



US Army Corps  
of Engineers  
St Paul District

**APPLICANT:** Lennar Corporation, c/o  
Ms. Carole Toohey

# **Public Notice**

**ISSUED:** June 18, 2014

**EXPIRES:** July 18, 2014

**REFER TO:** MVP-2012-04024-SEW

**SECTION:404 - Clean Water Act**

1. APPLICATION FOR PERMIT TO discharge dredged and fill material into approximately 5.98 acres of wetlands adjacent to a tributary of the Vermillion River.

## 2. SPECIFIC INFORMATION.

### APPLICANT'S ADDRESS:

Lennar Corporation  
16305 36<sup>th</sup> Avenue North, Suite 600  
Plymouth, MN 55446

### AGENT:

Mr. Ben Carlson  
Kjolhaug Environmental Services Company  
26105 Wild Rose Lane  
Shorewood, MN 55331

**PROJECT LOCATION:** The project site is located in the N ½ of Section 20, T. 114N., R. 20W., Dakota County, Minnesota. The project is located west of Holyoke Avenue, north of 194<sup>th</sup> Street West, east of Dodd Boulevard, and south of 190<sup>th</sup> Street West in the City of Lakeville. The approximate UTM coordinates are -93.247830W., 44.668905N.

**DESCRIPTION OF PROJECT:** Lennar Corporation proposes to construct a 139-lot, single-family residential development called "Summerlyn Park Development" on a 75-acre property in the City of Lakeville. The site would provide access from Holyoke Avenue and 194<sup>th</sup> Street West. The project includes grading for building pads, roads, and utilities, and is expected to begin in 2014/2015. The applicant anticipates that the necessary infrastructure would be completed in 2016, and the homes would be finished in 2018. The purpose of the project is to meet demand for single family homes in the City of Lakeville.

The project site includes an approximately 8.7-acre emergent, seasonally flooded basin wetland. The wetland would be impacted by an east-west residential road crossing for the construction of Hillcrest Avenue. The City of Lakeville is requiring that an east-west roadway cross the wetland area, which bisects the site in a north-south fashion, in order to provide sufficient access to the community by safety vehicles. Hillcrest Avenue was designed to City of Lakeville standards, and would include a 32-foot road width, a 14-foot wide boulevard, a five-foot sidewalk on both sides, and 3H:1V sideslopes. A 170-foot long, 48-inch diameter reinforced concrete pipe would be installed under the road where it crosses the wetland. Class III riprap would be installed at the culvert's outlet, and the culvert would have an inlet elevation of 1004.00 feet and an outlet elevation of 996.00 feet.

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The wetland would also be impacted by the construction of a stormwater pond. The stormwater pond would be constructed on the north end of the wetland, where the wetland includes a shallow, eroded channel. The wetland channel carries water and sediment from the northern 120 acres of agricultural fields. The purpose of the stormwater pond would be to intercept this sediment and allow it to settle out before discharging downstream. The City of Lakeville has noted that sediment from this location has ended up as far as a mile downstream in a restored wetland area; thus, the purpose of the stormwater pond is to reduce sediment inputs downstream by slowing the flow of water following rain events, and reducing further erosion in the wetland.

The south part of the wetland is planned to be restored by the applicant and the City of Lakeville in conjunction with the residential development project. The applicant would grade and seed the wetland restoration area, and the City would maintain the wetland area in the future. Approximately 5.43 acres of the existing seasonally-flooded wetland on the south part of the site would be restored to a seasonally-flooded basin wetland type through grading, spraying and tilling of invasive plant species, and seeding work. The wetland would be seeded with BWSR native seed mixes, including “wet meadow south and west” (BWSR 34-271), and “emergent wetland” (BWSR 34-181), and the upland buffer would be seeded with a native prairie mix (“mesic prairie general”, BWSR 35-241). The wetland area would have an undulating bottom, and some of the depressional areas may hold water following large precipitation events. Three reinforced concrete pipes would be installed in the restored southern wetland area to connect the wetland area to another wetland area located immediately south of the project area and north of 194<sup>th</sup> Street West. The pipes would be buried under the ground surface, and Class III riprap would be placed at each outlet. The pipe locations and elevations are shown on the attached Figures 5, 6, 7, and 9.

Additionally, two other areas of the channelized portion of the wetland on the north half of the site would be re-graded, seeded, and restored to a seasonally-flooded wetland type. These two areas would be located on either side of the stormwater pond area.

Finally, the City of Lakeville would require a 25-foot buffer around the wetland area. A 20-foot setback from the buffer would be required for rear yard property lines, and a 10-foot setback from the buffer would be required from side yard property lines. As required by the City of Lakeville, signs stating wetland restrictions would be placed on buffer edges that intersect with lot boundaries.

**QUANTITY, TYPE, AND AREA OF FILL:** Approximately 5.98 acres of a seasonally flooded basin wetland that is adjacent to a tributary of the Vermillion River would be permanently impacted by the proposed project. A table of the proposed impacts is attached (Table 1 of 1), while the locations of each proposed impact is shown on the attached Figure 8. The wetland would be permanently impacted by fill for the Hillcrest Avenue road crossing, and by fill resulting from grading and excavating the stormwater basin and the restored wetland areas.

**VEGETATION IN AFFECTED AREA:** The project site includes an approximately 8.7-acre emergent, seasonally flooded basin wetland (“Wetland 1”) that was delineated in 2012 by Arrowhead Environmental Consulting. At the time of the delineation, the wetland was highly disturbed by farming and tilling activities, and was mostly devoid of vegetation. The north part of the wetland forms a shallow channel that is approximately a half foot to one foot deep and five-to-ten feet wide; the channel carries water from the northern 120-acres of agricultural fields following rain events. The wetland channel has a 10-foot wide saturated fringe area. The northern channel portion of the wetland was disturbed by corn planting in 2012. The southern portion of the wetland is a seasonally flooded wetland that was avoided by planting in 2012, and was dominated by land’s quarters along the edge of

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the wetland, and yellow nut-sedge and giant ragweed throughout the wetland. The application states the wetland is now dominated by reed canary grass.

**SOURCE OF FILL MATERIAL:** The source of fill material for the road crossing is expected to be obtained from a local or licensed source. The fill material resulting from grading work would be from native, on-site soil material.

**SURROUNDING LAND USE:** The proposal is located on a property that is zoned for residential development. Residential developments exist to the west, south, and east sides of the property. The land north of the site is currently in agricultural land use, but is expected to be developed into residential use in the near future. Additional agricultural land lies in the two Sections east of the site, and this agricultural land is surrounded on four sides by development in the City of Lakeville. A school exists immediately southwest of the site, and a wetland complex lies west of the site and south of another residential development. Lake Marion lies about a mile west/southwest of the site.

**DESCRIPTION OF STRUCTURE:** See above for a description of the proposed road crossing in Wetland 1.

**DESCRIPTION OF DREDGING OR EXCAVATION:** See above discussion and the attached table and figures for additional information on the proposed excavation work in Wetland 1.

**THE FOLLOWING POTENTIALLY TOXIC MATERIALS COULD BE USED AT THE PROJECT SITE:** Construction of the project may involve potentially toxic materials from the use of equipment, such as fuels, lubricants, and solvents, and the use of herbicides to control invasive species in the wetland restoration areas. Specific types of products, quantities, and specific applications of these materials were not provided with the application.

**THE FOLLOWING PRECAUTIONS TO PROTECT WATER QUALITY HAVE BEEN DESCRIBED BY THE APPLICANT:** The applicant would employ the following erosion control best management practices in various locations around the wetland area: catch basin inlet protections, perimeter and secondary silt fence, heavy duty silt fence, erosion control blanket, rock construction entrances, straw biorolls, and rock berms.

**MITIGATION:** The applicant proposes to provide compensatory mitigation for 10,203 square feet (0.23 acre) of unavoidable permanent and adverse wetland impacts to Wetland 1 through the purchasing of 0.47 wetland credits (2:1 ratio) from the Minnesota Wetland Bank. The permanent and adverse impacts that the applicant proposes to compensate for are the Hillcrest Avenue road crossing and the stormwater pond construction. The applicant proposes to purchase 0.47 fresh (wet) meadow credits from Account 1473 (Thomas Mariska Bank), which is Corps-approved and located in Waseca County, major watershed 39 (Cannon River), Bank Service Area 8. The proposed wetland impacts are located in major watershed 38 (Mississippi River & Lake Pepin), Bank Service Area 8. Final compensatory mitigation requirements will be determined by the Corps following evaluation of the proposal.

**3. REPLIES/COMMENTS.**

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Interested parties are invited to submit to this office written facts, arguments, or objections within 30 days of the date of this notice. These statements should bear upon the suitability of the location and the adequacy of the project and should, if appropriate, suggest any changes believed to be desirable. Comments received may be forwarded to the applicant.

Replies may be addressed to Regulatory Branch, St. Paul District, Corps of Engineers, 180 Fifth Street East, Suite 700, Saint Paul, MN 55101-1678.

Or, IF YOU HAVE QUESTIONS ABOUT THE PROJECT, call Sarah Wingert at the St. Paul office of the Corps, telephone number (651) 290-5358.

To receive Public Notices by e-mail, go to: [http://mvp-extstp.mvp.usace.army.mil/list\\_server/](http://mvp-extstp.mvp.usace.army.mil/list_server/) and add your information in the New Registration Box.

**4. FEDERALLY-LISTED THREATENED OR ENDANGERED WILDLIFE OR PLANTS OR THEIR CRITICAL HABITAT.**

None were identified by the applicant or are known to exist in the permit area. However, Dakota County is within the known or historic range of the following Federally-listed threatened (T) and endangered (E) species:

Species

- Higgins' eye pearl mussel (E)
- Prairie bush clover (T)
- Northern long-eared bat (Proposed as E)

Habitat

- Mississippi River
- Native prairie on well-drained soils
- Hibernates in caves and mines, and swarms in surrounding wooded areas in autumn; roosts and forages in upland forests during spring and summer.

This application is being coordinated with the U.S. Fish and Wildlife Service. Any comments it may have concerning Federally-listed threatened or endangered wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

**5. JURISDICTION.**

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 08-02. We have made an initial determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act and/or Section(s) 9 & 10 of the Rivers and Harbors Act. The Corps will prepare an approved or preliminary jurisdictional determination prior to making a permit decision. Approved jurisdictional determinations are posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.

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THE APPLICANT HAS STATED THAT THE FOLLOWING STATE, COUNTY, AND/OR LOCAL PERMITS HAVE BEEN APPLIED FOR/ISSUED: Local grading and land use permits are in process.

**6. STATE SECTION 401 WATER QUALITY CERTIFICATION.**

Valid Section 404 permits cannot be issued for any activity unless state water quality certification for the activity is granted or waived pursuant to Section 401 of the Clean Water Act. The state Section 401 authority in Minnesota is the Minnesota Pollution Control Agency (MPCA). The St. Paul District has provided this public notice and a copy of the applicant's Section 404 permit application form to the MPCA. If MPCA needs any additional information in order for the Section 401 application to be considered complete by MPCA, the MPCA has indicated that it will request such information from the applicant. It is the permit applicant's responsibility to ensure that the MPCA has received a valid, complete application for state Section 401 certification and to obtain a final Section 401 action from the MPCA.

The MPCA has indicated that this public notice serves as its public notice of the application for Section 401 water quality certification under Minnesota Rules Part 7001. The MPCA has also indicated that the Section 401 process shall begin to commence upon the issuance date of this public notice unless the MPCA notifies both the St. Paul District and the permit applicant to the contrary, in writing, before the expiration date of this public notice.

Any comments relative to MPCA's Section 401 Certification for the activity proposed in this public notice may be sent to:

Minnesota Pollution Control Agency, Resource Management and Assistance Division,  
Attention: 401 Certification, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

**7. HISTORICAL/ARCHAEOLOGICAL.**

This public notice is being sent to the National Park Service and the State Archaeologist for their comments. The Corps will review information on known cultural resources and/or historic properties within and adjacent to the project area. The Corps will also consider the potential effects of the project on any properties that have yet to be identified. The results of this review and the Corps' determination of effect will be coordinated with the State Historic Preservation Officer independent of this public notice. Any adverse effects on historic properties will be resolved prior to the Corps authorization, or approval, of the work in connection with this project.

The latest version of the National Register of Historic Places has been consulted and no listed properties (known to be eligible for inclusion, or included in the Register) are located in or adjacent to the project area.

**8. PUBLIC HEARING REQUESTS.**

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, in detail, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided or if there is otherwise no valid interest to be served.

**9. PUBLIC INTEREST REVIEW.**

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The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. Environmental and other documents will be available for review in the St. Paul District Office.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Chad Konickson  
Chief, Southwest Section

Enclosures

NOTICE TO EDITORS: This public notice is provided as background information and is not a request or contract for publication.

Table 1 of 1: Proposed Impacts to Wetland 1

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T)	Size of Impact (square feet)	Size of Impact (acre)	Overall Size of Aquatic Resource (acre)	Existing Plant Community Type(s) in Impact Area	County, Major Watershed #, and Bank Service Area # of Impact Area
Area 1	wetland	excavation to restore	P	5,829	0.13	8.7	seasonally flooded basin	Dakota, WS #38, BSA #8
Area 2	wetland	excavation to build stormwater pond	P	5,723	0.13	8.7	seasonally flooded basin	Dakota, WS #38, BSA #8
Area 3	wetland	excavation to restore	P	8,428	0.19	8.7	seasonally flooded basin	Dakota, WS #38, BSA #8
Area 4	wetland	fill for road crossing	P	4,480	0.1	8.7	seasonally flooded basin	Dakota, WS #38, BSA #8
Area 5	wetland	excavation to restore	P	236,383	5.43	8.7	seasonally flooded basin	Dakota, WS #38, BSA #8
Area 6	upland converted to wetland	excavation to create wetland	P	102,957	2.36*	8.7	upland	Dakota, WS #38, BSA #8
TOTAL				260,843	5.98			

\*The upland impact area is NOT included in the impact total, since this is not an aquatic resource.



**2012-04024-SEW**  
**Lennar Corporation's Summerlyn Park Residential Development**  
**Dakota County**

U.S. Army Corps of Engineers  
St. Paul District



0 400 800 1,600 2,400 3,200  
Feet

Base Map Source: FSA 2013 aerial photograph

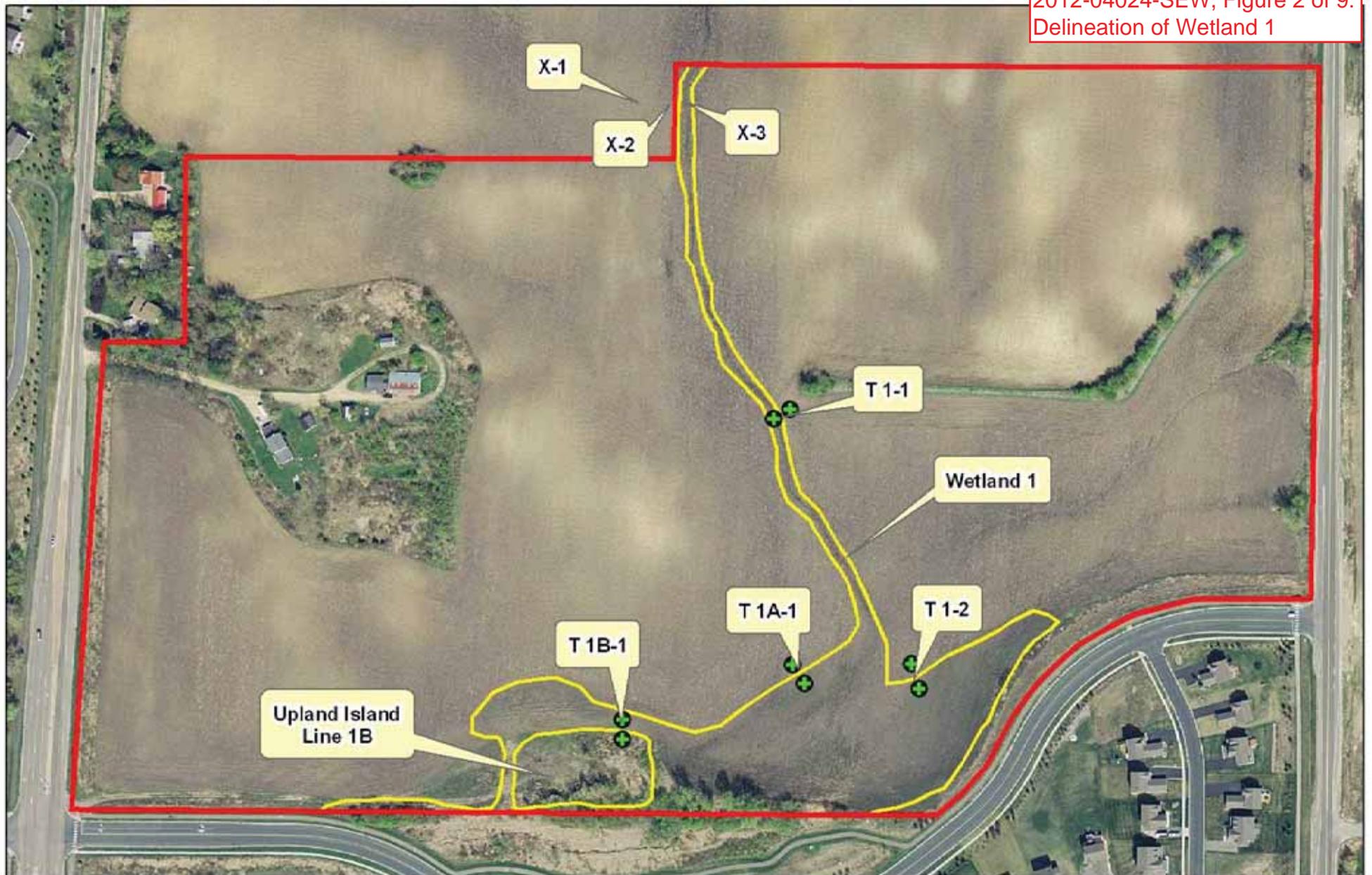
 approx. project location

**Legend**

**Minn NHD**

**Flow**

-  Intermittent
-  Perennial
-  Unidentified



### Wetland Delineation Map

Overlaid on 2012 Aerial Image

Project Location Sample Point Survey Located Wetland Boundary



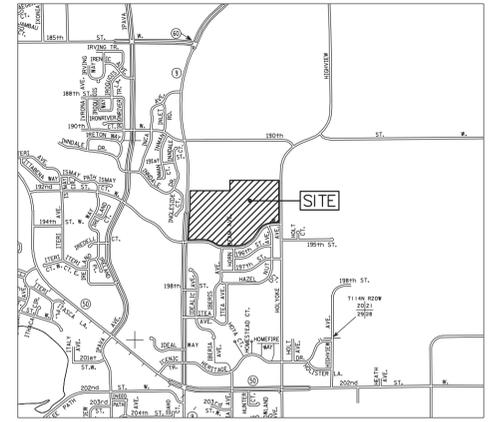
### Figure 5

Summerlyn Park  
Lakeville, MN  
Lennar Corp.

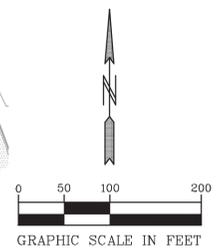
# SUMMERLYN WETLAND RESTORATION CONSTRUCTION PLAN LAKEVILLE, MINNESOTA

## LEGEND

EXISTING	PROPOSED	FUTURE	DESCRIPTION
○	●	⊙	SANITARY MANHOLE
—	—	—	EXISTING SANITARY SEWER
—	—	—	PROPOSED SANITARY SEWER
—	—	—	FUTURE SANITARY SEWER
⊗	⊗	⊗	HYDRANT
▽	▽	▽	GATE VALVE
△	△	△	REDUCER
—	—	—	EXISTING WATERMAIN
—	—	—	PROPOSED WATERMAIN
—	—	—	FUTURE WATERMAIN
□	□	□	CATCH BASIN
○	○	○	BEEHIVE
○	○	○	STORM MANHOLE
△	△	△	FLARED END SECTION
⊗	⊗	⊗	CONTROL STRUCTURE
—	—	—	EXISTING STORM SEWER
—	—	—	PROPOSED STORM SEWER
—	—	—	FUTURE STORM SEWER
—	—	—	SURMOUNTABLE CURB & GUTTER
—	—	—	B-STYLE CURB & GUTTER
—	—	—	RIBBON CURB & GUTTER
—	—	—	PHASE LINE
—	—	—	EASEMENT LINE
—	—	—	EXISTING 2' CONTOUR LINE
—	—	—	EXISTING 10' CONTOUR LINE
—	—	—	PROPOSED 2' CONTOUR LINE
—	—	—	PROPOSED 10' CONTOUR LINE
—	—	—	POND OUTLET LINE
—	—	—	POND HIGH WATER LINE
—	—	—	PROPOSED SPOT ELEVATION
—	—	—	EMERGENCY OVERFLOW
—	—	—	DELINEATED WETLAND LINE
—	—	—	FEMA FLOODPLAIN BOUNDARY
—	—	—	STANDARD EROSION CONTROL
—	—	—	HEAVY-DUTY EROSION CONTROL
—	—	—	TREE FENCE
—	—	—	RETAINING WALL
—	—	—	CONSERVATION AREA SIGN
—	—	—	WETLAND BUFFER SIGN
—	—	—	EX. CULVERT
—	—	—	EX. OVERHEAD UTILITY LINES
—	—	—	EX. UNDERGROUND TELEVISION LINE
—	—	—	EX. UNDERGROUND TELEPHONE LINE
—	—	—	EX. UNDERGROUND FIBER OPTIC LINE
—	—	—	EX. UNDERGROUND ELECTRIC LINE
—	—	—	EX. UNDERGROUND GAS LINE
—	—	—	EX. FENCE (BARBED WIRE)
—	—	—	EX. FENCE (CHAIN LINK)
—	—	—	EX. FENCE (WOOD)
—	—	—	EX. CAST IRON MONUMENT
—	—	—	EX. ELECTRIC BOX
—	—	—	EX. FLAG POLE
—	—	—	EX. NATURAL GAS METER
—	—	—	EX. HAND HOLE
—	—	—	EX. FOUND IRON PIPE
—	—	—	EX. JUDICIAL LAND MARK
—	—	—	EX. LIGHT POLE
—	—	—	EX. PK NAIL
—	—	—	EX. UTILITY POLE
—	—	—	EX. LAWN SPRINKLER VALVE
—	—	—	EX. LAWN SPRINKLER HEAD
—	—	—	EX. SEMAPHORE
—	—	—	EX. SERVICE
—	—	—	EX. TELEPHONE BOX
—	—	—	EX. TEST HOLE
—	—	—	EX. TELEVISION BOX
—	—	—	EX. WATER WELL
—	—	—	EX. MONITORING WELL
—	—	—	EX. MAILBOX
—	—	—	EX. CONTROL POINT
—	—	—	EX. SPIKE
—	—	—	EX. SIGN
—	—	—	EX. CLEANOUT
—	—	—	EX. SIGNIFICANT TREE
—	—	—	EX. TREE LINE
—	—	—	EX. GRAVEL SURFACE
—	—	—	EX. BITUMINOUS SURFACE
—	—	—	EX. CONCRETE SURFACE
—	—	—	SELECT BACKFILL MATERIAL
—	—	—	GRAVEL CONST. ENTRANCE

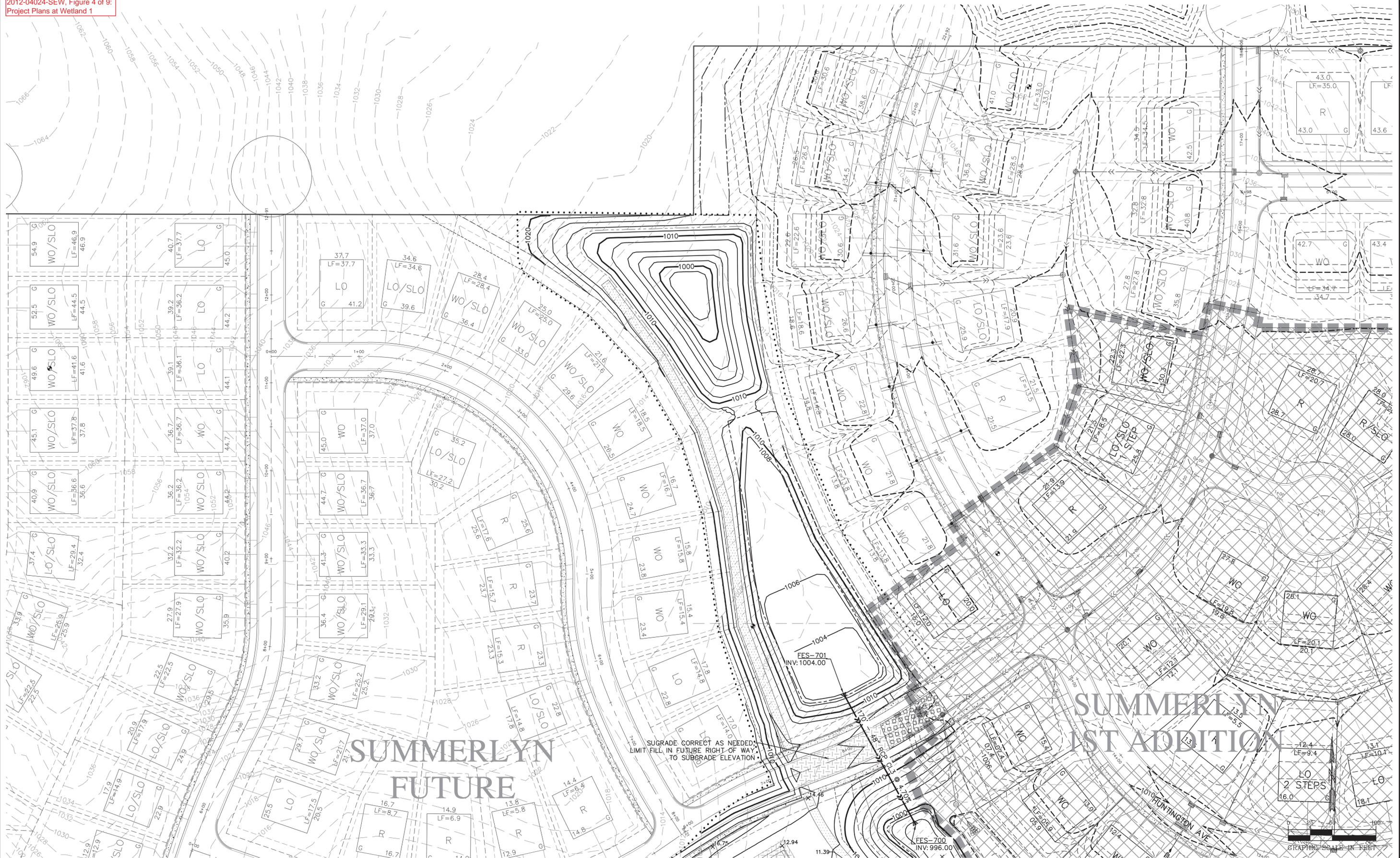


LOCATION MAP



**SHEET INDEX**

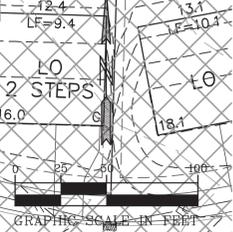
1. COVER SHEET
- 2-3. GRADING PLAN
4. EROSION CONTROL PLAN
5. WETLAND IMPACT/RESTORATION PLAN
6. SEEDING AND RESTORATION PLAN
7. STORM SEWER PLAN
- 8-9. GRADING DETAILS

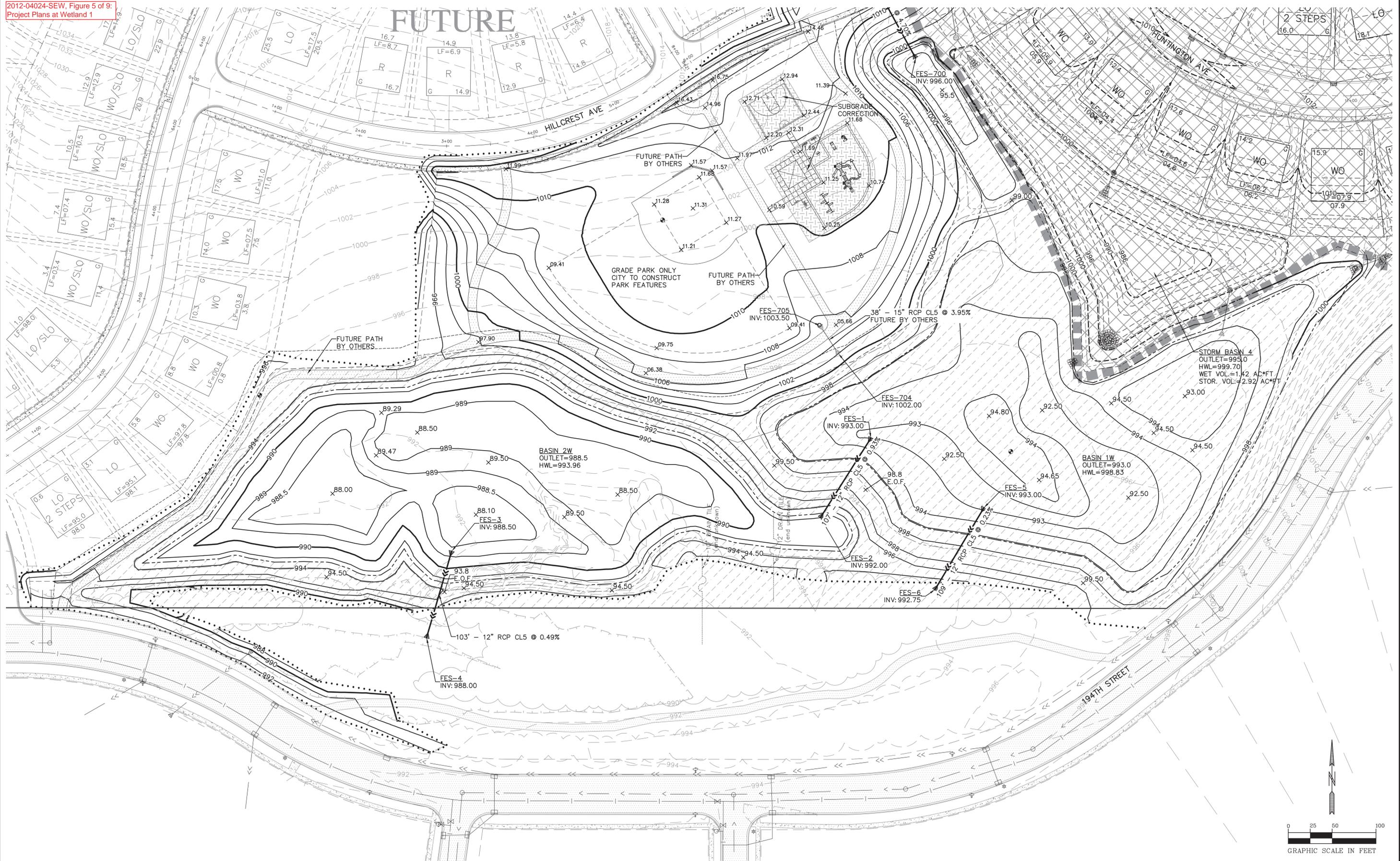


# SUMMERLYN FUTURE

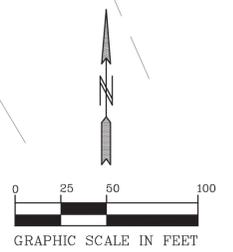
# SUMMERLYN 1ST ADDITION

SURGRADE CORRECT AS NEEDED,  
LIMIT FILL IN FUTURE RIGHT OF WAY  
TO SUBGRADE ELEVATION.





2 STEPS  
16.0 6 18.1



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www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Name: John M. Molinaro  
Reg. No.: 45831  
Date: 01-25-13

Revisions:  
1. 12-20-13 Revise Wetland Grading

Date: 01-25-2013  
Designed: NAP/JLL  
Drawn: JLL

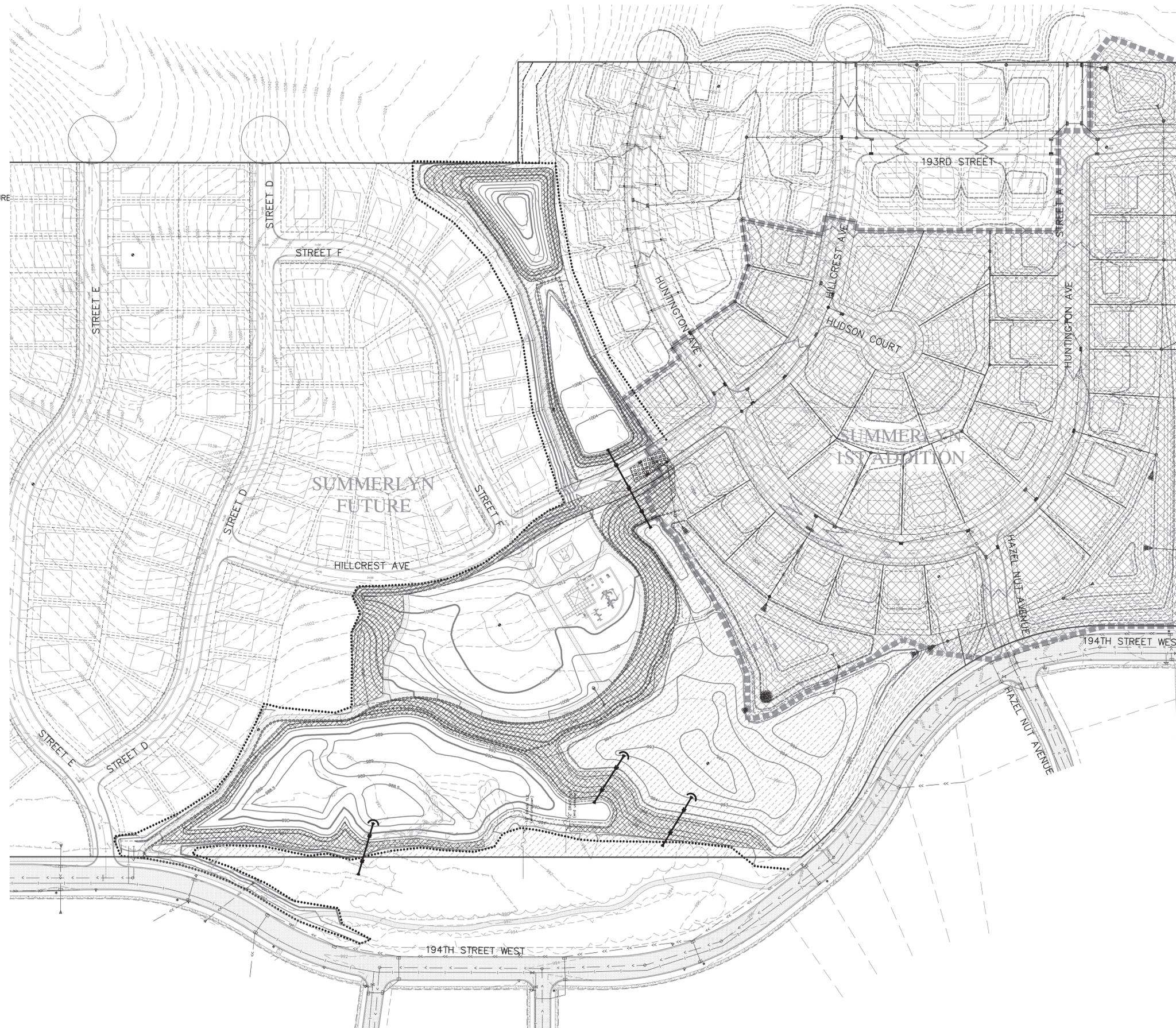
**GRADING PLAN**

**LENNAR**  
16305 36TH AVENUE NORTH  
PLYMOUTH, MINNESOTA 55446

**SUMMERLYN PARK IMPROVEMENTS**  
LAKEVILLE, MINNESOTA

**LEGEND**

-  CATCH BASIN INLET PROTECTION TO BE INSTALLED AFTER 1ST LIFT OF BITUMINOUS.
-  CATCH BASIN INLET PROTECTION TO BE INSTALLED WITH CATCH BASIN GRATE.
-  PERIMETER EROSION CONTROL FENCE. INSTALL BEFORE START OF GRADING
-  HEAVY DUTY EROSION CONTROL FENCE. INSTALL AFTER LOCAL GRADING COMPLETE
-  2' SOD OR EROSION CONTROL FENCE AT BACK OF CURE TO BE INSTALLED AFTER COMPLETION OF SIDEWALK CONSTRUCTION.
-  MNDOT CAT 3 EROSION CONTROL BLANKET. INSTALL WITHIN 7 DAYS OF GRADING COMPLETION OR BEFORE 1ST RAINFALL EVENT WHICHEVER IS FIRST
-  ROCK CONSTRUCTION ENTRANCE INSTALL BEFORE START OF GRADING
-  STRAW BIO ROLLS INSTALL WITHIN 7 DAYS OF GRADING COMPLETION OR BEFORE 1ST RAINFALL EVENT WHICHEVER IS FIRST
-  ROCK BERM INSTALL WITHIN 7 DAYS OF GRADING COMPLETION OR BEFORE 1ST RAINFALL EVENT WHICHEVER IS FIRST
-  SECONDARY EROSION CONTROL FENCE. TO BE INSTALLED 48 HOURS AFTER COMPLETION OF GRADING.





- WETLAND SEEDING AND RESTORATION NOTES**
1. THE RESTORATION AREAS WILL BE SEEDED WITH A NATIVE MIXES, AS INDICATED IN THE LEGEND.
  2. SITE PREPARATION
    - IF THE SOIL IS COMPACTED AFTER SCRAPING/GRADING OPERATION THE TOP SOIL SHOULD BE TILLED (TO A DEPTH OF 3"-6") AND RAKED/HARROWED TO SMOOTH OUT SOIL CLOUDS OR CLUMPS.
    - IF INVASIVE/EXOTIC SPECIES ARE PRESENT THEY WILL BE SPRAYED WITH HERBICIDES AND TILLED UNDER. ALL PERSONNEL APPLYING CHEMICALS SHALL HAVE A COMMERCIAL PESTICIDE APPLICATOR LICENSE.
  3. SEEDING
    - SEED SHALL BE HAND CAST. DRILL SEEDERS SHALL NOT BE USED TO SEED WETLAND BASINS.
    - IF THE RESTORATION AREA IS DRY THE AREA WILL BE PACKED WITH A ROLLER AFTER SEEDING IF APPROPRIATE.
  4. SCHEDULE
    - YEAR ONE:
      - FINAL GRADING OF THE WETLAND MITIGATION AREA AND REMOVAL/SPRAYING OF INVASIVES
      - PREPARATION OF THE SEED BED (LIGHT TILING /RAKING)
      - SEEDING OF THE WETLAND/BUFFER MITIGATION AREA (PLANTING IF THE MITIGATION AREA IS INUNDATED)
      - INSTALL EROSION CONTROL BLANKETS/MEASURES
      - MOWING OF INVASIVES
    - YEARS 2 & 3 (ADDITIONAL IF NECESSARY):
      - EARLY SEASON/LATE SEASON INVASIVES WEED CONTROL BY SPRAYING/REMOVAL
      - MOW THE MITIGATION AREA TO ENCOURAGE NATIVE GROWTH
  5. SEEDING DATES
 

PRAIRIE GRASSES	
SPRING/EARLY SUMMER	APR 15 - JUN 30
MID SUMMER	NO SEEDING
EARLY FALL	AUG 01 - OCT 1
LATE FALL (DORMANT)	OCT 15 - FROZEN SOIL
WETLAND	
SPRING/EARLY SUMMER	APR 15 - JUN 30
MID SUMMER	NO SEEDING
EARLY FALL	AUG 01 - OCT 1
LATE FALL (DORMANT)	OCT 15 - FROZEN SOIL
  6. MONITORING AND MAINTENANCE
    - THE RESTORATION AREA WILL BE MONITORED AND MAINTAINED FOR A PERIOD OF FIVE YEARS AFTER INSTALLATION.
    - A CONSULTANT WILL BE HIRED TO MONITOR THE MITIGATION AREAS TO ENSURE THE CRATED AND RESTORED WETLANDS (AND BUFFER) ACHIEVE THE GOAL OF REPLACING LOST FUNCTIONS AND VALUES.
    - MAINTENANCE SHALL INCLUDE (AS NEEDED):
      - HERBICIDE APPLICATION, MOWING, AND/OR BURNING OF UNWANTED SPECIES.
      - EROSIONAL CHANNELS WILL BE GRADED AND PLANTED/SEEDED ACCORDINGLY AND ANY SEDIMENTATION WILL BE REMOVED FROM THE MITIGATION AREA.
      - EXCESSIVE TRASH, CONSTRUCTION MATERIALS, LAWN CLIPPINGS, OR ANY MILL MATERIAL WILL BE REMOVED FROM THE MITIGATION AREA.
      - REAPPLICATION OF THE APPROPRIATE WETLAND SEED MIX.
    - A YEARLY MONITORING REPORT WILL BE PROVIDED AND CONTAIN:
      - A DESCRIPTION OF THE PROJECT, SIZE, CURRENT WETLAND TYPE AND DESIRED WETLAND TYPE (GOAL).
      - A COMPARISON OF THE AS-BUILT SPECIFICATION VERSUS THE DESIGN SPECIFICATIONS (FIRST ANNUAL PLAN ONLY) AND A RATIONALE FOR SIGNIFICANT CHANGES.
      - HYDROLOGY MEASUREMENTS: SEASON WATER LEVEL ELEVATIONS OR AREAL COVERAGE MEASUREMENTS DURING THE PERIOD APRIL THROUGH OCTOBER.
      - A MAP OF PLANT COMMUNITIES WITHIN THE BOUNDARIES OF THE REPLACEMENT SITE, INCLUDING HYDROLOGIC INDICATORS OBSERVED.
      - COLOR PHOTOGRAPHS OF THE PROJECT AREA.

PERMANENT TURF RESTORATION SHALL BE DONE IN ACCORDANCE WITH MNDOT 2575 & 3876 CONSISTING OF:

- MNDOT MIXTURE 240 AT 75 POUNDS PER ACRE.
- MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, INSTALLED TO MINIMUM 90% COVERAGE OF THE SURFACE AREA DISTURBED. MULCH AT 90% COVERAGE WITH DISC ANCHOR.
- TYPE 3 FERTILIZER, 22-5-10 80%W.I.N @ 350 LBS PER ACRE.

TEMPORARY SEED SHALL BE DONE IN ACCORDANCE TO MNDOT 2575 & 3876; CONSISTING OF:

- MNDOT MIX 150 @ 40 LBS. PER ACRE OR APPROVED EQUAL.
- MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, INSTALLED TO MINIMUM 90% COVERAGE OF THE SURFACE AREA DISTURBED.
- TYPE 1 FERTILIZER, 10-10-20 @ 200 LBS. PER ACRE



WETLAND BUFFER SEEDING SHALL BE DONE IN ACCORDANCE TO MNDOT 2575; CONSISTING OF:

- BWSR 35-241 "MESIC PRAIRIE GENERAL" @ 36.5 LBS. PER ACRE.
- MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, INSTALLED TO MINIMUM 90% COVERAGE OF THE SURFACE AREA DISTURBED.
- TYPE 4 FERTILIZER, 18-1-8 @ 120 LBS. PER ACRE



WETLAND UPLAND SEEDING SHALL BE DONE IN ACCORDANCE WITH MNDOT 2575 CONSISTING OF:

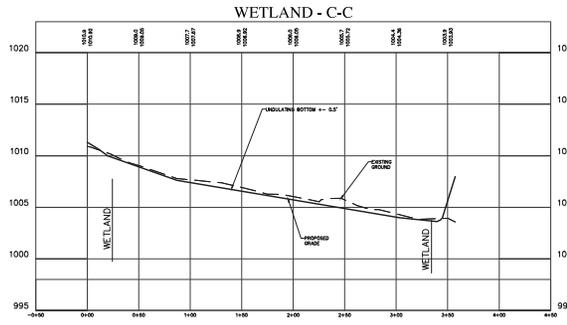
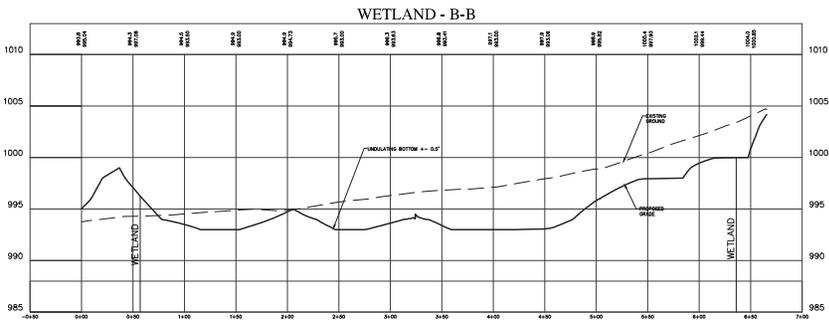
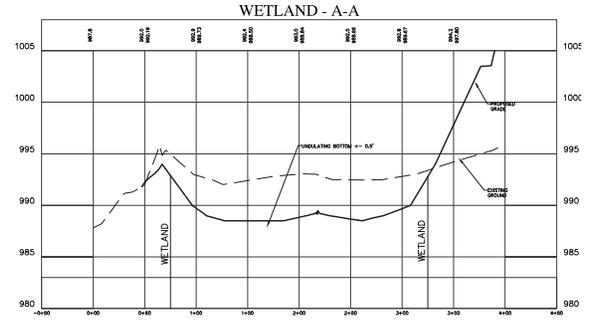
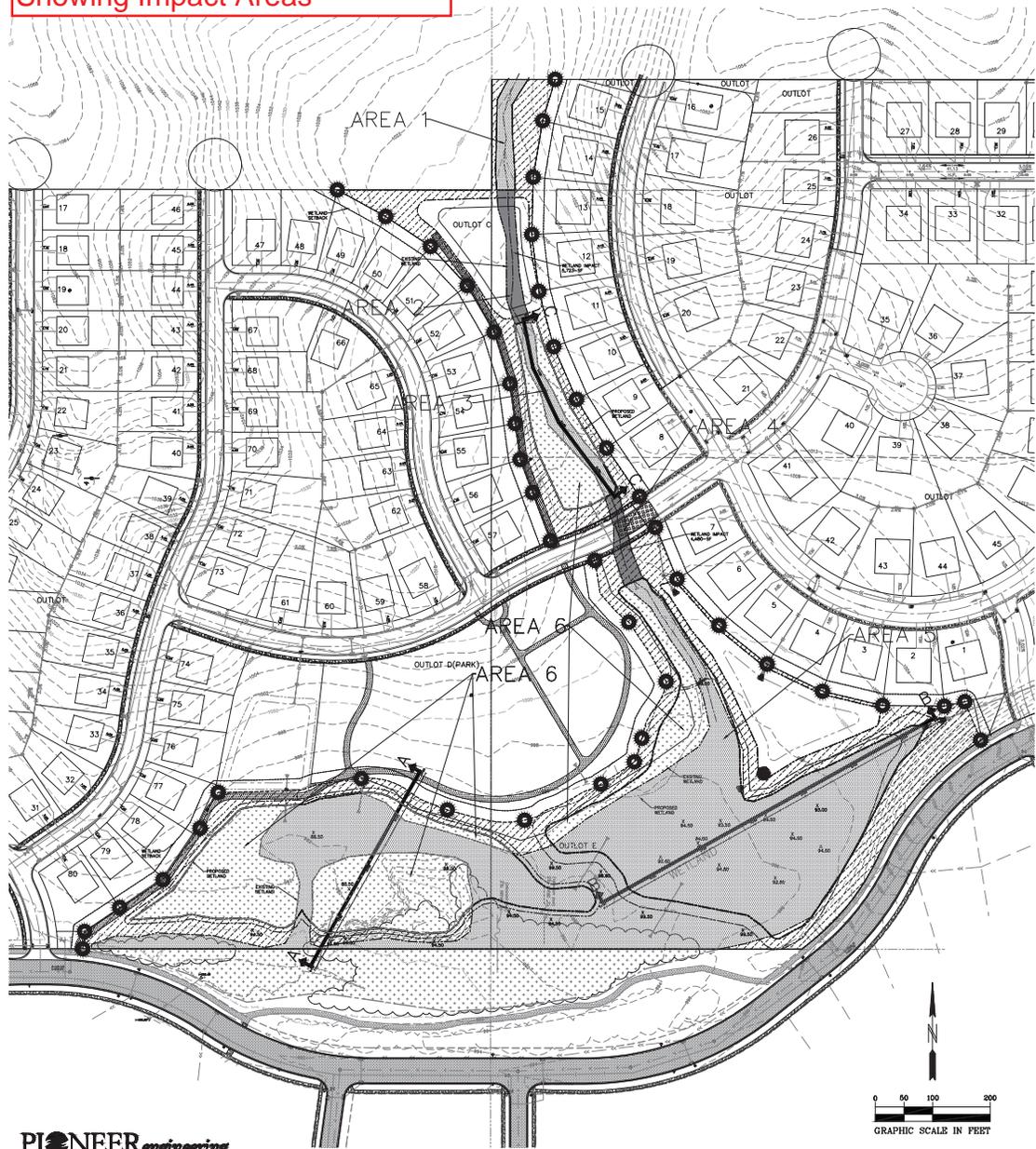
- BWSR 34-271 "WET MEADOW SOUTH & WEST" @ 12 POUNDS PER ACRE.
- MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, INSTALLED TO MINIMUM 90% COVERAGE OF THE SURFACE AREA DISTURBED.
- TYPE 4 FERTILIZER, 18-1-8 @ 120 LBS. PER ACRE



WETLAND LOW AREA SEEDING SHALL BE DONE IN ACCORDANCE TO MNDOT 2575; CONSISTING OF:

- BWSR 34-181 "EMERGENT WETLAND" @ 5 POUNDS PER ACRE.
- MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, INSTALLED TO MINIMUM 90% COVERAGE OF THE SURFACE AREA DISTURBED.
- TYPE 4 FERTILIZER, 18-1-8 @ 120 LBS. PER ACRE

**2012-04024-SEW, Figure 8 of 9:  
Project Plans at Wetland 1  
Showing Impact Areas**



**RESTORE WETLAND REQUIREMENTS:**  
 BUFFER: 25'  
 SETBACK FROM BUFFER:  
 20' REAR YARD, 10' SIDE YARD  
 2:1 MITIGATION REQUIRED

**WETLAND BUFFER MONUMENT**  
**10,203-SF WETLAND FILL**  
**20,406-SF REQUIRED WETLAND MITIGATION**

- Wetland Buffer - Area= 147,309 sf
- Area 1 - A 5,829 sf of regrade and restoration.
- Area 2 - A 5,723 sf of impact for the construction of a stormwater storage basin.
- Area 3- A 8,428 sf of regrade and restoration.
- Area 4 - A 4,480 sf of impact for the construction of Hillcrest Ave.
- Area 5 - A 236,383 sf of restoration.
- Area 6 - An additional 102,957 sf of upland will be converted to wetland.

**PIONEERengineering**  
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 Fax: 681-9488  
 www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota  
 Name: John M. Millano  
 Reg. No.: 45823 Date: 02-25-13

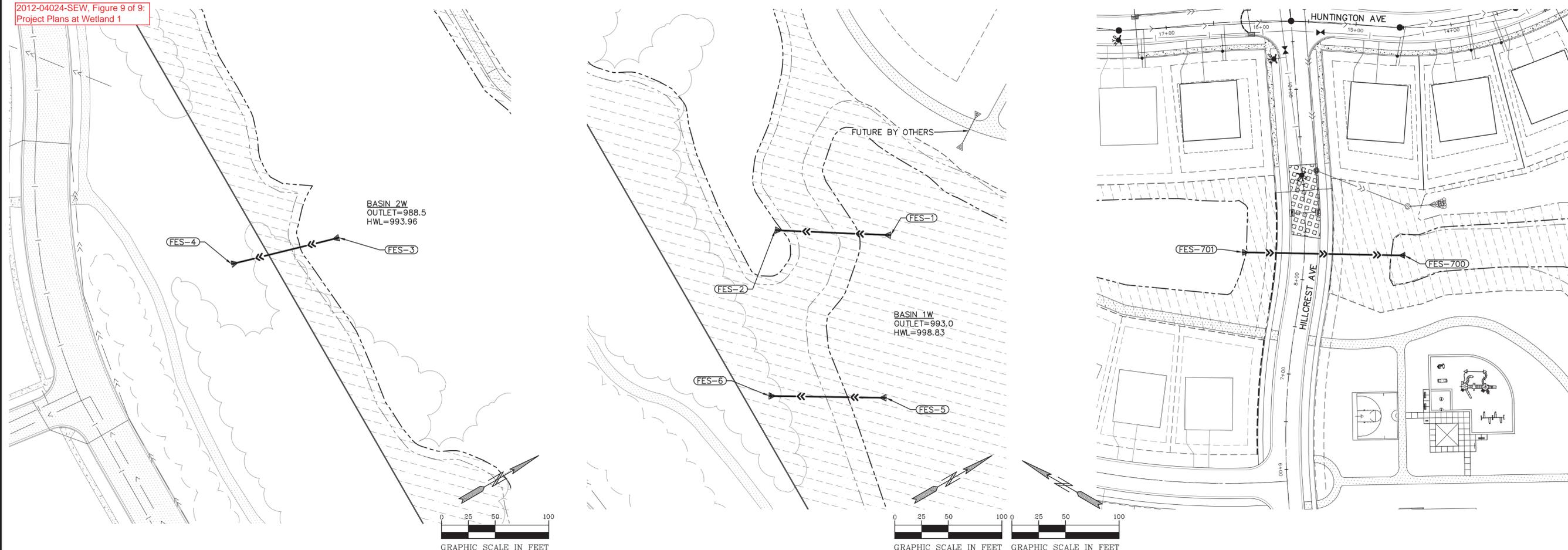
Revisions  
 1. 12-20-13 Revise Wetland Grading

Date: 01-25-2013  
 Designed: NAP/JLL  
 Drawn: J.L.

**WETLAND IMPACT/  
RESTORATION PLAN**

**LENNAR**  
 16305 36TH AVENUE NORTH  
 PLYMOUTH, MINNESOTA 55446

**SUMMERLYN PARK IMPROVEMENTS**  
 LAKEVILLE, MINNESOTA



**BENCH MARK**  
CITY OF LAKEVILLE BENCHMARK #570-TOP NUT HYDRANT EAST SIDE LAKEVILLE CITY HALL EL=977.49  
CITY OF LAKEVILLE BENCHMARK #580-TOP NUT HYDRANT NORTH SIDE OF 202ND, 200' EAST OF 202ND AND HIGHVIEW AVE. EL=991.87

