

ROAD USE AGREEMENT

THIS AGREEMENT effective this ____ day of _____, 2013 (the “**Effective Date**”)

B E T W E E N :

THE CORPORATION OF THE COUNTY OF MIDDLESEX
(hereinafter referred to as the “**County**”)

OF THE FIRST PART

- and -

KERWOOD WIND, INC.
a corporation established under the laws
of the Province of New Brunswick
(hereinafter referred to as “**Kerwood**”)

OF THE SECOND PART

WHEREAS:

- A. the County is a municipal corporation with the meaning of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, is governed by Warden and Council and operated by Administration, which is hereby authorized to administer this Agreement in its entirety, including but not limited to decisions with respect to the operation and termination of this Agreement in accordance with its provisions;
- B. the County exercises jurisdiction with respect to approval of certain activities with respect public rights of way, highways, streets, sidewalks, walkways, driveways, ditches and boulevards within the County of Middlesex;
- C. the County owns the roads identified in the Approved Road Use Plans, which is attached hereto as **Schedule “B”** and forms a part of this Agreement;
- D. Kerwood is a Wind Farm owner/operator, has a current registered corporate identity in New Brunswick; has an office and mailing address at 390 Bay Street, Suite 1720, Toronto, ON M5H 2Y2; and is operational out of 700 Universe Blvd., Juno Beach, Florida 33408;
- E. Kerwood is the owner of the Wind Project, as defined herein;
- F. Kerwood is the owner of the FIT Contract for the Wind Project, all assets of the Wind Project, as provided in the Kerwood Asset Document, which is attached hereto as **Schedule “A”**, forms a part of this agreement but shall be treated as confidential between the parties to extent possible under Applicable Law;

- G. Kerwood wishes to make use of certain roads located in the County of Middlesex to allow for construction, operation and maintenance of the Wind Project and to deliver components and materials thereto;
- H. pursuant to section 50(3)(d.1) of the *Planning Act*, as amended, the Parties may enter into an agreement that has the effect of granting a use of or right in land directly or by entitlement to renewal for a period of more than twenty-one years;
- I. the County and Kerwood enter into this Agreement with respect of the use, installation, construction, maintenance and operation of certain Electrical Infrastructure on, over, under and within the Road Allowances, as defined herein;
- J. subject to Provincial legislation and Ontario Energy Board Approval, and the terms and conditions set forth below with respect to the use of County Road Allowances, the County acknowledges Kerwood's right to install, construct, maintain, operate and decommission such Electrical Infrastructure over, along, across or under Road Allowances;
- K. subject to obtaining an access/work permit from the County for non-electricity transmission related work, Kerwood shall have the right to temporarily reconstruct or realign certain portions of the Road Allowances to permit delivery or movement of oversized Wind Project components, including wind turbine blades, tower sections and nacelles;
- L. subject to obtaining an access permit from the County, Kerwood shall have the right to connect access roads from Wind Project turbines to the Road Allowances to permit ongoing access to the wind turbines during Wind Project operations; and
- M. Kerwood warrants that all times throughout the term of this agreement, including its option periods, it shall retain assets which have a minimum value of \$5 million dollars.

NOW THEREFORE THIS AGREEMENT WITNESSETH THAT, in consideration of the payment of the sum of TWO DOLLARS (\$2.00) from each Party to the other and other good and valuable consideration, including the terms, covenants and provisions herein, the receipt and sufficiency of which is hereby acknowledged and agreed, the Parties covenant and agree as follows:

A. INTERPRETATION

- 1. The above recitals are true and the same are hereby incorporated into this Agreement by reference.
- 2. Each obligation of the Parties hereto contained in this Agreement, even if not specifically expressed as a covenant, shall be considered for all purposes to be a covenant. Each covenant in this Agreement is a separate and independent covenant and a breach of covenant by any Party will not relieve any other Party from its obligation to perform each of its covenants; except as otherwise provided herein.

Definitions

3. In this Agreement, in addition to terms defined elsewhere in this Agreement, the following terms have the following meanings:
- (a) **“Agreement”** means this Agreement, including all Schedules, as it may be confirmed, amended, modified, supplemented or restated by written agreement between the Parties.
 - (b) **“Anti-Bribery Laws”** mean any anti-bribery law or international convention, as may apply now or in the future, including the Canadian Corruption of Foreign Public Officials Act, the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and the OECD Convention on Combating Bribery of Foreign Public Officials.
 - (c) **“Applicable Law”** means all present or future applicable laws, statutes, regulations, treaties, judgments and decrees and all present or future applicable published directives, rules, policy statements and orders of any Public Authority and all applicable orders and decrees of courts and arbitrators of like application to the extent, in each case, that the same are legally binding on the Parties in the context of this Agreement.
 - (d) **“Appropriate Emergency Service Providers”** means those emergency service providers set out in Schedule “C”, which is attached hereto and forms a part of this Agreement;
 - (e) **“Approved Road Use Plans”** means the diagrams attached as Schedule “B” hereto depicting the location of and other aspects in relation to Electrical Infrastructure in Road Allowances, as approved by the County Engineer prior to the execution of this Agreement.
 - (f) **“As-Built Plan”** means a Plan following the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Electrical Infrastructure confirming the exact location and specifications of any Electrical Infrastructure installed over, along, across, under or within the Road Allowances.
 - (g) **“Business Day”** means any day excluding a Saturday, Sunday or statutory holiday in the Province of Ontario, and also excluding any day on which the principal chartered banks located in the Municipality of Strathroy-Caradoc are not open for business during normal banking hours.
 - (h) **“Commercial Operation Date”** means the Commercial Operation Date as defined in the Power Purchase Agreement, as defined herein.
 - (i) **“County Engineer”** means the individual designated to serve in that position for the Corporation of the County of Middlesex duly passed via municipal by-law.

- (j) **“Deliveries”** means the transporting of materials, components and equipment including overweight or over-size cargoes across or along Road Allowances, to provide for the construction, maintenance, repair, replacement, relocation or removal of wind turbines and other infrastructure for the Wind Project.
- (k) **“Distribution Infrastructure”** means infrastructure and systems for the purposes of conveying electricity at voltages of 50 kilovolts or less and includes all structures, equipment or other things used for that purpose including, but not limited to, towers and/or poles, with such wires and/or cables for the distribution of electricity at voltages of 50 kilovolts or less, and all necessary and proper foundations, safety barriers, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith including without limitation, substation facilities and equipment, pads, vaults and junction boxes (whether above or below ground), manholes, handholes, conduits, fiber optics, cables, wires, lines and other conductors of any nature, multiple above or below ground control, communications, data and radio relay systems, and telecommunications equipment, including without limitation, conduits, fiber optics, cables, wires and lines.
- (l) **“Easement Rights”** means the right to place, install, construct, re-construct, inspect, maintain, operate, alter, enlarge, repair, replace, relocate and remove Electrical Infrastructure over, along, across, within or under the Road Allowances provided for this Agreement.
- (m) **“Electrical Infrastructure”** means, collectively, all Distribution Infrastructure and Transmission Infrastructure.
- (n) **“Electrical Infrastructure Work”** means the installing, constructing, operating, inspecting, maintaining, altering, enlarging, repairing, replacing, relocating and removing of Electrical Infrastructure over, along, across, within or under the Road Allowances in connection with the Wind Project.
- (o) **“Entrance(s)”** means one or more points of access across and through the Road Allowances from the travelled portion of the Road Allowances connecting to private lands beyond and certain access roads in and upon adjacent lands used in connection with the Wind Project, which has been approved by the County Engineer
- (p) **“Entrance Work”** means the constructing and maintaining of Entrances to private wind turbine access roads.
- (q) **“Municipal Infrastructure”** means structures, services or facilities of any kind owned or operated by or for the benefit of the County, including drains, water mains and culverts.
- (r) **“Parties”** means the County and Kerwood collectively, and **“Party”** means any one of them.

- (s) **“Permits”** means those permits required to be obtained by Kerwood from the County for the purposes of performing the Work and for the purposes of use of the Road Allowances, along with all requirements for the issuance of such Permits and all fees associated with such Permits, as set out in the Permits and Fees Document, which is attached hereto as **Schedule “D”** and forms a part of this Agreement.
- (t) **“Plan”** means a detailed plan drawn to scale, which:
 - (i) identifies the location, size and elevation of the Electrical Infrastructure;
 - (ii) demonstrate that the installation of the Electrical Infrastructure will comply with applicable safety, technical and regulatory standards and the requirements of Applicable Law;
 - (iii) show the Road Allowances where the installation of Electrical Infrastructure is proposed and the location of the proposed Electrical Infrastructure or part thereof together with specifications relating to the proposed Electrical Infrastructure or part thereof; and
 - (iv) shows the “no winter maintenance” road allowances within the County.
- (u) **“Plans”** means more than one Plan, as defined herein, referred to collectively.
- (v) **“Power Purchase Agreement”**, (hereinafter **“PPA”**) means the Feed-In Tariff Contract made between Kerwood and the Ontario Power Authority, including any amendments or renewals thereof.
- (w) **“Public Authority”** means any governmental, federal, provincial, regional, municipal or local body having authority over the County, Kerwood, the Wind Project, the Electrical Infrastructure or the Road Allowances.
- (x) **“Repair Work”** means work involving the maintenance, repair and replacement of the Wind Project, including the maintenance, repair and replacement of installed Electrical Infrastructure and Entrances that does not cause the location, elevation, position, layout or route of the Electrical Infrastructure or Entrance to materially change.
- (y) **“Road Allowances”** means public rights of way, road allowances, streets, sidewalks, highways, walkways, driveways, ditches and boulevards and the allowances therefor, and includes all existing infrastructure located on or within the Road Allowances, all owned, or managed under the legal jurisdiction of the County as shown in the Approved Road Use Plans (**Schedule “B”**).
- (z) **“Secured Party”** or **“Secured Parties”** means Kerwood’s lenders, from time to time.

- (aa) **“Transmission”** means the conveyance of electricity at voltages in excess of 50 kilovolts.
- (bb) **“Transmission Infrastructure”** means infrastructure conveying electricity at voltages in excess of 50 kilovolts and includes all structures, equipment or other things used for that purpose including, but not limited to, a line or lines of towers and/or poles, with such wires and/or cables for the transmission of electricity at voltages in excess of 50 kilovolts, and all necessary and proper foundations, safety barriers, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith including without limitation, pads, vaults and junction boxes manholes, handholes, conduits, fiber optics, cables, wires, lines and other conductors of any nature, multiple above or below ground control, communications, data and radio relay systems, and telecommunications equipment, including without limitation, conduits, fiber optics, cables, wires and lines.
- (cc) **“Tree Work”** means the cutting, trimming, removing or replacing of trees or bushes growing in or extending into, over or under the Road Allowances.
- (dd) **“Wind Project(s)”** means the 59.9 megawatt renewable energy generating facility known as Adelaide Wind Energy Centre and its appurtenant wind turbines, equipment, buildings and Electrical Infrastructure, to be constructed in the County of Middlesex for the purpose of supplying electricity in accordance with the PPA.
- (ee) **“Work”** means all work required to be performed by Kerwood pursuant to the terms of this Agreement, including, but not limited to, all Deliveries, Electrical Infrastructure Work, Entrance Work, Tree Work, and Repair Work.

Schedules

4. The following schedules to this Agreement are an integral part of this Agreement:

Schedule “A”

Kerwood Asset Document

Shows type and value of all current assets owned by Kerwood

Schedule “B”

Approved Road Use Plans

Geographically shows the location of the Wind Project; municipal description and location of County Road Allowances (including those Road Allowances which are not subject to winter maintenance); and particulars with respect of the route of Transmission and Distribution Infrastructure, including but not limited to location of poles, engineering details of poles

(type, material, size, foundation, construction methods, guying details.), electrical transmission line arrangement (height of cables, vertical clearances, expected cable sag/sway, etc.), and the location of any alteration of the County Road in relation to the installation of said transmission facilities (ditch grading and guardrails).

Schedule “C”

List of Appropriate Emergency Service Providers Rights

Schedule “D”

Permits and Fees

Shows all Permits and fees required to be applied for and obtained by Kerwood from the County, including but not limited to Oversize/Overweight Permits, Entrance Permits, Drain Crossing Permits, Road Occupation/Excavation Permits

Schedule “E”

Rights and Remedies afforded to Secured Parties

Statutory Rights

5. The Parties agree that nothing contained in this Agreement shall abrogate or prejudice any statutory rights held by any Party under any applicable statute, including but not limited to the *Municipal Act, 2001*, as amended, the *Ontario Energy Board Act, 1998*, as amended, the *Green Energy and Green Economy Act, 2009*, as amended and the *Electricity Act, 1998*, as amended.

B. GRANT OF PERMISSION

Term

6. The rights provided for in this Agreement shall be for a term which is the greater of: (i) thirty (30) years from the Effective Date plus an option in favour of Kerwood to extend the term of this Agreement for two (2) further ten (10) year periods, or (ii) from the Effective Date to the expiry of the term of the PPA and any extensions thereof, together

with such additional time (not to exceed nine (9) months) as may be reasonably required to complete the decommissioning of the Wind Project, (hereinafter, the “**Term**”).

Grant of Easement

7. The County hereby grants and transfers to Kerwood for the duration of the Term, the non-exclusive right, privilege, interest, benefit and easement to enter upon and use the Road Allowances as identified in the Approved Road Use Plans (**Schedule “B”**) with such persons, vehicles, equipment and machinery as may be necessary for the purpose of placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Electrical Infrastructure and the right to perform Work over, along, across, within or under the Road Allowances in connection with the Wind Project, subject to the following conditions:

Prior Approvals

- (a) Kerwood, prior to the installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Electrical Infrastructure over, along, across, within or under the Road Allowances, shall obtain the approval of any Public Authority required by or have the authority pursuant to Applicable Law in connection with such activity.

Notice

- (b) Kerwood shall make its best effort, prior to the installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Electrical Infrastructure over, along, across, within or under the Road Allowances, to provide notice of all other existing Road Allowance users of the aforementioned installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Electrical Infrastructure over, along, across, within or under the Road Allowances.

Transmission Infrastructure Placement

- (c) All Transmission Infrastructure shall be installed above-grade within the Road Allowance in the location specified in the Approved Road Use Plans (**Schedule “B”**) within a reasonable error range and supported by stand facilities (poles) at an appropriate elevation to avoid incompatibilities and/or conflicts with other existing infrastructure;

Distribution Line Placement

- (d) All Distribution Infrastructure shall be installed below-grade and within but under the Road Allowances at an appropriate depth so as to avoid incompatibilities and/or conflicts with other existing and potential infrastructure, except where

Kerwood in consultation with the County identifies environmental, topographical or other obstacles that require the installation of poles or other above-grade Distribution Infrastructure to permit the distribution of electricity over, around or across the obstacle;

Distance from Travelled Portion and Property Line

- (e) The Parties agree that Kerwood shall make commercially reasonable efforts to install Electrical Infrastructure in the following locations within the Road Allowances:
 - (i) in locations between the outer limit of the travelled portion of the relevant Road Allowance and the property line of the Road Allowance;
 - (ii) at depths and/or elevations within the relevant Road Allowance to avoid incompatibilities and/or conflicts with existing infrastructure and, using commercially reasonable efforts, to avoid incompatibilities and/or conflicts with currently planned infrastructure; and
 - (iii) in consistent locations within the Road Allowances such that the number of road crossings is minimized.

Permits/Fees

- (f) Kerwood will obtain all Permits from the County and pay the appropriate fees associated with obtaining the same, which fees are shown in the Permits and Fees Document (**Schedule "D"**). The County shall issue all such Permits within the timelines set out in the County's by-laws or in the relevant statutes or regulations or thirty (30) days following receipt from Kerwood of its applications and fees, whichever is less, and, without limiting the generality of the foregoing, in respect of grading, guardrails and culverts related to the Electrical Infrastructure, shall issue the applicable work permit on the basis of standards typically applied in accordance with the Road Safety Manual;

Legal Compliance

- (g) All actions of Kerwood and the County shall be in compliance with Applicable Law;

Insurance Coverage

- (h) Kerwood agrees that prior to the placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Electrical Infrastructure over, along, across, within or under the Road Allowances, Kerwood shall arrange for and maintain commercial general liability insurance (hereinafter, the "**CGL**"), insuring Kerwood and naming the County as an additional insured. The CGL shall provide, at a minimum limits of liability, not less than five million dollars (\$5,000,000.00) per

incident and in the aggregate. In addition, the CGL shall contain a cross liability and severability of interest clause and provide for a minimum of ten (10) days' notice of cancellation of the CGL. Kerwood shall upon written request thereof, deliver to the County, from time to time and in any event prior to commencement of the Work, a copy of a certificate of insurance evidencing that the CGL is in full force and effect.

Commencement of Work

- (i) Prior to the commencement of any Work, Kerwood shall document, by means of a video recording or other means satisfactory to the County, acting reasonably, the then-existing condition of all Road Allowances or structures that Kerwood expects will or may be used for or subject to Work, and both Parties shall receive a complete copy of such video recording or document;
- (j) Kerwood agrees to maintain the surface of the Road Allowances for a period of twelve (12) months following the Commercial Operations Date and restore the surface of the Road Allowance to at least the same condition as prior to the commencement of any Work, except in the cases where the alteration to the untraveled portion of the Road Allowance forms part of the Work;
- (k) Kerwood agrees the Easement Rights shall be exercised and carried out in a good, safe and workmanlike manner;
- (l) Kerwood shall be responsible for any damage caused to the Road Allowances at any time by itself, its agents, employees or contractors and for removing all debris from the work area following the undertaking of any of the Easement Rights contemplated herein;
- (m) Kerwood shall make commercially reasonable efforts to protect the integrity and security of all existing equipment, installations, utilities, and other facilities within the Road Allowance or which might otherwise be located in, on, or under the Road Allowances or any adjacent lands;
- (n) Kerwood shall make all payments and taking all such steps as may be reasonably necessary to ensure that no construction lien or other lien is registered against the Road Allowances as a result of the undertaking by Kerwood of any of the Easement Rights or any other work contemplated in this Agreement and taking such steps as may be required to cause any such registered lien or claim for lien to be discharged or vacated immediately after notice thereof from the County is provided to Kerwood.

Non-Exclusive Permission

- 8. The Easement Rights provided for in this Agreement shall constitute a non-exclusive easement. Without limiting the foregoing, the Easement Rights are subject to the rights of the owners of the property adjoining the Road Allowances who are entitled access to and from the Road Allowances from their properties, and subject to the rights and

privileges that the County may grant to other persons on the Road Allowances, all of which rights are expressly reserved, the rights shown on the Approved Road Use Plans and specifications only excepted. Kerwood hereby acknowledges and agrees that there are other utilities and third parties that do and/or may have similar rights over the Road Allowances and Kerwood hereby agree to make commercially reasonable efforts to accommodate the interests of other third parties when exercising the Easement Rights.

9. In respect of and without limiting the foregoing, Kerwood agrees that when engaging in any Work, it shall use commercially reasonable efforts to ensure there is minimal interference with the traveled portion of any Road Allowance or any pedestrian, vehicular, or other traffic thereon, or any use or operation of any ditch or drain adjacent to such public right-of-way, highway, street, or walkway. Unless otherwise agreed by the County, the Road Allowances shall always be open to pedestrian, vehicular or other traffic and shall be open to the public. Without limiting the generality of the foregoing, Kerwood shall be entitled to temporarily close any of the Road Allowances with the prior written consent of the County Engineer, which consent shall not be unreasonably withheld, delayed or conditioned. Kerwood agrees that it shall reimburse the County for all reasonable costs associated with services rendered for traffic control purposes, and/or the erection of road closures/barriers required during the period in which Work is being performed, including but not limited to during decommissioning periods. If Kerwood proposes the temporary closure of a Road Allowance, it shall also provide written notice to the Appropriate Emergency Service Providers.

Right of Entry

10. The County reserves its right to enter upon and use the Road Allowances without notice to Kerwood for its own purposes and to grant and transfer rights to third parties to enter upon and use the Road Allowances to construct, operate, maintain, alter, repair or relate infrastructure, and to modify the Road Allowances, provided such entry, use, grant or transfer by the County does not adversely affect the Electrical Infrastructure, the Work, the Wind Project or the exercise of Kerwood's rights under this Agreement.

Title

11. The County represents that:
 - (a) it has legal and beneficial title to the Road Allowances;
 - (b) it has obtained the full and unconditional due authorization for execution and delivery of this Agreement by all required resolutions and other required municipal approvals; and
 - (c) it shall defend its title to the Road Allowances against any person or entity claiming any interest adverse to the County in the Road Allowances during the term of this Agreement, save and except where such adverse interest arises as a result of the gross negligence or willful misconduct of Kerwood or any person for which they are responsible at law;

- (d) the Permits are the only permits, approvals, consents or authority within the jurisdiction of the County required in connection with the Work and the fees as set forth in attached hereto are the only fees payable by Kerwood in connection with the Permits; and
- (e) the execution and delivery of this Agreement by the County will not result in a breach of any other agreement to which the County is a party and no rights, interests or privileges have been granted in respect of the Road Allowances by the County which will or could adversely affect the rights, interests or privileges granted to Kerwood hereunder.

Electrical Infrastructure at Expense of Kerwood

- 12. Notwithstanding and without limiting any other term hereof, Kerwood agrees and undertakes that all Electrical Infrastructure over, along, across, within or under the Road Allowances will be placed, installed, constructed, re-constructed, inspected, maintained, operated, altered, enlarged, repaired, replaced, relocated and removed at its own expense and in accordance with good engineering practices, and in compliance with Approved Road Use Plans, this Agreement and Applicable Law.

C. ADDITIONAL TERMS AND CONDITIONS RE EASEMENT RIGHTS

Road Closure

- 13. The County agrees, in the event of closing of any Road Allowances, to give Kerwood reasonable notice of such closing and to provide Kerwood with a further easement over that part of the closed Road Allowances sufficient to allow Kerwood to preserve any part of the Electrical Infrastructure in its then existing location, and to enter upon the closed Road Allowances to maintain and repair such part of the Electrical Infrastructure.

Traffic Effects

- 14. Notwithstanding and without limiting any other term hereof, the Parties acknowledge that the Work from time to time may require the temporary modification of traffic patterns or the imposition of temporary restrictions on public access to or use of the Road Allowances (“**Traffic Effects**”). In the event that Kerwood determine that Traffic Effects are required, Kerwood agrees to:
 - (a) give five (5) days’ notice of anticipated Traffic Effects to the County Engineer and affected residents and to coordinate with the County Engineer and the Appropriate Emergency Service Providers to minimize and mitigate any adverse impacts of the Traffic Effects and to ensure public safety; and
 - (b) use reasonable efforts to maintain adequate public access to and use of the Road Allowances while Traffic Effects are in progress and to remove the Traffic Effects as soon as reasonably possible when the Traffic Effects are no longer necessary.

Restoration

15. Kerwood further agrees that in the event that it becomes necessary to break, remove, or otherwise pierce the existing surface of any of the Road Allowances or any other municipal lands to undertake any placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Electrical Infrastructure or to undertake any Work over, along, across, within or under the Road Allowances, Kerwood in all cases will repair, reinstate and restore such surface at its own expense to the same or better condition which existed prior to the performing of the Work. Kerwood also agrees that, except in those cases where breaking, removing or otherwise piercing the untraveled portion of the Road Allowance forms part of the Work, it shall thereafter, for a period of twelve (12) months following the Commercial Operation Date (the “**Interim Period**”), monitor that portion of such restored Road Allowances, at the sole expense of Kerwood, and repair any settling thereof directly caused by the placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Electrical Infrastructure or any of the Work performed over, along, across, within or under the Road Allowances to the satisfaction of the County Engineer, acting reasonably.

Repairs

16. Kerwood shall be liable for any and all Repairs required to be performed on the Electrical Infrastructure or on the Road Allowances due to the existence of the Electrical Infrastructure. Any Repair Work undertaken shall restore the road surface to at least the same condition it was in immediately prior to the use of the Road Allowances by Kerwood. In the event that Repair Work is required, Kerwood agrees to provide the County with at least five (5) days’ notice that the Repair Work will occur if such Repair Work:
 - (a) will have or is likely to have Traffic Effects;
 - (b) will involve or is likely to involve Tree Work;
 - (c) could present a danger to public health and safety; or
 - (d) is located in Entrances.
17. Subject to the provisions of this Agreement and provided that Repair Work on Electrical Infrastructure complies with this Agreement, Kerwood shall be entitled to conduct Repair Work on Electrical Infrastructure without prior approval of the County Engineer.

Emergency

18. Notwithstanding any other provision of this Agreement, in the event of any emergency involving the Electrical Infrastructure, Kerwood shall notify the Appropriate Emergency Service Providers immediately upon becoming aware of the situation and shall do all that is necessary and desirable to control the emergency, including such work in and to the

Electrical Infrastructure or the Road Allowances as may be required for the purpose. If after reasonable and unsuccessful efforts to communicate with the County and in the event the emergency, at Kerwood's sole determination, Kerwood requires immediate access to Electrical Infrastructure, Kerwood may enter upon the subject Road Allowances and/or municipal lands without prior notice to the County in order to gain access to such Electrical Infrastructure in order to address such emergency and, in so doing, shall undertake to rectify the Electrical Infrastructure to the standards and as are otherwise required by the terms of this Agreement and to thereafter provide written notification and details and specification of such Repair Work to the County on the next municipal business day and to thereafter file amended Plans and drawings detailing such repairs as is otherwise required by this Agreement. Without limiting the foregoing, subject to resolving to the emergency, Kerwood agrees that all work completed under this subsection shall maintain the same location of the Electrical Infrastructure as previously approved by the County.

19. Kerwood shall be responsible for all costs associated with such emergencies. The Parties hereby agree to cooperate with each other and with the Appropriate Emergency Service Providers and Hydro One Networks Inc. to develop and adopt protocols applicable in the event of an emergency involving the Electrical Infrastructure.

Upgrades Required

20. In the event that the standard, condition or maintenance of any of the Road Allowances is not sufficient to permit Kerwood to carry out its desired operations, Kerwood shall be solely responsible for carrying out any work or maintenance required to upgrade the Road Allowances, at its own expense.

Locating Infrastructure:

21. Kerwood agrees at its sole expense to:
 - (a) mark the location of Electrical Infrastructure installed by Kerwood within the Road Allowances with appropriate markings;
 - (b) participate in the "Ontario One Call" system to facilitate ongoing notice to the public of the location of the Electrical Infrastructure; and
 - (c) upon written request of the County, Kerwood shall properly and accurately identify the location of any Electrical Infrastructure within the County, and provide such reports to identify the depth of the relevant portion of the Distribution Infrastructure, such request to be made in writing to Kerwood with advance notice of twenty (20) days prior to the County or a third party commencing work that may conflict with the Electrical Infrastructure.

Relocation of Installed Infrastructure

Upon Election of Kerwood

22. In the event that Kerwood wishes to relocate Electrical Infrastructure which has been previously installed in accordance with this Agreement at 100% its own expense, Kerwood shall notify the County of such request, in writing, and such request will thereafter be considered and administered by the County acting reasonably and with diligence giving due consideration to the scope of the works already undertaken by Kerwood on the Road Allowances, provided that, in considering and administering such request the County shall be entitled to take into consideration any specific municipal or engineering interests affected by such relocation including any additional facilities located within the Road Allowances. Notwithstanding the foregoing, the County shall not be permitted to unreasonably withhold, delay or condition its approval for such request.

Required by the County

23. In the event that the County, in conjunction with an approved municipal plan, and acting reasonably, deems it necessary for the location of the Electrical Infrastructure or Entrances (hereafter, “a **General Relocation**”) to be taken up, removed, or modified within the Road Allowance, the General Relocation and any related installation work shall be conducted at the 100% of the expense of Kerwood within a reasonable period of time and subject to Force Majeure.
24. Without limiting and in addition to Section 23, in the event that Kerwood determines that leave to construct or amendment thereto or any other approval is required from a Public Authority, or any successor thereof, with respect to the proposed General Relocation or related installation work, then the County shall provide such reasonable period of time as is necessary for Kerwood to obtain such leave to construct, amendment or other approval before closing or disposing of the Road Allowance, if applicable; provided, however, in the event that any Public Authority’s approval is not provided to Kerwood, both Kerwood and the County shall be bound to comply with the determination of the Public Authority and shall modify or discontinue the relocation of the Electrical Infrastructure or Entrances as necessary.

Required by Legislation or Lawful Order

25. In the event that a General Relocation is required as a result of the County’s compliance with a legislative requirement, Ministerial order or such other law or order of a body which has the ability to force the County to act then the costs of the Relocation and/or related installation work associated with the installed Electrical Infrastructure shall be performed by Kerwood at 100% its cost.

By Third Party

26. Where the Relocation under Section 24 is required due to the County accommodating a third party (hereinafter “**Third Party Work**”), the required Relocation or related installation work shall be conducted by Kerwood in accordance with the terms of this Agreement respecting installation, and the full cost of the amendment or Relocation shall be borne solely by the third party and paid in advance. The County agrees to provide Kerwood with ninety (90) days’ notice of the need for any such Third Party Work and to require that the relevant third party or parties bear the full cost of such Third Party Work and indemnify Kerwood against all claims and liabilities arising from the amendment or Relocation as a condition precedent to any such amendment or Relocation.

Temporary Reconstruction or Realignment of Road Allowances

27. Kerwood shall, upon reasonable prior notice to the County, have the right to:
- (a) temporarily reconstruct or realign certain portions of the Road Allowances in order to permit the delivery or movement of oversized Wind Project components, including wind turbine blades, tower sections and nacelles; and
 - (b) connect access roads located on private land and running from the Wind Project turbines to the Road Allowances to permit ongoing access to such wind turbines during the period of commercial operation of the Wind Project.

D. MAINTENANCE, SNOW CLEARANCE AND TREE WORK/REPLACEMENT

No County Winter Maintenance

28. Kerwood acknowledges that certain of the Road Allowances, which are clearly identified in the Road-Use Diagram (**Schedule “B”**) are not maintained by the County for winter use due to soft surfaces and otherwise. In the event that Kerwood requires the Road Allowances to be maintained for winter access, they shall undertake the necessary snow plowing on its own accord and at its expense and shall be responsible for all costs associated with the repair of any Road Allowance damaged as a result of such use by Kerwood.

Tree Work

29. Notwithstanding applicable statutory rights, in the event that Kerwood deems it necessary to perform any Tree Work, Kerwood shall be entitled to conduct the Tree Work. In the event that trees are removed from within the Road Allowances, Kerwood agrees at its sole expense, to remove the tree stump to a level below grade and to restore and remediate the surface of the Road Allowance.

E. IMPLEMENTATION OF PLANS

30. Intentionally Deleted

Revisions Required

31. In the event that physical features of the Road Allowances or other obstacles or circumstances frustrate the ability of Kerwood to complete the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlargement, repair, replacement, relocation and removal of Electrical Infrastructure in compliance in all material respects with the Approved Road Use Plans, Kerwood agrees to revise the relevant Plans and submit such revised Plans for review by the County Engineer. If a material revision is required, subject to Section 64 of this Agreement, the County agrees to expedite in the instance of a revision of Plans submitted and agrees not to unreasonably condition, delay or withhold approval of revised Plans.

Adherence to Approved Road Use Plans

32. Kerwood further agrees to commence, perform and complete the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Electrical Infrastructure in compliance with the Approved Road Use Plans and Road-Use Diagram within a reasonable margin of error.

Filing of As-Built Plan Following Installation etc.

33. Following the completed placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Electrical Infrastructure and within one hundred eight (180) days after the Commercial Operation Date, Kerwood agree to conduct the necessary investigation necessary to produce and file with the County Engineer an As-Built Plan together with a final electronic copy (CD ROM or DVD) prepared in an AUTOCAD, CAD or GIS environment of the As-Built Plan, showing the exact location and specifications of any Electrical Infrastructure installed over, along, across, under or within the Road Allowances and any Entrances. The Parties agree that the County shall not release of any deposits or securities held until the As-Built Plan is filed.

Post-Installation Report and Required Repairs

34. Following the County Engineer's receipt of notice from Kerwood confirming that installation of the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Electrical Infrastructure over, along, across, within or under the Road Allowances is complete (the "**Completion Notice**"), the Consulting Engineer shall conduct a further inspection and provide a post-installation report (the "**Post-Installation Report**"), which includes the following:
 - (a) identification of the Road Allowances which in the opinion of the Consulting Engineer, have been damaged or destroyed by Kerwood and its employees, agents or contractors during the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing,

relocating and removing Electrical Infrastructure over, along, across, within or under the Road Allowances, hauling, or establishing of Entrances; and

- (b) identification of the repairs, replacements or remedial work necessary to repair the damaged Road Allowances.

The Consulting Engineer's inspection, for the purposes of producing the Post-Installation Report shall be completed no later than ten (10) business days following receipt by the County of the Completion Notice. The Consulting Engineer shall prepare a draft Post-Installation Report for review and approval by the County Engineer, acting reasonably. Kerwood agree to repair any and all damage to the Road Allowances directly caused by the Work in accordance with the Post-Installation Report (hereinafter referred to as the "**Required Repairs**"). In the event Kerwood fails to complete the Required Repairs in a manner and within a timeframe acceptable to the County Engineer acting reasonably, the County may do so at the sole expense of Kerwood.

Final Condition Report and Final Repairs

- 35. Following the expiry of the Interim Period, the County's Engineer shall forthwith conduct an inspection of the Road Allowances to either (i) confirm its satisfaction that all restoration work has been completed and that the Road Allowances are in the same or better condition which existed prior to the performing of the Work; or (ii) identify those Road Allowances which are not in the same or better condition which existed prior to the performing of the Work and identify the repair, replacement or remedial work required to repair the Road Allowance to the same condition which existed prior to the performing of the Work (the "**Final Condition Report**"). The County Engineer's inspection, for the purposes of producing the Final Condition Report shall be completed no later than ten (10) business days following the expiry of the Interim Period and the Final Condition Report shall be delivered to Kerwood not later than ten (10) business days following the date of inspection aforesaid. Kerwood agrees to repair any damage to the Road Allowances identified in the Final Condition Report (the "**Final Repairs**") within a reasonable period of time. In the event Kerwood fails to complete the Final Repairs in a manner and within a timeframe acceptable to the County Engineer acting reasonably, the County may do so at the sole expense of Kerwood.

F. COMPENSATION

For Use of Road Allowance

- 36. To offset the administrative expenses incurred by the County as a result of the use of its road allowances and to further secure covenants of Kerwood as set out in this Agreement, Kerwood agrees to pay to the County,
 - (a) An initial payment of ten thousand dollars (\$10,000.00) within 30 days of the effective date of this Agreement, which shall *inter alia*, fully compensate the County for all reasonable out of pocket costs incurred in connection with the preparation and implementation of this Agreement including reasonable legal, engineering and inspection costs; and

An annual fee in the amount of four thousand dollars (\$4000.00) per kilometer of transmission lines located on County Road Allowances per year, payable by March 31 of every year during the term of this Agreement.

- (b) The appropriate permit fees, which fees are shown in the Permits and Fees Document (**Schedule “C”**) with respect to those permits Kerwood requires in order to engage in desired actions while using the rights identified in this Agreement.
37. All overdue payments payable by Kerwood to the County under the terms of this Agreement shall bear interest at the rate of ten (10%) per cent per annum.

First Security Deposit

38. Prior to the commencement of the Work, Kerwood shall deposit with the County an irrevocable letter of credit in a form satisfactory to the County and from a financial institution satisfactory to the County, acting reasonably (the “**First LC**”) in the amount of \$250,000, which shall secure the obligations of Kerwood pursuant to this Agreement during the initial placement, installation and construction of the Electrical Infrastructure over, along, across, within or under the Road Allowances. Kerwood acknowledges and agrees that the County shall be entitled to draw on and use the proceeds from the First LC to complete the Required Repairs if Kerwood fails to do so in accordance with Section 34 of this Agreement.

Second Security Deposit

39. Following the completion of any Required Repairs to the satisfaction of the County acting reasonably, the County shall forthwith return the First LC to Kerwood and Kerwood shall, within five (5) business days of the receipt of the First LC, provide a second irrevocable letter of credit in a form satisfactory to the County and from a financial institution satisfactory to the County, acting reasonably (the “**Second LC**”) in the amount of \$125,000, which shall secure the obligations of Kerwood with respect to Section 35. Kerwood acknowledges and agrees that the County shall be entitled to draw on and use the proceeds of the Second LC to complete the Final Repairs in the event Kerwood fails to do so within a reasonable period of time, in accordance with Section 35 of this Agreement. The County shall return the Second LC to Kerwood within five (5) business days following the earlier of, (i) the date on which Kerwood notifies the County that the Final Repairs required to be performed by Kerwood pursuant to Section 35 have been satisfactorily completed in the opinion of the County, acting reasonably; and (ii) the date which is ninety (90) days following the date of the Final Condition Report.

G: LIABILITY

Risk with Kerwood

40. Kerwood hereby acknowledges that the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Electrical Infrastructure by Kerwood in

accordance with the Easement Rights granted hereunder is performed entirely at the risk of Kerwood and that the County shall in no way or under any circumstances will be responsible or liable to Kerwood or its contractors, agents, or customers for any damage or losses in consequence thereof, unless due to the negligent or intentional acts of the County or those for whom it is at law responsible.

Indemnification

41. Kerwood will indemnify and hold harmless the County, its Warden, Councilors, officers, employees, legal counsel, agents and contractors from and against any and all claims, suits, demands, liabilities, losses, costs, damages, and other expenses of every kind that the County may incur or suffer as a direct consequence of the Easement Rights granted hereunder, except where such claims, suits, demands, liabilities, losses, costs, damages, and other expenses result from the negligence or intentional acts of the County, its Warden, Councilors, officers, employees, legal counsel, agents or contractors.

No Joint Venture, Partnership or Co-ownership

42. The Parties hereby acknowledge and agree that this Agreement is solely a road use agreement and that no relationship is formed between the Parties in the nature of a joint venture, partnership co-ownership arrangement or other similar relationship.

G. ABANDONMENT AND DECOMMISSIONING OF ELECTRICAL INFRASTRUCTURE

Notice of Abandonment

43. During the term of this Agreement, Kerwood may elect to permanently discontinue the use of (hereinafter, “**Abandon**”) any part of the Electrical Infrastructure in which event Kerwood shall provide written notice specifying the part of the Electrical Infrastructure to be abandoned and the date when the abandonment will occur.

Removal

44. If Kerwood Abandons any part or all of the Electrical Infrastructure, it shall decommission and remove in accordance with the Project’s decommissioning plan and the Ministry of Environment (“MOE”) requirements in Kerwood’s Renewable Energy Approval (“REA”). Should Kerwood fail to decommission and remove the infrastructure as set out above, the County may, to the extent permitted by Applicable Law, retain necessary personnel to remove the infrastructure and Kerwood shall compensate the County for 100% of its cost to decommission and remove the infrastructure. This provision shall survive the termination of this Agreement.

H. DEFAULT

Breach

45. Subject to the rights granted to any Secured Parties hereunder or by the County, in the event that a Party commits a material breach of or omits to comply with any of the provisions of this Agreement (the “**Defaulting Party**”) which continues for at least sixty (60) days after written notification of such default is provided to the Defaulting Party, the other Party (the “**Complainant**”) shall have the right to terminate this Agreement. However, if the Defaulting Party shall have remedied the breach or shall have commenced to remedy the breach and has diligently pursued the remedying thereof within the sixty (60) days after the initial written notification of default, the Defaulting Party shall be allowed not less than one hundred and fifty (150) days after the expiry of the original notice period to remedy the breach, or such longer period of time as is reasonable in the circumstances. In the event of default by Kerwood and without such default being rectified within the time period referred to in this section, the County shall have the right to terminate this Agreement

Expiration of PPA

46. Notwithstanding any other term or provision of this Agreement, if the PPA expires or is terminated and not otherwise extended or renewed during the Term of this Agreement, and Kerwood do not secure an adequate replacement market for the electricity generated by the Wind Project within ninety (90) days of the expiry or termination of the PPA, this Agreement shall, at the option of Kerwood be terminated.

Force Majeure

47. Whenever, and to the extent that a Party will be unable to fulfill or will be delayed or restricted in the fulfillment of any obligations under any provision of this Agreement by reason of:
- (a) strikes;
 - (b) lock-outs;
 - (c) war acts of military authority;
 - (d) rebellion or civil unrest;
 - (e) material or labour shortage not within the control of the affected Party;
 - (f) fire or explosion;
 - (g) inclement weather, flood, wind, water, earthquake, or other casualty;

- (h) changes in Applicable Law not wholly or mainly within the control of the affected Party, including the revocation by any Public Authority of any permit, privilege, right, approval, license or similar permission granted to Kerwood or the Wind Project;
- (i) any event or matter not wholly or mainly within the control of the affected Party (other than lack of funds or any financial condition of the parties hereto); or,
- (j) acts of God,

(in each case a “**Force Majeure**”) not caused by the default or act of or omission by that Party and not avoidable by the exercise or reasonable effort or foresight by it, then, so long as any such impediment exists, that Party will be relieved from the fulfillment of such obligation and the other Party will not be entitled to compensation for any damage, inconvenience, nuisance or discomfort thereby occasioned. The Party relying on Force Majeure will be required and is entitled to perform such obligation within a period of time immediately following the discontinuance of such impediment that is equal to the period of time that such impediment existed. A Party shall promptly notify the other Party of the occurrence of any Force Majeure, which might prevent or delay, that doing or performance of acts or things required to be done or performed.

I. MISCELLANEOUS

Assignment

- 48. Subject to the provisions in other paragraphs of this Agreement, Kerwood shall not assign this Agreement without the written consent of the County, which shall not be unreasonably withheld, delayed or conditioned, except that no consent shall be required for Kerwood to assign this Agreement to an affiliated or successor entity, or for purposes of securing indebtedness or other obligations respecting the Electrical Infrastructure or the Wind Project. The County acknowledges that a change in control of Kerwood shall not be considered an assignment by Kerwood of this Agreement or of any of Kerwood's rights and obligations under this Agreement.
- 49. Kerwood shall be entitled to assign this Agreement and all of its rights thereunder without the consent of the County to the Secured Parties as security for Kerwood's obligations to such Secured Parties which shall be further entitled to assign this Agreement and Kerwood's rights thereunder in connection with an enforcement of their security. The County hereby grants to any Secured Party the rights and remedies set forth in this Agreement, including those rights and remedies set forth in **Schedule “E”**. In addition, the County will, from time to time, at the request of the Secured Party, promptly execute and deliver in favour of any Secured Party such consents and acknowledgements granting and confirming the rights and remedies in this Agreement, including those rights and remedies set forth in **Schedule “E”**. The County shall enter into any other reasonable agreements with the Secured Party, as may reasonably be required by Kerwood in order to obtain financing from the Secured Party.

50. Kerwood shall be entitled, with the written consent of the County, which may not be unreasonably conditioned, delayed, or withheld, to assign this Agreement to a transferee of the Wind Project other than an affiliated or successor company, and Kerwood shall thereupon be released from any and all obligations under this Agreement from and after the date of such assignment, provided that such assignee has agreed in writing with the County, in a form acceptable to the assignee and the County, both acting reasonably, to be bound by the provisions of this Agreement from and after the date of the assignment.
51. In the event Kerwood applies to the County for consent to a transfer, the County shall have a period of thirty (30) days following receipt of sufficient information to make a determination as to whether the County shall provide or refuse to provide its consent to the proposed Transfer. The County's failure to respond within that thirty (30) day period shall be construed as consent by the County.
52. Any documents relating to a transfer or the County's consent will be prepared by the County or its solicitors or their retained agents and all of the legal costs borne as a result by the County together with a reasonable administrative charge of One Thousand Dollars (\$1,000) shall be reimbursed to the County by Kerwood on demand.

Dispute Resolution

53. In the event that either Party provides the other Party with written notice of dispute regarding the interpretation or implementation of this Agreement (a "**Dispute**") then both Parties shall use their best efforts to settle the Dispute by consulting and negotiating with each other in good faith to reach a solution satisfactory to both Parties. However, if the Parties do not resolve the Dispute within thirty (30) days following receipt of such notice, then either Party may provide written notice to the other Party (the "**Arbitration Notice**") requiring resolution by arbitration or thereafter the Dispute shall be referred to arbitration in accordance with the provisions of the *Arbitration Act, 1991*.
54. The Parties agree to the following with respect to any arbitration between the Parties:
 - (a) the arbitration tribunal shall consist of one arbitrator appointed by mutual agreement of the Parties or, if the Parties fail to agree on an arbitrator within ten (10) days after receipt of the Arbitration Notice then either Party may apply to a judge of the Ontario Superior Court of Justice to appoint an arbitrator;
 - (b) The arbitrator shall be qualified by education and training to be able to decide upon the matter to be decided;
 - (c) The arbitration shall be conducted in English;
 - (d) The arbitration shall take place in the geographic boundary of the County of Middlesex or another place mutually agreed upon by the Parties;
 - (e) The arbitration award shall be given in writing and shall address the question of costs of the arbitration and all related matters;

- (f) The arbitration award shall be final and binding on the Parties as to all questions of fact and shall be subject to appeal only with respect to matters of law or jurisdiction.
55. The Parties agree that except to the extent that a matter is specifically the subject of a Dispute, both Parties shall continue to observe and perform the terms and conditions of this Agreement pending the resolution of a Dispute.

Termination by Kerwood

56. Kerwood may upon six (6) months' notice in writing, terminate this Agreement. Once the notice has been provided, Kerwood shall be liable to the County for the provisions of this Agreement to the date of termination. Following the termination date, Kerwood will only be liable for the provisions which survive this Agreement.

Further Assurances

57. Each of the Parties covenant and agrees with the other that it will at all times hereafter execute and deliver, at the request of the other, all such further documents, agreements, deeds and instruments, and will do and perform all such acts as may be necessary to give full effect to the intent and meaning of this Agreement.

Notices

58. The parties hereto agree as follows:

Any written notice provided for and contemplated by this Agreement will be delivered to the parties by hand or registered mail at the following addresses:

To the County: The Corporation of the County of Middlesex
Attention: County Clerk
399 Ridout Street North
London, ON N6A 2G7

To Kerwood: Kerwood Wind, Inc.
Attention: Business Management
390 Bay Street, Suite 1720
Toronto, ON, M5H 2Y2, Canada

Phone: (416) 364-9714

With a copy to: Kerwood Wind, Inc.
Attention: General Counsel
700 Universe Blvd. LAW/JB
Juno Beach, Florida 33408
Phone: (561) 691-2359

Every such notice shall be deemed to have been received if personally delivered at the time of such delivery and if sent by prepaid registered mail, at the end of five (5) business days after the mailing thereof.

Governing Law

59. This Agreement shall be governed by, and be construed and interpreted in accordance with, the laws of Ontario and the laws of Canada applicable in Ontario.

Counterparts

60. This Agreement may be executed by facsimile or PDF transmission and in one or more counterparts, all of which shall be considered one and the same Agreement.

Binding Covenant

61. This Agreement and the rights granted hereunder are and shall be of the same force and effect, to all intents and purposes, as a covenant running with the Road Allowances. The provisions of this Agreement, including all of the covenants and conditions herein shall extend, be binding upon and enure to the benefit of the County, Kerwood and their respective successors and permitted assigns as the case may be.

Severability

62. The invalidity or unenforceability of any provision of covenant contained in this Agreement shall affect the validity or enforceability of such provision or covenant only and any such invalid provision or covenant shall be deemed to be severable from the balance of this Agreement, which shall be enforced to the greatest extent permitted by law.

Amendments to the Agreement

63. No supplement, modification, amendment, or waiver of this Agreement shall be binding unless executed in writing by the Parties.

Amendments to the Approved Road Use Plan

64. Any material amendment to the Approved Road Use Plan will be submitted to the County Engineer for his approval, who will not unreasonably withhold such approval. The parties agree that once approved, the amended Approved Road Use Plan shall substitute for, and replace the attached **Schedule "B"** as part of this Agreement.

Waiver

65. No supplement, modification, amendment, or waiver of this Agreement shall be binding unless executed in writing by the Parties.

Foreign Corrupt Practices Act and Anti-Bribery Indemnity

66. Notwithstanding anything to the contrary herein, the County, in its administration of this Agreement, shall refrain from offering, giving or promising, directly or indirectly, money or anything of value to a Canadian or foreign governmental official to influence the official in his or her official capacity, induce the official to do or omit to do an act in violation of his or her lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business to, any person. For the purposes of this Section, **“anything of value”** includes, but is not limited to, cash or a cash equivalent, discounts, gifts, use of materials, facilities or equipment, entertainment, drinks, meals, transportation, lodging, insurance benefits, or promise of future employment. **“governmental official”** shall mean any person holding any level of legislative, administrative, or judicial office of the Canadian or a foreign government or any of its departments or agencies or divisions; any person acting on behalf of the Canadian or a foreign government, including a local or provincial agency, enterprise, or organization; any official or agent of a Canadian or a foreign public administration or publicly funded organization; any official of a Canadian or a foreign political party; any officer or agent of a public international organization (e.g., World Bank, International Monetary Fund, World Health Organization, United Nations, World Trade Organization); or any relatives or close family/household members of any of those listed above. The County shall indemnify and hold harmless Kerwood from all claims brought against Kerwood as a result of the County or its representatives’ failure to comply with Anti-Bribery Law. The County shall immediately report any breach of Anti-Bribery Law by the County or its representatives. The County shall indemnify and hold harmless Kerwood from all claims brought against Kerwood as a result of the County or its representatives’ failure to comply with Anti-Bribery Law. The County shall immediately report any breach of Anti-Bribery Law by the County or its representatives. Kerwood shall have the right to audit the County’s books and records with respect to payments made on behalf of Kerwood in the event that Kerwood believes that the County has violated this Section 66. Kerwood shall have the right to immediately terminate all payments to the County under this Agreement if the County fails to comply with this Section 66.

IN WITNESS WHEREOF the parties hereto affix their hands and seal or corporate seals, attested to by the hand of their authorized officers, as the case may be, at London, Ontario, this 10th day of September, 2013 to be effective as of the date first written above.

SIGNED, SEALED AND DELIVERED
in the presence of

THE CORPORATION OF THE
COUNTY OF MIDDLESEX

Warden

Clerk

We have the authority to bind the Corporation

SIGNED, SEALED AND DELIVERED
in the presence of

KERWOOD WIND INC.

As to Form

Per:

Title:

I have the authority to bind the Corporation

IN WITNESS WHEREOF the parties hereto affix their hands and seal or corporate seals,
attested to by the hand of their authorized officers, as the case may be, at June Beach,
Ontario, this 12th day of September, 2013 to be effective as of the date first written above.
Florida

SIGNED, SEALED AND DELIVERED
in the presence of

**THE CORPORATION OF THE
COUNTY OF MIDDLESEX**

Warden

Clerk

We have the authority to bind the Corporation

SIGNED, SEALED AND DELIVERED
in the presence of

KERWOOD WIND INC.

As to Form

Per: John DiDonato
Title: VicePresident

I have the authority to bind the Corporation

SCHEDULE “A”

Kerwood Asset Document

Kerwood Wind, Inc. (“Kerwood”) is the project entity for the Adelaide Wind Energy Centre (“Adelaide Project”) located in Middlesex County, Ontario. Kerwood is the owner of a Feed In Tariff Contract with reference number FIT-FZEYQNB (FIT Contract).

The Adelaide Project will generate 60 megawatts, and Kerwood is the owner of approximately 45-50 Wind Farm Leases and approximately 15 Easement Agreements to support the infrastructure and facilities for the Adelaide Project.

Kerwood will own all the turbines and infrastructure for the Adelaide Project. Kerwood will also have an interest in portions of the transmission lines and facilities supporting the Adelaide Project. The estimated value of the assets of the Adelaide Project, as of the commercial operation date, will be \$[REDACTED].

CONFIDENTIAL

As to Form

SCHEDULE “B”

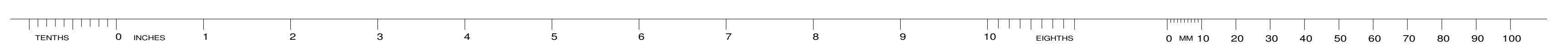
Approved Road Use Plans

As to Form

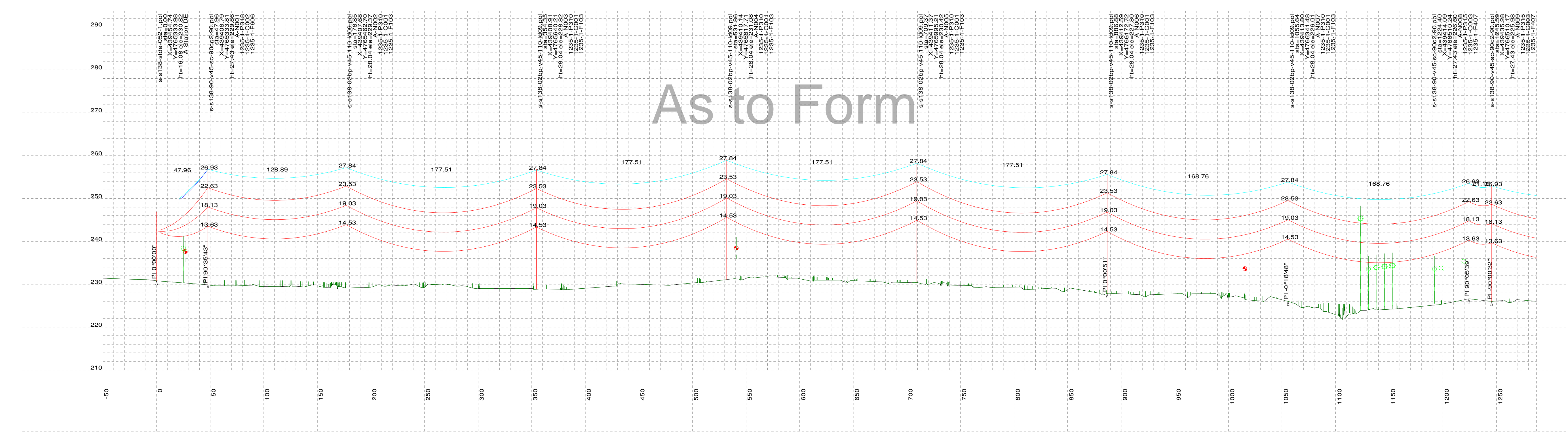
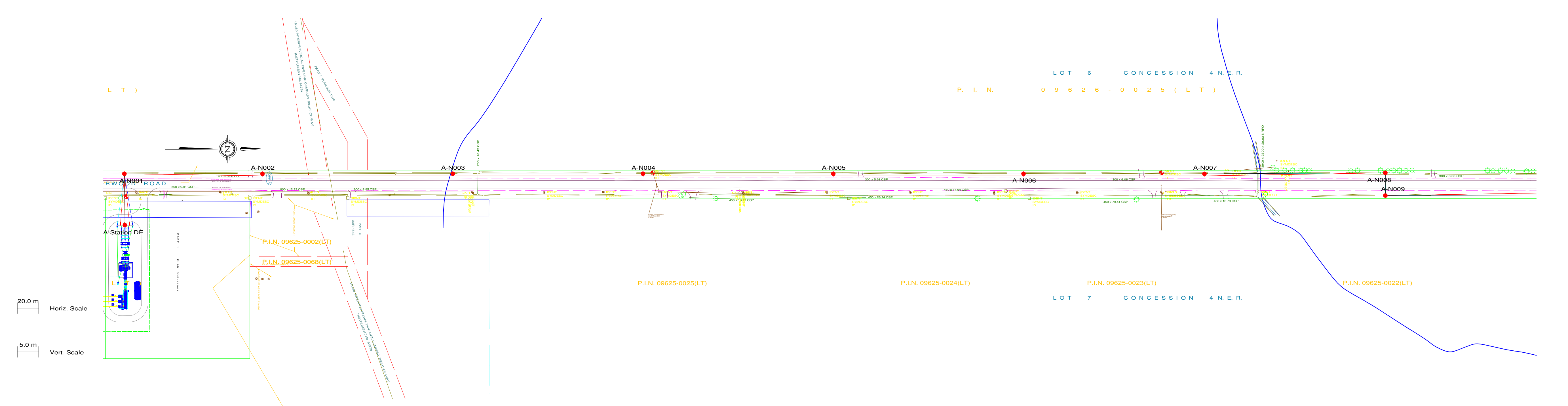
Kerwood B1

Kerwood Transmission Plan and Profile

As to Form



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 1 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

s-s138-02bp-v45-110-ld09.pol
sta
X
Y
ht
ele
A-N002
1235-1-P310
1235-1-C001
1235-1-F103

PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
STEEL POLE ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	30/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	30/08/13	ISSUED FOR REVIEW						
L	09/08/13	ISSUED FOR REVIEW	M.H.	E.K.					L	09/08/13	ISSUED FOR REVIEW						
K	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					K	07/08/13	ISSUED FOR REVIEW						
J1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J1	31/07/13	ISSUED FOR REVIEW						
J	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	25/07/13	ISSUED FOR REVIEW						
H	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	22/07/13	ISSUED FOR REVIEW						
G	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					G	21/07/13	ISSUED FOR REVIEW						
F	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					F	15/05/13	ISSUED FOR TENDER						
E	26/04/13	ISSUED FOR TENDER	M.H.	E.K.					E	26/04/13	ISSUED FOR REVIEW						
D	28/03/13	ISSUED FOR TENDER	M.H.	E.K.					D	28/03/13	ISSUED FOR REVIEW						
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW						
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW						
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW						
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP						

STAMP/SEAL
PROPRIETARY INFORMATION:
THIS DRAWING IS THE PROPERTY OF CHIMAX INC.
AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY
WITHOUT THE PERMISSION OF CHIMAX INC.

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				ADELAIDE WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 1 OF 10	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	CHK			
N.T.S.		APP			

Engineering Company
3550 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P012-S1
REV.
N



D



B



8

6

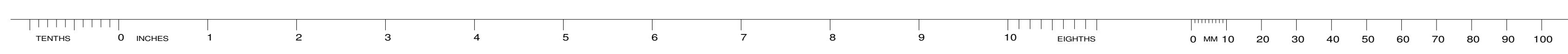
5

4

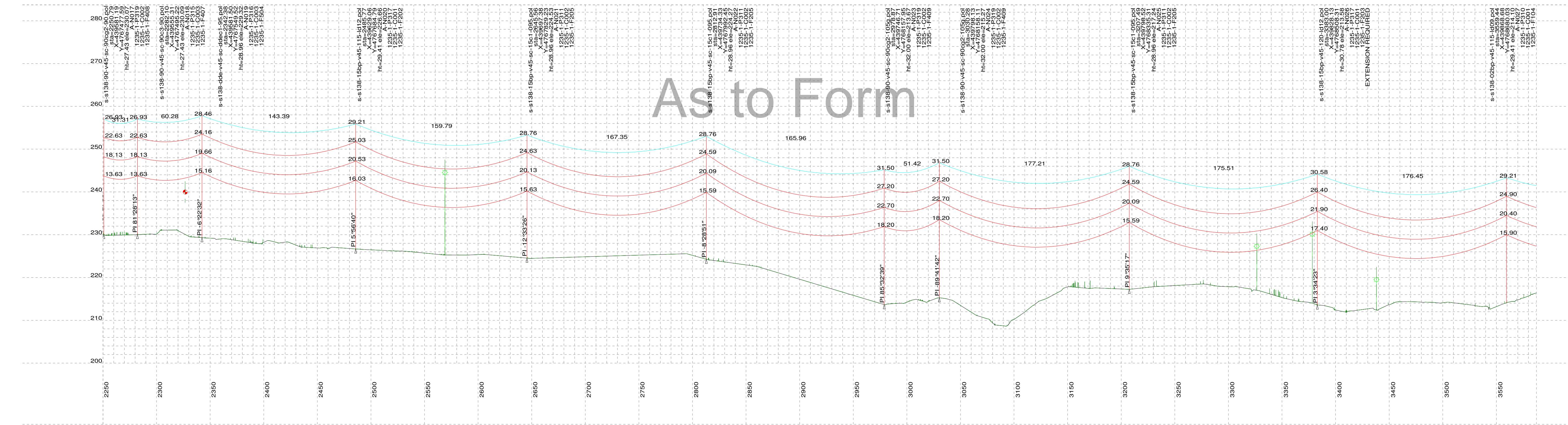
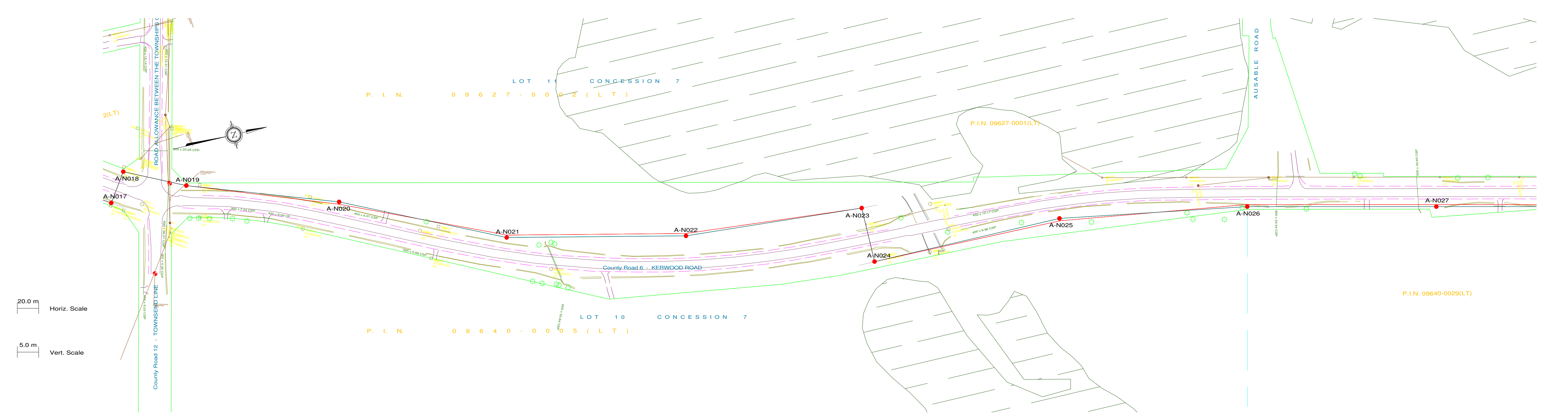
2

A

EV.
N



PLS-CADD Drawing



As to Form

PLAN & PROFILE LEGEND:

- 1 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

- s-s138-02bp-v45-110-ld09.pol
- sta
- X
- Y
- ht
- ele
- A-N002
- 1235-1-P310
- 1235-1-C001
- 1235-1-F103

- PLS-POLE FILE IDENTIFICATION
- STATION CHAINAGE
- UTM EASTING
- UTM NORTHING
- STRUCTURE HEIGHT ABOVE GROUND (M)
- GROUND ELEVATION (M)
- STRUCTURE NO.
- FRAMING DRAWING NO.
- FOUNDATION DRAWING NO.
- STEEL POLE ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	30/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	30/08/13	ISSUED FOR REVIEW								
L	09/08/13	ISSUED FOR REVIEW	M.H.	E.K.					L	09/08/13	ISSUED FOR REVIEW								
K	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					K	07/08/13	ISSUED FOR REVIEW								
J1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J1	31/07/13	ISSUED FOR REVIEW								
J	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	25/07/13	ISSUED FOR REVIEW								
H	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	22/07/13	ISSUED FOR REVIEW								
G	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					G	21/07/13	ISSUED FOR REVIEW								
F	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					F	15/05/13	ISSUED FOR TENDER								
E	26/04/13	ISSUED FOR TENDER	M.H.	E.K.					E	26/04/13	ISSUED FOR REVIEW								
D	28/03/13	ISSUED FOR TENDER	M.H.	E.K.					D	28/03/13	ISSUED FOR REVIEW								
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW								
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW								
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW								
REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES			

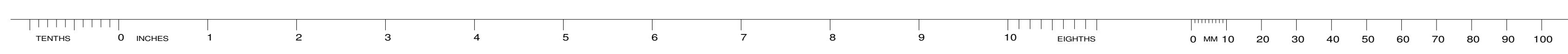
STAMP/SEAL
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				ADELAIDE WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 3 OF 10	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	APP			
N.T.S.					

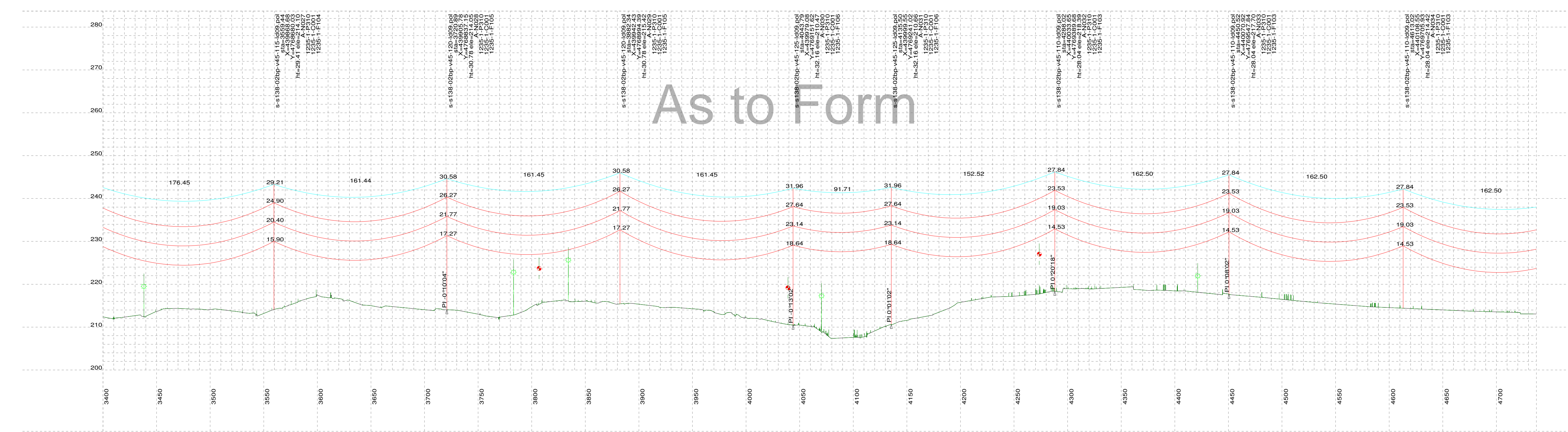
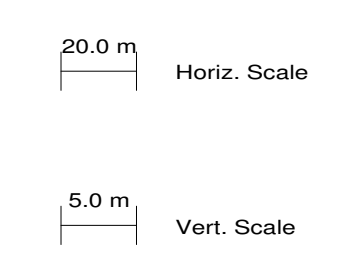
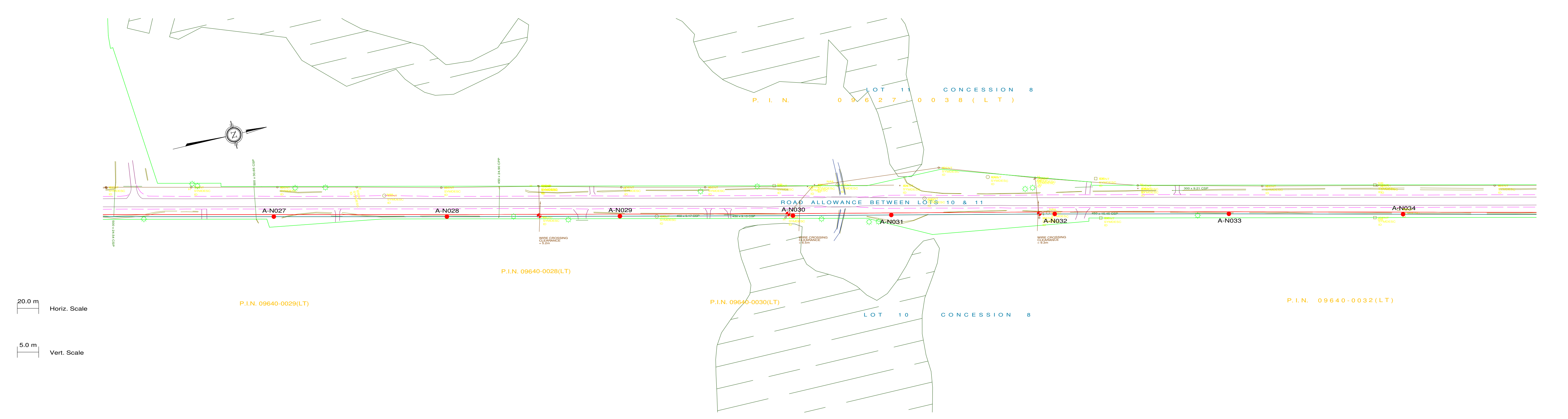
Engineering Company
3550 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P012-S3
REV.
N



PLS-CADD Drawing



As to Form

PLAN & PROFILE LEGEND:

- 1 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

- s-s138-02bp-v45-110-d09.pol
- sta
- X
- Y
- ht
- ele
- A-N002
- 1235-1-P310
- 1235-1-C001
- 1235-1-F103

- PLS-POLE FILE IDENTIFICATION
- STATION CHAINAGE
- UTM EASTING
- UTM NORTHING
- STRUCTURE HEIGHT ABOVE GROUND (M)
- GROUND ELEVATION (M)
- STRUCTURE NO.
- FRAMING DRAWING NO.
- FOUNDATION DRAWING NO.
- STEEL POLE ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	30/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	30/08/13	ISSUED FOR REVIEW				
L	09/08/13	ISSUED FOR REVIEW	M.H.	E.K.					L	09/08/13	ISSUED FOR REVIEW				
K	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					K	07/08/13	ISSUED FOR REVIEW				
J1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J1	31/07/13	ISSUED FOR REVIEW				
J	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	25/07/13	ISSUED FOR REVIEW				
H	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	22/07/13	ISSUED FOR REVIEW				
G	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					G	21/07/13	ISSUED FOR REVIEW				
F	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					F	15/05/13	ISSUED FOR TENDER				
E	26/04/13	ISSUED FOR TENDER	M.H.	E.K.					E	26/04/13	ISSUED FOR REVIEW				
D	28/03/13	ISSUED FOR TENDER	M.H.	E.K.					D	28/03/13	ISSUED FOR REVIEW				
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW				
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW				
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW				
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP				

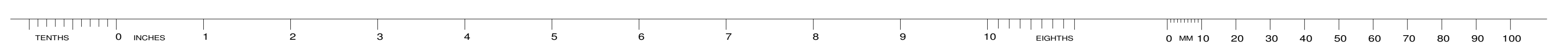
STAMP/SEAL
PROPRIETARY INFORMATION:
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				ADELAIDE WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 4 OF 10	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	APP			
N.T.S.					

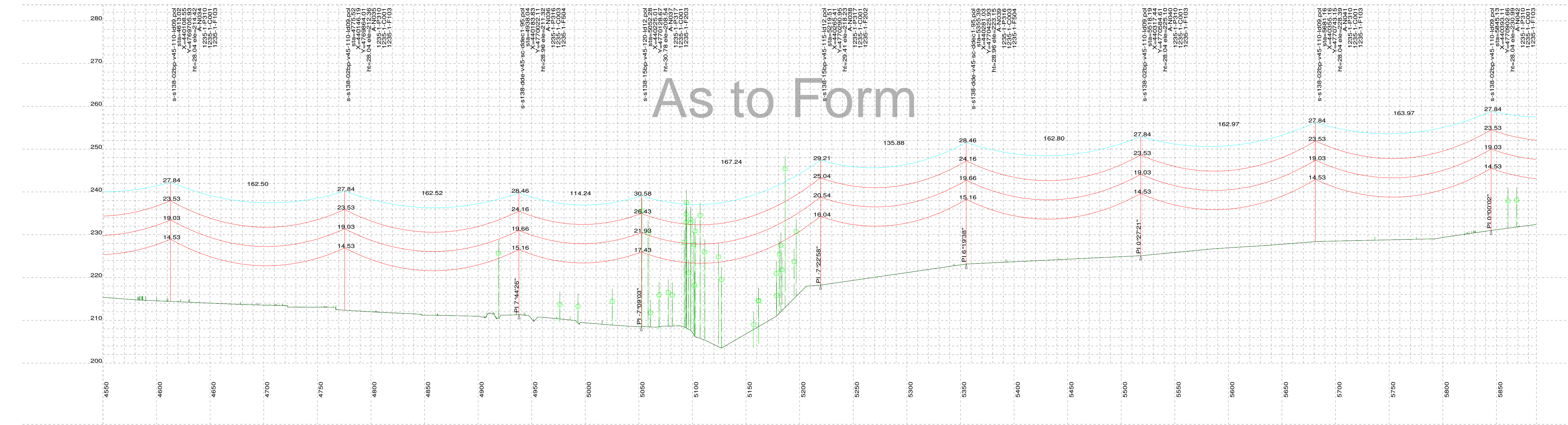
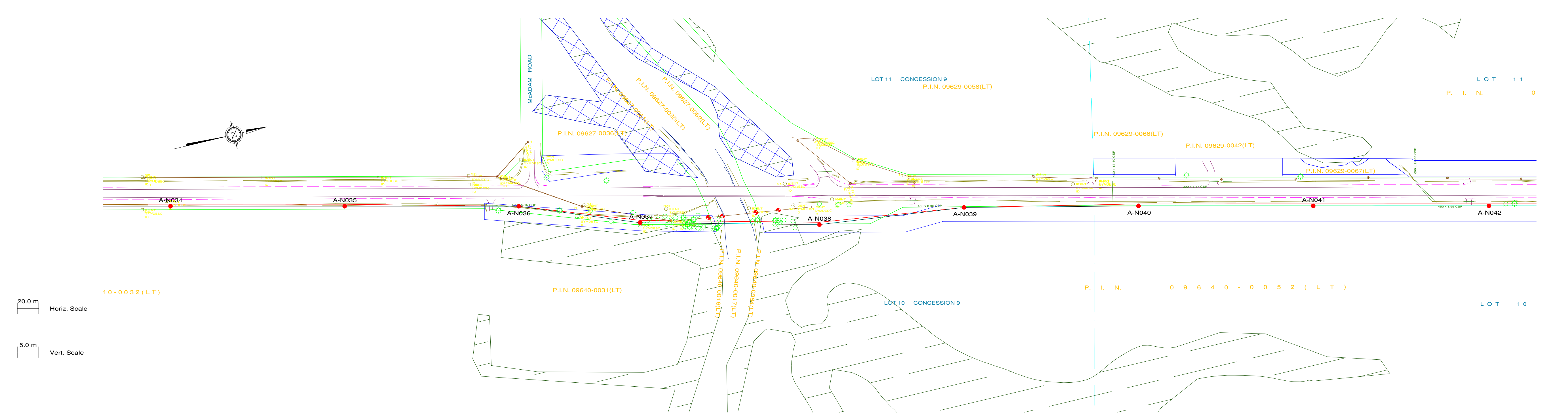
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P012-S4
REV.
N



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 1 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

- s-s138-02bp-v45-110-d09.pol
- sta
- X
- Y
- ht
- ele
- A-N002
- 1235-1-P310
- 1235-1-C001
- 1235-1-F103

- PLS-POLE FILE IDENTIFICATION
- STATION CHAINAGE
- UTM EASTING
- UTM NORTHING
- STRUCTURE HEIGHT ABOVE GROUND (M)
- GROUND ELEVATION (M)
- STRUCTURE NO.
- FRAMING DRAWING NO.
- FOUNDATION DRAWING NO.
- STEEL POLE ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	30/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	30/08/13	ISSUED FOR REVIEW								
L	09/08/13	ISSUED FOR REVIEW	M.H.	E.K.					L	09/08/13	ISSUED FOR REVIEW								
K	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					K	07/08/13	ISSUED FOR REVIEW								
J1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J1	31/07/13	ISSUED FOR REVIEW								
J	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	25/07/13	ISSUED FOR REVIEW								
H	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	22/07/13	ISSUED FOR REVIEW								
G	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					G	21/07/13	ISSUED FOR REVIEW								
F	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					F	15/05/13	ISSUED FOR TENDER								
E	26/04/13	ISSUED FOR TENDER	M.H.	E.K.					E	26/04/13	ISSUED FOR REVIEW								
D	28/03/13	ISSUED FOR TENDER	M.H.	E.K.					D	28/03/13	ISSUED FOR REVIEW								
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW								
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW								
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW								
REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES			

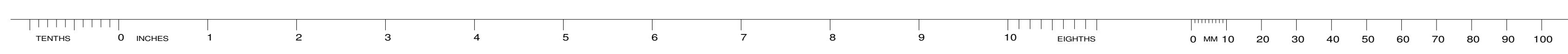
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WITHOUT THE PERMISSION OF CHIMAX INC.

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.					
PROJECT PHASE				AREA	ADELAIDE WIND PROJECT 1CCT 115KV TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.		BY	DDMMYY	SUBJECT
		DSN	E.KWONG	21/08/12	
		DRN	M.HUANG	21/08/12	
		CHK			
SCALE	PACKAGE CODE				
N.T.S.		APP			STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 5 OF 10

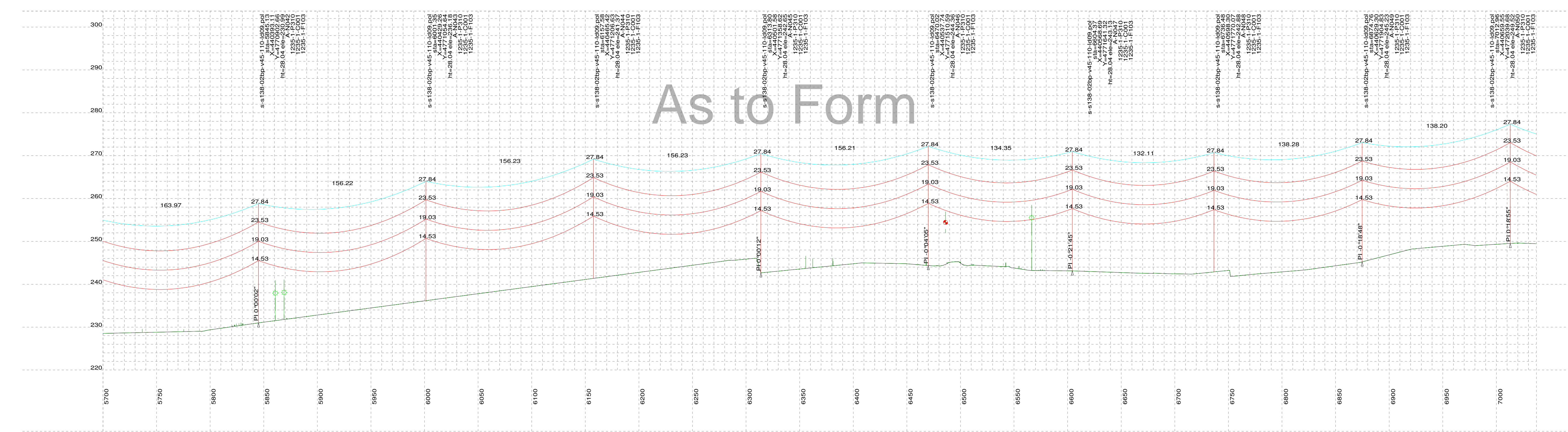
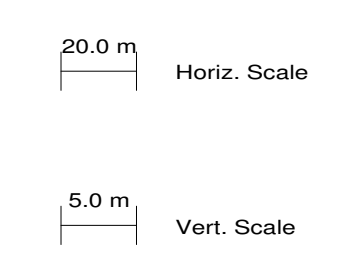
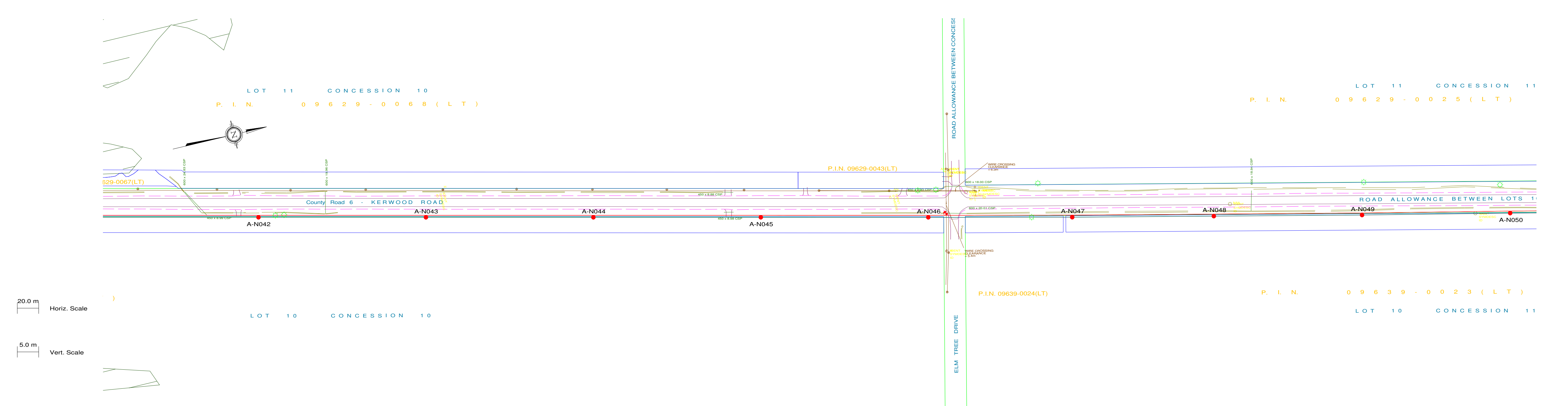
Engineering Company
3550 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P012-S5
REV.
N



PLS-CADD Drawing



As to Form

PLAN & PROFILE LEGEND:

- 1 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

- s-s138-02bp-v45-110-ld09.pol
- sta
- X
- Y
- ht
- ele
- A-N002
- 1235-1-P310
- 1235-1-C001
- 1235-1-F103

- PLS-POLE FILE IDENTIFICATION
- STATION CHAINAGE
- UTM EASTING
- UTM NORTHING
- STRUCTURE HEIGHT ABOVE GROUND (M)
- GROUND ELEVATION (M)
- STRUCTURE NO.
- FRAMING DRAWING NO.
- FOUNDATION DRAWING NO.
- STEEL POLE ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	30/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	30/08/13	ISSUED FOR REVIEW				
L	09/08/13	ISSUED FOR REVIEW	M.H.	E.K.					L	09/08/13	ISSUED FOR REVIEW				
K	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					K	07/08/13	ISSUED FOR REVIEW				
J1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J1	31/07/13	ISSUED FOR REVIEW				
J	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	25/07/13	ISSUED FOR REVIEW				
H	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	22/07/13	ISSUED FOR REVIEW				
G	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					G	21/07/13	ISSUED FOR REVIEW				
F	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					F	15/05/13	ISSUED FOR TENDER				
E	26/04/13	ISSUED FOR TENDER	M.H.	E.K.					E	26/04/13	ISSUED FOR REVIEW				
D	28/03/13	ISSUED FOR TENDER	M.H.	E.K.					D	28/03/13	ISSUED FOR REVIEW				
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW				
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW				
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW				
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP				

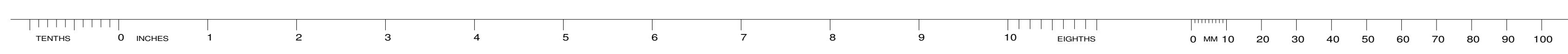
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				ADELAIDE WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 6 OF 10	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	APP			
N.T.S.					

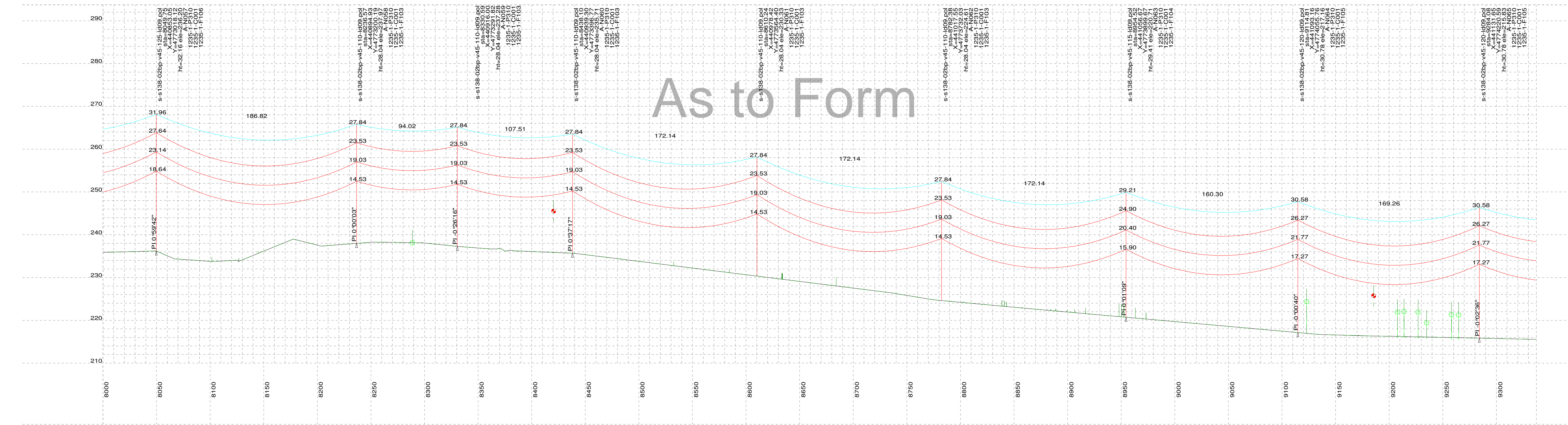
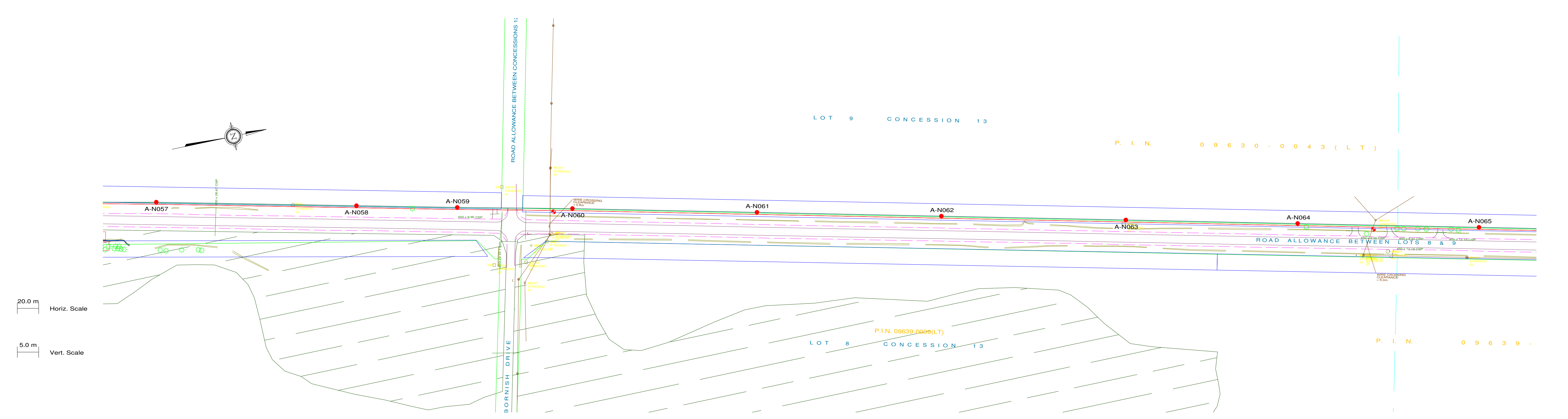
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P012-S6
REV.
N



PLS-CADD Drawing



As to Form

PLAN & PROFILE LEGEND:

- 1 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

- s-s138-02bp-v45-110-ld09.pol
- sta
- X
- Y
- ht
- ele
- A-N002
- 1235-1-P310
- 1235-1-C001
- 1235-1-F103

- PLS-POLE FILE IDENTIFICATION
- STATION CHAINAGE
- UTM EASTING
- UTM NORTHING
- STRUCTURE HEIGHT ABOVE GROUND (M)
- GROUND ELEVATION (M)
- STRUCTURE NO.
- FRAMING DRAWING NO.
- FOUNDATION DRAWING NO.
- STEEL POLE ENGINEERING DRAWING NO.

NOTES:

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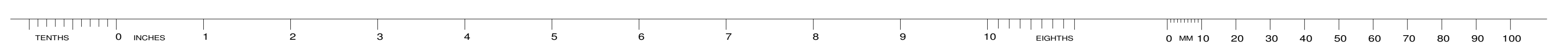
M	30/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	30/08/13	ISSUED FOR REVIEW				
L	09/08/13	ISSUED FOR REVIEW	M.H.	E.K.					L	09/08/13	ISSUED FOR REVIEW				
K	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					K	07/08/13	ISSUED FOR REVIEW				
J1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J1	31/07/13	ISSUED FOR REVIEW				
J	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	25/07/13	ISSUED FOR REVIEW				
H	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	22/07/13	ISSUED FOR REVIEW				
G	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					G	21/07/13	ISSUED FOR REVIEW				
F	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					F	15/05/13	ISSUED FOR TENDER				
E	26/04/13	ISSUED FOR TENDER	M.H.	E.K.					E	26/04/13	ISSUED FOR REVIEW				
D	28/03/13	ISSUED FOR TENDER	M.H.	E.K.					D	28/03/13	ISSUED FOR REVIEW				
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW				
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW				
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW				
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP				

STAMP/SEAL
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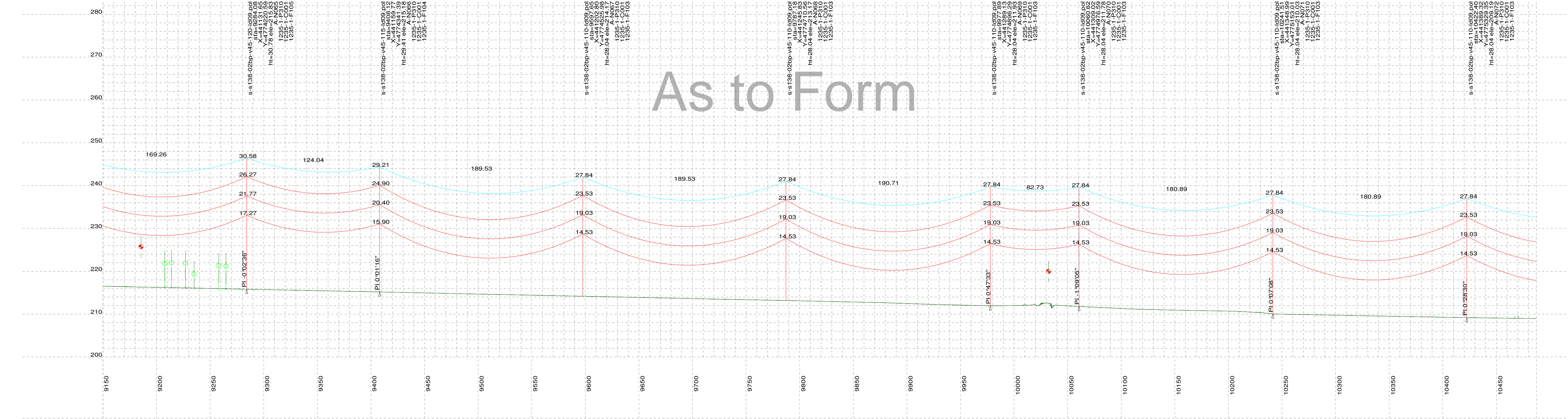
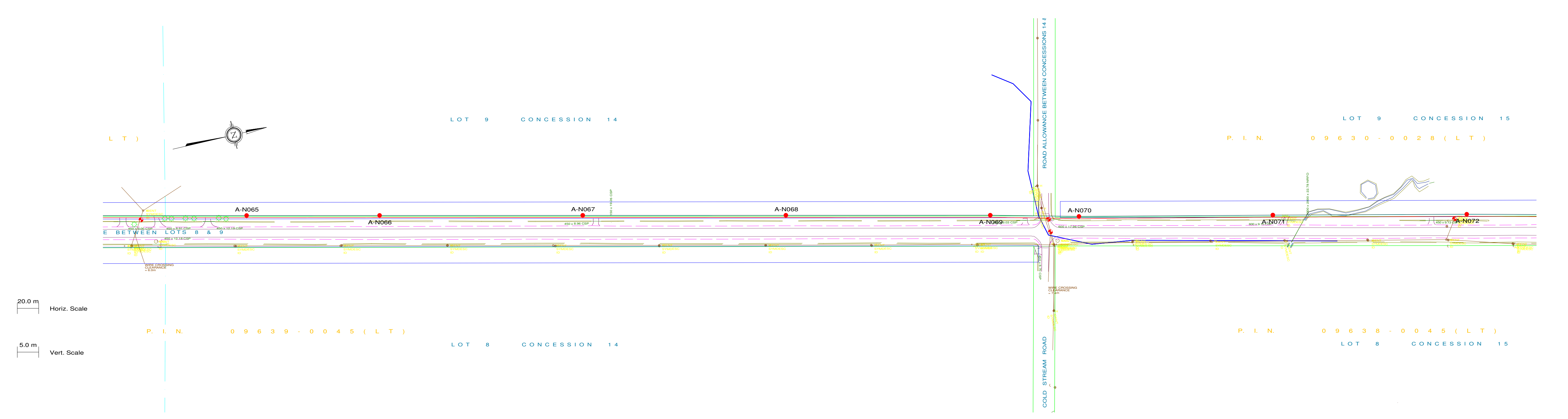
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				ADELAIDE WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 8 OF 10	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	CHK		CLIENT DWG. NO.	
N.T.S.		APP		DRAWING NO. 1235-1-P012-S8	
				REV. N	



Chimax Inc.
Engineering Company
3550 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 1 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

- s-s138-02bp-v45-110-ld09.pol
- sta
- X
- Y
- ht
- ele
- A-N002
- 1235-1-P310
- 1235-1-C001
- 1235-1-F103
- PLS-POLE FILE IDENTIFICATION
- STATION CHAINAGE
- UTM EASTING
- UTM NORTHING
- STRUCTURE HEIGHT ABOVE GROUND (M)
- GROUND ELEVATION (M)
- STRUCTURE NO.
- FRAMING DRAWING NO.
- FOUNDATION DRAWING NO.
- STEEL POLE ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	30/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	30/08/13	ISSUED FOR REVIEW				
L	09/08/13	ISSUED FOR REVIEW	M.H.	E.K.					L	09/08/13	ISSUED FOR REVIEW				
K	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					K	07/08/13	ISSUED FOR REVIEW				
J1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J1	31/07/13	ISSUED FOR REVIEW				
J	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	25/07/13	ISSUED FOR REVIEW				
H	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	22/07/13	ISSUED FOR REVIEW				
G	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					G	21/07/13	ISSUED FOR REVIEW				
F	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					F	15/05/13	ISSUED FOR TENDER				
E	26/04/13	ISSUED FOR TENDER	M.H.	E.K.					E	26/04/13	ISSUED FOR REVIEW				
D	28/03/13	ISSUED FOR TENDER	M.H.	E.K.					D	28/03/13	ISSUED FOR REVIEW				
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW				
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW				
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW				
REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE

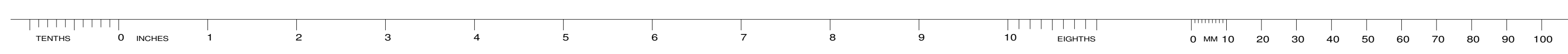
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				ADELAIDE WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 9 OF 10	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	CHK			
N.T.S.		APP			

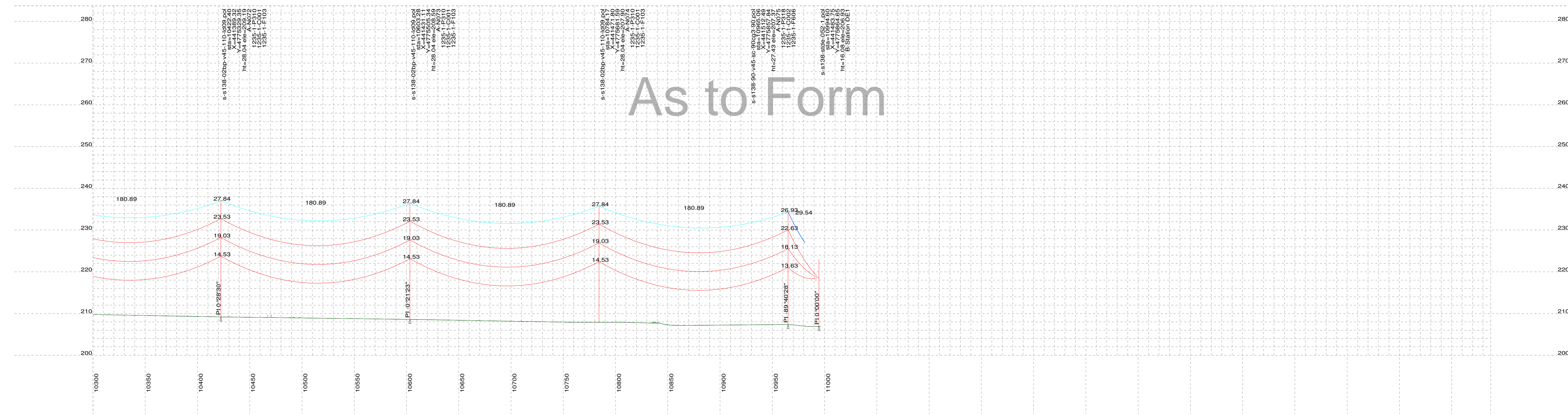
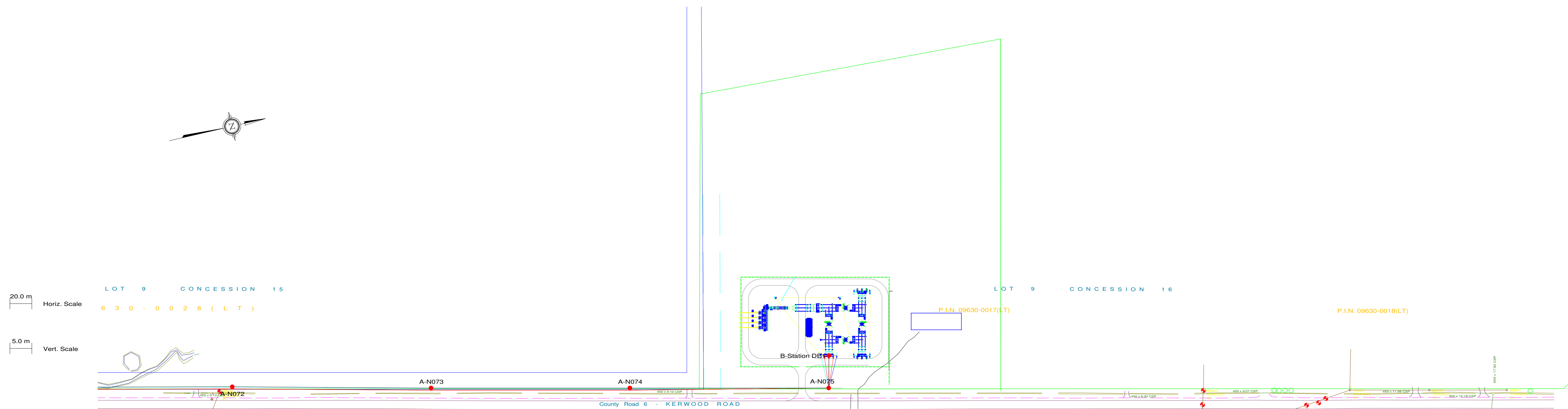
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P012-S9
REV.
N



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 1 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

- s-s138-02bp-v45-110-ld09.pol
- sta
- X
- Y
- ht
- ele
- A-N002
- 1235-1-P310
- 1235-1-C001
- 1235-1-F103
- PLS-POLE FILE IDENTIFICATION
- STATION CHAINAGE
- UTM EASTING
- UTM NORTHING
- STRUCTURE HEIGHT ABOVE GROUND (M)
- GROUND ELEVATION (M)
- STRUCTURE NO.
- FRAMING DRAWING NO.
- FOUNDATION DRAWING NO.
- STEEL POLE ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	30/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	30/08/13	ISSUED FOR REVIEW							
L	09/08/13	ISSUED FOR REVIEW	M.H.	E.K.					L	09/08/13	ISSUED FOR REVIEW							
K	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					K	07/08/13	ISSUED FOR REVIEW							
J1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J1	31/07/13	ISSUED FOR REVIEW							
J	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	25/07/13	ISSUED FOR REVIEW							
H	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	22/07/13	ISSUED FOR REVIEW							
G	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					G	21/07/13	ISSUED FOR REVIEW							
F	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					F	15/05/13	ISSUED FOR TENDER							
E	26/04/13	ISSUED FOR TENDER	M.H.	E.K.					E	26/04/13	ISSUED FOR REVIEW							
D	28/03/13	ISSUED FOR TENDER	M.H.	E.K.					D	28/03/13	ISSUED FOR REVIEW							
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW							
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW							
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW							
REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE			

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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA		ADELAIDE WIND PROJECT 1CCT 115KV TRANSMISSION LINE		CLIENT DWG. NO.	
PROJECT PHASE				SUBJECT		STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 10 OF 10		DRAWING NO. 1235-1-P012-S10	
PROJECT NO.		ACTIVITY NO.		BY		DDMMYY		REV.	
SCALE		PACKAGE CODE		DSN		21/08/12		N	
N.T.S.		CHK		DRN		21/08/12			
		APP							



Chimax Inc.
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CAD FILE: PLS-Cadd 1235-1-P012-K

Kerwood B2

Kerwood Transmission Foundation Designs

As to Form



GENERAL NOTES

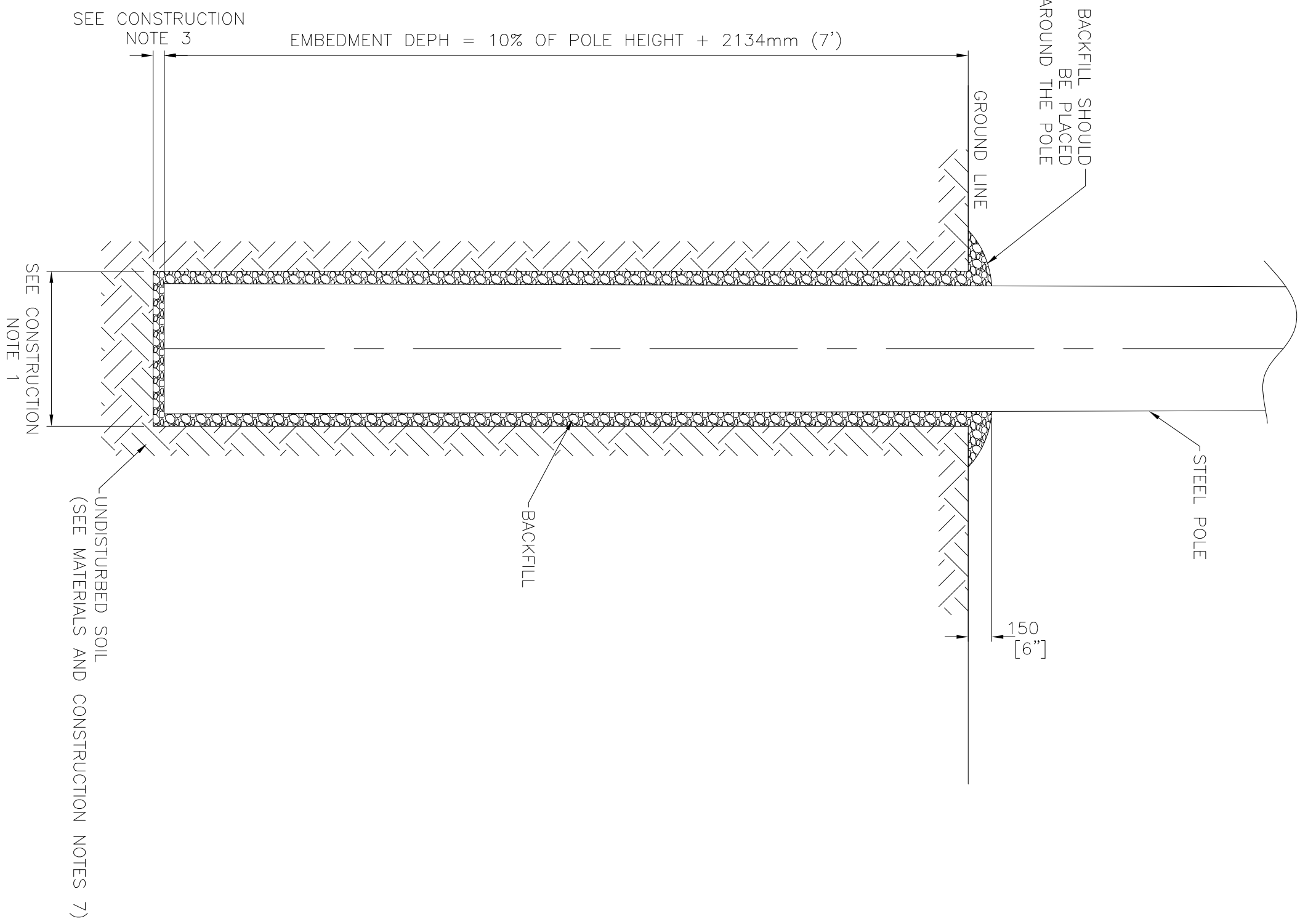
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN AND PROFILE DRAWINGS (DWG1235-1-P012), ANCHOR BOLT DRAWINGS AND STAKING FOR THE TRANSMISSION LINE HAS BEEN USED FOR THE FOUNDATION DESIGN.
- GROUND WATER LEVEL IS DESIGNED AT GRADE.
- FROST DEPTH IS 1.2m (4') BELOW GRADE.
- BASED ON THE INFORMATION ON BOREHOLE RECORD, THE FOLLOWING DESIGN PARAMETER AND ASSUMPTIONS ARE ADOPTED FOR THE FOUNDATION DESIGN:

DESIGN PARAMETERS

- FOUNDATION DESIGN IS BASED ON THE DRAFT GEOTECHNICAL INVESTIGATION REPORT PREPARED BY "AMEC ENVIRONMENT & INFRASTRUCTURE" DATED ON 07 DECEMBER, 2012. THE INFORMATION ON BOREHOLE RECORDS ALONG THE PROPOSED ADELAIDE TRANSMISSION LINE HAS BEEN USED FOR THE FOUNDATION DESIGN.
- GROUND WATER LEVEL IS DESIGNED AT GRADE.
- FROST DEPTH IS 1.2m (4') BELOW GRADE.
- BASED ON THE INFORMATION ON BOREHOLE RECORD, THE FOLLOWING DESIGN PARAMETER AND ASSUMPTIONS ARE ADOPTED FOR THE FOUNDATION DESIGN:
 - FROM 0m TO 1.2m BELOW GRADE, ASSUMED LOOSE CONDITION WITH FRICTION ANGLE = 20 DEGREE.
 - FROM 1.2m TO 1.75m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 9 (FRACTION ANGLE) FOR STRUCTURE A-N001 TO A-N075 AND 'N' = 7 (FRACTION ANGLE) FOR STRUCTURE A-N075 TO A-N075.
 - FROM 1.75m TO 2.5m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 14 (FRACTION ANGLE) FOR STRUCTURE A-N001 TO A-N010 AND 'N' = 10 (FRACTION ANGLE) FOR STRUCTURE A-N011 TO A-N075.
 - FROM 2.5m TO 3.25m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 14 (COHESIVE) FOR STRUCTURE A-N001 TO A-N010 AND 'N' = 12 (COHESIVE) FOR STRUCTURE A-N011 TO A-N075.
 - FROM 3.25m TO 4.0m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 6 (COHESIVE) FOR STRUCTURE A-N001 TO A-N010 AND 'N' = 12 (COHESIVE) FOR STRUCTURE A-N011 TO A-N075.
 - FROM 4.0m TO 9.0m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 8 (COHESIVE) FOR STRUCTURE A-N001 TO A-N010 AND 'N' = 12 (COHESIVE) FOR STRUCTURE A-N011 TO A-N075.

FOUNDATION MATERIAL AND CONSTRUCTION NOTES

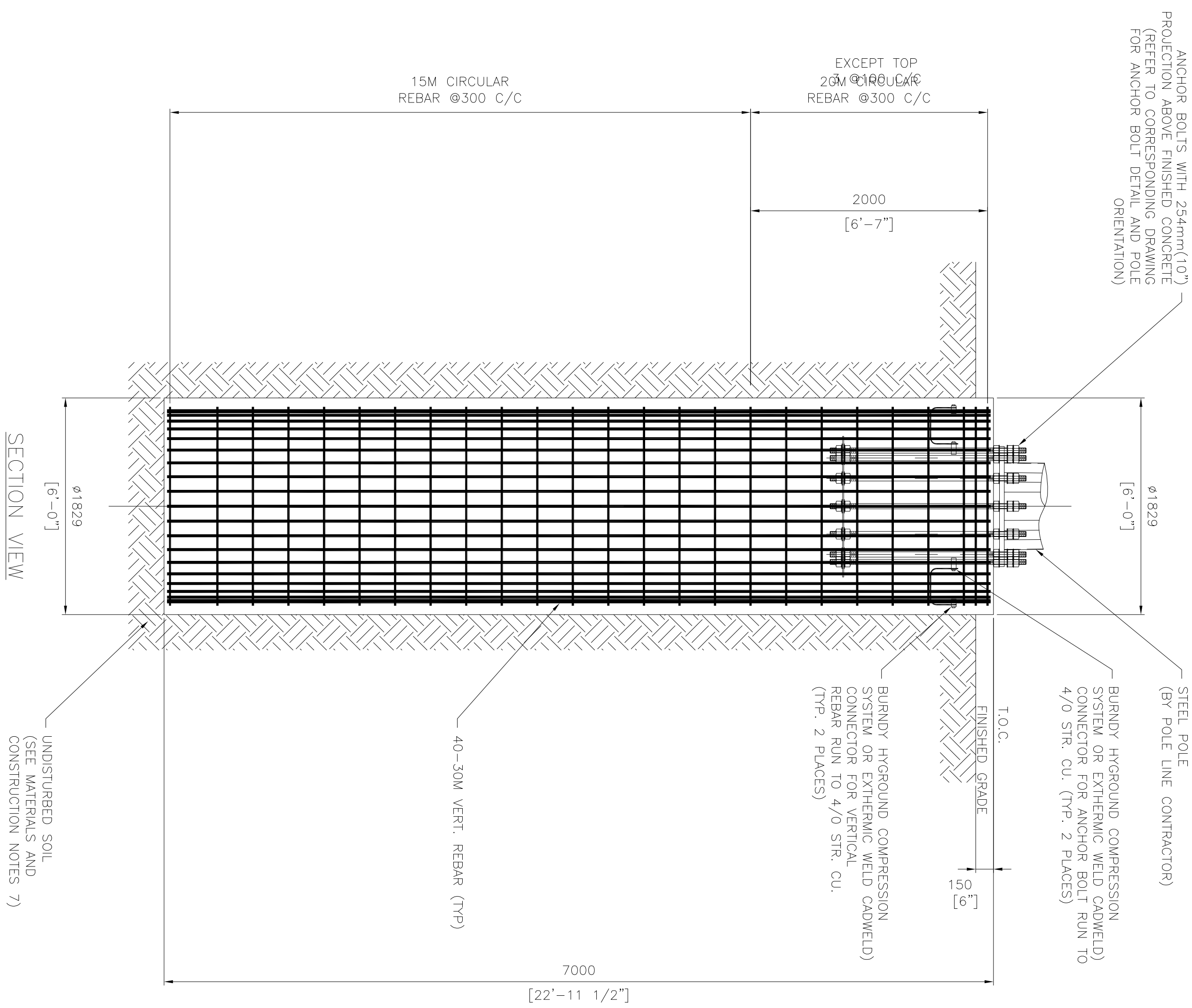
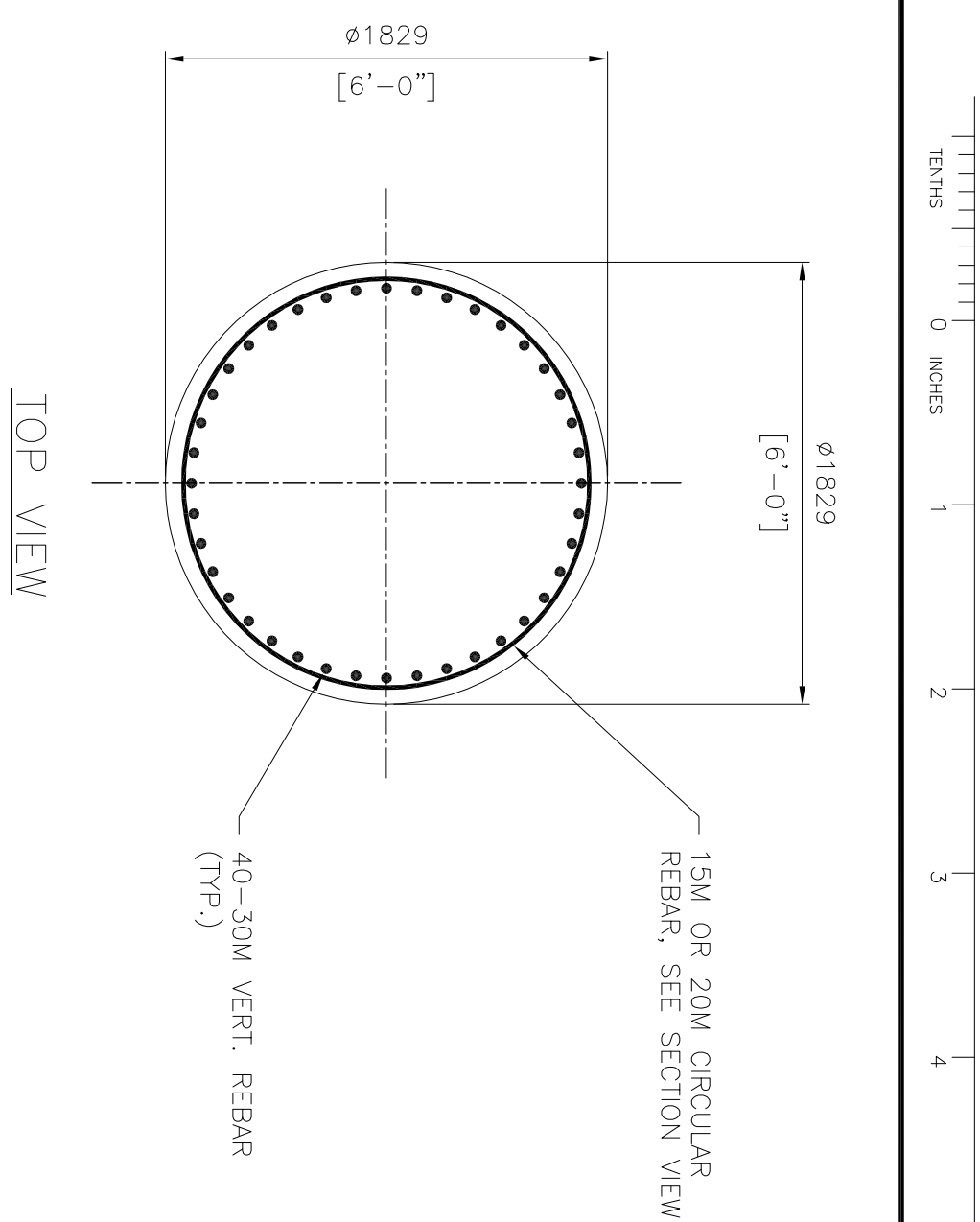
- MINIMUM DIAMETER OF HOLE EXCAVATION SHALL BE POLE BUTT DIAMETER + 300mm (12").
- DEPTH OF HOLE IN SLOPING GROUND SHALL BE MEASURED FROM THE LOWER SIDE OF HOLE.
- A MINIMUM OF 450mm (18") OF CRUSH STONE OR ROCKS SHALL BE USED AND TO BACKFILL THE BOTTOM OF THE POLE HOLE. PROPER COMPACTION OF BACKFILL MATERIAL SHALL BE ENSURED. THE CONTRACTOR SHALL ENSURE THE MINIMUM POLE EMBEDMENT DEPTH IS ACHIEVED WITH THE BACKFILL.
- PROPER DRAINAGE DURING THE COURSE OF WORK, FLOODED EXCAVATIONS SHALL BE DEWATERED AND ALL MUCK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
- AFTER EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO POLE PLACEMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADOPT PROPER CONSTRUCTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION.
- ALL EXCAVATION, BACKFILL AND INSTALLATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNICAL PERSONNEL.
- PRIOR TO THE PLACEMENT OF POLE, EXCAVATION SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATION REPORT AND DESIGN PARAMETERS.
- BACKFILL SURROUNDING FOUNDATIONS SHALL BE SELF-COMPACTED.
- STEEL POLE SHALL BE GRADED PIT RUN GRAVEL THAT CONFORMS TO RECOMMENDED SPECIFICATIONS FOR GRANULAR MATERIALS IN THE GEOTECHNICAL REPORT AND SHALL BE COMPACTED TO 95% SPMD WITH MAX LIFT OF 300mm.
- SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.



SECTION VIEW

TYPICAL DIRECT EMBEDMENT DETAILS FOR
POLE FOUNDATION

APPROVED FOR CONSTRUCTION											
CLIENT PROJECT MGR.					DEPARTMENT MGR.					PROJECT MGR.	
PROJECT PHASE					AREA					ADELAIDE WIND PROJECT	
PROJECT NO.					ACTIVITY NO.		PACKAGE CODE		SUBJECT		
									1CCT 115KV TRANSMISSION LINE DIRECT EMBEDMENT POLE FOUNDATION		
STAMP/SEAL					SCALE		BY		D/M/Y		
PROPRIETARY INFORMATION OF CHIMAX INC AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF CHIMAX INC.					DSN. K.WONG		26/04/13				
					DPM. K.WONG		26/04/13				



TOTAL 12 REQ'D

TOTAL 12 REQ'D

As to Form

GENERAL NOTES

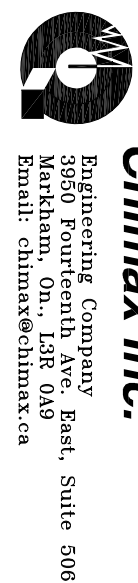
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN AND PROFILE DRAWINGS (DWG1235-1-P012). ANCHOR BOLT DRAWINGS AND STAKING INFORMATION, FOR POLE FRAMING DETAILS, SEE DWG#1235-1-P3XX SERIES.
2. FOR ANCHOR BOLT DETAILS, SEE DWG#1235-1-P701 AND 702.
3. ALL DIMENSIONS AS SHOWN ARE METRIC MILLIMETERS UNDO.

DESIGN PARAMETERS

1. FOUNDATION DESIGN IS BASED ON THE DEPT GEOTECHNICAL INVESTIGATION REPORT PREPARED BY "AMEC ENVIRONMENT & INFRASTRUCTURE" DATED ON 07 DECEMBER, 2012. THE INFORMATION ON BORHOLE RECORDS ALONG THE PROPOSED ADELADE TRANSMISSION LINE HAS BEEN USED FOR THE FOUNDATION DESIGN.
2. THE AVERAGE SOIL GRADE.
3. FROST DEPTH IS 1.2m (4') BELOW GRADE.
4. BASED ON THE INFORMATION ON BORHOLE RECORD, THE FOLLOWING DESIGN PARAMETER AND ASSUMPTIONS ARE ADOPTED FOR THE FOUNDATION DESIGN:
 - A. FROM 0m TO 1.2m BELOW GRADE, ASSUMED LOOSE CONDITION WITH FRICTION ANGLE = 20 DEG
 - B. FROM 1.2m TO 1.75m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 9 (FRACTION OF 1/3) FOR STRUCTURE A-N001 TO A-N010, AND 'N' = 7 (FRACTION ANGLE) FOR STRUCTURE A-N011 TO A-N075
 - C. FROM 1.75m TO 2.5m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 14 (FRACTION ANGLE) FOR STRUCTURE A-N001 TO A-N010, AND 'N' = 10 (FRACTION ANGLE) FOR STRUCTURE A-N011 TO A-N075
 - D. FROM 2.5m TO 3.25m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 14 (COHESIVE) FOR STRUCTURE A-N001 TO A-N010, AND 'N' = 12 (COHESIVE) FOR STRUCTURE A-N011 TO A-N075
 - E. FROM 3.25m TO 4.0m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 6 (COHESIVE) FOR STRUCTURE A-N001 TO A-N010, AND 'N' = 12 (COHESIVE) FOR STRUCTURE A-N011 TO A-N075
 - F. FROM 4.0m TO 9.0m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 8 (COHESIVE) FOR STRUCTURE A-N001 TO A-N010, AND 'N' = 12 (COHESIVE) FOR STRUCTURE A-N011 TO A-N075

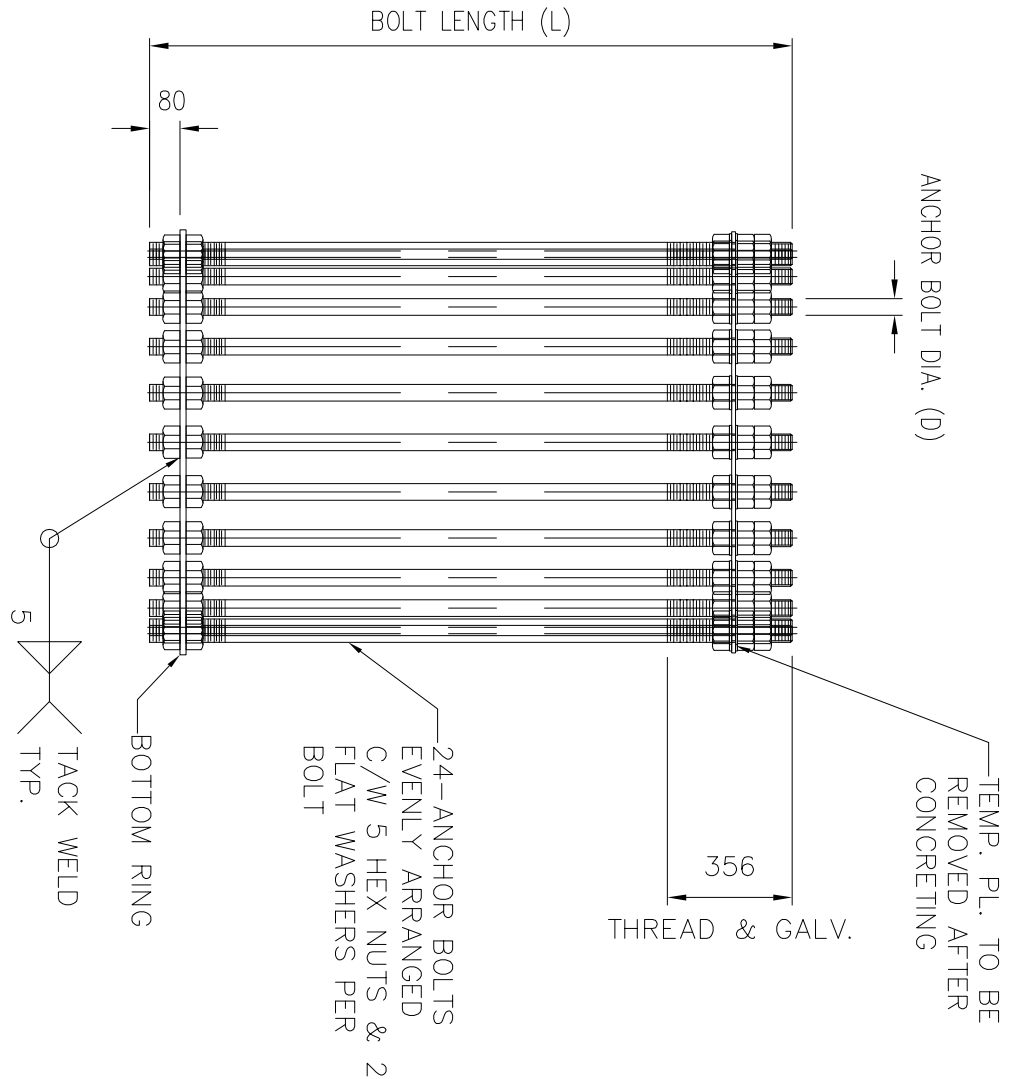
FOUNDATION MATERIAL AND CONSTRUCTION NOTES

1. CONCRETE/ALTERNATE, DESIGN, TESTING, AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSA STANDARD CAN 2-423 SERIES.
2. CONCRETE SPECIFICATION
A. SUPPLY AND DELIVERY OF CONCRETE SHALL BE AS FOLLOWS:
1. SPECIFIC COMPRESSIVE STRENGTH: 35 MPa AT 28 DAYS
2. SPECIFIC GRAVITY: 2400 KG/M³
3. PORTLAND CEMENT: TYPE 60 NORMAL PORTLAND CEMENT,
B. EXPOSURE CLASS: C-1
C. 4% - 7% AIR CONTENT
D. MIN. 3 CYLINDERS TESTING WITH ONE AT 7 DAYS AND TWO AT 28 DAYS ARE REQUIRED
E. UNLESS OTHERWISE SPECIFIED, MINIMUM CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
1. FORMED CONCRETE WITH DIRECT CONTACT TO SOIL = 75mm
2. FORMED CONCRETE EXPOSED TO WEATHER = 50mm
3. REINFORCED STEEL SHALL BE DEFORMED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 400 MPa (60ksi) AND CONFORMING TO CSA G30.12 GR 40 AND EXCEPT TIES AND STIRRUPS WHICH SHALL BE GRADE 300.
3. MINIMUM SPICES, LAPS AND HOOKS SHALL BE IN ACCORDANCE WITH CAN 3-423.1
4. ALL EXCAVATIONS SHALL BE TO GO DOWN TO -1500mm U.N.O. AND SHALL BE HOT DIPS GALVANIZED STEEL ACCORDING TO CAN 345.10
5. ALL EXCAVATIONS SHALL BE PERFORMED IN A MANNER THAT SHALL ENSURE PROPER DRAINAGE DURING THE COURSE OF WORK, FLOODED EXCAVATIONS SHALL BE DEMATERED AND ALL MUCK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
6. AFTER EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO REINFORCEMENT AND SHALL BE PROTECTED TO PREVENT PROPER CONSTRUCTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION FOUND ON SITE PRIOR TO THE PLACEMENT OF CONCRETE, BOTTOM OF FOUNDATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATION REPORT AND DESIGN PARAMETERS BEFORE PLACING CONCRETE. CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF ALL MECHANICAL, UTILITY SERVICES FOR EMBEDDED ITEMS, HOLES, ETC.
7. ALL EXCAVATIONS SHALL BE PROTECTED BY SHIELDING OR SHIELDING PROPERLY CONSTRUCTED TO BE ADEQUATE TO PREVENT COLLAPSE
8. CONCRETE SHALL BE PLACED WITHIN 15 MINUTES OF POURING AND/OR COVERED BY WATER RETAINING MATERIAL AFTER POURING.
9. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 25mm CHAMFER.
10. ALL BACKFILL SURROUNDING FOUNDATIONS SHALL BE WELL GRADED PIT RUN GRAVEL THAT CONFORMS TO RECOMMENDED SPECIFICATIONS FOR GRANULAR MATERIALS IN THE GEOTECHNICAL REPORT AND SHALL BE COMPACTED TO 95% SPADW WITH MAX LIFT OF 200MM
11. ALL BACKFILL UNDER FOUNDATIONS SHALL BE LEAN CONCRETE MAX 10% GRAVEL
12. MATERIAL AND SHALL BE COMPACTED TO 98% SPADW WITH MAX LIFT OF 200mm
13. SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.

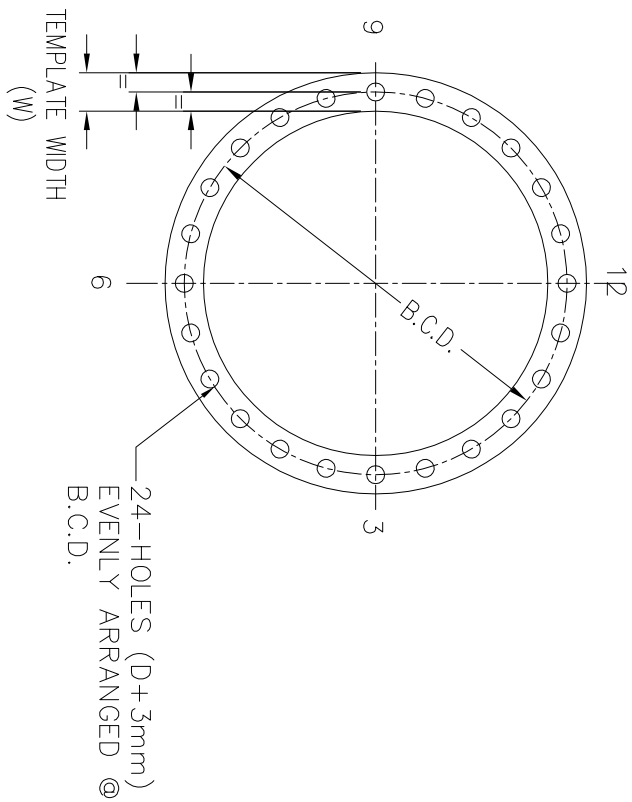
[illegible]




TYPE	BOLT CIRCLE DIA. B.C.D. mm	No. OF BOLT	BOLT DIA. (D) mm	BOLT LENGTH (L) mm	TEMP. RING TEMPLATE WIDTH (W) mm	BOTTOM RING TEMPLATE WIDTH (W) mm	TOTAL REQ'D	POLE
AP24-A	1220	24	51	2100	160	190	1	
AP24-B	1400	24	57	2100	170	210	5	

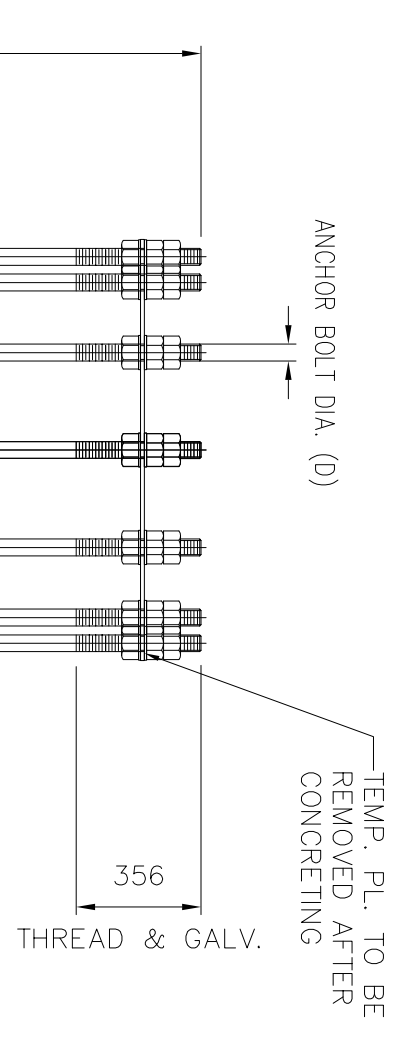
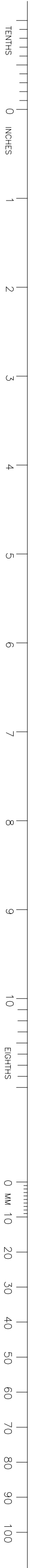


ANCHOR BOLT ARRANGEMENT



TEMP. (12 TK.) (NOT GALV'D)
BOTTOM RING (20 TK.) (NOT GALV'D)

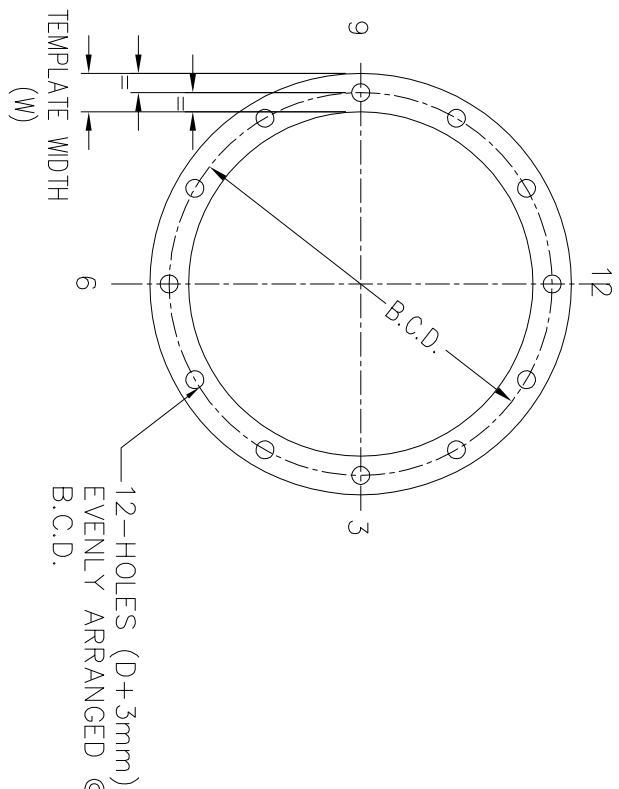
APPROVED FOR CONSTRUCTION												<div>Chimax Inc. Engineering Company 3550 Fourteenth Ave. East, Suite 208 Edmonton, Alberta T6C 2E5 Canada Email: info@chimax.ca Phone: (780) 443-9000</div>					
CLIENT PROJECT MOR.						DEPARTMENT MOR.			PROJECT MOR.								
PROJECT PHASE						AREA			ADELAIDE WIND PROJECT								
PROJECT NO.						ACTIVITY NO.		PACKAGE CODE			SUBJECT						
SCALE						DSN.		BY		D/M/Y		1CCT 115KV TRANSMISSION LINE ANCHOR BOLT AND TEMPLATE SETTING DETAILS					
NTS (D-SIZE)						K.WONG		26/04/13									
DRN.						K.KANG		26/04/13									
WITHOUT THE PERMISSION OF CHIMAX INC.																	
STAMP/SEAL												CLIENT DWG. NO.					
PROPRIETARY INFORMATION OF CHIMAX INC. THIS DOCUMENT IS NOT TO BE COPIED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF CHIMAX INC.												DRAWING NO.					
A												REV. A					
26/04/13																	
ISSUED FOR TENDER																	
REVISION																	
REV. D/M/Y																	
K.G.																	
CHK APP APP APP APP																	
DR																	
A																	
26/04/13																	
ISSUED FOR TENDER																	
D/M/Y APP																	
REF																	
NUMBER																	
TITLE																	
REFERENCES																	



TYPE	BOLT CIRCLE DIA. B.C.D. mm	No. OF BOLT	BOLT DIA. (Ø) mm	BOLT LENGTH (L) mm	TEMP. RING TEMPLATE WIDTH (W) mm	BOTTOM RING TEMPLATE WIDTH (W) mm	TOTAL REQ'D	POLE
AP12-A	840	12	44	1700	140	170	1	
AP12-B	940	12	51	1800	160	190	6	
AP12-C	1020	12	51	1800	160	190	5	

- NOTES:
- ALL DIMENSIONS AS SHOWN ARE IN MILLIMETERS [IMPERIAL] U.N.O.
 - FOR FOUNDATION DRAWINGS, SEE DWG# 1235-1-C001 TO C003.
 - FOR POLE LINE PLAN AND PROFILE DRAWINGS, SEE DWG# 1235-1-P012
 - FOR ANCHOR BOLT ORIENTATION, SEE DWG# 1235-1-XXXX
 - ANCHOR BOLT SHALL HAVE A MINIMUM ULTIMATE TENSILE STRENGTH OF 860 MPa (125 ksi) AND A MINIMUM YIELD STRENGTH OF 750 MPa (108 ksi) EQUIVALENT TO ASTM A354 GRADE BC. ANCHOR BOLT HARDWARE AND ASSEMBLIES SHALL MEET THE EQUIVALENT STRENGTH AND MATERIAL SPECIFICATION REQUIREMENTS.
 - ALL OTHER STEEL MATERIAL SHALL BE CSA-G40.21-300W U.N.O.
 - TOP PORTION OF ANCHOR BOLT AS SHOWN AND BOLT HARDWARE SHALL BE HOT DIP GALVANIZED FINISH AS IN ACCORDANCE WITH CSA-G164.
 - ANCHOR BOLT SHALL BE SET ACCURATELY PLUMB, TRUE, ALIGNED AND RIGID.
 - ANCHOR BOLT THREADS SHALL BE PROTECTED FROM DAMAGES DURING CONCRETING.
 - NUMBER 3, '6', '9' AND '12' DENOTES FACE ORIENTATION OF POLE STRUCTURE. SEE ANCHOR BOLT ORIENTATION DRAWINGS FOR SETTING DETAILS.

ANCHOR BOLT ARRANGEMENT



TEMP. (10 TK.) (NOT GALV'D)
BOTTOM RING (16 TK.) (NOT GALV'D)

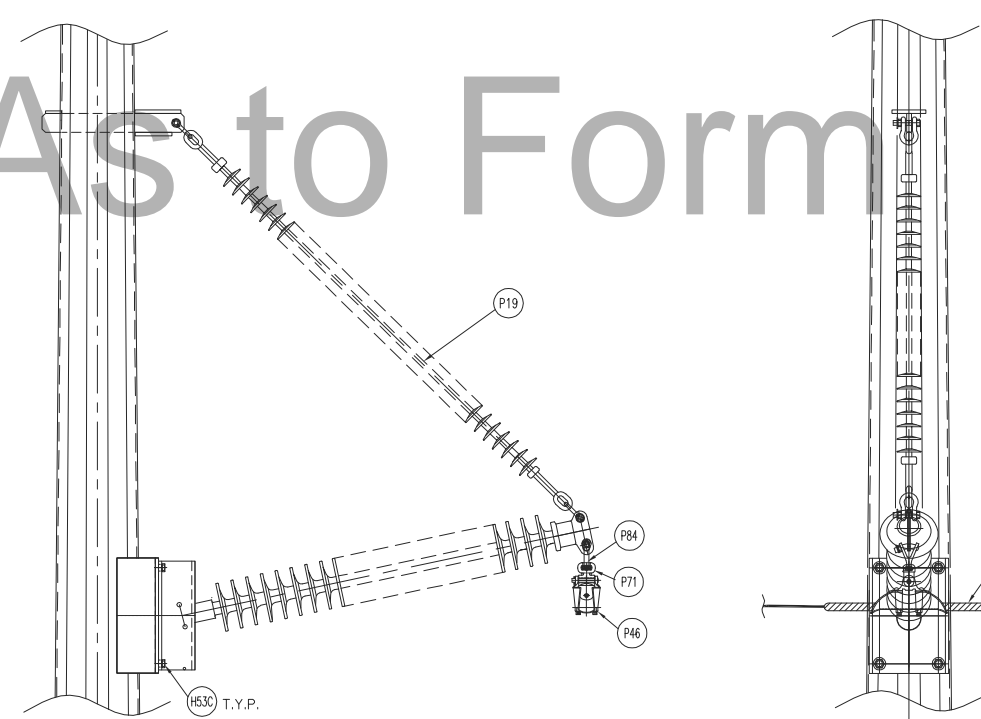
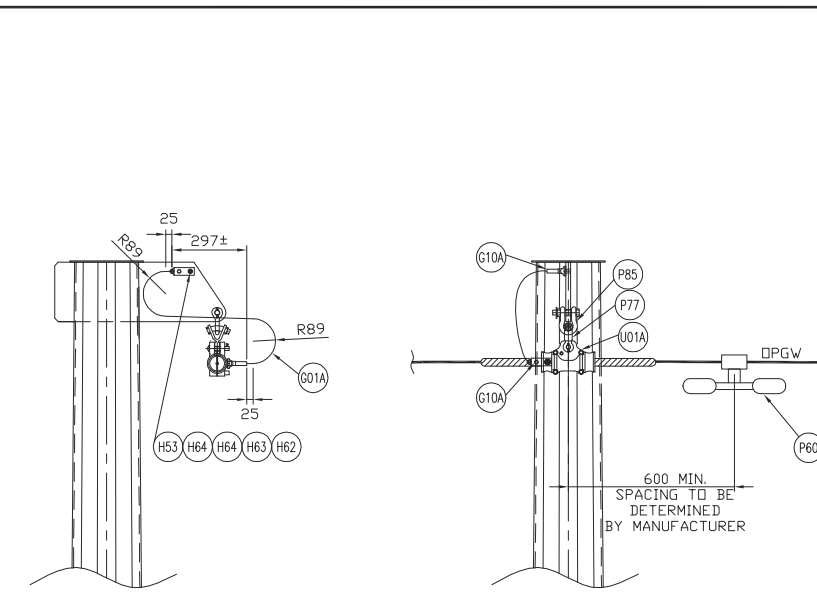
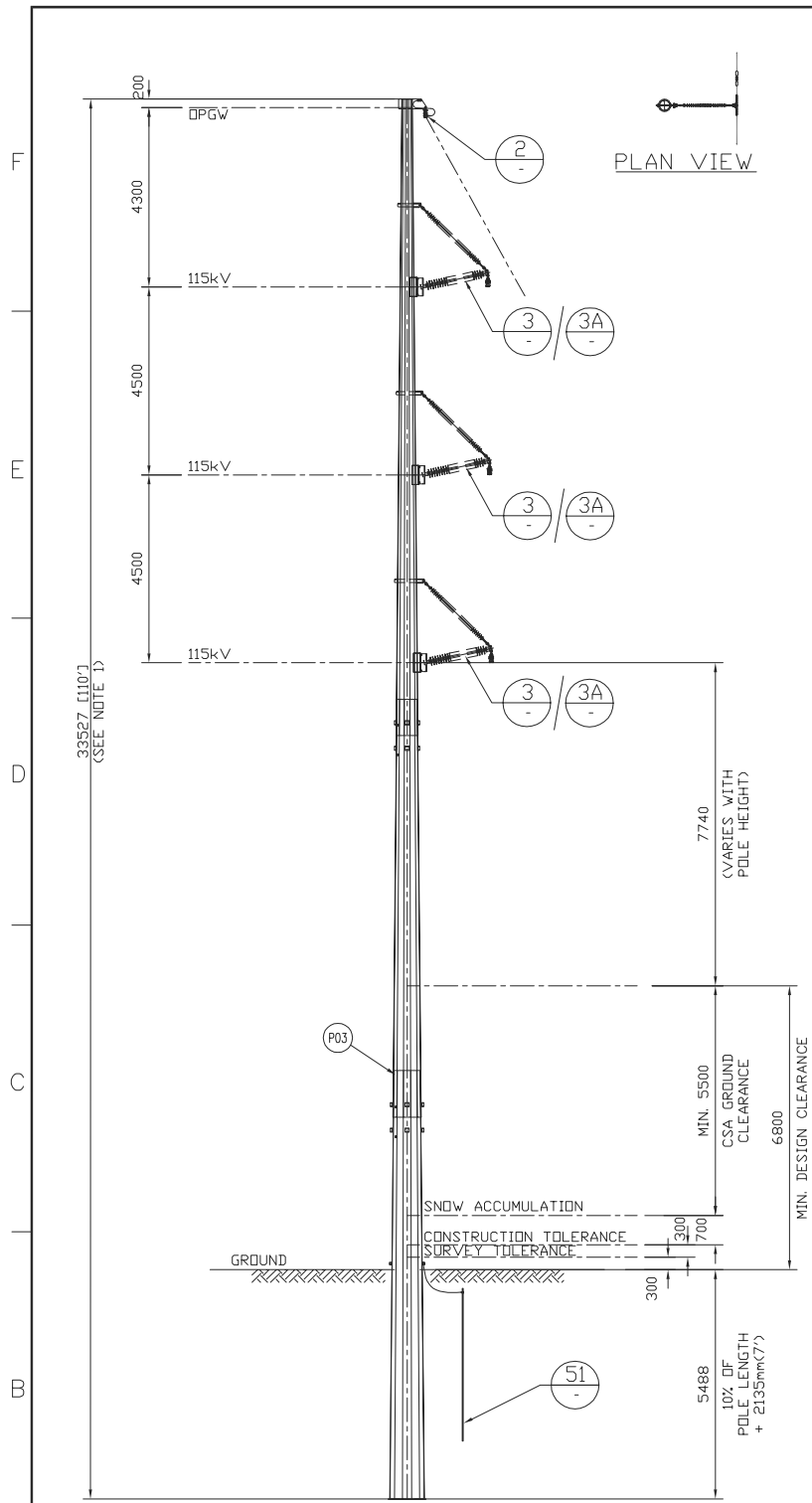
As to Form

APPROVED FOR CONSTRUCTION											
CLIENT PROJECT MGR.				DEPARTMENT MGR.				PROJECT MGR.			
PROJECT PHASE				AREA				ADELAIDE WIND PROJECT			
PROJECT NO.				ACTIVITY NO.				PACKAGE CODE			
SCALE				BY				D/M/Y			
MTS (0-SIZE)				DSN. K.MONG				26/04/13			
WITHOUT THE PERMISSION OF CHIMAX INC.				DRN. K.MONG				26/04/13			
STAMP/SEA.				10CT 115KV TRANSMISSION LINE				DRAWING NO.			
PROPRIETARY INFORMATION OF CHIMAX INC. AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY				ANCHOR BOLT AND TEMPLATE SETTING DETAILS				1235-1-F102			
REV. D/M/Y				ISSUED FOR TENDER				ISSUED FOR			
K.F.				K.M.				REV.			
CHK. APP											

Kerwood B3

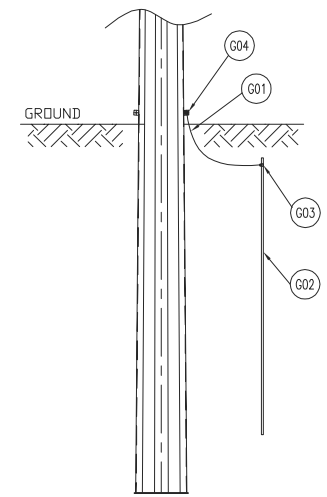
Kerwood Transmission Pole Configurations

As to Form



BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P19	3	BRACED LINE POST ASSEMBLY (FLAT BASE - L2-SN381-18, 251-SC590-EE, 2xAS-25-L-BNK)	NGK-LOCKE CAT.#: HV-604	
P46	3	AL. SUSPENSION CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 30,000LBS)	HUBBELL HAS252N	
P49A	3	AL ARMOR RODS FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS OPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P60A	3	VIBRATION DAMPER FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 6071513	
P71	3	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA22	
P77	1	Y-CLEVIS EYE CONNECTOR (UTS 25,000LBS)	HUBBELL YCS06	
P84	3	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	1	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P109	3	HOT LINE Y-CLEVIS BALL CONNECTOR (UTS 30,000LBS)	HUBBELL HYBC30	ALTERNATIVE OPTION
H53	1	1/2" HEX HEAD BOLT (STAINLESS STEEL)	HUBBELL HBS150	
H53C	12	19mm(3/4")x57mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
H62	1	HEX NUTS FOR 1/2" BOLTS (STAINLESS STEEL)	HUBBELL HNS500	
H63	1	BELLEVILLE WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL BW500	
H64	2	ROUND WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL HFS500	
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10A	2	COPPER COMPRESSION TERMINAL 90DEG. FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018BY90	
U01A	1	SINGLE CUSHION CLAMP FOR 48 FIBERS OPGW (REF: SFPOC/SFSJ-J-4388R2) AND ARMOR ROD, C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 20,000LBS)	PLP 4700105	

NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.

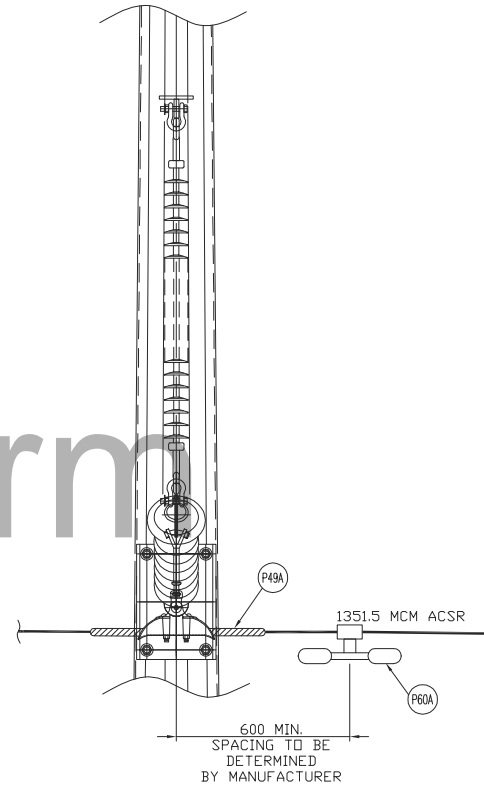
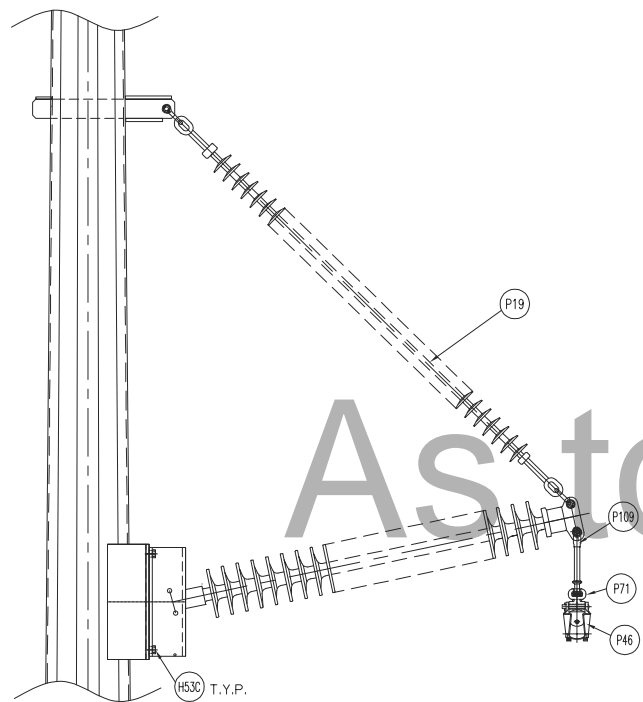


1CCT 115kV TRANSMISSION LINE
TANGENT (0 - 3°) FRAMING

APPROVED FOR CONSTRUCTION									
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.			AREA			NEXTERA 5-PACK TRANSMISSION LINE			
PROJECT PHASE			PROJECT NO.			SUBJECT			
ACTIVITY NO.			PACKAGE CODE			1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION TANGENT (0-3°) FRAMING			
SCALE			BY			CLIENT DWG. NO.			
N.T.S. (11"x17")			DSN. E.KWONG			DRAWING NO.			
			DRN. J.CHEN			1235-1-P310-S01			
						REV. F			
						CADD FILE ADDRESS			
						1235-1-P310-S01&S02-F			



REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
F	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						F	26/04/13	ISSUED FOR TENDER				
E	27/02/13	INC. CLIENT COMMENTS	D.W.	W.L.						E	27/02/13	ISSUED FOR REVIEW				
D	15/02/13	ISSUED FOR REVIEW	J.C.	M.A.						D	15/02/13	ISSUED FOR REVIEW				
C	04/02/13	ISSUED FOR REVIEW	D.W.	W.L.						C	04/02/13	ISSUED FOR REVIEW				
B	18/01/13	ISSUED FOR REVIEW	J.C.	M.A.						B	18/01/13	ISSUED FOR REVIEW				
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.A.						A	17/08/12	ISSUED FOR REVIEW				



DETAIL 3A
SCALE: N.T.S.
BRACED POST INSULATOR ASSEMBLY
(ALTERNATIVE OPTION FOR ADJACENT TO DEADEND)



REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
F	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						F	26/04/13	ISSUED FOR TENDER			
E	27/02/13	INC. CLIENT COMMENTS	D.M.	W.L.						E	27/02/13	ISSUED FOR REVIEW			
D	15/02/13	ISSUED FOR REVIEW	J.C.	M.A.						D	15/02/13	ISSUED FOR REVIEW			
C	04/02/13	ISSUED FOR REVIEW	D.M.	W.L.						C	04/02/13	ISSUED FOR REVIEW			
B	18/01/13	ISSUED FOR REVIEW	J.C.	M.A.						B	18/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.A.						A	17/08/12	ISSUED FOR REVIEW			

STAMP/SEAL
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WITHOUT THE PERMISSION OF CHIMAX INC.

APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE			
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG	14/08/12	
	DRN. J.CHEN	14/08/12	

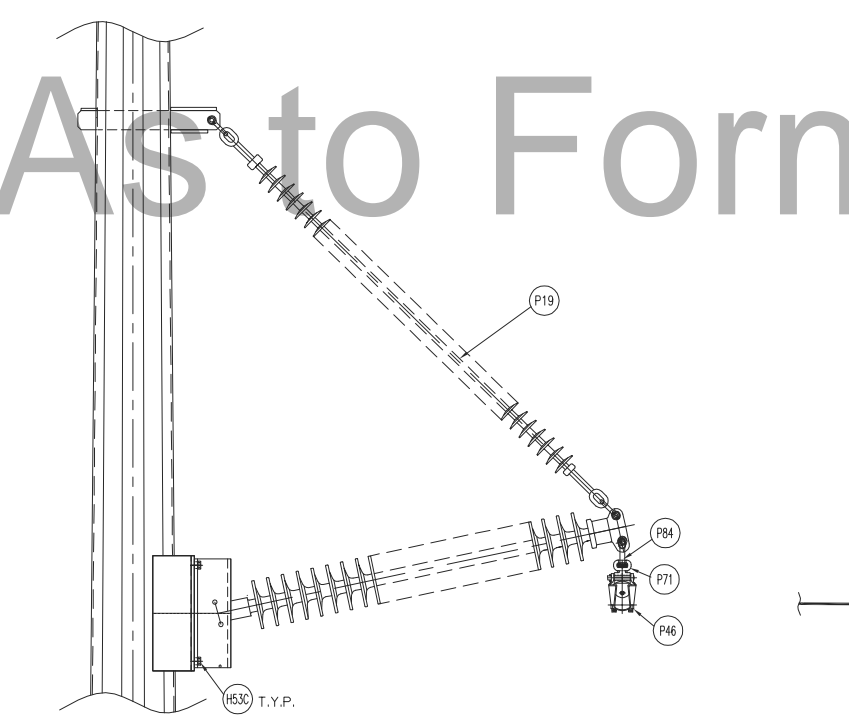
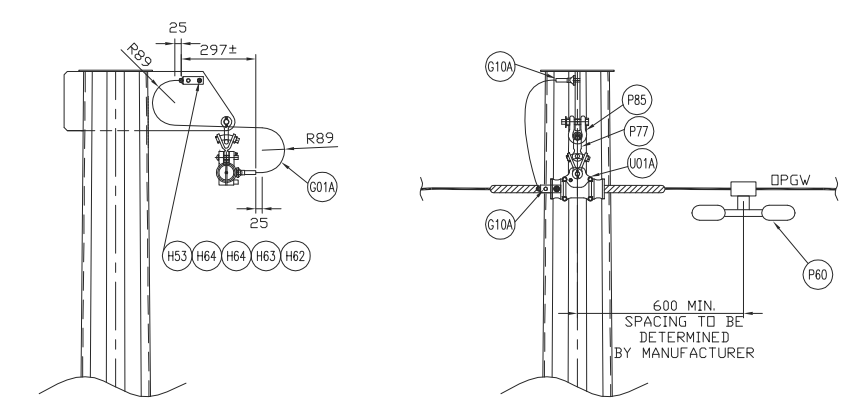
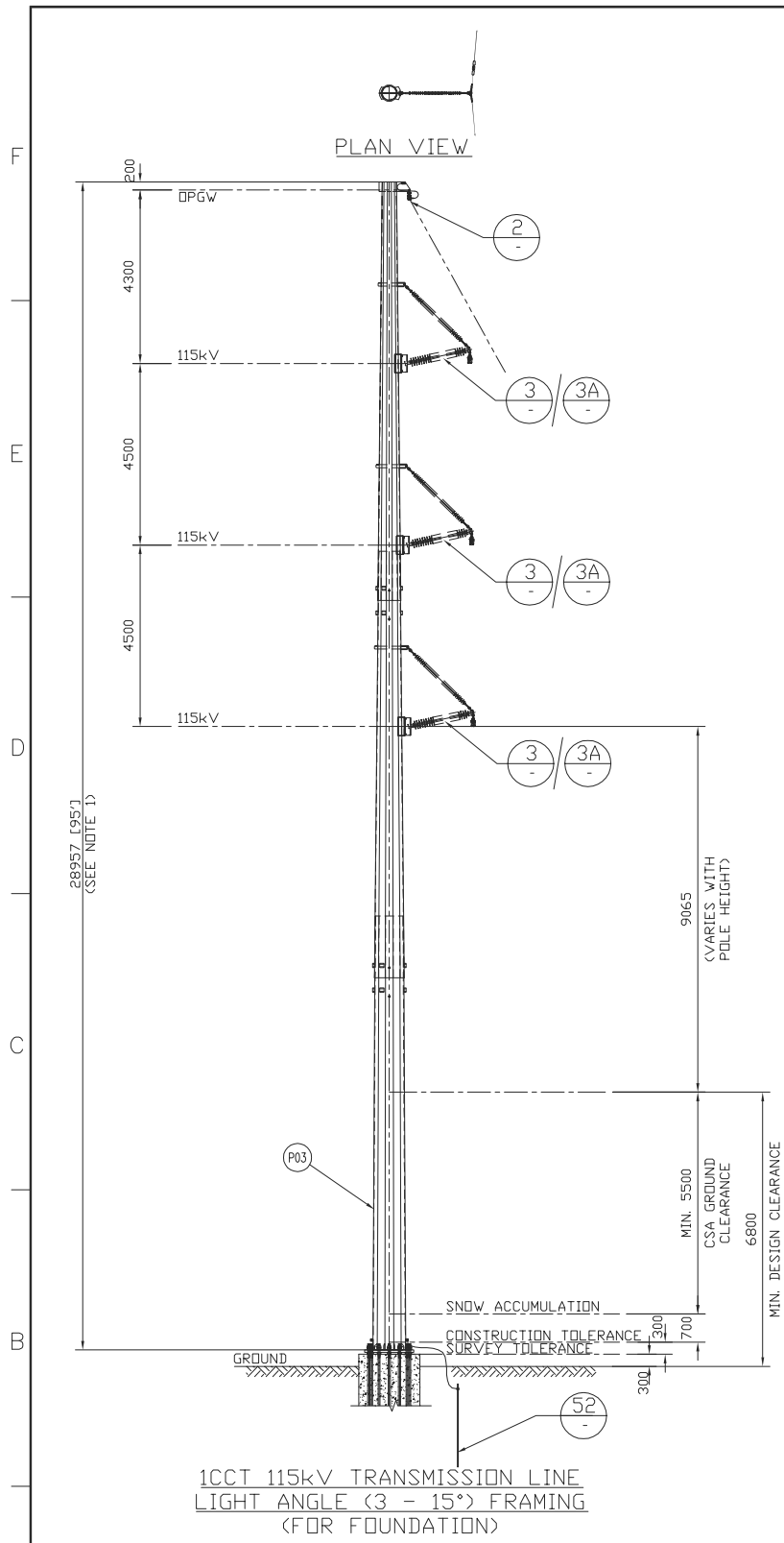
AREA	
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION TANGENT (0-3') FRAMING	

CLIENT DWG. NO.

DRAWING NO.
1235-1-P310-S02

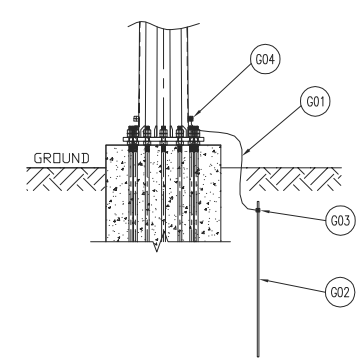
CADD FILE ADDRESS
1235-1-P310-S01&S02-F

REV.
F



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P49A	3	AL ARMOR RODS FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
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P109	3	HOT LINE Y-CLEVIS BALL CONNECTOR (UTS 30,000LBS)	HUBBELL HYBC30	ALTERNATIVE OPTION
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G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10A	2	COPPER COMPRESSION TERMINAL 90DEG. FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018BY90	
U01A	1	SINGLE CUSHION CLAMP FOR 48 FIBERS OPGW (REF: SFPOC/SFSJ-J-4388R2) AND ARMOR ROD, C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 20,000LBS)	PLP 4700105	

NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.



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Engineering Company
3850 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

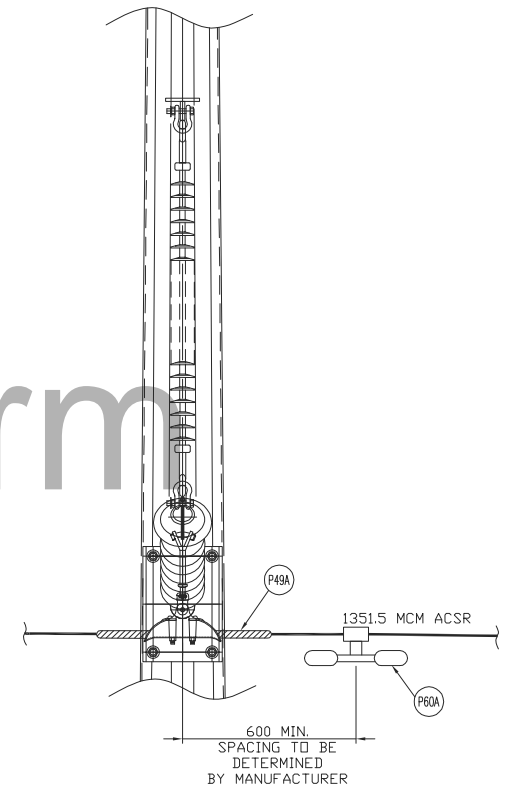
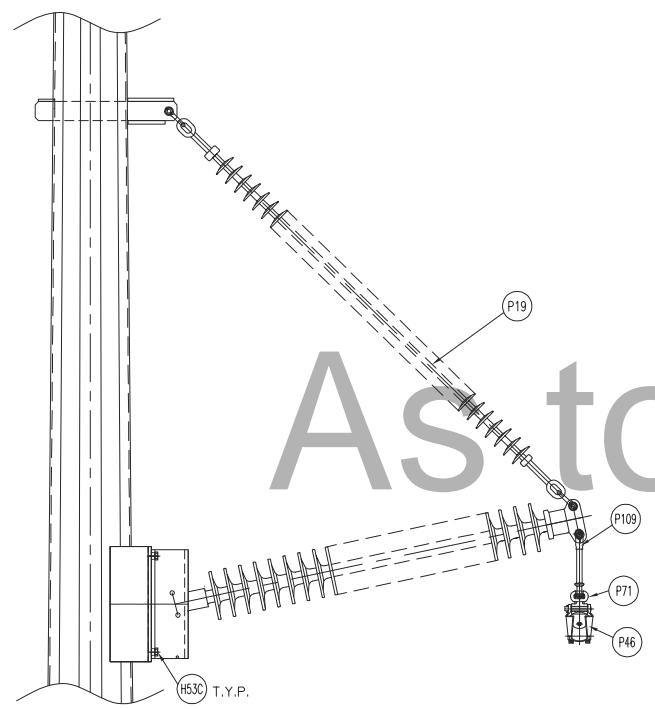
DRAWING NO.
1235-1-P311-S01

REV.
E

CADD FILE ADDRESS
1235-1-P311-S01&S02-E

F
E
D
C
B
A

F
E
D
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B
A



DETAIL 3A
SCALE: N.T.S.
BRACED POST INSULATOR ASSEMBLY
(ALTERNATIVE OPTION FOR ADJACENT TO DEADEND)



Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

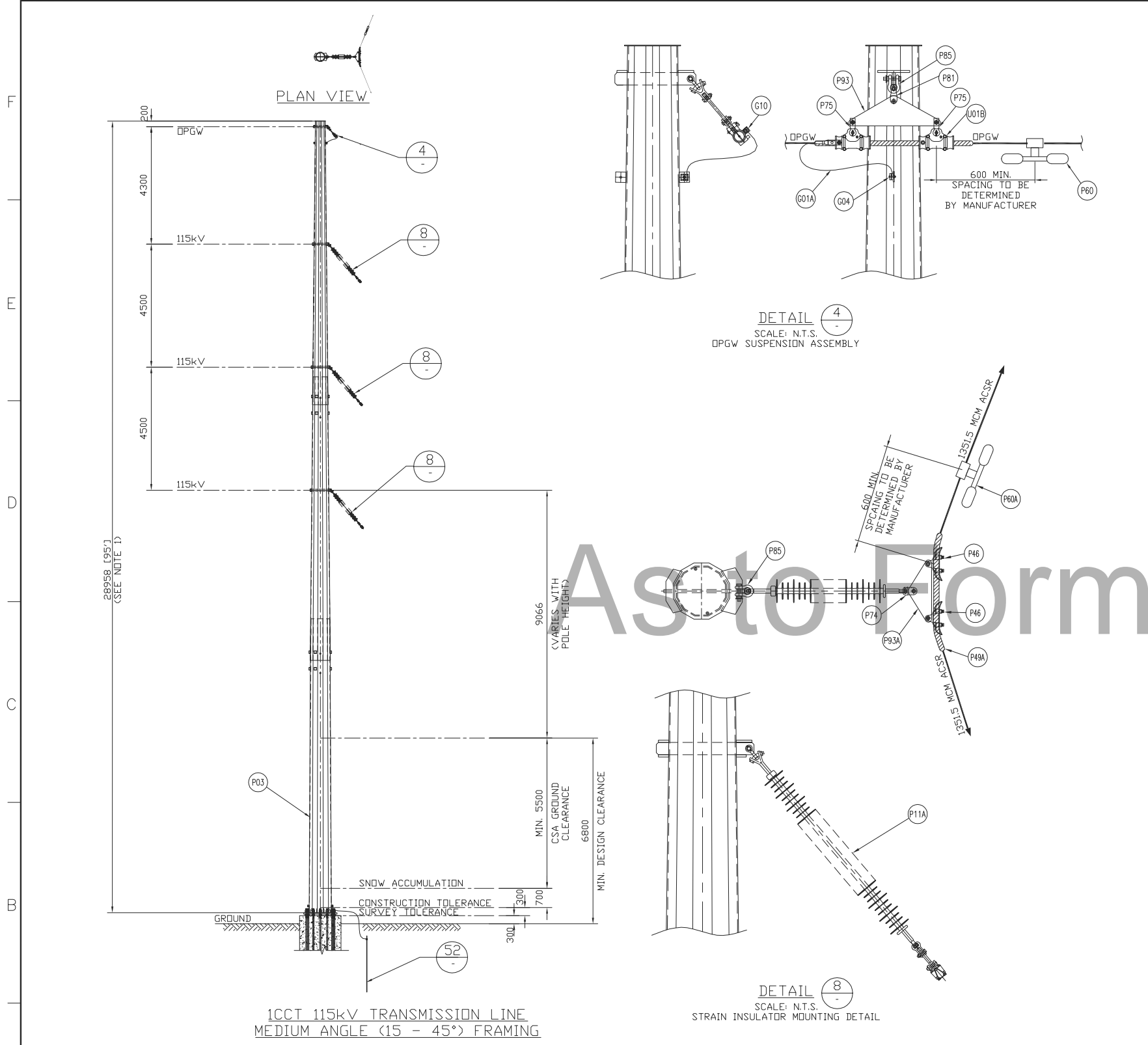
REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
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D	27/02/13	INC. CLIENT COMMENTS		D.M.	W.L.					D	27/02/13	ISSUED FOR REVIEW			
C	04/02/13	ISSUED FOR REVIEW		D.M.	W.L.					C	04/02/13	ISSUED FOR REVIEW			
B	18/01/13	ISSUED FOR REVIEW		J.C.	M.A.					B	18/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW		J.C.	E.K.					A	17/08/12	ISSUED FOR REVIEW			

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SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	14/08/12

AREA	
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION LIGHT ANGLE (3 - 15°) FRAMING (FOR FOUNDATION)	

CLIENT DWG. NO.	REV.
DRAWING NO. 1235-1-P311-S02	E
CADD FILE ADDRESS 1235-1-P311-S01&S02-E	



BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11A	3	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS Y-CLEVIS - BALL ENDS)	NGK-LOCKE PART #301-SC390-YJ	
P46	6	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL HAS252N	
P49A	3	AL. ARMOR RODS FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS OPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P60A	3	VIBRATION DAMPER FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 6071513	
P74	3	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P75	2	CLEVIS EYE CONNECTOR (UTS 25,000LBS)	HUBBELL CA06	
P81	1	Y-CLEVIS CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YCC30	
P85	4	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P93	1	YDKE PLATE FOR OPGW (UTS 40,000LBS)	PLP YP-5909	
P93A	3	YDKE PLATE (UTS 40,000LBS)	HUBBELL YPD4018342-4	
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	2	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10	1	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U01B	1	DOUBLE CUSHION CLAMP FOR 48 FIBERS OPGW (REF: SFPOC/SFSJ-J-4388R2) AND ARMOR ROD, C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 40,000LBS)	PLP 4700205	

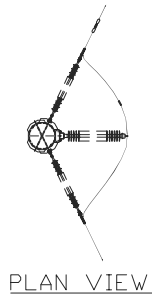
NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.

A

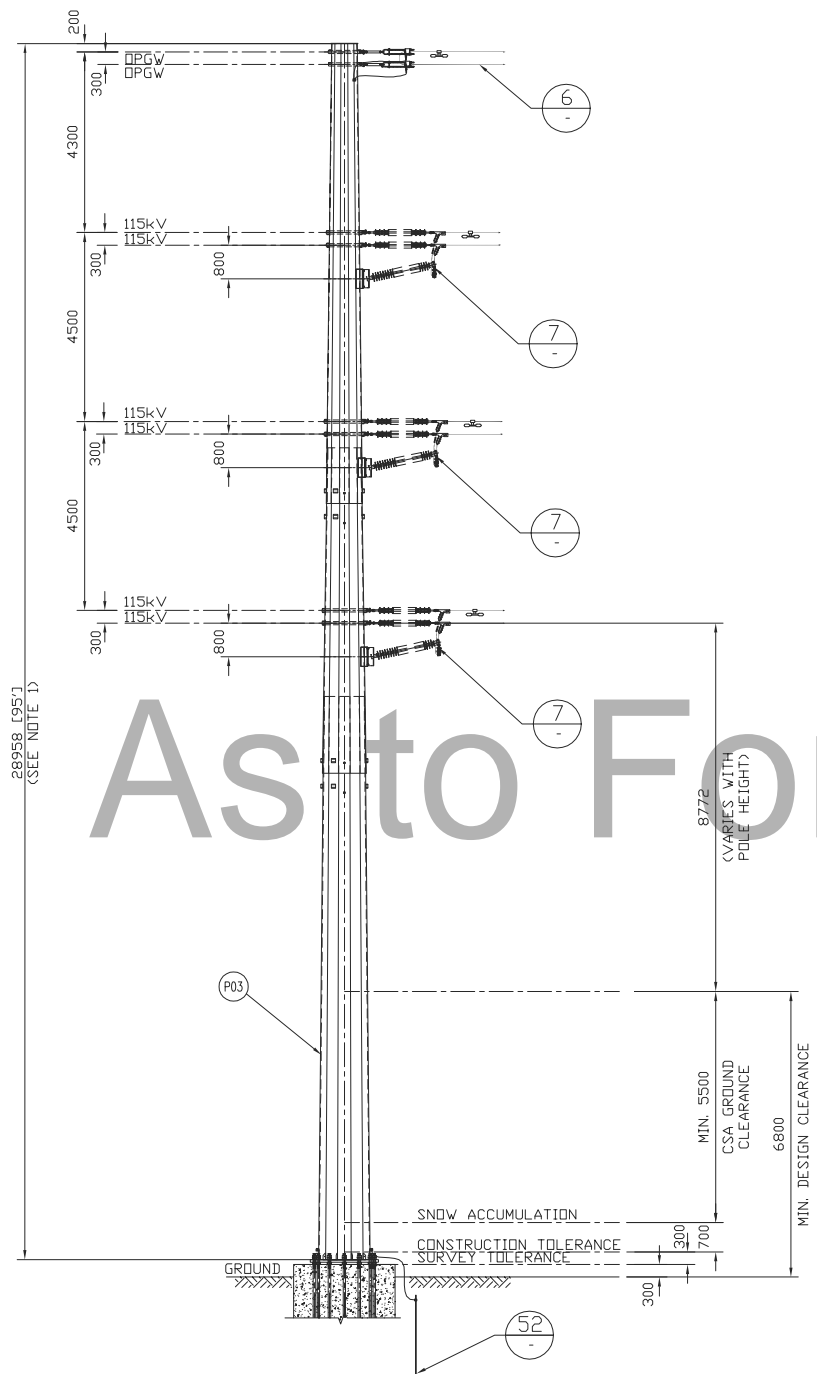
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PLAN VIEW



1CCT 115kV TRANSMISSION LINE
HEAVY ANGLE (45-60°) FRAMING

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	6	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12	3	138/161kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L2-SN381-18	
P41	3	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	6	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P46A	3	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 25,000LBS)	HUBBELL HAS162N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P60A	3	VIBRATION DAMPER FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 6071513	
P71B	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA1613	
P77A	3	Y-CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL EC83410	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	13	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	2	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
H53C	12	19mm(3/4")Øx57mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	26/04/13	ISSUED FOR TENDER	J.C.	W.L.					E	26/04/13	ISSUED FOR TENDER				
D	27/02/13	INC. CLIENT COMMENTS	J.C.	W.L.					D	27/02/13	ISSUED FOR REVIEW				
C	04/02/13	ISSUED FOR REVIEW	J.C.	W.L.					C	04/02/13	ISSUED FOR REVIEW				
B	18/01/13	ISSUED FOR REVIEW	J.C.	M.J.A.					B	18/01/13	ISSUED FOR REVIEW				
A	17/08/12	ISSUED FOR REVIEW	J.C.	E.K.					A	17/08/12	ISSUED FOR REVIEW				

STAMP/SEAL
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WITHOUT THE PERMISSION OF CHIMAX INC.

APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	14/08/12	

Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P314-S01

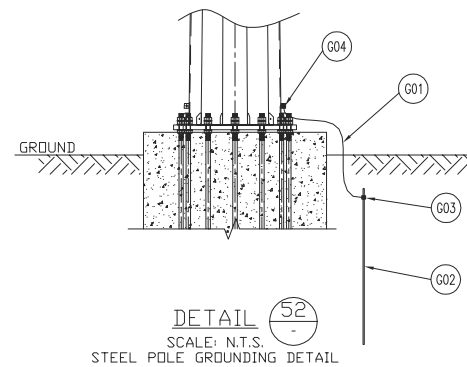
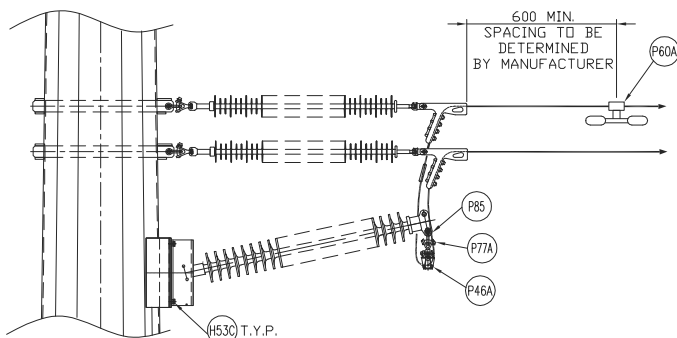
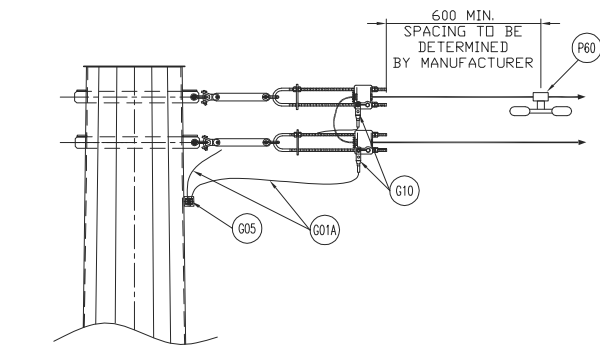
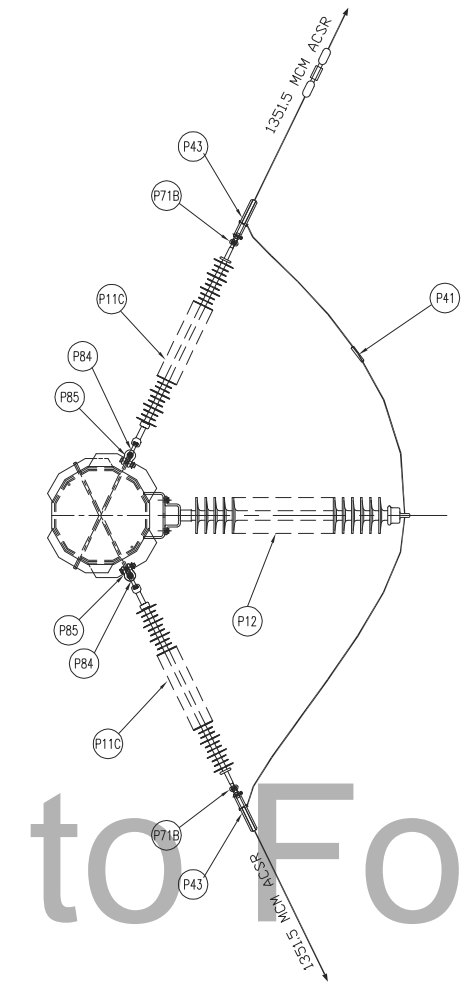
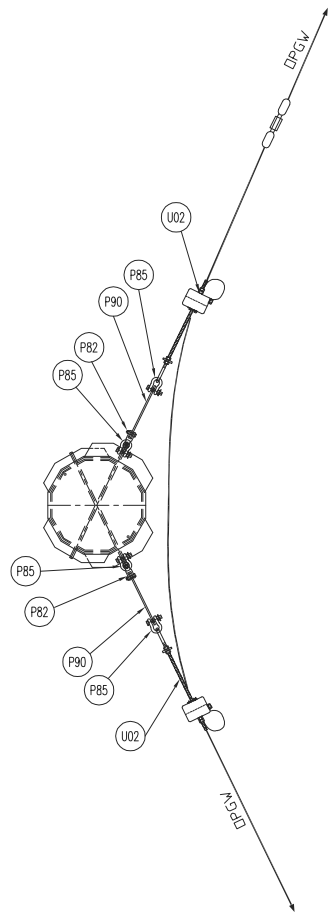
CADD FILE ADDRESS
1235-1-P314-S01&S02-E

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DETAIL 6
SCALE: N.T.S.
STEEL POLE DPGW SUSPENSION ASSEMBLY

DETAIL 7
SCALE: N.T.S.
STEEL POLE STRAIN INSULATOR MOUNTING DETAIL

DETAIL 52
SCALE: N.T.S.
STEEL POLE GROUNDING DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						E	26/04/13	ISSUED FOR TENDER			
D	27/02/13	INC. CLIENT COMMENTS	J.C.	W.L.						D	27/02/13	ISSUED FOR REVIEW			
C	04/02/13	ISSUED FOR REVIEW	J.C.	W.L.						C	04/02/13	ISSUED FOR REVIEW			
B	18/01/13	ISSUED FOR REVIEW	J.C.	M.J.A.						B	18/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	E.K.						A	17/08/12	ISSUED FOR REVIEW			

STAMP/SEAL
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WITHOUT THE PERMISSION OF CHIMAX INC.

APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE			
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG	14/08/12	
	DRN. J.CHEN	14/08/12	

AREA	NEXTERA 5-PACK TRANSMISSION LINE
SUBJECT	
1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION HEAVY ANGLE (45-60°) FRAMING	

Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

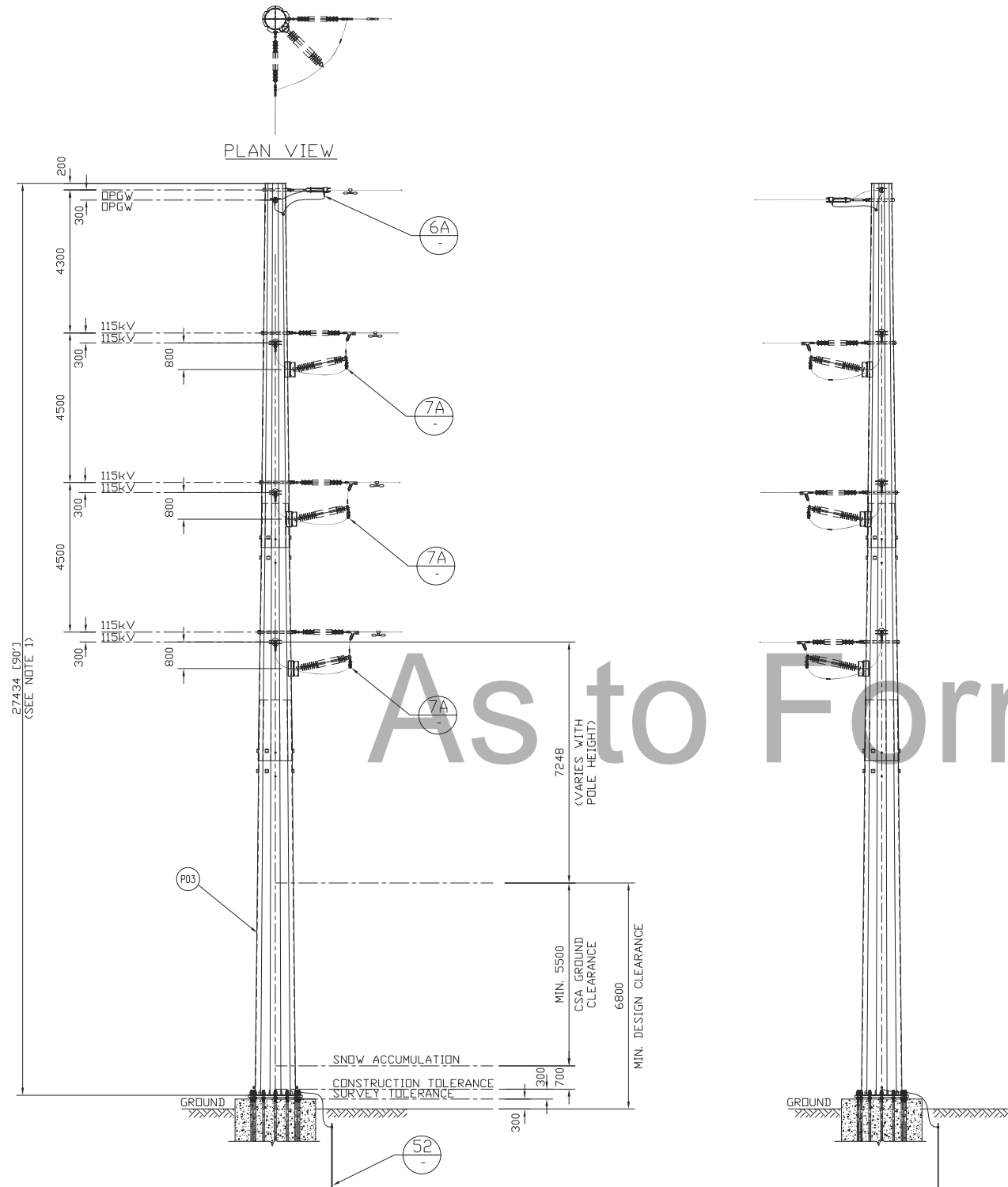
DRAWING NO.
1235-1-P314-S02

REV.
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CADD FILE ADDRESS
1235-1-P314-S01&S02-E

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BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	6	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12	3	138/161kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L2-SN381-18	
P41	3	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	6	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P46A	3	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 25,000LBS)	HUBBELL HAS162N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P60A	3	VIBRATION DAMPER FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 6071513	
P71B	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA1613	
P77A	3	Y-CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL YCS11	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	13	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	2	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
H53C	12	19mm(3/4")Øx57mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	26/04/13	ISSUED FOR TENDER		J.C.	W.L.					E	26/04/13	ISSUED FOR TENDER			
D	27/02/13	INC. CLIENT COMMENTS		J.C.	W.L.					D	27/02/13	ISSUED FOR REVIEW			
C	04/02/13	ISSUED FOR REVIEW		J.C.	W.L.					C	04/02/13	ISSUED FOR REVIEW			
B	18/01/13	ISSUED FOR REVIEW		J.C.	M.J.A.					B	18/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW		J.C.	E.K.					A	17/08/12	ISSUED FOR REVIEW			

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APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

PROJECT NO. ACTIVITY NO. PACKAGE CODE

SCALE
N.T.S. (11"x17")

BY
DSN. E.KWONG
DRN. J.CHEN

D/M/Y
14/08/12
14/08/12

AREA
NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT
1CCT 115kV TRANSMISSION LINE
SINGLE CONDUCTOR CONFIGURATION
HEAVY ANGLE (60-90°) FRAMING

Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

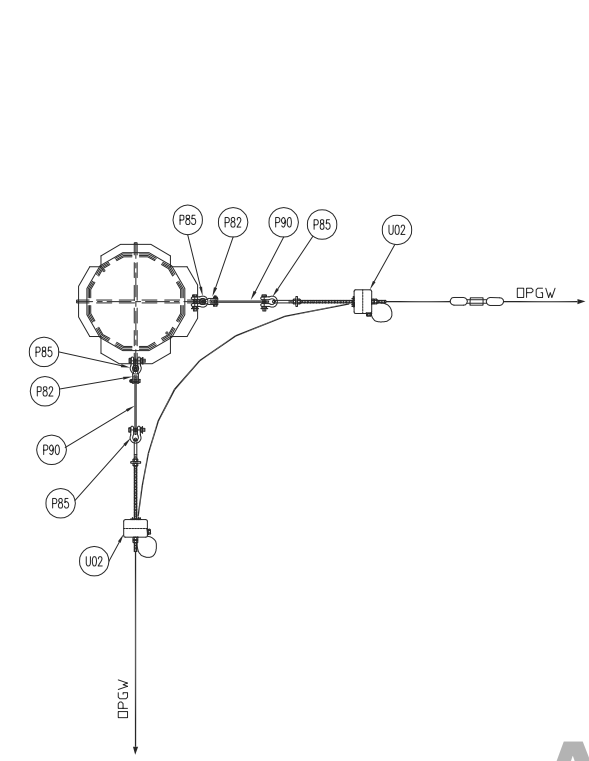
DRAWING NO.
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REV.
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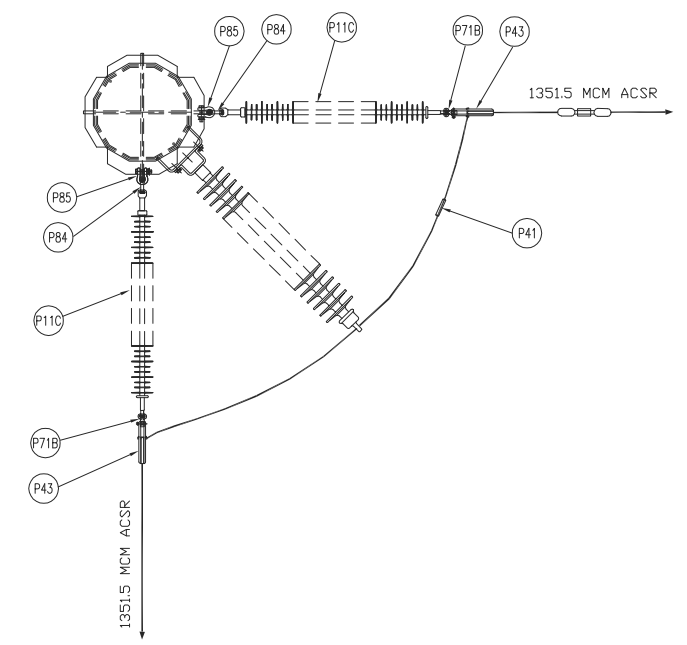
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1235-1-P315-S01&S02-E

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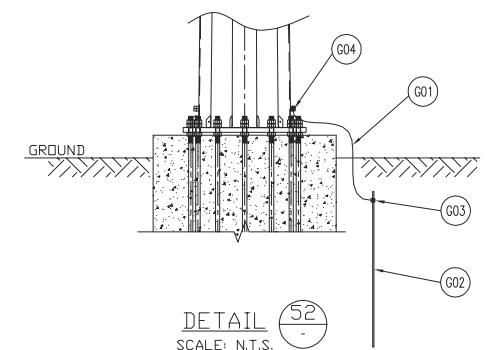
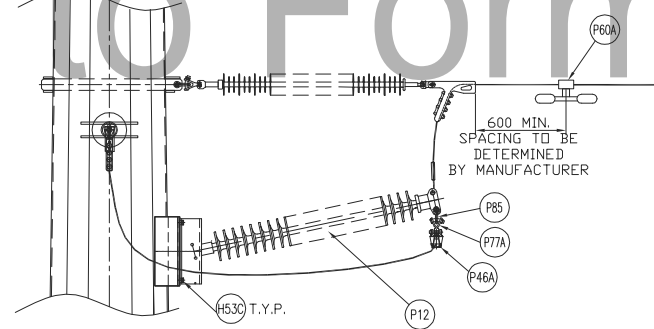
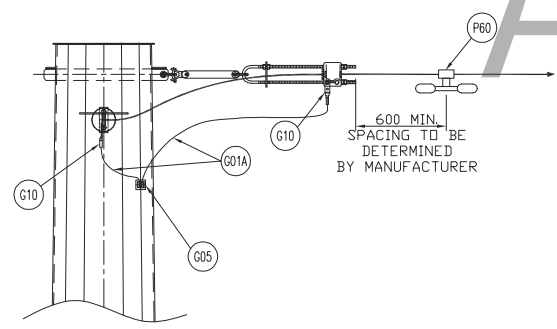
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DETAIL 6A
SCALE: N.T.S.
STEEL POLE DPGW SUSPENSION ASSEMBLY



DETAIL 7A
SCALE: N.T.S.
STEEL POLE STRAIN INSULATOR MOUNTING DETAIL



DETAIL 52
SCALE: N.T.S.
STEEL POLE GROUNDING DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						E	26/04/13	ISSUED FOR TENDER			
D	27/02/13	INC. CLIENT COMMENTS	J.C.	W.L.						D	27/02/13	ISSUED FOR REVIEW			
C	04/02/13	ISSUED FOR REVIEW	J.C.	W.L.						C	04/02/13	ISSUED FOR REVIEW			
B	18/01/13	ISSUED FOR REVIEW	J.C.	M.J.A.						B	18/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	E.K.						A	17/08/12	ISSUED FOR REVIEW			

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APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG	14/08/12
	DRN. J.CHEN	14/08/12

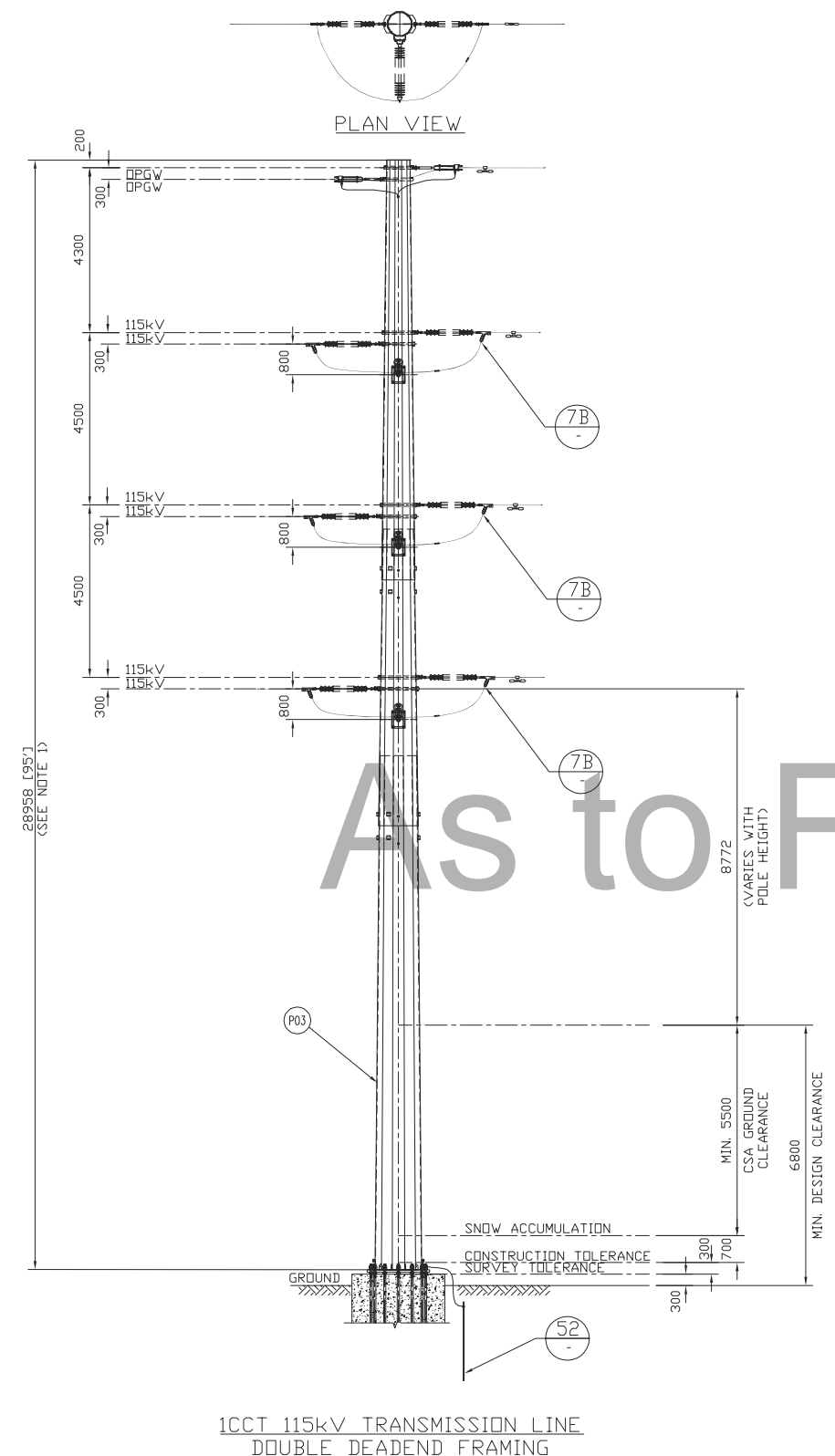
AREA	
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60-90°) FRAMING	

Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.	REV.
DRAWING NO. 1235-1-P315-S02	E
CADD FILE ADDRESS 1235-1-P315-S01&S02-E	

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1CCT 115kV TRANSMISSION LINE
DOUBLE DEADEND FRAMING

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	6	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12	3	138/161kV TRANSMISSION LINE POST INSULATOR (DRDP TONGUE - FLAT BASE)	NGK-LOCKE PART #L2-SN381-18	
P41	3	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	6	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P46A	3	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 25,000LBS)	HUBBELL HAS162N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P60A	3	VIBRATION DAMPER FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 6071513	
P71B	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA1613	
P77A	3	Y-CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL YCS11	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	13	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	2	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
H53C	12	19mm(3/4")Øx57mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						E	26/04/13	ISSUED FOR TENDER			
D	27/02/13	INC. CLIENT COMMENTS	J.C.	W.L.						D	27/02/13	ISSUED FOR REVIEW			
C	04/02/13	ISSUED FOR REVIEW	J.C.	W.L.						C	04/02/13	ISSUED FOR REVIEW			
B	18/01/13	ISSUED FOR REVIEW	J.C.	M.A.						B	18/01/13	ISSUED FOR REVIEW			
A	18/01/13	ISSUED FOR REVIEW	J.C.	E.K.						A	18/01/13	ISSUED FOR REVIEW			

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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

PROJECT NO. ACTIVITY NO. PACKAGE CODE

SCALE N.T.S. (11"x17")

BY DSN. E.KWONG DRN. J.CHEN

D/M/Y 14/08/12

AREA NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT 1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION DOUBLE DEADEND FRAMING

NEXTERA ENERGY CANADA

Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

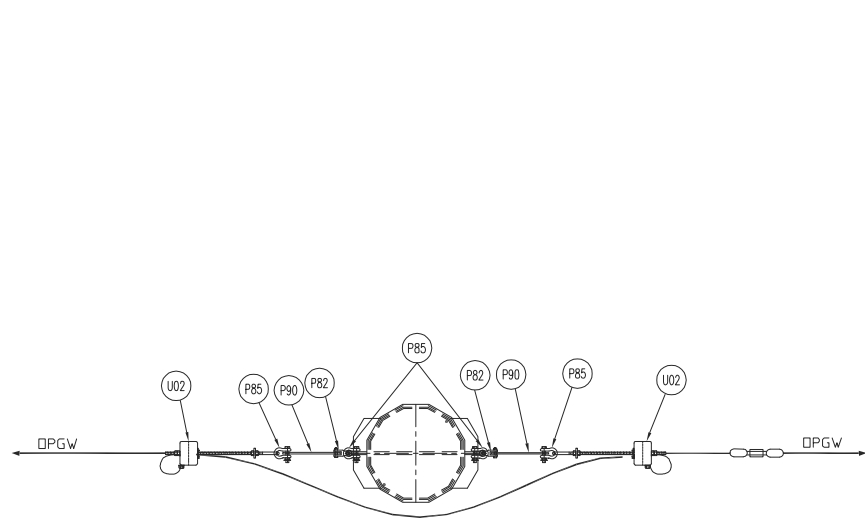
DRAWING NO. 1235-1-P316-S01

REV. E

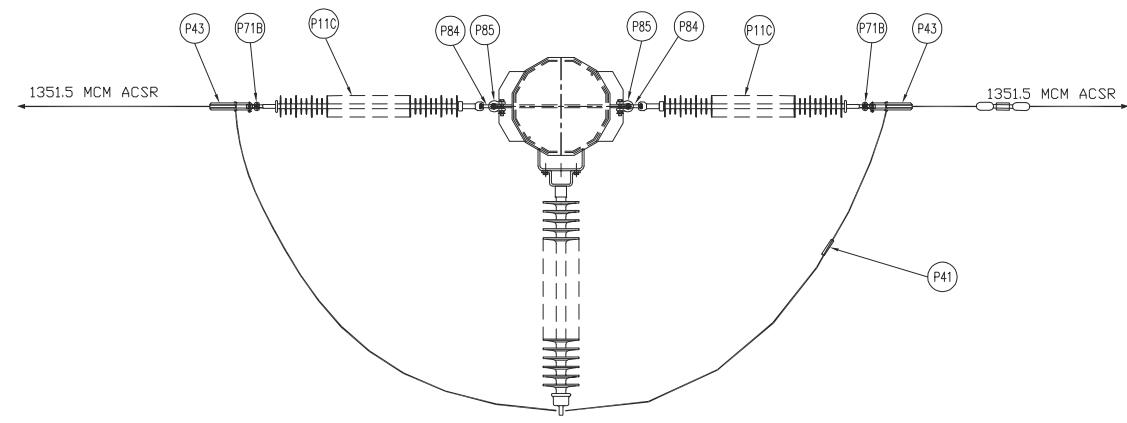
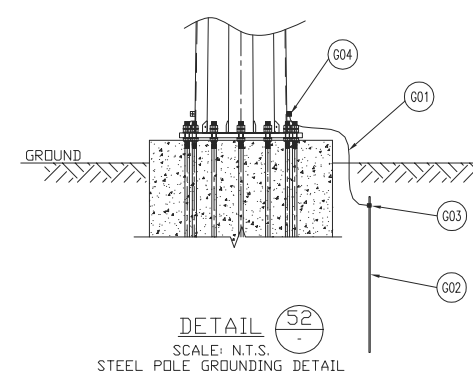
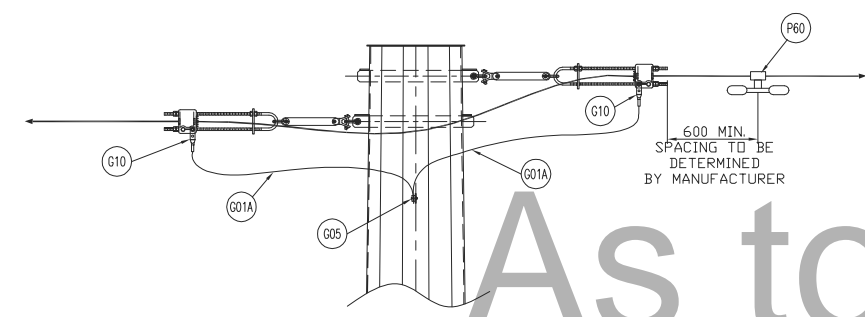
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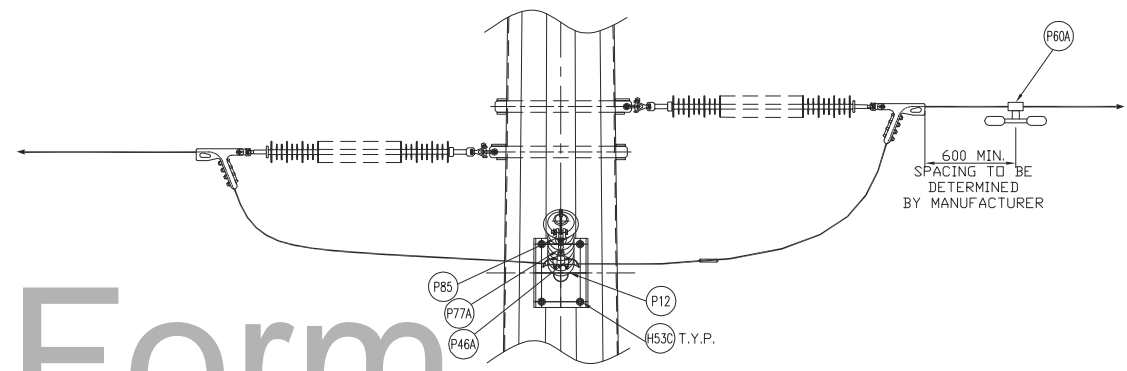
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DETAIL 6B
SCALE: N.T.S.
STEEL POLE OPGW SUSPENSION ASSEMBLY



DETAIL 7B
SCALE: N.T.S.
STEEL POLE STRAIN INSULATOR MOUNTING DETAIL



REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						E	26/04/13	ISSUED FOR TENDER			
D	27/02/13	INC. CLIENT COMMENTS	J.C.	W.L.						D	27/02/13	ISSUED FOR REVIEW			
C	04/02/13	ISSUED FOR REVIEW	J.C.	W.L.						C	04/02/13	ISSUED FOR REVIEW			
B	18/01/13	ISSUED FOR REVIEW	J.C.	M.J.A.						B	18/01/13	ISSUED FOR REVIEW			
A	18/01/13	ISSUED FOR REVIEW	J.C.	E.K.						A	18/01/13	ISSUED FOR REVIEW			

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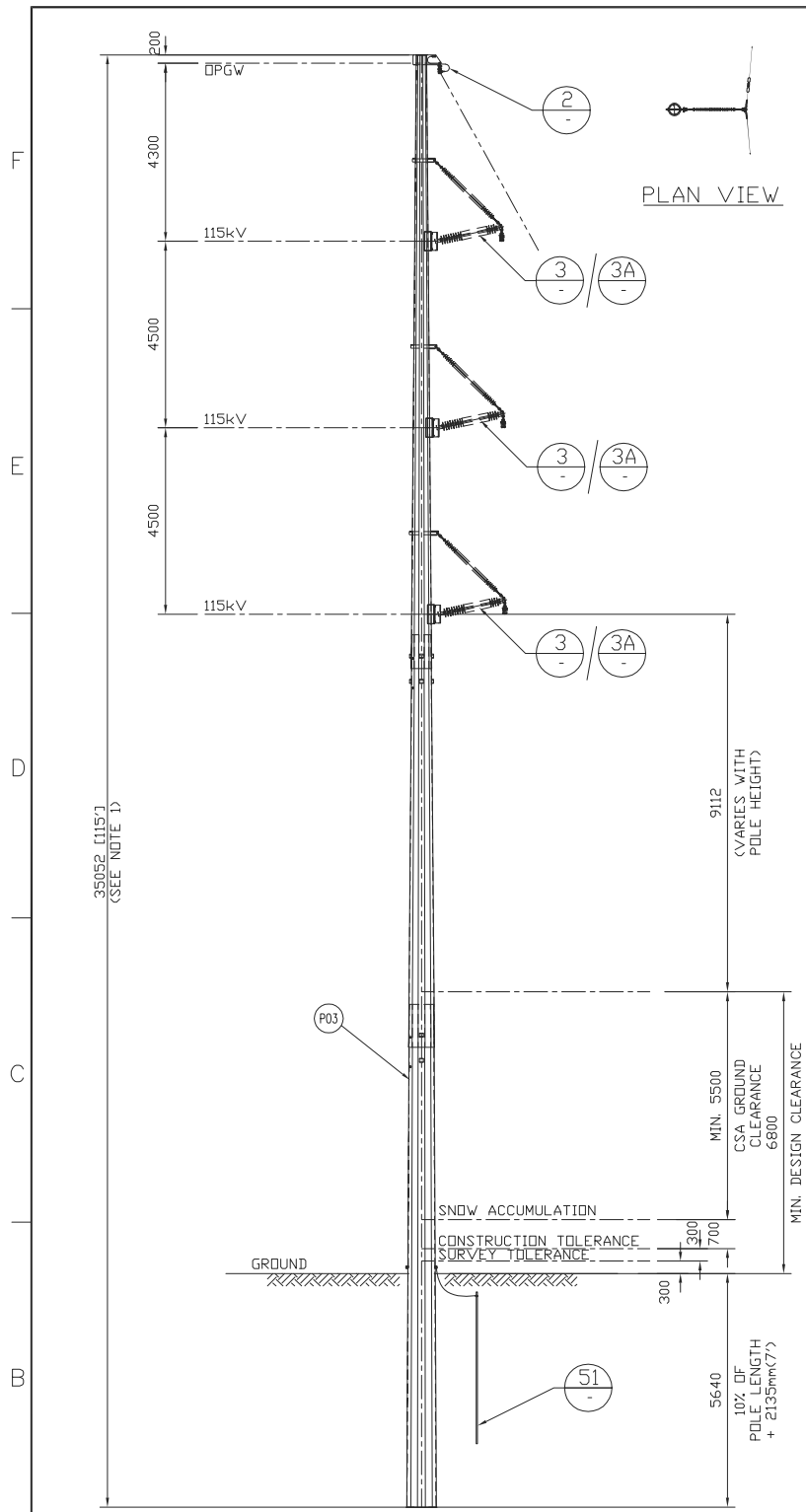
APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	14/08/12 14/08/12

AREA	NEXTERA 5-PACK TRANSMISSION LINE
SUBJECT	
1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION DOUBLE DEADEND FRAMING	

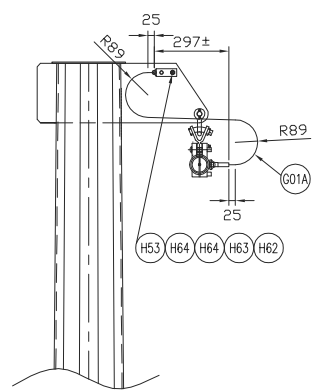
Engineering Company
3850 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.	
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REV.	E

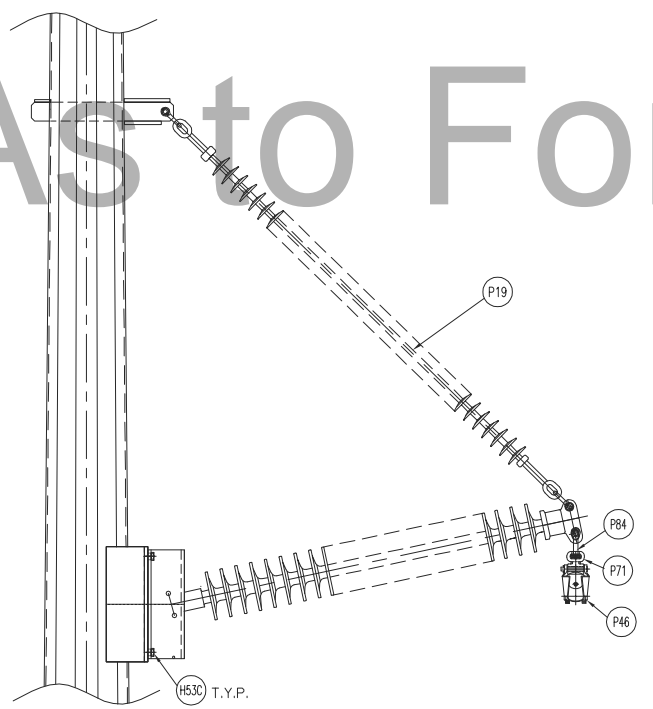
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1CCT 115kV TRANSMISSION LINE
LIGHT ANGLE (3 - 15°) FRAMING
(FOR DIRECT EMBEDMENT)



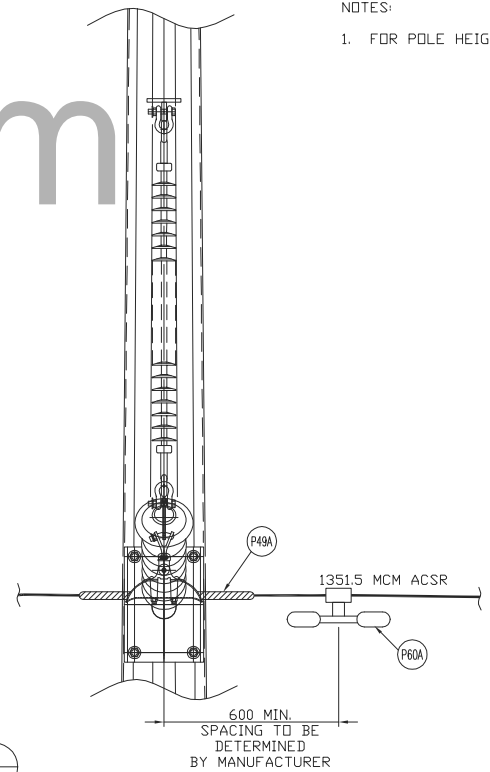
DETAIL 2
SCALE: N.T.S.
DPGW SUSPENSION ASSEMBLY



DETAIL 3
SCALE: N.T.S.
BRACED POST INSULATOR ASSEMBLY

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P19	3	BRACED LINE POST ASSEMBLY (FLAT BASE - L2-SN381-18, 251-SC590-EE, 2xAS-25-L-BNK)	NGK-LOCKE CAT.#: HV-604	
P46	3	AL. SUSPENSION CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 30,000LBS)	HUBBELL HAS252N	
P49A	3	AL. ARMOR RODS FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P60A	3	VIBRATION DAMPER FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 6071513	
P71	3	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA22	
P77	1	Y-CLEVIS EYE CONNECTOR (UTS 25,000LBS)	HUBBELL YCS06	
P84	3	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	1	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P109	3	HOT LINE Y-CLEVIS BALL CONNECTOR (UTS 30,000LBS)	HUBBELL HYBC30	ALTERNATIVE OPTION
H53	1	1/2" HEX HEAD BOLT (STAINLESS STEEL)	HUBBELL HBS150	
H53C	12	19mm(3/4")x57mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
H62	1	HEX NUTS FOR 1/2" BOLTS (STAINLESS STEEL)	HUBBELL HNS500	
H63	1	BELLEVILLE WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL BW500	
H64	2	ROUND WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL HFS500	
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10A	2	COPPER COMPRESSION TERMINAL 90DEG. FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018BY90	
U01A	1	SINGLE CUSHION CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2) AND ARMOR ROD, C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 20,000LBS)	PLP 4700105	

NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.



DETAIL 51
SCALE: N.T.S.
STEEL POLE GROUNDING DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
D	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						D	26/04/13	ISSUED FOR TENDER				
C	27/02/13	INC. CLIENT COMMENTS	D.M.	W.L.						C	27/02/13	ISSUED FOR REVIEW				
B	04/02/13	ISSUED FOR REVIEW	D.M.	W.L.						B	04/02/13	ISSUED FOR REVIEW				
A	18/01/13	ISSUED FOR REVIEW	J.C.	W.L.						A	18/01/13	ISSUED FOR REVIEW				

APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE: N.T.S. (11"x17")		
DSN. E.KWONG	BY: J.CHEN	D/M/Y: 14/08/12

AREA: NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT: 1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION LIGHT ANGLE (3 - 15°) FRAMING (FOR DIRECT EMBEDMENT)

CLIENT DWG. NO.

DRAWING NO. 1235-1-P317-S01

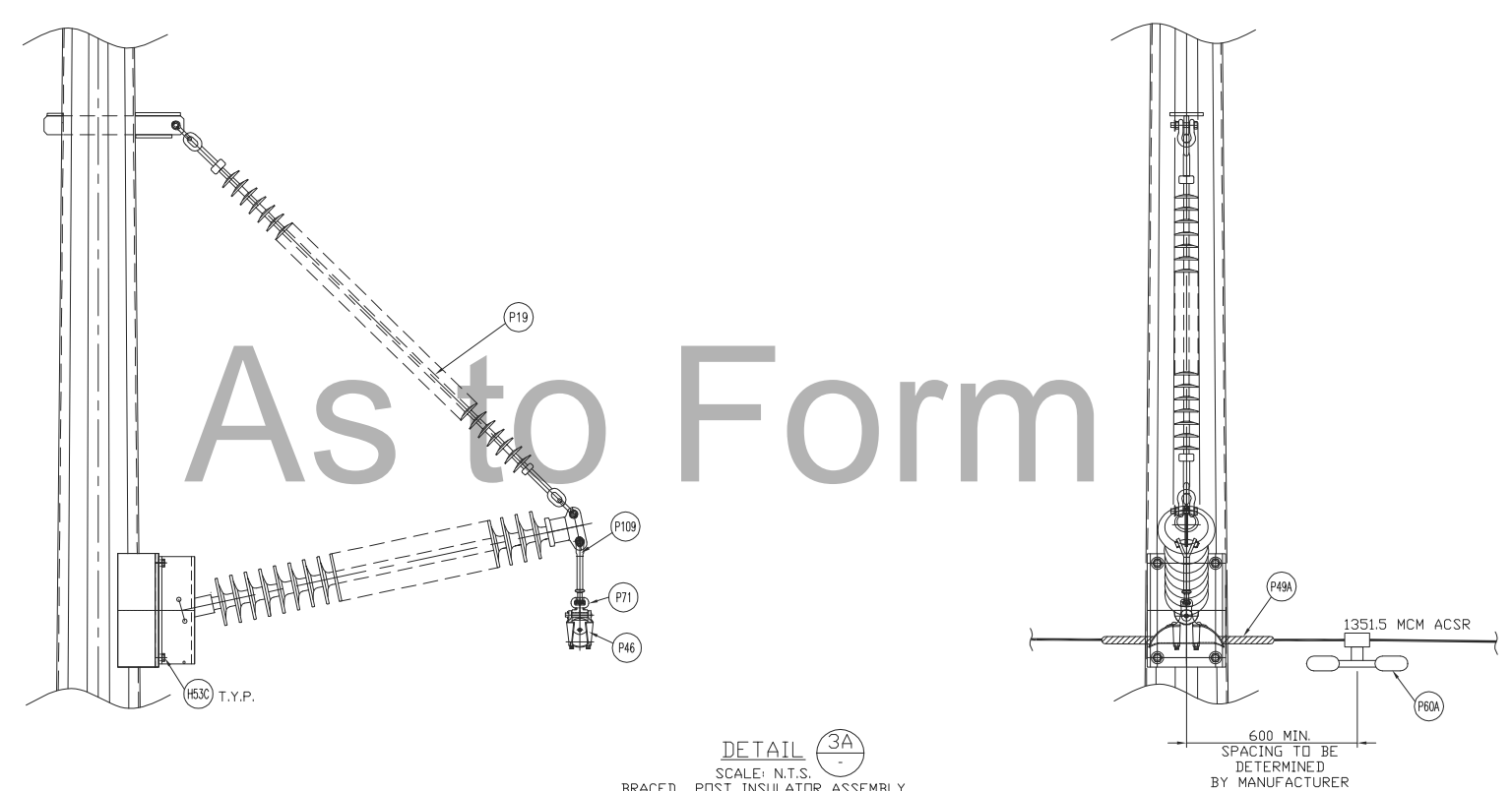
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Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

REV. D

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DETAIL 3A
SCALE: N.T.S.
BRACED POST INSULATOR ASSEMBLY
(ALTERNATIVE OPTION FOR ADJACENT TO DEADEND)

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
D	26/04/13	ISSUED FOR TENDER	J.C.	W.L.					D	26/04/13	ISSUED FOR TENDER				
C	27/02/13	INC. CLIENT COMMENTS	D.M.	W.L.					C	27/02/13	ISSUED FOR REVIEW				
B	04/02/13	ISSUED FOR REVIEW	D.M.	W.L.					B	04/02/13	ISSUED FOR REVIEW				
A	18/01/13	ISSUED FOR REVIEW	J.C.	M.A.					A	18/01/13	ISSUED FOR REVIEW				

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APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	14/08/12 14/08/12

AREA	
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION LIGHT ANGLE (3 - 15°) FRAMING (FOR DIRECT EMBEDMENT)	

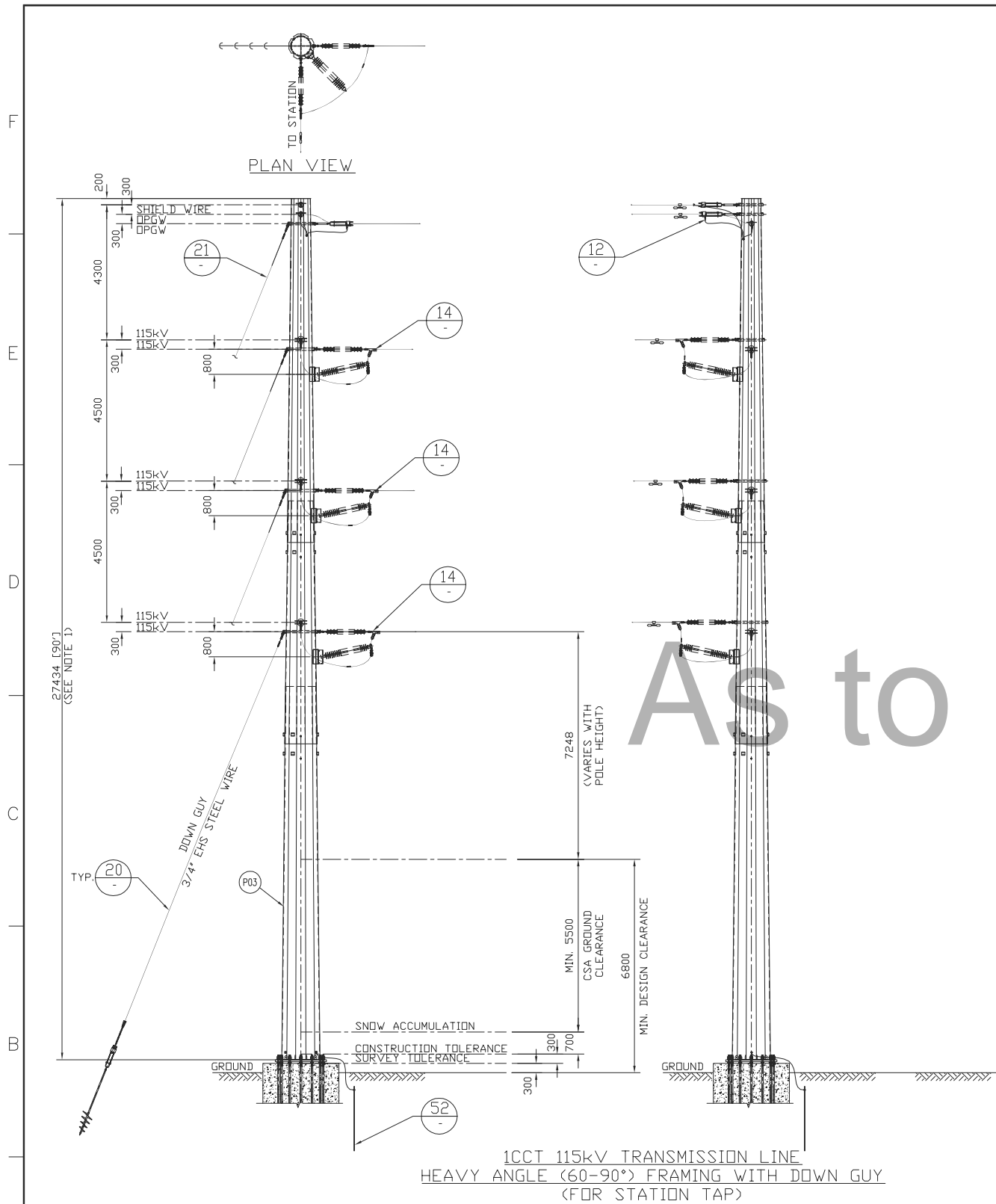
Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P317-S02

CADD FILE ADDRESS
1235-1-P317-S01&S02-D

REV.
D



BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	6	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12	3	138/161kV TRANSMISSION LINE POST INSULATOR (DRDP TONGUE - FLAT BASE)	NGK-LOCKE PART #L2-SN381-18	
P41	3	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	6	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P46A	3	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 25,000LBS)	HUBBELL HAS162N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P60A	3	VIBRATION DAMPER FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 6071513	
P71B	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA1613	
P77A	3	Y-CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL YCS11	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	13	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
H53C	12	19mm(3/4")Øx57mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

ADDITIONAL PARTS FOR SHIELD WIRE TAP TO STATION				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P60B	1	VIBRATION DAMPER FOR 7#5 ALUMOWELD SHIELD WIRE	HUBBELL 607051011	
P82	1	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P85	2	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	1	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
G01B	LOT	4/0 STR. Cu. GROUND WIRE		
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G11	1	IMPACT CONNECTOR FOR 7#5 ALUMOWELD TO 4/0 STR. Cu.	AMP 600466	
P201	1	DEADEND CLAMP FOR 7#5 ALUMOWELD SHIELD WIRE (UTS 25,000LBS)	PLP VG-18-3000	

ADDITIONAL PARTS FOR SINGLE DOWN GUY				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P85A	4	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50BNK	
H25	LOT	GUY WIRE 3/4" EHS GALVANIZED STEEL		
H28	4	PREFORMED GUY DEADEND FOR 3/4" EHS GALVANIZED STEEL (RHS 58,000LBS)	PLP BG-2112	
H39	4	GUY GUARD (HALF-ROUND MARKER 2" DIA. x 8' LENGTH)	HUBBELL 96PBG-2Y	AS REQ'D
H133	4	DUCTILE DEADEND GUY THIMBLE CLEVIS (UTS 60,000LBS)	HUBBELL DDT12	
H111	4	LEAD SECTION OF HIGH-STRENGTH SS ANCHORS (GALV.), C/W 8", 10", 12" & 14" DIA. HELIX AND 1 1/2" DIA. ROD x 2 1/2" LENGTH. (UTS 70,000LBS)	HUBBELL T1100521	
H112	LOT	HIGH-STRENGTH ANCHOR ROD EXTENSION, 1 1/2" DIA. ROD x 7' LENGTH, GALV., (UTS 70,000LBS)	HUBBELL C1100389	AS REQ'D
H115	4	GALV. TRIPLEYE CHAIN SHACKLE, FOR 1 1/2" DIA. ROD (UTS 70,000LBS)	HUBBELL C1100574	
H128	4	ADJUST-A-GRIP DEADEND GRIPS FOR 3/4" EHS GALV. STEEL WIRE, C/W SERVING SLEEVE (UTS 58,000LBS)	HUBBELL 34GA18S	

NOTES:


1. FOR POLE HEIGHT, POLE CLASS & GUY ANCHOR LOCATIONS, SEE CONSTRUCTION STAKING TABLE.

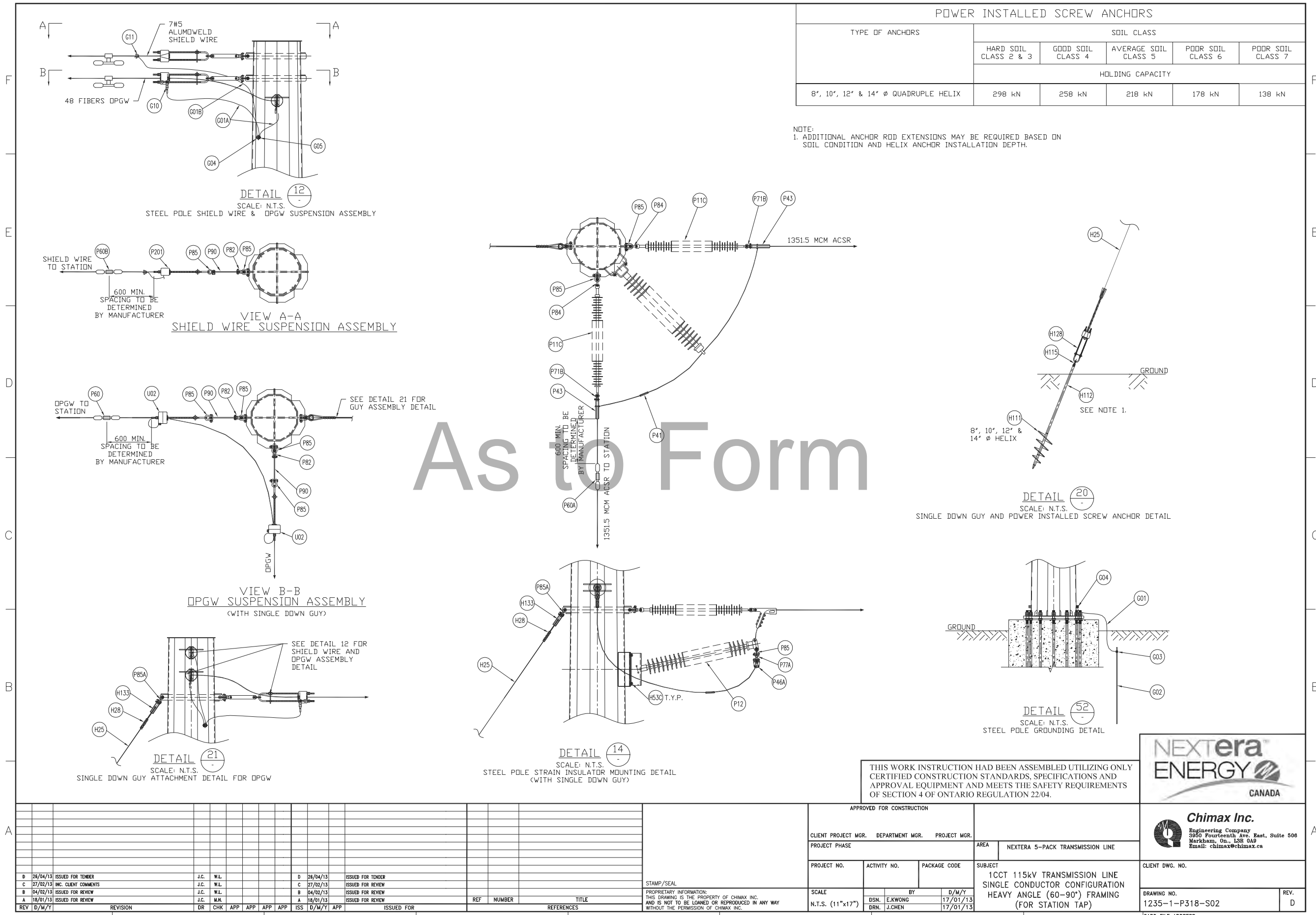


REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
D	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						D	26/04/13	ISSUED FOR TENDER				
C	27/02/13	INC. CLIENT COMMENTS	J.C.	W.L.						C	27/02/13	ISSUED FOR REVIEW				
B	04/02/13	ISSUED FOR REVIEW	J.C.	W.L.						B	04/02/13	ISSUED FOR REVIEW				
A	18/01/13	ISSUED FOR REVIEW	J.C.	M.A.						A	18/01/13	ISSUED FOR REVIEW				

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APPROVED FOR CONSTRUCTION						 <div>Chimax Inc. Engineering Company 3860 Fourteenth Ave. East, Suite 506 Markham, On., L3R 0A8 Email: chimax@chimax.ca</div>	
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA		NEXTERA 5-PACK TRANSMISSION LINE	
PROJECT PHASE							
PROJECT NO.		ACTIVITY NO.		PACKAGE CODE		SUBJECT	
						1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION	
SCALE		BY		D/M/Y		CLIENT DWG. NO.	
N.T.S. (11"x17")		DSN. E.KWONG DRN. J.CHEN		17/01/13 17/01/13		DRAWING NO.	
						1235-1-P318-S01	
						REV.	
						D	
						CADD FILE ADDRESS	
						1235-1-P315-S01&S02-D	



POWER INSTALLED SCREW ANCHORS					
TYPE OF ANCHORS	SOIL CLASS				
	HARD SOIL CLASS 2 & 3	GOOD SOIL CLASS 4	AVERAGE SOIL CLASS 5	POOR SOIL CLASS 6	POOR SOIL CLASS 7
	HOLDING CAPACITY				
8", 10", 12" & 14" Ø QUADRUPLE HELIX	298 kN	258 kN	218 kN	178 kN	138 kN

NOTE:
1. ADDITIONAL ANCHOR ROD EXTENSIONS MAY BE REQUIRED BASED ON
SOIL CONDITION AND HELIX ANCHOR INSTALLATION DEPTH.

THIS WORK INSTRUCTION HAD BEEN ASSEMBLED UTILIZING ONLY
CERTIFIED CONSTRUCTION STANDARDS, SPECIFICATIONS AND
APPROVAL EQUIPMENT AND MEETS THE SAFETY REQUIREMENTS
OF SECTION 4 OF ONTARIO REGULATION 22/04.

NEXtera
ENERGY
CANADA

Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-1-P318-S02

REV.
D

CADD FILE ADDRESS
1235-1-P315-S01&S02-D

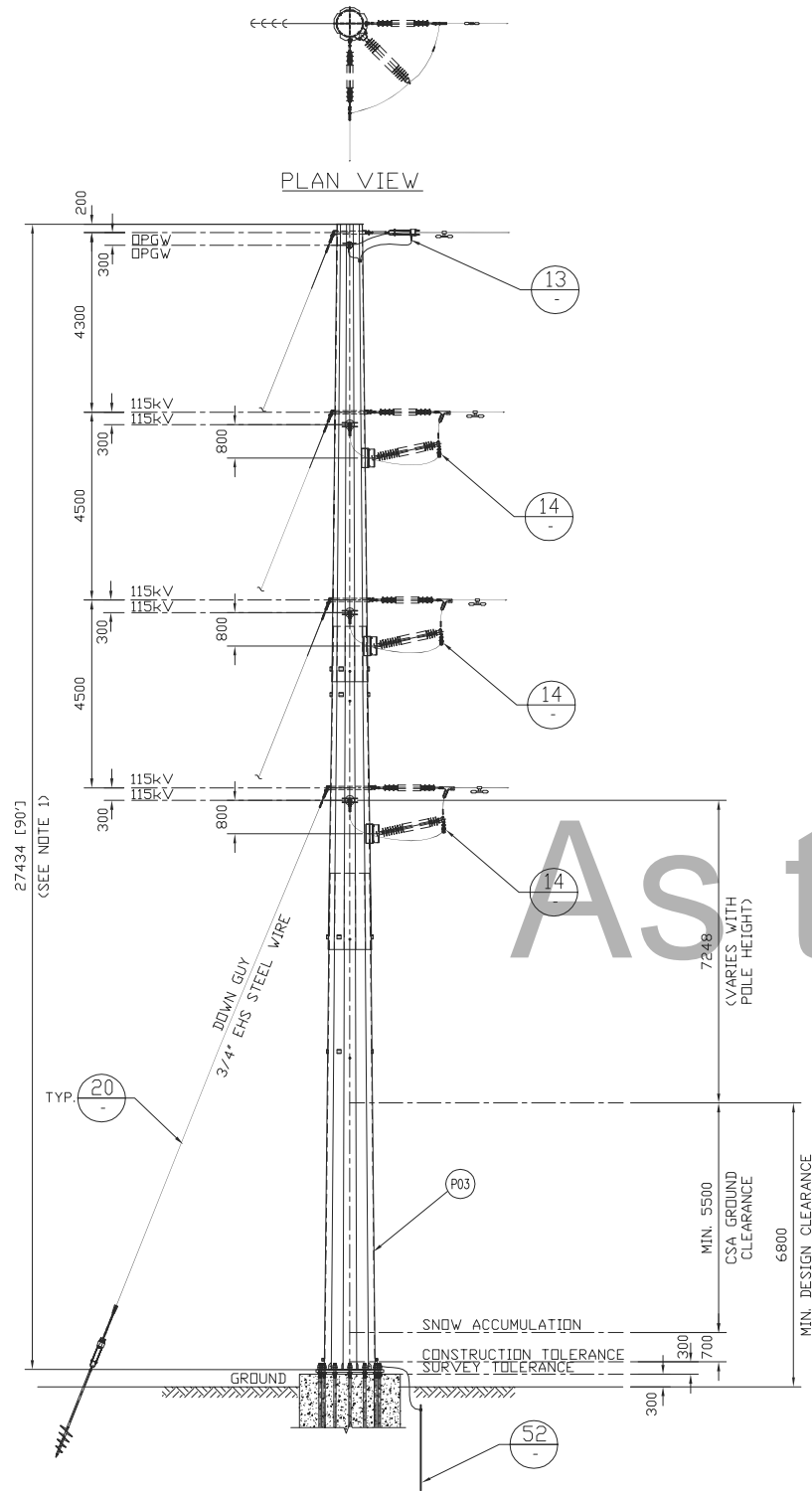
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REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
D	26/04/13	ISSUED FOR TENDER		J.C.	W.L.				D	26/04/13	ISSUED FOR TENDER				
C	27/02/13	INC. CLIENT COMMENTS		J.C.	W.L.				C	27/02/13	ISSUED FOR REVIEW				
B	04/02/13	ISSUED FOR REVIEW		J.C.	W.L.				B	04/02/13	ISSUED FOR REVIEW				
A	18/01/13	ISSUED FOR REVIEW		J.C.	M.A.				A	18/01/13	ISSUED FOR REVIEW				

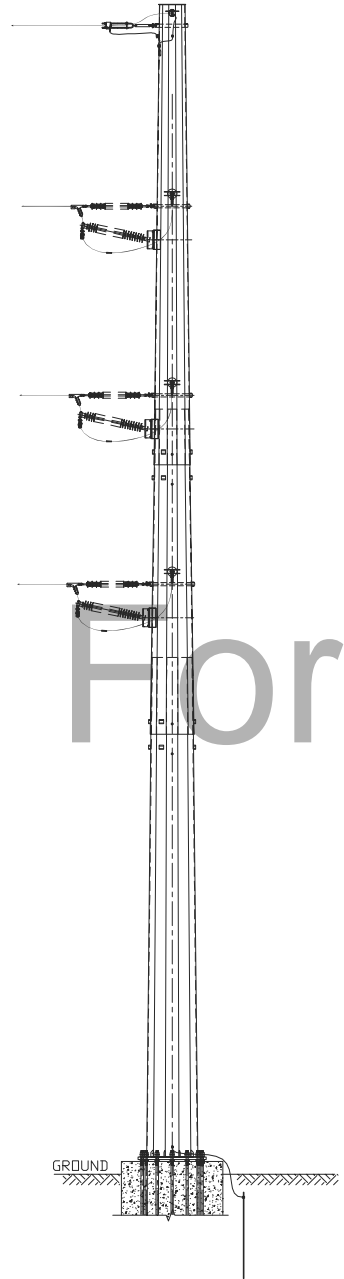
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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	SUBJECT
SCALE N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	BY D/M/Y 17/01/13	1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60-90°) FRAMING (FOR STATION TAP)

F
E
D
C
B
A



1CCT 115kV TRANSMISSION LINE
HEAVY ANGLE (60-90°) FRAMING
(WITH DOWN GUY)



BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	6	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12	3	138/161kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L2-SN381-18	
P41	3	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	6	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P46A	3	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 25,000LBS)	HUBBELL HAS162N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P60A	3	VIBRATION DAMPER FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 6071513	
P71B	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA1613	
P77A	3	Y-CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL YCS11	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	13	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	2	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
H53C	12	19mm(3/4")Øx57mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

ADDITIONAL PARTS FOR SINGLE DOWN GUY				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P85A	4	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50BNK	
H25	LOT	GUY WIRE 3/4" EHS GALVANIZED STEEL		
H28	4	PREFORMED GUY DEADEND FOR 3/4" EHS GALVANIZED STEEL	PLP BG-2112	
H39	4	GUY GUARD (HALF-ROUND MARKER 2" DIA. x 8' LENGTH)	HUBBELL 96PBG-2Y	AS REQ'D
H133	4	DUCTILE DEADEND GUY THIMBLE CLEVIS (UTS 60,000LBS)	HUBBELL DDT12	
H111	4	LEAD SECTION OF HIGH-STRENGTH SS ANCHORS (GALV.), C/W 8", 10", 12" & 14" DIA. HELIX AND 1 1/2" DIA. ROD x 2 1/2" LENGTH. (UTS 70,000LBS)	HUBBELL T1100521	
H112	LOT	HIGH-STRENGTH ANCHOR ROD EXTENSION, 1 1/2" DIA. ROD x 7' LENGTH, GALV., (UTS 70,000LBS)	HUBBELL C1100389	AS REQ'D
H115	4	GALV. TRIPLEYE CHAIN SHACKLE, FOR 1 1/2" DIA. ROD (UTS 70,000LBS)	HUBBELL C1100574	
H128	4	ADJUST-A-GRIP DEADEND GRIPS FOR 3/4" EHS GALV. STEEL WIRE, C/W SERVING SLEEVE (UTS 58,000LBS)	HUBBELL 34GA18S	

NOTES:
1. FOR POLE HEIGHT, POLE CLASS AND GUY ANCHOR LOCATIONS, SEE CONSTRUCTION STAKING TABLE.

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
D	26/04/13	ISSUED FOR TENDER	J.C.	W.L.						D	26/04/13	ISSUED FOR TENDER				
C	27/02/13	INC. CLIENT COMMENTS	J.C.	W.L.						C	27/02/13	ISSUED FOR REVIEW				
B	04/02/13	ISSUED FOR REVIEW	J.C.	W.L.						B	04/02/13	ISSUED FOR REVIEW				
A	23/01/13	ISSUED FOR REVIEW	J.C.	W.L.						A	23/01/13	ISSUED FOR REVIEW				

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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	NEXTERA 5-PAK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	23/01/13	

SUBJECT	1CCT 115kV TRANSMISSION LINE SINGLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60-90°) FRAMING (WITH DOWN GUY)
---------	---

Engineering Company
3850 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

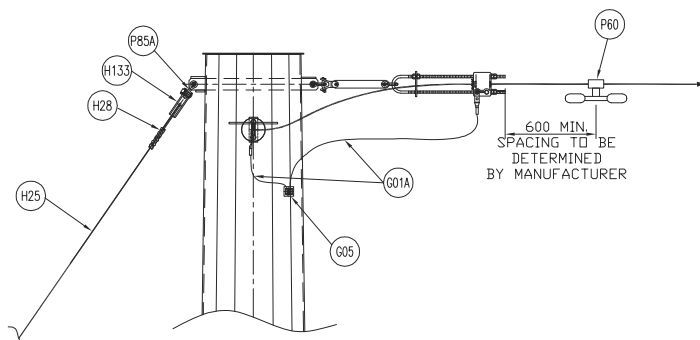
CLIENT DWG. NO.

DRAWING NO.
1235-1-P319-S01

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1235-1-P319-S01&S02-D

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A schematic diagram of a pile foundation system. It shows a cross-section of the ground with a horizontal line labeled 'GROUND'. Below the ground, there are four vertical piles. A horizontal line connects the tops of these piles, labeled 'G04'. A vertical line extends from the ground level down to the base of the piles, labeled 'G03'. A curved line connects the ground level to the base of the piles, labeled 'G01'.

A detailed line drawing of a cable assembly. The assembly consists of a main cable with multiple conductors, some of which are twisted. Various components are labeled with callouts: P85C, H133, H28, H25, H53C T.Y.P., P12, P85, P77A, P46A, P60A, and a note indicating a 600 MIN. spacing to be determined by the manufacturer. The cable is shown entering a structure from the left, passing through a series of components, and then branching out into a bundle of twisted conductors. The drawing is a technical illustration showing the physical layout and component placement of the cable assembly.

Diagram illustrating a Helix Anchored Tie-Back System. The system consists of a helix anchor (H111) installed in the ground, connected to a tie-back rod (H112) which passes through a collar (H115) and a nut (H128) to a tensioning device (H25). The ground level is indicated by a horizontal line labeled "GROUND". The tie-back rod is shown extending from the helix anchor up to the tensioning device. A note "SEE NOTE 1." is present near the ground line.

8", 10", 12" & 14" Ø HELIX

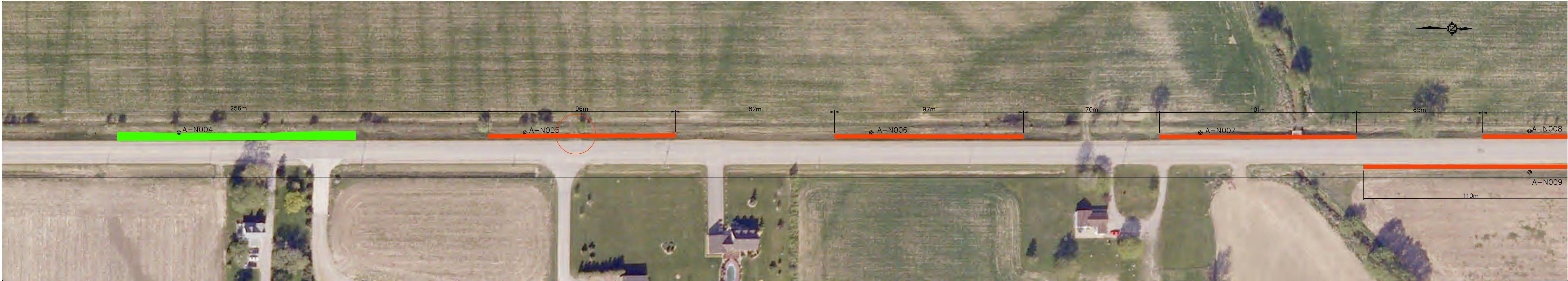
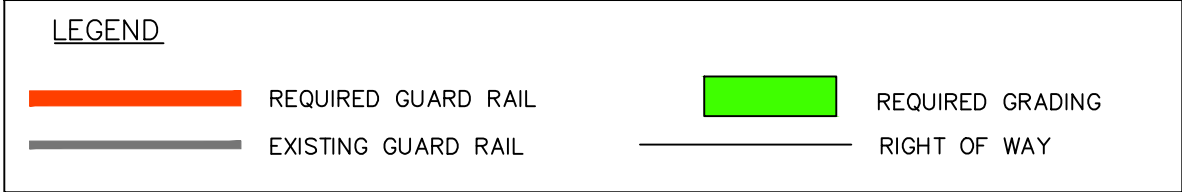
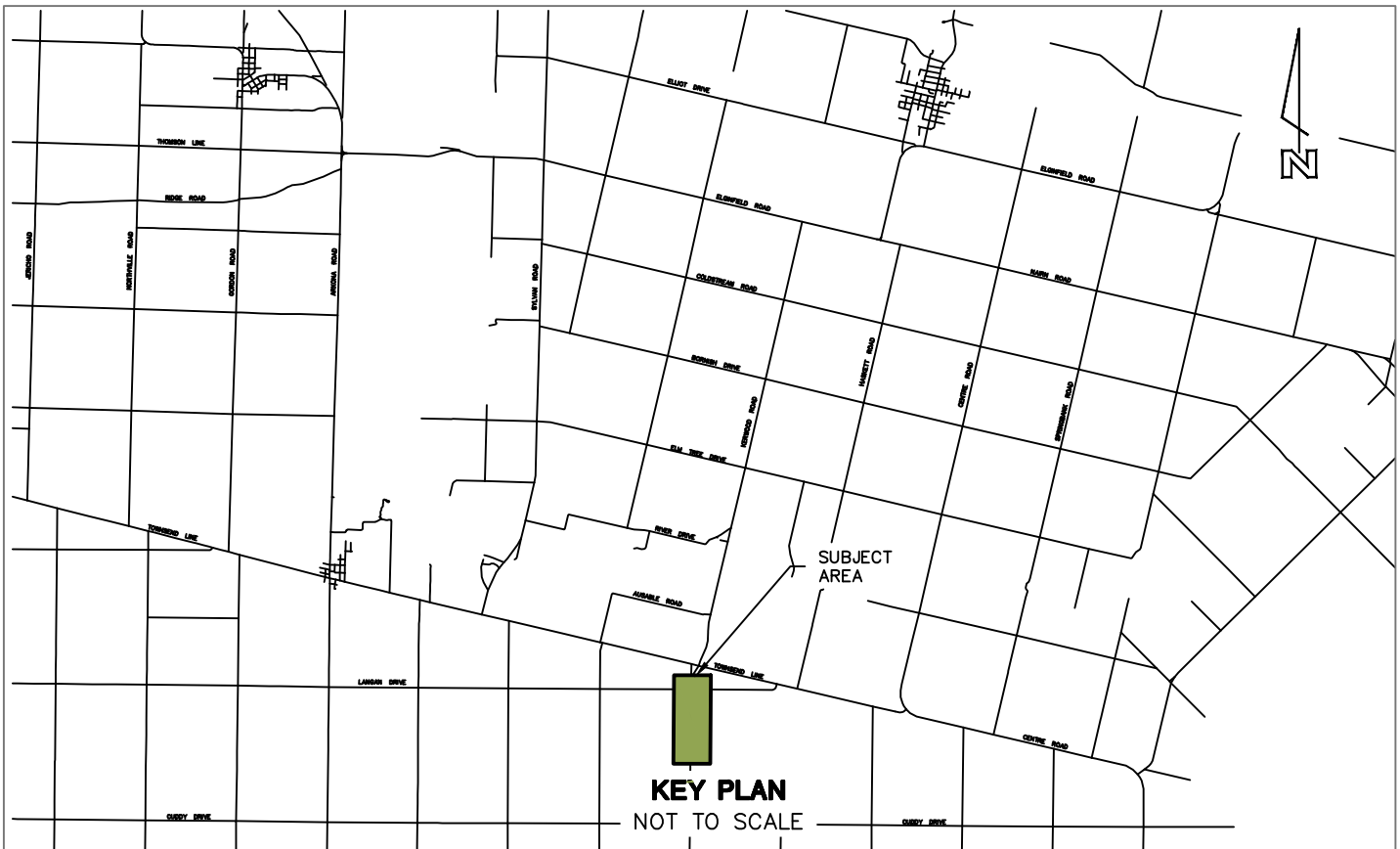
NEXTERATM
ENERGY 
CANADA



Kerwood B4

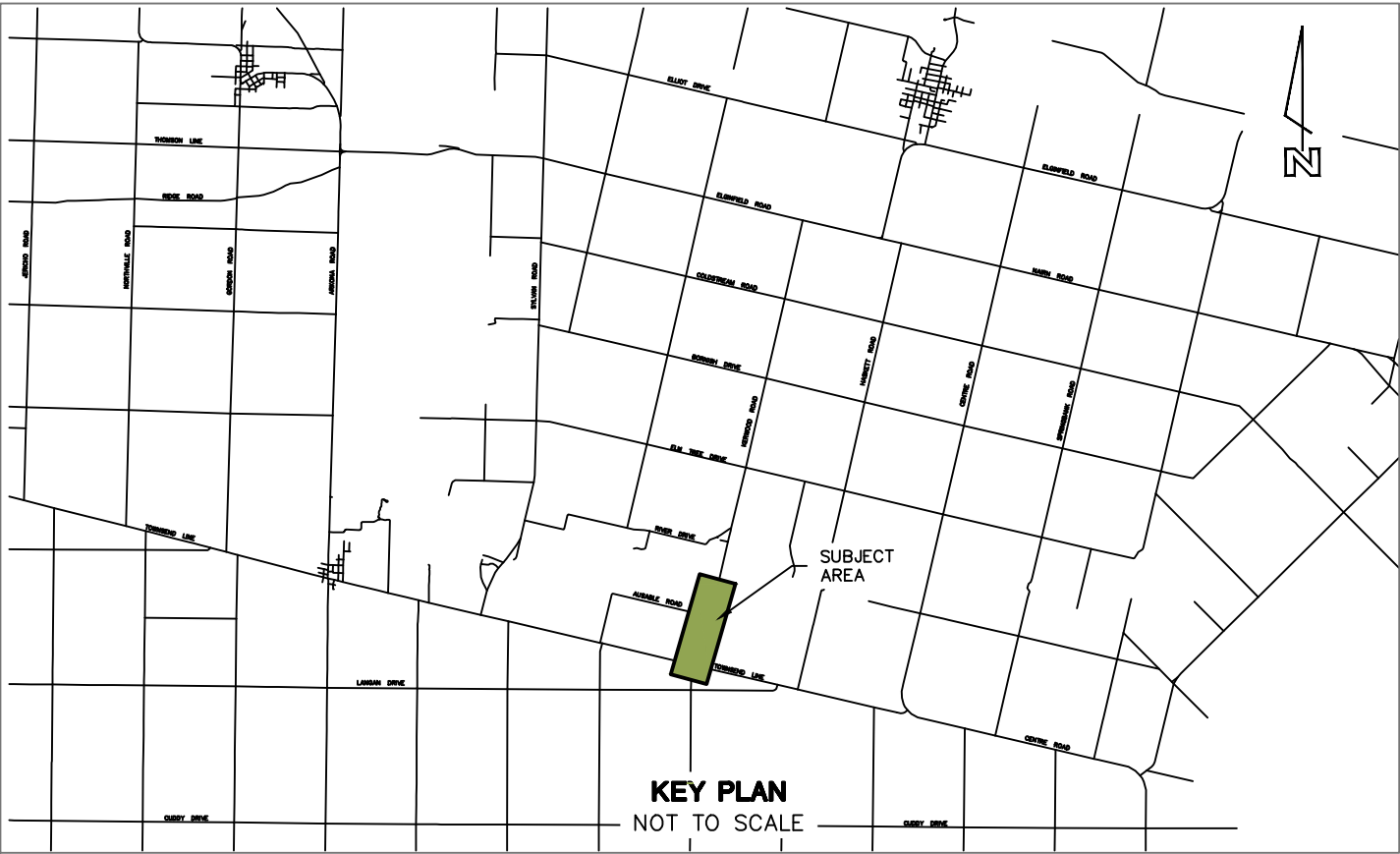
Kerwood Transmission Pole Clear Zone Mitigation Map

As to Form



EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE	TITLE	PROJECT No.
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				DATE 2013-08-29										
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										NEXT ERA ENERGY				

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LEGEND

	REQUIRED GUARD RAIL		REQUIRED GRADING
	EXISTING GUARD RAIL		RIGHT OF WAY

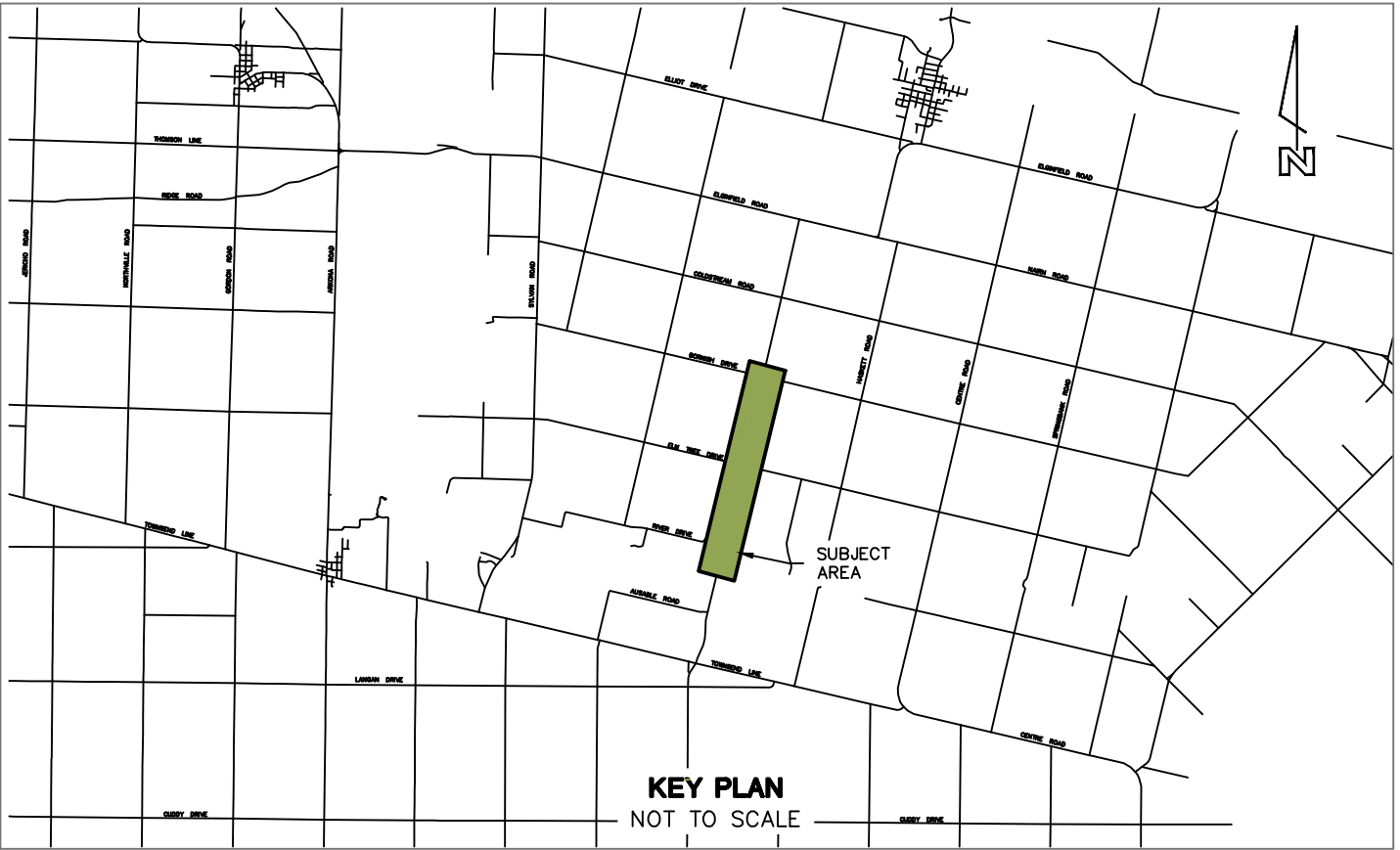


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SCALE 1:1000



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LEGEND

REQUIRED GUARD RAIL

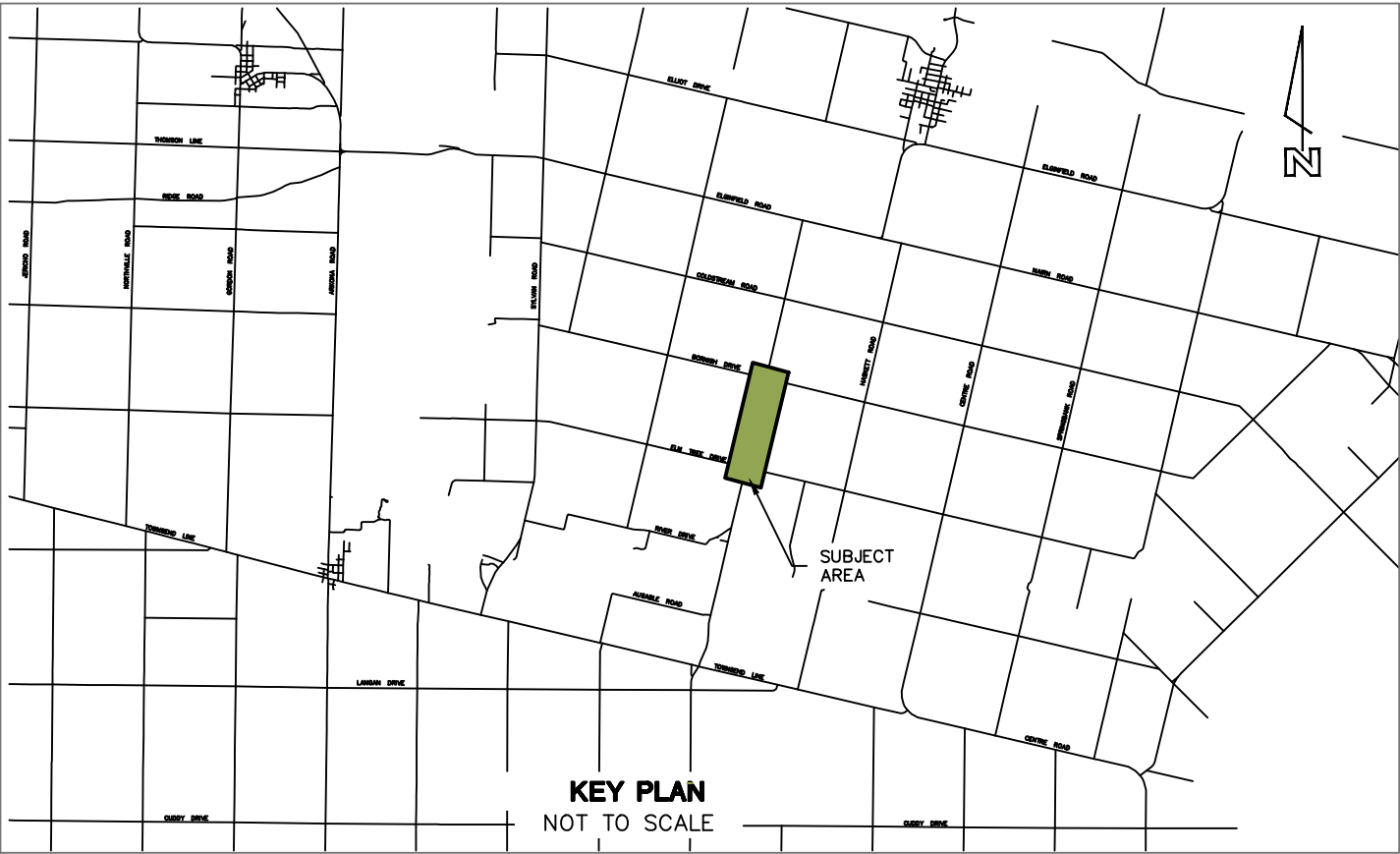
EXISTING GUARD RAIL

REQUIRED GRADING

RIGHT OF WAY



EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE	TITLE	PROJECT No.
					DESIGN REM	1	ISSUED FOR REVIEW	2013-08-30		<div><div>IBI GROUP</div><div>IBI Group 203 - 350 Oxford Street West London ON N6H 1T3 Canada tel 519 472 7328 fax 519 472 9354</div></div>		1:1000	ADELAIDE WIND ENERGY CENTRE MUNICIPALITY OF NORTH MIDDLESEX	34803
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LEGEND

REQUIRED GUARD RAIL

EXISTING GUARD RAIL

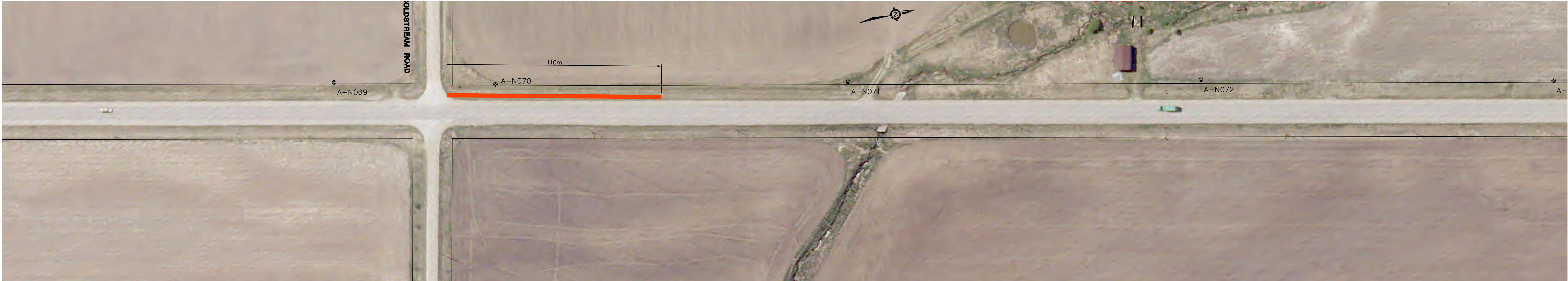
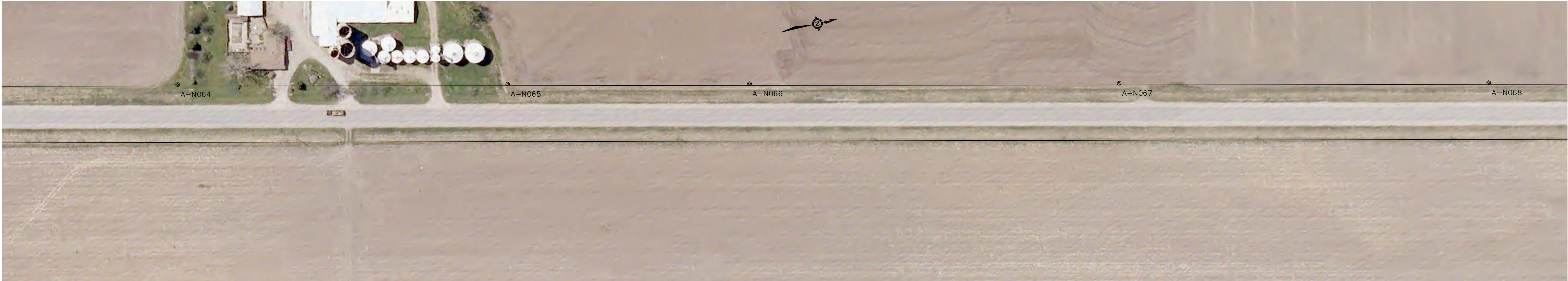
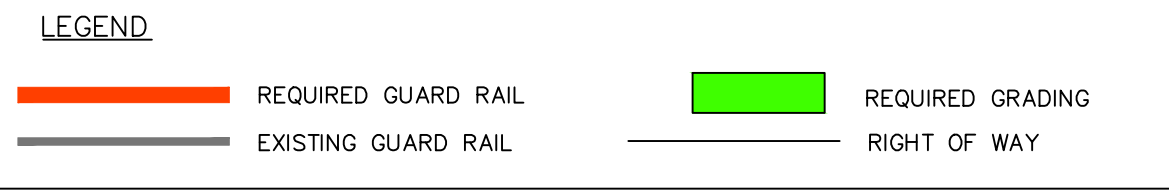
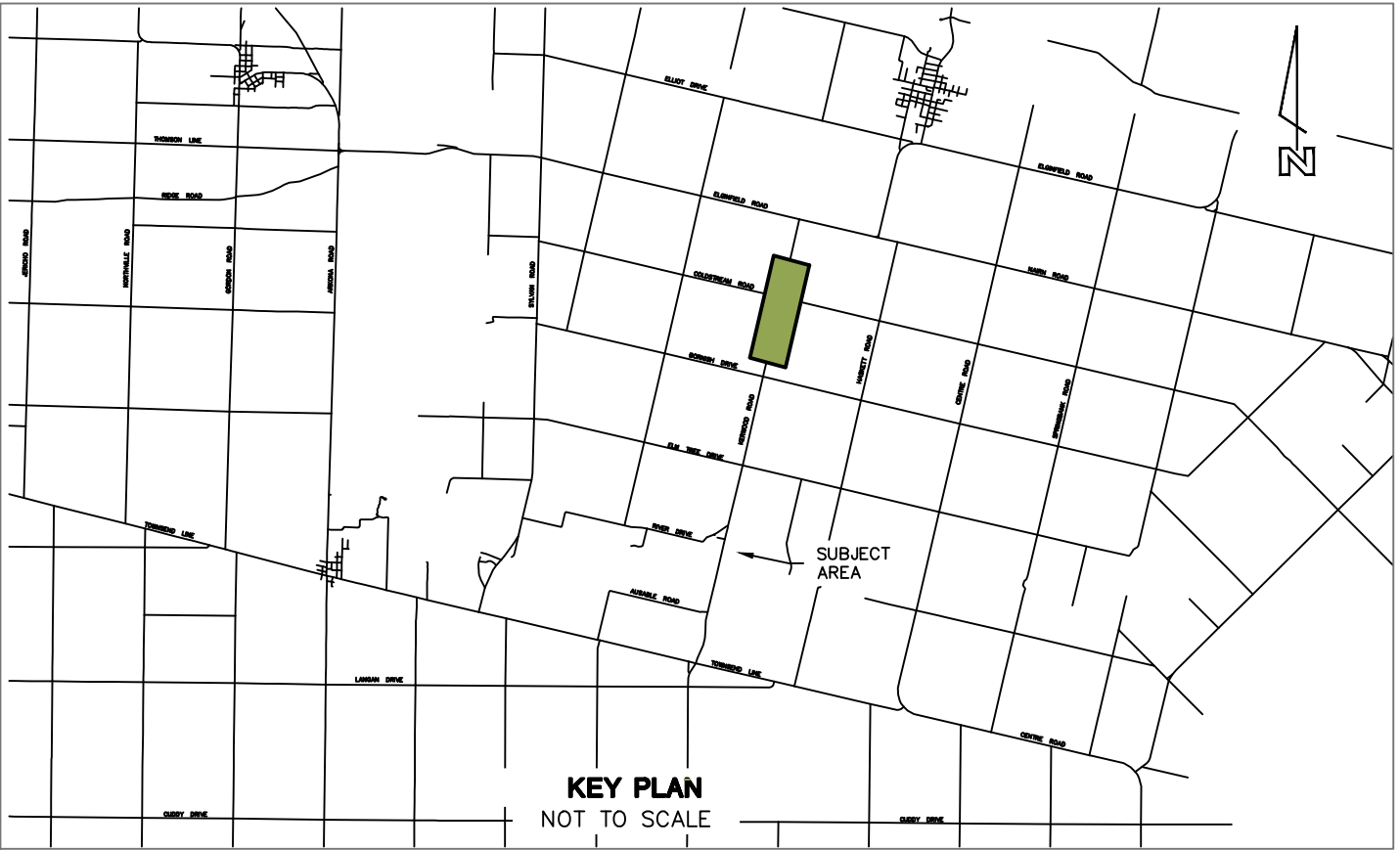
REQUIRED GRADING

RIGHT OF WAY



EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE	TITLE	PROJECT No.	
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				APPROVED RWC											
				DATE 2013-08-29											
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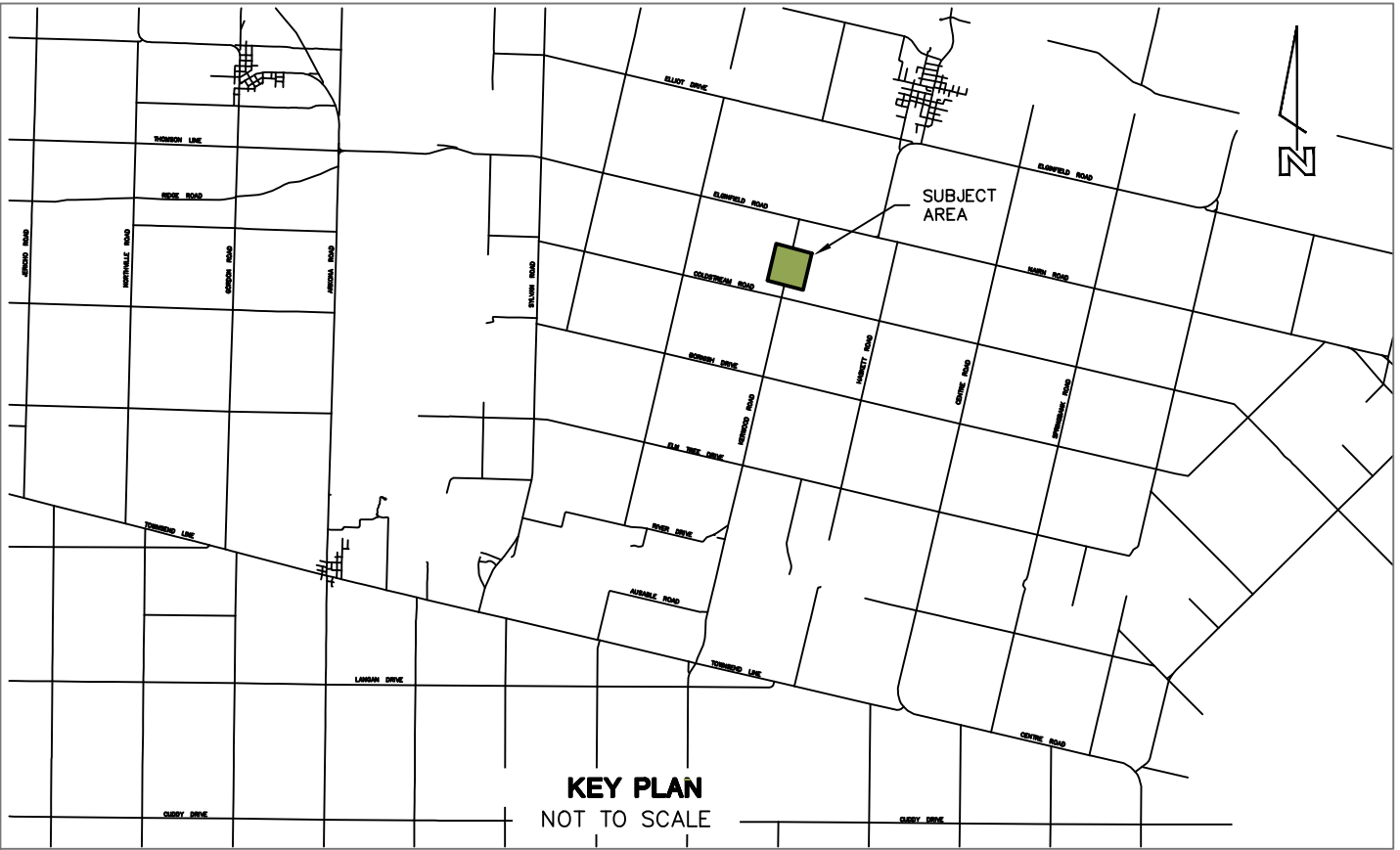
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EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	TITLE	PROJECT No.
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					APPROVED RWC								CZS-5
					DATE 2013-08-29								PLAN FILE No.
					ATLSite.dwg								
												ATLSITE - CLEARZONE SOL5	

SCALE 1:1000

J:\34803-Clear_Z-Adelaide-Bermuda\5.9 Drawings\Civil\Current\Adelaide\ATLSite.dwg



LEGEND

REQUIRED GUARD RAIL

EXISTING GUARD RAIL

REQUIRED GRADING

RIGHT OF WAY



EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE 1:1000	TITLE	PROJECT No.
					DESIGN REM	1	ISSUED FOR REVIEW	2013-08-30		<div><div>IBI GROUP</div><div>203 - 350 Oxford Street West London ON N6H 1T3 Canada tel 519 472 7328 fax 519 472 9354</div></div>	<div></div>	<div>1000 0 20m</div>	ADELAIDE WIND ENERGY CENTRE MUNICIPALITY OF NORTH MIDDLESEX	34803
				DRAWN BY MWB					ATLSITE - CLEARZONE SOL6				CZS-6	
				CHECKED RWC										
				APPROVED RWC										
				DATE 2013-08-29										
														PLAN FILE No.
					ATLSite.dwg									

J:\34803-Clear_Z-Adelaide-Bernal\5.9 Drawings\Civil\current\Adelaide\ATLSite.dwg

Kerwood B5

**Table re Kerwood Transmission Pole
Clearance from Pavement Edge**

As to Form



Kerwood Transmission
Line Pole Example
Ontario, Canada

* Pole location in private easement
**Attempting to move pole into private easement

Date: 9/9/2013

PROPRIETARY AND CONFIDENTIAL
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As to Form

Edge of Pavement

Edge of Shoulder

Distance in meters

Closest Face of Pole

Pole #

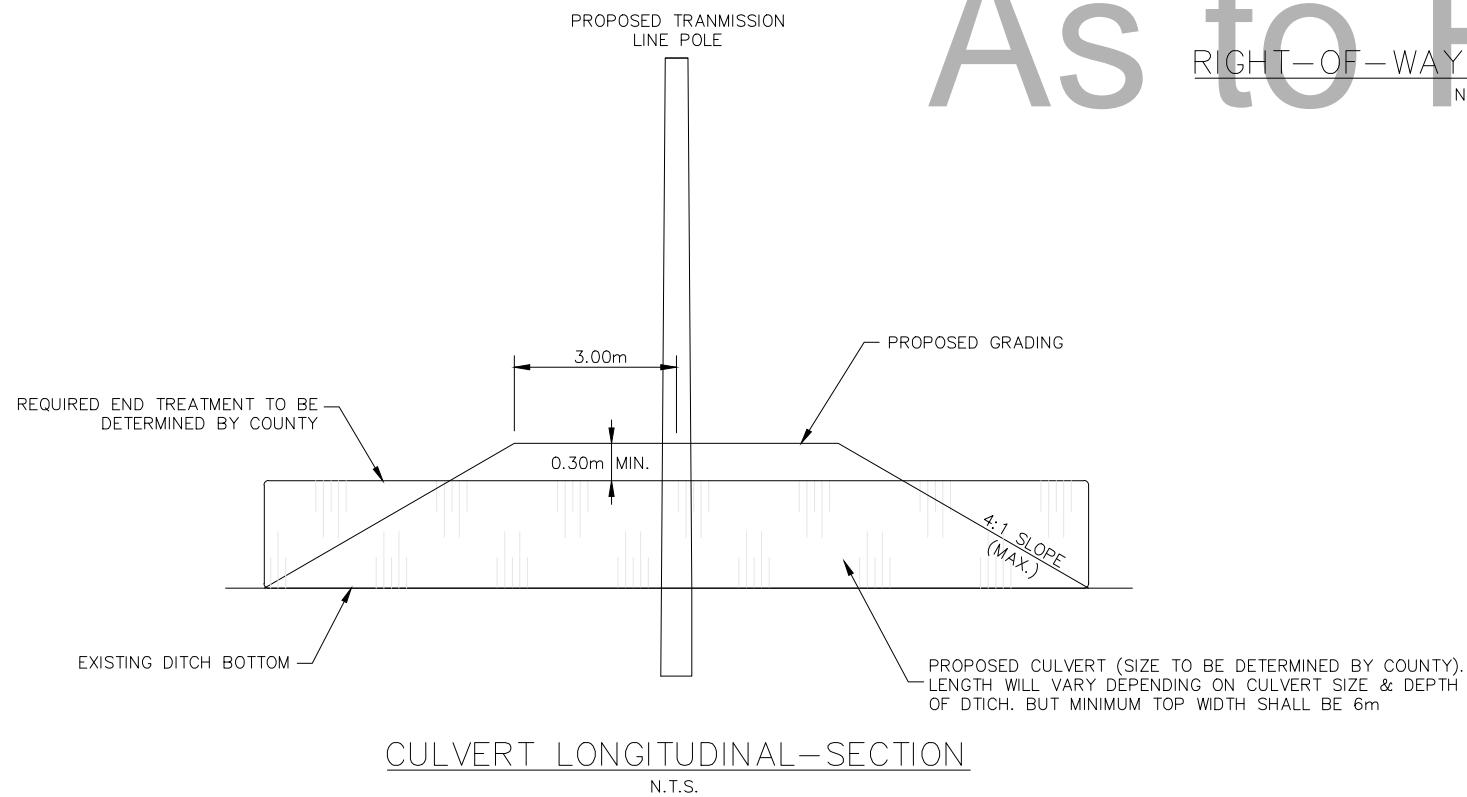
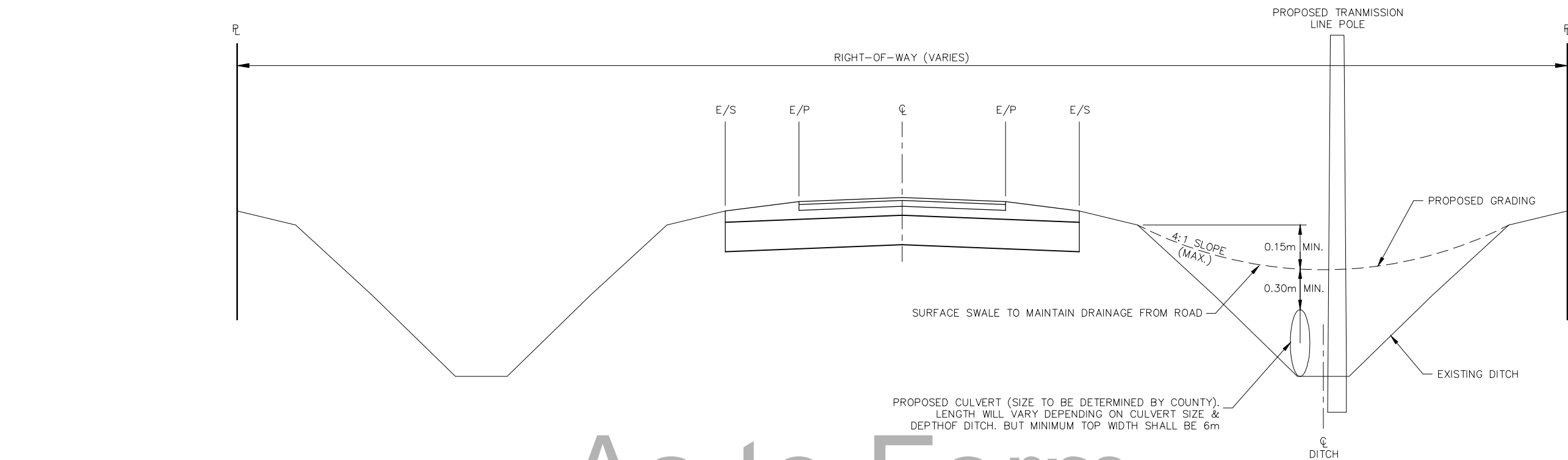
Kerwood Transmission Line		Kerwood Transmission Line	
POLE LOCATIONS		POLE LOCATIONS	
Pole #	Distance to Closest Pole Face	Pole #	Distance to Closest Pole Face
A-N001	5.9	A-N039*	10.7
A-N002	5.9	A-N040*	9.5
A-N003	5.8	A-N041*	9.5
A-N004	5.9	A-N042*	9.5
A-N005	5.8	A-N043*	9.7
A-N006	5.9	A-N044*	9.7
A-N007	6.0	A-N045*	9.6
A-N008	6.4	A-N046*	9.0
A-N009	6.4	A-N047*	10.4
A-N010	6.0	A-N048*	10.3
A-N011	5.4	A-N049*	10.1
A-N012	5.9	A-N050*	9.4
A-N013	5.2	A-N051*	9.3
A-N014	9.0	A-N052*	9.0
A-N015	7.3	A-N053*	9.1
A-N016	11.4	A-N054*	15.7
A-N017	11.8	A-N055*	23.1
A-N018	10.9	A-N056**	10.0
A-N019	9.8	A-N057*	12.9
A-N020	12.8	A-N058*	12.7
A-N021	12.1	A-N059*	12.6
A-N022	22.5	A-N060*	13.5
A-N023	25.5	A-N061*	13.4
A-N024	17.4	A-N062*	13.1
A-N025	10.7	A-N063*	12.9
A-N026	8.7	A-N064*	10.3
A-N027	8.9	A-N065*	10.0
A-N028	8.9	A-N066*	12.2
A-N029	8.8	A-N067*	11.9
A-N030	8.5	A-N068*	11.7
A-N031	8.3	A-N069*	11.5
A-N032	7.3	A-N070*	10.2
A-N033	7.5	A-N071*	11.2
A-N034	7.9	A-N072*	12.0
A-N035	8.5	A-N073*	11.0
A-N036	8.9	A-N074*	11.3
A-N037	24.8	A-N075*	11.4
A-N038*	26.8		

Kerwood B6

Kerwood Typical Culvert Cross-Section

As to Form

J:\34803-Clear_Z-Adelaide-Bornish\5.9 Drawings\Civil\current\Cross Section_Ditch-Pole.dwg



DETAILS	No.	REVISIONS	DATE
DESIGN	RWC	1	ISSUED FOR NEXTERA REVIEW
DRAWN BY	BDH		
CHECKED	RWC		
APPROVED	RWC		
DATE	2013-08-09		

CONSULTANT OR DIVISION	
	IBI Group 203 - 350 Oxford Street West London ON N6H 1T3 Canada tel 519 472 7328 fax 519 472 9354
ENGINEER'S STAMP	SCALE NOT TO SCALE
ADELAIDE & BORNISH WIND PROJECTS MIDDLESEX COUNTY	
TRANSMISSION LINE PROPOSED CULVERT INSTALLATION AT POLE LOCATIONS	
TYP-1.DWG	PROJECT No. 34803 SHEET No. TYP-1

Kerwood B7a

Kerwood T-line Construction Methods

As to Form

Exhibit B7a

DESCRIPTION OF PROPOSED CONSTRUCTION

Support Structure Assembly and Erection

Support structure assembly will begin with auger drilling of a cylindrical shaft in the soil of appropriate diameter and depth to provide necessary support to the structure. For direct-embedded poles, the bottom section of the pole will be centered in this drilled shaft and the gap between the pole and the soil will be backfilled with crushed rock. For base-plated tubular steel poles, a steel reinforcing bar "cage" and an anchor bolt "cage" will be placed in the shaft and the shaft will be filled with concrete to create a sturdy concrete foundation for the structure. Once the concrete has cured to an acceptable strength, the remaining structure will be assembled and erected on top of this foundation.

Equipment required for construction will likely include a combination of cranes, trucks, and augers.

Conductor Stringing

Once a series of support structures have been erected along the transmission line, the conductor stringing phase can begin. Specialized equipment will be attached to insulators that will properly support and protect the conductor during the pulling, tensioning, and sagging operations. Once the conductors and shield wire are in place, and tension and sag have been verified, suspension units are installed at each suspension point to maintain conductor position. Conductor stringing will continue until the transmission line construction is complete.

Kerwood B7b

Kerwood Collection Construction Methods

As to Form

Exhibit B7b

Description of Collection Cable Installation

In general, wind farm collection power cable will be direct-buried in an open-cut trench at a typical depth below grade of 1 meter in accordance with governing codes and standards. A fiber optic cable for wind farm communication and control will normally be co-located with the power cables. Each excavated trench will be backfilled with compacted native and/or imported material to original grade. Typical equipment for this activity consists of trenchers, backhoes, skid-steer loaders, compactors, utility trucks, and cable reel deployment rigs.

At times, it may be necessary to install power and fiber cables using directional drilling. In these instances, the power and fiber cables will be inside a polyethylene casing.

As to Form

Kerwood B8

Kerwood Conductor Horizontal Clearances

As to Form

Exhibit B8

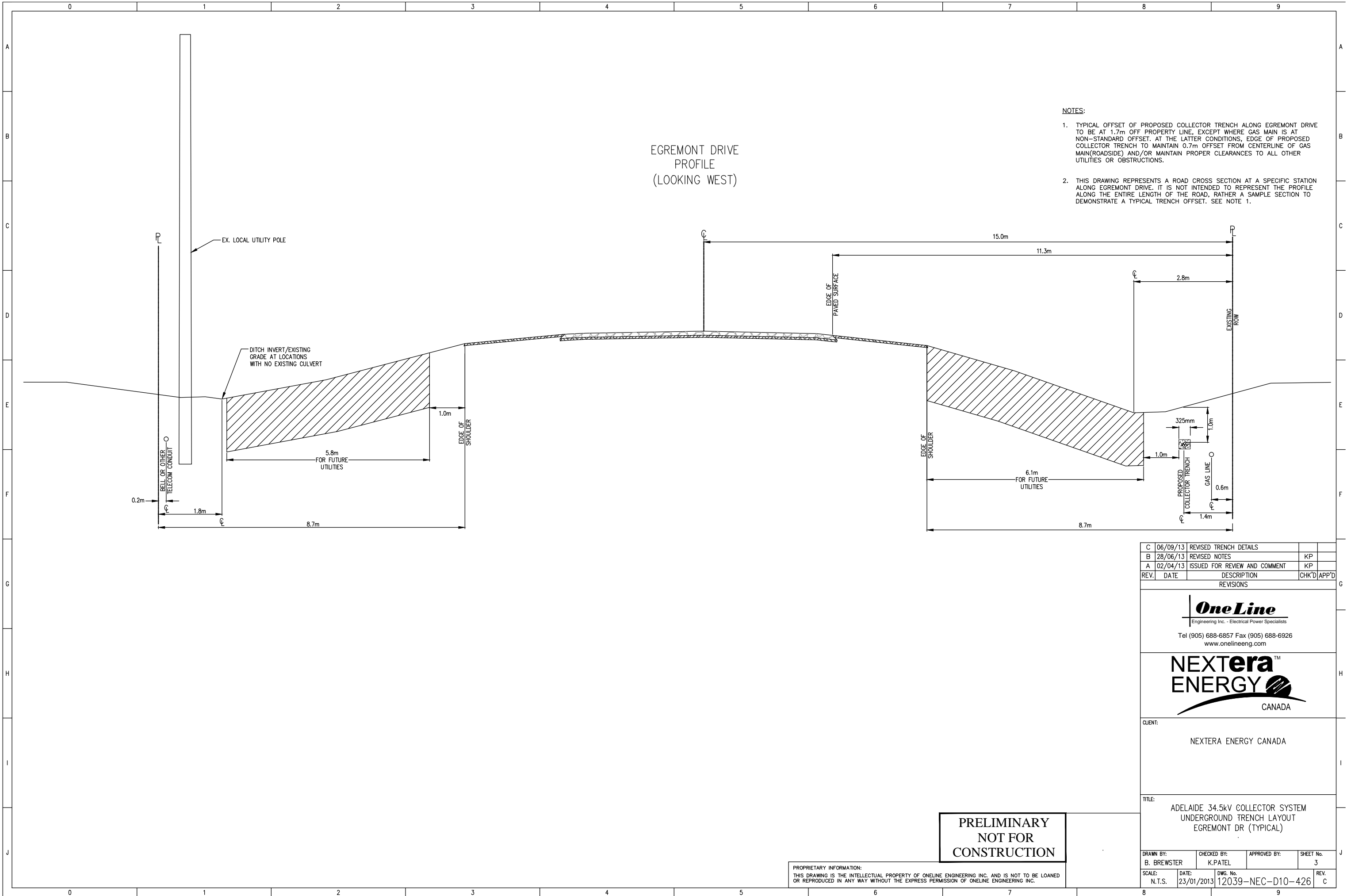
The horizontal cable clearance is defined for cable under conductor Blowout Wind condition as specified in C22.3 No.1 Section 5.2.7 & A5.2.7. The horizontal clearance requirements are specified in C22.3 No.1 Table 6 (Railroad), Table 9 (building, signs, fence, etc.), Table 10 (bridges) and Table 35 (flashover for tree pruning).

As to Form

Kerwood B9

**Kerwood Collection Longitudinal
Cross-Sections**

As to Form



C	06/09/13	REVISED TRENCH DETAILS		
B	28/06/13	REVISED NOTES	KP	
A	02/04/13	ISSUED FOR REVIEW AND COMMENT	KP	
REV.	DATE	DESCRIPTION	CHK'D	APP'D

REVISIONS

OneLine
Engineering Inc. - Electrical Power Specialists
Tel (905) 688-6857 Fax (905) 688-6926
www.onelineeng.com

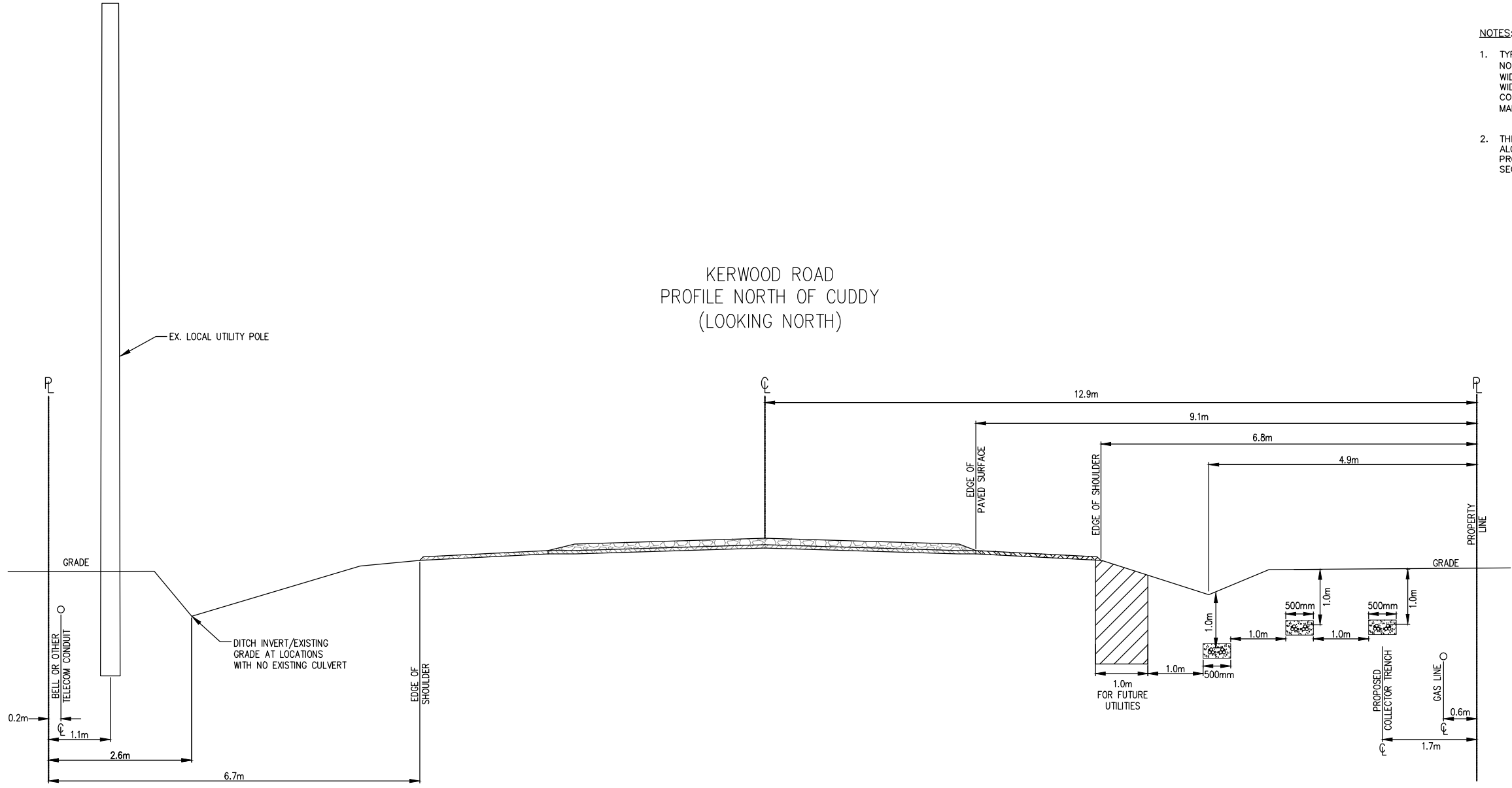
NEXtera
ENERGY
CANADA

CLIENT: NEXTERA ENERGY CANADA				
TITLE: ADELAIDE 34.5kV COLLECTOR SYSTEM UNDERGROUND TRENCH LAYOUT EGREMONT DR (TYPICAL)				
DRAWN BY: B. BREWSTER	CHECKED BY: K.PATEL	APPROVED BY:	SHEET No. 3	
SCALE: N.T.S.	DATE: 23/01/2013	DWG. No. 12039-NEC-D10-426	REV. C	

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NOT FOR
CONSTRUCTION

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KERWOOD ROAD
PROFILE NORTH OF CUDDY
(LOOKING NORTH)



- NOTES:
1. TYPICAL OFFSET OF PROPOSED COLLECTOR TRENCH ALONG KERWOOD ROAD, NORTH OF HWY. 402 TO BE AT 1.65m OFF PROPERTY LINE(PROPOSED ROAD WIDENING ROW), EXCEPT WHERE GAS MAIN IS LOCATED WITHIN THE ROAD WIDENING EASEMENT. AT THE LATTER CONDITIONS, EDGE OF PROPOSED COLLECTOR TRENCH TO MAINTAIN 0.7m OFFSET FROM CENTERLINE OF GAS MAIN(ROADSIDE), PER 12039-NEC-D10-420 TO 425.
 2. THIS DRAWING REPRESENTS A ROAD CROSS SECTION AT THE SPECIFIC STATION ALONG KERWOOD ROAD. IT IS NOT INTENDED TO REPRESENT THE THE PROFILES ALONG THE ENTIRE LENGTH OF KERWOOD ROAD, RATHER A SAMPLE SECTION TO DEMONSTRATE THE TRENCH OFFSETS. SEE NOTE 1.

D	06/09/13	REVISED TRENCH DETAILS		
C	28/06/13	REVISED NOTES	KP	
B	02/04/13	ISSUED FOR REVIEW AND COMMENT	KP	
A	23/01/13	ISSUED FOR REVIEW AND COMMENT	KP	
REV.	DATE	DESCRIPTION	CHK'D	APP'D

OneLine
Engineering Inc. - Electrical Power Specialists
Tel (905) 688-6857 Fax (905) 688-6926
www.onelineeng.com

NEXTERA ENERGY
CANADA

CLIENT:
NEXTERA ENERGY CANADA

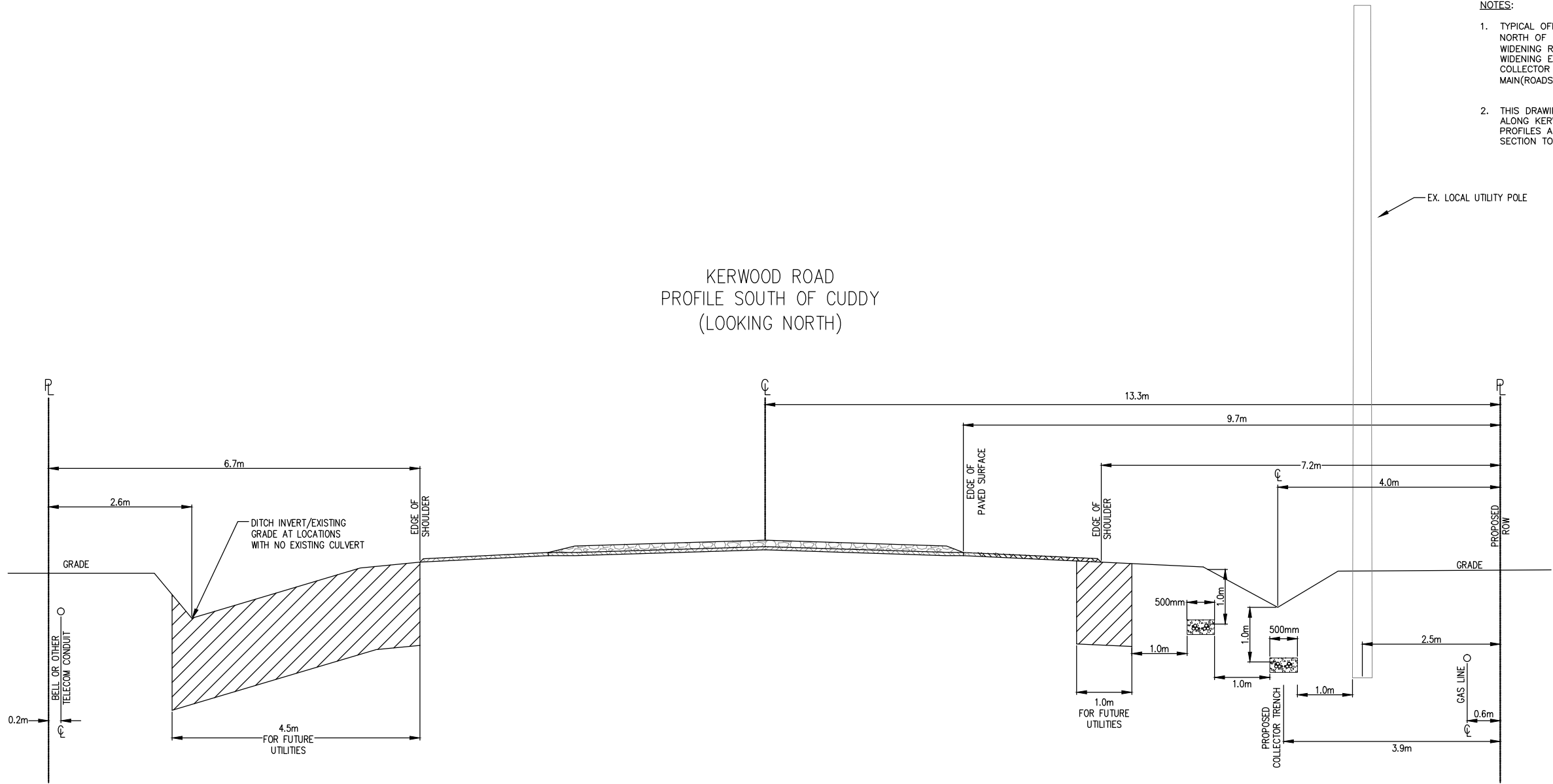
TITLE:
ADELAIDE 34.5kV COLLECTOR SYSTEM
UNDERGROUND TRENCH LAYOUT
KERWOOD RD (TYPICAL)

DRAWN BY: B. BREWSTER	CHECKED BY: K.PATEL	APPROVED BY:	SHEET No. 1
SCALE: N.T.S.	DATE: 23/01/2013	DWG. No. 12039-NEC-D10-426	REV. D

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CONSTRUCTION

PROPRIETARY INFORMATION:
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KERWOOD ROAD
PROFILE SOUTH OF CUDDY
(LOOKING NORTH)



- NOTES:
1. TYPICAL OFFSET OF PROPOSED COLLECTOR TRENCH ALONG KERWOOD ROAD, NORTH OF HWY. 402 TO BE AT 1.65m OFF PROPERTY LINE(PROPOSED ROAD WIDENING ROW), EXCEPT WHERE GAS MAIN IS LOCATED WITHIN THE ROAD WIDENING EASEMENT. AT THE LATTER CONDITIONS, EDGE OF PROPOSED COLLECTOR TRENCH TO MAINTAIN 0.7m OFFSET FROM CENTERLINE OF GAS MAIN(ROADSIDE), PER 12039-NEC-D10-420 TO 425.
 2. THIS DRAWING REPRESENTS A ROAD CROSS SECTION AT THE SPECIFIC STATION ALONG KERWOOD ROAD. IT IS NOT INTENDED TO REPRESENT THE THE PROFILES ALONG THE ENTIRE LENGTH OF KERWOOD ROAD, RATHER A SAMPLE SECTION TO DEMONSTRATE THE TRENCH OFFSETS. SEE NOTE 1.

D	06/09/13	REVISED TRENCH DETAILS		
C	28/06/13	REVISED NOTES	KP	
B	02/04/13	ISSUED FOR REVIEW AND COMMENT	KP	
A	23/01/13	ISSUED FOR REVIEW AND COMMENT	KP	
REV.	DATE	DESCRIPTION	CHK'D	APP'D

OneLine
Engineering Inc. - Electrical Power Specialists
Tel (905) 688-6857 Fax (905) 688-6926
www.onelineeng.com

NEXtera
ENERGY
CANADA

CLIENT:
NEXTERA ENERGY CANADA

TITLE:
ADELAIDE 34.5kV COLLECTOR SYSTEM
UNDERGROUND TRENCH LAYOUT
KERWOOD RD (TYPICAL)

DRAWN BY: B. BREWSTER	CHECKED BY: K.PATEL	APPROVED BY:	SHEET No. 1
SCALE: N.T.S.	DATE: 23/01/2013	DWG. No. 12039-NEC-D10-426	REV. D

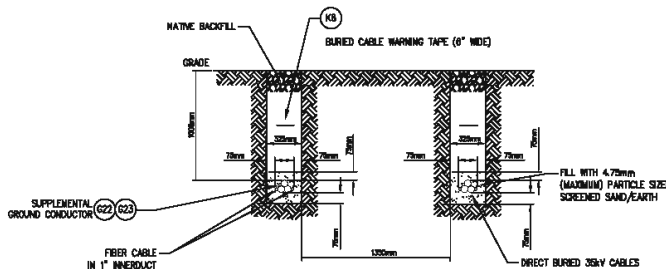
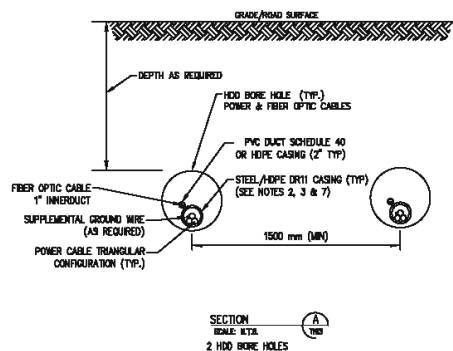
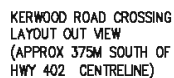
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Kerwood B10

**Kerwood Collection Perpendicular
Cross-Sections**

As to Form



DETAIL 
NTS:
2 PARALLEL
SINGLE CIRCUIT TRENCHES
FOR 34.5KV COLLECTION SYSTEM



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CONSTRUCTION

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- NOTES:**
1. INSTALLATION SHALL COMPLY WITH OESC 2012, 25TH EDITION
 2. CONTRACTOR SHALL INSTALL 35KV COLLECTION CABLES IN CONDUITS/CASINGS WHEN CROSSING ROADS, HIGHWAYS, RAILWAY/RAILWAY CUTTINGS/UTILITIES/PROTECTED DISTURBANCE AREAS. THE 35KV COLLECTION CABLE SHALL BE PERPENDICULAR TO ALL CROSSINGS. CONTRACTOR SHALL PLACE CABLE MARKERS ON EACH SIDE OF ALL CROSSINGS. CABLE SPLICERS SHALL BE PROVIDED ON ONE SIDE OF THE CROSSINGS.
 3. CONTRACTOR SHALL ENSURE THAT STEEL Casing MATERIAL MEETS CSA Z245.1 CANADIAN STANDARD FOR ELECTRICAL ROAD STEEL CONDUITS FOR RAILWAY CROSSINGS.
 4. FOR HIGH-VOLTAGE CROSSINGS, BORE PITS SHALL BE LOCATED AT LEAST 300mm FROM EDGE OF RIGHT OF WAY, (SUBJECT TO NOT TO APPROVAL FOR HIGH VOLTAGES, E.G. 402 HVW).
 5. CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION BETWEEN CONDUITS/CASINGS AND UTILITIES AS FOLLOWS:

UNION GAS	810mm	- POWER DISTRIBUTION CABLES	300mm
BELL TELCO	1000mm	- DRAINAGE LIE OR BOXED CULVERT	1000mm
SEWER	300mm	- GAS WELLS	600mm
UNIONFIBRE	810mm	- OIL PIPELINE	1000mm
 6. THE CONTRACTOR SHALL CONSULT WITH UTILITIES OWNERS TO ENSURE THE REQUIREMENT FOR THE SEPARATION PRIOR TO PROCEEDING WITH EXCAVATION, BORING AND DRILLING. ALL CROSSINGS SHALL BE PERPENDICULAR TO EXISTING UTILITIES.
 7. CONTRACTOR SHALL USE HOPE CONDUITS WITH D811 RATING FOR HIGHV/ROAD/RAILWAY/UTILITY/VEGETATION CROSSINGS. THE CONDUIT/CASINGS SHALL BE INSTALLED AT A SATURATE DEPTH BELOW GRADE/ROAD SURFACE APPROVED BY THE COUNTY/AUTHORITY HAVING JURISDICTION. THE CONDUIT/CASING SIZES SHALL BE AS FOLLOWS:

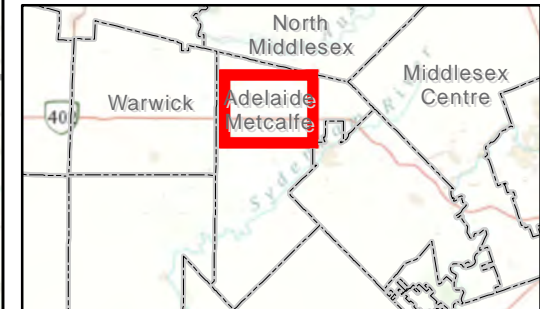
- 6" FOR ALL 4/0 AVG. 35KV CABLES IN TREFOIL CONFIGURATION
- 6" FOR 1000 OR 5000MM 35KV CABLES IN TREFOIL CONFIGURATION
- 10" FOR 12500MM 35KV CABLES IN TREFOIL CONFIGURATION
 8. CONTRACTOR SHALL MAINTAIN 200mm (MINIMUM) OF SEPARATION BETWEEN ADJACENT CONDUITS/CASINGS. IF INSTALLATION OF A BORE LIES IN THE SAME TRENCH, THE CONTRACTOR SHALL REFER TO DRAWING 12205-NR-003-002 FOR UTILITIES AND VEGETATION CROSSINGS
 9. CONTRACTOR, IN CONSULTATION WITH NEXTERA ENERGY CANADA, SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES, AND OBTAIN ALL NECESSARY PERMITS BEFORE EXCAVATION/BORING/DRILLING IS STARTED. CONTRACTOR SHALL NOTIFY M.T.O., ONTARIO CABLE AND UTILITY OWNERS AT LEAST 5 DAYS PRIOR TO COMMENCING WITH ANY WORK IN THE ROW/ RIGHT OF WAY, FOR MORE INFORMATION, VISIT www.ontario.ca/utility
 10. UNDERGROUND POWER CABLES AND FIBER OPTIC CABLES SHALL BE AT A MINIMUM DEPTH OF 1000mm BELOW DIRT WINKETS NEAR HIGHWAY ROADS, (E.G. 402 HWY).
 11. CONDUITS/SYSTEMS/TERMINALS MUST BE ARRANGED SO THAT NO BARE UNGROUNDED, CURRENT CARRYING METAL PARTS ARE EXPOSED TO ACCIDENTAL CONTACT WITH BUIS/SURFACE CHAMBERS/SERVICE BOXES.
 12. CONTRACTOR SHALL PROVIDE WARNING SIGNS FOR EVERY 15m where WARNING TAP IS NOT INSTALLED. IF NOT FEASIBLE, CONTRACTOR SHALL NOTIFY ESA INSPECTOR FOR INSPECTION AND APPROVAL.
 13. CONTRACTOR SHALL PLACE MARKER BALLS ABOVE ALL CABLE SPLICERS, DEFLECTION POINTS, AT EACH END OF WATER/ROAD/RAILWAY/UTILITY CROSSINGS, SLACK LOOPS, AND CONDUIT ENDS OF HORIZONTALLY DIRECTIONAL DRILLING (HDD). EACH MARKER BALL SHALL BE PLACED NOT MORE THAN 15 METERS FROM ANY SLACK LOOPS OR AT EACH END OF THE CONDUIT WITH A MINIMUM 2.5 METERS HORIZONTAL DISTANCE BETWEEN MARKER BALLS FOR ADJACENT TRENCHES. MARKER BALLS SHALL BE PLACED AT EVERY 150 METER (N/A) OF LINEAR RUN OF ALL TRENCHES.
 14. ALL DRAWING REVISIONS PREVIEWED WITH 12205-NR-003

A	17/09/13	ISSUED FOR REVIEW AND COMMENT	D.R.P.
REV.	DATE	DESCRIPTION	CHG'D APP'D
REVISIONS			
 Engineering Inc. - Electrical Power Specialists Tel (805) 888-8827 Fax (805) 888-8828 www.onelineeng.com			
			
CLIENT:			
NEXTERA ENERGY CANADA KERWOOD WIND, INC.			
TITLE:			
ADELAIDE WIND FARM 34.5kV COLLECTOR SYSTEM KERWOOD ROAD CROSSING (SOUTH OF HWY 402)			
DRAWN BY:	CHECKED BY:	APPROVED BY:	SHEET NO.
L.HULETT	D.PRAEMHAN		
SCALE:	DATE:	DWG. NO.	REV. A
NTS	2004.11	2004-MFC-D10-450	

Kerwood B11







Kerwood Collection Location Map

As to Form



Adelaide Project Collection

Ontario, Canada

-  Turbines
-  MET Towers
-  Collection Line in Municipal ROW
-  Substation
-  Property Boundary
-  Local Municipal Boundary

0 0.5 1
Kilometers

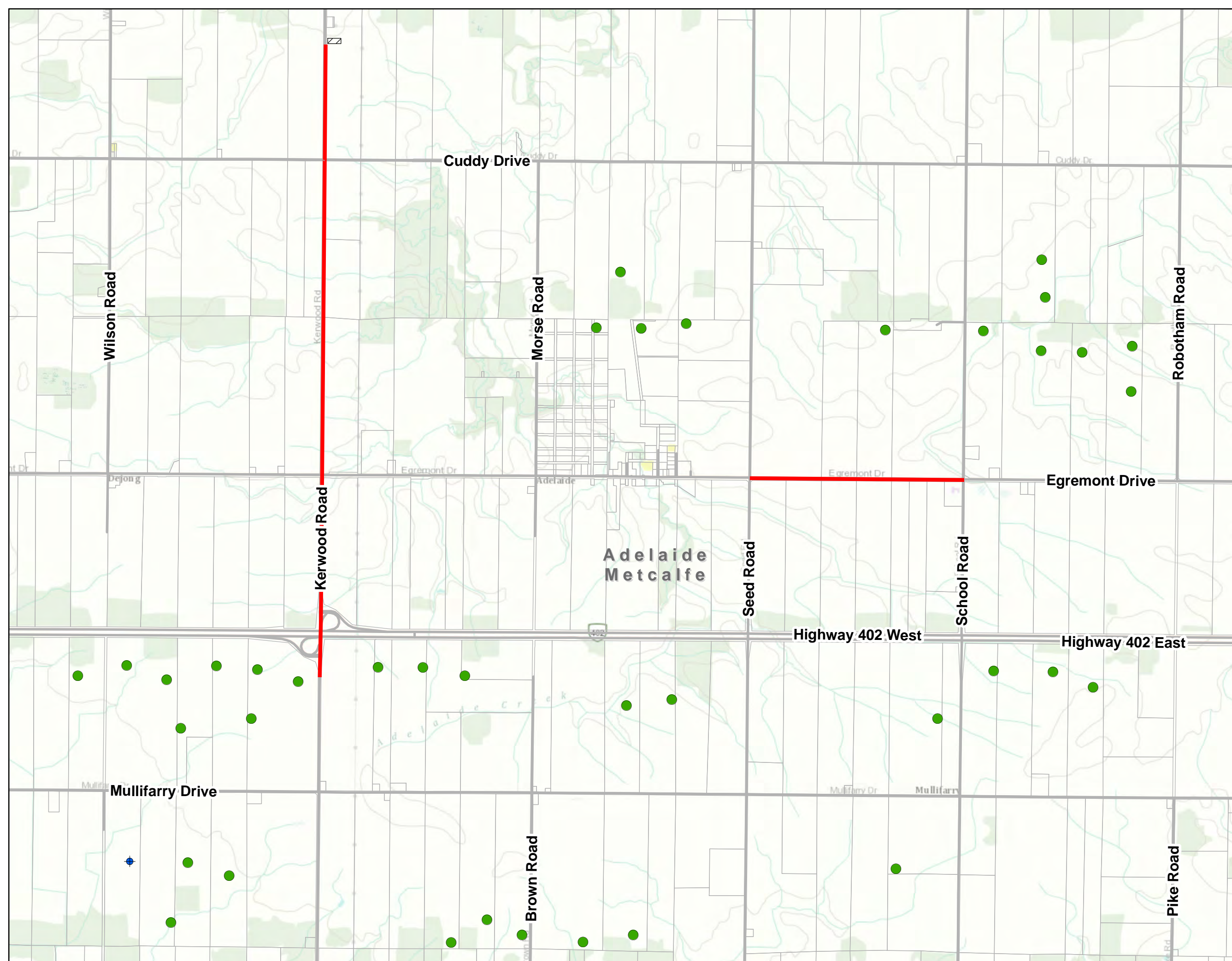


PROPRIETARY AND CONFIDENTIAL

Date: 8/30/2013

Coordinate System: NAD 1983 UTM Zone 17N
Projection: Transverse Mercator
Datum: North American 1983

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SCHEDULE "C"

Appropriate Emergency Service Providers

As to Form

Schedule “C”

Appropriate Emergency Service Providers

Contact Information:

Ambulance Station

Middlesex-London Emergency Medical Services Authority at 519-679-5466

Fire Stations

Kerwood Fire Department

Kerwood Fire Station

27817 Kerwood Road
Kerwood, ON N0M 2B0

Fire Chief: Arend Noordhof kerwoodfiredept@bellnet.ca

Ailsa Craig and Parkhill Fire Departments

Ailsa Craig Fire Station

159 William Street, Ailsa Craig, ON N0M 1A0

Parkhill Fire Station

194 Main Street, Parkhill, ON N0M 2K0

Contact Scott Jones: 519-494-6001

SCHEDULE "D"

Permits and Fees

[NTD: List all permits needed, application requirements and fees associated with granting of such permits]

As to Form

Schedule "D"

Permits and Fees

** All references to legislation, by-laws and fees in this Schedule shall be interpreted as references to those by-laws and fees as they may be amended, superseded or replaced from time to time*

<u>By-Law Reference</u>	<u>Permit Required with Appropriate Application</u>	<u>Cost</u>
By-law #5783: Use, Construction or Alteration; By-law #6410: User Fees	Access/Entrance Permit (authorizing access, via entrance application)	\$400 fee + refundable deposit determined by County Engineer
By-law #5783: Use, Construction or Alteration; By-law #6410: User Fees	Work Permit (authorizing work and/or services, via work application)	\$400 fee + refundable deposit determined by County Engineer
Highway Traffic Act , R.S.O. 1990, Chapter 198; By-law #6410: User Fees	Moving Oversize Load/Weight Vehicles on County Roads Permit (via application with utility company and emergency services sign-offs)	Variable fee between \$50 and \$500 depending on dimensions and weight of load + \$500 refundable deposit (\$2M liability insurance required)

SCHEDULE "E"

Rights and Remedies Accorded to Secured Parties

1. The County will from time to time execute and deliver such consents and acknowledgements reasonably requested by the Secured Party.
2. The County agrees that, upon the Secured Party giving the County written notice of any security granted by Kerwood in the Agreement, the Secured Party will, without any further action being required, have the benefit of the following provisions until such time as the Secured Party advises the County in writing that its security is no longer in effect (and, if the Secured Party so requests, the County will (i) acknowledge in writing that the Secured Party so benefits from these provisions, or (ii) enter into a written agreement with the Secured Party substantially in accordance with these provisions):
 - (a) the County will give prompt written notice to the Secured Party of any breach or default by Kerwood of its obligations under the Agreement in respect of which the County proposes to exercise any of its remedies;
 - (b) the County will give the Secured Party the right to cure any breach or default by Kerwood under the Agreement, within a period of 90 days commencing on the later of (i) the expiry of the cure period afforded Kerwood under the Agreement, and (ii) the date on which the County gives the Secured Party notice of such breach or default pursuant to Section 2(a), or such longer period of time as the Secured Party may reasonably require to cure such breach or default; and no exercise by the County of any of its rights or remedies against Kerwood will be effective against Kerwood or the Secured Party unless the County has provided the Secured Party such notice and opportunity to cure.
 - (c) the County will, at any time and from time to time, upon not less than ten (10) days' prior request by Kerwood or the Secured Party or proposed the Secured Party, execute any agreements, certificates or acknowledgements that Kerwood or the Secured Party may reasonably request with respect to this Agreement; and
 - (d) all notices to the Secured Party from the County will be in writing and will be sent by personal delivery, registered mail, email or by fax to the address, email address or facsimile number of the Secured Party set out in any notice that the Secured Party delivers to the County.
3. The provisions of Section 2 will enure to the benefit of the Secured Party and its successors and assigns, and any rights conferred on the Secured Party by the terms of this Agreement or limiting its liability under the Agreement will benefit each receiver or receiver-manager appointed by the Secured Party or by a court of competent jurisdiction.
5. The County hereby acknowledges that Kerwood may grant security to a trustee or collateral agent acting on behalf of one or more lenders (a "**Collateral Agent**"), and the County hereby acknowledges and agrees that upon its receipt of notice that such security was granted,

the Collateral Agent will be entitled to all of the rights of the Secured Party set forth in this and such notice will constitute notice of the existence of the Collateral Agent as the Secured Party.

As to Form