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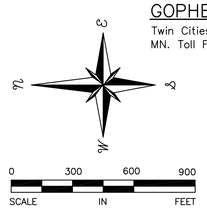
GOPHER STATE ONE CALL
Twin Cities Area 651-454-0002
MN. Toll Free 1-800-252-1166



- DEVELOPMENT NEIGHBORHOOD PARKS
- NU-6 PARK
- GREENWAY/OPEN SPACE
- THREE RIVERS REGIONAL TRAIL
- COUNTY TRAILS
- CITY OFF-ROAD TRAILS
- HOA/PUBLIC EASEMENT TRAILS
- CITY FIRE STATION SITE

DEVELOPMENT NEIGHBORHOOD PARKS
TOTAL ACRES: 7.45 ACRES
WETLAND AREA: 0.00 ACRES
UPLAND AREA: 7.45 ACRES

NU-6 PARK
TOTAL ACRES: 9.23 ACRES
WETLAND AREA: 3.44 ACRES
UPLAND AREA: 5.79 ACRES

GREENWAY/OPEN SPACE
TOTAL ACRES: 244.23 ACRES
WETLAND AREA: 215.73 ACRES
UPLAND AREA: 28.50 ACRES

THREE RIVERS REGIONAL TRAIL
TOTAL ACRES: 8.22 ACRES
WETLAND AREA: 1.12 ACRES
UPLAND AREA: 7.10 ACRES

COUNTY TRAIL
TOTAL ACRES: 6.61 ACRES
WETLAND AREA: 0.00 ACRES
UPLAND AREA: 6.61 ACRES

CITY OFF-ROAD TRAIL
TOTAL ACRES: 2.85 ACRES
WETLAND AREA: 0.49 ACRES
UPLAND AREA: 2.36 ACRES

HOA/PUBLIC EASEMENT TRAILS
TOTAL ACRES: 1.09 ACRES
WETLAND AREA: 0.00 ACRES
UPLAND AREA: 1.09 ACRES

FIRE STATION SITE
TOTAL ACRES: 4.56 ACRES
WETLAND AREA: 2.53 ACRES
UPLAND AREA: 2.02 ACRES

TOTAL OPEN SPACE, PARKS & COMMUNITY FACILITIES
TOTAL ACRES: 284.24 ACRES
WETLAND AREA: 223.31 ACRES (25% CREDIT = 55.83 ACRES)
UPLAND AREA: 60.93 ACRES
TOTAL PUBLIC VALUE DEDICATION: 116.76 ACRES

* CITY SIDEWALKS & COUNTY TRAILS/SIDEWALKS TO BE PROVIDED WITHIN PROPOSED RIGHTS OF WAY.

** WETLAND AREA BASED UPON WETLAND DELINEATION REPORT DATED JUNE, 2006, EXCEPT FOR THE NORTH SOD FIELD AREA, WHICH WAS ASSUMED TO BE ALL WETLAND FOR THE PURPOSE OF CALCULATING PUBLIC VALUE DEDICATION.

- THREE RIVERS REGIONAL BITUMINOUS TRAIL
- COUNTY ROAD BITUMINOUS TRAIL
- COUNTY ROAD CONCRETE SIDEWALK
- CITY BITUMINOUS TRAIL
- CITY CONCRETE SIDEWALK
- HOA BITUMINOUS TRAIL
- HOA CONCRETE SIDEWALK

Date: 04/14/09
Sheet: OS0
Project Name/Location: STONES THROW - MASTER DEVELOPMENT PLAN CITY OF ROGERS, MINNESOTA
Sheet Title: MASTER OPEN SPACE, PARKS AND COMMUNITY FACILITIES PLAN
Hill Engineering Project Number: 10001
Client: HASSAN MAINSTREET, LLC. 750 2ND STREET NE HOPKINS, MINNESOTA 55343 952-930-0630
HILL Engineering, Inc. 1585 Dunlap Street St. Paul, Mn 55108 (612)987-4455
Designed By: JRH
Drawn By: JRH
Checked By: JRH
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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.
JAY R. HILL
Date: 04/14/09 Reg. No. 24552

Revisions Date:	Description:	By:
03/27/09	City Resubmittal	JRH
04/14/09	P.C. Meeting	JRH

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Twin Cities Area 651-454-0002
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LEGEND

PROPOSED | EXISTING

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- PROPERTY LINE
- SETBACK LINE
- EASEMENT LINE
- EDGE OF WETLAND
- WETLAND BUFFER
- CURB LINE
- TIP-OUT CURB LINE
- SANITARY SEWER W/ MANHOLE
- SANITARY FORCE MAIN
- CO SEWER CLEANOUT
- WATER MAIN W/ FIRE HYDRANT & AUX. VALVE
- GATE VALVE
- REDUCER
- POST INDICATOR VALVE
- STAND PIPE
- WELL
- WATERMAIN MANHOLE
- CATCH BASIN/STORM SEWER/MANHOLE
- FLARED END SECTION W/ RIPRAP
- INLET PROTECTION
- DRAINTILE
- UNDERGROUND GAS MAIN
- GAS VALVE
- GAS METER
- UNDERGROUND ELECTRIC
- OVERHEAD UTILITIES
- ELECTRIC MANHOLE
- ELECTRIC TRANSFORMER
- ELECTRIC METER
- UNDERGROUND TELEPHONE
- TELEPHONE MANHOLE
- UNDERGROUND TELEVISION
- UNDERGROUND FIBER OPTIC
- BARBED WIRE FENCE
- CHAIN LINK FENCE
- WOOD FENCE
- 940 MAJOR CONTOUR LINE
- 938 MINOR CONTOUR LINE
- EDGE OF TREES
- 1.50% PERCENT GRADE/DRAINAGE SLOPE
- E.O.F. EMERGENCY OVERFLOW DRAINAGE
- RETAINING WALL
- SILT FENCE-BEFORE
- SILT FENCE-AFTER
- CONCRETE PAVEMENT
- ROCK CONSTRUCTION ENTRANCE
- +907.08 GUTTER ELEV.
- +907.08 BIT/CNC PAVEMENT ELEV. (BITUMINOUS OR CONCRETE)
- +BW=907.1 TW=912.0 WALL ELEVATION TW=TOP OF RETAINING WALL BW=BOTTOM OF RETAINING WALL
- 47.8 GROUND/FINISHED GRADE SPOT ELEV. W/ DRAINAGE ARROW
- DITCH CHECK
- TRAFFIC CONTROL SIGN
- TWIN BLADE STREET SIGN
- TYPE III BARRICADE
- STREET LIGHT
- BUILDING
- SB #1 SOIL BORING
- REMOVALS
- UTILITY MANHOLE
- FOUND IRON MONUMENT
- SET IRON MONUMENT
- CAST IRON MONUMENT
- UTILITY POLE
- COMMUNICATIONS RISER
- POST
- TRAFFIC SIGNAL BOX

GRADING & EROSION CONTROL NOTES

1. CONTRACTOR SHALL CONTACT 'GOPHER STATE ONE CALL' WITHIN TWO WORKING DAYS PRIOR TO EXCAVATION/ CONSTRUCTION, FOR UTILITY LOCATIONS. TWIN CITIES METRO AREA: 651-454-0002 OR TOLL-FREE: 1-800-252-1166.
2. CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
4. INSTALL PERIMETER EROSION CONTROL AND TREE PROTECTION MEASURES BEFORE BEGINNING SITE GRADING ACTIVITIES. SOME EROSION CONTROLS SUCH AS BALE CHECKS AND TEMPORARY SILT PONDS MAY BE INSTALLED AS GRADING OCCURS IN THE SPECIFIC AREA. MAINTAIN EROSION CONTROLS THROUGHOUT THE GRADING PROCESS AND REMOVE WHEN TURF HAS BEEN ESTABLISHED.
5. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO GENERAL SITE GRADING.
6. CONTRACTOR TO ADHERE TO ALL REQUIREMENTS OF THE MINNESOTA POLLUTION CONTROL AGENCY N.P.D.E.S. PERMIT, INCLUDING THE REQUIREMENT TO MINIMIZE THE AREA DISTURBED BY GRADING AT ANY GIVEN TIME AND TO COMPLETE TURF RESTORATION WITHIN THE TIME REQUIRED BY THE PERMIT AFTER COMPLETION OF GRADING OF AN AREA.
7. ALL EXPOSED SOIL AREAS WITHIN 100 FEET OF A WATER OF THE STATE OR ANY STORMWATER CONVEYANCE SYSTEM WHICH IS CONNECTED TO A WATER OF THE STATE MUST BE STABILIZED WITHIN 7 DAYS (STEEPER THAN 3:1 SLOPES), 14 DAYS (10:1 TO 3:1 SLOPES), OR 21 DAYS (FLATTER THAN 10:1).
8. ALL CONSTRUCTION ENTRANCES SHALL BE SURFACED WITH CRUSHED ROCK ACROSS FULL WIDTH FROM ENTRANCE POINT TO 50 FEET INTO THE CONSTRUCTION ZONE. SEE DETAIL.
9. INLET PROTECTION IS TO BE USED DURING CONSTRUCTION. SEE DETAIL.
10. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, WATERSHED DISTRICT AND N.P.D.E.S. PERMITS.
11. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF ACCUMULATED SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.
12. MAINTAIN EXISTING EROSION CONTROL AND TREE PROTECTION MEASURES. RE-ESTABLISH ANY EXISTING EROSION CONTROL DISTURBED BY CONSTRUCTION.
13. CONTRACTOR SHALL PROVIDE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES AS REQUIRED FOR CONSTRUCTION.
14. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.
15. REMOVE ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.
16. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS.
17. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.
18. SWEEP ADJACENT STREETS IN ACCORDANCE WITH CITY REQUIREMENTS.
19. INSPECT EROSION CONTROL DEVICES AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. IMMEDIATELY REPAIR FAILED OR FAILING EROSION CONTROL DEVICES.
20. SEDIMENT REMOVAL – SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT.
21. ANY SEDIMENT REMAINING IN PLACE AFTER THE EROSION CONTROL DEVICE IS NO LONGER REQUIRED SHALL BE GRADED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SEEDED WITH THE APPROPRIATE SEED MIX AS DIRECTED BY THE OWNER.
22. SUITABLE GRADING MATERIAL SHALL CONSIST OF ALL SOIL ENCOUNTERED ON THE SITE WITH EXCEPTION OF TOPSOIL, DEBRIS, ORGANIC MATERIAL AND OTHER UNSTABLE MATERIAL. STOCKPILE TOPSOIL AND GRANULAR FILL AT LOCATIONS DIRECTED BY CONTRACTOR.
23. EXISTING GRANULAR MATERIALS SHALL BE SEGREGATED AND STOCKPILED FOR REUSE ON-SITE.
24. CONTRACTOR SHALL STRIP, STOCKPILE AND RE-SPREAD EXISTING ON-SITE TOPSOIL TO PROVIDE A UNIFORM THICKNESS ON ALL DISTURBED AREAS TO BE SODDED OR SEEDED, EXCEPT NEW BOULEVARD AREAS BETWEEN THE STREET RIGHT OF WAY AND PROPOSED BACK OF CURB. STOCKPILE TOPSOIL ADJACENT TO THE RIGHT OF WAYS FOR RESPREADING IN THE BOULEVARDS AFTER PRIVATE AND PUBLIC UTILITY SERVICE LINES ARE INSTALLED.
25. OUTSIDE OF STREET RIGHT-OF WAYS, STRIP EXISTING TOPSOIL PRIOR TO BEGINNING CONSTRUCTION. RESPREAD TOPSOIL AND RE-ESTABLISH PRE-EXISTING TURF COVER AFTER CONSTRUCTION IS COMPLETED.
26. IN STREET BOULEVARD AREAS, SPREAD TOPSOIL STOCKPILED ON-SITE AND SEED & SOD AFTER INSTALLATION OF GAS, TELEPHONE, ELECTRIC, STREET LIGHTING AND CABLE TV IS COMPLETED.
27. CONTRACTOR SHALL PROVIDE A MINIMUM OF 2 ROWS (3' MIN.) OF SOD BEHIND ALL CURBS.
28. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF THE EXISTING PAVEMENT.
29. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
30. GRADES SHOWN ARE FINISHED GRADES, CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION, LEAVE STREET READY FOR SUBBASE.
31. COMPLETION OF SITE GRADING OPERATIONS SHALL RESULT IN ALL AREAS BEING GRADED TO 'PLAN SUBGRADE ELEVATION'. BUILDING PAD AREAS SHALL BE DETERMINED BY REFERRING TO THE ARCHITECTURAL DRAWINGS. THE PARKING LOT AND DRIVEWAY AREAS SHALL BE DETERMINED BY REFERRING TO THE SITE PLAN AND PAVEMENT SECTION DETAILS FOR LOCATION AND LIMITS OF BITUMINOUS PAVEMENT SECTIONS.
32. FINAL GRADING TOLERANCES ARE ±0.2 FEET OF PLAN GRADES.
33. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OFF THE CONSTRUCTION SITE.
34. CONTRACTOR IS RESPONSIBLE FOR GRADING AND SLOPING THE FINISHED GROUND SURFACE TO PROVIDE SMOOTH & UNIFORM SLOPES, WHICH PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND PREVENT PONDING IN LOWER AREAS. CONTACT ARCHITECT IF FIELD ADJUSTMENTS TO GRADING PLANS ARE REQUIRED.
35. FINISHED GROUND AND SOD ELEVATION ADJACENT TO BUILDING SHALL BE 6" BELOW FLOOR ELEVATION. SLOPE GROUND AWAY FROM BUILDING A MINIMUM OF 6" IN 10 FEET, BEYOND 10 FEET REFER TO PLAN GRADES.
36. GRADE LOTS TO PROVIDE A MINIMUM 1 FOOT DEEP DRAINAGE SWALE ALONG PROPOSED PROPERTY LINES UNLESS SPECIFICALLY SHOWN OTHERWISE BY DRAINAGE ARROWS.
37. LOWEST FLOOR ADJACENT TO POND OR WETLAND, HIGHER OF 3.0 FEET ABOVE NORMAL WATER LEVEL OR 1.0 FEET ABOVE HIGH WATER LEVEL.
38. LOWEST OPENING (DOOR OR WINDOW) 1.0 FEET ABOVE EMERGENCY OVERFLOW ELEVATION (E.O.F.)
39. GARAGE MINIMUM 1.5 FEET ABOVE TOP OF CURB AT DRIVEWAY, MAXIMUM 10% GRADE.
40. UNDER PAVEMENTS COMPACT THE UPPER THREE FEET OF SUBGRADE TO 100% STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT AND 95% STANDARD PROCTOR DENSITY BELOW THE UPPER THREE FEET OF SUBGRADE. OUTSIDE OF PAVEMENT AREAS COMPACT EMBANKMENTS TO 95% STANDARD PROCTOR DENSITY.
41. TURF RESTORATION IS SEEDING IN ACCORDANCE WITH MNDOT 3876, SEED IS MIXTURE 90B AT 50 POUNDS PER ACRE, TYPE 1 MULCH AT 90% COVERAGE WITH DISC ANCHOR. WETLAND SEEDING IS MNDOT MIXTURE 25B AT 25 POUNDS PER ACRE, UPLAND BUFFER IS MNDOT 5B AT 30 POUNDS PER ACRE, WITH FIBER BLANKET. (INSTALL ONLY WHERE GROUND IS DISTURBED) ALL SEEDED AREAS ARE TO RECEIVE TYPE I MULCH AND DISC ANCHOR OR FIBER BLANKET.
42. SLOPES AT 3:1 OR STEEPER, AND/OR WHERE INDICATED ON THE PLANS SHALL BE SEEDED AND HAVE A WOOD FIBER BLANKET INSTALLED OR MAY BE HYDROSEEDED WITH TACKIFER MULCH.
43. NORMAL WATER ELEVATION IS AN ENGINEERING TERM RELATED TO THE VOLUMETRIC CAPACITY / OR HYDRAULIC OPERATION OF A PONDING AREA. IT DOES NOT IMPLY A TYPICAL SURFACE ELEVATION WITHIN THE PONDING AREA, OR THAT WATER WILL BE RETAINED IN THE PONDING AREA ON A NORMAL BASIS.

Date: 04/14/09

Sheet: GDO

Hill Engineering Project Number: 10001

Project Name/Location: STONES THROW- MASTER DEVELOPMENT PLAN CITY OF ROGERS, MINNESOTA

Sheet Title: MASTER GRADING AND DRAINAGE PLAN

Client: HASSAN MAINSTREET, LLC.
750 2ND STREET NE
HOPKINS, MINNESOTA 55343
952-930-0630

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1585 Dunlap Street
St. Paul, Mn 55108
(612)987-4455

Designed By: JRH
Drawn By: JRH
Checked By: JRH

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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.

JAY R. HILL

Date: 04/14/09 Reg. No. 24552

Revisions Date:	Description:	By:
03/27/09	City Resubmittal	JRH
04/14/09	P.C. Meeting	JRH