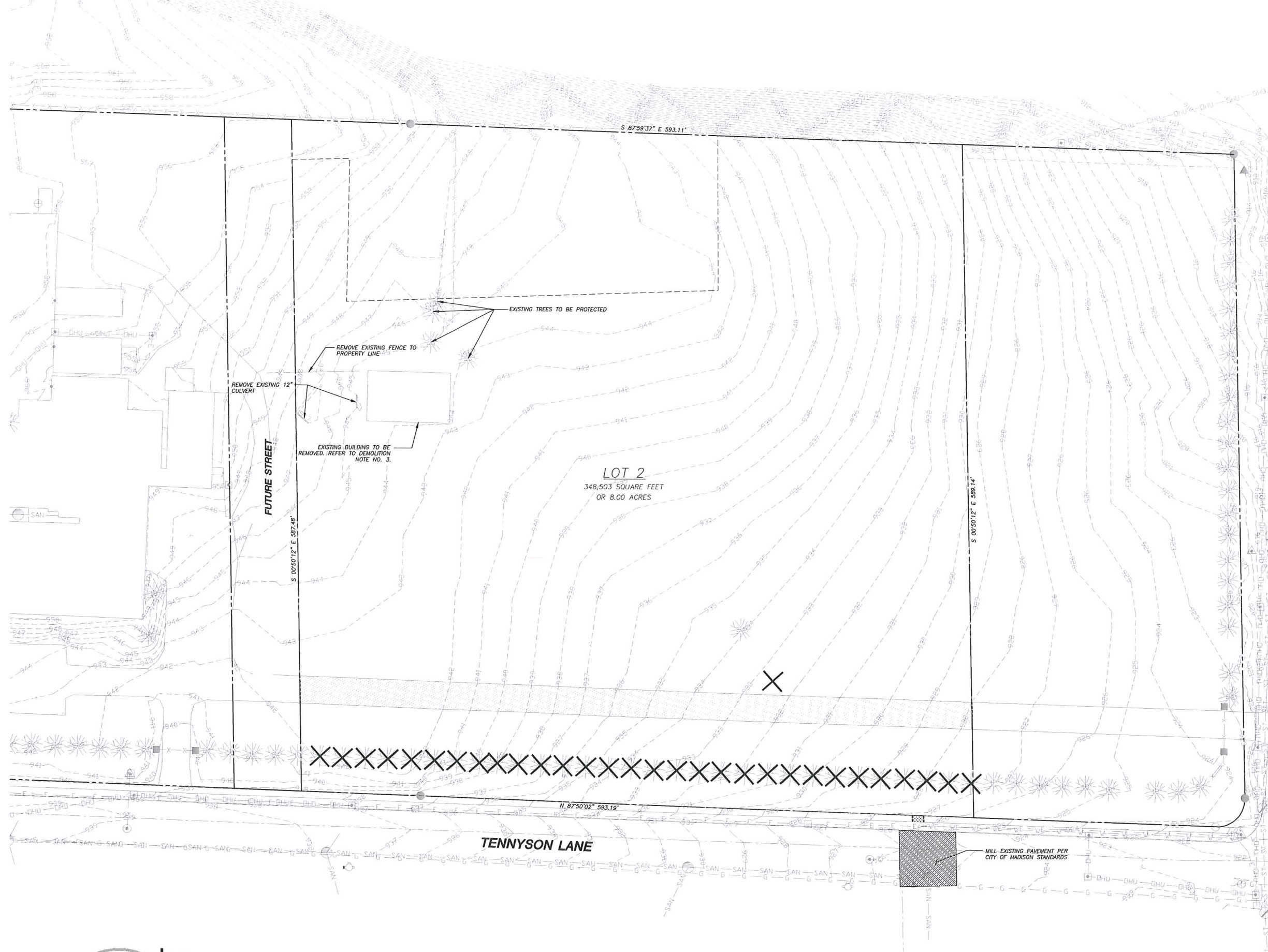
-  SEED MIX A - LAWN
-  SEED MIX B - NO MOW FESCUE
-  SEED MIX C - PRAIRIE
-  BIORETENTION PLUGS



- LEGEND (PHOPOSED)**
- PROPERTY LINE
  - - - - - LIMITS OF DISTURBANCE
  - SAWCUT
  - ASPHALT/BASE REMOVAL
  - CONCRETE/BASE REMOVAL
  - CONCRETE/BASE REMOVAL
  - REMOVE / RELOCATE TREE

- GENERAL NOTES**
1. REFER TO THE EXISTING CONDITIONS SURVEY, PROVIDED BY OTHERS, FOR EXISTING CONDITIONS NOTES AND LEGEND. JSD DOES NOT TAKE RESPONSIBILITY FOR ANY BENCHMARKS LOCATED ON THE SURVEY PROVIDED BY OTHERS.
  2. ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF MADISON REQUIREMENTS.
  3. NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES UNLESS OTHERWISE SHOWN.
  4. THIS PROJECT HAS BEEN DESIGNED AND WILL BE CONSTRUCTED IN COMPLIANCE WITH ALL OF THE WDRR WRAPP PERMIT APPLICATION STANDARDS.

- DEMOLITION NOTES**
1. THIS PLAN INDICATES ITEMS ON THE PROPERTY INTENDED FOR DEMOLITION BASED ON THE CURRENT SITE DESIGN THAT HAVE BEEN IDENTIFIED BY A REASONABLE OBSERVATION OF THE EXISTING CONDITIONS THROUGH FIELD SURVEY, RECONNAISSANCE, "DIGGER'S HOTLINE" LOCATION, AND GENERAL "STANDARD OF CARE". THERE MAY BE ADDITIONAL ITEMS THAT CAN NOT BE IDENTIFIED BY A REASONABLE ABOVE GROUND OBSERVATION, OF WHICH THE ENGINEER WOULD HAVE NO KNOWLEDGE OR MAY BE A PART OF ANOTHER DESIGN DISCIPLINE. IT IS THE CONTRACTOR'S/BIDDER'S RESPONSIBILITY TO REVIEW THE PLANS, INSPECT THE SITE AND PROVIDE HIS OWN DUE DILIGENCE TO INCLUDE IN HIS BID WHAT ADDITIONAL ITEMS, IN HIS OPINION, MAY BE NECESSARY FOR DEMOLITION. ANY ADDITIONAL ITEMS IDENTIFIED BY THE CONTRACTOR/BIDDER SHALL BE IDENTIFIED IN THE BID AND REPORTED TO THE ENGINEER OF RECORD. JSD TAKES NO RESPONSIBILITY FOR ITEMS ON THE PROPERTY THAT COULD NOT BE LOCATED BY A REASONABLE OBSERVATION OF THE PROPERTY OR OF WHICH THEY WOULD HAVE NO KNOWLEDGE.
  2. ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITIES. CONTRACTOR SHALL KEEP ALL STREETS FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.
  3. BUILDING REMOVALS SHALL BE BY A QUALIFIED CONTRACTOR. CONTRACTOR TO FOLLOW ALL DEMOLITION REGULATIONS, DISCONNECT ALL UTILITIES, OBTAIN ALL APPLICABLE PERMITS AND DISPOSE OF ALL BUILDING MATERIALS IN APPROPRIATE LANDFILLS. NO PORTIONS OF THE BUILDING SHALL NOT BE BURIED ON SITE. ANY CONTAMINATED SOILS SHALL BE REMOVED TO A LANDFILL IN ACCORDANCE WITH APPROPRIATE STATE AND FEDERAL REGULATIONS. THE OWNER WILL PROVIDE ENVIRONMENTAL DOCUMENTATION AVAILABLE. THIS CONTRACTOR SHALL SUBMIT THE RECYCLING PLAN PER CITY OF MADISON REQUIREMENTS.
  4. ABANDONED/REMOVED ITEMS SHALL BE DISPOSED OF OFF SITE UNLESS OTHERWISE NOTED.
  5. THE CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVERNIGHT AS REQUIRED.
  6. CONTRACTOR TO REMOVE EXISTING UTILITY PIPE OR PROVIDE PIPE BACK-FILLING AFTER REMOVAL OF EXISTING UTILITIES WITHIN BUILDING FOOTPRINT USING "LOW DENSITY CONCRETE/FLOWABLE FILL".
  7. RESTORATION OF THE EXISTING ROADWAY RIGHT-OF-WAYS ARE CONSIDERED INCIDENTAL AND SHOULD BE PART OF THE COST OF THE UNDERGROUND IMPROVEMENTS, DEMOLITION AND REMOVAL. THIS INCLUDES CURB & GUTTER, SIDEWALK, TOPSOIL, SEEDING AND MULCHING.
  8. GRANULAR BACKFILL MATERIALS ARE REQUIRED IN ALL UTILITY TRENCHES UNDER SIDEWALKS AND PROPOSED PAVED AREAS, ALL UTILITY TRENCH BACKFILL SHALL BE COMPACTED PER SPECIFICATIONS.
  9. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
    - EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
    - VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCIES. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCIES ARE RESOLVED.
    - NOTIFYING ALL UTILITIES PRIOR TO THE REMOVAL OF ANY UNDERGROUND UTILITIES.
    - NOTIFYING THE DESIGN ENGINEER AND LOCAL CONTROLLING MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.
  9. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
  10. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF THESE IMPROVEMENTS.
  11. THIS SITE IS PART OF A PARCEL THAT WAS IDENTIFIED IN THE BUREAU OF REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM (BRRTS) 03-13-553975. SEE ENVIRONMENTAL DOCUMENTS PROVIDED BY THE OWNER FOR SPECIFIC REQUIREMENTS.



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MADISON REGIONAL OFFICE  
 161 HORIZON DRIVE, SUITE 101  
 VERONA, WISCONSIN 53593  
 608.848.5060 PHONE | 608.848.2255 FAX

**LEGEND (PROPOSED)**

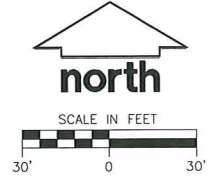
	PROPERTY LINE
	BUILDING FIRST FLOOR
	BUILDING LOWER LEVEL
	FUTURE BUILDING ADDITION
	EDGE OF PAVEMENT
	TEMPORARY PAVEMENT EDGE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	18" STANDARD CURB AND GUTTER
	18" REJECT CURB AND GUTTER
	STONE RETAINING WALL (SEE LANDSCAPE PLANS FOR DETAILS)
	FENCE LINE (SEE LANDSCAPE PLANS FOR DETAILS)
	MODULAR BLOCK RETAINING WALL
	STORMWATER MANAGEMENT AREA

- GENERAL NOTES**
- REFER TO THE EXISTING CONDITIONS SURVEY, PROVIDED BY OTHERS, FOR EXISTING CONDITIONS NOTES AND LEGEND. JSD DOES NOT TAKE RESPONSIBILITY FOR ANY BENCHMARKS LOCATED ON THE SURVEY PROVIDED BY OTHERS.
  - ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF MADISON REQUIREMENTS.
  - NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES UNLESS OTHERWISE SHOWN.
  - THIS PROJECT HAS BEEN DESIGNED AND WILL BE CONSTRUCTED IN COMPLIANCE WITH ALL OF THE WDNR WRAPP PERMIT APPLICATION STANDARDS.

- SITE PLAN NOTES**
- ALL DIMENSIONS TO FACE OF CURB UNLESS OTHERWISE NOTED.
  - ALL RADII TO FACE OF CURB UNLESS OTHERWISE NOTED.
  - ALL PRIVATE CURB AND GUTTER SHALL BE 18" STANDARD CURB AND GUTTER. ANY REQUIRED REPLACEMENT OF PUBLIC CURB AND GUTTER SHALL MATCH EXISTING AND MEET THE REQUIREMENTS OF THE CITY OF VERONA.
  - CONTRACTOR SHALL PROVIDE CONTROL JOINTS AND CONSTRUCTION JOINTS OF ONE-QUARTER CONCRETE THICKNESS AT AN EQUAL RATIO OF LENGTH TO WIDTH WHEREVER POSSIBLE WITH A MAXIMUM LENGTH BETWEEN JOINTS OF 8' ON CENTER.
  - CONTRACTOR SHALL PROVIDE EXPANSION JOINTS IN SIDEWALKS AT A MAXIMUM 24' ON CENTER.
  - EXTERIOR CONCRETE SURFACES SHALL BE BROOM FINISHED.
  - ALL CONCRETE SURFACES TO BE SEALED WITH TYPE TK-26UV CONCRETE SEALANT.
  - USE 4" WIDE, HIGH VISIBILITY YELLOW LATEX PAINT FOR STALL LINES.
  - MARK AND STRIPE ADA PARKING SPACES APPROPRIATELY.
  - 2' x 4' TRUNCATED DOME SECTIONS SHALL BE PLACED AT ALL ADA RAMPS.
  - BIKE RACKS SHALL BE LOCATED ON A 4" THICK CONCRETE PAD OVER 4" OF AGGREGATE BASE. EACH BIKE PARKING STALL SHALL BE AT LEAST 2'x6'. BIKE RACK SHALL BE APPROVED BY OWNER AND INSTALLED INTEGRAL TO THE CONCRETE PAD.
  - DETAILS OF WALK LAYOUT WILL BE PROVIDED IN ELECTRONIC FORMAT FOR LAYOUT.
  - SEE LANDSCAPE PLANS FOR HARDSCAPE AND LANDSCAPE OF SPECIAL GARDEN AREAS AS NOTED.

**SITE INFORMATION BLOCK**

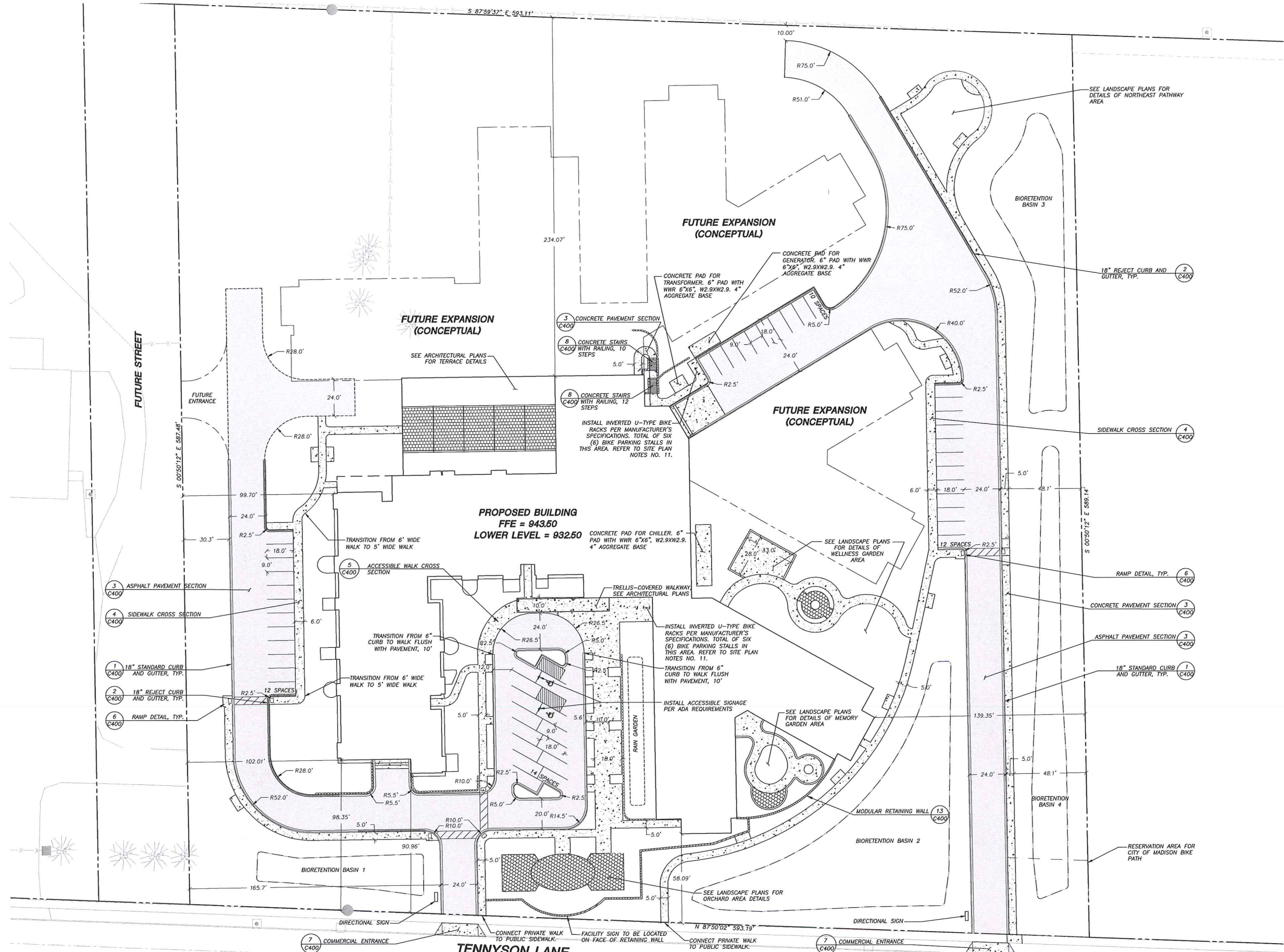
Site Location	Madison, WI
Site Acreage (Total)	8.00
Disturbed Area	291,450 S.F.
Existing Site Zoning	PD-GDP
Proposed use of property:	300 UNIT SENIOR HOUSING AND ASSISTED LIVING FACILITY
Building Information:	
Number of stories (above grade)	2
Building height	18-20'
Total square footage of building	42,610 S.F.
Number of surface parking stalls:	
Large car	46
Accessible	2
Number of underground parking stalls:	
Large car	86
Accessible	0
Number of bicycle stalls shown:	12
Existing Impervious Surface Area	17,266 S.F.
Existing Pervious Surface Area	331,214 S.F.
Existing Impervious Surface Area Ratio	0.050
Proposed Impervious Surface Area	115,656 S.F.
Proposed Pervious Surface Area	232,847 S.F.
Proposed Impervious Surface Area Ratio	0.332
Usable Open Space	192,923 S.F.



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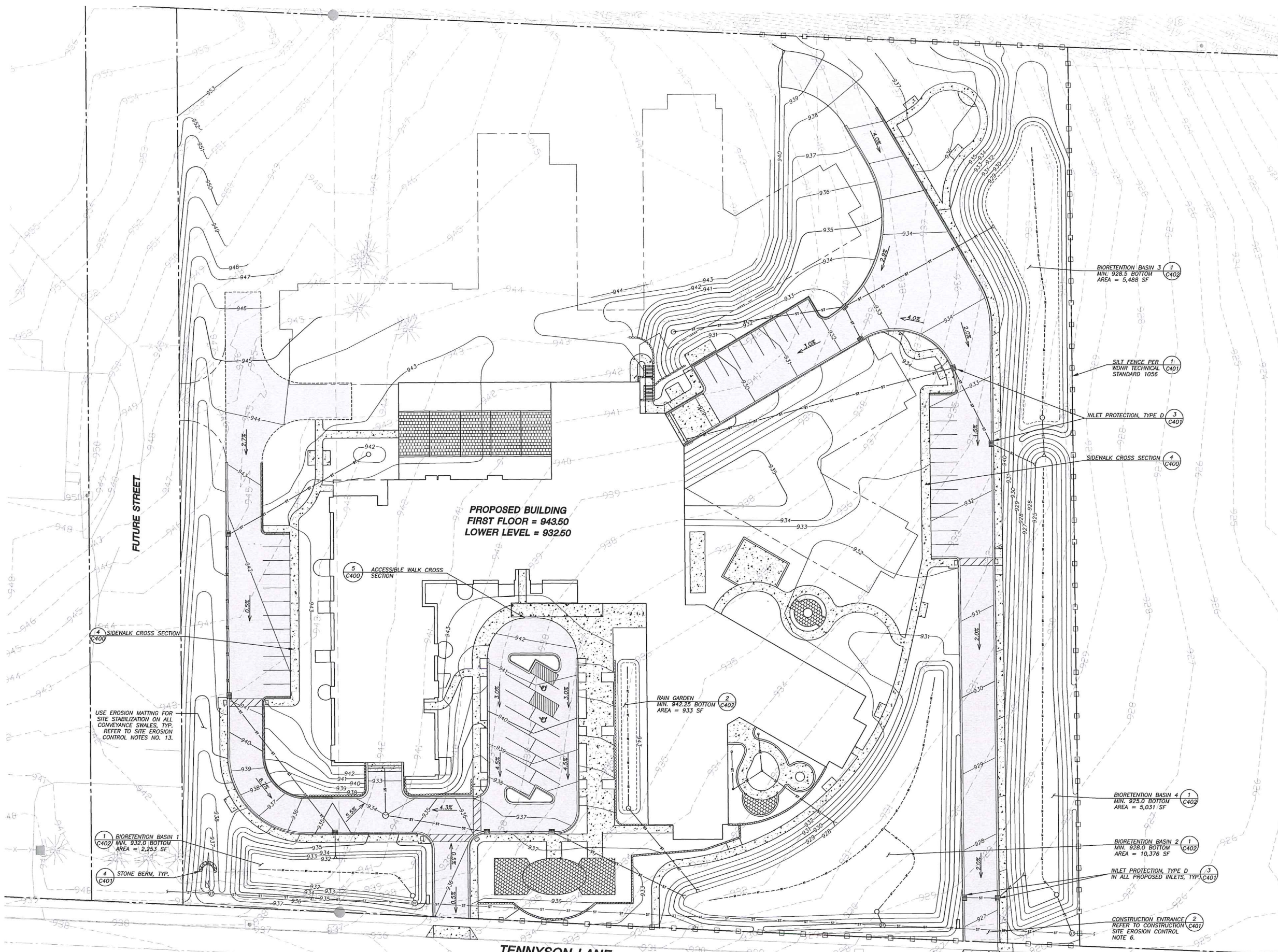
MADISON REGIONAL OFFICE  
 161 HORIZON DRIVE, SUITE 101  
 VERONA, WISCONSIN 53593  
 608.848.5060 PHONE | 608.848.2255 FAX



# Tennyson Senior Living Community

SITE PLAN  
 1" = 30'-0"  
 JUNE 18, 2014  
 Engberg Anderson Project No. 132290

**C101**



**LEGEND (PROPOSED)**

- PROPERTY LINE
- BUILDING FIRST FLOOR
- BUILDING LOWER LEVEL
- - - FUTURE BUILDING ADDITION
- 934 PROPOSED 1 FOOT CONTOUR
- 935 PROPOSED 5 FOOT CONTOUR
- EDGE OF PAVEMENT
- - - TEMPORARY PAVEMENT EDGE
- SILT FENCE
- ▨ ASPHALT PAVEMENT
- ▩ CONCRETE PAVEMENT
- ▧ 18" STANDARD CURB AND GUTTER
- ▧ 18" REJECT CURB & GUTTER
- ▧ STONE RETAINING WALL (SEE LANDSCAPE PLANS FOR DETAILS)
- FENCE LINE (SEE LANDSCAPE PLANS FOR DETAILS)

- GENERAL NOTES**
- REFER TO THE EXISTING CONDITIONS SURVEY, PROVIDED BY OTHERS, FOR EXISTING CONDITIONS NOTES AND LEGEND. JSD DOES NOT TAKE RESPONSIBILITY FOR ANY BENCHMARKS LOCATED ON THE SURVEY PROVIDED BY OTHERS.
  - ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF MADISON REQUIREMENTS.
  - NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES UNLESS OTHERWISE SHOWN.
  - THIS PROJECT HAS BEEN DESIGNED AND WILL BE CONSTRUCTED IN COMPLIANCE WITH ALL OF THE WDNR WRAPP PERMIT APPLICATION STANDARDS.

- CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS**
- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE CURRENT DEPARTMENT OF NATURAL RESOURCES EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS WHICH ARE AVAILABLE AT: <http://www.dnr.state.wi.us/runoff/stormwater/techstds.htm>
  - INSTALL EROSION CONTROL MEASURES PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIALS AS SHOWN ON PLAN. MODIFICATIONS TO SEDIMENT CONTROL DESIGN MAY BE CONDUCTED TO MEET UNFORESEEN FIELD CONDITIONS IF MODIFICATIONS CONFORM TO WDNR TECHNICAL STANDARDS.
  - INSPECTIONS AND MAINTENANCE OF ALL EROSION CONTROL MEASURES SHALL BE ROUTINE (ONCE PER WEEK MINIMUM) TO ENSURE PROPER FUNCTION OF EROSION CONTROLS AT ALL TIMES. EROSION CONTROL MEASURES ARE TO BE IN WORKING ORDER AT THE END OF EACH WORK DAY.
  - INSPECT EROSION CONTROL MEASURES AFTER EACH 1/2" OR GREATER RAINFALL. REPAIR ANY DAMAGE OBSERVED DURING THE INSPECTION.
  - EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.
  - INSTALL A TRACKING PAD, 50' LONG AND NO LESS THAN 12" THICK BY USE OF 3" CLEAR STONE. TRACKING PADS ARE TO BE MAINTAINED BY THE CONTRACTOR IN A CONDITION WHICH WILL PREVENT THE TRACKING OF MUD OR DRY SEDIMENT ONTO THE ADJACENT PUBLIC STREETS AFTER EACH WORKING DAY OR MORE FREQUENTLY AS REQUIRED BY THE MUNICIPALITY.
  - INSTALL EROSION CONTROLS ON THE DOWNSLOPE SIDE OF STOCKPILES AND PROVIDE TEMPORARY SEEDING ON STOCKPILES WHICH ARE TO REMAIN IN PLACE FOR MORE THAN 7 DAYS.
  - INSTALL CHECK DAMS WITHIN DRAINAGE DITCHES AND IN FRONT OF SILT FENCING IN ANY LOW AREA ALL IN ACCORDANCE WITH WDNR TECHNICAL STANDARDS.
  - EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.):
    - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
    - BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
    - DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH THE DEWATERING TECHNICAL STANDARD NO. 1061 PRIOR TO RELEASE INTO THE STORM SEWER, RECEIVING STREAM, OR DRAINAGE DITCH.
  - INSTALL TYPE D INLET PROTECTION AROUND ALL STORM SEWER INLETS AND CATCH BASINS THAT MAY RECEIVE RUNOFF FROM AREAS UNDER CONSTRUCTION.
  - APPLY ANIONIC POLYMER TO DISTURBED AREAS IF EROSION BECOMES PROBLEMATIC.
  - ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED BY STATE INSPECTORS, LOCAL INSPECTORS, AND/OR ENGINEER SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
  - ALL SLOPES EXCEEDING 5:1 (20%) AND DRAINAGE SWALES SHALL BE STABILIZED WITH CLASS I, TYPE B EROSION MATTING OR APPLICATION OF A WOOD APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. CONTRACTOR SHALL PROVIDE PRODUCT SPECIFICATIONS TO PROJECT ENGINEER FOR APPROVAL. SLOPES 3:1 (33%) SHALL BE STABILIZED AS SOON AS PRACTICABLE FOLLOWING GRADING ACTIVITIES ARE COMPLETE.
  - CONTRACTOR/OWNER SHALL FILE A NOTICE OF TERMINATION UPON VEGETATIVE STABILIZATION AND/OR PROPERTY SALE IN ACCORDANCE WITH WISCONSIN SAFETY AND PROFESSIONAL SERVICES REQUIREMENTS.
  - CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO CONTROL DUST ARISING FROM CONSTRUCTION OPERATIONS. REFER TO WDNR TECHNICAL STANDARD 106B.
  - CONTRACTOR TO PROVIDE SOLID LID OR METAL PLATE ON ALL OPEN MANHOLES DURING CONSTRUCTION TO MINIMIZE SEDIMENT FROM ENTERING THE STORM SEWER SYSTEM.
  - ALL APRON ENDWALLS SHALL BE PROVIDED WITH RIP RAP PER DETAILS.

- GRADING AND SEEDING NOTES**
- ALL DISTURBED AREAS SHALL BE SEED AND MULCHED IMMEDIATELY FOLLOWING GRADING ACTIVITIES. SEED MIX TO BE IN ACCORDANCE WITH LANDSCAPE PLAN.
  - ALL PROPOSED GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL VERIFY ALL GRADES, MAKE SURE ALL AREAS DRAIN PROPERLY AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
  - CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES WITH SILT FENCING FOR EROSION CONTROL UNTIL CONSTRUCTION IS COMPLETED AND NOTICE OF TERMINATION FILED.
  - CONTRACTOR SHALL CHISEL-PLow OR DEEP TILL WITH DOUBLE TINES ALL STORMWATER MANAGEMENT FACILITIES JUST PRIOR TO SEEDING AND MULCHING TO PROMOTE INFILTRATION.
  - CONTRACTOR SHALL WATER ALL NEWLY SEEDING AREAS DURING THE SUMMER MONTHS WHENEVER THERE IS A 7 DAY LAPSE WITH NO SIGNIFICANT RAINFALL.
  - CONTRACTOR TO DEEP TILL ALL COMPACTED PEROUS SURFACES PRIOR TO SEEDING AND MULCHING.
  - THE CONTRACTOR SHALL NOTIFY THE CITY OF MADISON TWO (2) WORKING DAYS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
  - IF GRADING ACTIVITIES STOP ON ANY PORTION OF LAND FOR 14 OR MORE CALENDAR DAYS, THE AREA IN QUESTION MUST BE TEMPORARILY STABILIZED.
  - ALL SLOPES 20% OR GREATER SHALL BE TEMPORARILY SEED, MULCHED, OR OTHER MEANS OF COVER PLACED ON THEM WITHIN 2 WEEKS OF DISTURBANCE. ALL SLOPES 33% OR GREATER SHALL BE TEMPORARILY SEED, MULCHED, OR OTHER MEANS OF COVER PLACED ON THEM AS SOON AS PRACTICABLE.

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north

SCALE IN FEET

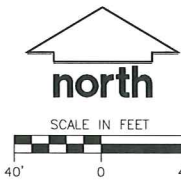
30' 0 30'



# Tennyson Senior Living Community

GRADING & EROSION CONTROL PLAN  
 1" = 30'-0"  
 JUNE 18, 2014  
 Engberg Anderson Project No. 132290

**C200**



- PROPERTY LINE
- BUILDING FIRST FLOOR
- BUILDING LOWER LEVEL
- FUTURE BUILDING ADDITION
- EDGE OF PAVEMENT
- TEMPORARY PAVEMENT EDGE
- TRENCH PATCH LIMITS
- STORM SEWER
- SANITARY SEWER
- WATER SERVICE
- STORM SEWER (BY OTHERS)
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 18" STANDARD CURB & GUTTER
- 18" RECT CURB & GUTTER
- STONE RETAINING WALL (SEE LANDSCAPE PLANS FOR DETAILS)
- FENCE LINE (SEE LANDSCAPE PLANS FOR DETAILS)
- STORMWATER MANAGEMENT AREA
- SITE LIGHTING FIXTURES (SEE LIGHTING PLANS FOR DETAILS)

**GENERAL NOTES**

1. REFER TO THE EXISTING CONDITIONS SURVEY, PROVIDED BY OTHERS, FOR EXISTING CONDITIONS NOTES AND LEGEND. JSD DOES NOT TAKE RESPONSIBILITY FOR ANY BENCHMARKS LOCATED ON THE SURVEY PROVIDED BY OTHERS.
2. ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF MADISON REQUIREMENTS.
3. NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES UNLESS OTHERWISE SHOWN.
4. THIS PROJECT HAS BEEN DESIGNED AND WILL BE CONSTRUCTED IN COMPLIANCE WITH ALL OF THE WDNR WRAPP PERMIT APPLICATION STANDARDS.

**UTILITY NOTES**

1. ALL WORK IN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF MADISON STANDARD CONSTRUCTION SPECIFICATIONS (STANDARD SPECIFICATIONS).
2. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
3. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
4. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.
5. ALL CONSTRUCTION SIGNING TO BE IN ACCORDANCE WITH THE CITY OF MADISON AND WISCONSIN DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
6. PROVIDE DE-WATERING ACTIVITIES AND PERMITS AS NECESSARY PER WDNR REQUIREMENTS AND WDNR TECHNICAL STANDARD 1061.
7. ALL PRIVATE WATER MAIN AND WATER SERVICES SHALL BE INSTALLED WITH A 6' MINIMUM BURY.
8. THE CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVER NIGHT AS REQUIRED.
9. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH ENGINEERING PLANS DESIGNED TO MEET ORDINANCES AND REQUIREMENTS OF THE MUNICIPALITY AND WISDOT, WDCOMM, AND WDNR.
10. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
  - EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
  - OBTAINING ALL PERMITS INCLUDING RELATIVE COSTS, TAP FEES, METER DEPOSITS, BONDS, AND ALL OTHER FEES REQUIRED FOR PROPOSED WORK TO OBTAIN OCCUPANCY.
  - VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCY. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS RESOLVED.
  - NOTIFYING THE DESIGN ENGINEER AND MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION OBSERVATION.
11. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AS-BUILT CONDITIONS OF THE DESIGNATED IMPROVEMENTS IN ORDER THAT THE APPROPRIATE DRAWINGS CAN BE PREPARED, IF REQUIRED. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE ENGINEER AS WORK PROGRESSES.
12. THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.
13. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
14. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF IMPROVEMENTS.
15. OPEN PICK HOLES IN SANITARY MANHOLE CASTING LIDS ARE PROHIBITED.
16. ALL PRIVATE SANITARY BUILDING PIPE AND TUBING SHALL CONFORM TO SPS 384.30-2.
17. ALL PRIVATE STORM BUILDING PIPE AND TUBING SHALL CONFORM TO SPS 384.30-3.
18. ALL PRIVATE PIPE AND TUBING FOR WATER SERVICE SHALL CONFORM TO SPS 384.30-4.
19. ALL PRIVATE PIPE SHALL BE INSTALLED PER SPS 382.40-8 INCLUDING AT LEAST 8' OF HORIZONTAL DISTANCE BETWEEN WATER PIPING AND SANITARY SEWER FROM CENTER OF PIPE TO CENTER OF PIPE AND 6" OF SEPARATION BETWEEN STORM SEWER AND WATER PIPING.
20. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST AND EROSION DURING CONSTRUCTION AT HIS EXPENSE. STREETS SHALL BE WATERED TO CONTROL DUST WHEN ORDERED BY THE ENGINEER.
21. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO BE IN CONFORMANCE WITH THE CITY EROSION CONTROL AND STORMWATER ORDINANCE, AND DNR ADMINISTRATIVE RULE NR 216 AT ALL TIMES.

**PROPOSED BUILDING  
 FIRST FLOOR = 943.50  
 LOWER LEVEL = 932.50**

PROPOSED STORM SEWER STRUCTURES SCHEDULE					
LABEL	INVERT ELEV. (FT)	RIM ELEV. (FT)	DEPTH (FT)	STRUCTURE DESCRIPTION	GRATE
STMMH NO. 1	922.00	926.00	4.00	36" DIA MANHOLE	R-4390-32, IN BELL GRATE
STMMH NO. 2	925.00	928.50	3.50	36" DIA MANHOLE	R-4390-32, IN BELL GRATE
STMMH NO. 3	929.00	933.00	4.00	36" DIA MANHOLE	R-4390-32, IN BELL GRATE
STMMH NO. 4	925.67	927.15	1.48	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 5	925.83	927.35	1.52	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 6	926.44	942.75	13.31	36" DIA MANHOLE	R-4390-32, IN BELL GRATE
STMMH NO. 7	926.48	936.75	7.27	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 8	926.74	936.25	6.51	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 9	930.13	934.00	3.87	48" DIA MANHOLE	R-2050, COMBINATION INLET FRAME, TYPE D GRATE
TRENCH DRAIN NO. 10	930.33	932.45	2.12	18" WIDE TRENCH DRAIN	R-4990-FX, TYPE C COVER
STMMH NO. 11	932.65	934.75	2.10	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 12	935.05	941.11	6.06	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 13	936.21	941.62	5.41	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 14	938.43	941.50	3.07	48" DIA MANHOLE	R-2050, COMBINATION INLET FRAME, TYPE D GRATE
STMMH NO. 15	928.25	928.75	0.50	36" DIA MANHOLE	R-4390-32, IN BELL GRATE
STMMH NO. 16	928.40	932.50	4.10	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 17	927.73	933.28	5.55	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
TRENCH DRAIN NO. 18	926.26	928.45	2.19	18" WIDE TRENCH DRAIN	R-4990-FX, TYPE C COVER
STMMH NO. 19	929.55	932.50	2.95	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 20	929.72	932.50	2.78	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMMH NO. 21	930.22	934.50	4.28	48" DIA MANHOLE	R-2050, COMBINATION INLET FRAME, TYPE D GRATE
STMMH NO. 22	929.57	942.50	12.93	36" DIA MANHOLE	R-4390-32, IN BELL GRATE
STMMH NO. 23	938.60	943.35	4.75	12" ADS DRAIN BASIN	12" SQUARE, H-10 CAST IRON FRAME
STMMH NO. 24	938.60	943.35	4.75	12" ADS DRAIN BASIN	12" SQUARE, H-10 CAST IRON FRAME
STMMH NO. 25	938.65	943.40	4.75	12" ADS DRAIN BASIN	12" SQUARE, H-10 CAST IRON FRAME

PROPOSED STORM SEWER PIPE SCHEDULE							
PIPE LABEL	FROM	TO	LENGTH (FT)	INVERT	DISCHARGE	SLOPE	PIPE SIZE
P-1	STMMH NO. 1	PROPOSED MANHOLE	26	922.00	921.61	1.50%	8" HDPE
P-2	STMMH NO. 2	PROPOSED MANHOLE	8	925.00	924.92	1.00%	8" HDPE
P-3	STMMH NO. 3	PROPOSED MANHOLE	4	929.00	928.93	2.00%	8" HDPE
P-4	APRON ENDWALL	PROPOSED MANHOLE	6	935.50	935.38	2.00%	12" RCP
P-5	STMMH NO. 4	APRON ENDWALL	22	925.67	925.50	0.75%	8" HDPE
P-6	STMMH NO. 5	APRON ENDWALL	22	925.83	925.72	0.50%	8" HDPE
P-7	STMMH NO. 6	APRON ENDWALL	69	926.44	926.75	1.00%	8" HDPE
P-8	STMMH NO. 7	APRON ENDWALL	95	926.48	929.48	0.50%	10" HDPE
P-9	STMMH NO. 8	STMMH NO. 7	43	926.74	929.53	0.50%	10" HDPE
P-10	STMMH NO. 9	STMMH NO. 8	67	930.13	929.79	0.50%	10" HDPE
P-11	TRENCH DRAIN NO. 10	STMMH NO. 9	31	930.33	930.18	0.50%	10" HDPE
P-12	STMMH NO. 11	APRON ENDWALL	15	932.65	932.50	1.00%	12" HDPE
P-13	STMMH NO. 12	STMMH NO. 11	115	935.05	932.75	2.00%	10" HDPE
P-14	STMMH NO. 13	STMMH NO. 12	106	936.21	935.15	1.00%	10" HDPE
P-15	STMMH NO. 14	STMMH NO. 13	108	938.43	938.31	2.00%	10" HDPE
P-16	STMMH NO. 15	APRON ENDWALL	23	925.25	925.13	0.50%	8" HDPE
P-17	STMMH NO. 16	APRON ENDWALL	31	925.40	925.25	0.50%	10" HDPE
P-18	STMMH NO. 17	STMMH NO. 16	56	925.73	925.45	0.50%	10" HDPE
P-19	TRENCH DRAIN NO. 18	STMMH NO. 17	182	926.26	925.76	0.26%	10" HDPE
P-20	STMMH NO. 19	APRON ENDWALL	110	929.55	929.00	0.50%	10" HDPE
P-21	STMMH NO. 20	STMMH NO. 19	24	929.72	929.60	0.50%	10" HDPE
P-22	STMMH NO. 21	STMMH NO. 19	115	930.22	929.65	0.50%	10" HDPE
P-23	STMMH NO. 22	APRON ENDWALL	57	929.57	929.00	1.00%	8" HDPE
P-24	STMMH NO. 23	STMMH NO. 22	24	938.60	938.36	1.00%	8" HDPE
P-25	STMMH NO. 24	STMMH NO. 22	21	938.60	938.39	1.00%	8" HDPE
P-26	STMMH NO. 25	STMMH NO. 24	23	938.65	938.42	1.00%	8" HDPE



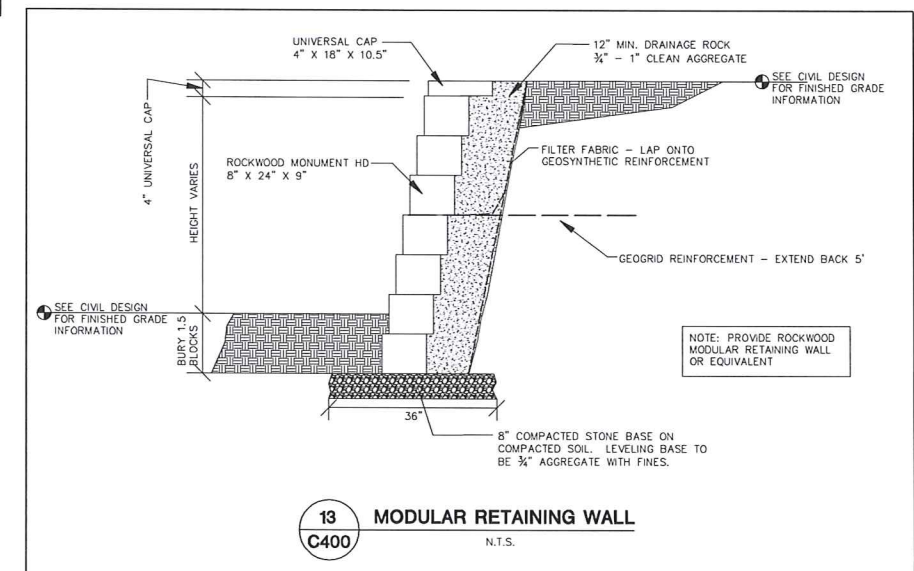
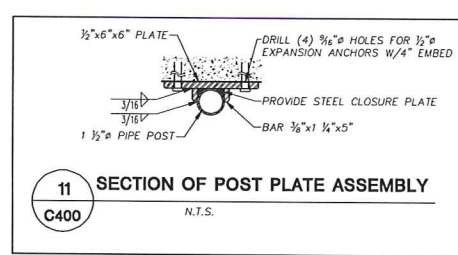
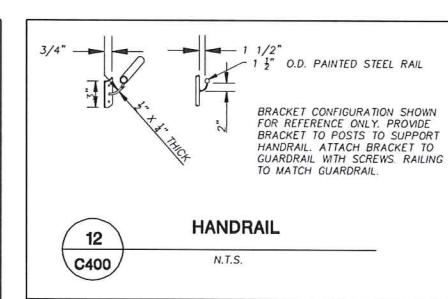
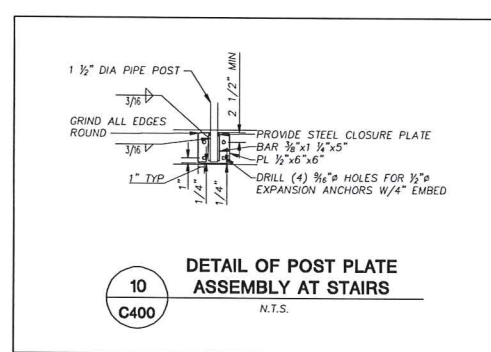
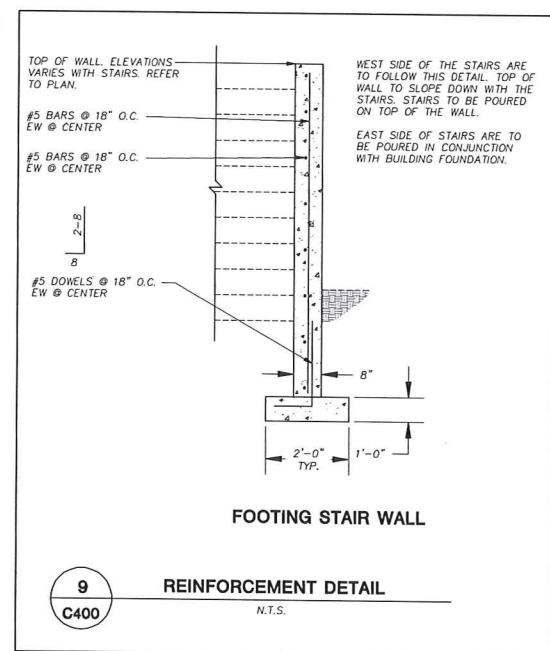
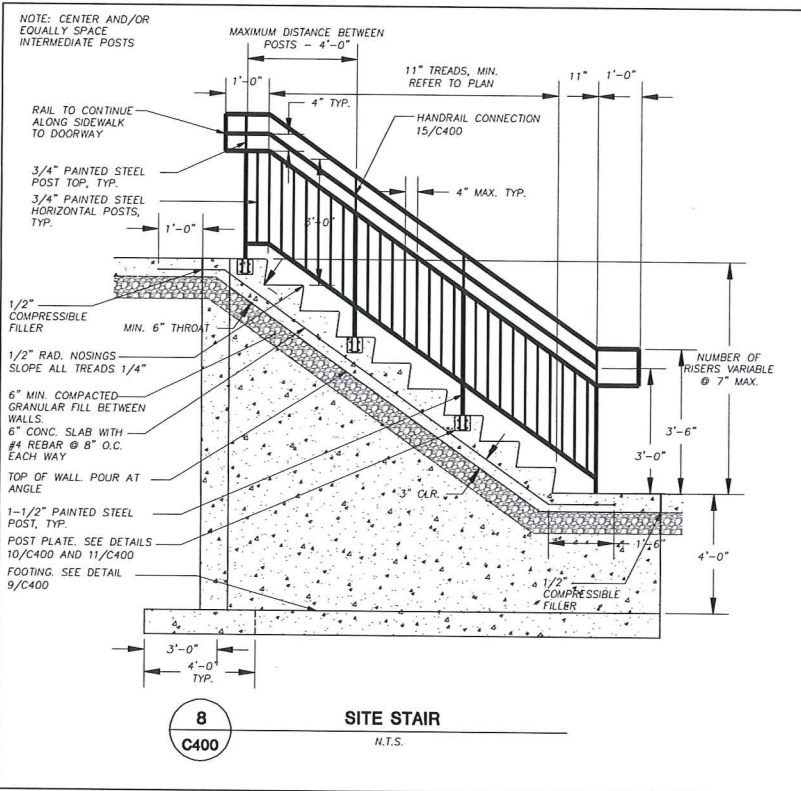
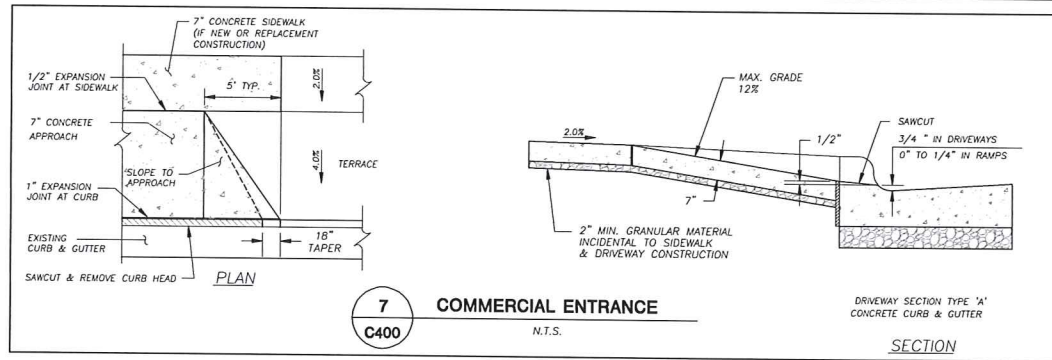
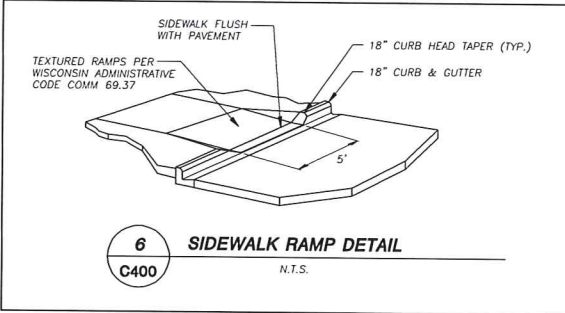
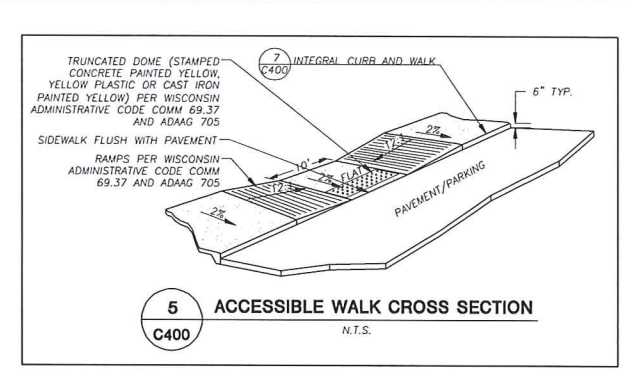
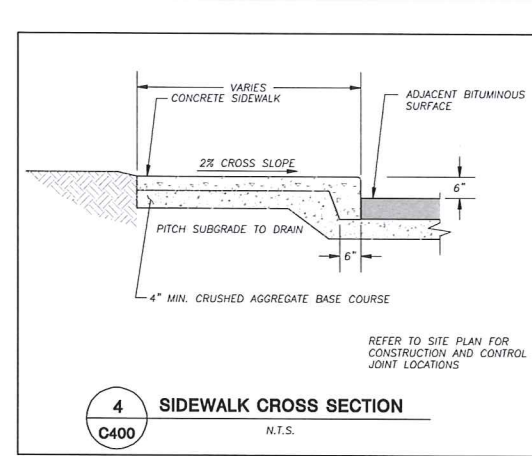
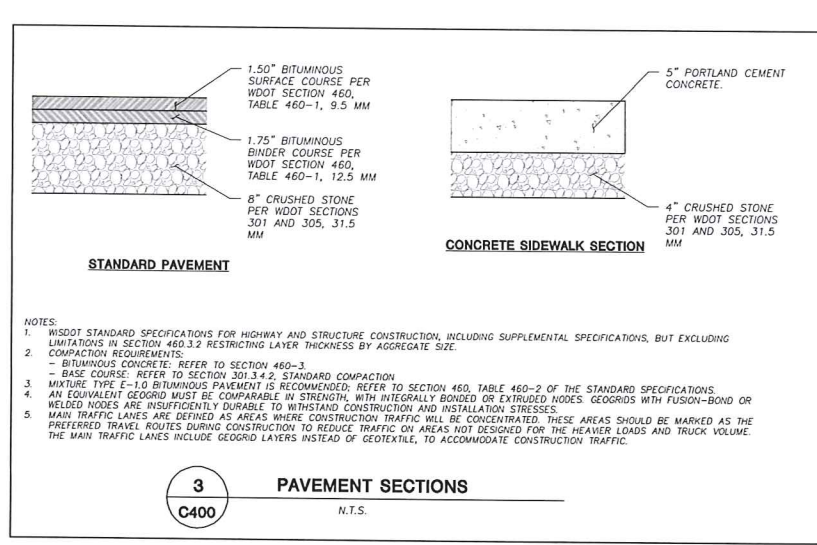
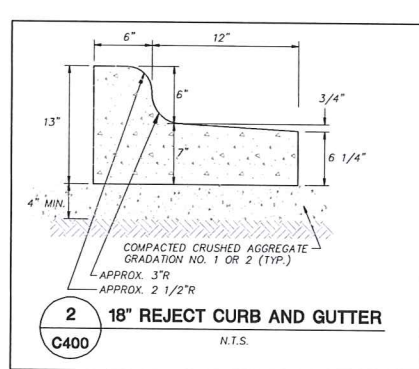
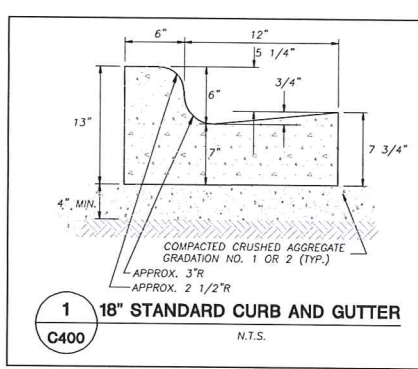
Tennyson Senior Living Community

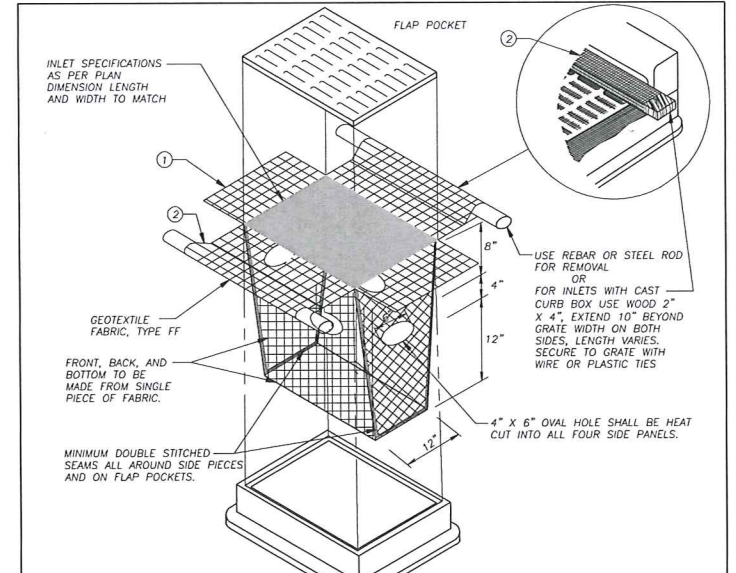
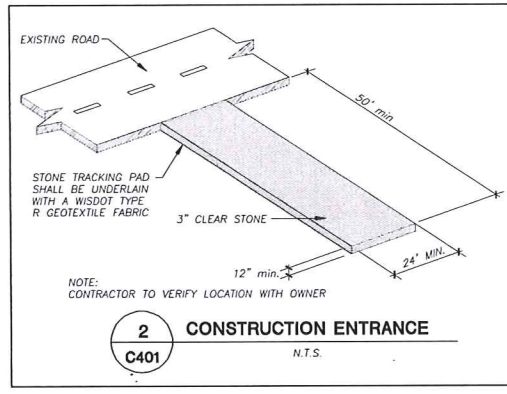
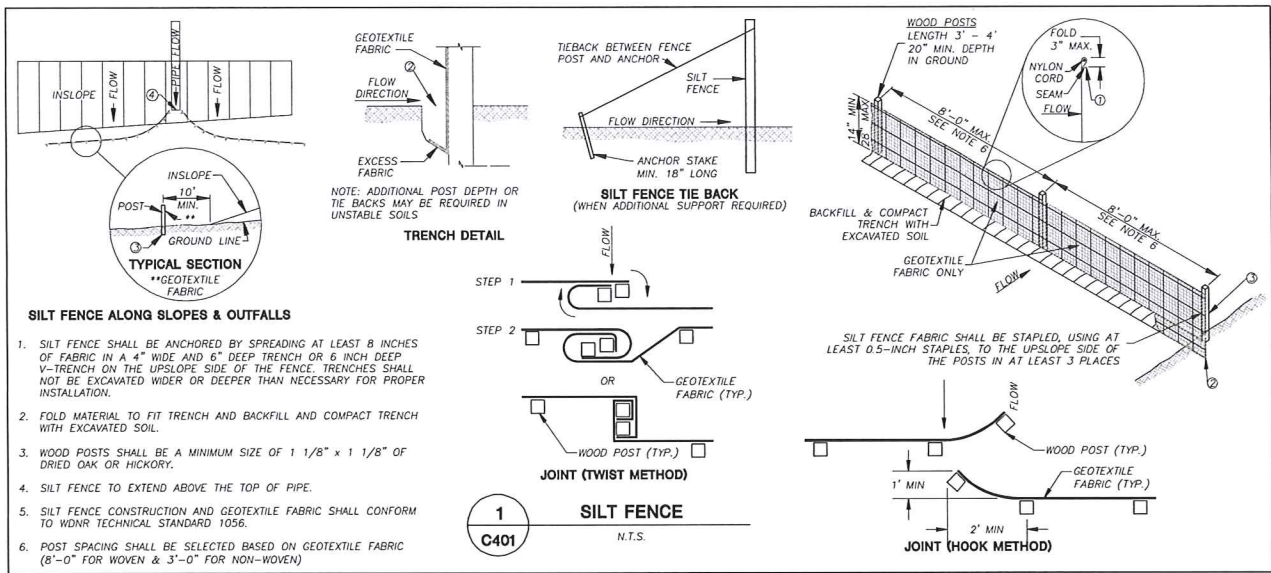
UTILITY PLAN  
 1" = 40'-0"  
 JUNE 18, 2014

Engberg Anderson Project No. 132290

**C300**







**GENERAL NOTES**

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

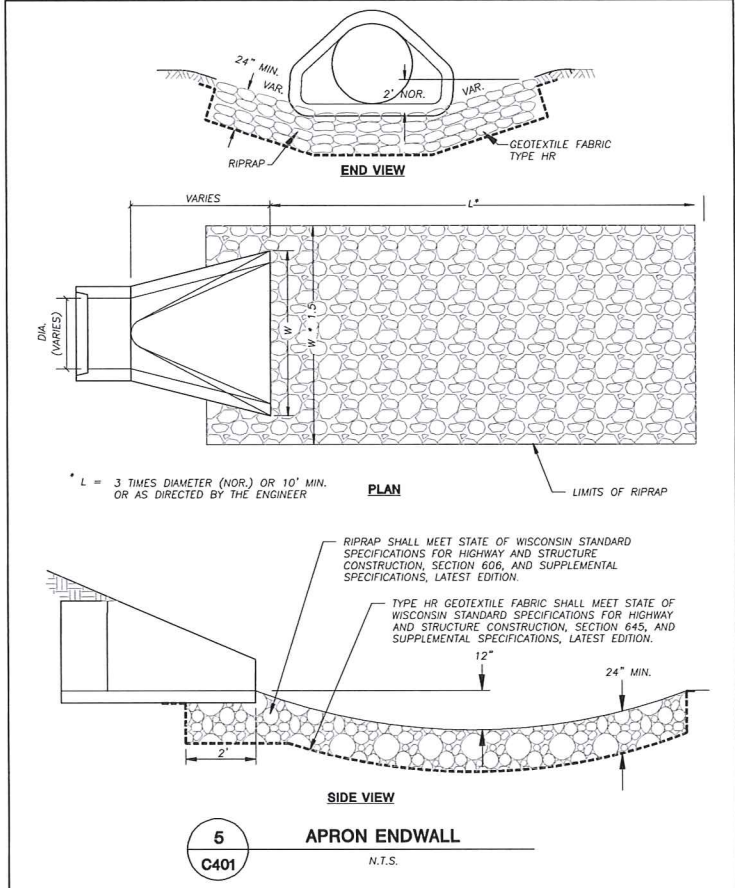
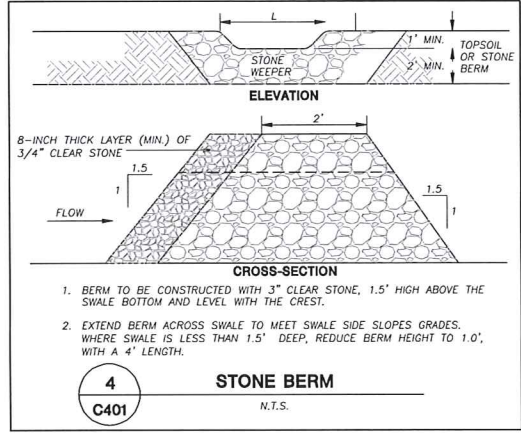
② FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

**INSTALLATION NOTES**

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

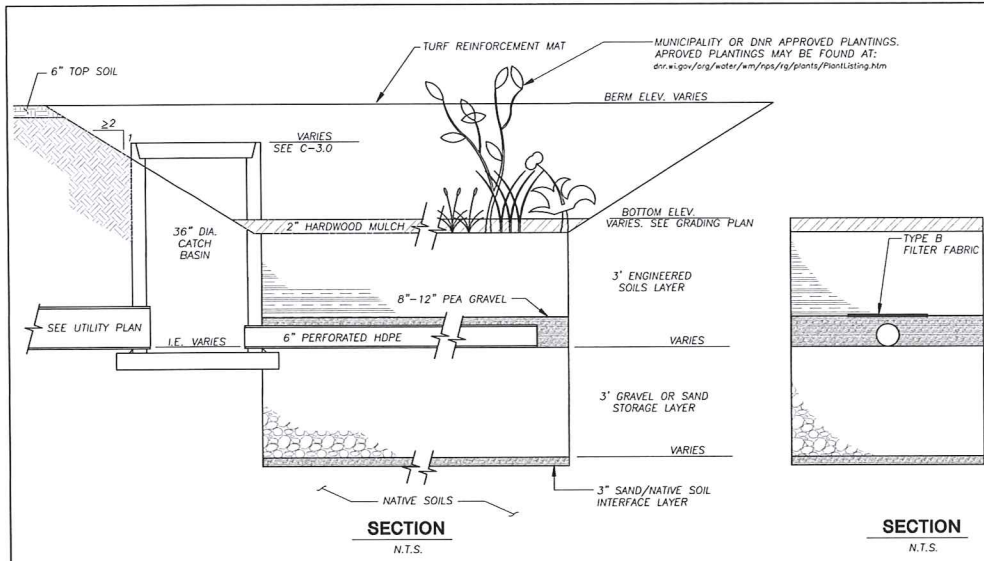


# Tennyson Senior Living Community

## EROSION CONTROL DETAILS

JUNE 18, 2014  
Engberg Anderson Project No. 132290

**C401**

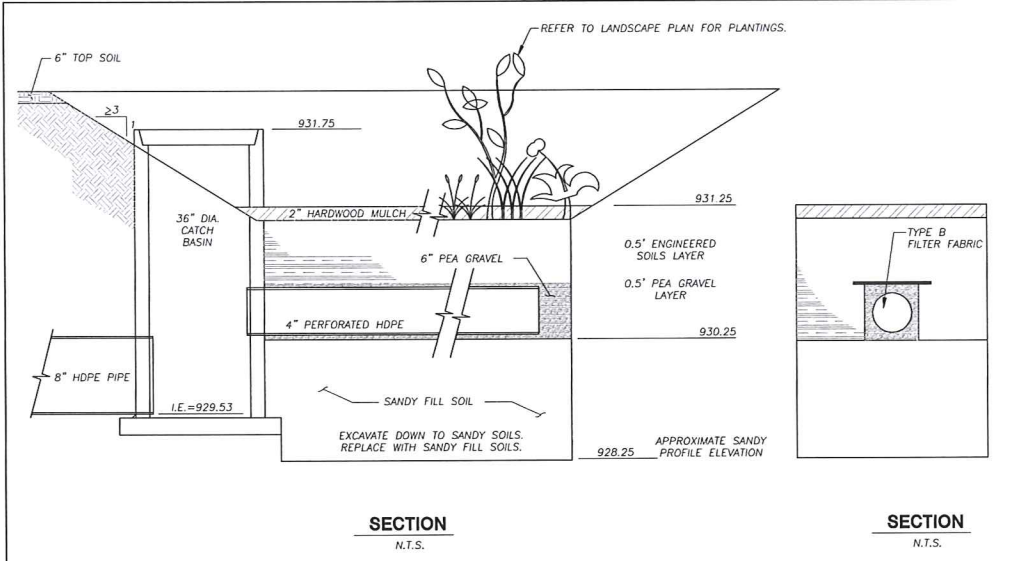


- GENERAL NOTES:**
- ALL CONSTRUCTION PRACTICES SHALL MEET THE SPECIFICATIONS OF THE WDNR TECHNICAL STANDARD 1004 - BIORETENTION FOR INFILTRATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THIS STANDARD AND CONSTRUCT THE BIORETENTION DEVICE IN ACCORDANCE WITH THE REQUIREMENTS OUTLINED THEREIN.
  - CONTRACTOR SHALL INSTALL 36\"/>

INFILTRATION DEVICES ARE DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR), COUNTY, MUNICIPALITY, AND ENGINEERING STANDARD OF CARE. ALL DESIGNATED INFILTRATION AREAS (E.G. RAIN GARDENS, INFILTRATION BASINS, BIORETENTION DEVICES) SHALL BE FENCED PRIOR TO CONSTRUCTION AND REMAIN UNDISTURBED AND PROTECTED DURING THE CONSTRUCTION OF PROPOSED SITE IMPROVEMENTS. PROPOSED BIORETENTION DEVICES SHALL NOT BE CONSTRUCTED UNTIL THE DEVICE'S CONTRIBUTING WATERSHED AREA MEETS ESTABLISHED VEGETATION REQUIREMENTS SET FORTH WITHIN THE RESPECTIVE WDNR TECHNICAL STANDARDS. IF THE LOCATION OF THE INFILTRATION AREA CONFLICTS WITH CONSTRUCTION STAGING AND/OR CONSTRUCTION TRAFFIC AND IS DISTURBED, COMPACTION MITIGATION WILL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR IS REQUIRED TO PROVIDE QUALIFIED STAFF FOR INSPECTION AND OBSERVATION OF THE CONSTRUCTION ACTIVITIES RELATING TO ALL JOB SITE REGULATORY COMPLIANCE INCLUDING THE PROTECTION AND CONSTRUCTION OF ALL STORMWATER MANAGEMENT FEATURES. ANY OBSERVATION OF PLAN OR SITE DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

**1 BIORETENTION DEVICE**  
N.T.S.  
C402

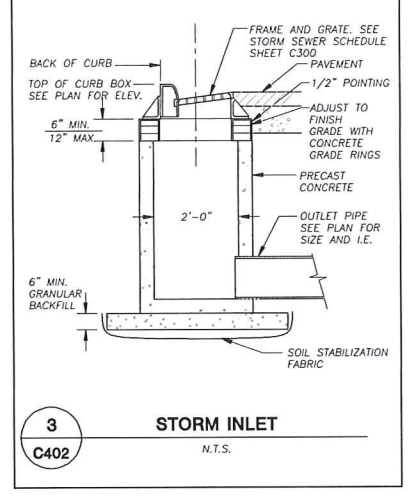


- GENERAL NOTES:**
- CONTRACTOR SHALL INSTALL 6\"/>

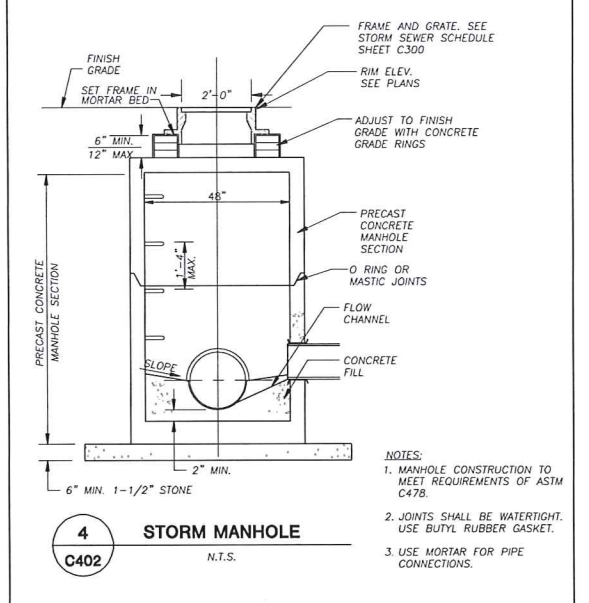
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**2 RAIN GARDEN**  
N.T.S.  
C402

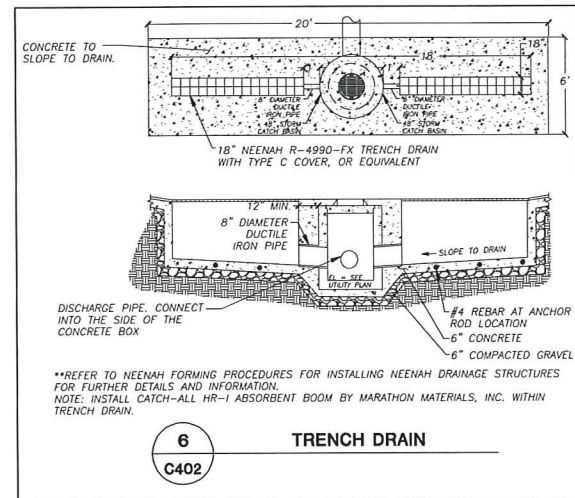


**3 STORM INLET**  
N.T.S.  
C402

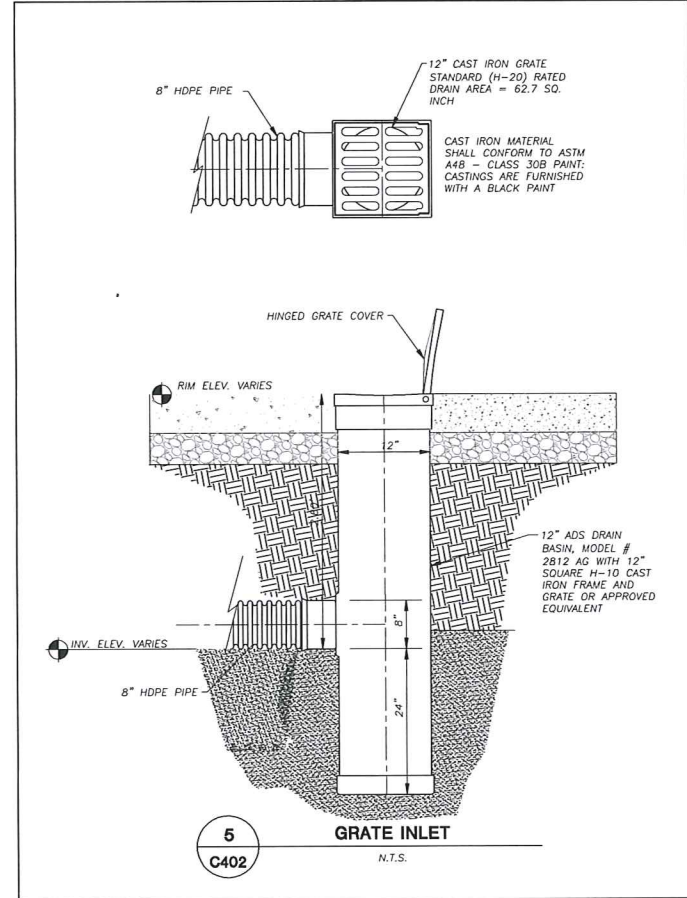


**4 STORM MANHOLE**  
N.T.S.  
C402

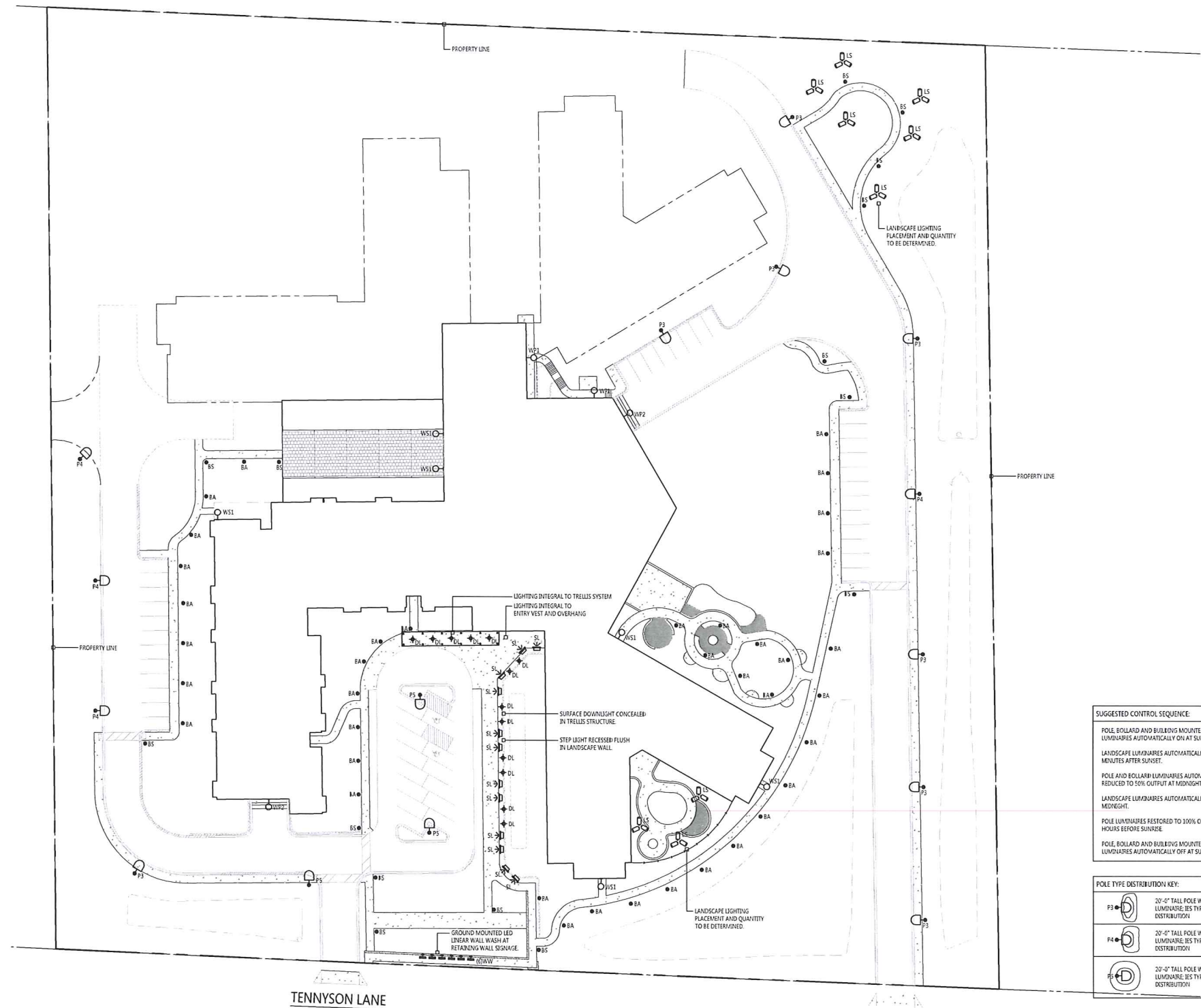
- NOTES:**
- MANHOLE CONSTRUCTION TO MEET REQUIREMENTS OF ASTM C478.
  - JOINTS SHALL BE WATERTIGHT. USE BUTYL RUBBER GASKET.
  - USE MORTAR FOR PIPE CONNECTIONS.



**6 TRENCH DRAIN**  
N.T.S.  
C402



**5 GRATE INLET**  
N.T.S.  
C402



**SUGGESTED CONTROL SEQUENCE:**

- POLE, BOLLARD AND BUILDING MOUNTED LUMINAIRES AUTOMATICALLY ON AT SUNSET.
- LANDSCAPE LUMINAIRES AUTOMATICALLY ON 30 MINUTES AFTER SUNSET.
- POLE AND BOLLARD LUMINAIRES AUTOMATICALLY REDUCED TO 50% OUTPUT AT MIDNIGHT.
- LANDSCAPE LUMINAIRES AUTOMATICALLY OFF AT MIDNIGHT.
- POLE LUMINAIRES RESTORED TO 100% OUTPUT TWO HOURS BEFORE SUNRISE.
- POLE, BOLLARD AND BUILDING MOUNTED LUMINAIRES AUTOMATICALLY OFF AT SUNRISE.

**POLE TYPE DISTRIBUTION KEY:**

- P3: 20'-0" TALL POLE WITH LED LUMINAIRE, BS TYPE 3 DISTRIBUTION
- P4: 20'-0" TALL POLE WITH LED LUMINAIRE, BS TYPE 4 DISTRIBUTION
- P5: 20'-0" TALL POLE WITH LED LUMINAIRE, BS TYPE 5 DISTRIBUTION

**BOLLARD TYPE DISTRIBUTION KEY:**

- BA: 42" TALL PATHWAY LIGHTING BOLLARD WITH ASYMMETRIC LIGHTING DISTRIBUTION TO CONTROL BACK LIGHT.
- BS: 42" TALL PATHWAY LIGHTING BOLLARD WITH SYMMETRICAL LIGHTING DISTRIBUTION.

**CALCULATION SUMMARY**

LABEL	CALC TYPE	UNITS	MIN	AVG	AVG-HOURLY
OVERALL SITE	ILLUMINANCE	FC	0.9	0.37	N/A
EAST ENTRANCE BRIDGE	ILLUMINANCE	FC	0.4	0.81	2.33
EAST PARKING	ILLUMINANCE	FC	0.5	0.78	1.56
SOUTH PARKING	ILLUMINANCE	FC	0.5	1.28	4.30
STAFF PARKING	ILLUMINANCE	FC	0.5	0.95	1.90
WEST ENTRANCE DRIVE	ILLUMINANCE	FC	0.3	1.05	3.50
WEST PARKING	ILLUMINANCE	FC	0.4	0.92	1.53



# Tennyson Senior Living Community

**PRELIMINARY SITE LIGHTING PLAN**  
 1" = 30'-0"  
 May 7, 2014  
 Engberg Anderson Project No. 122200



**SUGGESTED CONTROL SEQUENCE**

POLE BOLLARD AND BUILDING MOUNTED LUMINAIRES AUTOMATICALLY ON AT SUNSET.

LANDSCAPE LUMINAIRES AUTOMATICALLY ON 30 MINUTES AFTER SUNSET.

POLE AND BOLLARD LUMINAIRES AUTOMATICALLY REDUCED TO 50% OUTPUT AT MIDNIGHT.

LANDSCAPE LUMINAIRES AUTOMATICALLY OFF AT MIDNIGHT.

POLE LUMINAIRES RESTORE TO 100% OUTPUT TWO HOURS BEFORE SUNRISE.

POLE BOLLARD AND BUILDING MOUNTED LUMINAIRES AUTOMATICALLY OFF AT SUNRISE.

**POLE TYPE DISTRIBUTION KEY:**

P34 20'-0" TALL POLE WITH LED LUMINAIRES TYPE 3 DISTRIBUTION

P44 20'-0" TALL POLE WITH LED LUMINAIRES TYPE 4 DISTRIBUTION

P54 20'-0" TALL POLE WITH LED LUMINAIRES TYPE 5 DISTRIBUTION

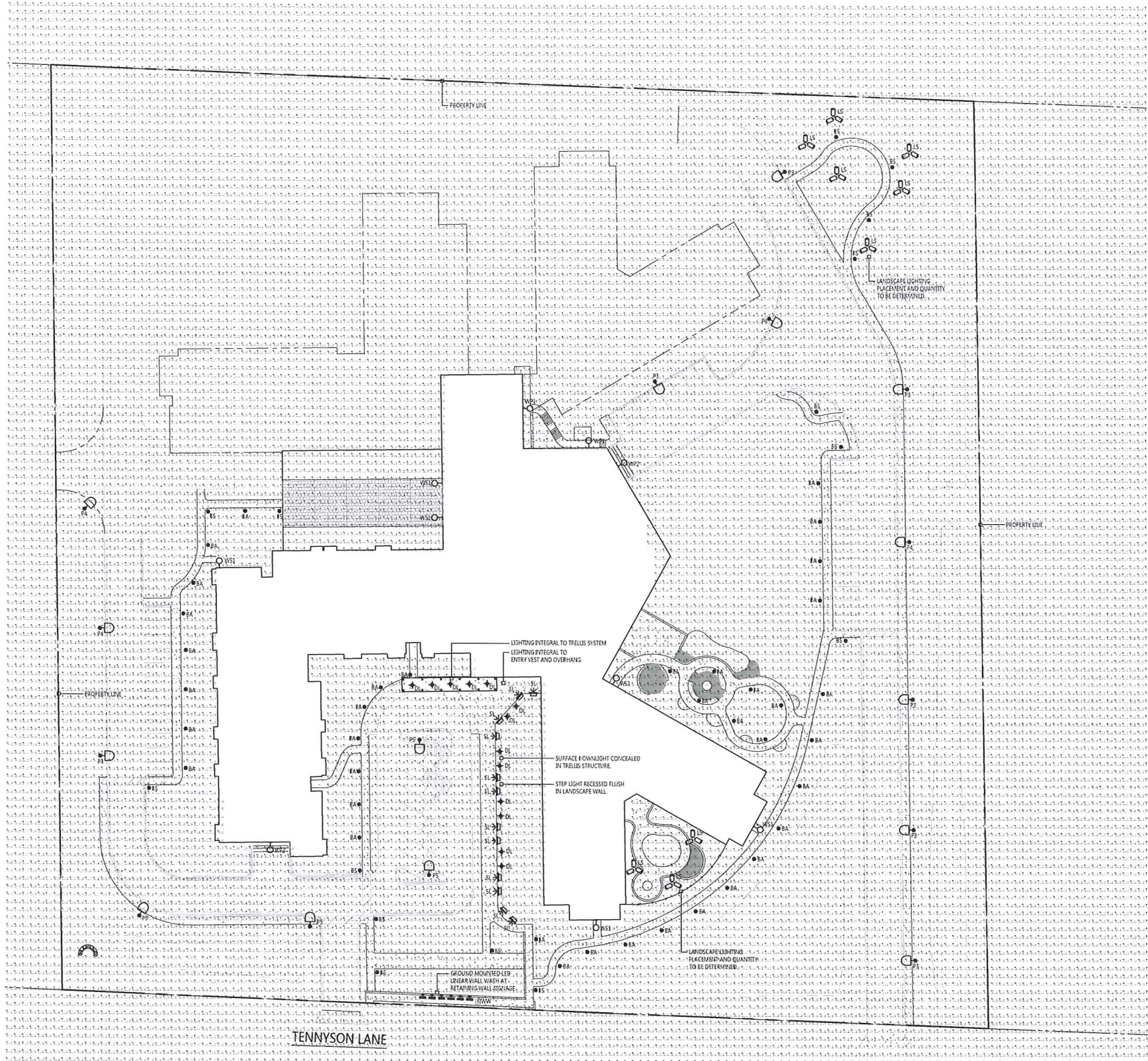
**BOLLARD TYPE DISTRIBUTION KEY:**

BA 42" TALL PATHWAY LIGHTING BOLLARD WITH ASYMMETRIC LIGHTING DISTRIBUTION TO CONTROL BACKLIGHT

BS 42" TALL PATHWAY LIGHTING BOLLARD WITH SYMMETRICAL LIGHTING DISTRIBUTION

**CALCULATION SUMMARY**

LABEL	CALCTYPE	UNITS	MIN	AVG	AVG/MIN
OVERALL SITE	ILLUMINANCE	FC	00	017	N/A
EAST ENTRANCE DRIVE	ILLUMINANCE	FC	04	093	239
EAST PARKING	ILLUMINANCE	FC	05	076	156
SOUTH PARKING	ILLUMINANCE	FC	03	126	420
STAFF PARKING	ILLUMINANCE	FC	05	065	190
WEST ENTRANCE DRIVE	ILLUMINANCE	FC	03	106	330
WEST PARKING	ILLUMINANCE	FC	06	092	153



# Tennysoon Senior Living Community

PRELIMINARY SITE LIGHTING PLAN - ILLUMINANCE CALCULATION

1" = 30'-0"

May 7, 2014

Engberg Anderson Project No. 132000



TYPE P3, P4, P5 POLE

**LITHONIA LIGHTING**

**FEATURES & SPECIFICATIONS**

... (text describing features) ...

**SSA**

**EXAMPLE: D30 LED 400 1000 40K T3M MV02 SPA D30D**

Part No.	Part Name	Quantity	Notes
30100	SSA Pole	1	
30101	SSA Bracket	1	
30102	SSA Mounting Hardware	1	

**RADIATION MEASUREMENT**

... (text describing radiation measurement) ...

**SSA Square Straight Aluminum Poles**

Code	Height (ft)	Height (m)	Length (ft)	Length (m)	Weight (lb)	Weight (kg)	Wind Load (psf)	Wind Load (kN/m²)
SSA10	10	3.05	10	3.05	10	10	10	10
SSA12	12	3.66	12	3.66	12	12	12	12
SSA14	14	4.27	14	4.27	14	14	14	14
SSA16	16	4.88	16	4.88	16	16	16	16
SSA18	18	5.49	18	5.49	18	18	18	18
SSA20	20	6.10	20	6.10	20	20	20	20
SSA22	22	6.71	22	6.71	22	22	22	22
SSA24	24	7.32	24	7.32	24	24	24	24
SSA26	26	7.93	26	7.93	26	26	26	26
SSA28	28	8.54	28	8.54	28	28	28	28
SSA30	30	9.15	30	9.15	30	30	30	30

**LITHONIA LIGHTING**

LUMINAIRE TYPE P5

**D-Series Size 0 LED Area Luminaire**

**Introduction**

The D-Series Size 0 LED Area Luminaire is a high performance, high efficiency, long life, compact luminaire designed for use in a wide variety of applications.

**Specifications**

- Length: 24.5"
- Width: 18"
- Height: 1.5"
- Weight: 1.5 lbs

**EXAMPLE: D30 LED 400 1000 40K T3M MV02 SPA D30D**

Part No.	Part Name	Quantity	Notes
30100	SSA Pole	1	
30101	SSA Bracket	1	
30102	SSA Mounting Hardware	1	

**RADIATION MEASUREMENT**

**Performance Data**

**Lumen Output**

Part No.	Height (ft)	Height (m)	Length (ft)	Length (m)	Weight (lb)	Weight (kg)	Wind Load (psf)	Wind Load (kN/m²)
D30	10	3.05	10	3.05	10	10	10	10
D12	12	3.66	12	3.66	12	12	12	12
D14	14	4.27	14	4.27	14	14	14	14
D16	16	4.88	16	4.88	16	16	16	16
D18	18	5.49	18	5.49	18	18	18	18
D20	20	6.10	20	6.10	20	20	20	20
D22	22	6.71	22	6.71	22	22	22	22
D24	24	7.32	24	7.32	24	24	24	24
D26	26	7.93	26	7.93	26	26	26	26
D28	28	8.54	28	8.54	28	28	28	28
D30	30	9.15	30	9.15	30	30	30	30

**LITHONIA LIGHTING**

**Performance Data**

**Lumen Ambient Temperature (LAT) Multiplier**

Temperature (°F)	Multiplier
68	1.0
70	0.95
75	0.85
80	0.75
85	0.65
90	0.55
95	0.45
100	0.35

**Projected LED Lumen Maintenance**

Hours	Maintenance (%)
1000	95
2000	90
3000	85
4000	80
5000	75
6000	70
7000	65
8000	60
9000	55
10000	50

**FEATURES & SPECIFICATIONS**

... (text describing features) ...

**LITHONIA LIGHTING**

LUMINAIRE TYPE P4

**D-Series Size 0 LED Area Luminaire**

**Introduction**

The D-Series Size 0 LED Area Luminaire is a high performance, high efficiency, long life, compact luminaire designed for use in a wide variety of applications.

**Specifications**

- Length: 24.5"
- Width: 18"
- Height: 1.5"
- Weight: 1.5 lbs

**EXAMPLE: D30 LED 400 1000 40K T3M MV02 SPA D30D**

Part No.	Part Name	Quantity	Notes
30100	SSA Pole	1	
30101	SSA Bracket	1	
30102	SSA Mounting Hardware	1	

**RADIATION MEASUREMENT**

**Performance Data**

**Lumen Output**

Part No.	Height (ft)	Height (m)	Length (ft)	Length (m)	Weight (lb)	Weight (kg)	Wind Load (psf)	Wind Load (kN/m²)
D30	10	3.05	10	3.05	10	10	10	10
D12	12	3.66	12	3.66	12	12	12	12
D14	14	4.27	14	4.27	14	14	14	14
D16	16	4.88	16	4.88	16	16	16	16
D18	18	5.49	18	5.49	18	18	18	18
D20	20	6.10	20	6.10	20	20	20	20
D22	22	6.71	22	6.71	22	22	22	22
D24	24	7.32	24	7.32	24	24	24	24
D26	26	7.93	26	7.93	26	26	26	26
D28	28	8.54	28	8.54	28	28	28	28
D30	30	9.15	30	9.15	30	30	30	30

**LITHONIA LIGHTING**

**Performance Data**

**Lumen Ambient Temperature (LAT) Multiplier**

Temperature (°F)	Multiplier
68	1.0
70	0.95
75	0.85
80	0.75
85	0.65
90	0.55
95	0.45
100	0.35

**Projected LED Lumen Maintenance**

Hours	Maintenance (%)
1000	95
2000	90
3000	85
4000	80
5000	75
6000	70
7000	65
8000	60
9000	55
10000	50

**FEATURES & SPECIFICATIONS**

... (text describing features) ...

**LITHONIA LIGHTING**

LUMINAIRE TYPE P3

**D-Series Size 0 LED Area Luminaire**

**Introduction**

The D-Series Size 0 LED Area Luminaire is a high performance, high efficiency, long life, compact luminaire designed for use in a wide variety of applications.

**Specifications**

- Length: 24.5"
- Width: 18"
- Height: 1.5"
- Weight: 1.5 lbs

**EXAMPLE: D30 LED 400 1000 40K T3M MV02 SPA D30D**

Part No.	Part Name	Quantity	Notes
30100	SSA Pole	1	
30101	SSA Bracket	1	
30102	SSA Mounting Hardware	1	

**RADIATION MEASUREMENT**

**Performance Data**

**Lumen Output**

Part No.	Height (ft)	Height (m)	Length (ft)	Length (m)	Weight (lb)	Weight (kg)	Wind Load (psf)	Wind Load (kN/m²)
D30	10	3.05	10	3.05	10	10	10	10
D12	12	3.66	12	3.66	12	12	12	12
D14	14	4.27	14	4.27	14	14	14	14
D16	16	4.88	16	4.88	16	16	16	16
D18	18	5.49	18	5.49	18	18	18	18
D20	20	6.10	20	6.10	20	20	20	20
D22	22	6.71	22	6.71	22	22	22	22
D24	24	7.32	24	7.32	24	24	24	24
D26	26	7.93	26	7.93	26	26	26	26
D28	28	8.54	28	8.54	28	28	28	28
D30	30	9.15	30	9.15	30	30	30	30

**LITHONIA LIGHTING**

**Performance Data**

**Lumen Ambient Temperature (LAT) Multiplier**

Temperature (°F)	Multiplier
68	1.0
70	0.95
75	0.85
80	0.75
85	0.65
90	0.55
95	0.45
100	0.35

**Projected LED Lumen Maintenance**

Hours	Maintenance (%)
1000	95
2000	90
3000	85
4000	80
5000	75
6000	70
7000	65
8000	60
9000	55
10000	50

**FEATURES & SPECIFICATIONS**

... (text describing features) ...

**LITHONIA LIGHTING**



### LUMINAIRE TYPE WW

#### HYDREL RHYTHM™ LINEAR LED FLOOD

**DESCRIPTION:** The RHYTHM™ Linear LED Flood is a high-performance, energy-efficient lighting fixture designed for outdoor use. It features a rugged, weather-resistant housing and a long-life LED light source. The fixture is available in various lengths and mounting options to suit a wide range of applications.

**SPECIFICATIONS:**  
 MATERIAL: Die-cast aluminum housing with a powder-coated finish.  
 LED: High-efficiency LED chips with a long life expectancy.  
 MOUNTING: Adjustable surface mount (SM), pole mount (PM), or recessed mount (RM).  
 DIMENSIONS: Lengths range from 12" to 48". Mounting height is adjustable.  
 POWER: Available in 100W, 150W, and 200W configurations.  
 TEMPERATURE: Operating temperature range from -40°C to 50°C.  
 DISTRIBUTION: 12" to 48" lengths. 12" length is standard. 18" length is available. 24" length is available. 30" length is available. 36" length is available. 42" length is available. 48" length is available.

#### RHYTHM ORDERING INFORMATION

Ordering information table with columns for Model, LED Color, Mounting Options, and Accessories. Includes a section for LIGHT ENGINE SPECIFICATIONS with a table of beam angles and footcandle outputs.

Beam Angle	12" Length	18" Length	24" Length	30" Length	36" Length	42" Length	48" Length
15°	1000	1500	2000	2500	3000	3500	4000
30°	500	750	1000	1250	1500	1750	2000
45°	330	500	660	830	1000	1170	1330
60°	250	375	500	625	750	875	1000
75°	167	250	330	410	500	580	660
90°	125	188	250	310	375	450	500

### LUMINAIRE TYPE LS

#### LITHONIA LIGHTING OLB

**FEATURES & SPECIFICATIONS:** The OLB (Outdoor LED Bulb) is a compact, energy-efficient lighting fixture. It is designed for use in outdoor environments and offers a long service life. The fixture is available in various sizes and mounting options.

**DESCRIPTION:** The OLB is a compact, energy-efficient lighting fixture designed for outdoor use. It features a rugged, weather-resistant housing and a long-life LED light source. The fixture is available in various sizes and mounting options to suit a wide range of applications.

**SPECIFICATIONS:**  
 MATERIAL: Die-cast aluminum housing with a powder-coated finish.  
 LED: High-efficiency LED chips with a long life expectancy.  
 MOUNTING: Surface mount (SM), pole mount (PM), or recessed mount (RM).  
 DIMENSIONS: Lengths range from 12" to 48". Mounting height is adjustable.  
 POWER: Available in 100W, 150W, and 200W configurations.  
 TEMPERATURE: Operating temperature range from -40°C to 50°C.

#### OLB LED Bulb Flood Light

Lighting facts table for OLB LED Bulb Flood Light. Includes a section for Projected LED Linear Maintenance and Electrical Load.

Model	Length	Power	Beam Angle	Footcandle @ 10'
OLB-12	12"	100W	15°	1000
OLB-18	18"	150W	15°	1500
OLB-24	24"	200W	15°	2000
OLB-30	30"	250W	15°	2500
OLB-36	36"	300W	15°	3000
OLB-42	42"	350W	15°	3500
OLB-48	48"	400W	15°	4000

### LUMINAIRE TYPE BS

#### D-Series LED Bulb

**DESCRIPTION:** The D-Series LED Bulb is a compact, energy-efficient lighting fixture. It is designed for use in outdoor environments and offers a long service life. The fixture is available in various sizes and mounting options.

**SPECIFICATIONS:**  
 MATERIAL: Die-cast aluminum housing with a powder-coated finish.  
 LED: High-efficiency LED chips with a long life expectancy.  
 MOUNTING: Surface mount (SM), pole mount (PM), or recessed mount (RM).  
 DIMENSIONS: Lengths range from 12" to 48". Mounting height is adjustable.  
 POWER: Available in 100W, 150W, and 200W configurations.  
 TEMPERATURE: Operating temperature range from -40°C to 50°C.

#### D-Series LED Bulb

Lighting facts table for D-Series LED Bulb. Includes a section for Projected LED Linear Maintenance and Electrical Load.

Model	Length	Power	Beam Angle	Footcandle @ 10'
BS-12	12"	100W	15°	1000
BS-18	18"	150W	15°	1500
BS-24	24"	200W	15°	2000
BS-30	30"	250W	15°	2500
BS-36	36"	300W	15°	3000
BS-42	42"	350W	15°	3500
BS-48	48"	400W	15°	4000

### LUMINAIRE TYPE BA

#### D-Series LED Bulb

**DESCRIPTION:** The D-Series LED Bulb is a compact, energy-efficient lighting fixture. It is designed for use in outdoor environments and offers a long service life. The fixture is available in various sizes and mounting options.

**SPECIFICATIONS:**  
 MATERIAL: Die-cast aluminum housing with a powder-coated finish.  
 LED: High-efficiency LED chips with a long life expectancy.  
 MOUNTING: Surface mount (SM), pole mount (PM), or recessed mount (RM).  
 DIMENSIONS: Lengths range from 12" to 48". Mounting height is adjustable.  
 POWER: Available in 100W, 150W, and 200W configurations.  
 TEMPERATURE: Operating temperature range from -40°C to 50°C.

#### D-Series LED Bulb

Lighting facts table for D-Series LED Bulb. Includes a section for Projected LED Linear Maintenance and Electrical Load.

Model	Length	Power	Beam Angle	Footcandle @ 10'
BA-12	12"	100W	15°	1000
BA-18	18"	150W	15°	1500
BA-24	24"	200W	15°	2000
BA-30	30"	250W	15°	2500
BA-36	36"	300W	15°	3000
BA-42	42"	350W	15°	3500
BA-48	48"	400W	15°	4000

### LUMINAIRE TYPE WP1 / WP2

#### D-Series Size 1 LED Wall Luminaire

**DESCRIPTION:** The D-Series Size 1 LED Wall Luminaire is a compact, energy-efficient lighting fixture. It is designed for use in outdoor environments and offers a long service life. The fixture is available in various sizes and mounting options.

**SPECIFICATIONS:**  
 MATERIAL: Die-cast aluminum housing with a powder-coated finish.  
 LED: High-efficiency LED chips with a long life expectancy.  
 MOUNTING: Surface mount (SM), pole mount (PM), or recessed mount (RM).  
 DIMENSIONS: Lengths range from 12" to 48". Mounting height is adjustable.  
 POWER: Available in 100W, 150W, and 200W configurations.  
 TEMPERATURE: Operating temperature range from -40°C to 50°C.

#### D-Series Size 1 LED Wall Luminaire

Lighting facts table for D-Series Size 1 LED Wall Luminaire. Includes a section for Projected LED Linear Maintenance and Electrical Load.

Model	Length	Power	Beam Angle	Footcandle @ 10'
WP1-12	12"	100W	15°	1000
WP1-18	18"	150W	15°	1500
WP1-24	24"	200W	15°	2000
WP1-30	30"	250W	15°	2500
WP1-36	36"	300W	15°	3000
WP1-42	42"	350W	15°	3500
WP1-48	48"	400W	15°	4000

### LUMINAIRE TYPE SL

Released wall luminaire with directed light. Technical drawing showing dimensions and mounting options.

### LUMINAIRE TYPE DL

LED Ceiling-mounted downlight - narrow beam. Technical drawing showing dimensions and mounting options.

